Aperture 2
User Manual

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- New Features
- Exploring Aperture
- Keyboard Shortcuts
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Contents

Preface 13 **Introducing Aperture**
14 What's Next?

Part I Interface and Acquisition

Chapter 1 17 **An Overview of Aperture**
18 A First Look at Aperture
19 Creating Projects and Importing Your Photos
23 Photo Editing with Aperture
34 Image Processing
35 Distribution
40 Sharing Images with iLife and iWork Applications
41 Backing Up Your Work

Chapter 2 43 **The Aperture Interface**
44 The Aperture Main Window
45 Browser
48 Viewer
50 Full Screen View
57 Inspector Pane
61 Toolbar
62 Control Bar
63 Import Pane
64 Vault Pane
65 Book Layout Editor
68 Webpage Editor
72 Light Table
73 Heads-Up Displays
76 Changing Views
77 Customizing the Toolbar
79 Customizing Keyboard Shortcuts
85 Setting Aperture Preferences

Chapter 3 93 **Working with Aperture Projects**
94 Basic Components of Aperture
100 Working with Projects
101 Creating and Naming Projects
103 Opening and Closing Projects
104 Creating and Showing Favorite Projects
105 Deleting Images from Projects and Albums
105 Deleting Items from the Projects Inspector
106 Working with Library Files
108 Working with the Library in the Projects Inspector
108 Quickly Accessing Commands

Chapter 4 109 **Importing Images**
110 An Overview of Importing Images
111 File Formats You Can Import into the Library
111 Planning Your Import Strategy
113 Importing from Your Digital Camera or Card Reader
119 Importing Image Files Stored on Your Computer
127 Automatically Naming Your Imported Images
132 Adding Metadata to Images During Import
133 Creating Stacks Automatically During Import
134 Adjusting the Image File's Time When Importing
134 Dragging Files from the Finder to the Projects Inspector
135 Capturing Images as You Work
138 Importing Folders of Images from the Finder
139 Importing Your iPhoto Library
141 Browsing and Selecting Images from Your iPhoto Library
143 Transferring Projects from Another System
143 Making an Immediate Backup
144 Where Aperture Stores Your Managed Files in the Library
144 Migrating Images from Previous Versions of Aperture

Part II Photo Editing

Chapter 5 149 **Working with Images in the Browser**
150 An Overview of the Browser
153 Navigating Through and Selecting Images
155 Working with Images in Filmstrip View
156 Working with Images in Grid View
157 Working with Images in List View
158 Choosing a Workspace View
160 Navigating Through Images in Quick Preview Mode

161 Searching for Images in the Browser
162 Rearranging Images in the Browser
163 Sorting Images
163 Rotating Images
165 Creating Versions of an Image
166 Deleting Images from the Browser
168 Dragging Images into Different Projects and Albums
169 Working with Referenced Images
176 Working with Two or More Projects Open
176 Displaying Specific Metadata with Your Images

Chapter 6 179 **Displaying Images in the Viewer**
180 An Overview of the Viewer
182 Showing and Hiding the Viewer
182 Changing the Viewer Background
183 Changing the Number of Images in the Viewer
184 Comparing Images
185 Viewing Stacks
185 Viewing Images with the Loupe
190 Showing Hot and Cold Areas in Your Images
191 Viewing Images at Full Resolution
192 Viewing Master Images
192 Setting Up the Viewer for Onscreen Proofing
193 Viewing Images on Multiple Displays
194 Displaying Metadata Associated with Images
196 Working with Preview Images
206 Quickly Accessing Commands

Chapter 7 207 **Viewing Images in Full Screen View**
208 An Overview of Full Screen View
209 Entering and Exiting Full Screen View
209 Working with the Filmstrip in Full Screen View
211 Working with the Toolbar in Full Screen View
214 Using HUDs in Full Screen View
216 Changing the Display of Metadata in Full Screen View
217 Using Keyboard Shortcuts in Full Screen View
218 Quickly Accessing Commands

Chapter 8 219 **Stacking Images and Making Picks**
219 An Overview of Stacking Images
221 Creating Stacks
225 Working with Stacks
231 Keyboard Shortcuts for Working with Stacks

Chapter 9 233 **Rating Images**
234 An Overview of the Aperture Rating System
236 Rating Images
238 Sorting Images by Rating
239 Including Image Rating in Your Workflow
240 Comparing and Rating Images
242 Keyboard Shortcuts for Displaying Images with Specific Ratings

Chapter 10 243 **Applying Keywords to Images**
244 An Overview of Keywords
246 Viewing Keywords Applied to Images
250 Applying Keywords Using the Keywords HUD
257 Applying Keywords Using Keyword Controls and Keyword Presets
262 Applying Keywords Using the Lift & Stamp HUD
266 Applying Keywords Using the Metadata Inspector
267 Applying Keywords to Images in the Light Table
267 Removing Keywords from an Image
268 Importing and Exporting Keyword Lists

Chapter 11 269 **Working with Metadata**
270 An Overview of Metadata, Metadata Views, and Metadata Presets
273 Displaying Metadata with Your Images
277 Turning the Display of Metadata On or Off
278 Viewing and Changing Metadata in the Metadata Inspector and Inspector HUD
279 Working with the AutoFill Editor
281 Working with Metadata Views
284 Working with Metadata Presets
288 Batch Changing Metadata
289 More Information About IPTC Metadata
290 Understanding Badge Overlays
293 Adjusting Image Date and Time

Chapter 12 295 **Searching for and Displaying Images**
296 An Overview of Searching
300 Controls in the Query HUD
301 Searching Across the Entire Library
302 Searching by Image Name, Caption, or Other Text
303 Searching by Keyword
305 Searching by Date
307 Searching by Rating
308 Searching by IPTC Information
309 Searching by EXIF Information

310 Searching by Adjustments
311 Searching by Import Session
312 Searching by File Status
312 Searching by Other Metadata
313 Searching by a Combination of Criteria
315 Saving Your Search Results

Chapter 13 317 **Grouping Images with Smart Albums**
318 An Overview of Smart Albums
320 Collecting Images in a New Smart Album
321 Searching Within a Smart Album
322 Revising the Contents of a Smart Album
323 Transferring Smart Album Images to Another Project or Album
324 Deleting a Smart Album

Part III Performing Image Adjustments

Chapter 14 327 **An Overview of Image Adjustments**
328 An Overview of Adjustments in Aperture
332 Using the Adjustment Controls
333 Working with Adjustment Tools in the Viewer
334 Performing Adjustments in Full Screen View
335 Applying Adjustments to a Group of Images
337 Working with Adjustment Presets
342 Remove Adjustments Command
342 Using Modifier Keys to Identify Color Clipping
346 Using the Color Meter
350 Using an External Editor
351 Working with the RAW Fine Tuning Controls
360 Understanding How to Read Histograms

Chapter 15 365 **Making Image Adjustments**
366 ***Working with Automatic Adjustments***
367 Using the Auto Exposure Button
369 Using the Auto Levels Combined Button
370 Using the Auto Levels Separate Button
371 Setting the Auto Levels Options
372 Resetting Auto Levels Adjustments
373 ***Working with the Red Eye Correction Controls***
373 Reducing Red-Eye Using the Red Eye Tool
374 Adjusting the Size of Red Eye Target Overlays
377 Adjusting the Sensitivity of Red Eye Target Overlays

378 Viewing the Corrected Image Without Red Eye Target Overlays
379 Moving Red Eye Target Overlays
380 Deleting Red Eye Target Overlays
381 ***Working with the Retouch and Spot & Patch Controls***
381 Working with the Retouch Controls
386 Working with the Spot & Patch Controls
398 ***Working with the Devignette Controls***
399 ***Working with the Straighten Controls***
400 Rotating Images with the Straighten Tool
401 Rotating Images with the Straighten Controls
402 ***Working with the Crop Controls***
403 Cropping Images with the Crop Tool
406 Displaying the Cropped Image Without the Crop Overlay
406 Cropping Images with the Crop Controls
408 ***Working with the White Balance Controls***
409 Adjusting White Balance in the Image with the White Balance Eyedropper
410 Adjusting the Color Temperature of the Image with the Temp Controls
411 Adjusting the Tint of the Image with the Tint Controls
412 ***Working with the Exposure Controls***
412 Correcting Exposure in the Image
413 Recovering Highlight Details in the Image
414 Setting the Image's Blacks
416 Adjusting Brightness in the Image
417 ***Working with the Enhance Controls***
417 Adjusting Contrast in the Image
419 Adjusting Definition in the Image
420 Adjusting Saturation in the Image
421 Adjusting Vibrancy in the Image
422 Setting the Tint of the Black, Gray, and White Values in the Image
429 ***Working with the Levels Controls***
429 Adjusting the Luminance Levels in an Image
432 Showing Quarter-Tone Levels Controls
432 Adjusting the Brightness of an Image with the Brightness Levels Sliders
433 Using Levels for Color Correction
435 ***Working with the Highlights & Shadows Controls***
436 Adjusting Brightness Values in the Highlight Areas of the Image
437 Adjusting Brightness Values in the Shadow Areas of the Image
438 Using the Highlights & Shadows Advanced Settings
445 ***Working with the Color Controls***
447 Adjusting the Color of the Image with the Color Controls
451 Adjusting Custom Colors Using the Color Eyedropper
452 ***Working with the Monochrome Mixer Controls***
452 Choosing a Monochrome Mixer Preset

454 Using the Monochrome Mixer Controls
455 ***Working with the Color Monochrome Controls***
456 ***Working with the Sepia Tone Controls***
457 ***Working with the Noise Reduction Controls***
458 ***Working with the Sharpen and Edge Sharpen Controls***
459 Working with the Edge Sharpen Controls
462 Understanding the Edge Sharpen Workflow
462 Working with the Sharpen Controls
463 ***Working with the Vignette Controls***
464 Applying an Exposure Vignette
465 Applying a Gamma Vignette
467 Switching Vignette Types

Part IV Distribution and Backup

Chapter 16
471 **Printing Your Images**
472 An Overview of Printing
474 Controls in the Print Dialog
477 Printing a Single Image
477 Printing a Series of Images
478 Printing a Contact Sheet or Series of Contact Sheets
479 Printing a Book
480 Printing a Light Table Arrangement
480 Creating and Modifying Print Presets
482 Proofing Your Images Onscreen
483 Calibrating Your Printer
484 Turning Off Color Management in Your Printer

Chapter 17
487 **Exporting Your Images**
487 An Overview of Exporting Images
489 Exporting Copies of Masters
492 Exporting Image Versions
505 Working with Export Presets

Chapter 18
509 **Creating Slideshow Presentations**
510 An Overview of Slideshows
512 Creating a Slideshow
513 Controlling a Slideshow
513 Arranging the Order of a Slideshow's Images
514 Controls in the Slideshow Presets Dialog
516 Creating Slideshow Presets
517 Modifying Slideshow Presets

518 Creating a Growing Grid of Images
519 Playing Your Slideshow on Your Main Display Only
520 Displaying Your Images to Music

Chapter 19 523 **Using the Light Table**
524 An Overview of the Light Table
525 Creating a Light Table Album
526 Placing and Viewing Images in the Light Table
527 Moving and Resizing Images in the Light Table
528 Aligning and Arranging Images in the Light Table
531 Adjusting the Light Table View
532 Setting View Options for the Light Table
532 Transferring Images from the Light Table
533 Printing a Light Table Arrangement
534 Deleting a Light Table Album

Chapter 20 535 **Creating Webpages**
536 An Overview of Creating Webpages
539 Creating Webpages
542 Creating Web Journals
544 Viewing and Navigating Through Webpages
545 Choosing and Modifying Themes
548 Working with Webpages
549 Working with Web Journal Pages
551 Exporting Webpages
555 Working with Web Export Presets
560 Publishing Images to Web Galleries

Chapter 21 569 **Creating Books**
570 An Overview of Creating Books
575 Planning Your Book
577 Creating a Book Album
578 Controls in the Book Layout Editor
581 Choosing a Theme
582 Viewing Pages
584 Placing Images in a Book
586 Adding and Removing Pages
591 Working with Pages
595 Working with Images
600 Working with Text
605 Working with the Layout Options Inspector
606 Working with Master Pages
609 Working with Custom Themes

610 Copying a Book Album
611 Printing Books

Chapter 22 613 **Backing Up Your Images**
614 An Overview of the Backup Workflow
615 Planning Your Backup System
616 Working with the Vault Pane
618 Creating Vaults
619 Updating Vaults
620 Disconnecting a Vault's Hard Drive from Your System Temporarily
620 Reconnecting a Vault's Hard Drive to your System
621 Deleting a Vault Permanently
621 Backing Up Images from a Portable in the Field
623 Restoring Your Aperture System

Part V Appendixes and Glossary

Appendix A 627 **Setting Up an Aperture System**
628 Setting Up a Basic System
629 Optional Equipment to Consider
631 Setting Up Your System with Two Displays
633 Configuring Mac OS X for Multiple Displays

Appendix B 637 **Calibrating Your Aperture System**
637 An Overview of Color Management
641 Calibrating Your Camera
642 Calibrating and Profiling Your Display
644 Calibrating and Profiling Your Printer

Glossary 645

Index 673

Introducing Aperture

Aperture is a powerful and easy-to-use digital image management system that can track thousands of digital images and provides the advanced photographer with high-quality image management and adjustment tools.

Designed for the needs of professional photographers, Aperture is an all-in-one post-production tool that provides:

- *An advanced RAW workflow:* From capture to output, you can work with your images captured as RAW files, without having to first convert them to another format before viewing, adjusting, organizing, or printing them. Aperture supports RAW formats from leading digital camera manufacturers (including Canon and Nikon).
- *Flexible image management:* An open library structure lets you store photos anywhere you want. You can have Aperture either store image files in the library or simply link to image files in their current locations. You can also have Aperture link to your iPhoto Library without copying the images into the Aperture library. Aperture can work with photos stored on any number of hard disk drives and other storage media. You can catalog and search for images that are stored on multiple hard disks, including offline volumes, CDs, and DVDs.
- *Professional project management:* Aperture allows you to manage thousands of projects and provides flexible organizational tools, comprehensive metadata support, and powerful search tools that let you find files instantly.
- *Nondestructive image processing:* Designed to protect your images from the moment they're imported, Aperture identifies your original images as digital "masters" and has built-in safeguards to help ensure that you don't accidentally overwrite or modify them.
- *Versatile printing and publishing:* Working directly with your RAW images, you can create color-accurate prints, custom contact sheets, stunning websites, and unique bound books with tools that are intuitive and powerful.

With Aperture you can efficiently import digital images, perform a photo edit, adjust and retouch images, publish images for the web or print, and back up your entire image library for safekeeping. Aperture lets you work with high-quality JPEG, TIFF, and RAW image files directly from your camera or card reader and maintain that high quality throughout your workflow.

What's Next?

This manual is only one of several types of documentation you can use as you work with Aperture.

- For instructions for installing Aperture software, see *Installing Your Software*.
- For a hands-on introduction to the basics of Aperture, see *Exploring Aperture*. You can try out Aperture features as you work with the sample images to quickly get acquainted with the Aperture digital photography workflow.
- For an overview of Aperture, an introduction to the Aperture interface, and detailed instructions for using the many features and tools in Aperture, continue reading this manual.
- For a list of the keyboard shortcuts you can use to perform tasks in Aperture, see *Aperture Keyboard Shortcuts*.
- For the most recent technical and release information about Aperture, choose Late-Breaking News from the Aperture Help menu.
- For information about new features in Aperture, choose New Features from the Aperture Help menu.
- For the latest articles about technical issues and solutions, go to the Aperture Support website, available from the Aperture Help menu.

Part I: Interface and Acquisition

This section provides introductory information about the application and its interface. It also explains how to set up your image management system and import images into it.

Chapter 1 An Overview of Aperture

Chapter 2 The Aperture Interface

Chapter 3 Working with Aperture Projects

Chapter 4 Importing Images

An Overview of Aperture

1

Aperture is designed to be the center of your digital photography workflow, from capturing new images to the final delivery of professional-quality photographs.

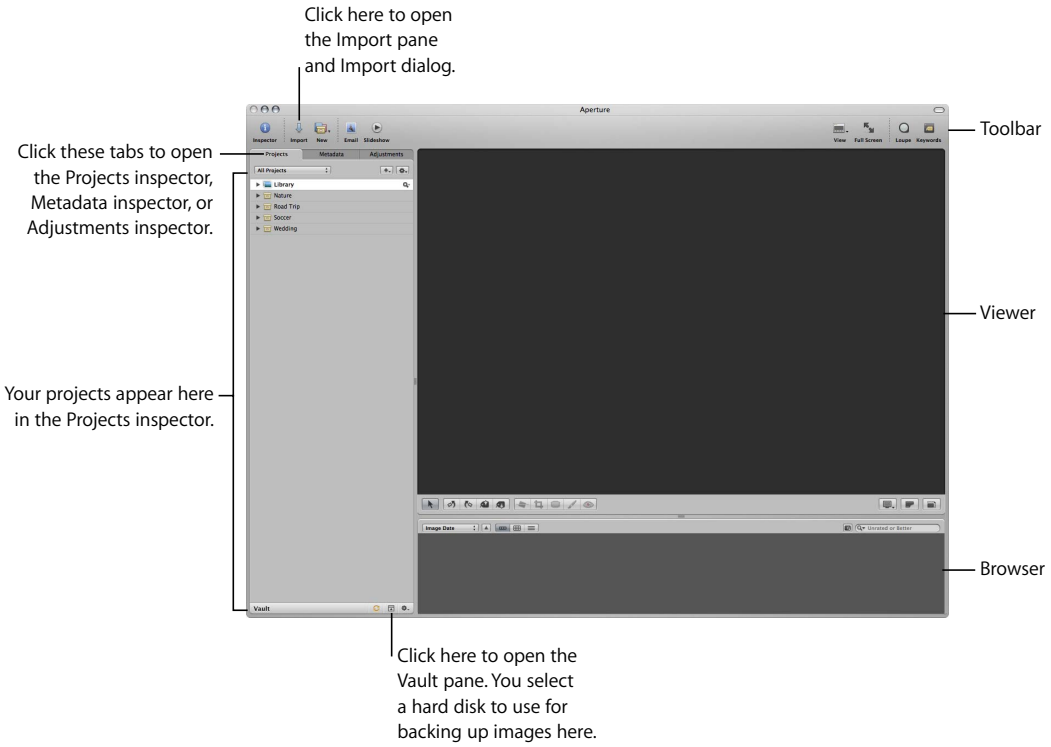
This chapter provides an overview of how Aperture works and what you can do with it. If you're new to Aperture, this chapter is for you. If you're familiar with the Aperture features and interface, feel free to skip this chapter. The chapter doesn't provide all the detailed information and instructions needed to perform work on your images. Once you're familiar with Aperture, you'll find in-depth explanations and instructions in later chapters.

This chapter covers:

- A First Look at Aperture (p. 18)
- Creating Projects and Importing Your Photos (p. 19)
- Photo Editing with Aperture (p. 23)
- Image Processing (p. 34)
- Distribution (p. 35)
- Sharing Images with iLife and iWork Applications (p. 40)
- Backing Up Your Work (p. 41)

A First Look at Aperture

When you first open Aperture, you see the following areas:



Note: Because you can customize the toolbar, adding and deleting the buttons you want, your toolbar may appear different from the one pictured in this manual. For more information about changing the toolbar, see "Customizing the Toolbar" on page 77.

After you import images into a project, your screen will look similar to this:



About Aperture Sample Projects

The Aperture installation disc includes several sample projects containing high-resolution images. When you first open Aperture, a dialog appears asking if you'd like to install sample projects. You can import the sample projects into Aperture from the Aperture installation disc at any time after installing the application.

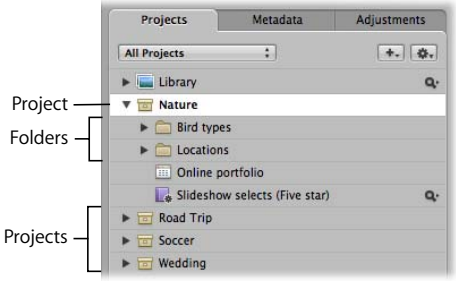
Creating Projects and Importing Your Photos

To use Aperture, you first import your photos. You can import digital photos directly from your camera or a card reader and from hard disks or other storage devices where you've archived digital files. After a shoot, you can connect your card reader or digital camera to your computer and Aperture automatically detects it. You can then easily import your new images into Aperture.

Creating Projects

As you work with Aperture, you create projects to hold your images. A project is similar to a folder that can hold dozens, hundreds, or even thousands of images. For example, after completing a soccer sports shoot, you might create a new project named World Cup Soccer and import the photos into it.

Your new project appears in a list in the Projects inspector.



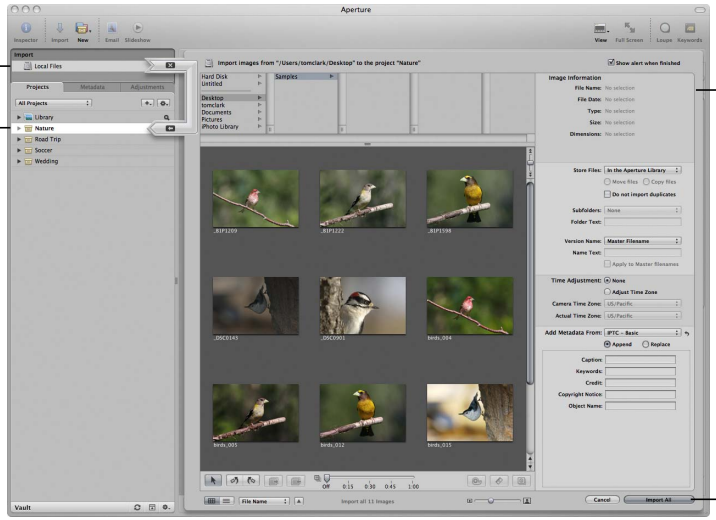
As your portfolio increases and you create more and more projects, you can organize your work into hierarchies of folders, projects, and albums.

You can create as many projects as you need and name them according to any naming scheme you prefer. It's important to name projects so that they will be easy to identify and access. When you need to further subdivide and organize images in a project, you can create albums.

Over the long term you may be using Aperture to track years of projects, so you'll want to develop a naming system that is easy to use and understand. For more information about organizing your images in projects and albums, see Chapter 3, "Working with Aperture Projects," on page 93.

Importing Images

When you connect a camera or card reader to your computer, the Import dialog appears. You can select your camera or card reader and see the images you're about to import. You can select all the images or select and import only those you want. You can also select image files on your hard disk for importing.



You can then specify options for importing your images. For example, you can specify that your images be imported into the Aperture library in your Pictures folder, or you can specify another location to store them. If you have images already stored on a hard disk, you can simply allow Aperture to access them without changing their current location. You can choose how images are named and include other information that is recorded with each image to help identify it. For example, you can specify the event name, date, time, photographer, and location, as well as copyright information.

You can also specify other import options, such as whether you want Aperture to group related images together in stacks. For example, if you have bracketed images or images shot in quick succession, you can have Aperture import and stack these images together to make reviewing and working with them easier.

Importing Files from Your Body of Work

You can easily import your collection of archived digital images into Aperture from any hard disk or storage device connected to your computer. When importing legacy images from your portfolio, you can move them into the main Aperture library, or you can simply identify where the images are located, and Aperture adds them to its management system without changing the image locations. This means that with Aperture, you can still work with your images in their current organization and on multiple hard disks without relocating or reorganizing your files. You can also move or copy images to new locations when needed.

Aperture can also import your iPhoto library and files stored in a variety of common file types and formats, including:

- GIF
- DNG
- JPEG
- JPEG2000
- PNG
- PSD
- RAW files from a variety of supported digital cameras
- TIFF

Note: For a list of supported digital cameras, go to http://www.apple.com/aperture.

For more information about importing images, see Chapter 4, "Importing Images," on page 109.

Photo Editing with Aperture

Aperture allows you to easily view and work with your images onscreen. It provides easy-to-use tools and controls, as well as efficient methods for rating images, searching for images, and comparing and adjusting images.

Viewing and Working with Images

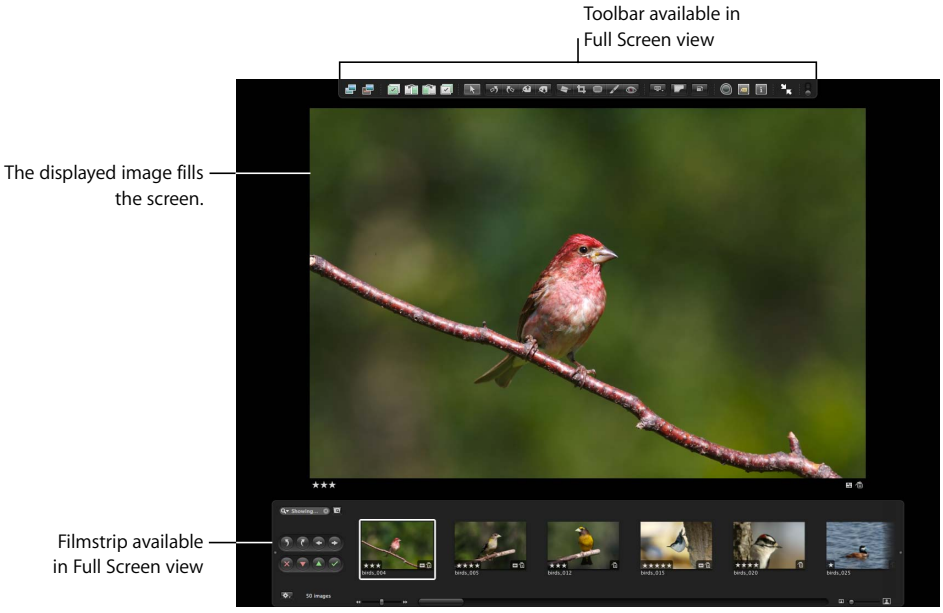
To work with your images, you select a project in the Projects inspector and Aperture displays that project's images in the Browser. You use the Browser to review, organize, and select images. You can display the Browser only or display the Browser and a Viewer that shows images in detail.

When you select a thumbnail image in the Browser, the image appears in the Viewer.



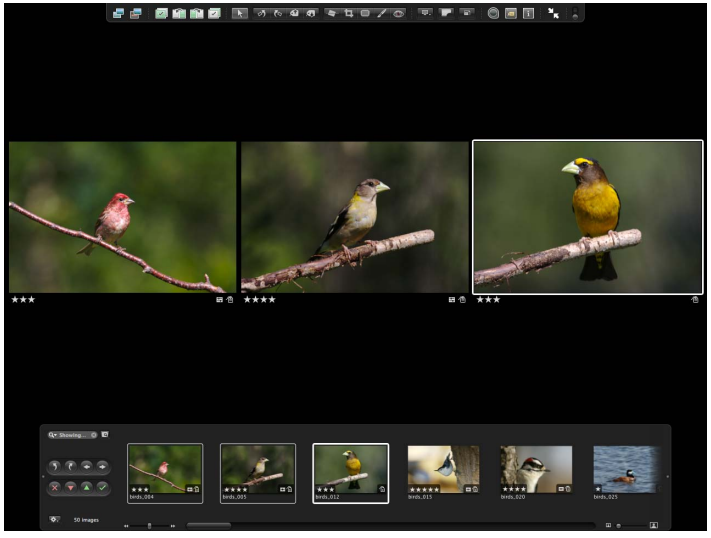
The Browser can show your images as thumbnails arranged as a row in a filmstrip or as a grid of thumbnails appearing in rows and columns. You can click an individual image to select it, and a white border appears around the image. To quickly move to and select other images, press the arrow keys. You can drag images to rearrange them in the Browser, or drag them into different projects or albums. You can also display your images as a list of files.

You can also view your images in Full Screen view, where you can work with them in detail.



To see images in Full Screen view, you press F. Press F again to exit Full Screen view.

In Full Screen view, you can change the display of images to show single images, three images, or up to ten images at once. For more information about using Full Screen view, see Chapter 7, "Viewing Images in Full Screen View," on page 207.



Displaying your images clearly and accurately is a pivotal function of Aperture. With Aperture you can take advantage of the latest display technology and view and work with your images in Full Screen view and on dual displays.

Using Aperture with two displays is ideal for creating a large workspace. You can easily compare and adjust images, play slideshows, and present the best of your photos at optimal size during client reviews.

Working with Heads-Up Displays

To work efficiently in Aperture, you can use floating windows of controls called *heads-up displays* (HUDs) to change images. For example, when you view images in Aperture in Full Screen view, you can open an Inspector HUD to adjust your images.



As you work on your images, you can position HUDs anywhere on the screen and use them to make changes. For example, Aperture provides a Keywords HUD that you can use to quickly assign keywords to your images. To assign a keyword, you simply drag it from the Keywords HUD to the image.



Working with Inspectors

Aperture also provides an Adjustments inspector for applying adjustments and a Metadata inspector that allows you to review metadata and assign it to your images. You can show or hide the Adjustments and Metadata inspectors by clicking the appropriate tab at the top of the Inspector pane. Showing the inspectors is as easy as pressing the I key.



For more information about making adjustments and retouching your images, see Chapter 15, "Making Image Adjustments," on page 365.

Rating Images with Aperture

You can rate images as you review them in the Viewer, in the Browser, or in Full Screen view. By selecting an image and pressing a number key from 0 to 5, you can quickly rate images as rejected or assign them from one to five stars (with five stars being the highest, or Select, rating). Image ratings appear as easy-to-read overlays on the image. Rating controls for assigning ratings also appear in the control bar and in the filmstrip in Full Screen view, if you prefer to use them.



Once images are rated, you can have Aperture display only images of a certain rating, so you can focus on a particular group of images. For more information about rating your images, see Chapter 9, "Rating Images," on page 233.

Finding and Displaying Images with the Query HUD

You can use the Query HUD to search for and display only certain photos in a project or album. Click the Query HUD button beside the search field in the Browser and the Query HUD appears. In the Query HUD, you can specify criteria for the photos you want to work with.



You can enter any search criteria you want to display specific images. You can also display images based on rating, date when shot, keywords, or import group. After you specify the search criteria, Aperture displays only those images that match the criteria and hides the rest. For more information about searching for images, see "Searching for and Displaying Images" on page 295.

Comparing Photos

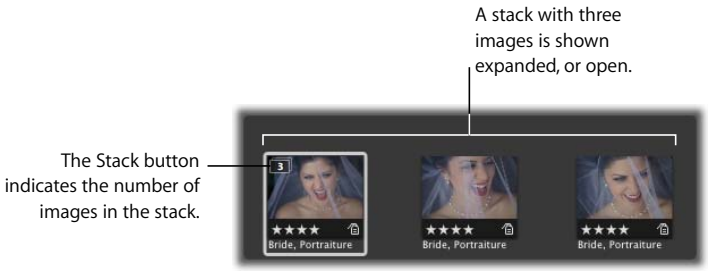
Aperture allows you to carefully compare images. You select an image and press Return to have Aperture display it for comparison against other images in a selection.



While comparing images, you can rate the selected images or make adjustments to them. For example, you might use the comparison method to make final selections of the best images in a series. Or, you might compare two versions of an image and make adjustments.

Stacking Images

Photographers frequently work with large selections of images. To help you work efficiently with a series of shots, such as bracketed shots or shots taken in quick succession, Aperture can automatically stack related shots. You can also select and manually stack related shots yourself and review them for a "pick", the image that you intend to use.



Once photos are in a stack, you can work with them as if they were a single image instead of many individual photos. A stack appears as a series of linked photos in the Browser. The pick of the stack appears on the left with a Stack button. You can drag an image in the stack into the pick position. By clicking the Stack button, you can close the stack so that only the pick image appears. You can then work with the single pick image without the encumbrance of the other stacked photos. You can expand a stack to see all its images whenever you want.



Working with stacks can greatly increase the efficiency of reviewing large collections of photos. For more information about working with stacks of images, see Chapter 8, "Stacking Images and Making Picks," on page 219.

Assigning Keywords to Images

Carefully assigning keywords to images is critical for the photographer who needs a means to easily locate specific images among thousands. Applying keywords is also required if you plan to sell images to image libraries, such as Corbis or Getty Images.

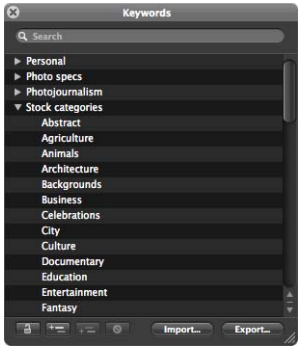
You can use Aperture to assign keywords to images using standard IPTC fields (the standard metadata fields defined by the International Press Telecommunications Council). You can also select images and assign keywords that you define.

You can display images in the Viewer with their version names and any assigned keywords appearing on or below the image.



Keywords and other metadata

The Keywords HUD lists all the keyword categories and keywords that you define. For example, if you shoot weddings, you might create a wedding category with specific keywords that include *Candid*, *Ceremony*, *Guests*, and so on.



You can apply a keyword directly to a selected image or group of images by dragging it from the Keywords HUD to the selection in the Viewer or Browser.

You can also show keyword controls in the control bar at the bottom of the Aperture main window by choosing Window > Show Keyword Controls.



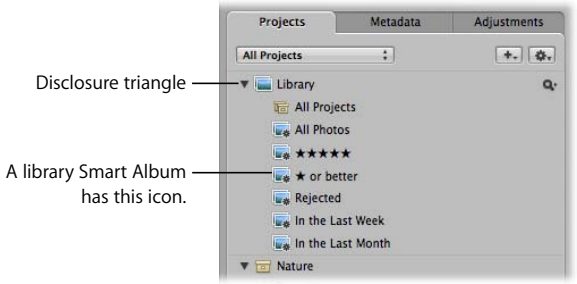
Using these simple controls, you can display different categories of keywords and easily apply those keywords with a quick click or keystroke.

Your Aperture keyword scheme can ensure comprehensive accessibility to your images and even help with the management of your copyrights, usage rights, and sales. For more information about assigning keywords, see Chapter 10, "Applying Keywords to Images," on page 243.

Grouping Images with Smart Albums

Photographers often need an easy way of regrouping and presenting images based on the needs of a client or project. For example, a corporate client might call to request images of a general location or subject, such as wildlife, to be included with future collateral. Aperture allows you to easily make selections from across the entire library of images and group them in Smart Albums, which are albums that can be dynamically generated based on search criteria you specify.

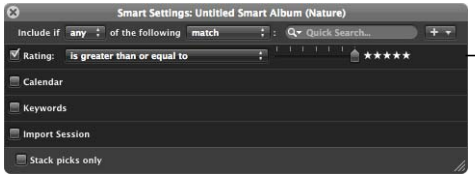
Aperture comes with a selection of predefined Smart Albums set up in the library for you. For example, there are Smart Albums that gather all your select images, all images taken in the last week, and all images taken in the last month. When you click the Library disclosure triangle, you see the list of Smart Albums created for you. Select a Smart Album to see its contents in the Browser.



Although a Smart Album appears similar to the other projects or albums in the Projects inspector, the contents of the album are specified by search criteria. You don't import masters or versions into a Smart Album. You use the Query HUD to specify the image keywords or other criteria that identify the images you want, and image versions automatically appear in the album. By adjusting the search criteria, you change the contents of the Smart Album.

For example, after creating an empty Smart Album in the Projects inspector, you might specify that you want any image that is rated five stars.

Aperture searches across the library and displays all the images rated five stars in the Smart Album. New images rated five stars are added to the Smart Album automatically.



In the Query HUD, specify the search criteria for images you want in the Smart Album.

You can work with the photos in the Smart Album just as you can with images in any other album.

You can make Smart Albums that gather images from across the entire library or from within a specific project only. When you no longer need a Smart Album, you can delete it, and the contents of the library remain the same (the Smart Album's images are not deleted from the library). For more information about using Smart Albums, see Chapter 13, "Grouping Images with Smart Albums," on page 317.

Image Processing

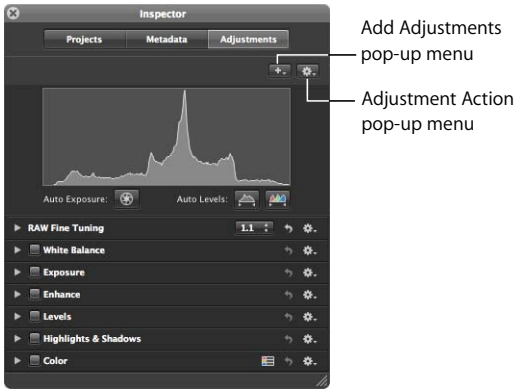
You can use Aperture to crop, rotate, horizontally align, and remove red-eye from images, as well as adjust color and exposure, reduce noise, and so on.

Aperture provides controls for performing many types of image adjustments, including:

- RAW image fine-tuning
- Exposure adjustments
- Levels adjustments
- Color adjustments
- White-balance adjustments
- Red-eye correction
- Straightening
- Cropping
- Highlights and shadows adjustments
- Retouching adjustments
- Vignetting adjustments
- Devignetting adjustments
- Monochrome color mixing
- Choosing monochrome colors
- Applying sepia tones
- Noise-reduction adjustments
- Image-sharpening adjustments

For especially efficient image adjusting, you can save adjustment settings as presets (collections of saved settings) and apply the same adjustments to many images at once.

You can adjust your images using the controls in the Adjustments pane of the Inspector HUD.



The controls in the Adjustments pane of the Inspector HUD are also available in the Adjustments inspector. You can also easily export your images to a third-party application such as Adobe Photoshop, make adjustments, and then bring the adjusted image back into Aperture by simply saving it. For detailed information about making adjustments to your images, see Chapter 15, "Making Image Adjustments," on page 365.

Distribution

When it's time to show your work to others, Aperture provides the following methods of distribution:

- Creating slideshow presentations
- Performing Light Table reviews
- Creating webpages and web journals
- Ordering printed books
- Printing and exporting images

Presenting Your Images in Slideshows

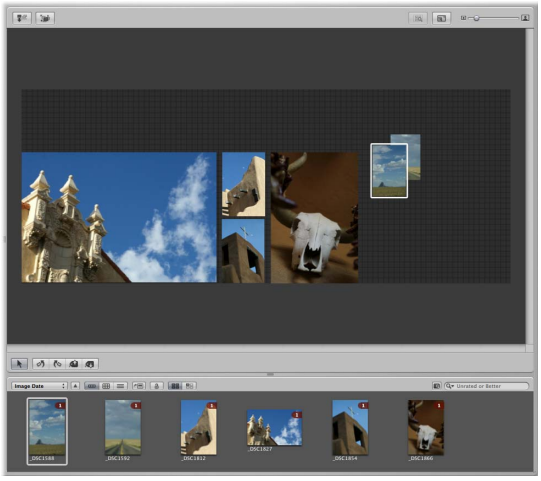
You can use Aperture to make slideshow presentations to clients or viewers. Using one or two large-screen displays, you can set Aperture to present slideshow images in a variety of ways. For example, you can present images as a sequence of single images or as multiple images in columns and rows on your screen. You can also customize your slideshow by setting the display interval, choosing accompanying music, using transitional fades, changing the background, and more. You can control the slideshow using the arrow keys on your keyboard or have images appear automatically.



To create a slideshow, you select the images you want to show and choose File > Slideshow. For more information about creating slideshows, see Chapter 18, "Creating Slideshow Presentations," on page 509.

Reviewing Images in the Aperture Light Table

You can use the Aperture Light Table to freely arrange and organize a group of images visually to see how various combinations of images work together. Or, you can arrange a combination of images and print them in specific geometric arrangements. When viewing a selection of images in the Light Table, you can freely drag the images into any position or arrangement you want and resize them to determine how they might look grouped on a page.



For more information about using the Light Table, see Chapter 19, "Using the Light Table," on page 523.

Publishing Your Images in Webpages and Web Journals

To provide clients or the public the convenience of an online review, you can use Aperture to create webpages and websites. With Aperture, you can easily post your webpages to your .Mac account, or you can post them to your own website server and then provide the Internet address to clients or other reviewers.

Aperture provides ready-made themes and webpage layouts that you can quickly choose for the design of your pages.



To create webpages that present a gallery of your images, you create a webpage album and use the Webpage Editor to design your pages. When you place images in the album, Aperture automatically populates your webpages with your images.



The new album you created appears in the Projects inspector.

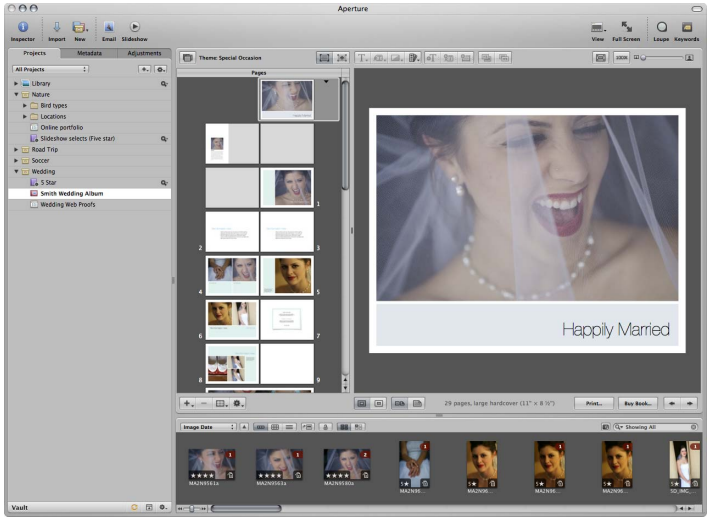
The Webpage Editor appears with the selected images.

You can also create a web journal, which allows you to mix text and images on the webpage. For example, you might create a web journal that chronicles your latest trip and include your photos. You create web journal pages by creating a web journal album and using the Webpage Editor to design your pages. For more information about creating web galleries and web journals, see Chapter 20, "Creating Webpages," on page 535.

Printing Your Images in Books

You can lay out images and combine them with text to create books. Aperture provides a Book Layout Editor that allows you to easily combine your images with text on the page. Aperture also provides master templates that you can use to compose pages. You can easily create professional-looking pages for art books, wedding albums, picture books, and more.

You create a book by creating a book album and using the Book Layout Editor to design the book's pages.



In the Book Layout Editor, you select a page's thumbnail image to see an enlarged view of the page's layout and contents. You can also change the page design, and the current page is automatically updated to the format you chose. To add an image, you drag it from the Browser into a photo box on the page. For more information about creating books, see Chapter 21, "Creating Books," on page 569.

Printing and Exporting Images

You can also easily print individual images in standard and custom print sizes and print collections of images on contact sheets. Aperture has many preset printing options to help facilitate printing. You can also customize print settings to get the optimum use of your printer and meet custom print requirements. For more information about print options, see Chapter 16, "Printing Your Images," on page 471.

When you need to deliver digital files to clients, prepare files for posting on websites, or transfer files to other computers or users, you can export images in a variety of formats. You can export your original masters as well as versions that you've created. Aperture provides many preset options for exporting files in a variety of file sizes and formats, and you can add custom touches such as watermarks or copyright information. When you export images, you can assign custom filenames and export all or a selection of the metadata associated with an image. For example, you can send an editor a digital file complete with the IPTC information you've added. Aperture also enables you to quickly email images. For more information about exporting images, see Chapter 17, "Exporting Your Images," on page 487.

Sharing Images with iLife and iWork Applications

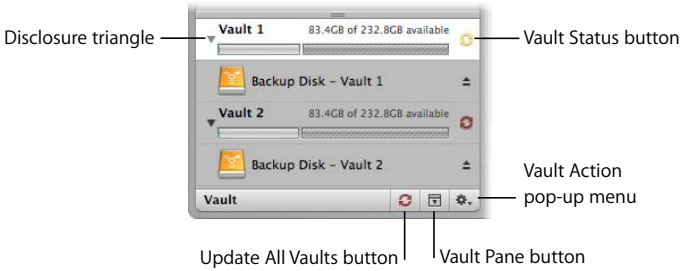
The Aperture library is accessible from within iLife and iWork applications so you can easily share and use your photos in iLife or iWork projects and documents. You can also import your entire iPhoto library into Aperture, or open the iPhoto Browser in Aperture and review and select iPhoto images that you want to import. You can import documents or files from iLife or iWork applications as long as the files are in formats compatible with Aperture.

Backing Up Your Work

After importing images from your camera and erasing memory cards in preparation for the next shoot, the only record of your images is stored on your hard disks. It's vital that you back up your files on storage media separate from your computer and its hard disks. Backing up your photos and storing the backups in a safe place can save your work from catastrophes such as fire, theft, storm-related disruptions, or equipment failure.

Aperture backs up your managed images (images that are stored in the Aperture library) and all information associated with the images, such as versions, metadata, and previews, on vaults located on hard disk drives. Aperture doesn't back up the masters of referenced images located outside the Aperture library. You must maintain your own backup system of referenced image masters. Aperture does back up the versions, previews, and metadata information associated with referenced images, but not the masters themselves.

You can view your vaults in the Vault pane. There are several controls that you'll use when you update vaults to back up your images.



You can create multiple vaults to provide duplicate backups. Each vault holds a backup copy of the entire Aperture library.

After you import new images into Aperture, you should immediately make a backup of the newly imported files. Once the images are backed up, you can depend on the reliable Aperture backup functions to track all the versions of your photos and the work you have done with them.

For an explanation of the Aperture backup and archiving features, see Chapter 22, "Backing Up Your Images," on page 613.

The Aperture Interface

2

The Aperture interface is modeled around acquiring, editing, processing, and distributing photos.

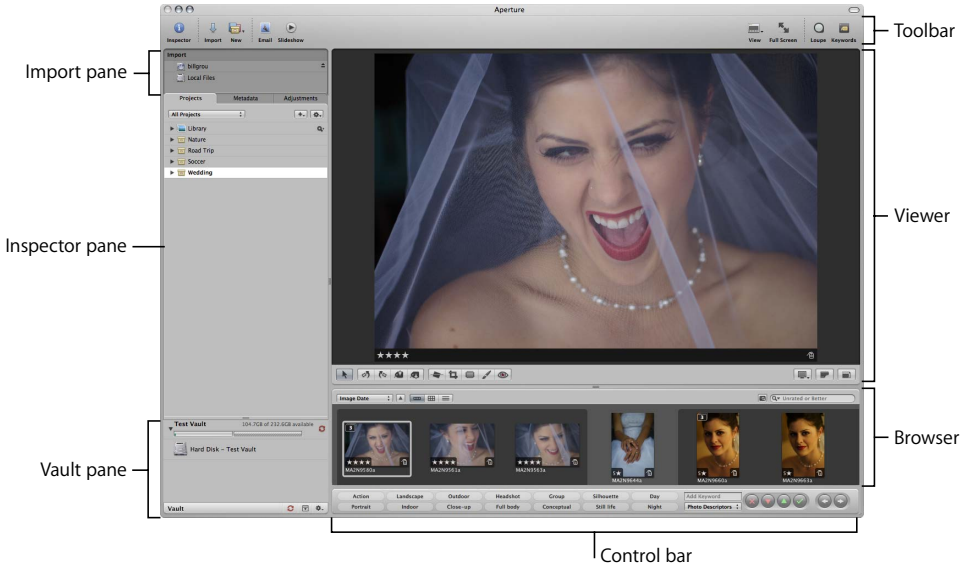
This chapter describes the names and functions of the Aperture interface elements. Use this chapter to orient yourself while learning Aperture. To find detailed information about the concepts described in this chapter, read the chapter about the topic. You can also search for terms associated with Aperture in the index and glossary.

This chapter covers:

- The Aperture Main Window (p. 44)
- Browser (p. 45)
- Viewer (p. 48)
- Full Screen View (p. 50)
- Inspector Pane (p. 57)
- Toolbar (p. 61)
- Control Bar (p. 62)
- Import Pane (p. 63)
- Vault Pane (p. 64)
- Book Layout Editor (p. 65)
- Webpage Editor (p. 68)
- Light Table (p. 72)
- Heads-Up Displays (p. 73)
- Changing Views (p. 76)
- Customizing the Toolbar (p. 77)
- Customizing Keyboard Shortcuts (p. 79)
- Setting Aperture Preferences (p. 85)

The Aperture Main Window

The Aperture main window contains the following areas:



Note: The Inspector pane is shown by default. You can show or hide the Inspector pane by pressing I.

Arranging the Interface

Aperture provides four basic views of your images: Browser Only, Browser & Viewer, Viewer Only, and Full Screen. The areas in the Aperture interface are resizable, and you can customize any of these views to suit your workflow.

To see the main window view shown above, choose View > Browser & Viewer. Then choose View > Browser > Grid. To display the control bar, choose Window > Show Control Bar.

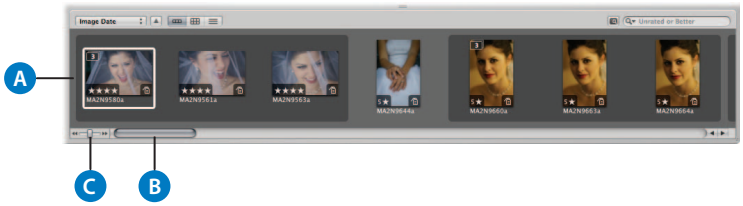
For more information about views, see "Changing Views" on page 76.

Browser

The Browser displays a project's or album's thumbnail images. When you select a project or album in the Projects inspector, images appear in the Browser. You can display images in the Browser in three ways: in filmstrip view, in grid view, and in list view. You can also open multiple projects at a time in the Browser.

Browser in Filmstrip View

When the Browser is in filmstrip view, images in a selected project appear as a row of thumbnails. You can scroll the images left and right and quickly select and work with them one after the other. You can resize the thumbnails in the filmstrip by dragging the top of the filmstrip to enlarge its area.



A	**Browser filmstrip**	The Browser displays the contents of any project or album selected in the Projects inspector. By default, the Browser displays images in a project or album as a row of image thumbnails.
B	**Scroll bar**	Use the scroll bar to scroll through your image thumbnails.
C	**Shuttle control**	Use the Shuttle control to move quickly through your image thumbnails. You can also press the J and L keys to scroll backward or forward, and press K to stop. Press the J or L keys again to increase the shuttling speed.

To learn more about using the Browser and Viewer, see Chapter 5, "Working with Images in the Browser," on page 149 and Chapter 6, "Displaying Images in the Viewer," on page 179.

Browser in Grid View

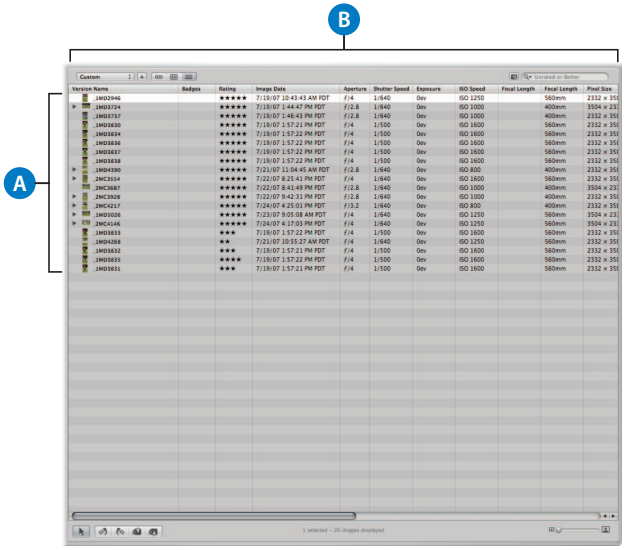
When the Browser is in grid view, images in a selected project appear as thumbnails within the Browser arranged in columns and rows. You can adjust the size of the thumbnails to easily review and work with your images.



A	**Browser**	The Browser displays the contents of any project or album selected in the Projects inspector. By default, the Browser displays images in a project or album as a grid of image thumbnails. You can also view your images in list view.
B	**Sorting pop-up menu**	Sort your images by a variety of sort properties in this pop-up menu, or define your own custom sort criteria.
C	**Sort Direction button**	Use this button in conjunction with the Sorting pop-up menu to arrange the order of your images.
D	**Grid View/List View/ Filmstrip View buttons**	Display the Browser contents in grid view (a grid of image thumbnails), in list view (a list of sortable file data), or in filmstrip view (a scrollable row of thumbnails).
E	**Query HUD button and search field**	Search for images by entering a term in the search field or choosing an option from the search field pop-up menu (with a magnifying glass icon). To perform a more complex search for images using the Query HUD, click the Query HUD button (to the left of the search field).
F	**Shuttle control**	Use the Shuttle control to quickly move through your image thumbnails.
G	**Scroll bar**	Use the scroll bar to scroll through your image thumbnails.
H	**Thumbnail Resize slider**	Use the Thumbnail Resize slider to quickly change the size of your image thumbnails.

Browser in List View

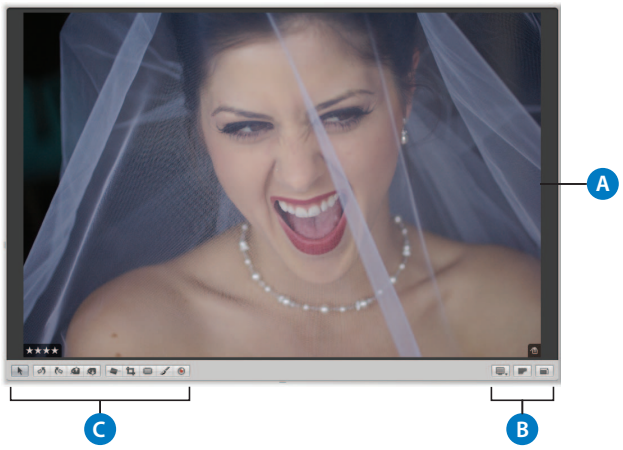
When the Browser is in list view, images in a selected project appear as rows of information. Metadata about each image appears in columns, and by clicking a column heading you can sort the images by that column category.



A	**List of images**	The Browser displays the contents of any selected project or album as a list.
B	**Column headings**	Columns display image information and metadata. You can click a column heading to sort the list by that category of information. You can also drag to reorder or resize the columns.

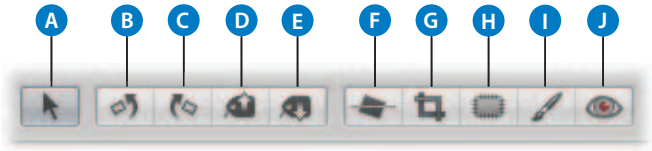
Viewer

When you select one or several image thumbnails in the Browser, those images are displayed in the Viewer. You can use the Viewer to examine an image at its full size or compare multiple images side by side.



A	**Viewer**	The Viewer displays the images you've selected in the Browser. You can apply adjustments, keywords, and metadata to an image in the Viewer.
B	**Display controls**	You use these controls to change the number of images displayed in the Viewer, display the masters that versions are based on, and display images at full resolution.
C	**Tool strip**	Use these tools to select and adjust images.

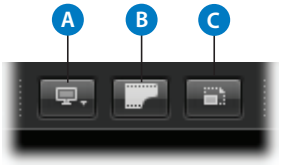
Tool Strip



A	**Selection tool**	Select projects, albums, and images with this tool.
B	**Rotate Left tool**	Rotate an image to the left with this tool. You can use this tool to rotate an image displayed in the Viewer or Browser.
C	**Rotate Right tool**	Rotate an image to the right with this tool. You can use this tool to rotate an image displayed in the Viewer or Browser.
D	**Lift tool**	Copy a set of metadata and adjustments, including cropping and straightening of images, from a selected image with this tool.
E	**Stamp tool**	Stamp, or apply, a copied set of adjustments or metadata to one or several images with this tool.
F	**Straighten tool**	Use the guides to help manually straighten (or level) the selected image.
G	**Crop tool**	Trim the selected image with this tool.
H	**Spot & Patch tool**	Remove imperfections in the image, such as sensor dust, with this tool. The tool either copies the pixels around the blemish ("spotting") or copies pixels from another area of the image ("patching").
I	**Retouch tool**	Retouch all types of imperfections in an image, such as skin blemishes, using either the Repair or Clone brush.
J	**Red Eye tool**	Reduce red-eye, occurring when the subject's retinas reflect light from your camera's flash, with this tool.

For more information about working with the adjustment tools, see Chapter 14, "An Overview of Image Adjustments," on page 327 and Chapter 15, "Making Image Adjustments," on page 365

Display Controls



A	**Viewer Mode pop-up menu**	Choose how to view your images and arrange your displays from this pop-up menu. For more information, see Chapter 6, "Displaying Images in the Viewer," on page 179.
B	**Show Master Image button**	Click this button to view the master image without any applied adjustments. Click again to switch the view back to the current version.
C	**Zoom Viewer button**	Click this button to move between viewing an image at actual size and fitting the image to the Viewer's screen size.

Full Screen View

Full Screen view projects your images onto a black background for detailed viewing. Using a dual-display system in Full Screen view gives you an enlarged space to compare and adjust images.

To enter Full Screen view:

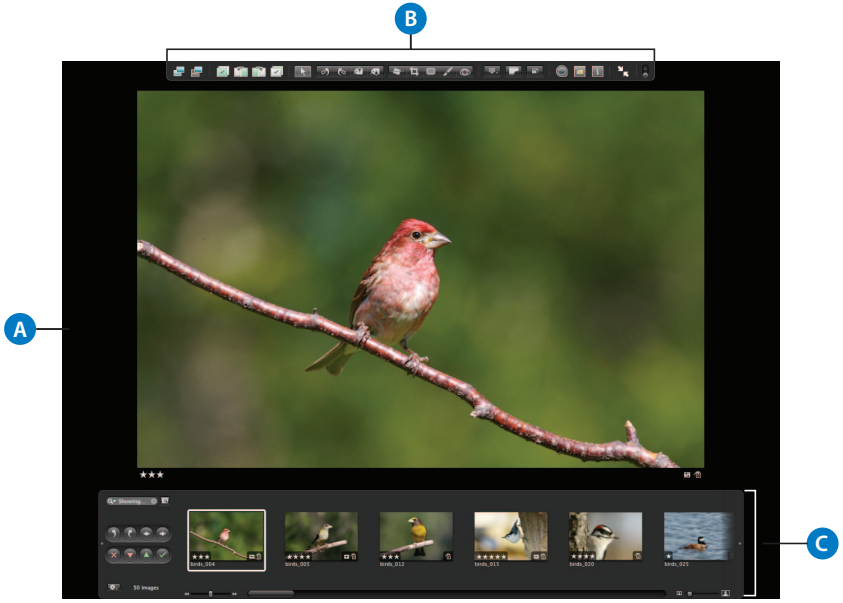
- Click the Full Screen button in the toolbar (or press F).



The Aperture main window disappears and your images appear in Full Screen view.

To exit Full Screen view, do one of the following:

- Click the Exit Full Screen button in the toolbar (or press F).
- Press Escape.

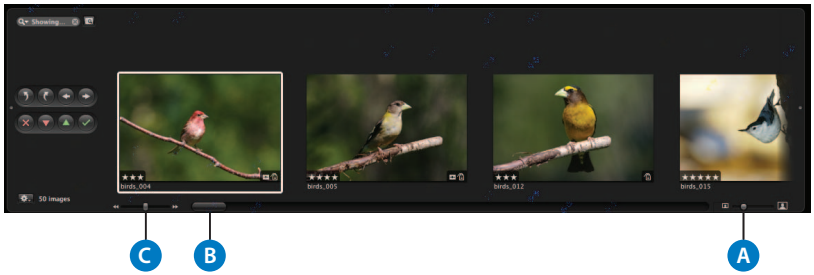


A	**Full Screen view**	Use Full Screen view to view, compare, and stack your images. You can also apply adjustments and keywords. When you've finished working with your images, you can use this view to preview and proof your images.
B	**Toolbar**	Use the toolbar buttons and tools to change your images. The toolbar includes buttons for creating versions and working with stacks, as well as a full set of image adjustment tools.
C	**Filmstrip**	Use the filmstrip to move through, organize, and rate your images.

Controls in the Filmstrip

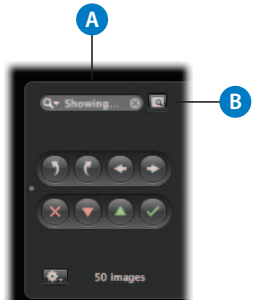
The filmstrip provides controls for resizing thumbnails, scrolling images, and shuttling images. You can also use the filmstrip to search for images, rotate images, and rate images.

Navigation Controls



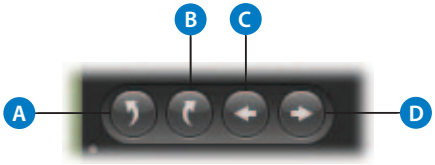
A	**Thumbnail Resize slider**	Drag the slider to change the size of the image thumbnails shown in the filmstrip.
B	**Scroll bar**	Use this to scroll through your images.
C	**Shuttle control**	Click either side of this slider to rapidly shuttle through your filmstrip images. The closer to the double arrows you click, the more rapidly the filmstrip moves through its images. You can also use the J, K, and L keys to shuttle through your images.

Search Controls



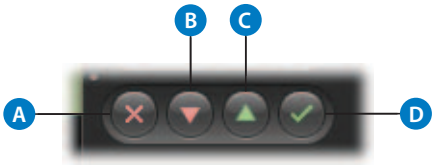
A	**Search field**	Enter text; images that match appear in the full-screen view.
B	**Query HUD button**	Click this button to open the Query HUD to search for images.

Rotate and Navigation Buttons



A	**Rotate Left**	Click this button to rotate the selected image to the left.
B	**Rotate Right**	Click this button to rotate the selected image to the right.
C	**Previous Image**	Click this button to go to the previous image.
D	**Next Image**	Click this button to go to the next image.

Rating Buttons



A	**Reject**	Click this button to give the selected image a Reject rating.
B	**Decrease Rating**	Click this button to decrease the rating of the selected image.
C	**Increase Rating**	Click this button to increase the rating of the selected image.
D	**Select**	Click this button to give the selected image a Select rating (five stars).

Controls in the Toolbar

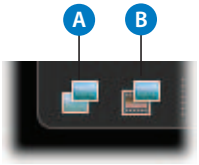


To view the Full Screen view toolbar:

- In Full Screen view, move the pointer to the top of your primary screen.

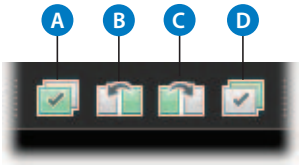
You can also have the toolbar always appear on the screen by clicking the Always Show Toolbar button.

Version Buttons



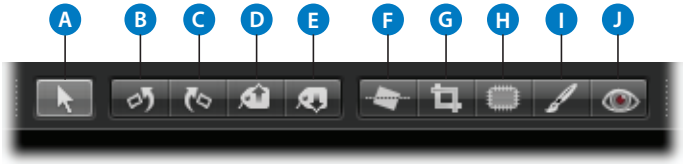
A	**Duplicate Version**	Click this button to create a new version of the selected image.
B	**New Version From Master**	Click this button to create a version from the original master image. A duplicate of the master image is created.

Stacking Buttons



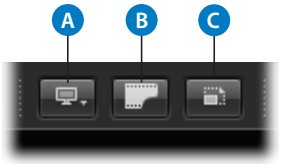
A	**Stack Pick**	Select a stack item, then click this button to mark the image as its stack's pick.
B	**Promote**	Select a stack item, then click this button to move the selected stack item closer to the stack's pick.
C	**Demote**	Select a stack item, then click this button to move the selected stack item farther from the stack's pick.
D	**Album Pick**	Select an image version to represent a stack, then click this button to select the image as the pick within that particular album (the stack can have a different pick image in another album).

Adjustment Tools



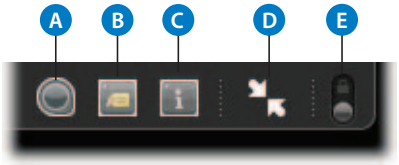
A	**Selection tool**	Select projects, albums, and images with this tool.
B	**Rotate Left tool**	Rotate an image to the left with this tool. You can use this tool to rotate an image displayed in the Viewer or Browser.
C	**Rotate Right tool**	Rotate an image to the right with this tool. You can use this tool to rotate an image displayed in the Viewer or Browser.
D	**Lift tool**	Copy a set of metadata and adjustments, including cropping and straightening of images, from a selected image with this tool.
E	**Stamp tool**	Stamp, or apply, a copied set of adjustments or metadata to one or several images with this tool.
F	**Straighten tool**	Use the guides to help manually straighten (or level) the selected image.
G	**Crop tool**	Trim the selected image with this tool.
H	**Spot & Patch tool**	Remove imperfections in the image, such as sensor dust, with this tool. The tool either copies the pixels around the blemish ("spotting") or copies pixels from another area of the image ("patching").
I	**Retouch tool**	Retouch all types of imperfections in an image, such as skin blemishes, using either the Repair or Clone brush.
J	**Red Eye tool**	Reduce red-eye, occurring when the subject's retinas reflect light from your camera's flash, with this tool.

Display Controls



A	**Viewer Mode pop-up menu**	Choose how to view your images and arrange your displays from this pop-up menu. For more information, see Chapter 6, "Displaying Images in the Viewer," on page 179.
B	**Show Master Image button**	Click this button to view the master image without any applied adjustments. Click again to switch the view back to the current version.
C	**Zoom Viewer button**	Click this button to move between viewing an image at actual size and fitting the image to the Viewer's screen size.

Other Buttons



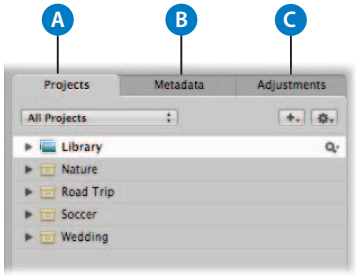
A	**Loupe**	Click this button to open the Loupe, which you can use to minutely examine parts of an image.
B	**Keywords HUD**	Click this button to show or hide the Keywords HUD.
C	**Inspector HUD**	Click this button to show or hide the Inspector HUD.
D	**Exit Full Screen**	Click this button to exit Full Screen view.
E	**Always Show Toolbar button**	Click this button to turn the automatic display of the toolbar on or off.

Inspector Pane

The Inspector pane provides easy access to your projects, to image metadata, and to controls for adjusting images. The Inspector pane includes three inspectors: the Projects inspector, the Metadata inspector, and the Adjustments inspector. Click the tabs at the top of the Inspector pane to select the inspector you want.

To show the Inspector pane, do one of the following:

- Choose Window > Show Inspector (or press I).
- Click the Inspector button in the toolbar.



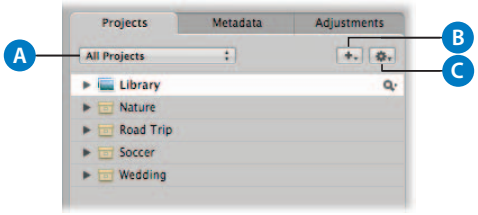
A	**Projects tab**	Click to open the Projects inspector.
B	**Metadata tab**	Click to open the Metadata inspector.
C	**Adjustments tab**	Click to open the Adjustments inspector.

Projects Inspector

The Projects inspector holds containers—projects, folders, and albums—with which you can organize your images. You can create Smart Albums that automatically find and store images based on search criteria you specify. You can also create webpages (photo galleries and online journals), Light Table arrangements, and books.

To display the Projects inspector, do one of the following:

- Click the Projects tab in the Inspector pane (or press Control-P).
- Press W repeatedly to cycle through the inspectors until you select the one you want.



A	**Projects pop-up menu**	Choose to show all projects, your favorite projects, or just recently selected projects by choosing an option from the pop-up menu.
B	**Add to Library pop-up menu**	Create new projects and albums, including webpage, web journal, Light Table, and book albums, using this pop-up menu. You can automatically fill your albums with selected images or create empty albums. You can also create Smart Albums, which you fill by specifying search criteria such as filenames or dates.
C	**Project Action pop-up menu**	Add and remove favorite items or export projects using this pop-up menu.

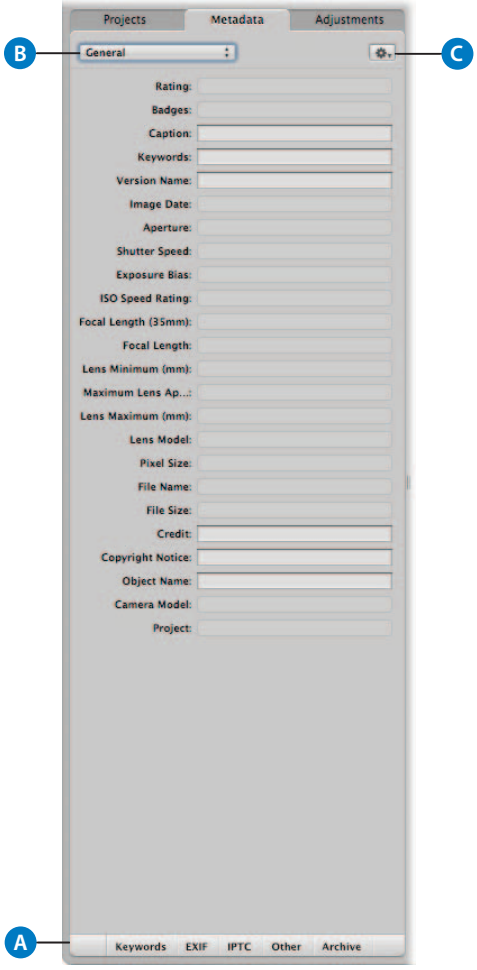
To learn more about using the Projects inspector, see Chapter 3, "Working with Aperture Projects," on page 93.

Metadata Inspector

The Metadata inspector displays an image's caption text, keywords, version number, filename, and file size. You can also view Exchangeable Image File (EXIF) and International Press Telecommunications Council (IPTC) data associated with your image. EXIF metadata is embedded with an image file by the digital camera and includes camera settings such as shutter speed, date and time, focal length, exposure, metering pattern, and flash information. IPTC information can be embedded in a digital image with most software programs used to edit photos and can include a caption, the place and date a photo was taken, and copyright information.

To display the Metadata inspector, do one of the following:

- Click the Metadata tab in the Inspector pane (or press Control-D).
- Press W repeatedly to cycle through the inspectors until you select the one you want.



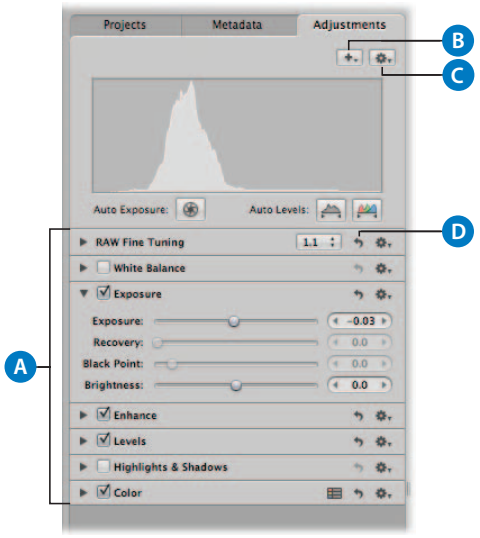
A	**Metadata display buttons**	Click a button to select the type of metadata to display.
B	**Metadata View pop-up menu**	Choose the metadata view being displayed from this pop-up menu.
C	**Metadata Action pop-up menu**	Choose options for editing and arranging your metadata views and for creating metadata presets from this pop-up menu.

Adjustments Inspector

You can use controls in the Adjustments inspector to apply, edit, and remove image adjustments. Controls in the Adjustments inspector are grouped according to the type of image adjustment they perform. You can see the controls for an adjustment by clicking its disclosure triangle.

To show the Adjustments inspector, do one of the following:

- Click the Adjustments tab in the Inspector pane (or press Control-A).
- Press W repeatedly to cycle through the inspectors until you select the one you want.



A	**Adjustments**	Click the disclosure triangle for an adjustment to view its controls. Select the checkbox for an adjustment to apply changes using the adjustment controls.
B	**Add Adjustments pop-up menu**	Choose the types of adjustments you want to apply to an image from this pop-up menu. When you choose an adjustment, its controls appear in the Adjustments inspector.
C	**Adjustment Action pop-up menu**	Choose a histogram view and remove selected or all adjustments made.
D	**Reset button**	Click the Reset button for an adjustment to reset the controls to their default settings.

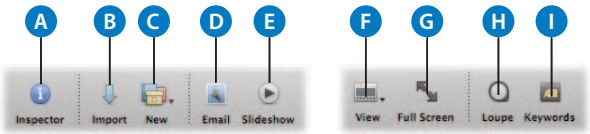
To remove an adjustment from an image, deselect the checkbox for the adjustment. For more information about using adjustment controls, see Chapter 14, "An Overview of Image Adjustments," on page 327 and Chapter 15, "Making Image Adjustments," on page 365.

Although you can apply initial adjustments with the Adjustments inspector, it's often more convenient to use the Adjustments pane of the Inspector HUD in Full Screen view. For more information, see Chapter 7, "Viewing Images in Full Screen View," on page 207.

Toolbar

The toolbar is a collection of buttons and tools located at the top of the Aperture main window. The toolbar is shown by default, but you can hide it by choosing View > Hide Toolbar.

You can customize the toolbar, adding buttons or tools for the functions you use most, or removing less frequently used toolbar items. For more information, see "Customizing the Toolbar" on page 77.



Note: Because you can customize the toolbar, adding and deleting the buttons you want, your toolbar may appear different from the one pictured in this manual.

A	**Inspector button**	Click this button to show or hide the Inspector pane.
B	**Import button**	Click this button to show the Import pane and open the Import dialog. When you select either a camera, a memory card, or a mounted drive, the Import dialog appears. For more information, see "Import Pane" on page 63.
C	**New pop-up menu**	Choose the item you want to create in the Projects inspector from this pop-up menu.
D	**Email button**	Click this button to open your email program and attach selected images.
E	**Slideshow button**	Select images that you want to display in a slideshow, then click this button to initiate the slideshow.
F	**View pop-up menu**	Choose the workspace view you want to use to arrange the main window components from this menu.
G	**Full Screen button**	Click this button to switch to Full Screen view, in which images are displayed on the screen without the Inspector pane, Browser, or Viewer.
H	**Loupe button**	Click this button to open the Loupe, which zooms in on your image by magnifying the area of the image it is placed over. You can adjust the diameter of the Loupe by choosing View > Increase Diameter or View > Decrease Diameter.
I	**Keywords HUD button**	Click this button to show or hide the Keywords HUD.

Control Bar

You can display a control bar at the bottom of the main window that provides convenient access to controls and buttons for rating and navigating through images, as well as applying keywords to them.

To display the control bar:

- Choose Window > Control Bar (or press D).



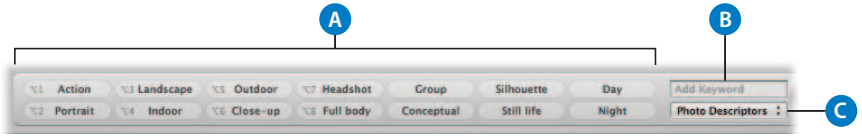
A	**Keyword controls**	Use these buttons and options to apply and work with keywords.
B	**Rating buttons**	Click these buttons to apply ratings to the selected image.
C	**Navigation buttons**	Click these buttons to navigate to the next or previous image.

Keyword Controls

You can display keyword controls in the control bar and use the buttons and pop-up menus to apply keywords to images.

To display keyword controls in the control bar:

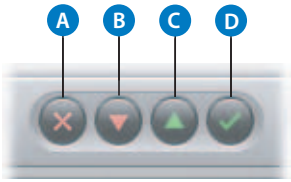
- Choose Window > Show Keyword Controls (or press Shift-D).



A	**Individual keyword buttons**	Click any of these buttons to apply a preset keyword to a selected image or group of images. Hold down Shift and click the button to remove the keyword.
B	**Add Keyword field**	Enter a new keyword, then press Return. Aperture creates a new keyword and applies it to the selected image.
C	**Keyword Preset Group pop-up menu**	Choose a keyword preset group to display on the keyword buttons, or edit the buttons in an existing keyword preset group.

To learn more about applying keywords, see Chapter 10, "Applying Keywords to Images," on page 243.

Rating Buttons



A	**Reject**	Click this button to give the selected image a Reject rating.
B	**Decrease Rating**	Click this button to decrease the rating of the selected image.
C	**Increase Rating**	Click this button to increase the rating of the selected image.
D	**Select**	Click this button to give the selected image a Select rating (five stars).

To learn more about rating your images, see Chapter 9, "Rating Images," on page 233.

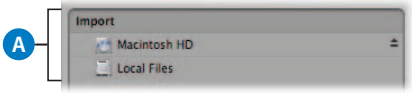
Navigation Buttons



A	**Previous Image**	Click this button to go to the previous image.
B	**Next Image**	Click this button to go to the next image.

Import Pane

The Import pane displays a list of connected cameras, card readers, and external hard disk drives, as well as local hard disks and mounted servers. To import images into Aperture, you select a device in the pane or connect a camera or card reader, and the Import dialog appears.



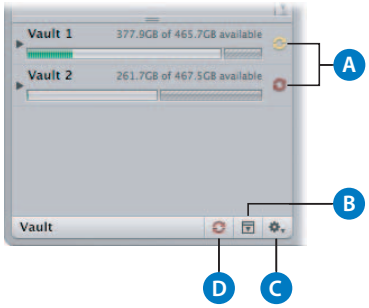
A	**Import pane**	This list displays all locations from which you can currently import images, including internal disks and connected drives. Select a camera or disk icon to open the Import dialog and select images to import.

For more information, see Chapter 4, "Importing Images," on page 109.

Vault Pane

The Vault pane lists your backup vaults and their locations. Vaults are usually located on external FireWire drives.

As you add images to the library, Aperture automatically tracks which managed images have been backed up to your vault. When your vault is up to date, the Vault Status button appears black. When a change to at least one version occurs, such as an adjustment, the Vault Status button appears yellow. When Aperture determines that even a single master has not been backed up, the Vault Status button appears red. You can have Aperture update your vaults whenever you want.

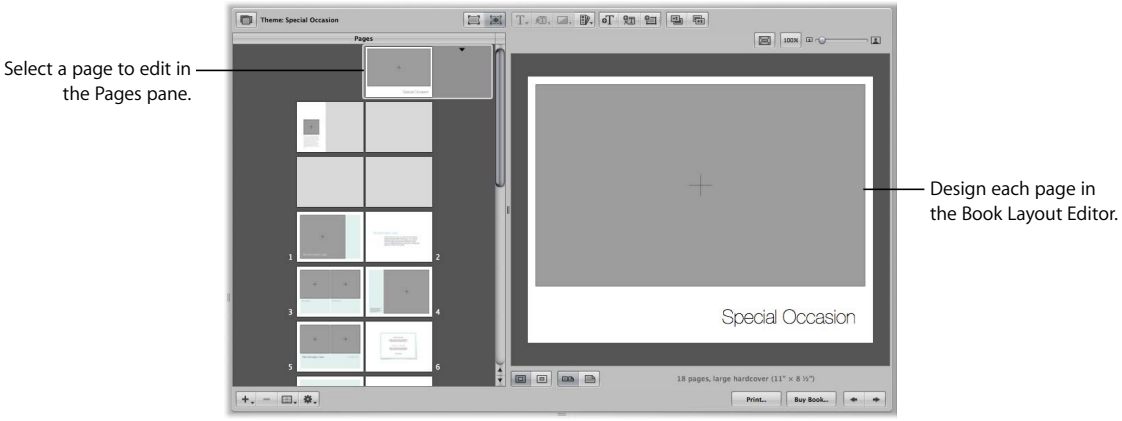


A	**Vault Status buttons**	Click the Vault Status button next to a vault to update the vault. The Vault Status button changes color to indicate the current update status of the vault. Black means the vault is up to date. Yellow means that changes have been made to images that have not been backed up. Red means that images have been added to the library that have not been backed up.
B	**Vault Pane button**	Click this button to show or hide the Vault pane.
C	**Vault Action pop-up menu**	Add, remove, and update vaults using this pop-up menu.
D	**Update All Vaults button**	Click this button to update all your existing vaults.

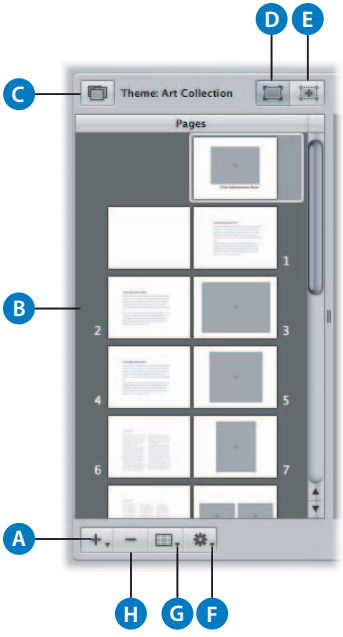
For more information, see Chapter 22, "Backing Up Your Images," on page 613.

Book Layout Editor

When you create a new book album, the Book Layout Editor appears. In it, you can create a variety of printed books to showcase your images.



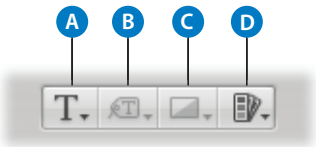
Pages Pane



A	**Add Pages pop-up menu**	Choose to add one or several pages to your book using this pop-up menu.
B	**Pages pane**	Select an individual book page in the Pages pane to view, or rearrange your book pages.

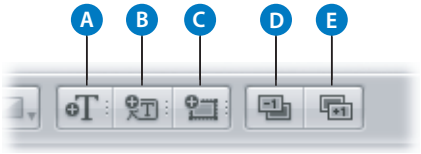
C	**Theme button**	Click this button to choose a theme and layout for your book's pages.
D	**Edit Content button**	Click this button to change images or edit text on your pages.
E	**Edit Layout button**	Click this button to change the page layout, moving and resizing text, metadata, and photo boxes on pages.
F	**Book Action pop-up menu**	Choose options to reflow the images in a book, add an index and page numbers, or add and change the look of text, metadata, and photo boxes from this pop-up menu.
G	**Set Master Page pop-up menu**	Choose the master page you want to apply to a selected page from this pop-up menu.
H	**Delete Pages button**	Click this button to delete one or several selected pages from your book.

Book Layout Controls



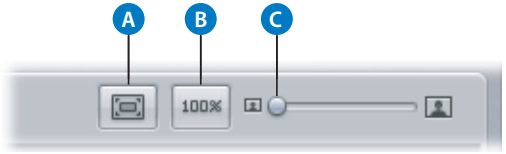
A	**Text Style pop-up menu**	Choose the style of text you want for a selected text box using this pop-up menu.
B	**Metadata Format pop-up menu**	Choose the type of metadata you want to display with your images from this pop-up menu.
C	**Photo Filter pop-up menu**	Choose a filter to change the look of images. For example, you might apply filters that change an image to black and white or sepia.
D	**Set Background Page pop-up menu**	Choose to remove the background image from this pop-up menu.

Text, Metadata, and Photo Box Buttons



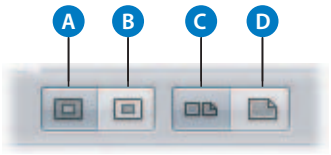
A	**Add Text Box**	Click this button to add a text box to the page.
B	**Add Metadata Box**	Click this button to add a metadata box to the page.
C	**Add Photo Box**	Click this button to add a photo box to the page.
D	**Send Backward**	Click this button to move a selected box backward in the stacking order of overlapping text or image boxes.
E	**Bring Forward**	Click this button to move a selected box forward in the stacking order of overlapping text or image boxes.

Page Display Controls



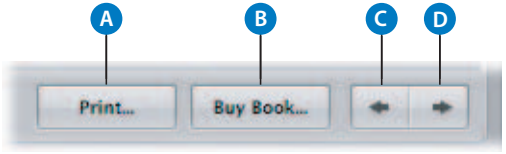
A	**Scale To Fit button**	Click this button to scale the display of your pages to fit the Book Layout Editor screen size.
B	**Actual Size button**	Click this button to view the selected page at its actual size.
C	**Display Size slider**	Drag this slider to increase or decrease the size of the page.

Cover and Page Display Buttons



A	**Large Hardcover**	Click this button to choose a large hardcover book format.
B	**Large Softcover**	Click this button to choose a large softcover book format.
C	**Show Full Spreads**	Click this button to display two facing pages.
D	**Show Single Pages**	Click this button to display single pages.

Printing and Page Navigation Buttons



A	**Print**	Click this button to print your book's pages.
B	**Buy Book**	Click this button to purchase a printed copy of your book from Apple's print vendor.
C	**Previous Page**	Click this button to go to the previous page of your book.
D	**Next Page**	Click this button to go to the next page of your book.

To learn more about creating books, see Chapter 21, "Creating Books," on page 569.

Webpage Editor

You can use the Webpage Editor to create professional-quality, gallery-style pages and web journal pages for displaying your images. After designing your pages, you can post them to your .Mac account or web server. The controls in the Webpage Editor differ slightly depending on whether you have selected a webpage album or a web journal album.

Webpage Controls

To work with a webpage in the Webpage Editor, select a webpage album in the Projects inspector and select a page to view from the thumbnail pages on the left side. When the selected page appears, you can add and arrange images and text.



A	**Detail Images pane**	Click the thumbnail image in this pane to see the enlarged version of the selected image.
B	**Pages pane**	Click a page's thumbnail to see the enlarged version.
C	**Site Theme button**	Click this button to choose a theme, or layout, for your webpages.
D	**Metadata View pop-up menu**	Choose a metadata view to use with the webpage images from this pop-up menu.
E	**Columns value slider**	Specify the number of columns you want on a page.
F	**Rows value slider**	Specify the number of rows you want on a page.
G	**"Fit images within" pop-up menu**	Choose how to display images on the webpage.
H	**Width value slider**	Specify the width of the images displayed on the page.
I	**Height value slider**	Specify the height of the images displayed on the page.
J	**Next Page button**	Click this button to go to the next webpage.
K	**Previous Page button**	Click this button to go to the previous webpage.
L	**Publish to .Mac button**	Click this button to publish your finalized webpages to your .Mac account. For more information, see "Exporting to .Mac" on page 552.
M	**Export Web Pages button**	Click this button to export your webpages. For more information, see "Exporting Webpages as HTML Files" on page 554.

Web Journal Controls

You can also create journal-style webpages, mixing paragraphs of text and images, to display on the web. When working with a web journal, you can manually arrange images and text on the page.



To work with a web journal in the Webpage Editor, select a web journal album in the Projects inspector, and select a page to view from the thumbnail pages on the left side. When the selected page appears, you can add and arrange images and text.

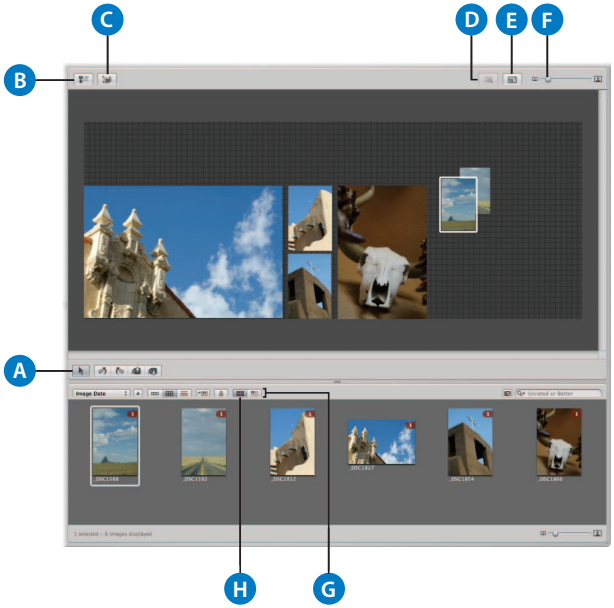
A	**Detail Images pane**	Click the thumbnail image in this pane to see the enlarged version of a selected image.
B	**Pages pane**	Select a page's thumbnail in this pane to see the enlarged version.
C	**Site Theme button**	Click this button to choose a theme, or layout, for your webpage.
D	**Metadata View pop-up menu**	Choose a metadata view to use with the webpage images from this pop-up menu.
E	**Add Text Box button**	Click this button to add a text box to the current webpage.
F	**Columns value slider**	Specify the number of columns you want on a page.
G	**"Fit images within" pop-up menu**	Choose how images appear on the webpage from this pop-up menu.
H	**Width value slider**	Specify the width of the images displayed on the page.
I	**Height value slider**	Specify the height of the images displayed on the page.
J	**Next Page button**	Click this button to go to the next webpage.
K	**Previous Page button**	Click this button to go to the previous webpage.

L	**Publish to .Mac button**	Click this button to publish your finalized webpages to your .Mac account. For more information, see "Exporting to .Mac" on page 552.
M	**Export Web Pages button**	Click this button to export your webpages. For more information, see "Exporting Webpages as HTML Files" on page 554.
N	**Page Action pop-up menu**	Rearrange the order of images and choose the conditions for automatically adding pages to your web journal from this pop-up menu.
O	**Page Template pop-up menu**	Choose a page template, or layout, from this pop-up menu.
P	**Remove Page and Add Page buttons**	Click the Remove Page button to remove a selected page from your web journal. Click the Add Page button to add a page to your web journal.

To learn more about creating webpages, see Chapter 20, "Creating Webpages," on page 535.

Light Table

The Light Table provides an open workspace where you can freely arrange images. You can use the Light Table to review and compare images, create mockups of webpages, compare color values in a selection of images before applying color corrections, or do anything else that involves viewing and comparing your images.



A	**Tool strip**	Use these tools for selecting and rotating images and for lifting and stamping adjustments and metadata.
B	**Put Back button**	Click this button to remove a selected image from the Light Table.
C	**Uncover button**	Click this button to reveal images that are covered by other images in the Light Table.
D	**Navigator button**	When the Light Table is larger than your screen, click this button to reposition your view on another area of the Light Table.
E	**Scale to Fit All Items button**	Click this button to fit the entire Light Table on your screen.
F	**Light Table Zoom slider**	Drag the Light Table Zoom slider to change the Light Table's size.
G	**Show Unplaced Images button**	Click this button to see only images in the Browser that are not yet placed in the Light Table.
H	**Show All Images button**	Click this button to see the entire contents of the Light Table album in the Browser.

To learn more about the Light Table, see Chapter 19, "Using the Light Table," on page 523.

Heads-Up Displays

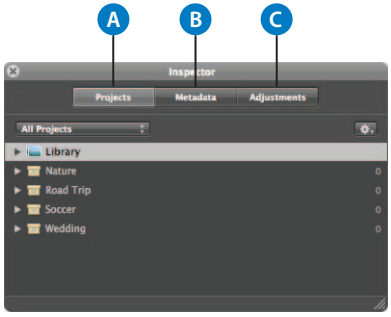
Heads-up displays, or HUDs, are collections of related tools and controls contained in a floating window. You can move a HUD as far as your display screen extends. You can use HUDs in all the main window views, including Full Screen view.

Inspector HUD

The Inspector HUD provides access to three inspector panes: the Projects pane, the Metadata pane, and the Adjustments pane. The controls in the Inspector HUD are the same as those in the inspectors in the Inspector pane. You can use the HUD in the Viewer or in Full Screen view. To open a pane, click the corresponding button at the top of the Inspector HUD. For more information about the controls in the specific inspectors, see "Inspector Pane" on page 57.

To show the Inspector HUD:

- Choose Window > Show Inspector HUD (or press H).



A	**Projects button**	Click this button to open the Projects pane.
B	**Metadata button**	Click this button to open the Metadata pane.
C	**Adjustments button**	Click this button to open the Adjustments pane.

For more information about working with projects in the Projects inspector or the Projects pane of the Inspector HUD, see Chapter 3, "Working with Aperture Projects," on page 93. For more information about working with metadata in the Metadata inspector or the Metadata pane of the Inspector HUD, see Chapter 11, "Working with Metadata," on page 269. For more information about working with adjustments in the Adjustments inspector or the Adjustments pane of the Inspector HUD, see Chapter 14, "An Overview of Image Adjustments," on page 327 and Chapter 15, "Making Image Adjustments," on page 365.

Individual Adjustment Tool HUDs

Many of the Aperture adjustment tools, including Crop, Spot & Patch, Red Eye, Lift, Stamp, and Retouch, work in conjunction with HUDs.

To view any of these HUDs:

- Select the adjustment tool in the tool strip.

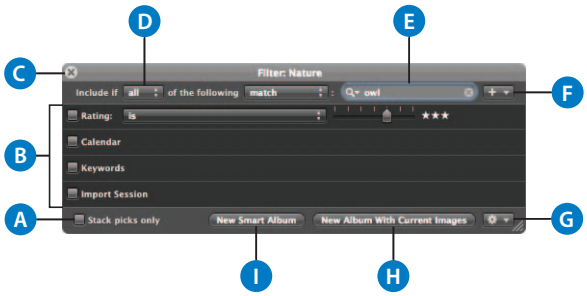
To learn more about the adjustment tools, see Chapter 14, "An Overview of Image Adjustments," on page 327 and Chapter 15, "Making Image Adjustments," on page 365.

Query HUD

The Query HUD provides options for searching for images.

To show the Query HUD:

- Choose Edit > Find (or press Command-F).
- Click the Query HUD button (with a magnifying glass icon) next to the search field in the Browser.



A	**"Stack picks only" checkbox**	Select this checkbox to prevent the search from querying within stacks. Only the picks of the stacks are made available to the search. The images within each stack are ignored.
B	**Search criteria**	Select checkboxes for categories and specify what you want to search for, such as ratings, keywords, and dates.
C	**Close button**	Click this button to close the Query HUD.
D	**"Include if" pop-up menu and Match pop-up menu**	Choose whether the image should match or not match any of the search criteria or all the criteria that are marked by selected checkboxes.
E	**Search field**	Enter the text you want to search for. Click the search field's Reset button (with an X) to clear the search field.
F	**Add Filter pop-up menu**	Choose additional search criteria, such as date, EXIF and IPTC information, text, rating, and other metadata.
G	**Query HUD Action pop-up menu**	Create a new Light Table, book, webpage, Smart Webpage, or web journal album containing images that match the current search criteria.

H	**New Album With Current Images button**	Click this button to create a new album containing images that match the current search criteria.
I	**New Smart Album button**	Click this button to create a new Smart Album based on the search criteria. For more information, see Chapter 13, "Grouping Images with Smart Albums," on page 317.

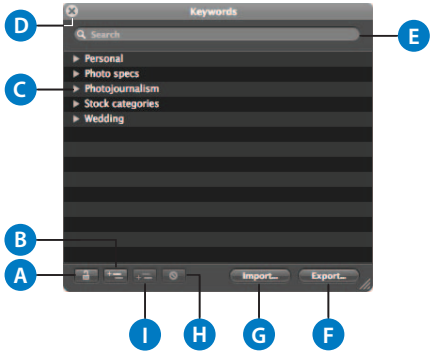
For more information about searching for images, see Chapter 12, "Searching for and Displaying Images," on page 295.

Keywords HUD

The Keywords HUD contains a library of keywords, allowing you to efficiently organize and apply keywords to your images.

To show the Keywords HUD:

- Choose Window > Show Keywords HUD (or press Shift-H).



A	**Lock button**	Click this button to lock the Keywords HUD and prevent changes. Click it again to unlock the HUD.
B	**Add Keyword button**	Click this button to add a keyword to the keyword library of the Keywords HUD.
C	**Disclosure triangle**	Click the disclosure triangle for a keyword group to view all keywords in the group.
D	**Close button**	Click this button to close the Keywords HUD.
E	**Search field**	Enter text to search for keywords that match the text. Click the Reset button (with an X) to clear the field.
F	**Export button**	Click this button to export your Aperture keyword list.
G	**Import button**	Click this button to import keywords into the Keywords HUD.
H	**Remove Keyword button**	Click this button to remove one or more selected keywords.
I	**Add Subordinate Keyword button**	Click this button to add a subordinate keyword, such as a keyword within a keyword group.

Changing Views

In addition to allowing you to show and hide areas of the interface, Aperture offers four basic views of the main window:

- *Browser Only:* Use this view to display images in an enlarged Browser so you can review images, perform initial rating passes, and create and work with stacks of images.
- *Browser & Viewer:* Use this view to display both the Browser and Viewer together and use them in combination to review and work with images.
- *Viewer Only:* Use this view to display images in an enlarged Viewer and work with them in detail.
- *Full Screen:* Use this view to work with images displayed full screen against a black background.

You can easily switch between views by pressing V, choosing commands from the View menu, or pressing keyboard shortcuts.

To change views:

- Choose Browser Only, Browser & Viewer, Viewer Only, or Full Screen from the View menu (or press V).

You can use keyboard shortcuts to quickly show or hide different areas of the main window.

Keyboard shortcut	Function
⌘ + I	Open the Import pane and Import dialog
shift + R	Show/Hide Vault pane
control + P	Select the Projects inspector
W	Select the next pane in the Inspector pane
V	Select the next view
shift + D	Show/Hide keyword controls
I	Show/Hide Inspector pane
shift + I	Switch the Inspector pane position
option + W	Swap the Browser and Viewer positions
shift + W	Rotate the Browser and Viewer positions

Keyboard shortcut	Function
shift + T	Show/Hide toolbar
F	Enter/Exit Full Screen view

Customizing the Toolbar

The toolbar can be customized to display exactly the tools you need. You can customize the toolbar by selecting the tools to include, rearranging them, and choosing whether both the tool's icon and text appear.

Hiding and Showing the Toolbar

You can choose to hide the toolbar completely.

To hide the toolbar:

- Choose View > Hide Toolbar (or press Shift-T).

To show a toolbar that has been hidden:

- Choose View > Show Toolbar (or press Shift-T).

Tip: You can also quickly hide or show the toolbar by clicking the Toolbar button (a gray oblong button) in the top-right corner of the Aperture main window.

Customizing the Toolbar Buttons

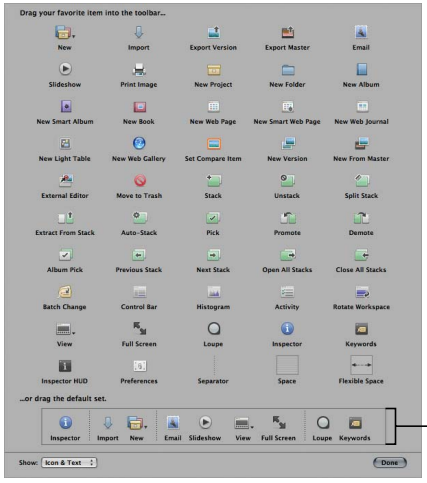
Aperture provides a simple drag-and-drop interface for adding, deleting, and rearranging the toolbar buttons.

To customize the toolbar:

1 Do one of the following:

- Choose View > Customize Toolbar.
- Control-click the toolbar, then choose Customize Toolbar from the shortcut menu.

A dialog appears, showing icons for toolbar buttons and tools.



2 Configure the toolbar by doing any of the following:

- *To add tools to the toolbar:* Drag their icons from the dialog to the location where you want them to appear in the toolbar.
- *To remove items from the toolbar:* Drag them out of the toolbar, or Control-click the item you want to remove and choose Remove Item from the shortcut menu.
- *To change the order of the items in the toolbar:* Drag each item to its new position.
- *To control whether each tool's icon and text appear in the toolbar:* Choose Text Only, Icon Only, or Icon & Text from the Show pop-up menu in the lower-left corner of the dialog, or Control-click the toolbar and choose Text Only, Icon Only, or Icon & Text from the shortcut menu.

3 Click Done when you have finished configuring the toolbar.

To reset the toolbar to its default state:

- Drag the default toolbar up from the bottom of the dialog and into the toolbar area.

Customizing Keyboard Shortcuts

Aperture provides a wide variety of menu commands and keyboard shortcuts that let you control almost every aspect of your workflow. The Command Editor lets you search or browse the various commands and keyboard shortcuts in Aperture. In addition, the Command Editor lets you customize keyboard shortcuts so you can streamline the way you work.

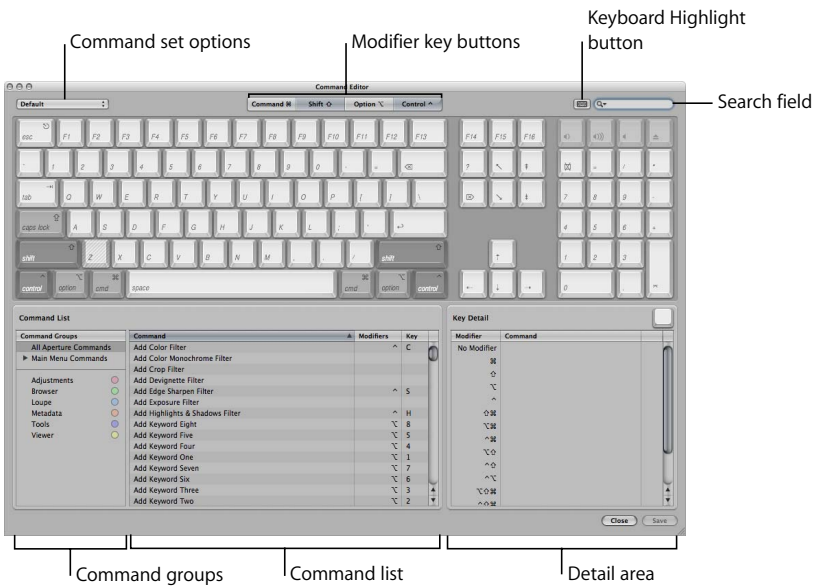
This section covers how to modify keyboard shortcuts using the Command Editor.

Use the Command Editor's search tools to find commands, view their descriptions and keyboard shortcuts, and preview highlighted key combinations in a visual representation of your keyboard. You can modify existing shortcuts, create new shortcuts, and save multiple sets of keyboard shortcuts, called *command sets*, that can be imported and exported for use by others. If you're more familiar with keyboard shortcuts from other applications, you can use the Command Editor to substitute keyboard shortcuts for the default set of Aperture keyboard shortcuts.

To display the Command Editor in Aperture:

- Choose Aperture > Commands > Customize.

The Command Editor appears.

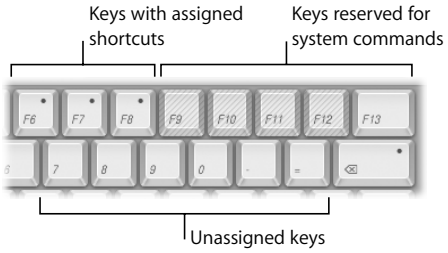


Command Editor Interface

The upper half of the Command Editor displays a virtual keyboard. The lower half contains a command list that sorts menu commands by group and offers a brief description of each command, along with its associated keyboard shortcut, if one exists.

The virtual keyboard is color-coded to help you identify the type of command each key performs. The Command Groups column on the left side of the Command List area includes a clickable color key for reference.

Keys that are assigned to shortcuts are marked with a dark gray dot, while unassigned keys have no additional markings. Several keys are shaded with diagonal lines, indicating that they are reserved for system use.



Choosing a Command Set

By default, Aperture uses a standard set of commands, with the language choice that you specified when you set up your computer.

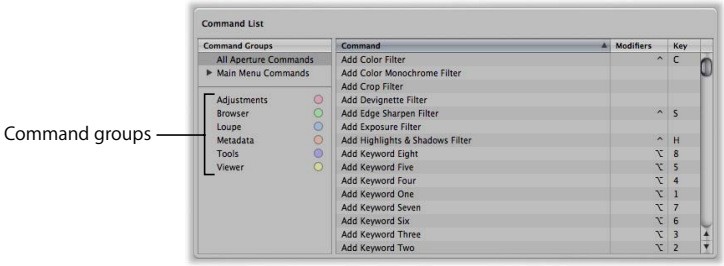
To choose a command set, do one of the following:

- Choose Aperture > Commands, then choose a set from the submenu.
- If the Command Editor is already open, choose a set from the pop-up menu in the upper-left corner.

Once you choose the command set you want, the keyboard shortcuts in the set become active in Aperture.

Viewing Keyboard Shortcuts by Group

The Command List area displays several groupings of commands, organized by Aperture menus as well as by types of command. Click a group to have the Command list display only the commands and keyboard shortcuts in that group.



Searching for Commands

Use the search field in the upper-right corner of the Command Editor to quickly locate a command or its keyboard shortcut. You can search by command name, description, or keyboard shortcut.

To search for a keyboard shortcut:

- In the Command Editor, click in the search field and type a word that describes the keyboard shortcut you need, or type the keystroke.

  The Command list immediately displays the search results, listing all commands and keyboard shortcuts related to the search term.

  You can further narrow your search by choosing a category from the search field pop-up menu. The menu options include All, Command, Description, and Key Equivalent.

  Note: Do not use the Shift key to capitalize letters when typing in the search field. The search field recognizes the Shift key as a modifier key in a keyboard shortcut.

  You can use the search field in conjunction with the virtual keyboard to highlight keyboard shortcuts.

To search for and highlight a keyboard shortcut on the virtual keyboard:

1. Click the Keyboard Highlight button to the left of the search field.

   The keyboard dims.

2. Click in the search field and begin typing.

   The Command list changes as you type, highlighting the keys related to your search term.

Note: When you select the Keyboard Highlight button, only command keys are highlighted. Modifier keys that may be part of the keyboard shortcut (Command, Shift, Option, and Control) are not highlighted.

Filtering the View by Modifier Keys

You can use the modifier key buttons (Command, Shift, Option, and Control) at the top of the Command Editor to quickly see which keys work in conjunction with the various modifier keys.

To filter by modifier keys:

1. Click one of the four modifier key buttons at the top of the Command Editor (or click one of the modifier keys on the virtual keyboard).

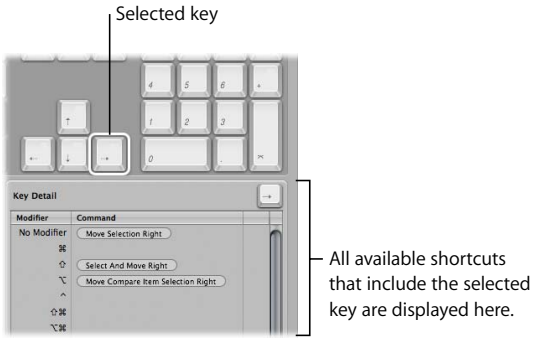
   Keys assigned to work in conjunction with the selected modifier key appear marked with a dark gray dot.

2. If necessary, click another modifier key button (or modifier key in the virtual keyboard) to create a combination.
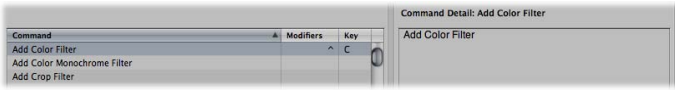
   The virtual keyboard updates to show which keys are assigned to shortcuts that use the combined modifier keys.

Viewing Key and Command Details

The Detail area to the right of the Command List area provides additional information about a selected key in the virtual keyboard or a selected command in the Command list. When you select a key in the virtual keyboard, this area displays a list of all keyboard shortcuts associated with that key.



When you select a command in the Command list, the Detail area displays a brief description of the command.



Assigning Keyboard Shortcuts

Customizing shortcuts in the Command Editor is fast and easy. Because the default Standard Set includes commands for which no shortcut is defined, you may want to apply a new shortcut to a command. Because you cannot modify the Standard Set, you must first duplicate that set and then customize the new duplicate set.

To duplicate the currently active command set:

1. Choose Duplicate from the pop-up menu at the top of the Command Editor.

   A dialog appears and prompts you to name the new command set.

2. Type a name in the dialog, then click OK.

   The new duplicate command set is saved and appears as an item in both the pop-up menu in the Command Editor and the Command submenu of the Aperture menu.

Now that you have a duplicate set of assigned keyboard shortcuts, you can modify the individual key assignments to create new or modified shortcuts.

To add or modify a keyboard shortcut:

1. Using the search field (or browsing the Command list) of the Command Editor, select the command to which you want to assign a new keyboard shortcut.
2. Using your physical keyboard, press the combination of keys you want to use for the command (for example, Shift-Option-T).

   Note: When you assign a keyboard combination to a command, the Delete key becomes an assignable key when one of the modifier keys (Command, Shift, Option, or Control) is held down. See how to delete a command set below.

   If the key combination is not already assigned to a command, the virtual keyboard updates to show the new key assignment. A gray dot appears on the newly assigned key or keys, and a color is applied if the command belongs to a color-coded command group.

   If the key combination is already assigned to a command, Aperture displays the current assignment and prompts you to confirm the change.

   Once you make changes to the command set, you can use several methods to save the changes.

To save a command set:

- Click the Save button in the lower-right corner of the Command Editor.

  If you close the Command Editor with unsaved changes, Aperture prompts you to save the command set.

To delete a command set:

1. Make sure you are using the command set you want to delete, then choose Delete from the pop-up menu at the top of the Command Editor.

   A dialog appears.

2. Click Delete.

   The command set is removed, and the Standard Set becomes the active set of commands.

Importing and Exporting Command Sets

Once you save a command set, you may want to export it to create a backup or to share the new set with someone. Exported command sets are saved in a file that can be imported back into Aperture at a later time.

To export a set of keyboard shortcuts:

1. If necessary, use the pop-up menu to activate the command set you want to export, then do one of the following:
   - Choose Aperture > Commands > Export.
   - In the Command Editor, choose Export from the pop-up menu.
2. In the dialog that appears, navigate to the location where you want to save the exported command set, then type a name in the Save As field.
3. Click OK.

   The file is saved in the location you chose, with the ".commandset" filename extension.

To import a set of keyboard shortcuts:

1. Do one of the following:
   - Choose Aperture > Commands > Import.
   - In the Command Editor, choose Import from the pop-up menu.
2. In the dialog that appears, navigate to the location where you have stored a command set file, select it, then click Open.

   The new command set is added to the Commands submenu of the Aperture menu and to the pop-up menu in the Command Editor.

   If you are already using a command set with the same name, a dialog appears and prompts you to rename the set.

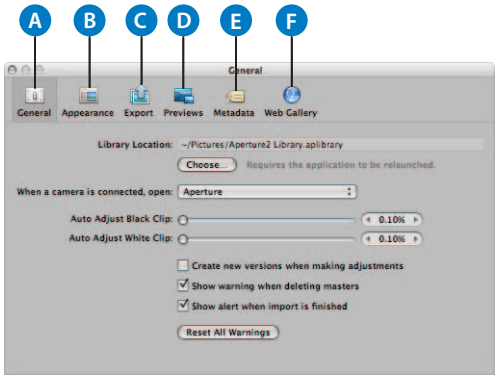
Setting Aperture Preferences

You can use the Preferences window to specify settings in Aperture. By taking time to specify your preference settings, you can speed up your workflow.

To open the Preferences window:

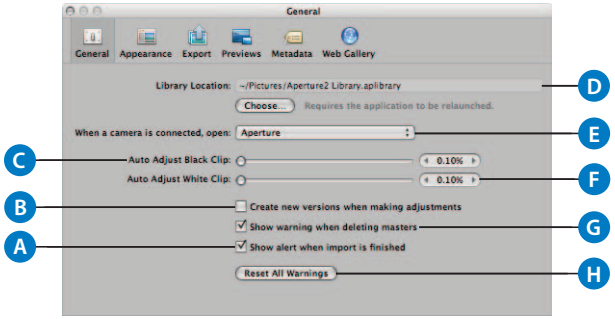
- Choose Aperture > Preferences, or press Command-Comma (,).

The Preferences window appears.



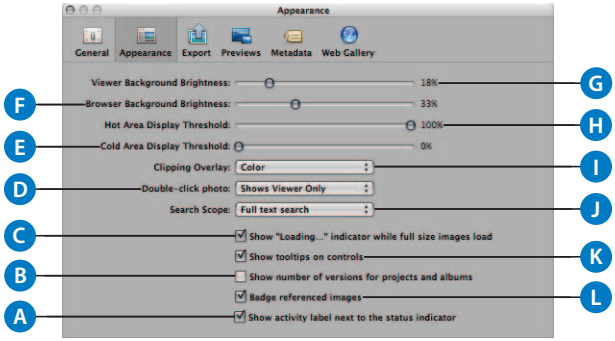
A	**General button**	Click this button to display options for setting the location of your library, specifying what Aperture should do when a camera is connected to your computer, and other image management options.
B	**Appearance button**	Click this button to display options for customizing the Aperture interface, including setting background brightness for the Browser and Viewer, displaying tooltips and badges, and more.
C	**Export button**	Click this button to display options for selecting an external editor for changing your images outside of Aperture, as well as selecting the email application and settings you want used when emailing images. You can also create a copyright statement that will be included in webpages that you create.
D	**Previews button**	Click this button to display options for how Aperture creates and displays preview images.
E	**Metadata button**	Click this button to display options for choosing what metadata is shown with images in the Browser and Viewer, as well as in image tooltips.
F	**Web Gallery button**	Click this button to display options for reviewing and updating web galleries that you've published to .Mac.

General Preferences



A	**"Show alert when import is finished" checkbox**	Select this checkbox to have Aperture show an alert message when importing images is complete.
B	**"Create new versions when making adjustments" checkbox**	Select this checkbox to have Aperture automatically create a new version when you adjust a selected image.
C	**Auto Adjust Black Clip slider**	Use the Auto Adjust Black Clip slider and value slider to add tolerance to Auto Levels adjustments when evaluating colors beyond black.
D	**Library Location field**	Displays the default location of the library. To specify a custom location for the Aperture library, click Choose and navigate to a location to store the library. Reopen Aperture to complete the location change.
E	**"When a camera is connected" pop-up menu**	Specify which application should open when a camera is connected to your computer.
F	**Auto Adjust White Clip slider**	Use the Auto Adjust White Clip slider and value slider to add tolerance to Auto Levels adjustments when evaluating colors beyond white.
G	**"Show warning when deleting masters" checkbox**	Select this checkbox to have Aperture display an alert message when you delete masters.
H	**Reset All Warnings button**	Click this button to display warning messages. If you have set Aperture not to display certain warnings, this button resets Aperture to display them again.

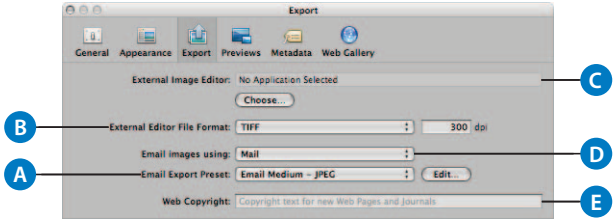
Appearance Preferences



A	**"Show activity label next to the status indicator" checkbox**	Select this checkbox to set Aperture to display the current activity next to the status indicator.
B	**"Show number of versions for projects and albums" checkbox**	Select this checkbox to have Aperture display the number of versions in a project or album in the Projects inspector.
C	**"Show 'Loading...' indicator while full size images load" checkbox**	Select this checkbox to have Aperture display an initial proxy image if there is any delay when loading a full-size image.
D	**"Double-click photo" pop-up menu**	Choose an option from this pop-up menu to set what Aperture does when you double-click a thumbnail in the Browser. You can set Aperture to switch to Viewer Only view, switch to Full Screen view, or do nothing. Double-clicking the image again restores Aperture to the original view.
E	**Cold Area Display Threshold slider**	You can view an image's cold areas (where black data in any color channel has been clipped) by choosing View > Highlight Cold Areas. To adjust the threshold used to determine an image's cold areas, drag the slider.
F	**Browser Background Brightness slider**	Adjust the Browser background brightness using this slider.
G	**Viewer Background Brightness slider**	Adjust the Viewer background brightness using this slider.
H	**Hot Area Display Threshold slider**	You can view an image's hot areas (where highlight data in any color channel has been clipped) by choosing View > Highlight Hot Areas. To adjust the threshold used to determine an image's hot areas, drag the slider.
I	**Clipping Overlay pop-up menu**	Choose color or monochrome for the display of your clipping overlays.
J	**Search Scope pop-up menu**	Use this pop-up menu to set your preferences for how Aperture performs searches. You can have Aperture search for your entered text throughout all the metadata associated with your images or perform a limited text search that doesn't search through your images' EXIF information.

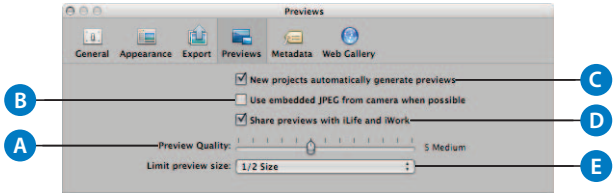
K	**"Show tooltips on controls" checkbox**	Select this checkbox to have Aperture display the names of interface items when you place your pointer over them.
L	**"Badge referenced images" checkbox**	Select this checkbox to have Aperture display badges that identify referenced images.

Export Preferences



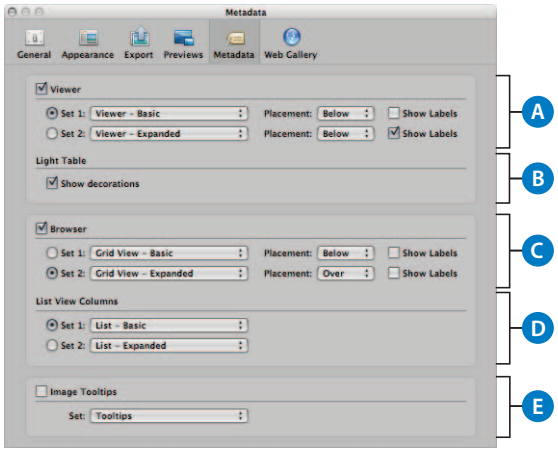
A	**Email Export Preset pop-up menu**	Choose an export preset to use when exporting images to your email client. If you want to create a custom export preset, click Edit and create a new preset in the Export Presets dialog.
B	**External Editor File Format pop-up menu**	Choose a file format in which to export an image to an external editor from this pop-up menu. You can also specify the dot-per-inch (dpi) resolution of the image in the dpi field.
C	**External Image Editor field**	You can use an external editor to make adjustments to your images. To identify an external image editor, click Choose and select an application. To open an image in the external editor, select the image, then choose Images > Edit With > External Editor.
D	**"Email images using" pop-up menu**	If you want to export images to an email client, choose the email application from this pop-up menu.
E	**Web Copyright field**	Enter copyright text for webpages and web journals here.

Previews Preferences



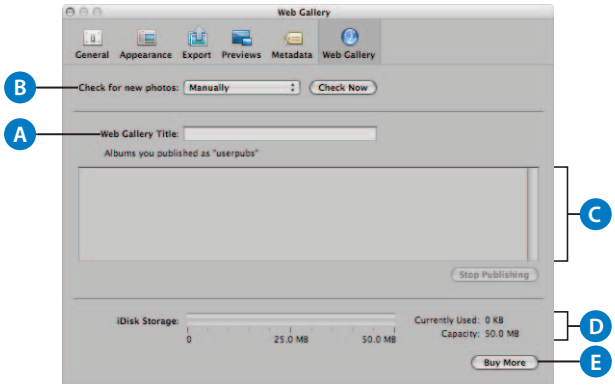
A	**Preview Quality slider**	To change the image quality of the previews, drag the Preview Quality slider. The higher the quality you select, the more disk space the previews require.
B	**"Use embedded JPEG from camera when possible" checkbox**	Select this checkbox to set Aperture to use the JPEG thumbnail of an image produced by the camera, if available.
C	**"New projects automatically generate previews" checkbox**	To set Aperture to create previews for the images in all new projects and new libraries, select this checkbox. Deselect this option if you don't want previews created for images in new projects.
D	**"Share previews with iLife and iWork" checkbox**	To enable sharing of JPEG preview images with iLife and iWork applications, select this checkbox.
E	**"Limit preview size" pop-up menu**	To set a maximum pixel size for your previews, choose a size from this pop-up menu.

Metadata Preferences



A	**Viewer area**	Select the Viewer checkbox to specify how you want metadata displayed for images in the Viewer. Select the Set buttons and choose the information you want displayed from the Set 1 and Set 2 pop-up menus. You can also choose where the information should appear from the Placement pop-up menus. Select the Set 1 or Set 2 button to select the metadata view you want displayed as the default.
B	**Light Table area**	Select the "Show decorations" checkbox to display badges and icons on images in the Light Table.
C	**Browser area**	Select the Browser checkbox to specify how you want metadata displayed for images in the Browser in grid view and filmstrip view. Select the Set buttons and choose the information you want displayed from the Set 1 and Set 2 pop-up menus. You can also choose where the information should appear from the Placement pop-up menus. Select the Set 1 or Set 2 button to select the metadata view you want displayed as the default.
D	**List View Columns area**	Select the List View Columns checkbox to specify how you want metadata displayed for images in the Browser in list view. Select the Set buttons and choose the information you want displayed from the Set 1 and Set 2 pop-up menus. Select the Set 1 or Set 2 button to select the metadata view you want displayed as the default.
E	**Image Tooltips area**	Select the Image Tooltips checkbox to specify what metadata you want displayed in an image's tooltip. Choose a metadata view from the Set pop-up menu.

Web Gallery Preferences



A	**Web Gallery Title field**	Enter text in this field to specify the webpage title that appears on your web gallery page.
B	**"Check for new photos" pop-up menu**	Choose whether you want Aperture to update your web galleries automatically on a scheduled basis or whether you want to update them manually. You can have Aperture automatically update the galleries once an hour, once a day, or once a week.
C	**"Albums you** published" list	Lists the albums that you currently have published on your .Mac account. You can select an album and click Stop Publishing to remove the album from your .Mac account.
D	**iDisk Storage indicator**	Indicates the amount of iDisk storage space that your web galleries are currently using and the total amount that you have access to.
E	**Buy More button**	Click this button to buy more storage space for your web galleries.

Working with Aperture Projects

3

The basic components of Aperture, including projects, albums, and versions, provide the building blocks for working in a nondestructive environment.

This chapter explains basic elements in Aperture and describes how to set up and use projects to hold your images.

This chapter covers:

- Basic Components of Aperture (p. 94)
- Working with Projects (p. 100)
- Creating and Naming Projects (p. 101)
- Opening and Closing Projects (p. 103)
- Creating and Showing Favorite Projects (p. 104)
- Deleting Images from Projects and Albums (p. 105)
- Deleting Items from the Projects Inspector (p. 105)
- Working with Library Files (p. 106)
- Working with the Library in the Projects Inspector (p. 108)
- Quickly Accessing Commands (p. 108)

Basic Components of Aperture

Aperture uses the following basic components in your image management system:

- *Masters:* The original image files imported from your camera, memory card, computer, or external storage media.
- *Versions:* Files derived from the masters and used to display your images with any changes you've made, including image adjustments or changes to metadata.
- *Projects:* Containers that hold masters, versions, and albums. Projects can hold tens of thousands of masters and even more versions.
- *Albums:* Containers that hold versions. You can create albums to organize images within projects or outside of them.
- *Folders:* Containers used to organize projects and albums.
- *Library:* The Aperture database that records and tracks your masters and all corresponding versions. You can also create multiple Aperture library files in different locations. The library tracks all the information about projects and albums you create to organize your images.
- *Managed and referenced images:* Masters stored in the Aperture library are called *managed images* because Aperture manages the location of the image files in its database. Managed images are physically located in the Aperture Library file in the Pictures folder. You can also import images into Aperture without storing the masters in the library. Images that are not stored in the library are called *referenced images*. Aperture links to referenced images in their current locations on your hard disk, without placing them in the Aperture Library file.
- *Vaults:* Containers that each hold a backup of the library and all its images and information.

The next sections explain details about each of these elements and how you work with them in Aperture.

What Are Masters?

A digital master file, or *master*, is the original RAW, GIF, JPEG, TIFF, DNG, or PNG file that was imported into Aperture from a camera, a memory card, a computer, or external storage media such as an external hard disk drive or CD. Aperture never changes the master, so you always have originals to work from.

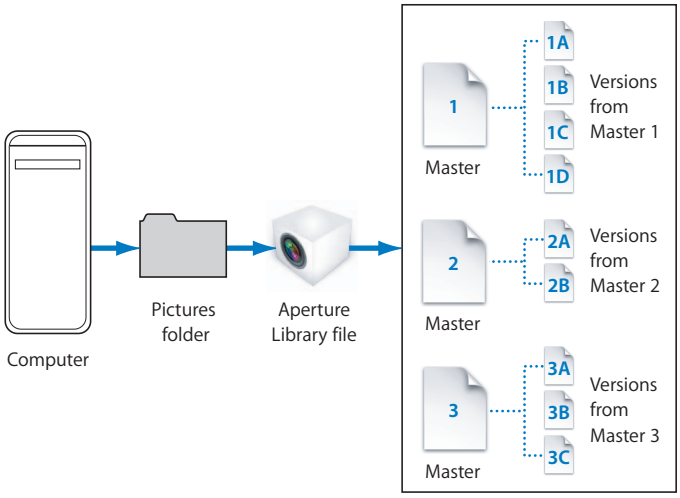
Important: Masters—especially RAW files—tend to be quite large. Projects consisting of several thousand masters require high-capacity hard disks.

For information about importing your masters, see Chapter 4, "Importing Images," on page 109.

What Are Versions?

Once you have masters on your hard disk, you can review and make adjustments to your images. For example, you can change the exposure, contrast, or saturation, or add information to an image, such as the photographer's name, event, and location. To work with images, Aperture creates a "version" of each master that includes your adjustments and embedded information, and leaves the master unchanged. A version refers to the master on your hard disk, but it is not the master itself. Versions store only the thumbnail image, adjustments, and embedded information. A full image file is not created until you are ready to print or export, saving valuable storage space on your hard disk.

In many cases, your workflow may call for different renderings of the same image. For example, a client may request a color as well as a black-and-white version of the same head shot. You can create multiple versions of the same image in Aperture at any time.

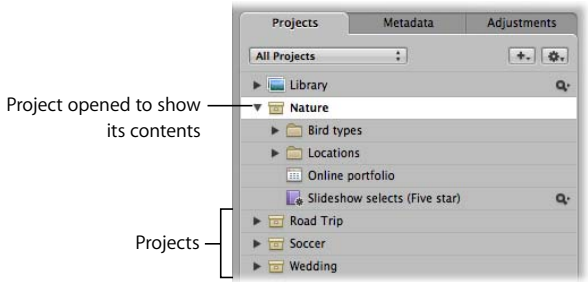


When you create a version, Aperture reads the original master on disk and displays it on the screen. As you make adjustments or add information to the image, Aperture displays the image with your changes to the version, but the original master is never changed.

What Are Projects?

You organize your masters and versions using projects. A project is a container consisting of image versions and their corresponding masters. A project can hold tens of thousands of masters, and you can create as many projects as you wish up to the limitations of your disk space. For example, you can create a new project for each of your shoots. Or if you do several shoots of the same subject, you may want to create a project that encompasses all of the shoots. Projects are the most basic component of Aperture because they contain your masters and track all changes to versions.

You can easily transfer projects from one Aperture system to another. All links between versions and their masters are maintained when projects are transferred. This is particularly useful if you use a portable computer when on location or away from your studio, and a workstation at your studio. For more information, see "Transferring Projects from Another System" on page 143.



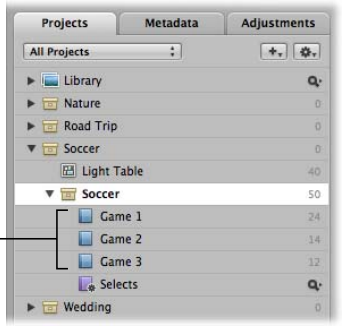
You can have multiple projects open at the same time, each represented by its own icon in the Projects inspector and tab in the Browser.

What Are Albums?

An album is a container in the Aperture library that holds only image versions (not the masters to which they refer). You use albums to organize images in the library, making your selections of versions easier to manage. You can create albums at the library level or within a project.

You use albums created at the library level to organize versions from multiple projects. For example, you can create an album to consolidate your favorite images, or "selects," from multiple projects. You can then publish this collection of selects on your website or export the album's contents for review by a prospective client.

You can also create albums within projects to help you organize your images into relevant groups. For example, images in your Soccer project can be divided into three albums: Game 1, Game 2, and Game 3.

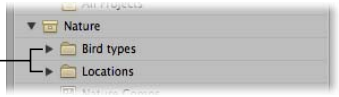


Three albums created within one project

You can also place versions from other projects into an album that resides within a project.

What Are Folders?

In Aperture, you use folders to organize projects and albums. For example, you can import images into projects and then place the projects in folders based on photo type or location. If you shoot multiple projects for the same client, you can create a folder that holds the client's individual projects.



These folders organize images based on type and location.

Folders contain only albums, projects, and other folders. They don't contain masters or versions.

What Is the Library?

The Aperture library tracks every project, album, master, and version no matter whether the images are stored in the Aperture Library file or in other hard disk locations. Aperture automatically creates a library file in your Pictures folder the first time you open Aperture. You can choose to import images into the library or have Aperture access them from other locations on different hard disks. The library tracks all your images and the information recorded about them, as well as information about where backup files are stored. You can access the library by clicking the Library icon at the top of the Projects inspector.

You can change the location of the library file to a different folder or a different disk. You can specify where the library should be located using the Preferences window. For more information about working with multiple library files in Aperture, see "Working with Library Files" on page 106.

Projects that you transfer from other Aperture systems to your Aperture system are also added to the library. And when you back up your masters to your vaults on external FireWire drives, those actions are tracked by the Aperture library as well.

What Are Managed Images and Referenced Images?

Aperture lets you choose how you organize your photos on disk. You can store your photos in the Aperture library, or you can import images by simply linking to the image files in their current locations, without placing them in the library.

Images whose masters are stored in the Aperture library are called *managed images*. These masters are stored in the library exactly as they were in previous versions of Aperture. Aperture manages master image files in the library, keeping them always accessible, and provides benefits such as one-click backup of masters to vaults.

Imported images whose masters haven't been placed in the library are called *referenced images*. Using referenced images in your Aperture system can provide a number of substantial benefits to your photography workflow. You can incorporate your existing portfolio of images into Aperture without changing the current location of the files. Importing images by reference does not result in a duplication of your image files in the Aperture library, thus saving hard disk space. You can also connect and disconnect hard disks holding your referenced images' masters as you need them. This allows you to keep masters for less-used images offline or to make specific types of images available for editing or adjustments as needed. Using referenced images in your Aperture system provides a means of building a flexible image management system customized to your work style.

You specify that an image will be a managed image or a referenced image when you import it. When importing images, you can:

- Specify that masters be stored in the Aperture library
- Import images as referenced images, so that their masters remain in their current locations
- Move or copy image files to a new location. For example, you might decide that a certain group of referenced image files, such as wedding photos, will always be placed in one hard disk location, while other groups, such as sports photos, will reside in a different hard disk location.

You can work with referenced images—creating versions, making adjustments, cropping, and adding metadata—just as you can with images whose masters are stored in the library. Versions that you create from a referenced image are stored in the library. In order for you to make adjustments to a version from a referenced image, the referenced image's master must be available on your hard disk or other storage device. For example, if you delete a referenced image's master in the Finder, Aperture no longer has access to the master and so no longer allows you to change your versions or create new ones.

To help you identify referenced images, Aperture marks them with a badge overlay that you can display or hide. When a referenced image's master is missing or offline, its badge changes to show that the image is not accessible. For example, if you disconnect a hard disk that holds masters for many referenced images, Aperture automatically marks the referenced images in the Browser and Viewer as offline. If you reconnect the hard disk or other storage device later, Aperture accesses the masters automatically and you can work with and change their versions again.

You can also relocate masters, moving them out of the library or moving referenced masters to different hard disk locations. If needed, you can also move referenced masters into the Aperture library by choosing the Consolidate command.

You can search for images based on whether they are managed images, referenced images, or online or offline images. Aperture also provides robust file-management tools that let you quickly determine which images are offline and easily reconnect images that have been moved to different volumes.

What Is a Vault?

To ensure you have backup copies of your images, you create a vault to hold the backup. A vault is a container that holds an exact copy of the library. This includes projects, masters, and any versions you've created. You can easily create and update a vault to back up the library. It's a good idea to create multiple vaults on multiple external hard drives to safeguard copies of the library.

You can have as many vaults as you deem necessary. Creating more than one vault is useful if you work at different locations; you can always keep one vault on a FireWire drive onsite and another one offsite. All vaults and backup files are tracked by the library so that even if you disconnect the external hard drive that contains a vault, Aperture can access it the next time you reconnect the drive and update the vault.

All the masters and versions for managed images are backed up, as well as all metadata, previews, and adjustment information associated with managed images. The versions, previews, metadata, and adjustment information associated with referenced masters are also backed up in the vault. Referenced masters are not backed up in the vault with the library.

Important: Because the masters for referenced images are stored outside of the library, you must manage the backup and archiving of them yourself.

Working with Projects

How you use and organize your projects depends on the scope of your workflow as well as your particular organizational style. These factors also affect your decision to use one or more albums in your project.

Organizing Your Projects

Typically, you create a new project for each photographic project or job that you work on, regardless of its duration. For example, if you're working on a documentary in Thailand, you would create a project for it. If you're also shooting the temples in the interior of the country, that could be a second, separate project. Both projects could conceivably refer to some of the same images, but they are completely independent structures, each with its own versions, masters, and albums.

Very large photography projects, such as documentaries and sporting events, often consist of large numbers of captured images. You can always break one project into several should the need arise.

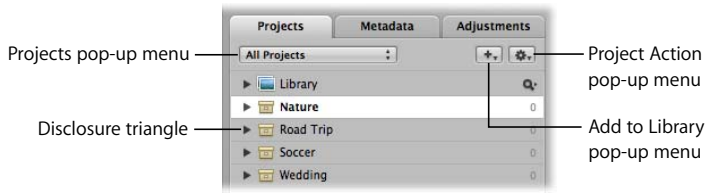
Using More Than One Album in a Project

For some projects, it makes sense to use several albums within the project. You can use albums in several ways, including:

- *Albums as events:* Break a project into a series of albums according to specific events. For example, a wedding project can be divided into albums for each of the following events: Preparation, Ceremony, and Reception.
- *Albums as days:* Break a project that spans multiple days into albums for individual days. For example, a project consisting of a two-week trip to Japan can be divided into 14 individual albums corresponding to each day.
- *Albums for specific subjects:* Break a project consisting of multiple photographed subjects into individual albums dedicated to each subject. For example, a studio photographer may shoot three models for a single project. The photographer can create an album for each model. Or you might create albums to hold specific image types, such as candid shots, landscapes, or close-ups.

Creating and Naming Projects

There are several controls in the Projects inspector that you'll use when working with projects.



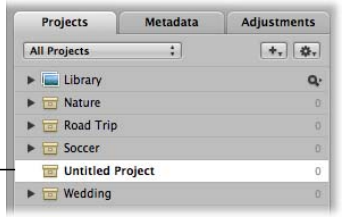
- *Disclosure triangle:* Click this to see all items within the library, project, or folder.
- *Projects pop-up menu:* Choose to display all projects, favorites, or recent projects.
- *Add to Library pop-up menu:* Choose to add a new item, such as a project or Smart Album, to the library or selected project.
- *Project Action pop-up menu:* Add the selected item to a list of favorites, or remove it from the favorites list.

You can create projects at any time, although typically you create them when you import images. When you import images into the Aperture library and no project is selected, a new project is created to contain those images. However, you can create a new empty project at any time. For more information about importing files and creating projects automatically, see Chapter 4, "Importing Images," on page 109.

To create a new project:

1 Do one of the following:

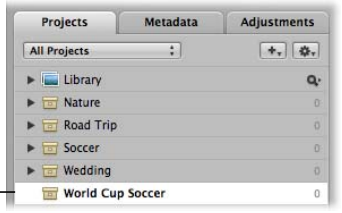
- Choose File > New Project (or press Command-N).
- Choose New Project from the New pop-up menu in the toolbar.



A new, untitled project appears in the Projects inspector.

2 Enter the name you want for the project, then press Return.

For information about naming files, see "Automatically Naming Your Imported Images" on page 127.



The project now has the name you entered.

Opening and Closing Projects

To work with your images in Aperture, you first select a project in the Projects inspector to open it in the Browser. You can open and work on more than one project at a time. When multiple projects are open, each project appears in the Browser with its own tab. You can click a project's tab to bring it to the front. You can also open a project in its own pane to view two projects in the Browser side by side. When you finish working and quit Aperture, Aperture remembers which projects were open. The next time you open Aperture, all projects that were open at the end of your last session open automatically.

To open a project:

- Select the project in the Projects inspector.



To open additional projects in the Browser:

- Command-click a project in the Projects inspector.

  The newly opened project appears in the Browser with its own tab, in front of any other open projects.

To open another project in its own pane:

- Option-click a project in the Projects inspector.

  The newly opened project appears in the Browser in its own pane.

To switch between several open projects:

- In the Browser, click a project's tab.



To close a project:

1. Click the project's tab to bring it to the front.
2. Do one of the following:
   - Choose File > Close Tab (or press Command-W).
   - Click the tab's close button.



Creating and Showing Favorite Projects

If you have certain projects that you work on most often or projects that you work on together, you can make them favorites to quickly view them all at the same time.

To make a project or folder a favorite:

- In the Projects inspector, select a project or folder, then choose Add to Favorites from the Project Action pop-up menu.

To view favorite projects or folders:

- In the Projects inspector, choose Favorite Projects from the Projects pop-up menu at the top-left corner.

To remove a project or folder as a favorite:

- In the Projects inspector, select a project or folder, then choose Remove From Favorites from the Project Action pop-up menu.

Deleting Images from Projects and Albums

Aperture allows you to delete versions separately from their masters. You can also delete a master and all its versions in a project. If you delete a version in an album, its master and related versions are not deleted.

To delete a master and all its versions from a project:

1. Select the image, then choose File > Delete Master Image and All Versions.

   A dialog appears asking if you want to continue.

2. Click the Move to Trash button.

   The master and all versions are deleted.

> ***Warning:*** This action cannot be undone. Once you click the Move to Trash button, the master is moved to the Trash. All versions and their adjustments and metadata are permanently deleted. To permanently remove the master from your hard disk, empty the Trash.

To delete only a version from an album:

- Select the image, then choose Images > Remove From Album (or press Delete).

  The version is deleted. The master and its other versions are not deleted.

Deleting Items from the Projects Inspector

You can also delete items from the Projects inspector. When you delete an item from the Projects inspector, the contents of the item are deleted with it.

Note: If you delete a project or a project within a folder, the masters contained in the project are also deleted.

To delete projects and folders:

1. Select the item, then do one of the following:

   - *To delete a project:* Choose File > Delete Project (or press Command-Delete).
   - *To delete a folder:* Choose File > Delete Folder (or press Command-Delete).

   A dialog appears asking if you want to continue.

2. Click the Delete button.

   The selected item is deleted along with its contents.

> ***Warning:*** This action cannot be undone. Once you click the Delete button, the masters are moved to the Trash. All versions and their adjustments and metadata are permanently deleted. To permanently remove the masters from your hard disk, empty the Trash.

To delete an album, a Light Table album, a webpage album, a web journal album, or a book album:

- Select the album, then choose File > Delete [*Item*].

  The selected item is deleted along with its contents.

Adding Times and Dates to Aperture Album Names

It is common to differentiate albums in a project by adding the dates to the album names. If you add dates to an album name, avoid using special characters like the slash (/), since that may be interpreted by Mac OS X as a file separator.

Working with Library Files

When the library file becomes large and requires more disk space than is available in its current location, you can move it to a hard disk with more storage capacity. Aperture is preset to create the library file in the Pictures folder on your internal hard disk. You can specify that the library file be located in a different folder or on a different disk. Each time you open Aperture, the application opens the library in the location you specified. To change the location of the library, you move the library file to a new location and then use the Aperture Preferences window to specify the new location.

Tip: To maximize performance, place the library file on an internal hard disk.

To change the location of a library file:

1. Quit Aperture.
2. Locate the Aperture Library file in the Pictures folder on your hard disk and move it to the new location in a different folder or on a different hard disk.
3. Open Aperture and choose Aperture > Preferences, or press Command-Comma (,).
4. Click General in the Preferences window, if necessary.
5. Click Choose under the Library Location option.
6. Navigate to the new location of the library, select it, and click Select.
7. Quit Aperture and then reopen it.

   When you reopen Aperture, it accesses the library in the new location.

If the Aperture library becomes large, you can create additional, separate library files to hold more images. For example, you might create additional library files in different locations on your internal hard disk, or on different hard disks. You then specify in the Aperture Preferences window which library file the application should access when it opens. Creating a new, empty library file is as easy as specifying a different folder for the library in the Preferences window and then quitting and reopening Aperture. You can also rename library files as needed. Thus, you might have multiple library files with different names in the same location and set Aperture to access the library file you want.

To create a new, empty library file in a new location:

1. Choose Aperture > Preferences, or press Command-Comma (,).
2. Click General in the Preferences window, if necessary.
3. Click Choose under the Library Location option.
4. Navigate to and select the folder where you want to place the new library, then click Select.
5. Quit Aperture and then reopen it.

By default, Aperture creates a new library file named Aperture Library. It's recommended that you rename library files to avoid any mix-ups or the possibility of overwriting one library file with another accidentally. After renaming a library file, make sure to open Aperture and select the renamed library file.

When you have multiple library files and you want to switch between them, you use the Preferences window to select the library you want. You then quit and reopen the application to complete the switch.

To access a different Aperture library:

1. Choose Aperture > Preferences, or press Command-Comma (,).
2. Click General in the Preferences window, if necessary.
3. Click Choose under the Library Location option.
4. Navigate to and select the library you want, then click Select.
5. Quit Aperture and then reopen it.

Working with the Library in the Projects Inspector

Clicking the Library icon in the Projects inspector displays thumbnails of all the images in the library in the Browser.

When you click the disclosure triangle beside the Library icon in the Projects inspector, you see the project named All Projects and the following Smart Albums:

- *Five Stars:* Select this Smart Album to see all images in the library that are rated five stars.
- *One Star or Better:* Select this Smart Album to see all images that are rated one star or better.
- *Rejected:* Select this Smart Album to see all images that are rated Reject.
- *In the Last Week:* Select this Smart Album to see all images taken in the last week.
- *In the Last Month:* Select this Smart Album to see all images taken in the last month.
- *All Projects:* Select this project to see all the projects in the library in the Browser. Each project is represented by a single thumbnail. You can position the pointer over a project thumbnail and drag to quickly skim the images in the project. When you hold down the Control key and click a project thumbnail, a shortcut menu appears that allows you to create a new project, delete a project, and set the currently displayed image as the key photo that represents the project.

Quickly Accessing Commands

You can access commands via a shortcut menu, as an alternative to using the menu bar at the top of the screen or pop-up menus within a window.

To view the shortcut menu:

- Position the pointer over the Projects inspector, then Control-click.

Note: Although accessing commands from shortcut menus can help you work more quickly, keep in mind that not all commands are available in shortcut menus.

Importing Images

4

Aperture provides tools and workflow options that make it easy to import your images.

This chapter describes a variety of methods for importing images into Aperture. You can import images directly from your camera or card reader, import images stored on your computer hard disk or other storage devices, import your iPhoto library, and more.

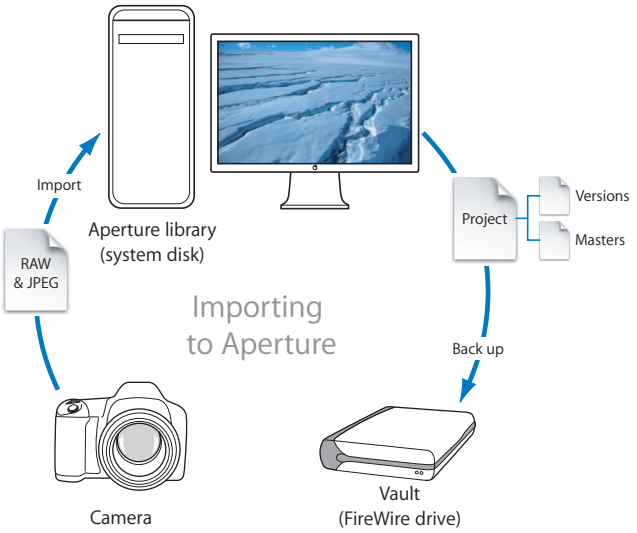
This chapter covers:

- An Overview of Importing Images (p. 110)
- File Formats You Can Import into the Library (p. 111)
- Planning Your Import Strategy (p. 111)
- Importing from Your Digital Camera or Card Reader (p. 113)
- Importing Image Files Stored on Your Computer (p. 119)
- Automatically Naming Your Imported Images (p. 127)
- Adding Metadata to Images During Import (p. 132)
- Creating Stacks Automatically During Import (p. 133)
- Adjusting the Image File's Time When Importing (p. 134)
- Dragging Files from the Finder to the Projects Inspector (p. 134)
- Capturing Images as You Work (p. 135)
- Importing Folders of Images from the Finder (p. 138)
- Importing Your iPhoto Library (p. 139)
- Browsing and Selecting Images from Your iPhoto Library (p. 141)
- Transferring Projects from Another System (p. 143)
- Making an Immediate Backup (p. 143)
- Where Aperture Stores Your Managed Files in the Library (p. 144)
- Migrating Images from Previous Versions of Aperture (p. 144)

An Overview of Importing Images

When you import from a camera or card reader, Aperture places the images in a project. If you don't select an existing project, a new one is created automatically.

As Aperture imports images, it generates a version file and an image thumbnail corresponding to each master.



You can import masters directly from a camera or card reader and from your hard disk drives.

When you import images, you can choose whether to have the masters stored in the Aperture library or on a hard disk outside of the library, where they can be accessed as referenced images. For more information about referenced images, see "What Are Managed Images and Referenced Images?" on page 98.

As you import images, you can have Aperture automatically name and record information about them. Aperture can assign filenames using custom naming conventions, as well as record metadata such as captions, keywords, dates, copyright and credit information, and IPTC information. You can even set Aperture to stack related images together, keeping bracketed shots or a series of shots taken in quick succession in groups that you can easily select and work with. For more information about stacks, see Chapter 8, "Stacking Images and Making Picks," on page 219.

File Formats You Can Import into the Library

Aperture is a QuickTime-compatible application, so it supports standard QuickTime-compatible still-image file formats, as well as some other file formats and file types. The following file types and formats can be imported:

- GIF
- JPEG
- JPEG2000
- PNG
- PSD (8- and 16-bit)
- DNG
- RAW files from a variety of supported digital cameras
- TIFF (8- and 16-bit)

Note: For a list of supported digital cameras, go to http://www.apple.com/aperture.

Planning Your Import Strategy

Before you import images into Aperture, it's a good idea to plan the organization of your images. Eventually your image library may contain many thousands of images that you'll want organized in a flexible and easy-to-manage system. It's important to take a long-term view of what makes for an effective and efficient organization of your projects based on your specific type of photography.

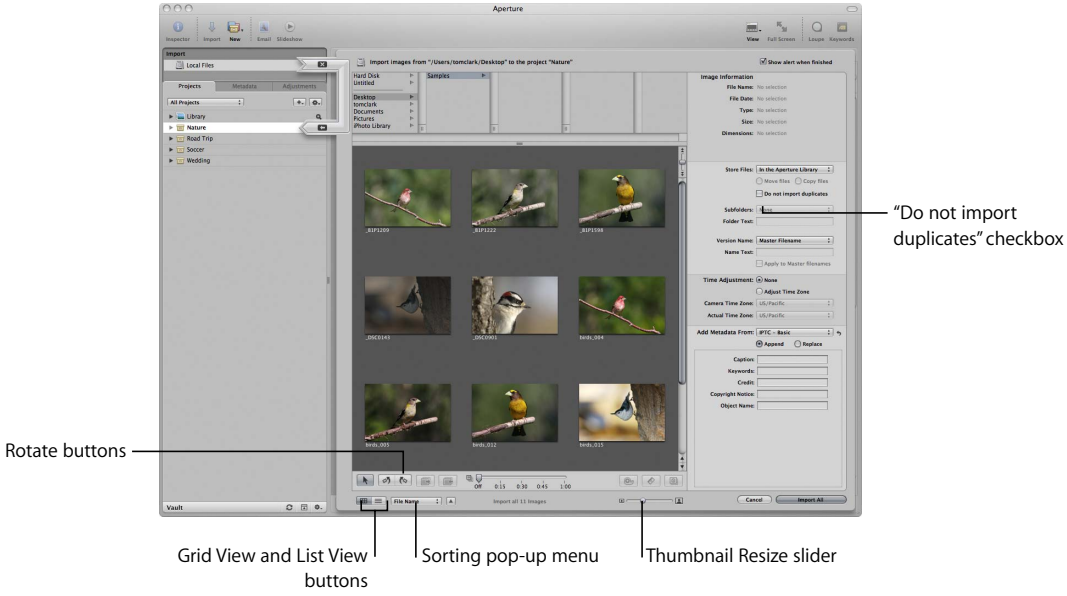
You may already have a large digital portfolio that you eventually want to import into the Aperture library. As an import strategy, it's best to try out importing images in a series of steps:

- Open and use the sample project as you explore Aperture features.
- If you have an iPhoto library, you can import it so that you can use your images in Aperture. For more information about importing your iPhoto library, see "Importing Your iPhoto Library" on page 139.
- Make trial imports of a small group of images directly from your digital camera or card reader. Learn about the filenaming and automatic metadata features of Aperture. For information about importing from your digital camera or card reader, see "Importing from Your Digital Camera or Card Reader," next.

- Plan how you want to import your legacy digital images. Because you may have many thousands of images previously stored on disk, you need to decide whether you'll store newly imported images in the Aperture library or store them as referenced images, leaving them in their current hard disk locations. You can also copy or move images to a different hard disk location when importing them. Also, plan the project organization you'll need to hold the images. For more information about importing files, see "Importing Image Files Stored on Your Computer" on page 119.
- Try out the different methods for importing individual files into your system. You can import individual files, import files stored in folders, and drag files or folders from the Finder into Aperture. For more information, see "Dragging Files from the Finder to the Projects Inspector" on page 134 and "Importing Folders of Images from the Finder" on page 138.

Once you're familiar with Aperture, you can begin to create and organize your professional image management system.

When you connect a camera or click an item in the Import pane, Aperture opens the Import dialog.



You use the options in the Import dialog to set up how and where images are imported. The Import dialog shows thumbnails of your images that you can enlarge or reduce in size by using the Thumbnail Resize slider. You can select individual images to import or select all the images to import at once. You can also change the dialog to display images in a list by clicking the List View button. In list view, you can then sort images by category by clicking a column heading.

You can change the order of images in the dialog by choosing a sort order from the Sorting pop-up menu.

You can also select images in the Import dialog and rotate them to the orientation you want. Click a Rotate button and then click the image you want to rotate, or select several images to be rotated and click a Rotate button to rotate them all at once. Aperture imports the images into your projects with the orientation you selected.

When you import images, Aperture can automatically check to see if any of the images are duplicates of previously imported images. Aperture checks the filename of the master to determine if the image is a duplicate of one in the library. Select the "Do not import duplicates" checkbox to prevent Aperture from importing duplicates. If this checkbox is not selected, Aperture imports all images, even if they are duplicates, and creates a new master with a different name for each duplicate. Aperture never overwrites or replaces a master that has already been imported.

Importing from Your Digital Camera or Card Reader

You can import images from a camera or card reader into Aperture using the Import dialog in two ways:

- Import all images on the camera or card reader at once.
- Import a selection of images from the camera or card reader.

You can also:

- Choose to store imported images in the Aperture library or select a different location on your hard disk and import the images as referenced images
- Have Aperture automatically reformat your memory card after the images are imported
- Have Aperture automatically create stacks of bracketed images or images shot in quick succession
- Display images in the Import dialog as a grid of thumbnails or as a list that you can sort
- Rotate images so that they are all imported right side up or with the orientation you want
- Apply a naming convention to standardize the names of the image files in the library
- Apply metadata to the image files, such as keywords, captions, copyright information, and the photographer's name. You can also apply or replace existing metadata associated with an image when you import the image.
- Adjust the shoot time of images that were shot in a different time zone

When connecting your camera directly to the computer, make sure that you turn the camera on and set it to the mode for transferring images (PC, PTP, Normal, or another mode, depending on the type of camera). Some cameras automatically select the correct transfer mode when connected to a computer. See your camera's manual for specific instructions.

Importing All Images from a Camera or Card Reader

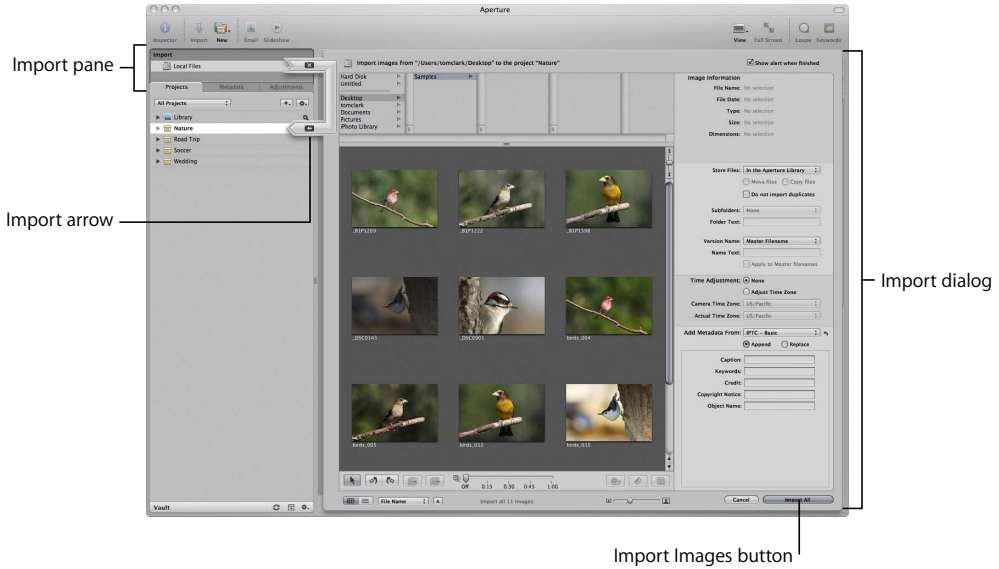
You can import all the image files located on your camera or card reader into Aperture at once.

To import all the images from a camera or card reader into Aperture:

1 Connect your camera or card reader to your computer.

The Import pane and Import dialog appear, showing the images on the camera or card.

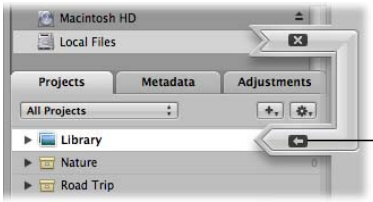
Note: If iPhoto opens when you connect your camera or card reader, quit iPhoto and then, in Aperture, choose Aperture > Preferences and click General. Choose Aperture from the "When a camera is connected, open" pop-up menu. Disconnect and reconnect your camera to have Aperture open the Import dialog.



2 Do one of the following:

- *If you want to import into a new, empty project:* Choose File > New Project (or press Command-N) to create a new project. You can also choose New Project from the New pop-up menu in the toolbar.

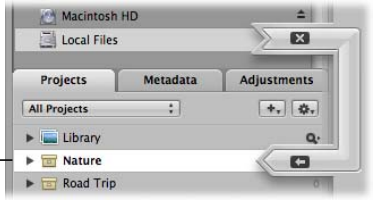
  Note: You can also click the Library icon in the Projects inspector, if necessary, to select it. When you select the library (not a project), a new, untitled project is automatically created when images are imported.



Make sure the Import arrow is pointing to the library to import the images into a new project.

- *If you want to import the images into an existing project:* Select the project. The Import arrow points at the currently selected project, indicating the destination for the import.

Select the project into which you want to import images.



The top-left portion of the Import dialog updates, displaying where the images are being placed.

3 Choose a location for the imported images by doing one of the following:

- *To store imported masters in the Aperture library:* Choose In the Aperture Library from the Store Files pop-up menu.
- *To store imported masters as referenced images in the Pictures folder on your hard disk:* Choose Pictures from the Store Files pop-up menu.
- *To store imported masters as referenced images in a location other than the Pictures folder:* Choose "Choose" from the Store Files pop-up menu and select the folder you want. Choose "No folder" from the Subfolders pop-up menu to specify that the files be stored as separate individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your imported images, see "Importing Masters for Referenced Images into Folders" on page 125. Choose whether you want the image files moved or copied to a new location by clicking the "Move files" or "Copy files" button. For more information about moving and copying files, see "Changing the Location of Images When You Import Them" on page 122.

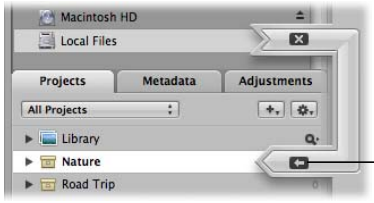
4 Choose a naming convention from the Version Name pop-up menu to specify how you want the images named.

For example, choose Master Filename from the Version Name pop-up menu to have your files stored using the current master filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your images stored using a specified name. If you choose a custom name format, enter the name you want in the Name Text field. You can also apply the name format to the master as well. Choose Edit from the Version Name pop-up menu to define a new naming scheme. For more information about naming files, see "Automatically Naming Your Imported Images" on page 127.

5 To add metadata to your images as they're imported, choose a metadata preset from the Add Metadata From pop-up menu. For more information about setting up and using metadata presets, see "Working with Metadata Views" on page 281.

6 With no images selected in the dialog, click the Import arrow or the Import Images button in the lower-right corner of the dialog.

If you select images, only the selected images are imported. To reset the image selection so that no images are selected, click in the background beside a thumbnail.



The import process begins and an indicator appears next to the project's name, showing the progress of the import. When images are imported, a dialog appears.

7 Click Eject Card, Erase and Eject Card, or Done.

As the images appear in the Browser, you can begin working with them. Images may temporarily appear as gray boxes until the loading is complete.

Importing a Selection of Images

You can also import a selection of images from your camera or card reader.

To import a selection of images:

1. Connect your camera or card reader to your computer.

   The Import pane and Import dialog appear, showing the images on the camera or card.

2. In the Projects inspector, do one of the following:

   - Choose File > New Project (or press Command-N) to create a new project. You can also choose New Project from the New pop-up menu in the toolbar.
   - Select an existing project to hold your images. (The Import arrow points at the selected project.)

   The top-left portion of the Import dialog updates, displaying where the images are being placed.

3. Select the images you want to import by Shift-clicking to select a range of adjacent images, Command-clicking to select nonadjacent images, or dragging a selection rectangle around the images you want.

   The current number of images selected for import is displayed on the Import Images button in the lower-right corner of the dialog.



Import Images button showing the number of images selected for import

   To reset the image selection so that no images are selected, click in the background beside a thumbnail.

4. Choose a location for the imported images by doing one of the following:

   - *To store imported masters in the Aperture library:* Choose In the Aperture Library from the Store Files pop-up menu.
   - *To store imported masters as referenced images in the Pictures folder on your hard disk:* Choose Pictures from the Store Files pop-up menu.

- *To store imported masters as referenced images in a location other than the Pictures folder:* Choose "Choose" from the Store Files pop-up menu and select the folder you want. Choose "No folder" from the Subfolders pop-up menu to specify that the files be stored as separate individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your imported images, see "Importing Masters for Referenced Images into Folders" on page 125. Choose whether you want the image files moved or copied to a new location by clicking the "Move files" or "Copy files" button. For more information about moving and copying files, see "Changing the Location of Images When You Import Them" on page 122.

5 Choose a naming convention from the Version Name pop-up menu to specify how you want the images named.

For example, choose Master Filename from the Version Name pop-up menu to have your files stored using the current master filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your images stored using a specified name. If you choose a custom name format, enter the name you want in the Name Text field. You can also apply the name format to the master as well. Choose Edit from the Version Name pop-up menu to define a new naming scheme. For more information about naming files, see "Automatically Naming Your Imported Images" on page 127.

6 To add metadata to your images as they're imported, choose a metadata preset from the Add Metadata From pop-up menu. For more information about setting up and using metadata presets, see "Working with Metadata Views" on page 281.

7 When you are satisfied with your image selection, click the Import arrow or the Import Images button in the lower-right corner of the dialog.

The import process begins and an indicator appears next to the project's name, showing the progress of the import. When images are imported, a dialog appears.

8 Click Eject Card, Erase and Eject Card, or Done.

As the images appear in the Browser, you can begin working with them. Images may temporarily appear as gray boxes until the loading is complete.

Importing Image Files Stored on Your Computer

You can import image files stored on your computer and other storage devices. You have a choice of storing imported images in the Aperture library, importing images as referenced images and leaving them in their current locations, or importing images as referenced images and moving or copying them to a different location.

Note: If you have folders of images to import, you can import them using the Import Folders as Projects command. For more information, see "Importing Folders of Images from the Finder" on page 138.

You can import image files in many common image formats, including images scanned from nondigital sources such as film and photographic prints. Adding these image files to your Aperture database is as simple as navigating to the folder where they reside on your hard disk using the Import dialog.

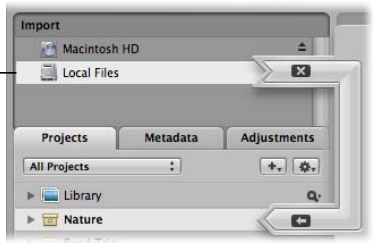
When you import images from a folder on your computer system, you have the choice of importing the images into a new project or an existing one.

To import image files stored on your computer's hard disk or other storage device:

1. Click the Import button in the toolbar (or press Command-I).

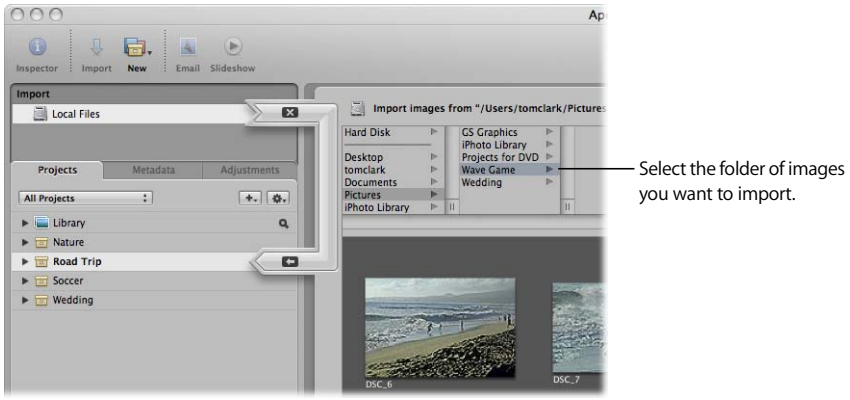
   The Import dialog appears with the file browser at the top.

2. Select the disk that holds the image files you want to import.



Select the disk where the images you want to import are located.

3 In the file browser, navigate to the folder containing the image files you want to import.



When you have selected the folder containing the image files you want to import, image thumbnails appear in the Import dialog.

4 In the Projects inspector, do one of the following:

- Select Library to create a new, untitled project, or choose File > New Project (or press Command-N). You can also choose New Project from the New pop-up menu in the toolbar.
- Select an existing project to hold your images.

The top-left portion of the Import dialog updates, displaying where the images are being placed.

5 Select the images you want to import by Shift-clicking to select a range of adjacent images, Command-clicking to select nonadjacent images, or dragging a selection rectangle around the images you want.

6 Choose a location for the imported images by doing one of the following:

- *To store imported masters in the Aperture library:* Choose In the Aperture Library from the Store Files pop-up menu.
- *To import the files as referenced images stored in their current locations on your hard disk:* Choose "In their current location" from the Store Files pop-up menu.
- *To store imported masters as referenced images in the Pictures folder on your hard disk:* Choose Pictures from the Store Files pop-up menu.
- *To store imported masters as referenced images in a location other than the Pictures folder:* Choose "Choose" from the Store Files pop-up menu and select the folder you want. Choose "No folder" from the Subfolders pop-up menu to specify that the files be stored as separate individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your imported images, see "Importing Masters for Referenced Images into Folders" on page 125. Choose whether you want the image files moved or copied to a new location by clicking the "Move files" or "Copy files" button. For more information about moving and copying files, see "Changing the Location of Images When You Import Them" on page 122.

7 Choose a naming convention from the Version Name pop-up menu to specify how you want the images named.

For example, choose Master Filename from the Version Name pop-up menu to have your files stored using the current master filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your images stored using a specified name. If you choose a custom name format, enter the name you want in the Name Text field. You can also apply the name format to the master as well. Choose Edit from the Version Name pop-up menu to define a new naming scheme. For more information about naming files, see "Automatically Naming Your Imported Images" on page 127.

8 To add metadata to your images as they're imported, choose a metadata preset from the Add Metadata From pop-up menu. For more information about setting up and using metadata presets, see "Working with Metadata Views" on page 281.

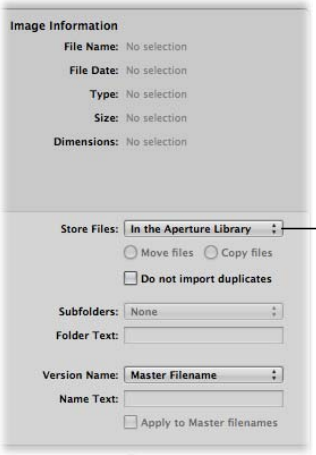
9 When you are satisfied with your image selection, click the Import arrow or the Import Images button in the lower-right corner of the dialog.

As the images appear in the Browser, you can begin working with them.

Note: If the folder containing the images you want to import contains subfolders of images and you want those imported too, choose File > Import > Folders as Projects as described in "Importing Folders of Images from the Finder" on page 138.

Changing the Location of Images When You Import Them

When you import images stored on a hard disk, you can copy or move those images to a new location. You specify a new location for the moved or copied files by choosing a destination folder from the Store Files pop-up menu in the Import dialog.

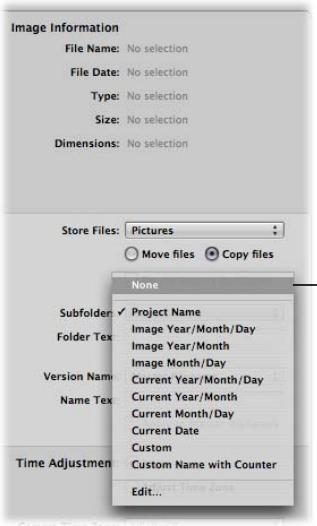


Choose a folder destination for the files you are moving or copying using this pop-up menu.

You specify filenames used within Aperture by choosing a name format from the Version Name pop-up menu. You can also have Aperture change the Finder filename of images to the selected name format by selecting the "Apply to Master filenames" checkbox. Then an image will have the same filename in the Finder and in Aperture.

When you move or copy image files to a different location, you can have Aperture place them as individual files in the destination folder, or place them in subfolders within the destination folder. For example, a group of images might be copied into a destination folder with each image placed in a subfolder identified by a date. Or, each image might be placed in a hierarchy of subfolders organized by year, month, and day.

You choose the subfolder organization you want from the Subfolders pop-up menu. You can also specify your own custom folder organization by choosing the Edit command.



Subfolders pop-up menu

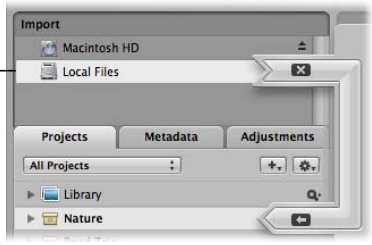
For more information about creating custom subfolder hierarchies, see "Importing Masters for Referenced Images into Folders" on page 125.

To copy or move images to a new location when importing them from a hard disk:

1. Click the Import button in the toolbar (or press Command-I).

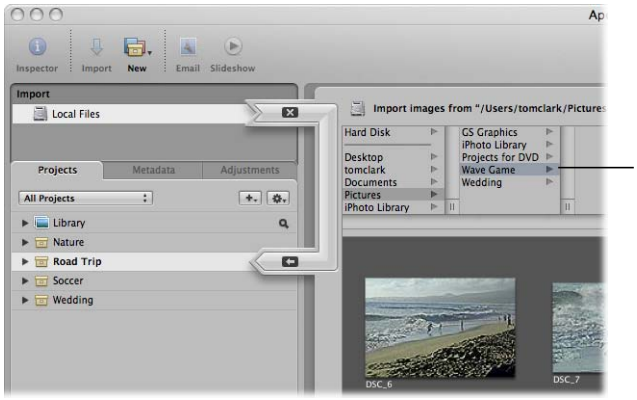
   The Import dialog appears with the file browser at the top.

2. Select the disk that holds the image files you want to import.



Select the disk where the images you want to import are located.

3 In the file browser, navigate to the folder containing the image files you want to import.



When you have selected the folder containing the image files you want to import, image thumbnails appear in the Import dialog.

4 In the Projects inspector, do one of the following:

- Select Library to create a new, untitled project, or choose File > New Project (or press Command-N). You can also choose New Project from the New pop-up menu in the toolbar.
- Select an existing project to hold your images.

The top-left portion of the Import dialog updates, displaying where the images are being placed.

5 Select the images you want to import.

6 Choose a location for the imported images by doing one of the following:

- *To store imported masters as referenced images in the Pictures folder on your hard disk:* Choose Pictures from the Store Files pop-up menu.
- *To store imported masters as referenced images in a location other than the Pictures folder:* Choose "Choose" from the Store Files pop-up menu and select the folder you want. Choose "No folder" from the Subfolders pop-up menu to specify that the files be stored as separate individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your imported images, see "Importing Masters for Referenced Images into Folders" on page 125. Choose whether you want the image files moved or copied to a new location by clicking the "Move files" or "Copy files" button. For more information about moving and copying files, see "Changing the Location of Images When You Import Them" on page 122.

7 Choose a naming convention from the Version Name pop-up menu to specify how you want the images named.

For example, choose Master Filename from the Version Name pop-up menu to have your files stored using the current master filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your images stored using a specified name. If you choose a custom name format, enter the name you want in the Name Text field. You can also apply the name format to the masters as well. Choose Edit from the Version Name pop-up menu to define a new naming scheme. For more information about naming files, see "Automatically Naming Your Imported Images" on page 127.

8 To add metadata to your images as they're imported, choose a metadata preset from the Add Metadata From pop-up menu. For more information about setting up and using metadata presets, see "Working with Metadata Views" on page 281.

9 When you are satisfied with your image selection, click the Import arrow or the Import Images button in the lower-right corner of the dialog.

As the images appear in the Browser, you can begin working with them.

Importing Masters for Referenced Images into Folders

When you import images as referenced images, you can have Aperture place their masters individually into a selected folder, or create subfolders to hold the files. For example, you might have the imported image files placed in subfolders identified by date. You can create folder name format presets that you can quickly choose to select the folder name format you want.

To create a folder name format, you select the name elements you want in the Folder Naming Presets dialog. You can specify a combination of name elements to create the custom folder names you want. You can compose folder name formats that combine the following name elements:

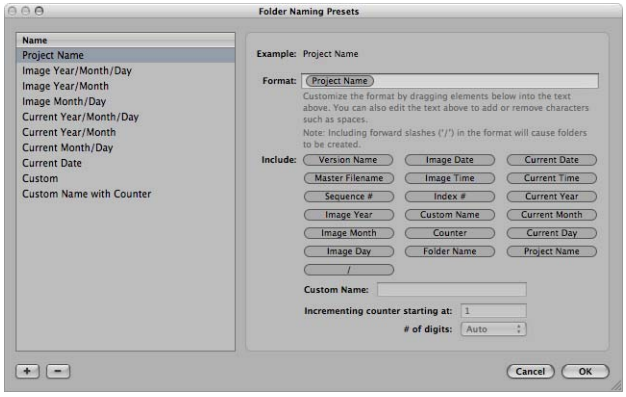
- Version Name
- Master Filename
- Sequence Number (1 of 3, 2 of 3, 3 of 3, and so on)
- Image Year
- Image Month
- Image Day
- Image Date
- Image Time
- Index Number (1, 2, 3, and so on)
- Custom Name
- Counter (001, 002, 003, and so on)
- Current Date
- Current Time

- Current Year
- Current Month
- Current Day
- Folder Name
- Project Name

You can also create a hierarchy of folders within folders. For example, you can specify that Aperture place your images in a subfolder named Date, and within that folder you can create subfolders identified by the time the image was taken. To create the folder name format, you drag the elements you want into the Format field and drag the slash element between the elements where a subfolder should be created.

To create a custom folder name format:

1 In the Import dialog, choose Edit from the Subfolders pop-up menu.



The Folder Naming Presets dialog appears.

2 Click the Add (+) button to create a new name format, or select the preset name format you want to change.

3 Drag the name elements you want into the Format field in the order you want them.

4 Drag a slash between the elements where you want subfolders created.

5 Enter a custom name in the Custom Name field, if you want.

6 Click OK.

Your new folder name format now appears in the Subfolders pop-up menu.

When using a counter in your folder name format, you can specify the starting number and the number of digits, from one to six digits, that appear in the counter. When you use a folder name format with a counter, make sure to reset the initial starting number, if necessary. Otherwise, on the next import Aperture will continue numbering the image folders starting from the last number of the previous import.

To reset the starting number of a counter in a folder name format:

- In the Folder Naming Presets dialog, type 0 (zero) in the "Incrementing counter starting at" field.

Automatically Naming Your Imported Images

The filenames given to images by the camera are often difficult to distinguish. When you import images, you can have Aperture use the original name assigned by the camera, or use a filenaming convention that you choose or create. For example, you can use a name format that includes a name that you specify, plus the date, time, and index number. Aperture provides a number of preset name formats, and you can also create your own naming conventions to suit the different types of shoots you do. You can choose a preset name format when you import new photos.

Aperture provides the following preset name formats:

Preset name format	Example
Master Filename	IMG001
Image Date/Time	2005-10-14 09.03.25 PM
Version Name	IMG001
Version Name and Date/Time	IMG001 - 2005-10-14 09.03.25 PM
Version Name with Sequence	IMG001 (1 of 2), IMG002 (2 of 2), and so on
Version Name with Index	IMG001 1, IMG002 2, and so on
Custom Name with Index	Thailand 1, Thailand 2, and so on
Custom Name with Counter	Thailand 001, Thailand 002, and so on

You can apply names to your image files when you import them and when you export them. You can specify names that will be applied to the versions and to the masters. For example, when you import images from your camera, you can specify that a name format be applied to each image version that Aperture creates. You can also specify that Aperture apply names to the masters as they are stored in the library or on a hard disk. When importing image files, you select the "Apply to Master filenames" checkbox to apply the name format you want to the masters. Then both versions and masters share the same name format. When you export masters, you can also rename the masters, if you choose.

When you import masters as referenced images, you can't rename the masters when you leave them in their original locations. However, when you import masters as referenced images and move them to a new hard disk location, you can rename them at that time.

To choose a preset name format:

1. In the Import dialog, choose a name format from the Version Name pop-up menu.
2. To apply the filename to the master as well as to the versions, select the "Apply to Master filenames" checkbox.

Applying Valid Filenames

Proper filenaming is one of the most critical aspects of media and project management. When you capture your masters, consider how and where your files may be used in the future. Naming your files simply and consistently makes it easier to share media among multiple photographers, transfer projects to other Aperture systems, move files across a network, and properly restore archived projects. The following sections present several issues to consider when naming project files and image files.

Avoiding Special Characters

The most conservative filenaming conventions provide the most cross-platform compatibility. This means that your filenames will work in different operating systems, such as Mac OS X and other UNIX-based operating systems, Mac OS 9, and Windows. You also need to consider filenaming when you transfer files via the Internet, where you can never be certain what computer platform your files may be stored on, even if temporarily.

Avoid	Example characters	Reasons
File separators	: (colon) / (slash) \ (backslash)	You cannot use colons in the names of files and folders because Mac OS 9 (Classic) uses this character to separate directories in pathnames. In addition, some applications may not allow you to use slashes in the names of items. These characters are directory separators for Mac OS 9, Mac OS X, and DOS (Windows) respectively.
Special characters not included in your native alphabet	□ □ ¢ ™	These characters may not be supported or may be difficult to work with when exported to other applications.
Punctuation marks, parentheses, quotation marks, brackets, and operators	. , [ ] { } ( ) ! ; “ ‘ * ? < > |	These characters are often used in scripting and programming languages.
White space characters such as spaces, tabs, new lines, and carriage returns (the last two are uncommon)		White space is handled differently in different programming languages and operating systems, so certain processing scripts and applications may treat your files differently than expected. The most conservative filenames avoid all use of white space characters, and use the underscore (_) character instead.

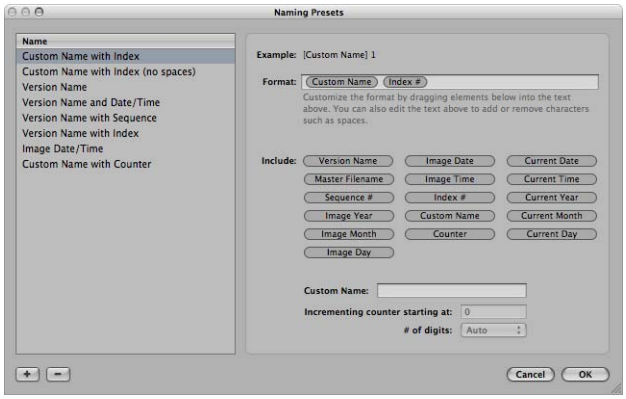
Creating Custom Name Formats

In addition to the preset name formats, you can create custom name formats. To create a name format, you select the name elements you want in the Naming Presets dialog. You can compose a name format that combines the following name elements:

- Version Name
- Master Filename
- Sequence Number (1 of 3, 2 of 3, 3 of 3, and so on)
- Image Year
- Image Month
- Image Day
- Image Date
- Image Time
- Index Number (1, 2, 3, and so on)
- Custom Name
- Counter (001, 002, 003, and so on)
- Current Date
- Current Time
- Current Year
- Current Month
- Current Day

To create a custom name format:

1 In the Import dialog, choose Edit from the Version Name pop-up menu.



The Naming Presets dialog appears.

2 Click the Add (+) button to create a new name format, or select the preset name format you want to change.

3 Drag the name elements you want into the Format field in the order you want them. You can also add valid characters or spaces between the name elements. For more information about valid filenaming characters, see "Avoiding Special Characters" on page 129.

4 Enter a custom name in the Custom Name field, if you want.

5 Click OK.

Your new name format now appears in the Version Name pop-up menu.

When using a counter in your name format, you can specify the starting number and the number of digits, from one to six digits, that appear in the counter. When you use a preset name format with a counter, make sure to reset the initial starting number, if necessary. Otherwise, on the next import Aperture will continue numbering the imported images starting from the last number of the previous import.

To reset the starting number of a counter in a name format:

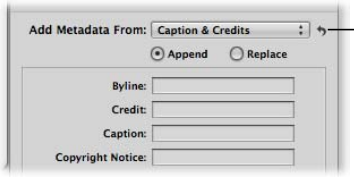
- In the Naming Presets dialog, type 0 (zero) in the "Incrementing counter starting at" field.

Adding Metadata to Images During Import

You can add metadata to your images as they are imported into Aperture. Adding metadata during import helps you keep track of your images and quickly locate them using the Query HUD. For example, you can add IPTC keywords and other metadata to the image files.

To add metadata to your images as they're imported:

- Choose a metadata view or preset from the Add Metadata From pop-up menu in the Import dialog.



When you choose a view, Aperture displays the metadata fields for that view for you to complete. You can enter the metadata you want in the fields.

When you choose a metadata preset, Aperture displays the list of metadata fields and metadata for that preset. You can edit the metadata preset to store any metadata that you want to apply frequently to your images using the Metadata inspector. For more information about editing metadata presets, see Chapter 11, "Working with Metadata," on page 269.

To clear the entries in the metadata fields:

- Click the Reset button (with a curved arrow) beside the Add Metadata From pop-up menu.

Creating Stacks Automatically During Import

You can automatically create stacks when you import images. You can preview the stacks before you import using the Auto-Stack slider in the Import dialog. For detailed information about working with stacks, see Chapter 8, "Stacking Images and Making Picks," on page 219.

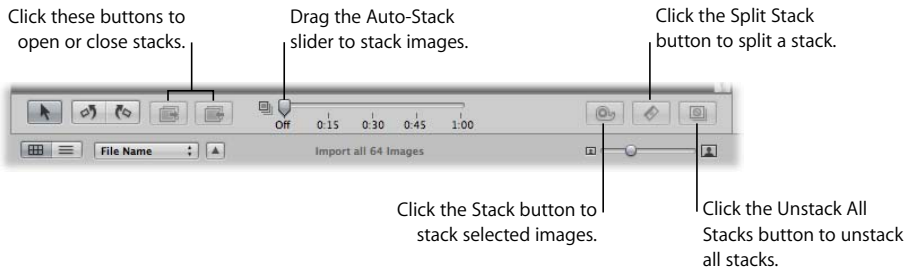
Stacks are automatically created based on auto-bracketed images and images shot continuously or within short intervals of time. You can manually adjust the stacking of images shot within a short period of time by specifying the time interval of images that should be stacked.

To create stacks automatically:

1. Click the Import button in the toolbar (or press Command-I).

   The Import dialog appears with the file browser at the top.

2. Select your camera or card reader, or navigate to a folder on your hard disk that holds images you want to import.
3. Select the images you want to import.
4. Adjust the Auto-Stack slider.



You can adjust the period of time between shots from 0 seconds to 1 minute.

When the images appear stacked, you can open or close the stacks by clicking the Open All Stacks and Close All Stacks buttons. If you want to divide a stack, you can select an image within a stack and click the Split Stack button, and a new stack appears holding your selected image and stacked images after it. You can also unstack your images by clicking the Unstack All Stacks button.

If you are not satisfied with how the images are stacked, drag the slider to the Off position.

You can also manually select and stack images in the Import dialog in the same way you can in the Browser. For more information about stacking images, see Chapter 8, "Stacking Images and Making Picks," on page 219.

Adjusting the Image File's Time When Importing

On a trip, it's easy to forget to update your camera's clock to match the local time zone. If you didn't synchronize your camera time to the new location, Aperture makes it easy to correct the time assigned to the image file by whole hours when importing.

To adjust image file capture time when importing:

1. Click the Import button in the toolbar (or press Command-I).

   The Import dialog appears with the file browser at the top.

2. Select your camera or card reader, or navigate to a folder on your hard disk that holds images you want to import.
3. Select the images you want to import.
4. In the Import dialog, select Adjust Time Zone.
5. Choose the time zone that matches the camera's time setting from the Camera Time Zone pop-up menu.
6. Choose the time zone of the shoot location from the Actual Time Zone pop-up menu.
7. Verify that the additional settings are correct, then click the Import Images button.

   Aperture automatically updates the capture time of your image files according to the Time Adjustment settings.

   After you've imported images, you can adjust the date and time of any versions you've created by choosing File > Adjust Versions Date and Time. For more information about this command, see "Adjusting Image Date and Time" on page 293.

Dragging Files from the Finder to the Projects Inspector

You can drag image files from the Finder or desktop directly into a project. This is useful if you've received image files from a source other than your camera, and you want to use them in Aperture. You can also do this if you have image files scattered on your desktop or throughout folders on your system and you want to consolidate them in one place in the library.

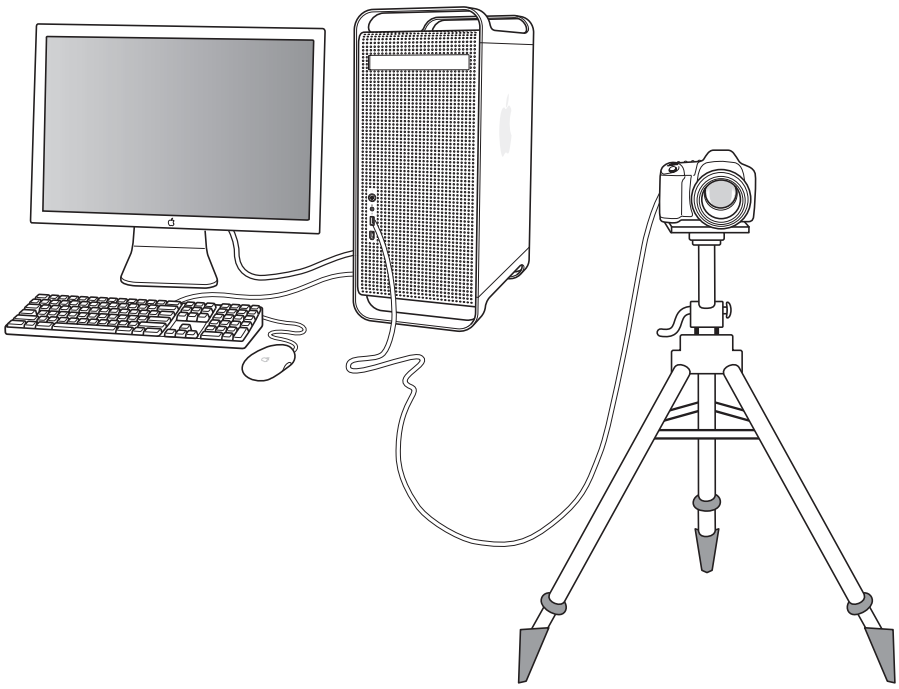
To quickly import image files from the Finder into a project:

1. In the Projects inspector, create a new project or select an existing project.
2. Locate the image file or files in the Finder.
3. Select the image files and drag them to the project in the Projects inspector.

   The import process begins and an indicator appears next to the project's name, showing the progress of the import.

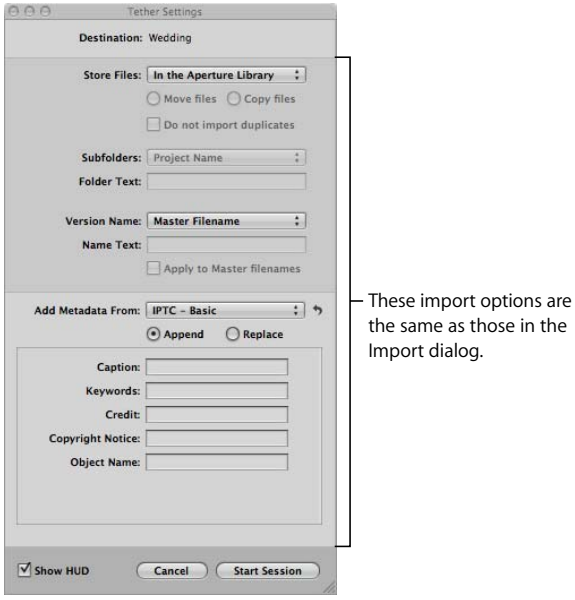
Capturing Images as You Work

For certain kinds of shoots, such as product shots done within your office studio, you may want to immediately see test shots on your computer to check on lighting and other production factors. You can connect your camera directly to your computer and have each shot immediately appear in an Aperture project as you shoot. You can review an image in detail, make production changes, and then shoot and immediately see the results again. This process is called *tethered shooting,* and it's ideal for checking out the details of a shot while setting up the final shot.



Note: For a list of cameras that Aperture supports for tethered shooting, go to: http://www.apple.com/aperture/raw/cameras.html. See your camera's handbook for information about setting up your camera for tethered shooting.

To use tethered shooting, you first connect your camera to the computer using a USB or FireWire cable. You then select a project for the images to be stored in. Aperture provides a Tether Settings dialog for choosing your tethered shooting settings, and you can use this dialog to specify any other import settings (just as you would normally specify import settings in the Import dialog).

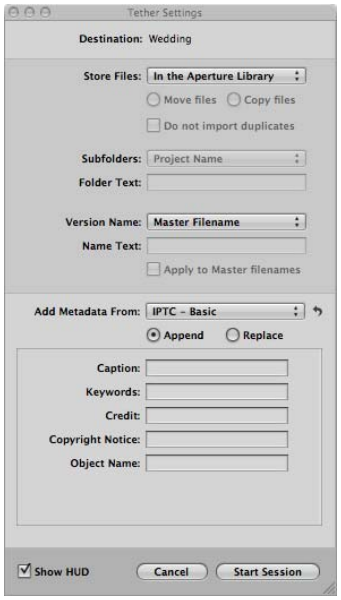


After starting a session, you can use Aperture to view and capture images while at your computer. You use the Aperture Tether HUD to control your camera and take photos as you work.



To set up Aperture for tethered shooting:

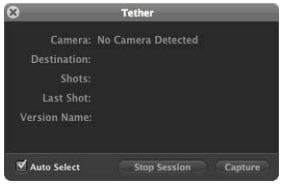
1. Connect your camera to your computer.
2. Select or create a project or album to hold the images.
3. Choose File > Tether > Start Session.
4. Specify the import settings you want.



For more information about the import settings, see "Importing from Your Digital Camera or Card Reader" on page 113.

5. Click Start Session.

   The Tether HUD appears.



6. Do one of the following:
   - *To begin the capture session:* Click Capture.
   - *To stop capturing images:* Click Stop Session.

Importing Folders of Images from the Finder

If you've spent time organizing your images into a meaningful hierarchy on your computer and you want to keep that organization, you can import a folder of images as a project or drag it directly into the Projects inspector. When you import a folder of images or drag it into the Projects inspector, the folder becomes a project and any subfolders become albums within the project.

> ***Warning:*** When importing folders of images into Aperture, carefully plan how you want your images organized before you begin. The top-level folder containing images becomes a project containing all the images in the subfolders as well. This means that if you import a folder with thousands of images contained within its subfolders, Aperture will create a project with thousands of images.

To import a folder of images from the Finder using the Import command:

1. In the Projects inspector, select Library.
2. Choose File > Import > Folders into a Project.
3. Select the folder of images that you want to import.
4. Choose a location for the imported images by doing one of the following:
   - *To store imported masters in the Aperture library:* Choose In the Aperture Library from the Store Files pop-up menu.
   - *To import the files as referenced images stored in their current locations on your hard disk:* Choose "In their current location" from the Store Files pop-up menu.
   - *To store imported masters as referenced images in the Pictures folder on your hard disk:* Choose Pictures from the Store Files pop-up menu.
   - *To store imported masters as referenced images in a location other than the Pictures folder:* Choose "Choose" from the Store Files pop-up menu and select the folder you want. Choose "No folder" from the Subfolders pop-up menu to specify that the files be stored as separate individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your imported images, see "Importing Masters for Referenced Images into Folders" on page 125. Choose whether you want the image files moved or copied to a new location by clicking the "Move files" or "Copy files" button.

5 Choose a naming convention from the Version Name pop-up menu to specify how you want the images named.

For example, choose Master Filename from the Version Name pop-up menu to have your files stored using the current master filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your images stored using a specified name. If you choose a custom name format, enter the name you want in the Name Text field. You can also apply the name format to the masters as well. Choose Edit from the Version Name pop-up menu to define a new naming scheme. For more information about naming files, see "Automatically Naming Your Imported Images" on page 127.

6 Click Open.

The top-level folder is converted to a project. If the folder you imported contains a hierarchy of subfolders and images, the subfolders appear as albums.

You can select multiple folders to import by Shift-clicking them.

When you drag folders into the Projects inspector, Aperture uses the last import settings you specified to determine how the folders are imported and where they are stored.

To drag folders into Aperture:

1 In the Finder, locate the folder containing the images you want to import.

2 Drag the folder to the Projects inspector.

The top-level folder is converted to a project. If the folder you imported contains a hierarchy of subfolders and images, the subfolders appear as albums.

Importing Your iPhoto Library

When you first open Aperture, a dialog appears that enables you to import your iPhoto library. You can import your iPhoto library, copying the images into the Aperture library, or you can simply allow Aperture to access images in the iPhoto library as referenced images without storing them in the Aperture library.

The organization of your iPhoto images and albums is maintained as projects in the Projects inspector. Each image's name, EXIF information, keywords, rating, and any applied adjustments are maintained as well. You cannot import slideshows, books, and Smart Albums from your iPhoto library.

Note: You must upgrade to iPhoto version 5.0.4 or later before you can import photos from your iPhoto library into Aperture.

If you choose not to import your iPhoto library right away, you can do it later.

To import your iPhoto library:

1. Choose File > Import > iPhoto Library.
2. Select the iPhoto Library folder using the file browser in the Import dialog.
3. Choose a location for the imported images by doing one of the following:
   - *To store imported masters in the Aperture library:* Choose In the Aperture Library from the Store Files pop-up menu.
   - *To import the files as referenced images stored in their current locations on your hard disk:* Choose "In their current location" from the Store Files pop-up menu.
   - *To store imported masters as referenced images in the Pictures folder on your hard disk:* Choose Pictures from the Store Files pop-up menu.
   - *To store imported masters as referenced images in a location other than the Pictures folder:* Choose "Choose" from the Store Files pop-up menu and select the folder you want. Choose "No folder" from the Subfolders pop-up menu to specify that the files be stored as separate individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your imported images, see "Importing Masters for Referenced Images into Folders" on page 125. Choose whether you want the image files moved or copied to a new location by clicking the "Move files" or "Copy files" button.
4. Choose a naming convention from the Version Name pop-up menu to specify how you want the images named.

   For example, choose Master Filename from the Version Name pop-up menu to have your files stored using the current master filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your images stored using a specified name. If you choose a custom name format, enter the name you want in the Name Text field. You can also apply the name format to the masters as well. Choose Edit from the Version Name pop-up menu to define a new naming scheme. For more information about naming files, see "Automatically Naming Your Imported Images" on page 127.
5. Click Choose.

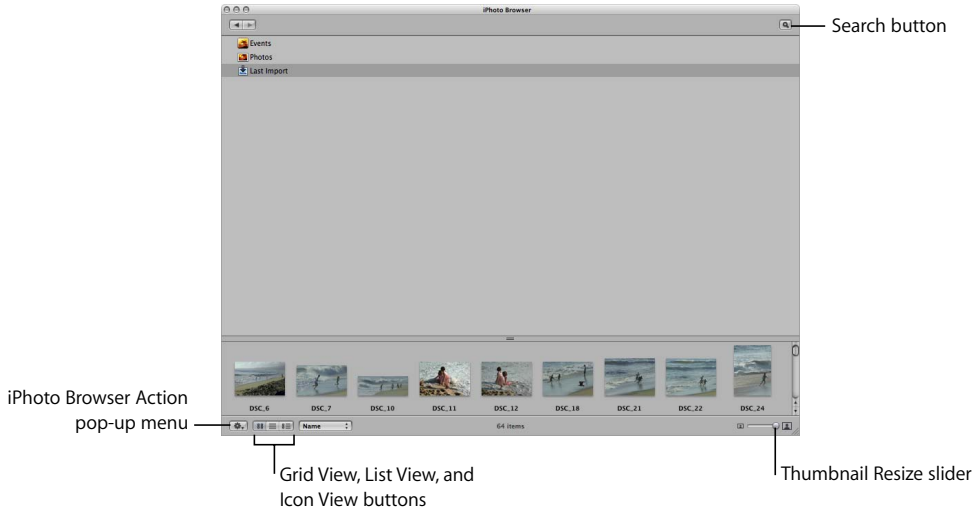
   Your iPhoto library is imported into Aperture.

   If you choose to store the photos imported from your iPhoto library in the Aperture library, Aperture makes a copy of each image file and places it in the Aperture library. This doubles the amount of disk space the image files occupy on your computer. To save space, import the photos in your iPhoto library as referenced images. You can also delete images from your iPhoto library after importing them, but you will no longer have access to those images within iPhoto. If you choose not to delete the images in your iPhoto library, any changes you make to those images in iPhoto will not be reflected in the duplicate images in Aperture.

   Note: You can also import individual images or albums from your iPhoto library.

Browsing and Selecting Images from Your iPhoto Library

You can open the Aperture iPhoto Browser to review iPhoto images and import specific images into the Aperture library. The iPhoto Browser gives you a handy way of looking for images that you want without having to import your entire iPhoto library.



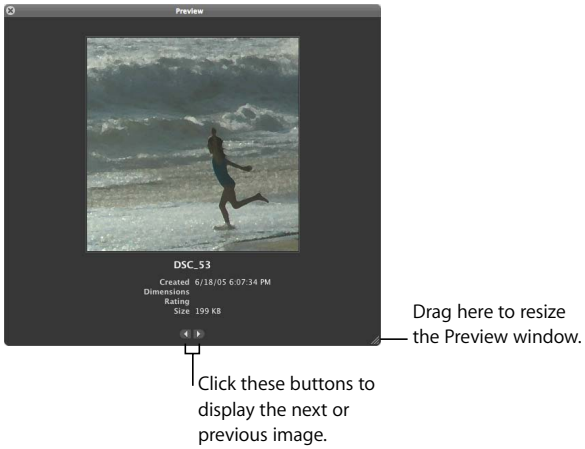
The iPhoto Browser window allows you to navigate through the contents of your iPhoto library and display thumbnails of your images in a grid view, in a list view, or in a large icon view. You can sort images within these different views to locate the images you want. The iPhoto Browser Action pop-up menu allows you to move an image to the Trash, rename an image, and then reveal the Finder location of an image. You can also search for images by entering text in a search field.

Note: You can also share the images in your Aperture library with any iLife or iWork application that has a media browser.

To open the iPhoto Browser and select images:

1. Choose File > Show iPhoto Browser (or press Command-Option-I).
2. Select the iPhoto roll or folder that you want.

You can display larger previews of the thumbnails in the iPhoto Browser. When you double-click an image, it appears in the Preview window. You can reposition the window and resize it as needed.



To see a preview of an image in the iPhoto Browser:

1. Double-click an image thumbnail in the iPhoto Browser.

   The Preview window appears.
2. Click the Next Image and Previous Image buttons to display other images in the Preview window.

To search for an image in the iPhoto Browser:

1. Click the Search button (with the magnifying glass icon) in the upper-right corner of the iPhoto Browser.
2. Type text in the search field.

After locating images that you'd like to transfer to your Aperture system, you can drag selected images from the iPhoto Browser (or from the Preview window) into an Aperture project.

To import images from the iPhoto Browser:

1. In the iPhoto Browser, select the images that you want to import.
2. Drag the selection into a project in the Projects inspector.

Transferring Projects from Another System

If you work with several computers, or work on projects with other people, you may find it necessary to transfer projects from one Aperture system to another. Transferring projects is a simple import process.

To transfer a project from one computer to another:

1. Select the project you want to transfer, then choose File > Export > Project.
2. Enter a name and choose a location for the exported project.
3. If your project contains referenced images, select the "Consolidate images into exported project" checkbox to transfer the original masters as well as the previews and metadata as a self-contained project that another Aperture system can use.

   If you are transferring projects with referenced images to another computer and want to transfer just the referenced image previews and not the masters, don't select the "Consolidate images into exported project" checkbox.
4. Click Save.

   The project file is exported to the location you chose.
5. Connect or network the two computers together.

   For more information, see the documentation that came with the computers.
6. Open Aperture on the computer to which you want to transfer the project.
7. In the Projects inspector, select Library.
8. Choose File > Import > Projects.
9. In the Import dialog, navigate to the location on the other computer where the project you want to transfer is stored, select the project, then click Open.

   The selected project appears in the Projects inspector.

Making an Immediate Backup

After you import images into Aperture, you can make an immediate backup to ensure that your masters exist in more than one place. You do this by having Aperture update your vault. For more information, see Chapter 22, "Backing Up Your Images," on page 613.

Where Aperture Stores Your Managed Files in the Library

You always view and work with your images within Aperture. However, you may wonder where your managed image files physically reside in the Aperture library on the computer's hard disk. By default, your images are stored in the Aperture Library file within your Pictures folder.

You can open and see the contents of the Aperture Library file in the Finder by Control-clicking the file and choosing Show Package Contents. However, it's not recommended that you access or work with your masters in this way because it presents a risk of interfering with the Aperture library.

> ***Warning:*** You should always back up and work with your managed images and projects from within the Aperture application. If you move or accidentally change the files stored in the Aperture Library file, Aperture may not be able to locate your project and images later. Making a change to a managed file in the Finder, such as renaming it, creates changes that the application cannot track.

Migrating Images from Previous Versions of Aperture

Aperture 2 provides new RAW decoding algorithms that deliver improved RAW image quality. With improved default rendering of RAW images from supported cameras, Aperture 2 provides significantly enhanced image quality with improvements in noise reduction, sharpening, and highlights recovery.

To maintain the image integrity of the existing photos in your Aperture library, Aperture 2 enables you to retain the original RAW decoding of your images from previous versions, selectively migrate images using the new Aperture 2 RAW decoding process, or create duplicate versions of each original RAW image file with Aperture 2 RAW decoding applied.

Strategies for Migrating Images

When you start using Aperture 2, all of your existing images continue to use the previous version's RAW decoding process, in order to preserve their appearance. Any of these images can be individually migrated to use the new Aperture 2 RAW decoding process. You can also use the Migrate Images command in the File menu to migrate selected images, projects, books, webpages and web journals, Light Table albums, albums, and Smart Albums.

Migrating a large number of images can be a time-consuming process. Therefore, you may find it easier to migrate images on an as-needed basis. For example, if you have five-star selects, you may wish to initially migrate only those images. It does not affect an image to migrate it more than once; if an image already uses Aperture 2 RAW decoding, migrating it again has no effect.

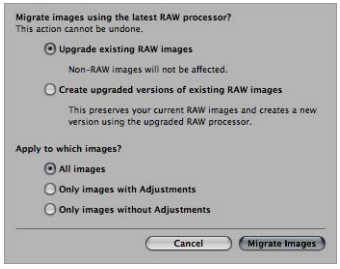
Migrating a RAW Image Selection

You can choose to migrate all images, migrate only images with adjustments, or migrate only images without adjustments. You can also migrate images one at a time using the RAW Fine Tuning controls in the Adjustments inspector or the Adjustments pane of the Inspector HUD. For more information about migrating individual images, see "Migrating Images Individually with the RAW Fine Tuning Controls" on page 146.

Important: The Migrate Images command cannot be undone. However, you can return an individual image to the previous version's RAW decoding process using the Version pop-up menu in the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD. For more information, see "Migrating Images Individually with the RAW Fine Tuning Controls" on page 146.

To migrate a selection of RAW images:

1. Select an image or group of images.
2. Choose File > Migrate Images.
3. In the dialog that appears, select the appropriate migration criteria, then click the Migrate Images button.



The RAW image files are migrated from the earlier RAW decoding process to the Aperture 2 RAW decoding process according to the criteria you specified.

You can also migrate all the images in a selected project, book, webpage, web journal, Light Table album, album, or Smart Album.

To migrate a project or album:

1. In the Projects inspector, select a project or album.
2. Choose File > Migrate [*Item*].
3. In the dialog that appears, select the appropriate migration criteria, then click the Migrate Images button.

   All RAW images in the selected project or album are migrated to the Aperture 2 RAW decoding process.

You can also migrate all the RAW images in the library at once. However, this migration process may take a long time for large libraries.

To migrate every RAW image in the library:

1. In the Projects inspector, click the Library disclosure triangle to reveal the Smart Albums beneath it.
2. Select the Smart Album named All Photos.
3. Choose File > Migrate Smart Album.
4. In the dialog that appears, select the appropriate migration criteria, then click the Migrate Images button.

   Every RAW image in the library is migrated to the Aperture 2 RAW decoding process.

   Important: Migrating thousands of RAW image files to Aperture 2 can take a long time to process. Make sure to set aside a significant amount of time for Aperture to process the RAW files–preferably when you don't require the use of your Aperture system.

Migrating Images Individually with the RAW Fine Tuning Controls

You can migrate RAW images one at a time using the Version pop-up menu.

To migrate a RAW image using the Version pop-up menu:

1. Select a RAW image.
2. In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose 2.0 from the Version pop-up menu in the RAW Fine Tuning adjustment.

   The image is redecoded using the Aperture 2 RAW decoding process, the image version is updated, and the RAW Fine Tuning controls become available.

Part II: Photo Editing

II

This section explains the Aperture features used for photo editing and working with your images.

Chapter 5 Working with Images in the Browser

Chapter 6 Displaying Images in the Viewer

Chapter 7 Viewing Images in Full Screen View

Chapter 8 Stacking Images and Making Picks

Chapter 9 Rating Images

Chapter 10 Applying Keywords to Images

Chapter 11 Working with Metadata

Chapter 12 Searching for and Displaying Images

Chapter 13 Grouping Images with Smart Albums

Working with Images in the Browser

5

After a shoot, you may need to sort through hundreds or even thousands of images in a project. Aperture provides efficient methods for increasing your productivity when working with large numbers of images.

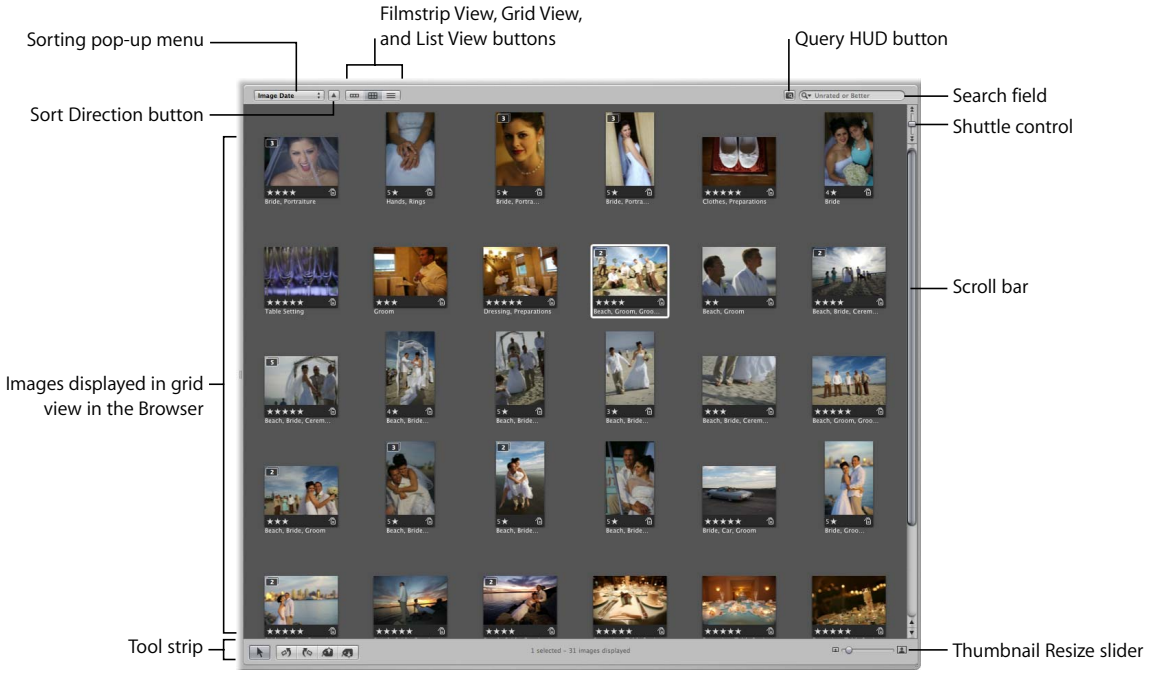
This chapter provides information about using the Browser to select and work with images in a project. The Browser provides the principal ways of viewing, selecting, and working with images. You can quickly search for an image in a project, reorder and sort images, rotate images to portrait or landscape orientation, create new versions, and delete images.

This chapter covers:

- An Overview of the Browser (p. 150)
- Navigating Through and Selecting Images (p. 153)
- Working with Images in Filmstrip View (p. 155)
- Working with Images in Grid View (p. 156)
- Working with Images in List View (p. 157)
- Choosing a Workspace View (p. 158)
- Navigating Through Images in Quick Preview Mode (p. 160)
- Searching for Images in the Browser (p. 161)
- Rearranging Images in the Browser (p. 162)
- Sorting Images (p. 163)
- Rotating Images (p. 163)
- Creating Versions of an Image (p. 165)
- Deleting Images from the Browser (p. 166)
- Dragging Images into Different Projects and Albums (p. 168)
- Working with Referenced Images (p. 169)
- Working with Two or More Projects Open (p. 176)
- Displaying Specific Metadata with Your Images (p. 176)

An Overview of the Browser

When you select a project or album in the Projects inspector, thumbnails of its images appear in the Browser. You select images in the Browser to work with them. You can move and rearrange images, rotate images, make new versions, and delete images from the project.



- *Filmstrip View button:* Click this button to display images as a single row of thumbnails that you can scroll left or right.
- *Grid View button:* Click this button to display images as thumbnails.
- *List View button:* Click this button to display images as a text list.
- *Sorting pop-up menu:* You can choose to sort images by image date, rating, or keywords from this pop-up menu.
- *Sort Direction button:* Click this button to sort images in ascending or descending order.
- *Query HUD button:* Click this button to show the Query HUD for searching. For more information, see Chapter 12, "Searching for and Displaying Images," on page 295.
- *Search field:* Enter text to search for images associated with that text, such as a version name or keyword.
- *Shuttle control:* Drag this to shuttle continuously through images in the Browser. You can also use the J, K, and L keys.

- *Tool strip:* Click the buttons in the tool strip to select tools to work with. The tool strip provides access to the Selection tool for selecting images, the Rotate Right and Rotate Left tools for rotating images, and the Lift and Stamp tools for lifting keywords and adjustments from images and stamping them on other images.
- *Scroll bar:* Use this to scroll through all images in a project.
- *Thumbnail Resize slider:* Drag this slider to increase or decrease the size of thumbnails displayed in grid view.

Aperture provides fast and efficient ways of selecting images. You can use the arrow keys to quickly select an image or multiple images to work on. You can also select images by clicking, dragging a selection rectangle, and using keyboard shortcuts.

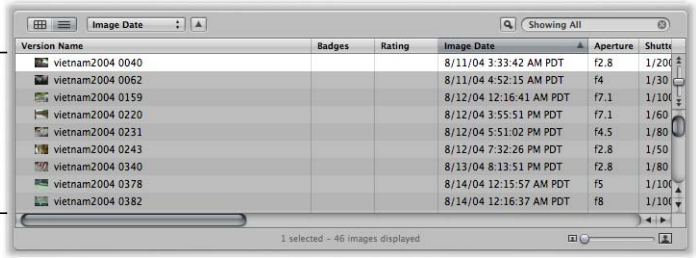
You can display images in the Browser in filmstrip view, grid view, and list view.

When you select filmstrip view, the Browser changes to a single row of images that you can select and navigate through, and selected images appear in the Viewer.



Grid view organizes thumbnails of your images in a grid pattern. Use grid view when it's easiest to identify your images by sight and work with thumbnails as you organize, stack, or assign keywords to images.

List view displays a list of your images with associated file information. Use list view when you need to see or sort your images by corresponding file data such as image date, file size, or rating.



Images displayed in list view in the Browser

List view is a great way to quickly see information about your files. You can also use list view to sort your images by any of the column categories. Click the category column heading to sort your images by that category.

You can also customize the information that appears with your images. For example, you can set your images to appear with filename, IPTC data, and EXIF data. You can change what information appears in the Browser in grid view, list view, and filmstrip view by customizing the Metadata options in the Preferences window. For more information, see "Displaying Specific Metadata with Your Images" on page 176.

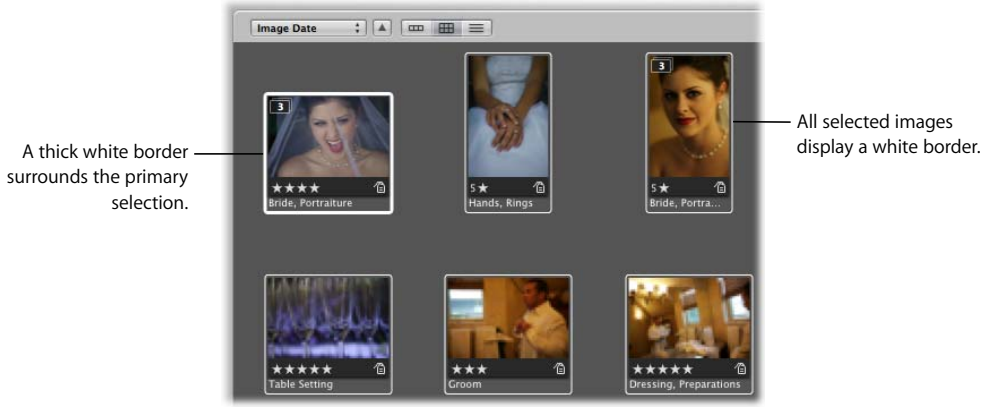
If you make a mistake while editing, in most cases you can choose the Undo command to immediately cancel your last action. In fact, you can choose the Undo command multiple times to undo your last series of actions. Aperture places deleted masters in the Trash. If you discover a deletion you did not intend to make, and the Undo command cannot recover the deletion, you can still recover the master from the Trash until the Trash is emptied.

Navigating Through and Selecting Images

Selecting images is a fundamental task in Aperture. Knowing the many ways you can select images can help increase your productivity and satisfaction while working with your images.

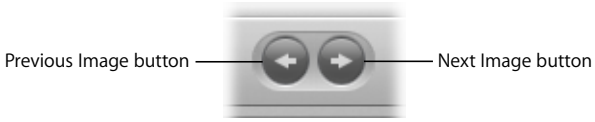
Navigating Through Images in the Browser

You can select one or several of the images in the Browser to work with them or to view them in the Viewer. Aperture identifies the images you've selected by displaying them with a white border. When you select a group of images, the actively selected image, called the *primary selection*, appears with a thick white border and the rest of the selected images appear with thin white borders.



To navigate through images, do one of the following:

- Press an arrow key to move left, right, up, or down.
- Use the scroll bar to scroll through the images in the Browser, then click the image you want.
- Choose Window > Show Control Bar to display the control bar. In the control bar, click the Previous Image or Next Image button.



Selecting Images

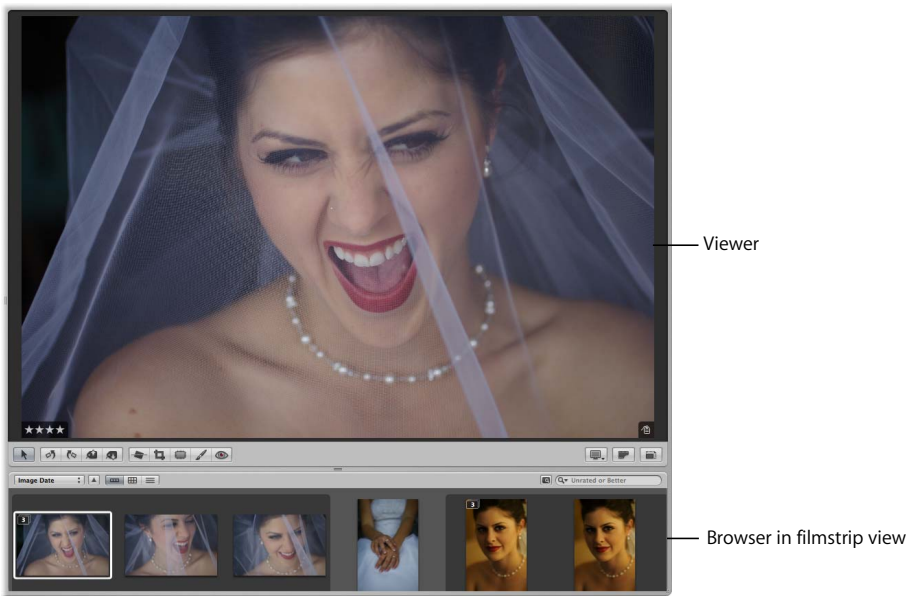
Aperture provides fast and efficient ways of selecting images, depending on your work style and preferences.

You can select images in the following ways.

Task	Action
Select a single image	• Click the image. • Press the arrow keys to navigate to the image.
Select a range of images	• Click the first image in a range, then Shift-click the last image. • Press the arrow keys to select the first image, then press Shift and the arrow keys to select the last image in the range. • Select the first image, then choose Edit > Select to End (or press Shift-End) to extend the selection to the last image in the Browser. • Select the last image in a range, then choose Edit > Select to Beginning (or press Shift-Home) to extend the selection to the first image in the Browser. • Drag a selection rectangle to select all the images that fall within the rectangle.
Select an image among selected images	• Press Semicolon (;) or press Command–Option–Left Arrow to select the previous image in the selection. Press Apostrophe (') or press Command–Option–Right Arrow to select the next image in the selection.
Select an image in a stack	• Press the Right Arrow or Left Arrow key.
Select nonadjacent images	• Command-click the images you want to select. Command-click the images again to deselect them.
Slide a selection	• Press Command–Left Arrow or Command–Right Arrow to slide the current selection over by one image. For example, you can move a three-image selection left or right by one image at a time.
Select the next stack	• With a stack selected, press Option–Page Up or Option–Page Down.
Select or set a compare image	• Select the image, then press Return.
Deselect the compare image	• Press Command-Return.
Select a different compare image	• Select the image you want as a compare image, then press Return.
Select all images in the Browser	• Choose Edit > Select All (or press Command-A).
Select only the primary image, deselecting all others	• Choose Edit > Reduce Selection (or press Shift-E).
Deselect all images in the Browser	• Click the gray background of the Browser, or Choose Edit > Deselect All (or press Command-Shift-A).
Deselect the current selection and select all unselected images	• Choose Edit > Invert Selection (or press Command-R).

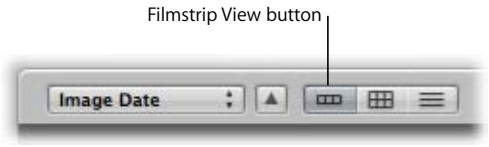
Working with Images in Filmstrip View

You can use the filmstrip view in combination with the Viewer to quickly scroll from image to image, making changes and comparing images. For example, you can select several images in a row, group them in a stack, apply ratings, and compare them side by side in the Viewer. You can use the Right Arrow and Left Arrow keys to quickly move from image to image, and you can use the scroll bar and the Shuttle control to quickly scroll through images. You can resize the thumbnails in the filmstrip by dragging the top of the filmstrip to enlarge its area.



To switch to filmstrip view, do one of the following:

- Choose View > Browser > Filmstrip (or press Control-F).
- Click the Filmstrip View button in the Browser.



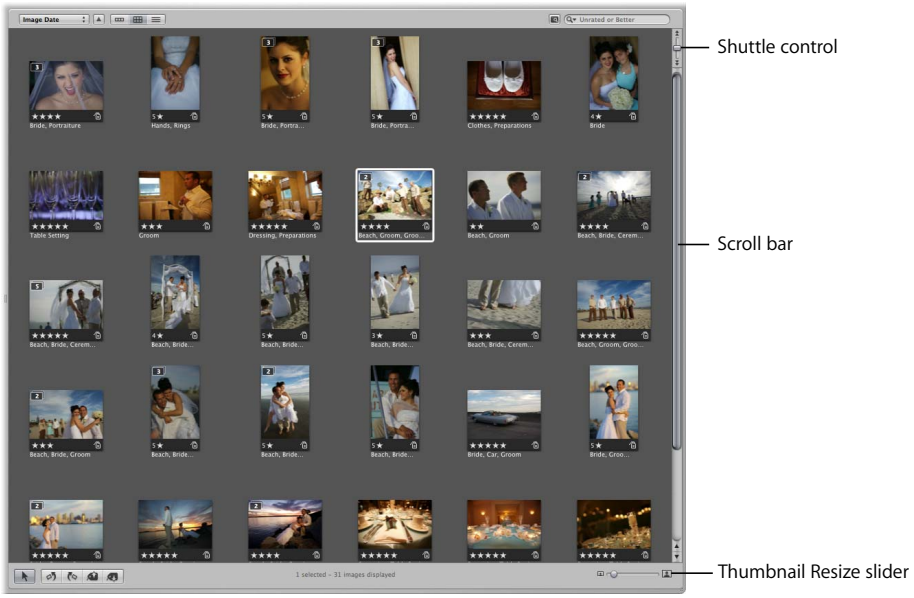
To shuttle continuously through the images in a project, do one of the following:

- Drag the Shuttle control.
- Press J to shuttle left, press K to stop shuttling, or press L to shuttle right.

Note: Pressing J or L multiple times increases the shuttle speed.

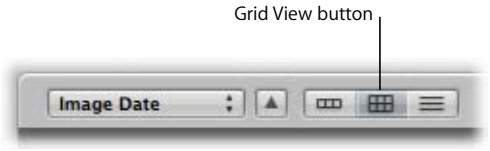
Working with Images in Grid View

Grid view displays a grid of thumbnails as a top-level view of your project. Grid view is the Browser's default view. If your project has many images, you may want to adjust the size of the thumbnails to a size convenient for selecting and working with them. You can also use the Shuttle control or scroll bar to scroll through the images.



To switch to grid view, do one of the following:

- Choose View > Browser > Grid (or press Control-G).
- Click the Grid View button in the Browser.



To adjust thumbnail size:

- Drag the Thumbnail Resize slider to increase or decrease the size of the thumbnails.

To shuttle continuously through the images in a project, do one of the following:

- Drag the Shuttle control.
- Press J to shuttle left, press K to stop shuttling, or press L to shuttle right.

Note: Pressing J or L multiple times increases the shuttle speed.

Depending on your work preferences, you may want to lighten or darken the background that your thumbnails appear against in the Browser. The darker the background, the less it interferes with the colors in your image. It's a good idea to set the background to a dark color when performing color adjustments to your images. You can darken the background from shades of gray all the way to black, or lighten it from gray to white.

To lighten or darken the background of the Browser:

1. Choose Aperture > Preferences, or press Command-Comma (,).
2. In the Preferences window, click Appearance and drag the Browser Background Brightness slider to lighten or darken the background, then close the window.

Working with Images in List View

Instead of thumbnails, list view displays images by name and icon with accompanying information such as rating, image dimensions, file size, and date.

To switch to list view, do one of the following:

- Choose View > Browser > List (or press Control-L).
- Click the List View button in the Browser.



To choose what type of information is displayed in list view:

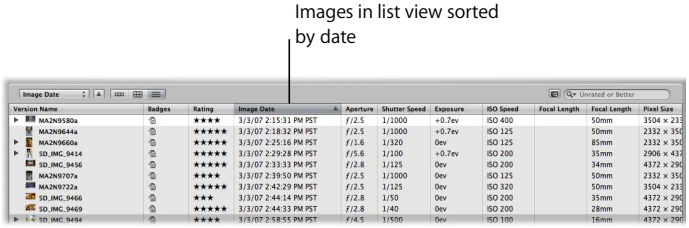
1. Choose Aperture > Preferences, or press Command-Comma (,).
2. In the Preferences window, click Metadata.
3. In the List View Columns section, choose a display option from the Set 1 pop-up menu.

   Columns in the Browser immediately change to display the information you selected.
4. Close the Preferences window.

One of the main advantages of list view is that you can quickly sort images based on a category of information. When you click a column heading in list view, Aperture reorders the images, sorting them by that category. For example, you might sort your images by date.

To sort images in list view by a category:

- Click the category column heading in the Browser.



When you work in list view, it may sometimes be difficult to determine the content of an image based on the file information. You can enlarge the thumbnail icons that appear in list view to give you a better look at the images.

To enlarge the thumbnail icons in list view:

- Drag the Thumbnail Resize slider to increase or decrease the size of the icons.

You can also easily rename files after importing. When you rename a file, you are renaming the image version, not the master. The filename of the original master does not change.

To rename an image version in list view:

- Select an image, double-click the image name, then enter a new name.

Choosing a Workspace View

Aperture allows you to conveniently change the Browser to match your workspace preferences and workflow. You can work with the Browser filling the main window, work with it in combination with the Viewer, or work with only the Viewer open.

To work with the Browser (without the Viewer) in the main window:

- Choose View > Browser Only.

To work with the Browser and Viewer together in the main window:

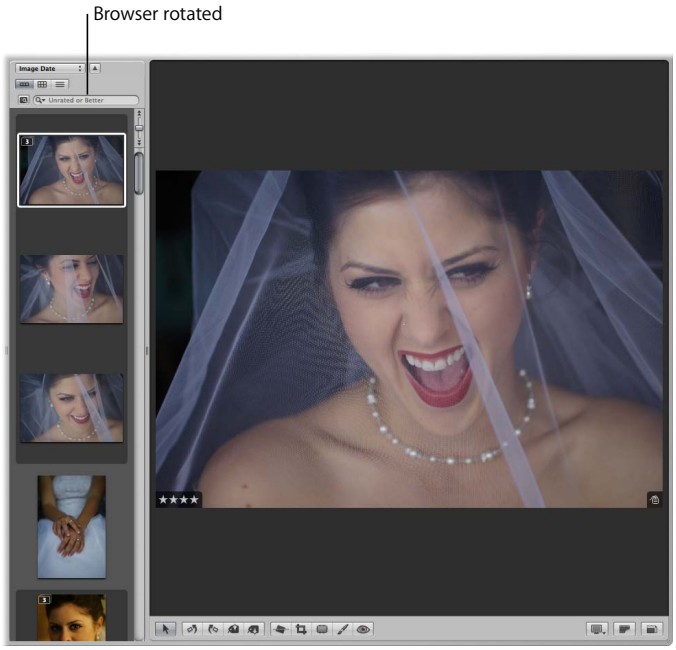
- Choose View > Browser & Viewer.

To work with Viewer only:

- Choose View > Viewer Only.

Tip: To quickly change workspace views, press the V key repeatedly until you see the view you want.

When you're working with the Browser and Viewer together, you can also reposition the Browser on the screen. For example, you can rotate the Browser to the side.



You can also swap the position of the Viewer and Browser when you want.

To rotate the position of the Browser:

- Choose View > Browser > Rotate Position (or press Shift-W).

To swap the position of the Browser and the Viewer:

- Choose View > Browser > Swap Position (or press Option-W).

Using the Rotate Position and Swap Position commands, you can arrange the Browser and Viewer in positions most convenient for you.

Navigating Through Images in Quick Preview Mode

As you work with images in the Browser and Viewer, you can set Aperture to display representations of the images called *previews*. A preview is a JPEG representation of the image that has less information than the original and is used to allow Aperture to more quickly display images. For example, the thumbnails in the Browser are preview representations of the master reduced to thumbnail size.

Likewise, when you select an image in the Viewer, Aperture first displays a preview image as it reads the larger master on disk. It then displays the full master once the image is completely accessed. This process of displaying previews and then the masters can be nearly instantaneous, or, depending on the size of your masters, there can be a short delay in the final display.

For more information about creating and working with previews, see "Working with Preview Images" on page 196.

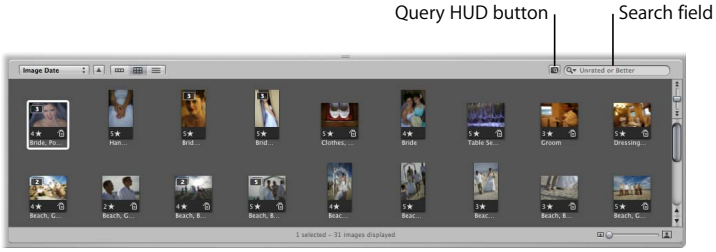
To speed up the accessing and display of images, you can turn on Quick Preview mode. In Quick Preview mode, Aperture displays preview images only, without reading the larger masters. You can use Quick Preview mode to rapidly switch between and select images. For example, you might use Quick Preview mode to quickly select and stack images, add keywords, or change other metadata. When using Quick Preview mode, however, there are some things you can't do, such as make adjustments to images. In Quick Preview mode, tools and functions that aren't available appear dimmed. Depending on your task, you may find switching to Quick Preview mode a great way to gain speedy access to images.

To turn on Quick Preview mode:

- Choose View > Quick Preview (or press Control-B).

Searching for Images in the Browser

When you have many images in a project, more than the Browser can display at once, you can use the search field to locate images. Enter the search criteria in the search field and Aperture finds the image or images for you.



You can search for images in a project and show just the search results in the Browser. For example, if you have several hundred images of a wedding but want to view only those that have the keyword *Bride*, you can use the Query HUD to display only the images of the bride, hiding the remainder from view.

For more information about using the Query HUD to find images, see Chapter 12, "Searching for and Displaying Images," on page 295.

To search for an image in the Browser:

- Enter text associated with that image in the Browser's search field.

To see all your images again:

- Click the search field's Reset button (with an X) or delete the text in the search field.

Important: You can use keyboard shortcuts to quickly implement a search that displays images with specific ratings or images that have a specific keyword. It's possible while working with images to accidentally press such a keyboard shortcut and see images on your screen unexpectedly change or even disappear. If this happens, you can quickly display your images by clicking the Reset button in the search field to reset the search criteria in the Query HUD.

When viewing the contents of albums (including Smart Albums) in the Browser, you may not be able to see images with a rating of Reject. This is because the Browser Query HUD is set to show unrated images or better. To view rejected images, you must set the Browser Query HUD to show all images.

To set the Browser Query HUD to show all images:

1. In the Projects inspector, select an album.
2. In the Browser, click the Query HUD button (with a magnifying glass icon).
3. In the Query HUD, deselect the Rating checkbox.

All images, including rejects, appear in the Browser, and Showing All appears in the Browser's search field.

To set the Browser Query HUD to show rejected images only:

1. In the Query HUD, make sure the Rating checkbox is selected.
2. Choose "is" from the Rating pop-up menu, and set the Rating slider to X (Reject).

Only images with the Reject rating appear in the Browser, and X appears in the Browser's search field.

Rearranging Images in the Browser

As you work with images in the Browser, you can move and rearrange images into any order or grouping you want. For example, you might want to keep all related images of a wedding event, such as the cake cutting, in close proximity to allow you to easily adjust them.

You can drag images to new locations in the Browser. You can drag single images or selections of multiple images. When you drag images to new locations, you create a custom arrangement of your images; the Sorting pop-up menu changes to show the Custom option. Aperture records the order of your images, and any time you choose Custom from the Sorting pop-up menu, your images reappear in that order.

To rearrange images in the Browser:

- Drag the images you want to rearrange to a new location; when the green bar appears, release the mouse button.

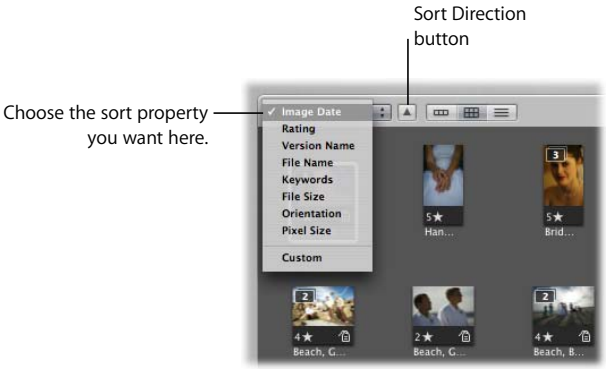
To restore a custom arrangement of your images in the Browser:

- Choose Custom from the Sorting pop-up menu.

Aperture remembers the last time you moved images and restores that arrangement.

Sorting Images

You can change the order of images in the Browser based on image properties such as filename, file size, date, rating, and more. For example, when displaying images by filename, Aperture places the images in alphabetical order according to filename. You might also order the images by date or time. You choose the sort property from the Sorting pop-up menu in grid view, list view, and filmstrip view.



To change the displayed order of images in the Browser:

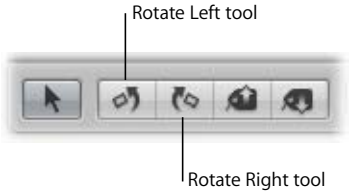
- Choose a sort property from the Sorting pop-up menu. Click the Sort Direction button to select an ascending or descending sort order.

Rotating Images

When images are imported into a project, some may appear in an incorrect orientation, requiring you to rotate them right side up. The Browser's tool strip (or the Viewer tool strip in filmstrip view) provides rotate buttons for rotating selected images. You can rotate images individually or select a group and rotate them all at once. You can also conveniently select images and quickly rotate them using keyboard shortcuts.

To rotate images individually, do one of the following:

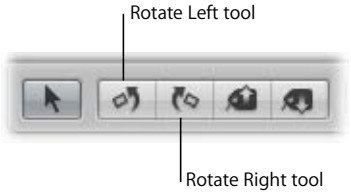
- To rotate individual images, select the Rotate Left tool or Rotate Right tool in the tool strip, then click an image.



- Select the image you want to rotate, then choose Images > Rotate Counterclockwise (or press the Left Bracket key) or choose Images > Rotate Clockwise (or press the Right Bracket key).

To rotate groups of selected images, do one of the following:

- Select a group of images, then click the Rotate Left tool or Rotate Right tool in the tool strip.



- Select a group of images, then choose Images > Rotate Counterclockwise (or press the Left Bracket key) or choose Images > Rotate Clockwise (or press the Right Bracket key).

Creating Versions of an Image

Occasionally, you may want to make copies of an image. For example, you might copy an image and apply different exposure settings or other adjustments, or change it for a specific use, such as for placement in a webpage or book. When you copy an image, Aperture makes a new version of the image.

When you create a new image version, you have a choice of copying the original master image or the currently selected version with any changes you've made. For example, if you've made a series of adjustments to an image and now you want to start from the original master image and make different adjustments, you can copy the master and start with a fresh, unchanged image.

To create a new version from a master:

1. Select the image you want to copy.
2. Do one of the following:
   - Choose Images > New Version From Master (or press Option-G).
   - Click the New Version From Master button in the toolbar.
   - To copy the master JPEG image, choose Images > New Version From Master JPEG (or press Option-J).

     Note: This command is dimmed unless a JPEG image is selected.
   - To duplicate the master image and automatically select the duplicate, choose Images > Create and Add to Selection > New Version From Master (or press Shift-Option-G).

If you're creating a number of image versions showing incremental changes to an image, you can copy the last version you made and make more changes. For example, if you plan to use the same cropping and exposure adjustments in multiple versions, it makes sense to perform those adjustments first and then make copies of the image version before proceeding.

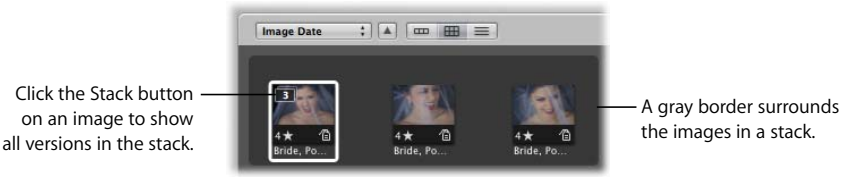
To copy the selected image version:

1. Select the image you want to copy.
2. Do one of the following:
   - Choose Images > Duplicate Version (or press Option-V).
   - Click the Duplicate Version button in the toolbar.
   - To duplicate the version and automatically select the duplicate, choose Images > Create and Add to Selection > Duplicate Version (or press Shift-Option-V).

If you create multiple versions of an image, Aperture groups the versions in a stack. The stack represents all the versions of a particular image that you have created. You can open the stack and see the different versions you've created for an image. For example, you might open a stack of versions and select a specific image version to copy. The entire stack appears in all the different projects or albums in which the image appears.

To open a stack to see all the versions:

- Click the Stack button on the stack.



When a stack is open, you can select any of its image versions to display that version in the Viewer. For more information about working with stacks, see Chapter 8, "Stacking Images and Making Picks," on page 219.

Deleting Images from the Browser

When necessary, you can delete versions and even masters.

When deleting images, you can:

- Remove a version from an album, leaving any other versions of the image in their original locations
- Delete versions from within a stack
- Delete masters

To remove a version from an album:

- Select the version and choose Images > Remove From Album (or press Delete).

You may also want to delete a version from a stack.

To delete a version from a stack:

1. Open the stack and select the version you want to delete.
2. Choose File > Delete Version (or press Command-Delete).

If you delete the last version in a stack, Aperture asks whether you want to delete the master. If you confirm that you want to delete the master, the master is moved to the Trash.

When an image is represented in the Browser by a single version, you can select the version and delete it, and the corresponding master is deleted as well.

To delete a master:

1. Select a version in an album or project.
2. Choose File > Delete Version (or press Command-Delete).
3. When a dialog appears asking you to confirm that you want to delete the master and versions, click Move to Trash.

You can select a stack containing versions of an image and delete all the images in the stack as well as the master.

> ***Warning:*** When you delete a master, the master and all version information is permanently removed from the Aperture library. This includes all applied adjustments and metadata. You cannot use the Undo command to restore the master or associated versions. Deleting a master also clears the Undo queue, so you cannot undo the series of actions before the master deletion. Deleted files are placed in the Trash in an Aperture folder. The deleted files are recoverable from the Trash until you empty it.

To delete a stack and its master:

1. Select the stack you want to delete.
2. Choose File > Delete Master Image and All Versions.
3. When a dialog appears asking you to confirm that you want to delete the master and versions, click Move to Trash.

Recovering Deleted Files

If you accidentally delete an image you meant to keep, and you can't recover it by choosing Undo, you may be able to recover it from the Trash. If you originally backed up your deleted masters, the vault may also still hold them. If necessary, you can restore the library from the vault. If you updated your vault after the deletion, the deleted masters are placed in a folder given your vault's name and the words "Deleted Images." You can find the Deleted Images folder in the folder that holds your vault. The Deleted Images folder holds the deleted masters only; it does not hold any information about versions or changes to your files. You can open this folder and import the original masters. To remove the deleted images from your hard disk, move the files to the Trash. To make the space these files occupied on both your internal and external hard disks available, you have to empty the Trash (choose Finder > Empty Trash).

Dragging Images into Different Projects and Albums

You can drag images into different projects and albums. Depending on where you drag an image, Aperture either moves or copies the image to the new location.

As a general rule, when you drag an image into a different *project*, Aperture moves the version and the corresponding master into the new project.

When you drag an image into a different *album*, Aperture copies the version into the album, leaving the master in the original location. An image can be copied into any album in the same project or into albums in different projects. The destination album can be an album, book album, Light Table album, webpage album, or web journal album.

You can also change the result of dragging by holding down the Option key as you drag.

To copy an image into a different album:

- Drag the image into another album in the Projects inspector.

To move an image into a different album:

- Option-drag the image into another album in the Projects inspector.

To move an image into a different project:

- Drag the image into another project in the Projects inspector.

To copy an image into a different project:

- Option-drag the image into another project in the Projects inspector.

You can also drag images out of Smart Albums. If you drag an image from a Smart Album into another album, the version is copied to the new location. If you drag an image into a project different from the project that contains the master, Aperture moves the master to the destination project. All links to versions in other albums are maintained. For more information about using Smart Albums, see Chapter 13, "Grouping Images with Smart Albums," on page 317.

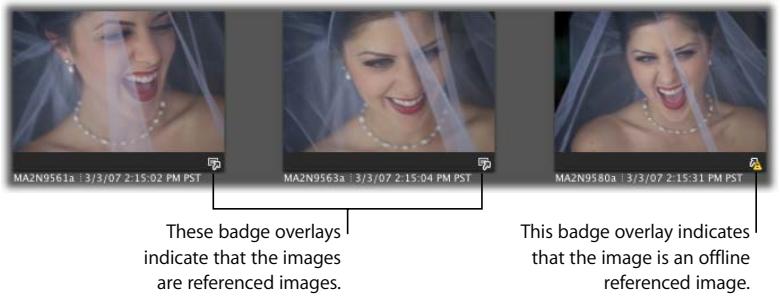
Working with Referenced Images

Masters for images that you import as referenced images may reside in many different locations on your hard disk storage devices instead of in the single location of your main Aperture Library file. At times you may need to determine which images are referenced images in order to readily locate them in the Finder. With Aperture, you can easily:

- Display badge overlays that identify referenced images
- Display a list of referenced images
- Locate a referenced image's master on your hard disk
- Reconnect missing or offline referenced images
- Relocate referenced images' masters
- Copy, move, and delete masters for referenced images
- Move referenced images' masters to the Aperture library
- Use the Query HUD to search for referenced images

Identifying Referenced Images

After you import referenced images, you can identify them in the Browser by turning on referenced image badge overlays. Referenced images appear with badges that show whether their masters are currently available (online) or not found (offline).



To turn on referenced image badge overlays:

1. Choose Aperture > Preferences.
2. In the Preferences window, click Appearance, then select the "Badge referenced images" checkbox.

You can select and work with online referenced images using the same procedures you use with images whose masters reside in the Aperture library.

Aperture keeps track of referenced images' masters when you simply move or rename the files in the Finder, keeping them on the same hard disk or volume.

A referenced image appears as an offline image if the hard disk holding the referenced image's master has been disconnected from your computer system. A referenced image is listed as "not found" when its master has been deleted, moved to the Trash, or moved from its original hard disk location to another hard disk drive and Aperture can't find it.

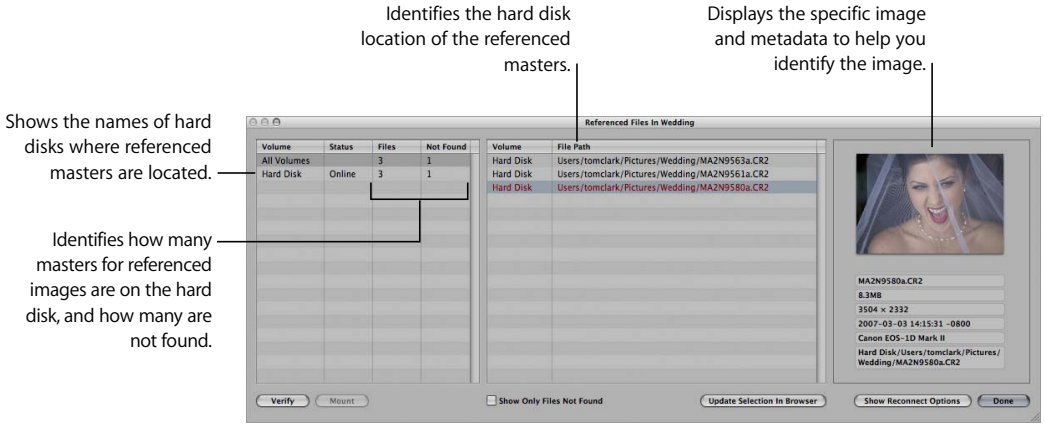
Displaying a List of Referenced Images

When working with numerous images in the Browser, you may need to determine which images have masters that reside in the Aperture library and which are referenced images whose masters are located elsewhere on your hard disks.

You can select a group of images in the Browser and then have Aperture show a list of the referenced images within the selection and where the masters are located.

To see a list of referenced images in a selection:

1. In the Browser, select the group of images you want.
2. Choose File > Manage Referenced Files.



The Referenced Files dialog appears.

Locating a Referenced Image on a Hard Disk

At times you may need to quickly find a referenced image's master on your hard disk to copy or move it, attach it to an email, or otherwise work with it outside of Aperture. You can select an image in the Browser and have Aperture display the image's master location in the Finder.

To locate a referenced image's master in the Finder:

1. Select the referenced image you want in the Browser.
2. Choose File > Show in Finder.

A Finder window appears, displaying the selected referenced image's master.

Note: If you open a referenced image's master from the Finder in another application, you will not see the changes or adjustments you've made to the image in Aperture. Your changes appear in versions stored in the Aperture library, and the referenced image's master is always left unchanged. To see the adjusted photo, you need to export a version of it.

Reconnecting Missing or Offline Referenced Images

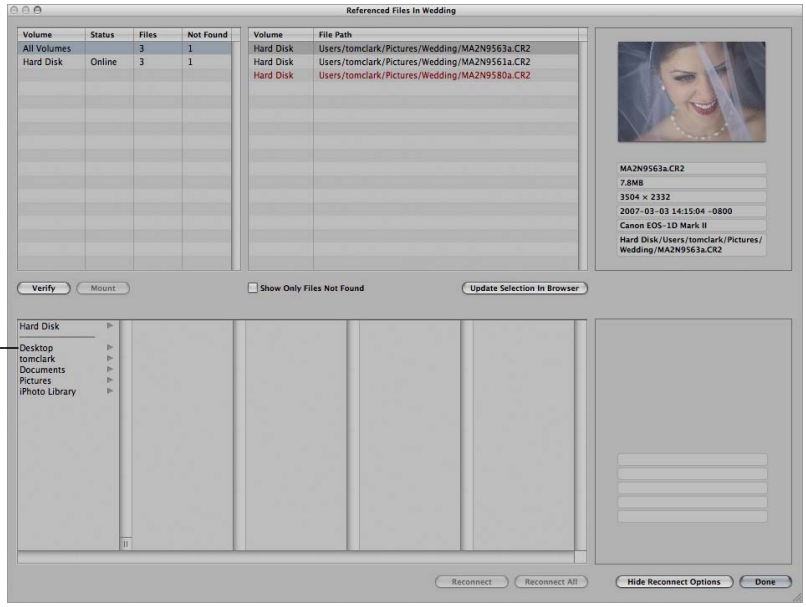
When a referenced image's master is offline, you can't make adjustments to the image until you reconnect the master to your Aperture system. If you have disconnected a hard disk drive that holds a referenced image's master, you can reconnect the drive to your computer system and Aperture automatically locates the hard disk and reconnects the master.

If an image is offline or modified in some way that makes it unrecognizable as the original referenced image, you can still select it and have Aperture reconnect the master for the specific image.

To reconnect an offline referenced image:

1. Reconnect the hard disk holding the referenced image's master, or otherwise locate or make the file available to Aperture for reconnecting.
2. Select a project that contains the offline image you want to reconnect, or select the offline image in the Browser.
3. Choose File > Manage Referenced Files.

4 Click the Show Reconnect Options button.



Select the volume you want here, and navigate to the location of the file on the hard disk.

5 At the top of the dialog, select the file path for the master that you want to reconnect.

A thumbnail of the image and some identifying metadata appear.

6 In the bottom half of the dialog, navigate to the referenced image's master location on the hard disk and select the master.

You can follow the file path listed for a selected image in the top of the dialog.

When you select the file, a thumbnail of the image and metadata appear, allowing you to compare them to the thumbnail and metadata in the upper part of the dialog to make sure you've selected the correct file.

7 Click Reconnect to reconnect a specific image, or click Reconnect All to reconnect all the selected images.

Relocating Referenced Images' Masters

You can easily move masters for referenced images to new locations on the same hard disk or a different hard disk. For example, if you use several hard disks, you might want to move the masters they contain to a convenient location on a different hard disk.

To move masters for referenced images to a new location:

1. In the Browser, select the referenced images whose masters you want to move.
2. Choose File > Relocate Masters.
3. Choose the folder location you want in the Relocate Masters dialog.
4. Choose "No folder" from the Subfolders pop-up menu to specify that the files be stored as separate individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to store your files. For more information about creating folders to hold your imported image files, see "Importing Masters for Referenced Images into Folders" on page 125. Choose whether you want the image files moved or copied to the new location by clicking the "Move files" or "Copy files" button.
5. Choose a naming convention from the Name Format pop-up menu to specify how you want the masters named.

   For example, choose Master Filename from the Version Name pop-up menu to have your files stored using the current master filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your masters stored using a specified name. If you choose a custom name format, enter the name you want in the Name Text field. For more information about naming files, see "Automatically Naming Your Imported Images" on page 127.
6. Click Relocate Masters.

Moving Referenced Images' Masters to the Aperture Library

You can move referenced images' masters to the Aperture library. For example, if you have a variety of masters stored in different hard disk locations and it would be convenient to work with them all stored in the Aperture library, you can select the referenced images in the Browser and have Aperture move their masters to the library. With the referenced images' masters stored in the library, Aperture manages all aspects of them, always keeps them available, and allows you to back them up in your vaults.

To move referenced images' masters to the Aperture library:

1. In the Browser, select the referenced images whose masters you want to move to the library.
2. Choose File > Consolidate Masters.
3. Click Continue to confirm that you want the referenced images consolidated.

Copying, Moving, and Deleting Referenced Images

You can copy, move, and delete referenced images in your Aperture projects using the same procedures you use for other Aperture versions and masters.

When you copy a version of a referenced image in Aperture, a new version is created and tracked in the Aperture library. No new files are recorded on the hard disk in the location of the referenced image's master.

When you move a referenced image between the projects on your Aperture system, the referenced image's master remains in its original location on your hard disk.

When you delete a referenced image's master from Aperture, you can specify whether the image's master is placed in the Trash.

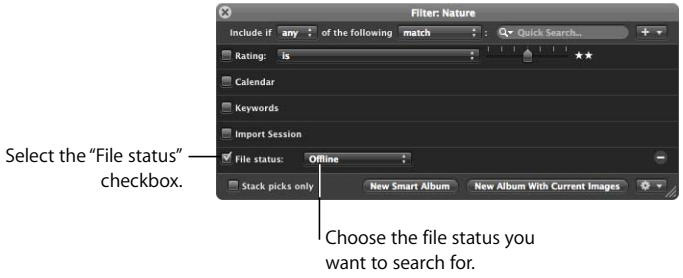
Using the Query HUD to Search for Referenced Images' Masters

You can search for images using their file status. For example, you can search for images that are referenced images, managed images, and online or offline images.

To search for images by file status, you use the File Status search options.

To search for images by file status:

1. In the Projects inspector, select a project or an album you want to search.
2. Show the Query HUD by doing one of the following:
   - Choose Edit > Find (or press Command-F).
   - Click the Query HUD button beside the search field in the Browser.
3. In the Query HUD, choose File Status from the Add Filter pop-up menu, and select the "File status" checkbox.
4. Deselect any checkboxes that aren't part of your query, and choose the search criteria from the "File status" pop-up menu.



5. Choose "any" from the Match pop-up menu, if it's not already chosen.

   The images that match the search criteria are displayed in the Browser.

Working with Two or More Projects Open

You can work with two projects open at once, splitting the Browser into a separate pane for each project.

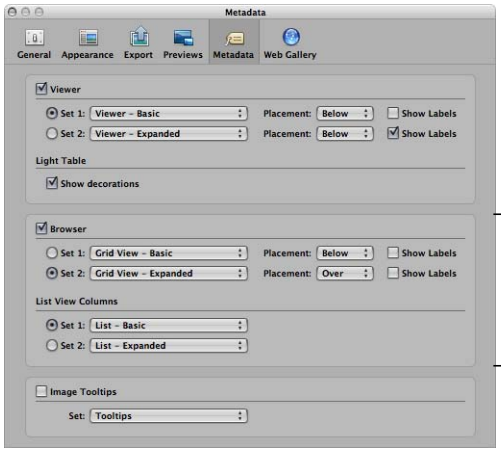


When you Option-click a second project in the Projects inspector, Aperture splits the Browser into two panes and shows thumbnails for both projects. You can select images in either pane and see the selections in the Viewer. You can also set the two panes to different display options. For example, one pane may show images in grid view and the other in list view. You may find that working with multiple projects open allows you to easily copy or transfer the contents of one project to another. For more information about opening and closing multiple projects, see "Opening and Closing Projects" on page 103.

Displaying Specific Metadata with Your Images

To help identify your images as you work, you can set Aperture to display the metadata associated with images by changing metadata options in the Preferences window. For example, you can set Aperture to display keywords, IPTC information, or EXIF information with images in grid view. You can also configure two views of information to be displayed with images and quickly switch between views. For example, the first view might show ratings for use while photo editing. You might also create another view to display IPTC and EXIF information as you manage files for export. You can then switch between views to change the information that appears with your images depending on the task at hand.

You use the Metadata pane of the Preferences window to customize the display of information shown with images in the Browser.



In the Browser section, you select the Set buttons and choose the information you want displayed in grid view or filmstrip view. You can also choose where the information should appear from the Placement pop-up menus.

To set the display of metadata shown with images in the Browser:

1. Choose Aperture > Preferences, then click Metadata.
2. Select the Browser checkbox.
3. Choose the metadata views you want to use from the Set 1 and Set 2 pop-up menus.
4. Choose the location where you want the metadata displayed from the Placement pop-up menus.
5. Click the Set 1 or Set 2 button to select the metadata view you want displayed.
6. Close the Preferences window.

To turn the display of metadata on or off in the Browser:

- Choose View > Metadata > Grid View (or press U).

To switch between sets of Browser metadata information:

- Choose View > Metadata > Change Browser Set (or press Shift-U).

For more information about displaying metadata with your images, see Chapter 11, "Working with Metadata," on page 269.

Displaying Images in the Viewer

6

The Viewer displays a detailed view of the image or images selected in the Browser. You can view an image in incredible detail or view several images at a time.

This chapter provides instructions for displaying images in the Viewer so you can make adjustments, closely compare similar images, and inspect images at full resolution. If you use a dual-display system, you can set the Viewer to show your images on both screens to provide stunning, full-detail views.

This chapter covers:

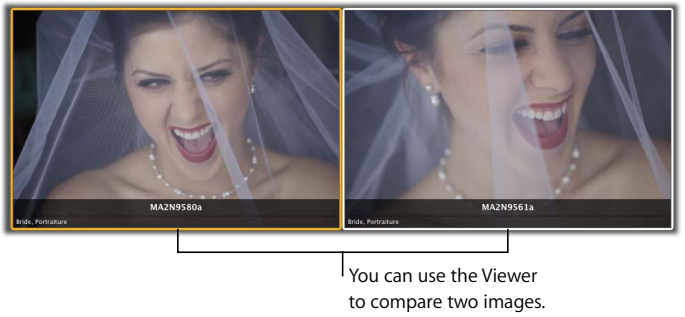
- An Overview of the Viewer (p. 180)
- Showing and Hiding the Viewer (p. 182)
- Changing the Viewer Background (p. 182)
- Changing the Number of Images in the Viewer (p. 183)
- Comparing Images (p. 184)
- Viewing Stacks (p. 185)
- Viewing Images with the Loupe (p. 185)
- Showing Hot and Cold Areas in Your Images (p. 190)
- Viewing Images at Full Resolution (p. 191)
- Viewing Master Images (p. 192)
- Setting Up the Viewer for Onscreen Proofing (p. 192)
- Viewing Images on Multiple Displays (p. 193)
- Displaying Metadata Associated with Images (p. 194)
- Working with Preview Images (p. 196)
- Quickly Accessing Commands (p. 206)

An Overview of the Viewer

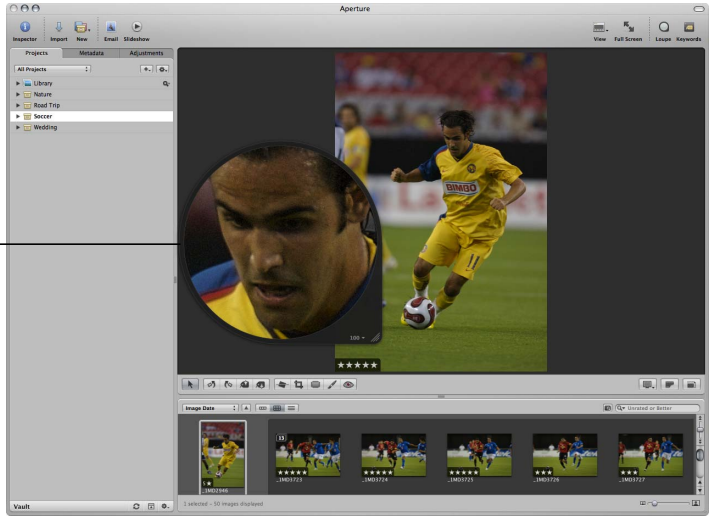
When you select images in the Browser, the Viewer immediately displays a detailed view of your selection. You can display one image at a time, three images at a time, or multiple images.



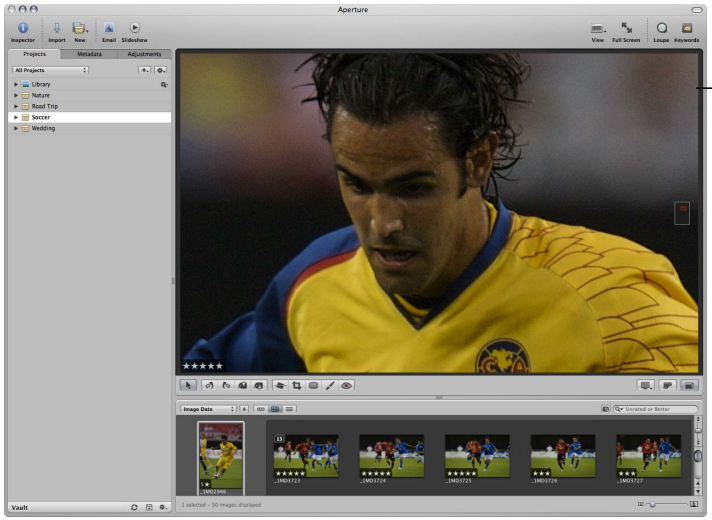
When rating or adjusting images, you can set the Viewer to compare two images at once. You can select an image to compare against and then display other similar or related images next to it for inspection. You might use the Aperture comparison feature to select images from a series or compare versions of adjusted images to see which is the best.



You can use a software loupe to magnify part of an image, perhaps to see the effect of removing blemishes or sharpening an image. You can position the Loupe over different portions of an image and see the magnified view.



Depending on the size of your display and Viewer, images may be displayed at a reduced size to fit your Viewer. You can have Aperture display your images at full resolution, pixel for pixel, which can create images larger than can fit on your display's screen. Displaying an image at full resolution allows you to examine the image exactly as it was recorded and see the precise effects of your adjustments and changes.



Using two displays with your Aperture system is an excellent means of viewing your images. Aperture can show your images on both displays, allowing you to dedicate one display to enlarged views. When your system uses two or more displays, Aperture provides two Viewers, called the *Main Viewer* and *Secondary Viewer*. Just as you can with a single Viewer, you can set the Viewer on your second display to show images singly, three at a time, or up to ten at a time.

You can also set metadata options that determine the amount of information that appears with each image. For example, you can display images in the Viewer with their keywords and other information, such as IPTC or EXIF metadata.

Showing and Hiding the Viewer

You can hide the Browser when necessary and work only in the Viewer. You can also quickly hide the Viewer to provide more room for the Browser, and show the Viewer again when needed.

To work with the Viewer only:

- Choose View > Viewer Only.

To hide the Viewer:

- Choose View > Browser Only.

Changing the Viewer Background

Depending on your work preferences, you may want to lighten or darken the background that your images appear against in the Viewer. You can darken the background from shades of gray all the way to black, or lighten it from gray to white.

To change the background of the Viewer:

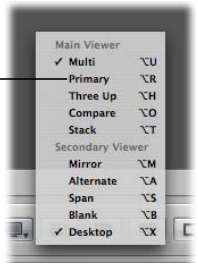
1. Choose Aperture > Preferences, or press Command-Comma (,).
2. In the Preferences window, click Appearance, then drag the Viewer Background Brightness slider to lighten or darken the background.
3. Close the Preferences window.

Changing the Number of Images in the Viewer

You can specify whether the Viewer displays one image, three images, or multiple images at a time. If your system uses multiple displays, you can configure your main and secondary displays to show single images, three images, or multiple images simultaneously. The display settings you choose also set the display of images in Full Screen view.

To display a single image, do one of the following:

- Choose View > Main Viewer > Primary (or press Option-R).
- Choose Primary from the Viewer Mode pop-up menu in the tool strip.



Choose Primary from the Viewer Mode pop-up menu to view a single image on the screen.

When the Viewer is set to show three images at a time, Aperture displays the selected image in the center of the three images that appear in the Viewer.

To display three images, do one of the following:

- Choose View > Main Viewer > Three Up (or press Option-H).
- Choose Three Up from the Viewer Mode pop-up menu in the tool strip.

When the Viewer is set to show multiple images, Aperture displays all selected images.

To display multiple images, do one of the following:

- Choose View > Main Viewer > Multi (or press Option-U).
- Choose Multi from the Viewer Mode pop-up menu in the tool strip.

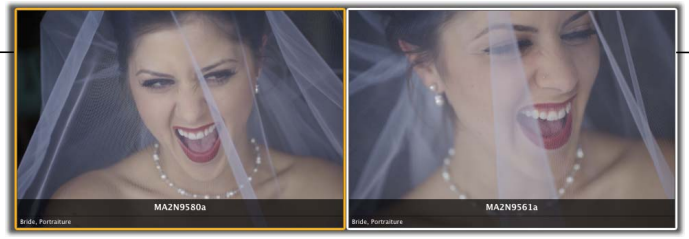
Comparing Images

You can select an image against which to compare other images in your project or the library. The selected image remains on the screen as you select and display other images to compare against it. The comparison feature is useful for making final selections of the best images in a series or comparing two versions of an image for correct exposure or highlights. When comparing images, you can apply ratings and keywords and make adjustments to selected images.

Comparing images involves setting a "compare" image and then viewing other images against the compare image.

To set the compare image:

1. Select an image.
2. Choose Edit > Set Compare Item (or press Return).



To view an image against a compare image, do one of the following:

- Select a second image.
- Navigate through the images in the Browser with the Up Arrow, Down Arrow, Left Arrow, and Right Arrow keys.

If you wish, you can view multiple images against the compare image.

To view multiple images against a compare image, do one of the following:

- Command-click multiple images in the Browser.
- Hold down the Shift key while pressing the Up Arrow, Down Arrow, Left Arrow, and Right Arrow keys.

When you've finished comparing images, you can turn this feature off.

To turn off the comparison feature and select the compare image:

- Choose Edit > Select Compare Item (or press Option-Return).

To turn off the feature and select the image you're viewing against the compare image:

- Choose Edit > Clear Compare Item (or press Command-Return).

You can also use these procedures to compare images in Full Screen view. For more information about Full Screen view, see Chapter 7, "Viewing Images in Full Screen View," on page 207.

Viewing Stacks

To efficiently work with images in stacks, you can set the Viewer to automatically open a selected stack and set up the stacked images for comparison. The pick of the stack is set as the compare image. This stack viewing feature also works in Full Screen view.

To set the Viewer to automatically open and compare the images in stacks, do one of the following:

- Choose View > Main Viewer > Stack (or press Option-T).
- Choose Stack from the Viewer Mode pop-up menu in the tool strip.

For more information about using stacks, see Chapter 8, "Stacking Images and Making Picks," on page 219.

Viewing Images with the Loupe

Aperture has a Loupe (also called the *Centered Loupe*) that you can position over a portion of the image you want to magnify. You can also position the Loupe off to the side of the image and have the Loupe magnify the image at the position of the pointer. Then, as you move the pointer, you see specific parts of the image magnified. The Loupe is useful for examining the effects of adjustments as you make them, as well as making quick checks for sensor dust, flaws, fingerprints on film scans, or other issues. You can use the Loupe on any image or thumbnail in the Aperture library.

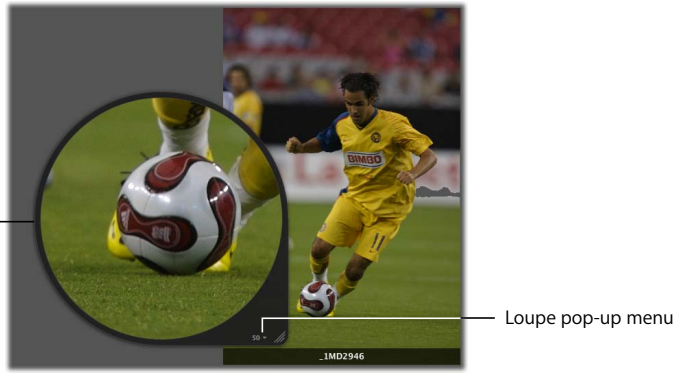
Aperture also provides a second version of the Loupe for your convenience. For more information about using this alternate Loupe, see "Using the Alternate Loupe" on page 189.

To show the Loupe, do one of the following:

- Click the Loupe button in the toolbar.
- Choose View > Show Loupe, or press the Grave Accent (`) key.

Note: To hide the Loupe, do any of the above again.

The Loupe appears.



Moving the Loupe

You can move the Loupe by dragging it to different locations over an image.

To move the Loupe:

- Drag the Loupe to a new location. If you drag within the Loupe, a circle appears that targets the area that will be magnified.

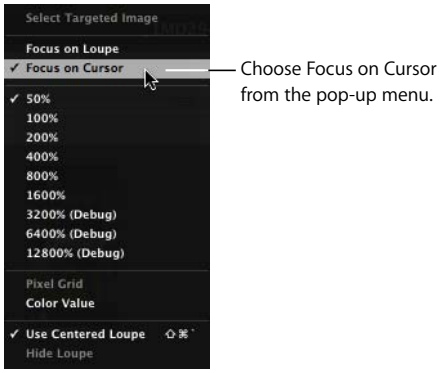
Using the Pointer to Magnify Parts of an Image

You can leave the Loupe stationary and have it magnify the portion of the image at the position of the pointer.



To use the pointer to magnify parts of an image:

- Choose Focus on Cursor from the Loupe pop-up menu.



To turn off this feature, choose Focus on Loupe from the Loupe pop-up menu again.

Changing the Size and Magnification of the Loupe

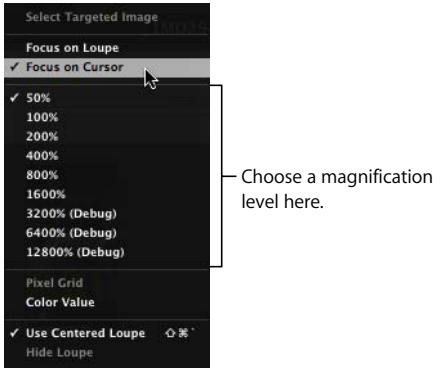
You can also change the size of the Loupe and increase or decrease its magnification level.

To change the size of the Loupe, do one of the following:

- *To decrease the size:* Choose View > Loupe Scaling > Decrease Diameter, or press Shift–Option–Minus Sign (–).
- *To increase the size:* Choose View > Loupe Scaling > Increase Diameter, or press Shift-Option–Plus Sign (+).

To change the Loupe's magnification, do one of the following:

- Choose the magnification level you want from the Loupe pop-up menu.



- Choose View > Loupe Scaling > Increase Zoom, or press Command–Shift–Plus Sign (+), to increase the Loupe's magnification.

  Press these keys repeatedly to increase magnification more.

- Choose View > Loupe Scaling > Decrease Zoom, or press Command–Shift–Minus Sign (–), to decrease the Loupe's magnification.

  Press these keys repeatedly to decrease magnification more.
- Place the pointer within the Loupe and roll the mouse wheel to create smooth changes in magnification.

Displaying a Pixel Grid and Color Values

You can have the Loupe display the image as a grid of pixels that shows the actual pixel composition of the image, allowing you to see the individual pixel values at high magnification (400 percent or higher). You can also set the Loupe to display readings of the color values of the image, showing the RGB (%), RGB (8-bit), Lab, CMYK, HSB, or HSL values chosen for the Color meter.



To set the Loupe to show a pixel grid:

1. Set the Loupe's magnification to 400% or higher.

   For more information about setting the Loupe's magnification, see "Changing the Size and Magnification of the Loupe" on page 187.
2. Do one of the following:
   - Choose View > Show Pixel Grid in Loupe.
   - Choose Pixel Grid from the Loupe pop-up menu.

   To turn off this feature, choose the menu item again.

You can turn on the display of Color meter values within the Loupe.

To turn on the display of color values in the Loupe, do one of the following:

- Choose View > Show Color Value in Loupe, or press Shift–Option–Grave Accent (`).
- Choose Color Value from the Loupe pop-up menu.

To turn off this feature, choose the menu item again.

Using the Alternate Loupe

You can also use an alternate Loupe to examine parts of an image. You position the small ring of the alternate Loupe over the portion of the image you want to see, and the large ring shows a magnified view. It's useful for making quick checks for dust specks, flaws, fingerprints, or other issues. You can use the alternate Loupe on any image or thumbnail in the Aperture library.



The alternate Loupe shows a magnified view of whatever is beneath it.

To show the alternate Loupe:

1. Do one of the following:
   - Choose View > Loupe, or press the Grave Accent (`) key.
   - Click the Loupe button in the toolbar.
2. If necessary, choose View > Use Centered Loupe to turn off the display of the regular Loupe.

You can change the size of the alternate Loupe and increase or decrease its magnification level.

To reduce the size of the alternate Loupe:

- Choose View > Decrease Diameter, or press Shift–Option–Minus Sign (–).

To enlarge the size of the alternate Loupe:

- Choose View > Increase Diameter, or press Shift–Option–Plus Sign (+).

To increase the alternate Loupe magnification:

- Press Command–Shift–Plus Sign (+).

  Press these keys repeatedly to increase magnification more.

To decrease the alternate Loupe magnification:

- Press Command–Shift–Minus Sign (–).

  Press these keys repeatedly to decrease magnification more.

Showing Hot and Cold Areas in Your Images

Images may occasionally have overly bright areas where color information about the area is beyond the standard limits of the Aperture working color space. For example, white areas in an image brightly lit with direct sunlight, or bright flashes off a water surface, may be so bright that their color is outside the working color space. In addition, images may occasionally have black areas where color information about the area is below the standard limits of the working color space. Aperture can display these "hot" and "cold" areas of an image with tints on the image to help you identify hot and cold areas. You may be able to adjust these areas and recover highlight and shadow detail identified by the hot and cold area overlays by changing the exposure, the recovery, the black point, or the gamma setting of the image.

To show the hot and cold areas in your images:

- Choose View > Highlight Hot & Cold Areas (or press Shift-Option-H).

  You can also monitor color clipping per color channel when performing specific adjustments using modifier keys. For more information, see "Using Modifier Keys to Identify Color Clipping" on page 342.

  You can adjust the threshold or sensitivity of the hot area overlays. By default, the threshold is set to 100%. You can set Aperture to flag pixels that are near the 100% mark by lowering the threshold in the Preferences window.

To adjust the hot area display threshold:

1. Choose Aperture > Preferences, or press Command-Comma (,).
2. In the Preferences window, click Appearance.
3. Drag the Hot Area Display Threshold slider to the left to increase its sensitivity to highlight pixels, and drag the slider back to the right to decrease it.

   You can also adjust the threshold or sensitivity of the cold area overlays. By default, the threshold is set to 0%. You can set Aperture to flag pixels that are near the 0% mark by increasing the threshold in Preferences.

To adjust the cold area display threshold:

1. Choose Aperture > Preferences, or press Command-Comma (,).
2. In the Preferences window, click Appearance.
3. Drag the Cold Area Display Threshold slider to the right to increase its sensitivity to shadow pixels, and drag the slider back to the left to decrease it.

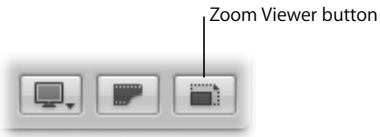
Viewing Images at Full Resolution

A full-resolution view of an image shows every pixel in the image. You can set Aperture to display an image at full resolution, even though the image may not fit within the Viewer. Viewing images at full resolution allows you to inspect your images using the finest level of detail possible.

To display a selected image at full resolution, do one of the following:

- Choose View > Zoom to Actual Size (or press Z).
- Click the Zoom Viewer button in the Viewer tool strip.

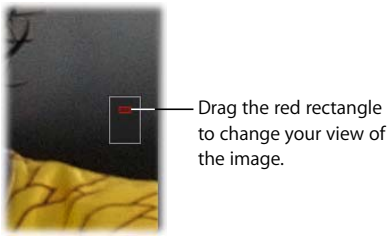
  Click the button again to turn off the full-resolution display.



When an image doesn't fit within the area of the Viewer, a small, gray box appears on the image with a red rectangle inside, showing the portion of the image that is currently visible in the Viewer. You can drag the red rectangle within the gray box to see other parts of the image, also known as *panning*.

To pan the full-resolution image in the Viewer, do one of the following:

- Drag the red rectangle that appears on the image.



- Hold down the Space bar and drag the image.

Viewing Master Images

When working with adjusted images, or versions, you may at times want to check what the original master image looks like. You can have Aperture quickly display the master image on which a selected version is based.

To display the master image for a selected version, do one of the following:

- Choose View > Show Master Image (or press M).
- Click the Show Master Image button in the Viewer tool strip.

Setting Up the Viewer for Onscreen Proofing

Images displayed on your computer screen may look different when displayed on computer screens that use different color technologies. Your images may also reproduce differently in print depending on the type of printer, the paper used, and the color profile of the printing device.

To see what an image will look like when you print it or view it on a different display, you can have Aperture adjust your display so that your images resemble the final results. To adjust your computer display, you choose a proofing profile that matches as closely as possible the characteristics of the final output device. For example, if your image will be printed on sheetfed coated paper, you can choose a proofing profile for sheetfed coated paper to see what the printed image might look like. Aperture provides several dozen profiles that match the characteristics of many printers, display devices, and color spaces.

After choosing a proofing profile that matches the final output of the image, you turn on the onscreen proofing feature, and the image changes to show the expected results.

Onscreen proofing changes the look of images in the Viewer and in Full Screen view.

To choose a proofing profile:

- Choose View > Proofing Profile, then choose the profile you want from the submenu.

To turn onscreen proofing on or off:

- Choose View > Onscreen Proofing (or press Shift-Option-P).

Note: After setting up onscreen proofing, make sure to set your image export preset to match the eventual output of the image. Choose Aperture > Presets > Image Export. In the dialog that appears, choose the profile you want from the ColorSync Profile pop-up menu. For more information about exporting images, see Chapter 17, "Exporting Your Images," on page 487.

Viewing Images on Multiple Displays

Using the additional screen space of a second display affords an excellent platform for viewing and adjusting images, playing slideshows, and presenting your full-color, full-size images to clients. For more information about setting up two displays, see "Setting Up Your System with Two Displays" on page 631.

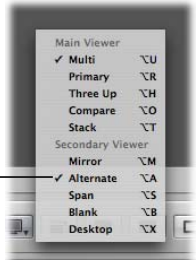
When your system uses two displays, Aperture provides two Viewers in which you can view multiple images. These Viewers are called the *Main Viewer* and *Secondary Viewer*. The Main Viewer is used for displaying the Aperture application, and the Secondary Viewer for viewing images.

You can set the Secondary Viewer to display images in different ways by choosing an option from the Viewer Mode pop-up menu in the tool strip.

- *Desktop:* Turns off the dual-display function.
- *Blank:* Sets the Secondary Viewer to be a blank screen.
- *Mirror:* Displays the same images in the Main and Secondary Viewers. For example, if you have the Main Viewer set to display three images, the Secondary Viewer displays three images as well.
- *Alternate:* Displays the currently selected image in the Secondary Viewer. The Secondary Viewer shows only one image even when you have the Main Viewer set to display multiple images.
- *Span:* Splits the display of the currently selected images between the Main and Secondary Viewers. For example, if you select seven images to view, the Main Viewer shows as many as fit its screen size, and the remaining images appear in the Secondary Viewer. Thus, one Viewer might show four images, and the other Viewer might show the remaining three of the seven. Span is also used if you want to compare images and show one image per display.

To display the currently selected image in the Secondary Viewer, do one of the following:

- Choose View > Secondary Viewer > Alternate (or press Option-A).
- Choose Alternate from the Viewer Mode pop-up menu in the tool strip.



Choose Alternate from the Viewer Mode pop-up menu to display the selected image in the Secondary Viewer.

To display the same images in both the Main and Secondary Viewers, do one of the following:

- Choose View > Secondary Viewer > Mirror (or press Option-M).
- Choose Mirror from the Viewer Mode pop-up menu in the tool strip.

To display a selection of images across both the Main and Secondary Viewers, do one of the following:

- Choose View > Secondary Viewer > Span (or press Option-S).
- Choose Span from the Viewer Mode pop-up menu in the tool strip.

To turn off the display of images in the Secondary Viewer, do one of the following:

- Choose View > Secondary Viewer > Blank (or press Option-B).
- Choose Blank from the Viewer Mode pop-up menu in the tool strip.

To turn off the Secondary Viewer function, do one of the following:

- Choose View > Secondary Viewer > Desktop (or press Option-X).
- Choose Desktop from the Viewer Mode pop-up menu in the tool strip.

Displaying Metadata Associated with Images

To help identify your images as you work with them, you can set Aperture to display the metadata associated with images in the Viewer. You can display keywords, ratings, EXIF information, IPTC information, and more. You can specify whether the information appears below the image or across the bottom of the image.

You can also specify up to two sets of predefined information displays. For example, one set of Viewer options can be configured to show ratings only, and another set to show all the IPTC information associated with an image. You can then switch between sets to change the information that appears with your images.

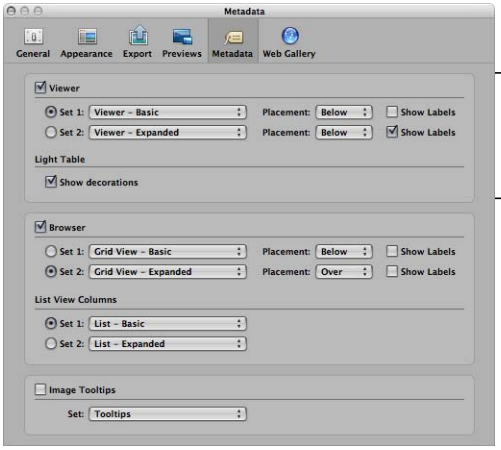


The caption and keywords are displayed here.

To set the display of metadata shown with images in the Viewer:

1 Do one of the following:

- Choose Aperture > Preferences, or press Command-Comma (,), then click Metadata.
- Press Command-J.



In the Metadata pane, you can choose how you want to view metadata in the Viewer.

2 Select the Viewer checkbox.

3 Choose the metadata views you want to use from the Set 1 and Set 2 pop-up menus.

4 Choose the location where you want the metadata displayed from the Placement pop-up menus.

You can choose whether you want the metadata to appear over the bottom edge of the image or below the image.

5 Click the Set 1 or Set 2 button to select the metadata view you want displayed.

6 Close the Preferences window.

To turn the display of metadata on or off in the Viewer:

- Press Y.

To switch metadata views in the Viewer:

- Press Shift-Y.

For more information about using metadata, see Chapter 11, "Working with Metadata," on page 269.

Working with Preview Images

Aperture allows you to create and use JPEG previews of versions in the library. Aperture preview images improve the display of images in Aperture and allow you to easily use your images in other applications. These preview images are used to speed up the display of images in the Viewer, in the Browser, and in Full Screen view. Previews are JPEG images generated by Aperture that represent the original master with any applied adjustments.

You can have Aperture create and maintain previews automatically as you add or modify versions, or you can create previews manually whenever you need them. To maintain an efficient use of disk space and adequate display speed, you can control the size of previews, from a preview image that has the full-size dimensions of the master down to a preview image that is 1280 pixels in the longest dimension. You can also control the JPEG compression quality of the previews. Furthermore, if your workflows do not benefit from previews, you can configure Aperture to not create them at all.

Previews are also shared with applications in iLife and iWork. As an additional advantage of using previews, Aperture uses JPEG previews to display images in slideshows. The result is smoother, more responsive slideshows. However, if the previews are absent or not up to date, Aperture must render the preview images before the slideshow begins.

Displaying Images in the Viewer

When a version needs to be displayed in the Viewer, Aperture does the following:

1. Aperture draws the thumbnail image (a JPEG image that is 1024 pixels in the longest dimension).
2. Aperture draws the JPEG preview, if present.
3. Aperture decodes the master and applies any adjustments to it.

Once the third step is completed, the adjustment controls become enabled. Because the JPEG preview is created with all the adjustments for that version, it appears onscreen faster than the adjusted master would. The result is a sharp preview image that appears quickly in the Viewer.

Controlling Preview Images

You can control the creation and maintenance of preview images for an entire library, as well as on a project-by-project or image-by-image basis.

Aperture is preset to create previews for images in the library. Previews are built as a background activity after importing images. If you import a large number of images, it may take an extended time to build these previews. In that case, you may wish to temporarily stop the building of previews using the Activity window and then resume building the previews later. Or, you can deselect the "Create previews for existing images" checkbox and build previews on a project-by-project basis, as discussed in "Sample Workflows for Using Previews Effectively" on page 202.

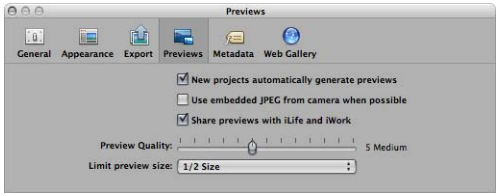
Setting Preview Preferences

Aperture provides four preference settings for controlling previews. These settings apply to all libraries.

To open Aperture preferences:

- Choose Aperture > Preferences, then click Previews.

The Previews pane appears.



- *New projects automatically generate previews:* Selecting this checkbox tells Aperture to automatically build and maintain previews for new projects you create in the current library (and, by extension, in new libraries). This checkbox sets the Maintain Previews for Project setting (discussed below) for each new project as it is created.
- *Use embedded JPEG from camera when possible:* Selecting this checkbox tells Aperture to use the JPEG thumbnail produced by the camera, if available.
- *Share previews with iLife and iWork:* Selecting this checkbox tells Aperture to create a file, in XML format, that the iLife and iWork media browsers (and Mac OS X screen saver) use to access the Aperture library. If this checkbox is deselected, Aperture will not create this file for any of your libraries, and the media browsers and the screen saver cannot see your Aperture libraries. The XML file is updated whenever Aperture quits or is no longer the active application. For very large libraries, the XML file can take some time to update. In this case, if you are not sharing your previews with other applications (other than through dragging and dropping), you may decide to deselect this checkbox.

- *Preview Quality:* Use this slider to determine the compression setting used for the JPEG previews. The scale ranges from 0 (very high compression and relatively low quality) to 12 (very low compression and relatively high quality). The lower the quality setting, the less disk space a preview uses.
- *Limit preview size:* Choose the size (width and height in pixels) of preview images from this pop-up menu. The default setting is Fit within 2560 x 2560. The "Don't limit" setting tells Aperture to make each preview the same size as the version. The other choices limit the preview to a size no larger than the specified size. A preview is never wider or taller than the version from which it is made. Aperture places asterisks (*) next to choices that match the resolution of your currently connected displays. Not all display resolutions are offered in the pop-up menu, so you may not see any asterisks here.

  Note: Changing the preview quality and size settings does not affect previews that have already been generated. If you want to regenerate previews using the new settings, you must use the methods described in the following sections.

Controlling Previews with the Project Action Pop-Up Menu

You enable or disable automatic preview maintenance either on a project-by-project basis or for all projects in a library.

To have Aperture automatically update previews in the library:

1. In the Projects inspector, select Library.
2. Choose Maintain Previews For All Projects from the Project Action pop-up menu (with a gear icon).

   Aperture enables automatic preview maintenance for each project in the library. Aperture will now automatically update previews when images are imported into projects in the library, as well as when versions are created or adjusted. For new projects, Aperture examines the application preference described earlier ("New projects automatically generate previews"). At the library level, a checkmark by the menu item indicates that the setting is enabled for all projects (or for the selected project). A dash (–) indicates that some projects have their previews maintained and others don't (a mixed state). Finally, if neither a checkmark nor a dash appears, automatic preview maintenance is disabled for the entire library.

   Note: Enabling this setting does not generate the previews. It only tells Aperture what to do the next time an image is imported or a version is created or adjusted. To generate previews, you can use the shortcut menus described below.

   You can also have Aperture update previews on a project-by-project basis.

To have Aperture automatically update previews in a single project only:

1. In the Projects inspector, select the project with the images you want to maintain previews for.
2. Choose Maintain Previews For Project from the Project Action pop-up menu (with a gear icon).

   A checkmark appears next to the Maintain Previews For Project menu command. Aperture will now automatically update previews when images are imported into the project, as well as when versions are created or adjusted.
3. Repeat steps 1 and 2 until all the projects you want maintained are set to update previews automatically.

Note: Enabling this setting does not generate the previews. It only tells Aperture what to do the next time an image is imported or a version is created or adjusted. To generate previews, you can use the shortcut menus described below.

Controlling Previews with Shortcut Menus

You can control previews in projects by Control-clicking a project in the Projects inspector and choosing an item from the shortcut menu that appears. In addition, you can control previews for single images or for a selection of images by Control-clicking images in the Browser.

In the Projects inspector, you can delete all the previews for a project or update all the previews for a project.

To delete all the JPEG previews for a project:

- In the Projects inspector, Control-click the project whose JPEG previews you want to delete, then choose Delete Previews for Project from the shortcut menu.

To update all the JPEG previews in a project:

- In the Projects inspector, Control-click the project whose JPEG previews you want to update, then choose Update Previews for Project from the shortcut menu.

If previews are already up to date and you choose Update Previews for Project, Aperture alerts you that no work is required. However, you can force the rebuilding of previews.

To force the rebuilding of JPEG previews in a project:

1. In the Projects inspector, hold down the Option key while Control-clicking the project whose JPEG previews you want to force Aperture to update.
2. Choose Generate Previews for Project from the shortcut menu.

In the Browser, you can select one or more images and either delete or update the JPEG previews.

To delete JPEG previews for an image selection:

1. In the Browser, select an image or group of images whose JPEG previews you want to delete.
2. Control-click the image selection, then choose Delete Previews from the shortcut menu.

To update JPEG previews for an image selection:

1. In the Browser, select an image or group of images whose JPEG previews you want to update.
2. Control-click the image selection, then choose Update Previews from the shortcut menu.

You can also force the rebuilding of previews for an image selection.

To force the rebuilding of JPEG previews for an image selection:

1. In the Browser, select an image or group of images whose JPEG previews you want to force Aperture to update.
2. Hold down the Option key while Control-clicking the image selection, then choose Generate Previews from the shortcut menu.

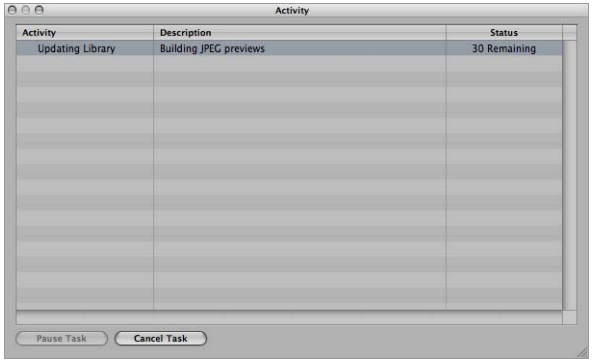
Note: The commands for deleting, updating, and generating previews are also available in the Images menu.

Viewing Preview Generation Progress in the Activity Window

Aperture renders preview images in the background; however, there may be times when you want to stop this operation. You can view the progress of the preview render operation, as well as cancel the operation, in the Activity window.

To stop building previews:

1. Choose Window > Show Activity.



2. In the Activity window, select the "Processing previews" task, then click the Cancel Task button.
3. Close the Activity window.

Note: Because slideshows that use the Best quality setting cannot begin until all preview images are up to date, preview generation is done in the foreground with a Cancel button to stop the operation. In all other cases, previews are created in the background.

Rescheduling JPEG Preview Maintenance

For projects in which automatic preview maintenance is disabled, canceled previews can be rescheduled.

To reschedule JPEG preview maintenance, do one of the following:

- In the Projects inspector, select the project whose JPEG previews you want to start updating again, then choose Images > Update Previews for Project.
- Control-click the project, then choose Update Previews for Project from the shortcut menu.

Note: Each time you open Aperture, it checks for out-of-date previews in those projects whose automatic preview maintenance option is enabled and then schedules the previews for regeneration. If you don't want previews updated automatically, disable automatic preview maintenance for your projects. For more information, see "Controlling Previews with the Project Action Pop-Up Menu" on page 198.

Rendering Preview Images

Aperture renders preview images in four situations:

- When a library is upgraded—provided that the "Create previews for existing images" checkbox is selected in the Welcome to Aperture dialog
- When an image is imported, or a version is created, rotated, or adjusted—provided that the Maintain Previews item is enabled in the Project Action pop-up menu (with a gear icon)
- When you Control-click the library, a project, or an image selection and choose Update Previews from the shortcut menu
- Immediately before a slideshow, if the previews are not up to date, and the preset uses the Best quality setting

When rendering a group of preview images, Aperture uses the current application preference settings for compression quality and picture size, not the settings that were specified when preview rendering began. For example, if you have the quality set to 6, and then halfway through rendering you change the setting to 8, the previews that have not yet been rendered will be compressed at setting 8. Already rendered previews are unaffected.

To update previews to use new size and compression settings:

1. In the Browser, select the images you want to update.
2. Hold down the Option key, Control-click the image selection, and choose Generate Previews from the shortcut menu.

   If you encounter performance issues, you can check the Background Task List window to see if Aperture is doing work in the background (choose Window > Show Task List). If you think that preview processing may be degrading performance, you can disable automatic preview maintenance for that project and cancel the preview processing task underway. You can then generate the previews at a more convenient time.

Sample Workflows for Using Previews Effectively

There are several methods for using preview images efficiently and effectively.

Generating Previews on a Project-by-Project Basis for Large Libraries

Because previews can take a long time to render (especially for high-resolution images or heavily adjusted ones), it may be best to disable automatic preview maintenance for a large library, and instead select the projects for which you want previews created.

To stop building previews library-wide and build previews on a project-by-project basis:

1. Choose Window > Show Activity.
2. Select the "Processing previews" task, then click the Cancel Task button.
3. Close the Activity window.
4. In the Projects inspector, select Library and choose Maintain Previews For All Projects from the Project Action pop-up menu (with a gear icon).

   No checkmark or dash (–) next to the menu item indicates that preview maintenance is disabled for the entire library.
5. In the Projects inspector, individually select the projects for which you want previews created, then do one of the following:

   - Control-click each project and choose Update Previews for Project from the shortcut menu.
   - Select each project and choose Maintain Previews for Project from the Project Action pop-up menu (with a gear icon).

     A checkmark next to the Maintain Previews for Project menu item indicates that preview maintenance is enabled for the selected project.

Generating Previews for Projects You Intend to Keep Offline

A JPEG preview is displayed when a referenced image's master is offline or cannot be found. This makes previews a great way of maintaining high picture quality while conserving the disk space that masters (especially RAW files) require.

To use previews for offline referenced images:

1. Make sure the external hard drive containing the referenced masters you want to keep offline is connected to your computer.

   If the masters you want to keep offline are currently stored on your computer, you must convert the images to referenced images and move the masters to an external hard disk. You can do this by selecting the project containing the images whose masters you want to keep offline, choosing File > Relocate Masters for Project, selecting an external hard disk location for the masters, and then clicking Relocate Masters.

2. Control-click the project containing the images whose masters you want to keep offline, then choose Update Previews from the shortcut menu.

3. When the previews are built (you can tell by choosing Window > Show Activity), you can disconnect the hard disk containing the masters.

Even though the masters are offline, you can browse, search, and assign metadata to preview images. You can even use the Loupe to zoom in on preview images, because they are high-quality JPEG files.

Generating Previews for Images Based on Rating

Another way to use previews is to create a search that displays only low-rated images. You can then build previews just for those images, and take their masters offline (for example, burn them to a DVD). That way you still have good-quality images for all of your photos, without using a lot of disk space.

You can also create a search that displays only highly rated images, and then build previews for those images only. This is a useful alternative for workflows where the default thumbnail resolution is sufficient for low-rated images.

Generating Previews for New or Active Projects

Because previews are used by the iLife and iWork media browsers, as well as by the Mac OS X screen saver, you can use previews as a way to distribute your Aperture pictures in movies, on the web, on DVDs, in slideshows, and in podcasts. You can also download your Aperture pictures to your iPod, import them into iPhoto, or use them to create Pages documents.

To share previews with other applications:

1. Select the project whose images you want to share with other applications, then choose Maintain Previews for Project from the Project Action pop-up menu (with a gear icon).
2. Make sure the "Share previews with iLife and iWork" checkbox is selected in Aperture (Choose Aperture > Preferences, then click Previews).
3. In the Projects inspector, Control-click the project and choose Update Previews for Project from the shortcut menu.

   When the previews are built, you can open any of the iLife and iWork applications and use your Aperture images.

Generating Previews for Smart Albums

You can also create previews for images collected in Smart Albums. For example, you can create previews for highly rated images only. For more information about working with Smart Albums, see Chapter 13, "Grouping Images with Smart Albums," on page 317.

To generate previews for Smart Albums:

1. Create a Smart Album and specify criteria for it using the Smart Album's Query HUD.
2. Click in the Browser, then press Command-A to select all the images.
3. Control-click one of the selected images and choose Update Previews from the shortcut menu.

   When the previews are built, you can share them with iLife and iWork applications or drag them to other applications.

   Note: Previews for Smart Albums are not automatically maintained—automatic preview maintenance is a project-level and library-level setting only. In this workflow, you need to update the previews yourself periodically, by Control-clicking the images in the album and choosing Update Previews from the shortcut menu. Aperture builds previews only for the versions that have changed, so you don't need to determine which ones to update.

Determining Which Versions Have Previews

There isn't a badge indicating if a version has a preview. You can Control-click the version and choose Update Preview from the shortcut menu to learn if a version's preview is up to date (if the version's preview is not present or needs updating, Aperture will build it or update it). You can also drag a single version out of the Aperture Browser, and a plus sign (+) appears over the pointer indicating that there is a preview to drag out. If a plus sign (+) does not appear over the pointer, no preview exists for the selected version.

Turning Previews Off

If your workflow does not benefit from previews, you can turn them off completely.

To turn off previews:

1. Choose Aperture > Preferences, then click Previews.
2. Deselect the "New projects automatically generate previews" checkbox.

   This step disables automatic preview maintenance for any new projects that you create.
3. In the Projects inspector, select Library, then choose Maintain Previews For All Projects from the Project Action pop-up menu (so there is no checkmark next to it).

   This step disables automatic preview maintenance for your existing projects.

   Note: You will need to perform steps 1 and 2 for each of your libraries.
4. If you have already generated previews for some projects and do not want them, select Library in the Projects inspector, then choose Images > Delete Previews For Library.

   This step deletes all previews that have previously been generated. Again, you will need to do this for each library in which you have already generated previews.

Dragging and Dropping

When a version has a preview built for it, you can drag the image directly from the Browser to any application that accepts JPEG files, including the Finder, Mail, and most other applications. If the version doesn't have a preview, dragging and dropping is disabled for that version (except within Aperture). If you are dragging multiple images, but only some of them have previews, only the versions with previews are dragged out.

Integration with iLife and iWork

You can use previews to distribute your Aperture pictures in movies, on the web, on DVDs, in slideshows, and in podcasts. You can also download your Aperture pictures to your iPod, import them into iPhoto, or use them to create Pages documents. The media browsers in the iLife and iWork applications now support browsing Aperture libraries. For each version in the library, Aperture provides two JPEG files to iLife and iWork: a 240-pixel (longest dimension) JPEG thumbnail that is shown in the media browser, and the JPEG preview image (at whatever size you specified for it). If a version has no preview, the image is not made available to the media browser.

Note: When images are within stacks, only stack picks and album picks are shared. If you want iLife to have access to an image in a stack and it's not the pick, you need to extract it from the stack or make it the pick.

Integration with Mac OS X Desktop & Screen Saver System Preferences

Like images in iPhoto libraries, images in Aperture libraries can be used for your screen saver and desktop picture, through the same mechanism the media browser uses.

Displaying Offline Referenced Images

When a master is offline or cannot be found, Aperture draws the thumbnail image first, and then the preview if it is present. Because the preview is high quality, you can zoom and even use the Loupe.

Suppressing Preview Generation When Opening Aperture

When Aperture is opened, it begins updating previews for those projects whose Maintain Previews setting is enabled. (For more information about maintaining previews, see "Controlling Previews with the Project Action Pop-Up Menu" on page 198.) This can cause problems if a project contains damaged files or images in unsupported file formats. In Aperture, you can suppress preview generation when opening Aperture, allowing you to more easily identify the damaged image files. To do this, press the Shift key while opening Aperture. You can also cancel the current preview maintenance operation using the Background Task List window. For more information, see "Viewing Preview Generation Progress in the Activity Window" on page 200.

Note: If you have canceled a preview maintenance operation, the previews are not updated until another change is made to the image. To force Aperture to update the preview for an image, see "Controlling Previews with Shortcut Menus" on page 199. The next time you open Aperture, automatic preview maintenance resumes.

Quickly Accessing Commands

You can access commands via a shortcut menu, as an alternative to using the menu bar at the top of the screen or pop-up menus within a window.

To view the shortcut menu:

- Position the pointer over the Viewer, then Control-click (press the Control key and click).

Note: Although accessing commands from shortcut menus can help you work more quickly, keep in mind that not all commands are available in shortcut menus.

Viewing Images in Full Screen View

7

Full Screen view's large viewing space and black background provide an excellent work area for viewing and adjusting your images.

Full Screen view provides access to many of the tools and HUDs in Aperture. This chapter explains how you can use Full Screen view's filmstrip and toolbar to move through, compare, and rate your images. You can also use the Aperture HUDs in Full Screen view to adjust, retouch, and add metadata to your images.

This chapter covers:

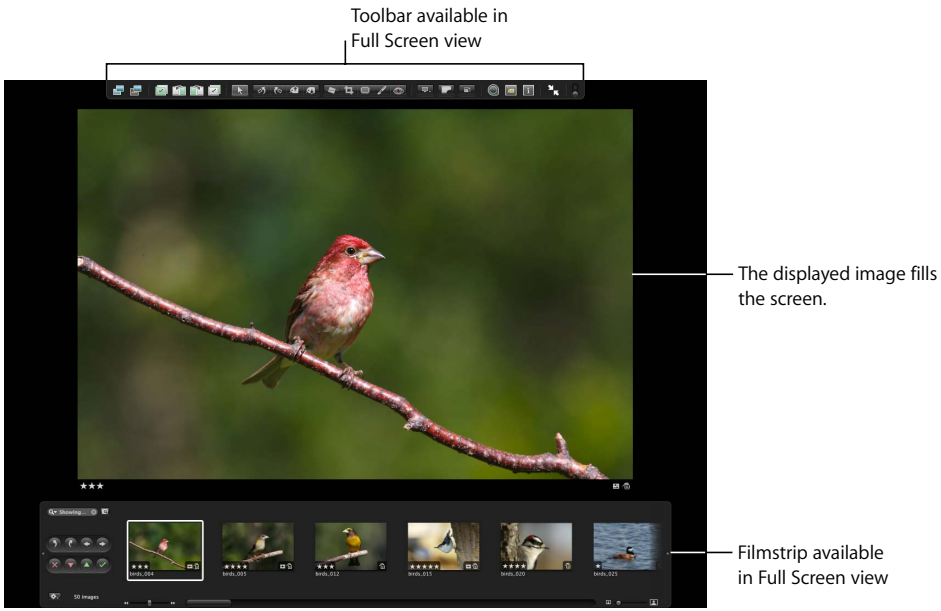
- An Overview of Full Screen View (p. 208)
- Entering and Exiting Full Screen View (p. 209)
- Working with the Filmstrip in Full Screen View (p. 209)
- Working with the Toolbar in Full Screen View (p. 211)
- Using HUDs in Full Screen View (p. 214)
- Changing the Display of Metadata in Full Screen View (p. 216)
- Using Keyboard Shortcuts in Full Screen View (p. 217)
- Quickly Accessing Commands (p. 218)

An Overview of Full Screen View

Full Screen view projects your images onto a black background for detailed viewing. Using a dual-display system in Full Screen view gives you an enlarged space to compare and adjust images. For more information about setting up a dual-display system, see "Setting Up Your System with Two Displays" on page 631.

You can view, compare, and stack your images in Full Screen view. You can also apply adjustments and keywords. When you've finished working with your images, you can use this view to preview and proof your images.

Full Screen view includes a toolbar and filmstrip to help you view, organize, and adjust your images.



Use the toolbar buttons and tools to change your images. The toolbar includes buttons for creating versions and working with stacks, as well as a full set of image adjustment tools.

Use the filmstrip to move through, organize, and rate your images. You can dock the filmstrip on the left, right, or bottom of the screen—wherever it best suits your work habits. You can also hide or show the filmstrip whenever you want.

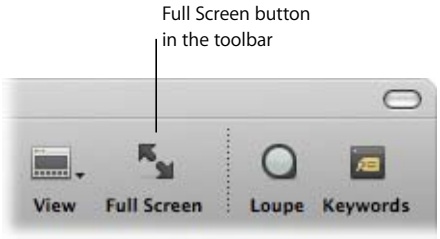
You can use any of the Aperture HUDs in Full Screen view. You can open the Adjustments HUD or Keywords HUD by pressing its keyboard shortcut. In fact, you'll find it convenient to use keyboard shortcuts for most features you use in Full Screen view. For more information about keyboard shortcuts you can use, see "Using Keyboard Shortcuts in Full Screen View" on page 217.

Entering and Exiting Full Screen View

You can quickly switch between Full Screen view and your workspace layout in the Aperture main window.

To enter Full Screen view:

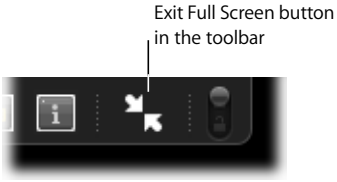
- Click the Full Screen button in the toolbar (or press F).



The Aperture main window disappears and your images appear in Full Screen view.

To exit Full Screen view, do one of the following:

- Click the Exit Full Screen button in the toolbar (or press F).



The workspace layout you were working in before entering Full Screen view reappears.

Working with the Filmstrip in Full Screen View

The filmstrip in Full Screen view is similar to the control bar in the Aperture main window. You can use the filmstrip's controls to move through, rotate, view, and rate your images.

Viewing Images with the Filmstrip

You can easily view images in Full Screen view by selecting them in the filmstrip.

To view an image that's in the filmstrip:

- Select an image displayed in the filmstrip by pressing the arrow keys or clicking the image you want to see.

To view more than one image at the same time, do one of the following:

- Command-click individual images that are not adjacent to select them.
- Shift-click images to select a range of images.
- Change your view settings in the Viewer Mode pop-up menu in the toolbar.



Moving and Resizing the Filmstrip

You can move the filmstrip to the left, bottom, and right sides of your main display. But there are times, especially when viewing an image at full resolution, that you cannot keep the filmstrip from overlapping your image. The filmstrip includes controls that let you define when the filmstrip appears. You can also specify how the filmstrip fits on the screen in relation to the image or images you are viewing.

There are several ways you can configure the filmstrip. You can choose to always show the filmstrip, show it based on image dimensions, or have Aperture automatically fit the images and filmstrip on your screen without overlapping.

To always show the filmstrip:

- Choose Turn Hiding Off from the Filmstrip Action pop-up menu.



Aperture automatically fits the image and the filmstrip on the screen, keeping the filmstrip and your images from overlapping.

To show the filmstrip only when you move the pointer over its docked position:

- Choose Turn Hiding On from the Filmstrip Action pop-up menu.

The image fills the screen, and the filmstrip appears over the image when you move the pointer over the area where the filmstrip is docked.

You can position the filmstrip to the left, bottom, and right sides of your main display.

To move the filmstrip to a different location, do one of the following:

- Drag the filmstrip to the left, right, or bottom of the Aperture window.
- Choose Left, Right, or Bottom from the Filmstrip Action pop-up menu.

You can also lengthen or shorten the filmstrip to make it better fit the screen.

To resize the filmstrip:

- Drag the end of the filmstrip (near the small dots that appear on either end).

Working with the Toolbar in Full Screen View

The toolbar displayed in Full Screen view is similar to the toolbar in the Aperture main window.



To view the Full Screen view toolbar:

- In Full Screen view, move the pointer to the top of the screen on the main display.

You can also have the toolbar always appear on the screen by clicking the Always Show Toolbar button in the toolbar.

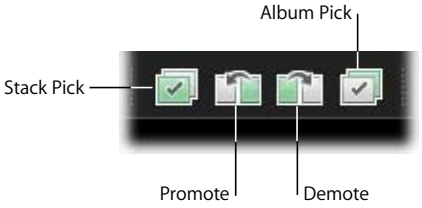
You can use the toolbar's buttons and tools to create image versions, work with stacks, make a variety of adjustments to your images, and control your displays.

Version Buttons



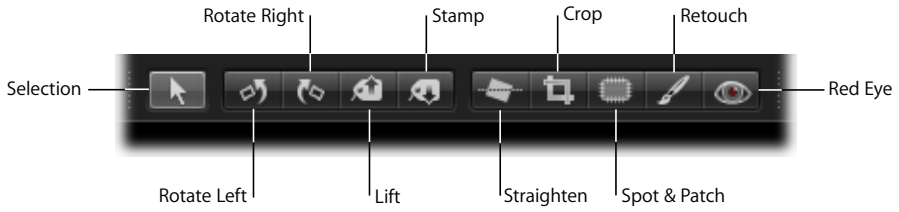
- *Duplicate Version:* Click this button to create a new version of the selected image.
- *New Version From Master:* Click this button to create a version from the original master. A duplicate of the master image is created.

Stacking Buttons



- *Stack Pick:* Select a stack item, then click this button to mark the image as its stack's pick.
- *Promote:* Select a stack item, then click this button to move the selected stack item closer to the stack's pick.
- *Demote:* Select a stack item, then click this button to move the selected stack item farther from the stack's pick.
- *Album Pick:* Select an image version to represent a stack, then click this button to select the image as the pick within that particular album (the stack can have a different pick image in another album).

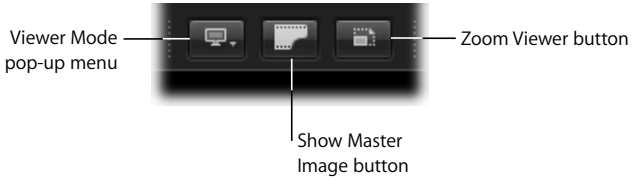
Adjustment Tools



- *Selection:* Use this tool to select images.
- *Rotate Left:* Use this tool to rotate an image counterclockwise.
- *Rotate Right:* Use this tool to rotate an image clockwise.
- *Lift:* Use this tool to copy a set of metadata and adjustments from a selected image.
- *Stamp:* Use this tool to stamp, or apply, a copied set of adjustments to one or several images.
- *Straighten:* Use this tool to manually rotate an image so that it's straight in relation to a virtual horizon.
- *Crop:* Use this tool to crop an image to a constrained aspect ratio or custom dimension.
- *Spot & Patch:* Use this tool to remove imperfections in the image, such as sensor dust, by either copying the pixels around the blemish ("spotting") or copying pixels from another area of the image ("patching").

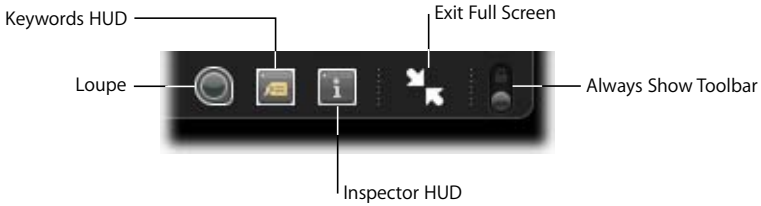
- *Retouch:* Use this tool to retouch all types of imperfections in an image, such as skin blemishes, using either the Repair or Clone brush.
- *Red Eye:* Use this tool to correct red-eye, occurring when the subject's retinas reflect light from your camera's flash.

Display Controls



- *Viewer Mode pop-up menu*: Use this to choose how to view images on your display or displays and how to position images on each display.
- *Zoom Viewer:* Click this button to enlarge the image to a 100 percent pixel-for-pixel view.
- *Show Master Image:* Click this button to view the original master image without any applied adjustments. Click again to switch the view back to the current version.

Other Buttons



- *Loupe:* Click this button to open the software loupe, which you can use to minutely examine parts of an image.
- *Keywords HUD:* Click this button to show or hide the Keywords HUD.
- *Inspector HUD:* Click this button to show or hide the Inspector HUD.
- *Exit Full Screen:* Click this button to exit Full Screen view.
- *Always Show Toolbar:* Click this button to turn the automatic display of the toolbar on or off.

Using HUDs in Full Screen View

You can use any of the Aperture HUDs in Full Screen view. For example, you can open a HUD when you want to add keywords or make adjustments to images.



HUDs are available for use in Full Screen view and can make adjusting images easier.

Keywords HUD

Use the Keywords HUD to create and organize keywords and to add keywords to your images.

To show the Keywords HUD:

- Press Shift-H.



Use the Keywords HUD in Full Screen view to quickly add keywords to your images.

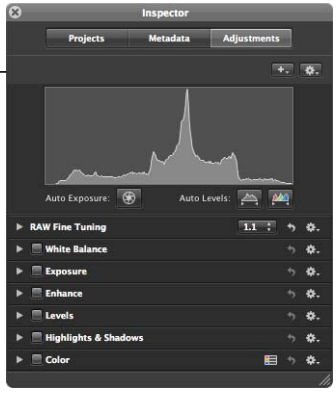
For more information about using the Keywords HUD, see Chapter 10, "Applying Keywords to Images," on page 243.

Inspector HUD

Use the Inspector HUD to navigate through the library, modify metadata in your images, and perform adjustments.

To show the Inspector HUD:

- Press H.



Use the Inspector HUD in Full Screen view to open the Projects pane, Metadata pane, or Adjustments pane when working with images.

Tool HUDs

Many of the adjustment tools work in conjunction with HUDs, and you can use all of them in Full Screen view.

To open any of the adjustment tool HUDs:

1. Show the Full Screen view toolbar by moving your pointer to the top of the screen on your main display.
2. Select an adjustment tool in the toolbar.

   If the tool you selected has a HUD, that HUD appears. For more information about using any of the adjustment tools and their HUDs, see Chapter 15, "Making Image Adjustments," on page 365.



The Crop HUD appears when you select the Crop tool in the toolbar.

Changing the Display of Metadata in Full Screen View

The metadata display settings you have chosen for the Viewer and Browser also apply to images displayed in Full Screen view and in its filmstrip. The settings for the Viewer control the display of metadata for full-screen images, and the settings for the Browser control the display of metadata for thumbnails in the filmstrip. For more information about setting the display of metadata, see Chapter 11, "Working with Metadata," on page 269.

Although the menus are not available in Full Screen view, you can change the display of metadata using the same keyboard shortcuts used to change the display of metadata in the Browser and Viewer.

To turn the display of metadata on or off in Full Screen view:

- Press Y.

To switch between sets of metadata for images in Full Screen view:

- Press Shift-Y.

To hide or show metadata in the filmstrip:

- Press U.

To switch between sets of metadata in the filmstrip:

- Press Shift-U.

Using Keyboard Shortcuts in Full Screen View

Here are several useful keyboard shortcuts you can use in Full Screen view.

Keyboard shortcut	Function
→	Go to next image
←	Go to previous image
J	Shuttle filmstrip left
K	Stop shuttling left or right
L	Shuttle filmstrip right
H	Show Inspector HUD
shift + H	Show Keywords HUD
E	Show Red Eye HUD
X	Show Retouch HUD
O	Show Lift & Stamp HUD
C	Show Crop HUD

To find more keyboard shortcuts, look in the Aperture menus, consult the *Aperture Keyboard Shortcuts* document, or open the Command Editor by choosing Aperture > Commands > Customize.

Quickly Accessing Commands

In Full Screen view, you can also access commands via a shortcut menu.

To view the shortcut menu:

- Position the pointer anywhere in the Full Screen view screen except the filmstrip or toolbar, then Control-click (press the Control key and click).

Note: Although accessing commands from shortcut menus can help you work more quickly, keep in mind that not all commands are available in shortcut menus.

Stacking Images and Making Picks

8

Photographers frequently shoot a series of related photos with the aim of selecting one image for use. Aperture makes it easy to choose the best image out of a series.

This chapter explains how you can easily group related images into sets, called *stacks*, that are easy to review, work with, and select final picks from.

This chapter covers:

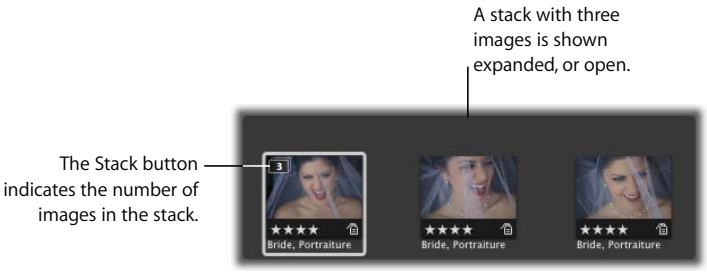
- An Overview of Stacking Images (p. 219)
- Creating Stacks (p. 221)
- Working with Stacks (p. 225)
- Keyboard Shortcuts for Working with Stacks (p. 231)

An Overview of Stacking Images

To capture a specific moment in time, such as a bride and groom kissing or two dignitaries shaking hands, a photographer may shoot multiple pictures, using both bracketing and continuous shooting, to increase the odds of capturing a usable image. After shooting the series, the photographer reviews the images and picks the best image of the group.

Reviewing and making picks from many related pictures can be time-consuming and difficult. To help with this task, you can organize related shots into stacks. A stack is a set of similar or related images from which one image will be selected for use. Aperture can automatically group such photos into stacks when you import them from a camera or memory card. You can also select images and create stacks manually.

A stack appears in the Browser as a group of images. The image that represents the stack, called the *pick*, is selected and displayed on the left. You can select any image in the stack as the pick, and it moves to the leftmost position in the stack. You can rearrange the order of images in a stack. For example, you might choose an alternate image and position it next to the pick. A Stack button appears in the upper-left corner of the pick image in the stack, indicating the number of images in the stack.



After creating a stack and selecting the pick, you can close the stack by clicking the Stack button on the pick image. When a stack is closed, only the stack's pick image appears in the Browser. Clicking the Stack button again expands the stack.



By closing stacks, you quickly reduce the number of images you have to sort through when selecting images in the final photo edit.

After creating stacks, you can organize and change them as you need. You can add images to a stack and remove those that don't belong. You can also split a stack into multiple stacks when necessary.

Creating Stacks

When you import your images, you can specify that Aperture create stacks automatically. For example, if you shoot a series of images in quick succession (such as at a sports event) or if you bracket images to allow for differences in lighting or exposure, you most likely will want to view those images together. Aperture can stack those images based on metadata recorded by the camera as the series of pictures is taken.



This shows an example of a series of images taken in quick succession.

- *Image series:* With a series of images shot in quick succession, Aperture can determine the images in a sequence and group them in a single stack. For example, sports photographers shoot rapid bursts of images to capture actions. Based on timeline metadata—when a series of shots was taken and the interval between shots—Aperture can determine which images fall into a sequence and group them in stacks.
- *Bracketed shots:* These typically represent a series of three pictures with slightly different exposure settings. Advanced digital cameras often have options for shooting bracketed shots automatically. When Aperture detects a series of bracketed images, it includes the neutral image and the over- and underexposed images in the stack.

Creating Stacks Automatically

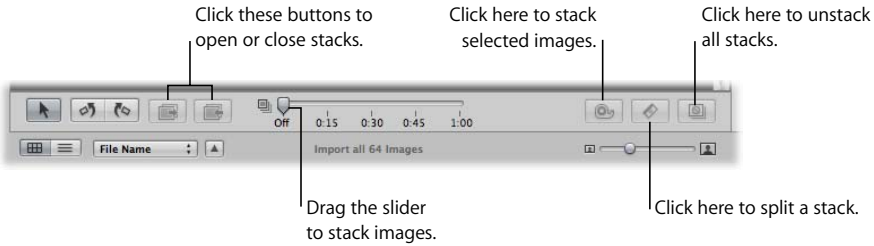
When importing images, you can have Aperture automatically group them into stacks.

To set Aperture to stack images automatically during import:

1 Connect your camera or card reader to your computer.

The Import pane and Import dialog appear, displaying the images on your camera or card reader.

2 Drag the Auto-Stack slider to set the time interval for successive shots in a stack.



The images in the dialog are stacked according to the slider setting. Inspect the stacks to determine if the time interval should be shortened or lengthened.

Note: You can also manually select images in the Import dialog and stack and unstack them using the same commands and procedures you use to stack images in the Browser.

3 Specify the other import options you want, then click Import All.

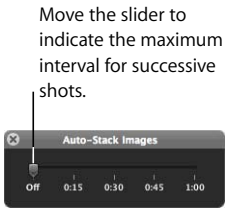
For more information about importing your photos, see Chapter 4, "Importing Images," on page 109.

After Aperture imports and stacks your images, you can review each stack to determine if the automatic stacking meets your approval.

If you prefer, you can also automatically stack images after importing them.

To stack images after they are imported:

1. In the Projects inspector, select a project or album that contains images you want to stack.
2. Choose Stacks > Auto-Stack (or press Command-Option-A).
3. In the Auto-Stack Images HUD, drag the slider to specify the maximum interval for successive shots in a stack.



As you drag the slider, the images in the Browser are stacked according to the interval of time specified. For example, if you typically shoot a series of related images in 15-second intervals, set the slider to 15 seconds.

4. Inspect the stacks to determine if the time interval should be shortened or lengthened.

Comparing Images in Stacks

To help with the photo editing process, you can set the Viewer and Browser to automatically open a selected stack and set up the stacked images for comparison. The pick of the stack is set as the "compare" image. This stack viewing feature also works in Full Screen view.

To set the Viewer to automatically open and compare the images in stacks, do one of the following:

- Choose View > Main Viewer > Stack (or press Option-T).
- Choose Stack from the Viewer Mode pop-up menu.

Tip: When the Viewer is in Stack mode, you can press the Up Arrow and Down Arrow keys to move from stack to stack.

Creating Stacks Manually

After importing photos, you may want to quickly review them and delete those that you immediately see have technical or content flaws. You may then want to group the remaining images into stacks before rating them. Stacking images manually can help provide an initial organization and an overview of your shots, which you can then put through a more refined or discriminating rating pass later.

To create a stack manually:

1. In the Browser, select the images you want to stack.

   You can Shift-click adjacent images and Command-click nonadjacent images to select them.

   Tip: As a fast way to select a series of images, select an image at one end of the series, hold down the Shift key, and press the Right Arrow or Left Arrow key to select additional images.

2. Choose Stacks > Stack (or press Command-K).



The selected images are now stacked and appear linked in gray. The Stack button appears on the current pick image. You can change the pick image and rearrange the order of the images in the stack as you wish.

You can unstack a selection of images, if you need to.

To unstack a selection of images:

- After creating a stack, choose Edit > Undo, or select an image in the stack and choose Stacks > Unstack (or press Command-Shift-K).

Tips for Creating Stacks Quickly and Efficiently

One secret to an efficient photo edit is to quickly group related images into stacks before rating. Here is a suggested method for quickly creating multiple stacks in a fast initial pass through your images.

To create multiple stacks quickly:

1. Drag related images into easily selectable rows or groups.

   Adjacent images are the easiest to select when creating stacks.

2. Select an image at one end of the series.
3. Holding down the Shift key, press the Right Arrow or Left Arrow key to quickly select additional images. To select individual images that are not adjacent, Command-click the images.
4. Press Command-K to create the new stack.
5. Press Shift-K to close the stack.

Tip: To quickly move from stack to stack in the Browser, press Option–Page Up or Option–Page Down.

Working with Stacks

When working with stacks you can:

- Open and close stacks
- Designate a pick image for a stack
- Designate an album pick for a stack
- Arrange images in a stack
- Add images to and remove images from stacks
- Split stacks
- Drag stacks to new locations
- Work with stacks in list view
- Work with stacks in Full Screen view

Opening and Closing Stacks

You can close a stack and open it again whenever you wish. You may want to do this to free up space in the Browser. You can also close stacks to quickly reduce the number of images you must sort through when selecting images for a final photo edit. When a stack is closed, only the stack's pick image appears in the Browser.

To close a stack, do one of the following:

- Select an open stack, then choose Stacks > Close Stack (or press Shift-K).
- Click the Stack button on the pick image.



Only the pick image is shown when the stack is closed.

To close all stacks:

- Choose Stacks > Close All Stacks, or press Option-Semicolon (;).

To open a stack, do one of the following:

- Select a closed stack, then choose Stacks > Open Stack (or press Shift-K).
- Click the Stack button.

To open all stacks:

- Choose Stacks > Open All Stacks, or press Option-Apostrophe (').

Designating a Pick Image for a Stack

The pick image represents the stack. You can set the image you like best as the pick, or Aperture can set the pick automatically. When you select and stack images manually in the Browser, the leftmost image becomes the pick. You can change the pick whenever you wish.

To set an image as the pick, do one of the following:

- Select an image in the stack, then choose Stacks > Pick, or press Command-Backslash (\).
- Drag the image you want into the pick (or leftmost) position in the stack. When you see a green bar appear, release the mouse button.

Designating an Album Pick for a Stack

The same stack may appear in several albums. Depending on the purpose of the album, you may want a different pick image for each album. For example, a stack in a webpage album may have one pick image, and the same stack in a book album may have a different pick image adjusted for printing. You can designate a specific image in a stack to be an "album pick"—the pick for the stack within a specific album. Each album can have a different album pick for the stack.

An album pick appears with the Album Pick badge.



To select an album pick for a stack that appears in multiple albums:

- Select an image in the stack, then choose Stacks > Set Album Pick, or press Command-Shift-Backslash (\).

Arranging Images in a Stack

It can sometimes be difficult to decide which image in the stack should be the pick. In many cases, images are so similar that more than one merits the pick position. For this reason, you may want to have alternate images available when presenting images to clients.

You can change the order of images within a stack to help you choose the pick and alternates. Moving an image to the left promotes it, and moving it to the right demotes it.

To promote an image in a stack, do one of the following:

- Select an image, then choose Stacks > Promote, or press Command–Left Bracket ([).
- Drag the image over the image location you want until you see a green bar appear, then release the mouse button.

To demote an image in a stack, do one of the following:

- Select an image, then choose Stacks > Demote, or press Command–Right Bracket (]).
- Drag the image over the image location you want until you see a green bar appear, then release the mouse button.

Adding Images to and Removing Images from Stacks

You can add images to and remove images from stacks at any time. You can drag images into or out of a stack, as well as drag images from one stack to another.

To add an image to a stack, do one of the following:

- Select images in a stack and the image you want to add to it, then choose Stacks > Stack (or press Command-K).
- Drag the image into an expanded stack.

To remove an image from a stack, do one of the following:

- Select the image, then choose Stacks > Extract Item (or press Shift-Option-K).
- Drag the image out of an expanded stack.

Splitting Stacks

You can split a stack into multiple stacks to refine the organization of your images. All images remain stacked, but they are now part of new stacks. The image selected as the splitting point becomes the pick for the new stack.

To split a stack:

1. In an expanded stack, select the image that you want as the first image in a new stack.



Select the image you want as the first image. in the new stack.

2. Choose Stacks > Split Stack (or press Option-K).



The selected image becomes the pick in the new stack, which is marked with a white outline.

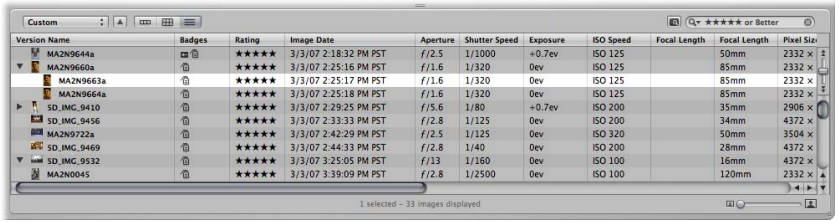
The selected image becomes the pick of the new stack.

Dragging Stacks

You can drag an entire stack to a new location, and you can drag specific images within a stack to a new location. When a stack is closed, dragging the stack moves the entire stack. When a stack is open, you can drag individual versions to new locations in the Browser. You can also drag images into a stack. If you drag a stacked image into a different project, however, the entire stack moves to the new location.

Working with Stacks in List View

If you prefer, you can also create and work with stacks in list view. You can select images to stack, select a pick, add and remove images, and split stacks, just as you can in grid view.



In list view, a stack is identified by a disclosure triangle beside the image name.

To open and close stacks in list view:

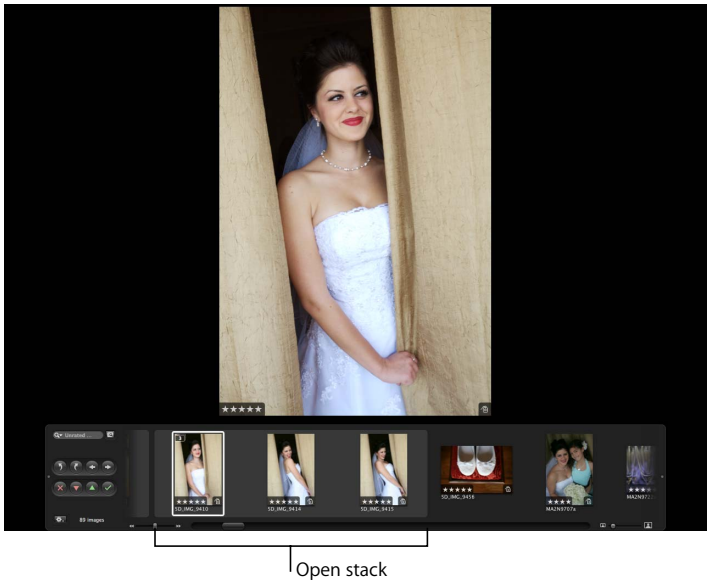
- Click the disclosure triangle beside the stack name.

You can work with the images in a stack in list view by dragging, pressing keyboard shortcuts, or choosing commands from the Stacks menu.

Working with Stacks in Full Screen View

You can also review stacks using the filmstrip in Full Screen view. A stack appears marked with a Stack button. You can open or close stacks to review the contents of a stack or compare images within stacks. You can reorder images in a stack or change a stack's pick image using the keyboard shortcuts for promoting and demoting stacked images. You can also use the stacking buttons in the toolbar and keyboard shortcuts to work with stacks.

When a stack appears in the filmstrip, you can rate the pick image and open the stack and rate the images within it.



After stacking images, you may want to rate your picks or the images within stacks. For more information about rating images, see Chapter 9, "Rating Images," on page 233.

Keyboard Shortcuts for Working with Stacks

Aperture provides the following keyboard shortcuts for efficiently working with stacks.

Keyboard shortcut	Function
option + page up	Go to previous stack
option + page down	Go to next stack
shift + K	Open/Close stack
option + '	Open all stacks
option + ;	Close all stacks
⌘ + K	Create stack
⌘ + shift + K	Unstack
option + K	Split stack
⌘ + \	Set stack pick
⌘ + [	Promote stack item
⌘ +]	Demote stack item
shift + option + K	Extract item

Rating Images

9

Rating images is a quick and easy way to narrow down the number of images you intend to work with. It can also help you locate your best images later.

This chapter explains how to quickly assign image ratings and use them to sort and review images.

This chapter covers:

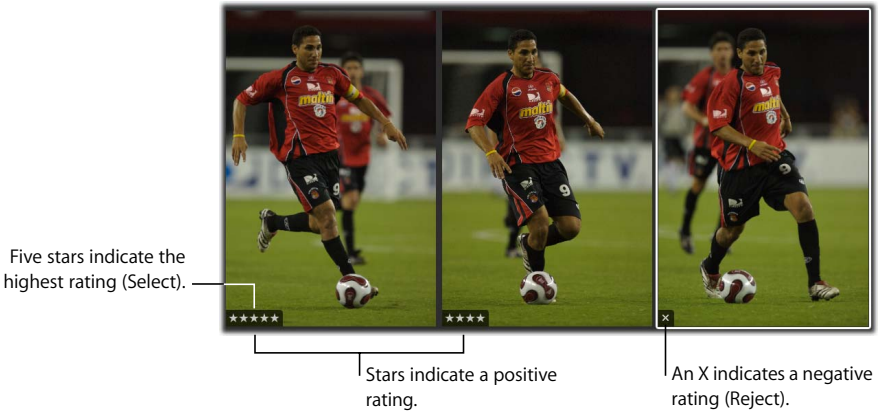
- An Overview of the Aperture Rating System (p. 234)
- Rating Images (p. 236)
- Sorting Images by Rating (p. 238)
- Including Image Rating in Your Workflow (p. 239)
- Comparing and Rating Images (p. 240)
- Keyboard Shortcuts for Displaying Images with Specific Ratings (p. 242)

An Overview of the Aperture Rating System

After finishing a shoot, photographers typically review their images and determine which ones are worth working with. While a "yes or no" judgment of an image can work for a small selection of photos, with a larger collection of similar images that show small variations, photographers need an organized method of noting which images are superior shots, which deserve further review, and which are poor quality or rejects. A simple and effective rating system can help photographers quickly narrow the focus of the selection process.

Rating is a simple process with powerful results. If you can easily identify 100 out of 500 images that aren't going to work, removing these images reduces your workload by 20 percent. Rating and thereby reducing your workload can save you a considerable amount of time.

Aperture provides a system for rating images from Select to Reject. The easily decipherable image ratings appear on the images themselves as overlays. Positive ratings appear as stars; you can rate images from one to five stars, with five being the highest, or Select, rating. A negative, or Reject, rating appears as an X.



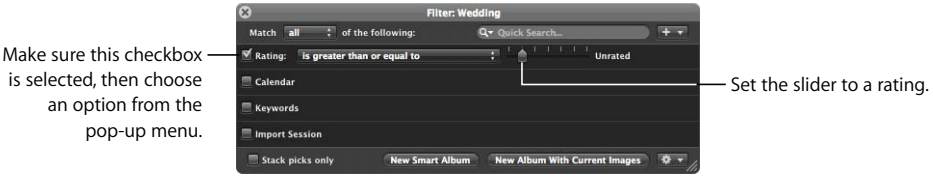
The process of rating an image can be as easy as selecting an image and clicking a rating button in the control bar to assign a rating to the image.



You can also use keyboard shortcuts to quickly assign or change ratings.

You can quickly review and rate images one after another with speed and efficiency. You can also select and rate multiple images at once. You can review and rate images in the Viewer, Browser, and Light Table, as well as in Full Screen view. When you've finished rating images, Aperture allows you to sort images according to their ratings.

You can use the Query HUD to hide or show images of a certain rating. For example, after an initial rating pass, you can set the Query HUD to show only those images that are rated one star. You can then closely inspect and further refine your selection or begin an adjustments pass. Aperture is preset to hide images that are rated Reject, so you may need to change the Query HUD settings to see rejected images.



Rating Images

Aperture provides a set of seven possible image ratings:

- Five stars, or Select
- Four stars
- Three stars
- Two stars
- One star
- Unrated, or neutral
- Reject

Rejected images appear with a white X overlay. Positive ratings appear with white star overlays. If no overlays are displayed on the image, the image is considered neutral or is not rated. You can rate a single image or apply a rating to several images at once.

Rating Individual Images

You can quickly rate a selected image with the rating buttons.

To rate an individual image:

1. Select an image.
2. To show the control bar, choose Window > Show Control Bar (or press D).
3. Click the rating buttons in the control bar to assign a rating.



- *To assign the highest rating to the image:* Click the Select button.
- *To assign a rating of Reject:* Click the Reject button.
- *To increase or decrease the image rating:* Click the Increase Rating or Decrease Rating button.

Note: As long as the image is selected, you can change its rating.

4. To select the next image, press the Right Arrow or Left Arrow key, or click the Previous Image or Next Image button in the control bar.

Keyboard Shortcuts for Rating Images

For quick and efficient rating, use the arrow keys to select images, and use the following keyboard shortcuts to apply ratings.

Keyboard shortcut	Function
+	Increase rating
-	Decrease rating
9	Apply Reject
1	Apply one star
2	Apply two stars
3	Apply three stars
4	Apply four stars
5	Apply five stars

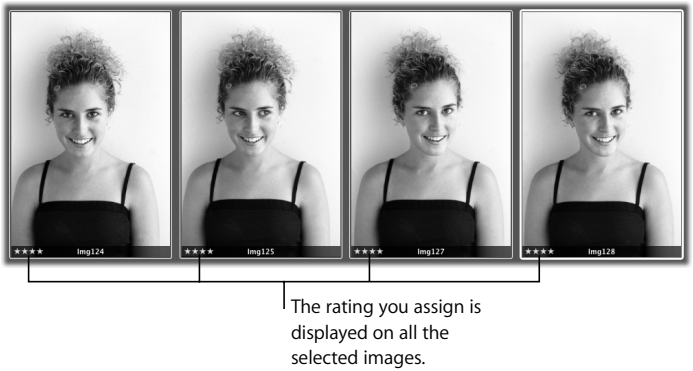
You can also apply a rating to several images at once.

To apply the same rating to multiple images at once:

1 Select the images you want to rate.

For more information, see "Navigating Through and Selecting Images" on page 153.

2 Click a rating button, or press the keyboard shortcut for a rating.



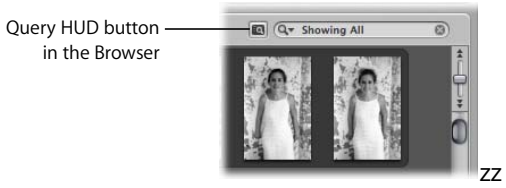
Sorting Images by Rating

After you've rated your images, you can sort images according to a specific rating. For example, after an initial rating pass, you can choose to show only those images rated Select, with five stars. You can then closely inspect and further refine your selection or begin making adjustments to images.

Image files are not deleted when sorted by rating. They are only temporarily removed from view.

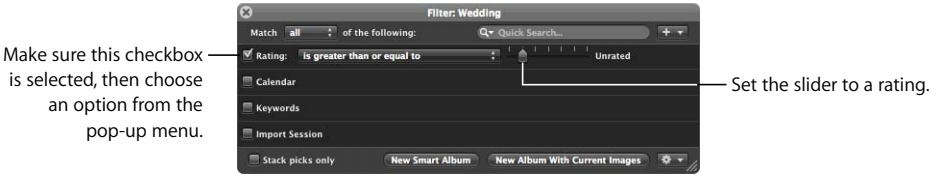
To sort images by rating:

1. Show the Query HUD by doing one of the following:
   - Choose Edit > Find (or press Command-F).
   - In the Browser, click the Query HUD button next to the search field.



ZZ

2. Select the Rating checkbox.



3. Choose an option from the Rating pop-up menu.
4. Drag the Rating slider to specify a rating.

   The Browser instantly displays only images that meet the specified rating criteria.

To view all images again:

- Deselect the Rating checkbox in the Query HUD (or press Control-6).

To view all images that are unrated or better:

- Press Control–Grave Accent (`).

To view rejected images only:

- Press Control-8.

Including Image Rating in Your Workflow

You can use image rating as part of your workflow to help reduce a large group of images to a smaller group of preferred images. Sometimes you can accomplish the selection process in one pass, especially if the group of images is small. If the group is large, additional rating and culling passes may be necessary.

Rating images with multiple passes can allow you to take a measured approach to the photo editing process. You can systematically rate images and then remove levels of rated images from view to work with your best images.

Here is a suggested workflow for rating images in multiple passes.

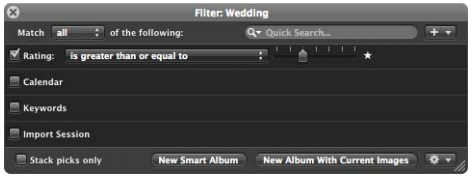
To rate images in multiple passes:

1. Begin by assigning a Reject rating to all images that are clearly unacceptable.

   If the Query HUD is set to show unrated images or better (the default setting), the rejected images immediately disappear.

2. In the next rating pass, assign positive ratings to any images that deserve a rating of one star or higher. Leave images you're uncertain about unrated.

3. To hide all unrated images, show the Query HUD and specify a rating that is greater than or equal to one star as search criteria.



   Only images with a rating of one star or better remain visible in the Browser.

4. In the next rating pass, assign a rating of two stars or better to any images that are better than one star.

5. Change the search criteria in the Query HUD to show only those images that are rated two stars or better.

6. In the next rating pass, assign a rating of three stars or better to your images.

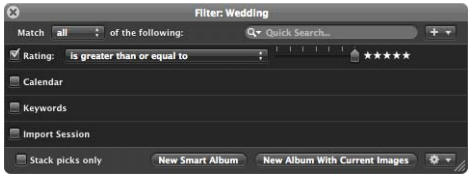
7. Change the search criteria in the Query HUD to show only those images that are rated three stars or better.

8. In the next rating pass, assign a rating of four stars or better to your images.

9. Change the search criteria in the Query HUD to show only those images that are rated four stars or better.

10 In the next pass, assign a rating of five stars, or Select, to your best images.

11 Specify a rating that is equal to five stars in the Query HUD.



Only the images rated Select remain visible in the Browser.

Comparing and Rating Images

For those really tough decisions, Aperture allows you to compare and rate a select image against close alternates. This is particularly useful when you are trying to choose an image from a small group of similarly composed images.

For example, choosing the best image from a series of head shots can be difficult. Even in head shots captured within a short time span, the facial expressions of the subject can change ever so slightly. By comparing images side by side and rating them, you can more easily select among like images.

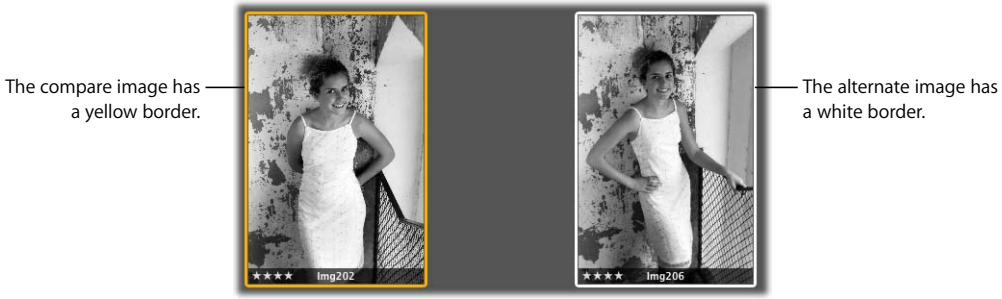
To compare and rate images:

1 Make sure the Browser and Viewer are showing.

2 In the Browser, select the image that appears to be the best.

3 To set this image as the "compare" image, choose Edit > Set Compare Item (or press Return).

The compare image appears in the Viewer and the Browser with a yellow border. The next selected image appears with a white border immediately to the right of the compare image. If you want to view another image against the compare image, simply select it. The alternate image you selected appears to the right of the compare image in the Viewer.



If you have a second display and want to view each image on a different display, choose View > Secondary Viewer > Span (or press Option-S).

4 Rate your compare image by doing one of the following:

- *To assign the Select rating:* Press Option-Backslash (\).
- *To increase the compare image's rating:* Press Option–Plus Sign (+).
- *To decrease the compare image's rating:* Press Option–Minus Sign (–).

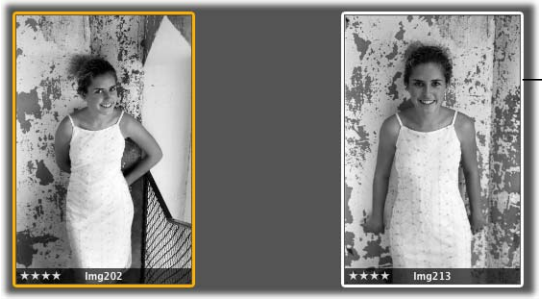
The rating appears as an overlay on the compare image.

5 Rate the alternate image by doing one of the following:

- *To assign the Select rating:* Press Backslash (\).
- *To increase the image's rating:* Press Plus Sign (+).
- *To decrease the image's rating:* Press Minus Sign (–).
- *To assign the Reject rating:* Press 9.

The rating appears as an overlay on the alternate image.

6 Navigate to the next alternate by pressing the Left Arrow or Right Arrow key, or click the Previous Image or Next Image button in the control bar.



The new alternate appears in the Browser with a white border.

If you discover that the new selection is a better choice or has the best rating, you can make it the compare image by pressing Return or choosing Edit > Set Compare Item. You can then review and compare your alternates against this image to confirm it as the best image.

Tip: To quickly make a selected image the compare image, press Return. To turn off the comparison feature, press Command-Return.

Keyboard Shortcuts for Displaying Images with Specific Ratings

To quickly display images with a certain rating level or better, use the following keyboard shortcuts.

Keyboard shortcut	Function
control + `	Show unrated images or better
control + 1	Show images rated one star or better
control + 2	Show images rated two stars or better
control + 3	Show images rated three stars or better
control + 4	Show images rated four stars or better
control + 5	Show images rated five stars (Select)
control + 6	Show all
control + 7	Show unrated images only
control + 8	Show rejects only

Applying Keywords to Images

10

Adding keywords to your images helps you organize your images and quickly locate specific images.

This chapter provides information about adding keywords to images and using these keywords to help define and organize your images.

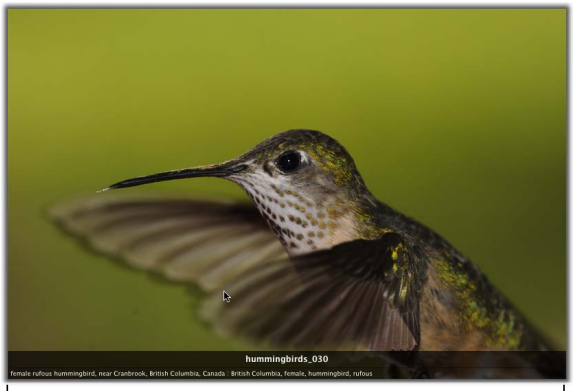
This chapter covers:

- An Overview of Keywords (p. 244)
- Viewing Keywords Applied to Images (p. 246)
- Applying Keywords Using the Keywords HUD (p. 250)
- Applying Keywords Using Keyword Controls and Keyword Presets (p. 257)
- Applying Keywords Using the Lift & Stamp HUD (p. 262)
- Applying Keywords Using the Metadata Inspector (p. 266)
- Applying Keywords to Images in the Light Table (p. 267)
- Removing Keywords from an Image (p. 267)
- Importing and Exporting Keyword Lists (p. 268)

An Overview of Keywords

Keywords are descriptive words assigned to image versions and saved as metadata. For example, a family portrait may include such keywords as *Portrait*, *Family*, *Father*, *Mother*, *Daughter*, *Husband*, *Wife*, *Park*, *Client Select*, *Purchased,* and more.

Once you have applied keywords to your images, you can have Aperture display an image's keywords in the Viewer and Browser. You can also view keywords for selected images in the Metadata inspector.



You can use the Query HUD to quickly locate images by their keywords, and you can use Smart Albums to automatically group images that have specific keywords. For example, you can create a Smart Album at the library level named Purchased, which automatically groups all images with the keyword *Purchased*. If you want to quickly review the images your clients bought over time, all you have to do is open the Smart Album named Purchased.

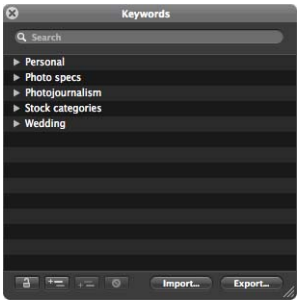
You can also apply keywords to images based on your future intentions. For example, you could create a Smart Webpage Album that gathers images that have a *For web* keyword applied. As you're reviewing your images, apply the keyword *For web* to any image you think is worthy of being published on your website. All images with the keyword *For web* are now collected in the Smart Webpage Album. If you later change your mind about publishing an image on your website, you can always remove the keyword. As soon as you remove the keyword, the image is removed from the Smart Webpage Album.

If you sell your images to image libraries, you can export the keywords assigned to your images as IPTC data. During export, Aperture embeds your keywords individually in the image file as IPTC-compliant keyword fields. The more keywords you apply to your images, the more likely it is that your images will be located by potential customers. For more information, see Chapter 17, "Exporting Your Images," on page 487.

Important: If you are planning to export your keywords as IPTC data, make sure your keyword phrases are no more than 64 characters in length. Longer keyword phrases may not be displayed properly in other IPTC editors or operating systems.

There are several ways to apply keywords:

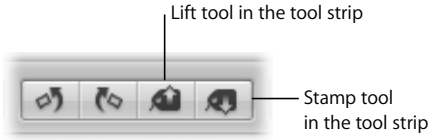
- Using the Keywords HUD



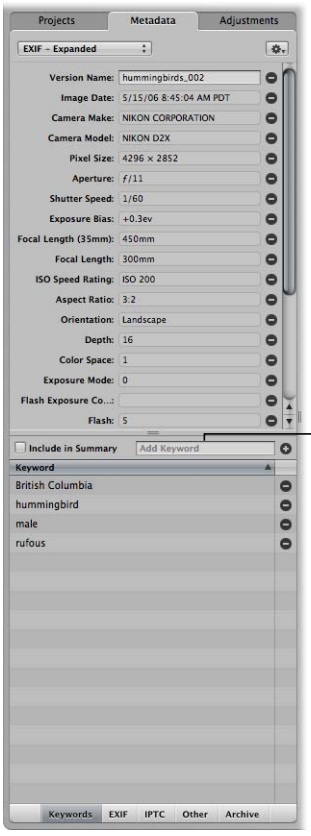
- Using keyword controls and presets in the control bar



- Using the Lift and Stamp tools via the Lift & Stamp HUD



- Using the Metadata inspector



Add keywords here.

Viewing Keywords Applied to Images

You can view the keywords applied to an image version in several areas:

- In overlays that appear on or below images in the Browser or Viewer
- In the Metadata inspector
- In the Keywords column of the Browser, when the Browser is in list view

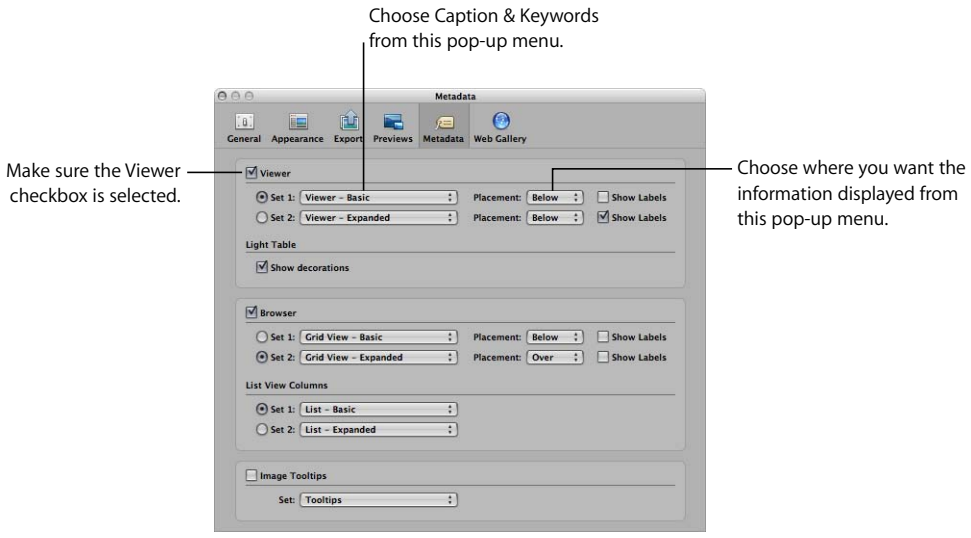
Displaying Keywords in the Viewer and Browser

You can turn on the display of image keywords in the Browser and Viewer. Your keywords are displayed in overlays that appear across the bottom of the image or below the image.

To display keywords using overlays:

1. Do one of the following:
   - Choose View > Metadata > Customize (or press Command-J).
   - Choose Aperture > Preferences, or press Command-Comma (,), then click Metadata.

   The Metadata pane of the Preferences window appears.
2. To display keywords in the Viewer, select the Viewer checkbox.
3. Choose Caption & Keywords from the Set 1 pop-up menu.

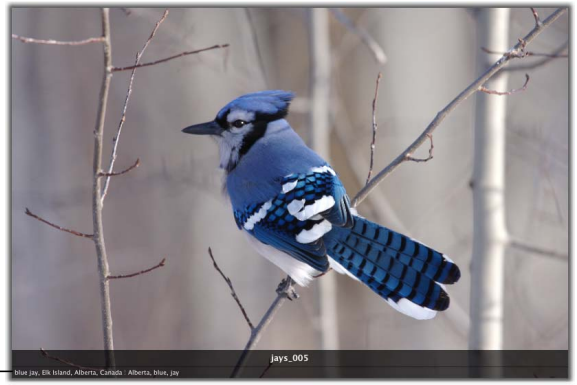


4. Choose an option from the Placement pop-up menu to specify where you want the information displayed in relation to the image.
5. To display keywords in the Browser, select the Browser checkbox.
6. Choose Caption & Keywords from the Set 1 pop-up menu.
7. Choose an option from the Placement pop-up menu to specify where you want the information displayed in relation to the image.

Aperture is now set to display keywords assigned to images. You can quickly hide or show the overlays when you need to.

To hide or show overlays in the Viewer or Browser, do one of the following:

- *To hide or show overlays in the Viewer:* Choose View > Metadata > Viewer (or press the Y key).



The captions and keywords appear in the area you specified.

- *To hide or show overlays in the Browser:* Choose View > Metadata > Grid View (or press the U key).

Viewing an Image's Keywords Using the Metadata Inspector

The Metadata inspector and the Metadata pane of the Inspector HUD provide views of the metadata associated with a selected image. When you show the Metadata inspector or the Metadata pane of the Inspector HUD and then select an image, you can see the keywords assigned to your image, including IPTC keywords.

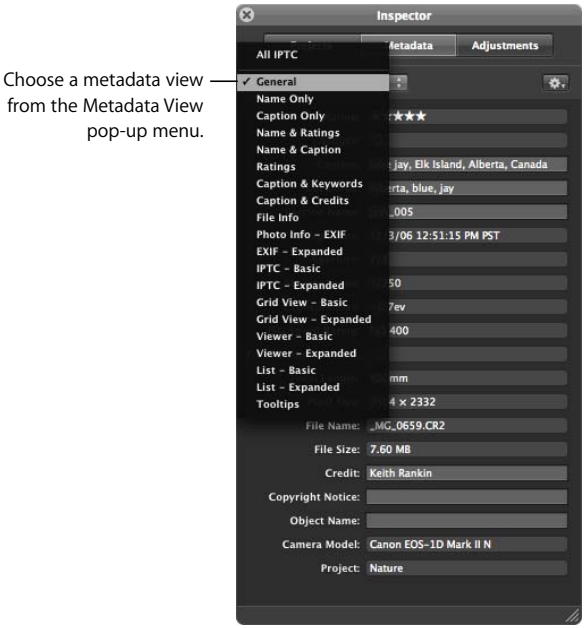
To view an image's keywords using the Metadata inspector:

1. If necessary, show the Metadata inspector by doing one of the following:
   - Choose Window > Show Inspector (or press I), then click the Metadata tab.
   - Click the Inspector button in the toolbar, then click the Metadata tab.
2. Choose a metadata view that includes keywords, such as General or Caption & Keywords, from the Metadata View pop-up menu.
3. In the Browser, select an image to see its keywords.

   Any keywords applied to the selected image appear in the Keywords field of the Metadata inspector.

To view an image's keywords using the Metadata pane of the Inspector HUD:

1. If necessary, show the Metadata pane of the Inspector HUD by choosing Window > Show Inspector HUD (or pressing H), then click the Metadata button.
2. Choose a metadata view that includes keywords, such as General or Caption & Keywords, from the Metadata View pop-up menu.



3. Select an image to see its keywords.

   Any keywords applied to the selected image appear in the Keywords field of the Metadata pane of the Inspector HUD.

Viewing Keywords in the Browser in List View

When the Browser is set to list view, Aperture can display a column that shows the keywords assigned to images.

To view keywords in the Keywords column of the Browser:

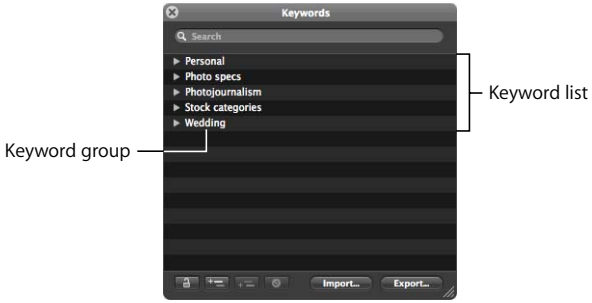
1. Do one of the following:
   - Choose View > Metadata > Customize (or press Command-J).
   - Choose Aperture > Preferences, or press Command-Comma (,), then click Metadata.

   The Metadata pane of the Preferences window appears.
2. In the List View Columns section, select the Set 1 button, if necessary, and choose Caption & Keywords from the Set 1 pop-up menu.
3. To set the Browser to list view, click the List View button (or press Control-L).

   The Browser switches from grid view to list view. The keywords for each image appear in the Keywords column.
4. If necessary, resize the Keywords column by dragging the header to view all the keywords assigned to the image.

Applying Keywords Using the Keywords HUD

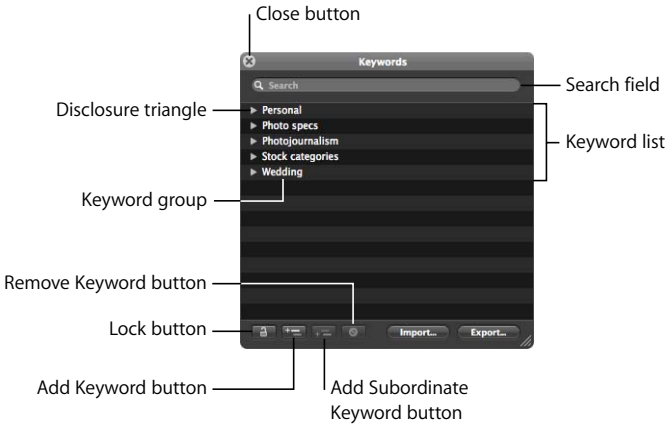
The Keywords HUD provides a versatile way to apply keywords to images. The Keywords HUD contains a library of predefined keywords that you can browse and search. You can also add your own keywords or remove keywords. The Keywords HUD is automatically updated with any keywords you add. For example, when you enter a new keyword in the Metadata inspector, that keyword also appears in the Keywords HUD. When you change a keyword, for example, by changing its spelling or capitalization, the keyword is updated on all images that have that keyword assigned.



You can use the Keywords HUD in the Browser in grid and list views, in the Light Table, and in Full Screen view. You can also use the Keywords HUD when working with book albums in the Book Layout Editor and when working with webpage and web journal albums in the Webpage Editor.

Controls in the Keywords HUD

The following controls are found in the Keywords HUD:



- *Close button:* Click this button to close the Keywords HUD.
- *Search field:* Enter text to search for keywords that match the text. Click the Reset button (with an X) to clear the field.
- *Keyword group:* A set of related keywords. Some are predefined in Aperture, but you can create new groups and add keywords to them. You can have keyword groups within other groups.
- *Disclosure triangle:* Click the disclosure triangle next to a keyword group to view all keywords in the group.
- *Lock button:* Click the Lock button to prevent changes to the Keywords HUD.
- *Add Keyword button:* Click this button to add a keyword to the keyword library of the Keywords HUD.
- *Add Subordinate Keyword button:* Click this button to add a subordinate keyword, such as a keyword within a keyword group.
- *Remove Keyword button:* Click this button to remove one or more selected keywords.
- *Keyword list:* Displays all keywords in the keyword library of the Keywords HUD.

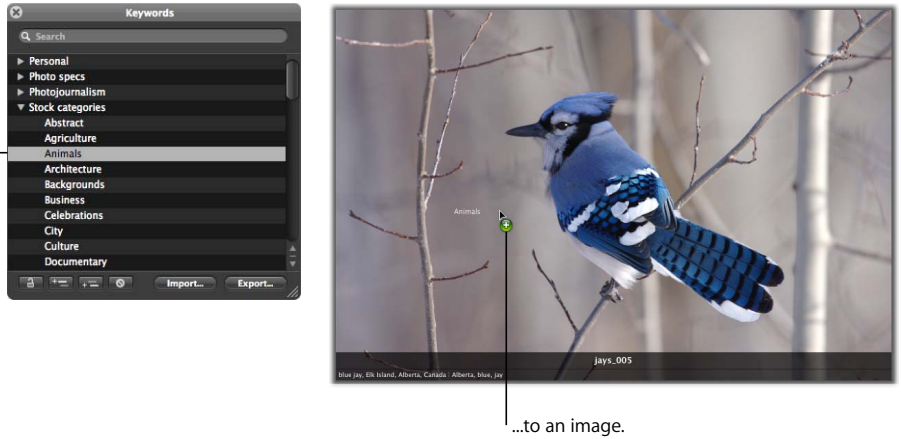
Using the Keywords HUD to Apply Keywords

You can use the Keywords HUD to quickly apply keywords to one or more images. You can simply drag keywords to any image or selection of images in the Viewer or Browser. When you select a group of images, you can assign keywords to all the selected images at once.

To assign a keyword using the Keywords HUD:

1. To show the Keywords HUD, do one of the following:
   - Choose Window > Show Keywords HUD (or press Shift-H).
   - Click the Keywords HUD button in the toolbar.

   The Keywords HUD appears.
2. Do one of the following:
   - *If the Browser is in grid view:* Drag a keyword or keyword group from the Keywords HUD to an image or selected images in the Viewer or Browser.



   - *If the Browser is in list view:* Drag a keyword from the Keywords HUD to an image in the Browser list. The keyword appears in the Keywords column for that image.

     Note: Depending on the metadata options you have set, the Keywords column may not appear. For more information, see "Viewing Keywords in the Browser in List View" on page 250.
   - *If Aperture is set to Full Screen view:* Drag a keyword or keyword group from the Keywords HUD to an image or selected images.

The keyword is applied to the image or selection of images to which you dragged it. To view keywords applied to images, see "Viewing Keywords Applied to Images" on page 246.

To apply multiple keywords using the Keywords HUD:

1. To show the Keywords HUD, do one of the following:
   - Choose Window > Show Keywords HUD (or press Shift-H).
   - Click the Keywords HUD button in the toolbar.

   The Keywords HUD appears.
2. To select the keywords you want to apply, do one of the following:
   - Hold down the Shift key while pressing the Up Arrow or Down Arrow key to select several keywords.
   - Shift-click a group of adjacent keywords.
   - Command-click keywords that aren't adjacent.

   The selected keywords are highlighted in the keyword list.
3. Drag the keywords from the Keywords HUD to an image or selection of images in the Browser, in the Viewer, or in Full Screen view.

   The keywords are assigned to the image or selection of images to which you dragged them.

Browsing and Searching for Keywords

You can browse and search for specific keywords in the Keywords HUD.

To locate a keyword using the Keywords HUD:

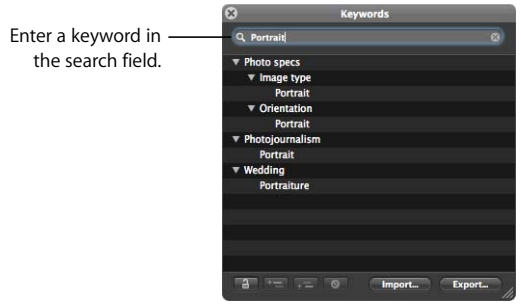
1. To show the Keywords HUD, do one of the following:
   - Choose Window > Show Keywords HUD (or press Shift-H).
   - Click the Keywords HUD button in the toolbar.

   The Keywords HUD appears.
2. Do one of the following:
   - Scroll up and down to review the keywords, and click the disclosure triangles to reveal the keywords in each keyword group.



Click the disclosure triangle next to a keyword group to display all the keywords in it.

- Type the keyword you're looking for in the Keywords HUD search field.



The keyword list updates to reveal all instances of the keyword you entered.

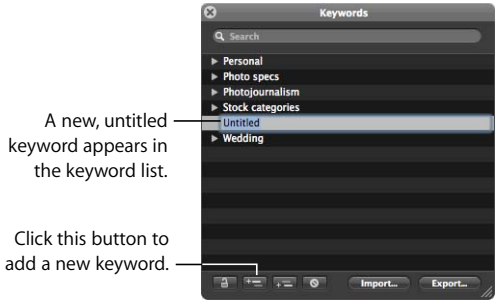
Adding Keywords to the Keywords HUD

You can add new keywords to the keyword library of the Keywords HUD.

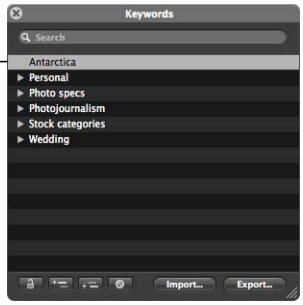
To add new keywords to the keyword library:

1. To show the Keywords HUD, do one of the following:
   - Choose Window > Show Keywords HUD (or press Shift-H).
   - Click the Keywords HUD button in the toolbar.

   The Keywords HUD appears.
2. Click the Add Keyword button.



3 Type the new keyword, then press Return.



The new keyword is added to the keyword library and is sorted alphabetically.

To add keywords to a keyword group:

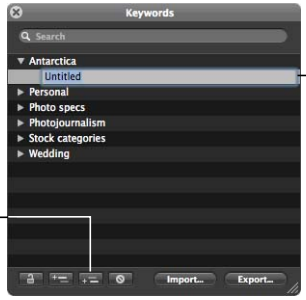
1 To show the Keywords HUD, do one of the following:

- Choose Window > Show Keywords HUD (or press Shift-H).
- Click the Keywords HUD button in the toolbar.

The Keywords HUD appears.

2 Select the keyword group to which you want to add a keyword.

3 Click the Add Subordinate Keyword button.



A new, untitled keyword appears in this list within the keyword group.

Click this button to add a keyword within a keyword group.

4 Type the new keyword, then press Return.

The new keyword appears in the keyword group you selected, sorted alphabetically within the group.

You can also create new keyword groups. For example, if you added the keyword *Fish* to your list, you might want to add *Angelfish*, *Dolphin*, *Tuna*, and *Shark* under the *Fish* keyword so you can further define your images.

To create a new keyword group with keywords in it:

1. To show the Keywords HUD, do one of the following:
   - Choose Window > Show Keywords HUD (or press Shift-H).
   - Click the Keywords HUD button in the toolbar.

   The Keywords HUD appears.
2. Click the Add Keyword button, then type a name for the new keyword group.
3. With the new keyword group name selected, click the Add Subordinate Keyword button, type a keyword, then press Return.

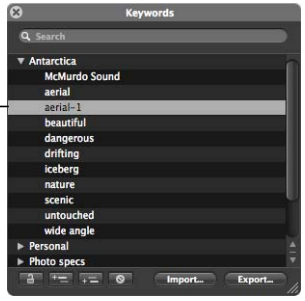
   The keyword you just added becomes the first keyword in the new group.
4. To add another keyword to the new group, click the Add Keyword button, type a keyword, then press Return.

Removing Keywords from the Keywords HUD

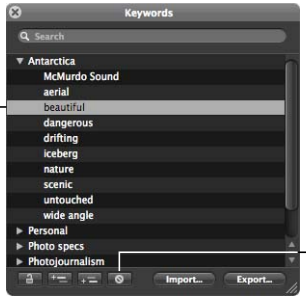
After adding keywords to the keyword library of the Keywords HUD, you may decide not to use certain keywords. If so, you can easily remove them.

To remove a keyword or keyword group from the keyword library:

1. In the Keywords HUD, select the keyword or keyword group you want to remove.



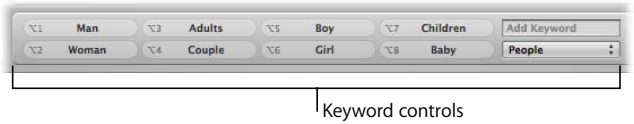
2. Click the Remove Keyword button.



Important: Removing a keyword from the keyword library removes it from any images to which it's already assigned.

Applying Keywords Using Keyword Controls and Keyword Presets

One way to apply keywords is to use the keyword controls located in the control bar. You can add new keywords to images or apply preset keywords that are part of a keyword group.

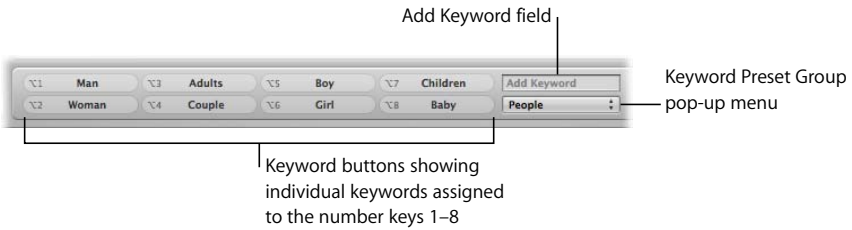


About the Keyword Controls in the Control Bar

The keyword controls are located at the right side of the control bar and are typically shown by default. However, if there is not enough room on your screen (for example, if the inspectors are shown), they are hidden.

To show the keyword controls in the control bar:

1. Choose Window > Show Control Bar (or press D).
2. Choose Window > Show Keyword Controls (or press Shift-D).



The following keyword controls appear:

- *Keyword buttons:* These buttons display the preset keywords in the selected keyword preset group. The first eight keywords are assigned to the keyboard shortcut key combination of Option and a number key (1 through 8) on the keyboard. Press Option and a number key on the keyboard (not the numeric keypad) to add the preset keyword to a selected image, or click a button. The control bar can hold up to 20 keyword buttons. To remove a keyword applied by clicking a button, press Shift-Option and the button's corresponding number key. To remove all keywords, press Shift-Option-9.

- *Add Keyword field:* Type a new keyword in this field and press Return to add it to a selected image. To remove a keyword you've just applied, type the keyword again and press Shift-Return. If the Keywords HUD is locked, you are asked whether you want to unlock the Keywords HUD and add the keyword to the keyword library, or not add the keyword to the image.
- *Keyword Preset Group pop-up menu:* Use this to choose the keyword preset group you want displayed. The first eight keywords in the group are assigned to the keyboard shortcut key combination of Option and a number key from 1 through 8.

Adding Keywords to Images Using Keyword Controls

You can easily add a preset keyword to an image.

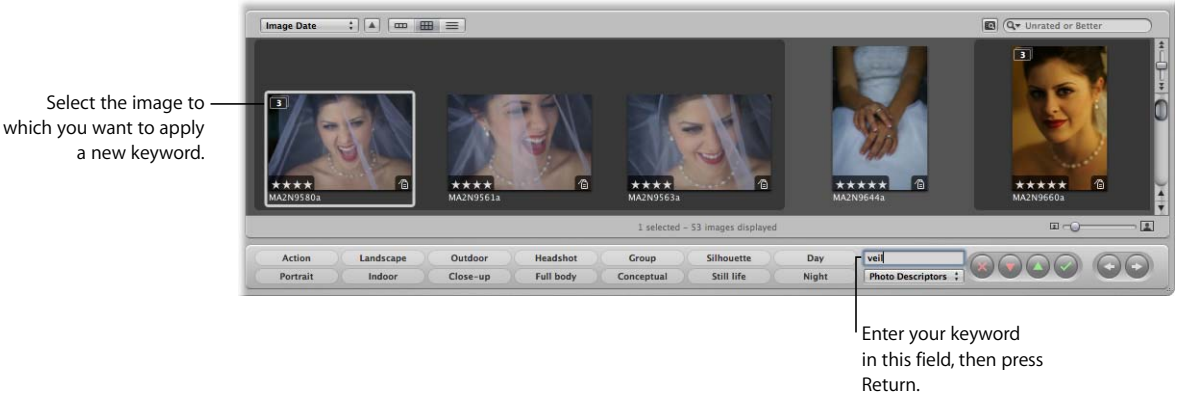
To add a preset keyword to an image:

1. Select the image to which you want to assign a keyword.
2. Do one of the following:
   - Choose Metadata > Add Keyword, then choose the keyword you want from the submenu.
   - Press Option and a number key from 1 to 8 to assign one of the first eight keywords.
   - Click a keyword button in the control bar.

You can also easily apply a new keyword that's not part of your keyword library.

To apply a new keyword using the keyword controls:

1. In the Browser, select an image or group of images.
2. In the control bar, type the new keyword in the Add Keyword field, then press Return.



The keyword you entered is now applied to the image or group of images.

To view keywords applied to images, see "Viewing Keywords Applied to Images" on page 246.

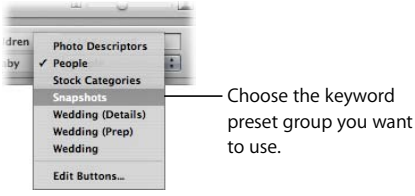
Choosing a Keyword Preset Group

Aperture provides groups of related keywords in sets that you can easily select and use. A group of related keywords is called a *keyword preset group*. You can select a keyword preset group whenever you need it, and you can create your own keyword preset groups that include keywords you frequently use.

When you choose a keyword preset group, Aperture assigns the specific keywords to keyword buttons in the control bar. This allows you to quickly set the control bar to show the most useful keywords.

To choose a keyword preset group and apply keywords to images:

1. Select an image or group of images in the Browser.
2. Choose a keyword preset group from the Keyword Preset Group pop-up menu.



The keyword buttons in the control bar update according to the keyword preset group you chose.



3. Click the keyword buttons or press Option and a number key (1 through 8) on your keyboard to apply keywords to the selected images.

Tip: You can quickly move through the keyword preset groups in the Keyword Preset Group pop-up menu by pressing Comma (,) or Period (.).

For information about viewing keywords applied to images, see "Viewing Keywords Applied to Images" on page 246.

Creating a Keyword Preset Group

You can create new keyword preset groups when you need them.

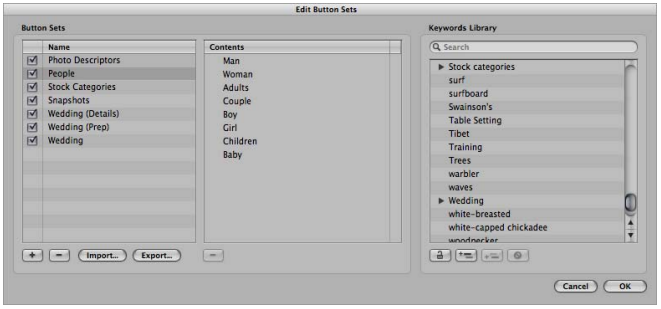
To create a keyword preset group and assign keywords to it:

1 In the control bar, choose Edit Buttons from the Keyword Preset Group pop-up menu.



Choose Edit Buttons to add a new keyword preset group.

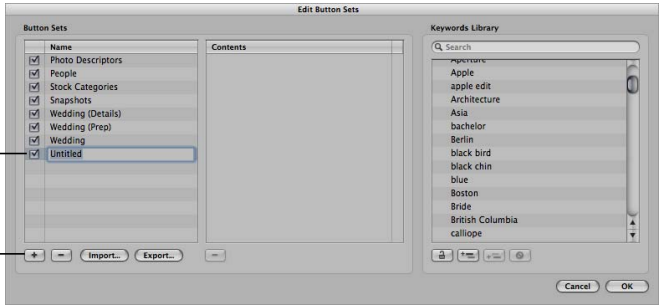
The Edit Button Sets window appears.



The Name column on the left lists the keyword preset groups that already exist. When you select a keyword preset group in this column, the keywords included in the group appear in the center Contents column. You add or remove keywords by adding them to or removing them from the Contents column. The Keywords Library column provides a list of the existing keywords in your keyword library. You can drag keywords from this list into the Contents column. You can also add keywords and keyword groups to your keyword library using the controls below the Keywords Library column.

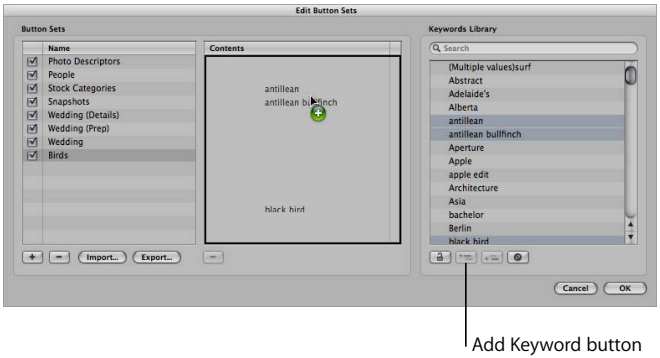
2 To create a new keyword preset group, click the Add (+) button.

An untitled preset group appears in the Name column.



3 Type a name for the new keyword preset group, then press Return.

4 Drag keywords from the Keywords Library column to the Contents column.



If you wish, you can select multiple keywords and drag them to the Contents column at once. Hold down the Shift key while pressing the Up Arrow or Down Arrow key to select several keywords, Shift-click to select adjacent keywords, or Command-click to select nonadjacent keywords.

You can also add new keywords to the Keywords Library list by clicking the Add Keyword button. You can then drag the new keywords into the Contents column.

5 Drag the keywords in the Contents column into the order you want.

The first eight keywords will be assigned to the keyboard shortcut key combination of Option and a number key (1 through 8) on the keyboard. To remove a keyword from the column, select it and press Delete, or click the Delete (–) button below the column.

6 After arranging the keywords in order, click OK.

The new keyword preset group appears in the Keyword Preset Group pop-up menu.

If the keyword preset group has fewer than eight keywords, the unassigned keys are inactive.

Applying Keywords Using the Lift & Stamp HUD

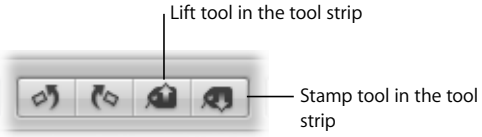
If you have images that should share the same keywords, you can use the Lift and Stamp tools to quickly apply all or some of the keywords from one image to other images. Using the Lift and Stamp tools is an efficient way to apply keywords and other types of metadata, such as ratings, to large numbers of images. The Lift and Stamp tools can also apply adjustments made to images, such as cropping, straightening, exposure changes, and other adjustments. For more information about using the Lift and Stamp tools to apply adjustments, see "Applying Adjustments to a Group of Images" on page 335.

The Lift and Stamp tools have a corresponding HUD you can use in the Browser, the Viewer, and the Light Table, as well as in Full Screen view.

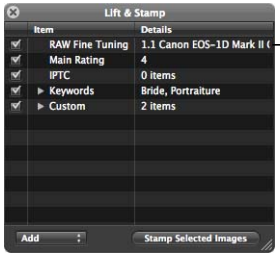
To lift all the keywords from an image and stamp them on another image or group of images:

1 Click an image.

2 Select the Lift tool (or press O).



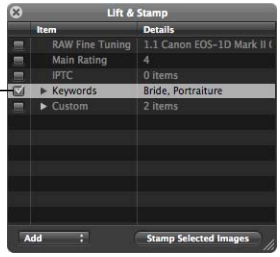
The Lift & Stamp HUD appears.



All information for the selected image appears here.

All the image's metadata, such as applied adjustments, rating, and keywords, appears in the Lift & Stamp HUD.

3 Deselect the metadata checkboxes except for Keywords, or select items in the HUD and press Delete to delete them.



Make sure the Keywords checkbox is the only one selected.

4 To apply the keywords from the HUD, click the images to which you want to assign the keywords, then select the Stamp tool.

Note: You can Shift-click to stamp a range of images.

The keywords from the first image are applied to the second image or group of images.

You can also lift keywords and apply them to a selection of images at once.

To stamp keywords on a selection of images at once using the Lift & Stamp HUD:

1. Select an image.
2. Select the Lift tool (or press O).

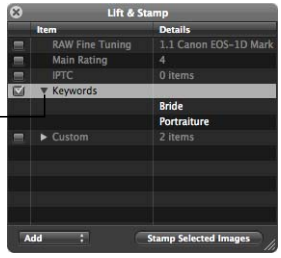
   The Lift & Stamp HUD appears, displaying all the image's metadata, such as applied adjustments, rating, and keywords.
3. In the Lift & Stamp HUD, deselect the metadata checkboxes except for Keywords.
4. Select the images you want to apply the keywords to.
5. Click the Stamp Selected Images button.

In many cases, you do not want to copy all keywords from one image and paste them onto another. For this reason, you can select specific keywords that apply to the image you want to stamp them on.

To stamp a reduced selection of keywords on an image or group of images:

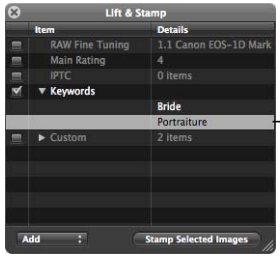
1. Select an image.
2. Select the Lift tool (or press O).

   The Lift & Stamp HUD appears.
3. In the Lift & Stamp HUD, deselect all image information checkboxes except for Keywords.
4. Click the Keywords disclosure triangle to reveal the keywords from the selected image.



Click the disclosure triangle to reveal all keywords applied to the selected image.

5. Remove any keywords you don't want to stamp on an image or group of images by selecting each unwanted keyword in the list and pressing the Delete key.



Select the keywords you don't want to stamp, then press Delete.

6 Select an image or group of images, then select the Stamp tool to apply the keywords.

The reduced selection of keywords is applied to the selected image or group of images.

You can quickly lift and stamp the keywords and all other metadata and adjustments from one image to another using keyboard shortcuts.

To quickly lift and stamp image metadata:

1 Select an image, then press Command-Shift-C to lift the metadata from the image.

2 Select an image or group of images, then press Command-Shift-V to stamp the metadata on the selected images.

You can also lift RAW Fine Tuning parameter values from one RAW image and stamp them on another. RAW Fine Tuning adjustments are included in lift and stamp operations by default. If you don't want to lift and stamp RAW Fine Tuning adjustments, you must deselect them in the Lift & Stamp HUD.

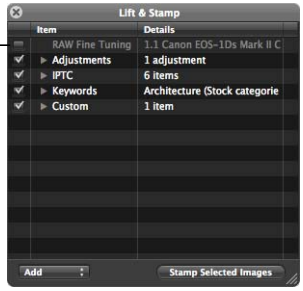
To exclude RAW Fine Tuning adjustments from lift and stamp operations:

1 Click the RAW image that has the adjustments, metadata, or keywords you want to copy.

The Lift & Stamp HUD appears, showing the RAW Fine Tuning parameter values, adjustments, IPTC metadata, and keywords applied to the image.

2 Select the Lift tool (or press O).

3 Deselect the RAW Fine Tuning checkbox to prevent Aperture from copying the RAW Fine Tuning parameter values from one image to another.



4 Select an image or group of images, then select the Stamp tool to apply the adjustments, keywords, and metadata.

The adjustments and metadata copied from the first image are applied to the selected images; however, the RAW Fine Tuning parameter values are not applied to the image selection. For more information about RAW Fine Tuning, see "Working with the RAW Fine Tuning Controls" on page 351.

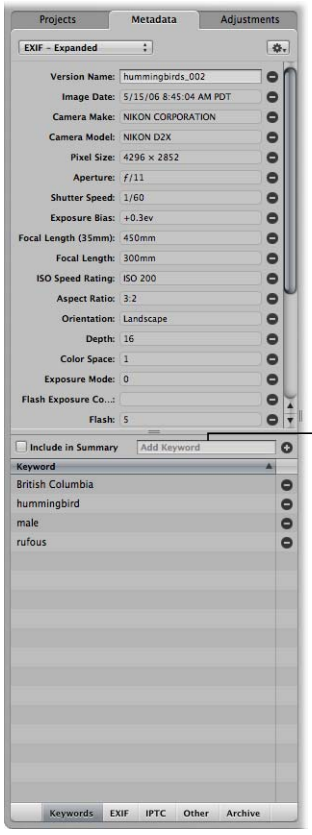
Applying Keywords Using the Metadata Inspector

When you select an image, you can use the Metadata inspector to see the image's keywords and add new keywords, if needed.

To apply keywords using the Metadata inspector:

1. Select an image,
2. Choose Window > Show Inspector (or press I), then click Metadata.
3. Click the Keywords button at the bottom of the Metadata inspector.

   A list of the image's keywords appears.



Type a keyword here and click the Add button.

4. To add a keyword, type a keyword in the Add Keyword field and click the Add (+) button.

Applying Keywords to Images in the Light Table

You can use the Light Table to arrange your image selection in a freeform manner. After arranging your images into groups, you can apply keywords to groups at once. For example, if you make a Light Table album consisting of the selects from your wedding shoot, you can group the images according to the part of the wedding event they show. After you've arranged them, you can apply keywords, such as *Getting Ready*, *Wedding Ceremony*, *Formal Shots*, and *Reception*, as appropriate.

To apply keywords to groups of images in the Light Table:

1. Select a Light Table album in the Projects inspector.
2. Click the Keywords HUD button in the toolbar (or press Shift-H).
3. In the Light Table or Browser, select a group of images to which you want to assign keywords.
4. Drag the appropriate keywords from the Keywords HUD to the selected images.

   The keywords are applied to the selected images at once.

For more information about using the Light Table, see Chapter 19, "Using the Light Table," on page 523.

Removing Keywords from an Image

At times, you may want to remove all the keywords that you have applied to an image.

To remove all keywords from an image:

1. Select the image.
2. Choose Metadata > Remove Keyword > Remove All Keywords (or press Shift-Option-9).

You can also remove keywords from an image by removing specific keywords in the Metadata inspector.

To remove specific keywords using the Metadata inspector:

1. If the Metadata inspector isn't shown, click the Inspector button in the toolbar, then click Metadata.
2. Click the Keywords button at the bottom of the Metadata inspector to show the image's assigned keywords.
3. Click the Delete (–) button beside the keywords you want to remove.

You can also remove an individual keyword from a selection of images using the keyword controls in the control bar.

To remove an individual keyword from a group of images using keyword controls in the control bar:

1. Select the group of images.
2. In the control bar, type the keyword you want to remove in the Add Keyword field, then press Shift-Return.

The keyword is removed from the selected images. For more information about using the control bar, see "Applying Keywords Using Keyword Controls and Keyword Presets" on page 257.

Importing and Exporting Keyword Lists

You can import and export keyword lists to share with other Aperture users and transfer to other Aperture systems. You can also create keyword lists for specific projects and then import them as needed. When you export a keyword list, all your keywords are placed in a simple tab-delimited text file (.txt). The tab-delimited list is set up in a hierarchical structure that matches the hierarchical structure of the Keywords HUD.

To export a keyword list:

1. In the Keywords HUD, click the Export button.
2. In the dialog that appears, give the keyword list a name, choose a location, and click Save.

The keyword list is saved as a text file (.txt) to the location you chose.

Once you have an exported keyword list, you can transfer the file to another Aperture system and import it. You can also manually create or edit keyword lists using other applications, such as TextEdit, and you can import the lists into Aperture as long as they follow a tab-delimited text file structure.

To import a keyword list:

1. In the Keywords HUD, click the Import button.
2. In the dialog that appears, navigate to the keyword list file and click Open.

The Keywords HUD is updated to include all the new keywords from the imported keyword list.

Working with Metadata

11

You can display different combinations of metadata, such as version names, captions, ratings, keywords, and IPTC information, with your images.

This chapter explains how to set the display of metadata with your images using the Metadata pane of the Preferences window. It also explains how to use the Metadata inspector to display and change the metadata for a selected image, as well as create custom sets of metadata for display. This chapter also provides information about the icons (called *badges*) that appear on images when you've made changes to them.

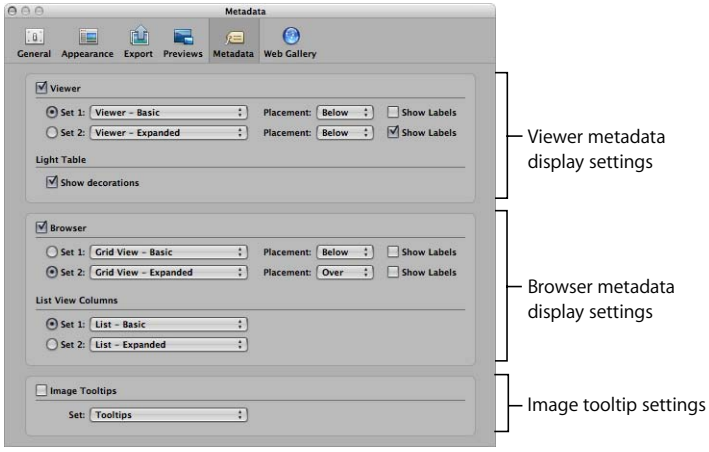
This chapter covers:

- An Overview of Metadata, Metadata Views, and Metadata Presets (p. 270)
- Displaying Metadata with Your Images (p. 273)
- Turning the Display of Metadata On or Off (p. 277)
- Viewing and Changing Metadata in the Metadata Inspector and Inspector HUD (p. 278)
- Working with the AutoFill Editor (p. 279)
- Working with Metadata Views (p. 281)
- Working with Metadata Presets (p. 284)
- Batch Changing Metadata (p. 288)
- More Information About IPTC Metadata (p. 289)
- Understanding Badge Overlays (p. 290)
- Adjusting Image Date and Time (p. 293)

An Overview of Metadata, Metadata Views, and Metadata Presets

You can display different combinations of metadata with your images in the Viewer and Browser, as well as in Full Screen view. Aperture provides many metadata views that represent specific combinations of information that you can display. For example, you can choose a basic metadata view that shows an image's version name and caption. Or, you can choose an expanded metadata view that displays an image's rating, badges, aperture setting, shutter speed, exposure bias, focal length, caption, keywords, version name, ISO speed rating, file size, and master location. You can also create your own metadata views.

You choose the metadata view you want in the Metadata pane of the Preferences window. You can choose different metadata views for the Viewer, the Browser in grid view and filmstrip view, and the Browser in list view. You can also display metadata with labels that help identify the types of metadata being displayed.



When you position the pointer over an image, Aperture can display information about it in a pop-up text box called an *image tooltip*. You can turn the display of image tooltips on or off in the Metadata pane of the Preferences window. Tooltips can also show whether an image is a managed image or a referenced image. You can choose a metadata view to specify the combination of metadata that appears in image tooltips.

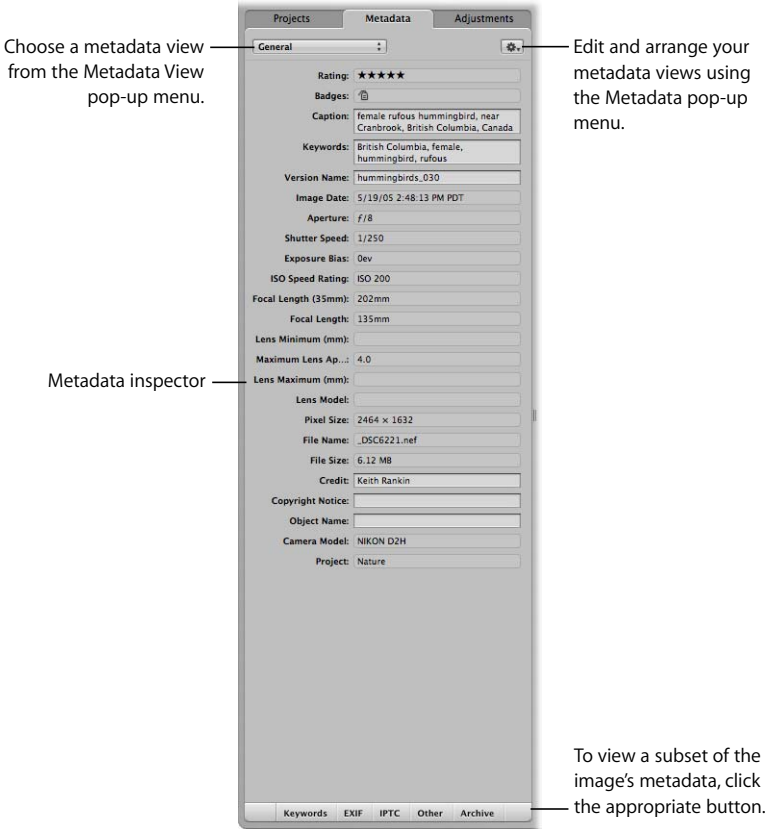
About Displaying Metadata in Full Screen View

Choosing a metadata view for the Viewer also defines the metadata that appears with images in Full Screen view. Choosing a metadata view for the Browser in grid view defines the metadata that appears with image thumbnails in the Full Screen view filmstrip.

You can view the metadata for a selected image in the Metadata inspector and the Metadata pane of the Inspector HUD.

To show the Metadata inspector, do one of the following:

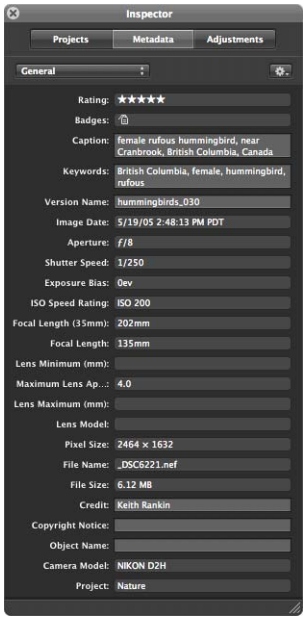
- Choose Window > Show Inspector (or press I), then click the Metadata tab.
- Click the Inspector button in the toolbar, then click the Metadata tab.



You can change the combination of metadata that appears in the Metadata inspector by choosing a metadata view from the Metadata View pop-up menu. You can also change those metadata items that are editable. Click the buttons at the bottom of the inspector to display each button's type of metadata.

To show the Metadata pane of the Inspector HUD:

- Choose Window > Show Inspector HUD (or press H), then click Metadata.

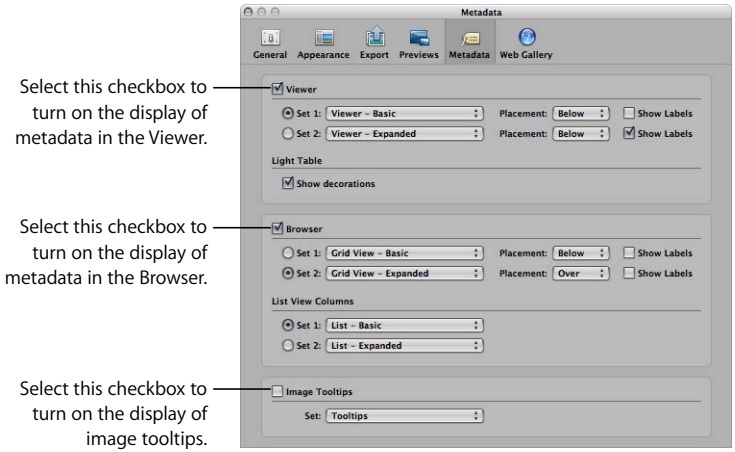


You can also add the actual metadata you want applied to your images to the fields of a metadata view and save it as a metadata preset. You can then use that metadata preset to apply combinations of metadata to images as you import them or change them using the Batch Change dialog. For example, if you have a specific combination of metadata that one of your services always requires, you can create a metadata preset just for that service. Then whenever you import images destined for that service or prepare images to send to that service, you can apply the metadata you need using the preset you created.

You can create and manage your own metadata views and metadata presets using the Metadata Action pop-up menu in the Metadata inspector.

Displaying Metadata with Your Images

You use the Metadata pane of the Preferences window to specify the metadata shown with images in the Viewer and Browser, as well as the metadata that appears in image tooltips. For the Viewer and Browser, you can choose a metadata view to display and choose an alternate that you can quickly switch to by pressing a keyboard shortcut.



You can also choose whether the information should appear on or below the image using the Placement pop-up menus.

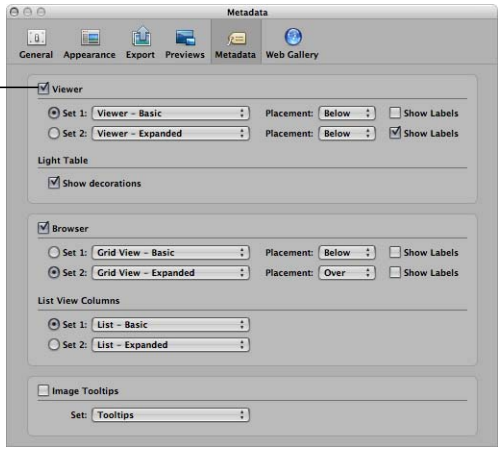
Some metadata views are specifically designed for displaying information in the Viewer, in the Browser in grid view or list view, or in image tooltips. The following table lists the metadata views that you can choose and the information that each view displays.

Metadata view name	Information displayed
All IPTC	All IPTC fields
General	Rating, badges, caption, version name, image date, aperture, shutter speed, exposure bias, ISO speed rating, focal length (35mm), focal length, pixel size, filename, file size, credit, copyright notice, object name, camera model, project (master location), and keywords
Name Only	Version name
Caption Only	Caption
Name & Rating	Version name, rating, and badges
Name & Caption	Version name and caption
Ratings	Rating and badges
Caption & Keywords	Version name, caption, and keywords
Caption & Credits	Version name, byline, credit, caption, and copyright notice
File Info	Version name, filename, file size, pixel size, color model, image date, and badges

Metadata view name	Information displayed
Photo Info–EXIF	Version name, image date, camera model, pixel size, aperture, shutter speed, exposure bias, focal length (35mm), focal length, and ISO speed rating
EXIF-Expanded	Version name, image date, camera make, camera model, pixel size, aperture, shutter speed, exposure bias, focal length (35mm), focal length, ISO speed rating, aspect ratio, orientation, depth, color space, exposure mode, flash, serial number, lens minimum (mm), maximum lens aperture, lens maximum (mm), color model, profile name, and badges
IPTC-Basic	Version name, caption, keywords, credit, copyright notice, and object name
IPTC-Expanded	Version name, caption, credit, copyright notice, object name, city, province/state, country name, special instructions, byline, category, date created, headline, source, and keywords
Grid View–Basic	Badges and rating
Grid View–Expanded	Badges, rating, and version name
Viewer-Basic	Badges and rating
Viewer-Expanded	Rating, badges, aperture, shutter speed, exposure bias, focal length (35mm), focal length, caption, keywords, version name, image date, ISO speed rating, file size, and master location
List-Basic	Version name, badges, rating, image date, aperture, shutter speed, exposure bias, ISO speed rating, focal length (35mm), focal length, pixel size, orientation, aspect ratio, filename, file size, camera model, import session, and project (master location)
List-Expanded	Version name, badges, rating, image date, caption, keywords, credit, copyright notice, object name, filename, file size, camera model, import session, project (master location), aperture, shutter speed, exposure bias, ISO speed rating, focal length (35mm), focal length, and pixel size
Tooltips	Version name, filename, image date, caption, keywords, aperture, shutter speed, exposure bias, focal length, ISO speed rating, focal length (35mm), focal length, pixel size, camera make, camera model, and rating

To set the display of metadata in the Viewer:

1. Do one of the following:
   - Choose View > Metadata > Customize (or press Command-J).
   - Choose Aperture > Preferences, or press Command-Comma (,), then click Metadata.
2. Select the Viewer checkbox.



Select this checkbox to turn on the display of metadata in the Viewer.

3. In the Viewer area, choose the metadata view you want from the Set 1 pop-up menu. Choose an alternate metadata view from the Set 2 pop-up menu.
4. Choose where you want the metadata displayed in relation to the image from the Placement pop-up menus.
5. To include labels with metadata items, select the Show Labels checkbox.
6. Click the Set 1 or Set 2 button to specify the set you want to use.
7. Close the Preferences window.

To set the display of metadata in the Browser in grid view:

1. Do one of the following:
   - Choose View > Metadata > Customize (or press Command-J).
   - Choose Aperture > Preferences, or press Command-Comma (,), then click Metadata.
2. Select the Browser checkbox.
3. In the Browser area, choose the metadata view you want from the Set 1 pop-up menu. Choose an alternate metadata view from the Set 2 pop-up menu.
4. Choose where you want the metadata displayed in relation to the image from the Placement pop-up menus.
5. To include labels with metadata items, select the Show Labels checkbox.
6. Click the Set 1 or Set 2 button to specify the set you want to use.
7. Close the Preferences window.

When you choose a metadata view for the Browser in list view, the metadata view determines the number of columns that appear. Each metadata item in the metadata view becomes a list view column.

To set the display of metadata in the Browser in list view:

1. Do one of the following:
   - Choose View > Metadata > Customize (or press Command-J).
   - Choose Aperture > Preferences, then click Metadata.
2. Select the Browser checkbox.
3. In the List View Columns area, choose the metadata view you want from the Set 1 pop-up menu. Choose an alternate metadata view from the Set 2 pop-up menu.
4. Click the Set 1 or Set 2 button to specify the set you want to use.
5. Close the Preferences window.

To set the display of metadata in image tooltips, do one of the following:

- Choose View > Metadata > Image Tooltips (or press T).
- Choose Aperture > Preferences, or press Command-Comma (,), click Metadata, select the Image Tooltips checkbox, then choose the metadata view you want from the Set pop-up menu.

Turning the Display of Metadata On or Off

After choosing a metadata view, you can turn the display of metadata on and off and switch between metadata views.

To hide or show metadata in the Viewer, do one of the following:

- Choose View > Metadata > Viewer (or press Y).
- Choose Aperture > Preferences, or press Command-Comma (,), click Metadata, then select or deselect the Viewer checkbox.

To switch metadata views in the Viewer, do one of the following:

- Choose View > Metadata > Change Viewer Set (or press Shift-Y).
- Choose Aperture > Preferences, or press Command-Comma (,), click Metadata, then select the Set 1 or Set 2 button in the Viewer section.

To hide or show metadata in the Browser in grid view, do one of the following:

- Choose View > Metadata > Grid View (or press U).
- Choose Aperture > Preferences, or press Command-Comma (,), click Metadata, then select or deselect the Browser checkbox.

To switch metadata views in the Browser, do one of the following:

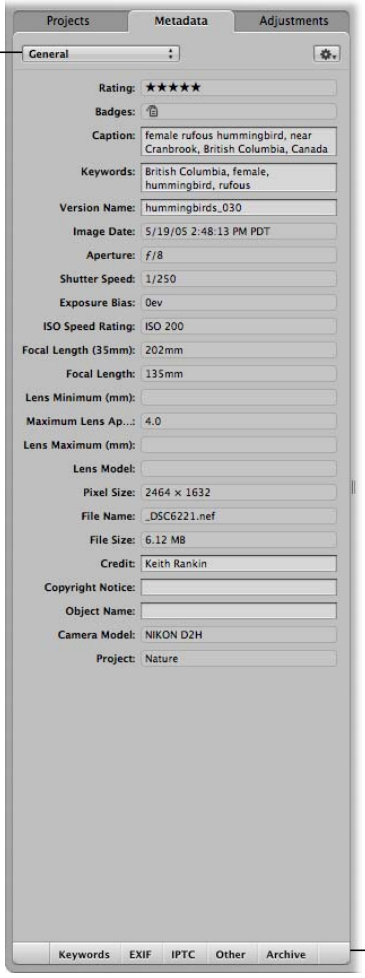
- Choose View > Metadata Overlays > Change Browser Set (or press Shift-U).
- Choose Aperture > Preferences, or press Command-Comma (,), click Metadata, then select the Set 1 or Set 2 button in the Grid View or List View Columns section.

To turn image tooltips on or off, do one of the following:

- Choose View > Image Tooltips (or press T).
- Choose Aperture > Preferences, or press Command-Comma (,), click Metadata, then select or deselect the Image Tooltips checkbox.

Viewing and Changing Metadata in the Metadata Inspector and Inspector HUD

You can view or change the metadata for a selected image in the Metadata inspector and the Metadata pane of the Inspector HUD. The selected image's metadata appears in text fields. You can change the metadata categories shown in the Metadata inspector and the Metadata pane of the Inspector HUD by choosing a different metadata view from the Metadata View pop-up menu. You can also view keywords, EXIF information, IPTC information, other miscellaneous metadata that you specify, and backup location information by clicking the buttons at the bottom of the inspector (Metadata inspector only).

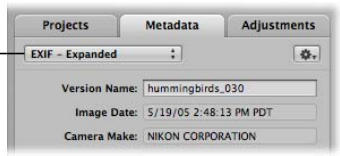


Choose a metadata view from the Metadata View pop-up menu.

To view a subset of the image's metadata, click the appropriate button (Metadata inspector only).

To view and change metadata in the Metadata inspector and Inspector HUD:

1. Select an image.
2. Do one of the following:
   - *To show the Metadata inspector:* Click the Inspector button in the toolbar (or press I), then click the Metadata tab.
   - *To show the Metadata pane of the Inspector HUD:* Choose Window > Show Inspector HUD (or press H), then click Metadata.
3. Choose a metadata view from the Metadata View pop-up menu.



Choose a metadata view from the Metadata View pop-up menu.

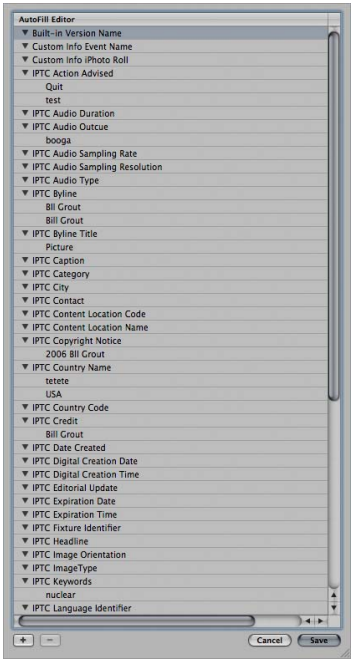
4. To change the metadata in an editable text field, click in the text field to make it active, then enter the text you want.

Working with the AutoFill Editor

As you enter metadata in the Metadata inspector's fields, Aperture checks for previous entries, and if it locates a match, it completes the entry for you. For example, if you used the keyword *Landscape* previously, and you type the first few letters of *Landscape* again, Aperture automatically enters *Landscape* in the field. You can set up and change the list of metadata that Aperture automatically enters using the AutoFill Editor. You can enter up to 20 entries for a field type. If you've made a spelling mistake when typing an entry, you can also use the AutoFill Editor to correct the mistake so that Aperture always suggests the correct spelling.

To set up autofill entries in the AutoFill Editor:

1 Choose Metadata > Edit AutoFill List.



2 To edit the list, do one of the following:

- *To add an entry:* Select the metadata type you want to change, click the Add (+) button, and enter the text you want.
- *To change an entry:* Click the disclosure triangle for the metadata type you want to work with to display its entries, then double-click the entry you want to change. Type the new text.
- *To delete an entry:* Click the disclosure triangle for the metadata type you want to work with to display its entries. Select the entry you want to delete, then click the Delete (–) button.

3 Click Save.

Working with Metadata Views

You can create your own combinations of metadata to display with your images, called *metadata views*. You can modify the metadata views that come with Aperture.

Using the Metadata inspector, you can:

- Create new metadata views
- Modify existing metadata views
- Arrange the order of metadata views in pop-up menus
- Rename metadata views
- Duplicate metadata views
- Delete metadata views

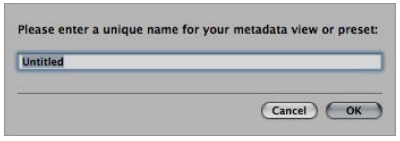
You can also apply combinations of metadata to your images by recording metadata in a view and saving it as a metadata preset. For more information about creating and using metadata presets, see "Working with Metadata Presets" on page 284.

Creating New Metadata Views

You can create new metadata views that display different combinations of metadata. You can also add new kinds of metadata to your metadata views in addition to the metadata categories that Aperture provides.

To create a new metadata view:

1. To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.
2. Choose New View from the Metadata Action pop-up menu.
3. In the dialog that appears, enter a name for the new metadata view, then click OK.



The Metadata inspector changes to display an empty area to which you can now add categories of metadata.

4 To add metadata categories to your metadata view, do any of the following:

- *To add a keywords field to the metadata view:* Click the Keywords button and select the Include in Summary checkbox.
- *To add EXIF fields to the metadata view:* Click the EXIF button and select the checkboxes for the EXIF fields you want.
- *To add IPTC fields to the metadata view:* Click the IPTC button and select the checkboxes for the IPTC fields you want.
- *To add other fields to the metadata view:* Click the Other button and select the checkboxes for the fields you want. You can also create new metadata fields by entering text in the New Custom Metadata and Metadata Value fields and then clicking the Add (+) button. The new metadata field appears in the list, and you can select its checkbox to add it to the metadata view.

  Note: Once a new metadata field is created, it isn't associated with a specific metadata view. If you delete the metadata view in which a new metadata field was created, the field is not deleted from Aperture.
- *To add information to the metadata view about where and when an image was backed up in a vault:* Click the Archive button and select the Include in Summary checkbox.

You can remove a metadata category by clicking the Delete (–) button beside it.

Modifying Existing Metadata Views

You can change the combination of metadata displayed by a metadata view. You can add or remove metadata categories, or create new ones.

To modify a metadata view:

1 To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.

2 Choose the metadata view you want to change from the Metadata View pop-up menu.

3 Choose the Edit command for the view you want to change from the Metadata Action pop-up menu.

You can now change the metadata fields that appear in the metadata view.

4 To add or remove categories of metadata that appear in the metadata view, do any of the following:

- *To add or remove a keywords field:* Click the Keywords button and select or deselect the Include in Summary checkbox.
- *To add or remove EXIF fields:* Click the EXIF button and select or deselect the checkboxes for the EXIF fields you want to add or remove.
- *To add or remove IPTC fields:* Click the IPTC button and select or deselect the checkboxes for the IPTC fields you want to add or remove.
- *To add or remove other fields:* Click the Other button and select or deselect the checkboxes for the fields you want to add or remove. You can also create new metadata fields by entering text in the New Custom Metadata and Metadata Value fields and then clicking the Add (+) button. The new metadata field appears in the Name list, and you can select its checkbox to add it to the metadata view.
- *To add or remove information about where and when an image was backed up in a vault:* Click the Archive button and select or deselect the Include in Summary checkbox.

Managing Metadata Views

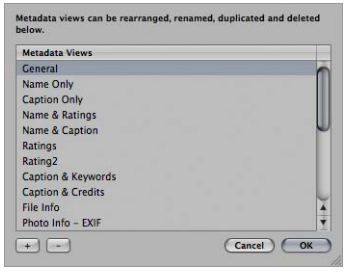
You can make changes to the list of metadata views that appears in the pop-up menus in the Metadata pane of the Preferences window and the Metadata inspector.

To arrange the metadata view list:

1 To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.

2 Choose Manage Views from the Metadata Action pop-up menu.

3 To rearrange the order of metadata views, drag them to new locations in the Metadata Views list.



You can also rename, add, or delete metadata views in this dialog.

To rename a metadata view:

- Double-click the metadata view name, then type a new name in the field that appears.

To add a duplicate metadata view:

- Select a metadata view, then click the Add (+) button.

To delete a metadata view:

- Select a metadata view, then click the Delete (–) button.

Working with Metadata Presets

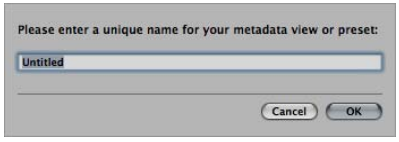
You can create your own preset combinations of metadata that you want applied to images. You create a preset by first choosing a metadata view that displays the types of metadata you want to apply. You can also create a custom view if you want. You then add the metadata you want to apply to the view's metadata fields, and save the information as a metadata preset. Your metadata preset is then available to be chosen when you import images, batch change images, or modify an image's metadata in the Metadata inspector. Aperture also provides easy methods of managing your presets.

Creating Metadata Presets

You can create new metadata presets that apply different combinations of metadata.

To create a new metadata preset:

1. To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.
2. Choose the metadata view that you want to use for the preset from the Metadata View pop-up menu.
3. Enter the metadata you want applied to your images in the metadata fields.
4. Choose Save as Preset from the Metadata Action pop-up menu.
5. In the dialog that appears, enter a name for the new metadata preset, then click OK.



The new metadata preset now appears under the Append with Preset and Replace with Preset commands in the Metadata Action pop-up menu.

To modify an existing metadata preset:

1. To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.
2. Choose the metadata view that you want to use for the preset from the Metadata View pop-up menu.
3. Choose Replace with Preset from the Metadata Action pop-up menu, then choose the preset you want to modify.
4. Enter the changes you want in the metadata fields in the Metadata inspector.
5. Choose Save as Preset from the Metadata Action pop-up menu.
6. Give the metadata preset a new name, then click OK.

If you want, you can delete the previous metadata preset or rename presets by choosing Manage Presets from the Metadata Action pop-up menu.

Applying Combinations of Metadata Using Metadata Presets

You can apply metadata using metadata presets when importing images using the Import dialog and when using the Batch Change command. You can also apply metadata presets to selected images using the Metadata inspector.

To apply a metadata preset when importing images:

1. Show the Import pane by choosing File > Import > Images or by clicking the Import button in the toolbar.
2. Select the images you want to import, if necessary.
3. Choose the metadata preset you want to use from the Add Metadata From pop-up menu.
4. Select Append to add the preset's metadata to the images, maintaining any currently associated metadata, or select Replace to add the preset's metadata to the images and remove any other associated metadata.
5. Select the other import options you want, then click the Import Images button.

To apply a metadata preset when changing images with the Batch Change dialog:

1. Select the images you want to change.
2. Do one of the following:
   - Choose Metadata > Batch Change.
   - Show the Metadata inspector by clicking the Inspector button in the toolbar (or pressing I), click the Metadata tab, then choose Batch Change from the Metadata Action pop-up menu.
3. Choose the metadata preset you want from the Add Metadata From pop-up menu.
4. Select Append to add the preset's metadata to the images, maintaining any currently associated metadata, or select Replace to add the preset's metadata to the images and remove any other associated metadata.
5. Select the other options you want, then click OK.

To apply a metadata preset when changing images with the Metadata inspector:

1. Select the images you want to change.
2. To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.
3. Choose the metadata preset you want from the Add Metadata From pop-up menu.
4. Do one of the following:
   - *To add metadata to the images, maintaining any currently associated metadata:* Choose Append with Preset from the Metadata Action pop-up menu, then choose the metadata preset you want.
   - *To add metadata to the images, removing any previously applied metadata:* Choose Replace with Preset from the Metadata Action pop-up menu, then choose the preset you want to use.

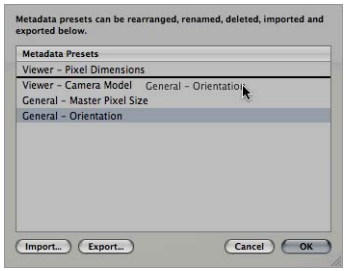
Managing Metadata Presets

You can make changes to the list of metadata presets that appears in pop-up menus.

To arrange the metadata preset list:

1. To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.
2. Choose Manage Presets from the Metadata Action pop-up menu.

3 To rearrange the order of metadata presets, drag them to new locations in the Metadata Presets list.



You can also rename and delete metadata presets in this dialog.

To rename a metadata preset:

- Double-click the metadata preset name, then type a new name in the field that appears.

To delete a metadata preset:

- Select a metadata preset, then press the Delete key.

When you work with other Aperture users, you can share your metadata presets to ensure a consistent application of metadata to all the images. You can export metadata presets for others to use and import presets when you need them.

To export a metadata preset:

1 To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.

2 Choose Manage Presets from the Metadata Action pop-up menu.

3 Select the metadata preset that you want to export, then click Export.

4 Choose a location where you want the metadata preset information stored, then click Save.

To import a metadata preset:

1 To show the Metadata inspector, click the Inspector button in the toolbar (or press I), then click the Metadata tab.

2 Choose Manage Presets from the Metadata Action pop-up menu.

3 Click Import.

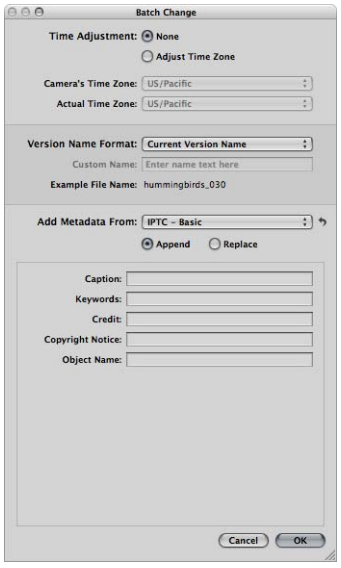
4 Select the metadata preset file that you want to import, then click Open.

Batch Changing Metadata

You can select a group of images and make metadata changes to all the images at once. For example, if you need to add the same set of keywords to a selection of images, or change the version name format, you can select the images and use the Batch Change dialog to change them.

To change the metadata associated with a selection of images:

1. Select the images you want to change.
2. Choose Metadata > Batch Change (or press Command-Shift-B).



3. In the Batch Change dialog, choose a metadata preset from the Add Metadata From pop-up menu to select a preset template of metadata to be applied.

   You can select the Append button to add the metadata to that already applied to the selected images, or select the Replace button to add the metadata and replace any previously assigned metadata.
4. Enter any metadata you want applied in the metadata fields.
5. Specify any other metadata options you want to change, then click OK.

More Information About IPTC Metadata

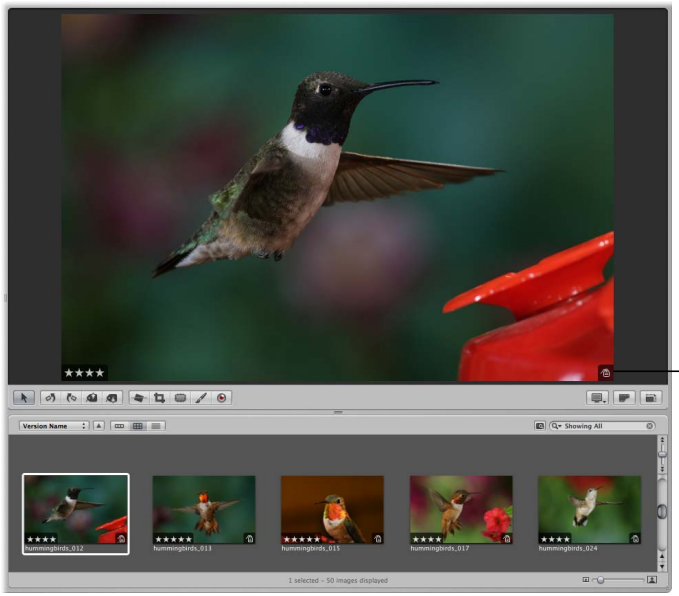
If you intend to export your keywords as IPTC metadata, make sure each keyword entry is no more than 64 characters long. Keyword entries longer than 64 characters may not be displayed properly in other IPTC editors or operating systems.

Here are some examples of common character limits for IPTC fields.

IPTC field and character limit	Description and example
Caption 2000 characters	A long-form description of the subject and related information in a natural language caption. *Example:* Mayor Alvarado addresses a crowd at the first soccer match of the season.
Keywords 64 characters	A list of words describing the subject in discrete words or phrases. *Example:* Politician, Mayor, Futbol, Soccer, News, Game, Team, San Jose
Credit 32 characters	Photographer's name and/or agency name. *Example:* Matthew Birdsell/Mercury News
Copyright 128 characters	Copyright date, photographer's name, agency name, and rights. *Example:* © 2003 Matthew Birdsell/Mercury News. All rights reserved.
Object name 64 characters	A unique identifier, used by an agency or organization to catalog images. *Example:* mt52642j
Created date 16 characters	Date the image was created. *Example:* 05/16/2003
City 32 characters	City where the image was captured. *Example:* San Jose
Province/State 32 characters	Province or state where the image was captured. *Example:* California
Country 64 characters	Country where the image was captured. *Example:* USA
Special instructions 256 characters	Applicable restrictions, rights, or embargo information. *Example:* MAGS OUT, INTERNET OUT, NO THIRD-PARTY SALES
Byline 64 characters	The image byline text. *Example:* © Matthew Birdsell/Mercury News
Category 3 characters	Applicable ANPA category codes. *Example:* I (International)
Headline 256 characters	The headline published with the image. *Example:* Mayor Alvarado Opens New Soccer Season in San Jose
Source 32 characters	The source that provided the image. *Example:* Mercury News

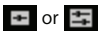
Understanding Badge Overlays

When you apply adjustments, keywords, or other changes to an image, Aperture marks the image with a badge overlay. Badges can appear on images in the Viewer, the Browser, and the Light Table, in book pages and webpages, and in Full Screen view.



How Badge Overlays Appear in Aperture

The following table shows badges that appear on images in Aperture.

Badge	Definition
	One or more adjustments have been applied to the image.
	One or more keywords have been applied to the image.
	Images are contained in a stack. The number indicates the number of images in the stack.
	The image has been edited with the external editor, and is therefore represented by the master created when the file was exported to the external editor.
	The image is an album's pick image, the identifying image for that album, webpage album, web journal album, Light Table album, or book album.
	Because of low image resolution, the image's print quality may be affected. This badge appears on images placed in book pages and webpages.
	The number indicates the number of times the image has been used in a given book, web journal, or Light Table arrangement.
	The image is a referenced image.
	The referenced image's master is offline.
	The referenced image's master has not been found.

Displaying Images with Badge Overlays

Badge visibility is determined by the metadata view that is displayed. You can control whether badges are visible by choosing a metadata view that includes badge overlays; you can also control whether badge overlays are visible by turning metadata views on or off.

Important: Badge overlays appear only in the Aperture application; they do not appear on images exported or printed from Aperture.

To display badge overlays on images in the Viewer:

1. Do one of the following:
   - Choose View > Metadata > Customize (or press Command-J).
   - Choose Aperture > Preferences, then click Metadata.
2. Select the Viewer checkbox.
3. From the Viewer Set 1 pop-up menu, choose a metadata view that includes badge overlays. Some examples are General and Ratings, as well as Viewer-Basic and Viewer-Expanded.
4. Close the Preferences window.

   Badges are now visible in the Viewer.

You can turn off the display of badge overlays in the Viewer by turning off the display of metadata. For more information, see "Turning the Display of Metadata On or Off" on page 277.

To display badge overlays on images in the Browser in grid view:

1. Do one of the following:
   - Choose View > Metadata > Customize (or press Command-J).
   - Choose Aperture > Preferences, then click Metadata.
2. Select the Browser checkbox.
3. From the Browser Set 1 pop-up menu, choose a metadata view that includes badge overlays. Some examples are General and Ratings, as well as Grid View–Basic and Grid View–Expanded.
4. Close the Preferences window.

   Badge overlays are now visible in the Browser in grid view.

You can turn off the display of badge overlays in the Browser by turning off the display of metadata. For more information, see "Turning the Display of Metadata On or Off" on page 277.

To display badge overlays on images in the Light Table, do one of the following:

- Choose View > Metadata > Light Table (or press Shift-G).
- Choose Aperture > Preferences, click Metadata, then select the "Show decorations" checkbox in the Light Table section.

Badges and metadata are now visible in the Light Table.

To turn off badge overlays in the Light Table, do one of the following:

- Choose View > Metadata > Light Table (to remove the checkmark), or press G.
- Choose Aperture > Preferences, click Metadata, then deselect the "Show decorations" checkbox in the Light Table section.

Badge overlays are now turned off in the Light Table.

Adjusting Image Date and Time

You can adjust the date and time an image was taken at any time. Aperture gives you the option of adjusting the date and time of an image's version or the image's version and master.

To change the creation date of an image or group of images:

1. Select an image or group of images.
2. Choose Metadata > Adjust Date and Time.



3. Add a new date and time in the Adjusted field.
4. If you want to modify the creation date of the master or masters, select the "Modify N original master files" checkbox.
5. Click the Adjust button.

The creation date and time of the version or versions has changed. If you selected the "Modify N original master files" checkbox, the date and time adjustment has been applied to the masters as well.

Searching for and Displaying Images

12

Aperture allows you to easily search for and gather images in a variety of locations. You can perform complex searches and save your search results.

This chapter provides information about using the Query HUD to search for images using a wide variety of criteria, including image name, subject, keyword, photographer, caption or text, date, location, EXIF and IPTC information, applied adjustments, and more.

This chapter covers:

- An Overview of Searching (p. 296)
- Controls in the Query HUD (p. 300)
- Searching Across the Entire Library (p. 301)
- Searching by Image Name, Caption, or Other Text (p. 302)
- Searching by Keyword (p. 303)
- Searching by Date (p. 305)
- Searching by Rating (p. 307)
- Searching by IPTC Information (p. 308)
- Searching by EXIF Information (p. 309)
- Searching by Adjustments (p. 310)
- Searching by Import Session (p. 311)
- Searching by File Status (p. 312)
- Searching by Other Metadata (p. 312)
- Searching by a Combination of Criteria (p. 313)
- Saving Your Search Results (p. 315)

An Overview of Searching

Aperture provides a pop-up menu in the search field of the Browser that allows you to quickly display images by rating and change how Aperture performs searches.



To have Aperture search for images by rating, you can choose a rating level from the pop-up menu. You can also have Aperture perform full text searches or limited text searches. When you choose "Full text search" from the pop-up menu, Aperture searches for any text entered in the search field throughout all the metadata associated with your images. If you choose "Limited text search", Aperture searches for any entered text, but doesn't search through the EXIF, IPTC, badge, or custom metadata associated with images. However, a limited text search does include keywords, aspect ratio, filename, rating, version name, orientation, pixel size, processed pixel size, master location, and import group. Choosing a limited text search provides faster results. You can set your preference for a full or limited text search using the Search Scope pop-up menu in the Appearance pane of the Preferences window.

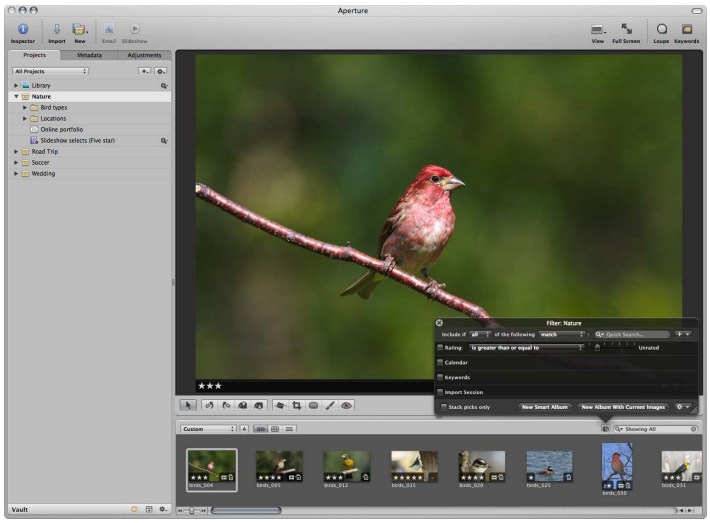
To set the search scope in the search field:

- Choose the type of search you want to perform from the search field pop-up menu.

To view specific images in the library or a selected project, you can also use the Query HUD.

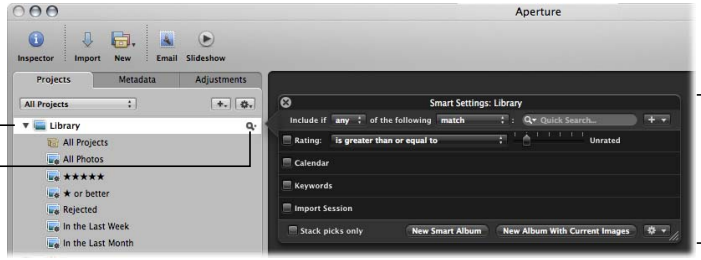


The Query HUD is an easy-to-use window with options for specifying search criteria. For example, you might enter the text "finch" in the Query HUD, and Aperture locates files that include that text in their metadata. To show the Query HUD for a selected project, you click the Query HUD button (with a magnifying glass icon) next to the search field in the Browser.



You can use the Query HUD to locate images across all projects; to display particular images within a project, album, or folder; and to create Smart Albums, which automatically gather images based on search criteria.

You specify where you want to search by selecting the library or the project or album that contains the images you want. To search for images across your entire Aperture portfolio, select Library and click the Query HUD button to the right of the Library name. When you enter search criteria in the Query HUD, Aperture displays results from across all your projects.

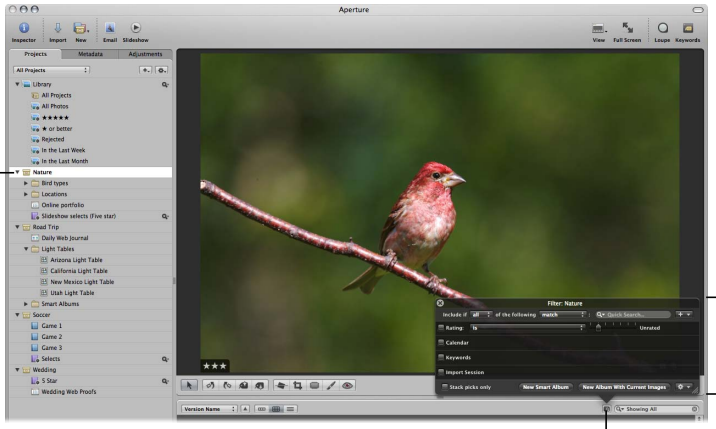


Select Library to search across the entire library.

Click here to show a Query HUD for searching across the library.

Specify your search criteria here.

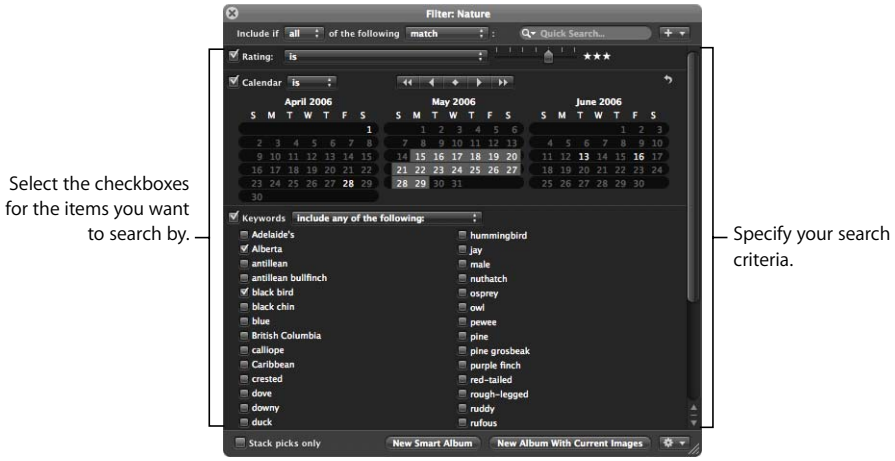
The most common reason to perform a search is to display a selection of images within a project. By selecting a project and using the Query HUD, you can quickly display specific images, hiding the rest from view. For example, you might isolate and display only those images of a certain subject, pose, rating, or location. Your search doesn't change the contents of the project; it only temporarily changes the images you view in the Browser. If you cancel the search criteria in the Query HUD, all of your images appear in the Browser again. The Query HUD is preset to show images that are unrated or better, hiding rejected images. You can change the Query HUD criteria to show rejected images if you wish.



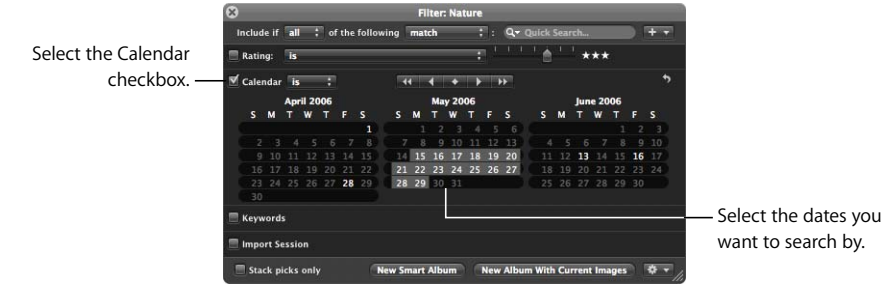
You can also create special albums, called *Smart Albums*, whose contents are derived solely by search criteria. For example, you might create a Smart Album that searches for and displays all portrait images from the entire library. When you create a Smart Album, you use the Query HUD to define criteria for the images that should appear in it. For more information about creating and using Smart Albums, see Chapter 13, "Grouping Images with Smart Albums," on page 317.

Aperture can locate images based on many types of information associated with the images. When you import images into Aperture, certain information is automatically assigned to each image, including EXIF metadata such as image date, photographer, camera technical data, filename, and much more. You can also assign your own metadata to images, including keywords, summaries, captions, and information used by IPTC fields, and then locate your images by searching for the metadata. In addition, you can search for images based on the type of adjustment applied to them as well as the version of the RAW decoding process used to decode the RAW master.

The search criteria that you use can be simple or complex. For example, the following illustration shows some of the search criteria you can specify using the Query HUD.



To search using a particular type of search criteria, you select the checkbox to turn on the search option and then specify the criteria that Aperture should look for. For example, to find images taken on a specific date, you select the Calendar checkbox and select a date or range of dates.



The images taken on the dates you specified are displayed in the Browser, where you can review and work with them.

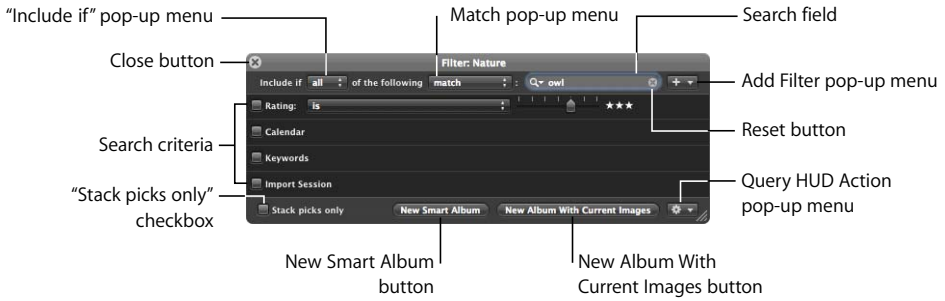
You can also create complex searches by adding search criteria options to the Query HUD.

To show the Query HUD, do one of the following:

- Choose Edit > Find (or press Command-F).
- Click the Query HUD button (with a magnifying glass icon) beside the search field in the Browser.

Controls in the Query HUD

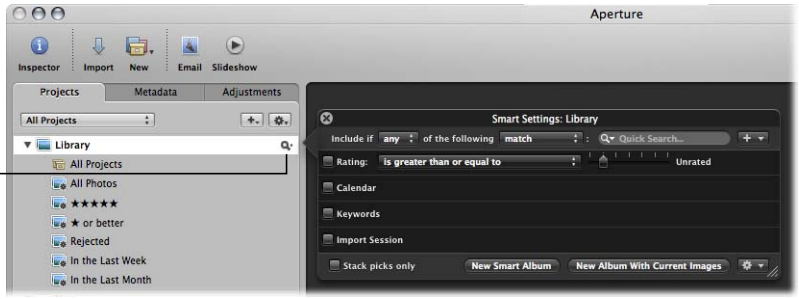
The Query HUD has the following controls:



- *Close button:* Click this button to close the Query HUD.
- *"Include if" pop-up menu:* Choose whether the image should include all of the criteria or any of the criteria that are marked by selected checkboxes.
- *Match pop-up menu:* Choose whether the image should match or not match any of the search criteria or all the criteria that are marked by selected checkboxes.
- *Search field:* Enter the text you want to search for. Click the search field's Reset button (with an X) to clear the search field.
- *Add Filter pop-up menu:* Choose additional search criteria, such as date, EXIF and IPTC information, text, rating, and other metadata.
- *Search criteria:* Select checkboxes for categories and specify what you want to search for, such as ratings, keywords, and dates.
- *New Smart Album:* Click this button to create a new Smart Album based on the search criteria. For more information, see Chapter 13, "Grouping Images with Smart Albums," on page 317.
- *New Album With Current Images:* Click this button to create a new album containing images that match the current search criteria.
- *Query HUD Action pop-up menu:* Create a new Light Table, book, webpage, Smart Webpage, web journal, or web gallery album containing images that match the current search criteria.
- *Stack picks only:* Select this checkbox to prevent the search from querying images within stacks that are not stack picks. Only the picks of the stacks are made available to the search. The other images within each stack are ignored.

Searching Across the Entire Library

At times, you may want to search for images that reside in many different projects. For example, you might want to locate all your select photos for an entire year or for a particular month. To search across the library, you click the Query HUD button beside the Library name.



Click the Query HUD button next to the Library name to search across the entire library.

To search for images across the entire library:

1. Select Library in the Projects inspector.
2. Click the Query HUD button beside the Library name.
3. When the Query HUD appears, enter or select the search criteria you want.

The results of your search appear in the Browser.

Tip: You can further refine the results of the library search by clicking the Query HUD button beside the search field in the Browser. The Browser's Query HUD appears, and any search criteria you specify change the results you see in the Browser.

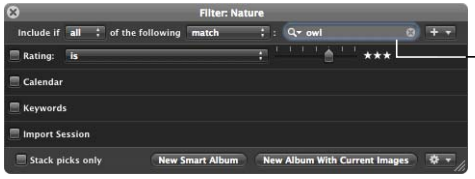
For information about entering search criteria in the Query HUD to perform different kinds of searches, see the following sections about specifying search criteria.

Searching by Image Name, Caption, or Other Text

You can search for images using any text that you've associated with an image. For example, you might search for images based on text in an image's caption or keywords, or in any other text entry. You can also search by multiple text entries.

To search for images by text:

1. In the Projects inspector, select a project or an album you want to search.
2. Show the Query HUD by doing one of the following:
   - Choose Edit > Find (or press Command-F).
   - Click the Query HUD button beside the search field in the Browser.
3. In the Query HUD, enter the text you want to search for in the search field.

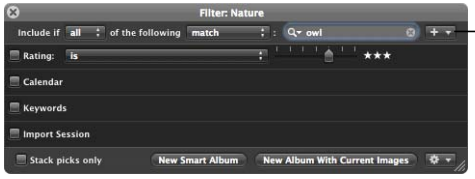


You can enter multiple text items, separating them by commas. Aperture locates any images that have a match for all the text items.

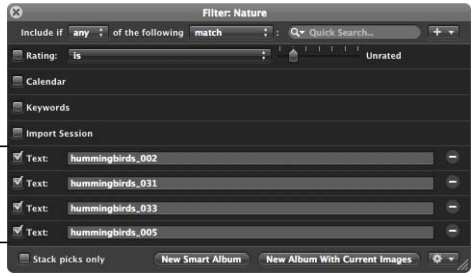
The images that match the search criteria are displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

To search for images by multiple text entries:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, add as many text fields as you need by choosing Text from the Add Filter pop-up menu multiple times.



4 Select the Text checkboxes and enter text in each field to locate the images you want.



Select the Text checkboxes and enter text in each text field you added.

5 Choose "any" from the Match pop-up menu to locate images that have matches for any of the text entries, or choose "all" to locate images that have matches for all of the text entries.

The images that match the search criteria are immediately displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

Searching by Keyword

You can search for and locate images by any of the keywords that you've assigned to them. You can select one or more keywords to search for. You can also specify which keywords an image must have to qualify as a match. For example, you can choose to search for images that have both *Silhouette* and *Landscape* as keywords, or images that have either *Silhouette* or *Landscape* as keywords. In addition, you can search for images that do not have specific keywords applied to them.

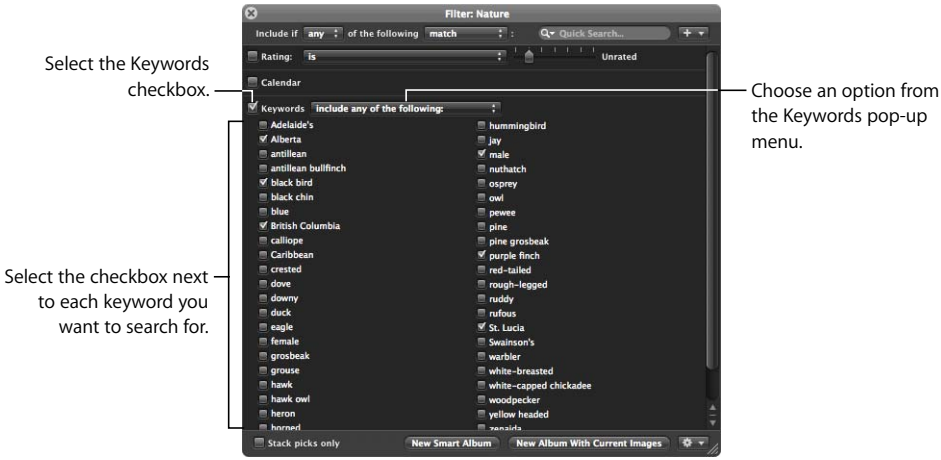
To search for images by keyword:

1 In the Projects inspector, select a project or an album you want to search.

2 Click the Query HUD button beside the search field in the Browser (or press Command-F).

3 In the Query HUD, select the Keywords checkbox.

Note: The Keywords checkbox is dimmed if no keywords have been applied to the images in the selected project or album.



4 Choose an option from the Keywords pop-up menu:

- *To display images that have the selected keywords:* Choose "are applied."
- *To display images that do not have the selected keywords:* Choose "are not applied."
- *To display images that have any of the selected keywords:* Choose "include any of the following."
- *To display only those images that have all the keywords you selected:* Choose "include all of the following."
- *To display images that have only the selected keywords:* Choose "includes only the following."
- *To display images that do not have any of the selected keywords:* Choose "do not include any of the following."
- *To display images that do not have all of the selected keywords:* Choose "do not include all of the following."

5 Select the checkboxes next to the keywords you want to search for.

6 Choose "any" from the Match pop-up menu, if it's not already chosen.

You can also search for IPTC keywords using the IPTC search options. These options allow you to specify searches for specific IPTC fields in a variety of ways. For example, you can search for any images that don't have keywords assigned. For more information, see "Searching by IPTC Information" on page 308.

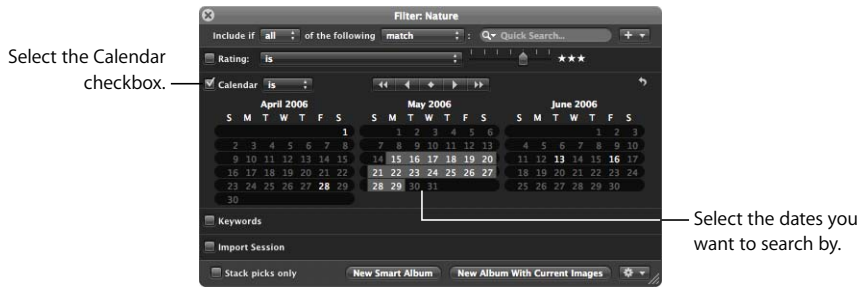
The images that match the search criteria are immediately displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

Searching by Date

You can search for and locate images by the date they were taken. For example, you might locate any images taken during a trip between May 16, 2005, and May 20, 2005. To search for images by date, you use the Calendar search options. When the calendar appears, any dates that appear in bold represent dates on which new photos were taken as registered in the EXIF data. You can select a date or several dates in the calendar to search for images taken on those dates, as well as specify a range of dates. In addition, you can search for images taken outside of a range of dates.

To search for images by date:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, select the Calendar checkbox.



4. Choose an option from the Calendar pop-up menu:
   - *To display images shot on the selected dates:* Choose "is."
   - *To display images not shot on the selected dates:* Choose "is not."
5. Select the date or dates you want to search by.

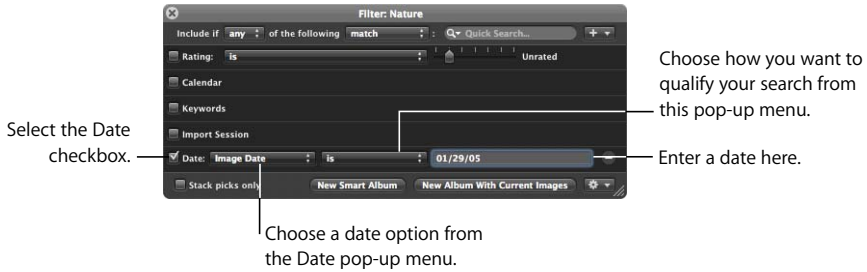
   Shift-click to select a range of continuous dates; Command-click to select multiple noncontinuous dates.
6. Choose "any" from the Match pop-up menu, if it's not already chosen.

   The images that match the search criteria are immediately displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

Images that you import from sources other than cameras and card readers, such as JPEG or TIFF files, may not have EXIF information associated with them. However, they typically have a creation date assigned to the file. You can use this creation date to locate images using the Date search options.

To search for images by creation date:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, choose Date from the Add Filter pop-up menu.
4. Select the Date checkbox, then choose a date option from the Date pop-up menu.
5. Choose an option from the middle pop-up menu to qualify your search.
6. Enter the date you want the search based upon.



If needed, you can add multiple Date options to specify the capture year, capture month, capture day, and so on.

7. Choose "any" from the Match pop-up menu, if it's not already chosen.

The images that match the search criteria are immediately displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

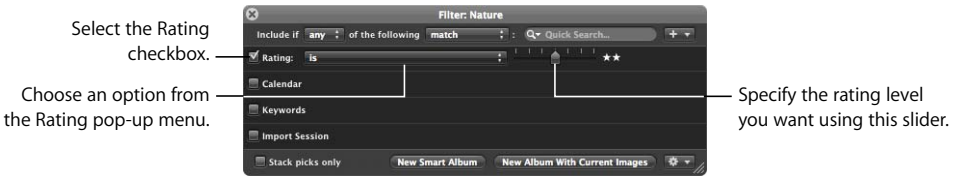
Searching by Rating

You can use the Query HUD to see all images with a certain rating. For example, you can search for all the images in a project that have a rating of five stars. You can show images with a specific rating, images rated at or below a specific rating, or images rated at or above a rating. Aperture is preset to hide images rated as rejected, showing only those that are unrated or better.

You can also search using multiple rating criteria by adding several rating search criteria options from the Add Filter pop-up menu. For example, you might create a search that locates images that have a rating of three stars or four stars only.

To search for images by rating:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, select the Rating checkbox.



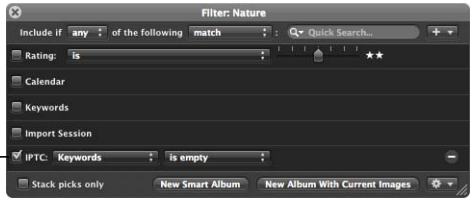
4. From the Rating pop-up menu, choose whether you want to search for images with a rating that is equal to, greater than or equal to, or less than or equal to the specified rating.
5. Specify the rating level by dragging the slider.

The images that match the search criteria are displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

You can quickly display images with specific ratings using keyboard shortcuts. For more information, see "Keyboard Shortcuts for Displaying Images with Specific Ratings" on page 242.

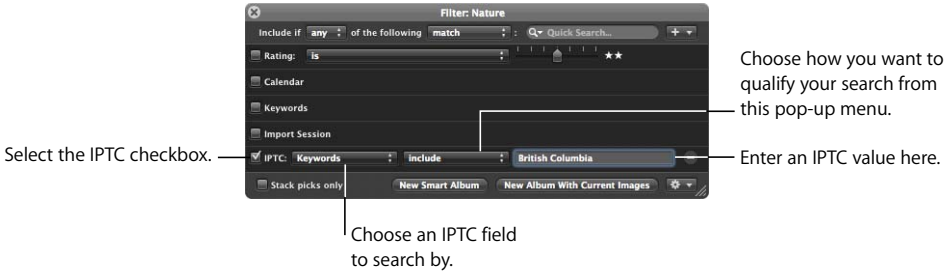
Searching by IPTC Information

You can now search for and locate images using any IPTC information that you've assigned using enhanced search qualifiers. For example, you might locate any images that have IPTC keywords assigned to them. To search for images by IPTC information, you use the IPTC search options. For example, you can search for any image that doesn't have keywords applied by specifying a search that uses the Keywords IPTC field and an "is empty" search qualifier.



To search for images by IPTC information:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, choose IPTC from the Add Filter pop-up menu.
4. Select the IPTC checkbox, then choose the IPTC field you want to search by from the IPTC pop-up menu.



5. Choose an option from the middle pop-up menu to qualify your search.
   - *To specify characters that the IPTC field should contain somewhere within the field:* Choose "include".
   - *To specify characters that the IPTC field should not contain:* Choose "is empty and does not include".
   - *To specify the exact characters that the IPTC field should contain:* Choose "is".
   - *To specify the exact characters that the IPTC field should not contain:* Choose "is not empty and is not".
   - *To specify the characters that the IPTC field should begin with:* Choose "starts with".

- *To specify the characters that the IPTC field should end with:* Choose "ends with".
- *To specify that the IPTC field should hold no entry:* Choose "is empty".
- *To specify that the IPTC field can be any entry as long as the field is not empty:* Choose "is not empty".

6 Enter an IPTC value you want to search by in the IPTC text field.

7 Choose "any" from the Match pop-up menu, if it's not already chosen.

The images that match the search criteria are immediately displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

Searching by EXIF Information

You can search for and locate images using any EXIF information recorded by your camera for your images. For example, you might locate any images that were created with a certain camera or at a specific exposure. To search for images by EXIF information, you use the EXIF search options.

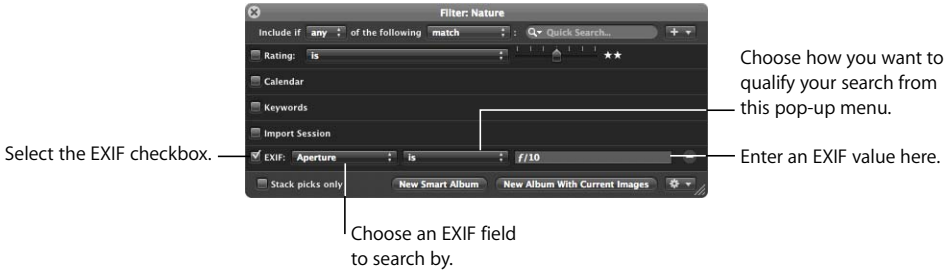
To search for images by EXIF information:

1 In the Projects inspector, select a project or an album you want to search.

2 Click the Query HUD button beside the search field in the Browser (or press Command-F).

3 In the Query HUD, choose EXIF from the Add Filter pop-up menu.

4 Select the EXIF checkbox, then choose an EXIF field you want to search by from the EXIF pop-up menu.



5 Choose an option from the middle pop-up menu to qualify your search.

6 Enter the EXIF value you want to search by in the EXIF text field.

7 Choose "any" from the Match pop-up menu, if it's not already chosen.

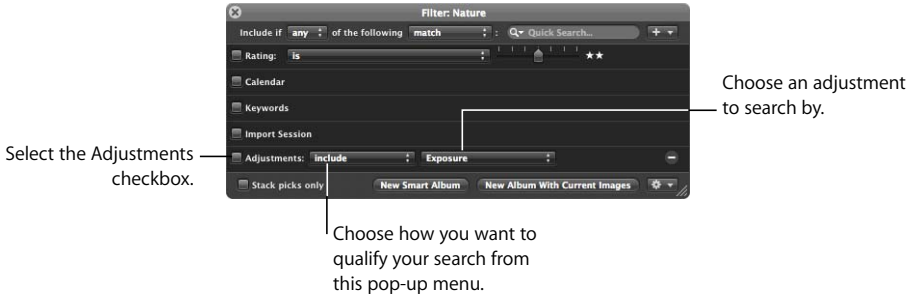
The images that match the search criteria are immediately displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

Searching by Adjustments

You can search for and identify images based on the type of adjustment that has been applied to them. To search for images based on a specific adjustment, you use the Adjustment search options. You can also search for images that do not have a specific type of adjustment applied to them.

To search for images by adjustment type:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, choose Adjustments from the Add Filter pop-up menu, and select the Adjustments checkbox.



4. Choose an option from the Adjustments pop-up menu:
   - *To display any image that has had an adjustment applied to it:* Choose "are applied."
   - *To display images with no adjustments:* Choose "are not applied."
   - *To display images with a specific adjustment applied to them:* Choose "include," and then choose an adjustment from the pop-up menu to the right.
   - *To display images that do not have a specific adjustment applied to them:* Choose "do not include," and then choose an adjustment from the pop-up menu to the right.
5. Choose "any" from the Match pop-up menu, if it's not already chosen.

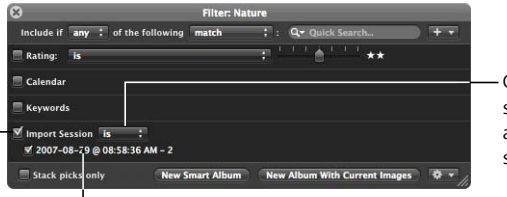
The images that match the search criteria are displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

Searching by Import Session

At times, you may want to locate images that were imported at a specific time or date. Aperture keeps track of your import sessions and can identify images that were imported at the same time. To search for images based on their import session, you use the Import Session search options. You can also search for images that were not imported during a specific import session or range of sessions.

To search for images by import session:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, select the Import Session checkbox and select the checkbox for the import group you want to search by.



4. Choose an option from the Import Session pop-up menu:
   - *To display images imported during the selected import sessions:* Choose "is."
   - *To display images not imported during the selected import sessions:* Choose "is not."
5. Choose "any" from the Match pop-up menu, if it's not already chosen.

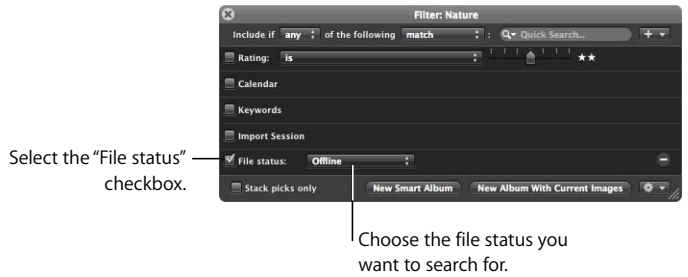
The images that match the search criteria are displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

Searching by File Status

You can also search for images based on whether they are managed images, referenced images, and online or offline images.

To search for images by file status:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, choose File Status from the Add Filter pop-up menu, and select the "File status" checkbox.
4. Deselect any checkboxes that aren't part of your query, and choose the search criteria from the "File status" pop-up menu.



5. Choose "any" from the Match pop-up menu, if it's not already chosen.

The images that match the search criteria are displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

Searching by Other Metadata

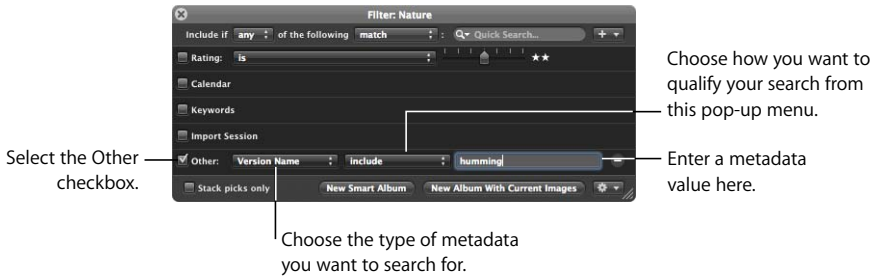
You can also search for images using the following kinds of metadata:

- Aspect ratio
- Camera time zone
- Filename
- File size
- Master pixel size
- Orientation
- Picture time zone
- Pixel size
- Project
- Version name

To search for images by metadata other than IPTC or EXIF information, you use the Other Metadata search options.

To search for images by metadata:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, choose Other Metadata from the Add Filter pop-up menu.
4. Select the Other checkbox, choose the type of metadata to search for, and specify the search criteria.



5. Choose "any" from the Match pop-up menu, if it's not already chosen.

The images that match the search criteria are displayed in the Browser. To save your search results, see "Saving Your Search Results" on page 315.

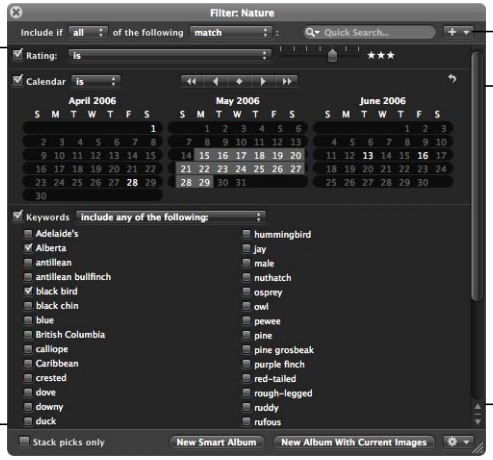
Searching by a Combination of Criteria

You can create complex combinations of search criteria in the Query HUD. For example, you could search for images that have certain keywords and that were taken on a specific date. To create complex searches, you can add multiple search options using the Add Filter pop-up menu.

To search for images by a combination of search criteria:

1. In the Projects inspector, select a project or an album you want to search.
2. Click the Query HUD button beside the search field in the Browser (or press Command-F).
3. In the Query HUD, choose the search options you want to add from the Add Filter pop-up menu.

4 Select the checkboxes beside the criteria you want to use, and specify the search criteria.



To add additional search options, choose them from this pop-up menu.

Select the checkboxes for the items you want to search by.

Specify your search criteria.

5 Do one of the following:

- *To specify that an image must match at least one of the criteria or keywords:* Choose "any" from the Match pop-up menu.
- *To specify that an image must match all the criteria and keywords:* Choose "all" from the Match pop-up menu.
- *To specify that an image must not match any of the criteria and keywords:* Choose "none" from the Match pop-up menu.
- *To specify that an image must not match all of the criteria and keywords:* Choose "not all" from the Match pop-up menu.

The images that match the search criteria are immediately displayed in the Browser. To save your search results, see the next section, "Saving Your Search Results."

Saving Your Search Results

When you perform a search using the Query HUD, you can choose to save your results in several ways. You can create a new Smart Album that locates images that match the search criteria. You can also save the search results themselves into a new album, Light Table album, book album, web gallery album, Smart Web Gallery Album, or web journal album.

To create a Smart Album based on the search criteria:

1. Use the Query HUD to search for images based on specified criteria.
2. In the Query HUD, click New Smart Album.

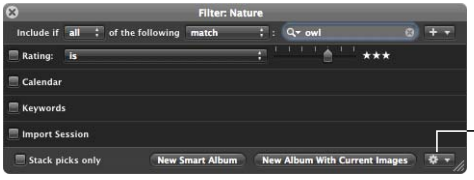
   A new, untitled Smart Album appears in the Projects inspector.
3. Enter the name you want for the Smart Album, then press Return.

When you add images to a project or the library that match the search criteria, they are automatically added to the Smart Album.

For more information, see Chapter 13, "Grouping Images with Smart Albums," on page 317.

To save your search results in an album:

1. Use the Query HUD to search for images based on specified criteria.
2. In the Query HUD, do one of the following:
   - *To create a new album:* Click the New Album With Current Images button, enter the name you want for the album, then press Return.
   - *To create a new Light Table, book, webpage, Smart Webpage, web journal, or web gallery album:* Choose the appropriate option from the Query HUD Action pop-up menu, enter the name you want for the album, then press Return.



All images that match the search criteria are placed in the new album you created.

Grouping Images with Smart Albums

13

When you need to group certain types of images, either temporarily or permanently, you can use a Smart Album to gather the images.

This chapter provides instructions for using the Aperture Smart Album feature. You can create a Smart Album and specify search criteria that identify the images you want, and Aperture automatically searches for and displays them in the new album. Whenever an image meets the search criteria later, it's automatically added to the Smart Album.

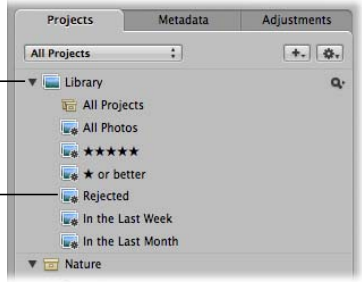
This chapter covers:

- An Overview of Smart Albums (p. 318)
- Collecting Images in a New Smart Album (p. 320)
- Searching Within a Smart Album (p. 321)
- Revising the Contents of a Smart Album (p. 322)
- Transferring Smart Album Images to Another Project or Album (p. 323)
- Deleting a Smart Album (p. 324)

An Overview of Smart Albums

Unlike a standard project into which you import images, a Smart Album's contents are controlled by the criteria you specify in the Smart Album's Query HUD. When you change a Smart Album's search criteria, the contents of the Smart Album change.

Aperture comes with a selection of Smart Albums set up in the library for you. For example, there are Smart Albums that gather all your select images, all images taken in the last week, and all images taken in the last month. When you click the Library disclosure triangle, you see the list of Smart Albums created for you. Select a Smart Album to see its contents in the Browser.



You can also create your own Smart Albums. For example, suppose you want to create a Smart Album that includes the best images you took of a particular sports event. You select the project containing shots of the sports event, create a Smart Album, show the Query HUD, and search for images rated Select (five stars). All images with that rating immediately appear in the Smart Album.

You can also choose where to search for images—across the entire library or within a specific project or folder. The scope of a Smart Album's search is determined when you create the album and can't be changed afterward. For example, when you select Library and create a Smart Album, the Smart Album searches across the entire library. When you select a project, the Smart Album searches within that project. When you select a folder, the Smart Album searches the projects within the folder.

By instituting specific keyword schemes, you can create Smart Albums that are automatically updated with specific kinds of images.

For example, you might create Smart Albums that:

- Collect images of certain poses or subjects, such as head shots, images of particular models, or sports scenes
- Collect images based on business information, such as purchase date, payment, or amount due
- Collect images suitable for a specific purpose, such as for distribution on the web or submission to stock photography houses
- Gather the best images of your collection into a portfolio of poster images that you use to present or introduce your work
- Automatically gather a project's select images

As you complete projects throughout the year, Smart Albums are automatically updated with images that match their search criteria.

You might also use Smart Albums to explore different aspects of your photography. For example, you can create temporary collections of images based on technical data such as camera model, exposure, or lens type as you investigate technical influences on your images.

You can also use Smart Albums to track images that you've performed adjustments on. Using the Smart Album Query HUD, you can specify whether the Smart Album collects any image that has had an adjustment applied to it or any image that has had a specific adjustment applied to it, such as Vignette.

You can quickly create a Smart Album to review images and then delete it. Or, you can create Smart Albums that hold permanent and expanding collections of images. Using Smart Albums can become a handy way to relieve yourself from slow reviews of images that you are required to track periodically.

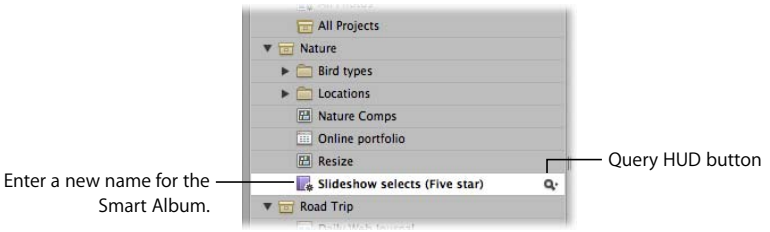
Collecting Images in a New Smart Album

You can collect images based on any of the information you can search for using the Query HUD. For example, you can create a Smart Album that gathers images based on a specific keyword or a combination of keywords, ratings, dates, or other metadata. You can narrow or broaden the Smart Album search criteria in the Query HUD at any time.

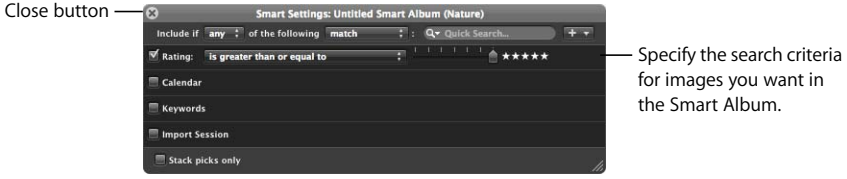
To create a Smart Album that searches only within one project:

1. Select the project in the Projects inspector.
2. Do one of the following:
   - Choose File > New Smart > Album (or press Command-Shift-L).
   - Choose Smart Album from the Add to Library pop-up menu in the Projects inspector.
   - Choose Smart Album from the New pop-up menu in the toolbar.

   A new, untitled Smart Album appears within the project, and the Query HUD appears to its right.
3. Rename the Smart Album by entering the name you want.



4. In the Query HUD, specify the search criteria you want.



For more information about using the Query HUD and specifying search criteria, see Chapter 12, "Searching for and Displaying Images," on page 295.

5. Click the Query HUD's close button.

To create a Smart Album that searches across the entire library:

1. Select Library in the Projects inspector.
2. Do one of the following:
   - Choose File > New Smart > Album (or press Command-Shift-L).
   - Choose New Smart Album from the Add to Library pop-up menu in the Projects inspector.
   - Choose Smart Album from the New pop-up menu in the toolbar.

   A new, untitled Smart Album appears in the Projects inspector.
3. Rename the Smart Album by entering the name you want.
4. In the Query HUD, specify the search criteria you want.

   For more information about using the Query HUD and specifying search criteria, see Chapter 12, "Searching for and Displaying Images," on page 295.
5. Click the Query HUD's close button.

Aperture finds the images matching the specified search criteria and displays them in the Browser. You can now work with these versions of your images in the same way you work with images in any project or album.

Searching Within a Smart Album

After creating a Smart Album, you can search for specific images within the contents of the Smart Album.



To search within the contents of a Smart Album:

1. Show the Query HUD by clicking the Query HUD button in the Browser.
2. When the Query HUD appears, specify secondary search criteria to show specific images within the Smart Album.

   To see the entire contents of the Smart Album again, delete the search criteria in the Query HUD.

Revising the Contents of a Smart Album

To change the contents of a Smart Album, you change the search criteria for the Smart Album. You can manually select individual images and delete them, but the deletion removes both the version and the master wherever it exists in the original project. Similarly, you cannot simply drag images into a Smart Album to add them.

If you decide that certain images should not be in a Smart Album, you can narrow the search criteria to exclude images. Aperture performs a new search and revises the Smart Album's contents. To remove an image from a Smart Album, you can also change the image so that it no longer matches the Smart Album's search criteria. For example, if a Smart Album gathers images rated five stars, changing an image's rating to four stars removes it from the Smart Album.

To change the contents of a Smart Album by changing the search criteria:

1. In the Projects inspector, click the Query HUD button to the right of the Smart Album to show the Query HUD.
2. Revise the search criteria in the Query HUD to eliminate or add the images you want, or change the keyword or rating for the image itself.
3. Click the Query HUD's close button.

Transferring Smart Album Images to Another Project or Album

You can transfer images from a Smart Album to another project or album, including web gallery albums, webpage albums, and book albums. You transfer images by selecting the images in the Smart Album and dragging or copying them into another project or album.

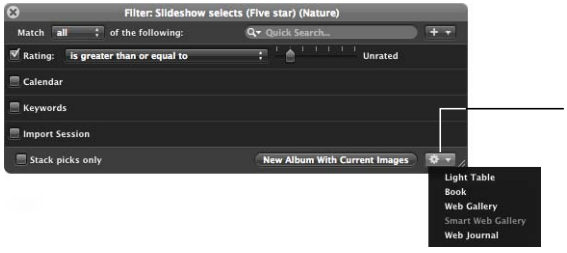
To transfer images from a Smart Album to another project or album:

1. Select a project or album to hold the images, or create a new project or album.
2. Select the Smart Album, then select the images you want.
3. Drag the images into the project or album you want.

You can also select the images in the Smart Album and have Aperture create a new album to hold them.

To transfer images from a Smart Album to a new album:

1. In the Projects inspector, select the Smart Album containing the images you want to transfer.
2. Click the Query HUD button in the Browser, and choose the appropriate filter criteria in the Query HUD.
3. Click the New Album With Current Images button to create an album, or choose the type of album you want from the Query HUD Action pop-up menu in the bottom-right corner of the Query HUD.



A new album is created, containing the images you selected using the filter criteria.

Deleting a Smart Album

You can delete a Smart Album at any time, and none of the images gathered from the library are deleted. If you've transferred images from a Smart Album to another album, the images in the other album are also not deleted when you delete the Smart Album.

To delete a Smart Album:

1. Select the Smart Album in the Projects inspector.
2. Choose File > Delete Smart Album (or press Command-Delete).

Part III: Performing Image Adjustments



This section provides information about applying adjustments to images, working with adjustment presets, using the Color meter, and using the RAW Fine Tuning controls.

Chapter 14 An Overview of Image Adjustments

Chapter 15 Making Image Adjustments

An Overview of Image Adjustments

14

Aperture provides adjustment controls to help you improve the appearance of your images. You can make image adjustments using the controls in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

This chapter provides basic information about making adjustments to images, such as correcting red-eye and adjusting exposure, levels, and white balance.

This chapter covers:

- An Overview of Adjustments in Aperture (p. 328)
- Using the Adjustment Controls (p. 332)
- Working with Adjustment Tools in the Viewer (p. 333)
- Performing Adjustments in Full Screen View (p. 334)
- Applying Adjustments to a Group of Images (p. 335)
- Working with Adjustment Presets (p. 337)
- Remove Adjustments Command (p. 342)
- Using Modifier Keys to Identify Color Clipping (p. 342)
- Using the Color Meter (p. 346)
- Using an External Editor (p. 350)
- Working with the RAW Fine Tuning Controls (p. 351)
- Understanding How to Read Histograms (p. 360)

An Overview of Adjustments in Aperture

Adjustment controls are found in the Adjustments inspector and the Adjustments pane of the Inspector HUD. The controls are the same in each. The Inspector pane is shown on the left side of the screen. The Inspector HUD is a floating version of the inspectors that can be placed anywhere onscreen, allowing you the most flexibility in how you use your screen workspace.

You can make the following adjustments to images in Aperture.

Adjustment	Function
Red Eye Correction	Reduces red-eye in the eyes of the subjects in your images. Used in conjunction with the Red Eye tool.
Spot & Patch	Specifically used to fix imperfections in an image caused by sensor dust. Used in conjunction with the Spot & Patch tool.
Retouch	A tool used to retouch all types of imperfections in an image, such as skin blemishes, using either the Repair or Clone brush.
Straighten	Levels the image's horizon. Used in conjunction with the Straighten tool.
Devignette	Corrects a vignette applied to the image when it was shot.
Crop	Trims the image. Used in conjunction with the Crop tool.
Exposure	Adjusts exposure, highlight recovery, black point, and brightness.
Enhance	Adjusts contrast, definition, saturation, and vibrancy, as well as black, gray, and white tints.
Levels	Selectively adjusts the tonal range of an image.
Highlights & Shadows	Selectively adjusts the exposure in the shadows and highlights of an image.
White Balance	Sets an image's white balance by adjusting its color temperature and tint.
Color	Adjusts hue, saturation, and luminance on a color-by-color basis, as well as chromatic range.
Monochrome Mixer	Selectively controls the source red, green, and blue color channels when a color image is converted to grayscale.
Color Monochrome	Desaturates the image and applies a color tint of your choosing to the midtones.
Sepia Tone	Changes a color image to sepia. Allows you to desaturate the color image to the level of sepia coloring you want.
Noise Reduction	Reduces digital noise in an image.
Sharpen	Sharpens the image.
Edge Sharpen	Sharpens the image based on luminance using multiple sharpening passes.
Vignette	Applies a vignette effect to the image.

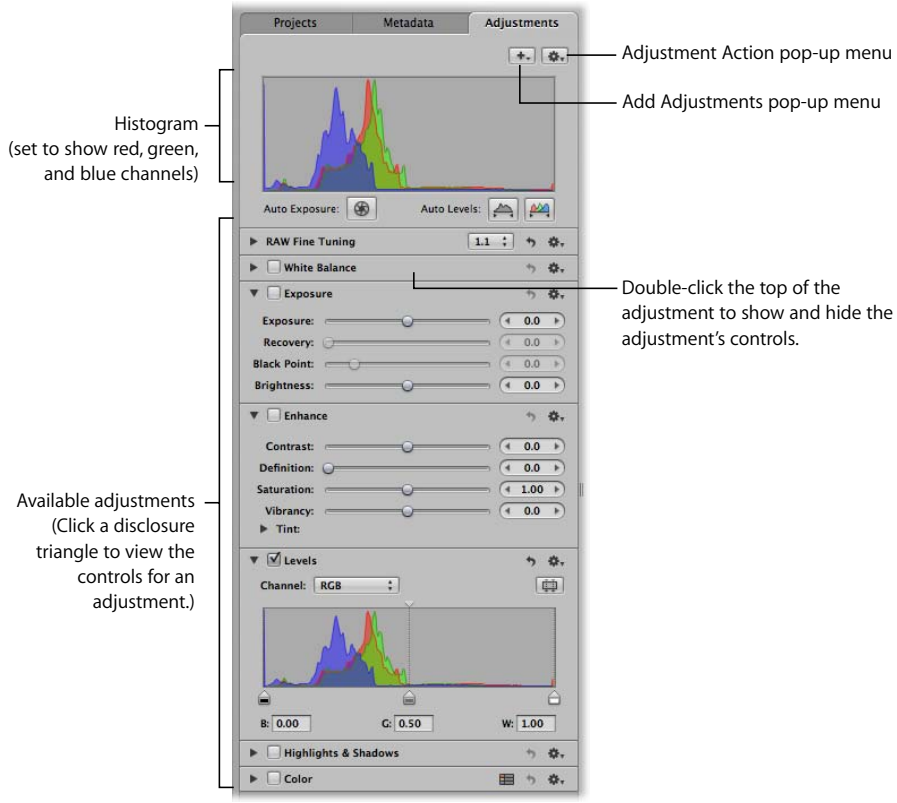
Showing the Adjustment Controls

You can use menu commands, keyboard shortcuts, or the buttons on the right side of the toolbar to show and hide the Inspector pane containing the adjustment controls.



To show the Adjustments inspector, do one of the following:

- Choose Window > Show Inspector (or press I), then click the Adjustments tab.
- Click the Inspector button in the toolbar, then click the Adjustments tab.



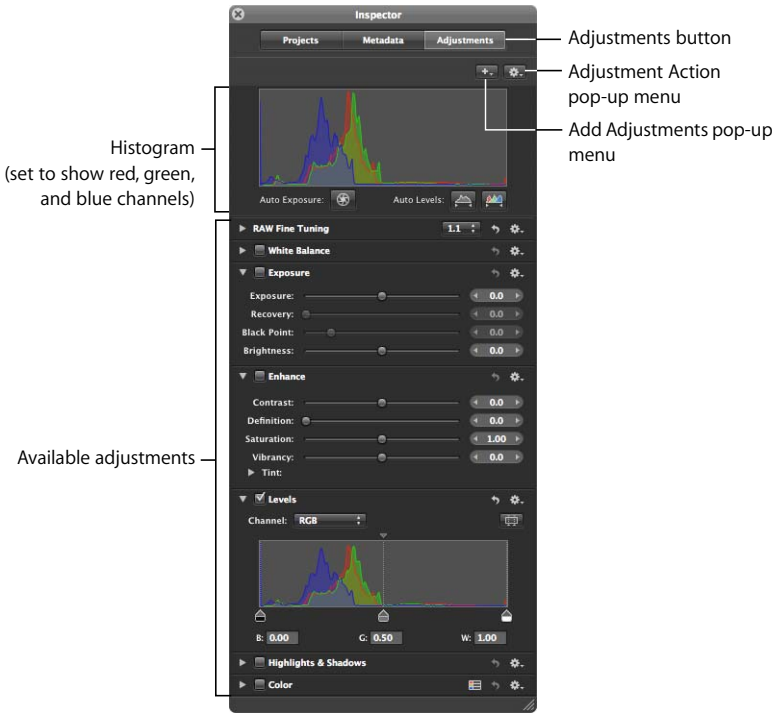
Each adjustment contains individual properties, called *parameters*, for which you can specify a range of values. You click an adjustment's disclosure triangle, or double-click the top of the adjustment, to view the parameters for the adjustment and the controls you use to change parameter values. For more information about using the adjustment controls to change parameter values, see "Using the Adjustment Controls" on page 332.

You can use menu commands and buttons in the Full Screen view toolbar to show or hide the Inspector HUD.

To show the Adjustments pane of the Inspector HUD, do one of the following:

- Choose Window > Show Inspector HUD (or press H), then click the Adjustments button.
- Click the Inspector HUD button in the Full Screen view toolbar, then click the Adjustments button.

For more information about Full Screen view, see "Performing Adjustments in Full Screen View" on page 334.



Choosing a Histogram View for Adjustments

When you show the Adjustments inspector or the Adjustments pane of the Inspector HUD, a histogram of the selected image's luminance or color channels appears. The histogram displays a graph of the brightness values in the image, from the blackest point to the whitest point. You can adjust the histogram to show luminance; red, green, and blue (RGB) channels displayed together; or separate red, green, and blue channels.

To choose a histogram view:

- Choose a view option from the Histogram Options section of the Adjustment Action pop-up menu.

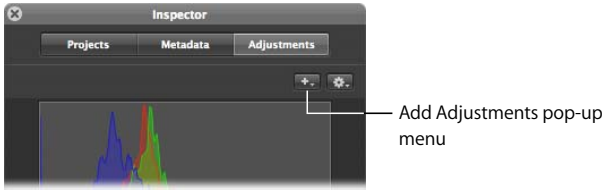
Note: The histogram updates in real time in the Viewer and in Full Screen view, but it is slightly delayed in the Book Layout Editor, the Webpage Editor, and the Light Table. For more information about how to interpret a histogram, see "Understanding How to Read Histograms" on page 360.

Showing Additional Adjustment Controls

The first time you show either the Adjustments inspector or the Adjustments pane of the Inspector HUD, only the White Balance, Exposure, Levels, Highlights & Shadows, and Color adjustments are available.

To add additional adjustments:

- Choose a type of adjustment from the Add Adjustments pop-up menu at the top of either the Adjustments inspector or the Adjustments pane of the Inspector HUD.



The new adjustment appears highlighted in both the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

Using the Adjustment Controls

Whenever an image is selected and displayed in the Viewer or in Full Screen view, you can adjust it using the adjustment controls in the Adjustments inspector and the Adjustments pane of the Inspector HUD. You can also adjust images in the Book Layout Editor, Webpage Editor, and Light Table.

Note: The Crop, Straighten, Spot & Patch, and Retouch tools and adjustment controls are not available for use in the Book Layout Editor, Webpage Editor, and Light Table, but you can easily switch to the Viewer to make your changes.

To switch to the Viewer from the Book Layout Editor, Webpage Editor, or Light Table, do one of the following:

- Click the Show Viewer button at the top of the Browser.



When you have finished making the adjustment, click the Show Viewer button again to return to the previous view.

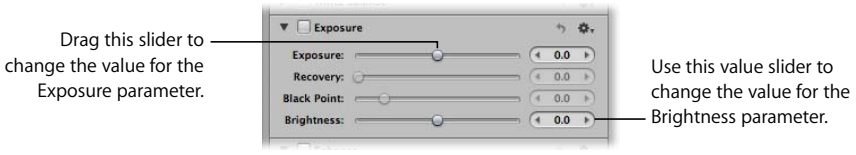
- If you have a system with more than one display, choose Alternate from the Viewer Mode pop-up menu in the Viewer tool strip or the Full Screen view toolbar, then perform the adjustments on the second display.

For more information about the Show Viewer button and the Viewer Mode pop-up menu, see "Viewing Images on Multiple Displays" on page 193.

Using Sliders

There are two types of slider controls for changing parameter values—sliders and value sliders. Slider controls have varying value ranges depending on the parameter.

- *Sliders:* Drag the slider left or right to set a value.



- *Value sliders:* Double-click the value and type a specific number in the value field, click the left or right arrow, or drag inside the value field to set a value. Often, you can type a much higher number in the value field than can be achieved by dragging the normal sliders. When using value sliders, you can use a modifier key to make value adjustments in small or large increments.

To change values in small increments:

- Option-drag in the value field.

To change values in large increments:

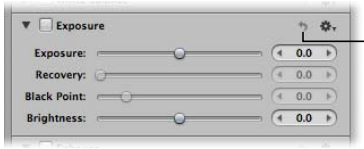
- Shift-drag in the value field.

Resetting Parameter Values

You can reset all of the parameters for an adjustment to their default values.

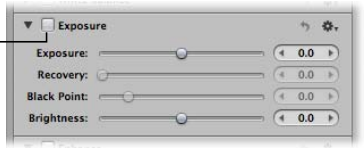
To reset all parameter values for an adjustment:

- Click the Reset button to the right of the adjustment name.



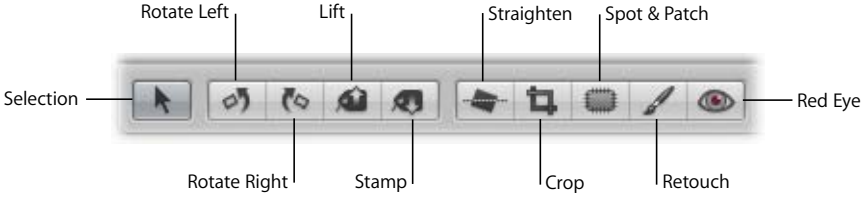
Turning Adjustments On and Off

Use checkboxes to turn adjustments on and off. Turning adjustments on and off is a good way to verify the cumulative effect of adjustments on your image.



Working with Adjustment Tools in the Viewer

The tool strip, located below the Viewer, contains tools for working with your images in the Viewer and Browser. Many of the Adjustment tools also work in conjunction with adjustment controls. For information about the individual adjustment tools, see Chapter 15, "Making Image Adjustments," on page 365.



Performing Adjustments in Full Screen View

Full Screen view, which displays an image against a black background and contains only a few interface elements, provides the best onscreen work environment for performing color adjustments. It is highly recommended that you perform adjustments in Full Screen view to achieve the best results possible. For more information about Full Screen view, see Chapter 7, "Viewing Images in Full Screen View," on page 207.

To switch to Full Screen view, do one of the following:

- Choose View > Full Screen (or press F).
- Click the Full Screen button in the control bar.

To switch back to the Aperture main window, do one of the following:

- Click the Exit Full Screen button in the toolbar (or press F or the Escape key).

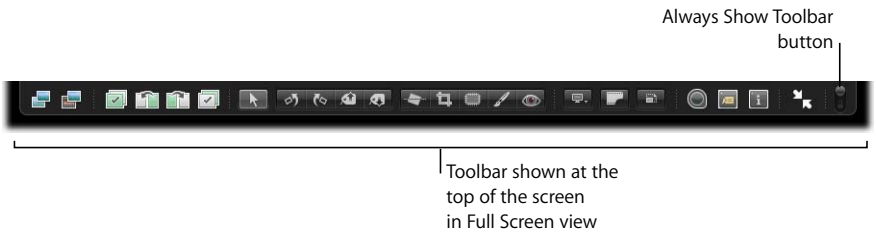
In Full Screen view, you have access to all the tools you need to perform adjustments to your images.

To show the Inspector HUD while in Full Screen view:

- Press H.

To access a tool in Full Screen view:

- Move your pointer to the top of the screen, and in the Full Screen view toolbar that appears, select a tool.



By default, the toolbar is not shown in Full Screen view until the pointer is moved to the top of the screen. You can set the toolbar to remain on the screen.

To keep the Full Screen view toolbar on the screen:

- Move the pointer to the top of the screen in Full Screen view, then click the Always Show Toolbar button in the toolbar.

Applying Adjustments to a Group of Images

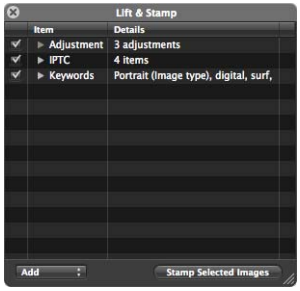
You can apply an adjustment or group of adjustments to a range of images by first applying the adjustments to one image and then lifting the adjustments from the first image and stamping them on the other images. You do this by using the Lift and Stamp tools and the Lift & Stamp HUD.

To lift adjustments from one image and stamp them on a group of images:

1 Select the image that has the adjustments you want to copy.

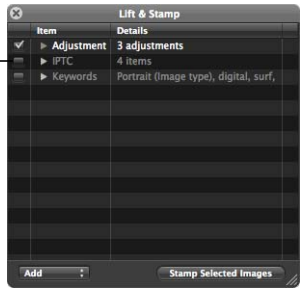


2 In the tool strip, select the Lift tool (or press O).



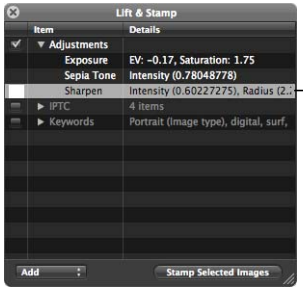
The Lift & Stamp HUD appears, showing the adjustments, IPTC metadata, and keywords applied to the image.

3 Deselect the IPTC and Keywords checkboxes to prevent Aperture from copying IPTC metadata and keywords from the selected image.



Deselect a checkbox to prevent Aperture from copying the item from the selected image.

4 If necessary, remove any unwanted adjustments by clicking the Adjustments disclosure triangle in the Lift & Stamp HUD, selecting the unwanted adjustments, and then pressing Delete.



Select an adjustment and press Delete to remove it.

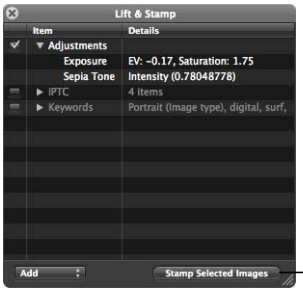
5 In the tool strip, select the Selection tool (or press A), then do one of the following:

- Drag a selection rectangle around the images to which you want to apply the adjustments.
- Select the images to which you want to apply the adjustments by Shift-clicking to select a range of adjacent images and Command-clicking to select nonadjacent images.

Note: The adjustments aren't applied to images within closed stacks. If you want to stamp the adjustments on images within a stack, you must open it first by choosing Stacks > Open Stack (or pressing Shift-K).

6 Do one of the following

- In the tool strip, select the Stamp tool.
- In the Lift & Stamp HUD, click the Stamp Selected Images button.

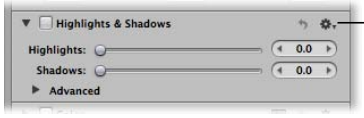


Click the Stamp Selected Images button to apply the adjustments to the selected images.

The adjustments copied from the first image are applied to the selected images. For more information about using the Lift & Stamp HUD, see "Applying Keywords Using the Lift & Stamp HUD" on page 262.

Working with Adjustment Presets

If you frequently use the same adjustment parameter settings, Aperture provides the ability to save these settings as adjustment presets. You can create new adjustment presets, rename and rearrange adjustment presets, and delete adjustment presets you no longer use. When you delete an adjustment preset, adjustments already applied to your images are unaffected. Each individual adjustment has its own set of presets accessible via its Preset Action pop-up menu. (Adjustment presets are not supplied with Aperture and do not appear in the Preset Action pop-up menu until you create them.)



Preset Action pop-up menu

Creating Adjustment Presets

Creating an adjustment preset is as simple as saving the adjustment parameter settings and naming them using the Preset Action pop-up menu.

To create an adjustment preset:

1. Select an image with the adjustment parameter settings you want to save.
2. In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Save as Preset from the Preset Action pop-up menu for the adjustment.

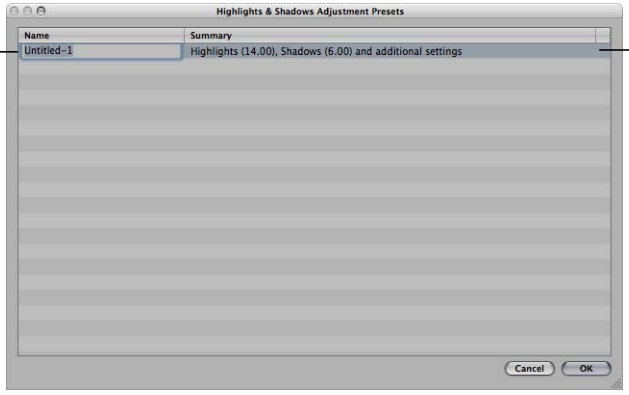


Choose Save as Preset from the Preset Action pop-up menu.

Note: Each adjustment has its own Preset Action pop-up menu. For example, if you want to save a White Balance parameter setting as a preset, use the Preset Action pop-up menu for the White Balance adjustment.

3. In the Adjustment Presets dialog, enter a name for the new adjustment preset, then click OK.

Enter a name for the preset here.



The parameter settings are displayed in the Summary column.

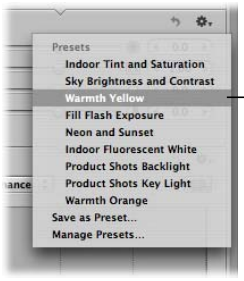
The adjustment parameter settings are saved as an adjustment preset, and the adjustment preset is now available for use in the Preset Action pop-up menu for the adjustment.

Applying Adjustment Presets

Applying an adjustment preset to an image is as simple as selecting the image and choosing the adjustment preset from the Preset Action pop-up menu. When you apply an adjustment preset to an image, the adjustment controls and parameter values update to reflect the settings saved in the adjustment preset. If you prefer, you can use an adjustment preset as a starting point in your image adjustment workflow, and then fine-tune the adjustment after it's applied to the image.

To apply an adjustment preset to an image:

1. Select an image.
2. In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose the preset you want to apply to the image from the Preset Action pop-up menu for the adjustment.



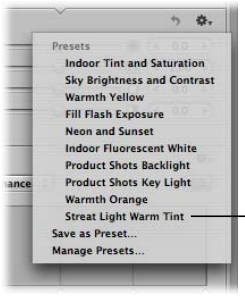
The adjustment preset is applied to the image, and a checkmark appears next to the preset in the Preset Action pop-up menu.

Renaming Adjustment Presets

You can rename an adjustment preset at any time.

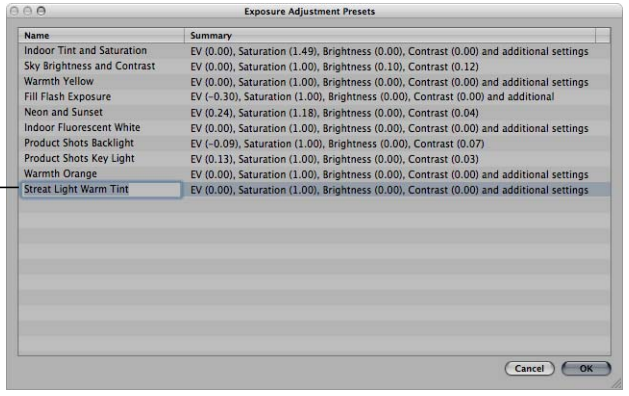
To rename an adjustment preset:

1. In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Manage Presets from the Preset Action pop-up menu for the adjustment.



You can rename an adjustment preset, for example, when you want to fix a spelling error.

2. In the Adjustment Presets dialog, double-click the name of the adjustment preset you want to change.



Double-click an adjustment preset's name to rename it.

The adjustment preset's name is highlighted.

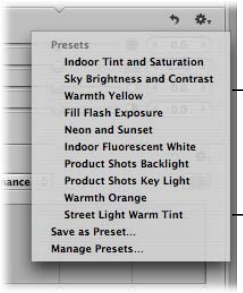
3. Enter a new name, then press Return.

   The adjustment preset is renamed.

4. Repeat steps 2 and 3 until all presets that need renaming have been renamed, then click OK.

Organizing Adjustment Presets

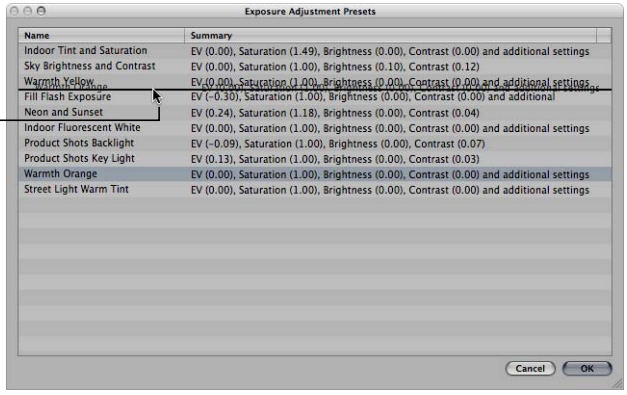
Each time you create an adjustment preset, it is added to the bottom of the list of presets in the Adjustment Presets dialog and Preset Action pop-up menu. As this list grows, it can become difficult to locate a specific adjustment preset in a long list of presets. Therefore, you can rearrange the order of the presets in the Adjustment Presets dialog.



You can rearrange the order of adjustment presets, for example, when you want to group similar parameter settings like tint values.

To rearrange the order of adjustment presets:

1. In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Manage Presets from the Preset Action pop-up menu for the adjustment.
2. In the Adjustment Presets dialog, drag the adjustment preset to its new position.



Drag the preset to its new position. A black bar indicates where it will be placed.

A black bar indicates where the adjustment preset will be placed.

3. Repeat step 2 until your adjustment preset list is organized, then click OK.

The adjustment presets list in the Preset Action pop-up menu updates to match the order of presets in the Adjustment Presets dialog.

Deleting Adjustment Presets

You can delete an adjustment preset at any time. Any adjustments that were previously applied using the deleted preset are unaffected.

To delete an adjustment preset:

1. In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Manage Presets from the Preset Action pop-up menu for the adjustment.
2. In the dialog that appears, select the adjustment preset you want to delete, then press the Delete key.

   The adjustment preset is deleted.
3. Repeat step 2 until all of the presets you want to remove have been deleted, then click OK.

Remove Adjustments Command

In Aperture, you can remove all adjustments from an image selection.

Note: The Remove Adjustments command located in the Adjustment Action pop-up menu in the Adjustments inspector or the Adjustments pane of the Inspector HUD removes the adjustments from single images only.

To remove all adjustments from an image selection:

1. Select a group of images.
2. Choose Images > Remove Adjustments.

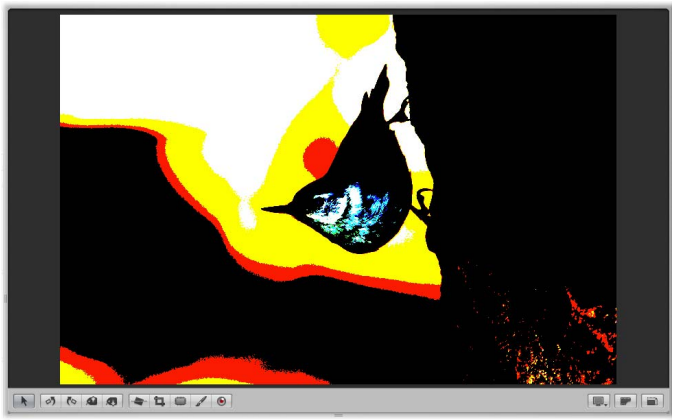
   All adjustments applied to the selection of images are removed.

Using Modifier Keys to Identify Color Clipping

In Aperture, you can use modifier keys to get instant feedback on channel clipping when using controls in the Exposure and Levels adjustments. Color overlays appear on the image when you press the Command key and drag the sliders to indicate that any, all, or a combination of color channels have been clipped.

Identifying Color Channel Clipping

When performing adjustments, it's useful to know if you're clipping one or more color channels and thereby losing important image details.



To identify color channel clipping:

- Press Command while dragging the following sliders:
  - *Exposure slider (Exposure controls):* Shows highlight clipping.
  - *Recovery slider (Exposure controls):* Shows highlight clipping.
  - *Black Point slider (Exposure controls):* Shows shadow clipping.
  - *Black Levels slider (Levels controls):* Shows highlight clipping.
  - *White Levels slider (Levels controls):* Shows highlight clipping.

  If one or more color channels are clipped as a result of making one of the adjustments above, colored overlays appear over the areas of the image where clipping is occurring. Release the Command key, and the color overlays disappear.

  The color of the overlay indicates which color channel is clipped. For more information, see the next section, "Understanding Color Channel Clipping Overlay Colors."

  Note: The color channel clipping overlays appear regardless of whether the Highlight Hot & Cold Areas command is turned on. For more information about the Highlight Hot & Cold Areas command, see "Showing Hot and Cold Areas in Your Images" on page 190.

Understanding Color Channel Clipping Overlay Colors

The color of the color channel clipping overlay indicates which color channel or combination of color channels are clipped. In addition, Aperture gives you the option of choosing color or monochromatic overlays to indicate clipping.

To set the color channel clipping overlay color:

1. Choose Aperture > Preferences, or press Command-Comma (,), then click Appearance.
2. Choose one of the following options from the Clipping Overlay pop-up menu:
   - *To display the clipping overlays in shades of color:* Choose Color.
   - *To display the clipping overlays in black, shades of gray, and white:* Choose Monochrome.

Color Overlay Descriptions

The following table lists the color overlays and the corresponding color channels that have been clipped by the adjustment slider setting.

Adjustment	Color clipping information
Exposure slider (Exposure adjustment controls)	*Red:* Indicates highlight clipping in the red color channel. *Green:* Indicates highlight clipping in the green color channel. *Blue:* Indicates highlight clipping in the blue color channel. *Yellow:* Indicates highlight clipping in the red and green color channels. *Pink:* Indicates highlight clipping in the red and blue color channels. *Cyan:* Indicates highlight clipping in the blue and green color channels. *White:* Indicates highlight clipping in all three color channels. *Black:* Indicates no highlight clipping in any color channel.
Recovery slider (Exposure adjustment controls)	*Red:* Indicates highlight clipping in the red color channel. *Green:* Indicates highlight clipping in the green color channel. *Blue:* Indicates highlight clipping in the blue color channel. *Yellow:* Indicates highlight clipping in the red and green color channels. *Pink:* Indicates highlight clipping in the red and blue color channels. *Cyan:* Indicates highlight clipping in the blue and green color channels. *White:* Indicates highlight clipping in all three color channels. *Black:* Indicates no highlight clipping in any color channel.

Adjustment	Color clipping information
Black Point slider (Exposure adjustment controls)	*Red:* Indicates shadow clipping in the red color channel. *Green:* Indicates shadow clipping in the green color channel. *Blue:* Indicates shadow clipping in the blue color channel. *Yellow:* Indicates shadow clipping in the red and green color channels. *Pink:* Indicates shadow clipping in the red and blue color channels. *Cyan:* Indicates shadow clipping in the blue and green color channels. *White:* Indicates no shadow clipping in any color channel. *Black:* Indicates shadow clipping in all three color channels.
Black Levels slider (Levels adjustment controls)	*Red:* Indicates shadow clipping in the red color channel. *Green:* Indicates shadow clipping in the green color channel. *Blue:* Indicates shadow clipping in the blue color channel. *Yellow:* Indicates shadow clipping in the red and green color channels. *Pink:* Indicates shadow clipping in the red and blue color channels. *Cyan:* Indicates shadow clipping in the blue and green color channels. *White:* Indicates no shadow clipping in any color channel. *Black:* Indicates shadow clipping in all three color channels.
White Levels slider (Levels adjustment controls)	*Red:* Indicates highlight clipping in the red color channel. *Green:* Indicates highlight clipping in the green color channel. *Blue:* Indicates highlight clipping in the blue color channel. *Yellow:* Indicates highlight clipping in the red and green color channels. *Pink:* Indicates highlight clipping in the red and blue color channels. *Cyan:* Indicates highlight clipping in the blue and green color channels. *White:* Indicates highlight clipping in all three color channels. *Black:* Indicates no highlight clipping in any color channel.

Monochrome Overlay Descriptions

The following table lists the monochrome overlays and the corresponding color channels that have been clipped by the adjustment slider setting.

Adjustment	Color clipping information
Exposure slider (Exposure adjustment controls)	*White:* Indicates highlight clipping in all color channels. *66% Gray:* Indicates highlight clipping in two color channels. *33% Gray:* Indicates highlight clipping in one color channel. *Black:* Indicates no highlight clipping in any color channel.
Recovery slider (Exposure adjustment controls)	*White:* Indicates highlight clipping in all color channels. *66% Gray:* Indicates highlight clipping in two color channels. *33% Gray:* Indicates highlight clipping in one color channel. *Black:* Indicates no highlight clipping in any color channel.
Black Point slider (Exposure adjustment controls)	*White:* Indicates no shadow clipping in any color channel. *66% Gray:* Indicates shadow clipping in one color channel. *33% Gray:* Indicates shadow clipping in two color channels. *Black:* Indicates shadow clipping in all three color channels.
Black Levels slider (Levels adjustment controls)	*White:* Indicates no shadow clipping in any color channel. *66% Gray:* Indicates shadow clipping in one color channel. *33% Gray:* Indicates shadow clipping in two color channels. *Black:* Indicates shadow clipping in all three color channels.
White Levels slider (Levels adjustment controls)	*White:* Indicates highlight clipping in all color channels. *66% Gray:* Indicates highlight clipping in two color channels. *33% Gray:* Indicates highlight clipping in one color channel. *Black:* Indicates no highlight clipping in any color channel.

Using the Color Meter

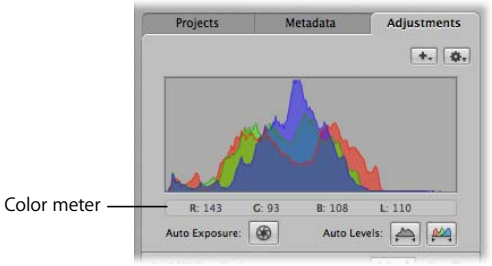
Aperture provides a built-in Color meter you can use to sample the color values in an image and display them as RGB, Lab, CMYK, HSL, or HSB values. When you place the pointer over an image or thumbnail, the color values are displayed in the Adjustments inspector or the Adjustments pane of the Inspector HUD. You can also use the Loupe for a more accurate pixel selection and see the color values displayed within the magnified area of the Loupe. When the pointer is moved away from the image, basic EXIF data values about the image are displayed in place of the color values, such as ISO setting, f-stop, shutter speed, and focal length.

Sampling Color Values

The Color meter displays the color values of the pixels in the image beneath the pointer or the target area of the Loupe.

To use the pointer to sample the color values in an image:

- Place the pointer over the area of the image where you want to sample the color values, and view the values at the top of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



To use the Loupe to sample color values in an image:

1. Click the Loupe button in the toolbar, or press the Grave Accent (`) key.
2. Choose View > Show Color Value in Loupe, or press Shift–Option–Grave Accent (`).
3. Place the target area of the Loupe over the area of the image where you want to sample the color values, and the values appear in the magnified area of the Loupe.

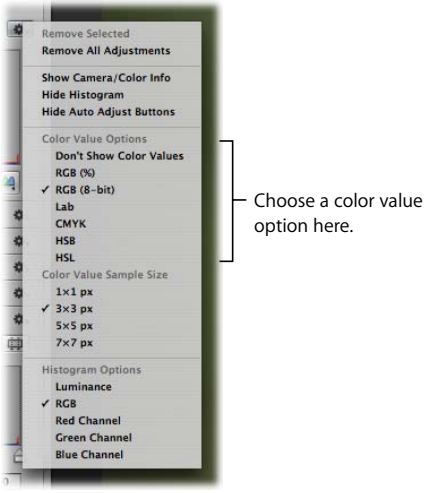


Choosing a Color Value Option

In Aperture, you can set the Color meter to display RGB, Lab, CMYK, HSB, or HSL color values.

To choose a color value option for the Color meter:

- In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose a color value option from the Adjustment Action pop-up menu.

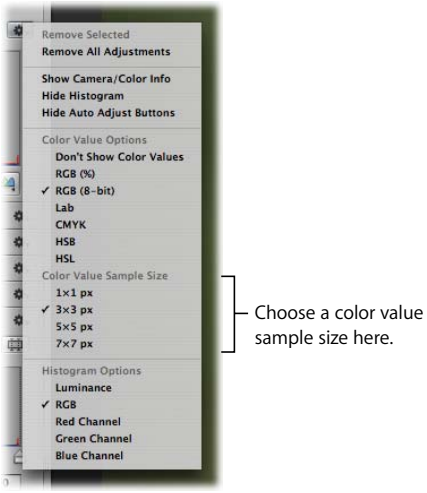


Choosing a Color Value Sample Size

You can also set the sample size (pixel area) Aperture uses to determine color values.

To choose a color value sample size for the Color meter:

- In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose an appropriate color value sample size from the Adjustment Action pop-up menu.



Using an External Editor

If you need to perform more advanced image operations, such as compositing, you can set an external editor for use within Aperture. First you have to specify which application Aperture should use and the 16-bit file format (TIFF or PSD). You only have to do this once. Then you select an image and choose a menu command to have the image open in the application designated as the external editor.

To set an external editor in Aperture:

1. Choose Aperture > Preferences, or press Command-Comma (,), then click Export.
2. Click the Choose button below the External Image Editor field, navigate to an application in the Select Application dialog, then click Select.

   The application's name appears in the External Image Editor field.
3. Choose the appropriate 16-bit file format (TIFF or PSD) from the External Editor File Format pop-up menu.

   This is the file format Aperture uses when opening files in external editors.

To use an external editor in Aperture:

1. Select an image in the Browser.
2. Choose Images > Edit With > [*Application Name*] (or press Command-Shift-O).

   Aperture creates a new master (leaving the original unchanged), converts it to the chosen file format, and then opens the image file in the selected external editor. The image file is tracked as a new master stacked with the original master.
3. When you've finished modifying the image in the external application, save the image file.

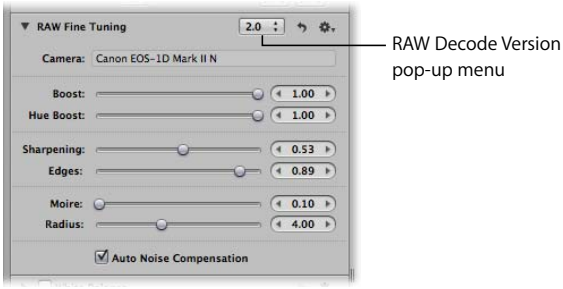
   The saved image file is automatically updated in Aperture.

Working with the RAW Fine Tuning Controls

You can modify how the Mac OS decodes RAW files using the adjustment controls in the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD. The Mac OS characterizes the RAW file format for each digital camera supported by Aperture. This calibration data usually results in the optimal decoding of the RAW image files for that camera. However, certain types of images require adjustments to how the Mac OS decodes the RAW image file.

The RAW Fine Tuning controls include the following parameters:

- *Boost:* Use the Boost and Hue Boost sliders and value sliders to control image contrast.
- *Sharpening:* Use the Sharpening and Edges sliders and value sliders to fine-tune the amount of sharpening you want applied to images during the RAW decoding process.
- *Moire:* Use the Moire and Radius sliders and value sliders to correct color fringing in high-contrast edges and the moire pattern effect found in images with subjects whose linear patterns introduce the effect, such as a brick wall or a picket fence.
- *Auto Noise Compensation:* Select this checkbox to turn on additional adjustments, such as noise reduction and stuck pixel removal, that are automatically applied to the image.



Note: Some controls in the RAW Fine Tuning area of the Adjustments inspector and the Adjustments pane of the Inspector HUD appear dimmed if these settings are not available for use with this camera model.

Using these controls, you can fine-tune your RAW decoding settings on an image-by-image basis. Aperture also enables you to save your customized RAW decoding settings as presets or as the default settings always used with a specific camera, so they are easily applied to newly imported images. For more information about saving your custom RAW Fine Tuning settings as the default for a specific camera, see "Setting the Camera Default" on page 358.

Using the Boost Controls

The Mac OS characterizes each digital camera's RAW file format to determine an optimal contrast setting. The Boost controls allow you to set the strength of the contrast when the RAW file is decoded. The Hue Boost controls are used to maintain the hues in the image as the contrast is increased using the Boost controls. When the Hue Boost parameter is set to 1.00 and the Boost parameter is set to 1.00, the hues of the primary and secondary colors are pinned to their pure color values, resulting in a shift of all the hues in the image. For images that consist of saturated primary and secondary colors, such as an image of flowers in a lush garden, shifting the hues to their true values has a desirable visual effect. However, this is not visually desirable for images containing skin tones. Shifting the hues most often causes the skin to appear yellow. Setting the Hue Boost parameter to 0.00 increases the color contrast in the image while preserving the original hues in the image.

To adjust the Boost parameters:

1. Select a RAW image imported with or migrated to Aperture 2.0 or later.

   The version is indicated by the RAW Decode Version pop-up menu.

2. In the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Boost parameter by doing one of the following:



Use the Boost slider and value slider to adjust the amount of contrast applied during the RAW decoding process.

- By default, the Boost slider is set to 1.00. Drag the Boost slider to the left to decrease the amount of contrast applied to the image during the RAW decoding process, and drag the Boost slider back to the right to increase it.
- Click the left or right arrow in the Boost value slider to adjust the contrast by 5 percent increments, or drag in the value field.
- Double-click the number in the Boost value slider, then enter a value from 0.00 to 1.00 and press Return.

  A value of 0.00 applies no contrast adjustment to the image during the RAW decoding process. A value greater than 0.00 increases the contrast adjustment to the image. A value of 1.00 applies the full Apple-recommended contrast adjustment for the specific camera model.

3 Adjust the Hue Boost parameter by doing one of the following:



Use the Hue Boost slider and value slider to protect hue fidelity during the RAW decoding process.

- By default, the Hue Boost slider is set to 1.00. Drag the Hue Boost slider to the left to preserve the accuracy of the hues, and drag the Hue Boost slider back to the right to allow the hues to shift during the RAW decoding process.
- Click the left or right arrow in the Hue Boost value slider to adjust the accuracy of the hues by 5 percent increments, or drag in the value field.
- Double-click the number in the Boost value slider, then enter a value from 0.00 to 1.00 and press Return.

  A value of 0.00 preserves the original hues in the image in relation to the Boost adjustment (color contrast) during the RAW decoding process. A value greater than 0.00 increases the hue adjustment to the image. A value of 1.00 applies the full Apple-recommended hue adjustment for the specific camera model.

Using the Sharpening Controls

You can turn on sharpening during the RAW decoding process by selecting the Sharpening checkbox in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

Note: The effect of sharpening an image or group of images using the RAW Fine Tuning adjustment is very subtle. More sharpening effects can be obtained using the Edge Sharpen adjustment. For more information about the Edge Sharpen adjustment, see "Working with the Edge Sharpen Controls" on page 459.

To adjust the sharpening applied during the RAW decoding process:

1. Select a RAW image imported with or migrated to Aperture 2.0 or later.

   The version is indicated by the RAW Decode Version pop-up menu.

2. Adjust the strength of the sharpening effect by doing one of the following:



Use the Sharpening slider and value slider to adjust the strength of the sharpening effect applied during the RAW decoding process.

   - The default value for the Sharpening slider and value slider is determined by the camera used to create the RAW image file. Drag the Sharpening slider to the right to increase the strength of the sharpening effect applied during the RAW decoding process, and drag the Sharpening slider back to the left to reduce it.
   - Click the left or right arrow in the Sharpening value slider to adjust the strength of the sharpening effect by 5 percent increments, or drag in the value field.
   - Double-click the number in the Sharpening value slider, then enter a value from 0.00 to 1.00 and press Return.

     A value of 0.00 applies no sharpening effect to the image during the RAW decoding process. A value greater than 0.00 increases the sharpening effect to the image.

3. Adjust how the sharpening effect is applied to edges by doing one of the following:



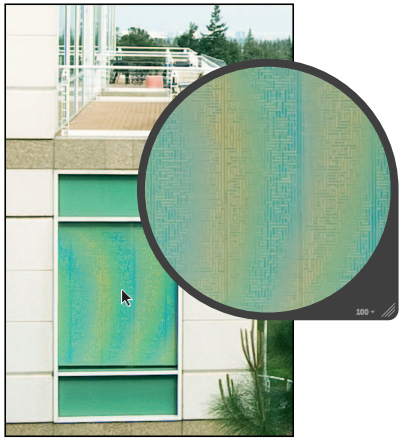
Use the Edges slider and value slider to adjust how the sharpening effect is applied to edges during the RAW decoding process.

   - The default value for the Edges slider and value slider is determined by the camera used to create the RAW image file. Drag the Edges slider to the right to intensify the sharpening effect that occurs at "hard" edges (areas where significant color changes occur) during the RAW decoding process, and drag the Sharpening slider back to the left to limit it.
   - Click the left or right arrow in the Edges value slider to adjust the strength of the sharpening effect that occurs at hard edges by 5 percent increments, or drag in the value field.
   - Double-click the number in the Edges value slider, then enter a value from 0.00 to 1.00 and press Return.

     A value greater than 0.00 intensifies the sharpening effect on hard edges.

Using the Moire Controls

Digital images often have color artifacts that appear around edges and lines because of noise created by digital image sensors. Images whose subjects have linear patterns often introduce a moire pattern that gives the subject a wrinkled or rainbow-colored appearance. In addition, cameras with image sensors employing Bayer patterns often introduce noise to monochromatic images. The Moire adjustment controls identify these patterns and correct these artifacts.



Because many digital cameras have weak anti-aliasing filters, the Moire and Radius parameters are specifically used to correct aliasing in an image caused by high-color-contrast edges. Weak anti-aliasing filters tend to curve edges, skewing the colors in the process. During the RAW decoding process, the Mac OS scans for high-frequency information in the RAW file, looking for blended colors, and then replaces the blended colors with the edge colors that originally existed in the scene. The Moire parameter adjusts the amount of signal to apply the adjustment to. The Radius parameter adjusts the pixel area (visual threshold) the adjustment is applied to.

Note: The Moire controls replace the Chroma Blur controls found in previous versions of Aperture. For more information, see "Using the Chroma Blur Controls from Aperture 1.1" on page 359.

To adjust the Moire and Radius parameters:

1. Select a RAW image imported with or migrated to Aperture 2.0 or later.

   The version is indicated by the RAW Decode Version pop-up menu.

2. Adjust the amount of signal to apply the Moire adjustment to by doing one of the following:



Use the Moire slider and value slider to adjust the amount of signal the Moire adjustment is applied to during the RAW decoding process.

   - The default value for the Moire slider and value slider is 0.10. Drag the Moire slider to the right to increase the amount of signal the Moire adjustment is applied to during the RAW decoding process, and drag the Moire slider back to the left to reduce it.
   - Click the left or right arrow in the Moire value slider to adjust the intensity by 10 percent increments, or drag in the value field.
   - Double-click the number in the Moire value slider, then enter a value from 0.10 to 10.00 and press Return.

     A value of 0.10 applies the least amount of moire correction during the RAW decoding process. A value greater than 0.10 increases the moire correction during the RAW decoding process.

3. Adjust the pixel area (visual threshold) the Moire adjustment is applied to by doing one of the following:



Use the Radius slider and value slider to adjust the visual threshold of the Moire adjustment during the RAW decoding process.

   - The default value for the Radius slider and value slider is 4.00 pixels. Drag the Radius slider to the right to increase the area over which the Moire adjustment is applied during the RAW decoding process, and drag the Radius slider back to the left to reduce it.
   - Click the left or right arrow in the Moire value slider to adjust the radius by 10 percent increments, or drag in the value field.
   - Double-click the number in the Radius value slider, then enter a value from 0.10 to 10.00 and press Return.

     A value of 0.10 is the most limited area over which Moire correction is applied during the RAW decoding process. A value greater than 0.10 increases area over which the Moire correction is applied during the RAW decoding process.

Turning On Automatic Noise-Compensation Adjustments

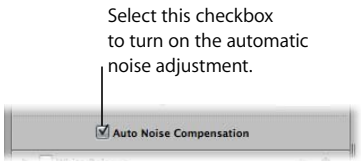
Digital image sensors produce noisy images at certain settings (generally high ISO settings and long exposures). The Mac OS analyzes the noise characteristics of each camera and uses them to control parameters such as sharpness. You can turn on the automatic adjustment by selecting the Auto Noise Compensation checkbox.

To turn on the automatic noise-compensation adjustment:

1. Select a RAW image imported with or migrated to Aperture 2.0 or later.

   The version is indicated by the RAW Decode Version pop-up menu.

2. In the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, select the Auto Noise Compensation checkbox.



Aperture applies the automatic noise-compensation adjustment.

Working with DNG Files

In Aperture, you can adjust how the Mac OS decodes RAW images in the DNG format. If the digital camera is supported by Aperture, the calibration data for that camera is used to decode the RAW file in the same manner as if it were decoded from the RAW file format itself. If the DNG file is from an unsupported camera, Aperture uses the camera information stored in the DNG file to decode the image.

To adjust the RAW Fine Tuning parameters of a DNG file:

1. Select a DNG file decoded to Aperture 2.0 or later.

   The version is indicated by the RAW Decode Version pop-up menu.

2. If the camera is supported by Aperture, the RAW Decode Version pop-up menu displays "2.0." If the camera is not supported by Aperture, the RAW Decode Version pop-up menu displays "2.0 DNG."

3. Adjust the RAW Fine Tuning parameters as necessary for the image.

Setting the Camera Default

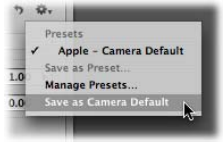
When you've modified the RAW decoding settings using the controls in the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, you can save these settings as the default parameter values for the camera model. All RAW image files from this camera model imported into Aperture are decoded using these saved settings.



The camera model is displayed in the Camera field.

To set the camera default:

1. In the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Save as Camera Default from the Preset Action pop-up menu.



The Adjustment Presets dialog appears.

2. Enter a name for the preset and click OK.

The Preset Action pop-up menu displays the preset's name with a checkmark next to it.

You can always clear the saved camera default settings.

To clear the camera default settings:

- Delete the camera preset. For more information about deleting adjustment presets, see "Deleting Adjustment Presets" on page 342.

You can also set the RAW Fine Tuning controls to use the Apple-recommended RAW decoding settings.

To use the Apple-recommended camera default settings:

- In the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Apple - Camera Default from the Preset Action pop-up menu.

A checkmark appears next to Apple - Camera Default in the Preset Action pop-up menu.

Using the Chroma Blur Controls from Aperture 1.1

In previous versions of Aperture, the RAW Fine Tuning controls had a Chroma Blur adjustment that corrected color artifacts that appear in digital images because of noise created by digital image sensors. The Moire controls in Aperture 2 replace the Chroma Blur controls.

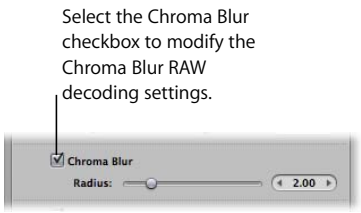
The Chroma Blur adjustment controls slightly smear the color to correct color artifacts that often occur in images shot at high ISO speeds. The Mac OS characterizes each digital camera's RAW file format to determine the appropriate chroma blur value. When you select the Chroma Blur checkbox in the Adjustments inspector or the Adjustments pane of the Inspector HUD, this default chroma blur adjustment is turned off, allowing you to set your own chroma blur value.

To adjust the Chroma Blur parameter:

1. Select a RAW image imported with or migrated to Aperture 1.1.

   The version is indicated by the RAW Decode Version pop-up menu.

2. In the Adjustments inspector or the Adjustments pane of the Inspector HUD, select the Chroma Blur checkbox.



3. Adjust the area over which the chroma blur effect is applied by doing one of the following:

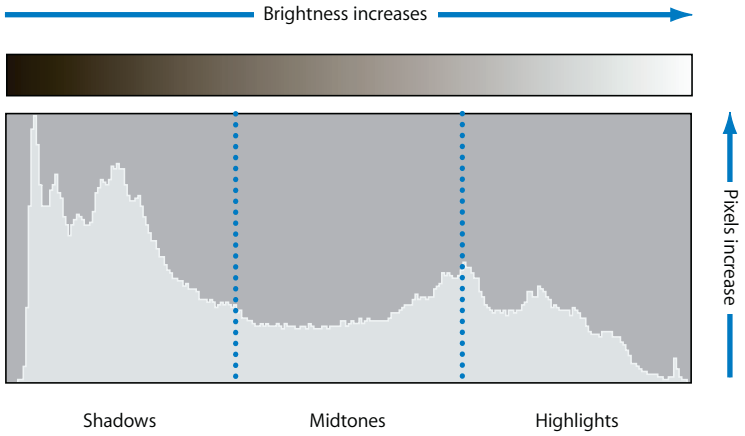


- The default value for the Radius slider and value slider is determined by the camera used to create the RAW image file. Drag the Radius slider to the right to increase the radius of the area over which the chroma blur effect is applied during the RAW decoding process, and drag the Radius slider back to the left to reduce it.
- Click the left or right arrow in the Radius value slider to adjust the radius by increments of one-tenth of a pixel, or drag in the value field.
- Double-click the number in the Radius value slider, then enter a value from 0.10 to 10.00 and press Return.

  A value of 0.10 applies the least amount of chroma blur during the RAW decoding process. A value greater than 0.10 increases the chroma blur effect during the RAW decoding process.

Understanding How to Read Histograms

The histogram is a graph that displays relative brightness in an image, from pure black to pure white. The area under the graph represents all the pixels in the image. From left to right, the histogram describes the range of dark pixels (shadows), gray pixels (midtones), and bright pixels (highlights) in the image. The shape of the histogram graph depends on the tonality of the scene and the exposure.



Evaluating Exposure

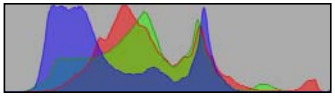
Histograms are good tools for evaluating exposure. For example, a series of peaks in the darker side of the histogram often indicates an underexposed image that consists mainly of dark pixels.





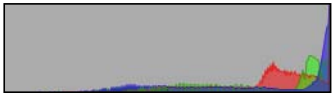
A series of peaks in the center of the histogram often indicates a balanced exposure because a majority of the pixels are concentrated within the midtones of the histogram. They're not too dark or too bright.





However, a series of peaks in the brighter side of the histogram often indicates an overexposed image because most of the pixels in the image are too bright.





Evaluating Tonality and Contrast

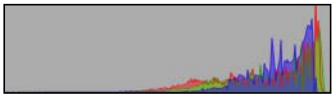
Although histogram graphs are good tools for evaluating an image's exposure, you shouldn't interpret histograms for exposure information only, because the shape of the histogram is also influenced by the tonality in the scene. You need to take the subject of the image into account when evaluating its histogram. For example, images shot at night are naturally going to have a majority of peaks in the darker side of the histogram.





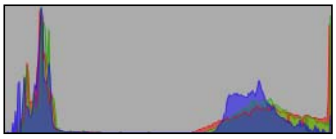
Likewise, images of bright scenes, such as snow or light reflecting off the ocean, have a majority of their peaks in the brighter side of the histogram.





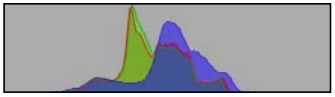
Histograms can also depict contrast in an image. For example, this silhouette of the man in the hammock in front of the sunset consists of a relatively even assortment of extreme bright and dark tonal values with few midtones. In this case, the histogram is shaped like a valley with peaks in both the dark and bright sides.





Likewise, histograms can also depict lack of contrast in an image. For example, an image of a rainbow in the fog lacks contrast. Without directional lighting, there aren't any highlights or shadows in the image. In this case, the peaks of the histogram are concentrated in the center and do not come close to either the dark or bright sides.





Using Histograms to Correct Images

A histogram can also be used as a tool to evaluate whether or not there is enough shadow, midtone, and highlight information in the image. Aperture provides two histograms in the Adjustments inspector and the Adjustments pane of the Inspector HUD. The histogram above the adjustment controls indicates the current state of the image. The Levels histogram included with the Levels adjustment controls provides a way to adjust the brightness values in the image in relation to the displayed histogram. You use the Levels controls to adjust the shadow, dark quarter-tone, midtone, light quarter-tone, and highlight values independently of each other without affecting the other areas of the image. For more information about performing levels adjustments, see "Working with the Levels Controls" on page 429.

About Making Adjustments Onscreen

Human eyes perceive color subjectively. It's difficult for the human eye to make objective changes to the colors in an image because the brain is so advanced that it skews the perception of colors to make them appear as natural as possible. For this reason, it is essential that you create the best possible work environment for performing color adjustments. Such an environment excludes extraneous colors that have the potential to throw off your eye.

Creating a Good Work Environment

Before you begin making color adjustments to your images, it's important to pay attention to the following:

- Set your display to its highest-resolution setting. This will give you the best view of your image.
- Make sure you are employing good color management. This means that your displays and printers are calibrated and their profiles are up to date. For more information about calibrating and profiling your Aperture system, see Appendix B, "Calibrating Your Aperture System," on page 637.
- Reduce the ambient light in the room you are working in to prevent the light from skewing your perception of the colors on your screens, and make sure your displays are set to their brightest levels.
- If possible, paint the walls in the room in which you perform detailed image adjustments a neutral gray. Keep bright-colored objects to a minimum to ensure that the colors on your screens are not altered by the color in the rest of the room.

Making Image Adjustments

15

You use adjustment controls when you want to perfect an image. The type of adjustment control you use depends on the aspect of the image you are trying to change.

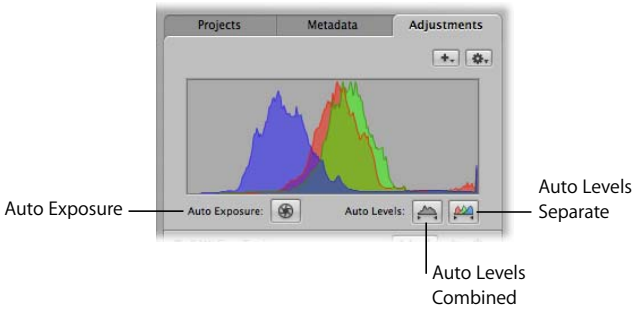
This chapter provides detailed information about using adjustment controls to perfect your image.

This chapter covers:

- Working with Automatic Adjustments (p. 366)
- Working with the Red Eye Correction Controls (p. 373)
- Working with the Retouch and Spot & Patch Controls (p. 381)
- Working with the Devignette Controls (p. 398)
- Working with the Straighten Controls (p. 399)
- Working with the Crop Controls (p. 402)
- Working with the White Balance Controls (p. 408)
- Working with the Exposure Controls (p. 412)
- Working with the Enhance Controls (p. 417)
- Working with the Levels Controls (p. 429)
- Working with the Highlights & Shadows Controls (p. 435)
- Working with the Color Controls (p. 445)
- Working with the Monochrome Mixer Controls (p. 452)
- Working with the Color Monochrome Controls (p. 455)
- Working with the Sepia Tone Controls (p. 456)
- Working with the Noise Reduction Controls (p. 457)
- Working with the Sharpen and Edge Sharpen Controls (p. 458)
- Working with the Vignette Controls (p. 463)

Working with Automatic Adjustments

Aperture comes with a set of automatic adjustment controls. These controls analyze the image and apply an adjustment to the image based on that analysis. This is a good way to make a quick correction to an image before fine-tuning the adjustment with the manual adjustment controls.



The automatic adjustments include:

- *Auto Exposure button:* Click the button to have Aperture automatically adjust the exposure of the selected RAW image.
- *Auto Levels Combined button:* Click the button to have Aperture automatically adjust the levels in the selected image based on the combined luminance values of all three color channels.
- *Auto Levels Separate button:* Click the button to have Aperture automatically adjust the levels in the selected image by individual color channels.

Using the Auto Exposure Button

When you want to quickly adjust the exposure of a RAW image, you can use the Auto Exposure button. Depending on the exposure Aperture sets for the image, you can always fine-tune the image's exposure setting using the Exposure controls. For more information about manually adjusting the exposure of an image, see "Working with the Exposure Controls" on page 412.



Before Auto Exposure adjustment



After Auto Exposure adjustment

Note: Automatic exposure adjustment is available for Aperture-supported RAW images only. If you want to adjust the exposure of another file type, such as JPEG or TIFF, see "Working with the Exposure Controls" on page 412. For a list of supported RAW file types, go to the Apple website at http://www.apple.com/aperture/raw.

To automatically correct the exposure of a RAW image:

1. Select an image.
2. In either the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Auto Exposure button.



Click the Auto Exposure button to automatically set the exposure for the image.

The exposure of the image is automatically corrected. If you need to fine-tune the image's exposure setting, see "Working with the Exposure Controls" on page 412.

You can always reset the image to its original exposure.

To reset the exposure of an image:

- Choose Edit > Undo Auto Exposure (or press Command-Z).

Using the Auto Levels Combined Button

When you want to quickly adjust the levels of an image based on total luminance values—red, green, and blue channels combined—you use the Auto Levels Combined button. Red, green, and blue channels are adjusted by the same amount based on the total luminance. You use the Auto Levels Combined button when you want to correct the contrast of the image without modifying the color cast of the image.



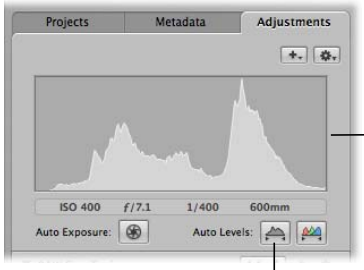
Before Auto Levels Combined adjustment



After Auto Levels Combined adjustment

To automatically adjust the levels of an image based on total luminance:

1. Select an image.
2. In either the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Auto Levels Combined button.



The luminance histogram is displayed as a gray graph.

Click the Auto Levels Combined button to automatically set the levels for the image based on the combined luminance of all three color channels.

The levels of the image are automatically adjusted. To fine-tune the levels adjustment, see "Working with the Levels Controls" on page 429.

Using the Auto Levels Separate Button

When you want to automatically adjust the levels of an image based on individual evaluations of the red, green, and blue channels, you use the Auto Levels Separate button. Red, green, and blue channels are adjusted based on the evaluation of each channel. You use the Auto Levels Separate button when you want to correct the color cast in the image in addition to correcting the contrast.



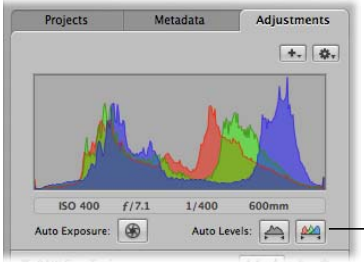
Before Auto Levels Separate adjustment



After Auto Levels Separate adjustment

To automatically adjust the levels based on an evaluation of each color channel:

1. Select an image.
2. In either the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Auto Levels Separate button.



Click the Auto Levels Separate button to automatically set the levels for the image based on an evaluation of each color channel's luminance values.

The levels of the image are automatically adjusted for each color channel. To fine-tune the levels adjustment, see "Working with the Levels Controls" on page 429.

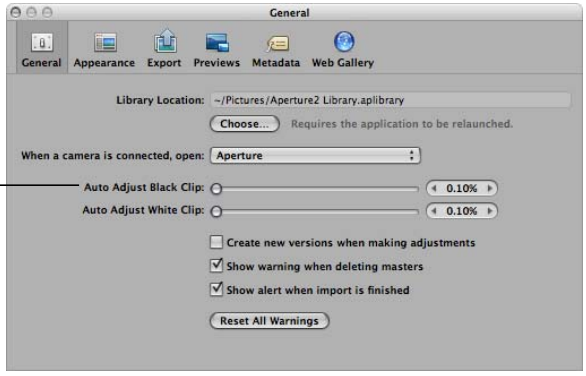
Setting the Auto Levels Options

Aperture provides the option to set both the black and white clipping point parameters for the Auto Levels adjustments. Modifying the black and white clipping points from their default value of 0% expands the tonal range of the image. One reason for expanding the tonal range of an image is to preserve shadow and highlight detail when the image is printed.

Note: You may have to perform a few print tests to determine the output characteristics of your printer before settling on final values for black and white clipping points.

To adjust the black clipping point:

1 Choose Aperture > Preferences, then click General.



Use the Auto Adjust Black Clip slider and value slider to add tolerance to Auto Levels adjustments when evaluating colors beyond black.

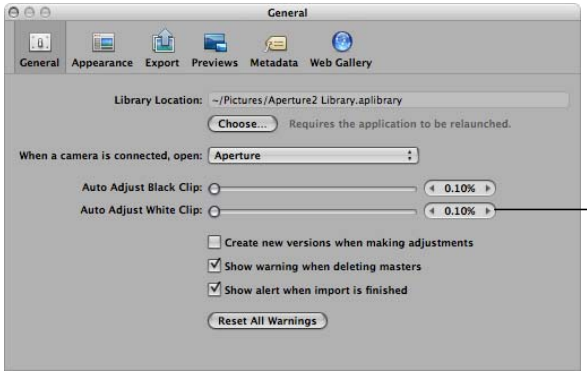
- By default, the Auto Adjust Black Clip slider is set to the left side of the slider control. Drag the slider to the right to increase the tolerance of Auto Levels adjustments to colors beyond the analyzed black point in the image, and drag the slider back to the left to reduce the tolerance.
- By default, the Auto Adjust Black Clip value slider is set to 0%. Double-click the number in the value slider, then enter a value from 0% to 10% and press Return.
- Click the left or right arrow in the value slider to change the tolerance of Auto Levels adjustments to colors beyond the analyzed black point in the image, or drag in the value field.

  The left arrow reduces the tolerance, and the right arrow increases it.

2 Once the black clipping point is adjusted, click either the Auto Levels Combined or Auto Levels Separate button in the Adjustments inspector or the Adjustments pane of the Inspector HUD to view the effect on the image.

To adjust the white clipping point:

1 Choose Aperture > Preferences, then click General.



Use the Auto Adjust White Clip slider and value slider to add tolerance to Auto Levels adjustments when evaluating colors beyond white.

- By default, the Auto Adjust White Clip slider is set to the left side of the slider control. Drag the slider to the right to increase the tolerance of Auto Levels adjustments to colors beyond the analyzed white point in the image, and drag the slider back to the left to reduce the tolerance.
- By default, the Auto Adjust White Clip value slider is set to 0%. Double-click the number in the value slider, then enter a value from 0% to 10% and press Return.
- Click the left or right arrow in the value slider to change the tolerance of Auto Levels adjustments to colors beyond the analyzed white point in the image, or drag in the value field.

  The left arrow reduces the tolerance, and the right arrow increases it.

2 Once the white clipping point is adjusted, click either the Auto Levels Combined or Auto Levels Separate button in the Adjustments inspector or the Adjustments pane of the Inspector HUD to view the effect on the image.

Resetting Auto Levels Adjustments

You can always reset the levels of your image back to their original values.

To reset the levels of the image:

- Choose Edit > Undo Auto Adjust (or press Command-Z).

Working with the Red Eye Correction Controls

You use the Red Eye tool and the Red Eye Correction adjustment controls to reduce the red-eye effect in the eyes of the subjects in your image. You use the Red Eye tool to place targets on the red eyes of the subjects in the image, and then you can adjust the radius and sensitivity of the target overlays using the Red Eye Correction controls. Aperture desaturates the red pixels within the target overlay area, reducing the effect.

Reducing Red-Eye Using the Red Eye Tool

Reducing red-eye in the eyes of the subjects in your image is as simple as targeting them with the Red Eye tool.

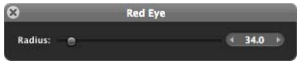


Before Red Eye adjustment

After Red Eye adjustment

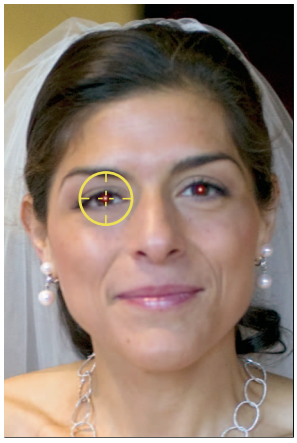
To remove red-eye with the Red Eye tool:

1. Select an image.
2. It's a good idea to set the image to appear at full size (100 percent) to prevent image scaling from obscuring details. To display images at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).
3. Select the Red Eye tool in the tool strip or Full Screen toolbar (or press E).



The pointer changes to a target, and the Red Eye HUD appears.

4 Click a red eye in the image to place a Red Eye target overlay on it.



The Red Eye target overlay is placed over the red eye, and the red pixels within the Red Eye target overlay are desaturated.

5 Repeat step 4 until all of the red eyes in your image are corrected.

Adjusting the Size of Red Eye Target Overlays

Aperture fixes red-eye in your images by desaturating the red pixels within the Red Eye target overlay area. It's a good idea to fit each Red Eye target overlay to the size of the eye it covers. This prevents any red pixels in the skin around your subject's eyes or in clothing, such as a scarf or hat, from being affected by the red-eye adjustment. You may also need to increase the size of a Red Eye target overlay to completely encompass the eye you are targeting if the image is a close-up. You can adjust the size of a Red Eye target overlay before and after it's placed on the image.

To change the size of the Red Eye tool's target, do one of the following:

- Drag the Radius slider in the Red Eye HUD.



Drag the Radius slider in the Red Eye HUD to adjust the size of the Red Eye target overlay that the tool places on an image.

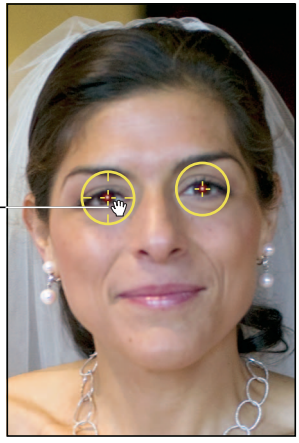
- If you have a mouse device with a scroll wheel, rotate the scroll wheel.

  The size of the Red Eye tool's target changes.

You can also change the size of any Red Eye target overlay that you've already placed on an image.

To change the size of an existing Red Eye target overlay:

1. Display the image at full size (100 percent) by clicking the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or pressing Z).
2. Click the Red Eye target overlay to select it.

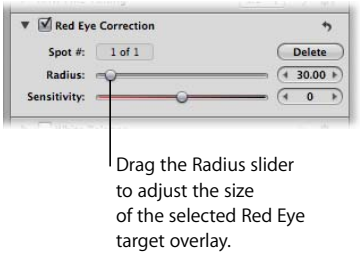


The Red Eye tool changes to a hand icon to indicate that you can select the Red Eye target overlay.

A hand icon appears to indicate that you can select the Red Eye target overlay.

3 If necessary, click the Inspector button (or press I) to show the Inspector pane, or press H to show the Inspector HUD.

4 In the Red Eye Correction area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Radius parameter by doing one of the following:



- Drag the Radius slider.
- Click the left or right arrow in the Radius value slider to change the size of the Red Eye target overlay by single increments, or drag in the value field.
- Double-click the number in the Radius value slider, then enter a value from 3.00 to 400.00.

The size of the Red Eye target overlay increases as the parameter value increases.

Adjusting the Sensitivity of Red Eye Target Overlays

When you select a red eye in a picture, Aperture automatically chooses the area within the target overlay circle where the desaturation is applied. In a few cases, the area chosen by Aperture might be either slightly too wide or slightly too small (typically including a few pixels in the eyelid skin, or missing a few red pixels inside the pupil). For these difficult cases, you can adjust the Sensitivity parameter to change the area where desaturation occurs. For example, dragging the Sensitivity slider to the left by one notch decreases the size of the active area within the Red Eye target overlay by one pixel, and dragging the Sensitivity slider one notch to the right enlarges it by one pixel.



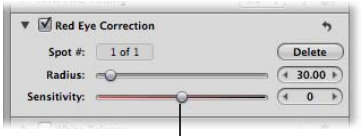
Before Sensitivity adjustment (the eyelids are desaturated)



After Sensitivity adjustment

To adjust the sensitivity of a Red Eye target overlay:

1. Click the Red Eye target overlay to select it.
2. In the Red Eye Correction area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Sensitivity parameter by doing one of the following:



Use the Sensitivity slider and value slider to fine-tune the area within the Red Eye target overlay where desaturation occurs.

- Drag the Sensitivity slider.
- Click the left or right arrow in the Sensitivity value slider to change the sensitivity of the Red Eye target overlay by single-pixel increments, or drag in the value field.
- Double-click the number in the Sensitivity value slider, then enter a value from –10.00 to 10.00 and press Return.

The area within the Red Eye target overlay where desaturation occurs increases as the parameter value increases.

Viewing the Corrected Image Without Red Eye Target Overlays

After correcting the red eyes in your image, you can view the corrected image with the Red Eye target overlays turned off.

To view the corrected image with the Red Eye target overlays turned off:

- Select the Selection tool in the tool strip or the Full Screen view toolbar (or press A).

The Red Eye target overlays disappear, but the effect of the red-eye adjustment remains visible.

Note: You can still make adjustments to the targeted red eyes with the overlays turned off, and the image updates to show the changes.

To turn the Red Eye target overlays on again:

- Select the Red Eye tool in the tool strip or the Full Screen view toolbar (or press E).

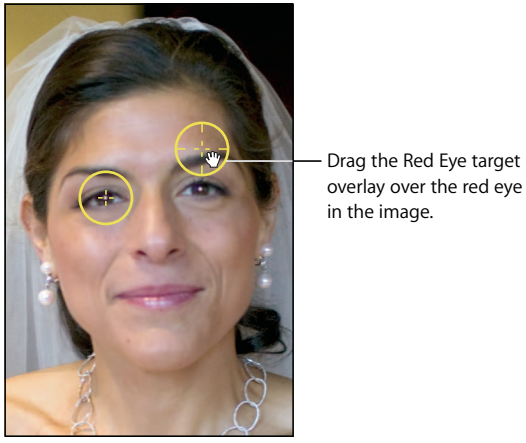
  The Red Eye target overlays reappear.

Moving Red Eye Target Overlays

Once placed, a Red Eye target overlay can always be moved.

To move a Red Eye target overlay:

1. Make sure the Red Eye tool is selected, then place the Red Eye tool's target over the Red Eye target overlay you want to move until the target changes to a hand icon.



   The hand icon indicates that you can drag the target overlay rather than place a new one.

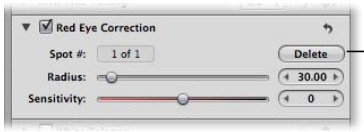
2. Drag the Red Eye target overlay to the appropriate position over the subject's eye.

Deleting Red Eye Target Overlays

You can always delete a Red Eye target overlay.

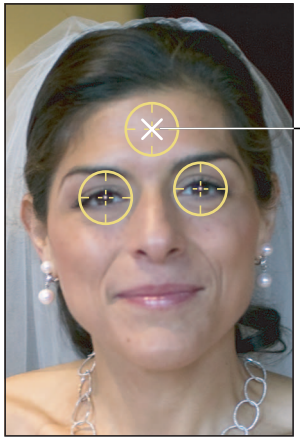
To delete a Red Eye target overlay, do one of the following:

- Select a Red Eye target overlay in the image, then click the Delete button in the Red Eye Correction area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



Click the Delete button to delete a Red Eye target overlay.

- Command-click a Red Eye target overlay.



Command-click a Red Eye target overlay to delete it.

The Red Eye target overlay disappears.

Working with the Retouch and Spot & Patch Controls

Aperture provides two sets of controls that you can use to retouch your image: Spot & Patch and Retouch.

Which Retouching Tool Should You Use?

In the vast majority of cases, Retouch provides the controls that will best serve your image-repair needs. The Spot & Patch controls have been included in Aperture 2 in order to retain the integrity of images that were adjusted with earlier versions of Aperture. In many cases, image repairs might even be improved by removing an existing Spot & Patch repair and replacing it with Repair or Clone repairs performed with the Retouch tool. For more information about the Retouch tool, see "Working with the Retouch Controls," next.

There are certain situations in which Spot & Patch is the tool of choice. For example, an artifact on or very near a curved edge in an image may be more effectively removed using the Angle control. For more information about the Spot & Patch adjustment controls, see "Working with the Spot & Patch Controls" on page 386.

Working with the Retouch Controls

You use the Retouch tool and brushes to touch up imperfections in the image caused by sensor dust, image artifacts, and other environmental conditions. You can also copy an element of an image and paste it in another area for purely aesthetic reasons. Aperture provides two methods for retouching your images. The method you use depends on whether you are trying to copy texture from the source while preserving hard edges at the destination (where the blemish is) or simply copy pixels from one area of the image and replace them over another.

If the area you need to repair has a hard edge near the problem area, you use the "repair" method. You also use the repair method when you want to copy high-frequency texture from one area of the image (the source) and brush the texture over the destination area while maintaining the underlying color and shading of the destination area.

The second method, "cloning," is used when you simply want to copy pixels from one area and paste them on another area. Cloning is useful when you want to copy an element of an image as is, such as a bird, and paste it in another area.

Repairing Your Images

You use the Repair brush when the area surrounding the blemish has elements of high contrast, such as an edge, or when you need to copy texture from the source area and maintain the color and shading in the destination area.



Before Repair adjustment



After Repair adjustment

To retouch an image using the Repair brush:

1. Select an image.
2. It's a good idea to set the image to appear at full size (100 percent) to prevent image scaling from obscuring details. To display images at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).
3. Select the Retouch tool in the tool strip or the Full Screen view toolbar (or press X).

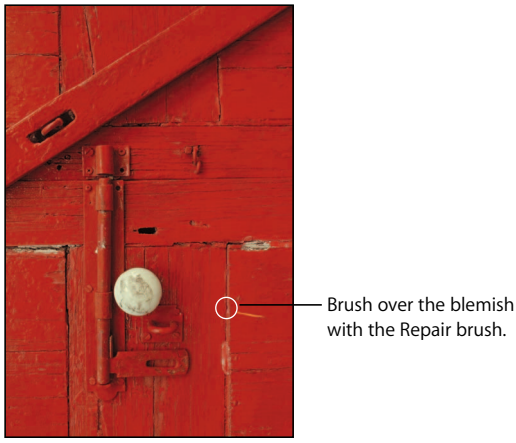


The pointer changes to a target, and the Retouch HUD appears.

4 In the Retouch HUD, do the following:

- Click the Repair button.
- Set the radius of the brush by dragging the Radius slider or entering a value in the Radius value slider.
- Set the softness of the brush by dragging the Softness slider or entering a value in the Softness value slider.
- Set the Opacity of the brush by dragging the Opacity slider or entering a value in the Opacity value slider.

5 If you need to copy pixels from another area of the image, deselect the "Automatically choose source" checkbox, and Option-click while brushing over the source area.

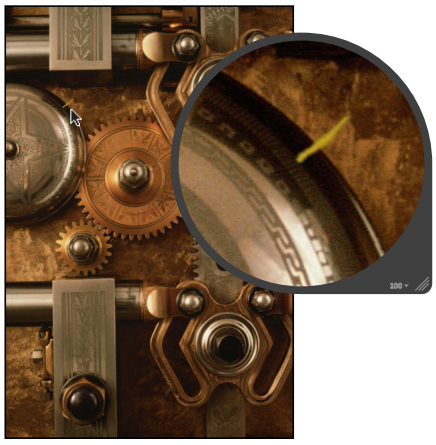


6 Brush over the area with the imperfection.

7 Repeat step 6 until the imperfection disappears.

Cloning Your Images

You use the Clone brush to copy pixels from an area of the image with similar visual elements and paste the pixels over the area with the imperfection. No pixels are blended from the area surrounding the brush stroke.



Before Clone adjustment



After Clone adjustment

To retouch an image using the Clone brush:

1. Select an image.
2. It's a good idea to set the image to appear at full size (100 percent) to prevent image scaling from obscuring details. To display images at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).
3. Select the Retouch tool in the tool strip or the Full Screen view toolbar (or press X).

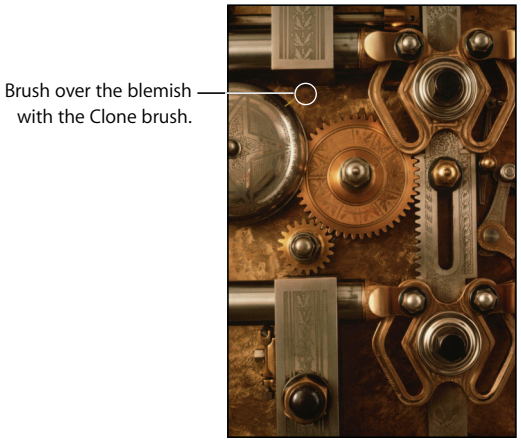


The pointer changes to a target, and the Retouch HUD appears.

4 In the Retouch HUD, do the following:

- Select the Clone button.
- Set the radius of the brush by dragging the Radius slider or entering a value in the Radius value slider.
- Set the softness of the brush by dragging the Softness slider or entering a value in the Softness value slider.
- Set the Opacity of the brush by dragging the Opacity slider or entering a value in the Opacity value slider.

5 Option-click while brushing over the source area (the area where you want to copy the pixels).



6 Brush over the area with the imperfection.

7 Repeat step 6 until the imperfection disappears.

Deleting Retouch Brush Strokes

You can delete a Retouch brush stroke at any time. Because pixels in brush strokes are sampled sequentially, brush strokes can only be deleted in reverse order.

To delete a brush stroke:

1 Click the Delete button in the Retouch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



2 Repeat step 1 until the brush stroke you want to remove is deleted.

Working with the Spot & Patch Controls

You use the Spot & Patch tool and adjustment controls when you need to modify Spot & Patch parameter settings that were applied using previous versions of Aperture.

Spotting Your Images

When the area around the blemish is continuous (such as a solid color) and doesn't contain a distinct texture, you can use the spotting method to obscure the blemish by integrating the pixels that surround it. You fix a blemish by placing the Spot & Patch target overlay over the blemish in the image and then adjusting the size of the target overlay so that it just barely covers the blemish. By keeping the target overlay small, you minimize the chance of a visual aberration in the final image. Aperture provides additional parameter controls to allow you to adjust the softness, opacity, and amount of detail in the cloned pixels, so that the corrected area looks as natural as possible.



Before Spot & Patch adjustment (spotting)



After Spot & Patch adjustment (spotting)

To spot an image:

1. Select an image.
2. It's a good idea to set the image to appear at full size (100 percent) to prevent image scaling from obscuring details. To display an image at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).
3. Select the Spot & Patch tool in the tool strip or the Full Screen view toolbar.



The pointer changes to a target, and the Spot & Patch HUD appears.

4. Click the blemish area to place the Spot & Patch target overlay on it.



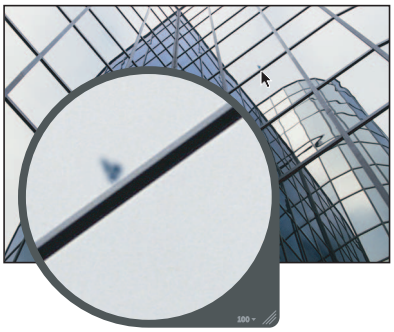
The yellow Spot & Patch target overlay is placed over the blemish, and the blemish disappears.

Note: You can always adjust the size of the target overlay and other parameters. For more information, see "Using the Spot & Patch Controls" on page 391.

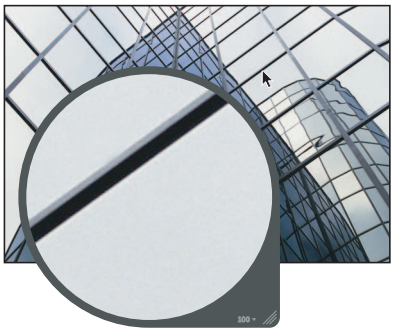
5. Repeat step 4 until all of the blemishes in your image are removed.

Patching Your Images

When you need to clone pixels from a different area of an image to fix the area where the blemish is, you use the "patching" method. Patching is similar to spotting, except that there are some additional steps. You first place a Spot & Patch overlay (yellow) over the blemish, and then you place a source target overlay (white) over the area you want to clone. The pixels in the Spot & Patch target overlay are replaced by the pixels copied from the source target overlay. Aperture provides additional parameter controls to allow you to adjust the size of target overlays and the softness, opacity, and amount of detail in cloned pixels, so that the patched area looks as natural as possible.



Before Spot & Patch adjustment (patching)



After Spot & Patch adjustment (patching)

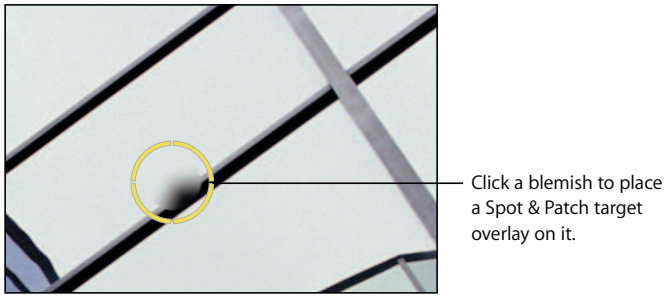
To patch a blemish in an image:

1. Select an image.
2. It's a good idea to set the image to appear at full size (100 percent) to prevent image scaling from obscuring details. To display an image at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).
3. Select the Spot & Patch tool in the tool strip or the Full Screen view toolbar.



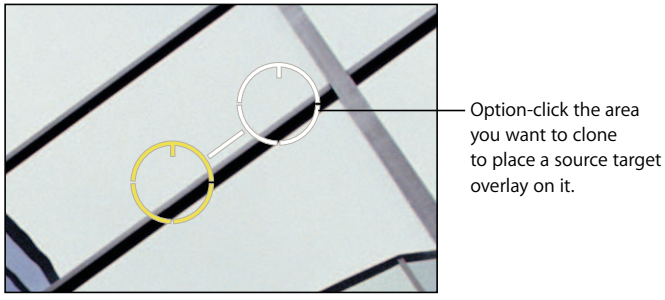
The pointer changes to a target, and the Spot & Patch HUD appears.

4 Click the blemish area to place a Spot & Patch target overlay on it.



A yellow target overlay is placed over the blemish, and the blemish is replaced by the pixels that surround it. This yellow target overlay is the destination target overlay.

5 Do one of the following:



- Select the Patch checkbox in the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, then drag the white source target overlay to the area you want to clone (the source area).
- Option-click the area you want to clone.

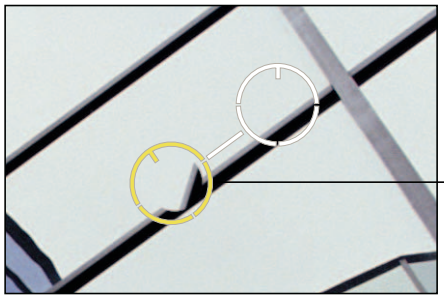
  A white source target overlay appears and is placed over the source area.

The pixels within the source target overlay are copied and replace the pixels within the destination target overlay. The blemish is patched.

Note: You can always adjust the size of the target overlay and other parameters. For more information, see "Using the Spot & Patch Controls" on page 391.

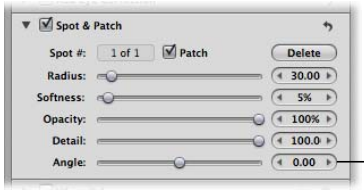
6 Repeat steps 4 and 5 until all blemishes are removed from your image.

You can adjust the angle of the cloned pixels within the destination target overlay. Adjusting the angle rotates the cloned pixels over the destination area. This is particularly useful if you're cloning an area that has visual elements, such as a pattern or line, that are at a different angle from elements in the destination area. The angle adjustment allows you to match the angle of the pixels within the destination target overlay.



To adjust the angle of the cloned pixels within a destination target overlay:

- In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Angle parameter by doing one of the following:



Use the Angle slider and value slider to adjust the angle of the pixels in the destination target overlay.

- Drag the Angle slider to the left to rotate the cloned pixels counterclockwise, or drag the Angle slider to the right to rotate the cloned pixels clockwise.
- Click the left or right arrow in the Angle value slider, or drag in the value field.
- Double-click the number in the Angle value slider, then enter a value from –180.00 to 180.00 and press Return.

A negative value rotates the cloned pixels counterclockwise, and a positive value rotates the cloned pixels clockwise.

Using the Spot & Patch Controls

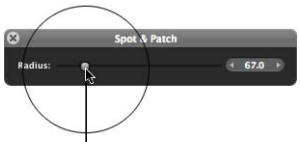
When using the Spot & Patch tool to spot or patch your images, you can modify the appearance of the pixels within the target overlays using the Spot & Patch adjustment controls. You can also adjust the size of Spot & Patch target overlays.

Adjusting the Size of Spot & Patch Target Overlays

You can change the size of a Spot & Patch target overlay before and after it's placed on an image. It's best to adjust the size of the target overlay so it fits the area around the blemish as tightly as possible. A tight fit ensures that any visual aberrations are minimal.

To change the size of the Spot & Patch tool's target, do one of the following:

- Drag the Radius slider in the Spot & Patch HUD.



Drag the Radius slider in the Spot & Patch HUD to adjust the size of the Spot & Patch target overlay that the tool places on an image.

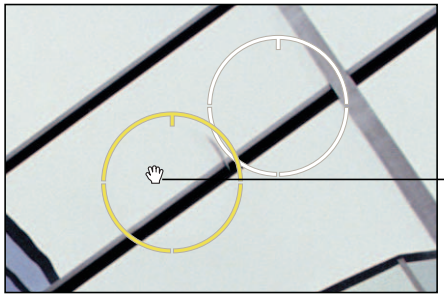
- Click the left or right arrow in the Radius value slider, or drag in the value field.
- Double-click the number in the Radius value slider, then enter a value from 3.00 to 400.0 and press Return.
- If you have a mouse with a scroll wheel, rotate the scroll wheel.

The size of the Spot & Patch tool's target changes.

You can also change the size of any Spot & Patch target overlay that you've already placed on an image.

To change the size of an existing Spot & Patch target overlay:

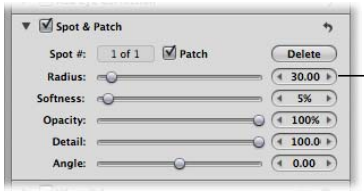
1. Display the image at full size (100 percent) by clicking the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or pressing Z).
2. Click a Spot & Patch target overlay to select it.



A hand icon appears to indicate that you can select the Spot & Patch target overlay.

A hand icon appears to indicate that you can select the Spot & Patch target overlay rather than place a new one.

3. In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Radius parameter by doing one of the following:



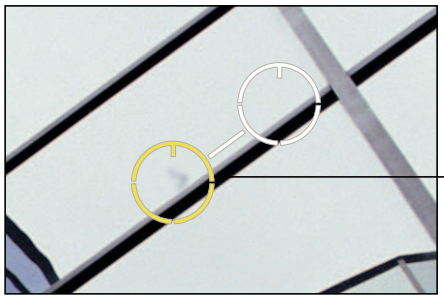
Use the Radius slider and value slider to adjust the size of previously placed Spot & Patch target overlays.

- Drag the Radius slider.
- Click the left or right arrow in the Radius value slider to change the radius of the Spot & Patch target overlay by single-pixel increments, or drag in the value field.
- Double-click the number in the Radius value slider, then enter a value from 3.00 to 400.00 and press Return.

The size of the Spot & Patch target overlay increases as the parameter value increases.

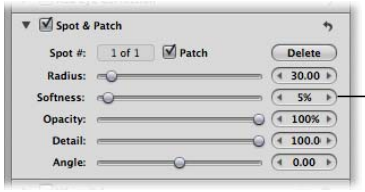
Adjusting the Softness Within Spot & Patch Target Overlays

You can also change the "softness" of cloned pixels within Spot & Patch target overlays. Softness describes how well the area within the target overlay blends in with the surrounding image area. The Softness parameter controls the blending of pixels between the center of the Spot & Patch target overlay and the circumference. The higher the Softness parameter value, the closer to the center the pixel blending occurs. The lower the parameter value, the less pixel blending occurs, resulting in a "hard edge".



To adjust the softness of pixels within a Spot & Patch target overlay:

- In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Softness parameter by doing one of the following:



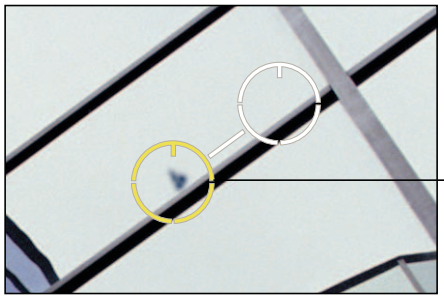
Use the Softness slider and value slider to make the edges of the Spot & Patch target overlay blend better with the surrounding image area.

- Drag the Softness slider.
- Click the left or right arrow in the Softness value slider, or drag in the value field.
- Double-click the number in the Softness value slider, then enter a value from 0% to 100% and press Return.

A low value decreases the softness of pixels within the Spot & Patch target overlay, and a high value increases the softness.

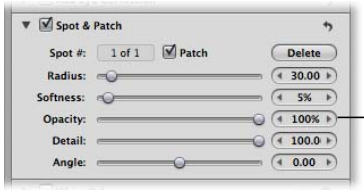
Adjusting the Opacity Within Spot & Patch Target Overlays

Another method of modifying Spot & Patch target overlays to make cloned pixels blend in better with surrounding pixels is to adjust the opacity of pixels in the target overlay. The higher the Opacity parameter value, the more the cloned pixels obscure the original pixels they cover.



To adjust the opacity of cloned pixels in a Spot & Patch target overlay:

- In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Opacity parameter by doing one of the following:



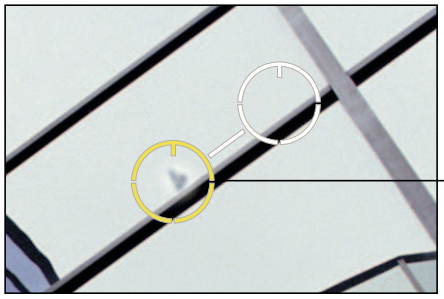
Use the Opacity slider and value slider to adjust the opacity of the cloned pixels in the target overlay.

  - Drag the Opacity slider.
  - Click the left or right arrow in the Opacity value slider, or drag in the value field.
  - Double-click the number in the Opacity value slider, then enter a value from 0.00 to 100.00 and press Return.

  A low value decreases the opacity of the cloned pixels in the Spot & Patch target overlay, and a high value increases the opacity.

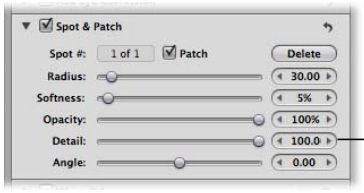
Adjusting the Detail Within Spot & Patch Overlays

In addition to adjusting softness and opacity in Spot & Patch target overlays, you can adjust the amount of detail, such as texture or grain, that is preserved in the cloned pixels.



To adjust the amount of detail in cloned pixels in a Spot & Patch target overlay:

- In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Detail parameter by doing one of the following:



- Drag the Detail slider.
- Click the left or right arrow in the Detail value slider, or drag in the value field.
- Double-click the number in the Detail value slider, then enter a value from 0% to 100% and press Return.

A low value decreases the amount of detail, such as texture or grain, preserved in the cloned pixels, and a high value increases the amount of detail.

Viewing the Corrected Image Without Spot & Patch Target Overlays

After retouching the blemishes in your image, you can view the corrected image with the Spot & Patch target overlays turned off.

To view the corrected image with the Spot & Patch target overlays turned off:

- Select the Selection tool in the tool strip or the Full Screen view toolbar (or press A).

  The Spot & Patch target overlays disappear, but the effects of the Spot & Patch adjustments remain visible.

To turn the Spot & Patch target overlays on again:

- Select the Spot & Patch tool in the tool strip or the Full Screen view toolbar.

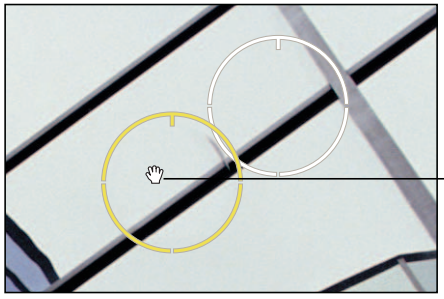
  The Spot & Patch target overlays reappear.

Moving Spot & Patch Target Overlays

Once placed, a Spot & Patch target overlay can always be moved.

To move a Spot & Patch target overlay:

1. Make sure the Spot & Patch tool is selected, then place the Spot & Patch tool's target over the Spot & Patch target overlay you want to move until the target changes to a hand icon.



   The hand icon indicates that you can drag the target overlay rather than place a new one.

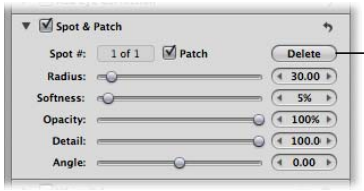
2. Drag the Spot & Patch target overlay to the appropriate position on the image.

Deleting Spot & Patch Target Overlays

You can delete a Spot & Patch target overlay at any time.

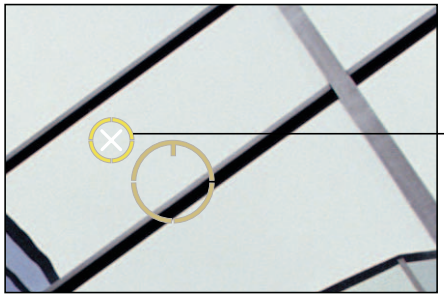
To delete a Spot & Patch target overlay:

- Select a Spot & Patch target overlay in the image, then click the Delete button in the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



Click the Delete button to delete a Spot & Patch target overlay.

- Command-click the Spot & Patch target overlay.



Command-click a Spot & Patch target overlay to delete it.

The Spot & Patch target overlay disappears.

Working with the Devignette Controls

You use the Devignette controls to correct a vignette that was applied to an image as it was shot. The term *vignette* describes an image whose brightness fades to its periphery from its center. Vignettes are usually caused by poor lens design, stacked filters, lens hoods, and wide-angle zoom lenses. Aperture corrects the image by increasing the brightness on the edges of the image where vignettes typically occur.

Note: When you apply a devignette and crop adjustment to the same image, Aperture applies the devignette adjustment prior to the crop in order to correct lens artifacts. Applying the devignette adjustment before the crop prevents any distortion that would otherwise appear in the cropped image.



Before Devignette adjustment



After Devignette adjustment

To remove the vignette from your image:

1. Select an image.
2. In the Devignette area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Amount parameter by doing one of the following:

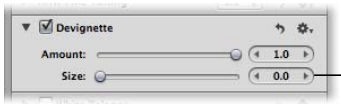


Use the Amount slider and value slider to adjust the amount of brightness applied to the edges of the image.

- Drag the Amount slider to the left to decrease amount of brightness applied to the edges of the image, or drag it to the right to increase the brightness.
- Click the left or right arrow in the Amount value slider to change the brightness applied to edges of the image, or drag in the value field.

  The left arrow decreases the amount of brightness applied to the edges of the image, and the right arrow increases the brightness.
- Double-click the number in the Amount value slider, then enter a value from 0.0 to 1.0 and press Return.

3 To adjust the distance Aperture goes from the edge of the image, in pixels, to apply the devignette adjustment, do one of the following:



Use the Size slider and value slider to adjust the size of the area over which the devignette adjustment is applied.

- Drag the Size slider to the right to increase the number of pixels Aperture goes toward the center of the image to apply the devignette adjustment, or drag it to the left to limit the vignette to the edges of the image.
- Click the left or right arrow in the Size value slider, or drag in the value field.

  The left arrow limits the devignette adjustment to the edges of the image, and the right arrow moves the devignette adjustment toward the center point of the image.
- Double-click the number in the Size value slider, then enter a value from 0.0 to 2.00 and press Return.

The vignette is removed from the image.

You can also apply a vignette to an image. For more information, see "Working with the Vignette Controls" on page 463.

Working with the Straighten Controls

When you shoot photos, environmental conditions often make it difficult to frame an image that is level in relation to the horizon—either real or virtual. In Aperture, you can straighten an image so that the horizon in the image is parallel to the bottom and top edges.



Before Straighten adjustment



After Straighten adjustment

You can use two different methods to straighten your images. You can use either the Straighten tool or the Straighten adjustment controls. However, you may find it most efficient to use the Straighten tool to quickly level the image so that it's roughly straight, and then use the Straighten controls for more precision.

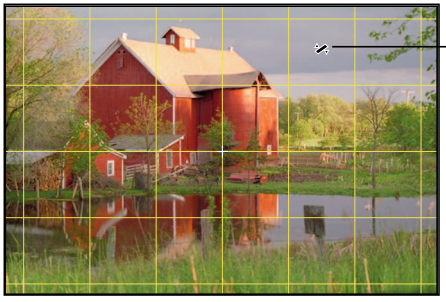
Rotating Images with the Straighten Tool

Rotating an image with the Straighten tool is as simple as selecting the tool and dragging within the image to make it straight. However, it's important to understand that although the image appears to enlarge as you rotate it, Aperture actually crops the image so that it fits within its rectangular border without blank edges appearing on the sides.

To straighten your image using the Straighten tool:

1. Select an image.
2. Select the Straighten tool in the tool strip or the Full Screen view toolbar (or press G).

   The Selection tool changes to the Straighten tool.
3. With the Straighten tool selected, drag within the image to rotate it either clockwise or counterclockwise.



As you rotate the image, a yellow grid overlay appears to help you make the horizon perfectly straight, and the image is cropped to prevent gaps from appearing in the corners of the image.

Note: It's a good idea to turn zooming off when straightening an image, so that the full image fits within the Viewer. If an image is zoomed in to actual size, you can turn off zooming by clicking the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or pressing Z).

Rotating Images with the Straighten Controls

You can also straighten an image using the Straighten adjustment controls. Using these controls provides more precision.

To straighten an image using the Straighten controls:

1. Select the image.
2. If the Straighten controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Straighten from the Add Adjustments pop-up menu.
3. Change the value for the Rotate parameter by doing one of the following:



Use the Rotate slider and value slider to straighten the image.

- Drag the Rotate slider.
- Click the left or right arrow in the Rotate value slider, or drag in the value field.
- Double-click the number in the Rotate value slider, then enter a value from –20 to 20 degrees and press Return.

Decreasing the value rotates the image clockwise, and increasing the value rotates the image counterclockwise.

As you rotate the image, a yellow grid overlay appears to help you make the horizon perfectly straight, and the image is cropped to prevent gaps from appearing in the corners of the image.

Note: It's a good idea to turn zooming off when straightening an image, so that the full image fits within the Viewer. If an image is zoomed in to actual size, you can turn off zooming by clicking the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or pressing Z).

Working with the Crop Controls

You use the Crop tool and Crop adjustment controls when you want to improve the composition of your image by trimming the edges, or when you want to change the aspect ratio of the image. For example, you can change an image's aspect ratio from 4 x 6 to 3 x 5.



Before Crop adjustment



After Crop adjustment

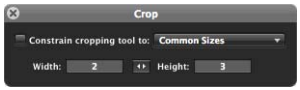
There are two methods for cropping an image: you can either use the Crop tool to manually crop the image, or you can use the Crop adjustment controls. The method you choose is determined by the level of precision you require. The Crop tool provides a fast freehand method and works in conjunction with a Crop HUD that contains controls for setting the aspect ratio of the crop. The extra precision provided by the Crop controls is useful when you want to specify exact dimensions for the cropped image.

Cropping Images with the Crop Tool

Cropping an image with the Crop tool is the easiest method. You simply select the Crop tool and drag a rectangle over your image to exclude the unwanted areas. The Crop HUD appears, providing additional controls for setting the aspect ratio of the image.

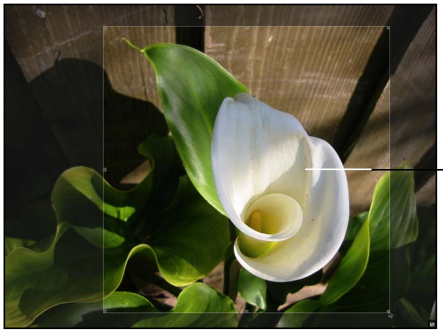
To crop an image using the Crop tool:

1. Select an image.
2. Select the Crop tool in the tool strip or the Full Screen view toolbar (or press C).



The Selection tool changes to the Crop tool, and the Crop HUD appears.

3. With the Crop tool selected, drag a rectangle over the image to exclude the areas that you want to trim.



Drag across the image with the Crop tool. A dark overlay is placed over the trimmed areas.

A Crop overlay appears on the image with resize handles, and the trimmed edges are dimmed. When you release the mouse button, the image is cropped. For instructions on viewing the cropped image without the Crop overlay, see "Displaying the Cropped Image Without the Crop Overlay" on page 406.

After adding a Crop overlay to an image, you can always change its size and shape.

To change the size and shape of a Crop overlay:

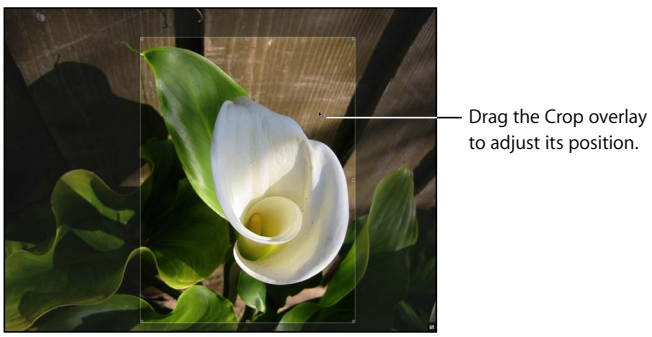
- Drag a resize handle on the Crop overlay to change the size of the crop.



You can adjust the placement of the crop by moving the Crop overlay across the image.

To adjust the placement of the crop:

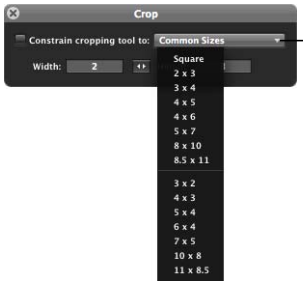
- Drag the Crop overlay to the appropriate position.



You can also set the Crop overlay to a specific aspect ratio using the Crop HUD.

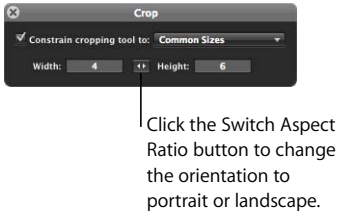
To set the aspect ratio of the Crop overlay:

1 In the Crop HUD, choose an aspect ratio from the Common Sizes pop-up menu.



The Crop overlay updates to match the chosen aspect ratio. The "Constrain cropping tool to" checkbox in the Crop HUD is automatically selected.

2 If you wish, click the Switch Aspect Ratio button to switch the orientation of the Crop overlay to portrait or landscape.



The values in the Width and Height fields are reversed, and the Crop overlay updates to show the new orientation. (Entering a number in the Width field that is smaller than the number in the Height field sets a portrait orientation. Entering a larger number in the Width field sets a landscape orientation.)

Displaying the Cropped Image Without the Crop Overlay

When the Crop tool is selected, the whole image is shown, with the trimmed edges dimmed. You can also have Aperture display the cropped image without the trimmed edges.

To display the cropped image without the trimmed edges:

- Select another tool in the tool strip or the Full Screen view toolbar, such as the Selection tool (or press A).

  Select the Crop tool (or press C) to make the trimmed edges visible in the Viewer again.

Cropping Images with the Crop Controls

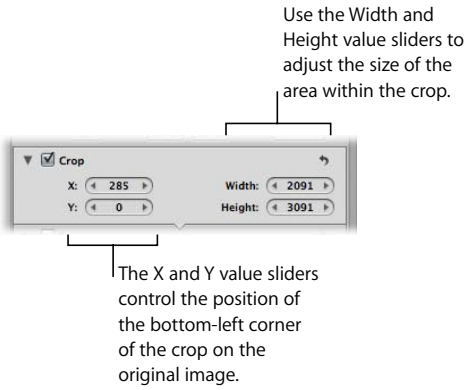
You use the Crop adjustment controls when an extra level of precision is required. For example, if a client wants an image cropped to a precise dimension that is different from the standard aspect ratios, you use the Crop controls.

Aperture uses a simple coordinate system to position the Crop overlay on the image. You simply set x and y coordinates to specify the position of the bottom-left corner of the crop. The x-coordinate moves the bottom-left corner of the crop horizontally, and the y-coordinate moves the bottom-left corner of the crop vertically. Then you set the width and height to determine the area within the crop.

To set crop dimensions using the Crop controls:

1. Select an image.
2. If you wish, use the Crop tool to place a rough crop on the image.
3. If the Crop controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Crop from the Add Adjustments pop-up menu.

4 In the Crop area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the X value slider's left or right arrow, or double-click the number and enter a new number, to set the horizontal position of the bottom-left corner of the crop.



The X value is measured in pixels, and as the value increases, the crop moves to the right.

5 Specify the vertical position of the bottom-left corner of the crop using the Y value slider.

The Y value is measured in pixels, and as the value increases, the crop moves up.

6 Specify the width of the crop using the Width value slider.

The width is measured in pixels, and the measurement starts at the bottom-left corner, increasing from left to right.

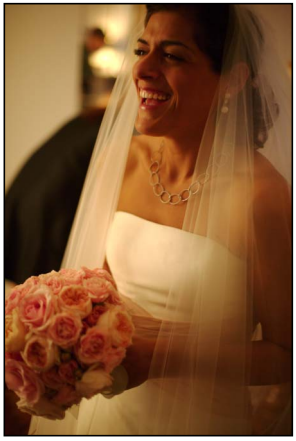
7 Specify the height of the crop using the Height value slider.

The height is measured in pixels, and the measurement starts at the bottom-left corner, increasing from bottom to top.

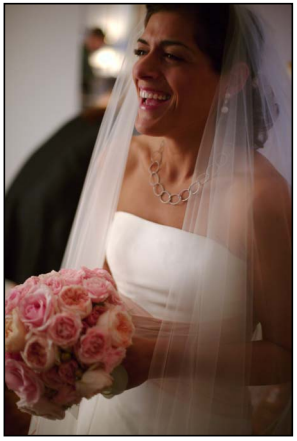
Working with the White Balance Controls

You use the White Balance adjustment controls to change the color temperature and color tint of an image. If an image has pixels that are supposed to be pure white, you can use the White Balance eyedropper to automatically adjust the color temperature and tint, or you can adjust the color temperature and tint manually. In most cases, the automatic adjustment succeeds in removing the color cast from the image. If the White Balance eyedropper does not completely remove the color cast from the image, you can use the Temp and Tint adjustment controls to fine-tune the image.

Although Aperture can set the white balance of the image with great accuracy, sometimes you have to use a combination of these two methods to have the image appear with the warm or cool tonality you intended.



Before White Balance adjustment



After White Balance adjustment

Adjusting White Balance in the Image with the White Balance Eyedropper

When you have pixels in your image that should be pure white, you can use the White Balance eyedropper tool to automatically set the color temperature and tint of the image. All you have to do is select a portion of the image that contains neutral gray pixels with the White Balance eyedropper, and Aperture white balances the image instantaneously.

To adjust the color temperature and tint with the White Balance eyedropper:

1. Select an image.
2. In the White Balance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, select the White Balance eyedropper.



Click the White Balance eyedropper tool to activate the Loupe.

The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see "Viewing Images with the Loupe" on page 185.

3. Position the target area of the Loupe over the pixels in the image that are a neutral gray, then click.



The white balance of the image is adjusted. The color tonality of the image is shifted either cooler or warmer, depending on the white-balance adjustment.

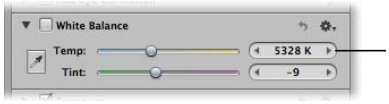
Important: Make sure that there is as little digital noise in the target area of the Loupe as possible. Digital noise can skew the white-balance calculation results, introducing a color cast that wasn't previously there. A simple way to avoid errant pixels is to increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+).

Adjusting the Color Temperature of the Image with the Temp Controls

You can also adjust the color temperature of an image manually using the Temp parameter controls. *Color temperature* is a term used to describe the color of light when the image was shot. However, it refers to the color value of the light rather than its heat value. Light's color temperature is measured in units called *kelvin* (K). Adjusting the color temperature of the image changes how Aperture interprets the colors in the image in relation to the assigned temperature of light. The purpose of adjusting the color temperature of an image is to make colors look as natural as possible.

To manually adjust the color temperature of an image:

1. Select an image.
2. In the White Balance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Temp parameter by doing one of the following:



Use the Temp slider and value slider to adjust the color temperature of the image.

- Drag the Temp slider to the left to cool the tonality of the image, or drag it to the right to warm the tonality.
- Click the left or right arrow in the Temp value slider to change the brightness of the image by 10 K increments, or drag in the value field.

  The left arrow decreases the color temperature of the image, and the right arrow increases the color temperature.
- Double-click the number in the Temp value slider, then enter a value from 2000 K to 50,000 K and press Return.

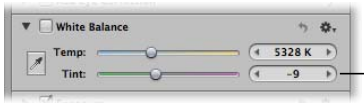
The color temperature of the image updates as you change the parameter value.

Adjusting the Tint of the Image with the Tint Controls

You can also manually adjust the tint of an image using the Tint parameter controls. You use the Tint parameter controls when you need to fine-tune the white balance adjustment by neutralizing the remaining green or magenta tint.

To manually adjust the tint of your image:

1. Select an image.
2. In the White Balance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Tint parameter by doing one of the following:



Use the Tint slider and value slider to adjust the tint of the image.

- Drag the Tint slider to the left to add a green tint to the image, or drag it to the right to add a magenta tint.
- Click the left or right arrow in the Tint value slider to change the tint of the image by single increments, or drag in the value field.

  The left arrow adds a green tint to the image, and the right arrow adds a magenta tint.
- Double-click the number in the Tint value slider, then enter a value from –150 to 150 and press Return.

The image's tint updates as you change the parameter value.

Working with the Exposure Controls

You use the Exposure adjustment controls to set the exposure, recovery, black point, and brightness values.

Correcting Exposure in the Image

If you've over- or underexposed an image, you can correct it by adjusting the Exposure parameter. The amount of latitude you have—the visually acceptable range of f-stops—depends on the file type and the bit depth of the image. Typically, a RAW file is capable of a slightly wider latitude than a JPEG file.



Before Exposure adjustment



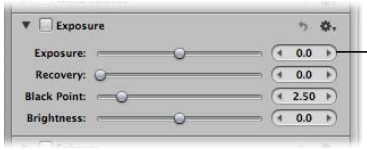
After Exposure adjustment

Note: The amount of latitude depends on the camera, bit depth, file format, and amount of compression applied during capture. For optimum results, you should shoot your images within 1.5 stops of a balanced exposure.

To correct the exposure of an image:

1 Select an image.

2 In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Exposure parameter by doing one of the following:



Use the Exposure slider and value slider to correct the image's exposure.

- Drag the Exposure slider.
- Click the left or right arrow in the Exposure value slider to change the exposure of the image by tenths of an f-stop, or drag in the value field.
- Double-click the number in the Exposure value slider, then enter a value from –9.99 to 9.99 stops and press Return.

A negative value decreases the exposure (darkening the image), and a positive value increases the exposure (lightening the image). The exposure of the image updates as you change the parameter value.

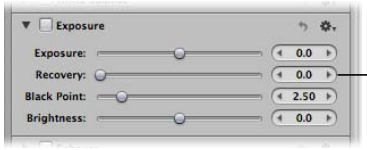
Recovering Highlight Details in the Image

Many images, especially RAW image files, have additional highlight detail that isn't displayed by default. Aperture provides the Recovery parameter controls to give you access to that additional headroom. Because digital image sensors differ from camera model to camera model, the highlight headroom varies. In some cases, you can recover significant detail that appears lost or blown out in the most extreme highlight areas of the image.

Note: The Recovery slider is not available for RAW decoding versions 1.0 and 1.1. To make the Recovery slider available, migrate the image to Aperture 2.0 or later. For more information, see "Working with the RAW Fine Tuning Controls" on page 351.

To recover highlight details in the image:

1. Select an image.
2. In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Recovery parameter by doing one of the following:



- Drag the Recovery slider.
- Click the left or right arrow in the Recovery value slider to change the amount of highlight detail in the image to recover by 5 percent increments, or drag in the value field.
- Double-click the number in the Recovery value slider, then enter a value from 0.00 to 1.50 and press Return.

The higher the value, the more highlight information is made available, and the more highlight detail is recovered.

The image's highlights update as you change the parameter value.

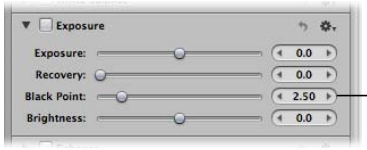
Setting the Image's Blacks

Shadow detail and the importance of visual elements in shadow vary from image to image. In addition, some cameras are more capable of capturing shadow details than others. In some images, such as a person's face in the shadow of an alley, the shadow is the most important visual element in the image. In other images, the details in the shadows have nothing to do with the main subject of the image. For example, the shadow area of the image may obscure trash that would otherwise ruin a pristine image. In Aperture, you use the Black Point parameter controls to increase the threshold of shadow details in the image as well as crush the blacks when necessary.

Note: The Black Point slider is not available for RAW decoding versions 1.0 and 1.1. To make the Black Point slider available, migrate the image to Aperture 2.0 or later. For more information, see "Working with the RAW Fine Tuning Controls" on page 351.

To set the black point of the image:

1. Select an image.
2. In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Black Point parameter by doing one of the following:



- Drag the Black Point slider.
- Click the left or right arrow in the Black Point value slider to change the shadow detail in the image to recover by 5 percent increments, or drag in the value field.
- Double-click the number in the Black Point value slider, then enter a value from –5.00 to 50.00 and press Return.

Decreasing the value increases the amount of detail in the shadow areas by moving pure black below the current black point. Increasing the value decreases the amount of detail in the shadow areas of the image, effectively crushing the blacks by moving pure black above the current black point.

The image's black point updates as you change the parameter value.

Adjusting Brightness in the Image

You can adjust the Brightness parameter when you want to lighten or darken your image. When you make a brightness adjustment, the brightness values of the midtone pixels in the image change the most. You can change the brightness of the image temporarily to see how the adjustment affects details in the shadows, midtones, and highlights. For more precise control over the range of tonality in the image, consider using the Levels adjustment controls. For more information about adjusting levels, see "Working with the Levels Controls" on page 429.



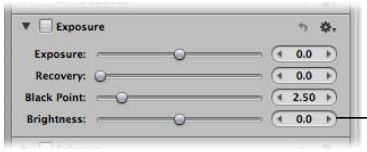
Before Brightness adjustment



After Brightness adjustment

To adjust brightness in an image:

1. Select an image.
2. In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Brightness parameter by doing one of the following:



Use the Brightness slider and value slider to lighten or darken the image.

- Drag the Brightness slider.
- Click the left or right arrow in the Brightness value slider to change the brightness of the image by 5 percent increments, or drag in the value field.
- Double-click the number in the Brightness value slider, then enter a value from –2.00 to 2.00 and press Return.

A value below 0.0 decreases the brightness of the image. A value greater than 0.0 increases the brightness of the image. The brightness of the image updates as you change the parameter value.

Working with the Enhance Controls

You use the Enhance adjustment controls to set the contrast, definition, saturation, and vibrancy, as well as the black, gray, and white tint values.

Adjusting Contrast in the Image

If you want to adjust the difference between the dark and bright areas of the image, you can modify the Contrast parameter. An image with very little midtone tonality is considered to have a lot of contrast, whereas an image with considerable midtone tonality is considered to have minimal contrast. Often, an image with too much midtone tonality looks flat. Adding contrast to the image can add depth to it. However, you add contrast to the image at the expense of detail in the midtones, so a little contrast goes a long way.



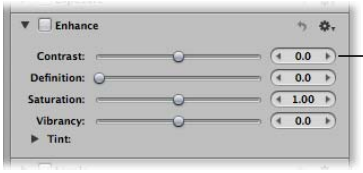
Before Contrast adjustment



After Contrast adjustment

To adjust the contrast in an image:

1. Select an image.
2. In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Contrast parameter by doing one of the following:



Use the Contrast slider and value slider to modify the contrast between light and dark colors in the image.

- Drag the Contrast slider.
- Click the left or right arrow in the Contrast value slider to change the contrast of the image by 5 percent increments, or drag in the value field.
- Double-click the number in the Contrast value slider, then enter a value from –1.00 to 1.00 and press Return.

A value below 0.0 decreases the contrast in the image. A value greater than 0.0 increases the contrast in the image. The contrast in the image updates as you change the parameter value.

Note: If you're trying to retrieve detail in a high-contrast image, you should use the Highlights & Shadows controls. For more information, see "Working with the Highlights & Shadows Controls" on page 435.

Adjusting Definition in the Image

When you want to add a little clarity and definition to an image without adding too much contrast, you use the Definition parameter controls. The Definition parameter is useful for adding local contrast (adding contrast to areas of the image that are improved by a contrast adjustment without affecting the image's global contrast), as well as reducing haze.



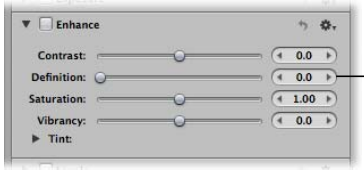
Before Definition adjustment



After Definition adjustment

To adjust definition in an image:

1. Select an image.
2. In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Contrast parameter by doing one of the following:



Use the Definition slider and value slider to add local contrast to the image.

- Drag the Definition slider.
- Click the left or right arrow in the Definition value slider to change the clarity of the image by 5 percent increments, or drag in the value field.
- Double-click the number in the Definition value slider, then enter a value from 0.0 to 1.00 and press Return.

A value greater than 0.0 increases the clarity in the image. The definition in the image updates as you change the parameter value.

Adjusting Saturation in the Image

You can change the value for the Saturation parameter to either give your image an extra burst of color or tone down the color palette by desaturating the image.



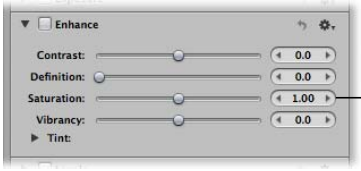
Before Saturation adjustment



After Saturation adjustment

To change the saturation of an image:

1. Select an image.
2. In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Saturation parameter by doing one of the following:



Use the Saturation slider and value slider to adjust the saturation of colors in the image.

- Drag the Saturation slider.
- Click the left or right arrow in the Saturation value slider to change the saturation of the image by 10 percent increments, or drag in the value field.
- Double-click the number in the Saturation value slider, then enter a value from 0.00 to 4.00 and press Return.

A value below 1.00 decreases the color saturation in the image, and a value above 1.00 increases the saturation. A value of 0.00 removes all color from the image, making it grayscale. A value of 4.00 increases the saturation by 400 percent.

The saturation of the image updates as you change the parameter value.

A Little Saturation Goes a Long Way

Increasing the saturation of an image can make the colors appear more pure, and many people like the effect of an image whose colors are more saturated than they would appear naturally. However, you can easily oversaturate an image. In the process of making the colors more pure, subtleties in shades of colors disappear, often resulting in reduced detail in the image. To ensure that visual elements aren't unnecessarily lost, pay attention to the details in your image as you increase saturation.

Adjusting Vibrancy in the Image

You use the Vibrancy parameter controls when you want to add a bit of punch to the image without saturating every color. The Vibrancy parameter applies saturation to the image in a nonlinear manner. Colors that are already saturated are left alone, while saturation is added to all other colors. In addition, the Vibrancy parameter takes skin tones into account, leaving them untouched. This allows you to take a portrait and desaturate the image except for the skin tones.



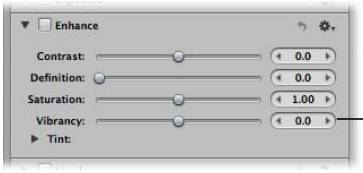
Before Vibrancy adjustment



After Vibrancy adjustment (reduced saturation except for the skin tones)

To adjust vibrancy in an image:

1. Select an image.
2. In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Vibrancy parameter by doing one of the following:



Use the Vibrancy slider and value slider to add smart saturation to the image.

- Drag the Vibrancy slider.
- Click the left or right arrow in the Vibrancy value slider to change the saturation of the image by 5 percent increments, or drag in the value field.
- Double-click the number in the Vibrancy value slider, then enter a value from –1.00 to 1.00 and press Return.

A value below 0.0 decreases the color saturation in the image, and a value above 0.0 increases the saturation of the nonsaturated colors. A value of –1.00 removes all color from the image, making it grayscale except for any skin tones.

Setting the Tint of the Black, Gray, and White Values in the Image

You use the Black Tint, Gray Tint, and White Tint color wheels when you want to selectively remove color casts from the shadows, midtones, and highlights in the image. Color casts are often caused by shooting in mixed lighting and unnatural lighting situations, where the difference in the color from the mixture of multiple types of source lights can produce a color variance in a specific tonal range in an image. For example, when shooting indoors, interior incandescent (tungsten) lighting can often produce a yellow color cast through the white colors in the image. Using the White Tint eyedropper, you can have Aperture isolate the highlights and add blue to the white values, thereby reducing the yellow color cast and returning the whites to neutral white.

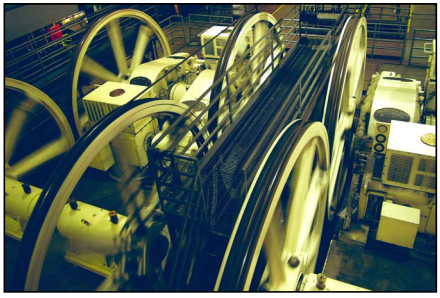
There are two methods for selectively adjusting the tint values in an image: you can either use the Black Tint, Gray Tint, and White Tint eyedroppers to have Aperture automatically adjust the tint to neutral color values, or you can use the Black Tint, Gray Tint, and White Tint color wheels to manually adjust the tint values. The method you choose is determined by the level of precision you require. The eyedroppers provide an accurate means of identifying the color cast within the tonal range of each eyedropper and returning the color values to neutral. However, depending on the subject, you may not want to completely remove the color cast found in a specific tonal range. Therefore, you can manually adjust the tint values in the shadows, midtones, and highlights using the Black Tint, Gray Tint, and White Tint color wheels.

Using the Eyedroppers to Set the Tint of the Shadows, Midtones, and Highlights in an Image

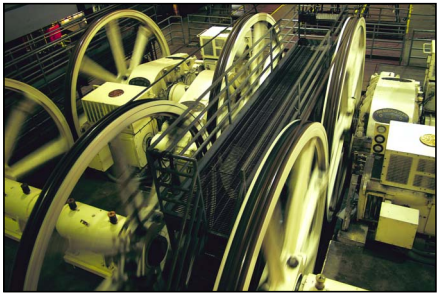
You use the Black Tint, Gray Tint, and White Tint eyedropper tools when you want to have Aperture selectively modify the tints of the shadows, midtones, and highlights in an image automatically. Whereas using the White Balance controls adjusts the tints of all tonal values in the image uniformly, the Black Tint, Gray Tint, and White Tint eyedropper tools allow you to selectively neutralize color casts that affect only the shadows, midtones, or highlights. In some difficult cases, you can use the Black Tint, Gray Tint, and White Tint eyedropper tools in combination with the White Balance controls to first neutralize a tint in a specific tonal range and then uniformly remove the tint from the rest of the image. For more information about adjusting white balance, see "Working with the White Balance Controls" on page 408.

Correcting the Tint of the Shadows with the Black Tint Eyedropper

You use the Black Tint eyedropper to remove color casts from the shadows in your images.



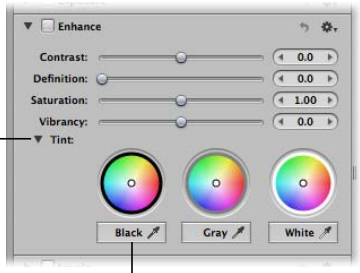
Before Black Tint adjustment



After Black Tint adjustment

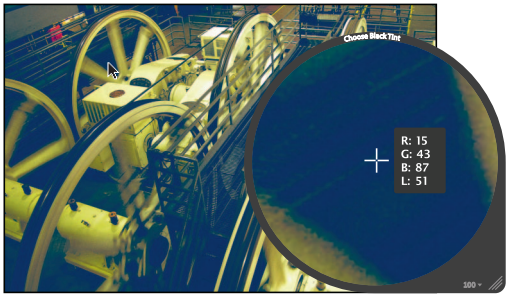
To set the tint of the shadows in an image:

1. Select an image.
2. If necessary, click the Tint disclosure triangle in the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD to reveal the Tint color wheels, then select the Black Tint eyedropper.



The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see "Viewing Images with the Loupe" on page 185.

3. Position the target area of the Loupe over the darkest pixels in the image, then click.

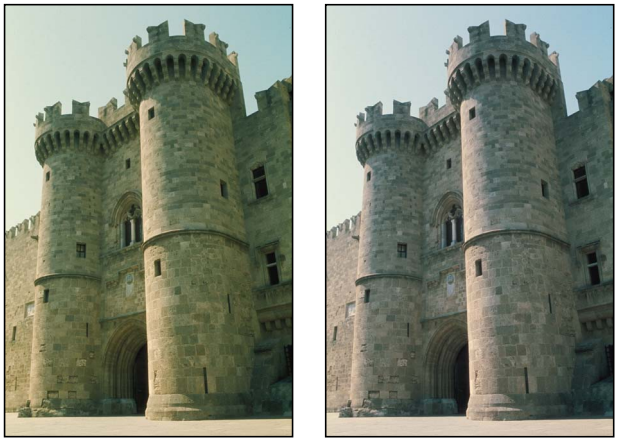


The tint (hue and saturation) of the black values in the image is set to remove the color cast in the shadows.

Important: Make sure that there are no bright pixels in the target area of the Loupe. Bright pixels in the target area can skew the black tint calculation, making the image appear different than intended. A simple way to avoid errant bright pixels is to increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+).

Correcting the Tint of the Midtones with the Gray Tint Eyedropper

You use the Gray Tint eyedropper to remove color casts from the midtones in your images.

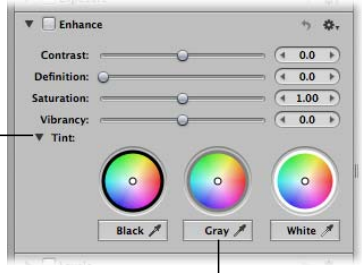


Before Gray Tint adjustment

After Gray Tint adjustment

To set the tint of the midtone values in an image:

1. Select an image.
2. If necessary, click the Tint disclosure triangle in the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD to reveal the Tint color wheels, then select the Gray Tint eyedropper.

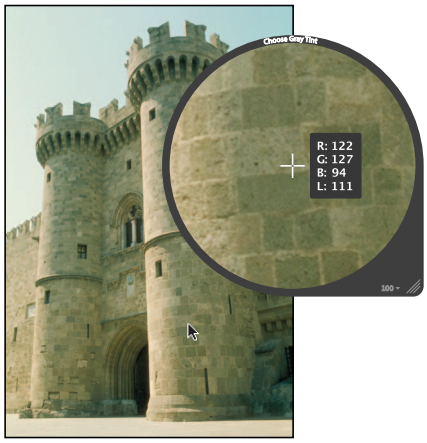


Click the disclosure triangle to reveal the Tint color wheels.

Select the Gray Tint eyedropper to activate the Loupe.

The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see "Viewing Images with the Loupe" on page 185.

3 Position the target area of the Loupe over a midrange color that is as close as possible to medium gray, then click.



The tint (hue and saturation) of the gray values in the image is set to remove the color cast in the midtones.

Correcting the Tint of the Highlights with the White Tint Eyedropper

You use the White Tint eyedropper to remove color casts from the highlights in your images.



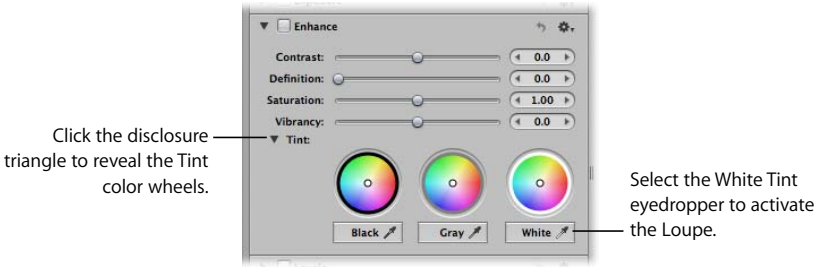
Before White Tint adjustment



After White Tint adjustment

To set the tint of the highlight values in an image:

1. Select an image.
2. If necessary, click the Tint disclosure triangle in the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD to reveal the Tint color wheels, then select the White Tint eyedropper.



The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see "Viewing Images with the Loupe" on page 185.

3. Position the target area of the Loupe over the lightest (white) pixels in the image, then click.



The tint (hue and saturation) of the white values in the image is set to remove the color cast in the highlights.

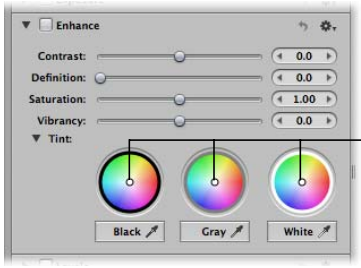
Important: Make sure that there are no dark pixels in the target area of the Loupe. Dark pixels in the target area can skew the white tint calculation, making the image appear different than intended. A simple way to avoid errant dark pixels is to increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+).

Manually Setting the Tint of the Shadows, Midtones, and Highlights in an Image

You can also manually adjust the tint of the shadow, midtone, and highlight values in the image using the Black Tint, Gray Tint, and White Tint color wheels.

To manually adjust the tint of the shadow, midtone, and highlight values in an image:

1. Select an image.
2. In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, do the following:



Drag the Black, Gray, and White points (white circles) to selectively adjust the tint of the image.

- Drag the Black point in the color wheel to adjust the tint of the shadows.
- Drag the Gray point in the color wheel to adjust the tint of the midtones.
- Drag the White point in the color wheel to adjust the tint of the highlights.

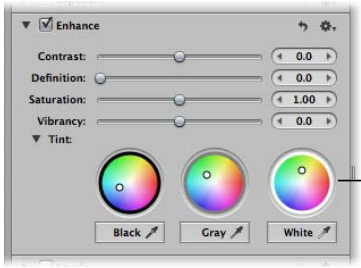
You remove a color cast in a tonal range by dragging the point in the color wheel toward the opposite color. For example, to remove a blue cast, you drag the point in the color wheel toward yellow until the color cast is neutralized.

Resetting the Tint Color Wheels

You can individually reset the Tint color wheels without affecting the other parameters in the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.

To reset a Tint color wheel:

- Double-click the color wheel.



Double-click a color wheel to reset it to its default value.

Working with the Levels Controls

You use the Levels adjustment controls when you want to manually set the tonal values of the shadows, midtones, and highlights in an image. By default, Aperture sets 0 as pure black and 1 as pure white. Constraining the white and black point values evenly redistributes the tonal range of the pixels between black and white. Reapportioning the luminance values increases the tonal range and contrast in the image. However, if you clip too far into either the black or white tonal values, tonal values that were originally *near* pure black and pure white are now changed to pure black and pure white, resulting in lost image detail.

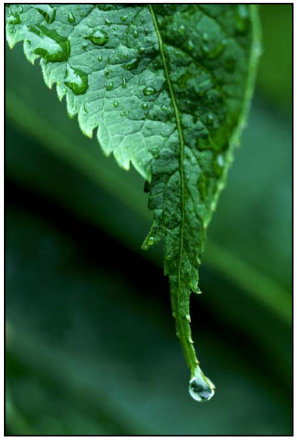
In addition to adjusting the tonal values of an image for overall shadows, midtones, and highlights, you can also color correct an image by adjusting the levels of the red, green, and blue channels independently. Aperture provides a way to adjust levels for each color channel, allowing you to control the color tonality in an image.

Adjusting the Luminance Levels in an Image

When you want to adjust the overall tonality of an image, you use the Levels adjustment controls based on a histogram that shows luminance. When the histogram is set to show luminance, it displays the cumulative brightness values for all three color channels for each pixel. You use the histogram's luminance view when you want to adjust an image's tonal values without affecting the color cast.



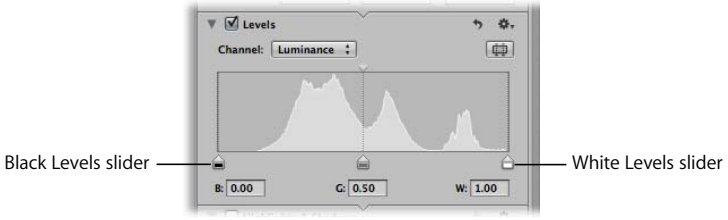
Before Levels adjustment



After Levels adjustment

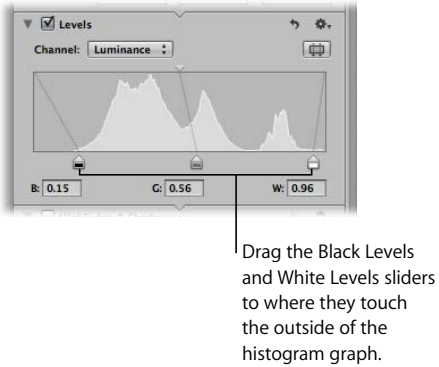
To adjust levels in an image based on luminance:

1. Select an image.
2. Show the Adjustments inspector or the Adjustments pane of the Inspector HUD.
3. By default, the Levels histogram is off. Turn it on by selecting the Levels checkbox.



The Levels histogram appears.

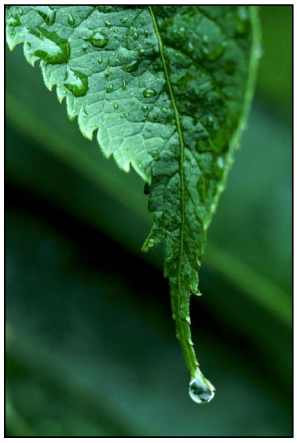
4. Choose Luminance from the Channel pop-up menu.
5. Do one of the following:



- Drag the Black Levels and White Levels sliders to where they touch the outside of the histogram graph, constraining the image to its new black and white points.
- Select the numbers in the Black (B) and White (W) fields, then enter a value from 0 to 1.00. By default, the black point is set to 0.00, and the white point is set to 1.00.

The tonal values for shadows and highlights in the image are updated, resulting in more defined blacks and highlight values as well as increased overall contrast.

You can also use the Gray Levels slider if you need to adjust the brightness values of the midtones while limiting the brightening effect in the black and white points. The brighter areas of shadows and darker areas of highlights are affected, but the effect tapers off as it nears the dark blacks and bright whites.



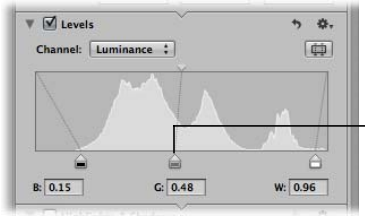
Before Gray Levels adjustment



After Gray Levels adjustment

To adjust the midtone levels in an image, do one of the following:

- Drag the Gray Levels slider until the brightness values in the image's midtones are correct.



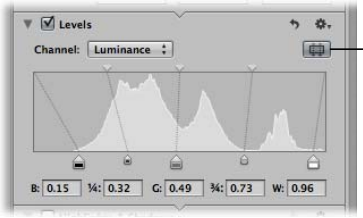
- By default, the gray point is set to 0.50. Select the number in the Gray (G) field, then enter a value from 0.02 to 0.98 until the brightness values in the image's midtones are correct.

Showing Quarter-Tone Levels Controls

When you need additional control over tonal values between the midtones and shadows as well as the midtones and highlights, you use the Quarter-Tone controls. For example, if you need to add contrast to the midtone values independently of the black and white point settings, you use the Quarter-Tone Levels sliders. Unlike the Black Levels and White Levels sliders, Quarter-Tone Levels sliders are independent and affect only the tonal range of the pixels they represent: either shadows to midtones or midtones to highlights.

To show the Quarter-Tone controls:

- Click the Quarter-Tone Controls button.



Click the Quarter-Tone Controls button to show the Quarter-Tone Levels sliders.

Adjusting the Brightness of an Image with the Brightness Levels Sliders

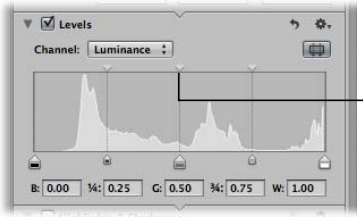
You can also use the Levels adjustment controls to adjust the brightness of an image. When you adjust the brightness of the image, the Black Levels, Gray Levels, and White Levels sliders modify the tonality of the image based on the new brightness value.

Adjusting the Brightness of an Image Uniformly with the Brightness Levels Slider

You use the center Brightness Levels slider at the top of the Levels histogram to uniformly adjust the brightness of the image.

To uniformly adjust the brightness of the image:

- Drag the Brightness Levels slider until the brightness of the entire image is correct.



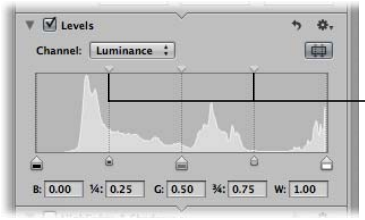
Drag the Brightness Levels slider to uniformly adjust the brightness of an image.

Selectively Adjusting the Brightness of an Image with the Shadow Brightness Levels and Highlight Brightness Levels Sliders

You can selectively adjust the brightness of the shadows and highlights in the image using the Shadow Brightness Levels and Highlight Brightness Levels sliders.

To selectively adjust the brightness of the shadows and highlights in an image:

- Drag the Shadow Brightness Levels and Highlight Brightness Levels sliders until the brightness values of the shadows and highlights in the image are correct.



Drag the Shadow Brightness Levels (on the left) and Highlight Brightness Levels sliders to selectively adjust the brightness of an image.

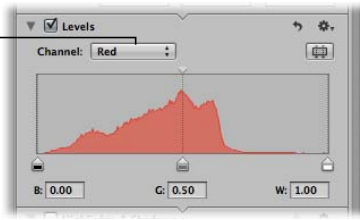
Using Levels for Color Correction

A powerful way to color correct an image is to adjust the levels of each color channel in the image. Adjusting the levels of each color channel is useful for removing color casts in an image. It's important to understand that you're adjusting the colors of the image within the RGB spectrum; therefore, you reduce yellow when you increase blue, you reduce magenta when you increase green, and so on.

To adjust the levels of a single color channel in an image:

1. In the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose a color channel from the Channel pop-up menu.

Choose a color channel from the Channel pop-up menu.



2. Drag the Black Levels, Gray Levels, and White Levels sliders (or enter values in the corresponding fields) to create the effect you want.

For more information about making specific adjustments to the levels of each color channel, see the next sections.

Adjusting the Levels of the Red Color Channel

You adjust the levels of the red color channel when you want to remove red and cyan color casts in the image.



Before Red Levels adjustment



After Red Levels adjustment
(moved Gray Levels slider right)

Red adjustments	Effect
Move Black Levels slider right	Adds cyan to the shadows, removing red.
Move Gray Levels slider left	Adds red to the midtones, removing cyan.
Move Gray Levels slider right	Adds cyan to the midtones, removing red.
Move White Levels slider left	Adds red to the highlights, removing cyan.

Adjusting the Levels of the Green Color Channel

You adjust the levels of the green color channel when you want to remove green and magenta color casts in the image.



Before Green Levels adjustment



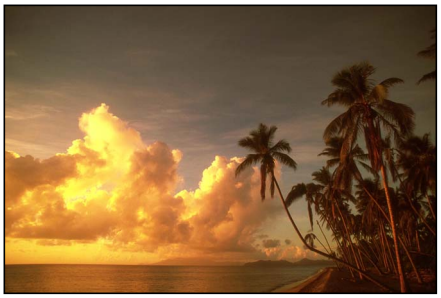
After Green Levels adjustment
(moved Gray Levels slider right)

Green adjustments	Effect
Move Black Levels slider right	Adds magenta to the shadows, removing green.
Move Gray Levels slider left	Adds green to the midtones, removing magenta.

Green adjustments	Effect
Move Gray Levels slider right	Adds magenta to the midtones, removing green.
Move White Levels slider left	Adds green to the highlights, removing magenta.

Adjusting the Levels of the Blue Color Channel

You adjust the levels of the blue color channel when you want to remove blue and yellow color casts in the image.



Before Blue Levels adjustment



After Blue Levels adjustment (moved White Levels and Gray Levels sliders left)

Blue adjustments	Effect
Move Black Levels slider right	Adds yellow to the shadows, removing blue.
Move Gray Levels slider left	Adds blue to the midtones, removing yellow.
Move Gray Levels slider right	Adds yellow to the midtones, removing blue.
Move White Levels slider left	Adds blue to the highlights, removing yellow.

Working with the Highlights & Shadows Controls

You use the Highlights & Shadows adjustment controls to correct the exposure in images shot in complex lighting conditions. For example, you can use the Highlights & Shadows controls to correct the exposure of the darker areas (shadows) of an image that was otherwise correctly exposed for silhouette. You can also use the Highlights & Shadows controls to retrieve detail in extremely bright areas of an image. This is particularly useful when adjusting images of clouds, snow, or images correctly exposed for the shadow areas. Using the Highlights & Shadows controls is the best way to optimize your image's exposure in the highlights, midtones, or shadows without compromising detail in the other areas of tonality.

Adjusting Brightness Values in the Highlight Areas of the Image

When you want to adjust the brightness values in the highlight areas of the image without affecting the midtones and shadows, you can adjust the Highlights parameter. Although the human eye is more sensitive to details in shadow areas than in highlight areas, such as snow, there is usually a fair amount of visual information that you can retrieve in the highlights using the Highlights parameter controls. Another example of when to use the Highlights controls is when the background of your image is correctly exposed, and the foreground of the image is slightly overexposed. In this case, you use the Highlights controls to make the overexposed foreground match the exposure of the correctly exposed background.



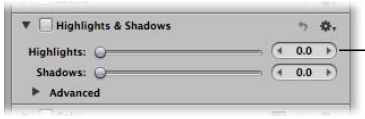
Before Highlights adjustment



After Highlights adjustment

To adjust the highlights in an image:

1. Select an image.
2. In the Highlights & Shadows area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Highlights parameter by doing one of the following:



Use the Highlights slider and value slider to adjust the brightness values in the image's highlights.

- By default, the Highlights slider is set to the left side of the slider control. Drag the slider to the right to darken the highlight areas of the image, and drag the slider back to the left to reduce the darkening effect in the highlights.
- Click the left or right arrow in the Highlights value slider to change the brightness of the highlights in the image by single increments, or drag in the value field.

  The left arrow reduces the darkening effect in the highlights, making them brighter. The right arrow increases the darkening effect in the highlights, making them darker.
- By default, the Highlights value slider is set to 0.0. Double-click the number in the value slider, then enter a value from 0.0 to 100.0 and press Return.

Aperture isolates the areas of the image with highlights and updates them as you change the parameter value.

Adjusting Brightness Values in the Shadow Areas of the Image

Adjusting the shadow areas is necessary when the shadow areas in an image are underexposed. A good example is an image shot in a doorway, where the background is correctly exposed but the foreground is a little underexposed. Adjusting the shadows lightens the pixels in the shadow areas only, bringing out detail that would normally have been shades of black or dark gray.



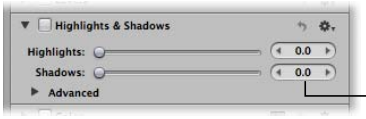
Before Shadows adjustment



After Shadows adjustment

To adjust the shadows in an image:

1. Select an image.
2. In the Highlights & Shadows area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Shadows parameter by doing one of the following:



Use the Shadows slider and value slider to adjust the brightness values in the image's shadows.

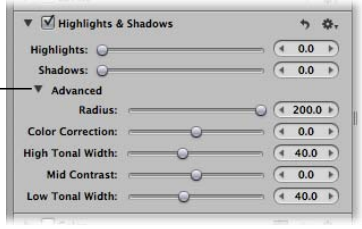
- By default, the Shadows slider is set to the left side of the slider control. Drag the slider to the right to lighten the shadow areas of the image, and drag the slider back to the left to reduce the lightening effect in the shadows.
- Click the left or right arrow in the Shadows value slider to change the brightness of the shadows in the image by single increments, or drag in the value field.

  The left arrow reduces the lightening effect in the shadows, making them darker. The right arrow increases the lightening effect in the shadows, making them lighter.
- By default, the Shadows value slider is set to 0.0. Double-click the number in the value slider, then enter a value from 0.0 to 100.0 and press Return.

Aperture isolates the shadow areas of the image and updates them as you change the parameter value.

Using the Highlights & Shadows Advanced Settings

The Highlights & Shadows adjustment includes the following advanced parameters:



Click the disclosure triangle to reveal the advanced Highlights & Shadows controls.

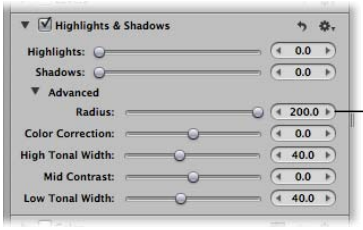
- *Radius:* Sets the area Aperture uses to determine each pixel's tonality.
- *Color Correction:* Sets the amount of saturation applied during a shadows or highlights adjustment.
- *High Tonal Width:* Sets the range of tones that are modified in the highlights.
- *Mid Contrast:* Sets the amount of contrast in the midtones.
- *Low Tonal Width:* Sets the range of tones that are modified in the shadows.

Adjusting the Radius of the Highlights & Shadows Controls

You use the Radius parameter controls to adjust the area around each pixel that Aperture uses to assess the tonal area that each pixel inhabits. The larger the radius value is, the larger the area used to determine each pixel's tonality. The Radius controls can have a large impact on the behavior of the Highlights & Shadows controls, because the Radius controls either increase or decrease the range of pixels used to determine how light or dark each individual pixel should be.

To adjust the radius of the Highlights & Shadows controls:

1 If necessary, click the Advanced disclosure triangle to show the advanced Highlights & Shadows controls.



Use the Radius slider and value slider to adjust the area used to determine a pixel's tonality.

2 Adjust the Radius parameter by doing one of the following:

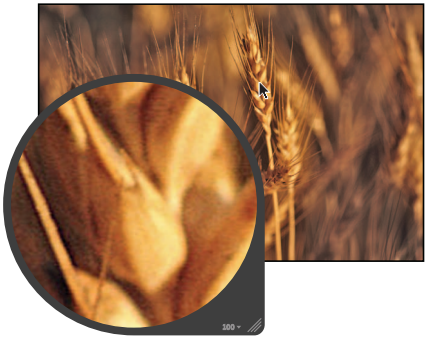
- By default, the Radius slider is set to the left side of the slider control. Drag the slider to the right to increase the radius of the area Aperture uses to assess whether the pixel requires a highlights or shadows adjustment, and drag the slider back to the left to reduce the radius.
- Click the left or right arrow in the Radius value slider to adjust the radius by single-pixel increments, or drag in the value field.

  The left arrow reduces the radius of the pixel area, and the right arrow increases it.
- By default, the Radius value slider is set to 200.00. Double-click the number in the Radius value slider, then enter a value from 1.0 to 1000.0 and press Return.

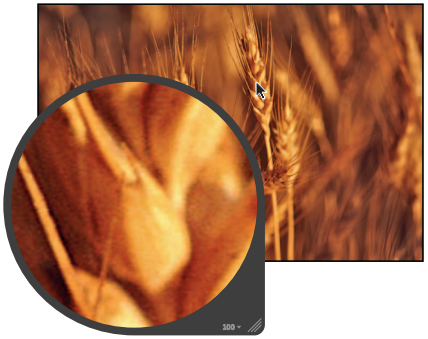
Aperture uses the new Radius setting to determine each pixel's tonality in relation to the pixels that surround it.

Adjusting the Color Correction for the Highlights & Shadows Controls

You use the Color Correction parameter controls to adjust the amount of saturation applied during shadows and highlights adjustments. However, the saturation adjustment is most noticeable in the shadows.



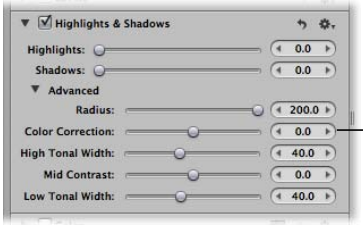
Before Highlights & Shadows Color Correction adjustment



After Highlights & Shadows Color Correction adjustment (increased color correction)

To adjust the saturation applied during highlights and shadows adjustments:

1 If necessary, click the Advanced disclosure triangle to show the advanced Highlights & Shadows controls.



Use the Color Correction slider and value slider to adjust the amount of saturation applied during highlights and shadows adjustments.

2 Adjust the Color Correction parameter by doing one of the following:

- Drag the Color Correction slider to the right to increase the amount of saturation applied during highlights and shadows adjustments, and drag the slider back to the left to reduce the saturation.
- Click the left or right arrow in the Color Correction value slider, or drag in the value field. The left arrow reduces the saturation, and the right arrow increases it.
- By default, the Color Correction value slider is set to 0.0. Double-click the number in the Color Correction value slider, then enter a value from –100.0 to 100.0 and press Return.

The new Color Correction setting determines the amount of saturation applied to the highlights and shadows during a highlights and shadows adjustment.

Adjusting the High Tonal Width of the Highlights & Shadows Controls

You use the High Tonal Width parameter controls to set the range of highlights that Aperture adjusts with the Highlights controls. Increasing the High Tonal Width parameter value widens the range of highlight tonal values that are adjusted toward the midtones. If you want to limit the highlights adjustment to a range of highlight values that are closer to white, you decrease the High Tonal Width parameter value.



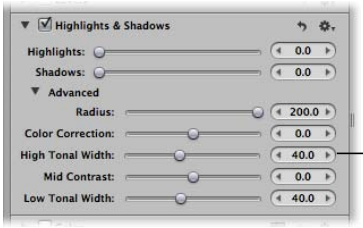
Before High Tonal Width adjustment



After High Tonal Width adjustment (increased high tonal width)

To adjust the high tonal width of the Highlights & Shadows controls:

1 If necessary, click the Advanced disclosure triangle to show the advanced Highlights & Shadows controls.



Use the High Tonal Width slider and value slider to adjust the range of highlight tonal values affected by a highlights adjustment.

2 Adjust the High Tonal Width parameter by doing one of the following:

- Drag the High Tonal Width slider to the right to increase the tonal range of the highlights adjustment, and drag the slider back to the left to reduce the tonal range.
- Click the left or right arrow in the High Tonal Width value slider to adjust the tonal range of the highlights adjustment by single increments, or drag in the value field.

  The left arrow reduces the tonal range, and the right arrow increases it.
- By default, the High Tonal Width value slider is set to 40.0. Double-click the number in the High Tonal Width value slider, then enter a value from 0.0 to 100.0 and press Return.

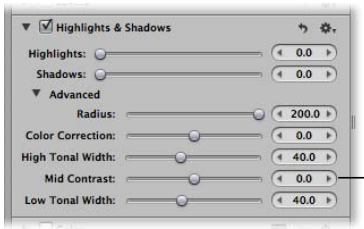
Aperture uses the new High Tonal Width setting to determine the range of highlight tonal values that are taken into account during a highlights adjustment. The tonal range begins at pure white, and increasing the High Tonal Width parameter value broadens the tonal range to include tonal values closer to the midtones.

Adjusting the Midtone Contrast of the Highlights & Shadows Controls

You use the Mid Contrast parameter controls to adjust the contrast of the midtones.

To adjust the midtone contrast of the Highlights & Shadows controls:

1 If necessary, click the Advanced disclosure triangle to show the advanced Highlights & Shadows controls.



Use the Mid Contrast slider and value slider to adjust the contrast of the midtone values in the image.

2 Adjust the Mid Contrast parameter by doing one of the following:

- Drag the Mid Contrast slider to the right to increase the contrast Aperture applies to the midtones in the image, and drag the slider back to the left to reduce the contrast.
- Click the left or right arrow in the Mid Contrast value slider, or drag in the value field. The left arrow reduces the contrast in the midtones, and the right arrow increases it.
- By default, the Mid Contrast value slider is set to 0.0. Double-click the number in the Mid Contrast value slider, then enter a value from –100.0 to 100.0 and press Return.

The contrast in the midtones updates as you change the parameter value.

Adjusting the Low Tonal Width of the Highlights & Shadows Controls

You use the Low Tonal Width parameter controls to set the range of shadows that Aperture adjusts with the Shadows controls. Increasing the Low Tonal Width parameter value widens the range of shadow tonal values that are adjusted toward the midtones. If you want to limit the shadows adjustment to a range of shadow values that are closer to black, you decrease the Low Tonal Width parameter value.



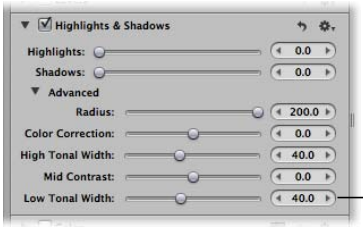
Before Low Tonal Width adjustment



After Low Tonal Width adjustment (increased low tonal width)

To adjust the low tonal width of the Highlights & Shadows controls:

1 If necessary, click the Advanced disclosure triangle to show the advanced Highlights & Shadows controls.



Use the Low Tonal Width slider and value slider to adjust the range of shadow tonal values affected by a shadows adjustment.

2 Adjust the Low Tonal Width parameter by doing one of the following:

- Drag the Low Tonal Width slider to the right to increase the tonal range of the shadows adjustment, and drag the slider back to the left to reduce the tonal range.
- Click the left or right arrow in the Low Tonal Width value slider to adjust the tonal range of the shadows adjustment by single increments, or drag in the value field.

  The left arrow reduces the tonal range, and the right arrow increases it.
- By default, the Low Tonal Width value slider is set to 40.0. Double-click the number in the Low Tonal Width value slider, then enter a value from 0.0 to 100.0 and press Return.

Aperture uses the new Low Tonal Width setting to determine the range of shadow tonal values that are taken into account during a shadows adjustment. The tonal range begins at pure black, and increasing the Low Tonal Width parameter value broadens the tonal range to include tonal values closer to the midtones.

Working with the Color Controls

You use the Color controls to selectively adjust the red, green, blue, cyan, magenta, and yellow colors in an image using the Color controls in the Adjustments inspector or the Adjustments pane of the Inspector HUD. Each color has individual Hue, Saturation, and Luminance controls. If you need to adjust the hue, saturation, and luminance of a color that does not appear in the Color controls, you can use the Color eyedropper to identify a hue in the image that needs adjusting.

Although segmenting control of hue, saturation, and luminance on a per-color basis may seem complicated at first, restricting these adjustments to specific colors helps correct and enhance targeted colors without affecting others. In addition, Aperture provides a Range control used to set the extent of colors affected by the Hue, Saturation, and Luminance adjustments, also known as *chromatic spread*. You use the Range control to fine-tune your color adjustments.



Before Color adjustment



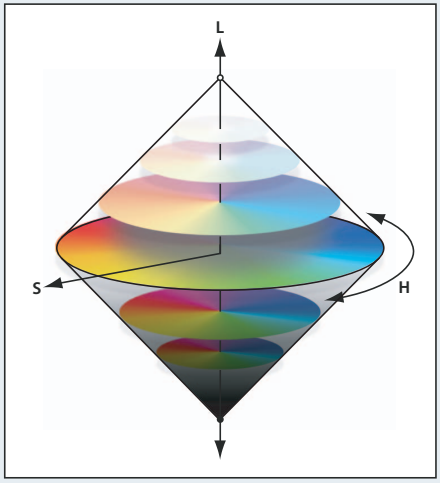
After Color adjustment (adjusted the hue and saturation of blue)

About Hue, Saturation, and Luminance

Hue (H) describes the actual color itself. Hue is measured as an angle on a color wheel. Moving a Hue slider in Aperture remaps the color from its original position on the color wheel to the new position indicated by the slider. Hue adjustments are often made to match the color of the same subject in different images. Adjusting the hue of an image is particularly useful when the subject you shot moved between various lighting conditions. Another advantage of adjusting the hue of an image is that camera models of different types or from different manufacturers rarely capture and render color exactly the same way. You can use the Hue controls to match the color of a subject shot by two different cameras, so that when the images are placed side by side, they match.

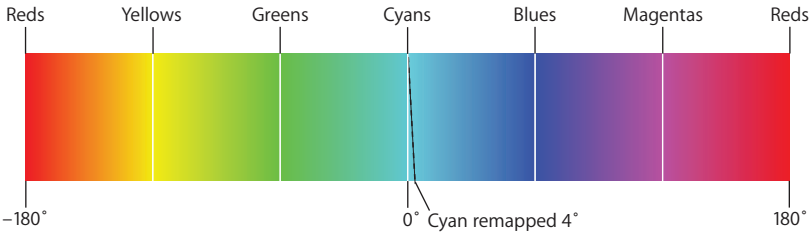
Saturation (S) defines the intensity of a specific hue. A saturated hue gives the color a vivid and pure appearance. A less saturated hue appears flatter and more gray. A completely desaturated hue becomes a shade of gray.

Luminance (L) describes the brightness of the selected color. An increase in luminance brightens the selected color value. A maximum Luminance adjustment results in pure white. Conversely, a decrease in luminance darkens the selected color. A minimum Luminance adjustment results in pure black.



Adjusting the Color of the Image with the Color Controls

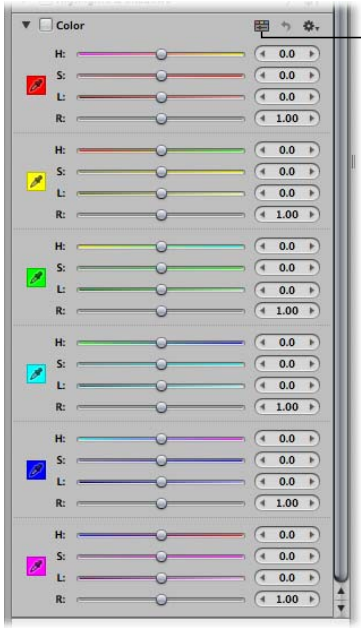
When you want to adjust the color values in an image, you must first identify the colors that have the most influence on the colors you want to change. It's important to understand that you're adjusting the colors of the image within the RGB spectrum; therefore, you reduce yellow when you increase blue, you reduce magenta when you increase green, and so on. When you want to isolate a color and adjust its hue, it's important to identify the color's location on the color wheel. For example, if the color value is closer to cyan than blue, you may decide to adjust the cyan's Hue value without adjusting the blue's Hue value. Depending on the image, you may decide to adjust both the cyan and blue Hue values to achieve the color values you're looking for. There's not just one correct way of perfecting the colors in an image. Your approach should be based on the image's subject and the overall aesthetic you want to achieve.



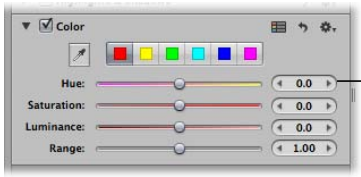
To adjust a color value in an image:

1. Select an image.
2. In the Color area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the color button that corresponds to the color you want to adjust to view its Hue, Saturation, Luminance, and Range controls.

Note: You can also click the Expanded View button to expand the Color area to show the controls for all colors at the same time.



3 If necessary, adjust the Hue parameter by doing one of the following:



- By default, the Hue slider is set to the center of the slider control. Drag the Hue slider to the left or right to change the hue of the selected color.
- Click the left or right arrow in the Hue value slider to change the hue of the selected color in the image by single increments, or drag in the value field.

  The left arrow remaps the hue in the following ways:

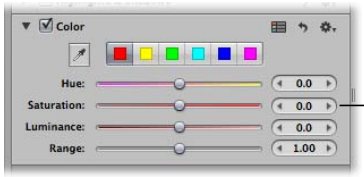
  - Red hue moves toward magenta.
  - Yellow hue moves toward red.
  - Green hue moves toward yellow.
  - Cyan hue moves toward green.
  - Blue hue moves toward cyan.
  - Magenta hue moves toward blue.

The right arrow remaps the hue in the following ways:

- Red hue moves toward yellow.
- Yellow hue moves toward green.
- Green hue moves toward cyan.
- Cyan hue moves toward blue.
- Blue hue moves toward magenta.
- Magenta hue moves toward red.

- By default, the Hue value slider is set to 0.0. Double-click the number in the value slider, then enter a value from –180.0 to 180.0 and press Return.

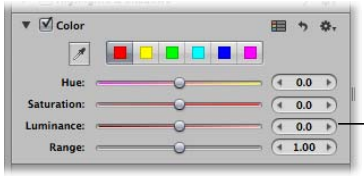
4 If necessary, adjust the Saturation parameter by doing one of the following:



Use the Saturation slider and value slider to correct the intensity of the hue of the selected color.

- By default, the Saturation slider is set to the center of the slider control. Drag the slider to the left to desaturate the selected color, and drag it to the right to increase the saturation of the selected color.
- Click the left or right arrow in the Saturation value slider to change the saturation of the selected color in the image by single increments, or drag in the value field.
- By default, the Saturation value slider is set to 0.0. Double-click the number in the value slider, then enter a value from –100.0 to 100.0 and press Return.

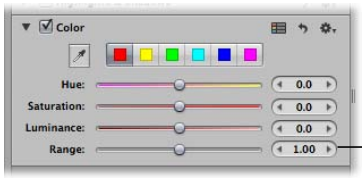
5 If necessary, adjust the Luminance parameter by doing one of the following:



Use the Luminance slider and value slider to correct the brightness of the hue of the selected color.

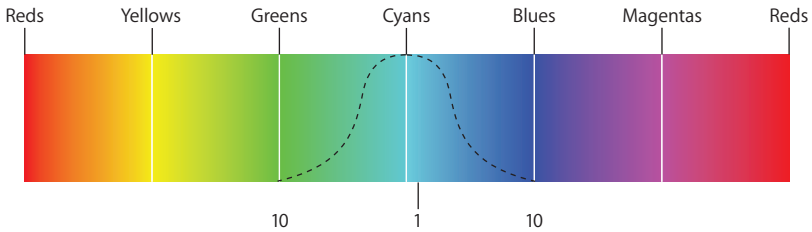
- By default, the Luminance slider is set to the center of the slider control. Drag the slider to the left to decrease the brightness of the selected color, and drag it to the right to increase the brightness of the selected color.
- Click the left or right arrow in the Luminance value slider to change the brightness of the selected color in the image by single increments, or drag in the value field.
- By default, the Luminance value slider is set to 0.0. Double-click the number in the value slider, then enter a value from –100.0 to 100.0 and press Return.

6 The Range parameter limits or expands the chromatic range of the adjustment. Adjust the Range parameter by doing one of the following:



Use the Range slider and value slider to adjust the chromatic range of the color adjustment.

- By default, the Range slider is set to the center of the slider control. Drag the slider to the left to decrease the range of the selected color, and drag it to the right to increase the range of the selected color.
- Click the left or right arrow in the Range value slider to change the chromatic range of the selected color by single increments, or drag in the value field.
- By default, the Range value slider is set to 1.00. Double-click the number in the value slider, then enter a value from 0.00 to 20.00 and press Return.



You can adjust the chromatic range up to 20. The default spread is 1.

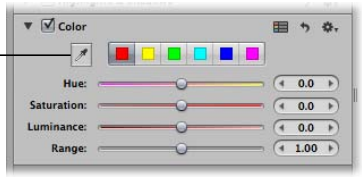
7 Repeat steps 2 through 7 until you are satisfied with the appearance of the colors in your image.

Adjusting Custom Colors Using the Color Eyedropper

If you require a more specific hue as a starting point for your color adjustment, you can use the Color eyedropper to identify a hue in the image.

To adjust a custom color value in an image:

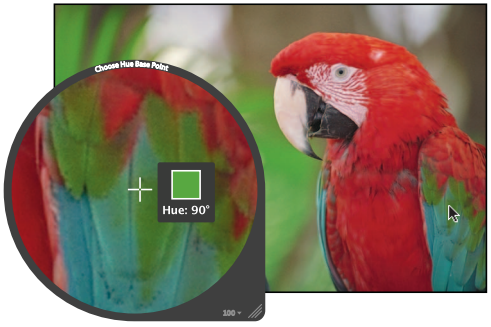
1. Select an image.
2. In the Color area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the color button with the hue closest to the one you plan to adjust, then click the Color eyedropper.



Click the Color eyedropper and select the color in the image you want to adjust.

The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see "Viewing Images with the Loupe" on page 185.

3. Position the target area of the Loupe over the color in the image that you want to adjust, then click.



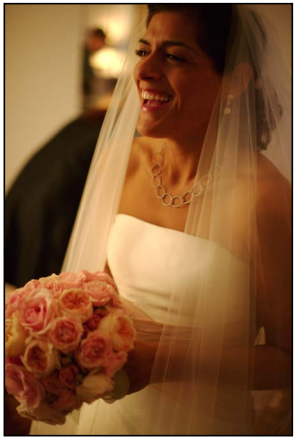
The new hue is selected and becomes the starting point for color adjustments of that hue. For more information about Color adjustments, see "Adjusting the Color of the Image with the Color Controls" on page 447.

Working with the Monochrome Mixer Controls

You use the Monochrome Mixer adjustment controls when you want more control over converting your image from color to black and white than simply desaturating it gives you. The Monochrome Mixer allows you to adjust tonal relationships and contrast in an image by adjusting the red, green, and blue channels independently. The effects of a monochrome adjustment are similar to attaching a color filter to a camera lens and shooting black-and-white film. In fact, the Monochrome Mixer comes with a set of presets that simulate shooting black-and-white film through a color filter.

Choosing a Monochrome Mixer Preset

Aperture comes with a set of Monochrome Mixer presets that simulate the effect of shooting black-and-white film through a color filter, such as a red filter. You can use one of these presets, or you can apply a preset as a starting point and then fine-tune the color mix.



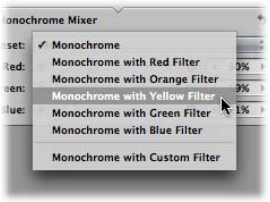
Before Monochrome Mixer adjustment



After Monochrome Mixer adjustment (Yellow Filter preset)

To convert a color image to black and white using a Monochrome Mixer preset:

1. Select an image.
2. If the Monochrome Mixer controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Monochrome Mixer from the Add Adjustments pop-up menu (or press Control-M).
3. Choose a Monochrome Mixer preset from the Preset pop-up menu.



The image updates to reflect the effect of the preset you chose.

The following table lists the Monochrome Mixer presets and their effect on an image.

Preset	Effect
Monochrome	Desaturates the image.
Monochrome with Red Filter	Darkens blue areas such as skies and retrieves details in highlight areas such as white clouds, making this preset useful for landscapes.
Monochrome with Orange Filter	Produces more contrast in skies than the yellow and green filters, making this preset useful for landscapes.
Monochrome with Yellow Filter	Applies a natural tonal correction and improved contrast. Increases green in the color mix to help preserve skin tones.
Monochrome with Green Filter	Makes reds appear darker and greens appear lighter.
Monochrome with Blue Filter	Eliminates definition in the sky, preserving details in reds and greens.
Monochrome with Custom Filter	Desaturates the image according to your custom settings.

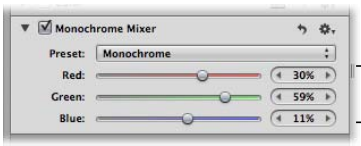
Using the Monochrome Mixer Controls

You use the Monochrome Mixer's Red, Green, and Blue parameter controls when a Monochrome Mixer preset does not produce the effect you were looking for or needs to be fine-tuned to suit your image. The key to the successful use of the Monochrome Mixer is to experiment with changing values for the Red, Green, and Blue parameters until you are satisfied with the effect on the image.

Note: A good rule of thumb is to keep the total percentage of the red, green, and blue channels at or below 100 percent to prevent you from blowing out the highlights in your image.

To convert a color image to black and white using the Monochrome Mixer controls:

1. Select an image.
2. If the Monochrome Mixer controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Monochrome Mixer from the Add Adjustments pop-up menu.
3. Adjust the mixture of red, green, and blue channels by doing one of the following:



Use the Red, Green, and Blue sliders and value sliders to manually adjust the mix of color channels.

- Drag a color slider to the left to decrease its percentage in the color mix, or drag the color slider to the right to increase its percentage.
- Click the left or right arrows in the value sliders to modify the percentages by single increments, or drag in the value fields.

  The left arrows decrease the percentage, and the right arrows increase it.
- Double-click the number in a value slider, then enter a value from 0% to 100% and press Return.

The tonal and contrast values in your black-and-white image are set.

Working with the Color Monochrome Controls

The Color Monochrome adjustment controls are useful when you want to perform a basic conversion from color to black and white while simultaneously applying a color tint to the image's midtones.



Before Color Monochrome adjustment



After Color Monochrome adjustment (applied blue tint)

To convert a color image to black and white with a color tint:

1. Select an image.
2. If the Color Monochrome controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Color Monochrome from the Add Adjustments pop-up menu.



3. Click in the Color well to select a color from the Colors window.

   The selected color appears in the Color well and tints the midtones in the image.
4. By default, the color intensity is set to the maximum value of 1.0. Adjust the intensity of the color tint by doing one of the following:
   - Drag the Intensity slider to the left to decrease the intensity of the color in the image's midtones, or drag the slider back to the right to increase its intensity.
   - Click the left or right arrow in the Intensity value slider to modify the intensity by 10 percent increments, or drag in the value field.

     The left arrow decreases the intensity, and the right arrow increases it.
   - Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.

The image is converted to black and white, with the selected color tint applied to the midtones.

Working with the Sepia Tone Controls

The Sepia Tone adjustment controls behave similarly to the Color Monochrome controls, except that the sepia color is already selected.



Before Sepia Tone adjustment



After Sepia Tone adjustment

To apply a sepia tone to an image:

1. Select an image.
2. If the Sepia Tone controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Sepia Tone from the Add Adjustments pop-up menu.



Use the Intensity slider and value slider to adjust the strength of the sepia tint applied to the image.

3. By default, the intensity of the sepia color is set to the maximum value of 1.0. Adjust the intensity of the sepia color by doing one of the following:
   - Drag the Intensity slider to the left to decrease the intensity of the sepia color in the image's midtones, or drag the slider back to the right to increase its intensity.
   - Click the left or right arrow in the Intensity value slider to modify the intensity by 10 percent increments, or drag in the value slider.

     The left arrow decreases the intensity, and the right arrow increases it.
   - Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.

The image is converted to black and white, with the sepia color tint applied to the midtones.

Working with the Noise Reduction Controls

You use the Noise Reduction adjustment controls when you need to reduce digital noise in an image. Digital noise is often caused by shooting at high ISO settings in low-light conditions. When you reduce noise in an image, you often have to sharpen the image to prevent blurry edges or loss of detail. For more information about sharpening an image, see "Working with the Edge Sharpen Controls" on page 459.



Before Noise Reduction adjustment

After Noise Reduction adjustment

To reduce digital noise in an image:

1. Select an image.
2. If the Noise Reduction controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Noise Reduction from the Add Adjustments pop-up menu.
3. Reduce digital noise in the image by doing one of the following:



Use the Radius slider and value slider to decrease digital noise in the image.

Use the Edge Detail slider and value slider to maintain details in areas of contrast.

- By default, the Radius slider is set to the left side of the slider control. Drag the Radius slider to the right to decrease digital noise in the image, or drag the slider back to the left to reduce the effect of the noise reduction.

- Click the left or right arrow in the Radius value slider to adjust the noise reduction by 2 percent increments, or drag in the value field.

  The left arrow decreases noise reduction in the image, and the right arrow increases it.

- Double-click the number in the Radius value slider, then enter a value from 0.10 to 4.00 and press Return.

  A value of 0.10 applies no digital noise adjustment to the image. A value greater than 0.10 reduces digital noise in the image.

4 Maintain edge detail in areas of high contrast in the image by doing one of the following:

- Drag the Edge Detail slider to the right to increase sharpness in areas of the image with high contrast, or drag the Edge Detail slider back to the left to reduce the sharpening effect.
- Click the left or right arrow in the Edge Detail value slider to adjust edge detail by 2 percent increments, or drag in the value field.

  The left arrow decreases edge detail sharpening in the image, and the right arrow increases it.

- Double-click the number in the Edge Detail value slider, then enter a value from 0.00 to 6.00 and press Return.

As you change the parameter value, the image updates to display the amount of edge detail sharpening applied to it.

Working with the Sharpen and Edge Sharpen Controls

Aperture provides two sharpen adjustments that you can use to sharpen the detail in your image: Sharpen and Edge Sharpen.

Which Sharpen Tool Should You Use?

If you've already applied sharpening in a previous version of Aperture using the Sharpen adjustment controls, the Sharpen adjustment controls are still there so that your adjustments remain intact and unchanged. However, to do further sharpening on other images, it is recommended that you use the Edge Sharpen adjustment controls, which generally offer more precise control over how sharpening is applied.

Working with the Edge Sharpen Controls

You use the Edge Sharpen controls when you want to sharpen the detail in your image. The Edge Sharpen controls adjust the luminance values in the image, increasing the contrast between light and dark pixels that touch, creating an "edge." Increasing the contrast between these neighboring light and dark pixels gives the image a crisper, or sharper, appearance. Images shot with digital image sensors are often a bit soft in focus because of the demosaic filter applied by the camera's processor. You also use the Edge Sharpen controls when you make noise-reduction adjustments, so that the image retains detail and crisp edges that might otherwise be obscured by the effect of the noise-reduction adjustment.



Before Edge Sharpen adjustment

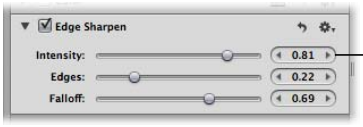


After Edge Sharpen adjustment

Important: The Edge Sharpen controls are not designed to correct images that were shot out of focus. They are designed to help mitigate the effects of the camera's demosaic filter, as well as maintain image detail when noise-reduction adjustments are applied. Edge Sharpen adjustments can also compensate for the softening that occurs with some printing processes.

To sharpen an image using the Edge Sharpen controls:

1. Select an image.
2. If the Edge Sharpen controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Edge Sharpen from the Add Adjustments pop-up menu (or press Control-S).
3. Sharpen the image by doing one of the following:

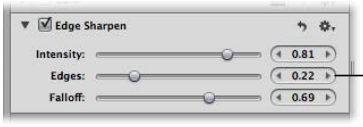


Use the Intensity slider and value slider to adjust the strength of the sharpening adjustment.

- Drag the Intensity slider to the right to increase the amount of sharpening applied to the image, and drag the Intensity slider back to the left to reduce it.
- Click the left or right arrow in the Intensity value slider to adjust the sharpening by 2 percent increments, or drag in the value field. The left arrow decreases the sharpening effect on the image, and the right arrow increases it.
- Double-click the number in the Intensity value slider, then enter a value from 0.00 to 1.00 and press Return.

  A value of 0.00 applies no sharpening adjustment to the image. A value greater than 0.00 increases the sharpening adjustment applied to the image.

4. Adjust the threshold for determining which pixels are edges and which ones are not by doing one of the following:



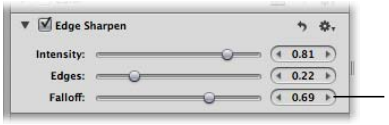
Use the Edges slider and value slider to adjust the threshold of the sharpening adjustment.

- Drag the Edges slider to the right to increase the area over which the sharpening effect is applied, and drag the Edges slider back to the left to reduce it.
- Click the left or right arrow in the Edges value slider to adjust the area over which the sharpening effect is applied by 2 percent increments, or drag in the value field.
- Double-click the number in the Edges value slider, then enter a value from 0.00 to 1.00 and press Return.

  A value of 0.00 applies no sharpening adjustment to the image. A value greater than 0.00 increases the number of pixels that qualify as edges.

  Note: If you observe digital noise beginning to increase in flat areas of the image (areas with little or no contrast), decrease the Edges parameter setting.

5 For maximum accuracy, the Edge Sharpen adjustment sharpens the image in three passes that appear to occur simultaneously—an initial sharpening pass, where a majority of the sharpening occurs, followed by two subsequent sharpening passes. These subsequent passes are called *falloff*. Adjust the amount of sharpening applied in the subsequent sharpening passes by doing one of the following:



- Drag the Falloff slider to the right to increase the percentage of the original sharpening that's applied during the subsequent sharpening passes, and drag the slider back to the left to reduce it.
- Click the left or right arrow in the Falloff value slider to adjust the falloff percentage by 2 percent increments, or drag in the value field.
- Double-click the number in the Falloff value slider, then enter a value from 0.00 to 1.00 and press Return.

  The falloff percentage is applied proportionally to the second and third sharpening passes. For example, if 0.69 (69 percent) is set as the Falloff parameter value, 69 percent of the original amount of sharpening is applied during the second sharpening pass, and 69 percent of the amount of sharpening from the second sharpening pass is applied during the third sharpening pass. In other words, only 47.6 percent of the amount of the original sharpening is applied during the third sharpening pass.

Understanding the Edge Sharpen Workflow

The Edge Sharpen adjustment in Aperture is a professional tool that's used to sharpen photos. Using the Edge Sharpen adjustment controls in conjunction with the following workflow makes it easy to achieve professional results.

To sharpen an image:

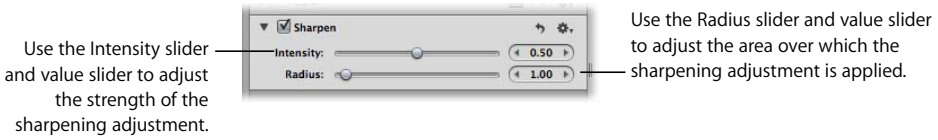
1. In the Edge Sharpen area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, set the Intensity slider to the maximum value to see the effect of the operation.
2. Adjust the Edges slider so you can see which parts of the image are being sharpened. If possible, adjust the Edges slider so that edges are sharpened, but noise and texture in the image are not affected.
3. Adjust the Falloff slider so that the edge sizes you want sharpened the most are accentuated.
4. Decrease the Intensity parameter value until the sharpening effect is appropriately subtle. Values below 0.5 usually work best.

Working with the Sharpen Controls

You use the Sharpen adjustment controls when you need to modify Sharpen adjustment control parameters that were applied to an image in a previous version of Aperture.

To sharpen an image using the Sharpen controls:

1. Select an image.
2. If the Sharpen controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Sharpen from the Add Adjustments pop-up menu.
3. Sharpen the image by doing one of the following:



- By default, the Intensity slider is set to 0.50. Drag the Intensity slider to the right to increase the intensity of the sharpening effect on the image, and drag the Intensity slider back to the left to reduce it.

- Click the left or right arrow in the Intensity value slider to adjust the sharpening by 2 percent increments, or drag in the value field.

  The left arrow decreases the sharpening effect on the image, and the right arrow increases it.

- Double-click the number in the Intensity value slider, then enter a value from 0.00 to 2.00 and press Return.

  A value of 0.00 applies no sharpening adjustment to the image. A value greater than 0.00 increases the sharpening adjustment to the image.

4 Adjust the area over which the sharpening adjustment is applied (the distance, in pixels, that Aperture goes from each pixel to evaluate sharpness) by doing one of the following:

- By default, the Radius slider is set to 1.00 pixels. Drag the Radius slider to the right to increase the area over which the sharpening effect is applied, and drag the Radius slider back to the left to reduce it.
- Click the left or right arrow in the Radius value slider to adjust the Radius pixel distance by 2 percent increments, or drag in the value field.
- Double-click the number in the Radius value slider, then enter a value from 0.00 to 200.00 and press Return.

  A value of 0.00 applies no sharpening adjustment to the image. A value greater than 0.00 increases the area over which the sharpening adjustment is applied.

As you change the parameter values, the image updates to display the sharpening effect.

Working with the Vignette Controls

You use the Vignette adjustment controls to apply a vignette to an image. The term *vignette* describes an image whose brightness fades to its periphery from its center. Vignettes are usually applied to an image after it is shot, for artistic effect. Aperture provides two types of vignettes: Exposure and Gamma. The Exposure vignette is designed to simulate a lens-created vignette. The Gamma vignette is designed for artistic effect and applies a gamma adjustment to the affected pixels within the vignette. Because the Gamma vignette intensifies the affected pixels, it creates a more pronounced vignette effect than the Exposure vignette.

Note: You can add a vignette to any image cropped in Aperture. The adjustment is applied after the image is cropped.

Applying an Exposure Vignette

You use the Exposure vignette when you want to apply the effect of a traditional lens-created vignette.



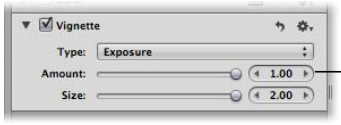
Before Exposure Vignette adjustment



After Exposure Vignette adjustment

To apply an Exposure vignette to an image:

1. Select an image.
2. If the Vignette controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Vignette from the Add Adjustments pop-up menu.
3. Choose Exposure from the Type pop-up menu.
4. Adjust the amount of vignette to apply to the image by doing one of the following:



Use the Amount slider and value slider to adjust the amount of brightness removed from the edges of the image.

- Drag the Amount slider to the left to decrease amount of dark shading applied to the edges of the image, or drag it to the right to increase the dark shading.
- Click the left or right arrow in the Amount value slider to change the amount of dark shading applied to the edges of the image, or drag in the value field.

  The left arrow decreases the amount of dark shading applied to the edges of the image, and the right arrow increases the dark shading.
- Double-click the number in the Amount value slider, then enter a value from 0.00 to 1.00 and press Return.

5 To adjust the distance Aperture goes from the edge of the image, in pixels, to apply the vignette adjustment, do one of the following:



Use the Size slider and value slider to adjust the size of the area over which the vignette adjustment is applied.

- Drag the Size slider to the right to increase the number of pixels Aperture goes toward the center of the image to apply the vignette adjustment, or drag it to the left to limit the vignette to the edges of the image.
- Click the left or right arrow in the Size value slider, or drag in the value field.

  The left arrow limits the vignette adjustment to the edges of the image, and the right arrow moves the vignette adjustment toward the center point of the image.
- Double-click the number in the Size value slider, then enter a value from 0.0 to 2.00 and press Return.

The Exposure vignette is applied to the image.

Applying a Gamma Vignette

A Gamma vignette is an artistic adjustment that intensifies colors in the pixels affected by the vignette.



Before Gamma Vignette adjustment



After Gamma Vignette adjustment

To apply a Gamma vignette to an image:

1 Select an image.

2 If the Vignette controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Vignette from the Add Adjustments pop-up menu.

3 Choose Gamma from the Type pop-up menu.

4 Adjust the amount of vignette to apply to the image by doing one of the following:



Use the Amount slider and value slider to adjust the amount of brightness removed from the edges of the image.

- Drag the Amount slider to the left to decrease the amount of dark shading applied to the edges of the image, or drag it to the right to increase the dark shading.
- Click the left or right arrow in the Amount value slider to change the amount of dark shading applied to the edges of the image, or drag in the value field.

  The left arrow decreases the amount of dark shading applied to the edges of the image, and the right arrow increases the dark shading.
- Double-click the number in the Amount value slider, then enter a value from 0.00 to 1.00 and press Return.

5 To adjust the distance Aperture goes from the edge of the image, in pixels, to apply the vignette adjustment, do one of the following:



Use the Size slider and value slider to adjust the size of the area over which the vignette adjustment is applied.

- Drag the Size slider to the right to increase the number of pixels Aperture goes toward the center of the image to apply the vignette adjustment, or drag it to the left to limit the vignette to the edges of the image.
- Click the left or right arrow in the Size value slider, or drag in the value field.

  The left arrow limits the vignette adjustment to the edges of the image, and the right arrow moves the vignette adjustment toward the center point of the image.
- Double-click the number in the Size value slider, then enter a value from 0.0 to 2.00 and press Return.

The Gamma vignette is applied to the image.

You can also remove a vignette that was applied to an image when it was shot using the Devignette controls. For more information, see "Working with the Devignette Controls" on page 398.

Switching Vignette Types

You can switch the type of vignette that's applied to an image and maintain the Amount and Size parameter values you set using the previous vignette type.

To switch vignette types:

- Select the other kind of vignette from the Type pop-up menu.

  The other type of vignette is applied to the image, but the Amount and Size parameters maintain their settings.

Part IV: Distribution and Backup

IV

This section describes methods of printing, exporting, and publishing your images for viewing. It also provides information about setting up and maintaining your backup systems.

Chapter 16 Printing Your Images

Chapter 17 Exporting Your Images

Chapter 18 Creating Slideshow Presentations

Chapter 19 Using the Light Table

Chapter 20 Creating Webpages

Chapter 21 Creating Books

Chapter 22 Backing Up Your Images

Printing Your Images

16

Aperture makes it easy to print high-resolution images. You can print single images, contact sheets, webpages, and books. You can also print images selected in the Light Table.

This chapter provides information about several methods for printing your images, including creating PDF files that you can easily transfer to clients for review.

This chapter covers:

- An Overview of Printing (p. 472)
- Controls in the Print Dialog (p. 474)
- Printing a Single Image (p. 477)
- Printing a Series of Images (p. 477)
- Printing a Contact Sheet or Series of Contact Sheets (p. 478)
- Printing a Book (p. 479)
- Printing a Light Table Arrangement (p. 480)
- Creating and Modifying Print Presets (p. 480)
- Proofing Your Images Onscreen (p. 482)
- Calibrating Your Printer (p. 483)
- Turning Off Color Management in Your Printer (p. 484)

An Overview of Printing

Aperture allows you to print your photos as high-resolution single images and multi-image contact sheets. You can also print books and Light Table arrangements created in Aperture. Aperture offers a variety of printing options, including using a standard or custom paper size and assigning a specific ColorSync profile.

The easiest way to print images is to use one of the Aperture print presets. Print presets, or groups of print settings, allow you to easily print your images without having to repeatedly change your settings. If the preconfigured presets don't meet your needs, you can create your own.

For example, if you regularly print both 8-by-10-inch and 11-by-14-inch photographs, you can create a print preset for each of these paper sizes. For photographers with multiple printers, such as a standard and wide-format inkjet printer, you can create print presets for each printer. Give the presets a name you'll remember, and next time you need to print, simply select the print preset that corresponds to your paper size or your printer type.

You can modify existing print presets, create new print presets, and delete print presets you no longer use. When changing your print presets, remember that modifying an existing preset deletes its original settings; creating a new preset, on the other hand, does not delete any existing settings.

Before you print your images, you can proof them onscreen using the onscreen proofing feature. For more information about onscreen proofing, see "Setting Up the Viewer for Onscreen Proofing" on page 192.

Printing Tips

Here are a few suggestions to help you with the printing process:

- *Use the highest-resolution image possible:* It's preferable to work with images imported directly from your camera. However, even images imported directly from your camera or card reader can be low-resolution, low-quality images. This is why it's important to shoot with the highest-resolution settings available on your camera. Compression settings applied during image capture may be apparent when you print. Consider shooting RAW files if the setting is available, and shoot at the highest bit depth possible.

  If you've imported an image that was reduced or compressed in another application, Aperture cannot increase the resolution of the file. In other words, Aperture cannot replace image information that was previously removed during the compression process. If possible, locate the original full-resolution image file, use the Lift and Stamp tools to apply the adjustments you've made to the low-resolution file, and print the higher-resolution image file.

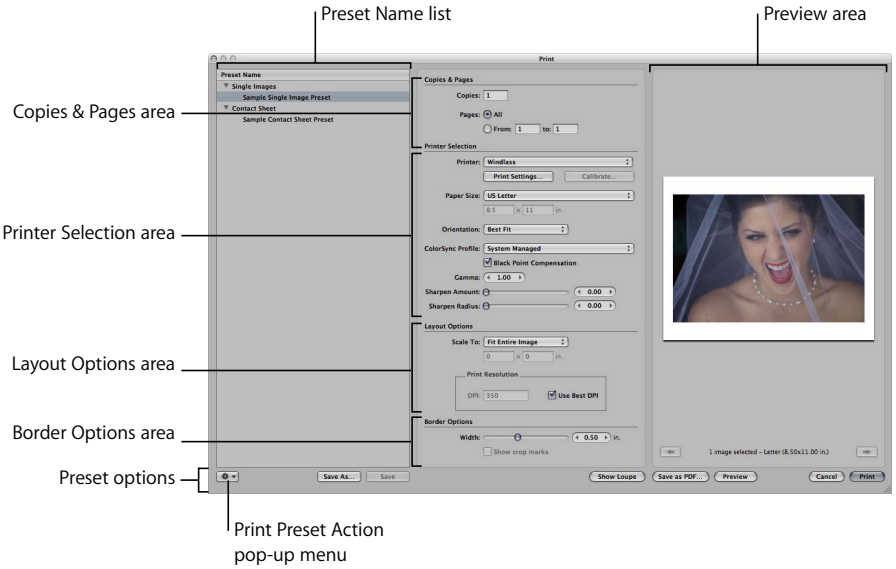
- *Use a printer that supports 16-bit printing:* Using a printer that supports 16-bit printing provides the widest color gamut for your prints. 16-bit printers have a wider range of colors, resulting in less color clipping.
- *Color calibrate your Aperture system:* It's important to calibrate your display and printer so that your printed images look as much as possible like the images you see on the computer screen. For more information about color calibrating your Aperture system, see Appendix B, "Calibrating Your Aperture System," on page 637.

Controls in the Print Dialog

Whether you're printing a single high-resolution print, a series of contact sheets, or your latest travelogue book, you use the Print dialog to print your work.

To open the Print dialog:

- Select an image in the Browser, then choose File > Print Image (or press Command-P).



The Print dialog is divided into several areas.

Preset Name List

This column contains all presets, those that come with Aperture as well as new ones that you create.

- *Single Images:* Click the disclosure triangle to display settings for printing a single image per page.
- *Contact Sheet:* Click the disclosure triangle to display settings for printing a series of images on one or more pages.

Preset Options

- *Print Preset Action pop-up menu:* Use this pop-up menu to add new print presets and lock and unlock presets.
- *Save As button:* Click this button to save a copy of the preset.
- *Save button:* Click this button to save a preset with its current name.

Copies & Pages

- *Copies field:* Enter the number of copies of the image to print.
- *Pages buttons and fields:* Print the entire selection of images or a reduced set.

Printer Selection

- *Printer field:* Displays the printer that will print the images.
- *Printer Settings button:* Click this button to choose a printer and adjust its settings. If you are using an ICC profile for your printer and paper choice, click this button and choose Color Management from the third pop-up menu from the top of the dialog, then select No Color Adjustment to turn off system-level color management. Aperture can then control color management using an ICC profile selected for your printer and paper.
- *Calibrate button:* Click this button to print a calibration page to determine the position of the margins.
- *Paper Size pop-up menu:* Choose a paper size from the list of available sizes.
- *Orientation pop-up menu:* Choose landscape or portrait orientation, or Best Fit. Best Fit automatically orients your image to the page and is usually a good choice for printing single images, but may not provide good results for contact sheets.
- *ColorSync Profile pop-up menu:* Choose a printer profile to use when printing.
- *Black Point Compensation checkbox:* Select this checkbox to scale the black and white luminance values to the selected ColorSync profile. This option compensates for the difference between the way black images are saturated on a computer screen and the way black ink is saturated on a print. Turning on black point compensation can prevent shadows from appearing as solid black.
- *Gamma value slider:* Specify a gamma setting to adjust the brightness of the printed image so that it matches the display's output as closely as possible. Because displays illuminate images, images shown on a display screen tend to appear more luminous than when printed. Increasing the gamma value can compensate for this difference. A typical setting ranges between 1.1 and 1.2.
- *Sharpen Amount slider and value slider:* Specify the amount of sharpness applied to the image as it is printed. Because images appear sharper onscreen than they do in print, a sharpen adjustment is often necessary to make the printed image match the image that appears onscreen.
- *Sharpen Radius slider and value slider:* Specify the area over which the sharpening adjustment is applied (the distance, in pixels, that Aperture goes from each pixel to evaluate sharpness).

Layout Options

- *Scale To pop-up menu:* When you select a single-image preset, you can use this pop-up menu to choose whether to fit your image to the selected paper size, print a specific image size, or print a custom image size. Fit Entire Image scales the image to be as large as possible for the paper size without cropping the image. Fill Page makes the image fit the entire page, cropping the image if necessary. Custom allows you to specify the image dimensions you'd like.
- *"Number of pages" and "Number of columns and rows" buttons:* When you select a contact sheet preset, select one of these options to specify the number of pages that you want the printed images to occupy, or the number of rows and columns of images on the page.
- *Metadata pop-up menu:* When you select a contact sheet preset, choose a metadata view to specify the metadata you want printed with your images.
- *Font Size pop-up menu:* When you select a contact sheet preset, choose the font size of the metadata that will be printed.
- *Print Resolution:* Type the dot-per-inch (dpi) resolution at which you want to print your image in the DPI field. You can also select the Use Best DPI checkbox to allow Aperture to calculate the best print resolution for the images for the selected printer.

Border Options

- *Width slider and value slider:* Drag the slider, or enter a value in the value slider, to reduce the size of the image in order to create a white border around the image.
- *"Show crop marks" checkbox:* Select this checkbox to print a cut line.

Preview Area

This area shows how the image or images will print on the selected paper size. If there is more than one page, you can use the Previous Image and Next Image buttons to navigate through the pages.

- *Show/Hide Loupe button:* Click this button to display or hide the Loupe.
- *Save as PDF button:* Click this button to create a PDF.
- *Preview button:* Click this button to view a PDF version of your print request in Preview.
- *Cancel button:* Click this button to close the Print dialog.
- *Print button:* Click this button to send your print job to the printer.

If Aperture Does Not Recognize Your Printer

If your printer does not appear in the Printer pop-up menu when you click the Printer Settings button, visit your printer manufacturer's website and download the latest drivers.

Printing a Single Image

When you want to print a single image on a single sheet of paper, you use a single-image preset.

To print a single image:

1. In the Browser, select an image.
2. Choose File > Print Image (or press Command-P).
3. In the Print dialog, select a single-image preset in the Preset Name list.
4. After you've verified that all the settings in the Print dialog are correct, click Print.

Printing a Series of Images

You can print multiple images at once, each on its own sheet of paper.

To print a series of images:

1. In the Browser, select the images you want to print.
2. Choose File > Print Images (or press Command-P).
3. In the Print dialog, select a single-image preset in the Preset Name list.
4. After you've verified that all the settings in the Print dialog are correct, click Print.

Your images are printed, one image per page.

Printing a Contact Sheet or Series of Contact Sheets

You can print contact sheets of your images, and Aperture does all the layout work for you. All you have to do is select the number of pages or columns; Aperture adjusts the size of the images based on your Layout Options settings.

To print contact sheets:

1. In the Browser, select the images you want to print.
2. Choose File > Print Images (or press Command-P).
3. In the Print dialog, specify the following settings:
   - Select a contact sheet preset in the Preset Name list.
   - Make sure the settings in the Printer Selection area are correct, such as paper size and ColorSync profile.
   - In the Layout Options area, specify the number of pages or the number of columns and rows as a basis for laying out the contact sheets.

     Aperture automatically adjusts the size of images based on your Layout Options settings. The size of the images on the contact sheet is based on whether or not you choose to constrain the images within a specific number of pages. The fewer pages selected, the smaller the images. Similarly, if you specify the number of columns and rows on the page, the more columns and rows, the smaller the images.
   - Verify the layout of your contact sheet in the preview area.
   - For printers incapable of printing full bleeds, select the "Show crop marks" checkbox in the Border Options area.
4. After you've verified that all the settings in the Print dialog are correct, click Print.

   Your contact sheet is printed.

Printing a Book

You can print a book to check the final format and look of it before having it printed by a professional printer, ordering a printed copy online, or distributing copies to others.

To print a book:

1. Select a book album in the Projects inspector.

   The book appears in the Book Layout Editor.

2. Choose File > Print Book (or press Command-Option-P).

3. In the Print dialog, specify the following settings:

   - Select a book preset in the Preset Name list.

     Note: The Mini-Size Book preset should be selected only for books created using the Mini book size. This preset selects a paper size appropriate for a mini-size book. Full-size book layouts may print with images cut off or missing when the Mini-Size Book preset is selected.

   - Make sure the settings in the Printer Selection area are correct, such as paper size and ColorSync profile.
   - Verify the layout of your book in the preview area.

4. Click Print.

   Your book is printed.

You can also create a PDF file of a book to store an electronic copy for use at another time or to send to others.

To create a PDF file of a book:

1. In the Projects inspector, select a book album.
2. Choose File > Print Book (or press Command-Option-P).
3. In the Print dialog, click the Save as PDF button.
4. Enter a name for the PDF file and choose a location to save the file, then click Save.

Printing a Light Table Arrangement

You can print an arrangement of images in the Light Table.

To print a Light Table arrangement:

1. Select a Light Table album in the Projects inspector.

   The Light Table appears above the Browser.

2. Do one of the following:

   - *To print selected images:* Select the images you want to print in the Light Table.
   - *To print the entire Light Table arrangement:* Deselect all images in the Light Table by clicking the background.

3. Choose File > Print Light Table (or press Command-Option-P).

4. In the Print dialog, specify the following settings:

   - Select a Light Table preset in the Preset Name list.
   - Make sure the settings in the Printer Selection area are correct, such as paper size and ColorSync profile.

5. After you've verified that all the settings in the Print dialog are correct, click Print.

   Your Light Table arrangement is printed.

Creating and Modifying Print Presets

After examining a selected preset's print settings, you may want to change certain settings. You can do this by modifying an existing print preset, creating a new, undefined print preset, or duplicating an existing print preset and making changes to it.

Creating a New Print Preset

In almost all situations, it's better to create a new print preset than to modify an existing one. You can easily create a new print preset based on any existing print preset. Creating a new print preset does not modify or delete any existing print preset settings.

To create a new print preset:

1. Choose File > Print Images (or press Command-P).

   The Print dialog appears.

2. Choose a print preset category from the Print Preset Action pop-up menu at the bottom-left side of the dialog.

   A new preset appears in the Preset Name list.

3. Enter a new name for the preset.

4. Change the print settings as required, then click OK.

   You can now select this preset whenever you need to use these print settings.

Modifying an Existing Print Preset

Any existing print preset can be changed, either temporarily or permanently. If you change a preset's settings without saving it, the preset will revert to its original settings after the print job is processed. If you save the modified settings, the preset will retain the setting changes.

To modify an existing print preset:

1. Choose File > Print Images (or press Command-P).

   The Print dialog appears.

2. Select a print preset, then modify it as appropriate.

   Changing an existing preset's settings activates the Save button.

3. When you're ready to save the preset, click Save.

   The print preset is saved with its new settings.

Duplicating a Print Preset

If you frequently use the majority of a specific print preset's settings, changing one or two items such as the type of printer or the paper size, it's more convenient to duplicate the preset with the print settings you need than to create a new one. For example, if you plan to frequently print 8-by-10-inch and 11-by-14-inch prints on the same printer, you can create a preset for 8-by-10-inch prints with the appropriate settings, duplicate the preset with its settings, and then change the paper size. Then name one preset 8 x 10 and the other 11 x 14. After that, you simply select the preset for the image size you plan to print, and click Print.

To copy a new print preset:

1. Choose File > Print Images (or press Command-P).

   The Print dialog appears.

2. Select a print preset to duplicate, then choose Duplicate from the Print Preset Action pop-up menu at the bottom-left side of the dialog.

   A new duplicate preset, based on the currently selected print preset, appears in the Preset Name list.

3. Enter a new name for the preset.

4. Change the print settings as required.

   You can now select this preset whenever you need to use these print settings.

Locking Print Presets

If you worry that you may inadvertently modify your print presets, you can lock them.

To lock or unlock a print preset:

- In the Print dialog, select the preset, then choose Lock or Unlock from the Print Preset Action pop-up menu at the bottom-left side of the dialog.

When a preset is locked, a lock icon appears to the right of the preset name.

Deleting a Print Preset

You can delete a print preset that you no longer use.

To delete a print preset:

- In the Print dialog, select the preset, then choose Delete from the Print Preset Action pop-up menu at the bottom-left side of the dialog.

The preset is deleted from the Preset Name list.

Proofing Your Images Onscreen

Your printer, paper type, and color profile all affect the way your images are printed. Onscreen proofing allows you to proof the color in your images onscreen, before you print them.

To use onscreen proofing, choose the proofing profile that most closely matches the characteristics of the final output device, and then turn on onscreen proofing.

To choose a proofing profile:

- Choose View > Proofing Profile, then choose the profile you want from the submenu.

To turn onscreen proofing on or off:

- Choose View > Onscreen Proofing (or press Shift-Option-P).

When onscreen proofing is on, a checkmark appears beside the option in the View menu.

For more information about using the Aperture onscreen proofing feature, see "Setting Up the Viewer for Onscreen Proofing" on page 192.

For more information about ColorSync profiles and color calibrating your computer, see Appendix B, "Calibrating Your Aperture System," on page 637.

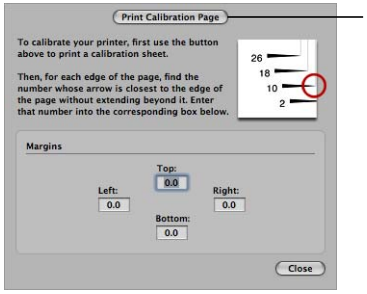
Calibrating Your Printer

Using the Aperture Print dialog, you can print a calibration page on your printer to verify that the margins are set correctly. If the margins are not set correctly, printing your image off-center, you can use the Calibrate button to adjust the placement of the image on the page.

To print a calibration page:

1. Make sure your printer is connected to your computer and turned on.
2. Choose File > Print Images (or press Command-P).

   The Print dialog appears.
3. In the Printer Selection area, click the Calibrate button.
4. Click the Print Calibration Page button in the dialog that appears.

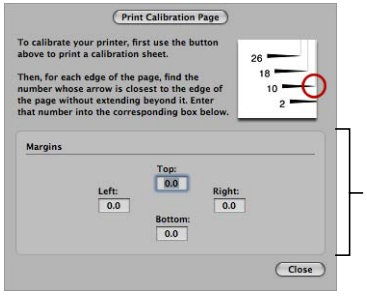


Click the Print Calibration Page button to print a calibration page.

Your printer prints a calibration page with numbered arrows that point to the margins on each side of the page. If the numbered arrows are not evenly spaced and printed on each side of the page, the printer needs calibration to center the image.

To calibrate your printer:

- In the calibration dialog, enter the amount of space needed to center the image in the Top, Right, Bottom, and Left margin fields. A positive number moves the image toward the center of the page.



Margin fields

Turning Off Color Management in Your Printer

For best results, you should turn off color management in your printer when printing an image using Aperture. By default, most printers are set to convert the image to the printer's color space. However, Aperture is designed to perform this conversion internally. Each printer manufacturer creates its own Print dialog. This means the setting for turning off color management in your printer varies depending upon the manufacturer of your printer and the printer model.

Note: If you have multiple printers connected to your computer, you must create a print preset and turn off color management for each printer.

The following is a set of example tasks for turning off color management in Epson R2400, Canon i9100, and HP Photosmart 8700 series printers.

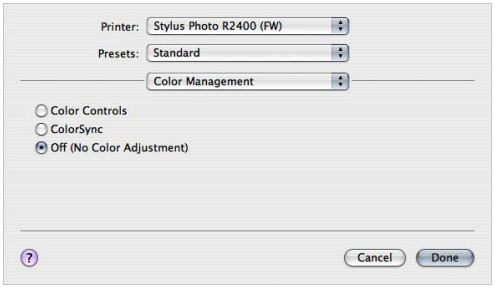
To turn off color management in an Epson R2400 printer:

1. In Aperture, choose File > Print Images (or press Command-P).

   The Print dialog appears.

2. Click the Printer Settings button.

3. In the dialog that appears, choose Color Management from the third pop-up menu from the top of the dialog, and select Off (No Color Adjustment).



4. Make sure the other printer settings are correct, then click Done.

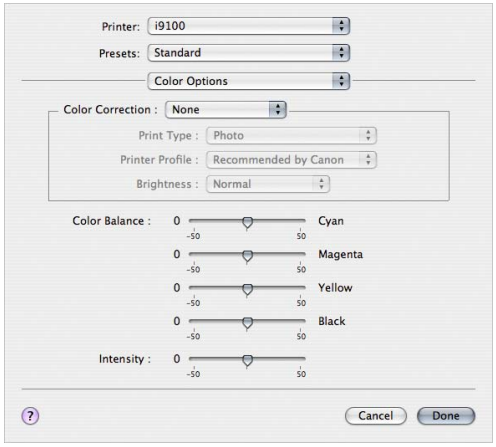
To turn off color management in a Canon i9100 printer:

1. In Aperture, choose File > Print Images (or press Command-P).

   The Print dialog appears.

2. Click the Printer Settings button.

3. In the dialog that appears, choose Color Options from the third pop-up menu from the top of the dialog, and choose None from the Color Correction pop-up menu.



4. Make sure the other printer settings are correct, then click Done.

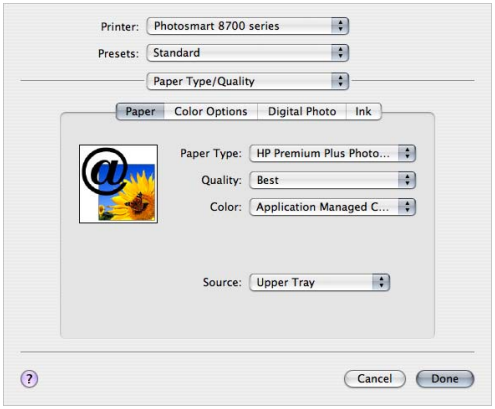
To turn off color management in an HP Photosmart 8700 series printer:

1. In Aperture, choose File > Print Images (or press Command-P).

   The Print dialog appears.

2. Click the Printer Settings button.

3. In the dialog that appears, choose Paper Type/Quality from the third pop-up menu from the top of the dialog, click the Paper button, then choose Application Managed Color from the Color pop-up menu.



4. Make sure the other printer settings are correct, then click Done.

Exporting Your Images

17

After you've finished working on your images, you can use Aperture to export them as files. You can export these files to another application, send them to a printing service or to your clients via email, or publish them on the web.

This chapter provides information about exporting your images in several formats, including JPEG, TIFF, PNG, and PSD file formats. During export you can rename, resize, and adjust images and include EXIF information, IPTC information, or other metadata. You can also apply ColorSync profiles and watermarks to files you export.

This chapter covers:

- An Overview of Exporting Images (p. 487)
- Exporting Copies of Masters (p. 489)
- Exporting Image Versions (p. 492)
- Working with Export Presets (p. 505)

An Overview of Exporting Images

Using Aperture, you can export copies of masters, as well as versions that you've created. When you export versions, you can export them in JPEG, TIFF, PNG, and PSD file formats.

At export, you can rename files, resize and adjust images, and include metadata such as EXIF information, IPTC information, and keywords. You can also apply ColorSync profiles and watermarks to the versions you're exporting. You can export separate lists of metadata for selected images as a file. You can also export masters with IPTC data stored in XMP sidecar files that can be used in other applications, such as Adobe Photoshop.

Before exporting your images to another application, a printing service, a client, or a website, you need to know what file types the receiver can use. You should also check with the receiver about other important information, including file size limitations, required image dimensions, and naming conventions. The key to successful file transfer is anticipating—and avoiding—anything that can prevent the receiver from opening your files.

Aperture allows you to perform multiple export operations concurrently. However, it's extremely important that you avoid making changes to the images you are exporting until the operation is complete to prevent unintended behavior.

The easiest way to export images is to use one of the Aperture export presets. Presets, or groups of export settings, allow you to easily export your images. If the presets included with Aperture don't meet your needs, you can create your own. For example, if you regularly send groups of photos to a stock photography house and a printer, you can create an export preset for each destination. Give the presets a name you'll remember, and next time you need to send images to either destination, simply select the correct export preset.

You can also modify existing export presets and delete export presets you no longer use.

Exporting Images to an External Editor

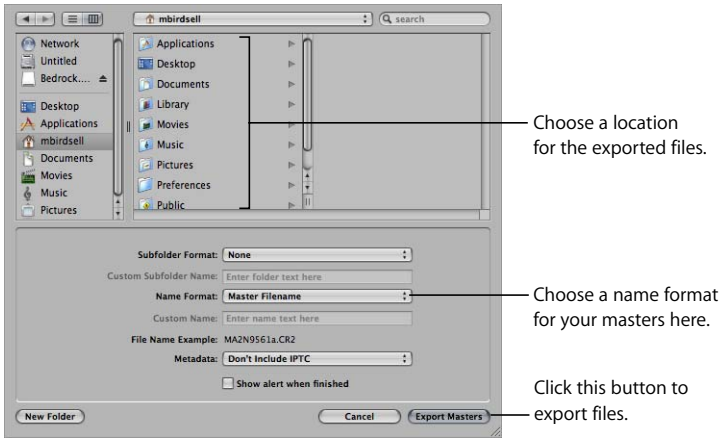
Aperture provides an easy way to transfer images to another application for changes and then bring the revised images back into Aperture. You can specify an application as an external editor in the Export pane of the Preferences window. For example, if your image editing sometimes requires one or more of the specialized tools available in Adobe Photoshop, you can select Photoshop as your external editor. You can then select an image and choose Images > Edit With > [*Application Name*]. Aperture makes a new master and version of your image and opens it in Adobe Photoshop. After you make your changes and save the image, the revised version automatically reappears in Aperture. The external editor doesn't change the original master. For more information, see "Using an External Editor" on page 350.

Exporting Copies of Masters

When you export masters, duplicates of the files that were imported from your camera or other source are created; no adjustments, file modifications, or any other changes are exported with the file.

To export copies of masters:

1. Select an image or images in the Browser.
2. Choose File > Export > Masters (or press Command-Shift-S).
3. Navigate to the location where you want the exported files placed.



4. Do one of the following:
   - Choose None from the Subfolder Format pop-up menu to specify that the files be stored as separate individual files in the selected folder.
   - To specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files, choose a folder name preset from the Subfolder Format pop-up menu. For more information about creating folders to hold your exported images, see "Exporting Masters into Folders in the Finder" on page 490.
   - Enter a custom folder name in the Custom Subfolder Name field.
5. Choose a name format for your masters from the Name Format pop-up menu.

   For more information about selecting and setting up filenaming formats, see "Creating Custom Name Formats" on page 130. Aperture shows an example of the selected name format in the dialog.

6 By default, IPTC metadata is not exported with the masters. To export the masters with IPTC metadata, do one of the following:

- *To write IPTC metadata into the master:* Choose "Include IPTC" from the Metadata pop-up menu.
- *To create an XMP sidecar file that contains the image's IPTC metadata:* Choose "Create IPTC4XMP sidecar file" from the Metadata pop-up menu.

7 If you would like to be notified when the export process is complete, select the "Show alert when finished" checkbox.

8 When you're ready to export your files, click Export Masters.

Copies of the masters for the selected images are exported to the location you specified. If you selected the "Show alert when finished" checkbox, a dialog appears displaying the number of masters exported and the file path. If you want Aperture to open the Finder to the location you exported your masters to, click the Reveal in Finder button. Otherwise, click OK to close the dialog.

Exporting Masters into Folders in the Finder

When you export masters, you can have Aperture place the files individually into a selected folder or create subfolders to hold the files. For example, you might have the exported files placed in subfolders identified by date. You can create folder name formats that you can quickly choose to select the folder structure you want.

To create a folder name format, you select the name elements you want in the Folder Naming Presets dialog. You can compose subfolder name formats that combine the following name elements:

- Version Name
- Master Filename
- Sequence Number (1 of 3, 2 of 3, 3 of 3, and so on)
- Image Year
- Image Month
- Image Day
- Image Date
- Image Time
- Index Number (1, 2, 3, and so on)
- Custom Name
- Counter (001, 002, 003, and so on)
- Folder Name
- Current Date
- Current Time
- Current Year

- Current Month
- Current Day
- Project Name
- / (slash)

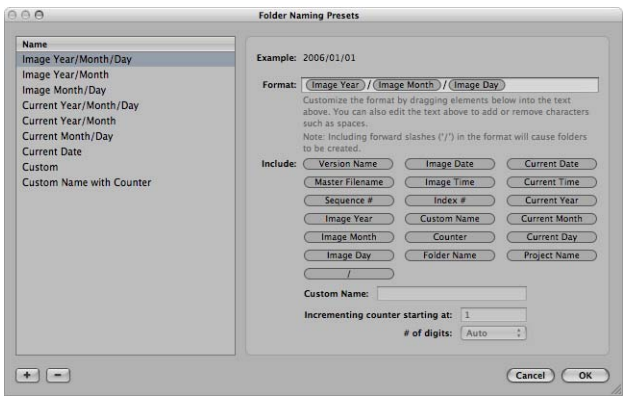
You can specify a combination of name elements to create the custom folder names you want.

You can also create a hierarchy of folders within folders. For example, you can specify that Aperture place your images in a subfolder named Date, and within that folder you can create subfolders identified by the time the image was taken. To create the folder name format, you drag the elements you want into the Format field and drag the slash element between the elements where a subfolder should be created.

To create a folder name format:

1 In the Export dialog, choose Edit from the Subfolder Format pop-up menu.

The Folder Naming Presets dialog appears.



2 Click the Add (+) button to create a new folder name format, or select the preset folder name format you want to change.

3 Drag the name elements you want into the Format field in the order you want them.

4 Drag a slash between the elements where you want subfolders created.

5 Enter a custom name in the Custom Name field, if you want.

6 Click OK.

Your new folder name format now appears in the Subfolder Format pop-up menu.

When using a counter in your folder name format, you can specify the starting number and the number of digits, from one to eleven digits, that appear in the counter. When you use a folder name format with a counter, make sure to reset the initial starting number, if necessary. Otherwise, on the next export Aperture will continue numbering the folders containing the exported images starting from the last number of the previous export.

To reset the starting number of a counter in a folder name format:

- In the Folder Naming Presets dialog, type 0 (zero) in the "Incrementing counter starting at" field.

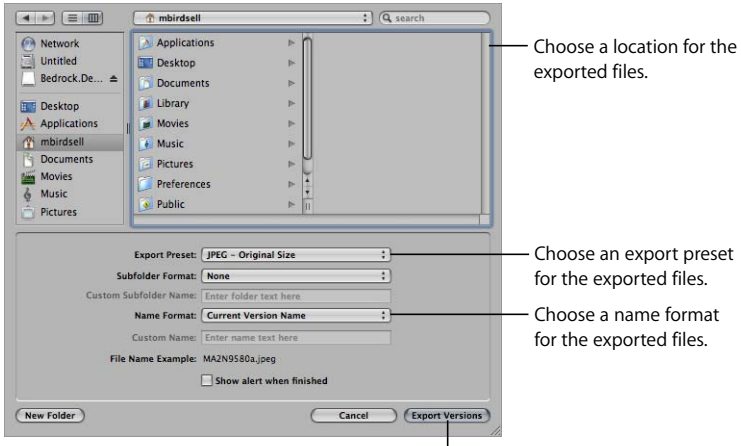
Exporting Image Versions

You can export image versions that you've created in Aperture. For example, you might make adjustments to images for a specific purpose and then export them for use in another application. You can also rename images when exporting them, make minor adjustments on export, add watermarks, and export images with metadata. You can also quickly export images to your email application to send them to others.

When you export image versions, you can specify settings for the exported files, such as format, size, and filename.

To export versions of images:

1. Select an image or images in the Browser.
2. Choose File > Export > Versions (or press Command-Shift-E).
3. Navigate to the location where you want the exported images placed.



4 Choose an export preset from the Export Preset pop-up menu.

5 Do one of the following:

- Choose None from the Subfolder Format pop-up menu to specify that the files be stored as separate individual files in the selected folder.
- To specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files, choose a folder name preset from the Subfolder Format pop-up menu. For more information about creating folders to hold your exported images, see "Exporting Masters into Folders in the Finder" on page 490.

6 Choose a name format for your files from the Name Format pop-up menu.

7 If you would like to be notified when the export process is complete, select the "Show alert when finished" checkbox.

8 When you're ready to export files, click Export Versions.

The images you selected are exported to the location you specified. If you selected the "Show alert when finished" checkbox, a dialog appears displaying the number of versions exported and the file path. If you want Aperture to open the Finder to the location you exported your versions to, click the Reveal in Finder button. Otherwise, click OK to close the dialog.

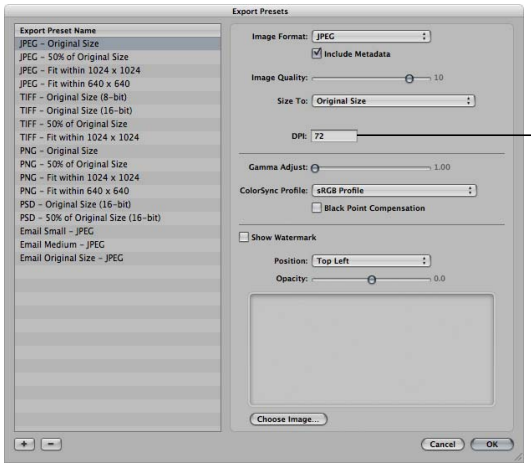
Note: If you would like to check on the progress of an export operation, choose Window > Show Activity. The Activity window displays the progress of each export operation. You can also use this window to pause and cancel an export operation.

Setting Image Resolution When Exporting

You can set the image resolution you want for exported images in the Export Presets dialog in several ways: by specifying a dpi setting, by specifying a percentage of the original, or by specifying image dimensions in inches, centimeters, or pixels. First you select an export preset in the Export Presets dialog, and then you specify the resolution you want used with that preset. When exporting images, you choose the export preset that has the resolution setting you want.

To specify the dpi setting for exported images in an export preset:

1. Select the image or images you want to export.
2. Choose File > Export > Versions (or press Command-Shift-E).
3. Navigate to the location where you want the exported images placed.
4. Choose Edit from the Export Preset pop-up menu.

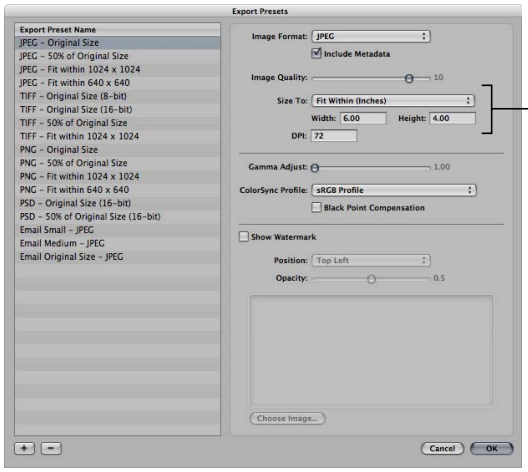


The Export Presets dialog appears.

5. Select an export preset, then enter the dpi setting you want.
6. Specify additional settings as necessary, then click OK.
7. Choose a name format from the Name Format pop-up menu, then click Export Versions.

To export images constrained to a specific size:

1. Select the image or images you want to export.
2. Choose File > Export > Versions (or press Command-Shift-E).
3. Navigate to the location where you want the exported images placed.
4. Choose Edit from the Export Preset pop-up menu.



Choose a Size To option and enter the corresponding values here.

The Export Presets dialog appears.

5. Select an export preset.
6. Choose an option from the Size To pop-up menu, and specify the size of the image by entering values in the fields that appear below the Size To pop-up menu.
7. Specify additional settings as necessary, then click OK.
8. Choose a name format from the Name Format pop-up menu, then click Export Versions.

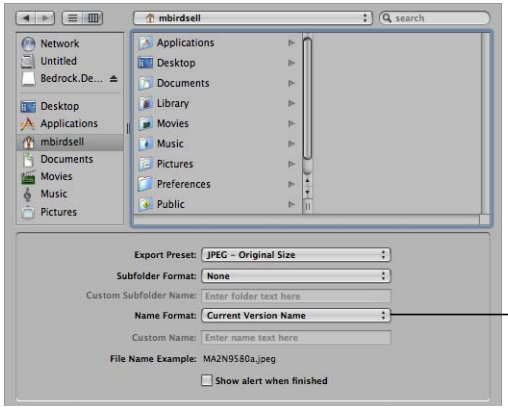
Renaming Images at Export

When you export selects from a large group of images, the exported files often have nonsequential names. You can rename your images at export, giving them more meaningful names.

For example, suppose you want to export images LA 031, LA 441, LA 686, and LA 894 from image group LA 001 to LA 1061. You can use the Custom Name with Index name format to rename your images LA 1, LA 2, and so on.

To rename images at export:

1. Select the image or images you want to export.
2. Choose File > Export > Versions (or press Command-Shift-E).
3. Navigate to the location where you want the exported images placed.
4. Choose a name format from the Name Format pop-up menu.



Choose a name format here; if you choose a Custom Name format, enter the name in the field below.

If you choose a Custom Name format, enter your custom name in the Custom Name field.

5. When you're ready to export files, click Export Versions.

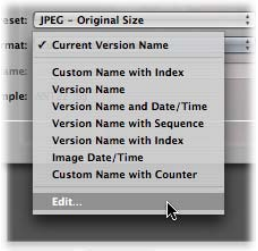
The files are exported with the name format you specified.

If none of the preset name formats meet your needs, you can create a new name format.

For example, you could create a name format that uses a custom name, the index number, and the date.

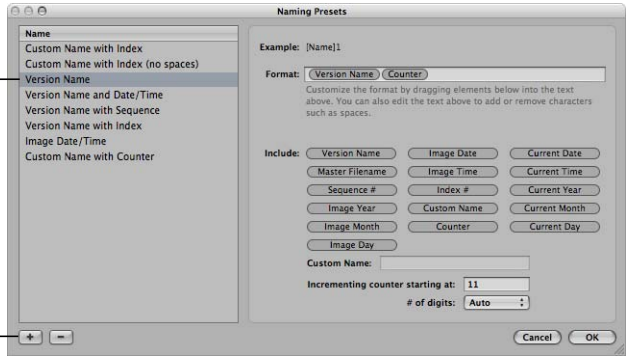
To create a new name format:

1. Select an image in the Browser.
2. Choose File > Export > Version (or press Command-Shift-E).
3. Choose Edit from the Name Format pop-up menu.



The Naming Presets dialog appears.

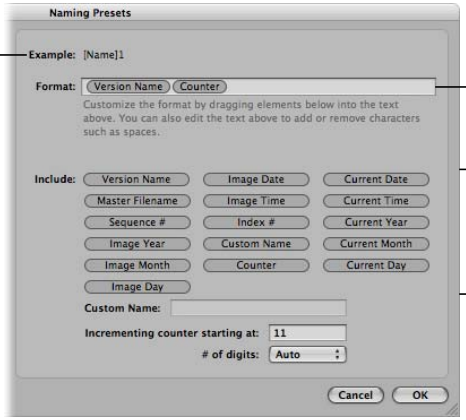
4. In the Name list, select an existing name format on which to base the new name format, then click the Add (+) button.



A copy of the selected name format is created.

5. Rename the new name format.

6 Add or remove name elements by dragging the elements where you want them and, when appropriate, entering relevant naming information in the fields provided. You can also enter characters directly in the Format field.



The name format example automatically updates as you change the name elements.

Name elements appear here. Remove a name element by selecting it and pressing Delete.

Add name elements by dragging them to the Format field.

As you select or deselect name elements, the Example field automatically updates.

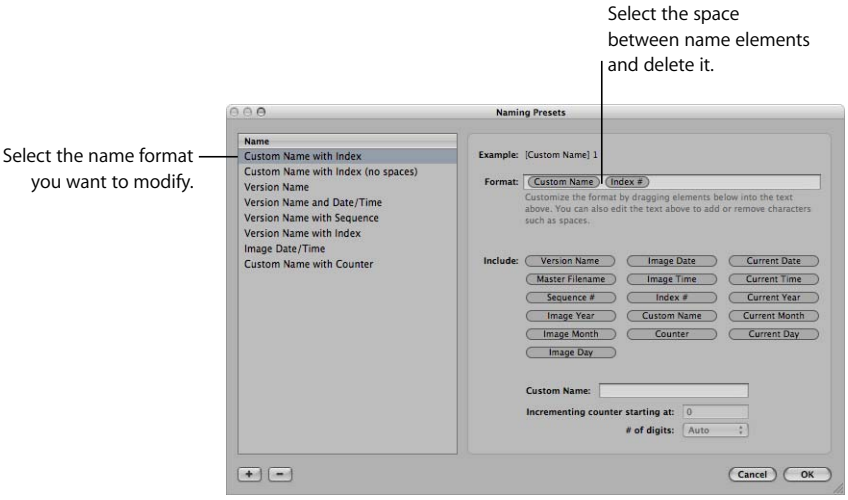
7 When you're satisfied with the new name format, click OK.

The new name format appears in the Name Format pop-up menu.

When exporting images for specific uses, such as for use on websites, you may need to use filenames without spaces so that the filenames are compatible with the intended application or website. Aperture adds spaces to filenames depending on the name format you use. You can easily modify name formats to remove spaces from filenames.

To modify a name format to remove spaces:

1. Choose Aperture > Presets > File Naming.
2. In the Naming Presets dialog, select the preset name format you want to modify.



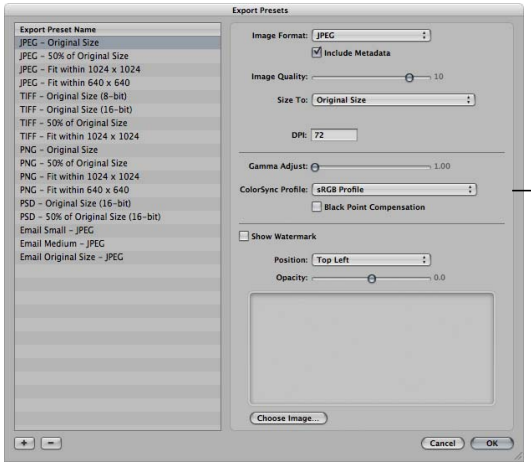
3. In the Format field, select and delete the spaces or characters between the name elements.

   If you wish, you can also add spaces or characters between name elements.
4. Click OK.

Adjusting Images at Export

You can also apply final adjustments to images at export by choosing ColorSync profiles, setting gamma adjustment, and applying black point compensation. Because these adjustments are applied at export, your Aperture image versions and masters are not changed. Only exported files receive image adjustments applied with an export preset.

To adjust images at export, you create a new export preset in the Export Presets dialog and then adjust the Image Quality, Gamma Adjust, ColorSync Profile, and Black Point Compensation settings as appropriate.



Use these options to adjust images when they are exported.

Gamma adjustments applied at export are applied on top of gamma adjustments previously applied to image versions. Before exporting, verify that you are not doubling any gamma adjustments previously applied to your images.

When you export, select the preset that includes the adjustments you want to make. For information about creating export presets, see "Working with Export Presets" on page 505.

To adjust images at export:

1. Select the image or images you want to export.
2. Choose File > Export > Versions (or press Command-Shift-E).
3. Navigate to the location where you want the exported images placed.
4. Choose Edit from the Export Preset pop-up menu.

   The Export Presets dialog appears.

5 Select an export preset and specify any adjustment options you want.

6 Click OK.

7 Choose a name format from the Name Format pop-up menu.

8 Click Export Versions.

Your files are exported with the adjustments you specified.

Adding a Watermark at Export

A watermark is a visible graphic overlay that is applied to an image. Photographers often use watermarks to indicate that images are protected by a copyright and discourage others from inappropriately using their images.

You can import a graphics file and add it to your images as a watermark.

To add a watermark image to your exported images:

1 Select the images you want to export.

2 Choose File > Export > Versions (or press Command-Shift-E).

3 In the dialog that appears, choose Edit from the Export Preset pop-up menu.

4 In the Export Presets dialog, select the export preset you want to use to export your images.

5 Select the Show Watermark checkbox.

6 Click the Choose Image button.

7 Select the image you want to use as a watermark, then click Choose.

8 Choose where you want the watermark to appear on the image from the Position pop-up menu.

9 To adjust the opacity of the watermark, drag the Opacity slider to a new position.

10 If you want the watermark to be scaled in proportion to the image's output size, select the "Scale watermark" checkbox.

11 When you're satisfied with how your watermark appears in the watermark preview area, click OK.

12 Navigate to the location where you want the exported images placed.

13 Choose a name format for your exported files from the Name Format pop-up menu.

14 Click Export Versions.

Your files are exported with the watermark you created.

Tips for Creating High-Quality Watermarks

Use the following guidelines to create high-quality watermarks for your images:

- Save your watermark as a .psd (Photoshop) file with a transparent background.
- Create multiple sizes of your watermark so that you can select the one that is the best match for the output size of the exported image.

  Note: If a watermark file is larger than the image you want to export, Aperture automatically scales the watermark down to fit the image. (Aperture does not scale watermarks up.)
- After you create a watermark, save it as part of an export preset so you can reuse it as often as you need.

Applying IPTC Metadata and Keywords to Your Images

Many publications use a standard set of image keywords; the American Newspaper Publishers Association (ANPA) wire codes, developed by the Newspaper Association of America, are one example. You can apply these keywords to your images when exporting to JPEG, TIFF, and PSD file formats.

Remember that applying metadata at export applies all the metadata attached to your image. If your image version has metadata that you don't want exported, create an image version that includes only the metadata intended for export.

Note: The PNG file format does not support the inclusion of metadata.

To include metadata with images at export:

1. Select the image or images you want to export.
2. Choose File > Export > Versions (or press Command-Shift-E).
3. Navigate to the location where you want the exported images placed.
4. Choose Edit from the Export Preset pop-up menu.
5. In the Export Presets dialog, select the export preset you want to use to export your images.
6. Select the Include Metadata checkbox.
7. Click OK.
8. Choose a name format for your exported files from the Name Format pop-up menu.
9. Click Export Versions.

The metadata is included in your exported images.

Exporting Metadata Listed in a Separate File

You can select images and export the metadata assigned to them in a tab-delimited text file. The text file lists the version names, ratings, keywords, and other metadata assigned to the images.

To export image metadata in a text file:

1. Select the images whose metadata you want to export.
2. Choose File > Export > Metadata.
3. Select the location where you want the file stored, then click Export Metadata.

Aperture exports the metadata information as a standard Unicode text file that you can open and use with any application that uses text files.

Exporting Using Plug-ins

Some applications or photography services supply plug-ins that allow Aperture to export files automatically with the format and settings the application or service requires. For example, a stock photography service or print lab may require that images be transferred at a specific size, in a specific file format, or with particular types of metadata. Such a service can create its own plug-in that automatically sets up Aperture to export files with precisely the characteristics the service needs.

To use an export plug-in, you must first obtain the plug-in software from the service or application vendor and install it. Third-party plug-ins for Aperture are stored in the following location: /Library/Application Support/Aperture/Plug-ins/Export/.

To export images using a third-party plug-in:

1. Select the images you want to transfer.
2. Choose File > Export, then select the plug-in that you wish to use.

Exporting Images to Use in Email

While it's not the best method for delivering uncompressed or large image files, email provides a quick and easy way to deliver images. Aperture contains three export presets (Email Small, Email Medium, and Email Original Size) that create compressed JPEG files that are easy to send via email. If these export presets don't meet your needs, you can create your own custom email export preset.

You can also have Aperture transfer an image directly to your email application. To specify that Aperture use a specific email application to send your images, choose the email application you want to use in the Export pane of the Preferences window. You can also specify the email export preset used to prepare the images.

To specify an email application and email export preset for Aperture to use:

1. Choose Aperture > Preferences, or press Command-Comma (,), then click Export.
2. In the Export pane of the Preferences window, choose the email application you want from the "Email images using" pop-up menu.
3. To specify an export preset for Aperture to use when preparing images for email transfer, choose the preset you want from the Email Export Preset pop-up menu. If none of the presets meet your needs, click the Edit button to the right of the Email Export Preset pop-up menu and create a new export preset.

   For more information about creating export presets, see "Creating an Export Preset" on page 506.

To send an image directly to your email application:

1. Select the image you want to send.
2. Choose File > Email (or press Option-E).

   The image is exported directly to your email application.

   Note: Before you attempt to email an image, find out the maximum file size your email client supports. If your exported images exceed this maximum file size, consider using FTP software or another file-sharing technique to deliver your images.

To export an image or images to attach to an email message later:

1. Select the image or images you want to export.
2. Choose File > Export > Versions (or press Command-Shift-E).
3. Navigate to the location where you want the exported images placed.
4. Choose an email export preset from the Export Preset pop-up menu.
5. Choose a name format for your files from the Name Format pop-up menu.
6. When you're ready to export files, click Export Versions.

   You can now open your email application and attach the exported files.

Working with Export Presets

Export presets are groups of saved export settings that help you quickly and easily export your images. Aperture comes with numerous export presets, and you can also create your own.

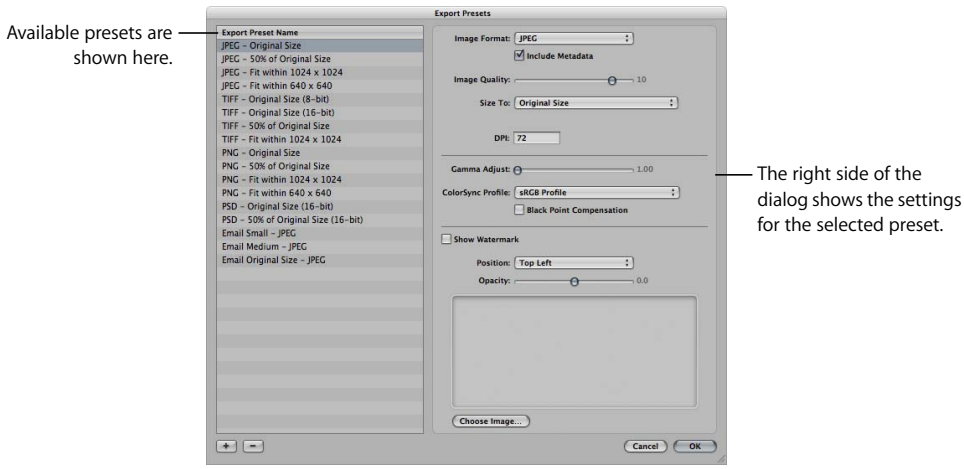
Controls in the Export Presets Dialog

Before using an export preset, whether it's one that comes with Aperture or one that you created, you can view its settings to make sure they are exactly what you want.

To view the settings for an export preset, do one of the following:

- Choose Aperture > Presets > Image Export.
- With an image selected, choose File > Export Version (or press Command-Shift-E) and in the dialog that appears, choose Edit from the Export Preset pop-up menu.

The Export Presets dialog appears, listing the presets available and the configurable export settings.



The Export Presets dialog includes these controls:

- *Image Format pop-up menu:* Choose an image format for the exported files, such as JPEG or TIFF.
- *Include Metadata checkbox:* Select this checkbox to include EXIF and IPTC metadata in the exported files.
- *Image Quality slider:* Choose how much to compress your files by dragging the slider. Setting the slider to 12 applies the least compression and results in a higher-quality image; setting the slider to 0 (zero) applies the most compression and results in a lower-quality image.

- *Size To pop-up menu:* Export your images at their original size, or specify image dimensions or a percentage of the image's original size.
- *DPI:* Specify dots per inch (dpi), the resolution at which the images will be reproduced.
- *Gamma Adjust slider:* Gamma describes how your image distributes brightness. Drag the slider to apply a uniform gamma adjustment to your exported images.
- *ColorSync Profile pop-up menu:* Choosing a ColorSync profile ensures consistent color reproduction on other systems and in the printed image. Aperture provides a large selection of profiles, and any custom profiles you've saved during calibration are also included in the pop-up menu. To apply a ColorSync profile to the images you've selected for export, choose a profile from the pop-up menu.
- *Black Point Compensation checkbox:* Select this checkbox to scale the black and white luminance values to the selected ColorSync profile. Activating black point compensation can prevent shadows from appearing as solid black.
- *Show Watermark checkbox:* To add a watermark to your images, select this checkbox. After selecting the checkbox, you can choose a file to apply as a watermark image and place your watermark with a specified opacity on your image.

  For more information about adding watermarks, see "Adding a Watermark at Export" on page 501.

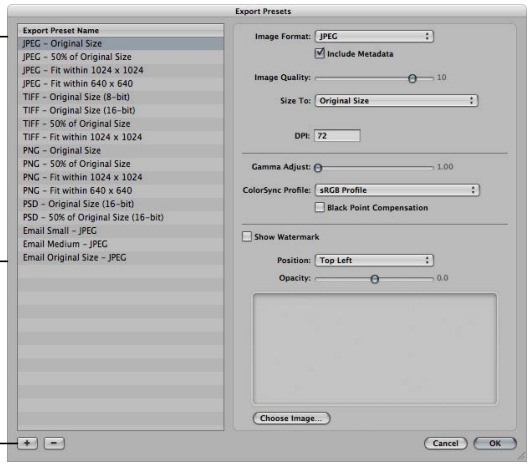
Creating an Export Preset

If none of the predefined export presets suit your needs, you can create your own export preset. An easy way to create a new export preset is to copy an existing preset and then modify the copy.

To create a new export preset:

1 Choose Aperture > Presets > Image Export.

The Export Presets dialog appears.



2 Select an export preset on which to base your new preset, then click the Add (+) button.

A new preset appears highlighted in the Export Preset Name list.

3 Enter a new name for the preset.

4 Change the export settings as required, then click OK.

Modifying an Export Preset

You can modify existing presets when you need to. The next time you export using that preset, Aperture remembers your modified settings and exports your images accordingly.

To modify an existing preset:

1 Choose Aperture > Presets > Image Export.

The Export Presets dialog appears.

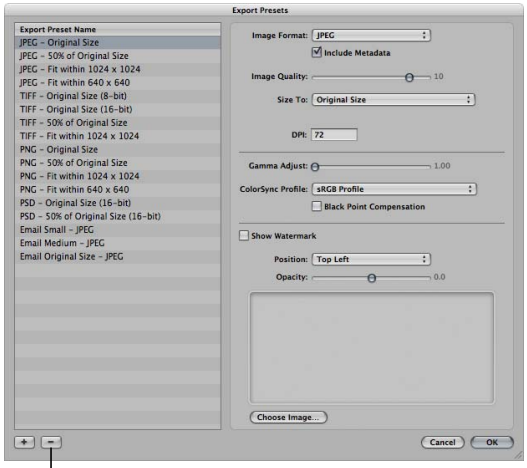
2 Select the preset you want and change its settings as required, then click OK.

Deleting an Export Preset

You can delete an export preset when you no longer need it.

To delete an export preset in the Export Presets dialog:

1 Select the preset, then click the Delete (–) button.



Click the Delete button to delete the selected preset.

The preset disappears from the preset list.

2 Click OK.

The preset is permanently deleted.

Note: If you click the Delete button and then click Cancel, the preset will reappear the next time you open the Export Presets dialog.

Creating Slideshow Presentations

18

With Aperture, you can easily create and present slideshows of your images. You can use slideshows to review images with clients, present a series of final select images, or present your images to audiences complete with background music.

This chapter explains how to create and play slideshows. You also learn how to specify the slideshow settings that determine how your images appear onscreen.

This chapter covers:

- An Overview of Slideshows (p. 510)
- Creating a Slideshow (p. 512)
- Controlling a Slideshow (p. 513)
- Arranging the Order of a Slideshow's Images (p. 513)
- Controls in the Slideshow Presets Dialog (p. 514)
- Creating Slideshow Presets (p. 516)
- Modifying Slideshow Presets (p. 517)
- Creating a Growing Grid of Images (p. 518)
- Playing Your Slideshow on Your Main Display Only (p. 519)
- Displaying Your Images to Music (p. 520)

An Overview of Slideshows

Aperture makes it easy to create slideshows to present your images. You can select a project in the Projects inspector or any number of images in the Browser and immediately display the images in a slideshow on your computer screen. You can determine the number of images that appear onscreen at one time, set the timing of the display, add music, and more. Your slideshows can play automatically or you can control them using keyboard shortcuts, displaying images one by one as you review them with a client.

To create a slideshow, you select a project or the individual images you want to display and then choose File > Slideshow.

When the Run Slideshow dialog appears, you can specify how you want images displayed by choosing a slideshow preset.



Slideshow presets are groups of predefined settings for playing a slideshow. For example, you can choose a slideshow preset to quickly set up a slideshow as a series of images that appear four at a time, with a specific display duration and type of transition between images.

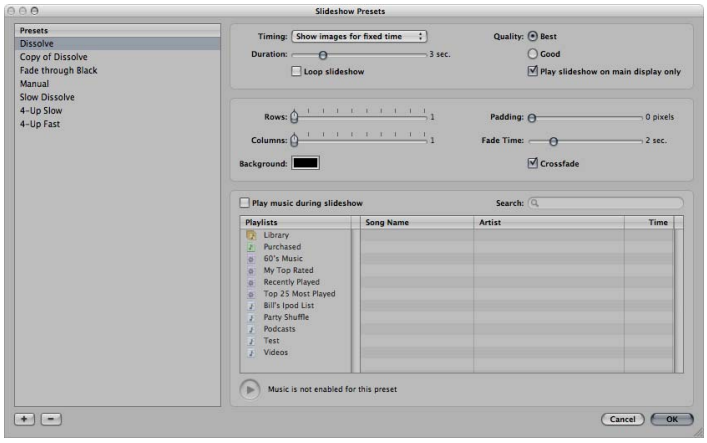
Aperture provides several slideshow presets that you can choose:

- *Dissolve:* Displays each image for 3 seconds, with a 2-second cross fade.
- *Fade through Black:* Displays each image on a black background for 3 seconds, with a 2-second cross fade.
- *Manual:* You control this slideshow's progression with the Right Arrow and Left Arrow keys.
- *Slow Dissolve:* Displays each image for 5.1 seconds, with a 5-second cross fade.
- *4-Up Slow:* Successively displays four images one at a time, showing each image for 3 seconds and then transitioning with a 2-second cross fade. The first image is replaced with the fifth, and so on.
- *4-Up Fast:* Successively displays four images one at a time, showing each image for 1 second. The first image is replaced with the fifth, and so on.

Important: To display slideshows at the best quality, you should set Aperture to create high-resolution previews. You can also display slideshows with good-quality images without creating high-resolution previews. For more information about creating high-resolution previews, see "Working with Preview Images" on page 196.

You can also create your own custom presets. For example, to prepare for a presentation, you could create two new slideshow presets: one for your presentation and the other for your question and answer period. The presentation slideshow can show one image at a time and be manually controlled, so you can move through the images at your own pace. Your second slideshow preset, to be used during the question and answer period of your presentation, can display the same images you just showed in a grid across two displays. The images can advance automatically and be set to music.

To create or modify a slideshow preset, you choose Aperture > Presets > Slideshow (or choose Edit from the Slideshow Preset pop-up menu in the Run Slideshow dialog), and the Slideshow Presets dialog appears.



You can then select a slideshow preset, or create a new one, and specify the settings you want.

Creating a Slideshow

You can easily set up your slideshow by selecting the images you want and then choosing a slideshow preset.

To create and play a slideshow:

1. Select a set of images by doing one of the following:
   - Select a project or album in the Projects inspector.
   - Select individual images or image stacks in the Browser.
2. Choose File > Slideshow (or press Shift-S).

   The Run Slideshow dialog appears.



3. Choose a preset from the Slideshow Preset pop-up menu:
   - *Dissolve:* Displays each image for 3 seconds, with a 2-second cross fade.
   - *Fade through Black:* Displays each image on a black background for 3 seconds, with a 2-second cross fade.
   - *Manual:* You control this slideshow's progression with the Right Arrow and Left Arrow keys.
   - *Slow Dissolve:* Displays each image for 5.1 seconds, with a 5-second cross fade.
   - *4-Up Slow:* Successively displays four images one at a time, showing each image for 3 seconds and then transitioning with a 2-second cross fade. The first image is replaced with the fifth, and so on.
   - *4-Up Fast:* Successively displays four images one at a time, showing each image for 1 second. The first image is replaced with the fifth, and so on.
4. If you want file status badges to appear over the images in the slideshow, select the "Show file status badges" checkbox.
5. Click Start.

   If either no image or a single image is selected, the slideshow displays all images in the current album or project.

Saving Slideshows

You can save a slideshow's images by creating an album and then placing the image versions for your slideshow in it. You can also apply a keyword such as *Slideshow* (or any other unique identifying keyword) to images and then create a Smart Album that automatically groups the images.

Controlling a Slideshow

Once you start playing a slideshow, you can use keyboard shortcuts to control the slideshow.

To pause the slideshow:

- Press the Space bar.

To continue playing the slideshow:

- Press the Space bar again.

To move forward through the slideshow:

- Press the Right Arrow key.

To move backward through the slideshow:

- Press the Left Arrow key.

To stop the slideshow:

- Press Esc (Escape). The slideshow stops playing, and your Aperture workspace reappears.

Arranging the Order of a Slideshow's Images

You can arrange the order of images in your slideshow.

To arrange the order of your slideshow's images:

- Before creating the slideshow, arrange the image thumbnails in the Browser in the order that you want them to appear in the slideshow.

You can then play your slideshow by following the instructions in the previous section, "Controlling a Slideshow."

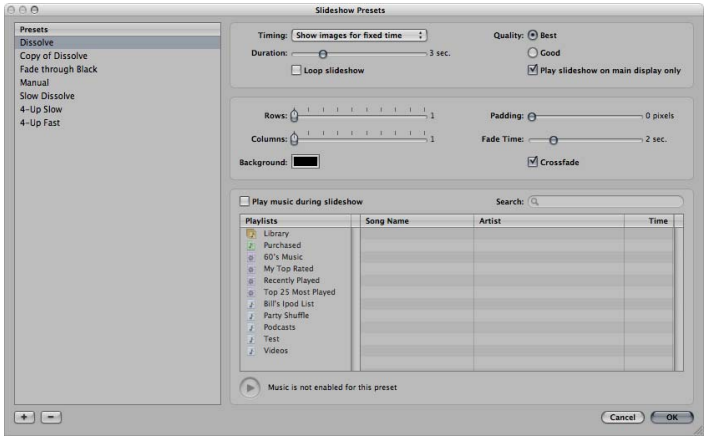
Controls in the Slideshow Presets Dialog

The Slideshow Presets dialog contains options for creating and modifying existing slideshow presets. In it, you can choose how many images to display at a time, how those images are arranged, and how long each image is displayed in your slideshow. You can also choose to play slideshows on one or two displays, with custom background colors and music.

To open the Slideshow Preset dialog, do one of the following:

- Choose Aperture > Presets > Slideshow.
- Choose File > Slideshow (or press Shift-S), then choose Edit from the Slideshow Preset pop-up menu in the Run Slideshow dialog.

The Slideshow Presets dialog appears.



The Slideshow Presets dialog has the following options:

- *Presets list:* Displays the list of current slideshow presets.
- *Timing pop-up menu:* Choose how the slideshow duration is determined: by fitting the slideshow to the duration of the music, by showing each image for a fixed time, or by advancing images manually.
- *Duration slider:* Determines the amount of time each image will be shown. Drag the slider to the right to increase each image's display time, and to the left to decrease display time.

- *"Loop slideshow" checkbox:* Select this checkbox to loop, or continuously play, your slideshow. If you select this option, you must stop your slideshow manually by pressing Esc.
- *Quality buttons:* Select a button to specify either Best or Good image quality. Selecting Best displays full-size images. Select Good for faster display.
- *"Play slideshow on main display only" checkbox:* If you use a dual-display system and want your slideshow to play only on your main display, select this checkbox.
- *Rows slider:* Drag this slider to increase the number of rows of images.
- *Columns slider:* Drag this slider to increase the number of columns of images.
- *Background color well:* Change the background color of your slideshow by clicking the Background color well and then choosing a new background color from the Colors window.
- *Padding slider:* Adjust padding, or the space between the top and bottom rows of images, by dragging the slider to the right to add space, and to the left to decrease space.
- *Fade Time slider:* Adjust the fade time between images by dragging this slider to the right to increase fade time, and to the left to decrease fade time.
- *Crossfade checkbox:* Select this checkbox to move between images by fading out the first and fading in the second.
- *"Play music during slideshow" checkbox:* Select this checkbox to play your slideshow with an accompanying song or iTunes playlist.
- *iTunes library area:* Displays your iTunes music library. Navigate through the library to select a song to accompany your slideshow, or search for a song name, artist, or song time by entering it in the search field.

Creating Slideshow Presets

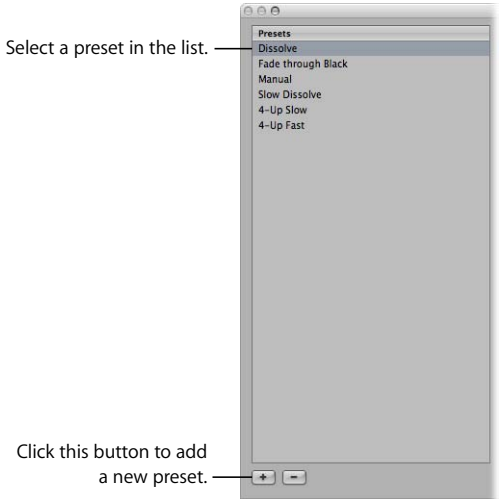
It's easiest to create a new slideshow preset by duplicating an existing preset and modifying it. First, identify which existing preset you want to model your new preset on. After duplicating the preset and renaming the duplicate, you can easily customize your new slideshow preset's settings.

To create a new slideshow preset:

1. Choose Aperture > Presets > Slideshow.

   The Slideshow Presets dialog appears.

2. Select a preset in the Presets list on which to model your new preset.
3. In the bottom-left corner of the dialog, click the Add (+) button.



   A copy of the slideshow preset appears highlighted in the Presets list.

4. Enter a name for the new slideshow preset, then press Return.
5. When you've finished specifying the slideshow options you want, click OK.

Modifying Slideshow Presets

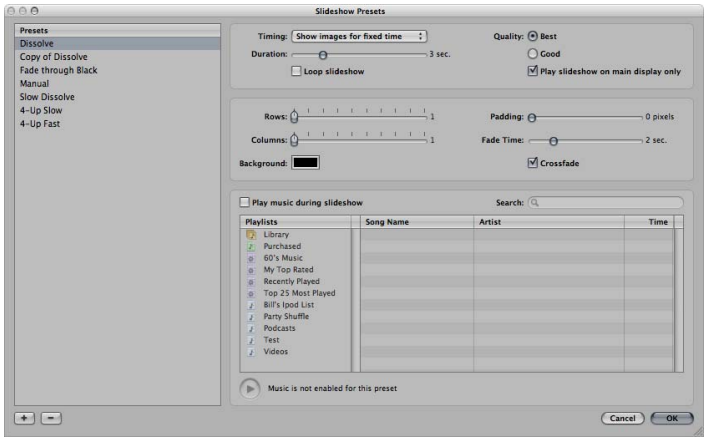
You can modify slideshow presets to create custom slideshows for any presentation.

To modify an existing preset:

1. Choose Aperture > Presets > Slideshow.

   The Slideshow Presets dialog appears.

2. Select the preset you want to modify in the Presets list.



3. Modify the slideshow preset's settings as appropriate.
4. When you've finished modifying the slideshow preset, click OK.

Creating a Growing Grid of Images

Most slideshow presets are set to replace one image with another. You can create a slideshow that successively adds images to your screen in a grid pattern.

To display images in a grid:

1. Select a set of images to be displayed in your slideshow.
2. Choose File > Slideshow (or press Shift-S).

   The Run Slideshow dialog appears.
3. Choose Edit from the Slideshow Preset pop-up menu.

   The Slideshow Presets dialog appears.
4. Do one of the following:
   - Select a slideshow preset to modify.
   - Create a new slideshow preset.
5. In the Slideshow Presets dialog, adjust the Rows and Columns sliders to specify the number of rows and columns in your image grid.



6. Click OK.

   The Run Slideshow dialog appears.
7. Click Start to begin playing the slideshow presentation.

Playing Your Slideshow on Your Main Display Only

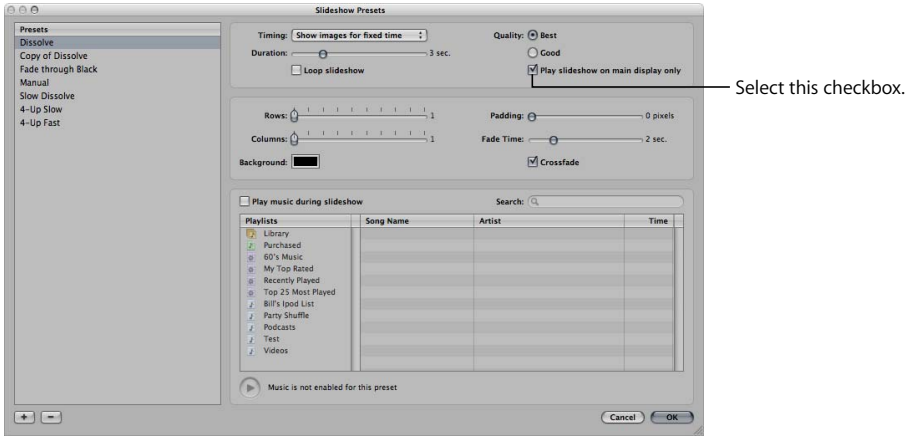
Your slideshow automatically plays according to your default display setup. If you use a dual-display system but want to view a slideshow only on your main display, you can easily make that change in the Slideshow Presets dialog.

To play your slideshow only on your main display:

1. Select a set of images to be displayed in your slideshow.
2. Choose File > Slideshow (or press Shift-S).

   The Run Slideshow dialog appears.
3. Choose Edit from the Slideshow Preset pop-up menu.

   The Slideshow Presets dialog appears.
4. Do one of the following:
   - Select a slideshow preset to modify.
   - Create a new slideshow preset.
5. In the Slideshow Presets dialog, select the "Play slideshow on main display only" checkbox.



6. Click OK.

   The Run Slideshow dialog appears.
7. Click Start to begin playing the slideshow presentation.

Displaying Your Images to Music

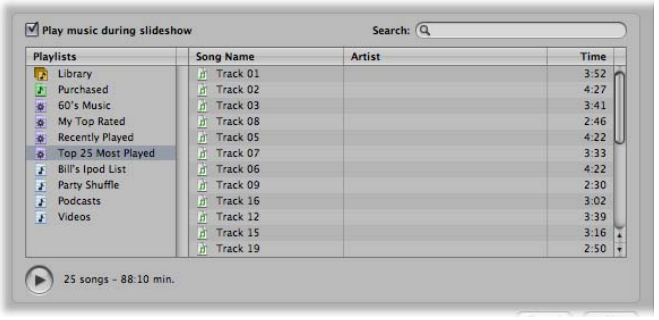
Adding music to your slideshow can increase your audience's enthusiasm and participation. You can easily add music from your iTunes music library to accompany your slideshow.

To add music to your slideshow presentation:

1. Select a set of images to be displayed in your slideshow.
2. Choose File > Slideshow (or press Shift-S).

   The Run Slideshow dialog appears.
3. Choose Edit from the Slideshow Preset pop-up menu.

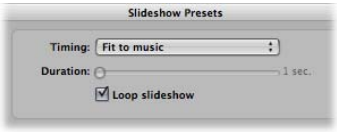
   The Slideshow Presets dialog appears.
4. Do one of the following:
   - Select a slideshow preset to modify.
   - Create a new slideshow preset.
5. In the Slideshow Presets dialog, select the "Play music during slideshow" checkbox.



6. Select a song or playlist from your iTunes music library.

   You can search for a specific song, artist, or song time by entering it in the search field.
7. If you want to preview your song choice, click the Play button.

8 If you want the image display time to be adjusted so that your slideshow is the same duration as the song, choose "Fit to music" from the Timing pop-up menu.



Aperture adjusts the amount of time each image is displayed to fit the duration of the selected song.

9 If you are satisfied with your music selection, click OK.

The Run Slideshow dialog appears.

10 Click Start to begin playing the slideshow presentation.

Using the Light Table

19

The Light Table provides a large, open space where you can freely resize, group, and rearrange images.

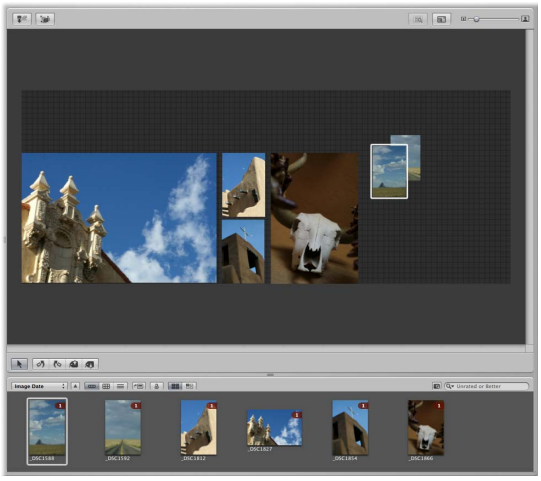
This chapter provides instructions for using the Light Table. You can place a selection of images in the Light Table for review and drag them to new positions, group them in different combinations, and resize them as needed. You can also easily arrange related images together to compare them, as you might during color correction.

This chapter covers:

- An Overview of the Light Table (p. 524)
- Creating a Light Table Album (p. 525)
- Placing and Viewing Images in the Light Table (p. 526)
- Moving and Resizing Images in the Light Table (p. 527)
- Aligning and Arranging Images in the Light Table (p. 528)
- Adjusting the Light Table View (p. 531)
- Setting View Options for the Light Table (p. 532)
- Transferring Images from the Light Table (p. 532)
- Printing a Light Table Arrangement (p. 533)
- Deleting a Light Table Album (p. 534)

An Overview of the Light Table

The Light Table is used to arrange and view images. You can work with images in the Light Table just as you would work with slides on a physical light table. You can place a selection of images in the Light Table for review and drag them to new positions, arranging, grouping, and resizing them in different combinations to see how they might look on webpages or book pages. The Light Table automatically displays yellow guidelines that show you how the item you're working with aligns with other items already on the page. You never run out of space in the Light Table—it grows as you add images to it, and it's easy to adjust the view by zooming in or changing the area of the Light Table that's shown.



You can use the Light Table when color correcting many related photos. You can arrange related images together and carefully compare the color values between images.

You can also use the Light Table to sort images into related piles. After sorting, you can select groups of images and assign keywords to all the images in a group at once.

You can use the Light Table to create editorial layouts as well, arranging images onscreen to tell a story. You can put the selects from a given project in the Light Table and arrange them so that they progress visually, eliminating repetitive images. As you group and pair images of the same subject, you'll find the Light Table ideal for examining the relationships between images.

Creating a Light Table Album

To view images in the Light Table, you first create a Light Table album. You can create a new, empty album and drag or import images into it, or you can select images in a project and create a Light Table album to hold them.

To create a new, empty Light Table album:

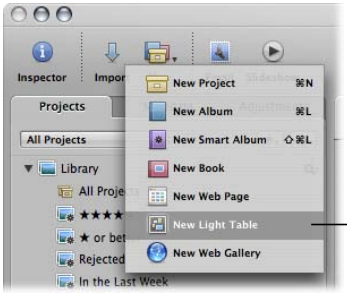
1. In the Projects inspector, select Library or the project where you want the new Light Table album to appear.
2. Do one of the following:
   - Choose File > New > Light Table.
   - Control-click in the Projects inspector, then choose New > Light Table from the shortcut menu.
   - Choose New Empty Light Table from the Add to Library pop-up menu in the Projects inspector.

   A new, untitled Light Table album appears.
3. Enter a new name for the Light Table album.

Now you can drag or import images into the new Light Table album.

To create a Light Table album that holds a selection of images:

1. In the Browser, select the images you want in the Light Table album.
2. Do one of the following:
   - Choose File > New From Selection > Light Table.
   - Control-click in the Projects inspector, then choose New From Selection > Light Table from the shortcut menu.
   - Choose New Light Table from the New pop-up menu in the toolbar.



   - In the Projects inspector, choose New Light Table From Selection from the Add to Library pop-up menu.

   A new, untitled Light Table album appears with the selected images in it.

3 Enter a new name for the Light Table album.

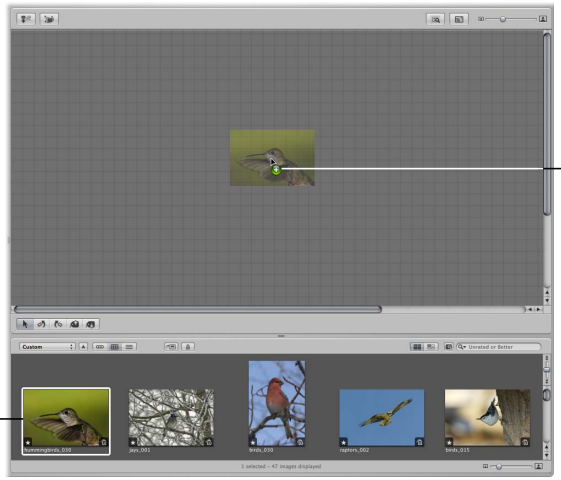
If necessary, you can drag additional images from the Browser to the Light Table album in the Projects inspector.

Placing and Viewing Images in the Light Table

After adding images to the Light Table album, you can select the ones you want to work with and place them in the Light Table for viewing.

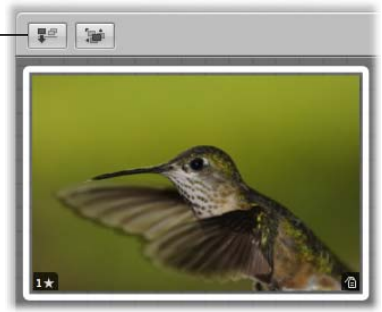
To add images to the Light Table:

- Select a Light Table album in the Projects inspector, then drag images from the Browser to the Light Table.



To remove an image from the Light Table:

- Select the image, then click the Put Back button.

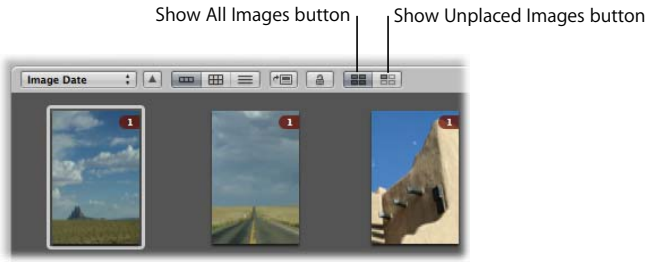


The image disappears from the Light Table but remains available in the Browser.

If you have many images in a Light Table album, it may be difficult to remember which images you haven't yet placed in the Light Table. You can set the Browser to show only those images that haven't been placed in the Light Table.

To see only images in the Browser that remain unplaced:

- Click the Show Unplaced Images button.



To see the entire contents of the Light Table album in the Browser:

- Click the Show All Images button.

Making Adjustments to Images in the Light Table

The Straighten, Crop, Spot & Patch, Retouch, and Red Eye tools in the tool strip are unavailable when using the Light Table. To use these tools to make a change to an image in the Light Table, select the image in the Browser, then click the Show Viewer button at the top of the Browser (to the right of the Filmstrip View, Grid View, and List View buttons). The selected image appears in the Viewer, and you can make your changes. Click the Show Viewer button again to return to the Light Table.

Moving and Resizing Images in the Light Table

You can drag images to different locations in the Light Table, trying out different combinations and orientations. For example, you might take a group of related images and arrange them to see how they'd appear on a print page. You can also enlarge or reduce images. After resizing an image, you can quickly reset the image back to its original size.

To move images in the Light Table:

- In the Light Table, select the images you want to move and drag them to a new location.

To drag an image to a location offscreen:

- Drag the image to the border of the Light Table until the screen begins to scroll.

To change an image's size:

1. Select the image in the Light Table.
2. Position the pointer over the image, then drag a resize handle to change the image's size.



Move the pointer over the image to show resize handles, then drag to change the image's size.

To reset an image to its previous size:

- Control-click the image, then choose Reset Selected Size from the shortcut menu.

Aligning and Arranging Images in the Light Table

As you drag images in the Light Table, you'll see yellow guidelines appear that mark the vertical, horizontal, and center points of the stationary, unselected images in relation to the images you are dragging. Using the guidelines, you can make sure that your selected images visually align with other images in the Light Table.

You can also select a group of images in the Light Table and automatically align them according to their top, bottom, or side edges, or by their centers. In addition, you can have Aperture arrange a selected group with equal space between each image.



When you drag an image, guidelines appear to help you align it with the other images.

To manually align images:

1. In the Light Table, select the images you want to align, making sure that the image or group of images you want to align with remain unselected.
2. Drag the selected image or group of images.



As you drag the selected image or group of images, yellow guidelines appear as a visual cue to help you align the selected images with the unselected ones. When you quit dragging, the yellow guidelines disappear.

You can also have Aperture automatically arrange the images in the Light Table.

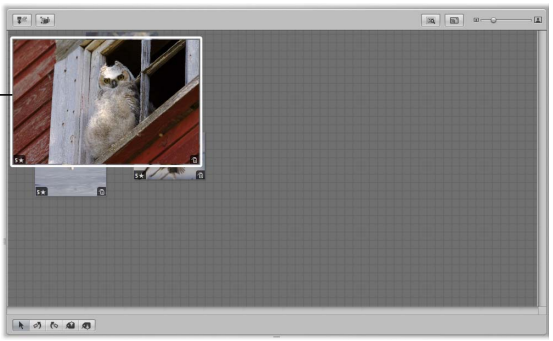
To automatically arrange images in the Light Table:

- In the Light Table, Control-click beside the images, then choose Arrange All Items from the shortcut menu.

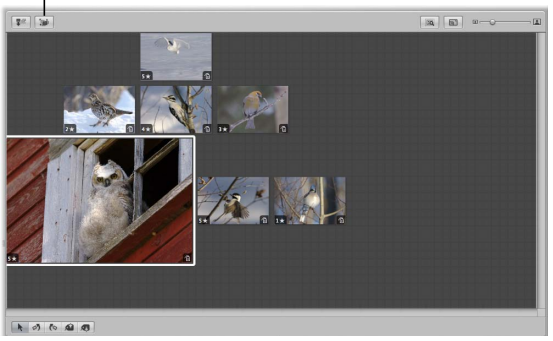
If some images in a group are hidden behind other images, you can also reveal, or uncover, all images in the group.

To reveal images in the Light Table that are covered by other images:

1 Select the top image in the group.



2 Click the Uncover button (or press Shift-X).



3 Select an uncovered image.

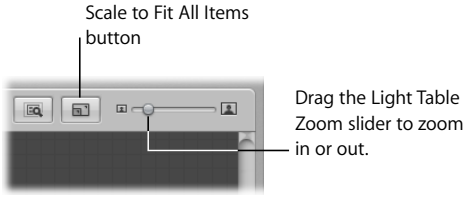
The images are regrouped, with the selected image on top.

Adjusting the Light Table View

You can adjust the Light Table view to better view and work with images. This is particularly useful when the Light Table is larger than your screen size. You can also increase the area of the Light Table.

To zoom in to or out of the Light Table:

- Drag the Light Table Zoom slider to change the view.



To fit the Light Table to your screen size:

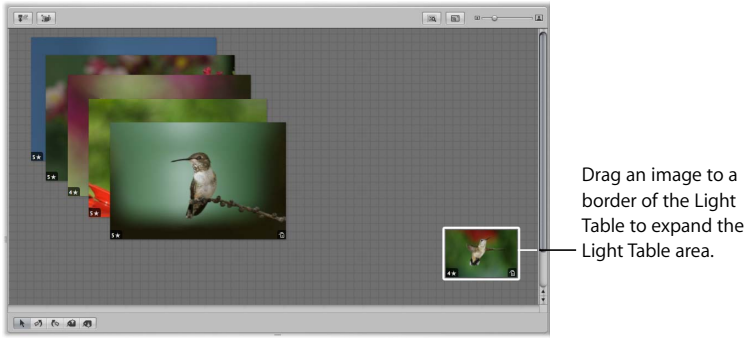
- Click the Scale to Fit All Items button.

To change the Light Table view to 100 percent:

- Control-click in a blank portion of the Light Table, then choose Zoom to 100% from the shortcut menu.

To increase the area of the Light Table:

- Drag an image to the border of the grid background so that the area of the Light Table automatically expands.



Setting View Options for the Light Table

You can set the view options for the Light Table to display badge and metadata overlays, such as ratings, on your images.

To change the display of image information in the Light Table:

1. Choose Aperture > Preferences, or press Command-Comma (,), then click Metadata.
2. In the Metadata pane of the Preferences window, select the "Show decorations" checkbox to display badge and metadata overlays on images in the Light Table.

Transferring Images from the Light Table

You can easily transfer your images from the Light Table to a new album.

To transfer images from the Light Table to a new album:

1. Select the images you want to transfer.
2. In the Projects inspector, choose New Album From Selection, New Webpage From Selection, New Web Journal From Selection, New Web Gallery From Selection, or New Book From Selection from the Add to Library pop-up menu.

   The images you selected are copied to the new album.

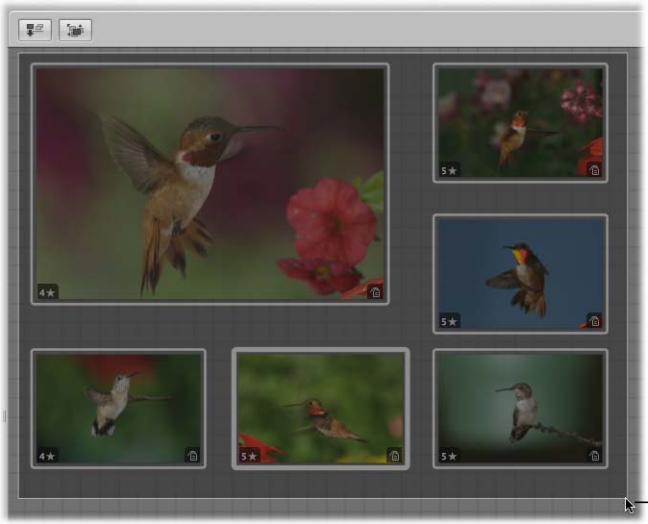
Printing a Light Table Arrangement

After arranging your images, you can print the image arrangement for further review.

To print a Light Table arrangement:

1 Select the images in the Light Table that you want to print by dragging a selection rectangle around them.

If no images are selected, the entire Light Table is printed.



2 Choose File > Print Light Table (or press Command-Option-P).

3 In the Print dialog, specify your print options, then click Print.

For more information, see Chapter 16, "Printing Your Images," on page 471.

Deleting a Light Table Album

You can quickly delete an entire Light Table album. If you've transferred images from the Light Table album to other projects or albums, the images in the other projects and albums remain unchanged, even though the Light Table versions are gone.

To delete a Light Table album:

1. Select the Light Table album in the Projects inspector.
2. Choose File > Delete Light Table (or press Command-Delete).

Creating Webpages

20

In Aperture, you can easily create webpages of your images that you can post to your .Mac account homepage or to your own website. Then clients can conveniently review your work via the Internet.

This chapter provides instructions for creating and posting webpages of your images. Using the built-in Aperture webpage themes, or designs, you can create webpages that show your images in eye-catching settings. You can also create web journal pages of images and explanatory text, narrative, or captions that support your images. For example, you might create web journal pages that show and tell the story of an overseas shoot or a journalistic project.

Aperture can also publish images directly to your .Mac account web galleries and even update these galleries automatically on a scheduled basis. Publishing web galleries is an ideal way of providing easy access to your photos over the web.

This chapter covers:

- An Overview of Creating Webpages (p. 536)
- Creating Webpages (p. 539)
- Creating Web Journals (p. 542)
- Viewing and Navigating Through Webpages (p. 544)
- Choosing and Modifying Themes (p. 545)
- Working with Webpages (p. 548)
- Working with Web Journal Pages (p. 549)
- Exporting Webpages (p. 551)
- Working with Web Export Presets (p. 555)
- Publishing Images to Web Galleries (p. 560)

An Overview of Creating Webpages

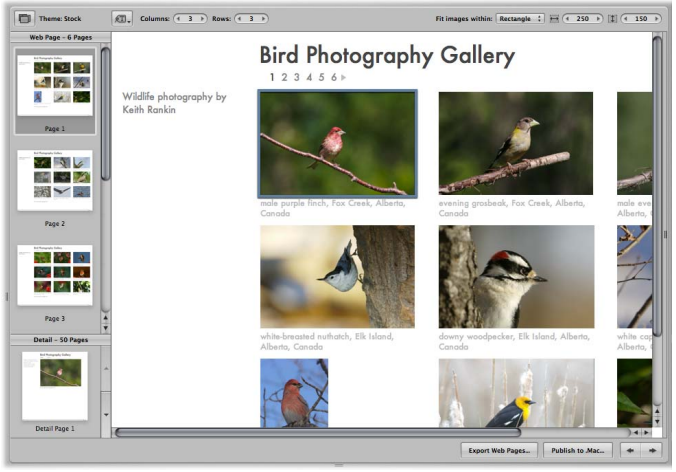
Web delivery is convenient when time won't allow office visits or delivery of prints to clients. Photographers around the world currently benefit from web distribution of their works, providing clients with online access to galleries of their best images. Building a web portfolio for prospective clients can extend the reach of your photography business and reputation globally.

Using Aperture, you can create webpages and web journals that you can post on your website or on your .Mac account. Your webpages and web journals are based on themes, or page designs, are easily editable, and can be posted to the web.

You can also easily create albums of photos and publish them as web galleries through your .Mac account. After setting up Aperture to work with your .Mac account, you'll find publishing photos on the web as easy as creating a new web gallery album and clicking a button.

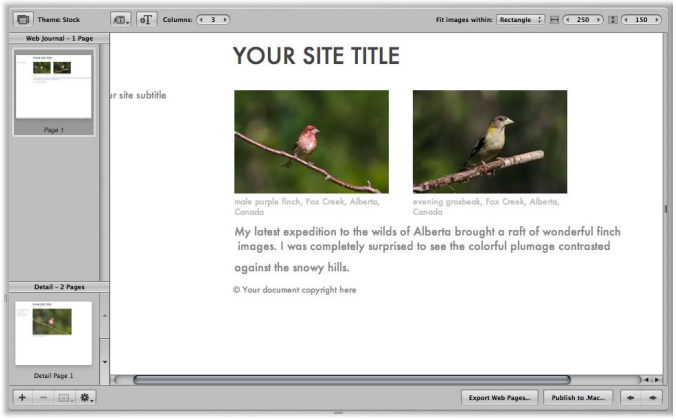
Webpages

Aperture webpages are designed to display images without your having to lay out pages by hand. Aperture automatically creates the appropriate number of webpages and populates them with the selected images. You can then adjust the pages to make the images appear as you want them. You can also choose the metadata information that appears next to each image, such as captions, names, and ratings.



Web Journals

Web journal pages allow you to mix images and text manually on the page. Web journals are ideal for projects in which you show photos with narrative to support them. When working with web journals, you manually add pages, images, and text to your web journal. You can choose a theme to apply to all your pages, and you can change the layout of images and text on your web journal pages.



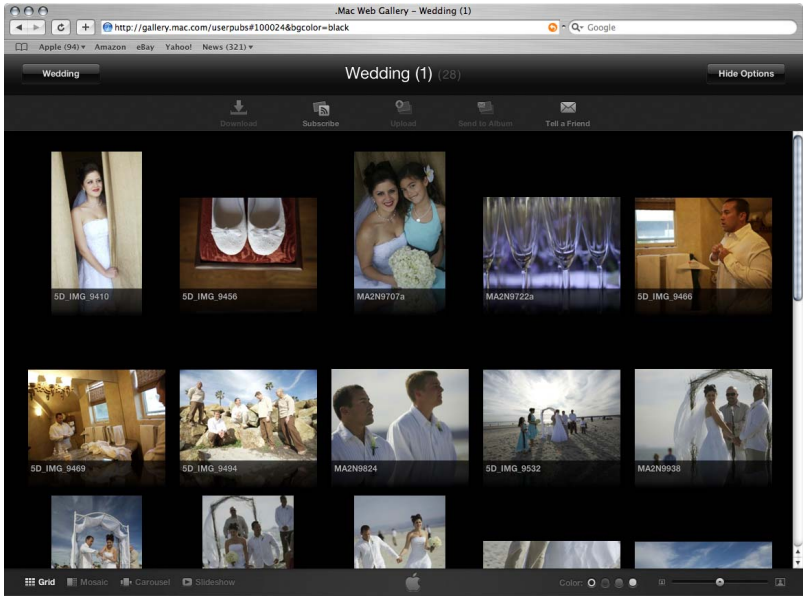
To create a webpage or web journal, you create a webpage or web journal album. When you select the album in the Projects inspector, the Webpage Editor appears. The Webpage Editor is where you design your webpages, including changing the theme, positioning images, and adding text.



After you've laid out your webpages or web journal pages in the Webpage Editor, you can export them to your .Mac account or save them as HTML pages that you can post to your webpage server. Once the images are posted online, you can give clients the Internet address of the pages, and clients can view them remotely.

Web Galleries

Using your .Mac account, you can use Aperture to easily publish albums on the web. You simply select the images that you want to publish and then create a web gallery album. Aperture automatically transfers the images to your .Mac account and creates a new web gallery for anyone with Internet access to view. Web galleries provide a simple and stylish way to post images on the web without having to deal with HTML coding or transferring files.



Once images are published in a web gallery, Aperture can automatically monitor and update the web galleries in your .Mac account with new images or remove deleted images as you change the contents of the web gallery albums in Aperture. People who access your web galleries can view the posted albums, inspect large versions of the images, and subscribe to your website. If you choose, you can also set up your web galleries to allow others to download images, send the photo album to others via email, and send out email messages announcing the album.

Creating Webpages

Aperture webpages offer a way to showcase your images on the web. You have a number of options for designing these pages. You can choose the type of information to accompany each image, such as name and rating. You can also specify the number of columns and rows you want on each page.

Creating Webpage Albums

To create a webpage, you must first create an album that holds your webpage images. The easiest way to do this is to select images you want to appear in the webpage, create an album, and have Aperture automatically place the images on the webpages. Aperture creates as many webpages as necessary to hold all of the selected images.

To create a webpage album from selected images:

1. In the Browser, select the images you want to place on your webpages.
2. Do one of the following:
   - Choose File > New From Selection > Web Page.
   - Choose New Web Page From Selection from the Add to Library pop-up menu in the Projects inspector.

   A new, untitled webpage album appears in the Projects inspector, and the Webpage Editor appears.
3. Rename the album.

   The new album contains the selected images.



You can also create an empty webpage album and then drag images into the album.

To create a new, empty webpage album:

1. Do one of the following:
   - Choose File > New > Web Page.
   - Choose New Empty Web Page from the Add to Library pop-up menu in the Projects inspector.
   - Choose Web Page from the New pop-up menu in the toolbar.

   A new, untitled webpage album appears in the Projects inspector.
2. Rename the album.
3. Drag the images you want into the new webpage album.

To make changes to the webpages, you use the controls in the Webpage Editor. For more information, see "Webpage Controls in the Webpage Editor" on page 541.

Creating Smart Webpage Albums

You can use the Aperture Smart Album feature to gather images from the library or from projects and place them automatically in webpages. Smart Albums gather images based on search criteria that you specify. For example, you can create a Smart Webpage Album that gathers your select images from across the entire Aperture library. Then each time you rate an image Select, Aperture automatically adds it to your Smart Webpage Album and to a webpage. You can then update your .Mac account with pages of your most up-to-date select images or post them to your website. For more information about creating and using Smart Albums, see Chapter 13, "Grouping Images with Smart Albums," on page 317.

Note: Smart Webpage Albums are not available as web journals.

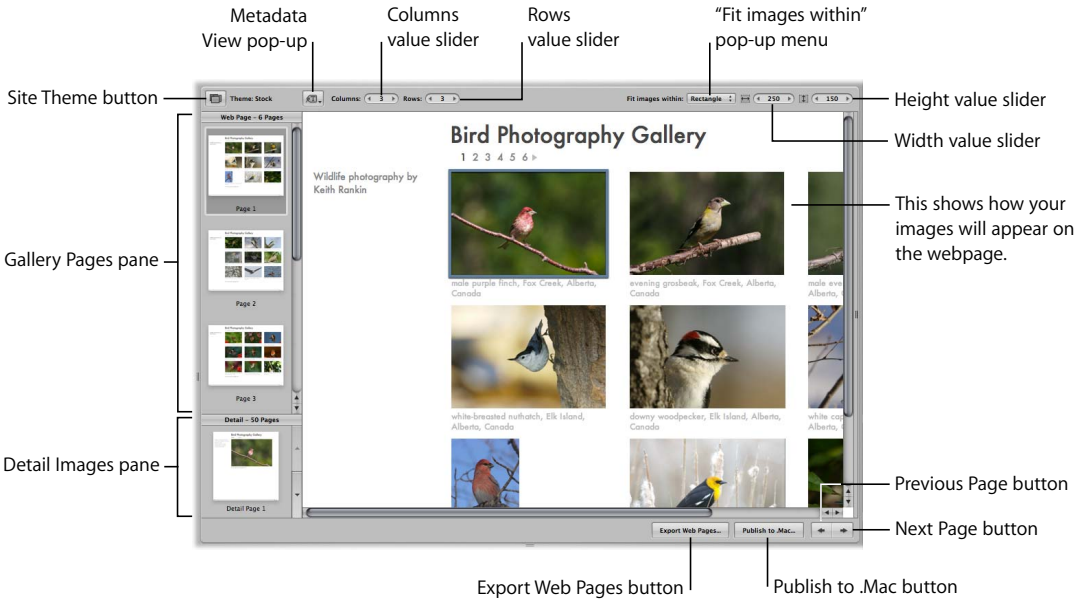
To create a Smart Webpage Album of your images:

1. Do one of the following:
   - Choose File > New Smart > Web Page.
   - Choose New Smart Web Page from the Add to Library pop-up menu in the Projects inspector.
2. Enter a name for the new Smart Webpage Album.
3. Click the Query HUD button (with a magnifying glass icon) to the right of the Smart Webpage Album name to show the Query HUD.
4. In the Query HUD, specify the criteria for the Smart Webpage Album.

   The Smart Webpage Album is created and filled with the images that meet the search criteria.

Webpage Controls in the Webpage Editor

The following controls are available for revising webpages and images.



- *Site Theme button:* Click this button to choose a theme, or layout, for your webpage.
- *Gallery Pages pane:* Click here to see a specific webpage.
- *Detail Images pane:* Click here to see the enlarged version of a selected image in a webpage.
- *Metadata View pop-up menu:* Choose the type of metadata that is included with each image in the webpage.
- *Columns value slider:* Use this to specify the number of columns you want on a page. Click the arrows to increase or decrease the number of columns, or double-click in the number field and enter a new value.
- *Rows value slider:* Use this to specify the number of rows you want on a page. Click the arrows to increase or decrease the number of columns, or double-click in the number field and enter a new value.
- *"Fit images within" pop-up menu:* Choose an option for how you want images to appear on the webpage.
- *Width value slider:* Use this to specify the column width. Click the arrows to increase or decrease the width, or double-click in the number field and enter a new value.
- *Height value slider:* Use this to specify the row height. Click the arrows to increase or decrease the height, or double-click in the number field and enter a new value.
- *Export Web Pages button:* Click this button to export your webpages.

- *Publish to .Mac button:* Click this button to publish your finalized webpages to your .Mac account. For more information, see "Exporting to .Mac" on page 552.
- *Previous Page button:* Click this button to go to the previous webpage.
- *Next Page button:* Click this button to go to the next webpage.

Making Adjustments to Images in a Webpage or Web Journal

You can't select and use the Crop, Straighten, Spot & Patch, and Red Eye tools in the tool strip when using the Webpage Editor. To use these tools to make a change to an image in a webpage or web journal, select the image in the Browser, then click the Show Viewer button at the top of the Browser (to the right of the Sort Direction button). The selected image appears in the Viewer and you can make your changes. Click the Show Viewer button again to return to the Webpage Editor.

Creating Web Journals

Web journals provide a great way to mix images and text to chronicle trips and explain images on the web. You can manually add and arrange images and text in your web journal.

Creating Web Journal Albums

To create a web journal, you must first create an album that holds your webpage's images. The easiest way to do this is to select images you want to appear in the web journal and create an album. Aperture creates a web journal album that contains the images you selected, and the Webpage Editor appears. The Browser contains the selected images, which you can then manually place on the webpages.

To create a web journal album from selected images:

1. In the Browser, select the images you want to place on your webpages.
2. Do one of the following:
   - Choose File > New From Selection > Web Journal.
   - Choose New Web Journal From Selection from the Add to Library pop-up menu in the Projects inspector.

   A new, untitled web journal album appears in the Projects inspector.
3. Rename the album.

The selected images appear in the Browser. You can then manually add images to your web journal pages.

To create a new, empty web journal album:

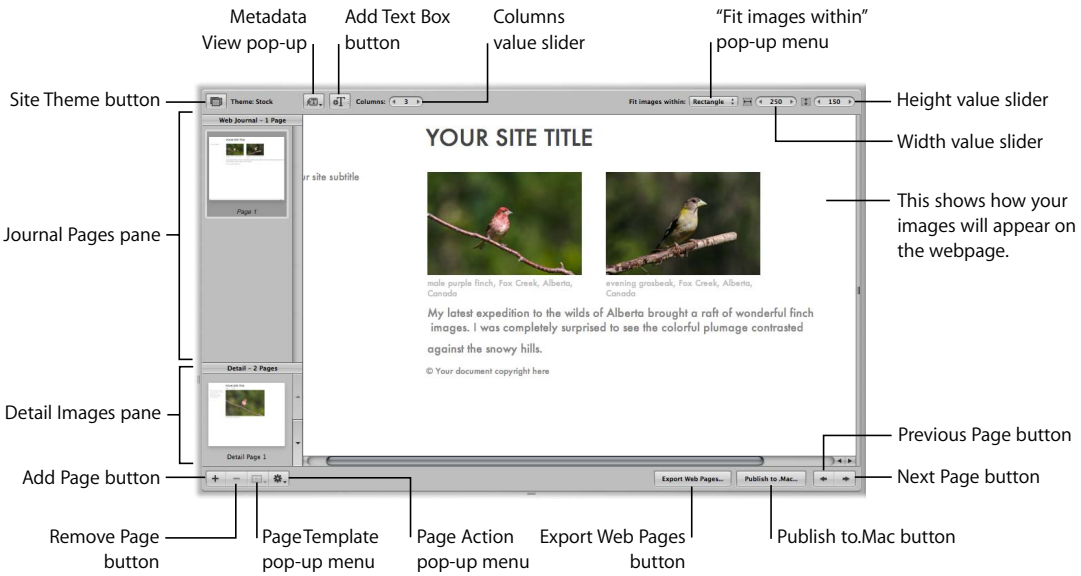
1. Do one of the following:
   - Choose File > New > Web Journal.
   - Choose New Empty Web Journal from the Add to Library pop-up menu in the Projects inspector.

   A new, untitled web journal album appears in the Projects inspector.
2. Rename the album.
3. Drag the images you want into the new web journal album.

To make changes to the webpages, you use the controls in the Webpage Editor. For more information, see "Web Journal Controls in the Webpage Editor," next.

Web Journal Controls in the Webpage Editor

The following controls are available for web journal pages and images.

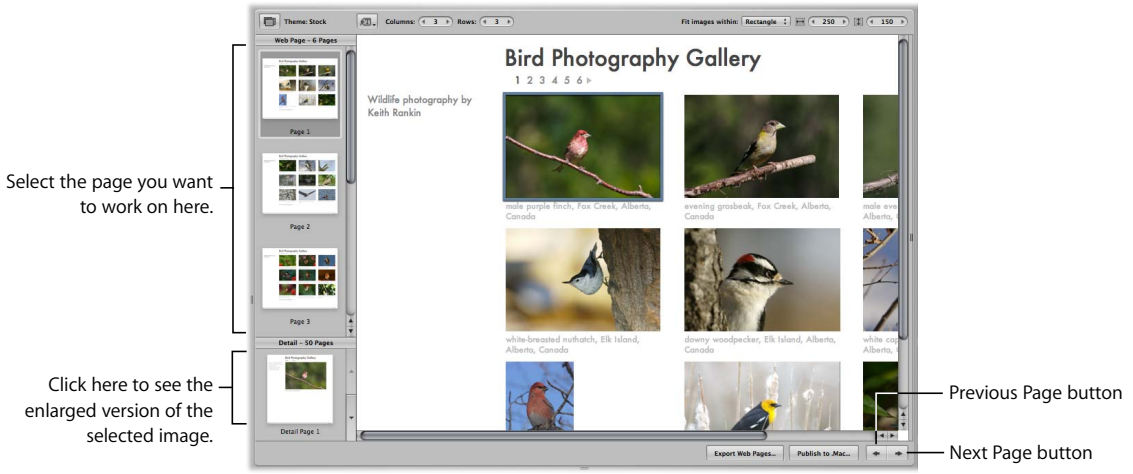


- *Site Theme button:* Click this button to choose a theme, or layout, for your webpage.
- *Journal Pages pane:* Click here to see a specific page of the web journal.
- *Detail Images pane:* Click here to see the enlarged version of a selected image in a web journal.
- *Add Page button:* Click this button to add a page to your web journal.
- *Remove Page button:* Click this button to remove a selected page from your web journal.
- *Page Template pop-up menu:* Use this to choose a page template, or layout.
- *Page Action pop-up menu:* Choose how to add pages to your web journal.

- *Metadata View pop-up menu:* Choose the type of metadata that is included with each image in the webpage.
- *Add Text Box button:* Click this button to add a text box to the bottom of the current webpage.
- *Columns value slider:* Specify the number of columns you want on a page. Click the arrows to increase or decrease the number of columns, or double-click in the number field and enter a new value.
- *"Fit images within" pop-up menu:* Choose an option for how you want images to appear on the webpage.
- *Width value slider:* Use this to specify the width of photo boxes on the page. Click the arrows to change the width, or double-click in the number field and enter a new value.
- *Height value slider:* Use this to specify the height of photo boxes on the page. Click the arrows to change the height, or double-click in the number field and enter a new value.
- *Export Web Pages button:* Click this button to export your webpages.
- *Publish to .Mac button:* Click this button to publish your finalized webpages to your .Mac account. See "Exporting to .Mac" on page 552.
- *Previous Page button:* Click this button to go to the previous webpage.
- *Next Page button:* Click this button to go to the next webpage.

Viewing and Navigating Through Webpages

As you modify your webpages, there are some easy ways to view and navigate through your pages.



To view a particular webpage, do one of the following:

- Use the scroll bar in the Gallery Pages pane (for a webpage) or the Journal Pages pane (for a web journal) to locate the page, then click the page.
- Click the Previous Page or Next Page button to display a different page.

When someone clicks an image on a webpage or web journal page in your website, a page showing an enlarged view of the image appears. You can view these enlarged images in the Webpage Editor.

To see an enlarged image from a webpage, do one of the following:

- Position the pointer over the image, then click the Detail button (with a curved arrow).
- Click the up arrow or down arrow buttons on the side of the Detail Images pane to navigate through detail pages for the images in a webpage or web journal.

To return to the page view after viewing an enlarged image:

- Click a page in the Gallery Pages pane (for a webpage) or the Journal Pages pane (for a web journal).

Choosing and Modifying Themes

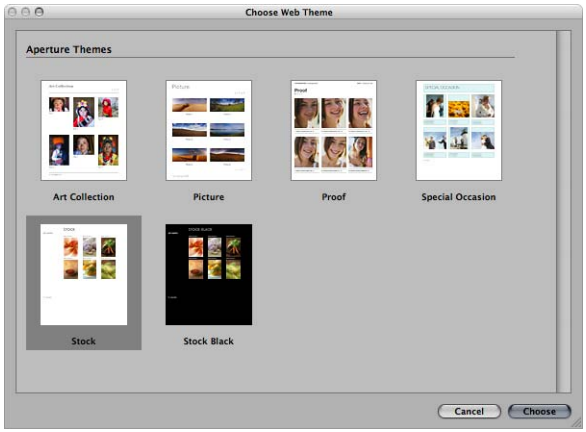
Aperture provides a variety of themes that you can choose for your webpage or web journal. When you choose or change a theme, Aperture updates all your pages to use the new theme. After a theme is applied to your pages, you can modify it by changing the number and size of images on the page. You can also display images with metadata and have copyright information appear on your webpages.

Choosing a Theme

The theme you choose for your pages determines the basic template design of the page. Make sure to explore the themes to see which best suits your work.

To choose a theme for your webpage or web journal:

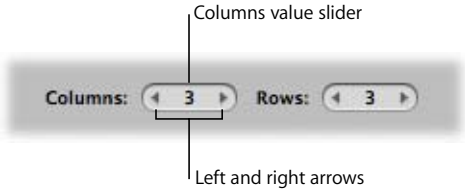
1 Click the Site Theme button at the top-left corner of the Webpage Editor.



2 Select the theme you want to use, then click Choose.

Changing the Number of Images on Webpages

After you've chosen a theme, you can modify how many images appear on each page.



Note: When a web journal is open in the Webpage Editor, only the Columns value slider is available. You can manually add as many rows of images to a page as you need.

To change the number of columns and rows of images on the page:

- Double-click in the number field of the Columns or Rows value slider and enter a new number, or click the left or right arrow.

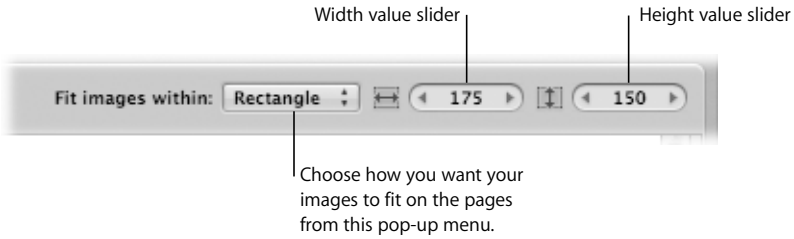
When you change the number of columns and rows, Aperture automatically updates all your webpages to reflect the new settings.

Resizing the Images on Webpages

You can increase or decrease the size of images on your pages.

To change the size of images on the page:

1. From the "Fit images within" pop-up menu, choose whether you want the images to be spaced according to their longest edge or both edges.
2. To increase or decrease the image size, double-click in the number field of the Height and Width value sliders and enter new numbers, or click the left or right arrows.



Displaying Images with Metadata

You can specify that your images appear with metadata in your webpage or web journal. You can choose different combinations of metadata to appear on your pages. For example, you might display your webpages with a simple set of metadata that includes the filename, caption, and image date.



To specify the types of metadata that appear with your images:

- In the Webpage Editor, choose an option from the Metadata View pop-up menu.

Changing Copyright Information

Webpages and web journals also appear with copyright information on the page. You can select the copyright text on the page and change it. You can also specify the copyright information you want for all your pages in the Preferences window.

To change the copyright information that appears in webpages or web journals:

1. Choose Aperture > Preferences, or press Command-Comma (,), then click Export.
2. Type the text you want in the Web Copyright field.

Working with Webpages

When you create a webpage, the images in it are placed automatically. You can then make changes to the pages in the Webpage Editor.

Ordering, Adding, and Deleting Images in a Webpage

You can adjust the placement of images on webpages and add and delete images in the Webpage Editor.

To change the viewing order of your images in a webpage:

- Drag the images to different locations, either in the Webpage Editor or Browser.

You can add images to a webpage after you've created it.

To add an image to a webpage:

- Drag an image from a project, album, or the library into your webpage album.

To delete an image from a webpage:

- Select the image in the Browser, then choose Images > Remove From Album (or press the Delete key).

Changing Text on Webpages

Depending on the theme you choose for your webpage, pages may appear with titles, subtitles, or headings. You can change the sample text to text appropriate for your webpage.

To change titles and subtitles on webpages:

- Click the title, subtitle, or heading you want to change, then type the text you want.

Hiding or Showing Image Plate Numbers in Webpages

You can turn on or turn off the display of plate numbers in your webpages. Aperture is preset to not display plate numbers for images.

To turn on the display of plate numbers in a webpage:

- In the Webpage Editor, choose Enable Plate Metadata from the Metadata View pop-up menu.

Working with Web Journal Pages

As you work with a web journal, you can add images and text to pages, add pages, choose header types, delete pages, and change the page order.

Adding, Arranging, and Deleting Images and Text on Web Journal Pages

When you create a web journal, you must manually place your images and add text.

To add images to a web journal page:

- Drag images from the Browser to the page in the Webpage Editor.

You can also drag several images into place at once by selecting and dragging groups of images. For example, if your webpage is set to display four images per row, you can arrange four images in the order you want them, and then drag all four to the page at once.

To move images on a web journal page:

1. Click an image to select it.
2. Drag the grid mark at the top of the photo box to move the image to the new location. Release the mouse button when a green bar appears where you want to place the image.

Aperture places your images in the photo boxes designed for the page.

To remove an image from a web journal page:

1. Click the image to select it.
2. Click the Remove button (with a minus sign) to remove the selected photo box.

You can add text boxes to web journal pages as you need them. Text boxes are added to the page one after another. New text boxes are always added to the bottom of the page, but you can drag text boxes to new locations when you need to rearrange them.

To add text to a web journal page:

1. In the Journal Pages pane, select the page to which you want to add text.
2. Click the Add Text Box button.
3. Enter the text you want.

You can drag the text box to a new location if you wish.

To move a text box:

1. Click the text box to select it.
2. Position the pointer on the grid mark at the top of the text box and drag the text box until you see a green bar appear where you want to place the text box.

To remove a text box from a web journal page:

1. Click the text box to select it.
2. Click the Remove button (with a minus sign) to remove the selected text box.

Adding Pages to a Web Journal

You can add pages to your web journal as you need them.

To add a page to a web journal:

1. Select a page in the Journal Pages pane where you want the new page to appear.

   The new page will appear after the selected page.
2. Click the Add Page (+) button to add a new page.

Adding Pages by Metadata Category

You can have Aperture create pages in your journal to hold images that have a type of metadata, such as a specific rating, keyword, or image date. For example, you can have Aperture create a page for each keyword assigned to the album's images and place images that have certain keywords on the correct pages automatically. Or, if your album holds images with four- and five-star ratings, you can create a page that automatically holds the five-star images and another that holds the four-star images.

You can have Aperture add pages for images based on:

- Day
- Keyword
- Rating
- Byline
- City
- Category

To add a new page based on a metadata category:

1. Select a page in the Journal Pages pane where you want the new page to appear.

   The new page will appear after the selected page.
2. Choose an option for the type of page you want from the Page Action pop-up menu.

Choosing a Header Style for a Web Journal Page

Depending on the theme you choose, you can change the look of web journal pages by choosing a style that displays either a heading followed by text, or a heading followed by an image.

To choose the header style for a web journal page:

1. Select a page in the Journal Pages pane.
2. Choose either Header with Text or Header with Image from the Page Template pop-up menu.

   Note: The theme applied to the web journal must support images in the header.

Deleting Pages from a Web Journal

When you no longer need a page, you can delete it from the web journal.

To delete a page from a web journal:

1. Select the page you want to delete in the Journal Pages pane.
2. Click the Remove Page (–) button to delete the page.

Reordering Pages in a Web Journal

You can change the order of web journal pages when necessary.

To move a page up or down in the page order of a web journal:

1. Select the page you want to move in the Journal Pages pane.
2. Choose either Move Current Page Up or Move Current Page Down from the Page Action pop-up menu.

Exporting Webpages

After you've created your webpages, you can post them to your .Mac account or your website so that others can access them via the Internet. Your Aperture webpages are composed of numerous files, including image files and thumbnail images, HTML webpage files, and additional web formatting files. All of these files are linked together to compose your webpages, and they must be transferred intact to the website in a manner that preserves the links and relationships between files.

You can post your webpages to the Internet in these ways:

- Set up Aperture to automatically post pages to your .Mac account.
- Export your pages as HTML files and images and then integrate them into your website.

Exporting to .Mac

The easiest way to transfer files to the Internet is to have Aperture automatically copy the files to your .Mac account. With a few clicks, you can have Aperture open your .Mac account, transfer the files with links intact, and create the Internet addresses that others need to use to access the pages.

To learn more about creating and setting up a .Mac account, go to http://www.mac.com.

With your .Mac account set up, you can easily transfer your webpage or web journal to your .Mac account. The web address of your new .Mac album appears in the Publish Album dialog and in the web browser after the pages are published. You can copy and send this address to clients so they can view the images.

To export your webpage or web journal to your .Mac account:

1. In the Webpage Editor, click Publish to .Mac.
2. In the dialog that appears, specify the following:
   - *Publish Album As:* Enter a name for the webpage or web journal.

     The Internet address for the webpage appears below the Publish Album As field. Make sure to write down this address for later use.
   - *Thumbnail Image Preset pop-up menu:* Choose the quality you want for displayed thumbnail images.
   - *Detail Image Preset pop-up menu:* Choose the quality of detail images that will appear when someone clicks a thumbnail.
3. When you're ready, click Publish.

   All images are first exported to your local hard disk and then uploaded to your .Mac account. The upload process may take a while, depending on the number and size of the images as well as the speed of the Internet connection. When the upload process is complete, the Publish Complete dialog appears, listing the address of your webpage.

   Note: If you would like to check on the progress of an export operation, choose Window > Show Activity. The Activity window displays the progress of each export operation. You can also use this window to pause and cancel an export operation.

   You can select the address and press Command-C to copy the address to the Clipboard. You need this address to link the webpage or web journal to your .Mac homepage.
4. Click View in Browser to see the new webpage.

   The published webpage or web journal appears in your web browser.

To link your webpage or web journal to your .Mac homepage:

1. Go to http://www.mac.com, then click the HomePage link at the top of the screen.
2. If you haven't already done so, log in.
3. If you don't have a menu page, create one.
4. In the Pages list, select the menu page, then click Edit.

   The page category is listed to the right of the selection.
5. In the "Edit your page" section, click the Add (+) button next to an existing link to add a new one.

   A new empty link is created to the right of the previous link.
6. Enter a page title and brief description, then click the Edit Link button.
7. In the "Edit your links" section, click the Other Pages tab, paste the link to your webpage or web journal in the Address field by pressing Command-V, then click Apply.
8. When you are ready to publish your new homepage, click the Publish button at the top-right corner of the screen.

   A new screen appears with a link to your updated homepage address.

   If you later forget the address of your site, you can check your iDisk to see a listing of sites. From the Finder, choose Go > iDisk > My iDisk, then open the Sites folder. The names listed in your Sites folder represent your published sites. From that, you can determine the path to a site by entering your personal information in the sample path:

   http://homepage.mac.com/*membername*/*sitenamezz*

About Updating Webpages and Web Journals

When you update the images in a webpage or web journal already posted to .Mac, Aperture first checks to determine which images in a webpage or web journal are new or changed and then exports only those images to temporary storage for transfer to .Mac, saving time when updating a large number of pages.

Exporting Webpages as HTML Files

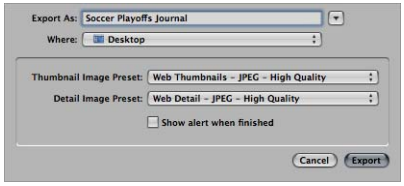
Integrating your Aperture webpages into your business's website requires you to thoroughly understand your website structure and web server. With some planning, you can modify your home or access pages to provide links to your Aperture webpages.

You can also open your webpages in a standard HTML editor and make the changes required for them to work in your site. You can add and revise the HTML code that creates the page structure. You can plan how the pages link to the structure of your website and provide additional items such as navigation buttons or links that normally appear on your webpages. If you use a web design service to create and maintain your site, you can supply your Aperture files to your design service as a folder and allow the design service to integrate your Aperture webpages. If you are your own webmaster, you can transfer your Aperture web files to your web server or Internet service provider using a copying method such as FTP, or using the transfer features of your webpage service.

You can export webpages that you've created in Aperture. When you export your Aperture webpages, you can export them to a folder on your computer to keep them organized in one place. You can name the folder and choose the image quality and file types that are created. Aperture has web export presets you can choose that automatically set up the export of webpages. You can choose an existing export preset or create your own.

To export webpages:

1. Click the Export Web Pages button.
2. Type a name for the folder that will hold the webpage files in the Export As field.



3. Choose a location for the webpage folder from the Where pop-up menu.
4. Choose a web export preset for your thumbnail images from the Thumbnail Image Preset pop-up menu.
5. Choose a web export preset for your detail image pages from the Detail Image Preset pop-up menu.

6 If you would like to be notified when the export process is complete, select the "Show alert when finished" checkbox.

7 When you're ready to export your webpages, click Export.

The images you selected are exported to the location you specified.

Note: If you would like to check on the progress of an export operation, choose Window > Show Activity. The Activity window displays the progress of each export operation. You can also use this window to pause and cancel an export operation.

Working with Web Export Presets

Web export presets are groups of saved export settings that are configured to produce different types of web images. You use them to help you quickly and easily export your images for use on the web. Aperture comes with a number of web export presets, and you can also create your own.

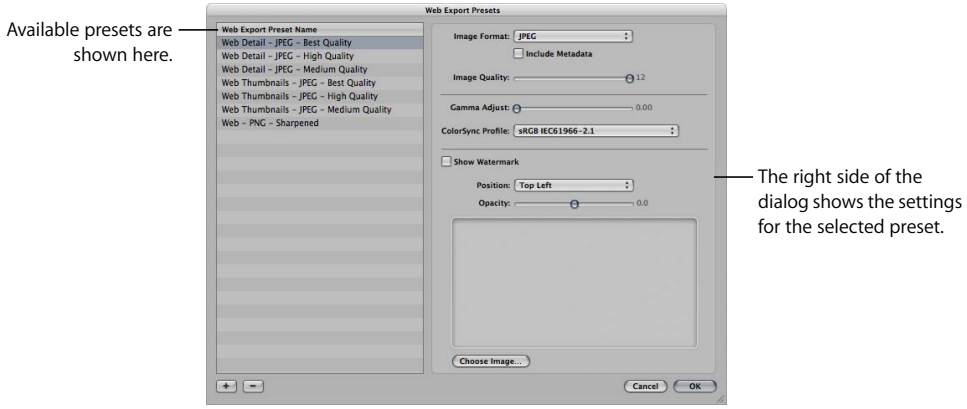
Viewing the Settings for a Web Export Preset

Before using a web export preset, whether it's one that comes with Aperture or one that you created, you can view its settings to make sure they are exactly what you want.

To view the settings for an export preset:

- Choose Aperture > Presets > Web Export.

The Web Export Presets dialog appears, listing the presets available and their export settings.



The Web Export Presets dialog includes these controls:

- *Image Format pop-up menu:* Choose an image format to convert your images to, such as JPEG or PNG, from this pop-up menu.
- *Include Metadata checkbox:* Select this checkbox to include EXIF and IPTC metadata information in the image files.
- *Image Quality slider*: Choose how much to compress your JPEG files by dragging the slider to a number. Setting the slider to 12 applies the least compression and results in a higher-quality image; setting the slider to 0 (zero) applies the most compression and results in a lower-quality image.
- *Gamma Adjust slider:* Gamma describes how your image distributes brightness. Drag the slider to apply a uniform gamma adjustment to your exported images.
- *ColorSync Profile pop-up menu:* Choosing a ColorSync profile ensures consistent color reproduction on other systems and in the printed image. Aperture provides a large selection of profiles, as well as any custom profiles you've saved during calibration. To apply a ColorSync profile to the images you've selected for export, choose a profile from the pop-up menu.
- *Show Watermark checkbox:* A watermark is a visible graphic or text overlay that is applied to an image. Photographers often use watermarks to indicate that images are protected by a copyright and discourage others from inappropriately using their images. To add a watermark to your images, select the Show Watermark checkbox. After selecting the checkbox, you can select a file to apply as a watermark image. You can place your watermark in various positions on your image.

  For more information about adding watermarks, see "Adding Watermarks to Webpage Images" on page 559.

Creating Web Export Presets

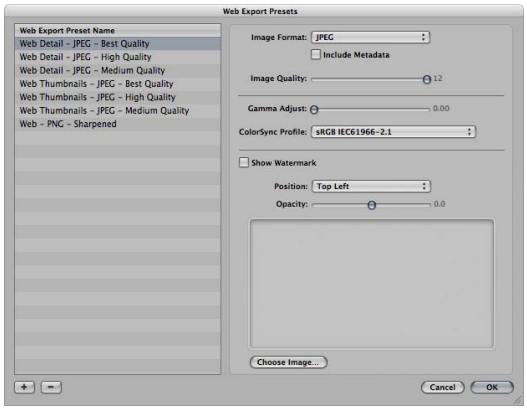
If none of the existing web export presets suit your needs, you can create your own. An easy way to create a new export preset is to copy an existing preset and then modify the copy.

To create a new web export preset:

1 Do one of the following:

- Choose Aperture > Presets > Web Export.
- In the Webpage Editor, click the Export Web Pages button, then choose Edit from the Thumbnail Image Preset or Detail Image Preset pop-up menu.

The Web Export Presets dialog appears.



2 Select a web export preset on which to base your new preset, then click the Add (+) button.

A new preset, based on the export preset you selected, appears highlighted in the Web Export Preset Name list.

3 Enter a new name for the preset.

4 Change the export criteria as required, then click OK.

Modifying Web Export Presets

After examining a selected preset's settings, you may want to change something about the preset. To modify a selected preset, you can simply change the necessary settings and click OK. The next time you export using that preset, Aperture remembers your modified settings and exports your web images accordingly.

When you modify an existing preset, you lose its original settings.

To change a web export preset:

1. Do one of the following:
   - Choose Aperture > Presets > Web Export.
   - In the Webpage Editor, click the Export Web Pages button, then choose Edit from the Thumbnail Image Preset or Detail Image Preset pop-up menu.

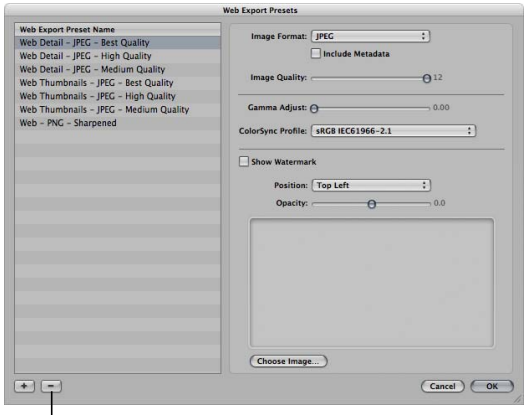
   The Web Export Presets dialog appears.
2. Select the export preset you want to change, modify its settings, then click OK.

Deleting Web Export Presets

You can delete web export presets when you no longer need them.

To delete a web export preset:

- In the Web Export Presets dialog, select the preset, then click the Delete (–) button.



Click the Delete button to delete the selected preset.

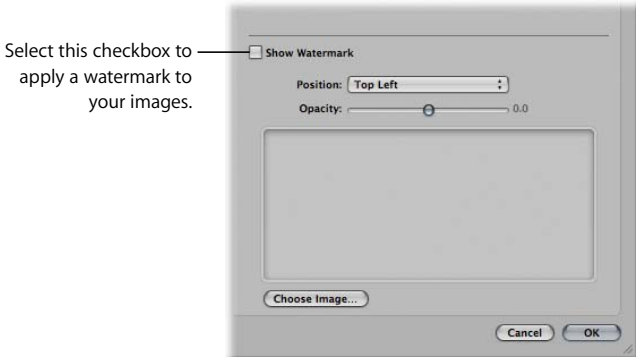
The preset is permanently deleted.

Adding Watermarks to Webpage Images

You can add a graphics file to your images as a watermark to discourage others from using your images without your permission. Watermarks are especially useful when applied to images posted on the web.

To create a preset that adds a watermark to your exported web images:

1. Choose Aperture > Presets > Web Export.
2. In the Web Export Presets dialog, select the web export preset you want to modify, or click the Add (+) button to create a new preset.
3. Select the Show Watermark checkbox.



4. Click the Choose Image button.
5. Select the image you want as a watermark, then click Choose.
6. Choose where you want the watermark to appear on the image from the Position pop-up menu.
7. To adjust the opacity of the watermark, drag the Opacity slider to a new position.
8. When you're satisfied with how your watermark appears in the watermark preview area, click OK.

Tips for Creating High-Quality Watermarks

Use the following guidelines to create high-quality watermarks for your images:

- Save your watermark as a .psd (Photoshop) file with a transparent background.
- Create multiple sizes of your watermark so that you can select the one that is the best match for the output size of the exported image.

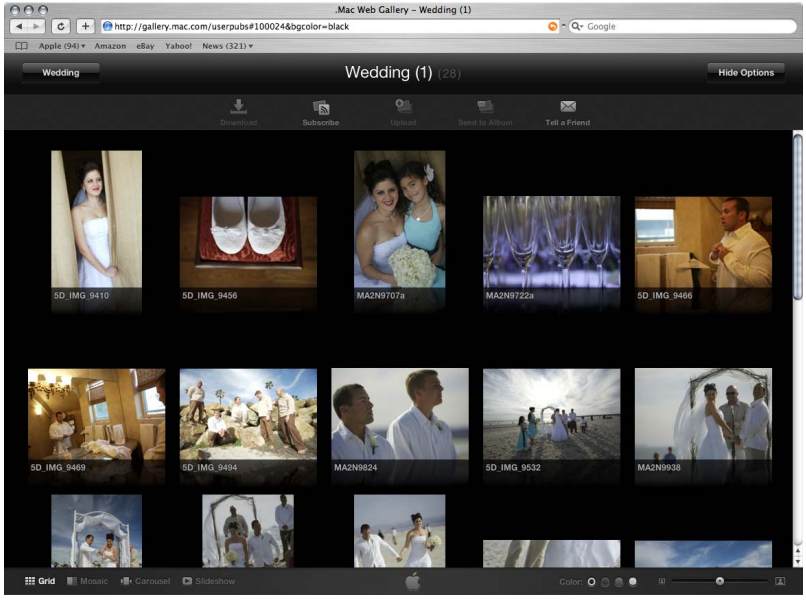
  Note: If a watermark file is larger than the image you wish to export, Aperture automatically scales the watermark down to fit the image. (Aperture does not scale watermarks up.)

- After you create a watermark, save it as part of a web export preset, so you can reuse it as often as you need.

  Note: Export presets and web export presets are independent of one another. Make sure to save your watermark as part of the appropriate preset.

Publishing Images to Web Galleries

Publishing photos directly from Aperture to your .Mac account is a convenient and effective method for providing web access to your images. Web galleries provide an easy-to-use framework of webpages that can display your images at their best with few design considerations on your part.



You can publish as many web gallery albums as you want. When you reach the storage capacity of your .Mac account, you can easily purchase more space.

To publish images to a web gallery, you must:

- Set up a .Mac account (if you don't have one already)
- Set your .Mac preferences in System Preferences
- Select images and create a web gallery album

Setting up a .Mac account

If you don't have a .Mac account, you can open one by visiting the .Mac website at: http://www.apple.com/dotmac

Note: If you already have a .Mac account, you can skip ahead to "Setting .Mac Preferences," next.

At the .Mac website you can read about all the .Mac features available to account users, review pricing, and even sign up for a free trial. Follow the instructions on this website to sign up, receive a member name, and set a password.

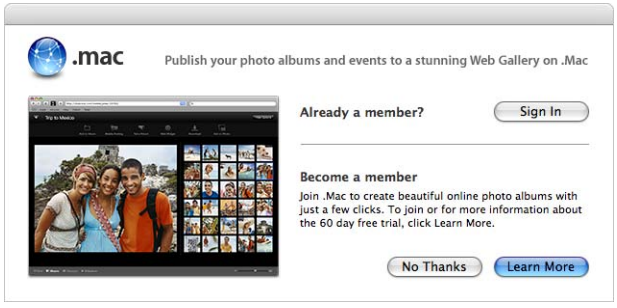
Write down your member name and password. You'll need it for setting up your .Mac System Preferences.

Setting .Mac Preferences

Aperture uses the information recorded in the .Mac pane of System Preferences to access and publish images to your .Mac account.

To set up your .Mac preferences:

1. Choose Apple > System Preferences, or click the System Preferences icon in the Dock.
2. Click the .Mac icon in the Internet & Network area of the System Preferences window.
3. Click the Account button, if necessary, and enter your member name in the .Mac Member Name field. Also enter your .Mac account password in the Password field and press Return.



Your computer checks that the member name and password you entered are valid.

4 Close the System Preferences window.

Creating a Web Gallery Album

To create a web gallery, you select the images you want to publish and then create a web gallery album.

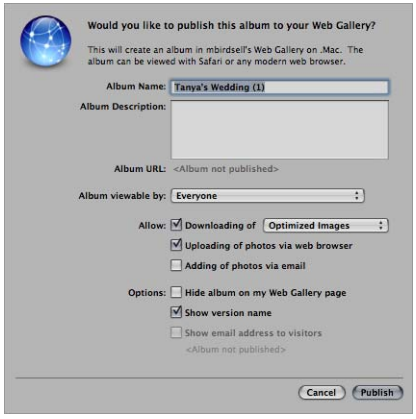
To create a web gallery album:

1 Select the images you want in the web gallery album.

2 Do one of the following:

- Choose File > New From Selection > Web Gallery.
- Choose Web Gallery from the New pop-up menu in the toolbar.

A dialog appears asking you to specify the name of the web gallery album. This name is used for the album that is created in the Projects inspector and for the web gallery album in your .Mac account.



3 Type an album name in the Album Name field.

4 Type a short synopsis detailing information about the images in the album in the Album Description field.

5 Choose the access restrictions you want for your visitors:

- *To specify who can view this album in your .Mac account:* Choose Everyone or "Only me" from the "Album Viewable by" pop-up menu.

  You can also add user names to this menu to allow specific people access to the album. To create specific user names, choose Edit Names and Passwords from the "Album Viewable by" pop-up menu and enter the names and passwords you want. You can then contact these people with the user name and password when contacting them about the album.

- *To allow visitors to download your photos from the web gallery:* Select the "Allow: Downloading of" checkbox.

  You can also choose the type of image the visitor can download from the pop-up menu to the right of the "Allow Downloading of" checkbox.

  - *To allow visitors to download optimized JPEG images for display on the web:* Choose Optimized.
  - *To allow visitors to download full-size JPEG images:* Choose Actual Size.
  - *To allow visitors to download both optimized JPEG images for the web and their masters:* Choose Optimized & Master Images.

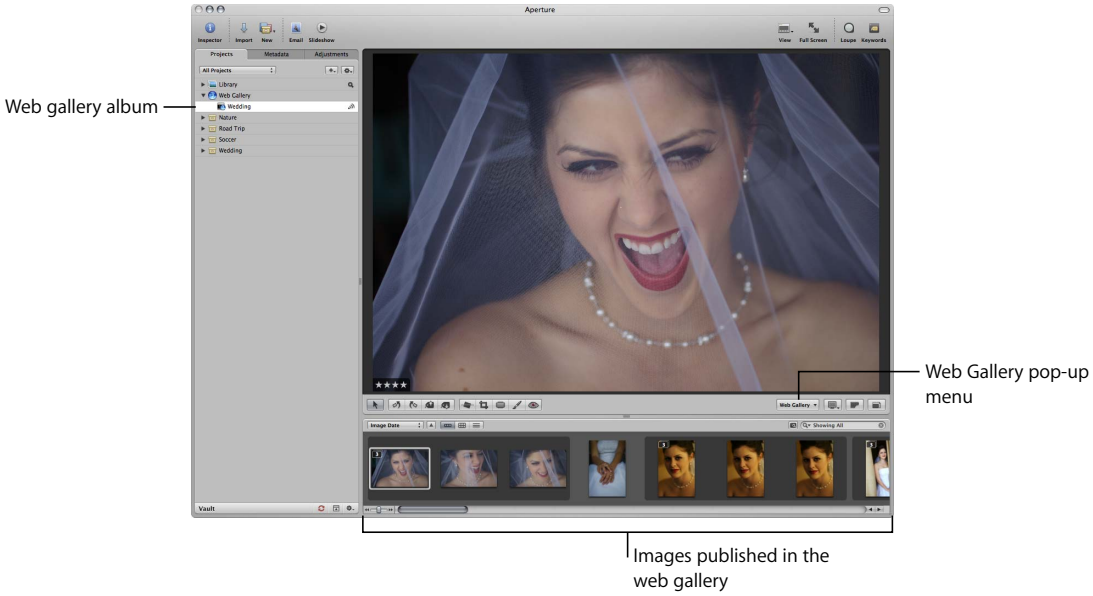
- *To allow visitors to upload photos to the web gallery:* Select the "Allow: Uploading of photos via web browser" checkbox.
- *To allow uploading of images to your album by email:* Select the "Allow: Adding of photos via email" checkbox.

6 Choose the publishing options you want:

- *To hide the album name on your web gallery page:* Select the "Hide album on my Web Gallery page" checkbox.
- *To display version names below the images:* Select the "Show version name" checkbox.
- *To display an email address visitors can use to submit images to the webpage:* Select the "Show email address to visitors" checkbox.

7 Click Publish.

Aperture creates a new web gallery album and uploads the images to a web gallery album in your .Mac account.

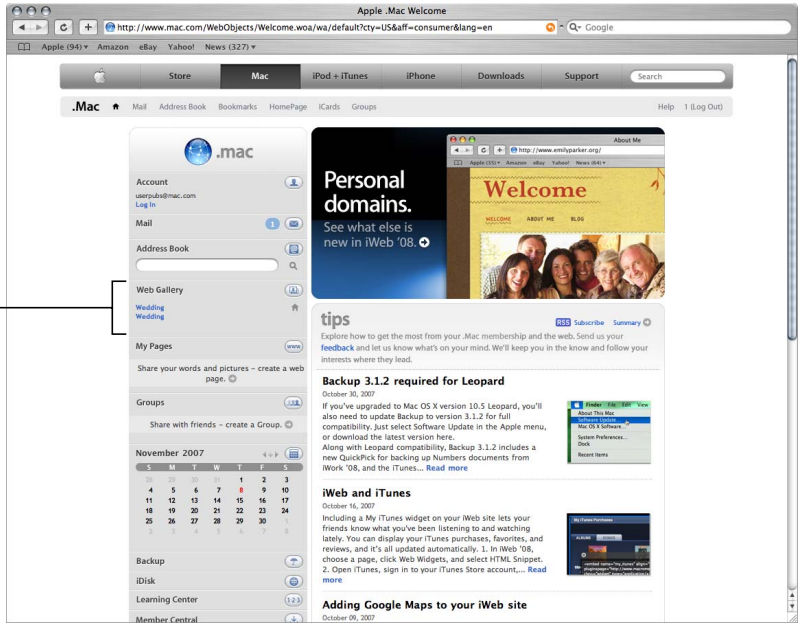


You can now use Safari to see the published web gallery.

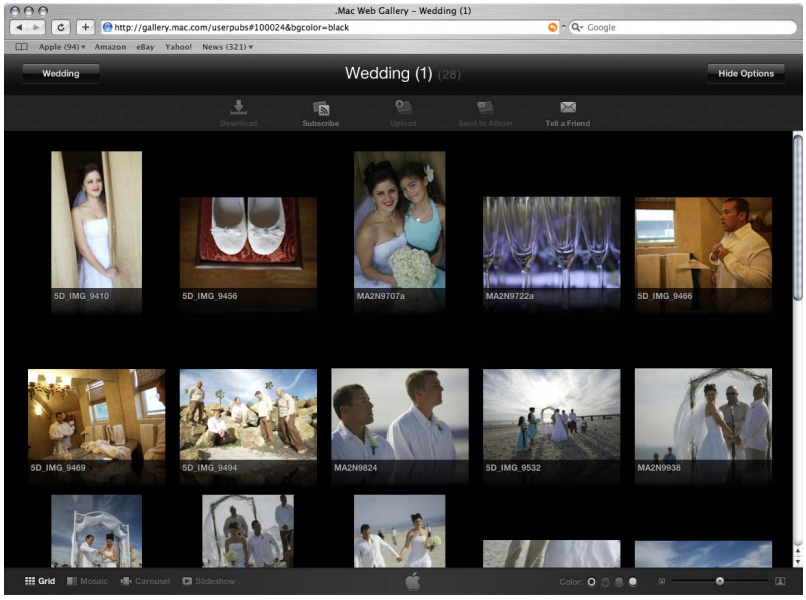
To view the published web gallery, do one of the following:

- Choose Open Web Gallery from the Web Gallery pop-up menu.
- Open Safari and go to the .Mac website at: www.apple.com/dotmac. Log in using your member name and password.

Your web gallery is listed in the Web Gallery area of your account page.



Click a web gallery name to open the web gallery.

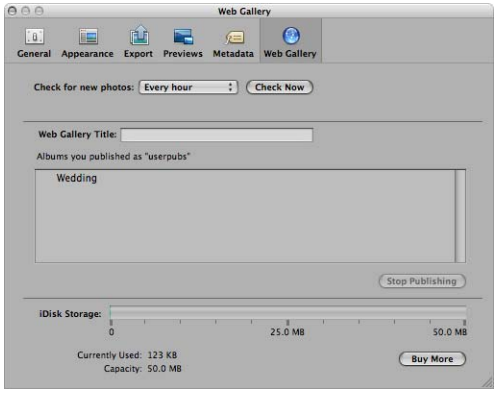


When the album is displayed in Safari or another browser, you can use the Tell a Friend feature of the album to send the address link to the people you want to review the album, or you can copy the URL site location from the browser and send it to people.

Updating Web Galleries

After you create a web gallery, you can add or remove images from the web gallery album in the Projects inspector and then have Aperture update the web gallery in your .Mac account with the changes. Aperture can also check to see whether images have been uploaded to your albums and download new or changed images to your web gallery album in the Projects inspector. You can have Aperture immediately update your web galleries or do it on an hourly, daily, or weekly, basis.

The Web Gallery pane of the Preferences window provides access to your web gallery controls and options.



You can schedule updates with the "Check for new photos" pop-up menu. Enter a title for your web gallery in the Web Gallery Title field. A list of the web gallery albums that you've published to your .Mac account appears in the "Albums you published as" area. If you want to remove a web gallery from your .Mac account, you can select a web gallery from this list and click Stop Publishing. Aperture then removes the web gallery from the web but preserves the web gallery album in the Projects inspector and in your iDisk.

The Web Gallery preferences pane also displays the amount of iDisk storage that you're currently using and the total storage capacity to which you have access. When more storage space is needed, you can purchase more by clicking the Buy More button.

To update and review your global web gallery settings:

- Choose Aperture > Preferences, then click Web Gallery.

To update and review an individual web gallery album's settings:

- Choose Settings from the Web Gallery pop-up menu in the tool strip of the Viewer.

To schedule the frequency of updates to your .Mac account:

- Choose the frequency you want from the "Check for new photos" pop-up menu.

To update your .Mac account manually:

- Choose Manually from the "Check for new photos" pop-up menu and click Check Now.

To stop publishing an album in your .Mac account:

1. Select the album that you want to remove from your .Mac account in the "Albums you published as" list.
2. Click Stop Publishing.

Aperture removes the selected web gallery from your .Mac account.

Creating Books

21

With Aperture, you can easily create books of your images that you can print using Apple's print vendor, your own print vendor, or your own printer.

This chapter provides instructions for using the selection of book designs and page layouts included in Aperture to create impressive books of your images.

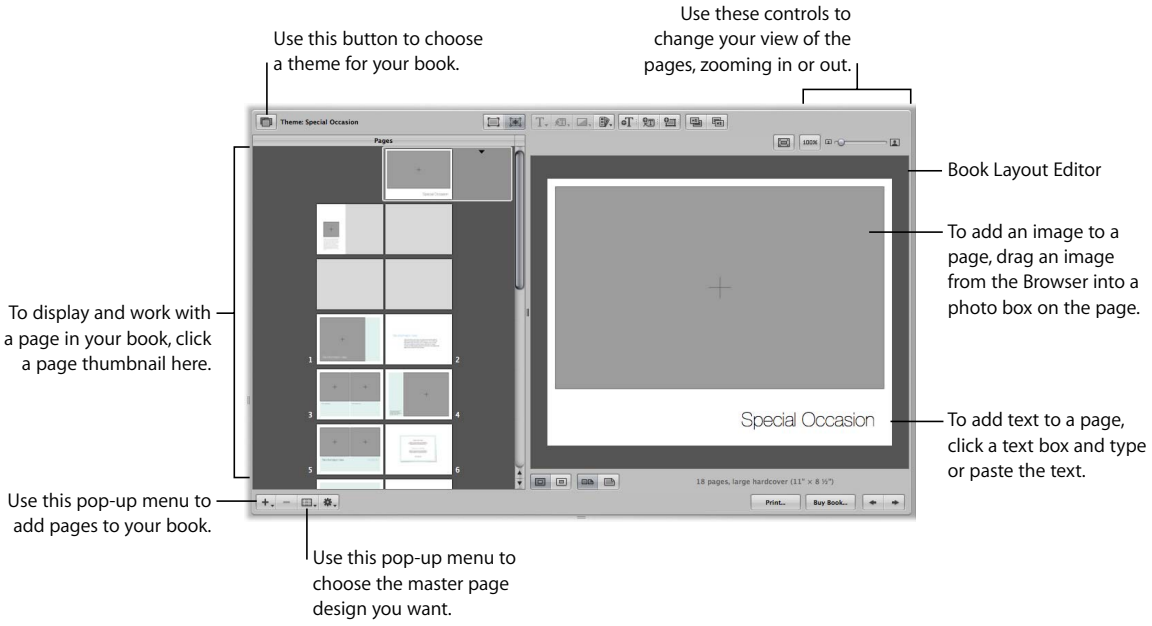
You can order printed books using Apple's print vendor service which provides excellent printed results and direct delivery to you or your clients. You can also print your books on your own custom books on a color printer, or create files that you can hand off to a print vendor. With Aperture, you can print outstanding portfolios of your works that effectively show your images in their best light.

This chapter covers:

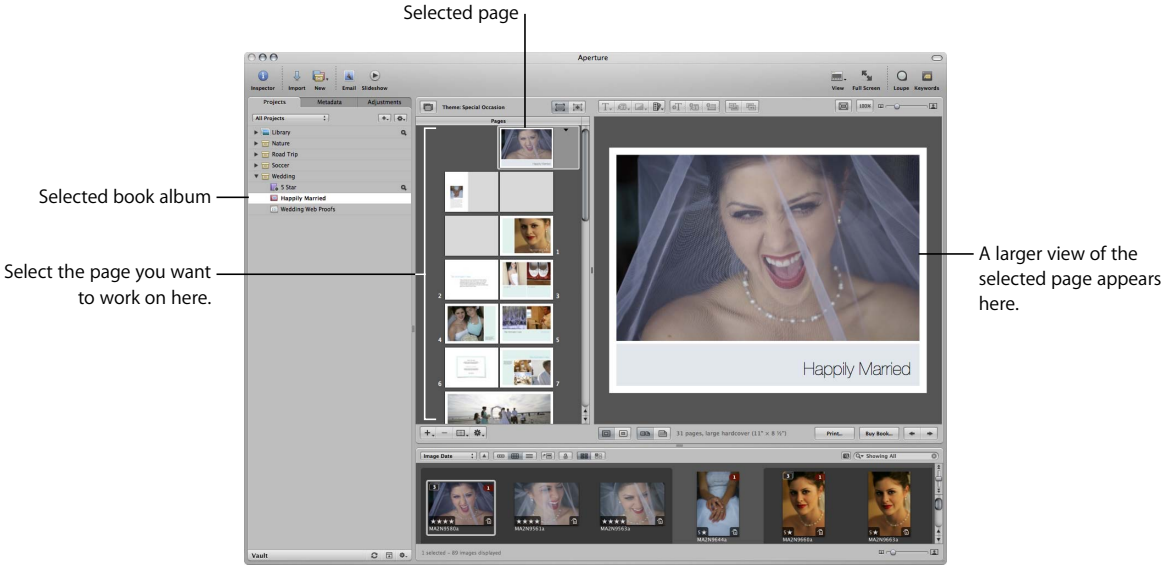
- An Overview of Creating Books (p. 570)
- Planning Your Book (p. 575)
- Creating a Book Album (p. 577)
- Controls in the Book Layout Editor (p. 578)
- Choosing a Theme (p. 581)
- Viewing Pages (p. 582)
- Placing Images in a Book (p. 584)
- Adding and Removing Pages (p. 586)
- Working with Pages (p. 591)
- Working with Images (p. 595)
- Working with Text (p. 600)
- Working with the Layout Options Inspector (p. 605)
- Working with Master Pages (p. 606)
- Working with Custom Themes (p. 609)
- Copying a Book Album (p. 610)
- Printing Books (p. 611)

An Overview of Creating Books

Aperture provides options for creating a print book to suit a variety of needs. When you select or create a book album in the Projects inspector, the Book Layout Editor appears along with the Browser. You use the Book Layout Editor to set up the page structure of your book and place images and text on the pages.



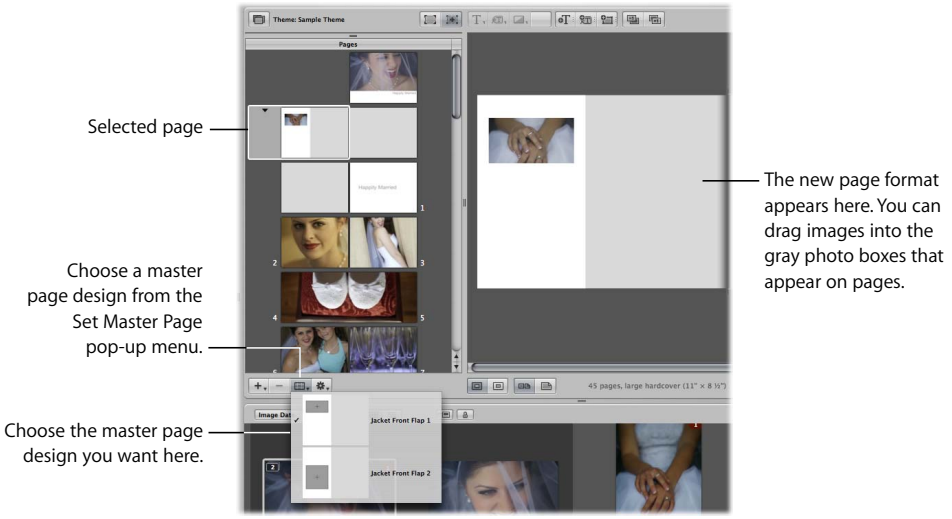
The Pages pane on the left shows thumbnails of your book pages. You can scroll through the thumbnails and click one to select a page of your book to work on. A larger view of the selected page appears on the right.



Books are based on a theme, or design, and master page layouts that present your images in a standardized way. Click the Theme button to see the themes you can choose.

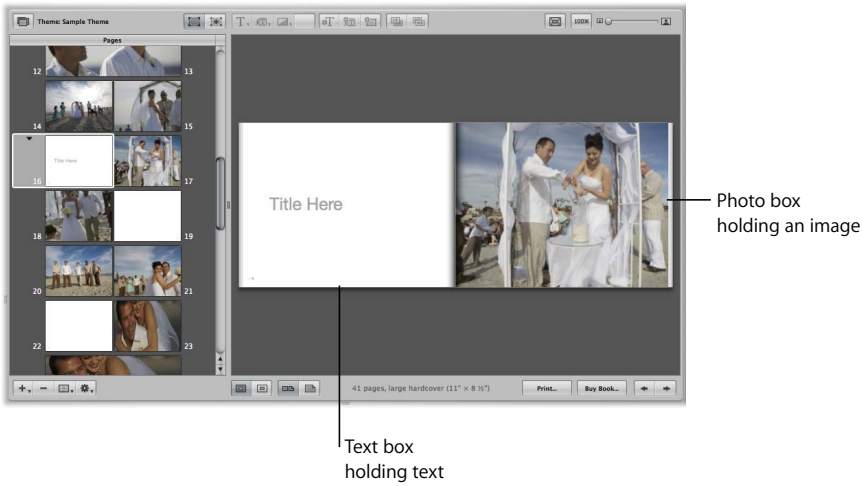


When you choose a theme, the Book Layout Editor provides a professionally designed set of master pages that determine how you mix text and images on the page. For example, you can choose among master pages that create a cover page, pages of text in columns of various sizes, pages of images in different arrangements, and pages with different combinations of images and text. You'll find master pages provide a fast and convenient method for quickly laying out a book.



When you first create a book album in the Projects inspector, Aperture automatically creates a default set of pages for you. You then use the Book Layout Editor to format your pages and create any additional pages you need.

You can apply a master page design to any selected page to define where your text and images appear. Pages appear with gray photo boxes to hold images and text boxes to hold text. To add images, you drag them into the photo boxes from the Browser. To add text, you select a text box and type or paste text into it. If you wish, you can also place metadata boxes next to images to display an image's version name, caption, keywords, and other metadata.

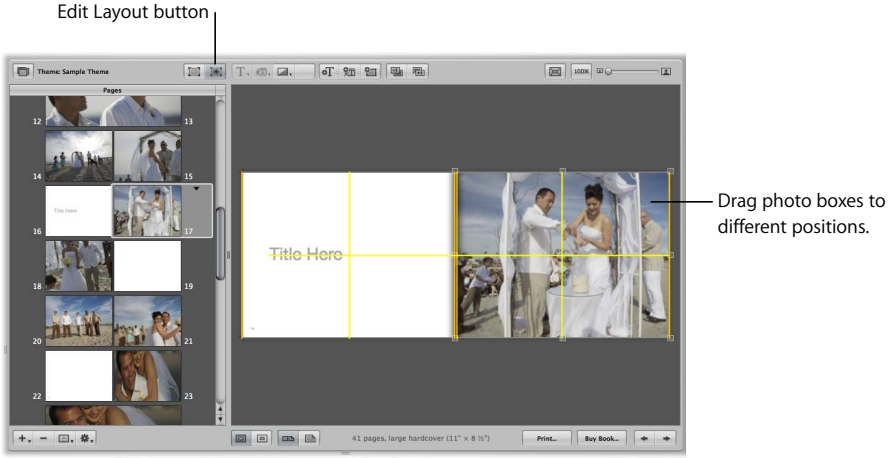


If you prefer, you can build a book page by page. You can add a new page to your book, choose a master page design, fill in images and text, and then create the next page, repeating the procedure for each page you add.

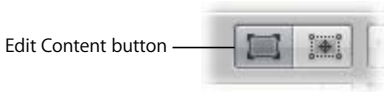
You can also select a group of images in the Browser and have Aperture automatically place them in pages in your book. Aperture creates as many pages as you need and fills them with your images. You can change the page design of individual pages later by applying different master page designs.

As you work on a book, you may need to adjust the layout of individual pages. For example, you may discover that one image in a group should appear slightly larger. You can move and resize the boxes that hold images on individual pages, making minor layout adjustments when a master page design doesn't quite suffice.

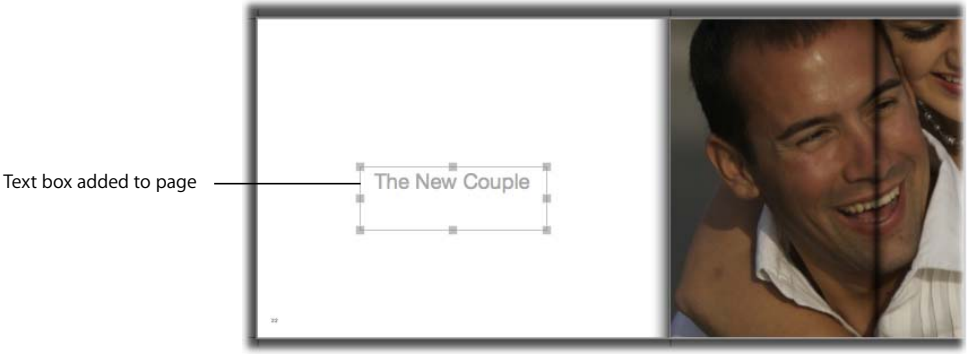
To change the design of a page, click the Edit Layout button. You can then work with the photo boxes and text boxes that appear on the page, resizing and rearranging them. The Book Layout Editor automatically displays yellow guidelines that show you how the item you're working with aligns with other items already on the page.



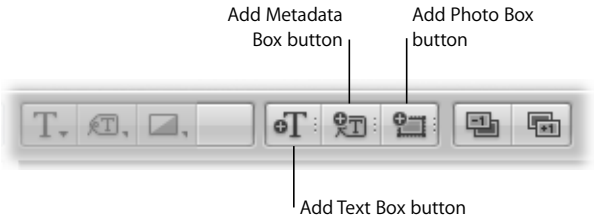
To add text and images to your pages without changing the page layout, click the Edit Content button. You can then add images and text to the page, but you can't move or resize the boxes on the page, which helps prevent unintended formatting changes.



You can also add photo, text, or metadata boxes to a page when you need them.



Click the Edit Layout button and then click the Add Text Box, Add Metadata Box, or Add Photo Box button to add a new box to the page. When a box appears, you can resize and reposition it.



The Book Layout Editor also allows you to create covers, indexes, and blank pages, use automatic page numbers, and create or modify master page designs.

When your book is complete, you can purchase printed copies from the Apple print vendor for a fee.

Note: Although you can create books larger than 99 pages, there is a 99-page limit for books ordered through the Apple print vendor. When you try to order a book larger than 99 pages, a dialog warns you that there are too many pages. If you plan to print a book using the Apple print vendor, make sure to keep the number of pages at or below the 99-page limit.

If you prefer to print your books yourself, you can print your book using your own office printer or export your book as a PDF file that you can send to a print shop for printing.

Planning Your Book

The amount of planning and work involved in creating a book varies with the type of project. If you're creating wedding photo albums, you may be primarily concerned with creating a reusable book design into which you can quickly place images that tell the wedding story. The end result may be one or several printed copies per project.

On the other hand, producing a large book, such as a coffee table book, may require a good deal of planning, writing, design, page composition, proofing, and production work. In addition, you'll want to look ahead and decide how the manuscript should be printed and bound, the number of copies for the print run, and what copyright and permissions information your book should include.

For relatively simple books, here are some of the typical steps in the publishing process:

1. Gather your initial selection of images in the Light Table and arrange them to tell the story you want.
2. Roughly plan the arrangement of images on each page.
3. If you'll be adding text to your images, you may want to write, edit, and spell-check your text using a word processor. You can then easily cut and paste the text into your book later.
4. Choose a cover image and decide what text should appear on the cover.
5. Create any copyright or permissions notices you need.
6. Create a book album and choose a theme for your book.
7. Place the book's images in the book album and order them as they should appear in the book. Don't place the images on your pages yet.
8. Specify any overall settings for the book, such as size, hardcover or softcover binding, page numbering, and so on.
9. Create the number of pages you need and apply master page designs to them.
10. Have Aperture automatically place your images, or drag the images onto your pages.
11. Reposition and resize images, adjusting individual page layouts if necessary.
12. Add text to your pages and cover.
13. Print a proof and carefully review the text and layout of the book.
14. Send the book to be printed using Apple's print vendor or create a PDF file that you can print or send to a print vendor. If you create a PDF file, make sure to include all the fonts you used in your book in the PDF file.

If you're creating a larger, more complex book, you'll want to contact a print vendor early to make sure you consider printing issues such as the choice of paper stock, the use of inks and varnishes, review of bluelines, binding, packaging, shipping, and pricing.

If you routinely produce printed albums, you can create a book album that you can copy and reuse with each new project. After setting up master pages and individual page layouts, you can copy the book album to another project and then substitute the new images, increasing your publishing productivity greatly. You can then customize certain pages, such as your cover, to provide any unique touches you like.

Creating a Book Album

You can create a book album two ways:

- Select the images you want in the book and then create a new album holding the selection.
- Create a new book album and then drag the images you want into it.

To create a book album from a selection of images:

1. Select the images you want to use in the book, then do one of the following:
   - In the toolbar, click the New button, and then choose New Book.
   - Choose File > New > Book.
   - In the Projects inspector, choose New Book From Selection from the Add to Library pop-up menu.
2. In the dialog that appears, specify the following:
   - *Theme list:* Select a theme in the list to see a preview of its design on the right.
   - *Book Size pop-up menu:* Choose the physical size of the book.
3. When you're ready, click Choose Theme.

   A new, untitled book album appears in the Projects inspector that includes the selected images.
4. Rename the book album.

To create a new, empty book album:

1. Do one of the following:
   - Choose File > New > Book.
   - In the Projects inspector, choose New Empty Book from the Add to Library pop-up menu.
2. In the dialog that appears, specify the following:
   - *Theme list:* Select a theme in the list to see a preview of its design on the right.
   - *Book Size pop-up menu:* Choose the physical size of the book.
3. When you're ready, click Choose Theme.

   A new, untitled book album appears in the Projects inspector.
4. Rename the book album.

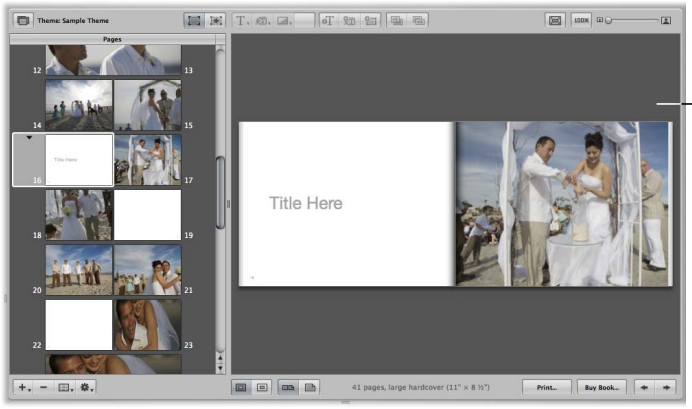
To add images to the empty book album:

1. Select the project that holds the images in the Projects inspector.

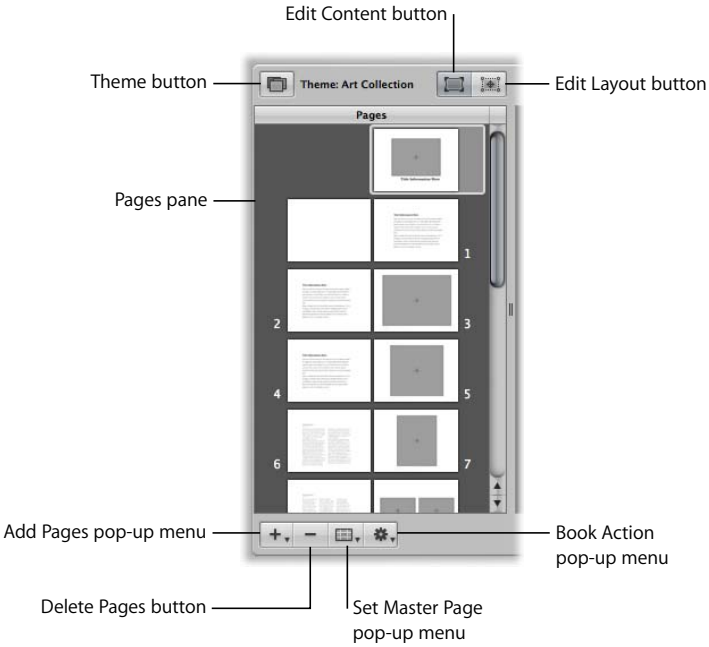
   The project's images appear in the Browser.
2. Drag the images from the Browser to the book album in the Projects inspector.

Controls in the Book Layout Editor

The Book Layout Editor is where you design the layout of pages in your book and add images and text to pages.

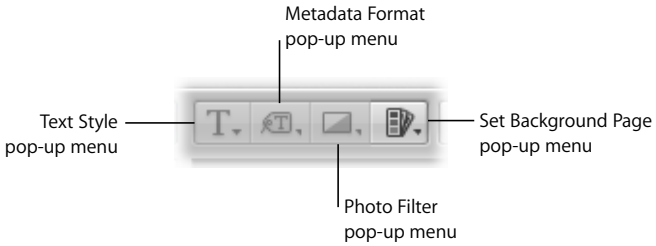


The following controls are available for working with books in the Book Layout Editor.

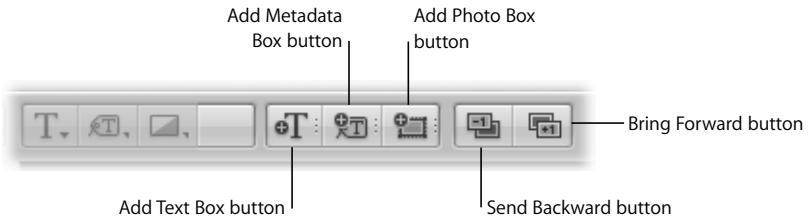


- *Theme button:* Click this button to choose a theme for your book's pages.
- *Edit Content button:* Click this button to edit the text on your pages.
- *Edit Layout button:* Click this button to change the page layout. You can then select text, metadata, and photo boxes on the page and move and resize them as you like.

- *Pages pane:* Click here to see an individual page in the book.
- *Add Pages pop-up menu:* Choose an option from this pop-up menu to add a page or pages to the book.
- *Delete Pages button:* Click this button to delete the selected page or pages from your book.
- *Set Master Page pop-up menu:* Choose the master page you want to apply to a selected page.
- *Book Action pop-up menu:* Choose options to reflow the images in a book, add an index and page numbers, add and change the look of text, metadata, and photo boxes, or show the Layout Options inspector.

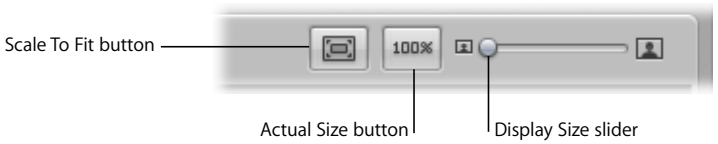


- *Text Style pop-up menu:* Choose the style of text you want for a selected text box.
- *Metadata Format pop-up menu:* Choose the type of metadata you want to display with your images.
- *Photo Filter pop-up menu:* Choose to apply various filters to an image to change its look.
- *Set Background Page pop-up menu:* Choose to remove the background image from this pop-up menu.

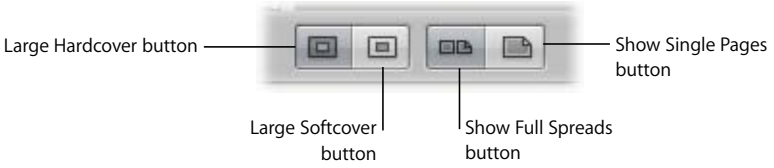


- *Add Text Box button:* Click this button to add a text box to the page.
- *Add Metadata Box button:* Click this button to add a metadata box to the page.
- *Add Photo Box button:* Click this button to add a photo box to the page to hold an image.
- *Send Backward button:* Click this button to move a selected box backward in the stacking order of overlapping text or image boxes.

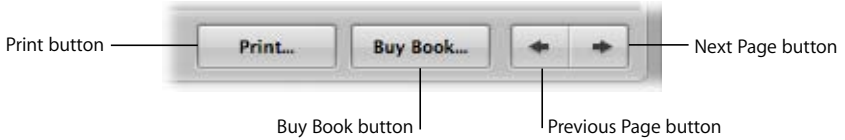
- *Bring Forward button:* Click this button to move a selected box forward in the stacking order of overlapping text or image boxes.



- *Scale To Fit button:* Click this button to scale the display of your pages to fit the Book Layout Editor size.
- *Actual Size button:* Click this button to view the selected page at its actual size.
- *Display Size slider:* Drag this slider to increase or decrease the size of the page in the Book Layout Editor.



- *Large Hardcover button:* Click this button to specify your book format as a large hardcover book.
- *Large Softcover button:* Click this button to specify your book format as a large softcover book.
- *Show Full Spreads button:* Click this button to display two facing pages in the Book Layout Editor.
- *Show Single Pages button:* Click this button to view single pages only.



- *Print button:* Click this button to print book pages.
- *Buy Book button:* Click this button to purchase your book from Apple's print vendor.
- *Previous Page button:* Click this button to see the previous page of your book.
- *Next Page button:* Click this button to see the next page of your book.

Choosing a Theme

You choose a theme for your book when you create your book album. A theme provides a professionally designed set of master pages that determine how you place text and images on the page.

It's a good idea to explore the page styles and looks of Aperture themes. Some theme designs lend themselves better to presenting many pictures without much text, others to more traditional mixes of text and images, such as you might find in coffee table books. Once you know the characteristics of the different themes, you can choose the theme best suited to a project.

You can also create your own custom theme with the dimensions of your choosing. However, you can't order books from Apple created with custom themes. For more information about creating custom themes, see "Working with Custom Themes" on page 609.

It's important to choose the theme you want at the beginning of a project. Each theme presents different combinations of master pages. Although you can change themes after you start a project and Aperture will attempt to convert your book structure to the new theme's master pages, you may need to redo some of your work to make up for differences between themes. Because themes are different, the conversion may not be exact. It's not recommended that you complete a book and then change themes to see it with different layouts.

> ***Warning:*** It's possible to lose text when you change themes. If you change book themes, make sure to first copy the text you've entered into another document so that you have a backup copy.

To choose a new theme for your book:

1. In the Book Layout Editor, click the Theme button.



A dialog appears alerting you that you may lose text when you change themes.

2. Click OK.
3. Choose a book size from the Book Type pop-up menu.
4. In the Themes list, select the theme you want.
5. Click Choose Theme.

After you change the theme, Aperture updates all your pages to use the new theme.

Viewing Pages

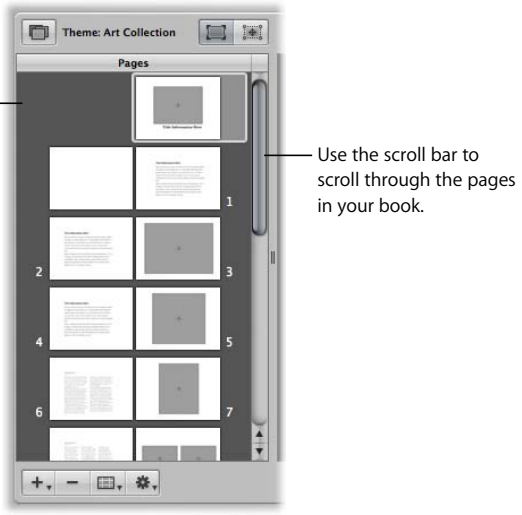
As you work on a book, you can select and view particular pages, and you can change your view of the pages. You can display your pages laid out singly or side by side, and you can enlarge or reduce your view of book pages.

Navigating to Book Pages

You can navigate to pages in your book by scrolling, pressing the arrow keys, or clicking the Previous Page and Next Page buttons.

To view a particular page in a book:

- Use the scroll bar in the Pages pane to scroll to the page you want, then click the page to select it.

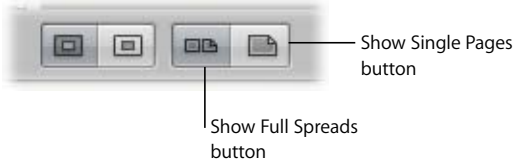


You can also quickly scroll through your pages by pressing the arrow keys or clicking the Previous Page and Next Page buttons.



Displaying Single Pages or Spreads

You can set the Book Layout Editor to display your pages singly or side by side. For example, you can display the pages side by side to see how images work in two-page spreads.



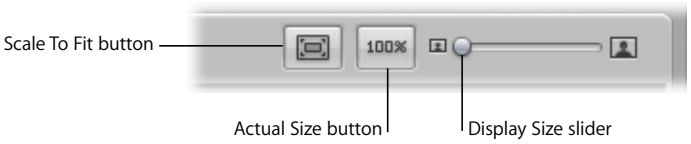
To display pages singly or side by side:

- Click the Show Single Pages or Show Full Spreads button.

Note: Printing single- or double-sided pages is a function of your printer and the options available in the printer's Print dialog. If you're purchasing printed books from Apple's print vendor, your book is automatically printed double-sided.

Resizing the Page View

You can reduce or enlarge your view of your book pages. For example, you might enlarge the display of your pages to closely inspect details, or reduce your view to get an overview of the general page composition.



To reduce or enlarge the display of your pages:

- Drag the Display Size slider left or right to change your view.

To return your page view to a size that fits the current screen size:

- Click the Scale to Fit button.

To change the page view to show the actual size of the page:

- Click the Actual Size button.

Placing Images in a Book

You can place images manually on your pages, or have Aperture automatically fill your pages with the images in a book album.

Placing Images Manually

You can place images in a book manually by dragging them in one at a time.

To add images to the book manually:

- Drag an image from the Browser to a photo box on the page.

Viewing Images to be Placed in a Book

Once an image is placed in the book, its Browser thumbnail is marked with a number to show how many times it appears on the pages of the book.



The number indicates the number of times an image has been placed in a book.

In a long book with many images, it can at times be difficult to know which images have been placed in a book. To help you work efficiently, you can click the Show Unplaced Images button to see only the images that remain unplaced.



Click here to see only unplaced images.

Click here to see all the images in the book album.

To display only unplaced images in the Browser:

- Click the Show Unplaced Images button.

To display all an album's images in the Browser:

- Click the Show All Images button.

To inspect selected images in detail, you can also quickly display them in a standard Viewer. When the Book Layout Editor is open, the Browser provides a button for quickly switching to a standard Viewer.



To display a selection of images in a book album in a standard Viewer:

1. Select the images in the Browser.
2. Click the Show Viewer button.

To return to the Book Layout Editor, click the Show Viewer button again.

Making Adjustments to Images in a Book

You can't select and use the Straighten, Crop, Spot & Patch, Retouch, and Red Eye tools in the tool strip when using the Book Layout Editor. To use these tools to make a change to an image in your book, select the image in the Browser, then click the Show Viewer button. The selected image appears in the Viewer and you can make your changes. Click the Show Viewer button again to return to the Book Layout Editor.

Placing Images Automatically

You can have Aperture automatically place your images in a book. It's a good idea to set up the page structure of your document first by creating the number of pages needed and assigning the master page layouts that you want. Then arrange your images in the Browser in the order in which they should appear in the book, and you can have Aperture flow the images into the structure you created.

You can place all the unplaced images in your book at once, or you can select specific images and have Aperture flow them into any empty pages. For example, you might select several images and have Aperture flow them into the first several pages of your book, and then select several more images and have Aperture flow them into the following pages.

If you prefer, you can have Aperture create as many pages as necessary to hold all your images and place them on the pages. Aperture creates new pages using master page designs from the selected theme and fills them with your images. You can then change the master page assignments if you wish.

Flowing Unplaced Images

When you create a structure of pages to hold your images, you can have Aperture flow in unplaced images. If more pages are required to hold your images than your book currently has, Aperture creates more pages. If you've already placed some images on pages in the book, Aperture flows in images beginning with the first empty photo box.

To have Aperture place unplaced images:

- Choose Autoflow Unplaced Images from the Book Action pop-up menu.

Flowing Selected Images

You can select images in the Browser and have Aperture flow them into the current page structure, starting with the first empty photo box. For example, you can select two images in the Browser and have Aperture flow them into the first two empty photo boxes of your book. You can thus flow images into a document's page structure little by little as you create a series of pages. If you select more images than your current page structure can hold, Aperture creates new pages as necessary to hold your images.

To have Aperture place selected images:

1. In the Browser, select the images you want to place in the book.
2. Choose Autoflow Selected Images from the Book Action pop-up menu.

Adding and Removing Pages

When you create a book album, Aperture automatically sets up default pages laid out for you. You can select and change these pages to suit your book's requirements, and you can add and remove pages as needed. You can insert new blank pages wherever you want in your book. After adding pages, you can drag them in the Pages pane to new locations in the book.

You can:

- Add individual pages one at a time to a book
- Have Aperture automatically add new pages to your book
- Select images and have Aperture create new pages to hold them
- Add images to new pages that use a specific master page design
- Add index pages that show thumbnails of all the images in the book

Adding Individual Pages to a Book

As you create a book, you can create new pages one by one and add them to your book.

To add a single page to your book:

1. Select a page in the Pages pane where the new page should appear.

   The new page will appear just after the selected page.

2. Choose Add New Page from the Add Pages pop-up menu.

   The new page appears in the Pages pane.

3. With the page selected in the Pages pane, choose a master page from the Set Master Page pop-up menu.

   The new page now has the page layout you chose.

You can also duplicate pages within a book.

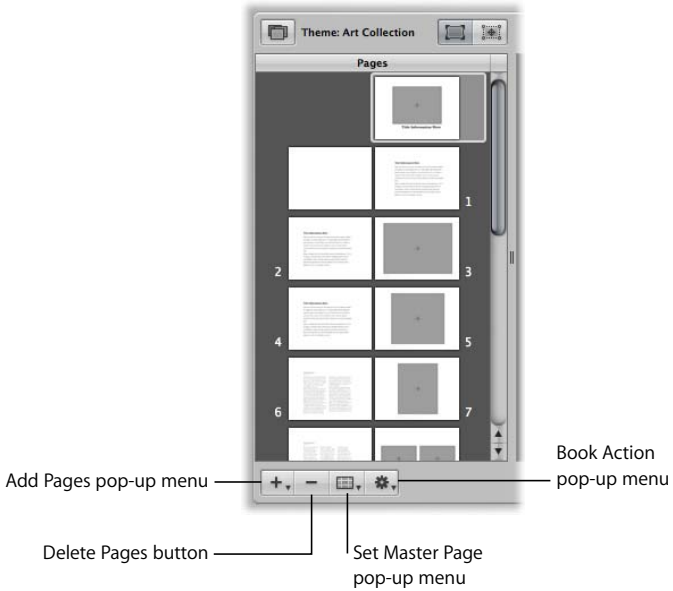
To duplicate a single page in your book, do one of the following:

- Select a page in the Pages pane where the new page should appear.
- Select a page in the Pages pane, and choose Duplicate Page from the Add Pages pop-up menu.

A new page appears in the Pages pane with the same page layout as the one you selected.

Automatically Creating New Pages

You can have Aperture automatically add pages to your book containing unplaced images in the book album. Aperture creates the number of pages needed to hold the remaining unplaced images.



To automatically place the unplaced images in pages added to your book:

1. Arrange the images in the Browser in the order in which you want them to appear in the book.
2. Select a page in the Pages pane where the new pages should appear.

   The new pages will appear just after the selected page.
3. Choose Add New Pages > With Unplaced Images from the Add Pages pop-up menu.

   All the unplaced images in the album are added to new pages in your book.

Adding New Pages to Hold a Selection of Images

You can also select a group of images and have Aperture automatically place them on new pages in your book. Aperture creates the number of pages needed to hold the selected images.

To add a selection of images to new pages in your book:

1. Select the images you want in the Browser.
2. Select a page in the Pages pane where the new pages should appear.

   The new pages will appear just after the selected page.
3. Choose Add New Pages > With Selected Images from the Add Pages pop-up menu.

   The selected images are added to your book.

Adding New Pages Based on a Master Page

You can add pages that are based on a specific master page to your book.

To add a new page based on a master page to your book:

1. To show master pages, choose Show Master Pages from the Book Action pop-up menu.
2. Select a master page in the Master Pages pane.
3. Select a page in the Pages pane where the new page should appear.

   The new page will appear just after the selected page.
4. Choose Add New Page From Master from the Add Pages pop-up menu.

   You can also select a master page and have Aperture place any unplaced images in new pages that are based on the master page.

To add pages based on a master page and have Aperture fill them with unplaced images:

1. To show master pages, choose Show Master Pages from the Book Action pop-up menu.
2. Select a master page in the Master Pages pane.
3. Select a page in the Pages pane where the new page should appear.

   The new page will appear just after the selected page.
4. Choose Add New Pages From Master > With Unplaced Images from the Add Pages pop-up menu.

   Aperture adds the unplaced images to new pages in your book. All the pages are based on the selected master page.

   You can also select images and have Aperture place them in new pages that are based on a master page.

To add pages based on a master page and have Aperture fill them with a selection of images:

1. To show master pages, choose Show Master Pages from the Book Action pop-up menu.
2. Select a master page in the Master Pages pane.
3. Select the images you want in the Browser.
4. Select a page in the Pages pane where the new pages should appear.

   The new pages will appear just after the selected page.
5. Choose Add New Pages From Master > With Selected Images from the Add Pages pop-up menu.

   Aperture adds the selected images to new pages in your book. All the pages are based on the selected master page.

Adding an Image Index to a Book

You can add index pages to a book that show thumbnails of all the book's images. Depending on the theme you choose, Aperture provides different looks and layouts for image indexes. Typically, the image index appears at the end of a book or at its beginning.

To add an index page to the end of your book:

1. To show master pages, choose Show Master Pages from the Book Action pop-up menu.
2. Select an index master page in the Master Pages pane.
3. Choose Add New Page From Master from the Add Pages pop-up menu.

   Add as many index pages as your book needs to hold all the images.
4. To fill the index pages at the end of your book, select all the images in your album and choose Autoflow Selected Images from the Book Action pop-up menu.

   All the selected images are flowed into the photo boxes on the index pages. You can also drag images into the index pages manually. If you want the index pages to appear in a different position in your book, you can drag them in the Pages pane.

   You can also add an index of metadata for the images to your book.

To add a metadata index to your book.

- Choose Create Index from the Book Action pop-up menu.

Aperture adds index pages to the end of your book and updates the index with the metadata information from your images. You can change the metadata that appears in the index by selecting metadata boxes and changing the metadata format using the Set Metadata Format pop-up menu.



Working with Pages

As you work with your book pages, you can make a variety of design and text changes.

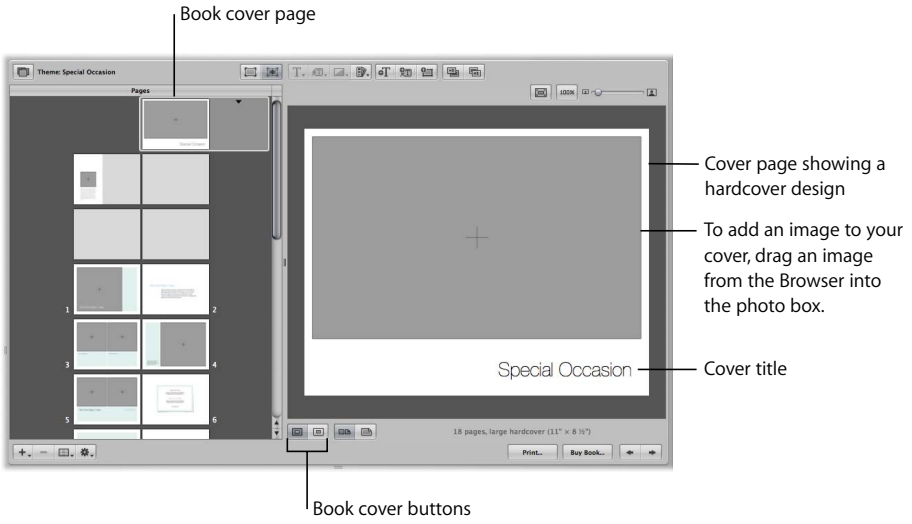
You can:

- Create a cover for a softcover or hardcover book
- Choose a master page design for your pages
- Copy pages
- Reorder pages in a book
- Remove pages from a book
- Choose a background image for a page
- Add page numbers to your pages
- Rebuild a book

Creating a Cover for Your Book

When you create a new book album, Aperture automatically creates a front cover page for your book. You can select the page and add a title, cover image or design, and other text or images that you like.

You can also choose between a softcover or hardcover design. Softcover designs have a white background, but when you select a hardcover design and purchase printed copies of the book from Apple's print vendor, you can choose from a selection of hardcover colors. Note that you can only add images and text to the front cover of your book; you can't specify images or text on the spine or back cover when purchasing books from Apple's print vendor.



To choose whether your book has a softcover or hardcover design, you click one of the book cover buttons.



To select a hardcover or softcover design for your book:

- Click the Large Hardcover or Large Softcover button.

If you don't plan to purchase printed books from the Apple print vendor, you may want to employ a graphic designer to create the front and back cover for you, or design the cover yourself using a graphics application.

Choosing a Master Page Layout

You select a design for your page by applying a master page layout. Aperture provides different master page layouts depending on the theme you chose. You can choose a page design from the Set Master Page pop-up menu. For example, you might create a single-image page, and later decide to change that page to hold two images.

You can apply different master page designs to a page to find the design that works best for your images and book.

To apply a master page design to a page:

1. Select the page in the Pages pane.
2. Choose the master page you want from the Set Master Page pop-up menu.

If you changed a page's design by repositioning or resizing boxes, and you want to start over with the original design, you can reapply the original master page design.

To reapply a master page design to a page:

1. Select the page you want to change in the Pages pane.
2. Choose Reapply Master from the Book Action pop-up menu.

Copying Pages

If you've made changes to a page and you'd like to use that page again in your book, you can duplicate it. Or, you might duplicate a page and then make small modifications to it, keeping both the new page design and the original for later use.

To copy pages:

1. Select the page or pages you want to duplicate.

   You can Shift-click pages in the Pages pane to select multiple pages.
2. Choose Duplicate Page from the Add Pages pop-up menu.

Reordering Pages in a Book

You can move pages within a book. If you need to move a particular page forward or backward in the page order, you can drag it to a new location in the book structure.

To move a page in your book:

1. Select the page in the Pages pane.
2. Drag the page to a new location.

Removing Pages from a Book

You can remove pages from a book. Removing pages removes the contents of the page, and remaining pages simply reflow to fill the deletion. You cannot remove the cover page of a book.

To remove pages from your book:

1. Select the page or pages you want to remove in the Pages pane.

   You can Shift-click pages to select multiple pages.

2. Click the Delete Page button (or press the Delete key), then confirm that you want to delete the page or pages.

Choosing a Background Image

You can choose a background image to appear behind the other images on a page. For example, you might create a page that shows a bride and groom in the foreground and a church setting in the background. Or, you might choose a background image that complements the colors of a foreground image.

To choose a background image for a page:

1. Select the page in the Pages pane.
2. Drag the image you want over the page until you see the background change color, then release the mouse button.

To remove a background image:

1. Select the page in the Pages pane.
2. Do one of the following:
   - Click the page background to select the image, and press the Delete key to remove the image.
   - Choose No Background from the Set Page Background pop-up menu.

     Note: The Set Page Background pop-up menu is not available for all themes.

Using Page Numbers in Your Book

Aperture can automatically provide page numbering in your books. Each theme provides page numbers in preset positions on the page. You can turn off page numbering if you wish. You cannot reposition page numbers on the page, or change the format of the page numbers.

To turn on page numbering:

- Choose Page Numbers > Always from the Book Action pop-up menu.

  You can also choose the Automatic option to turn on page numbering. When chosen, the Automatic option displays page numbers on pages when no images appear behind them.

To turn off page numbering:

- Choose Page Numbers > Off from the Book Action pop-up menu.

Rebuilding a Book

If you've made modifications to the design of a book and you want to start over with an unmodified design, you can have Aperture rebuild your book. Aperture rebuilds the book structure using the default series of master page designs and adds your images to the revised pages. You lose any changes that you previously made to your pages. You can have Aperture place all the images in the Browser in the book, or place selected images in the book.

To rebuild a book with all the images in the Browser:

- Choose Rebuild Book With All Images from the Book Action pop-up menu.

To rebuild a book with a selection of images:

1. Select the images you want to place in the book.
2. Choose Rebuild Book With Selected Images from the Book Action pop-up menu.

Working with Images

As you add images to your pages, you can make adjustments to the page design. You can adjust the position of images within photo boxes and change box sizes and locations on the page. Aperture also allows you to change the look of your images by applying filters. For example, you can select a photo box and apply a sepia tone to the image it holds.

Adding Photo Boxes to a Page

After creating a page and applying a master page design, you may need to add more photo boxes to hold images on the page. You can select a different master page design that has more photo boxes, or you can add photo boxes where you need them.

To add a photo box to a page:

1. Click the Edit Layout button, if it's not already selected.
2. Select the page you want in the Pages pane.
3. Click the Add Photo Box button.

When the photo box appears, you can drag it to a new position and resize it.

Changing How an Image Fills a Photo Box

Aperture is preset to scale images to fill a photo box. You can change the position of an image within a photo box, making it appear centered or aligned on the right or left edge.

To change how an image fills a box:

1. Click the Edit Layout button, if it's not already selected.
2. Select the photo box you want to change.
3. Choose Photo Box Alignment from the Book Action pop-up menu, then choose an alignment option from the submenu.
   - *To have an image scaled to fit the size of the box on the page:* Choose Scale to Fill.
   - *To have an image appear centered in the box:* Choose Scale to Fit Centered.
   - *To have an image appear aligned on the left edge of the box:* Choose Scale to Fit Left-Aligned.
   - *To have an image appear aligned on the right edge of the box:* Choose Scale to Fit Right-Aligned.

You can also adjust the scaling of an image within a box. Aperture provides an Image Scale slider to rescale images.

To change the scale of an image in a photo box:

1. Double-click the image.

   A slider appears that allows you to adjust the scale of the image.



2. Drag the slider to adjust the image scale.

   Click outside the photo box to hide the slider again.

If an image is scaled so that only part of the image is visible within the photo box, you can change the part of the image that's visible.

To change the part of the image that appears in a photo box:

1. Double-click the image.

   A slider appears that allows you to adjust the scale of the image.
2. Drag the image to change the part that's visible within the box.

Changing the Aspect Ratio for a Photo Box

Pages hold photo boxes with specific sizes and aspect ratios. You can select a box and change the aspect ratio to fit the image. For example, you can change a box with a landscape orientation to one with a portrait orientation.

Aperture provides commands for creating photo boxes in the following aspect ratios:

- 4:3 landscape
- 3:2 landscape
- 2:3 portrait
- 3:4 portrait
- Square
- The aspect ratio of the current image

To change the aspect ratio for a photo box:

1. Click the Edit Layout button, if it's not already selected.
2. Select the photo box you want to change.
3. Choose Photo Box Aspect Ratio from the Book Action pop-up menu, then choose an aspect ratio from the submenu.
   - *To change a photo box to a 4:3 landscape aspect ratio:* Choose Landscape 4:3.
   - *To change a photo box to a 3:2 landscape aspect ratio:* Choose Landscape 3:2.
   - *To change a photo box to a 2:3 portrait aspect ratio:* Choose Portrait 2:3.
   - *To change a photo box to a 3:4 portrait aspect ratio:* Choose Portrait 3:4.
   - *To change a photo box to a square aspect ratio:* Choose Square.
   - *To create a photo box that fits the cropping of the current image in the box:* Choose Photo Aspect Ratio.

Arranging Images on the Page

You can resize and reposition photo boxes on the page. You must first select the Edit Layout button to enable changing the page format. You can then click boxes to select them. Once selected, image and text boxes show handles that you can drag to resize the box. You can also drag the content of the box to move the box to a new position.

As you drag a box, you'll see yellow guidelines appear that mark the important margins and image borders on your page. Using the guidelines, you can make sure that your boxes correctly align with other boxes on your pages.

To arrange photo boxes on the page:

1. Click the Edit Layout button, if it's not already selected.
2. Select the photo box you want to move or resize.
3. Drag the box to a new location, or drag a handle on the selected box to change the image's size.

Copying, Pasting, Cutting, and Removing Images from Photo Boxes

After you place images in photo boxes on your pages, you can select a box or group of boxes and copy and paste the contents, or cut or remove the images from boxes.

To copy and paste the contents of selected boxes:

1. Click the Edit Content button, if it's not already selected.
2. Select the photo box or boxes whose contents you want to copy.
3. Choose Edit > Copy Content.
4. Select the photo box or boxes where you want the copied contents to appear.
5. Choose Edit > Paste Content.

To copy selected boxes:

1. Click the Edit Layout button, if it's not already selected.
2. Select the box or boxes you want to copy.
3. Choose Edit > Copy.
4. Select the page where you want the copied photo box or boxes to appear.
5. Choose Edit > Paste.

To cut the contents of selected boxes, placing the contents in the Clipboard:

1. Click the Edit Content button, if it's not already selected.
2. Select the photo box or boxes whose contents you want to cut.
3. Choose Edit > Cut Content.

To remove the contents of selected boxes without saving them in the Clipboard:

1. Click the Edit Content button, if it's not already selected.
2. Select the box or boxes whose contents you want to remove.
3. Press the Delete key.

Stacking Photo Boxes in a Specific Order

As you arrange boxes on the page, perhaps overlapping them to create a certain look, you may want to change their stacking order. For example, you might want to place three images on top of one another in a specific order. To change the stacking order of boxes, you select a box and then click the Bring Forward or Send Backward button.



To change the order of a stack of boxes:

1. Click the Edit Layout button, if it's not already selected.
2. Select the box whose stacking order you want to change.
3. Do one of the following:
   - Click the Bring Forward or Send Backward button.
   - Choose Arrange from the Book Action pop-up menu, then choose an option from the submenu.

Removing Photo Boxes

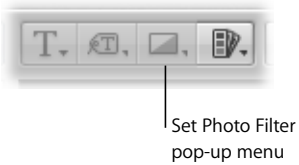
After creating a page and applying a master page design, you may want to remove one or more photo boxes from the page. You can choose a different master page design that has fewer photo boxes, or you can remove photo boxes from the page.

To remove photo boxes from a page:

- Click the Edit Layout button, select a photo box or boxes, then choose Edit > Cut (or press Delete).

Changing the Look of Images with Filters

Aperture allows you to change the look of images by applying filters. For example, you might apply a filter that fades an image so that you can position text over it to create an interesting cover. You can also apply filters that change an image to black and white or sepia.



To apply a filter to a photo box:

1. Select the photo box that contains the image you want to change.
2. Choose the filter style you want from the Set Photo Filter pop-up menu.

Note: When you apply a filter to an image in a book and then examine the image with the Loupe, the image appears without the filter effect. The filter is applied only to the image in the book, not to the image source. The Loupe displays the image source.

Working with Text

As you work with your book layout, you can add text and position it on the page.

You can:

- Place text on the page by entering it in text boxes
- Add new text boxes to the page
- Add metadata boxes that display an image's metadata
- Choose the style of your text, changing the font, font style, and font size
- Arrange text on the page by changing the size and position of text boxes
- Change the number of text columns on the page
- Remove text boxes from the page

You can make text changes to individual pages in your book, or you can change master pages to create template pages with custom text styles and layouts.

Placing Text on the Page

Master page designs provide text boxes that you can select and enter text in. You can also copy text and paste it into text boxes.

To add text to a text box:

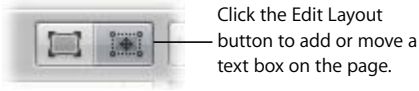
1. Click the Edit Content button, if it's not already selected.
2. Select the page you want to work on in the Pages pane.
3. Select the text box you want to change.
4. Select any existing text and type or paste in the text you want.

Adding Text Boxes to a Page

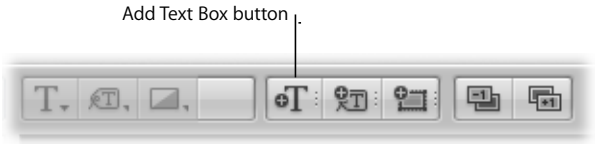
When you want to add text to a page and need another text box, you can add one and position it where you want.

To add a text box to a page:

1. In the Pages pane, select the page to which you want to add text.
2. Click the Edit Layout button.



3. Click the Add Text Box button.



A new text box appears on the page.

4. Drag the new text box to the location you want.

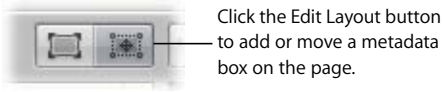
You can resize a text box by dragging its resize handles.

Adding Metadata Boxes to a Page

You can display your images on the page with the metadata associated with them. To display an image's metadata, you add a metadata box to the page and link it to the image.

To add a metadata box to a page:

1. In the Pages pane, select the page to which you want to add the metadata box.
2. Click the Edit Layout button.



3. Select the photo box to which you want to add a metadata box.

4 Click the Add Metadata Box button.

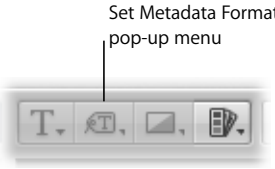


A new metadata box appears on the page.

5 Drag the new metadata box to the location you want.

You can resize a metadata box by dragging its resize handles.

6 Choose the type of metadata you want displayed in the box from the Metadata Format pop-up menu.



You can unlink a metadata box from its selected image and relink it when necessary.

To unlink a metadata box:

1 In the Pages pane, select the page that has a metadata box you want to unlink.

2 Select the metadata box you want to unlink.

3 Choose Unlink Metadata Box from the Book Action pop-up menu.

To relink a metadata box:

1 In the Pages pane, select the page that has the metadata box you want to link.

2 Command-click the metadata box and the photo box you want to link to select them.

3 Choose Link Metadata Box from the Book Action pop-up menu.

Hiding or Showing Image Plate Numbers in Books

You can turn on or turn off the display of plate numbers in your books and web galleries. Aperture is preset to not display plate numbers for images.

To turn on the display of plate numbers in a book:

- In the Book Layout Editor, choose Enable Plate Metadata from the Book Action pop-up menu.

Choosing a Text Style

You can assign text styles to text and metadata boxes to change the look of your text. Aperture master pages come with preset text styles that include designs for important text elements such as cover text, subtitles, headings, and paragraph text. You can easily apply these styles to text and metadata boxes as you work.

To change the text style of a text or metadata box:

1. Select the text or metadata box you want to change.
2. Choose a text style for your text from the Text Style pop-up menu.



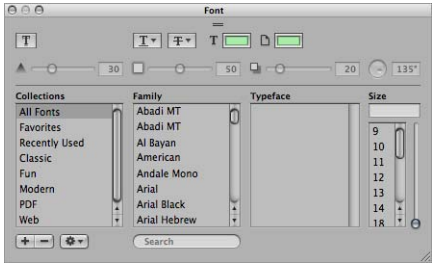
Making Font Changes in Books

Aperture provides a Font window that you can use to change fonts in your books. You can select text in a text box on a page and change the font, font size, font color, and more.

Important: Aperture follows the text-smoothing preferences you have set up in the Appearance pane of System Preferences. The default setting for Mac OS X doesn't smooth fonts that are 8 points in size or smaller. This setting only affects the appearance of fonts onscreen; the fonts will appear smoothed when printed.

To show the Font window:

- Select a text box, then choose Edit > Show Fonts (or press Command-T).



Arranging Text on the Page

You can resize and reposition text and metadata boxes on the page. You must first select the Edit Layout button to enable changing the page format. When you click boxes to select them, the boxes show handles that you can drag to resize the boxes. You can also drag the contents of a box to move the box to a new position.

To arrange text on the page:

1. Click the Edit Layout button, if it's not already selected.
2. Select the page you want to work on in the Pages pane.
3. Select the text box you want to move or resize.
4. Drag the box to a new location, or drag a handle on the selected box to change the image's size.

Changing the Number of Columns of Text

You can change a text box so that it's formatted to hold from one to four columns of text.

To change the number of text columns in a text box:

1. Click the Edit Layout button, if it's not already selected.
2. Select the text box.
3. Choose Text Box Columns from the Book Action pop-up menu, then choose the number of columns you want from the submenu.
4. If necessary, resize the text box to better accommodate the changed column layout of the box.

Removing Text Boxes from a Page

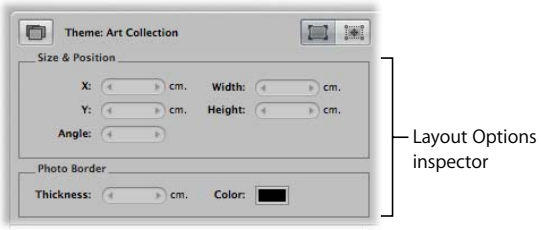
After creating a page and applying a master page design, you may want to remove one or more text boxes from the page. You can choose a different master page design that has fewer text boxes, or you can manually select and remove text boxes.

To remove text or metadata boxes from a page:

1. Click the Edit Layout button.
2. Select the text or metadata box you want to remove, then choose Edit > Cut Content (or press Delete).

Working with the Layout Options Inspector

You can select an item on a page and view its geometry using the Layout Options inspector. Some printers require precise layout dimensions; you can use the Layout Options inspector to accurately place all items on the page by entering new dimensions in the value sliders. In addition, you can change the angle of text and photo boxes, as well as apply a color border to a photo box.



To open the Layout Options inspector:

- Choose Show Layout Options from the Book Action pop-up menu.

The Layout Options inspector appears at the top-left area of the Book Layout Editor.

To change the dimensions of a text or photo box:

1. Select a text box or photo box.
2. Do the following:
   - *To move the selected item left or right:* Enter a new value in the X value slider.
   - *To move the selected item up or down:* Enter a new value in the Y value slider.
   - *To change the width of the selected item:* Enter a new value in the Width value slider.
   - *To change the height of the selected item:* Enter a new value in the Height value slider.

To change the angle of a text or photo box:

1. Select a text box or photo box.
2. Enter a value in the Angle value slider.

The image rotates counterclockwise as the value increases.

To add a border to a photo box:

1. Select a photo box.
2. Set the width of the border by entering a value in the Thickness value slider.
3. Set the color of the border by clicking in the Color well and then selecting a color from the Colors window.

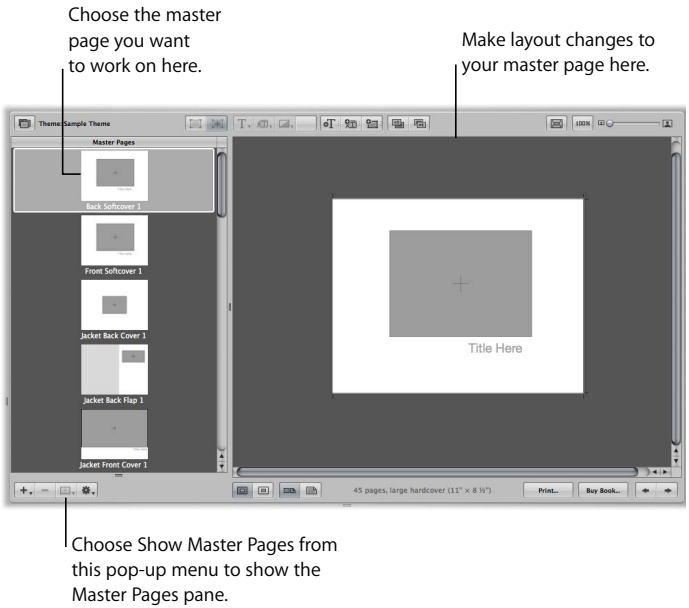
The border is applied to the image.

Working with Master Pages

Master pages supply the initial design of your pages. As you create pages, you apply master page designs repeatedly throughout a book.

If you plan to make reusable book albums, you can customize the page designs of a selected theme before creating your books. You can select a master page and modify it, changing the photo, text, and metadata boxes that appear on the page. You can also create new master pages to suit specific layout needs. To modify your pages, you can use the procedures for working with photo, text, and metadata boxes presented earlier in this chapter.

To modify a master page, you show master pages in the Master Pages pane, and then add a new page or select the page you want to work on. When you select a master page in the Master Pages pane, the Book Layout Editor displays an enlarged view of the page.



You can:

- View master pages
- Create new master page designs or modify existing master page designs
- Create left and right (facing page) versions of a master page, or combine left and right versions into one page
- Update your book with changes made to the master pages on which the book pages are based

Viewing Master Pages

To view and work on the master pages for a theme, you must show the master pages in the Master Pages pane.

To show master pages:

- Choose Show Master Pages from the Book Action pop-up menu.

The Master Pages pane appears above the Pages pane, showing thumbnails of the master pages for the selected theme. You can select master pages in the Master Pages pane to display and work on them. You can drag the border between the Master Pages pane and the Pages pane to resize the panel display.

To hide master pages:

- Choose Hide Master Pages from the Book Action pop-up menu.

Creating and Modifying Master Pages

You can create new master pages, or you can duplicate existing master pages and modify them. For example, if you decide to customize a two-photo layout from an original master page design, you can save the customized version and have multiple two-photo layouts that you can choose. Once you create a new master page, the master page name appears in the Set Master Page pop-up menu, where you can choose it to apply the design to pages in your book.

To create a new master page design:

1. Choose Show Master Pages from the Book Action pop-up menu.
2. Click a master page in the Master Pages pane.
3. Choose Add New Page from the Add Pages pop-up menu.
4. Rename the page if you wish.
5. Select the new master page and make your changes.

To duplicate and modify a master page design:

1. Choose Show Master Pages from the Book Action pop-up menu.
2. Select the master page you want to duplicate in the Master Pages pane.
3. Choose Duplicate Page from the Add Pages pop-up menu.
4. Rename the page if you wish.
5. Select the new master page and make your changes.

You can also change the design of a page in your book and save the changes to create a new master page.

To create a new master page design from a page in your book:

1. In the Pages pane, select a page in your book whose modifications you want to save as a master page.
2. Choose Save Page > As New Document Master from the Book Action pop-up menu.
3. Choose Show Master Pages from the Book Action pop-up menu, if necessary, to show the Master Pages pane.
4. Select the new master page in the Master Pages pane and rename it.

After updating the design of a page in your book, you can update the original master page with those changes.

To save changes in a book page to the original master page design:

1. In the Pages pane, select the page whose design you modified.
2. Choose Save Page > To Document Master from the Book Action pop-up menu.

Aperture updates the original master page with your design changes.

Unifying and Splitting Master Pages

Some master pages have left and right versions to match the book margins on the left and right facing pages. You can select a left or right master page and consolidate the two versions into one page.

To unify left and right versions of a master page:

1. Select a left or right master page in the Master Pages pane.
2. Choose Unify Master Page from the Book Action pop-up menu.

You can also select a master page that has only one version and split it into left and right versions.

To split a master page that doesn't have left or right versions into left and right versions:

1. Select a master page in the Master Pages pane.
2. Choose Split Master Page from the Book Action pop-up menu.

You can now adjust the position of items on the new pages to match the margins on the left and right pages.

Updating Book Pages with Master Page Changes

After you change a master page, the modified design can be applied to pages in your book. Aperture does not automatically update the design of pages whose master pages are modified later. However, you can choose to update the pages in a book with revised master page designs.

To update a page with a changed master page design:

1. In the Pages pane, select the page whose master page design you want to update.
2. Choose Reapply Master from the Book Action pop-up menu.

   Aperture applies the current master page design to the selected page.

Working with Custom Themes

If you need a book with dimensions different from those of the Small, Medium, and Large format books, you can create a custom theme with the precise dimensions you require. Setting the dimensions in a custom theme provides the precision demanded by professional printers.

Creating Custom Themes

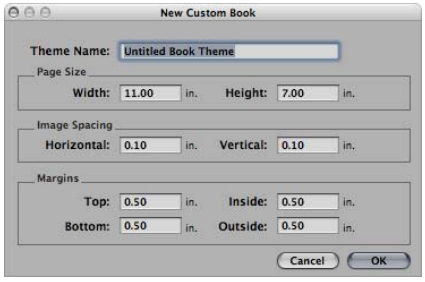
You create custom themes in the Themes dialog.

To create a custom theme:

1. In the Book Layout Editor, click the Theme button.

   A dialog appears alerting you that you may lose text when you change themes.
2. Click OK.
3. In the dialog that appears, choose Custom from the Book Type pop-up menu.
4. Click the Theme button at the bottom of the dialog.

   The New Custom Book dialog appears.
5. In the Theme Name field, enter a name for the custom theme.



6. Enter the book's dimensions in the Page Size, Image Spacing, and Margins areas, then click OK.

   The new custom theme appears in the Themes list.

Sharing Custom Themes

You can share your custom themes with other Aperture systems. By default, Aperture saves custom themes in the following location in the Finder: /Users/*username*/Library/Application Support/Aperture2/Book Themes/

To share custom themes with another Aperture system:

- Copy the themes you wish to share from the Book Themes folder on the first Aperture system to the same location on the other Aperture system.

The custom themes appear in the Themes dialog when you choose Custom from the Book Type pop-up menu.

Copying a Book Album

After you've set up a book structure that you like, you can reuse it for other projects. For example, you might create a wedding album book structure that you reuse frequently.

You can select and duplicate a book album. You can then remove the images from the album and replace them with others to fill the new book. Aperture can automatically flow the new images into the duplicated book structure.

To copy a book album and place new images in it:

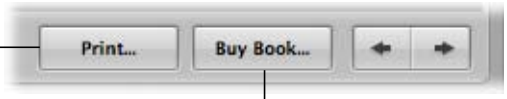
1. Select the book album in the Projects inspector.
2. Choose File > Duplicate Book.
3. Drag the duplicate book album to a new project, if you wish.
4. With the duplicate book album selected in the Projects inspector, select an image in the Browser and choose Edit > Select All (or press Command-A).
5. To remove the images from the album, choose Images > Remove From Album (or press Delete).

   All the images are removed from the Browser and the book pages.
6. Select the project that has the images you want to place in the book.
7. Select the images and drag them to the duplicate book album in the Projects inspector.
8. Select the duplicate book album in the Projects inspector.
9. Arrange the images in the Browser in the order you want them to appear in your book.
10. Choose Autoflow Unplaced Images from the Book Action pop-up menu.

    The images are automatically placed in the book pages.

Printing Books

After you've created your book, you can purchase printed and bound copies from Apple's print vendor. You can also print your book using your own printer or create PDF files that you can send to clients or your own print vendor.



Click here to print your book on your printer or create a PDF file.

Click here to purchase a printed book using your .Mac account.

If you plan to hand off your files to a print vendor, you can save your book either as a PDF file or a PostScript document. You can then deliver this file to the printer or lab. For more information about printing books on your printer, see Chapter 16, "Printing Your Images," on page 471.

Backing Up Your Images

22

To safeguard your photography portfolio, it's important to establish a reliable backup system and back up regularly.

This chapter provides instructions for using the Aperture backup system to back up the entire Aperture library on a regular basis. Aperture clearly indicates how up to date your most recent backup is, and you can update your backups immediately whenever you wish. In the event of a rare equipment failure or unforeseen catastrophe such as a fire or weather-related damage, you can easily restore the entire Aperture library onto your computer or a new computer.

This chapter covers:

- An Overview of the Backup Workflow (p. 614)
- Planning Your Backup System (p. 615)
- Working with the Vault Pane (p. 616)
- Creating Vaults (p. 618)
- Updating Vaults (p. 619)
- Disconnecting a Vault's Hard Drive from Your System Temporarily (p. 620)
- Reconnecting a Vault's Hard Drive to your System (p. 620)
- Deleting a Vault Permanently (p. 621)
- Backing Up Images from a Portable in the Field (p. 621)
- Restoring Your Aperture System (p. 623)

An Overview of the Backup Workflow

Making backup copies of the library affords you the reassurance that should an unforeseen incident cause the loss of your files, you can easily restore them from your backup vaults later. If you back up the library regularly and store backups offsite, you run little risk of losing your work.

When you back up your images, Aperture makes a complete copy of the library in its current state. If you remove items from the library, those items are removed from the backup when it is next updated.

You can make and store as many complete backups of the library as you wish. If you want to keep a historical archive of the library, you'll need to devise a system of storing separate backups in some regular chronological order.

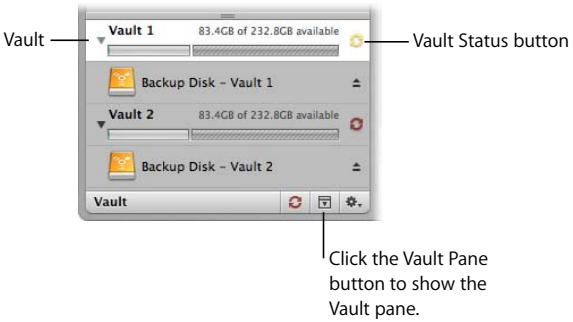
You set Aperture to back up a copy of the library to a designated storage area called a *vault*. For safety and redundancy, use external hard disks to hold your vaults. Aperture lets you create as many vaults as you deem necessary. For example, you may want to create one vault on an external hard disk for daily backups and a second vault on another external hard disk that you keep offsite.

All masters for managed images, all versions, and all metadata, previews, and adjustment information associated with your images are backed up. The versions, previews, and metadata associated with referenced masters are also backed up in the vault.

Important: Referenced masters are not backed up in the vault with the library. Because the masters for referenced images are stored outside of the library, you must manage the backup and archiving of them yourself.

Although rare, mechanical failures and unexpected damage to your computer system can occur. And from time to time you may upgrade your equipment and need to move your portfolio to a new system. Aperture allows you to easily restore the entire Aperture library from your backup disks onto your computer or a new system. For more information about restoring images and projects, see "Restoring Your Aperture System" on page 623.

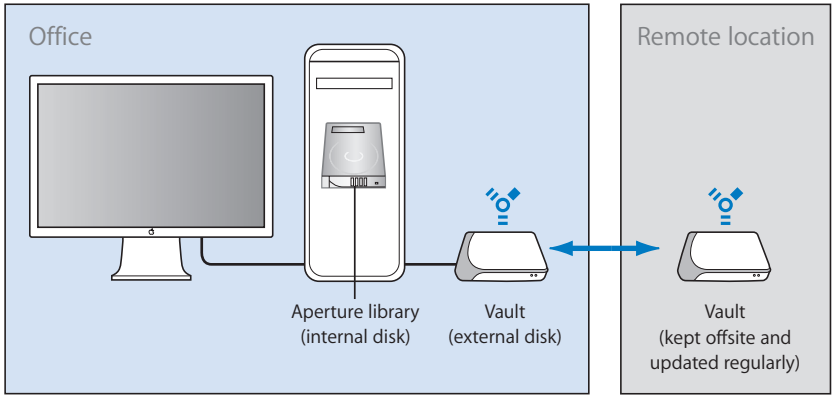
As you add to your photo library, Aperture automatically tracks which files have been backed up to each vault. When there are image files in the library that are not backed up in a vault, the Vault Status button appears red. When your vault is up to date, the Vault Status button for the vault appears black. When you have made image modifications (such as image adjustment, metadata, or keyword changes) that have not been backed up in a vault yet, the button appears yellow. You can update your vaults at any time.



Planning Your Backup System

As you begin working with Aperture, it's important to perform regular backups of your images. When you import new images from your camera, you should immediately create a backup so that you have copies safely stored. As you routinely work with Aperture, creating new image versions and making adjustments, you'll want to make sure your work is copied to disk and your backup vaults are up to date.

A typical backup system used with Aperture might look like the following:



This system backs up the Aperture library to two vaults stored on external hard disks. You routinely back up the library on one external hard disk. You use the second hard disk as a backup that you keep offsite. You can then alternately back up the library on your onsite external hard disk and swap it with the offsite hard disk to keep all your vaults updated.

To set up your Aperture backup system, you'll need to do the following:

1. Determine the number of vaults you need. For example, do you need one for routine backups, one for weekly backups, and one for offsite storage?
2. Determine the number of hard disks you need for routine backups.
3. Determine the number of hard disks you'll use for storing backups offsite.
4. Connect your hard disk drives to your computer.
5. Open Aperture and create the vaults you need, assigning a hard disk to each vault.
6. Update the new empty vaults with copies of the Aperture library.
7. Disconnect one of the vault hard disks and take it to an offsite location for safekeeping.

When planning the amount of storage space you'll need, estimate the amount of disk space needed to hold your existing digital images (photos you plan to import into Aperture) and the amount of space you might need for new projects. For example, RAW images typically require 8 to 18 MB of disk space per file. Estimating the number of images in a typical project and the number of projects you usually do in a year, you can make a rough estimate of what might represent a year's storage space.

For step-by-step instructions for initially setting up your hard disks and backup system, see Appendix A, "Setting Up an Aperture System," on page 627.

Working with the Vault Pane

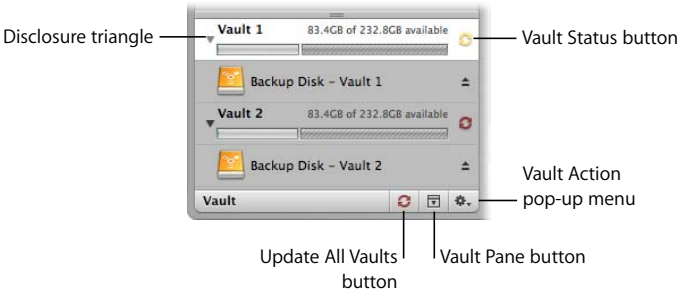
You use the Vault pane below the Projects inspector to set the location of your vaults and check their status.

To show the Vault pane, do one of the following:

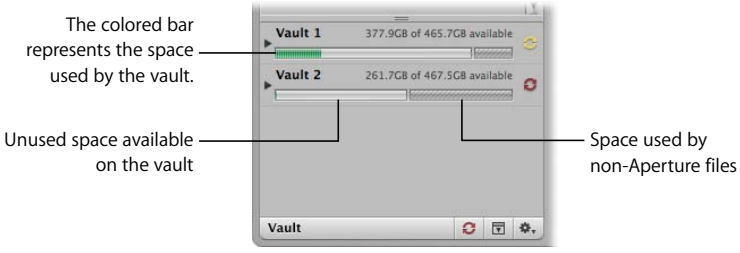
- Choose Window > Show Vaults (or press Shift-R).
- Click the Vault Pane button.

Controls in the Vault Pane

There are several controls that you'll use when you update vaults.



- *Disclosure triangle:* Click this to see the hard disk that is assigned to a vault.
- *Vault Status button:* Click this button to update a vault. The color of the Vault Status button indicates the state of the vault:
  - *Black:* The vault is up to date.
  - *Yellow:* All masters in the library have been backed up, but a change has occurred to at least one version (such as an adjustment) that has not been backed up. The vault should be updated to safeguard your work.
  - *Red:* At least one master in the library has not been backed up. The vault should be updated to protect against the loss of masters.
- *Update All Vaults button:* Click this button to update all of your connected vaults at the same time.
- *Vault Pane button:* Click this button to show or hide the Vault pane.
- *Vault Action pop-up menu:* You can use this pop-up menu to add and remove vaults, as well as update a vault.
- *Disk space available:* Aperture keeps track of how much storage space is available on the hard disk used by a vault. Color-coded bars indicate the space used by the vault, unused space, and space used for other, non-Aperture files.

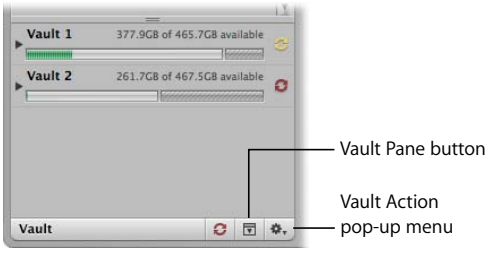


Creating Vaults

Before you can back up your files, you must create a vault and assign a hard disk to it. After you assign a disk to the vault, Aperture uses the vault to back up the entire library. You can create additional vaults and assign hard disks to them, and each additional vault also records a complete backup of the library.

To create a new vault:

1. Do one of the following:
   - Choose File > Vault > Add Vault.
   - Choose Add Vault from the Vault Action pop-up menu.

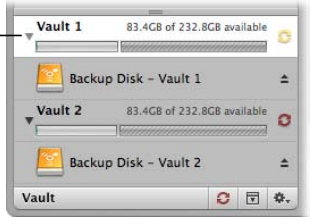


2. In the Add Vault dialog, specify the following options:
   - Type the name you want for the vault in the Vault Name field.
   - Choose where you want the vault stored from the Where pop-up menu.
3. Click Add.

Important: To ensure preservation of your image assets, make sure to assign a separate external hard disk drive to each vault.

To see the hard disk assigned to a vault:

- In the Vault pane, click the disclosure triangle beside the vault name.



You can easily see the amount of free space your vault has available next to the vault name. Make sure to assign enough disk space to the vault to ensure a complete backup of the library and to allow the library to grow as you import new images over time.

Updating Vaults

You can have Aperture update your vaults at any time. You can tell which vaults need to be updated by the color of the Vault Status button next to each vault. You can have Aperture update a particular vault or all of your vaults at once.

After you import new images into Aperture, you should make an immediate backup to ensure the digital files exist in more than one place. You can make an immediate backup of your imported images by updating an existing vault.

To update all connected vaults:

1. Do one of the following:
   - Choose File > Vault > Update All Vaults.
   - In the Vault pane, click the Update All Vaults button.
2. In the dialog that appears, click Update All Vaults.

To update an existing vault:

1. Do one of the following:
   - Choose Window > Show Vaults (or press Shift-R).
   - Click the Vault Pane button.
2. Select the vault you want to update.
3. Do one of the following:
   - In the Vault pane, choose Update Vault from the Vault Action pop-up menu.
   - Click the Vault Status button beside the vault name.
4. In the dialog that appears, click the Update Vault button.

Disconnecting a Vault's Hard Drive from Your System Temporarily

You may routinely disconnect a backup hard disk drive from your Aperture system and take it to a safe offsite location. When you disconnect a backup hard drive from your computer, Aperture takes the associated vault offline. When you reconnect the hard drive again, Aperture automatically detects the hard disk and connects it to the corresponding vault.

To disconnect a vault's hard disk drive from your Aperture system:

1. Do one of the following:
   - Click the disclosure triangle next to the vault name to display the name of the hard disk assigned to the vault, then click the Eject button next to the hard disk name.
   - In the Finder, drag the hard disk icon for the drive to the Trash, or select the disk in the sidebar and click the Eject button.
2. Disconnect the hard disk drive from your computer.

Reconnecting a Vault's Hard Drive to your System

If you keep a backup of the Aperture library on an offsite hard disk drive, you'll occasionally need to bring it in for updating. Aperture keeps track of the hard disks that have been disconnected from their vaults. When you reconnect a hard disk drive, Aperture automatically detects the hard disk, determines which vault it's assigned to, and reconnects the vault.

At times, you may rename a backup hard disk drive or add a new one and copy a vault to the new drive. In this case, you need to specify the location, or path, of the new or changed backup hard disk drive.

To specify a vault's new location or path:

1. Connect the hard disk drive to your computer.
2. To show the Vault pane, do one of the following:
   - Choose Window > Show Vaults (or press Shift-R).
   - Click the Vault Pane button.
3. Select the vault to be updated to a new path.
4. Choose Update Vault Path from the Vault Action pop-up menu.
5. Navigate to the location of the vault on the hard disk drive, select it, and click Update Path.

Deleting a Vault Permanently

You can delete an entire vault and all the images on it when you need to reconfigure your backup system. This is useful when you have moved your backup vault to a larger-capacity hard disk and you want to delete the vault information from the current hard disk drive to use it for other purposes.

To permanently remove a vault and delete its information:

1. In the Vault pane, select the vault you want to remove.
2. Do one of the following:
   - Choose File > Vault > Remove Vault.
   - Choose Remove Vault from the Vault Action pop-up menu.

   A dialog appears asking if you want to remove the vault.
3. Click one of the following buttons:
   - *Remove Vault:* When you click this button, Aperture no longer tracks the vault, but the vault's files remain on the hard disk.
   - *Remove and Delete Vault:* When you click this button, Aperture no longer tracks the vault, and the vault's files are deleted from the hard disk.

Backing Up Images from a Portable in the Field

Some photographers who work in the field capture images and store them temporarily in an Aperture library on a portable computer. It's important to use a safe and reliable way of updating your main Aperture system with new images from the field.

To update your main system's library without risking overwriting images, it's recommended that you export images from your field computer as a project. You can then transfer the project to your main computer and import it into the library. With this method, no images are overwritten and there is no risk of losing work.

Important: Copying the entire Aperture library from one computer to another is not recommended. Transferring images by copying the library risks overwriting and losing images when two library files are not identical.

To export a project from Aperture:

1. Select the project you want to export in the Projects inspector.
2. Do one of the following:
   - Choose File > Export > Project.
   - Choose Export Project from the Project Action pop-up menu in the Projects inspector.
3. Type a name for the exported project in the Save As field.
4. Choose a location to save the project from the Where pop-up menu.
5. If you would like to include the masters for any referenced images in the project file, select the "Consolidate images into exported project" checkbox.
6. If you would like to be notified when the export process is complete, select "Show alert when finished" checkbox.
7. Click Save.

After exporting your project, you can transfer it to your main Aperture system in a variety of ways. One way is to transfer the project to an external hard disk. You can then connect the hard disk to your main computer and import the project into the Aperture library. You might also transfer images over your office network.

You can also use a FireWire cable to connect two computers and transfer your project. You connect both computers via their FireWire ports, and then restart one of the computers in FireWire Target Disk Mode. When a computer is restarted in FireWire Target Disk Mode, the computer's hard disk icon appears on the desktop of the other computer. You can then copy the project from one computer to another.

For more information about using FireWire Target Disk Mode, see Mac Help in the Mac OS X Help menu.

To import a project into the Aperture library:

1. Connect the computer or hard disk drive from which you want to import the project.

   If you're connecting a computer directly to your Aperture system computer via a FireWire cable, restart the computer that holds the project while holding down the T key. The computer starts up in FireWire Target Disk Mode and a FireWire icon appears onscreen. The computer's hard disk icon then appears on the other computer's desktop.
2. Choose File > Import > Projects.
3. Select the project you want to import, then click Import.

   The new project appears in the Projects inspector.

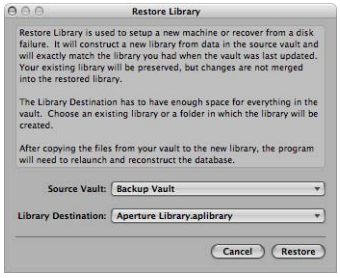
Restoring Your Aperture System

If you buy a new computer or use another system at a different location and want access to the Aperture library, you can install Aperture and then transfer the library from your vault (on your backup disk) to the other computer. If you experience equipment failure or other unexpected events, such as fire or weather-related damage to your equipment, you can easily restore the entire library to your new computer from a backup disk.

To restore the entire library from an external backup disk:

1. Connect the hard disk drive that contains the most up-to-date vault to your computer and open Aperture.
2. Choose File > Vault > Restore Library.

   The Restore Library dialog appears.



3. Choose Select Source Vault from the Source Vault pop-up menu.
4. Navigate to the vault from which you want to restore, then click Select.
5. Choose Select Destination from the Library Destination pop-up menu.
6. Navigate to the location where you want to place the library, then click Select.
7. Click Restore, then click Restore again.

Part V: Appendixes and Glossary

V

This section describes the procedures for setting up and color calibrating your Aperture system, and provides a glossary of photography and color management terms.

Appendix A Setting Up an Aperture System

Appendix B Calibrating Your Aperture System

Glossary

Index

Setting Up an Aperture System

A Appendix

Setting up the hardware for your system can be as simple as connecting your camera or card reader to your computer. You can also set up a system that uses external hard disks and color-calibrated displays.

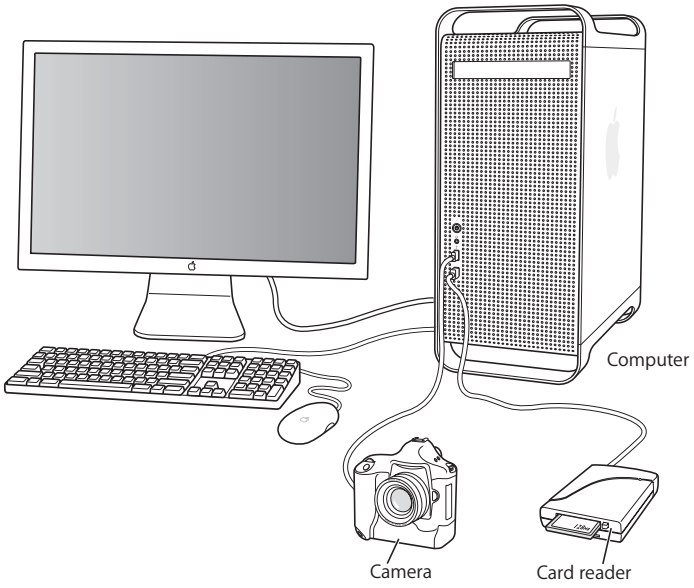
This appendix provides instructions for setting up your computer system to use Aperture. It provides instructions for setting up a basic system, explains optional equipment that you might consider to enhance your system, and explains how to set up additional displays. For information about software and hardware requirements for using Aperture, see the *Before You Install Aperture* document on the Aperture installation disc. For information about installing software, see the *Installing Your Software* booklet.

This chapter covers:

- Setting Up a Basic System (p. 628)
- Optional Equipment to Consider (p. 629)
- Setting Up Your System with Two Displays (p. 631)
- Configuring Mac OS X for Multiple Displays (p. 633)

Setting Up a Basic System

The following are basic instructions for connecting a digital camera or card reader to your computer.



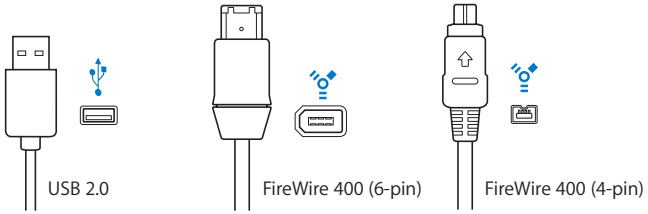
A basic Aperture system consists of the following equipment:

- A computer and display
- A digital camera or card reader (because of their speed, FireWire card readers are strongly recommended)
- A cable to connect your camera or card reader to your computer (typically a USB 2.0 cable or a 4-pin-to-6-pin FireWire cable that came with your camera or card reader)

For information about setting up a computer and display, see the documentation that came with the computer and display.

To connect a camera or card reader to your computer:

- Connect your camera or card reader to your computer using the USB or FireWire cable that came with your camera or card reader.



To ensure proper setup, see the documentation that came with your camera or card reader.

Optional Equipment to Consider

You may consider using additional hardware and equipment, depending on the number of images you have and your workflow:

- Additional random-access memory (RAM)
- Additional hard disk storage options
- Additional displays

Additional RAM

The more RAM your computer has, the faster it can process your actions. While Aperture functions with the minimum required amount of RAM, more RAM will make Aperture faster. If you plan to work on large projects or have multiple applications open at one time, it's a good idea to have extra RAM installed in your computer.

Additional Hard Disk Storage Options

The more disk space you have, the more images Aperture can store in the Aperture library. If you'll be shooting and storing many images (a photography project can contain thousands of images), consider purchasing the highest-capacity hard disk you can afford for your startup disk, the hard disk that contains the operating system. Even high-resolution JPEG files require a lot of space.

Aperture uses external FireWire drives to back up image files and the Aperture library. The Aperture database tracks the contents of all vaults located on external FireWire drives, whether they are connected to your computer or not. Storing multiple copies of your backup files in separate locations lessens your chances of losing your images to a catastrophic event.

FireWire drives provide many advantages:

- All FireWire drives can be daisy-chained, meaning that you can connect multiple drives using a single FireWire port.
- FireWire drives are a good way to attach additional hard disk storage space to a portable computer.
- FireWire drives are "hot-swappable," meaning that you can connect and disconnect them from a computer without having to shut down first.

Important: You should never physically disconnect a FireWire drive before unmounting it from the desktop.

When evaluating a FireWire drive for use with Aperture, take the following into consideration:

- *Some FireWire drives may require driver software:* You may need to install special driver software in order to use a particular FireWire drive. Check the documentation that came with your FireWire drive for more information.
- *FireWire drives may be bus-powered:* This means that they derive power from the FireWire interface itself via pins on the full-sized 6-pin FireWire connector. As a result, these drives are more convenient for portable use and can be used in conjunction with a portable computer without the need for AC power. Larger FireWire drives may not be bus-powered, however, requiring you to plug them into a wall socket.

Additional Displays

You can connect two displays to your computer. With a second display, you can use the extra screen space to take advantage of the ability of Aperture to compare images and play slideshows across multiple displays.

To connect three or more displays to your computer, you must install a PCI graphics card in one of your computer's PCI expansion slots. For more information, see your computer's manual or the instructions that came with the PCI expansion card.

For information about supported graphics cards, visit the Apple Aperture website at http://www.apple.com/aperture/specs.

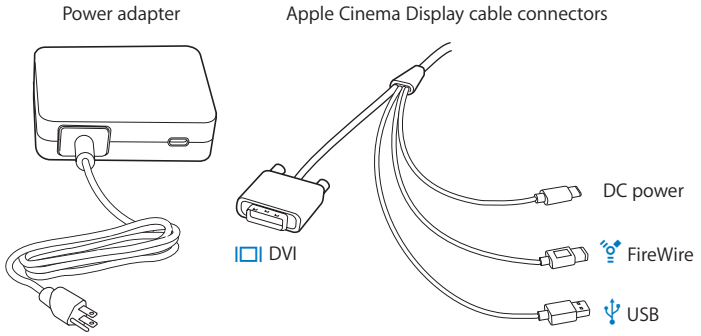
Setting Up Your System with Two Displays

Using more than one display gives you additional screen space to view and adjust images, play slideshows, and present your full-size, full-color images.



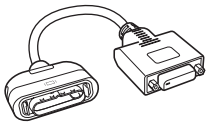
For connecting a second display, you'll need the following:

- Power adapter for the display
- Display cable to connect the display to the graphics card on your computer



Note: You may also need to purchase an adapter to connect the display cable to the graphics card on your computer.

ADC to DVI adapter



Macintosh computers come with two possible display ports: Apple Display Connector (ADC) ports to connect ADC displays, and Digital Visual Interface (DVI) ports to connect digital displays that have DVI connectors (such as a flat-panel Apple Cinema Display).



DVI display port



ADC display port

- *If your second display is an ADC display:* Connect it to an available ADC display port on your computer, or use a DVI to ADC adapter to connect the display to a DVI display port.
- *If your second display is a DVI display*: Connect the display to an available DVI display port on your computer, or use an ADC to DVI adapter to connect the display to an ADC display port.

See the documentation that came with your computer or graphics card for more information about the type of display cable or adapter you need.

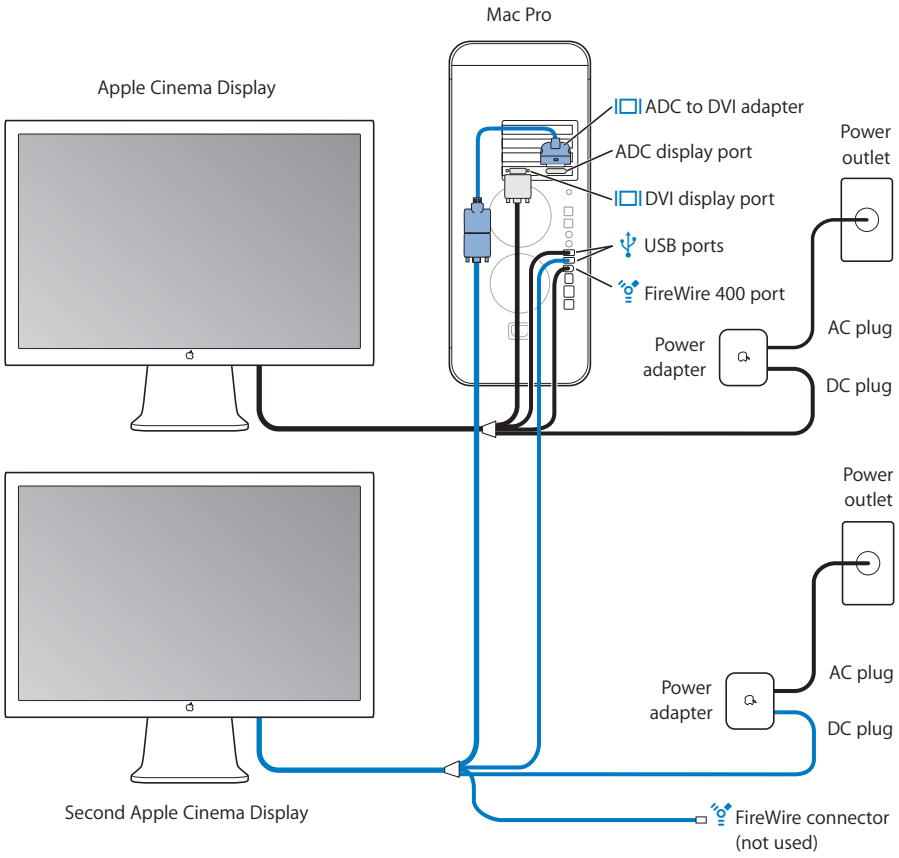
To connect a second display to your computer:

1. Turn off the computer.
2. Connect a display cable (and adapter, if necessary) from an available display port on your computer or graphics card to the display.

   Depending on your displays, you may have one or more cables to connect. Refer to the documentation that came with the display and your computer for detailed information.

   Important: Make sure the cables are connected firmly, or you may not be able to see an image on the display.

The following illustration shows one possible scenario for connecting two displays to a computer.



3 Turn on the displays (if necessary) and start up your computer.

You'll now want to adjust your displays for proper viewing.

Configuring Mac OS X for Multiple Displays

If your computer is connected to two displays, you can set them up to show a continuous desktop that extends across both screens. This is known as *extended desktop mode*.

Because Aperture controls the second display, you must keep your computer in this mode for the application to operate properly. If you work in mirroring mode, where the same contents appear on both displays, Aperture may not work properly.

To exit mirroring mode:

1. Choose Apple (🍎) menu > System Preferences.
2. Click Displays, then click Arrangement.

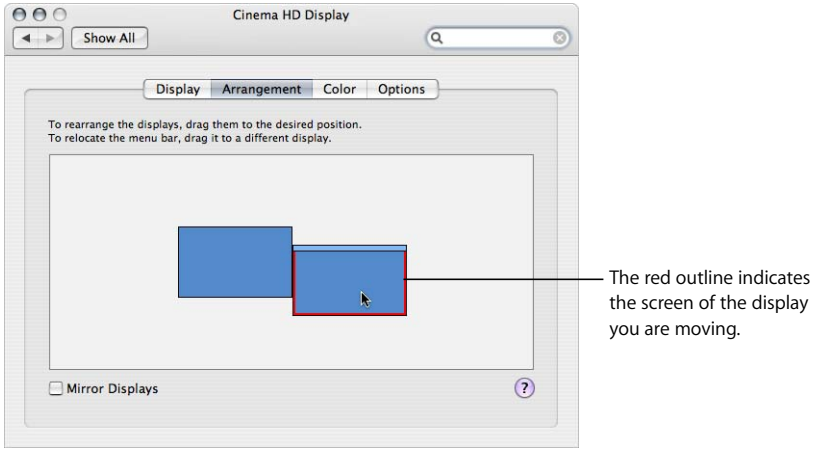
   Note: If the Arrangement button does not appear, click the Detect Displays button. If the Arrangement button still does not appear, make sure the second display is properly connected to your computer. For more information, see "Setting Up Your System with Two Displays" on page 631.
3. Deselect the Mirror Displays checkbox.

After you connect a second display, your displays may show the arrangement of the desktop out of order. For example, the display that shows the hard disk icon and menu bar is typically on the left, so that your desktop extends out to the right on the rightmost display.

To rearrange the position of the displays:

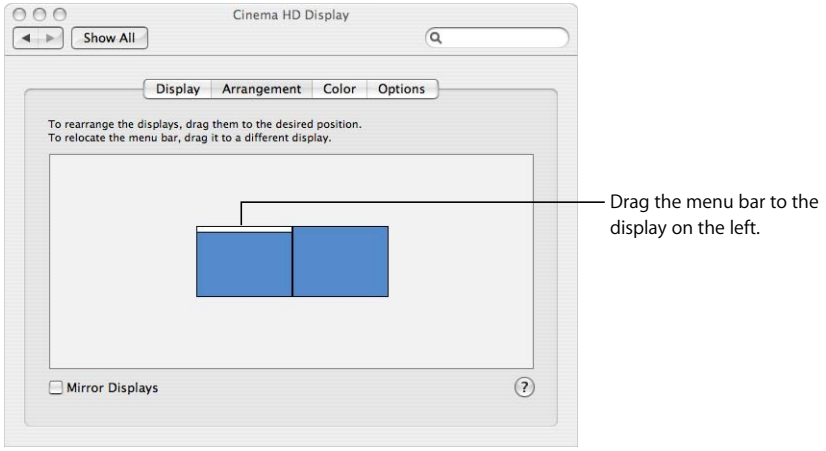
1. Choose Apple menu > System Preferences.
2. Click Displays, then click Arrangement.

   Note: If the Arrangement button does not appear, click the Detect Displays button. If the Arrangement button still does not appear, make sure the second display is properly connected to your computer. For more information, see "Setting Up Your System with Two Displays" on page 631.
3. Drag one of the blue rectangles, representing one of the displays, to match the position of the display on your desk.



The display screens temporarily refresh to accommodate the new arrangement.

4 Drag the white rectangle to move the menu bar to the display on the left.



The display screens temporarily refresh to accommodate the new arrangement. The contents of the screen may be rearranged to accommodate the new position of the menu bar.

To ensure proper color management from the time you download your images until the time you print them or send them to a professional lab, it is essential that you color calibrate your displays. Color calibrating your display or displays ensures that the colors you see on your screen are faithfully reproduced when images are printed.

For more information about color calibrating your displays, see Appendix B, "Calibrating Your Aperture System," on page 637.

Calibrating Your Aperture System

B Appendix

The accuracy of your display and printer's ColorSync profile is critical to ensuring accurate color reproduction.

Aperture is a powerful digital image adjustment application, but its power is limited to the accuracy of the devices that display and print your images. This appendix provides information about color calibrating cameras, displays, and printers. Whether you use a desktop inkjet printer or a professional lab prints your images, calibrating your display and print devices and using custom profiles ensure predictable colors in your prints every time.

This chapter covers:

- An Overview of Color Management (p. 637)
- Calibrating Your Camera (p. 641)
- Calibrating and Profiling Your Display (p. 642)
- Calibrating and Profiling Your Printer (p. 644)

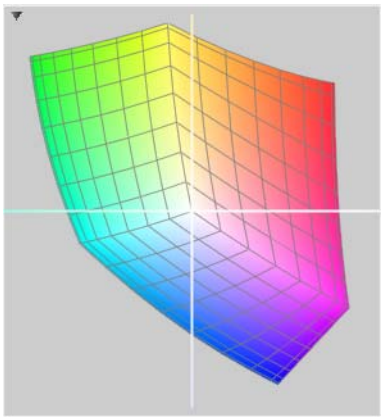
An Overview of Color Management

Maintaining calibrated displays and printers is essential to good color management. Every display and printer is unique. As these devices age, environmental conditions, system configurations, and changes in materials such as inks and paper affect the devices' ability to reproduce color. Changes in the way a device reproduces color over time are known as *drift*. Maintaining good color management ensures that when you make adjustments to the colors in your digital images in Aperture, these colors are faithfully reproduced on your display screen and on the printed page.

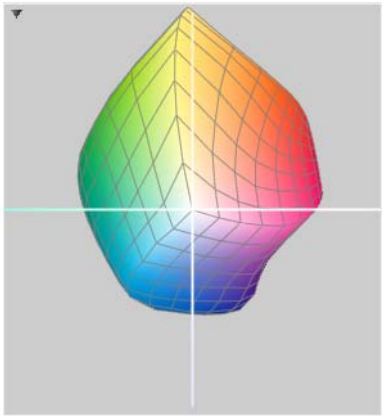
What Is a Device's Gamut?

The range of colors an individual color device is capable of reproducing is known as its *gamut*. Because of the differences in gamuts between devices, such as a displays and printers, these devices are incapable of exactly reproducing the same range of colors. In fact, two displays of the same model made by the same manufacturer have distinct gamuts. Types of ink and paper stock can also affect a printer's gamut. Likewise, the age of a display and how frequently it's used can affect its gamut.

Displays and printers cannot reproduce the same colors consistently when their gamuts don't overlap. For example, displays are capable of showing brighter and more saturated colors than the colors produced by a printer. The illustrations below show representations of the range of color and brightness values each device is capable of displaying. If you superimpose the printer's gamut on the display's gamut, some of the display's colors fall outside the range of the printer's gamut. The printer is incapable of reproducing the full range of colors in the image displayed onscreen because of the printer's smaller gamut. Color values that are contingent upon the ability of a device to reproduce color are known as *device dependent*.



Display's gamut



Printer's gamut

What Is a Color Space?

When compared to the full spectrum of light, the gamut of a display or printer is relatively narrow. Because of the small gamuts of the devices, mathematical models are used to simulate the full spectrum of light within the gamuts of the devices. These models are known as *color spaces*.

Color spaces in which the interpretation of a color is not dependent on a specific device are known as *device independent*. The Commission Internationale de l'Eclairage (CIE) was established in 1931 to create standards for a series of color spaces representing the visible spectrum. The CIE color spaces, CIE XYZ and CIE Lab, are found in ColorSync Utility. As technology evolved, new color spaces were created for RGB and CMYK color.

Device-independent color spaces are used by ColorSync Utility, Aperture, and other color management systems to transfer and transform color data from one device to another. Color from one device-dependent color space, such as a display, is translated to a device-independent color space, such as sRGB, and then translated to another device-dependent color space, such as a printer. The independent color space acts as an objective interpreter, ensuring that the color data is accurately passed on to the next device.

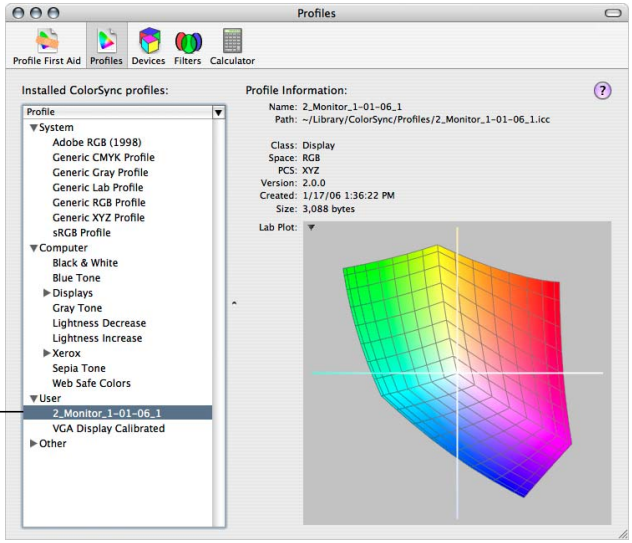
Understanding ColorSync Utility

ColorSync Utility is the color management system used by Mac OS X. ColorSync is completely integrated with Mac OS X and available to all native Mac OS X applications, including Aperture. ColorSync is used to manage accurate color, from image acquisition to image manipulation and display to publishing. ColorSync is used consistently by all devices and applications in your workflow.

What Is a Device Profile?

ColorSync and other color management systems use device profiles to identify and transfer color data from one device-dependent color space, such as a camera, to another device-dependent color space, such as a printer. Device profiles contain data about the unique color characteristics of a device. A device's profile includes information about its gamut, color space, colorants, and modes of operation.

Many types of hardware and software have generic ICC profiles available in ColorSync Utility. You can also use ColorSync Utility and a color measurement device, such as a spectrophotometer, to accurately create your own custom device profile. When you profile a color device, an ICC profile is created and placed in Users/*username*/Library/ColorSync/Profiles/.



A custom device profile for a display

Once your display and printer have up-to-date custom profiles, you can begin to make accurate color adjustments to your digital images in Aperture. Aperture uses the ColorSync CMM, or color matching method, to translate and transfer the color data from your camera to your display and then to your printer. Although the gamuts of the devices are very different, ColorSync knows the exact parameters of their gamuts because of their custom profiles. The ColorSync CMM allows you to preview how the color in an image changes when you make color adjustments in Aperture. As long as you have current profiles of your display and printer, the printed image will closely match the image on the screen.

Calibrating Your Camera

Creating an accurate profile for your digital camera is not easy. Unless you're using your camera in a strictly controlled lighting situation, such as a studio, the variable lighting conditions from one scene to another make profiling a digital camera difficult. This leaves you with three options: shoot RAW files, painstakingly profile the camera with the best profiling package you can afford, or use a generic profile, such as sRGB.

Shooting RAW Files Requires No Camera Profile

Whether you need to profile your camera depends on your workflow. If you shoot JPEG files, the camera has to apply a color space to the image file. However, if you shoot RAW files, no profiling is necessary. A RAW image file consists of bit-for-bit data captured by the digital image sensor. When you select the RAW setting on your camera, the camera ignores the color space settings. When you import the RAW image into Aperture, Aperture ignores the color space settings as well.

Profiling Your Camera

Most digital cameras are set at the factory to shoot in a default color space when you first use them, but each camera, regardless of manufacturer and model, has a unique gamut. In order to color calibrate your camera, you need to create a new custom profile. Color calibrating your camera requires the purchase of a profiling package designed for profiling digital cameras, a carefully constructed lighting environment dictated by the profiling package, and the use of a color calibration target. Because each camera is unique, you must repeat the color calibration for each camera.

Using a Generic Profile

Provided that your displays and printers are calibrated, setting your camera to shoot using a generic profile, such as sRGB, is easier than profiling your camera. Most digital cameras have more than one color space option available. As the image is shot, the camera converts the image from its native color space to the generic color space you selected prior to shooting the image. When the image file is imported into Aperture, ColorSync manages the color in the image according to the generic color space and accurately displays it on the screen.

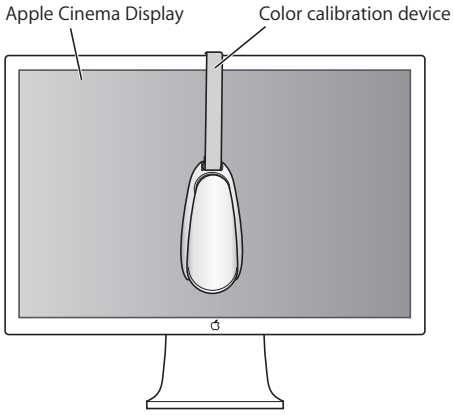
Note: Digital cameras that don't have the ability to change generic profiles shoot in the sRGB color space. You cannot create a custom profile for these cameras.

Calibrating and Profiling Your Display

To color calibrate your display, you must use a third-party color management system. Calibrating and profiling your display with a color management system is fairly easy. Today, color management systems do most of the work for you. Color calibration systems often come with an optical device that you place over the screen to read the display's output.

To calibrate and profile your display:

1. Install the software that came with your color management system.
2. Open the color calibration software application.
3. Attach the optical device to your display, and follow the instructions that came with your color management system.

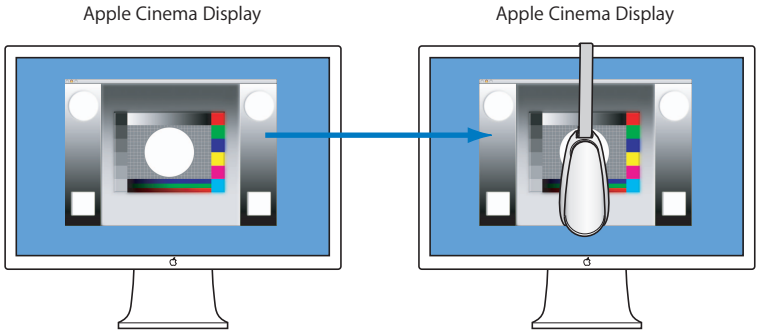


When the application has finished calibrating your display, it asks you to save the custom ICC profile created during the calibration process. This profile is saved at Users/*username*/Library/ColorSync/Profiles/. Now your display is calibrated.

If you have a second display, you can calibrate it as well.

To calibrate and profile your second display:

1 Drag the application to the second display, then attach the optical device.



Drag the color calibration window to the second display.

2 Follow the previous calibration steps.

Now your second display is calibrated.

Important: Your display's profile is a snapshot of the device's behavior. If the behavior of the display changes, the profile is no longer valid. Therefore, it's important to profile your display as frequently as possible. Some color adjustment professionals profile their displays daily.

Calibrating and Profiling Your Printer

Calibrating and profiling your printer is similar to calibrating and profiling your display. The color management system comes with color charts specifically designed to help the calibration system create a profile for your printer.

To calibrate and profile your printer:

1. If you haven't already done so, install the software that came with your color management system.
2. Open the color calibration software application.
3. Follow the onscreen instructions to print the color chart using the printer you want to profile.
4. Follow the instructions that came with your color management system to scan the color chart.

   When the application has finished scanning the color chart, it asks you to save the custom ICC profile created during the calibration process. This profile is saved at Users/*username*/Library/ColorSync/Profiles/. Now your printer is profiled.

   Important: Your printer's profile is a snapshot of the device's behavior. This means that the profile is specific to the type of paper and ink used when the printer was profiled. If you print on multiple types of paper, such as glossy and semi-glossy, it is important that you create separate profiles for each paper type.

Glossary

additive color Images with color elements derived from the light source itself. RGB is a common form of additive color. *See also* RGB.

adjustment Any change to the appearance of an image.

Adobe RGB (1998) A commonly used color profile often used for printing. *See also* color space.

album A type of container in the Aperture library that holds only versions. You can create albums at either the project level or within a project. There are specialized types of albums, including book, Light Table, webpage, web gallery, and web journal albums. *See also* folder, library, project, Smart Album, version.

alternate The image immediately next to the pick in a stack. Alternate images are useful when more than one image in a stack merits the pick position. *See also* image, pick, stack.

Alternate setting A Secondary Viewer setting that presents the currently selected image on the Secondary Viewer display. *See also* display, image, Main Viewer, primary selection, Secondary Viewer.

ambient light The lighting characteristics that already exist in the scene (indoor or outdoor) without any additional light supplied by the photographer.

analog-to-digital conversion The process of transforming light energy voltage values captured by the camera's digital image sensor into binary (digital numbers) for processing and storage. *See also* digitization, quantization.

angle of view The area of the scene displayed within the frame. Determined by the focal length of the lens.

aperture An adjustable iris or diaphragm in the lens through which light passes. Measured in f-stops. *See also* f-stop.

aperture priority A setting on certain cameras that automatically sets the shutter speed for a correct exposure based on the aperture setting provided by the photographer. *See also* exposure, shutter priority.

archive The process of storing image data on a permanent medium, such as optical media (CD or DVD).

aspect ratio The ratio of height to width of the dimensions of a photograph. Common North American aspect ratios are 3.5 x 5, 4 x 6, 5 x 7, 11 x 14, and 16 x 20 inches.

auto focus The system within the camera that automatically focuses the lens on a specific portion of the subject or scene.

automatic bracketing A setting on many professional cameras that automatically brackets the exposure of the image. *See also* bracketing.

background The area in the rear of the image that appears behind the subject. *See also* depth of field, foreground.

backlighting A light source that faces toward the lens of the camera, emanating from behind the subject. Backlighting makes the outline of the subject stand out from the background, often resulting in a silhouette. *See also* frontlighting, sidelighting, silhouette.

badge overlay A small icon Aperture places on an image to indicate that an adjustment, keyword, or other change has been applied to it. *See also* adjustment, keywords, offline.

Bayer pattern color filter array A specific arrangement of red, green, and blue lenses attached to the surface of a digital image sensor. There are roughly twice as many green lenses as blue and red to accommodate how the human eye perceives color. *See also* charge-coupled device (CCD), complementary metal oxide semiconductor (CMOS), digital image sensor.

bit depth The number of tonal values or shades of a color each channel in a pixel is capable of displaying. Increasing the bit depth of color channels in an image's pixels exponentially increases the number of colors each pixel can express. *See also* color channels, color depth.

black point compensation Black point compensation ensures that black and white luminance values are appropriately scaled to fit within the range or gamut of the destination device (printer, paper, and ink). Using black point compensation helps prevent clipping in shadows because the blacks are scaled to fit within the gamut of the printer, paper, and ink.

Black Point parameter An Exposure adjustment parameter in Aperture used to set the blacks in the image. *See also* Exposure adjustment.

Blank setting A Secondary Viewer setting that sets the Secondary Viewer display to be a blank screen. *See also* display, Secondary Viewer.

bounce lighting Natural and unnatural light sources (flash and tungsten) redirected toward the subject using a reflective surface to give the effect of natural light as well as fill-in shadows. *See also* color temperature, fill-in lighting, White Balance adjustment.

bracketing The process of taking three shots of the same image based on the aperture and shutter values recommended by the light meter: one shot one stop under the recommended exposure, one shot at the recommended exposure, and one shot one stop over the recommended exposure. You can also narrow the bracketing range to fractions of a stop. Bracketing is used in difficult lighting situations to ensure the scene is captured with the correct exposure. *See also* automatic bracketing.

Brightness parameter An Exposure adjustment parameter in Aperture used to lighten or darken an image. The adjustment affects the brightness values of the image's midtones the most. *See also* adjustment, Exposure adjustment, midtones.

Browser The part of the Aperture interface that displays the contents of the library, projects, or albums. The Browser displays images as a row of thumbnails (filmstrip view), a grid of thumbnails (grid view), or by file information (list view). *See also* grid view, filmstrip view, list view, Viewer.

Browser & Viewer view A workspace view in Aperture that displays the Viewer and Browser at the same time. *See also* Browser, Browser Only view, Viewer, Viewer Only view.

Browser Only view A workspace view in Aperture in which the Viewer is hidden. *See also* Browser, Browser & Viewer view, Full Screen view, Viewer, Viewer Only view.

Bulb (B) A manual shutter speed setting on many cameras used for timed exposures. When the shutter is set to B, the shutter stays open until the photographer presses the shutter release button. *See also* shutter, shutter speed.

calibration The process of creating an accurate color profile for a device. Calibrating a device ensures accurate color translation from device to device. *See also* device characterization.

camera A photographic device usually consisting of a lightproof box with a lens at one end and either light-sensitive film or a digital image sensor at the other. *See also* digital point-and-shoot camera, digital single-lens reflex (DSLR) camera.

camera shake Blurring of the image caused by the combination of a slow shutter speed, small aperture, and long focal length. *See also* aperture, shutter speed, tripod, unipod.

candid shot Refers to a photograph of a person that appears to have been taken informally and unposed, without the subject's knowledge. *See also* composition.

capture a. The process of taking the image received by the digital image sensor and camera processor and storing that information on the memory card in the camera. b. The process of recording an image in Aperture at the moment it is shot via a tethered camera. *See also* camera, digital image sensor, memory card, tethered shooting.

center-weighted metering A type of metering that measures the light in the entire viewfinder but gives extra emphasis to the center of the frame. Center-weighted metering is the most common type of metering in consumer cameras. *See also* evaluative metering, light meter, spot metering.

charge-coupled device (CCD) A type of digital image sensor that records the pixel information row by row. *See also* complementary metal oxide semiconductor (CMOS), digital image sensor.

chromatic spread The extent of colors affected by the hue, saturation, and luminance parameters in the Color adjustment. *See also* adjustment, Color adjustment.

Clone brush A type of Retouch brush in Aperture used to correct and obscure imperfections in an image by copying pixels from a similar-looking area of an image and pasting them over the area with the pixels you want to replace. See also Repair brush, retouching, Retouch tool.

close-up An image in which the subject usually appears within 3 feet of the camera. For example, head shots are often referred to as close-ups. A shot of an ant on a flower's petal, where the ant fills a majority of the frame, is also a close-up.

CMYK A working space used for print pieces combining cyan, magenta, and yellow inks in different combinations to create a color that reflects the proper color of light. Black ink (K) is added to the image last to generate pure black on the page. *See also* subtractive color, working space.

Color adjustment An adjustment in Aperture used to adjust hue, saturation, and luminance on a color-by-color basis, as well as chromatic range. *See also* adjustment, chromatic spread, hue, luminance, saturation.

color cast An unnatural tint in an image due to a lack of color balance. Color casts are often caused by artificial light sources such as interior lighting. Color casts in images are commonly removed by adjusting levels, tint, or white balance. *See also* White Balance adjustment.

color channels The individual channels into which color information for digital images is divided. Each individual color channel represents one of the three individual primary colors that combine to represent the final image. Each channel has a bit depth; most digital image files have 8 bits per channel, meaning that there are 256 levels of color for each channel. *See also* bit depth, color depth.

color depth The possible range of colors that can be used in an image. There are generally three choices with digital images: grayscale, 8-bit, and 16-bit. Higher color depths provide a wider range of colors but require more storage space. *See also* bit depth, color channels, grayscale.

color interpolation The process of calculating additional color values from light captured via the red, green, and blue elements on the digital image sensor.

color management system (CMS) An application that controls and interprets the reproduction of color between devices and imaging software for accuracy. *See also* ColorSync.

color matching method (CMM) A software algorithm designed to translate color information from one device profile to another, such as from your display to your printer. ColorSync is a thoroughly integrated CMM used by Mac OS X. *See also* ColorSync.

Color Monochrome adjustment An adjustment in Aperture that desaturates the image and applies a color tint of your choosing to the midtones. *See also* adjustment, desaturate, image, midtones, monochrome, Tint adjustment.

color space A mathematical model used to describe part of the visible spectrum. Color from one device is mapped from the device-dependent value to a device-independent value in a color space. Once in an independent space, the color can be mapped to another device-dependent space. *See also* device dependent, device independent.

colorimeter An instrument capable of measuring the color value of a sample, using color filters. A colorimeter is used to determine if two colors are the same. However, it does not take into account the light under which a sample is measured. Colorimeters are often used to calibrate displays and printers. *See also* calibration.

colorimetry The science of measuring color both objectively and perceptively.

ColorSync A color management system that is part of the Mac operating system. In Mac OS X, ColorSync is thoroughly integrated with the entire operating system and is available to all native Mac OS X applications. *See also* color management system (CMS), color matching method (CMM), ColorSync Utility.

ColorSync Utility A centralized application for setting preferences, viewing installed profiles, assigning profiles to devices, and repairing profiles that do not conform to the current ICC specification. *See also* ColorSync, International Color Consortium (ICC), profile.

color temperature Describes the color quality of light. Color temperature is measured in units called *kelvins* (K). *See also* kelvin (K), White Balance adjustment.

Commission Internationale de l'Eclairage (CIE) An organization established in 1931 to create standards for a series of color spaces representing the visible spectrum of light. *See also* color space, device dependent, device independent, lab plot.

compare image In Aperture, an image set to remain onscreen while other images are viewed against it. The compare image is indicated by a yellow border. *See also* image.

complementary metal oxide semiconductor (CMOS) A type of digital image sensor that is capable of recording the entire image provided by the light-sensitive elements in parallel (essentially all at once), resulting in a higher rate of data transfer to the storage device. Tiny colored microlenses are fitted on each light-sensitive element in a CMOS sensor to increase its ability to interpret light. *See also* charge-coupled device (CCD), digital image sensor.

compositing A process in which two or more digital images are combined into one. *See also* effects.

composition The arrangement of visual elements in a scene.

compression The process by which digital image files are reduced in size. Lossy compression is the process of reducing digital image file sizes through the removal of redundant or less important image data. Lossless compression reduces file sizes by mathematically consolidating redundant image data without discarding it. *See also* decompression, LZW compression.

cones A type of receptor in the eye capable of perceiving color. There are three types of cone cells, each sensitive to a particular frequency range in the visible spectrum. Cone cells are capable of seeing either red, green, or blue colors. *See also* rods.

contact sheet Based on a print preset in Aperture, a printed selection of thumbnail-sized images with or without associated metadata. Contact sheets in Aperture are similar in appearance to contact prints made by exposing negatives or transparencies against photographic paper.

contrast The difference between the brightness and color values in an image that allows the viewer to distinguish between objects in an image. High-contrast images have a large range of values, from the darkest shadow to the lightest highlight. Low-contrast images have a more narrow range of values, resulting in a "flatter" look. *See also* Contrast parameter, density, flat.

Contrast parameter An Enhance adjustment parameter in Aperture used to adjust the contrast in an image. *See also* adjustment, contrast, Exposure adjustment.

control bar The control bar contains buttons and controls you can use to rotate, rate, and navigate through images, as well as apply keywords to them. *See also* keywords, rating.

copyright The legal right to exclusive publication, production, sale, or distribution of a literary, musical, or artistic work. Typically, these rights are in effect for a specific period of time.

crop The process of printing or distributing only part of the original image. The general purpose of cropping an image is to create a more effective composition. Another reason for cropping an image is to make it fit a particular aspect ratio, such as 4 x 6. *See also* adjustment, aspect ratio, composition, Crop adjustment, effects.

Crop adjustment An adjustment in Aperture that trims the image for the purpose of changing the composition or modifying the aspect ratio. The Crop adjustment is used in conjunction with the Crop tool. *See also* adjustment, aspect ratio, composition, crop.

decompression The process of creating a viewable image from a compressed digital image file. *See also* compression.

definition The clarity of details in an image. *See also* resolution.

Definition parameter An Enhance adjustment parameter in Aperture used to adjust the clarity of details in an image. *See also* Enhance adjustment.

demote In Aperture, the process of moving an image in a stack away from the pick position. *See also* Full Screen view toolbar, image, pick, promote, stack.

densitometer An instrument designed to measure the optical density of photographs. *See also* device characterization.

density The ability of an image to reproduce distinct dark colors. An image with high definition in the darker colors is referred to as *dense*. *See also* contrast, flat.

depth of field The area of the image that appears in focus from the foreground to the background. Depth of field is determined by a combination of the opening of the aperture and the focal length of the lens. *See also* aperture, background, focal length, foreground.

desaturate To remove color from an image. Complete desaturation results in a grayscale image. *See also* grayscale, Monochrome Mixer adjustment, saturation.

Desktop setting A Secondary Viewer setting that turns off the dual-display function. *See also* display, Secondary Viewer.

destination profile The working-space profile that defines the results of a color conversion from a source profile. *See also* profile.

device characterization The process of creating a unique, custom profile for a device, such as a display or printer. Characterizing a device involves specialized dedicated hardware and software to determine the exact gamut of the device. *See also* calibration, gamut.

device dependent Color values that are contingent upon the ability of a device to reproduce those colors. For example, some colors produced by displays cannot be reproduced on paper by a printer. The colors produced by the display are outside the gamut of the printer. Therefore, those colors are considered to be device dependent. *See also* gamut.

device independent Standard color spaces, such as CIE Lab and XYZ, where the interpretation of a color is not dependent on a specific device. *See also* color space, Commission Internationale de l'Eclairage (CIE).

Devignette adjustment An adjustment in Aperture used to correct unwanted vignetting applied to the image at the time it was captured. *See also* Vignette adjustment, vignetting.

diffused lighting A type of light that is scattered across the subject or scene. Diffused lighting results in an image with low contrast and detail, as seen in images captured outdoors on an overcast day. *See also* contrast, flat.

digital A description of data that is stored or transmitted as a sequence of ones and zeros. Most commonly, refers to binary data represented using electronic or electromagnetic signals. JPEG, PNG, RAW, and TIFF files are all digital. *See also* digitization.

digital image sensor The computer chip located at the image plane inside the camera that consists of millions of individual light-sensitive elements capable of capturing light. *See also* camera, charge-coupled device (CCD), complementary metal oxide semiconductor (CMOS), megapixel.

digital master file *See* master.

digital noise Misinterpreted pixels occurring as the result of high ISO settings; also known as *chrominance signal-to-noise ratio.* Random bright pixels, especially in solid colors, are the result of digital noise. *See also* ISO speed, noise reduction.

digital point-and-shoot camera A lightweight digital camera with a built-in autofocus feature, aptly named for the two steps required of the photographer to capture an image. The lens, aperture, and shutter are one assembly that is usually irremovable from the camera. *See also* camera, digital single-lens reflex (DSLR) camera.

digital single-lens reflex (DSLR) camera An interchangeable-lens camera where the image created by the lens is transmitted via a reflexing mirror through a prism to the viewfinder, and the viewfinder image corresponds to the actual image area. The mirror reflexes, or moves up, so as not to block the digital image sensor when the shutter is open. *See also* camera, digital point-and-shoot camera.

digitization The process of converting an analog voltage value to a digital value.

digitize A term often used by photographers for converting images captured on film to a digital format, such as TIFF, using a film scanner.

disclosure triangle A small triangle you click to show or hide details in the Aperture interface.

display The computer's monitor.

distort Performing an adjustment that changes the shape or composition of an image. *See also* effects.

DNG A royalty-free RAW image format designed by Adobe Systems Incorporated. *See also* format, RAW.

dot gain A printing press term used to describe the enlargement of halftone dots as ink is absorbed into paper. Dot gain can affect the quality of an image's appearance by reducing the amount of white reflected off the paper.

dots per inch (dpi) A printer resolution measurement that refers to the maximum number of dots within a square inch. *See also* print, resolution.

drift Changes in the way a device reproduces color over time. For example, the age of inks and type of paper can cause a printer's color output to drift. *See also* device characterization, gamut.

drop shadow An effect that creates an artificial shadow behind an image. Typically used on websites and in photo albums to create the illusion of three dimensions.

Duplicate Version button A button in the Full Screen view toolbar that duplicates the selected image version with all applied metadata and adjustments. *See also* adjustment, Full Screen view toolbar, image, metadata, toolbar, version.

dust and scratch removal The process of digitally removing the blemishes caused by dust and scratches on film scans. *See also* Retouch tool.

dye sublimation A type of printer that creates images by heating colored ribbon to a gaseous state, bonding the ink to the paper. *See also* inkjet printer, photo printer, print, RA-4.

Edge Sharpen adjustment An adjustment in Aperture that sharpens the image based on luminance using multiple sharpening passes. *See also* adjustment, image, Sharpen adjustment.

editing The process of arranging and eliminating images. *See also* photo edit.

effects A general term used to describe the introduction of unnatural visual elements to enhance an image. *See also* compositing, filters.

electromagnetic radiation A type of energy ranging from gamma rays to radio waves that also includes visible light. *See also* light.

embedded profile The source profile saved in the digital image file. JPEG, TIFF, PNG, and PDF file formats support embedded profiles. *See also* device characterization, profile.

emulsion The tiny layers of gelatin, consisting of light-sensitive elements, found in film. When the emulsion is exposed to light, a chemical reaction occurs. After the film is developed, an image appears. *See also* dust and scratch removal, film.

Enhance adjustment An adjustment in Aperture that adjusts contrast, definition, saturation, and vibrancy, as well as black, gray, and white tints in an image. *See also* adjustment, contrast, Contrast parameter, definition, Definition parameter, saturation, Saturation parameter, tint, Tint adjustment, Vibrancy parameter.

evaluative metering A type of metering that operates by dividing the frame into several small segments, taking a reading from each individual segment, and processing the average of the total segments to recommend the best exposure value for the overall image. *See also* center-weighted metering, light meter, spot metering.

EXIF Short for *Exchangeable Image File.* The standard format for storing information—such as shutter speed, aperture, white balance, exposure compensation, metering setting, ISO setting, date, and time—about how an image was shot. *See also* IPTC, metadata.

export The process of formatting data in such a way that it can be understood by other applications. In Aperture, images can be exported in their native RAW format, as well as in JPEG, TIFF, PNG, and PSD formats. The EXIF and IPTC metadata associated with an image can be exported as well.

exposure The amount of light in an image. Exposure is controlled by limiting the intensity of light (controlled by the aperture) and the length of time light comes into contact with the digital image sensor (controlled by the shutter). Exposure affects the overall brightness of the image as well as its perceived contrast. *See also* adjustment, aperture, contrast, digital image sensor, Exposure adjustment, shutter.

Exposure adjustment An adjustment in Aperture that adjusts exposure, recovery, black point, and brightness. *See also* adjustment, Black Point parameter, Brightness parameter, exposure, Recovery parameter.

exposure meter *See* light meter.

extended desktop mode A setting in System Preferences that allows the Mac OS X desktop to span multiple displays. *See also* display, mirroring.

external editor An application used in tandem with Aperture to perform advanced adjustments, such as compositing. Aperture creates a new master when an image is sent to an external editor and automatically retrieves the master when the image is saved. *See also* compositing, master.

external flash A type of flash connected to the camera via the hot-shoe bracket or PC terminal. Using an external flash is the best technique for avoiding the red-eye effect in your subject's eyes. *See also* flash, red-eye.

fill-in lighting The use of an artificial light source, such as daylight lamps or flash, to soften a subject or fill in shadows. *See also* bounce lighting, color temperature, White Balance adjustment.

film A flexible transparent base coated with a light-sensitive emulsion capable of recording images. *See also* dust and scratch removal, emulsion.

filmstrip An interface element in Full Screen view that allows you to scroll through, rate, rotate, and search for images. *See also* Full Screen view.

filmstrip view A Browser view that allows you to quickly scroll through image thumbnails horizontally. *See also* Browser.

filters a. Modifiable search criteria used in the Query HUD to return a specific selection of images. b. Effects applied in Photoshop that affect the visual quality of the image to which they're applied. c. A colored piece of glass or plastic designed to be placed in front of a camera lens to change, emphasize, or eliminate density, reflections, or areas within the scene. *See also* compositing, density, effects.

Finder The part of Mac operating system software that keeps track of files, applications, and folders and displays the desktop.

finishing The process of applying the final adjustments to a digital image just before distribution. Finishing may involve applying an additional gamma adjustment upon export, or using an external editor to either burn or dodge a portion of the image before sending it to the printer. *See also* export, external editor.

FireWire The Apple trademark name for the IEEE 1394 standard, a fast and versatile interface used to connect external devices to computers. FireWire is well suited to transferring large amounts of data, and FireWire devices such as hard drives are often used to provide additional storage space. Aperture vaults are commonly stored on external FireWire hard drives. *See also* tethered shooting, USB, vault.

fixed lens *See* prime lens.

flash A device either on or attached to the camera that emits a brief, intense burst of light when the shutter release button is pressed. Flashes, synchronized with the shutter, are used to obtain a correctly exposed image in low-light situations. *See also* exposure, external flash, fill-in lighting, hot shoe.

flat The lack of density in an image when the contrast is too low. *See also* contrast, density.

focal length The distance from the rear nodal point of the lens to the point where the light rays passing through the lens are focused onto the image plane—the digital image sensor. Focal lengths are measured in millimeters (mm).

folder A type of container in the Aperture library used to organize projects and albums within projects. Folders do not contain images. *See also* album, library, project.

foreground The area of the image between the subject and the camera. *See also* background, depth of field.

format a. *File format:* A specific method of encoding information. Most well-known file formats, such as TIFF and PNG, have published specifications. b. *Disk formatting:* The preparation of a hard disk or other storage medium for use with a file system. For example, disk drives used with Mac OS X use the Mac OS Extended format. *See also* JPEG, PNG, PSD, TIFF, vault.

frame The border of an image. *Frame* can also be used as a verb to describe the process of constructing a composition within a specific image area. *See also* crop.

frontlighting A light source, emanating from the direction of the camera, that faces toward the subject. *See also* backlighting, sidelighting.

f-stop The ratio of the focal length of the lens to the diameter of the opening of the aperture. *See also* aperture.

Full Screen view A workspace view in Aperture with minimal user interface, used to view full-screen images with the least amount of light and color interference. *See also* Browser & Viewer view, Browser Only view, filmstrip, HUD.

Full Screen view toolbar A collection of buttons and tools, grouped by function, located at the top of the screen in Full Screen view. *See also* toolbar.

gamma A curve that describes how the middle tones of an image appear. Gamma is a nonlinear function often confused with brightness or contrast. Changing the value of the gamma affects middle tones while leaving the whites and blacks of the image unaltered. Gamma adjustment is often used to compensate for differences between Macintosh and Windows video cards and displays. The Mac Standard gamma is 1.8; the PC Standard is 2.2.

gamut The range of colors an individual color device is capable of reproducing. Each device capable of reproducing color has a unique gamut determined by age, frequency of use, and other elements such as inks and paper. *See also* device characterization, device dependent, gamut mapping, ICC profile.

gamut mapping The process of identifying colors outside a device's gamut and then calculating the nearest color within its gamut. Gamut mapping is used when receiving color information from another color space. *See also* color space, gamut.

grayscale An image whose only colors are shades of gray. Usually grayscale images have smaller file sizes because less information is required to display a gray pixel, in which the red, green, and blue pixel elements all emit an equal intensity. *See also* monochrome, Monochrome Mixer adjustment, pixel.

grid view A Browser view that displays images as a grid of thumbnails. Grid view is the Browser's default view. *See also* Browser, filmstrip view, list view.

highlights The brightest areas of the subject or scene. *See also* contrast, density, shadows.

Highlights & Shadows adjustment An adjustment in Aperture used to selectively adjust the highlights and shadows in an image. *See also* highlights, shadows.

hot shoe An apparatus at the top of a camera designed to hold a portable flash. When the shutter release button is pressed, an electric signal is transmitted through a connection in the hot shoe to activate the portable flash. *See also* external flash, flash.

HUD Short for *heads-up display*. In Aperture, HUDs are floating windows that allow you to work on your image. You can open and then move a HUD wherever you wish, based on your display setup. *See also* Full Screen view.

hue An attribute of color perception; also known as *color phase*. For example, red and blue are different hues. *See also* Color adjustment.

ICC profile Created as a result of device characterization, the ICC profile contains the data about the device's exact gamut. *See also* device characterization, gamut, International Color Consortium (ICC).

image An artifact that reproduces the likeness of some subject, usually a physical object or person, also known as a *picture*. *See also* image selection, photograph, picture, subject.

image selection Refers to an image or group of images selected in the Browser or Full Screen view filmstrip. A white rectangle surrounding the image indicates it is selected. *See also* Browser, Full Screen view, image.

importing The process of bringing digital image files of various types into a project in Aperture. Imported files can be created in another application, downloaded from a camera or card reader, or brought in from another Aperture project. *See also* project.

inkjet printer A type of printer that creates images by spraying little ink droplets onto the paper. *See also* dye sublimation, photo printer, print, RA-4.

Inspector pane An element of the main Aperture workspace that contains the Projects, Metadata, and Adjustments inspectors. *See also* Inspector HUD.

Inspector HUD A floating window that contains the Projects, Metadata, and Adjustments panes. *See also* Inspector pane.

International Color Consortium (ICC) An organization established to create the color management standard known as the *ICC profile*. ICC profiles are universally accepted by hardware and software vendors because they're based on an open standard. *See also* ICC profile.

IPTC Short for *International Press Telecommunications Council*. IPTC metadata is used by photographers and media organizations to embed keywords (words describing the characteristics of the image, including the photographer's name) in the image files themselves. Large publishers typically use image management systems to quickly identify images based on the IPTC information embedded in the image. *See also* EXIF, metadata.

iris *See* pupil.

ISO speed The relative sensitivity of film provided as a benchmark by the International Standards Organization (ISO). In digital cameras, the minimum ISO rating is defined by the sensitivity of the digital image sensor. When the ISO setting on the camera is increased, allowing the photographer to shoot in low-light situations, the camera amplifies the voltage received from the light-sensitive elements on the digital image sensor prior to converting the voltage signals to digital values. *See also* digital image sensor, digital noise.

JPEG Short for *Joint Photographic Experts Group*, JPEG is a popular image file format that lets you create highly compressed graphics files. The amount of compression used can be varied. Less compression results in a higher-quality image. JPEG files usually have the ".jpg" extension. *See also* format.

kelvin (K) A unit of measurement used to describe color values of light sources, based on a temperature scale that begins at absolute zero. *See also* color temperature, White Balance adjustment.

keywords Descriptive words about the subject in the image that are added to image versions and saved as metadata. *See also* control bar, Keywords HUD, metadata.

Keywords HUD A floating window containing a library of keywords that can be applied to an image selection. *See also* keywords, metadata.

lab plot A visual three-dimensional representation of the CIE Lab color space. *See also* color space, ColorSync.

lens A series of sophisticated elements—usually glass—constructed to refract and focus the reflective light from a scene at a specific point: the digital image sensor in a camera. *See also* camera, digital image sensor, macro lens, prime lens, telephoto lens, wide-angle lens, zoom lens.

Levels adjustment An adjustment in Aperture that provides controls to selectively adjust the tonal range of an image. *See also* adjustment, image.

library In Aperture, a container file that holds projects, folders, albums, masters, and versions. You organize elements in the library, rename items, sort items, and so on using the Projects inspector. By default, the Aperture Library file is located at /Users/*username*/Pictures/. *See also* album, folder, master, project, version.

Lift & Stamp HUD A floating window that displays the attributes lifted from an image. You can choose which attributes are stamped on an image selection by deselecting the attributes you don't want to apply. *See also* HUD, image selection, Lift and Stamp tools.

Lift and Stamp tools A pair of tools used in conjunction with the Lift & Stamp HUD to copy (lift) attributes, such as metadata and adjustments, from one image and paste (stamp) them on an image selection. *See also* adjustment, image selection, Lift & Stamp HUD, metadata.

light Visible energy in the electromagnetic spectrum with wavelengths ranging between 400 and 720 nanometers. *See also* electromagnetic radiation.

light meter A device capable of measuring the intensity of reflective light. Light meters are used as an aid for selecting the correct exposure settings on the camera. Most cameras have internal light meters. *See also* center-weighted metering, evaluative metering, meter, spot metering.

Light Table An area in the Aperture main window that appears when you select a Light Table album. The Light Table provides a large open space where you can place a large selection of images for review and drag them to new positions, group them in different combinations, and resize them as needed. *See also* album, Navigator button.

list view A Browser view that displays images in a list by name, icon, and accompanying metadata, such as rating, image dimensions, file size, and date, rather than as a row or grid of thumbnails. *See also* Browser, filmstrip view, grid view, metadata, rating.

Loupe A tool in Aperture used to magnify the area of the image you place it over. *See also* image.

luminance A value describing the brightness of all color channels combined in a pixel.

LZW compression A lossless data-compression algorithm developed by Abraham Lempel, Jakob Ziv, and Terry Welch in 1984. LZW compression algorithms are typically used with JPEG and TIFF graphics files to reduce the file size for archiving and transmission at a ratio of 2.8:1. *See also* compression, JPEG, TIFF.

macro lens A type of lens used for extreme close-up photography. *See also* camera, lens, prime lens, telephoto lens, wide-angle lens, zoom lens.

Main Viewer For systems with multiple displays, the Main Viewer is used for displaying the Aperture application. *See also* display, Secondary Viewer.

managed images Images whose masters are stored in the Aperture library. The locations of the individual masters are managed by the Aperture database. Managed image files are always online. *See also* library, master, offline, online, referenced images.

master The source image file that was copied from either your computer's file system or your camera's memory card. In Aperture, the master is never modified. Anytime a change is made to the image, that change is applied to the version. *See also* memory card, project, version.

megapixel One million pixels. For example, 1,500,000 pixels equals 1.5 megapixels. *See also* digital image sensor, pixel.

memory card The device in the camera where digital images are stored. *See also* camera, capture.

metadata Data about data; metadata describes how data was collected and formatted. Databases use metadata to track specific forms of data. Aperture supports both EXIF and IPTC metadata. *See also* EXIF, IPTC.

meter The process of using a light meter to calculate the appropriate exposure. *See also* light meter.

midtones The color values in an image between the highlights and shadows. *See also* contrast, highlights, Highlights & Shadows adjustment, Levels adjustment, shadows.

mirroring The process of showing the same image on two or more displays. *See also* extended desktop mode.

Mirror setting A Secondary Viewer setting that sets Aperture to present the same image selection on the Main and Secondary Viewer displays. *See also* display, image selection, mirroring, Main Viewer, Secondary Viewer.

moire pattern Refers to the type of visual pattern that is created by the interference of two grids overlaid on top of one another. Moire patterns can occur in images taken with digital cameras when the linear pattern in the image interferes with the linear pattern of the digital image sensor pixel array. The moire pattern often results from a weak anti-aliasing filter employed by the camera's image processor. *See also* digital image sensor, RAW Fine Tuning adjustment.

monitor *See* display.

monochrome An image presented in shades of a single color, such as the shades of gray in a black-and-white photograph. *See also* Color Monochrome adjustment, grayscale, image, Monochrome Mixer adjustment, photograph.

Monochrome Mixer adjustment An adjustment in Aperture that allows you to selectively control the source red, green, and blue color channels when a color image is converted to grayscale. *See also* adjustment, grayscale, image, monochrome.

Navigator button A button in the Light Table used to reposition your view when the contents of the Light Table are larger than your screen. *See also* Light Table.

negative Developed film with a reverse tone image of the subject or scene. *See also* dust and scratch removal, emulsion, film, positive.

New Version From Master button A button in the Full Screen view toolbar that creates a new version from a selected image's master. *See* Full Screen view toolbar, image, toolbar, version.

noise *See* digital noise.

noise reduction The process of removing digital noise in an image. *See also* adjustment, digital noise, image, Noise reduction adjustment.

Noise reduction adjustment An adjustment in Aperture that reduces digital noise in an image. *See also* adjustment, digital noise, image, noise reduction.

offline Images whose masters are currently unavailable to Aperture. Offline images appear in the Viewer and Browser with badge overlays displaying a red slash through them. Images may be offline because the media containing the masters, such as a CD, DVD, FireWire drive, or server, is not connected to your computer or the original filenames have been modified in some way. To bring the images online, you must reconnect them to their corresponding masters. *See also* Browser, FireWire, online, preview images, Viewer.

offset press A type of professional printer used for high-volume printing for items such as magazines and brochures. Offset printing presses deposit ink in lines of halftone dots to produce images on the page. *See also* photo printer.

online Images whose masters are currently available to Aperture. *See also* offline.

opacity The level of an image's transparency.

optical zoom lens *See* zoom lens.

overexposure The result of exposing a scene too long. Overexposed scenes appear too bright and lack adequate details in the shadows. *See also* exposure, underexposed.

panning a. Moving the camera along with a moving subject in order to keep the subject in the frame. Panning a fast-moving subject with a slow shutter speed usually causes the subject to remain relatively in focus, while the remaining areas of the scene are blurred or stretched in the direction of the camera movement. b. In Aperture, pressing the Space bar and dragging within an image to see other parts of the image when it is displayed at 100 percent size. *See also* camera, image, Viewer.

panorama Usually refers to a scenic landscape image with a wide aspect ratio. Photographers often digitally combine or "stitch" multiple images of the same scene to create a continuous panoramic image. *See also* aspect ratio.

phase An attribute of color perception; also known as *hue*. *See also* hue.

photo edit The process of choosing selects from a group of images, as well as sorting out images that you don't plan to use or publish, also known as *rejects*. The more aggressively you cull undesirable images from your working group of images, the more time you save when you process the images for display. *See also* rating, Reject rating, Select rating.

photograph An image created using a camera as a result of light interacting with a light-sensitive surface, usually film or a digital image sensor. *See also* camera, digital image sensor, film, picture.

photo printer A type of printer capable of producing photo-quality images. *See also* dye sublimation, gamut, inkjet printer, offset press, print, RA-4.

pick The image that represents a stack. The pick is usually the best image in the stack. *See also* alternate, stack.

picture A visual representation rendered on a flat surface or screen, such as a photograph. *See also* image, photograph.

Pictures folder Located in the Home folder, the Pictures folder is the default location for Aperture and iPhoto libraries. *See also* library.

pixel The smallest discernible visual element of a digital image. *See also* megapixel.

PNG Short for *Portable Network Graphics*. PNG is a bitmapped graphics file format that has been approved by the World Wide Web Consortium to replace patented GIF files. PNG files are patent and royalty free. *See also* format.

polarizing filter A filter placed on the front of the camera lens that selectively transmits light traveling on one plane while absorbing light traveling on other planes. Polarizing filters are capable of reducing unwanted reflections on windows and shiny surfaces. Polarizing filters are also used to darken the sky. *See also* filters.

positive Developed film where the tonal relationship of the subject or scene is the same on film as viewed by the eye; also known as a *slide*. *See also* dust and scratch removal, emulsion, negative.

presets A saved group of settings, such as export, naming, print, and web export settings. Presets determine properties such as file format, file compression, filename construction, paper size, and ColorSync profile. Presets are usually defined for particular workflows and can be tailored to client specifications. *See also* ColorSync.

preview images JPEG images generated by Aperture that represent the original master with any applied adjustments and associated metadata. Preview images are designed to be shared with other applications, such as iWeb, and used in place of the masters when they are offline. *See also* adjustment, JPEG, metadata, offline.

primary selection The most important image in an image selection. Adjustments are applied only to the primary selection in an image selection. The primary selection is identified by a thicker white border. There can only be one primary selection in an image selection. *See also* adjustment, image selection, Primary setting.

Primary setting A Viewer setting in Aperture that limits metadata changes to only the primary selection in a multiple-image selection. *See also* filmstrip, image selection, metadata, primary selection.

prime lens A lens with a fixed focal length that cannot be changed.

print An image printed on paper; also known as a *photograph*. *See also* dye sublimation, inkjet printer, RA-4.

profile A compilation of data on a specific device's color information, including its gamut, color space, and modes of operation. A profile represents a device's color-reproduction capabilities and is essential to effective color management. *See also* device characterization, gamut.

program exposure An exposure mode on many automatic cameras in which the camera automatically sets the aperture and shutter values for a correct exposure. *See also* exposure.

project In Aperture, the top-level container that holds all the masters, versions, and metadata associated with your shoot. In the case of referenced images, the masters are stored in their current location rather than in the project file. *See also* album, folder, library, master, referenced images, version.

promote The process of moving an image in a stack closer to the pick position. *See also* demote, Full Screen view toolbar, image, pick, stack.

PSD Short for *Photoshop Document*. PSD files are proprietary graphics files for Adobe Systems Incorporated. *See also* format.

pupil The part of the eye that contracts and expands depending on the amount of light; also known as the *iris*.

quantization The process of converting a value derived from an analog source to a discrete digital value. *See also* digitization.

Query HUD A floating window used to quickly locate images based on a combination of criteria, such as adjustments, keywords, ratings, and EXIF metadata, and to specify image criteria for the contents of Smart Albums. *See also* EXIF, image, keywords, rating, Smart Album.

QuickTime A cross-platform multimedia technology developed by Apple. Widely used for editing, compositing, web video, and more.

RA-4 A type of professional printer capable of printing digital files on traditional photographic paper. RA-4 printers use a series of colored lights to expose the paper; the colors blend together to produce continuous-tone prints. *See also* dye sublimation, inkjet printer, photo printer, print.

RAID Short for *Redundant Array of Independent Disks*. A method of providing photographers who have large image libraries many gigabytes of high-performance data storage by formatting a group of hard disks to act as a single drive volume. The performance of a group of hard disks striped together as a RAID can be much higher than that of the individual drives.

RAM Short for *random-access memory*. A computer's memory capacity, measured in megabytes (MB) or gigabytes (GB), which determines the amount of data the computer can process and temporarily store at any moment.

rangefinder An apparatus found on many cameras that is used to help focus the image. *See also* camera, viewfinder.

raster image processor (RIP) A specialized printer driver that replaces the driver that comes with your printer. It takes input from applications and converts, or rasterizes, the information to data that the printer understands so that it can put dots on a page. Software RIPs typically offer features not found in standard printer drivers.

rating In Aperture, the process of adding a value to an image to indicate its quality in relation to other images in a selection. *See also* photo edit, Reject rating, Select rating.

RAW The original bit-for-bit digital image file captured by the camera.

RAW Fine Tuning adjustment A set of adjustment parameters in Aperture used to control how Aperture decodes RAW image files. *See also* moire pattern.

reciprocity The relationship between the aperture and the shutter that allows for correct exposures as a result of multiple shutter speed and aperture setting combinations. An increase in aperture and decrease in shutter speed creates the same exposure as the previous aperture and shutter combination, and vice versa. *See also* aperture, shutter.

Recovery parameter An Exposure adjustment parameter in Aperture used to recover highlight detail. *See also* Exposure adjustment.

red-eye The phenomenon that gives people glowing red eyes in photographs. Red-eye is caused by the close proximity of the flash to the lens (especially built-in flash). *See also* external flash, Red Eye Correction adjustment.

Red Eye Correction adjustment An adjustment in Aperture that replaces red pixels with black, eliminating the red-eye effect. Used in conjunction with the Red Eye tool. *See also* adjustment, pixel, red-eye.

referenced images Images whose masters are stored outside of the Aperture library. *See also* library, managed images, offline, online.

Reject rating In Aperture, a negative rating applied to an image as part of the photo editing process. *See also* photo edit, rating, Select rating.

relative colorimetric A rendering intent suitable for photographic images. It compares the highlight values of the source color space to that of the destination color space and shifts out-of-gamut colors to the closest reproducible color in the destination color space. *See also* rendering intent.

rendering intent The method by which colors that are out of gamut for a selected output device are mapped to that device's reproducible gamut.

Repair brush A type of Retouch brush in Aperture used to correct and obscure imperfections in an image by copying pixels from a similar-looking area of an image and pasting them over the area with the pixels you want to replace. In addition to overwriting the pixels, the Repair brush resamples the pasted pixels to match the color, texture, and luminance of the pixels you replaced. *See also* Clone brush, retouching, Retouch tool.

resolution The amount of information a digital image is capable of conveying. Resolution is determined by the combination of file size (number of pixels), bit depth (pixel depth), and dots per inch (dpi). *See also* bit depth, dots per inch (dpi), pixel.

retouching The process of altering an image to add or remove details. *See also* Clone brush, compositing, effects, filters, Repair brush, Retouch tool.

Retouch tool In Aperture, a pair of brushes used to correct or obscure imperfections in an image. Used in conjunction with the Retouch HUD. *See also* Clone brush, Repair brush.

RGB Short for *Red, Green, Blue*. A color space commonly used on computers, in which each color is described by the strength of its red, green, and blue components. This color space directly translates to the red, green, and blue elements used in computer displays. The RGB color space has a very large gamut, meaning it can reproduce a wide range of colors. This range is typically larger than printers can reproduce. *See also* additive color.

rods A type of receptor in the eye capable of perceiving luminance. Rods do not perceive color, but only levels of brightness. *See also* cones.

saturation The intensity of color in an image. Saturated colors are perceived to have a "purer" look, resulting from the absence of the color gray. *See also* adjustment, desaturate.

Saturation parameter An Enhance adjustment parameter in Aperture used to adjust saturation in an image. *See also* adjustment, desaturate, Enhance adjustment, saturation.

Search Scope setting A setting in Aperture preferences that allows you to choose whether or not EXIF information is included in searches. *See also* EXIF.

Secondary Viewer The Secondary Viewer is used to present images on multiple displays separately from the application workspace. The Secondary Viewer has five settings: Desktop, Blank, Mirror, Alternate, and Span. *See also* Alternate setting, Blank setting, Desktop setting, display, Main Viewer, Mirror setting, Span setting, workspace views.

selective focus The process of isolating a subject by using an f-stop that produces a shallow depth of field. *See also* depth of field.

Select rating In Aperture, the highest rating that can be applied to an image as part of the photo editing process. A Select rating is applied when you intend to display or distribute the image. *See also* photo edit, rating, Reject rating.

sepia A photograph with a brown tint. *See also* photograph, Sepia Tone adjustment, Tint adjustment.

Sepia Tone adjustment An adjustment in Aperture that changes a color image to sepia—allowing you to desaturate the color image to the level of sepia coloring you want. *See also* adjustment, desaturate, image, sepia, Tint adjustment.

shadows The darkest areas of a subject or scene. *See also* contrast, density, highlights.

Sharpen adjustment An adjustment in Aperture used to sharpen images. *See also* adjustment, Edge Sharpen adjustment, image.

shortcut menu A menu you access by holding down the Control key and clicking an area of the interface, or by pressing the right mouse button.

shutter A complicated mechanism, usually consisting of a blade or a curtain, that precisely controls the duration of time light passing through the lens remains in contact with the digital image sensor. *See also* shutter speed.

shutter priority A setting on certain cameras that automatically sets the aperture for a correct exposure based on the shutter speed set by the photographer. *See also* aperture priority, exposure.

shutter speed The length of time the shutter is open or the digital image sensor is activated or charged. Shutter speeds appear as fractions of a second, such as 1/8 or 1/250. *See also* shutter.

Shuttle control A control in the Browser filmstrip view and the Full Screen view filmstrip that allows you to quickly advance through the images in the filmstrip. *See also* Browser, filmstrip, filmstrip view, Full Screen view.

sidelighting Light that hits the subject from the side perpendicular to the angle of the camera. *See also* backlighting, frontlighting.

silhouette An image in which the subject is a solid dark shape against a bright background. Extreme backlighting, such as a sunset, can cause the silhouette effect when your subject is placed in the foreground. *See also* backlighting, foreground.

single-image print Based on a print preset in Aperture, a single image printed on a single sheet of paper.

slide *See* positive.

slider In Aperture, an interface element that can be dragged forward or backward to make an adjustment. Sliders can be found in the Adjustments inspector as well as in the Adjustments pane of the Inspector HUD. *See also* adjustment, HUD, Inspector HUD.

slideshow An animated presentation of a series of images. In Aperture, slideshows can be combined with music to present a series of images across up to two displays.

Smart Album Dynamic albums in Aperture used to organize images by gathering versions based on search criteria. *See also* album, Query HUD, version.

soft lighting *See* diffused lighting.

soft proof The onscreen simulation by a display of the expected output from a printer or press.

Sorting pop-up menu Used to arrange images in the Browser based on a variety of sort properties or custom sort criteria. *See also* Browser, image.

source image file *See* master.

source profile The profile of an image file before it undergoes color conversion.

Span setting A Secondary Viewer setting that splits the presentation of the current image selection between the Main and Secondary Viewer displays. *See also* image selection, Main Viewer, Secondary Viewer.

spectrophotometer An instrument that measures the wavelength of color across an entire spectrum of colors. Because it can be used to profile both displays and printers, the spectrophotometer is preferred for device profiling.

Spot & Patch adjustment An adjustment in Aperture used to retouch imperfections in an image, such as sensor dust. Used in conjunction with the Spot & Patch tool. *See also* adjustment.

spot metering A type of metering that operates by metering within a small target that is usually in the center of the frame. *See also* center-weighted metering, evaluative metering, light meter.

sRGB A common working space designed to represent the average PC monitor. Because of its small gamut, it is suitable for web graphics but not for print production. *See also* working space.

stack In Aperture, a set of similar images, where only one image is intended for use. *See also* alternate, pick.

stopping down The process of changing the aperture, or f-stop, to a smaller opening. *See also* aperture, f-stop.

Straighten adjustment An adjustment in Aperture that levels the image's horizon. Used in conjunction with the Straighten tool. *See also* adjustment.

subject The main object, person, scene, or incident chosen by the photographer to be represented in an image. *See also* candid shot, image.

subtractive color Images with color elements derived from the light reflected off the surface of an object. CMYK is a common form of subtractive color. *See also* CMYK.

SWOP Short for *Specifications for Web Offset Publications,* a standard printing-press profile. *Web* here refers to a web press, not to the Internet.

tabs In Aperture, elements that delineate projects, folders, or albums in the Browser when more than one is selected in the Projects inspector. You click a tab to view the contents of a currently open project, folder, or album. *See also* album, folder, project.

target A reference file used to profile a device such as a scanner or digital camera. It often contains patches whose color values have been measured. The output from a device is then compared with the target. *See also* device characterization.

telephoto lens A lens with a long focal length that magnifies the subject. *See also* lens.

tethered shooting Refers to the process of connecting a digital camera to your Mac via a FireWire or USB cable, shooting photographs, and having Aperture capture and store the image files at the moment they are shot. *See also* camera, FireWire.

TIFF Short for *Tagged Image File Format*. TIFF is a widely used bitmapped graphics file format, developed by Aldus and Microsoft, that handles monochrome, grayscale images. *See also* format, grayscale, monochrome.

tint The shade of a color. *See also* color cast.

Tint adjustment An adjustment parameter in Aperture used to selectively remove color casts in the shadows, midtones, and highlights in an image. *See also* adjustment, color cast, exposure.

toolbar A collection of buttons and tools, grouped by function, located at the top of the Aperture main window. *See also* Full Screen view toolbar.

transition A visual effect applied between images in a slideshow. In Aperture, you can choose the duration of the cross fade between images.

tripod A stand with three legs used to keep a camera steady. The use of a tripod is especially necessary when shooting long exposures. *See also* camera shake, exposure.

tungsten light A type of light with low color temperature. Tungsten light sources usually include household lamps but should not be confused with fluorescent lights. *See also* color temperature, White Balance adjustment.

underexposed The result of not exposing a scene long enough. Underexposed scenes appear dark. *See also* exposure, overexposure.

unipod Similar to a tripod; a stand with one leg used as an aid in keeping a camera steady. *See also* camera shake, exposure.

untagged A document or an image that lacks an embedded profile.

USB Short for *Universal Serial Bus*. A versatile interface used to connect external devices to computers. USB cables are often used to connect computers to computer peripherals, such as keyboards and digital cameras, as well as transfer large amounts of data. *See also* camera, FireWire, tethered shooting.

vault A designated storage space that contains an exact copy of the Aperture library (from the last time you backed up), usually saved on an external FireWire drive. *See also* FireWire, library.

version The file containing all the metadata and adjustment information applied to an image. In Aperture, only versions are changed. The masters are never touched. *See also* master.

Vibrancy parameter An Enhance adjustment parameter in Aperture used to add saturation in an image in a nonlinear manner. Saturated colors are left alone while saturation is added to all other colors. However, skin tones are not modified. *See also* adjustment, desaturate, Enhance adjustment, saturation.

Viewer An area in Aperture that displays the images currently selected in the Browser. You can use the Viewer to perform adjustments on images as well as compare them with each other. *See also* Browser.

Viewer Only view A workspace view in Aperture in which the Browser is hidden. *See also* Browser, Browser & Viewer view, Browser Only view, Full Screen view, Viewer.

viewfinder The part of the camera designed to preview the area of the scene that will be captured by the digital image sensor. *See also* camera, digital image sensor.

Vignette adjustment An adjustment in Aperture designed to add a vignette effect to an image. *See also* Devignette adjustment, vignetting.

vignetting a. Darkening, also known as *falloff,* at the corners of the image as a result of too many filters attached to the lens, a large lens hood, or poor lens design. b. The process of applying a vignette to an image for artistic effect. *See also* Devignette adjustment, filters, lens, Vignette adjustment.

watermark A visible graphic or text overlay applied to an image to indicate that the image is protected by a copyright. Watermarks are used to discourage the use of images without the copyright holder's explicit permission.

White Balance adjustment An adjustment in Aperture that changes the color temperature and tint of a digital image. The goal of adjusting an image's white balance is to neutralize color casts in an image. For example, if the white in an image is too yellow because of incandescent lighting, white balancing adds enough blue to make the white appear neutral. *See also* color cast, color temperature, kelvin (K).

white point The color temperature of a display, measured in kelvins. The higher the white point, the bluer the white is; the lower the white point, the redder the white. The native white point for a Mac computer is D50 (5000 kelvins); for a Windows PC, it is D65 (6500 kelvins). *See also* color temperature, kelvin (K).

wide-angle lens A lens with a short focal length that takes in a wide view. The focal length of a wide-angle lens is smaller than the film plane or digital image sensor. *See also* digital image sensor, lens.

working space The color space in which you edit a file. Working spaces are based either on color space profiles such as Apple RGB or on device profiles.

workspace views The arrangement of the Browser, Viewer, and inspectors. In Aperture, there are multiple workspace views. *See also* Browser, Viewer.

XMP sidecar file An extensible markup language designed by Adobe Systems Incorporated that is used for defining metadata sets for photo editing applications. Resources, such as adjustment parameters, can be saved in this file and passed on to other applications. *See also* adjustment, IPTC, metadata.

zoom lens A lens that has the mechanical capacity to change its focal length; also known as an *optical zoom lens. See also* lens.

Zoom Viewer button A button in the Viewer and the Full Screen view toolbar that alternates the display of the image selection between fitting the images within the Viewer and presenting the images at 100 percent size. *See also* control bar, filmstrip, image, image selection, Viewer.

Index

2-page spreads 583
2:3 portrait aspect ratio 597
3:2 landscape aspect ratio 597
3:4 portrait aspect ratio 597
4-Up Fast or Slow slideshow preset 510, 512
4:3 landscape aspect ratio 597
100% view 531
.Mac account
  setting up 561
.Mac web galleries 538

A

Actual Size button 67, 580, 583
actual size display 67, 580, 583
Actual Time Zone pop-up menu 134
adapters (graphics cards) 632
ADC ports 632
Add Adjustments pop-up menu 60, 331
Add Filter pop-up menu 74, 300, 302, 306, 307, 313
additive color 645
Add Keyword button 75, 251, 254
Add Keyword field 62, 258
Add Metadata Box button 67, 575, 579, 602
Add New Page command 587
Add Page button 543, 550
Add Pages pop-up menu 65, 579
Add Photo Box button 67, 575, 579, 595
Add Subordinate Keyword button 75, 251, 255
Add Text Box button 67, 70, 544, 549, 575, 579, 601
Add to Favorites command 104
Add to Library pop-up menu 58, 101
Add Vault dialog 618
adjusting
  Chroma Blur 359
  contrast 328
  exposure 328
  highlight areas 436
  image date and time 293
  image definition 419
  image tint 411
  Light Table view 531
  radius of the Highlights & Shadows controls 439
  saturation 420
Adjustment Action pop-up menu 60
adjustment controls
  adding to HUDs or inspectors 331
  displaying 329
  resetting 333
adjustments 60
  See also image adjustments
  adding vignetting 463
  adjusting exposure 412
  changing automatically 366
  changing Boost 352
  changing Chroma Blur 359
  changing highlights 436
  changing highlights and shadows 435
  changing levels 363, 429
  changing moire patterns 355
  changing temperature 410
  changing tint 411
  changing vibrancy 421
  changing white balance 408
  cropping images 402, 406
  making color changes 445
  making color corrections 440
  making color monochrome adjustments 455
  making edge sharpening adjustments 459
  making enhancement adjustments 417
  making high tonal width corrections 441
  making low tonal width corrections 443
  making mid contrast corrections 443
  making monochrome adjustments 452, 454
  making noise reduction adjustments 457
  making patch corrections 391
  making red-eye corrections 373
  making sepia tone adjustments 456
  making spot corrections 381, 391
  removing vignetting 398
  retouching 381
  sharpening images 462
  straightening images 400, 401
Adjustments inspector 26, 58, 59, 60
  adjustment controls 328
Adjustments pane of the Inspector HUD
  adding controls to 331

adjustment controls 328
controls 35
displaying in Full Screen view 334
opening 215, 330
Adjustments tab 57
adjustment tool HUDs 215
adjustment tools 49, 52, 55, 212
Adobe RGB color profile 645
advanced Highlights & Shadows controls 440
Album Pick button 212
albums
album picks 227
copying albums 610
copying images from 323
creating 300
creating a web gallery album 562
creating a webpage album 536
defined 94, 645
deleting albums 106
deleting images from 105, 167
dragging images into 168
importing folders of images as 139
importing from iPhoto libraries 140
Light Table albums. *See* Light Table
marking picks 212
moving images into 168
organizing projects with 101
planning books 576
saving for slideshows 513
saving search results as 315
searching for images 297
Smart Albums. *See* Smart Albums
stacks in 227
transferring Light Table images into 532
types and functions 96
updating a web gallery album 566
web journal albums. *See* web journals
webpage albums. *See* webpages
Albums you published list 91
aligning
images in photo boxes 596
items on book pages 574
alternate images 645
Alternate option (multiple displays) 193
Always Show Toolbar button 53, 56, 211, 213
ambient light 363, 645
American Newspaper Publishers Association (ANPA) codes 289, 502
analog-to-digital conversion 645
Angle slider 390
angles of pixels 390
angles of view 645
ANPA codes 289, 502
Aperture
files outside of application 144
overview 18
Aperture Library file 144
aperture priority 645
aperture settings
aperture, defined 645
in metadata 273
Appearance button 85
Apple Display Connector (ADC) ports 632
applying
keywords 257, 267
master page designs 573
Archive button 282, 283
archiving images. *See* backing up images
Arrangement button 634
Arrange Sets command 283, 286, 287
arranging items. *See* rearranging images
aspect ratios 175, 312, 405, 597, 646
assigning keywords 252, 257, 262, 266, 267
attaching images to email 504
Auto Adjust Black Clip slider 86, 371
Auto Adjust White Clip slider 86, 372
auto-bracketed images 133, 646
Auto Exposure button 366, 367
Autoflow Selected Images command 586
Autoflow Unplaced Images command 586
auto focus 646
Auto Levels adjustment options 371
Auto Levels adjustments 371
Auto Levels Combined button 366, 369
Auto Levels Separate button 366, 370
automatic adjustment controls 366
automatic adjustments 366–372
Auto Exposure button 367
Auto Levels Combined button 369
Auto Levels Separate button 370
black and white clipping points 371
resetting 372
automatic bracketing 133, 646
automatic image placement 585
automatic page creation 588
automatic stack creation 221
Auto Noise Compensation 351
Auto Noise Compensation checkbox 357
Auto-Stack command 223
Auto-Stack Selected Images HUD 223
Auto-Stack slider 133, 222

B

B (Bulb) setting 647
backgrounds
in book pages 594
in Browser 157
in images 646
in slideshows 515
in Viewer 182

backing up images
after import 143
archives, defined 646
creating vaults 618
functions and controls 617
overview 41, 614
planning systems for 615
reconnecting hard disks 620
restoring files 614
restoring library 623
storage space 616, 617
updating vaults 619
in vaults 41, 64, 100, 618
working with multiple computers 621
backing up in slideshows 513
backlighting 646
back-to-back printing 583
"Badge referenced images" checkbox 88, 170
badges
displaying 273, 292
Light Table display 532
types of 290
basic workspace layout 76
Batch Change dialog 288
batch changes to metadata 288
Bayer pattern color filter array 646
bit depth 412, 473, 646
black-and-white images 599
converting color to 453, 454, 455
Monochrome Mixer adjustments 452
sepia tone adjustments 456
tinting 455
Black Levels slider 345, 346, 430
black point compensation 475, 646
Black Point Compensation setting 475, 500, 506
Black Point slider 345, 346
black point values 328, 429
Black Tint color wheel 422, 428
Black Tint eyedropper tool 423
black Vault Status buttons 617
blank screens, setting 193
bleeds 478
blemishes on images 386
blending spot and patch adjustments 393
blue channels
adjusting separately 370, 452
color correction levels adjustments 429, 433, 435
converting to grayscale 328
in histograms 331
in luminance 369
Monochrome Mixer adjustments 454
blue color channel
adjusting 435
blue filter preset 453
Blue slider 454
blue tones
adding 435
darkening 453
removing 435
Book Action pop-up menu 66, 579, 586
book albums
copying 610
creating 577
saving search results as 315
Book Layout Editor 332
displaying 570
functions and controls 65, 578–580
master page views 606
overview 39
printing books 479
selecting themes 581
switching to Viewer 585
books
adding images 574, 577, 584, 585
adding or removing pages 579, 586, 588, 594
badge overlays 290
book albums 315, 577
copying albums 610
covers 580, 592
creating 39, 577
creating automatically 573
custom themes 609
displaying pages 582
editing text and layout 578
flowing unplaced images into 586
indexes 579, 590
layout controls 66
metadata boxes 601
metadata in 573, 579
navigating through pages 582
numbering pages 594
number of pages in 575
ordering 575, 580, 611
overview 570
photo boxes 579, 595
planning process 575
printing 479, 575, 611
rearranging pages 593
rebuilding after changes 595
saving search results in albums 315
shortcut keys for turning pages 582
single-page or full-spread view 580, 583
text boxes 600
text on pages 574, 579
themes 571, 577, 578, 581
unplaced images 584, 589
updating pages with changes 608
zooming view of pages 580, 583
Book Size pop-up menu 577
Boost 351
Boost controls 352
borders

on images 240, 153
on printed images 476
bounce lighting 647
bracketed images 133, 221
brightness
adjusting 328, 416
bright pixels in black tint calculation 424
in highlights adjustments 436
histogram displays 360
in shadows adjustments 437
Brightness Levels slider 432
Brightness parameter 416
Brightness slider 416
Brightness value slider 416
Bring Forward button 67, 580, 599
Browser 46, 332
badge overlays 290
creating versions in 165–166
darkening or lightening background 157
deleting images 105, 166
dragging images into projects or albums 168
filmstrip view 155
finding images in 161
functions and controls 45
grid view 156, 176
illustrated 18
image information in 152
keyword display 246
list view 157, 176
metadata display 270, 273
navigating in 153
opening multiple projects 176
overview 150
rearranging images in 162
rotating images in 163
selecting images in 154
sorting images in 163
splitting panes 176
stacks in 220
working with 23
Browser & Viewer view 76
Browser area 90
Browser Background Brightness slider 87, 157
Browser Only view 76
browsing through keywords 253
Bulb setting (B) 647
bus-powered hard disks 630
buttons 333
Buy Book button 68, 580
buying books. *See* ordering books
Buy More button 91
byline-based web journal pages 550
bylines in metadata 274, 289

C

cables 628
Calendar search options 305
Calibrate button 475, 483
calibrating your printer 483
calibration 363
camera profiles 641
color management and 637
color spaces and 639
ColorSync Utility and 639
custom device profiles 506, 556
defined 647
device profiles 640
display calibration 473, 635, 642
printer profiles 644
proofing profiles 192
cameras
camera profiles 641
connecting to computers 628
connection modes 114
defined 647
importing images from 21, 114–118
importing selected images 117
metadata 273
resolution settings 473
shutter speeds and settings 58
supported digital cameras 22
cameras, exposure and 412
camera shake 647
Camera Time Zone pop-up menu 134
captions
in metadata 273, 289
in Metadata inspector 58
searching for images by 302
capturing images 647, 648
capturing images as you work 135
capturing images immediately 135
card readers
connecting to computer 628
ejecting cards 116
erasing cards 116
importing files from 21, 113–118
importing selected images 117
carriage return characters 129
categories
adding to metadata sets 282
deleting 282, 283
in IPTC and EXIF metadata 274
metadata character limits 289
category-based web journal pages 550
CCDs (charge-coupled devices) 648
centering images 596
center-weighted metering 648

changing the location of images 122
channels
adjustments 328
Auto Levels Combined button 369
Auto Levels Separate button 370
color correction levels adjustments 433
in histograms 331
See also blue channels, green channels, red channels
characters
in filenames 129
limits in IPTC data 245
limits in metadata 289
charge-coupled devices (CCDs) 648
checkboxes 333
"Check for new photos" pop-up menu 91
choosing a command set 80
Chroma Blur adjustment controls 359
chromatic spread 445
CIE (Commission Internationale de l'Eclairage) 639, 649
CIE color spaces 639
cities
city-based web journal pages 550
metadata character limits 289
names in metadata 274
Clear Compare Item command 185
clipping point parameters 371
Clone brush 384
cloning pixels 386, 388, 390
Close All Stacks button 133
Close button 74
close button 75, 251, 300
close-ups 648
closing
projects 103
stacks 133, 220, 226
cloud filter presets 453
CMM (color matching method) 649
CMOS (complementary metal oxide semiconductor) 650
CMS (color management systems) 649
CMYK color space 639, 648
Cold Area Display Threshold slider 87
cold areas display threshold 191
color
calibration 363
converting to black and white 453, 454, 455
converting to sepia tone 456
correcting. *See* color casts, correcting color
desaturating 328
Full Screen view and 334
levels adjustments 429
temperature. *See* color temperature
in work environment 363
Color adjustment 328
color casts 429
in black-and-white images 455
Black Tint eyedropper 423
correcting 370
digital noise and 410
Gray Tint eyedropper 425
in highlights and shadows 426, 440
levels adjustments 433
removing 422
removing blue or yellow 435
removing green or magenta 434
removing red or cyan 434
resetting color wheels 428
setting manually with color wheels 428
color channel clipping 343
color channel clipping overlays 343
color channels 648
Color controls 445
Color Correction parameter controls 440
color corrections 524
Color Correction settings 440
Color Correction slider 438, 440
color depth 649
color display proofing profiles 192
Color eyedropper 445
using 451
Color field 455
color gamut. *See* gamut
colorimeters 649
colorimetry 649
color interpolation 649
color management 363
calibration 473, 635, 642
camera profiles 641
color spaces 192, 639
ColorSync Utility 639
device profiles 640
gamut 190, 638
overview 637
printer calibration 644
color management systems (CMS) 649
color matching methods 640, 649
Color meter 348
Color Monochrome adjustment controls 455
Color Monochrome adjustments 455
color of book covers 592
color saturation. *See* saturation
color spaces 192, 639, 641
ColorSync 649
ColorSync Profile pop-up menu 475, 506, 556
ColorSync profiles 475, 487, 500
ColorSync Utility 640
camera profiles 641
color spaces in 639
defined 649
overview 639

color temperature 408, 409, 410
color value
adjusting 447
Color Value sample size 349
color wheels 428
columns
of images in slideshows 515, 518
in metadata display 276
in text boxes 604
in web journals 544
in webpages 541, 546
Columns slider 515, 518
Columns value slider 69, 70, 541, 544, 546
Command Editor 79
Command Group 80
Command List area 80
Commission Internationale de l'Eclairage (CIE) 639, 649
Common Sizes pop-up menu 405
compare images 154, 184, 240
comparing images
Light Table review 37
to originals 192
overview 29
rating process and 240
selecting compare images 154, 184
in stacks 223
in Viewer 180
complementary metal oxide semiconductor (CMOS) 650
compositing 650
composition 650
compression
defined 650
exporting compressed images 503
image quality 505
printing and 473
web exports 556
compression, exposure and 412
cones 650
connecting multiple displays 632
contact sheet preset 478
contact sheets 474, 478, 650
continuing slideshows after pauses 513
continuous-play slideshows (looping) 515
contrast 650
contrast adjustments
Auto Levels Combined button 369
Contrast slider 417
displaying contrast in histograms 361
exposure controls 328
high-contrast images 418
midtone adjustments 438, 443
Monochrome Mixer presets 453
Contrast slider 418
control bar 62
controls
adjustments 328
cool tonality 410
copies to print 475
Copy Content command 598
copying
book albums 610
duplicating images 168
duplicating versions 211
image adjustments 212, 335
images from projects or albums 168
images from Smart Albums 323
keywords 262–265
library 621
masters 489
page designs 593, 607
photo box contents 598
pixels 212, 386
print presets 481
copyright
data on webpages 548
metadata 58, 110, 273
metadata character limits 289
watermarks 501
correcting color
Color Correction slider 438, 440
highlights and shadows 440
levels adjustments 433
See also color casts
counters in filenames 126, 127, 131, 492
countries
metadata character limits 289
names in metadata 274
cover buttons 68
covers for books 580, 592
created date metadata 289
Create Index command 591
"Create new versions when making adjustments"
checkbox 86
creating a .Mac account 561
creation dates 305
credits in metadata 273, 289
Crop adjustment controls 402, 406
crop adjustments 402–407
aspect ratios 405
Crop adjustment controls 406
Crop tool 332, 403
hiding Crop overlay 406
trimming images 328
crop dimensions
setting 406
crop marks 476
cropping images 212, 596, 651
Crop tool 49, 55, 212, 332, 402, 403
Crop tool HUD 74
Crossfade checkbox 515

cross-platform filenames 129
custom filter preset 453
Customize Toolbar dialog 78
Custom name formats 496
Custom Name with Counter format 127
Custom Name with Index format 127
Cut Content command 598
cut lines 478
cyan tones 434

D

darkening images 413
dark pixels in white tint calculations 427
Date pop-up menu 306
dates
  creation dates 305
  date-based organization 101
  date-based web journal pages 550
  in filenames 106, 110, 127
  finding images by 305
  in metadata 58, 273, 289
  sorting by 163
decompression 651
decorations 532
Decrease Diameter command 187, 189
Decrease Rating button 53, 63, 236
decreasing ratings 53, 63, 236, 241
definition in images 651
Definition parameter 419
Delete command 106
Delete Folder command 105
Delete Master Image and All Versions command 105, 168
Delete Pages button 66, 579, 594
Delete Project command 105
Delete Smart Album command 324
Delete Version command 167
deleting. *See* removing
deleting Retouch brush strokes 385
Demote button 54, 212
demoting images 54, 212, 227
densitometers 651
density 651
depth of field 651
desaturating images 651
desaturation
  adjusting saturation 328, 420
  Monochrome Mixer presets 453
  sensitivity of Red Eye target overlay 377
deselecting images 154
deselecting unwanted adjustments 336
designs for pages. *See* themes
desktop, extended 633
destination profiles 651
destinations for restoration 623
Detail Image Preset pop-up menu 552
Detail Images pane 69, 70, 541, 543, 545
details
  in high-contrast images 418
  Monochrome Mixer presets 453
  retaining after noise reduction 458
  retaining after Spot & Patch adjustments 395
Detail slider 395
Detect Displays button 634
device characterization 651
device-dependent color capabilities 638, 652
device-independent color capabilities 639, 652
device profiles 640
Devignette adjustment 328
Devignette controls 398
devignetting adjustments 34
diffused lighting 652
digital cameras. *See* cameras
digital data 652
digital image sensors 652
digital master files
  defined 660
digital noise 652
  noise reduction adjustments 328, 457
  white-balance adjustments and 410
digital photos. *See* images
digital point-and-shoot cameras 652
digital single-lens reflex cameras (DSLRs) 652
Digital Visual Interface (DVI) ports 632
digitization 652
digitizing images 653
dirt removal adjustments 328
disclosure triangles 75, 101, 251, 617, 653
disconnecting hard disks 620
display adapters 630
display controls 50
displaying
  adjustment controls 329
  Adjustments inspector 58, 59, 60
  adjustment tool HUDs 74
  all images 238
  badges 292
  Book Layout Editor 570
  existing vaults 619
  export presets 505, 555
  favorite projects 104
  filmstrip 209, 210
  full-resolution images 181, 191
  Full Screen view 208, 334
  hot areas 190
  images without overlays 378
  keyword controls 257
  keywords 246–250
  Keywords HUD 75, 252, 253, 254, 255, 256
  Light Table adjustments 530
  master pages 607

masters 192, 213
metadata 176, 194, 273, 278
metadata sets 279
multiple displays. *See* dual displays
overlapping images in Light Table 530
overlays 248
pages in books 582
page spreads in books 580
panes with keyboard shortcuts 76
projects 101
Red Eye target overlays 379
Smart Album contents 318
Spot & Patch target overlays 396
stacks 185
storage space available 617
toolbar 53, 211, 334
unrated images 238
Viewer 182
watermarks 501, 506
webpages 544, 545
zooming in or out to view book pages 583
displays
calibration 473, 506, 635
color environment tips 363
color management 637
defined 653
device profiles 640
extended desktop or mirroring mode 633
Full Screen view 208
gamut 638
HUDs. *See* HUDs
Light Table adjustments 530
multiple displays. *See* dual displays
proofing images on 482
rearranging 634
resolution 363
slideshows 510, 515
Display Size slider 67, 580, 583
Dissolve slideshow preset 510, 512
distorting adjustments 653
distributing images
Light Table review 37
methods 35
printing books 39
slideshows 36
web journals 39
webpages 38, 536
dividing stacks 133, 228
DNG 22, 111
dot gain 653
dot-per-inch (dpi) print resolution 476
dots per inch (dpi) 506, 653
"Double-click photo" pop-up menu 87
double-sided printing 583
dpi (dots per inch) 506, 653
DPI field 476
dragging
folders into projects 139
images from Smart Albums 169
images in Browser 162
images in Light Table 526, 527
images in stacks 229
images into books 573, 584
images into projects 134
images into stacks 228
images into web journals 543
images into webpages 540
keywords for images 252
keywords in preset groups 261
panning view of images 191
stacks 229
drift 637, 653
drivers for hardware 630
drop shadows 653
DSLRs (digital single-lens reflex cameras) 652
dual displays 193, 332, 631–635
calibrating 643
configuring 633–635
Full Screen view and 25, 208
Main and Secondary Viewer 182
PCI graphics cards and 630
slideshow choices 515
slideshows and 515, 519
duplex printing 583
Duplicate Book command 610
Duplicate Page command 587, 588, 589, 590, 593, 607
Duplicate Version button 166, 211
duplicating. *See* copying
Duration slider 514
dust and scratch removal 653
dust on images 386
DVI ports 632
dye sublimation 653

E

Edge Detail slider 458
Edge Sharpen adjustment 328, 461
Edge Sharpen controls 459
using 460
Edge Sharpen workflow 462
Edges value slider 354
Edit Button Sets window 260
Edit Content button 66, 574, 578, 600
Edit Current Set command 282
editing
badge overlays on images 290
book page layouts 574
contents of Smart Albums 322
export presets 507
files outside of Aperture 144

images 23–28, 653
master pages 607
metadata 278, 288
metadata sets 282
photo layout in books 597
print presets 481
slideshow presets 517
web export presets 557, 558
webpage themes 545
editing images in external editors 350
Edit Layout button 66, 574, 578, 597, 601
Edit Link button 553
effects 653
Eject button 620
ejecting
cards from readers 116
hard disks 620
electromagnetic radiation 654
Email button 61
Email Export Preset pop-up menu 88, 504
"Email images using" pop-up menu 88
emailing images 503
embedded profiles 654
empty projects 115, 117
emulsion 654
Enhance adjustment 328
Enhance adjustment controls 417
erasing cards in readers 116
evaluating exposure 360
evaluative metering 654
event-based organization 101
Exchangeable Image File data. *See* EXIF (Exchangeable Image File) metadata
EXIF (Exchangeable Image File) metadata
adding fields to metadata sets 282
date information 305
defined 654
displaying 58, 176, 194
exporting 487
fields in 273
finding images with 309
EXIF button 282
Exit Full Screen button 56, 213
Export button 75, 85
Export dialog 489
Exported Master Name Format pop-up menu 489
Export File Format pop-up menu 88
exporting
adjusting images for export 500
black point adjustments and 500
ColorSync profiles and 500
export presets. *See* export presets
gamma adjustments 500
HTML files 551
image quality and 500
images, defined 654
images for email 503
keywords 245, 268
lists of metadata 487
masters 489
metadata 503
metadata with images 502
overview 487
PDF files 479
projects 143, 622
renaming files during export 496
using plug-ins 503
versions 492, 554
watermarks 501, 559
web export presets 554, 555
web journal pages 544
webpages 541, 551
XMP sidecar files 487
Export Name Format pop-up menu 493, 496
export plug-ins 503
Export Preset pop-up menu 493
export presets
creating 506
defined 488, 505
deleting 508
displaying settings 505
for email 503
filenames and 496
image adjustments and 500
metadata included in 502
modifying 507
versions of images 493
watermarks 501
web export presets 555
Export Presets dialog 505, 507
Export Web Pages button 69, 71, 541, 544, 554
exposure
defined 654
evaluating 360
hot areas 190
metadata 58
Exposure adjustment controls 412
exposure adjustments 328, 412–428
Auto Exposure button 367
black, gray, and white values 422
brightness 416
contrast 417
Exposure parameter 412
histograms and 360
saturation 420
exposure bias 273
exposure meters 654
Exposure parameter 412
Exposure slider 344, 346, 413
exposure vignette
applying to an image 464
extended desktop mode 633, 654

external editor
using 350
external editors 144, 350, 655
external flashes 655
external hard disks
adding additional space 629
backing up to 614
disconnecting 620
identifying 618
offsite storage 620
planning backup systems 616
reconnecting 620
restoring from 623
space on 616, 617
vaults on 100, 618
External Image Editor field 88
Extract Item command 228
eyedropper tool 423

F

facing pages 580
Fade through Black slideshow preset 510, 512
Fade Time slider 515
favorite projects 104
field computers 621
file formats 88, 111, 412, 505, 556
filenames
assigning automatically 110, 127
customized filenames 125, 130, 490
in metadata 273
in Metadata inspector 58
renaming images 158, 496
searching for images by 175, 302, 312
selecting for exported images 489
sorting by 163
times and dates in 106
files
changing outside Aperture 144
naming 128–129
size in Metadata inspector 58
file size
backup storage space and 616
for emailed images 504
in metadata 273
searching for images by 175, 312
sorting by 163
file status 175
fill-in lighting 655
film 655
filmstrip 23, 51, 208, 209–211, 230, 655
dragging 211
Filmstrip Action pop-up menu 210
filmstrip view 45, 151
Filmstrip View button 150
filtering search criteria 300, 302, 307, 313
filters
applying to book images 579
applying to images 599
defined 655
mimicking 452
Monochrome Mixer preset filters 453
Finder 144, 655
finding images
in Browser 150, 161
with combinations of criteria 175, 312, 313
by date 305
by EXIF data 309
in filmstrip 52
by import session 311
in library 301
by IPTC data 308
by keywords 303
by names or text 302
in Query HUD 296–299
by ratings 307
refining search results 301
saving search results 315
search criteria. *See* search criteria
Smart Albums and 321, 322
finding keywords 251, 253
finishing process 655
FireWire 622, 629, 655
"Fit images within" pop-up menu 69, 70, 541, 544, 547
fitting images
in web journal pages 544
in webpages 541
on webpages 547
fitting pages onscreen 583
fitting slideshows to music 521
fixed lenses 655
flashes 58, 656
flat images 417, 656
flowing unplaced images 589
focal lengths 58, 273, 656
folder name format 125
folder name format presets 125
Folder Naming Presets dialog 126
folders
defined 94, 97, 656
deleting 105
for webpages 554
importing 138
importing images from 120, 124
Font Size pop-up menu 476
foregrounds in images 656
foreign-language characters 129
formats, defined 656
See also file formats
formatting text 579, 603
frames 656

framing images 656
frontlighting 656
f-stops 412, 656
full-page spreads 583
full-resolution display 191
Full Screen button 50, 61, 209
Full Screen view 51, 76, 334
  badge overlays 290
  defined 656
  entering and exiting 24, 50, 209
  filmstrip 209
  keyboard shortcuts 217
  metadata display in 216, 270
  overview 208
  shortcut menu 218
  stacks in 230
  toolbar 211
  using HUDs in 214
full-size slideshows 515

G

galleries. *See* webpages
gamma 656
Gamma Adjust slider 500, 506, 556
Gamma value slider 475
Gamma vignette 465
  applying to an image 465
gamut 190, 638, 657
gamut mapping 657
General button 85
generic camera profiles 641
GIF files 22, 111
glossary 645–671
Go to next image
  keyboard shortcut 217
Go to previous image
  keyboard shortcut 217
grain in images 395
graphics cards 630, 632
Gray Levels adjustments 431
Gray Levels slider 431
gray point values 431
Gray Tint color wheel 422, 428
Gray Tint eyedropper 423, 425
green channels
  adjusting 434
  adjusting separately 370, 452
  color correction levels adjustments 429, 433, 434
  converting to grayscale 328
  in histograms 331
  in luminance 369
  Monochrome Mixer adjustments 454
green filter preset 453
Green slider 454
green tones
  increasing 434, 453
  lightening 453
  removing 411, 434
grid lines on book pages 574
grid patterns of images 518
grid view
  entering 151, 156
  metadata display 270
  options 176
  sorting images in 163
Grid View button 46, 150, 155, 156
grouping images
  in Light Table 529
  in Smart Albums 32
  in stacks 30
groups of images, adjusting 335

H

hardcover books 580, 592
hard disks
  adding additional disks 629
  backing up to 614
  bus-powered 630
  disconnecting 620
  identifying 618
  importing images from 119
  locations of images 144
  offsite storage 620
  planning backup systems 616
  reconnecting 620
  restoring from 623
  storage space 616, 617
  transferring images 622
  vaults on 100, 618
hardware
  color management 638
  considerations 630
  device profiles 640
  disk drive considerations 629
  multiple-display systems 630
  See also specific types of hardware
header styles 551
headings on pages 548
headlines in metadata 274, 289
heads-up displays. *See* HUDs, *names of specific HUDs*
height of images 405, 407
height of rows 541, 544
Height value slider 69, 70, 407, 541, 544
hidden images in Light Table 530
hiding
  filmstrip 210
  image tooltips 277
  master pages 607
  metadata 177, 195

overlays 248
page numbers 595
panes with keyboard shortcuts 76
Red Eye target overlays 379
rejected images 298
Spot & Patch target overlays 396
unrated images 298
Viewer 182
high-contrast images 418
Highlight brightness levels 433
Highlight Hot & Cold Areas command 190
Highlights & Shadows adjustment controls 435
Highlights & Shadows adjustments
advanced settings 438
Highlights & Shadows area 437, 438
Highlights & Shadows controls
high tonal width 442
low tonal width 444
highlights adjustments 328, 435–444
advanced settings 438
brightness values and 416, 436
color correction and saturation 440
in histograms 360, 362, 363
levels adjustments and 429
midtone contrast 443
Quarter-Tone Levels adjustments and 432
radius of pixel areas 439
removing color casts 422, 428
setting range of highlights 441
White Tint eyedropper 426
Highlights parameter controls 436
Highlights slider 437
high-resolution images 473
High Tonal Width parameter controls 441
High Tonal Width parameter value 441
High Tonal Width slider 438, 441, 442
histograms
contrast in 361
correcting images with 363
defined 331
exposure and 360
Levels histogram 430
luminance levels and 429
overview 360
reading 360
tonality in 361
updating 331
homepages, linking to 553
Hot Area Display Threshold slider 87
hot areas 87, 190
hot areas display threshold 190
HTML files
exporting 551, 554
saving webpages or journals 538
HUDs (heads-up displays)
using in Full Screen view 214
functions and controls 73
working with 25
Hue Boost parameter 352

I

ICC profiles 640, 642, 644
icons
badge icons 290
tools 78
identifying referenced images 170
iDisk Storage indicator 91
ID numbers 175, 312
IEEE 1394. *See* FireWire
image adjustments
adding controls for 331
adjusting during export 500
Adjustments inspector 60
Adjustments pane of Inspector HUD 35, 215
applying to multiple images 335
applying to stacked images 336
automatic adjustments 366–372
badge overlays 290
buttons and tools 333
checkboxes 333
Color Monochrome adjustments 455
crop adjustments 402–407
defined 645
deselecting unwanted adjustments 336
displaying controls 329
editing images in other applications 350
editing in external editors 350
editing prior adjustments 60
exposure adjustments 412–428
in Full Screen view 334
gamma adjustments 556
highlights and shadows adjustments 435–444
histograms and 363
HUDs for tools 74, 215
Levels adjustments 429–435
lifting 212
Monochrome Mixer adjustments 452–454
Noise Reduction adjustments 457–458
onscreen adjustments 363
overview 328
patching adjustments 386–397
Red Eye Correction adjustments 373–380
resetting controls 333
Sepia Tone adjustments 456
sliders for 332
Spot & Patch adjustments 386–397
Straighten adjustments 399–401
types of 34
using adjustment controls 332

versions and 95
White Balance adjustments 408–411
Image Date/Time format 127
Image Export command 505
Image Format pop-up menu 505, 556
image indexes 579, 590
Image Management button 106, 107
Image Quality slider 500, 505, 556
images
adjusting the time and date 293
adjustments. *See* image adjustments
on book covers 592
comparing 29, 180, 184
exporting. *See* exporting
file formats. *See* file formats
file information 157
finding. *See* finding images
image tooltips 270, 277
importing. *See* importing images
indexes 579, 590
keywording. *See* keywords
legacy images 112
locations of 144
master images. *See* masters
metadata in. *See* metadata
pick images 226
rating. *See* rating images
selecting 151, 153, 212
series of 221
sharing 35
slideshows. *See* slideshows
sorting. *See* sorting images
stacks. *See* stacks
storage space for 616
versions. *See* versions
Image Scale slider 596
image tooltips 270, 277
Image Tooltips area 90
Import button 61, 75
Import dialog 21, 114
importing images
automatically naming 127
backing up and 143
from cameras or card readers 113–118
defined 657
dragging files into projects 134
file formats 111
finding images imported during same session 311
folders of images 138
import groups 282, 283
Import Pane button 63
from iPhoto libraries 139
large numbers of images 138
locations of imported images 144
metadata and 132
options 21
organizing imports 111
overview 110
selected images 117
into stacks 133, 222
stored on computers 119
time stamps 134
transferring projects 143
trial imports 111
importing keyword lists 268
importing projects
from other computers 143, 622
Import pane 63
button 61
displaying 76
functions 63
hiding 76
opening 18, 114
incandescent lighting 422
"Include if" pop-up menu 300
"Include if" pop-up menu and Match pop-up menu 74
Include Metadata checkbox 505, 556
Increase Diameter command 187, 189
Increase Rating button 53, 63, 236
increasing ratings 53, 63, 236, 241
incremental versions 165
indexes in books 579, 590
indoor lighting 422
ink types 644
inkjet printers 658
inserting pages 587, 588, 589, 590
Inspector HUD 215
Adjustments button 73
Metadata button 73
Projects button 73
Inspector HUD button 56, 213
inspectors 26
displaying 76
displaying adjustments 60
displaying metadata 58, 59
hiding 76
overview 26
Inspectors button 58, 59, 60
instructions in metadata 274, 289
Intensity slider 455, 456, 460, 462
interface elements 43, 44
International Press Telecommunications Council data. *See* IPTC metadata
iPhoto
disabling for cameras or cards 114
importing images from 22, 111
importing library 139
iPhoto Browser 141
importing images 142
IPTC button 282

IPTC metadata
adding during import 132
adding fields to metadata sets 282
assigning keywords 31
character length 245
character limits 289
defined 658
displaying 58, 176, 194
exporting 487, 502
exporting keywords as 245
fields in 273, 289
finding images by 308
irises 658
ISO speeds 273, 658
iTunes library area 515
iTunes playlists 515, 520

J

journals. *See* web journals
JPEG files 412
color spaces and 641
compressing 556
defined 658
exporting 487
importing 22, 111
keywords for 502
masters 94
JPEG previews 196
JPEG2000 files 22, 111

K

K (kelvin) 410, 658
keyboard shortcut
select the next view 76
keyboard shortcuts
arranging workspace elements and panes 76
assigning 83
assigning keywords with 259, 262
customizing 79
displaying images 242
exporting a command set 84
Full Screen view 217
importing a command set 84
lifting and stamping keywords 265
Loupe tool 187, 190
metadata display 195, 216
navigating through books 582
rating 237
rating images 237, 241, 242
rotating images 164
searching 81
selecting images 154, 224
shuttling through images 155, 156
slideshows 513
stack commands 231
stacks 231
versions 165
viewing by group 81
keyword buttons 257
keyword controls 32, 62, 76, 257, 257–258
keyword groups 251
keyword list 251
Keyword Preset Group pop-up menu 62, 258, 259
keyword preset groups
applying keywords 259–262
assigning to buttons 62
creating 260
keywords
adding fields to metadata 282
adding or deleting from preset groups 260
adding to Keywords HUD 254
applying during import 132
applying preset groups 259–262
applying to images 245
applying to multiple images 264, 288
applying with Keywords HUD 250–256
applying with Lift & Stamp HUD 262–265
applying with Metadata inspector 266
assigning to buttons 62, 257
badge overlays 290
browsing through 253
character limits 289
defined 658
deleting 256, 267
displaying 176, 194, 246
exporting 245, 268, 487, 502
importing 268
IPTC data 245
keyboard shortcuts 259, 265
keyword-based web journal pages 550
keyword controls 32, 257–258
Light Table and 267
listing 251, 266
in metadata 273
in Metadata inspector 58
overview 31, 244
preset keywords 62, 250, 257, 258, 259
searching for images by 302, 303
searching through 251, 253
Smart Albums and 319
subordinate keywords 255

Keywords button 282
Keywords HUD
adding new keywords to 254
applying keywords with 250–256
functions and controls 75, 251
illustrated 25
listing keywords 31
opening 214
Keywords HUD button 56, 61, 213
Keywords pop-up menu 304

L

labels
metadata 275
tools 78
lab plots 658
landscape filter presets 453
landscape photo boxes 597
laptops, working with vaults on 621
Large Hardcover button 68, 580, 593
Large Softcover button 68, 580, 593
layering images and text on book pages 579
layouts
book designs. *See* master pages
options for printing 476
left-aligning images 596
left-hand pages 608
legacy images 112
lenses 659
Levels adjustment controls 429, 432
levels adjustments 328, 429–435
adjusting all channels 369
adjusting channels separately 370
color correction 433
gray levels 431
luminance levels 429
Quarter-Tone Levels adjustments 432
Levels controls 363
Levels histogram 430
library
adding items to 101
backing up to vaults 614
copying 621
defined 94, 98, 659
finding images in 301
overview 614
planning backup systems 615
restoring 614, 623
searching 297
updating vaults 619
vaults and 100
working with multiple computers 621
Library Location field 86
Lift & Stamp HUD 74, 262–265, 335
lifting
copying adjustments 212
keyboard shortcuts 265
keywords 262, 264
Lift tool 49, 55
lifting image adjustments 335
Lift tool 49, 55, 212, 262, 264, 335
light 659
lightening images 413
lighting, color casts and 422
light meters 659
Light Table 332
adding images to 526
arranging images 529
badge overlays 290, 532
color correcting and 524
creating albums 525
deleting albums 534
deleting images 526
functions and controls 72
grouping images 529
keywording images 267
metadata display 532
moving and resizing images 527
overlapping images in 530
overview 37, 524
printing arrangements of images 480, 533
resizing display 531
sorting images 524
transferring images from 532
unplaced images 527
Light Table albums
creating 525
saving search results as 315
Light Table area 90
Light Table Zoom slider 72, 531
“Limit preview size” pop-up menu 89
linking metadata boxes to images 602
linking to homepages 553
Link Metadata Box command 602
listing
assigned keywords 266
items in library 101
items in projects or folders 101
keywords 251
slideshow presets 514
list view
displaying 151
displaying stacks in 229
metadata display 270
metadata display in 276
options 176
working with images in 157
List View button 46, 150, 157, 250
List View Columns area 90

locations
of images 144
in metadata 58
for restoration 623
of vaults 618
Lock button 75, 251
locked vaults 621
locking print presets 482
looping slideshows 515
Loupe 56
alternate loupe 189
sample color values 347
Loupe button 61, 213
Loupe tool 61, 181, 189, 213, 424
low-resolution images 473
Low Tonal Width parameter controls 443
Low Tonal Width slider 438, 443, 444
luminance 659
luminance adjustments 445
Auto Levels Combined button 369
in histograms 331
levels adjustments and 429
Luminance parameter 449
LZW compression 660

M

.Mac accounts
exporting webpages to 538, 551
linking webpages to homepages 553
publishing to 542, 544
Mac OS display configuration 633–635
macro lenses 660
magenta tones
adding 434
neutralizing 411
removing 434
magnifying
full-resolution view 191
images on webpages 545
images with Loupe 181, 189
images with Zoom Viewer 213
view in Light Table 531
view of pages 580, 583
Mail pop-up menu 504
main window 44
managed images 94, 98
location 144
Manual slideshow preset 510, 512
master
defined 94
master digital files. *See* masters
Master File Name format 127
master page layouts 571, 579, 581
master pages
adding pages based on 589
copying 607
creating 607
displaying 607
editing 607
left-hand and right-hand 608
overview 606
saving 608
selecting 593
themes 581
unifying and splitting 608
updating 608
updating book pages with changes 608
master pixel size 175, 312
masters
copying versions of 165
creating projects 96
creation dates 305
defined 94
deleting 105, 166, 167
displaying 192, 213
exporting 489
importing into projects 110
location of 144, 273
versions of 95
matching colors 640
matching search criteria 300, 305
Match pop-up menu 300, 305
mathematical operators 129
Maximize Browser workspace layout 76
Maximize Viewer workspace layout 76
megapixels 660
memory cards 660
memory for processing 629
metadata
adding during import 132
applying to multiple images 288
badges 290
in book indexes 591
on book pages 579, 601
boxes. *See* metadata boxes
categorizing web journal pages with 550
character limits 289
customized fields 282
dates in 305
defined 660
deleting categories 282, 283
descriptions of fields 289
displaying 58, 176, 194, 273, 278, 573, 579
editing 278
EXIF metadata 274
exporting 487, 502, 503, 556
export presets 505
in filenames 110
finding images with 308, 309
formatting text in books 603
Full Screen view display 216

hiding 177
inspector. *See* Metadata inspector
IPTC metadata 31, 245
keyboard shortcuts for copying 265
keywords in 244
labels for 275
Light Table display 532
overview 270
positioning display 273
preset displays 194
Query HUD and 298
searchable data fields 175, 312
sets of. *See* metadata sets
switching sets 276, 277
Viewer display 275
in web journals 544
webpage display 547
in webpages 541
Metadata Action pop-up menu 59, 272, 281, 284, 285
metadata boxes
deleting 604
linking to images 602
moving 604
on book pages 601
Metadata button 85
metadata buttons 59, 67
Metadata Format pop-up menu 66, 579, 591
Metadata inspector 26, 58
applying keywords with 266
displaying metadata in 278
editing metadata in 278
functions and controls 58
illustrated 26
keyword display 248
metadata sets in 271
opening 248, 271
Metadata pane of the Preferences window 177, 195, 247, 270
Metadata pop-up menu 59, 279, 476
metadata preset 132
metadata sets
adding categories 282
applying to multiple images 288
badge display and 292
creating 281, 284
customized fields 282
deleting categories 282, 283
displaying 279
editing 282
fields and character limits 289
in Metadata inspector 271
overview 270
rearranging in pop-up menus 283, 286
switching 273, 276, 277, 278
types of 273
Metadata tab 57
metadata view 132
All IPTC 273
Caption & Credits 273
Caption & Keywords 273
Caption Only 273
File Info 273
General 273
Grid View–Basic 274
Grid View–Expanded 274
IPTC-Basic 274
List-Basic 274
List-Expanded 274
Name & Caption 273
Name & Rating 273
Name Only 273
Photo Info–EXIF 274
Ratings 273
Tooltips 274
Viewer-Basic 274
Viewer-Expanded 274
Metadata View pop-up menu 69, 70, 541, 544
metering 660
metering pattern metadata 58
Mid Contrast parameter controls 443
Mid Contrast slider 438, 443
midtones 660
black-and-white images 455
brightness adjustments and 416
contrast adjustments and 417, 438, 443
in histograms 360, 362, 363
Levels adjustments and 429
luminance adjustments and 431
Quarter-Tone Levels adjustments and 432
removing color casts 422, 428
tinting 328, 425, 455
migrating
a project or album 145
a selection of RAW images 145
Migrating images 144
strategies 144
migrating to new equipment 614, 623
mirroring displays 193, 633, 660
mixed lighting 422
modifying. *See* editing
modifying print presets 480
Moire controls 351, 355
Moire parameter 355
monitors. *See* displays
Monochrome Mixer adjustment controls 452
Monochrome Mixer adjustments 328, 452–454
controls 454
presets 452, 453
Monochrome Mixer controls 453
Monochrome Mixer presets 452
Move Current Page Up or Down commands 551

Move to Trash button 105
moving
book pages 593
filmstrip 210
images from project or albums 168
images in Browser 162
images in Light Table 527
items to Trash 105
panning images 191
photo boxes 597
Red Eye target overlays 379
selected images 154
Spot & Patch target overlays 396
text boxes in web journals 549
text on pages 604
web journal images 549
Multi command 183
multiple computers, working with 621
multiple-criteria searches 175, 312
multiple displays. *See* dual displays
multiple images
applying adjustments to 335
printing 477
rating 237
in slideshows 518
in Viewer 183
multiple projects 176
multiple search criteria 307
multiple stacks of images 228
multiple text fields 302
music settings for slideshows 515, 520

N

Name Format pop-up menu 126, 131, 491
naming
custom filenames 125, 130, 490
files 110, 128–129
imported images automatically 127
Light Table albums 525
projects 101, 102
renaming files 158, 496
Smart Albums 321
vaults 618
Naming Presets dialog 125, 130, 490, 497
navigating
through book pages 68, 580, 582
in Browser 153
through images 63, 150, 155, 156
through slideshows 513
in web journals 544
in webpages 542
through webpages 544, 545
navigation buttons 63, 68
Navigator button 72
negatives 661
networks, importing projects over 622
New Album With Current Images button 75, 300, 323
New Book From Selection command 577
New Empty Book command 577
New Empty Light Table command 525
New Light Table From Selection command 525
New Project button 61
"New projects automatically generate previews" checkbox 89
New Smart Album button 75, 300, 321
New Smart Webpage command 540
Newspaper Association of America 502
New Version From Master button 54, 165, 211
New Web Journal From Selection command 542
New Webpage command 540, 543
New Webpage From Selection command 539, 540
Next Image button 53, 63, 153
Next Page button 68, 69, 70, 542, 544, 580
noise 661
noise, White Balance adjustments and 410
Noise compensation 357
Noise Reduction adjustment controls 457
Noise Reduction adjustments 328, 457–458
Noise Reduction controls 457
nonadjacent images, selecting 154
non-Roman characters 129
Normal mode 114
numbering pages 579, 594
"Number of pages" and "Number of columns and rows" buttons 476
numbers of images on pages 546

O

object names in metadata 273, 289
offline hard disks 620
offset presses 661
offsite storage 620
onscreen adjustments 363
onscreen proofing 192, 482
onscreen slideshows 510–516
opacity 662
opacity of Spot & Patch adjustments 394
opacity of watermarks 506, 559
Opacity slider 394, 559
Open All Stacks button 133
opening
Adjustments HUD 215, 330
adjustment tool HUDs 215
Book Layout Editor 570
external editors 350
Keywords HUD 214
Metadata inspector 248, 271
multiple projects 176
projects 103

Query HUD 297
stacks 133, 220, 226, 336
Viewer 182
Webpage Editor 537
Open with External Editor command 350
operating system naming conventions 129
operator characters 129
optical zoom lenses 662
orange borders 240
orange filter preset 453
ordering books 575, 580, 611
organizing projects
before importing files 111
importing folders 138
tips 100
orientation
photo boxes 597
printer settings 475
searching for images by 175, 312
Orientation pop-up menu 475
Other button 282
output device proofing profiles 192
overexposed images 361, 436
overexposure 662
overlapping images
on book pages 579
in Light Table 530
overlapping photo boxes 599
overlapping text on book pages 579
overlays
badges 290
Crop overlays 403, 406
deleting 397
displaying or hiding 248
hiding 406
keywords 246
Light Table display 532
moving 379, 396
opacity 394
ratings 236
Red Eye target overlays 374, 377
removing 380
Spot & Patch target overlays 386, 388, 391
straightening images with 401
viewing images without overlays 378
oversaturation 421

P

Padding slider 515
Page Action pop-up menu 71, 543, 550
page controls 68
page designs. *See* themes
page display controls 67
page navigation buttons 68
page numbers in books 579, 594
pages
adding metadata boxes to 601
adding or removing from books 579, 586, 594
adding text to 601
background images 594
copying designs 593
creating automatically 586, 588
deleting photo boxes 599
formatting text in 603
inserting 587, 588, 589, 590
layouts 578
left-hand and right-hand 608
master pages 572, 589, 593, 606
navigating through 580
numbering 579, 594
number of, in books 575
number to print 475
overlapping images on 599
photo boxes 595, 599
rearranging in books 593
saving as master pages 608
updating with changes 608
in web journals 543, 550
in webpages 541
webpages. *See* webpages
Pages pane 65, 69, 70, 541, 543, 545, 571, 579
page spreads 580
Page Template pop-up menu 71, 543, 551
panning images 191, 596, 662
panoramas 662
Paper Size pop-up menu 475
paper size settings 475
paper types 644
Paste Content command 598
pasting
photo box contents 598
stamping. *See* stamping
pasting pixels 386
patch adjustments 212, 328
amount of detail retained 395
angle of patching 390
defined 388
deleting overlays 397
hiding overlays 396
moving overlays 396
opacity of 394
resizing overlays 391
Softness adjustments 393
Spot & Patch adjustment controls 391
patching adjustments 328, 386–397
patching images 388
Patch tool 212
paths to hard disks 620
pausing slideshows 513
PC mode 114
PCI graphics cards 630

PDF files 476, 479
phase 662
Photo Box Aspect Ratio command 597
photo box buttons 67
photo boxes
adding and filling 579, 584, 595
aspect ratios 597
buttons 67
copying and pasting contents 598
deleting boxes 599
deleting images 598
image size choices 596
moving 597
overlapping 599
photo edits, defined 662
Photo Filter pop-up menu 66, 579, 600
photo printers 662
photos. *See* images
Photoshop files. *See* PSD files
Pick command 226
picks
album picks 227
defined 220, 662
marking images as 54, 212
selecting 226
pixels
angles of 390
bright pixels in black tint calculation 424
copying 212
dark pixels in white tint calculation 427
defined 662
digital noise and adjustments 410
display resolution 181
radius of pixel area for adjustments 439
size in metadata 273
Placement pop-up menu 273
placing images 527, 586, 588, 589
placing metadata 273
planning
backup systems 615
book layout 575
platform naming conventions 129
playing slideshows 510, 519
PNG files 22, 94, 111, 487, 502, 663
polarizing filters 663
pop-up menus 106, 283, 286, 287
portable computers, working with vaults on 621
portfolios, importing 111
portrait photo boxes 597
positives 663
posting webpages on Internet 551
precise image dimensions 406
Preferences window 85
preset export options 492, 505, 554, 555
preset filename formats 127
preset information display 194
preset keywords 62, 250, 257, 258, 259
preset metadata displays 194
preset print settings 474, 477
presets 663
presets for Monochrome Mixer adjustments 452, 453
preset slideshows 510, 512
Presets list 514
Preview button 476
preview images 197
previewing images in the iPhoto Browser 142
previewing printing options 476
Preview quality 198
Preview Quality slider 89
previews 196
Activity window 200
sample workflows 202
scheduling JPEG maintenance 201
suppressing generation 206
turning off 205
updating 199
Previews button 85
Previous Image button 53, 63, 153
Previous Page button 68, 69, 70, 542, 544, 580
primary selections 153, 154
Primary Viewer 182, 193
prime lenses 663
Print button 68, 476, 580
Print dialog 474, 533
printer
calibrating 483
printers
calibrating 644
color management 637
double-sided functionality 583
gamut 638
settings 475
troubleshooting 477
printing
a Light Table arrangement 480
a single image 477
Book Layout Editor and 39
book pages 580
books 479, 570, 575, 611
color management 484
contact sheets 478
controls for 474
creating a PDF file 479
crop marks and borders 476
double-sided pages 583
dpi 476
hot areas and 190
layout options 476
Light Table arrangements 480, 533
metadata sets 476
multiple images 477

overview 472
previewing 476
printer settings 475
print presets. *See* print presets
print vendors 576, 611
proofing onscreen 482
single images 477
tips and suggestions 473
to PDF files 479
Use Best DPI checkbox 476
Print Preset Action pop-up menu 474, 480
print presets
books 479
creating and modifying 474, 480
deleting 482
duplicating 481
Light Table presets 480
locking presets 482
printing with 472
saving 474
print resolution 476
prints, defined 663
print vendors 576, 611
processing power 629
profiles, defined 663
program exposure 663
Project Action pop-up menu 58, 101
projects
albums in 97, 101
creating 20, 101, 102
defined 94, 96, 664
deleting images 105
deleting projects 105
displaying 101
dragging images into 134, 168
empty 115, 117
exporting 143, 622
favorites 104
filenaming schemes 128–129
folders in 97
importing images into 110, 115, 138
importing or exporting keyword lists 268
moving images into 168
naming 101, 102
opening and closing 103
opening multiple projects 176
organization tips 97, 100, 101, 111
Projects inspector functions 58
searching for images 297
Smart Albums and 320, 323
switching between 104
transferring images from Light Table 532
transferring projects 96, 143
working with multiple computers 621
Projects inspector 58, 76, 105, 108
Projects pane 20
Projects pop-up menu 58, 101
Projects tab 57
Promote button 54, 212
promoting images 54, 212, 227
proofing images onscreen 192, 482
proofing profiles 482
province/state names in metadata 274, 289
proxy-image slideshows 515
PSD files
defined 664
exporting 487
importing 111
metadata 502
supported formats 22
watermarks 502
PTP mode 114
Publish Album As option 552
Publish Complete dialog 552
publishing in a web gallery in a .Mac account 538
publishing web galleries to .Mac 560
Publish to .Mac button 69, 71, 542, 544
Publish to .Mac command 552
punctuation in filenames 129
pupils 664
purchasing books 580, 611
pure white and pure black 429
Put Back button 72, 526

Q

Quality button 515
quantization 664
Quarter-Tone controls 432
Quarter-Tone Levels sliders 432
quarter-tones
in histograms 363
levels adjustments 432
Query HUD
date searches 305
EXIF data searches 309
functions and controls 300
IPTC data searches 308
keyword searches 244, 303
multiple-criteria searches 175, 312, 313
opening 297
overview 296–300
ratings-based searches 307
saving search results 315
Smart Albums and 33, 298, 318, 320
Smart Webpage Albums 540
text searches 302
working with 28
Query HUD Action pop-up menu 74, 300
Query HUD button 46, 150, 299
QuickTime 664
QuickTime-compatible file formats 111

R

RA-4 printers 664
Radius parameter 356
Radius parameter controls 439
Radius slider 375, 392, 438, 439, 457, 463
RAID devices 664
RAM 629, 664
rangefinders 664
Range slider 450
raster image processors (RIPs) 664
rating buttons 236
rating images
  assigning ratings 236
  comparing images 240
  defined 665
  displaying ratings 194
  displaying unrated images 238
  finding images by ratings 307
  keyboard shortcuts 237, 241, 242
  multiple images at once 237
  multiple rating passes 239
  overview 27, 234
  rating-based web journal pages 550
  rating buttons 63, 236
  ratings in metadata 273
  sorting by ratings 163, 238
  star ratings 234
  workflow processes 239
Rating pop-up menu 307
RAW files
  color spaces and 641
  defined 665
  file size 616
  importing 111
  masters 94
  resolution and 473
  supported formats 22
RAW Fine Tuning controls 351
RAW images
  Auto Exposure adjustments 367
  exposure 412
reapplying master page layouts 593, 609
Reapply Master command 593, 609
rearranging display positions 634
rearranging images
  on book pages 580
  in Browser 162
  in Light Table 524, 527
  moving photo boxes 597
  in page layouts 573
  in slideshows 513
  in stacks 54, 212, 227
  in web journals 549
  in webpages 548
rearranging metadata sets in pop-up menus 283, 286
rearranging pages
  in books 593
  in web journals 551
rearranging text
  in page layouts 573, 604
  in web journals 549
rearranging tools in toolbar 78
Rebuild Book With All Images command 595
Rebuild Book With Selected Images command 595
reciprocity 665
reconnecting hard disks 620
recovering from file losses 614
recovering highlight detail 413
Recovery parameter 414
Recovery slider 344, 346
red channel
  adjusting 434
red channels
  adjusting separately 370, 452
  color correction levels adjustments 429, 433
  converting to grayscale 328
  in histograms 331
  in luminance 369
  Monochrome Mixer adjustments 454
red-eye 49, 55, 213, 665
Red Eye correction 373
Red Eye Correction adjustment controls 373
  Sensitivity slider 377
Red Eye Correction adjustments 328, 373–380
  deleting overlays 380
  moving overlays 379
  Red Eye tool 373
  resizing overlays 374
  sensitivity of overlays 377
  viewing images without overlays 378
Red Eye target overlay 374
  deleting 380
  moving 379
Red Eye tool 49, 55, 213, 373
Red Eye tool HUD 74
red filter preset 453
red rectangle symbol 191
Red slider 454
red tones
  adding 434
  darkening 453
  removing 434
red Vault Status buttons 617
referenced images 94, 98, 115, 118
  backing up 100, 614
  changing the location 122
  consolidating into the library 174
  displaying a list 171
  identifying 170

importing 110, 121, 124
importing iPhoto library 139
locating masters 172
reconnecting 172
relocating 174
searching for 175
working with 169
refining search results 301
reflowing images in books 579
Reject button 53, 63, 236
rejecting images
buttons for 236
displaying rejected images 238
hiding rejected images 298
Reject ratings 234, 665
relative colorimetric 665
relinking metadata boxes to images 602
Remove Album command 167
Remove and Delete Vault button 621
Remove From Album command 548
Remove From Favorites command 104
Remove Keyword button 75, 251, 256
Remove Page button 71, 543, 551
Remove Vault command 621
removing
albums 106
background images 594
blue or yellow color casts 422, 435
book pages 586
color casts 422
colors. *See* desaturation
export presets 508
folders 105
green or magenta color casts 411, 434
hard disks 620
images from Browser 166
images from Light Table 526
images from photo boxes 598
images from slideshows 513
images from Smart Albums 322
images from stacks 228
images from web journals 549
images from webpages 548
image versions 105
items from projects 105
keywords 256, 260, 267
Light Table albums 534
masters 166, 167
metadata boxes 604
metadata categories 282
noise 457
pages from books 579, 586, 594
photo boxes 599
print presets 482
projects 104, 105
red-eye 373
Red Eye target overlays 380
red or cyan casts 434
Smart Albums 324
Spot & Patch target overlays 397
text boxes 550, 604
tools from toolbar 78
vault images 621
vaults 621
versions 166
web export presets 558
web journal pages 543, 551
removing color casts from the midtones 425
renaming
files 158
image versions 158
rendering intent 665
Repair brush 382
Reset All Warnings button 86
Reset button 60
resetting
adjustment controls 333
automatic adjustments 372
color wheels 428
exposure adjustments 368
toolbar 78
resizing
common sizes for images 405
cropping images 403
filmstrip 211
fonts 476
images during export 506
images for email 503
images for printing 476
images in Light Table 528
images in photo boxes 596
Light Table view 531
Loupe tool 187, 189
overlays 374, 391, 404
watermarks 502, 560
webpage images 547
resolution 363
camera settings 473
defined 666
DPI setting 506
full-resolution display 181, 191
printing and 473
Restore Library dialog 623
restoring
last sorting arrangement 162
master page layouts 593
toolbar 78
Retouch controls 381
Retouch HUD 383
retouching images 212, 666
Retouch tool 49, 55, 213, 328, 381, 384
return characters 129

revealing images in Light Table 530
reverse order in slideshows 513
RGB color space 639, 666
right-aligning images 596
right-hand pages 608
RIPs (raster image processors) 664
rods 666
rolls from iPhoto libraries 140
Rotate Clockwise command 164
Rotate Counterclockwise command 164
Rotate Left and Rotate Right buttons 53, 164
Rotate Left and Rotate Right tools 49, 55, 164, 212
Rotate Right tool 55
Rotate slider 401
rotating
  pixels in patches 390
  straightening images 400
rotating images
  in Browser 163
  tools 212
rotating workspaces 76
rows
  of images in slideshows 515, 518
  in webpages 69, 541, 546
Rows slider 515, 518
Rows value slider 69, 541, 546
Run Slideshow dialog 510, 512

S

saturation 328, 666
  adjusting 420
  effects of 421
  highlights 438, 440
  shadows 438, 440
Saturation parameter 420
Saturation slider 420, 449
Save As button 474
Save as PDF button 476, 479
Save button 474
saving
  books as PDFs 479
  page designs as master pages 608
  print presets 474
  search results 315
  slideshows 513
saving a command set 84
Scale to Fit All Items button 72, 531
Scale to Fit button 67, 580, 583
Scale To pop-up menu 476
screen displays. *See* displays, dual displays
scroll bar 45, 46, 52, 151
search criteria 74
  combining 175, 312, 313
  filtering by 300
  matching 300
  multiple criteria 307
  options 300
  Smart Albums and 322
search field 52, 74, 75, 150, 161, 251, 300
searching 175
searching for images. *See* finding images
searching for images by metadata 313
Search Scope pop-up menu 87
Secondary Viewer 182, 193
Select 105
Select button 53, 63, 236
Select Compare Item command 185
Select Destination command 623
selecting images
  adding pages to books 588
  for book albums 577
  in Browser 151
  compare images 184
  deselecting 154
  for books 585
  for Light Table albums 525
  to import 117
  multiple images 154
  overview 153
  primary selections 154
  Selection tool 212
  shortcuts 154
  for stacks 224
selecting keywords 253, 264
Selection tool 49, 55, 212
selective focus 666
Select ratings 241, 666
selects, defined 96
"Select the next view" keyboard shortcut 76
Send Backward button 67, 579, 599
sending images in email 503
sensitivity of overlays 377
Sensitivity slider 377
sensor dust 328, 386
Sepia Tone adjustment controls 456
Sepia Tone adjustments 328, 456
sepia-tone filters 599
sequences of images 127, 221
Set 1 pop-up menu 247
Set Album Pick command 227
Set Background Page pop-up menu 66
Set Compare Item command 184, 240
Set Master Page pop-up menu 66, 579, 587, 593
setting crop dimensions 406
settings as the default camera parameters 358
setting the tint of highlight values 427
setting up systems 628–635
Shadow Brightness Levels 433
Shadow detail 414
shadows 506, 667
shadows adjustments 328, 435–444

advanced settings 438
brightness adjustments and 416, 437
color correction and saturation 440
in histograms 360, 362, 363
levels adjustments 429
midtone contrast 443
Quarter-Tone Levels adjustments and 432
radius of pixel areas 439
removing color casts 422, 428
setting range of adjustments 443
tinting 423
Shadows slider 438
"Share previews with iLife and iWork" checkbox 89
sharing custom book themes 610
sharing images. *See* distributing images
sharing photos in iLife or iWork 40
Sharpen adjustment controls 462
Sharpen adjustments 328, 458
Sharpen Amount slider and value slider 475
Sharpen controls 462
sharpening 351, 354
Sharpening checkbox 353
Sharpen Radius slider and value slider 475
shortcut keys. *See* keyboard shortcuts
shortcut menus
defined 667
displaying 106
Full Screen view 218
Projects inspector 108
Viewer 206
"Show 'Loading...' indicator while full size images load" checkbox 87
"Show activity label next to the status indicator" checkbox 87
"Show alert when import is finished" checkbox 86
Show All Images button 72, 527, 584
Show Crop HUD
keyboard shortcut 217
"Show crop marks" option 476
Show Full Spreads button 68, 580, 583
showing the hot and cold areas 190
Show Inspector command 271
Show Inspector HUD
keyboard shortcut 217
Show Keyword Controls command 257
Show Keywords HUD
keyboard shortcut 217
Show Lift & Stamp HUD
keyboard shortcut 217
Show Master Image button 50, 56, 192, 213
Show Master Pages command 589, 607
"Show number of versions for projects and albums" checkbox 87
Show Red Eye HUD
keyboard shortcut 217
Show Retouch HUD
keyboard shortcut 217
Show Single Pages button 68, 580, 583
"Show tooltips on controls" checkbox 88
Show Unplaced Images button 72, 527, 584
"Show warning when deleting masters" checkbox 86
Show Watermark checkbox 506, 556, 559
shutter priority 667
shutters 667
shutter speeds 58, 273, 667
Shuttle control 45, 46, 52, 150, 155, 156, 667
Shuttle filmstrip left
keyboard shortcut 217
Shuttle filmstrip right
keyboard shortcut 217
sidelighting 667
single-image prints 474, 667
Single Images preset 477
single-page view 580, 583
Site Theme button 69, 70, 541, 543, 546
Size To pop-up menu 506
skin tones 453
sky filter presets 453
sliders 332, 333, 667
slideshow button 61
Slideshow Preset pop-up menu 511
slideshow presets
creating 516
dual displays and 519
editing 517
functions and controls for 514
grid patterns 518
music settings 520
types of 510
Slideshow Presets dialog 511, 514
slideshows
backgrounds 515
changing images in 513
creating 512
defined 667
fade time 515
functions and controls for 514
grid patterns in 518
keyboard shortcuts 513
looping 515
music settings 515, 520
overview 36, 510
playing 519
presets. *See* slideshow presets
quality 515
saving 513
timing 514
transitions 510
Slow Dissolve slideshow preset 510, 512

Smart Albums
automatic updates to 319
changing contents of 322
collecting images into 320–324
creating 298, 300, 318
defined 298, 667
deleting 324
displaying contents of 318
dragging images from 169
listing contents 33
overview 32, 318–320
saving search results as 315
searching for images in 321
transferring images to projects or albums 323
Smart Webpage Albums 315, 540
softcover books 580, 592
soft lighting 667
softness
Spot & Patch adjustments 393
Softness slider 393
soft proofs 668
software drivers 630
Sort Direction button 46, 150
sorting images
in Browser 150
in grid view 163
Light Table and 524
in list view 158
by ratings 238
restoring last sort 162
Sorting pop-up menu 46, 150, 163
source image files. *See* digital master files
source lights 422
source profiles 668
sources in metadata 274, 289
source targets 388, 389
source vaults 623
space characters 129
spacing between images in slideshows 515
Span option (multiple displays) 193
special characters in filenames 129
special instructions in metadata 274, 289
spectrophotometers 668
Split Stack command 228
Split Stacks button 133
splitting
master pages 608
stacks 133, 228
Spot & Patch controls 381
Spot & Patch HUD appears. 387
Spot & Patch target overlay 388
changing the size of 391
Spot & Patch target overlays
adjusting detail 395
adjusting opacity 394
adjusting softness 393
deleting 397
moving 396
Spot & Patch tool 49, 55, 212, 386, 388, 397
amount of detail retained 395
controls 391
hiding overlays 396
moving overlays 396
opacity 394
patching images 388
resizing overlays 391
softness 393
spotting images 386
switching to Viewer and 332
Spot & Patch tool HUD 74
spot adjustments 212
amount of detail retained 395
defined 386
deleting overlays 397
hiding overlays 396
moving overlays 396
opacity 394
resizing overlays 391
Softness adjustments 393
Spot & Patch adjustment controls 391
spot metering 668
spotting adjustments 328, 386–397
square photo boxes 597
sRGB color space 639, 641, 668
Stack button 166, 220, 226
stacking photo boxes on pages 599
Stack Pick button 54, 212
Stack picks only 74
stacks
adding and removing images 228
arranging images in 227
closing 220
comparing images in 223
creating 133, 221, 224
defined 668
displaying 185
dividing 133
dragging images in 229
dragging stacks 229
Full Screen view 230
importing images automatically 133, 222
keyboard shortcuts for 231
list view 229
in multiple albums 227
opening or closing 133, 226
overview 30, 219
picks 54, 212, 220, 226
promoting and demoting images 227
selecting images in 154
splitting 228
tips for quickly creating 225
toolbar buttons 54, 212

unstacking 224
stacks, opening 336
stamping 49, 55, 212, 263, 265
stamping image adjustments 335
Stamp tool 49, 55, 212, 263, 335
Stamp tool HUD 74
star ratings 234
state names in metadata 274, 289
stock ID numbers 175, 312
stopping down 668
stopping slideshows 513
Stop shuttling left or right
keyboard shortcut 217
storage space 616, 617, 629
Straighten adjustment controls 400, 401
Straighten adjustments 328, 332, 399–401
straightening images 49, 55, 212
Straighten tool 49, 55, 212, 332, 400
subfolder organization 123
subfolders 139
subject-based organization 101
subordinate keywords 255
subtitles on pages 548
subtractive color 668
Switch Aspect Ratio button 405
switching
aspect ratios 405
between projects 104
to Full Screen view 50, 209, 334
metadata sets 273, 276, 277, 278
themes 581
workspaces 76
SWOP 668
symbols in filenames 129
synchronizing vaults and backup files 100
system setup 628–633

T

tab-delimited keyword lists 268
tabs 669
target files 669
telephoto lenses 669
Temp controls 410
temperature, color 408, 409, 410
templates
books 571
header styles 551
web journal templates 543
Temp slider 410
terms, glossary of 645–671
tethered shooting 135
cameras supported 135
Tether HUD 137
text
adding to books 574
adding to web journals 544
on book covers 592
in books 573, 578
boxes. *See* text boxes
buttons 67
columns in 604
on contact sheets 476
deleting 550
formatting 579, 603
keyword lists 268
lost after switching themes 581
moving on pages 604
searching for images by 302
on web journal pages 549
on webpages 548
See also metadata
Text Box Columns command 604
text boxes
adding boxes to pages 579, 601
adding text to 600
columns in 604
deleting 604
moving 604
text buttons 67
text files 268
Text Style pop-up menu 66, 579, 603
texture in images 395
Theme button 66, 571, 578, 581
themes
for books 571, 577, 578, 581
header styles 551
list of 577
master pages 593, 606
selecting and editing 545
switching to other themes 581
for web journals 543
for webpages 541
Themes list 581
Three Up command 183
Thumbnail Image Preset pop-up menu 552
Thumbnail Resize slider 46, 52, 151, 156, 158
thumbnails
of book pages 571
creating while importing 110
in grid view 155, 156
in image indexes 590
size of 151, 156, 158
viewing images as 150
on webpages 552
TIFF files 22, 94, 111, 487, 502, 669
time
adjusting for imported images 134
bracketing images 133
in filenames 106, 127
slideshow timing 514
stacking shots in same time interval 222

time zones 134, 175, 312
timing slideshows to music 521
Timing pop-up menu 514, 521
Tint color wheels 422
resetting 428
Tint eyedroppers 423
Tint parameter controls 411
tints
applying 328, 455
applying to midtones 455
correcting shadows 423
in midtones 425
removing 422
resetting color wheels 428
setting manually with color wheels 428
Tint parameter 411
White Balance adjustments 408
White Balance eyedropper 409
White Tint eyedropper 426
Tint slider 411
titles on pages 548
tonality
expanding tonal range 371
highlights adjustments 438, 441
in histograms 360, 361
luminance adjustments 430
range included in adjustments 439
shadows adjustments 438, 443
warm or cool 410
toolbar 51
adding tools to 78
customizing 77
displaying 77
in Full Screen view 208, 211, 334
hiding 77
illustrated 18
image adjustments and 333
overview 61
restoring 78
tools
adding to toolbar 78
in Full Screen view 334
image adjustments and 333
labels and icons 78
toolbar buttons 61
tools HUDs 215
tool strip 72, 151
tooltips for images 270, 277
transferring
files 488
images from cameras or cards 114
images from Smart Albums 323
images to or from Light Table 532
images to other computers 622
libraries 623
projects 96, 143
transition effects 669
transparency of Spot & Patch adjustments 394
transparency of watermarks 506, 559
trimming pictures. *See* crop adjustments
tripods 669
troubleshooting printers 477
tungsten lighting 422
tungsten lights 669

U

Uncover button 72, 530
underexposed images 360, 437
underexposure 669
unifying master pages 608
unipods 669
unlinking metadata boxes from images 602
Unlink Metadata Box command 602
unlocking print presets 482
unlocking vaults 621
unplaced images
creating pages automatically 588
displaying 584
flowing into books 586, 589
Light Table placement 527
unrated images 238, 298
unstacking images 224
untagged images 669
Update All Vaults button 64, 617, 619
Update Vault command 619
Update Vault Path command 620
updating
images on multiple computers 621
master pages 608
Smart Albums 319
vault images 615
vaults 64, 100, 616, 617, 619
updating histograms 331
USB cables 629
Use Best DPI checkbox 476
"Use embedded JPEG from camera when possible" checkbox 89
user interface elements 43, 44
using an external editor 350

V

value sliders 332, 333
vault
backing up referenced images 614
Vault Action pop-up menu 64, 617, 618
Vault pane
displaying 76
functions 64
hiding 76
illustrated 41
opening 18

overview 616
Vault Pane button 64, 617
vaults
adding or deleting 617
backing up library to 614
creating 618
defined 94, 100, 670
deleting images in 621
identifying hard disks 618
locking and unlocking 621
overview 41
planning backup systems 616
reconnecting hard disks 620
restoring images from 614
restoring library from 623
source vaults 623
status of 64, 616
updating 100, 615, 617, 619
working with multiple computers 621
Vault Status button 64, 615, 617
version buttons 54, 211
Version Name and Date/Time format 127
Version Name format 127
version names
formats for 127
in metadata 273
searching for 175, 312
Version Name with Index format 127
Version Name with Sequence format 127
version numbers 58
versions
in albums 96
creating 54, 165, 211
creating while importing 110
defined 94, 95, 670
deleting 105, 166
duplicating 211
exporting 492, 554
incremental versions 165
moving into other projects or albums 168
numbers 58
in projects 96
renaming 158
toolbar buttons 54, 211
Vibrancy parameter controls 421
video cards 630
Viewer 18, 332
adjusting image view 191
background 87, 182
badge overlays 290
comparing images in 184
defined 670
displaying metadata 195
displaying or hiding 182
full-resolution image display 191
hot areas in images 190
image display size 181
keyword display in 246
keywords in 247, 250, 275, 276, 277
Loupe 189
metadata in 194, 270, 273, 275
multiple screen displays 182, 193
number of images in 183
onscreen proofing 192
overview 180
shortcut menu 206
stacks in 185
switching to Book Layout Editor 585
Viewer area 90
Viewer Background Brightness slider 87
Viewer Mode pop-up menu 50, 56, 193, 213
Viewer Only view 76
viewfinders 670
view options 247, 250, 275, 276, 277
View pop-up menu 61
Vignette adjustment 34, 328
Vignette adjustment controls 463
vignettes
Exposure and Gamma 463
vignetting 670

W

warm tonality 410
watermarks
defined 670
displaying 506
exporting images with 487, 556
opacity 506, 559
resizing 560
tips for 502
webpage images 559
Web Copyright field 88, 548
Web Export command 555, 557, 558
web export presets
creating 557
deleting 558
editing 558
selecting 554
watermarks 559
Web Export Presets dialog 555, 557, 558
web galleries 538
creating an album 562
publishing 560
updating 566
Web Gallery button 85
Web Gallery Title field 91
web journals
adding images 543, 549
adding pages 543, 550
adding text to pages 544
albums 542

copyright information 548
creating 542
deleting images 549
deleting pages 543, 551
exporting 551, 554
functions and controls 70
header styles 551
metadata-based pages 550
metadata display 547
navigating and viewing 545
numbers of images on pages 546
overview 39, 536
posting on Internet 551
rearranging layout and images 549
rearranging pages 551
resizing images on 547
saving search results as 315
text boxes 549
themes 545
watermarks on images 559
Webpage Editor 332
functions and controls 68, 541, 543
opening 537, 539
overview 38
publishing functions 552
web journals 542
webpages
adding images 540, 548
albums 539
badge overlays 290
controls 69
copyright information 548
creating 536, 539
deleting images 548
displaying 544
exporting 541, 544, 551, 554
functions and controls 541
linking to .Mac homepages 553
metadata display 547
navigating and viewing 545
navigating through 544, 545
numbers of images on 546
numbers of images on pages 546
overview 38, 536
posting on Internet 551
rearranging images in 548
resizing images on 547
saving search results as 315
Smart Webpage Albums 540
text on pages 548
themes 545
types of 536
watermarks on images 559
web journals. *See* web journals
"When a camera is connected" pop-up menu 86
White Balance adjustment controls 408
White Balance adjustments 328, 408–411
compared to eyedropper tools 423
Temp controls 410
tint adjustments 411
White Balance eyedropper 409
White Balance eyedropper 408, 409
white borders 153, 240
white clipping point 372
White Levels slider 345, 346, 430
white point 671
White Point eyedropper 409
white point values 328, 429
white space characters 129
White Tint color wheel 422, 428
White Tint eyedropper 423, 426
wide-angle lenses 671
width
of borders 476
of columns 541, 544
of images 69, 70
Width controls 476
width of images 405, 407
Width value slider 69, 70, 407, 541, 544
wire codes 502
workflow processes 239
working space 671
workspaces
arranging interface elements 44
defined 671
rotating 76
switching between 76
types of 76

X

XMP sidecar files 487
X ratings 234
X value slider 407

Y

yellow filter preset 453
yellow tones 422, 435
yellow Vault Status buttons 617
Y value slider 407

Z

zooming
full-resolution view 191
viewing book pages 580, 583
viewing images at 100% 213
viewing images in Light Table 531
zoom lenses 671
Zoom to 100% command 531
Zoom Viewer button 50, 56, 191, 213