
TIFFEN®
Dfx
digital filter suite

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About Us

Tiffen has been a leading manufacturer and supplier of photographic filters and lens accessories for the consumer/professional imaging and the motion picture and broadcast television industries for over 69 years.

The company has a rich history of innovative product design, superior optical consistency and unparalleled quality. Tiffen has been recognized for its product and engineering excellence earning two Technical Achievement Awards and a Scientific and Engineering Award from the Academy of Motion Picture Arts & Sciences, as well as an Emmy Award from the Academy of Television Arts and Sciences.

The company's Special Effects optical filters, once an exclusive of the Motion Picture and Television industry are now available to still photographers and videographers through the Tiffen Hollywood F/X filter line and digitally through the Dfx line of software. The Dfx software is produced in collaboration with Digital Film Tools, a computer software company which is an off-shoot of a Los Angeles based motion picture visual effects facility. Their work includes hundreds of feature films, commercials and television shows. Together, our combined understanding of optical filters and computer software creates an unbeatable combination.

ABOUT THIS GUIDE

This User Guide is a reference for the Tiffen Dfx Digital Filter Suite. You can read from start to finish or jump around as you please. This guide is available in Acrobat PDF format.

Trademark Recognition

INSTALLATION

Video/Film Plug-ins

1. **Install Dfx using your installation CD.**

   or

2. **Download Dfx at www.tiffen.com**
3. **Double-click on the file that was downloaded and run through the installation process.**
4. **When prompted, select the destination programs to install to. You can choose from After Effects, Avid, Final Cut Pro and Premiere Pro.**
5. **Start your program and apply Dfx:**
   - **Adobe After Effects: Apply Dfx to a clip in the timeline from one of the Effects > Tiffen Dfx v3 menus.**
   - **Adobe Premiere Pro: Apply Dfx to a clip in the timeline from one of the Effects > Video Effects > Tiffen Dfx v3 groups.**
   - **Apple Final Cut Pro 6&7: Apply Dfx to a clip in the timeline from one of the Effects > Video Filters > Tiffen Dfx v3 groups.**
   - **Apple Final Cut Pro X: Select a clip in the timeline and apply Dfx from one of the Effects > Tiffen Dfx v3 groups.**
   - **Apple Motion: Drag a Dfx filter from one of the Library > Filters > Tiffen Dfx v3 groups to the image in the Canvas.**
   - **Avid Editing Systems: Apply Dfx to a clip in the timeline from one of the Effect Palette > Tiffen Dfx v3 groups.**

   A dialog box pops up when you run Dfx.
6. **If you purchased the software, select Activate Dfx and follow the instructions.**

   or
7. **Select Request Trial Activation (Internet Required) and click Next to receive a fully functioning version of Dfx for the specified trial period. At the end of the trial period, Dfx reverts to a limited demo mode.**

   or
8. **Select Run in Demo Mode and click Finish.**

   Note: In Demo Mode, a watermark is superimposed over the image.

UNINSTALLING

Windows

From the Windows Start Menu, select Programs > Digital Film Tools > Dfx v3.0 > Uninstall Dfx.

Macintosh

Go to Applications/Digital Film Tools/Dfx v3.0 and double-click on Uninstall Dfx.

Activating, Deactivating and Transferring Licenses

Activation Options

Internet Activate (Recommended)

Activates Dfx over the Internet.

Request License from Self-Service Website

If you do not have an Internet Connection on the computer where you want to run Dfx, use this option. The self-service website will generate a license file which you can then transfer to the desired computer.

Install a License File

Loads a license file obtained from the self-service website or received by email.

Note: If you experience an error when using Internet Activate, it is because you or your company uses a proxy server to access the Internet and/or your firewall is blocking our program's access to the Internet. For proxy server users, select Advanced Options and enter the appropriate proxy server settings. For firewall users, open your firewall software and allow our software to access the Internet.

Deactivation Options

Once Dfx has been activated, you can access the Deactivation Options by selecting the License menu.

Internet Deactivate

Deactivates Dfx over the Internet and is only available if you initially activated over the Internet. Use this method to return your Product Code back to the activation server. You will then be able to use your Product Code to activate Dfx on another computer.

License Transfer

Your Product Code allows you to run Dfx on one computer at a time. However, you may transfer the license by deactivating on one computer and activating on another.

Internet Deactivate / Internet Activate is the preferred method of license transfer between computers, but is only available if you initially activated over the Internet and currently have Internet access. If you do not have Internet access, you will need to contact customer support to assist you in transferring the license.

To transfer a license:

1. **Open the License menu.**
   - **After Effects / Premiere Pro: Apply a Dfx filter and click on License at the bottom of the Effect Controls window.**
   - **Apple Final Cut Pro 6&7: Apply a Dfx filter and click on License at the bottom of the Filters tab.**
   - **Apple Final Cut Pro X / Motion: Apply a Dfx filter and click on License at the bottom of the Inspector.**
   - **Avid Editing Systems: Apply a Dfx filter and click on License at the bottom of the Effect Editor.**
2. **Choose Internet Deactivate (Recommended) and click Next.**
   Dfx is now deactivated.
3. **On the target computer, select Activate Dfx and follow the instructions.**
   Dfx will then activate on the new computer.

INTRODUCTION

Tiffen Dfx Digital Filter Suite

The Tiffen Dfx digital filter suite is the definitive set of digital optical filters. Up to 2000 filters, including simulations of many popular award-winning Tiffen glass filters, specialized lenses, optical lab processes, film grain, exacting color correction plus natural light and photographic effects--are now in a controlled digital environment with either 8 or 16 bit per channel processing.

Available in various configurations: as a powerful but user friendly standalone application, or as plug-ins for either photo or video and film post production software, Tiffen Dfx filters expand your creative experience.

Dfx provides you with everything you will need to enhance your images using a staggering amount of filter presets. Using the Dfx Standalone or photo plug-in versions, any filter can be limited to a portion of the screen using sophisticated but simple to use masking controls. A layering system to apply multiple filters as well as the Standalone's batch processing system rounds out Dfx's set of tools.

Whether you are an amateur or professional photographer, a video or film editor, or graphic designer, Dfx's visual workflow and easy to use tools will help you create stunning images.

Dfx is comprised of the following filters: Ambient Light, Black and White, Black/White Looks, Black Diffusion/FX®, Black Pro-Mist®, Bleach Bypass, Blur, Bronze Glimmerglass®, Center Spot, Chromatic Aberration, Close-Up Lens, Color Compensating, Color Conversion, Color Correct, Color-Grad®, Color Infrared, Color Looks, Color Shadow, Color Spot, Cool Pro-Mist®, Cross Processing, Day for Night, DeBand, DeBlock, DeFog, DeFringe, DeNoise, Depth of Field, Diffusion, Dot, Double Fog, Dual Grad, Edge Glow, Enhancing, Eye Light, Faux Film, Film Stocks, Flag, Flashing, Fluorescent, Fog, F-Stop, Gels, Glimmerglass®, Glow, Glow Darks, Gobo, Gold Diffusion/FX®, Gold Reflector, Grain, Halo, Haze, HDTV/FX®, High Contrast, HFX® Star, Ice Halos, Infrared, Kelvin, Key Light, Lens Distortion, Light, Light Balancing, Low Contrast, Match, Mono Tint, ND-Grad, Night Vision, Nude/FX®, Old Photo,

Overexpose, Ozone, Pencil, Photographic, Polarizer, Printer Points, Pro-Mist®, Rack Focus, Radial Exposure, Rainbow, Rays, ReLight, Selective Color Correct, Selective Saturation, Sepia, Sky, Silver Reflector, Smoque®, Soft Contrast, Soft/FX®, Soft Light, Split Field, Split Tone, Star, Streaks, Strip Grad, Sunset/Twilight, Telecine, Temperature, Texture, Three Strip, Tint, Two Strip, Ultra Contrast, Vari-Star, Vignette, 812® Warming, Warm Black Pro-Mist®, Warm Center Spot, Warm Polarizer, Warm Pro-Mist®, Warm Soft/FX®, Water Droplets, Wide Angle Lens, and X-Ray.

Dfx Features

- **121 individual filters**
- **Thousands of customizable presets**
- **Simulation of Tiffen glass camera filters, specialized lenses, optical lab processes, film grain, exacting color correction as well as natural light and photographic effects**
- **Rosco and GamColor Gel libraries**
- **Rosco and Gam Gobo libraries for lighting effects**
- **8 or 16 bit image processing**
- **Multi-processor acceleration**

Filter Categories

The Filters are categorized by filter function: Film Lab, HFX Diffusion, HFX Grads/Tints, Image, Lens, Light, and Special Effects.

Film Lab

1. **Bleach Bypass**
2. **Cross Processing**
3. **Faux Film**
4. **Film Stocks**
5. **Flashing**
6. **Grain**
7. **Overexpose**
8. **Three Strip**
9. **Two Strip**

HFX Diffusion

1. Center Spot
   - Center Spot
   - Warm Center Spot
2. Diffusion
3. Diffusion/FX®
   - Black Diffusion/FX®
   - Gold Diffusion/FX®
4. Glimmerglass®
   - Glimmerglass®
   - Bronze Glimmerglass®
5. HDTV/FX®
6. High Contrast
7. Low Contrast
8. Pro-Mist®
   - Pro-Mist®
   - Cool Pro-Mist®
   - Warm Pro-Mist®
   - Black Pro-Mist®
   - Warm Black Pro-Mist®
9. Smoque®
10. Soft Contrast
11. Soft/FX®
    - Soft/FX®
    - Warm Soft/FX®
12. Ultra Contrast

HFX Grads/Tints

1. 812® Warming
2. Color Spot
3. Color-Grad®
4. Dual Grad
5. Gels
   - GamColor
   - GamColor Cine Filters
   - GamColor Naked Cosmetics
   - Gels
   - Rosco CalColor
   - Rosco Cinegel
   - Rosco Cinelux
   - Rosco Storaro Selection
6. Mono Tint
7. ND-Grad
8. Nude/FX®
9. Old Photo
10. Photographic
    - Color Compensating
    - Color Conversion
    - Light Balancing
    - Photographic
11. Sepia
12. Split Tone
13. Strip Grad
14. Sunset/Twilight
15. Tint

Image

1. **Black and White**
2. **Color Correct**
3. **DeBand**
4. **DeBlock**
5. **DeNoise**
6. **FL-B/D®**
7. **F-Stop**
8. **Haze**
9. **Kelvin**
10. **Match**

    Note: Match is not supported in Final Cut Pro X because of limitations in it's plug-in format.
11. **Ozone**
12. **Printer Points**
13. **Selective Color Correct**
14. **Selective Saturation**
15. **Sky**
16. **Telecine**
17. **Temperature**

Lens

1. **Blur**
2. **Chromatic Aberration**
3. **Close-Up Lens**
4. **Defringe**
5. **Depth of Field**
6. **Lens Distortion**
7. **Rack Focus**
8. **Radial Exposure**
9. **Split Field**
10. **Vignette**
11. **Wide Angle Lens**

Light

1. Ambient Light
2. Dot
3. Edge Glow
4. Eye Light
5. Flag
6. Glow
7. Glow Darks
8. Gobo
9. Halo
10. HFX® Star
11. Ice Halos
12. Key Light
13. Light
14. Rainbow
15. Rays
16. Reflector
    - Gold Reflector
    - Silver Reflector
17. ReLight
18. Soft Light
19. Star
20. Streaks
21. Vari-Star
22. Water Droplets

Special Effects

1. Color Infrared
2. Color Shadow
3. Day for Night
4. Defog
5. Double Fog
6. Enhancing
7. Fog
8. Infrared
9. Looks
   - Black/White Looks
   - Color Looks
10. Night Vision
11. Pencil
12. Polarizer
    - Polarizer
    - Warm Polarizer
13. Texture
14. X-Ray

Dfx User Interface

1. **Apply a Dfx filter that contains presets. For instance, Special Effects > Looks.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.

3. **Try out the various filter presets.**
4. **Adjust the filter parameters to your liking.**
5. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

Tagging and Sorting Favorite Presets

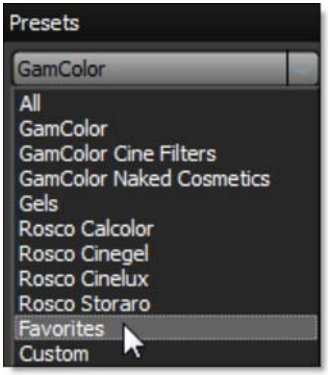
Presets can be tagged as a Favorite allowing them to be sorted separately in the Presets window.

1. **Apply a Dfx filter with presets.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Tag a preset as a Favorite by selecting the preset and pressing the Toggle Favorite icon located at the top right of the Presets window.**

Presets tagged as a favorite display a yellow star at the top right of the preset.

4. **To sort the Presets window by Favorites, select Favorites in the Presets pop-up menu.**



Comparing Images

Dfx can compare images using Side-by-Side, Vertical Split, Horizontal Split or A/B comparison modes. By default, the current filter and original image are selected for comparison.

1. **Apply a Dfx filter and make sure it is affecting the image in some way.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Click on the Side-by-Side Comparison icon.**

Horizontal images are stacked vertically and vertical images are placed side by side.

4 **Click the Vertical Split Comparison mode icon.**

You can now compare the images using a vertical split.

5 **Move your cursor into the image area over the split line and when the cursor changes to a double-arrow, click and drag to move the split.**

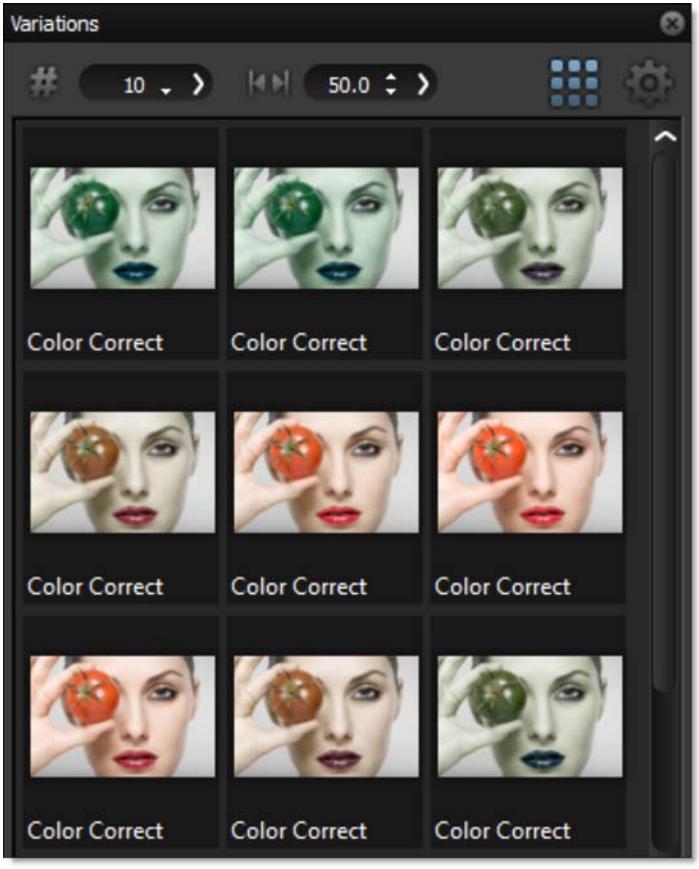
Depending on the filter used, the split line may not be obvious, so triangular sashes on the outside of the image help you find it. If you drag the sash all the way around, it will swap directions.

6 **Click the A/B Comparison icon repeatedly to cycle the current filter with the original image.**

7 **When done, press the A/B Comparison icon to turn it off.**

Creating Variations

Variations based on either one or two parameters can be created and are displayed as thumbnails in a window below the Presets window.



1. **Apply a Dfx filter.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.

3 **Click on a parameter name in the Parameters window.**

Variable parameters are Ranges, Toggles, and Colors.

When you select a parameter, the Variations appear and you'll see the variations being generated on that parameter.

4 **Click on a second parameter and it will generate variations between the two.**

The first parameter you click on will be the dominant parameter - it'll go across the top of the Variations tab. So, you can get different results depending on the order you select the parameters.

5 **Click on a selected parameter to toggle it back off again.**

Note: You can only have one or two parameters selected at a time. If you click on a third parameter, the last parameter you clicked on will deselect itself. If you deselect both of the parameters, the Variations window will disappear because the variations are no longer being generated.

Variations are generated based on the current effect parameters. So, you can pick some parameters for your variation, then go back to the Presets window and pick a different Preset, and the variations will regenerate.

See **Variations** for more information.

Setups

A Setup takes a snapshot of the parameter settings applied to your image. Setups can be saved and loaded and are independent of the image they were originally applied to.

1. **Apply a Dfx filter.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Choose a preset and make some parameter adjustments.**
4. **Select File > Save Setup.**
5. **When the file browser opens, enter a name and click Save.**

   You can now apply this setup to a different image using File > Open Setup.

FILTER TUTORIALS

Ambient Light

Ambient creates light without a defined source and contributes to the overall brightness of a scene without casting shadows.

1. **Apply Ambient Light from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Brightness to set the intensity of the ambient light.**
5. **To apply a custom light color to the image, click on the Color box and select a color.**

   Note: The Color picker allows you to treat the light with a custom color, but is only active when the Custom option has been selected in the GamColor Presets pop-up menu.
6. **To apply a colored gel to the light, select one from the GamColor Presets pop-up menu.**
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Ambient Light** filter for more information.

Black and White

Black and White converts color images to black and white simulating the look of Black and White photographic filters.

1. **Apply Black and White from the Image category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **From the Filter pop-up, select the type of black and white filter to be applied to your color image.**

   Your choice of filter can dramatically change the black and white result.
5. **Use the Brightness, Contrast and Gamma controls to further adjust the image.**
6. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Black and White** filter for more information.

Bleach Bypass

Bleach Bypass is a film laboratory technique where, by skipping the bleach stage in the color processing sequence, silver is retained in the image along with the color dyes. The result is effectively a black and white image superimposed on a color image. Bleach Bypass images have increased contrast, reduced saturation, often giving a pastel effect.

1. **Apply Bleach Bypass from the Film Lab category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Use the Amount slider to control the strength of the Bleach Bypass filter.**
5. **Saturation, Contrast and Temperature sliders are provided for additional enhancement.**
6. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Bleach Bypass** filter for more information.

Blur

It’s fast, high quality and blurs outside the frame which removes the dark inward bleeding edges of most blurs. Horizontal, vertical or both, Blur uses either Gaussian or Box quality settings.

1. **Apply Blur from the Lens category.**
2. **Adjust the Horizontal Blur slider.**

   Since the Gang button is activated, the Vertical Blur amount will match the Horizontal value.

3. **Un-click the Gang slider and now the Horizontal and Vertical sliders can be moved independently.**
4. **Change the Quality setting from Box to Gaussian.**

   Gaussian is a higher quality blur, but comes with a price--it’s slower.

See the **Blur** filter for more information.

Center Spot / Warm Center Spot

Center Spot diffuses and blurs distracting backgrounds while keeping a center spot in focus. The center spot can be moved, sized and the amount of blur can be controlled. Warm Center Spot combines the benefits of Center Spot with a warming filter making it ideal for portraits and skintones.

1. **Apply Center Spot from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the filters are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**
5. **Adjust the Spot > Position by clicking and dragging the center image point to the desired location.**
6. **Set the Radius, Falloff Radius and Falloff.**

   The area covered by the spot will be in focus with all other areas blurred.
7. **If you are curious, you can see what the Spot looks like by changing your View to Spot. Change your View to Output when done.**
8. **Adjust the Horizontal and Vertical Blur to your liking.**
9. **If you applied a Warm Center Spot preset, adjust the Temperature > Color and Opacity sliders to your liking.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Center Spot / Warm Center Spot** filters for more information.

Chromatic Aberration

Chromatic aberration is caused by a lens having a different refractive index for different wavelengths of light and is seen as fringes of color around the edges of the image. This fringing is removed by un-distorting the individual color channels.

1. **Apply Chromatic Aberration from the Lens category.**
2. **Look at the edges of the image and determine if the chromatic aberration is red/cyan, green/magenta, or blue/yellow.**
3. **Start by adjusting the Distortion parameter for the particular color fringing that you are trying to remove. For instance, if you see red/cyan fringing, adjust the Distortion slider in the Red/Cyan group.**

   If you are using anamorphic motion picture lenses or are experiencing non-radial, asymmetric fringing, you may need to adjust the Anamorphic Squeeze and Curvature X/Y parameters.

   See the **Chromatic Aberration** filter for more information.

Close-Up Lens

Simulates close-up lenses that allow you to zoom in extra close using high quality digital filtering.

1. **Apply Close-Up Lens from the Lens category.**
2. **Adjust Scale X to zoom into the center of the image.**
   By default, the Scale X and Scale Y sliders are ganged together so the image is proportionately scaled when Scale X is used.
3. **To select a different portion of the image to zoom in on, click and drag the center image point.**
4. **You can also use the Rotate slider if needed.**
   See the **Close-Up Lens** filter for more information.

Color Correctors

Dfx includes a number of different color correctors that are handy for adjusting an image's color. They include: Color Correct, F-Stop, Printer Points, Telecine and Temperature.

1. **Apply Color Correct, F-Stop, Printer Points, Telecine or Temperature from the Image category.**
2. **Adjust any of the controls in the Master group.**

   The master settings affect the entire image. However, you can also use selections in the shadow, midtone and highlight regions to adjust the color selectively in those areas.

   Note: Lift, Gamma and Gain in the Telecine filter are the same as Shadows, Midtones and Highlights.
3. **Change your View to Shadows, Midtones or Highlights to see the selection values.**

   The areas that are white in the selection are the areas that will be adjusted by the color controls. The areas defined as shadows, midtones or highlights can be adjusted by modifying the Position and Range parameters.
4. **Use the Shadows, Midtones or Highlights Position parameters if you want to select different values to be used for the selection.**
5. **Increase the Shadows, Midtones or Highlights Range controls to add more values to the selection. Decrease for less values.**
6. **Change your View to Output to see the image.**
7. **Adjust the color controls in the Shadows, Midtone or Highlight controls to see how it affects your image.**

   See the **Color Correctors** for more information.

Color-Grad®

Color-Grad® can transform an average sunrise or sunset into something spectacular or convert a dull, washed-out sky to a breathtaking blue. Add color selectively while leaving the rest of the scene unaffected by using a graduated transition between the colored portion and the original image.

1. **Apply Color-Grad® from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
5. **If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**

   The white area of the Grad will be tinted.
6. **If you want less coloring of the image, turn down the Filters > Opacity.**
7. **Image highlights can be retained by adjusting the Filters > Preserve Highlights control to a value of 100.**
8. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Color-Grad®** filter for more information.

Color Infrared

Color Infrared simulates infrared filters used in conjunction with infrared sensitive film or sensors to produce very interesting false-color images with a dreamlike or sometimes lurid appearance.

1. **Apply Color Infrared from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Magenta and Blue sliders to your liking.**
5. **Changing the Hue will only adjust hue in non-blue areas.**

   Color Infrared images usually have high contrast.
6. **Lower the Contrast setting if it is too high for your image.**
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Color Infrared** filter for more information.

Color Shadow

Creates a high contrast image overlayed with a gradient.

1. **Apply Color Shadow from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Threshold to obtain the desired amount of image detail.**

   The color gradient can be adjusted to your specific image.
5. **Adjust the Grad > Direction, Corner Points and Size to position and adjust the grad.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
6. **To change the background or gradient colors, click on the Background Color, Color 1 or Color 2 > Color boxes and select a color.**

   Color 1 sets the top of the gradient and Color 2 sets the bottom of the gradient.
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Color Shadow** filter for more information.

Color Spot

Tints the image using presets for common photographic filters except for a center spot which retains normal color. The center spot can be moved, sized and the amount of blur can be controlled.

1. **Apply Color Spot from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Spot > Position by clicking and dragging the center image point to the desired location.**
5. **Set the Spot > Radius, Falloff Radius and Falloff.**
6. **If you are curious, you can see what the Spot looks like by changing your View to Spot. Change your View to Output when done.**

   The white area of the spot will be tinted.
7. **If you want less coloring of the image, turn down the Color > Opacity.**
8. **Image highlights can be retained by adjusting the Color > Preserve Highlights control to a value of 100.**
9. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Color Spot** filter for more information.

Cross Processing

Cross-processing is a photographic technique where print film (C41) is processed in the set of chemicals usually used to process slide film (E6) or vice versa. The final result yields images with oddly skewed colors and increased contrast and saturation. Different film stocks produce different results, so we have created what we feel is a representative look.

1. **Apply Cross Processing from the Film Lab category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Use the Amount slider to control the strength of the Cross Processing filter.**
5. **Switch the Mode to Slide to Print.**

   Both Print to Slide and Slide to Print modes are available.
6. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Cross Processing** filter for more information.

Day for Night

Day for Night simulates a technique used for shooting exteriors in daylight made to look like they were photographed at night.

1. **Apply Day for Night from the Special Effects category.**
   Day for Night uses a type of diffusion that grows darks areas into bright areas.
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Diffusion > Blur and Opacity parameters to your liking.**
   The Day for Night effect relies on a blue tint to simulate moonlight. You can modify the color of the tint as well as its intensity using the Moonlight controls.
5. **Use the Moonlight controls to adjust the tint applied to the image.**
   Photographically the image is underexposed by two stops or so. We duplicate the underexposure by using a combination of color correction controls. Modify the color correct presets brighter or darker depending on your image.
6. **Change the Color Correct settings if necessary.**
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Day for Night** filter for more information.

Defog

Using advanced deweathering algorithms, Defog restores clear day contrasts and colors of a scene taken in bad weather such as fog and mist. It is also successful in removing the effects of optical Fog and Diffusion filters.

1. **Apply Defog from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Click on the Defog > Color picker and click on an area of fog.**

   This sets the color of the fog to be removed.
5. **Adjust the Defog > Defog parameter to remove more fog or mist.**

   The fog is removed in a radial pattern emanating from the vanishing point. For instance, if your fog moves in the direction of top right to bottom left, set your vanishing point towards the top right corner and the fog removal will be more intense at the upper right and fall off at the bottom left. However, in most cases, the vanishing point can be left in the center of the screen and you will obtain acceptable results.
6. **If needed, move the Vanishing Point to a new location by clicking and dragging the on-screen control in the center of the screen.**

   If the defogging operation causes the shadow areas to become too contrasty, adjust the Min Depth slider to a lower value. This will bring back some shadow detail.
7. **Lower the Min Depth value if you have lost to much detail in the shadow portions of the image.**
8. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Defog** filter for more information.

Defringe

Purple or blue fringing around overexposed areas is a result of sensor overloading in video as well as digital still cameras. Defringe isolates and removes the various types of color fringing.

1. **Apply Defringe from the Lens category.**
   Determine the color of the fringing that you would like to remove. Let's say that you have purple fringing in the highlight areas of your image.
2. **Go to the Magenta parameter group.**
3. **Move the Magenta slider to the right until the purple fringing is gone.**
4. **If the purple fringing is not being removed when the Magenta slider is adjusted, you may need to adjust the Position slider.**
5. **Change your View to Magenta to see the selection values.**
   The areas that are white in the selection are the areas that will be defringed.
6. **Change your View back to Output.**
7. **Move the Position slider to the right or left until you see the fringing go away.**
   This may be necessary if your purple fringing is not the same hue of what we consider to be magenta.
8. **If there is still some magenta left, you may want to increase the value of the Range slider to include more values considered as magenta.**
   See the **Defringe** filter for more information.

Depth of Field

Depth of Field can be added to a scene by isolating and blurring only a portion of the image. The amount of blurring is directly proportionate to the luminance of the depth source.

1. **Apply Depth of Field from the Lens category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Horizontal and Vertical Blur to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, depth of field.
5. **Change your View to Depth to see the selection values.**

   The areas that are white in the selection are the areas where blur will be introduced. The location of the blur within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
6. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
7. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
8. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
9. **Change your View to Output to see the filtered image.**

   The Depth of Field filter can also use a grad or an image as the depth source instead of the selection.
10. **Set the Depth to Grad or Strip.**

    Grad is a linear gradient while Strip is a strip gradient.
11. **Adjust the Grad > Direction, Corner Points and Size to change where the blur is added.**

    To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

12 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

13 **To use an image as the depth source in Adobe After Effects:**

- **Change Depth > Depth to Input.**
- **Select the layer you want to use from the Depth > Input selector.**

or

14 **To use an image as the depth source in Adobe Premiere Pro:**

- **Change Depth > Depth to Input.**
- **Select the track you want to use from the Depth > Input selector located below the Depth > Depth pop-up.**

or

15 **To use an image as the depth source in Apple Final Cut Pro 6&7:**

- **Change Depth > Depth to Input.**
- **Drag and drop a clip onto the clip icon to the right of the Depth > Input parameter.**

Note: Using an image as a depth source in Apple Final Cut Pro X is not supported because of limitations with it's plug-in format.

or

16 **To use an image as the depth source in Avid Editing Systems:**

- **Change Depth > Depth to Input.**
- **The track below the one that you added Depth of Field to is used as the depth source.**

See the **Depth of Field** filter for more information.

Diffusion

Diffusion creates atmosphere by reducing contrast while creating a glow around highlights or shadows. It simulates diffusion and fog filters as well as glows. In addition, a texture library allows you to add realistic diffusion to scenes as if you were adding diffusion directly to your camera lens.

1. **Apply Diffusion from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   Each preset uses a different texture to create the diffusion effect.
4. **Adjust the Diffusion > Brightness parameter to control the amount of diffusion added to the image.**

   You can either use the texture by itself or combine it with a selection using one of the Texture > Blend Modes. The areas that are white in the selection are the areas where diffusion will be introduced.
5. **Combine the texture with a selection by changing the Texture > Blend Mode from Texture Only to Multiply.**

   I like the Multiply blend mode because it only adds the texture in the areas of the selection.
6. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where diffusion will be introduced. The location of the diffusion within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
7. **Change the Selection > Position parameter if you want to add diffusion to different areas of the image.**
8. **Adjust the Selection > Range slider to increase or decrease the image areas affected by the diffusion.**
9. **Change your View to Output to see the filtered image.**
10. **Adjust the position of the texture by clicking and dragging the center image point to the desired location.**

11 **You can also use the Texture > DVE controls to transform the texture.**

12 **Adjust the Diffusion > Brightness, Blur and Color of the diffusion to your liking.**

13 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Diffusion** filter for more information.

Diffusion/FX®

Black Diffusion/FX® gives a silky-smooth look to textured surfaces, suppresses facial blemishes and wrinkles, while maintaining a clear, focused image. Creates a diffused image that doesn't look like it's been shot through a filter. Gold Diffusion/FX® infuses special warmth by adding a soft, golden tint to shadows.

1. **Apply Diffusion/FX® from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the filters are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

   In some of the filters, a selection is generated to create the desired effect--in this case, smoothing of image details.
5. **Change your View to Selection to see the selection values.**

   The idea here is to generate a selection that isolates the areas of the image that need to be smoothed. For instance, you might be trying to isolate and smooth the skin on a person’s face. The white areas of the selection are the areas that will be smoothed. The selection has been preset to a midtone selection. This can be modified by using Selection > Position to select the luminance value and Selection > Range to select the amount of values to be used for the selection.
6. **If needed, change the Selection > Position parameter so that the image areas you are trying to smooth are as white as possible in the selection.**
7. **Adjust the Selection > Range value so that the white values of the selection are limited as much as possible to the image areas that you are trying to isolate.**

   In the case of a person’s face, adjust the Selection > Position so that the face you are trying to smooth is as white as possible in the selection, and set the amount of white values in the person’s face using Position > Range.

8 **Increase the Selection > Blur parameter if you want to soften the transition areas of the selection.**

9 **Change your View to Edge to see the edge values.**

The areas that are white in the edge is where detail in the image is retained.

10 **Adjust the Edge > Brightness of the edge selection to make sure that you have sufficient levels of white in areas where you would like to retain detail.**

For a person's face, make sure that you have sufficient levels of white edges in areas such as the eyes, nose and mouth.

11 **Set the Edge > Blur to smooth out the edge selection.**

12 **Change your View to Output to see the filtered image.**

13 **Adjust the Horizontal and Vertical Blur to smooth out detail.**

14 **If the image is looking too soft, increase the Edge > Brightness, decrease the amount of Blur added to the scene or modify the Selection > Position and Range parameters.**

15 **If you applied a Gold Diffusion/FX® preset, adjust the Temperature > Color and Opacity sliders to your liking.**

16 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Diffusion/FX®** filters for more information.

Double Fog

The Double Fog filter creates a soft, misty atmosphere over the image by first applying fog using a vanishing point along the direction of increasing distance in the image. Then, a second pass blooms image highlights.

1. **Apply Double Fog from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Click on the Fog > Color parameter to set the color of the fog.**

   This sets the color of the fog to be added.
5. **Adjust the Fog > Fog parameter to control how much overall fog is added to the image.**

   The fog is added in a radial pattern emanating from the vanishing point. For instance, if want your fog to move in the direction of top right to bottom left, set your vanishing point towards the top right corner and the fog will be more intense at the upper right and fall off at the bottom left. However, in most cases, the vanishing point can be left in the center of the screen and you will obtain acceptable results.
6. **If needed, move the Vanishing Point to a new location by clicking and dragging the on-screen control in the center of the screen.**

   You can limit where the fog is added to your image by using the Min/Max Depth sliders. Min Depth controls how much fog is added in the darker areas of the image, while Max Depth controls how much fog is added in the brighter areas of the image.
7. **Change the Min/Max Depth values if you want to control how fog is added in the shadow and highlight areas of the image.**

   Secondary fogging effects can be achieved using the Glow parameters. A portion of the screen is isolated with a selection, and based on this selection, additional fog and glow can be added.

8 **Adjust the Glow > Brightness, Blur and Color settings to your liking.**

In some of the filters, a selection is generated to create the desired effect--in this case, highlight glow.

9 **Change your View to Selection to see the selection values.**

The areas that are white in the selection are the areas where glow will be introduced. For instance, If you want to put glow around bright lights, make sure that the light sources appear as white in the selection. The location and amount of the additional glow within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.

10 **Change the Selection > Position parameter if you want to select different luminance values to be used for the selection.**

11 **Increase the Selection > Range value to add more glow into the scene. Decrease for less glow.**

12 **Increase the Selection > Blur parameter to soften the transition areas of the selection.**

13 **Change your View to Output to see the filtered image.**

14 **To create Glow effects around highlights such as bright lights, change your Glow > Blend parameter to Add and make sure that your selection includes only the light sources.**

15 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Double Fog** filter for more information.

Dual Grad

Dual Grad applies two photographic filters to the image which are blended together with a gradient.

1. **Apply Dual Grad from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   The color gradient can be adjusted to your specific image.
4. **Adjust the Grad > Direction, Corner Points and Size to position and adjust the grad.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
5. **To apply a custom color to the image, select Custom from the Color 1 or Color 2 > Presets pop-up menu and click on the Color 1 or Color 2 > Color box and select a color.**

   Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the Presets pop-up menu.
6. **If you want less coloring of the image, turn down the Color 1 or Color 2 > Opacity.**
7. **Image highlights can be retained by adjusting the Preserve Highlights control to a value of 100.**
8. **Change your View to Grad to see the color gradient being applied to the image.**
9. **Change your View back to Output to see the filtered image.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Dual Grad** filter for more information.

Edge Glow

Edge Glow isolates lines and edges in an image and then adds glow only to these areas resulting in a stylized look.

1. **Apply the Edge Glow filter from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Select either the Add or Screen Blend Mode. Add will burn out highlights while the Screen Mode will retain them.**
5. **Adjust the Glow > Brightness, Blur and Color settings to your liking.**

   In Edge Glow, an edge selection is generated to create the desired effect.
6. **Change your View to Edge to see the selection values.**

   The areas that are white in the edge selection are the areas where glow will be introduced.
7. **Adjust the Edge > Brightness to make sure that you have sufficient white areas in the edge selection.**
8. **Set the Edge > Blur to smooth out the edge selection.**
9. **Change your View to Output to see the filtered image.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Edge Glow** filter for more information.

Enhancing

Makes reds, rust browns and oranges pop, with minimal effect on other colors. Perfect for fall foliage, earthtone rock formations, architecture, woodwork, faded rustic barns and any photos where red, brown and orange subjects should be enriched or appear more intense. In addition, the green or blue areas of the image can be isolated and enhanced with minimal effect on other colors.

1. **Apply the Enhancing filter from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Enhancing slider to make the red, orange and brown values pop.**

   In some of the filters, a selection is generated to create the desired effect--in this case, the enhancement effect. By default, the Selection > Hue is preset to red values.
5. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the red, orange and brown areas of the image that will be enhanced. The enhancement effect within the scene can be adjusted by modifying the Selection > Hue and Selection > Range parameters.
6. **Choose another Selection > Preset or change the Selection > Hue parameter if you want to add enhancement to different areas of the image.**
7. **Adjust the Selection > Range slider to increase or decrease the areas affected by the enhancement.**
8. **Change your View to Output to see the image.**
9. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Enhancing** filter for more information.

Eye Light

Creates a targeted light to be placed around a person's eyes.

1. **Apply Eye Light from the Light category.**
2. **Using the DVE controls, you can transform the eye light.**
3. **Select either the Light > Blend > Add or Screen Blend Mode.**

   Add will burn out highlights while the Screen Mode will retain them.

4. **Adjust the Light > Brightness to set the intensity of the light.**

   Note: You can darken the entire image except for the eye light shape by adjusting the Shadow > Brightness.

5. **Use the Light > Blur sliders to control the softness of the light.**
6. **To apply a custom light color to the image, click on the Color box and select a color.**

   Note: The Color picker allows you to treat the light with a custom color, but is only active when the Custom option has been selected in the GamColor Presets pop-up menu.

7. **To apply a colored gel to the light, select one from the Gamcolor Presets pop-up menu.**

   See the **Eye Light** filter for more information.

Faux Film

Faux Film attempts to give video or digital images the look of photographic film. It reduces contrast, creates a soft mist around highlights and adds film grain.

1. **Apply Faux Film from the Film Lab category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Mist > Brightness, Blur and Color as well as the Grain > Size and Amount settings to your liking.**

   Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.
5. **If you want, you can use the Color Correct controls to modify the color of the image.**

   In some of the filters, a selection is generated to create the desired effect--in this case, diffusion.
6. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where diffusion will be introduced. The location of the diffusion within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
7. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
8. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
9. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
10. **Change your View to Output to see the filtered image.**
11. **The softness of the diffusion can also be adjusted using the Mist > Blur setting.**
12. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Faux Film** filter for more information.

Film Stocks

Film Stocks is a unique filter that simulates a 113 different color and black and white photographic film stocks.

1. **Apply Film Stocks from the Film Lab category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the film stocks are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of film stock presets.**

   Each preset sets a combination of the various parameters to achieve the desired effect, but only the parameters that are necessary. You can modify the existing settings including adjusting those controls that were not previously set.
5. **Use the Amount slider to set the amount of the selected preset. The Amount mixes between the full effect of the preset and the original image.**

   To mimic the characteristics of a particular film stock, a combination of settings for the RGB channels have been set to form a film response curve.
6. **Change the Film Response > RGB, R, G and B sliders. They will minimize or accentuate the pre-configured film response curve.**

   Note: If you are using a black and white preset, the grayscale film response curve is adjusted using RGB.

   Feel free to modify any of the Black and White, Color Correct, Filter, Sharpen, Diffusion, Vignette or Grain settings.

   Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Film Stocks** filter for more information.

Flashing

Flashing allows you to use photographic filters to lower the contrast of your shadows or highlights. The motion picture lab can expose a small amount of light to the film at various stages of the developing and printing process. For example, Negative plus Dupe Negative flashing lifts blacks, while Print plus Master Positive flashing softens whites.

1. **Apply Flashing from the Film Lab category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets. When done, select the Custom Preset.**
4. **Adjust the Shadows > Brightness slider to brighten shadow areas.**
5. **Adjust the Highlights > Brightness slider to darken highlight areas.**
6. **To flash the Shadows or Highlights with a custom color, select Custom in the Presets pop-up menu and click on the Shadows or Highlights > Color box and select a color.**

   Note: The Color picker allows you to use a custom color, but is only active when the Custom option has been selected in the Presets pop-up menu.
7. **To choose one of the preset filters, select a filter from the Shadows or Highlights > Presets list.**
8. **Once colors have been chosen, adjust the Shadows or Highlights > Brightness sliders to set the amount of color added to either the Shadows or Highlights.**
9. **Change your View to Shadows or Highlights to see the selection values.**

   In some of the filters, a selection is generated to create the desired effect--in this case, flashing. The areas that are white in the selection are the areas that will be adjusted by either the Shadows or Highlights sliders. The areas defined as Shadows or Highlights can be adjusted by modifying the Position and Range parameters.
10. **Use the Shadows or Highlights Position parameters if you want to select different values to be used for the selection.**
11. **Increase the Shadows or Highlights Range controls to add more values to the selection. Decrease for less values.**

12 **Change your View to Output to see the image.**

13 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Flashing** filter for more information.

FL-B/D®

Provides correct color, removing the harsh green cast caused by fluorescent bulbs.

1. **Apply Fluorescent from the Image category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Temperature slider as needed.**
5. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **FL-B/D®** filter for more information.

Flag / Dot

Flags and Dots are rectangular and circular lighting control devices used to create shadow areas on a motion picture or photographic set. This concept has been extended to digital so that areas of the image can be selectively darkened.

1. **Apply Flag or Dot from the Light category.**
2. **Using the DVE controls, you can transform the flag or dot.**
3. **Adjust the Flag or Dot > Brightness to set the intensity.**
4. **Use the Flag or Dot > Blur sliders to control the softness.**

   See the **Flag and Dot** filters for more information.

Fog

The Fog filter creates a soft, misty atmosphere over the image and glows highlights.

1. **Apply Fog from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Fog > Brightness, Blur and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, fog.
5. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where fog will be introduced. The location of the fog within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
6. **Change the Selection > Position parameter if you want to select different luminance values to be used for the selection.**
7. **Increase the Selection > Range value to add more fog into the scene. Decrease for less fog.**
8. **Change your View to Output to see the filtered image.**
9. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Fog** filter for more information.

Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. We have created digital equivalents of the lighting gels and these same exact colors can be applied to the entire image or inside a gradient. In cooperation with Gamproducts and Rosco, we have created digital versions of their popular gels.

1. **Apply Gels from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the gels are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new presets group from the pop-up menu to see a different set of gel presets.**
5. **Adjust the Gels > Opacity, Preserve Highlights and Exposure Compensation sliders to your liking.**

   The selected gel can be applied through a gradient creating a graduated transition between the colored portion and the original image.
6. **Click on the Grad > Enable checkbox to activate the Grad.**
7. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
8. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Gels** filter for more information.

Glimmerglass® / Bronze Glimmerglass®

Softens fine details in a unique manner, while adding a mild glow to highlights. Bronze Glimmerglass® adds a warming filter.

1. **Apply Glimmerglass® from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the filters are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**
5. **Change your View to Selection to see the selection values.**

   In some of the filters, a selection is generated to create the desired effect--in this case, smoothing of image details.

   The idea here is to generate a selection that isolates the areas of the image that need to be smoothed. For instance, you might be trying to isolate and smooth the skin on a person's face. The white areas of the selection are the areas that will be smoothed. The selection has been preset to a midtone selection. This can be modified by using Selection > Position to select the luminance value and Selection > Range to select the amount of values to be used for the selection.
6. **If needed, change the Selection > Position parameter so that the image areas you are trying to smooth are as white as possible in the selection.**
7. **Adjust the Selection > Range value so that the white values of the selection are limited as much as possible to the image areas that you are trying to isolate.**

   In the case of a person's face, adjust the Selection > Position so that the face you are trying to smooth is as white as possible in the selection, and set the amount of white values in the person's face using Position > Range.
8. **Increase the Selection > Blur parameter if you want to soften the transition areas of the selection.**
9. **Change your View to Edge to see the edge values.**

The areas that are white in the edge is where detail in the image is retained.

10 **Adjust the Edge > Brightness of the edge selection to make sure that you have sufficient levels of white in areas where you would like to retain detail.**

For a person's face, make sure that you have sufficient levels of white edges in areas such as the eyes, nose and mouth.

11 **Set the Edge > Blur to smooth out the edge selection.**

12 **Change your View to Output to see the filtered image.**

13 **Adjust the Horizontal and Vertical Blur to smooth out detail.**

14 **If the image is looking too soft, increase the Edge > Brightness, decrease the amount of Blur added to the scene or modify the Selection > Position and Range parameters.**

In addition to softening fine image details, Glimmerglass® adds a mild glow to highlights which can be adjusted using the Mist controls.

15 **Adjust the Mist > Brightness and Blur to set the amount of highlight glow.**

16 **If you applied a Bronze Glimmerglass® preset, adjust the Temperature > Color and Opacity sliders to your liking.**

17 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Glimmerglass® and Bronze Glimmerglass®** filters for more information.

Glow

Glow creates glows around selected areas of the image based on a generated selection.

1. **Apply Glow from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Select either the Glow > Blend > Add or Screen blend mode.**

   Add will burn out highlights while the Screen Mode will retain them.
5. **Adjust the Glow > Brightness, Blur and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, glow.
6. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where glow will be introduced. The location of the glow within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
7. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
8. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
9. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
10. **Change your View to Output to see the filtered image.**
11. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Glow** filter for more information.

Glow Darks

Glows and grows the darks areas of the image

1. **Apply Glow Darks from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Glow > Amount and Blur settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, glowing darks.
5. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where glow will be introduced. The location of the glow within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
6. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
7. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
8. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
9. **Change your View to Output to see the filtered image.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Glow Darks** filter for more information.

Grain

Grain simulates film grain with individual control of red, green, and blue grain size and intensity.

1. **Apply Grain from the Film Lab category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Red, Green and Blue Size parameters.**

   The Size parameters control the size of the grain. Sometimes a film stock's grain structure varies in size from one color channel to another, so individual control has been given. The larger the Size settings, the larger the grain will be.

   Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.
5. **Manipulate the Red, Green and Blue Amount parameters.**

   The Amount parameters set the red, green and blue intensities of the grain. Film stocks generally have varying amounts of red, green and blue intensities with the blue intensity generally higher than the rest. If you turn the red, green and blue amount sliders to a value of 0, the grain will disappear.
6. **Change the Red, Green and Blue Softness parameters.**

   The Softness parameters set the red, green and blue softness of the grain. Some film stock's grain structure varies in softness from one color channel to another, so individual control has been given. Normally, only minor softness adjustments are necessary, usually between a value of 0-1.
7. **Adjust the Response Position and Response Range to control where you will see grain in the image.**

   In most cases, film grain is apparent over the entire image except the brightest whites with the black areas being the most affected. A low Response Position value places grain in the darkest image values, while a high Response Position

value places grain in the brightest areas. Response Range will increase or decrease the area where grain is added to the image based on the value of the slider.

8 **If you want, use Response Minimum to set the minimum level of grain that is always added to the image.**

9 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Grain** filter for more information.

Halo

Halo causes dark areas to glow into bright areas and bright areas to glow into dark areas along with a bit of diffusion.

1. **Apply Halo from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Diffusion > Blur and Opacity parameters to your liking.**

   The Halo effect is enhanced by using a combination of color correction controls in addition to the diffusion.
5. **Change the Color Correct settings if necessary.**
6. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Halo** filter for more information.

Haze / Sky

Haze

Reduces excessive blue by absorbing UV light and eliminates haze which tends to wash out color and image clarity.

Sky

Reduces UV light, haze and is pink tinted for added warmth and better colors. It is especially useful for images shot in outdoor open shade and on overcast days.

1. **Apply Haze or Sky from the Image category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Set the amount of haze to be removed from the scene using the Haze control.**
5. **Adjust the Temperature and Cyan/Magenta parameters to your liking.**

   Note: Cyan/Magenta is only included in the Sky filter.
6. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Haze and Sky** filters for more information.

HDTV/FX®

With the increase in HD production for both TV and Motion Pictures, HDTV/FX® filters address both contrast and sharpness issues associated with HD. Creates a “film look” and provides subtle improvements in shadow detail.

1. **Apply HDTV/FX® from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Change your View to Selection to see the selection values.**

   In some of the filters, a selection is generated to create the desired effect--in this case, smoothing of image details.

   The idea here is to generate a selection that isolates the areas of the image that need to be smoothed. For instance, you might be trying to isolate and smooth the skin on a person’s face. The white areas of the selection are the areas that will be smoothed. The selection has been preset to a midtone selection. This can be modified by using Selection > Position to select the luminance value and Selection > Range to select the amount of values to be used for the selection.
5. **If needed, change the Selection > Position parameter so that the image areas you are trying to smooth are as white as possible in the selection.**
6. **Adjust the Selection > Range value so that the white values of the selection are limited as much as possible to the image areas that you are trying to isolate.**

   In the case of a person’s face, adjust the Selection > Position so that the face you are trying to smooth is as white as possible in the selection, and set the amount of white values in the person’s face using Position > Range.
7. **Increase the Selection > Blur parameter if you want to soften the transition areas of the selection.**
8. **Change your View to Edge to see the edge values.**

   The areas that are white in the edge is where detail in the image is retained.
9. **Adjust the Edge > Brightness of the edge selection to make sure that you have sufficient levels of white in areas where you would like to retain detail.**

For a person's face, make sure that you have sufficient levels of white edges in areas such as the eyes, nose and mouth.

10 **Set the Edge > Blur to smooth out the edge selection.**

11 **Change your View to Output to see the filtered image.**

12 **Adjust the Horizontal and Vertical Blur to smooth out detail.**

13 **If the image is looking too soft, increase the Edge > Brightness, decrease the amount of Blur added to the scene or modify the Selection > Position and Range parameters.**

In addition to reducing excessive sharpness, HDTV/FX® lowers contrast which can be adjusted using the Contrast > Shadows and Highlights controls.

14 **Adjust the Contrast > Shadows and Highlights to your liking.**

15 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **HDTV/FX®** filter for more information.

HFX® Star

Exciting and dazzling star effects are generated from original point or reflected light sources with the added glitter and sparkle of these exclusive, natural looking asymmetrical designs and shapes. Great for water scenes, candle flames, street lights and more!

1. **Apply HFX® Star from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **You can also select different star types by choosing them from the Star > Type pop-up menu.**
5. **Adjust the Star > Brightness, Size and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, star effects.
6. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where stars will be introduced. The location of the stars within the scene can be adjusted by modifying the Threshold parameter.
7. **Change the Threshold parameter if you want to select different values to be used for the selection.**
8. **Change your View to Stars to see the generated stars.**
9. **Change your View to Output to see the filtered image.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **HFX® Star** filter for more information.

High Contrast

Creates an extreme high contrast image.

1. **Apply High Contrast from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Contrast and Amount sliders until you achieve the desired amount of contrast.**
5. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **High Contrast** filter for more information.

Ice Halos

Ice halos are created when small ice crystals in the atmosphere generate halos by reflecting and refracting light. Most notably, circles form around the sun or moon as well as rare occurrences when the entire sky is painted with a web of arcing halos.

1. **Apply Ice Halos from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **You can also choose different ice halos by adjusting the Halo > Sun Altitude slider.**
5. **Choose Light > Blend > Add or Screen blend mode.**

   Add will burn out highlights while Screen will retain them.
6. **In the Light menu, adjust the Brightness as well as the Displacement and Blur of the ice halo if you'd like.**
7. **Adjust the position of the ice halo by clicking and dragging the center image point to the desired location.**
8. **You can also use the Halo > Scale control to transform the ice halo.**
9. **Combine the ice halo with a selection by changing the Halo > Blend Mode from Halo Only to Selection.**

   Selection only adds the ice halo in the areas of the selection. If you are not seeing enough of the ice halo, your selection should be adjusted.
10. **Change your View selector to Selection to see the selection values.**

    The default selection settings are preset to a highlight selection. The areas that are white in the selection are the areas where the ice halo will be added into the image. The location of the ice halo within the scene can be adjusted by changing the Selection > Position and Range parameters.
11. **Change the View selector from Selection to Output.**
12. **Change the Selection > Position parameter if you want to change where you see the ice halo.**

13 **Increase the Selection > Range value to add more of the ice halo to the scene. Decrease to see less of the ice halo.**

14 **Increase the Selection > Blur parameter to soften the selection.**

15 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Ice Halos** filter for more information.

Infrared

Infrared simulates infrared filters used in conjunction with infrared sensitive film or sensors to produce very interesting black and white images with glow in highlight areas.

1. **Apply Infrared from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Choose the type of black and white filter to be applied to your color image from the Black and White pop-up menu.**

   The type of Black and White filter that you choose can dramatically change the look of your image.
5. **Set the Mist > Brightness and Blur to your liking.**
6. **If you want, you can use the Color Correct controls to modify the Brightness, Contrast and Gamma of the image.**

   In some of the filters, a selection is generated to create the desired effect--in this case, diffusion.
7. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where diffusion will be introduced. The location of the diffusion within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
8. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
9. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
10. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
11. **Change your View to Output to see the filtered image.**

12 Click the Done button to return to the host application.

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Infrared** filter for more information.

Kelvin

Degrees Kelvin is the standard unit of measure for color temperature which is a way to characterize the spectral properties of a light source. Low color temperature implies warmer (redder) light, while high color temperature implies a colder (bluer) light.

1. **Apply Kelvin from the Image category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   The Color Temperature of the image is determined by the difference of the Destination and Source Kelvin parameters.
4. **Adjust the Destination Kelvin slider.**

   Presets for a number of different light sources and conditions are provided in degrees Kelvin, the standard unit of measure for color temperature.
5. **If you want less coloring of the image, turn down the Color Temperature > Opacity.**
6. **Image highlights can be retained by adjusting the Color Temperature > Preserve Highlights control to a value of 100.**

   The temperature adjustment can be applied through a gradient creating a graduated transition between the colored portion and the original image.
7. **Click on the Grad > Enable checkbox to activate the Grad.**
8. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
9. **If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**

10 Click the Done button to return to the host application.

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Kelvin** filter for more information.

Key Light

Using Key Light, an image can be relit by with either a directional or point light.

1. **Apply Key Light from the Light category.**

   Parallel is the default light source type and creates a directional light source.

2. **Adjust the Angle to change the direction of the light source.**
3. **Set the Strength slider for the desired light intensity.**
4. **Switch the Type to Point.**

   A point light is used where the light either emanates from or fades into a vanishing point depending on the state of the Invert control.

5. **Move the point control in the center of the screen to change the Point light location.**

   Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter to move the Point light location.

6. **Activate Invert and the light source will fade into a vanishing point.**
7. **Set the Strength slider.**

   See the **Key Light** filter for more information.

Lens Distortion

Lens Distortion corrects for pin-cushioning and barrel distortion of camera lenses. It is also useful for creating the look of a wide angle lens.

1. **Apply Lens Distortion from the Lens category.**
2. **Start by adjusting the Distortion control to straighten out any curved lines that should be straight.**

   Note: Positive Distortion parameters correct Pin-cushioning while negative values correct Barrel distortion.

   Depending on the lens that was used, you may need to also adjust the Anamorphic Squeeze and Curvature X and Y parameters.

   See the **Lens Distortion** filter for more information.

Light / Gobo

Light can be added to a scene where none existed before just as if you were adding light at the time of shooting. Realistic lighting and shadow is introduced using digital versions of the entire gobo libraries created by Gamproducts and Rosco.

1. **Apply Light or Gobo from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the gobos are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new gobo group from the pop-up menu to see a different set of gobo presets.**
5. **Choose Light > Blend > Add, Screen or Subtract for the blend mode.**

   Add will burn out highlights while Screen will retain them. Subtract, on the other hand, will add shadow in place of light in the area of the gobo.
6. **In the Light menu, adjust the Brightness, Displacement, and Blur of the light.**

   Adding blur to the light makes the light glow.
7. **Adjust the position of the gobo by clicking and dragging the center image point to the desired location.**
8. **You can also use the Gobo > DVE controls to transform the gobo.**
9. **To apply a custom light color to the image, click on the Light > Color box and select a color.**

   Note: The Color picker allows you to treat the light with a custom color, but is only active when the Custom option has been selected in the Light > Gels pop-up menu.
10. **To apply a colored gel to the light, select one from the Light > Gels pop-up menu.**
11. **Combine the gobo with a selection by changing the Gobo > Blend Mode from Gobo Only to Multiply.**

    I like the Multiply blend mode because it only adds the gobo in the areas of the selection.

12 **Change your View selector to Selection to see the selection values.**

The default selection settings are preset to a highlight selection to create the light effect. If you are not seeing sufficient light, your selection should be adjusted. The areas that are white in the selection are the areas where light will be added into the image. The location of the light within the scene can be adjusted by changing the Selection > Position and Range parameters.

13 **Change the Selection > Position parameter if you want to select different values to be used for the light.**

14 **Increase the Selection > Range value to add more light into the scene. Decrease for less light.**

15 **Increase the Selection > Blur parameter to soften the transition areas of the light.**

16 **Change the View selector from Selection to Output.**

17 **The softness of the light can also be adjusted using the Light > Blur setting.**

18 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

19 **To use your own image or sequence as the light source in Adobe After Effects:**

- **Select Input from the Gobo > Type menu.**
- **Select a layer from the Gobo > Input menu.**

or

20 **To use your own image or sequence as the light source in Adobe Premiere Pro:**

- **Select Input from the Gobo > Type menu.**
- **Select a track from the Gobo > Input menu located below the Gobo > Type menu.**

or

21 **To use your own image or sequence as the light source in Apple Final Cut Pro 6&7:**

- **Select Input from the Gobo > Type menu.**
- **Drag and drop a clip onto the clip icon to the right of the Gobo > Input parameter.**

Note: Using an image as a light source in Apple Final Cut Pro X is not supported because of limitations with it's plug-in format.

or

22 To use your own image or sequence as the light source in Avid Editing Systems:

- **Select Input from the top most pop-up in the Gobo group.**
- **Place the light source clip on a track below the clip you applied Light/Gobo to.**

Note: If the camera is moving and you want to add a gobo, the gobo won't automatically follow the camera. You will either need to manually move the gobo to follow the camera or better, use Motion Tracking software to Match Move the gobo to the camera move. Track the motion of your source image, set your View to Gobo, apply the tracker motion to your gobo and render it. To use the newly tracked and rendered gobo as a light source, follow the previous instructions listed for using your own image or sequence as the light source.

See the **Light / Gobo** filters for more information.

Low Contrast

Low Contrast spreads highlights into darker areas, lowers contrast and keeps bright areas bright.

1. **Apply Low Contrast from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Contrast > Light Brightness and Contrast > Light Spread to control the brightness and distance of the light being spread into the shadow areas.**

   In some of the filters, a selection is generated to create the desired effect--in this case, low contrast.
5. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection will be the image areas used to spread light into the shadow areas. The location of the low contrast within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
6. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
7. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
8. **Change your View to Spread to see the special selection used to create the low contrast effect.**

   The Spread selection will change as the Contrast > Light Spread slider is adjusted.
9. **Move the Contrast > Light Spread slider to see how it affects the Spread selection. Leave it at a value of 200 when you are done.**
10. **Change your View to Output to see the filtered image.**
11. **Adjust the Contrast > Shadow Brightness if your shadows are still too dark.**

12 Click the Done button to return to the host application.

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Low Contrast** filter for more information.

Match

Matches the Brightness, Color, Detail, Grain and Tone of one image and applies it to another.

Note: Match is not supported in Final Cut Pro X because of limitations in it's plug-in format.

1. **Apply the Match filter from the Image category to a target clip.**
2. **Select the source image to be matched using the Source selector.**
   - **Adobe After Effects: Select the layer from the Source selector.**
   - **Adobe Premiere Pro CS6 or later: Select the track from the Source selector located above the Match button.**
   - **Apple Final Cut Pro 6&7: Drag and drop the source clip onto the filmstrip icon next to the Source parameter.**
   - **Avid Editing Systems: Place the source clip on a track below the clip you applied the Match filter to.**
3. **Change the View from Output to Source.**
4. **Find the frame in the sequence that you would like to copy.**
5. **Make sure that your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio. Otherwise, the grain in the viewer won't accurately match the rendered result.**
6. **Click the Match box.**

   The Color, Detail, Grain and Tone of the source image are analyzed and applied to your target image.
7. **Switch the View from Source to Output.**
8. **Adjust the Brightness, Color, Detail, Grain and Tone parameters to your liking.**

   Note: The Brightness and Detail parameters behave differently depending on the source image. For instance, the Brightness slider can either brighten or darken while the Detail slider can either sharpen or soften. They are dual use controls.

   See the **Match** filter for more information.

Mono Tint

Mono Tint converts color images to black and white while applying a color tint.

1. **Apply Mono Tint from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **In the Black and White > Filter pop-up menu, select a filter to convert your image to Black and White.**
5. **Adjust the Tint > Color, Opacity and Preserve Highlights sliders to your liking.**
6. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Mono Tint** filter for more information.

ND-Grad

The ND or Neutral Density Grad darkens only a portion of the image using a graduated transition between the darkened portion and the original image. It selectively adjusts brightness without affecting color balance. The most likely use for the ND-Grad would be to balance the difference between the sky and the ground.

1. **Apply ND-Grad from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Exposure slider to vary the amount of neutral density being applied to the image.**
5. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
6. **If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**
7. **If you want less darkening of the image in the area of the Grad, adjust F-Stop > Exposure.**
8. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **ND-Grad** filter for more information.

Night Vision

Night Vision creates the effect of a Night Vision lens by tinting the image green, blooming highlights and adding grain.

1. **Apply Night Vision from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Choose the type of black and white filter to be applied to your color image from the Black and White pop-up menu.**

   The type of Black and White filter that you choose can dramatically change the look of your image.
5. **Adjust the Glow > Brightness and Blur as well as the Grain > Size and Amount settings to your liking.**

   Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.
6. **If you want, you can use the Color Correct controls to modify the color of the image.**

   In some of the filters, a selection is generated to create the desired effect--in this case, glow.
7. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where glow will be introduced. The location of the glow within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
8. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
9. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
10. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
11. **Change your View to Output to see the filtered image.**

12 Click the Done button to return to the host application.

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Night Vision** filter for more information.

Nude/FX®

A series of different skin tone enhancing filters that offer ultimate flexibility and control for skintones. Perfect for headshots and close-ups.

1. **Apply Nude/FX® from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Color > Opacity, Preserve Highlights and Exposure Compensation sliders to your liking.**

   The selected color can be applied through a gradient creating a graduated transition between the colored portion and the original image.
5. **Click on the Grad > Enable checkbox to activate the Grad.**
6. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Nude/FX®** filter for more information.

Old Photo

Images are treated to look like a variety of historical photographic processes including Cyanotype, Kallitype, Light Cyan, Palladium, Platinum, Sepia, Silver, Silver Gelatin and Van Dyck.

1. **Apply Old Photo from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **From the Filter > Filter pop-up menu, select the type of black and white filter to be applied to your color image.**

   The look of the image will significantly change based on the type of black and white filter used.
5. **Adjust the Tint > Color and Opacity sliders to your liking.**
6. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Old Photo** filter for more information.

Overexpose

Overexpose simulates the overexposure that occurs when a film camera is stopped.

1. **Apply Overexpose from the Film Lab category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust both the Amount and Blur controls to achieve the desired effect.**
5. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Overexpose** filter for more information.

Ozone

The Ozone filter allows you to manipulate the color of an image with incredible flexibility and accuracy. The spectrum of image values is divided into 11 discrete zones using proprietary image slicing algorithms. When using Luminance as the method for slicing up the image, the Position and Range sliders are preset so that each zone is twice as bright as the previous zone, proceeding from black towards white. The color values of each zone can then be independently adjusted until you've painted a new picture. Your adjustments occur on a zone by zone basis, but you view the result of all color corrections simultaneously.

1. **Apply Ozone from the Image category.**
2. **Use the View menu to look at Zones 0-10.**

   The selected zone is represented as a black and white image. The values shown as white in the selected zone are the portions of the image that will be modified when using the color adjustments. As the values drop-off to black, so does the strength of whatever adjustments you'll make. Although the zone's Position and Range parameters are preset according to the Digital Zone system, they can be changed if you want.

3. **If you'd like, change the Position and Range parameters for the selected zone.**

   The Position value pinpoints the color values to be used in the selected zone. For instance, if the zones are created using Luminance, a high Position value shows the brightest image values as white values in the zone. A low Position value shows the darkest image values as white values in the zone. The Range value increases or decreases the range of values in the selected zone.

4. **Make sure that the View is set to Output.**

   The Viewer now shows the full color image.

5. **To modify your image, adjust any combination of the Hue, Saturation, Brightness, Contrast, Gamma, Red, Green, Blue and Temperature sliders for each zone.**

   Your adjustments occur on a zone by zone basis, but you view the result of all color corrections simultaneously.

See the **Ozone** filter for more information.

Pencil

Pencil converts your image to a pencil sketch.

1. **Apply Pencil from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Vary your result by adjusting both the Amount and Color controls.**
5. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Pencil** filter for more information.

Photographic

The most complete line of Kodak® filters for photographic uses is available in the form of gelatin films and are known as Wratten® Gelatin Filters. Our Photographic filter is a digital equivalent of the Wratten set and were created using the spectral transmission curves for each optical filter. The Color Conversion, Light Balancing and Color Compensating preset groups are subsets of the Photographic filters.

1. **Apply Photographic from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the filters are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**
5. **If you want less coloring of the image, turn down the Filters > Opacity.**
6. **Image highlights can be retained by adjusting the Filters > Preserve Highlights control to a value of 100.**

   The selected filter can be applied through a gradient creating a graduated transition between the colored portion and the original image.
7. **Click on the Grad > Enable checkbox to activate the Grad.**
8. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
9. **If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**

10 Click the Done button to return to the host application.

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Photographic** filter for more information.

Polarizer

The Polarizer creates a darkened, deep blue sky. Through the use of a selection and a gradient, the color of the sky can be adjusted. Warm Polarizer adds a warming filter.

1. **Apply Polarizer or Warm Polarizer from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the filters are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**
5. **Change your View to Selection to see the selection values.**

   In some of the filters, a selection is generated to create the desired effect--in this case, polarization.
6. **Change the Selection > Hue parameter if you want to select different blue values to be used for the sky selection.**

   A selection is generated based on the blue values in the sky. Skies vary in their color of blue, so you can adjust the selection to accommodate your sky. The blue that is used to create the selection can be modified by using Selection > Hue to select the exact blue value and Selection > Range to select the amount of blue values to be used for the selection.
7. **Increase the Selection > Range control to add more values to the sky selection. Decrease for less values.**
8. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**

   Remember, the areas that are white in the selection are the areas that will be polarized.
9. **Change your View to Output to see the filtered image.**

10 **Adjust the Sky color settings to make the sky look polarized--usually Brightness and Saturation.**

11 **If the polarization is affecting areas other than they sky, enable the Grad and adjust it to limit the areas of polarization.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

12 **If you applied Warm Polarizer, adjust the Warming > Color and Opacity sliders to your liking.**

13 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Polarizer** filter for more information.

Pro-Mist®

This popular motion picture effect creates a special atmosphere by softening excess sharpness and contrast. It generates a pearlescent halo around highlights. Black Pro-Mist® offers all the benefits of the Pro-Mist® filter in a more subtle form. Highlight flares are controlled and contrast is lowered for a more delicate effect. The Warm Pro-Mist's® add a warming filter.

1. **Apply Pro-Mist® from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the filters are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**
5. **Adjust the Mist > Brightness, Blur and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, diffusion.
6. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where diffusion will be introduced. The location of the diffusion within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
7. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
8. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
9. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
10. **Change your View to Output to see the filtered image.**
11. **If you applied one of the Warm Pro-Mist® presets, adjust the Temperature > Color and Opacity sliders to your liking**

12 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Pro-Mist** filters for more information.

Rack Focus

Rack Focus replicates a true camera defocus by introducing lens Bokeh effects. Bokeh is the Japanese term that describes the quality of out-of-focus points of light. In defocused areas, each point of light becomes a shape--either a circle or a polygon. The shape grows in size as the amount of defocusing is increased.

1. **Apply Rack Focus from the Lens category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Blur to your liking.**
5. **Set the Aperture > Brightness and Color settings.**
6. **Change the Aperture > Facets to control the polygon's shape and use Angle to rotate the Bokeh.**
7. **Set the Aperture > Curvature to 100 if you prefer the Bokeh to be circular in shape.**

   In some of the filters, a selection is generated to create the desired effect--in this case, Bokeh effects.
8. **Set your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where Bokeh will be introduced. The location of the Bokeh within the scene can be adjusted by modifying the Threshold parameter.
9. **Change the Threshold parameter if you want to select different values to be used for the selection.**
10. **Set your View to Aperture to see the generated Bokeh.**
11. **Change your View back to Output to see the filtered image.**
12. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Rack Focus** filter for more information.

Radial Exposure

Lightens and/or darkens the center or edges of an image to correct lens vignetting.

1. **Apply Radial Exposure from the Lens category.**
2. **Adjust the Exposure > Edges or Center parameters.**

   The radial gradient used to lighten or darken the edges or center of the image can be adjusted to suit your image.

3. **Adjust the Spot > Position, Radius, Falloff Radius and Falloff.**
4. **If you are curious, you can see what the Spot looks like by changing your View to Spot. Change your View to Output when done.**

   See the **Radial Exposure** filter for more information.

Rainbow

Recreates arced rainbows of spectral colors, usually identified as red, orange, yellow, green, blue, indigo, and violet, that appear in the sky as a result of the refractive dispersion of sunlight in drops of rain or mist.

1. **Apply Rainbow from the Light category.**
2. **Choose Light > Blend > Add, Screen or Normal blend mode.**

   Add will burn out highlights while Screen will retain them. Normal uses a normal composite function to add the rainbow.
3. **In the Light menu, adjust the Brightness, and if you'd like, set the Displacement and Blur of the rainbow.**
4. **Set the base of the rainbow using Crop > Offset, Angle and Softness.**
5. **Use the Rainbow > Position control to move the rainbow.**
6. **Set the Rainbow > Radius, Aspect, Thickness and Softness as desired.**
7. **Combine the rainbow with a selection by changing the Rainbow > Blend Mode from Rainbow Only to Selection.**

   Selection only adds the rainbow in the areas of the selection. If you are not seeing enough of the rainbow, your selection should be adjusted.
8. **Change your View selector to Selection to see the selection values.**

   The default selection settings are preset to a highlight selection. The areas that are white in the selection are the areas where the rainbow will be added into the image. The location of the rainbow within the scene can be adjusted by changing the Selection > Position and Range parameters.
9. **Change the View selector from Selection to Output.**
10. **Change the Selection > Position parameter if you want to change where you see the rainbow.**
11. **Increase the Selection > Range value to add more of the rainbow to the scene. Decrease to see less of the rainbow.**
12. **Increase the Selection > Blur parameter to soften the selection.**

    See the **Rainbow** filter for more information.

Rays

Create stunning and realistic light ray effects quickly and easily.

1. **Apply Rays from the Light category.**
2. **Move the point control in the center of the screen to change the source point from which the rays will emanate.**

   Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter to move the Rays source location.
3. **Adjust the Rays > Length, Color > Brightness and Color as desired.**
4. **To limit the amount of rays, increase the Rays > Threshold parameter.**

   Threshold controls the amount of rays based on a brightness threshold. Fewer rays with more definition are generated at higher threshold values.
5. **Use the Shimmer > Amount and Phase to randomize the rays.**
6. **To create a shimmering effect with the rays, increase the Shimmer > Amount.**

   See the **Rays** filters for more information.

ReLight

Light can be added to a scene where none existed before. A complete set of light source controls allow you to adjust the light just as you would at the time of shooting.

1. **Apply the ReLight filter located in the Light category.**
2. **Using the Light Source > DVE controls, you can move the shape around.**
3. **In the Light menu, adjust the Brightness, Displacement, and Blur of the light.**

   Adding blur to the light makes the light glow.

4. **To apply a custom light color to the image, click on the Light > Color box and select a color.**

   Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the GamColor Presets pop-up menu.

5. **To choose one of the GamColor gels, select a gel from the Light > GamColor Presets list.**
6. **Combine the light source with a selection by changing the Light Source > Blend Mode from Shape Only to Multiply.**

   I like the Multiply blend mode because it only adds the light source in the areas of the selection.

7. **Change your View selector to Selection to see the selection values.**

   The default Selection settings are preset to a highlight selection to create the light effect. If you are not seeing sufficient light, your selection should be adjusted. The areas that are white in the selection are the areas where light will be added into the image. The location of the light within the scene can be adjusted by changing the Selection > Position and Range parameters.

8. **Change the Selection > Position parameter if you want to select different values to be used for the light.**
9. **Increase the Selection > Range value to add more light into the scene. Decrease for less light.**
10. **Change the View selector from Selection to Output.**
11. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**

    See the **ReLight** filter for more information.

Reflector

Gold and Silver Reflector allow you to add white or gold light into shadow areas.

1. **Apply Reflector from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the filters are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**
5. **Adjust the Brightness and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, light reflecting into the shadow areas.
6. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where light will be introduced. The location of the light within the scene can be adjusted by modifying the Position and Range parameters.
7. **Change the Position parameter if you want to select different values to be used for the selection.**
8. **Increase the Range controls to add more values to the selection. Decrease for less values.**
9. **Change your View to Output to see the filtered image.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Reflector** filters for more information.

Selective Color Correct

Colors can be selectively isolated through the use of a selection and adjusted using hue, saturation, brightness, gamma, contrast, red, green, and blue controls.

1. **Apply Selective Color Correct from the Image category.**
2. **Change your View to Selection to see the selection values.**

   In some of the filters, a selection is generated to create the desired effect--in this case, selective color correction.

3. **Adjust the selection controls so that the areas that you want to color correct are white in the selection.**

   Go to the **Selection** parameters to see how they work.

4. **Change your View to Output to see the image.**
5. **Adjust the color correct parameters to your liking.**

   See the **Selective Color Correct** filter for more information.

Selective Saturation

The saturation of the image can be adjusted independently in the shadows, midtones and highlights.

1. **Apply Selective Saturation from the Image category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Saturation in the Shadows, Midtones or Highlights.**

   In some of the filters, a selection is generated to create the desired effect--in this case, selective saturation. Shadow, midtone and highlight selections have been preset for you to adjust the saturation selectively in those areas.
5. **Change your View to Shadows, Midtones or Highlights to see the selection values.**

   The areas that are white in the selection are the areas that will be adjusted by the Saturation sliders. The areas defined as shadows, midtones or highlights can be adjusted by modifying the Position and Range parameters.
6. **Use the Shadows, Midtones or Highlights Position parameters if you want to select different values to be used for the selection.**
7. **Increase the Shadows, Midtones or Highlights Range controls to add more values to the selection. Decrease for less values.**
8. **Change your View to Output to see the image.**
9. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Selective Saturation** filter for more information.

Sepia / 812® Warming

Sepia creates a warm brown tone for that nostalgic feeling while the 812® Warming filter, a Tiffen exclusive, improves skintones and is ideal for portraits taken on a cloudy day or in outdoor shade on a sunny day.

1. **Apply Sepia or 812® Warming from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Color > Amount, Opacity, Preserve Highlights and Exposure Compensation sliders to your liking.**

   The Sepia or 812® Warming color can be applied through a gradient creating a graduated transition between the colored portion and the original image.
5. **Click on the Grad > Enable checkbox to activate the Grad.**
6. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Sepia and 812® Warming** filters for more information.

Smoque®

Mechanical smoke generators are often used to enhance realism where smoke is normally encountered. This can be difficult, costly and less desirable to work in a smoke-filled environment. The Smoque® filter creates the look of smoke without the cost and hassle of smoke generators.

1. **Apply Smoque® from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Smoke > Brightness, Blur and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, smoke.
5. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where smoke will be introduced. The location of the smoke within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
6. **Change the Selection > Position parameter if you want to select different luminance values to be used for the selection.**
7. **Increase the Selection > Range value to add more smoke into the scene. Decrease for less smoke.**
8. **Change your View to Output to see the filtered image.**
9. **Increase the Selection > Blur parameter to soften the transition areas of the selection.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Smoque®** filter for more information.

Soft Contrast

Soft Contrast diminishes highlights while retaining the darker look of the shadows.

1. **Apply Soft Contrast from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   In some of the filters, a selection is generated to create the desired effect--in this case, lowering highlight contrast.
4. **Change your View to Highlights to see the selection values.**

   The areas that are white in the selection are the areas that will be adjusted using the Highlights slider. The areas defined as highlights can be adjusted by modifying the Position and Range parameters.
5. **Use the Position parameter if you want to select different values to be used for the selection.**
6. **Increase the Range control to add more values to the selection. Decrease for less values.**
7. **Change your View to Output to see the image.**
8. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Soft Contrast** filter for more information.

Soft/FX® / Warm Soft/FX®

Softens and minimizes facial imperfections while retaining overall image clarity. Warm Soft/FX® Effects adds a warming filter.

1. **Apply Soft/FX® from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**

   At the top left of the Presets window, the filters are categorized into various groups located inside a pop-up menu.
4. **In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**
5. **Adjust the Blur and Opacity parameters to your liking.**
6. **If using a Warm Soft/FX® preset, adjust the Temperature > Color, Opacity, Preserve Highlights and Exposure Compensation sliders to your liking.**
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Soft/FX® / Warm Soft/FX®** filters for more information.

Soft Light

Provides soft, digitally diffused and virtually shadowless light.

1. **Apply Soft Light from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Select either the Blend > Add or Screen Blend Mode.**

   Add will burn out highlights while the Screen Mode will retain them.
5. **Adjust the Brightness to set the intensity of the light.**
6. **Use the Blur sliders to control the softness of the light.**
7. **To apply a custom light color to the image, click on the Color box and select a color.**

   Note: The Color picker allows you to treat the light with a custom color, but is only active when the Custom option has been selected in the GamColor Presets pop-up menu.
8. **To apply a colored gel to the light, select one from the Gamcolor Presets pop-up menu.**
9. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Soft Light** filter for more information.

Split Field

Split Field splits the image with a line that can be positioned, rotated and blurred. On one side of the line, the image is blurred and on the other, it is in focus.

1. **Apply Split Field from the Lens category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Blur controls.**
5. **Position, Rotate and Blur the split line using the Split controls.**
6. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Split Field** filter for more information.

Split Tone

Shadows, midtones and highlights can be individually tinted with the Split tone filter.

1. **Apply Split Tone from the HFX Grads/Tints category.**
2. **Turn up the Opacity slider in the Shadows, Midtones or Highlights.**
3. **Change the Tint colors by clicking on the Tint color boxes.**

   In some of the filters, a selection is generated to create the desired effect--in this case, split toning.

4. **Change your View to Shadows, Midtones or Highlights to see the selection values.**

   The areas that are white in the selection are the areas that will be tinted by the selected tint color. The areas defined as Shadows, Midtones or Highlights can be adjusted by modifying the Position and Range parameters.

5. **Adjust the Shadows, Midtones or Highlights > Position and Range controls to change what is considered to be Shadows, Midtones or Highlights.**
6. **Change your View to Output to see the image.**

   See the **Split Tone** filter for more information.

Star

Six point star patterns are generated on highlights in the image.

1. **Apply Star from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Star > Brightness, Size and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, a star filter.
5. **Change your View to Selection to see the selection values.**

   The selection has been preset to a highlight selection to generate the stars. Different luminance values can be selected with the Selection > Position parameter and the range of selection values can be adjusted using Selection > Range.
6. **Change the Selection > Position parameter if you want to select different luminance values to be used for the selection.**

   Stars will be generated wherever there are white values in the selection.
7. **Change your View to Stars to see the generated stars.**
8. **Increase the Selection > Range value to add more stars into the scene. Decrease for less stars.**
9. **Change your View to Output to see the filtered image.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Star** filter for more information.

Streaks

The Streaks filter creates horizontal or vertical streaks around highlights in the image.

1. **Apply Streaks from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust either the Vertical or Horizontal Streaks controls.**

   Note: If you adjust both the Vertical and Horizontal Streak controls at the same time, the Streak effect will be lost.
5. **Select either the Add or Screen Blend Mode. Add will burn out highlights while the Screen Mode will retain them.**
6. **Adjust the Streak > Brightness and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, streaks.
7. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where streaks will be introduced. The location of the streaks within the scene can be adjusted by modifying the Selection > Position and Selection > Range parameters.
8. **Change the Selection > Position parameter if you want to select different values to be used for the selection.**
9. **Increase the Selection > Range control to add more values to the selection. Decrease for less values.**
10. **Change your View to Output to see the filtered image.**
11. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Streaks** filter for more information.

Strip Grad

Strip Grad colors only a portion of the image in the form of a narrow strip using Color-Grad® filters.

1. **Apply Strip Grad from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
5. **If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**

   The white area of the Grad will be tinted.
6. **If you want less coloring of the image, turn down the Filters > Opacity.**
7. **Image highlights can be retained by adjusting the Filters > Preserve Highlights control to a value of 100.**
8. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Strip Grad** filter for more information.

Sunset/Twilight

Sunset/Twilight applies three photographic filters to the image which are blended together with a gradient.

1. **Apply Sunset/Twilight from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
5. **To apply a custom color to the image, select Custom from the Color 1, 2 or 3 > Presets pop-up menu and click on the Color 1, 2 or 3 > Color box and select a color.**

   Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the Presets pop-up menu as well as the Color 1, 2 or 3 > Presets pop-up menu.
6. **If you want less coloring of the image, turn down Color 1, Color 2 or Color 3 > Opacity.**
7. **Image highlights can be retained by adjusting the Preserve Highlights control to a value of 100.**
8. **Change your View to Grad to see the color gradient being applied to the image.**
9. **Change your View back to Output to see the filtered image.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Sunset/Twilight** filter for more information.

Texture

Applies textures to an image for a stylized look.

1. **Apply Texture from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Amount slider to control how much texture is applied to the image.**
5. **Increase the Complexity to generate a more detailed, repetitive texture.**
6. **Use Randomize to change the look of the texture.**
7. **Adjust the position of the texture by clicking and dragging the center image point to the desired location.**
8. **You can also use the DVE controls to transform the texture.**
9. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Texture** filter for more information.

Three Strip / Two Strip

Three Strip

Known and celebrated for it ultra-realistic, saturated levels of color, the Technicolor® Three Strip process was commonly used for musicals, costume pictures and animated films. It was created by photographing three black and white strips of film each passing through red, green and blue filters on the camera lens and then recombining them in the printing process. Our Three Strip filter was created under the direction of Academy Award Winning Visual Effects Supervisor Rob Legato.

Two Strip

The Technicolor® Two Strip process was the first stab at producing color motion pictures and consisted of simultaneously photographing two black and white images using red and green filters. This look creates an odd but pleasing hand-painted look where faces appear normal and green takes on a blue-green quality, while the sky and all things blue appear cyan. Our Two Strip filter was created under the direction of Academy Award Winning Visual Effects Supervisor Rob Legato.

1. **Apply Three Strip or Two Strip from the Film Lab category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Change your View to Red, Green or Blue to see the selection values.**

   In some of the filters, a selection is generated to create the desired effect--in this case, modifying the intensity of the red, green and blue values.

   Normally, the areas that are white in the selection are the areas that will be adjusted by a particular filter or control. The Red, Green and Blue Intensities, on the other hand, make adjustments where you see black in the selection.

5 **Adjust the Intensity of whatever color channel you are viewing and you will see that certain values become darker. These are the values that will be intensified in the color image.**

6 **Change your View to Output to see the color image.**

7 **Adjust the Red, Green and Blue Intensities until you have the desired levels of red, green and blue in the image.**

Note: When using the Two Strip filter, adjusting the Blue Intensity will darken image areas that were blue in the source image.

8 **You may need to use the Red, Green and Blue Smooth controls to smooth out any noise that may have appeared if the intensities were turned up to high values.**

The Smooth controls are set to a low value by default.

9 **Set the Opacity to a lower level if the strength of the effect looks too strong.**

Color Correct controls are also provided for additional control.

10 **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Three Strip / Two Strip** filters for more information.

Tint

Tints the entire image with a selected color.

1. **Apply Tint from the HFX Grads/Tints category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **To apply a different color to the image, click on the Tint > Color box and select a new color.**
5. **If you want less tinting of the image, turn down the Tint > Opacity.**

   You can also use a gradient in combination with the Tint.
6. **To use a gradient with the Tint, click on Grad > Enable.**
7. **Adjust the Grad > Direction, Corner Points and Size.**

   To adjust the Corner Points, just click and drag them to the desired location.

   Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.
8. **If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**
9. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Tint** filter for more information.

Ultra Contrast

Tiffen was recognized with a Technical Achievement Award from the Academy of Motion Picture Arts and Sciences for the Ultra Contrast optical filter which redistributes ambient light to capture details that would be lost in shadows. Contrast is lowered evenly throughout the image with no flare or halation.

1. **Apply Ultra Contrast from the HFX Diffusion category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Shadows > Shadows slider to brighten shadow areas.**
5. **Adjust the Highlights > Highlights slider to darken highlight areas.**

   In some of the filters, a selection is generated to create the desired effect--in this case, lowering contrast.
6. **Change your View to Shadows or Highlights to see the selection values.**

   The areas that are white in the selection are the areas that will be adjusted by either the Shadows or Highlights sliders. The areas defined as Shadows or Highlights can be adjusted by modifying the Position and Range parameters.
7. **Use the Shadows or Highlights > Position parameters if you want to select different values to be used for the selection.**
8. **Increase the Shadows or Highlights > Range controls to add more values to the selection. Decrease for less values.**
9. **Change your View to Output to see the image.**
10. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Ultra Contrast** filter for more information.

Vari-Star

Variable multi-point star patterns are generated on highlights in the image.

1. **Apply Vari-Star from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Star > Brightness, Spokes, Size and Color settings to your liking.**

   In some of the filters, a selection is generated to create the desired effect--in this case, star effects.
5. **Change your View to Selection to see the selection values.**

   The areas that are white in the selection are the areas where stars will be introduced. The location of the stars within the scene can be adjusted by modifying the Threshold parameter.
6. **Change the Threshold parameter if you want to select different values to be used for the selection.**
7. **Change your View to Stars to see the generated stars.**
8. **Change your View to Output to see the filtered image.**
9. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Vari-Star** filter for more information.

Vignette

A vignette, or soft fade, is a popular photographic effect where the photo gradually fades into the background, usually in a circular or rectangular shape. The vignette can be any color as well as thrown out of focus.

1. **Apply Vignette from the Lens category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Adjust the Shape > Roundness to make the vignette either circular or rectangular and use Shape > Softness to control the softness of the vignette's edge.**
5. **To give the vignette's edge a random shape, use the Distortion, Distortion Size and Randomize controls.**
6. **Set the Vignette > Color and Opacity.**

   The vignette can be either colored or defocused or a combination of the two.
7. **Turn down the Vignette > Opacity if you would like to see only a blurred vignette.**
8. **Turn up the Vignette > Horizontal and Vertical Blur to your liking.**
9. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Vignette** filter for more information.

Water Droplets

Simulates the circular, rainbow colored optical effects produced by tiny water droplets in clouds, mist and fog.

1. **Apply Water Droplets from the Light category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **Choose Light > Blend > Add or Screen blend mode.**

   Add will burn out highlights while Screen will retain them.
5. **In the Light menu, adjust the Brightness as well as the Displacement and Blur of the rainbow if you'd like.**
6. **Adjust the position of the rainbow by clicking and dragging the center image point to the desired location.**
7. **You can also use the Rainbow > Scale control to transform the rainbow.**
8. **Combine the rainbow with a selection by changing the Rainbow > Blend Mode from Rainbow Only to Selection.**

   Selection only adds the rainbow in the areas of the selection. If you are not seeing enough of the rainbow, your selection should be adjusted.
9. **Change your View selector to Selection to see the selection values.**

   The default selection settings are preset to a highlight selection. The areas that are white in the selection are the areas where the rainbow will be added into the image. The location of the rainbow within the scene can be adjusted by changing the Selection > Position and Range parameters.
10. **Change the View selector from Selection to Output.**
11. **Change the Selection > Position parameter if you want to change where you see the rainbow.**
12. **Increase the Selection > Range value to add more of the rainbow to the scene. Decrease to see less of the rainbow.**
13. **Increase the Selection > Blur parameter to soften the selection.**

14 Click the Done button to return to the host application.

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **Water Droplets** filter for more information.

Wide Angle Lens

Simulates the effect of a wide angle lens.

1. **Apply Wide Angle Lens from the Lens category.**
2. **Start by adjusting the Distortion control to add the desired wide angle look.**

   You may need to also adjust the X and Y Correction parameters which compensate for the deformation introduced with the Distortion parameter.

   See the **Wide Angle Lens** filter for more information.

X-Ray

Simulates the look of X-Ray images.

1. **Apply X-Ray from the Special Effects category.**
2. **Open the Dfx Interface:**
   - **After Effects/Avid/Final Cut Pro: Click the Dfx Interface button.**
   - **Premiere Pro: Click on the Setup icon located to the right of the filter name.**

   The Dfx user interface opens and consists of Presets, Parameters and Viewer windows.
3. **Try out some of the presets.**
4. **From the Black and White > Filter pop-up menu, select the type of black and white filter to be applied to your color image.**

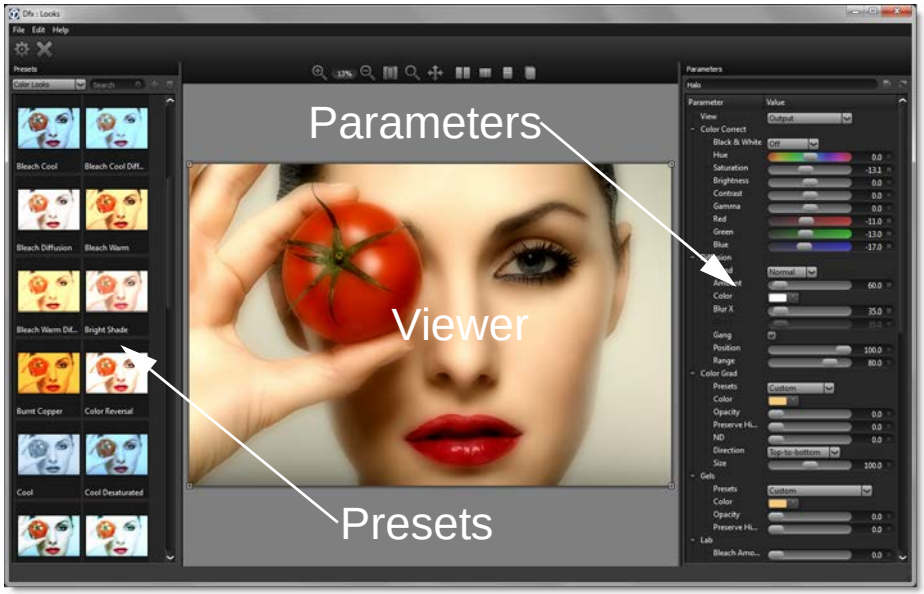
   Your choice of filter can dramatically change the black and white result.
5. **Use the Brightness, Contrast and Gamma controls to further adjust the image.**
6. **Adjust the Color if you would like to tint the image to something other than blue.**
7. **Click the Done button to return to the host application.**

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

See the **X-Ray** filter for more information.

DFX USER GUIDE

Dfx is comprised of 3 main components: Viewer, Presets and Parameters and can be opened by selecting the Dfx Interface button.



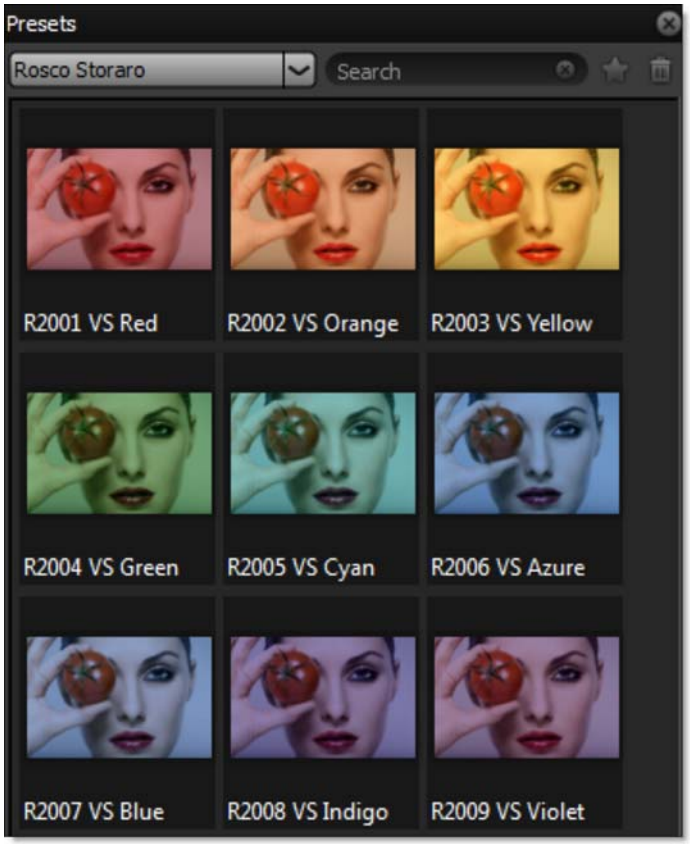
Viewer

The Viewer is where images are viewed, edited and manipulated.

Presets and Parameters

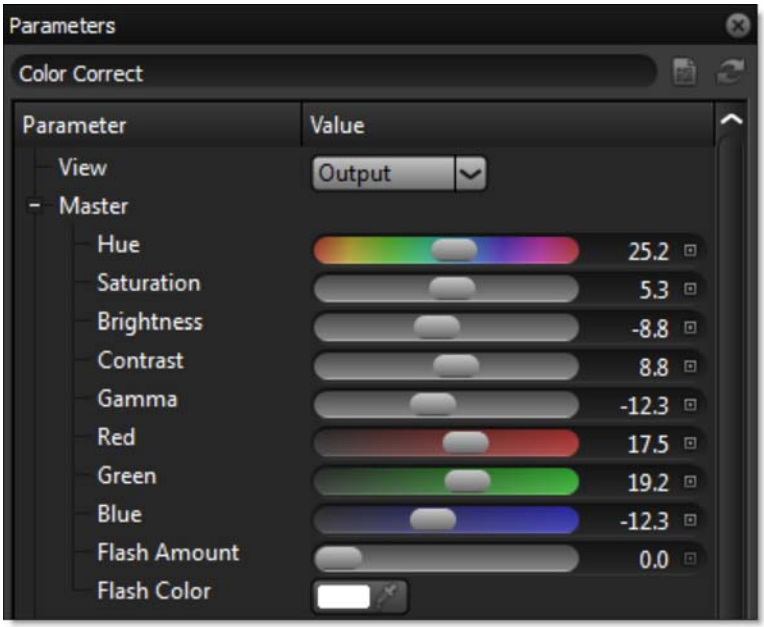
Presets

The Presets window allows you to select from existing filter presets.



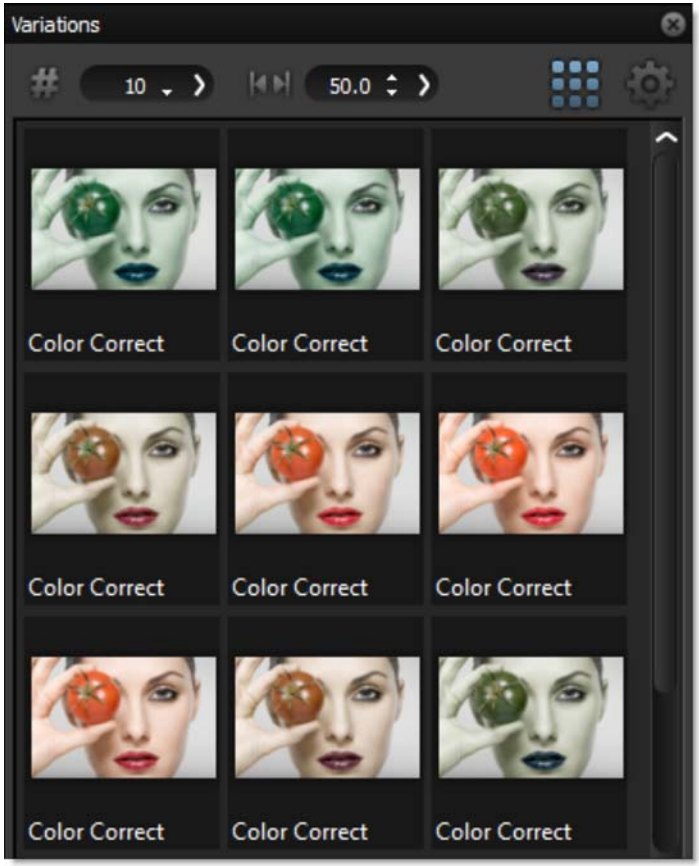
Parameters

The Parameters window displays the current filter's parameters. Adjusting the parameters will update and change the image in the Viewer.



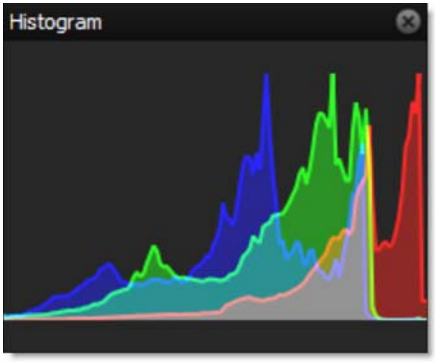
Variations

The Variations window allows you to create your own filter variations and becomes visible when a parameter name is selected in the Parameters window.



Histogram

A histogram is a specialized graph that plots the number of pixels at each color intensity level. It is very useful in seeing how an image's pixels are distributed.

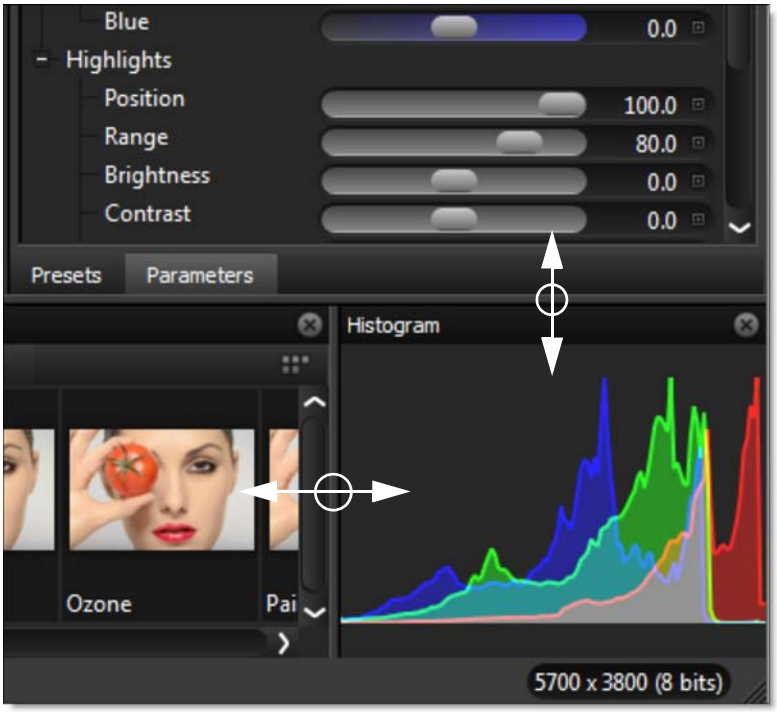


Toolbar

The Toolbar contains Done and Cancel buttons.

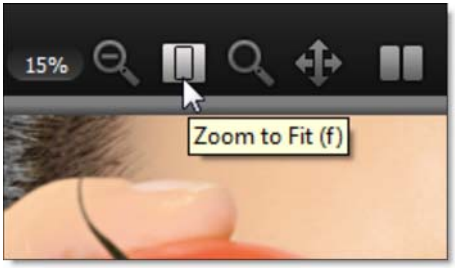
Sashes

By clicking and dragging the sashes, dividing lines between areas of the screen, you can customize the Dfx interface.



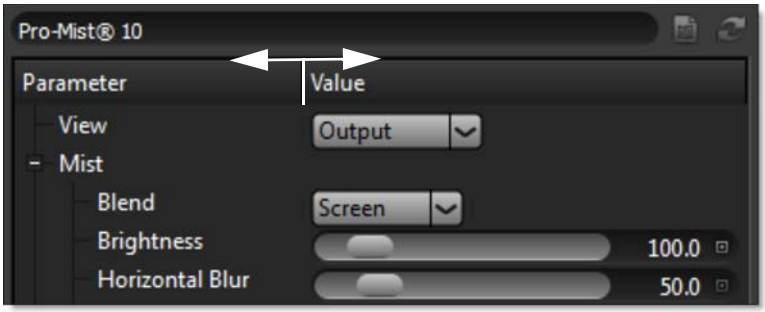
Tool Tips

Hovering the cursor over an icon will pop up a tool tip that displays its function.



Value Field Length

You can resize the Value field by clicking and dragging the dividing line between Parameter and Value at the top of the Parameters window. This is useful if the Parameter names are getting cut off.

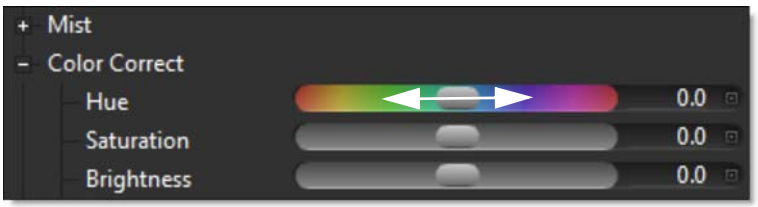


Parameter Groups

Parameter groups in the Parameters window can be expanded and collapsed using the plus and minus icons located to the left of the group.

Slider Precision

You can adjust any slider with finer precision by pressing **Ctrl(Win)/Cmd(Mac)** while dragging the slider.



Setups

A Setup takes a snapshot of the filter's parameters. Setups can be saved and loaded and are independent of the image they were originally applied to. If you are loading a Setup containing multiple filters that was saved from the standalone or photo plug-in versions, only the filter that you are currently working with is modified by the settings contained in the Setup.

Open Setup

Opens a previously saved Setup.

Save Setup

Takes a snapshot of the filter's parameters and saves it as a Setup file. This Setup file can later be loaded to the same or a different image.

Preferences

Preferences allow you to customize default settings.

Language

Normal

The language displayed in Dfx is set according to your operating system.

English

Forces the language to English.

French

Forces the language to French.

German

Forces the language to German.

Japanese

Forces the language to Japanese.

Spanish

Forces the language to Spanish.

Note: A restart is required after changing the Language preference for the selected language to be displayed.

Thumbnail Size

You can select whether the Dfx interface uses either a small or large thumbnail size. Medium thumbnails are the default.

Small

Small thumbnails are used in the Dfx interface.

Medium

Medium thumbnails are used in the Dfx interface.

Large

Large thumbnails are used in the Dfx interface.

Preview Size

Dfx works at a maximum resolution as defined by the Preview Size--the default being 1024 by 1024 pixels. Never fear, when your image is saved, Dfx always processes at the resolution of the original image.

1024

Dfx works at a maximum resolution of 1024 x 1024 pixels.

2048

Dfx works at a maximum resolution of 2048 x 2048 pixels.

Preview Scaling

Point

Uses a lower quality scaling method when displaying the image in the Viewer. Point is more accurate when applying filters such as grain and sharpen, but when zooming in, the image will display “chunky” artifacts.

Bicubic

Uses a smooth scaling method when displaying the image in the Viewer. Bicubic can mask the effect of grain and sharpen filters because of its inherent smoothing, but doesn’t suffer from the Point methods chunkiness when zooming in.

Edit

Undo/Redo

Undo or redo operations.

Undo/Redo History

Undo/Redo has a history, so you can jump to any item in the history by picking it from the menu.

Histogram

Opens or closes the Histogram window. See **Histogram** for more information.

Parameters

Opens or closes the Parameters window. See **Parameters** for more information.

Presets

Opens or closes the Presets window. See **Presets** for more information.

Variations

Opens or closes the Variations window. See **Variations** for more information.

Reset

Resets the window layout the next time Dfx is started. This is useful if you have tweaked your windows beyond recognition.

Zoom In

Zooms the image in.

Zoom Out

Zooms the image out.

Fit Image to Window

Fits the image to the window.

Layouts

There are 4 preset layouts that automatically arrange the interface windows into different configurations.

Default Layout

The interface is configured with the default Dfx layout where all windows are shown.

Edit Layout

The Edit Layout shows the Viewer, Presets and Parameters windows.

View Layout

The View Layout shows only the Viewer.

Dual Monitor Layout

The Dual Monitor Layout shows the Viewer on the left monitor and all other windows on the right monitor.

Layout Shortcuts

Shortcut	Action
F2	Selects the Default Layout
F3	Selects the Edit Layout
F4	Selects the View Layout
F5	Selects the Dual Monitor Layout

Help

User Guide

Opens the Dfx User Guide.

Help Shortcuts

Shortcut	Action
F1	Opens the Dfx User Guide

About

Shows the Dfx version.

VIEWER

The Viewer is where images are viewed, edited and manipulated.

Zoom and Pan

Zoom In

Zooms the image in.

Zoom Level

Displays the zoom level as a percentage.

Zoom Out

Zooms the image out.

Zoom to Fit

Fits the entire image inside the Viewer.

Zoom

Select the Zoom Region icon and drag select a square region in the Viewer to zoom in on that area.

Pan

Pans the image left, right, up and down.

See the **Viewer Keyboard Shortcuts** for more zooming and panning options.

Compare

Compares images using Side-by-Side, Vertical Split, Horizontal Split or A/B comparison modes. By default, the current filter and original image are selected for comparison. Choose one of the comparison modes using the icons above the Viewer.

Side-by-Side Comparison

Compares images side by side in the Viewer.

Vertical Split Comparison

Compares images using a vertical split. Move your cursor into the image area over the split line and when the cursor changes to a double-arrow, click and drag to move the split. Depending on the filter used, the split line may not be obvious, so triangular sashes on the outside of the image help you find it. If you drag the sash all the way around, it will swap directions.

Horizontal Split Comparison

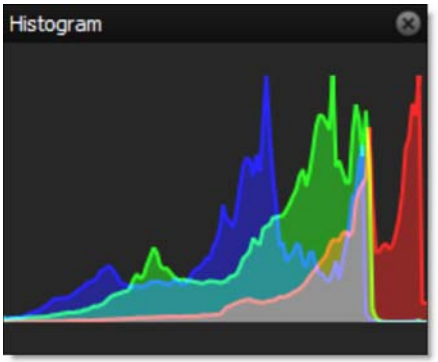
Compares images using a horizontal split. Move your cursor into the image area over the split line and when the cursor changes to a double-arrow, click and drag to move the split. Depending on the filter used, the split line may not be obvious, so triangular sashes on the outside of the image help you find it. If you drag the sash all the way around, it will swap directions.

A/B Comparison

Click the A/B Comparison icon to cycle though the images.

Histogram

A histogram is a specialized graph that plots the number of pixels at each color intensity level. It is very useful in seeing how an image's pixels are distributed.



Viewer Keyboard Shortcuts

Shortcut	Action
Middle-mouse drag	Pans the image
Space Bar-drag	Pans the image
I Key	Zooms the image in
O Key	Zooms the image out
Zoom icon-Drag a square	Zooms into the defined area
Scroll wheel over image	Zooms the image in and out
Middle-mouse double click	Fits the image to the window
F	Fits the image to the window
H	Opens the Histogram window

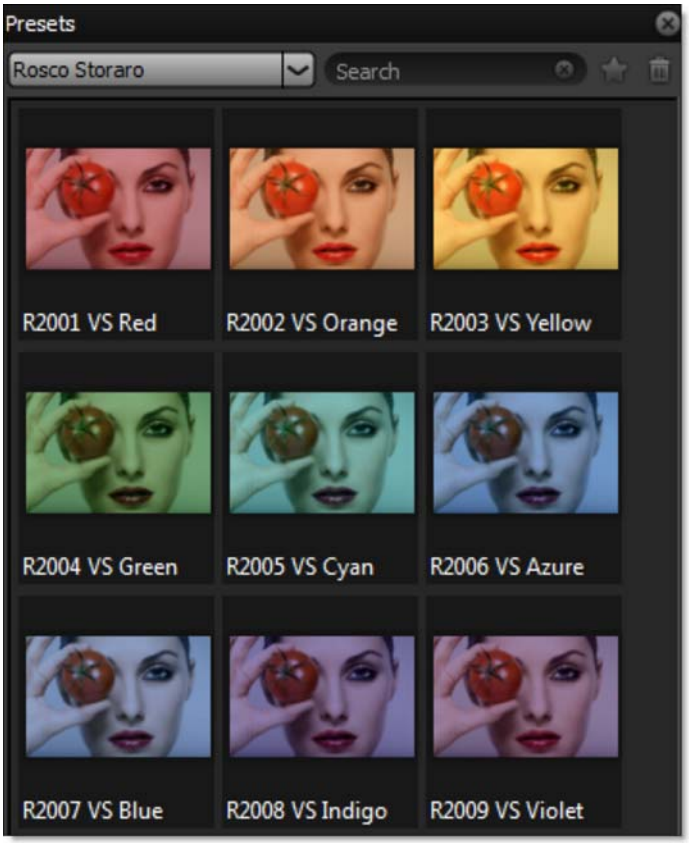
PRESETS AND PARAMETERS

The Dfx interface can be opened to select presets and adjust parameters by:

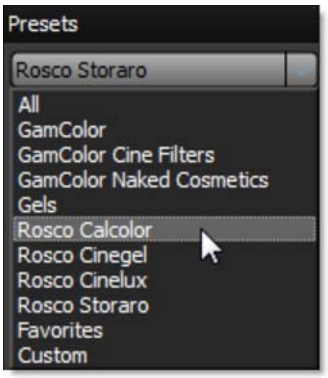
- **After Effects/Avid/Final Cut Pro: Clicking the Dfx Interface button.**
- **Premiere Pro: Clicking on the Setup icon located to the right of the filter name.**

Presets

The Presets window allows you to select from a set of pre-defined presets. Presets for most filters have been created so that you can easily click through the various choices.



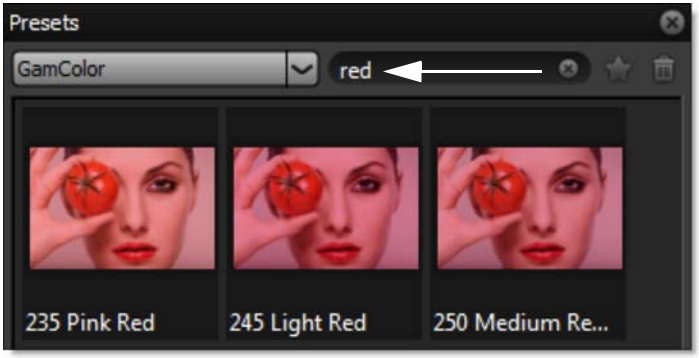
Most filters contain multiple preset groups which are selectable at the top of the window.



Clicking once on a preset modifies the image in the Viewer. As you click on different presets, the image in the Viewer will update. This allows you to quickly try out several different presets.

Preset Searching

Presets can be searched for by entering text in the search field located at the top of the Presets window. The pattern remains in effect when you switch filters, but it will clear automatically when you switch layers in the Effect window or apply a preset. Clear the search text to return the Presets window to it's normal state.



To search for a preset:

1. **Select a filter, for instance HFX Grads/Tints > Gels.**
2. **In the Presets window search field, type *red.***

   All presets with red in the name are shown.

3 **In the search field, type *sun|blue.***

Any preset with sun or blue in the name is shown.

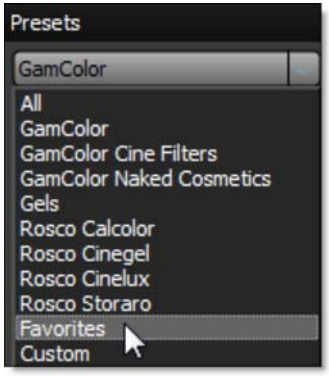
Favorites

Presets can be tagged as a Favorite allowing them to be sorted separately in the Presets window.

You can tag a preset as a Favorite by selecting the preset and pressing the Toggle Favorite icon located at the top right of the Presets window.

Presets tagged as a favorite display a yellow star at the top right of the preset.

To sort the Presets window by Favorites, select Favorites in the Presets pop-up menu.



Presets Right-Click Menu

Right-click over a preset to open Preset options.

Rename

Right-click on a preset, select Rename and type in the new name.

Delete

Right-click on a preset and select Delete.

Make Default

Right-click on a preset and select Make Default. The default preset is the one that is applied to the image when a filter is selected and the one shown in the Filter window. Changing the default will take effect the next time you start Dfx.

Restore

Default Presets

Restores the Default preset for each filter. The restore happens the next time you select the filter.

Deleted Presets

Restores deleted presets.

Renamed Presets

Restores renamed presets. The restore happens the next time you select the filter.

To Factory Default

Restores all presets to the default factory settings.

Parameters

The Parameters window displays the current filter’s parameters.

Adjusting the parameters will update and change the image in the Viewer.

Slider controls can be adjusted in the following ways:

- **Clicking and dragging the slider.**
- **You can adjust with finer precision by pressing Ctrl(Win)/Cmd(Mac) while dragging the slider.**
- **Clicking on the number to the right of the slider, typing in the desired value and hitting Enter.**
- **Hover the cursor over a slider and use the mouse scroll wheel to make the adjustment. Scrolling up raises the value while scrolling down lowers it.**

Pop-up menus can be adjusted in the following ways:

- **Click on the pop-up menu and make a selection.**
- **Hover the cursor over a pop-up menu and use the mouse scroll wheel to change the selection.**

Create Custom Preset

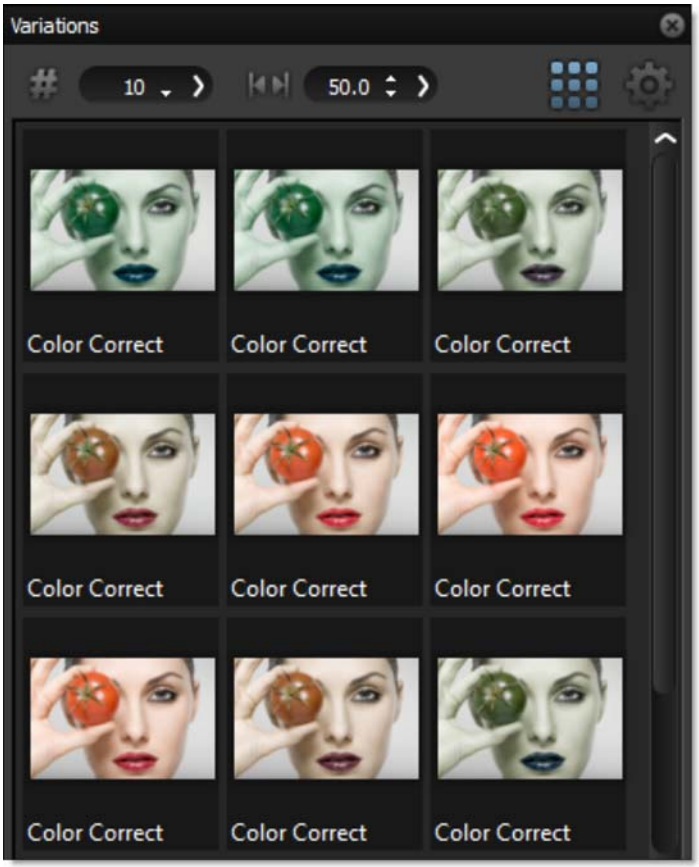
Creates a custom preset in the Presets window based on the current parameter settings. You must name the preset prior to creating it by using the name field to the left of the Add Preset icon.

Reset to Defaults

Resets all of the parameters for the currently selected preset to the built-in defaults.

VARIATIONS

Variations based on either one or two parameters can be created and are displayed as thumbnails in a window below the Presets window.



To display the Variations window and create variations, pick a filter and click on a parameter name in the Parameters window.

Ranges, Toggles, and Color parameters are available for creating variations. When you select a parameter, the Variations window appears and you'll see the variations being generated on that parameter. Click on a second parameter and it will generate variations between the two.

The first parameter you click on will be the dominant parameter - it'll go across the top of the Variations tab. So, you can get different results depending on the order you select the parameters. Click on a selected parameter to toggle it back off again.

Note: You can only have one or two parameters selected at a time. If you click on a third parameter, the last parameter you clicked on will deselect itself. If you deselect both of the parameters or switch effects, the Variations window will disappear because the variations are no longer being generated.

Variations are generated based on the current effect parameters. So, you can pick some parameters for your variation, then go back to the Presets window and pick a different Preset, and the variations will regenerate.

Variation Controls

Maximum Number of Variations

Sets the number of variations.

Parameter Value Spread

Determines the difference from one variation to another.

Auto Generate

Variations are constantly being generated every time you select a parameter or click on a variation thumbnail.

Generate

When Auto Generate is off, you must click the Generate icon to update the variations after new parameters are selected.

TOOLBAR

The Toolbar contains Done and Cancel icons.

Done

The values of the parameter adjustments in the Dfx user interface are transferred to your host application.

Cancel

Closes the Dfx user interface without making any changes.

COMMON FILTER CONTROLS

There are a number of common filter controls that appear in Dfx. For simplicity they are listed here.

View

Chooses what to view. The choices in this menu will change depending on the filter.

Dfx Interface

Opens the Dfx interface comprised of Viewer, Presets and Parameter windows. Here, you can select, view, adjust and save filter presets.

Note: In Premiere Pro, the Dfx interface is opened by clicking on the Setup icon located to the right of the filter name in the Effect Controls window.

Blur

Horizontal Blur

The image is blurred by a quality blur along the X-axis.

Vertical Blur

The image is blurred by a quality blur along the Y-axis.

Gang

The horizontal and vertical slider values can be ganged together. Slide the horizontal slider to affect both values.

Note: When Gang is turned on, the vertical slider doesn't physically move. However, the vertical value will follow the value of the horizontal slider when Gang is turned on.

Black and White

Selects the type of black and white filter to be applied to your color image.

Normal

Converts the color image to a monochrome image.

Red

Simulates a red filter in black and white photography.

Green

Simulates a green filter in black and white photography.

Blue

Simulates a blue filter in black and white photography.

Yellow

Simulates a yellow filter in black and white photography.

Orange

Simulates an orange filter in black and white photography.

DVE

The DVE allows you to transform your image using Position, Scale, Rotation, Corner Pin, Shear and Crop controls. Why the name DVE? DVE is an acronym for digital video effects and refers to a real-time image manipulation device which does pans, rotations, flips as well as various hardware-specific effects such as page turns or customized wipes. In the film and video post production industry, DVE is frequently used in reference to transforming the image in some way.

Crop

Top

Crops the image from the top down.

Bottom

Crops the image from the bottom up.

Left

Crops the image from left to right.

Right

Crops the image from right to left.

Corner Pin

The image can be corner pinned by adjusting the Corner Pin sliders as well as dragging the four points on the corners of the screen.

Note: You may need to zoom the image out a bit to see the corner points. In addition, to see and adjust the corner points in After Effects, make sure that the effect title in the Effect Controls window is highlighted. For Final Cut Pro, you must activate the cross hair icon next to the corner position parameters to see and adjust the corner points on the screen.

Upper-Left

Controls the X and Y position of the Upper Left Point.

Upper-Right

Controls the X and Y position of the Upper Right Point.

Lower-Right

Controls the X and Y position of the Lower Right Point.

Lower-Left

Controls the X and Y position of the Lower Left Point.

Position

Position can be adjusted by clicking and dragging an on-screen control in the center of the image.

Position X

The horizontal position.

Position Y

The vertical position.

Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter.

Scale

Scale X

The horizontal scale.

Scale Y

The vertical scale.

Gang Scale

The Scale X and Scale Y slider values can be ganged together.

Note: When Gang is turned on, the Scale Y slider doesn't physically move. However, the Scale Y value will follow the value of the Scale X slider when Gang is turned on.

Rotate

In addition to the standard position and scale controls, you can rotate. Positive values rotate clockwise and negative values rotate counter-clockwise.

Shear

Shear X

Skews left and right.

Shear Y

Skews up and down.

Anchor

Anchor X

Defines the point on the X axis around which position, rotation, scaling or shearing takes place.

Anchor Y

Defines the point on the Y axis around which position, rotation, scaling or shearing takes place.

Grad

Grad is the gradient transition area between the filtered image and the original. Its direction, corners and size can be adjusted.

Enable

Turns the Grad on and off.

ND Brightness

Darkens the colored portion of the Grad.

Direction

Controls the direction of the Grad.

Top-to-bottom

The direction of the Grad is from top to bottom.

Bottom-to-top

The direction of the Grad is from bottom to top.

Left-to-right

The direction of the Grad is from left to right.

Right-to-left

The direction of the Grad is from right to left.

Corner Pin

There are four points around the four corners of the image. By clicking and dragging any of the four points, the Grad can be adjusted.

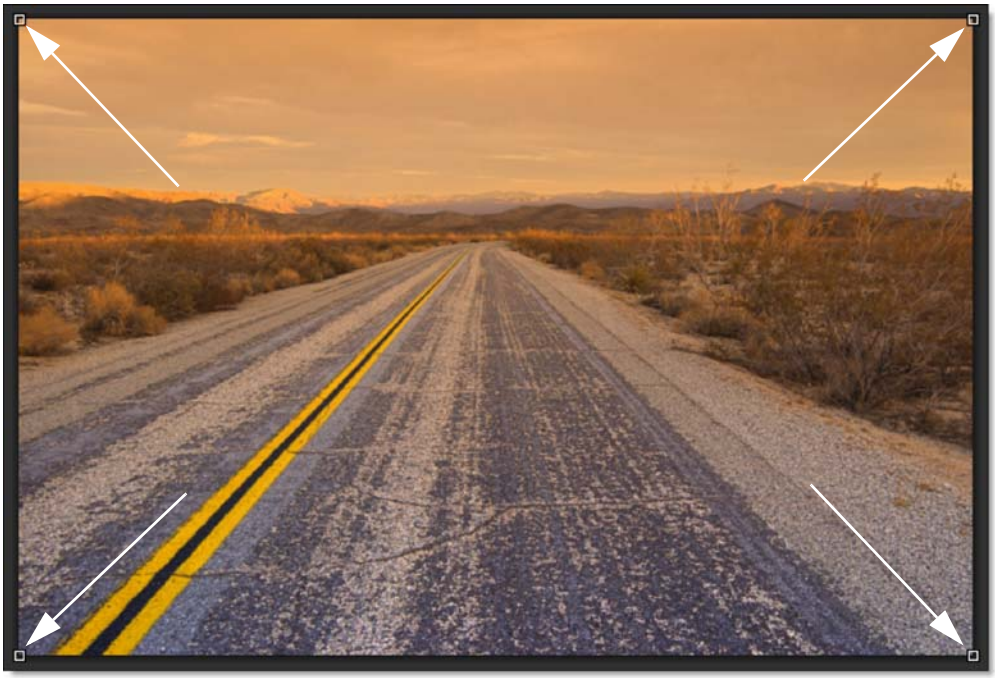


Photo © THINKSTOCK LLC--www.thinkstock.com

Note: You may need to zoom the image out a bit to see the corner points. In addition, to see the corner points in After Effects, make sure that the filter name in the Effect Controls window is highlighted. For Final Cut Pro, you must activate the cross hair icon next to the corner position parameters to see and adjust the corner points on the screen.

Upper Left

Controls the X and Y position of the Upper Left Point.

Upper Right

Controls the X and Y position of the Upper Right Point.

Lower Right

Controls the X and Y position of the Lower Right Point.

Lower Left

Controls the X and Y position of the Lower Left Point.

Size

The size of the Grad.

Selection

In some of the filters, a selection is generated to create the desired effect. The Selection controls consist of Position, Range and Blur parameters, and they work the same in all of the filters. The white areas of the selection are the areas that will be affected by the filter, while the black areas remain unaffected. The selection is extracted based on luminance, in most cases, and is created using the Position and Range parameters.

Position

Selects the values to be included in the selection. A higher Position value shows more white values from the original image as white values in the selection. A lower Position value shows more black values from the original image as white values in the selection.

Position 0, Range 25 | Original | Position 100, Range 25

Photo © THINKSTOCK LLC--www.thinkstock.com

Range

Controls the range of values to be used for the selection. Once you've selected the "Position", you can then add or subtract the "Range" of values to be included in the selection. A higher Range value includes more white values in the selection while a lower Range value includes less values in the selection.

Position 100, Range 25 Original Position 100, Range 75

Blur

The selection is blurred by a quality blur.

Spot

A spot in the form of a radial gradient is used to limit the effect of the filter.

Position

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the spot can be adjusted.

Position X

The horizontal position of the spot.

Position Y

The vertical position of the spot.

Note: To see the on-screen control in After Effects, you may need to highlight the filter name in the Effect Controls window, and in Final Cut Pro, you will have to click on the crosshair icon to the right of the Position parameter. On Avid Editing Systems, the Position parameters are named only X and Y.

Aspect

The aspect ratio of the spot.

Radius

The un-blurred radius of the spot.

Falloff Radius

The blurred edge radius.

Falloff

Moves the falloff towards the spot centerpoint.

Temperature

Color

Sets the color through the use of a standard color picker.

Opacity

Sets the opacity of the warming or cooling.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the warming or cooling.

Warming and Cooling

Color

Sets the color of the warming or cooling through the use of a standard color picker.

Opacity

Sets the opacity of the warming or cooling.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the warming or cooling.

16-bit Processing

Turns 16 bit processing on or off.

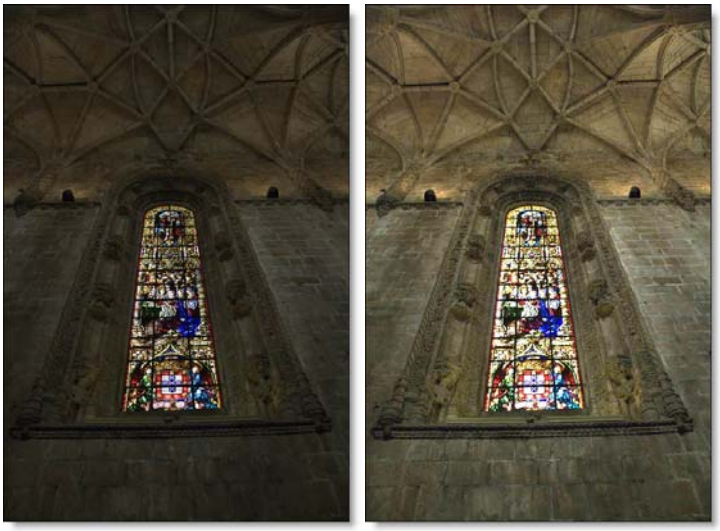
A Force 16-bit processing function allows you to process in 16 bit even if your source images are 8 bit. 16 bit processing take longer to render, but will remove banding artifacts associated with 8 bit processing.

AMBIENT LIGHT

Description

Ambient creates light without a defined source and contributes to the overall brightness of a scene without casting shadows.

Before After



Go to the **Ambient Light Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Brightness

Sets the intensity of the light.

GamColor Presets

Digital equivalents of the lighting gels created by Gamproducts can be applied to your light source. Select one of the GamColor presets from the pop-up list. For detailed information about Gamproducts gels, visit their website at **www.gamonline.com**.

Color

Sets the color of the light through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the GamColor Presets pop-up menu.

.Black and White

Description

Black and White converts color images to black and white simulating the look of Black and White photographic filters.

Before After

Go to the **Black and White Tutorial** to see how the filter works.

Category

Image.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Filter

The Filter pop-up selects the type of black and white filter to be applied to your color image. Go to the **Black and White** section of Common Filter Controls to see how the Black and White controls work.

Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

BLEACH BYPASS

Description

Bleach Bypass is a film laboratory technique where, by skipping the bleach stage in the color processing sequence, silver is retained in the image along with the color dyes. The result is effectively a black and white image superimposed on a color image. Bleach Bypass images have increased contrast, reduced saturation, often giving a pastel effect.

Before

After

Go to the **Bleach Bypass Tutorial** to see how the filter works.

Category

Film Lab.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Amount

Sets the intensity of the bleach effect.

Saturation

Adjusts the saturation of the image. Positive values saturate, negative values desaturate.

Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

Temperature

Sets the color temperature of the image. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

BLUR

Description

It's fast, high quality and blurs outside the frame which removes the dark inward bleeding edges of most blurs. Horizontal, vertical or both, Blur uses either Gaussian or Box quality settings.

Before After

Go to the **Blur Tutorial** to see how the filter works.

Category

Lens.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Quality

Selects the quality of the blur.

Box

A fast, lower quality box blur.

Gaussian

A slower, higher quality gaussian blur.

Blur

Sets how much the image is blurred.

CENTER SPOT / WARM CENTER SPOT

Description

Center Spot

Diffuses and blurs distracting backgrounds while keeping a center spot in focus. The center spot can be moved, sized and the amount of blur can be controlled.

Before

After

Warm Center Spot

Combines the benefits of Center Spot with a warming filter making it ideal for portraits and skintones.

Before

After

Go to the **Center Spot / Warm Center Spot Tutorial** to see how the filters work.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Blur

Sets how much the image is blurred.

Spot

A spot in the form of a radial gradient is used to control where blur is added to the image. Go to the **Spot** section of Common Filter Controls to see how the Spot controls work.

Temperature

Applies a warming filter to the image. Go to the **Temperature** section of Common Filter Controls to see how the Temperature controls work.

CHROMATIC ABERRATION

Description

Chromatic aberration is caused by a lens having a different refractive index for different wavelengths of light and is seen as fringes of color around the edges of the image. This fringing is removed by un-distorting the individual color channels.

Before

After

Go to the **Chromatic Aberration Tutorial** to see how the filter works.

There are some new types of color fringes that are not chromatic aberration. These effects might be visible as purple or blue fringes and are visible around overexposed areas in most cases. If the following conditions apply, your image most likely has true chromatic aberration as opposed to color fringing caused by sensor overloading:

- **Corners should show most color fringes whereas the center should show none.**
- **Color fringes should be not only at the edges of overexposed areas but at lower contrast edges, too.**
- **Color fringes should be of complementary color (red-cyan, green/magenta, and blue-yellow) on opposite sides of a dark or bright area.**
- **Color fringes should be in all corners with the same direction and pointing out from the center.**

Category

Lens.

Controls

Red/Cyan, Green/Magenta, Blue/Yellow

Use the appropriate color group to remove the chromatic aberration. For instance, if you see red/cyan fringing, use the Red/Cyan group. Start by adjusting the Distortion parameter.

Distortion

Pulls the corners of the image in or out. Negative values pull the corners of the image inward while positive values pull the corners of the image outward.

Anamorphic Squeeze

Anamorphic Squeeze corrects for the squeeze found in anamorphic motion picture lenses.

Curvature X and Y

Curvature X and Y correct for non-radial, asymmetric distortions found in anamorphic motion picture lenses.

Note: Anamorphic Squeeze and Curvature X and Y only work once the Distortion parameter has been adjusted.

Center X and Y

Determines the center point for the distortion.

CLOSE-UP LENS

Description

Simulates close-up lenses that allow you to zoom in extra close using high quality digital filtering.

Before

After

Go to the **Close-Up Lens Tutorial** to see how the filter works.

Category

Lens.

Controls

Scale X

The horizontal scale of the image.

Scale Y

The vertical scale of the image.

Gang Scale

The Scale X and Scale Y slider values can be ganged together.

Note: When Gang is turned on, the Scale Y slider doesn't physically move. However, the Scale Y value will follow the value of the Scale X slider when Gang is turned on.

Position

The position of the image can be adjusted by clicking and dragging an on-screen control in the center of the image.

Position X

The horizontal position of the image.

Position Y

The vertical position of the image.

Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter.

Rotate

Rotates the image. Positive values rotate clockwise and negative values rotate counter-clockwise.

COLOR CORRECTORS

Description

Dfx includes a number of different color correctors that are handy for adjusting an image's color. They include: Color Correct, F-Stop, Printer Points, Telecine and Temperature.

Before

After

Color Correct

Color Correct manipulates red, green and blue values of the overall image and separately in user definable shadow, midtone and highlight areas. Hue, saturation, brightness, contrast and gamma controls allow for further control.

F-Stop

F-Stop manipulates red, green and blue values of the overall image and separately in user definable shadow, midtone and highlight areas using F-Stops as the unit of measure. In camera terminology, F-Stops measure the size of the lens opening, otherwise known as aperture. Each F-Stop is twice as bright as the next.

Printer Points

Printer Points manipulate the red, green and blue values of the overall image and separately in user definable shadow, midtone and highlight areas using motion picture laboratory printer points as the unit of measure. When creating

color prints for motion pictures, a contact printer performs scene-to-scene color corrections. The most popular printing method is additive printing that uses three separate colored sources - red, green, and blue which are combined to form the light source that exposes the film. The red, green, and blue light valves in the printer are adjusted in values of 1, 2, 3... up to 60 for each primary color and are called printer points or printer lights.

Telecine

Telecine emulates the method of color correction done in a telecine film to tape transfer suite. Hue, saturation, brightness, contrast, gamma and pedestal values of the overall image can be adjusted as well as separately in user definable shadow, midtone and highlight areas.

Temperature

Temperature manipulates the temperature, cyan/magenta and brightness values of the overall image and separately in user definable shadow, midtone and highlight areas.

Go to the **Color Correctors Tutorial** to see how the filters work.

Category

Image.

Master, Shadows, Midtones, Highlights

All of the color correctors can adjust an image by using it's master, shadows, midtones and highlight groups. The Telecine filter uses the following terminology: Lift (shadows), Gamma (midtones) and Gain (highlights). The master settings affect the entire image while adjusting parameters within the shadows, midtones and highlights will only affect those specific areas.

If you are unsure about what values are included in the shadows, midtones and highlights, you can use the View pop-up menu. It will allow you to view the shadows, midtones and highlights as a black and white selection. The white areas are the areas that will be adjusted by that particular group. For instance, if you see white areas while viewing the midtones, then midtone color

adjustments will affect only those white areas. If you want to change the default areas defined by the shadows, midtones and highlights, you would use the Position and Range sliders.

Original Shadows Midtones Highlights

Position

The Position slider pinpoints the values to be considered as shadows, midtones, or highlights. A low Position value uses the darkest image values, while a high Position value uses the brightest.

Range

Increases or decreases the range of values considered as shadows, midtones or highlights. A low Range value indicates a narrow range of values, while a high Range value indicates a large range of values.

Go to the **Selection** section of Common Filter Controls to see how the Position and Range controls work.

Color Correct

Hue

Rotates the hue of the image.

Saturation

Adjusts the saturation of the image. Positive values saturate, negative values desaturate.

Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

Red

Adds or subtracts red from the image.

Green

Adds or subtracts green from the image.

Blue

Adds or subtracts blue from the image.

Flashing

The Flash parameters mix a color into the image through the use of a standard color picker. The default color is white. What in the world is this for? It is a great way to add atmosphere to an element. Flash comes from the film term “flashing”, which describes the optical process of lowering the contrast of an image by flashing it with light.

Flash Amount

Sets the opacity of the Flash Color.

Flash Color

The Flash Color can be set through the use of a standard color picker.

F-Stop

Red Exposure

Adds or subtracts red from the image.

Green Exposure

Adds or subtracts green from the image.

Blue Exposure

Adds or subtracts blue from the image.

Gang

The Red, Blue and Green Exposure slider values can be ganged together. Drag the Red Exposure slider to affect all three values.

Note: When Gang is turned on, the Green and Blue sliders don't physically move. However, they will follow the value of the Red slider when Gang is turned on.

Printer Points

The Red, Green and Blue Exposure are set to a value of 25 which represent no adjustment. Printer “lights” or points set to 25, 25, 25 are considered to be the normal or standard printer setup at most motion picture labs.

Red Exposure

Adds or subtracts red from the image. As in motion picture printing, higher values subtract and lower values add.

Green Exposure

Adds or subtracts green from the image. As in motion picture printing, higher values subtract and lower values add.

Blue Exposure

Adds or subtracts blue from the image. As in motion picture printing, higher values subtract and lower values add.

Gang

The Red, Blue and Green Exposure slider values can be ganged together. Drag the Red Exposure slider to affect all three values.

Note: When Gang is turned on, the Green and Blue sliders don’t physically move. However, they will follow the value of the Red slider when Gang is turned on.

Telecine

Hue

Rotates the hue of the image.

Saturation

Adjusts the saturation of the image. Positive values saturate, negative values desaturate.

Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

Pedestal

Adjusts the black level of the image.

Temperature

Temperature

Sets the color of the image to be either warmer or cooler. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

Cyan/Magenta

Adds either Cyan or Magenta to the image. Dragging the slider to the right makes the image more magenta and dragging the slider to the left makes the image more cyan.

Brightness

Adjusts the brightness of the image.

COLOR-GRAD®

Description

Color-Grad® can transform an average sunrise or sunset into something spectacular or convert a dull, washed-out sky to a breathtaking blue. No other filter has done as much to improve landscape photography as the graduated filter. Add color selectively while leaving the rest of the scene unaffected by using a graduated transition for a smooth color blend between the colored portion and the original image. Presets for your favorite Color-Grad® filters are provided as well as the ability to create custom colors.

Before

After

Go to the **Color-Grad® Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Filters

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Color

The Color parameter sets the color of the grad through the use of a standard color picker.

Opacity

Sets the opacity of the color filter.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

Grad

Grad is the transition area that goes from the tinted image to the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

COLOR INFRARED

Description

Color Infrared simulates infrared filters used in conjunction with infrared sensitive film or sensors to produce very interesting false-color images with a dreamlike or sometimes lurid appearance.

Before

After

Go to the **Color Infrared Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Magenta

Adjusts the amount of magenta.

Blue

Adjusts the amount of blue.

Hue

Adjusts the hue in any non-blue areas.

Contrast

Adjusts the contrast of the image.

COLOR SHADOW

Description

Creates a high contrast image overlayed with a gradient.

Before

After

Go to the **Color Shadow Tutorial** to see how the filter works.

Category

Special Effects

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Threshold

Sets the amount of image detail.

Invert

Changes whether the gradient is in the background or foreground.

Background Color

Sets the color of the background. Select the desired color using the color picker.

Color 1

Sets the color for the top half of the image. Select the desired color using the color picker.

Color 2

Sets the color for the bottom half of the image. Select the desired color using the color picker.

Grad

Grad is the transition area between the two colors. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

COLOR SPOT

Description

Tints the image using presets for common photographic filters except for a center spot which retains normal color. The center spot can be moved, sized and the amount of blur can be controlled.

Before

After

Go to the **Color Spot Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Color

Color

The Color parameter sets the color through the use of a standard color picker.

Opacity

Sets the opacity of the color filter.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

Spot

A spot in the form of a radial gradient is used to control where color is added to the image. Go to the **Spot** section of Common Filter Controls to see how the Spot controls work.

CROSS PROCESSING

Description

Cross-processing is a photographic technique where print film (C41) is processed in the set of chemicals usually used to process slide film (E6) or vice versa. The final result yields images with oddly skewed colors and increased contrast and saturation. Different film stocks produce different results, so we have created what we feel is a representative look.

Before After

Go to the **Cross Processing Tutorial** to see how the filter works.

Category

Film Lab.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Amount

Sets the intensity of the cross process effect.

Mode

Print to Slide

Simulates the effect of print film (C41) being processed in slide (E6) chemicals.

Slide to Print

Simulates the effect of slide film (E6) being processed in print (C41) chemicals.

DAY FOR NIGHT

Description

Day for Night simulates a technique used for shooting exteriors in daylight made to look like they were photographed at night. Typically, it involves underexposing by two to two-and-a-half stops and using a filter to provide a tint, that is often a lavender-blue, as it mimics twilight and appears to emulate the mood of moonlight.

Before

After

Go to the **Day for Night Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Diffusion

Blur

Sets how much the image is diffused.

Opacity

Sets the amount of diffusion mixed into the original image. The higher the setting, the more the image is blurred.

Moonlight

Color

The Color parameter sets the color of the moonlight through the use of a standard color picker. The default color is blue.

Opacity

Sets the opacity of the moonlight color.

Preserve Highlights

Preserves the white areas of the image.

Color Correct

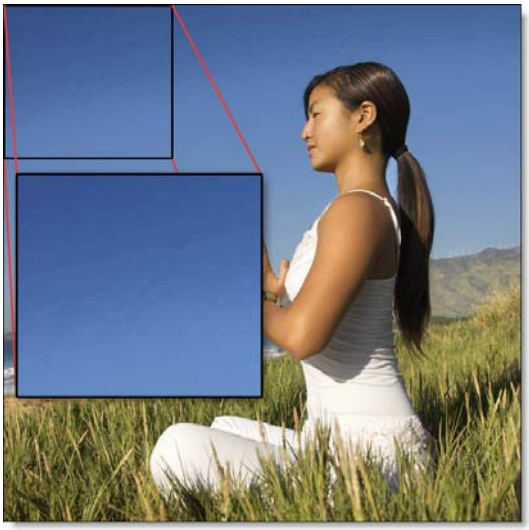
Go to the **Color Correct** filter to see how the Color Correct controls work.

DEBAND

Description

DeBand removes banding artifacts from an image by smoothing pixels in banded areas while retaining detail. It is also surprisingly good for smoothing out skin.

Before



After

Category

Image.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Amount

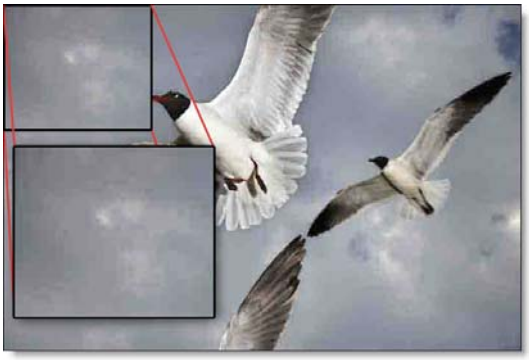
Sets the amount of debanding.

DEBLOCK

Description

Blocking artifacts created as a result of high compression factors can be removed with the DeBlock filter.

Before



After

Category

Image.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Amount

Sets the amount of deblocking.

DEFOG

Description

Using advanced deweathering algorithms, Defog restores clear day contrasts and colors of a scene taken in bad weather such as fog and mist. It is also successful in removing the effects of optical Fog and Diffusion filters.

Before

After

Go to the **Defog Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Defog

Color

The Color parameter sets the color of the fog to be removed through the use of a standard color picker. The default color is white.

Vanishing Point

A vanishing point along the direction of increasing distance in the image is used to remove fog. By default, the vanishing point is set to the center of the screen. Essentially, the fog is removed in a radial pattern emanating from the vanishing point. So at the default center position, fog is removed in a circular pattern with a greater amount of fog being removed from the center while falling off at the edges. For instance, if your fog moves in the direction of top right to bottom left, set your vanishing point towards the top right corner and the fog removal will be more intense at the upper right and fall off at the bottom left. However, in most cases, the vanishing point can be left in the center of the screen and you will obtain acceptable results.

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the vanishing point can be adjusted.

Position X

The horizontal position of the vanishing point.

Position Y

The vertical position of the vanishing point.

Note: To see the on-screen control in After Effects, you may need to highlight Defog in the Effect Controls window, and in Final Cut Pro, you will have to click on the crosshair icon to the right of the vanishing point parameter. On Avid Editing Systems, the Vanishing Point parameters are named only X and Y.

Defog

Sets the amount of fog to be removed from the scene.

Min Depth

Controls how much fog is removed from the darker areas of the image.

Max Depth

Controls how much fog is removed from the brighter areas of the image.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

DEFRINGE

Description

Purple or blue fringing around overexposed areas is a result of sensor overloading in video as well as digital still cameras. Defringe isolates and removes the various types of color fringing.

Before

After

Go to the **Defringe Tutorial** to see how the filter works.

Category

Lens.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Red

Red

Adjusts the saturation of red values in areas defined by the Position and Range controls. Positive values saturate, negative values desaturate.

Position

A selection is generated to isolate red fringing. The areas that are white in the red selection are the areas that will be defringed. Moving the Position slider will change the hue that is used for the red selection.

Range

Increases or decreases the range of values considered as red fringing. A low Range value indicates a narrow range of values, while a high Range value indicates a large range of values.

Go to the **Selection** section of Common Filter Controls to see how the Position and Range controls work.

Green, Blue, Cyan, Magenta, and Yellow

The Green, Blue, Cyan, Magenta and Yellow groups work in a similar fashion to the Red group.

DENOISE

Description

Removes film grain and noise.

Before

After

Category

Image.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Amount

Sets the amount of denoising.

Note: You may not see an accurate representation of the grain and noise removal in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

DEPTH OF FIELD

Description

Depth of Field can be added to a scene by isolating and blurring only a portion of the image. The amount of blurring is directly proportionate to the luminance of the selection settings, a gradient or an input image.

Before | Selection | After

Go to the **Depth of Field Tutorial** to see how the filter works.

Category

Lens.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Depth

Depth

Selects the source for the depth of field effect.

Selection

Uses the selection for the depth source.

Grad

Uses a gradient for the depth source.

Strip

Uses a strip gradient for the depth source.

Note: Since the strip grad is only horizontal or vertical, selecting Top-to-bottom and Bottom-to-top have the same result as do Left-to-right and Right-to-left.

Input

Uses an image as the depth source. This is useful for 3D programs which render out depth mattes.

To use an image as the depth source in Adobe After Effects:

- **Change Depth > Depth to Input.**
- **Select the layer you want to use from the Depth > Input selector.**

To use an image as the depth source in Adobe Premiere Pro:

- **Change Depth > Depth to Input.**
- **Select the track you want to use from the Depth > Input selector located below the Depth > Depth pop-up.**

To use an image as the depth source in Apple Final Cut Pro 6&7:

- **Change Depth > Depth to Input.**
- **Drag and drop a clip onto the clip icon to the right of the Depth > Input parameter.**

Note: Using an image as a depth source in Apple Final Cut Pro X is not supported because of limitations with it's plug-in format.

To use an image as the depth source in Avid Editing Systems:

- **Change Depth > Depth to Input.**
- **The track below the one that you added Depth of Field to is used as the depth source.**

Blur

Sets how much the image is blurred.

Grad

Depth of Field can optionally use a gradient that limits where the filter is applied. Grad is the transition area that goes from the blurred portion to the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

Selection

A selection can be used to create the depth of field effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

DIFFUSION

Description

Diffusion creates atmosphere by reducing contrast while creating a glow around highlights or shadows. It simulates diffusion and fog filters as well as glows. In addition, a texture library allows you to add realistic diffusion to scenes as if you were adding diffusion directly to your camera lens.

Before

After

Go to the **Diffusion Tutorial** to see how the filter works.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Diffusion

Blend

Determines the blend mode to be used to create the diffusion effect.

Add

The diffusion is added to your image.

Screen

The diffusion is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the diffusion.

Blur

Sets the softness of the diffusion.

Color

The Color parameter sets the color of the diffusion through the use of a standard color picker. The default color is white.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

Selection

A selection can be used to create the diffusion effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

Texture

Texture

Selects the texture which will be used to add diffusion to the image.

Blend

Textures can be used as the source of the diffusion as well as combined with a selection using a variety of Blend modes. Go to **Blend Modes** for explanations of the various modes.

I like the Multiply blend mode for combining textures with the selection because it only puts the texture within the areas of the generated selection.

DVE

The DVE allows you to transform your texture using Position, Scale, Rotation, Corner Pin, Shear and Crop controls. Why the name DVE? DVE is an acronym for digital video effects and refers to a real-time image manipulation device which does pans, rotations, flips as well as various hardware-specific effects

such as page turns or customized wipes. In the film and video post production industry, DVE is frequently used in reference to transforming the image in some way. Go to the **DVE** section of Common Filter Controls to see how the DVE Controls work.

DIFFUSION/FX®

Description

Black Diffusion/FX®

Gives a silky-smooth look to textured surfaces, suppresses facial blemishes and wrinkles, while maintaining a clear, focused image. Creates a diffused image that doesn't look like it's been shot through a filter.

Gold Diffusion/FX®

Offers all the benefits of the Black Diffusion/FX® filter, but also infuses special warmth by adding a soft, golden tint to shadows.

Before | Black After | Gold After

Go to the **Diffusion/FX Tutorial** to see how the filters works.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Blur

Fine image details are smoothed by softening the image based on a selection with areas of detail being retained by using an edge detect.

Edge

Edge detail lost as a result of the blurring is restored through the use of an edge detect.

Brightness

Determines the brightness of the edge selection.

Blur

Blurs the edge selection.

Opacity

Determines the opacity of the edge detail added back to the image.

Selection

A selection is used to smooth image details. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

Temperature

Applies a warming filter to the image. Go to the **Temperature** section of Common Filter Controls to see how the Temperature controls work.

DOUBLE FOG

Description

The Double Fog filter creates a soft, misty atmosphere over the image by first applying fog using a vanishing point along the direction of increasing distance in the image. Then, a second pass blooms image highlights.

Before After

Go to the **Double Fog Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Fog

Color

The Color parameter sets the color of the fog to be added through the use of a standard color picker. The default color is white.

Vanishing Point

A vanishing point along the direction of increasing distance in the image is used to add fog. By default, the vanishing point is set to the center of the screen. Essentially, the fog is added in a radial pattern emanating from the vanishing point. So at the default center position, fog is added in a circular pattern with a greater amount of fog being added in the center while falling off at the edges. For instance, if you would like your fog to move in the direction of top right to bottom left, set your vanishing point towards the top right corner and the fog will be more intense at the upper right and fall off at the bottom left. However, in most cases, the vanishing point can be left in the center of the screen and you will obtain acceptable results.

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the vanishing point can be adjusted.

Position X

The horizontal position of the vanishing point.

Position Y

The vertical position of the vanishing point.

Note: There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the vanishing point can be adjusted. To see the on-screen control in After Effects, you may need to highlight Double Fog in the Effect Controls window, and in Final Cut Pro, you will have to click on the crosshair icon to the right of the vanishing point parameter. On Avid Editing Systems, the Vanishing Point parameters are named only X and Y.

Fog

Sets the amount of fog to be added to the scene.

Min Depth

Controls how much fog is added in the darker areas of the image.

Max Depth

Controls how much fog is added in the brighter areas of the image.

Glow

The Glow controls are used to add additional atmosphere and are useful in adding glow to highlights. By default, a wide selection of highlights are glowed in the image and blended with the Screen blend mode. This works well for adding additional fog. To add glow around highlights such as light sources, it is best to set the Blend mode to Add and lower the Selection > Range parameter to limit the areas of glow to only include the light sources.

Blend

Determines the blend mode to be used to create the glow effect.

Add

The glow is added to your image.

Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the glow.

Blur

Sets the softness of the glow.

Color

The Color parameter sets the color of the glow through the use of a standard color picker. The default color is white.

Selection

A selection is used to create the glow effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

DUAL GRAD

Description

Dual Grad applies two photographic filters to the image which are blended together with a gradient. Presets for your favorite Color-Grad® filters are provided as well as the ability to create custom colors.

Before After

Go to the **Dual Grad Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Color 1

Sets the color for the top half of the image. Select the desired color using the color picker or choose a filter preset.

Presets

Select one of the filters from the pop-up list.

Color

The Color parameter sets the color of the grad through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the Presets pop-up menu.

Opacity

Sets the opacity of the color filter.

Color 2

The Color 2 controls are the same as the controls for Color 1 except it is applied to the bottom half of the image.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

Grad

Grad is the transition area between the two tints. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

EDGE GLOW

Description

Edge Glow isolates lines and edges in an image and then adds glow only to these areas resulting in a stylized look.

Before

After

Go to the **Edge Glow Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Glow

Blend

Determines the blend mode to be used to create the edge glow effect.

Add

The edge glow is added to your image.

Screen

The edge glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the edge glow.

Blur

Sets the softness of the edge glow.

Color

The Color parameter sets the color of the edge glow through the use of a standard color picker. The default color is white.

Edge

An edge selection is created to produce the edge glow effect.

Brightness

Determines the brightness of the edge selection.

Blur

Blurs the edge selection.

ENHANCING

Description

Makes reds, rust browns and oranges pop, with minimal effect on other colors. Perfect for fall foliage, earthtone rock formations, architecture, woodwork, faded rustic barns and any photos where red, brown and orange subjects should be enriched or appear more intense. In addition, the green or blue areas of the image can be isolated and enhanced with minimal effect on other colors.

Before

After

Go to the **Enhancing Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Enhancing

Adjusts the saturation of red, green or blue hues.

Selection

Presets

A selection is created based on the hue of the image to create the enhancement effect. Select from Red, Green or Blue preset hue selections from the pop-up list or use the Hue eyedropper to pick a color off of the screen.

Hue

When adjusting the Hue parameter, you are selecting the hue of the image which will be enhanced.

Note: The Hue Color picker allows you to select a custom selection color, but is only active when the Custom option has been selected in the Presets pop-up menu.

Range

Increases or decreases the range of values in the hue selection. A low Range value indicates a narrow range of values. A high Range value indicates a large range of values included in the selection.

Blur

Sets the softness of the selection by using a fast, quality blur.

Go to the **Selection** parameters to see how they work.

EYE LIGHT

Description

Creates a targeted light to be placed around a person's eyes.

Before

After

Go to the **Eye Light Tutorial** to see how the filter works.

Category

Light.

Controls

Light

Blend

Determines the blend mode to be used to add the light.

Add

The light is added to your image.

Screen

The light is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the light.

Blur

Sets the softness of the light.

GamColor Presets

Digital equivalents of the lighting gels created by Gamproducts can be applied to your light source. Select one of the GamColor presets from the pop-up list. For detailed information about Gamproducts gels, visit their website at **www.gamonline.com**.

Color

Sets the color of the light through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the GamColor Presets pop-up menu.

Shadow

Brightness

Sets the intensity of the shadows. The Brightness parameter will darken only those areas that are not being brightened by the Light settings.

DVE

The DVE allows you to transform your eye light using Position, Scale, Rotation and Corner Pin controls. Why the name DVE? DVE is an acronym for digital video effects and refers to a real-time image manipulation device which does pans, rotations, flips as well as various hardware-specific effects such as page turns or customized wipes. In the film and video post production industry, DVE is frequently used in reference to transforming the image in some way. Go to the **DVE** section of Common Filter Controls to see how the DVE Controls work.

FAUX FILM

Description

The Faux Film filter attempts to give digital images the look of photographic film. It reduces contrast, creates a soft mist around highlights and adds film grain.

Before

After

Go to the **Faux Film Tutorial** to see how the filter works.

Category

Film Lab.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Mist

Blend

Determines the blend mode to be used to create the mist effect.

Add

The mist is added to your image.

Screen

The mist is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the mist.

Blur

Sets the softness of the mist.

Color

The Color parameter sets the color of the mist through the use of a standard color picker. The default color is white.

Grain

Go to the **Grain** filter to see how the Grain controls work.

Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

Selection

A selection is used to create the mist effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

FILM STOCKS

Description

Film Stocks is a unique filter that simulates a 113 different color and black and white photographic film stocks.

Before

Fuji Sensia

Go to the **Film Stocks Tutorial** to see how the filter works.

Category

Film Lab.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Amount

Sets the amount of the selected preset.

Black and White

Red, Green and Blue controls allow you to determine the contribution of each color channel in the black and white conversion.

Enable

Enables the Black and White conversion.

Red

Sets the amount of the red channel that contributes to the black and white conversion.

Green

Sets the amount of the green channel that contributes to the black and white conversion.

Blue

Sets the amount of the blue channel that contributes to the black and white conversion.

Film Response

To mimic the characteristics of a particular film stock, a combination of settings for the RGB channels have been set.

RGB

Controls the RGB film response curve. If you are using a black and white preset, the grayscale film response curve will be adjusted.

Red

Controls the Red film response curve.

Green

Controls the Green film response curve.

Blue

Controls the Blue film response curve.

Color Correct

Color Correct manipulates the Temperature, Cyan/Magenta, Brightness, Contrast, Shadow, Midtone, Highlight, and Saturation values of the image. Go to the **Color Corrector** filters to see how it works.

Filter

Adds a color filter to the image.

Presets

Select one of the filters from the pop-up list.

Color

Sets the color through the use of a standard color picker.

Opacity

Sets the opacity of the color filter.

Preserve Highlights

Preserves the white areas of the image.

Sharpen

Amount

Determines how much contrast is added at the edges.

Radius

Controls the size of the edges you wish to sharpen.

Threshold

The threshold setting is used to sharpen more pronounced edges, while leaving more subtle edges untouched. Low values sharpen more image areas while higher threshold values sharpen less.

Diffusion

Blur

Sets the softness of the image.

Amount

Sets the amount of diffusion mixed into the original image. The higher the setting, the more the image is blurred.

Vignette

A vignette is a popular photographic effect where the photo gradually fades into a color. Go to the **Vignette** filter to see how it works.

Grain

Grain simulates film grain with individual control of red, green, and blue grain size, softness and intensity. In addition, a Film Response parameter controls where you will see grain in the image. Go to the **Grain** filter to see how it works.

Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

FLASHING

Description

Flashing allows you to use photographic filters to lower the contrast of your shadows or highlights. The motion picture lab can expose a small amount of light to the film at various stages of the developing and printing process. For example, Negative plus Dupe Negative flashing lifts blacks, while Print plus Master Positive flashing softens whites.

Before

After

Go to the **Flashing Tutorial** to see how the filter works.

Category

Film Lab.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Shadows

Brightness

Raises the brightness of the shadows using either the Shadow > Color or Shadow > Presets.

Presets

Select one of the filters from the pop-up list.

Color

The Color parameter sets the color of the flashing through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the Presets pop-up menu.

Position

Selects the shadow values to be adjusted.

Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

Highlights

Brightness

Lowers the brightness of the highlights using either the Highlights > Color or Highlights > Presets.

Presets

Select one of the filters from the pop-up list.

Color

The Color parameter sets the color of the flashing through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the Presets pop-up menu.

Position

Selects the highlight values to be adjusted.

Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the **Selection** section of Common Filter Controls to see how the Position and Range controls work.

FL-B/D®

Description

Provides correct color, removing the harsh green cast caused by fluorescent bulbs.

Before After

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Go to the **FL-B/D® Tutorial** to see how the filter works.

Category

Image.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Temperature

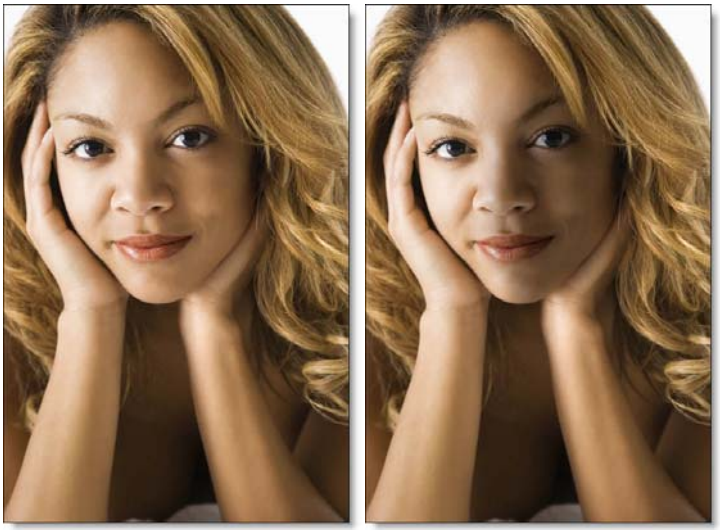
Removes the greenish tone caused by photographing under fluorescent lights.

FLAG / DOT

Description

Flags and Dots are rectangular and circular lighting control devices used to create shadow areas on a motion picture or photographic set. This concept has been extended to digital so that areas of the image can be selectively darkened.

Before After



Go to the **Flag / Dot Tutorial** to see how the filters works.

Category

Light.

Controls

Flag / Dot

Brightness

Sets the intensity of the flag or dot.

Blur

Sets the softness of the flag or dot.

DVE

The DVE allows you to transform your flag or dot using Position, Scale, Rotation and Corner Pin controls. Why the name DVE? DVE is an acronym for digital video effects and refers to a real-time image manipulation device which does pans, rotations, flips as well as various hardware-specific effects such as page turns or customized wipes. In the film and video post production industry, DVE is frequently used in reference to transforming the image in some way. Go to the **DVE** section of Common Filter Controls to see how the DVE Controls work.

Fog

Description

The Fog filter creates a soft, misty atmosphere over the image and glows highlights.

Before

After

Go to the **Fog Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Fog

Blend

Determines the blend mode to be used to create the fog effect.

Add

The fog is added to your image.

Screen

The fog is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the fog.

Blur

Sets the softness of the fog.

Color

The Color parameter sets the color of the fog through the use of a standard color picker. The default color is white.

Selection

A selection is used to create the fog effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

GELS

Description

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whether they want to create a romantic moonlit setting or a vicious, angry fight, they have the colors they need to achieve the effect. In cooperation with Gamproducts and Rosco, we have created digital versions of their popular gels.

Before

After

Go to the **Gels Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

GamColor Gels

Digital equivalents of the lighting gels created by Gamproducts can be applied to the entire image or inside a gradient. Three GamColor gel groups contain digital gels from the GamColor, CineFilters and Naked Cosmetics collections.

For detailed information about Gamproducts gels, visit their website at **www.gamonline.com**.

GamColor

The GamColor system divides the visible spectrum into nine color sections convenient to the lighting designer. It is a circular classification of colors by hue, referencing the primaries, secondaries and important subdivisions. The GamColor gels are arranged according to this system, making it easy to locate any color in a logical manner.

GamColor CineFilters

CineFilters change the color temperature to balance your lighting situation using a variety of filters including CTO(sunlight to incandescent), CTB(incandescent to daylight), ND(light reducing), Minus Green(eliminates the peak green output of fluorescent lights) and Plus Green(incandescent to fluorescent).

GamColor Naked Cosmetics

Naked Cosmetics™ are designed to modify skin tones. Use them to blend and enhance skin tones while masking undesirable undertones. The choice of which Naked Cosmetics™ gel to use depends on a few variables. Skin color of the subjects, costumes, make-up, the recording medium, the desired effect, and most important, your artistic taste.

Gels

A set of generic lighting gels are provided in the Gels preset group.

Rosco Gels

Digital equivalents of the lighting gels created by Rosco can now be applied to the entire image or inside a gradient. Four Rosco gel groups contain gels from the Calcolor, Cinegel, Cinelux and Storaro Selection collections.

For detailed information about Rosco gels, visit their website at **www.rosco.com**.

Rosco Calcolor

Calibrated color, by Rosco, is a series of color effects lighting gels designed specifically to the spectral sensitivity of color film. The series includes the primary colors Blue, Green and Red, along with the secondary colors Yellow, Magenta and Cyan followed by Pink and Lavender. Each color is designed in four densities: 15, 30, 60 and 90, corresponding to the familiar ½, 1, 2 and 3 stop calibrations.

Rosco Cinegel

The Rosco Cinegel range includes over 75 tools for controlling light including Tungsten Conversion Filters, Daylight Conversion Filters, Sun 85 & Neutral Density Filters, Filters for Controlling Carbon ARC & HMI Lighting as well as Fluorescent Light Filters. In 1974, Cinegel won an Academy Award for technical achievement.

Rosco Cinelux

Cinelux is a selection from the Roscolux range of color gels.

Rosco Storaro Selection

The Storaro Selection contains ten color effects lighting gels designed to the personal specifications of eminent cinematographer Vittorio Storaro. These ten colors represent key chromatic elements of the visible spectrum, and are intended for dramatic effect and strong emotional response.

Controls

Presets

To select a gel, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Gels

Color

The Color parameter sets the color through the use of a standard color picker.

Opacity

Sets the opacity of the color filter.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the gel application.

Grad

Gels can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

GLIMMERGLASS®, BRONZE GLIMMERGLASS®

Description

Glimmerglass®

Softens fine details in a unique manner, while adding a mild glow to highlights.

Bronze Glimmerglass®

Same as Glimmerglass® but combined with a warming filter.

Before | Glimmerglass® After | Bronze Glimmerglass® After

Go to the **Glimmerglass® / Bronze Glimmerglass® Tutorial** to see how the filters work.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Blur

Fine image details are smoothed by softening the image based on a selection with areas of detail being retained by using an edge detect.

Edge

Edge detail lost as a result of the blurring is restored through the use of an edge detect.

Brightness

Determines the brightness of the edge selection.

Blur

Blurs the edge selection.

Opacity

Determines the opacity of the edge detail added back to the image.

Selection

A selection is used to smooth image details. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

Mist

The Mist controls add a mild glow to image highlights.

Brightness

Sets the intensity of the mist.

Blur

Sets the softness of the mist.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

Temperature

Applies a warming filter to the image. Go to the **Temperature** section of Common Filter Controls to see how the Temperature controls work.

GLOW

Description

The Glow filter creates glows around selected areas of the image.

Before After

Go to the **Glow Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Glow

Blend

Determines the blend mode to be used to create the glow effect.

Add

The glow is added to your image.

Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the glow.

Blur

Sets the softness of the glow.

Color

The Color parameter sets the color of the glow through the use of a standard color picker. The default color is white.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

Selection

A selection is used to create the glow effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

GLOW DARKS

Description

Glows and grows the darks areas of the image.

Before

After

Go to the **Glow Darks Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Glow

Amount

Sets the intensity of the glow.

Blur

Sets the softness of the glow.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

Selection

A selection is used to create the glow effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

GRAIN

Description

Grain simulates film grain with individual control of red, green, and blue size, intensity and softness. In addition, a Film Response parameter controls where you will see grain in the image. Popular film stock presets are provided as a starting point to adding grain.

Before

After

Go to the **Grain Tutorial** to see how the filter works.

Category

Film Lab.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Monochrome

When checked, the grain is monochrome. In this mode, only the Red Size, Red Amount and Red Softness sliders are active. Since the grain is monochrome, only one slider is needed.

Size

The Size parameters control the size of the grain. Sometimes a film stock's grain structure varies in size from one color channel to another, so individual control has been given. The larger the Size settings, the larger the grain will be.

Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

Red Size

Controls the size of the red grain.

Green Size

Controls the size of the green grain.

Blue Size

Controls the size of the blue grain.

Amount

The Amount parameters set the red, green and blue intensities of the grain. Film stocks generally have varying amounts of red, green and blue intensities with the blue intensity generally higher than the rest. If you turn the red, green and blue amount sliders to a value of 0, the grain will disappear.

Red Amount

Controls the intensity of the red grain.

Green Amount

Controls the intensity of the green grain.

Blue Amount

Controls the intensity of the blue grain.

Softness

The Softness parameters control the softness of the grain. Some film stock's grain structure varies in softness from one color channel to another, so individual control has been given. Normally, only minor softness adjustments are necessary, usually between a value of 0-1.

Red Softness

Controls the softness of the red grain.

Green Softness

Controls the softness of the green grain.

Blue Softness

Controls the softness of the blue grain.

Film Response

The Film Response parameter allows the adjustment of where you will see grain in the image. In most cases, film grain is apparent over the entire image except the brightest whites with the black areas being the most affected.

Position

The Position slider defines the portions of the image where grain will be added. A low Position value places grain in the darkest image values, while a high Position value places grain in the brightest areas.

Range

Increases or decreases the area where grain is added to the image based on the value of the Position slider. A low Range value indicates a narrow range of values, while a high Range value indicates a large range of values.

Minimum

Sets the minimum level of grain that is always added to the image.

Note: A Position value of 0 and a Range of 80 is typical of standard film, with grain applied to the entire range except the brightest whites with black being the most affected.

HALO

Description

Halo causes dark areas to glow into bright areas and bright areas to glow into dark areas along with a bit of diffusion.

Before

After

Go to the **Halo Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Diffusion

Blur

Sets the softness of the image.

Opacity

Sets the amount of diffusion mixed into the original image. The higher the setting, the more the image is blurred.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

HAZE / SKY

Description

Haze

Reduces excessive blue by absorbing UV light and eliminates haze which tends to wash out color and image clarity.

Before

After

Sky

Reduces UV light, haze and is pink tinted for added warmth and better colors. It is especially useful for images shot in outdoor open shade and on overcast days

Before

After

Go to the **Haze / Sky Tutorial** to see how the filter works.

Category

Image.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Haze

Sets the amount of haze to be removed from the scene.

Temperature

Sets the color of the image to be either warmer or cooler. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

Cyan/Magenta

Adds either Cyan or Magenta to the image. Dragging the slider to the right makes the image more magenta and dragging the slider to the left makes the image more cyan.

Note: Cyan/Magenta is only included in the Sky filter.

HDTV/FX®

Description

With the increase in HD production for both TV and Motion Pictures, HDTV/FX® filters address both contrast and sharpness issues associated with HD. Creates a “film look” and provides subtle improvements in shadow detail.

Before

After

Go to the **HDTV/FX® Tutorial** to see how the filter works.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Blur

Fine image details are smoothed by softening the image based on a selection with areas of detail being retained by using an edge detect.

Edge

Edge detail lost as a result of the blurring is restored through the use of an edge detect.

Brightness

Determines the brightness of the edge selection.

Blur

Blurs the edge selection.

Opacity

Determines the opacity of the edge detail added back to the image.

Selection

A selection is used to smooth image details. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

Contrast

Shadows

Raises the brightness of the shadows.

Highlights

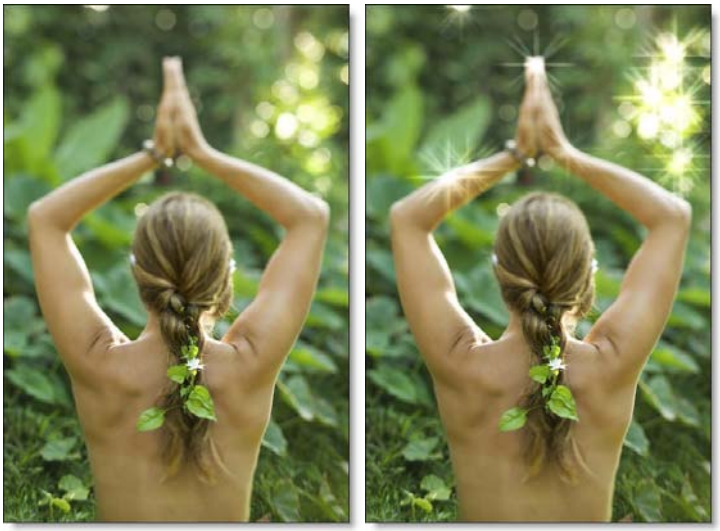
Lowers the brightness of the highlights.

HFX® STAR

Description

Exciting and dazzling star effects are generated from original point or reflected light sources with the added glitter and sparkle of these exclusive, natural looking asymmetrical designs and shapes. Great for water scenes, candle flames, street lights and more!

Before After



Go to the **HFX® Star Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

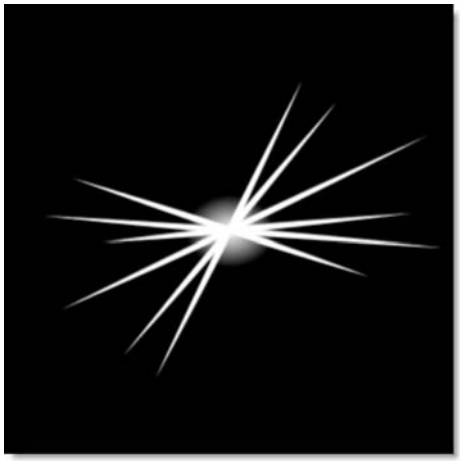
Star

The Star settings control the various qualities of the star patterns.

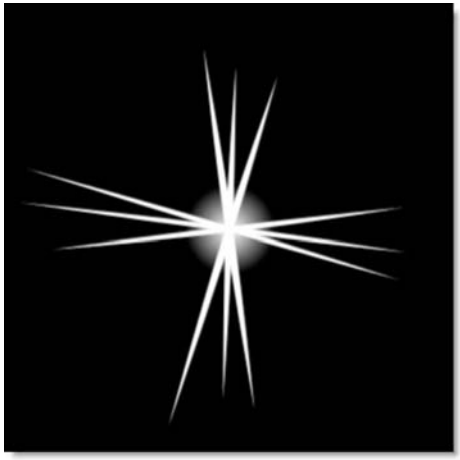
Type

Chooses the type of star pattern to use.

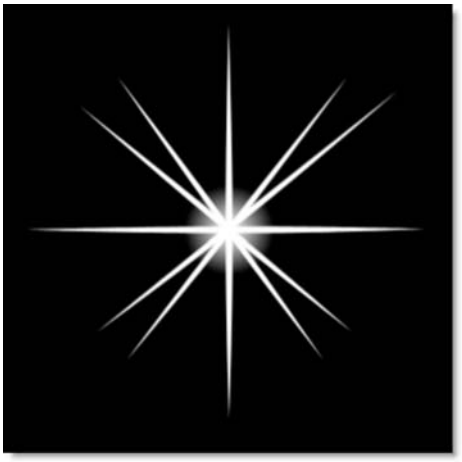
Hyper Star



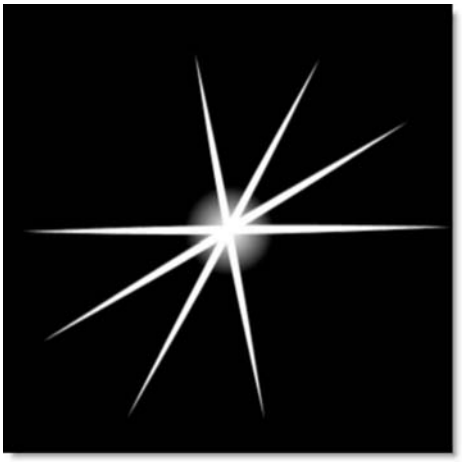
Hollywood Star



North Star



Vector Star



Blend

Determines the blend mode to be used when adding the stars.

Add

The stars are added to your image.

Screen

The stars are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Determines the brightness of the stars.

Size

Sets the star size.

Angle

Rotates the stars.

Color

Sets the star color.

Threshold

Controls the amount of stars. The higher the threshold value, the less stars you will see.

HIGH CONTRAST

Description

Creates an extreme high contrast image.

Before | After

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Go to the **High Contrast Tutorial** to see how the filter works.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Contrast

Sets the amount of contrast to be applied to the scene.

Amount

Sets the mix amount between the original and filtered version.

ICE HALOS

Description

Ice halos are created when small ice crystals in the atmosphere generate halos by reflecting and refracting light. Most notably, circles form around the sun or moon as well as rare occurrences when the entire sky is painted with a web of arcing halos.

Before

After

Go to the **Ice Halos Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Light

Blend

Determines the blend mode to be used to add the ice halo.

Add

The ice halo is added to your image.

Screen

The ice halo is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the ice halo.

Displacement

Displaces the ice halo by the luminance values of the image. This “fakes” the effect of the ice halo wrapping over objects in the image.

Blur

Sets the softness of the ice halo.

Halo

Blend Mode

The ice halo can be added to the entire image or limited to a selection.

Halo Only

The ice halo is added to the entire image.

Selection

The ice halo is added only in areas of the selection.

Sun Altitude

Selects the appropriate ice halo pattern based on the sun’s altitude.

Position

The ice halo position can be adjusted by clicking and dragging an on-screen control in the center of the image.

Position X

The horizontal position of the ice halo.

Position Y

The vertical position of the ice halo.

Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter.

Scale

Scale X

The horizontal scale of the ice halo.

Scale Y

The vertical scale of the ice halo.

Gang Scale

The Scale X and Scale Y slider values can be ganged together.

Note: When Gang is turned on, the Scale Y slider doesn't physically move. However, the Scale Y value will follow the value of the Scale X slider when Gang is turned on.

Selection

A selection can be used to limit where the ice halo will be placed. Wherever there is white in the selection is where the ice halo will be added. Go to the **Selection** parameters to see how they work.

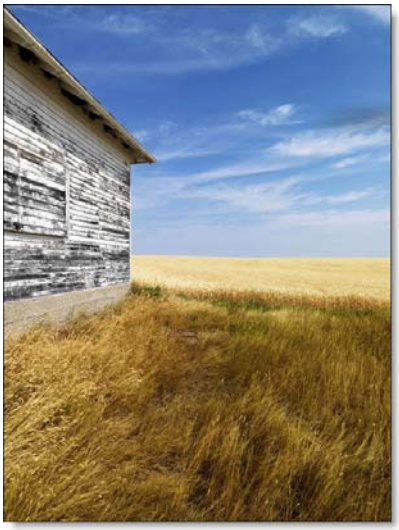
Note: To use a selection to limit where the ice halo will be added, the Halo > Blend Mode must be set to Selection.

INFRARED

Description

Infrared simulates infrared filters used in conjunction with infrared sensitive film or sensors to produce very interesting black and white images with glow in highlight areas.

Before



After

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Go to the **Infrared Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Black and White

Selects the type of black and white filter to be applied to your color image. Go to the **Black and White** section of Common Filter Controls to see how the Black and White controls work.

Mist

Blend

Determines the blend mode to be used to create the glow effect.

Add

The glow is added to your image.

Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the glow.

Blur

Sets the softness of the glow.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

Selection

A selection is used to create the glow effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

KELVIN

Description

Degrees Kelvin is the standard unit of measure for color temperature which is a way to characterize the spectral properties of a light source. Low color temperature implies warmer (redder) light, while high color temperature implies a colder (bluer) light. Presets for a number of different light sources and conditions are provided in degrees Kelvin.

Before

After

Go to the **Kelvin Tutorial** to see how the filter works.

Category

Image.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Color Temperature

The Color Temperature of the image is determined by the difference of the Destination and Source Kelvin parameters. For instance, if your Source Kelvin is 3200 degrees Kelvin and you adjust the Destination Kelvin to 6500 degrees,

your image would turn blue. This is the same as using tungsten indoor film meant to be used with lighting balanced for 3200 degrees Kelvin outside in daylight which is 6500 degrees Kelvin.

Destination Kelvin

Sets the destination color temperature of the image in degrees Kelvin.

Source Kelvin

Sets the source color temperature of the image in degrees Kelvin.

Opacity

Sets the opacity of the color temperature adjustment.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the color temperature application.

Grad

Kelvin can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

KEY LIGHT

Description

Using Key Light, an image can be relit by with either a directional or point light. The result looks natural even though the relighting is done without computing any scene geometry.

Before

After

Go to the **Key Light Tutorial** to see how the filter works.

Category

Light.

Controls

Type

Parallel

A directional light source.

Point

A point light where the light either emanates from or fades into a vanishing point. Move the point control in the center of the screen to change the Point light location.

Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter to move the Point light location.

Strength

Sets the strength of the light.

Angle

Used in conjunction with Parallel, Angle sets the direction of the light source.

Invert

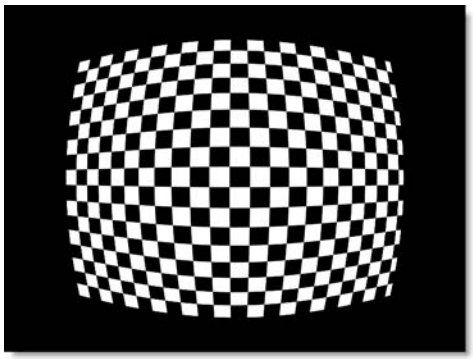
Used in conjunction with Point, Invert determines whether the light source emanates from or fades into a vanishing point.

LENS DISTORTION

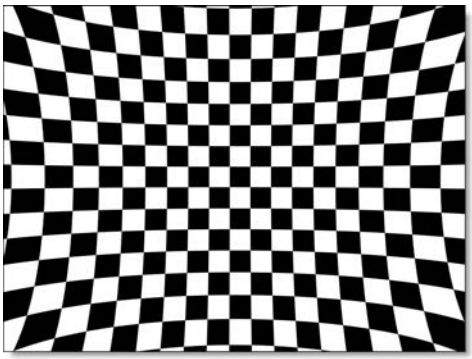
Description

Lens Distortion corrects for pin-cushioning and barrel distortion of camera lenses. It is also useful for creating the look of a wide angle lens.

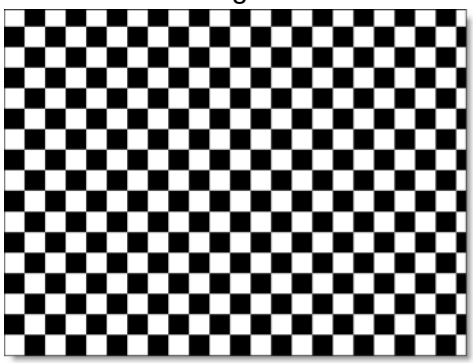
Barrel Distortion



Pin Cushion Distortion



Original



Go to the **Lens Distortion Tutorial** to see how the filter works.

Category

Lens.

Controls

Distortion

Pulls the corners of the image in or out. Negative values pull the corners of the image outward while positive values pull the corners of the image inward.

Before

After

Anamorphic Squeeze

Anamorphic Squeeze corrects for the squeeze found in anamorphic motion picture lenses.

Curvature X and Y

Curvature X and Y correct for non-radial, asymmetric distortions found in anamorphic motion picture lenses.

Note: Anamorphic Squeeze and Curvature X and Y only work once the Distortion parameter has been moved.

Center

Determines the center point for the distortion. There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the Center can be adjusted.

LIGHT / GOBO

Description

Light can be added to a scene where none existed before just as if you were adding light at the time of shooting. Realistic lighting and shadow is introduced using digital versions of the entire gobo libraries created by Gamproducts and Rosco.

Before

After

Gobos (patterns) are widely used by designers in theatre, film, photography and television to create atmosphere, project scenery, and generally enhance the visual impact of their lighting. Normally used in front of lights during photography, these same exact gobos can be applied digitally to the entire image or inside a selection.

Go to the **Light / Gobo Tutorial** to see how the filters work.

Category

Light.

Presets

To select a gobo, open the Dfx interface and pick one from the Presets window. If you would like to view gobos from a different category, use the pop-up menu at the top left of the Presets window.

Light

Blend

Determines the blend mode to be used to add the light.

Add

The light is added to your image.

Screen

The light is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Subtract

The light is subtracted from your image creating shadow instead of light.

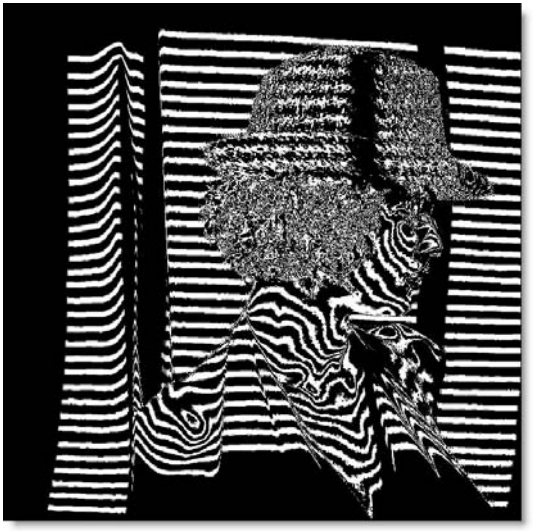
Brightness

Sets the intensity of the light.

Displacement

Displaces the gobo by the luminance values of the image. This “fakes” the effect of light wrapping over objects in the image.

Displaced Gobo



Blur

Sets the softness of the light.

Gels

Digital equivalents of the lighting gels created by Gamproducts and Rosco can be applied to the light source. Light uses GamColor gels while Gobo uses Rosco gels. Select one of the gel presets from the pop-up list. For detailed information about Gamproducts and Rosco gels, visit their websites at **www.gamonline.com** and **www.rosco.com**.

Color

Sets the color of the light through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the Gels pop-up menu.

Shadow

Brightness

Sets the intensity of the shadows. The Brightness parameter will darken only those areas that are not being affected by the Light settings.

Selection

A selection can be used to create areas of light or limit where gobos will be added. Wherever there is white in the selection is where the light will be added. When using the Light and Gobo filters, it is usually helpful to blur the selection. Go to the **Selection** parameters to see how they work.

Selection

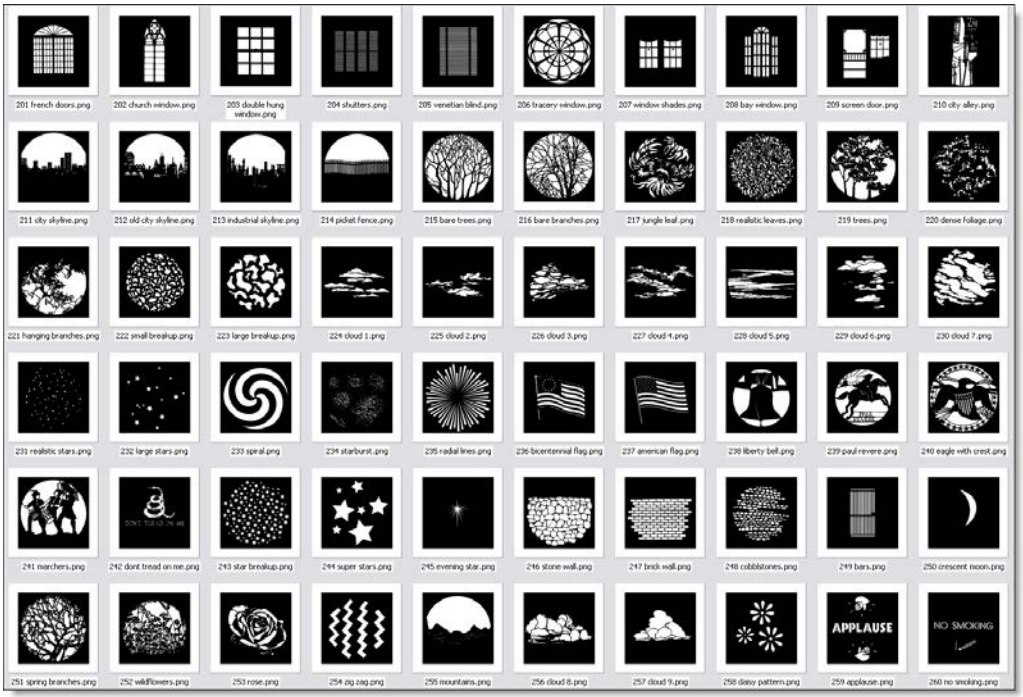
Note: To use a selection to create light, the Gobo > Blend Mode must be set to something other than Gobo Only for the Selection controls to be active.

Gobos

The gobos are organized into different categories. Light uses Gamproducts gobos while Gobo uses Rosco gobos. For detailed information about Gamproducts and Rosco gobos, visit their websites at **www.gamonline.com** and **www.rosco.com**.

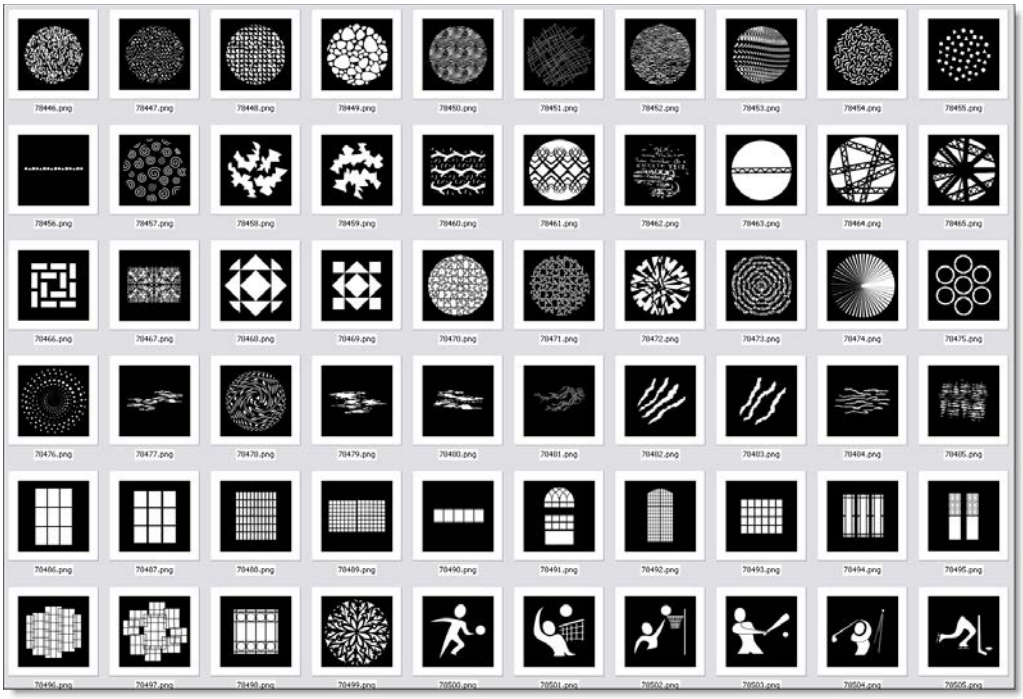
Gamproducts Gobos

The Gamproducts line of gobos are used in Light with 565 designs to choose from including Breakups; Fire, Water & Natural Elements; Flowers, Foliage & Trees; Holidays, Symbols & Religion; Pinspots, Vignettes & Spirals; Signage, Themes & Class of; Sky, Stars, Clouds & Moons; Skylines, Structures, Fences & Stone; Windows, Graphics, Grids & Grilles.



Rosco Gobos

The Rosco line of gobos are used in Gobo with 1300 designs to choose from including Abstract; Architectural & Retail; Boundaries & Wildlife; Breakups; Churches & Heraldics; Clouds Water & Sky; Fire & Ice; Foliage Breakups; Graphics & Grills; Occasions & Holidays; Rotation, Symbols & Signs; Trees & Flowers; Windows, Doors & Blinds; and World Around Us.



Type

Gobo

Uses the gobo selected in the Presets window.

Input

Input allows you to use your own image or sequence as the light source.

Note: You must first select Input from the Gobo > Type pop-up menu before you can use your own image or sequence as the light source.

To use your own image or sequence as a light source:

Adobe After Effects

- **Select Input from the Gobo > Type menu.**
- **Select a layer from the Gobo > Input menu.**

Adobe Premiere Pro

- **Select Input from the Gobo > Type menu.**
- **Select a track from the Gobo > Input menu located below the Gobo > Type menu.**

Apple Final Cut Pro 6&7

- **Select Input from the Gobo > Type menu.**
- **Drag and drop a clip onto the clip icon to the right of the Gobo > Input parameter.**

Note: Using an image as a light source in Apple Final Cut Pro X is not supported because of limitations with it's plug-in format.

Avid Editing Systems

- **Select Input from the top most pop-up in the Gobo group.**
- **Place the light source clip on a track below the clip you applied Light/Gobo to.**

Note: If the camera is moving and you want to add a gobo, the gobo won't automatically follow the camera. You will either need to manually move the gobo to follow the camera or better, use Motion Tracking software to Match Move the gobo to the camera move. Track the motion of your source image, set your View to Gobo, apply the tracker motion to your gobo and render it. To use the newly tracked and rendered gobo as a light source, follow the previous instructions listed for using your own image or sequence as the light source.

Blend Mode

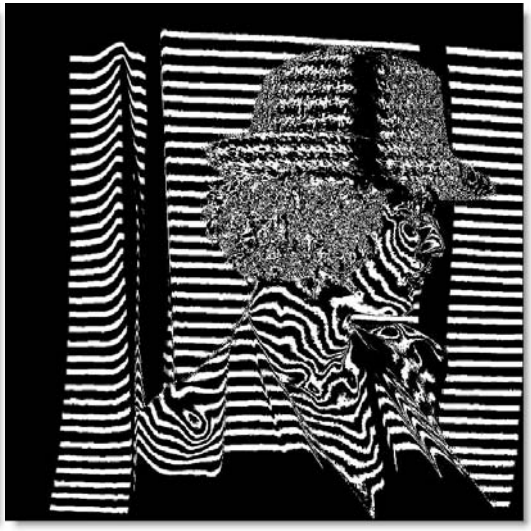
The gobo can be added to a selection using a variety of Blend modes. Go to **Blend Modes** for explanations of the various modes.

I like the Multiply blend mode for combining gobos with the selection because it only puts the gobo within the areas of the selection.

Multiply

Selection

Gobo



Opacity

Sets the opacity of the gobo.

Blur

Sets the softness of the gobo.

Selection with Shape Blur=20

DVE

The DVE allows you to transform your gobo using Position, Scale, Rotation, Corner Pin, Shear and Crop controls. Why the name DVE? DVE is an acronym for digital video effects and refers to a real-time image manipulation device which does pans, rotations, flips as well as various hardware-specific effects such as page turns or customized wipes. In the film and video post production industry, DVE is frequently used in reference to transforming the image in some way. Go to the **DVE** section of Common Filter Controls to see how the DVE Controls work.

LOOKS: BLACK/WHITE & COLOR

Description

Looks is a unique filter meant to simulate a variety of color and black and white photographic/film looks, diffusion and color grad camera filters, lighting gels, film stocks and optical lab processes. By selecting from the available presets, parameters in the various modules are automatically set to achieve a variety of different effects.

Category

Special Effects.

Controls

The Looks filters are made up of Color Correct, Diffusion, Color-Grad®, Gels, Lab, Grain and Post Color Correct groups. Together, they simulate a variety of photographic and film looks. By selecting from the available presets, parameters in the various groups are automatically set to achieve a variety of different effects.

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Color Correct

Color Correct manipulates the Black and White, Hue, Saturation, Brightness, Contrast, Gamma, Red, Green and Blue values of the image. Go to the **Color Correct** filter to see how it works.

Diffusion

Diffusion creates atmosphere by reducing contrast while creating a glow around highlights or shadows. It simulates diffusion and fog filters as well as glows. Go to the **Pro-Mist** filter to see how it works.

Color-Grad®

Color-Grad® can transform an average sunrise or sunset into something spectacular or convert a dull, washed-out sky to a breathtaking blue. No other filter has done as much to improve landscape photography as the graduated filter. Add color selectively while leaving the rest of the scene unaffected by using a graduated transition for a smooth color blend between the colored portion and the original image. Presets for your favorite Color-Grad® filters are provided as well as the ability to create custom colors. Go to the **Color-Grad®** filter to see how it works.

Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whether they want to create a romantic moonlit setting or a vicious, angry fight, they have the colors they need to achieve the effect. We have created digital equivalents to the lighting gels and these same exact colors can be applied to the entire image. Go to the **Gels** filter to see how it works.

Lab

The Lab group simulates a variety of different optical lab processes including Bleach Bypass, Cross Processing, Flashing and Overexposure. Go to the **Bleach Bypass** filter, **Cross Processing** filter, **Flashing** and the **Overexpose** filter to see how they work.

Grain

Grain simulates film grain with individual control of red, green, and blue grain size, softness and intensity. In addition, a Film Response parameter controls where you will see grain in the image. Go to the **Grain** filter to see how it works.

Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

Post Color Correct

Post Color Correct gives you further color correction after all other operations have been processed. This is often helpful as some of the operations affect the brightness, contrast and color of the image. In addition, Temperature controls allow you to make the scene warmer or cooler, and cyan or magenta. Go to the **Color Correct** filter to see how it works.

LOW CONTRAST

Description

Low Contrast spreads highlights into darker areas, lowers contrast and keeps bright areas bright.

Before After

Go to the **Low Contrast Tutorial** to see how the filter works.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Contrast

Light Brightness

Sets the intensity of the light that is spread into darker areas.

Light Spread

Sets how far light is spread from bright areas to darker areas.

Shadow Brightness

Adjusts the brightness of the shadow areas.

Selection

A selection is used to create the light spread effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

MATCH

Description

Matches the Brightness, Color, Detail, Grain and Tone of one image and applies it to another.

Source | Target | After

Go to the **Match Tutorial** to see how the filter works.

Note: Match is not supported in Final Cut Pro X because of limitations in it's plug-in format. For Premiere Pro, Match requires CS6 or later for matching capability.

Category

Image.

Controls

Brightness

Matches the brightness of the source image.

Note: The Brightness parameter behaves differently depending on the source image. For instance, the slider can either brighten or darken. It is a dual use control.

Color

Matches the color of the source image.

Detail

Matches the sharpness of the source image.

Note: The Detail parameter behaves differently depending on the source image. For instance, the slider can either sharpen or soften. It is a dual use control.

Grain

Simulates the grain of the source image.

Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

Tone

Matches the tint of the source image. With some source images, a duotone effect is created.

Source

Selects a source image to be matched.

- **Adobe After Effects: Select the layer from the Source selector.**
- **Adobe Premiere Pro CS6 or later: Select the track from the Source selector located above the Match button.**
- **Apple Final Cut Pro: Drag and drop the source clip onto the filmstrip icon next to the Source parameter.**
- **Avid Editing Systems: Place the source clip on a track below the clip you applied Match to.**

Match

Analyzes the source image's settings at the selected frame.

Note: Switch the View from Output to Source to view the source frame you want to copy.

Matching Clips:

1. **Apply the Match filter to a target clip.**
2. **Select the source image to be matched using the Source selector.**
3. **Change the View from Output to Source.**
4. **Find the frame in the sequence that you would like to copy.**

5 **Make sure that your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio. Otherwise, the grain in the viewer won't accurately match the rendered result.**

6 **Click the Match box.**

The Color, Detail, Grain and Tone of the source image are analyzed and applied to your target image.

7 **Switch the View from Source to Output.**

8 **Adjust the Color, Detail, Grain and Tone parameters to your liking.**

MONO TINT

Description

Mono Tint converts color images to black and white while applying a color tint.

Before

After

Go to the **Mono Tint Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Black and White

Filter

The Filter pop-up selects the type of black and white filter to be applied to your color image. Go to the **Black and White** section of Common Filter Controls to see how the Black and White controls work.

Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

Tint

Color

The Color parameter sets the color of the tint through the use of a standard color picker.

Opacity

Sets the opacity of the tint.

Preserve Highlights

Preserves the white areas of the image.

ND-GRAD

Description

The ND or Neutral Density Grad darkens only a portion of the image using a graduated transition between the darkened portion and the original image. It selectively adjusts brightness without affecting color balance. The most likely use for the ND-Grad would be to balance the difference between the sky and the ground.

Before

After

Go to the **ND-Grad Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

F-Stop

Presets

Select one of the ND-Grad presets from the pop-up list.

Exposure

Darkens the image using F-Stops as the unit of measure.

Preserve Highlights

Preserves the white areas of the image.

Grad

Grad is the transition area between the darkened portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

NIGHT VISION

Description

The Night Vision filter creates the effect of a Night Vision lens--that green, glowy, grainy look.

Before After

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Go to the **Night Vision Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Black and White

Selects the type of black and white filter to be applied to your color image. Go to the **Black and White** section of Common Filter Controls to see how the Black and White controls work.

Tint

Color

Sets the color that the image will be tinted with. The color is preset to a night vision green, but feel free change it by using the color picker.

Opacity

Sets the opacity of the tint color.

Glow

Blend

Determines the blend mode to be used to create the glow effect.

Add

The glow is added to your image.

Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the glow.

Blur

Sets the softness of the glow.

Additional Controls

Grain

Grain Size

Controls the size of the grain.

Note: You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

Grain Amount

Controls the intensity of the grain.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

Selection

A selection is used to create the glow effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

NUDE/FX®

Description

A series of different skin tone enhancing filters that offer ultimate flexibility and control for skintones. Perfect for headshots and close-ups.

Before After

Go to the **Nude/FX® Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Color

Color

The Color parameter sets the color through the use of a standard color picker.

Opacity

Sets the opacity of the color filter.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

Grad

The Nude/FX® filters can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

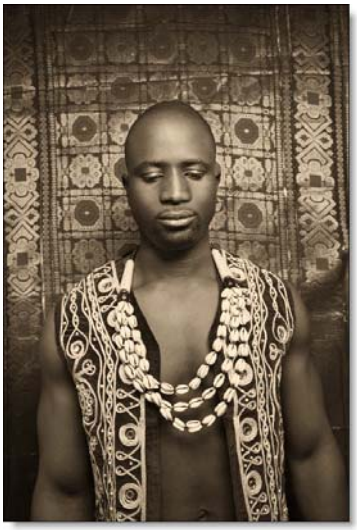
OLD PHOTO

Description

Images are treated to look like a variety of historical photographic processes including Cyanotype, Kallitype, Light Cyan, Palladium, Platinum, Sepia, Silver, Silver Gelatin and Van Dyck.

Before

After



Go to the **Old Photo Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Cyanotype

Blue photographic prints employing light sensitive iron salts, most commonly on paper.

Kallitype

A silver-iron method for making permanent prints in gold, palladium and platinum metals.

Light Cyan

A lighter, less saturated version of Cyanotype.

Palladium

Palladium was introduced as a cheaper alternative to Platinum prints, and possesses a remarkable range of tones and surface texture.

Platinum

Platinum prints are an iron (non-silver) process for making photographic prints in which platinum is reduced from a salt to form the image.

Sepia

Sepia toning replaces silver in the black and white photographic print with silver sulphide, which is brown.

Silver

Prints made on paper coated with a solution of albumen (egg whites) and ammonia salt, which is then sensitized with silver nitrate and printed (usually using a collodion negative).

Silver Gelatin

The silver gelatin process uses gelatin as the binder and developed silver as the image material.

Van Dyck

The Vandyke print gets its name from its similarity in color to the deep brown pigment, Vandyke brown, used by the Flemish painter Van Dyck.

Filter

Filter

The Filter pop-up selects the type of black and white filter to be applied to your color image. Go to the **Black and White** section of Common Filter Controls to see how the Black and White controls work.

Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

Tint

Color

Sets the color that the image will be tinted with. Select the desired color using the color picker. The default color is a cyan tone.

Opacity

Sets the opacity of the tint.

Color Correct

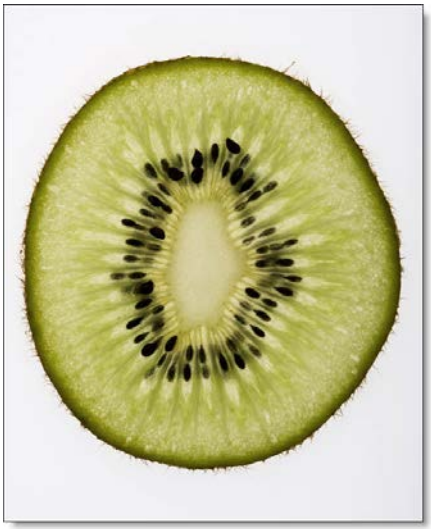
Go to the **Color Correct** filter to see how the Color Correct controls work.

OVEREXPOSE

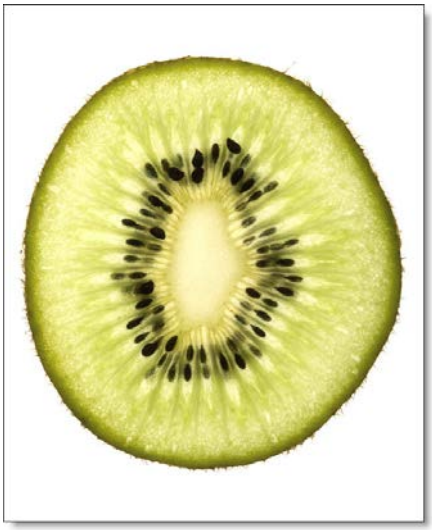
Description

Overexpose simulates the overexposure that occurs when a film camera is stopped.

Before



After



Go to the **Overexpose Tutorial** to see how the filter works.

Category

Film Lab.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Amount

Controls the amount of overexposure.

Intensity

Sets the intensity of the overexposure.

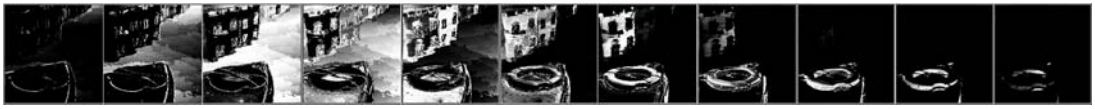
Blur

Sets the softness of the overexposure.

OZONE

Description

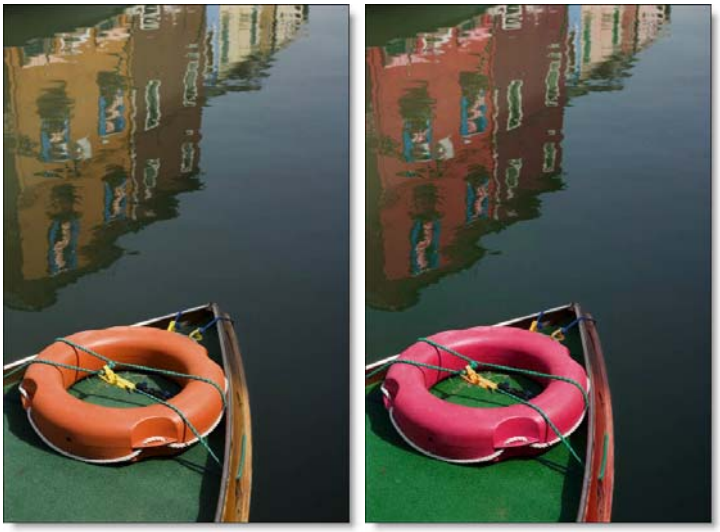
The Ozone filter allows you to manipulate the color of an image with incredible flexibility and accuracy. Inspired by Ansel Adams' Zone System for still photography, we have created "The Digital Zone System". Just what is the Digital Zone System? The world around us contains an infinite palette of colors, tones and brightness. To reproduce this vast range of brightness, the Digital Zone System takes the spectrum of image values and divides them into 11 discrete zones using proprietary image slicing algorithms. Zones can be created using luminance, hue, saturation, average, red, green, blue, cyan, magenta, and yellow values. Look at how the image below is divided into hue zones.



Zone 0 Zone 1 Zone 2 Zone 3 Zone 4 Zone 5 Zone 6 Zone 7 Zone 8 Zone 9 Zone 10

With Ozone, the color values of each zone can be independently adjusted until you've painted a new picture. Your adjustments occur on a zone by zone basis, but you view the result of all color corrections simultaneously.

Before After



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Go to the **Ozone Tutorial** to see how the filter works.

Category

Image.

Extract On

The Extract On pop-up menu allows you to specify the image values to be used for dividing the image into the 11 individual zones.

Luminance

Zones are created using the image's luminance values.

Hue

Zones are created using the image's hue. When adjusting the Position parameter, you are selecting different hues.

Saturation

Zones are created using the image's saturation values.

Average

Zones are created based on the average of the image's RGB values.

Red

Zones are created using the image's red values.

Green

Zones are created using the image's green values.

Blue

Zones are created using the image's blue values.

Cyan

Zones are created using the image's cyan values.

Magenta

Zones are created using the image's magenta values.

Yellow

Zones are created using the image's yellow values.

Zone Controls

When using Luminance as the method for slicing up the image, the Position and Range sliders are preset so that each zone is twice as bright as the previous zone, proceeding from black towards white.

Pure black is defined as Zone 0, Zone 5 as middle gray and pure white as Zone 10. By using the View menu, you can look at the zone which is helpful in determining the portions of the image you are going to adjust. The values shown as white in the selected zone are the areas of the image that will be modified by the color adjustments.Go to the **Selection** section of Common Filter Controls to see how the Position and Range controls work.

Position

The Position value pinpoints the color values to be used in the selected zone. This value has been preset according to the Digital Zone System, but can be changed if you choose. If the zones are created using Luminance, a high Position value shows the brightest image values as white values in the zone. A low Position value shows the darkest image values as white values in the zone.

Range

The Range value increases or decreases the range of values in the selected zone. This value has been preset according to the Digital Zone System, but can be changed if you want.

Hue

Rotates the hue of the zone.

Saturation

Adjusts the saturation of the zone. Positive values saturate, negative values desaturate.

Brightness

Adjusts the brightness of the zone. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the zone. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the zone. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

Red

Adds or subtracts red from the zone.

Green

Adds or subtracts green from the zone.

Blue

Adds or subtracts blue from the zone.

Temperature

Sets the color temperature of the zone. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

Zone Thumbnail

At the bottom of the Parameter window is a thumbnail of the selected zone to help you see which areas of the image will be adjusted.

PENCIL

Description

Pencil converts your image to a pencil sketch.

Before

After

Go to the **Pencil Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Amount

Sets the intensity of the pencil effect.

Color

The Color parameter sets the color of the pencil effect through the use of a standard color picker.

PHOTOGRAPHIC

Description

The most complete line of Kodak® filters for photographic uses is available in the form of gelatin films and are known as Wratten® Gelatin Filters. Our Photographic filter is a digital equivalent of the Wratten set and were created using the spectral transmission curves for each optical filter. The Color Conversion, Light Balancing and Color Compensating preset groups are subsets of the Photographic filters.

Before

After

Go to the **Photographic Tutorial** to see how the filter works.

Photographic

Digital versions of the complete line of Kodak® Wratten® Gelatin Filters.

Color Conversion

Color Conversion filters correct for significant differences in color temperature between your light source and recording media.

Light Balancing

Light Balancing filters correct for minor differences in color temperature between your light source and recording media.

Color Compensating

Color Compensating filters control color by attenuating specific parts of the spectrum. They can be used to make changes in color balance or compensate for deficiencies in the image's spectral quality.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Filters

Color

The Color parameter sets the color of the filter through the use of a standard color picker.

Opacity

Sets the opacity of the color filter.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

Grad

These filters can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

POLARIZER / WARM POLARIZER

Description

Polarizer

The greatest use of polarizing filters is to achieve a darkened, deep blue sky. Our digital version of the Polarizer is designed to do just that. Through the use of a selection and an adjustable gradient, the color of the sky can be adjusted.

Before

After

Warm Polarizer

Combines the benefits of the Polarizer with a warming filter making it ideal for portraits and scenics.

Before

After

Go to the **Polarizer Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Sky

Color Correct controls are provided to adjust the sky.

Hue

Rotates the hue of the sky.

Saturation

Adjusts the saturation of the sky. Positive values saturate, negative values desaturate.

Brightness

Adjusts the brightness of the sky. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the sky. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the sky. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

Red

Adds or subtracts red from the sky.

Green

Adds or subtracts green from the sky.

Blue

Adds or subtracts blue from the sky.

Temperature

Sets the color temperature of the sky. Dragging the slider to the right makes the sky cooler (bluer) and dragging the slider to the left makes the sky warmer (redder).

Warming

Applies a warming filter to the image. Go to the **Warming** section of Common Filter Controls to see how the Warming controls work.

Grad

The Polarizer can optionally use a gradient that limits where the filter is applied. For instance, if the polarization is affecting areas other than the sky, enable the Grad and adjust it to limit the areas of polarization. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

Selection

Hue

The Polarizer isolates the sky using a selection based on a blue hue. Use the Hue eyedropper to select the exact color of the sky if you are not seeing enough polarization.

Range

Increases or decreases the range of values in the hue selection. A low Range value indicates a narrow range of values. A high Range value indicates a large range of values included in the selection.

Blur

Sets the softness of the selection by using a quality blur.

Go to the **Selection** parameters to see how they work.

PRO-MIST®

Description

Pro-Mist®

This popular motion picture effect creates a special atmosphere by softening excess sharpness and contrast. It generates a pearlescent halo around highlights.

Before

After

Warm Pro-Mist®

Same as Pro-Mist® but combined with a warming filter. It is useful in outdoor open shade situations where there is excessive blue in the image and when total control over lighting may not be possible.

Before

After

Cool Pro-Mist®

Same as Pro-Mist® but combined with a cooling filter.

Before

After

Black Pro-Mist®

Offers all the benefits of the Pro-Mist® filter in a more subtle form. Highlight flares are controlled and contrast is lowered for a more delicate effect.

Before

After

Warm Black Pro-Mist®

Same as Black Pro-Mist® but combined with a warming filter.

Before

After

Go to the **Pro-Mist® Tutorial** to see how the filters work.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Mist

Blend

Determines the blend mode to be used to create the mist effect.

Add

The mist is added to your image.

Screen

The mist is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the mist.

Blur

Sets the softness of the mist.

Color

The Color parameter sets the color of the mist through the use of a standard color picker. The default color is white.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

Temperature

Applies a filter to the image to achieve either warming or cooling. Go to the **Temperature** section of Common Filter Controls to see how the Temperature controls work.

Selection

A selection is used to create the mist effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

RACK FOCUS

Description

Rack Focus replicates a true camera defocus by introducing lens Bokeh effects. Bokeh is the Japanese term that describes the quality of out-of-focus points of light. In defocused areas, each point of light becomes a shape--either a circle or a polygon. The shape grows in size as the amount of defocusing is increased.

Before After

Go to the **Rack Focus Tutorial** to see how the filter works.

Category

Lens.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Blur

The image is blurred by using a quality blur.

Aperture

Blend

Determines the blend mode to be used when adding Bokeh.

Add

Bokeh's are added to your image.

Screen

The Bokeh are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Brightens the Bokeh.

Facets

Set the number of Bokeh facets when the Curvature parameter is set to 0.

Curvature

Controls the curvature of the Bokeh. When set to 100, the Bokeh are completely round. Set to a value of 0 to see a polygonal shape.

Angle

Rotates the Bokeh.

Color

Sets the Bokeh color.

Threshold

Controls the amount of Bokeh. The higher the threshold value, the less Bokeh you will see.

Blur

Sets the softness of the Bokeh. This can be useful when using high threshold values.

RADIAL EXPOSURE

Description

Lightens and/or darkens the center or edges of an image to correct lens vignetting.

Before After

Go to the **Radial Exposure Tutorial** to see how the filter works.

Category

Lens.

Controls

Exposure

Edges

Lightens or darkens the edges of the image.

Center

Lightens or darkens the center of the image.

Spot

A radial gradient is used to lighten or darken the edges or center of the image. Go to the **Spot** section of Common Filter Controls to see how the Spot controls work.

RAINBOW

Description

Recreates arced rainbows of spectral colors, usually identified as red, orange, yellow, green, blue, indigo, and violet, that appear in the sky as a result of the refractive dispersion of sunlight in drops of rain or mist.

Before

After

Go to the **Rainbow Tutorial** to see how the filter works.

Category

Light.

Controls

Light

Blend

Determines the blend mode to be used to add the rainbow.

Add

The rainbow is combined with the image using an Add blend mode.

Screen

The rainbow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Normal

The rainbow is added to the image using a normal composite function.

Amount

Sets the intensity of the rainbow.

Displacement

Displaces the rainbow by the luminance values of the image. This “fakes” the effect of the rainbow wrapping over objects in the image.

Blur

Sets the softness of the rainbow.

Rainbow

Blend Mode

The rainbow can be added to the entire image or limited to a selection.

Rainbow Only

The rainbow is added to the entire image.

Selection

The rainbow is added only in areas of the selection.

Position

The rainbow position can be adjusted by clicking and dragging an on-screen control in the center of the image.

Position X

The horizontal position of the rainbow.

Position Y

The vertical position of the rainbow.

Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter.

Radius

The size of the rainbow.

Aspect

Sets the aspect ratio of the rainbow. Positive values stretch the rainbow horizontally and negative values stretch it vertically.

Thickness

Sets the thickness of the rainbow's bands.

Softness

Sets the softness of the rainbow's bands.

Crop

Offset

The rainbow is cropped based on the Offset value. The higher the value, the more rainbow you see. A value of -100 shows no rainbow at all while 100 displays a complete 360 degree rainbow.

Angle

Sets the angle of the crop.

Softness

Sets the softness of the crop's edge.

Selection

A selection can be used to limit where the rainbow will be placed. Wherever there is white in the selection is where the rainbow will be added. Go to the **Selection** parameters to see how they work.

Note: To use a selection to limit where the rainbow will be added, the Rainbow > Blend Mode must be set to Selection.

RAYS

Description

Create stunning and realistic light ray effects quickly and easily. Known as volumetric lighting in computer graphics or crepuscular rays in atmospheric optics, this dramatic effect adds polish and style. Since the rays are only added to highlight areas, they have the effect of passing through objects and add a third dimensional quality. Add shafts of light streaming through clouds, rays filtering through a forest canopy, beams of light on a foggy night or rays shooting out from text. Rays adds a striking and dramatic quality to any image.

Before After

Go to the **Rays Tutorial** to see how the filter works.

Category

Light.

Controls

Rays

Length

Sets the ray length.

Threshold

Controls the amount of rays based on a brightness threshold. Fewer rays with more definition are generated at higher threshold values.

Position

Move the point control in the center of the screen to change the source point from which the rays will emanate.

Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter to move the Rays source location.

Color

Brightness

Sets the brightness of the rays.

Color

Sets the color of the rays.

Shimmer

Randomizes the rays.

Amount

Sets the amount of shimmering.

Phase

Sets the randomness of the shimmering.

Opacity

Rays

Sets the opacity of the rays.

Source

Sets the opacity of your image.

RELIGHT

Description

Light can be added to a scene where none existed before. A complete set of light source controls allow you to adjust the light just as you would at the time of shooting.

Before After

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Go to the **ReLight Tutorial** to see how the filter works.

Category

Light.

Light

Blend

Determines the blend mode to be used to add the light.

Add

The light is added to your image.

Screen

The light is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the light.

Displacement

Displaces the light source by the luminance values of the image. This “fakes” the effect of light wrapping over objects in the image.

Blur

Sets the softness of the light.

GamColor Presets

Digital equivalents of the lighting gels created by Gamproducts can be applied to your light source. Select one of the GamColor presets from the pop-up list. For detailed information about Gamproducts gels, visit their website at **www.gamonline.com**.

Color

Sets the color of the light through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the GamColor Presets pop-up menu.

Selection

A selection can be used to limit the area of added light. Wherever there is white in the selection is where the light will be added. When using ReLight, it is usually helpful to blur the selection. Go to the **Selection** parameters to see how they work.

Note: Light Source > Blend Mode must be set to something other than Shape Only for the Selection controls to be active.

Light Source

Blend

The light source can be added to the selection using a variety of Blend modes. Go to **Blend Modes** for explanations of the various modes.

I like the Multiply blend mode for combining the light source with the selection because it only puts the light source within the areas of the selection.

Opacity

Sets the opacity of the light source.

Radius

The un-blurred radius of the light.

Falloff Radius

The blurred edge radius.

Falloff

Moves the falloff towards the light centerpoint.

DVE

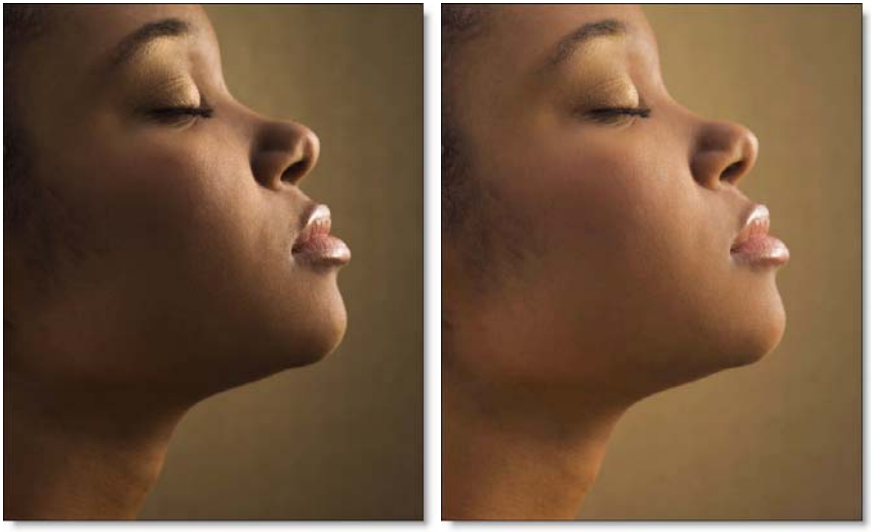
The DVE allows you to transform your light source using Position, Scale, Rotation, Corner Pin, Shear and Crop controls. Why the name DVE? DVE is an acronym for digital video effects and refers to a real-time image manipulation device which does pans, rotations, flips as well as various hardware-specific effects such as page turns or customized wipes. In the film and video post production industry, DVE is frequently used in reference to transforming the image in some way. Go to the **DVE** section of Common Filter Controls to see how the DVE Controls work.

REFLECTOR

Description

One of the oldest and still most popular means of lighting an exterior set is by taking a reflective surface and redirecting sunlight or artificial light exactly where it is needed. Unfortunately, it is nearly impossible for actors to keep their eyes open when looking into a reflector, resulting in squinting eyes. Our silver and gold reflectors allow you to add white or gold light into shadow areas without the squinting.

Before | After



Go to the **Gold / Silver Reflector Tutorial** to see how the filters work.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Brightness

Sets the intensity of the reflector.

Color

The Color parameter sets the color of the reflector through the use of a standard color picker. The default color is gold for Gold Reflector and white for Silver Reflector.

Position

Selects the shadow values that will be adjusted with the Brightness slider.

Range

Controls the range of shadow values that will be adjusted with the Brightness slider.

Go to the **Selection** section of Common Filter Controls to see how the Position and Range controls work.

SELECTIVE COLOR CORRECT

Description

Colors can be selectively isolated through the use of a selection and adjusted using hue, saturation, brightness, gamma, contrast, red, green, and blue controls.

Before

After

Go to the **Selective Color Correct Tutorial** to see how the filter works.

Category

Image.

Color Correct

Certain parts of the image are isolated by the creation of a selection. Whatever is shown as white in the selection can be adjusted by the color controls below.

Hue

Rotates the hue of the image.

Saturation

Adjusts the saturation of the image. Positive values saturate, negative values desaturate.

Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

Red

Adds or subtracts red from the image.

Green

Adds or subtracts green from the image.

Blue

Adds or subtracts blue from the image.

Temperature

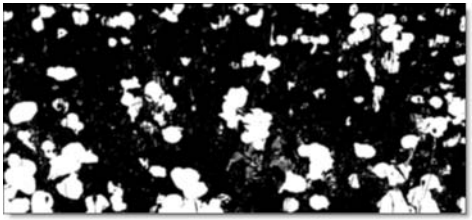
Sets the color temperature of the image. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

Selection

A selection is created to isolate areas to be color corrected. Using advanced image slicing algorithms, selections are created using luminance, hue, saturation, average, red, green, blue, cyan, magenta, and yellow values.

Original

Selection



Extract On

Extract On selects the type of selection. Select whichever type isolates the desired values.

Hue Selection

A selection is created based on one of the following:

Luminance

A selection is created based on the luminance of the image.

Hue

A selection is created based on the hue of the image. When adjusting the Position parameter, you are selecting different hues.

Saturation

A selection is created based on the saturation of the image.

Average

A selection is created based on the average of the image's RGB values.

Red

A selection is created based on the image's red values.

Green

A selection is created based on the image's green values.

Blue

A selection is created based on the image's blue values.

Cyan

A selection is created based on the image's cyan values.

Magenta

A selection is created based on the image's magenta values.

Yellow

A selection is created based on the image's yellow values.

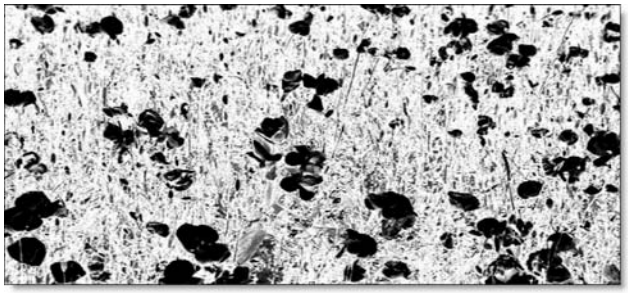
Position

The Position value pinpoints the color values to be used in the selection. For a luminance selection, a Position value of 100 would make a white selection of the highlights and a value of 0 would make a white selection of the shadows. In the flower image below, look at how the selection varies for different Position values in a red extraction. When the Position is at a value of 100, the red flowers are shown as white in the selection.

Position=100, Range=25

When the Position is moved to 50, the red flowers turn black.

Position=50, Range=25



Range

Increases or decreases the range of values in the selection. A low Range value indicates a narrow range of values. A high Range value indicates a large range of values included in the selection.

Position=100, Range=50

Black Clip

Blacks in the selection are made blacker by increasing the value of the slider. As the slider value increases, more values are clipped to black. This is helpful for getting rid of unwanted grey areas in what should be the black part of the selection.

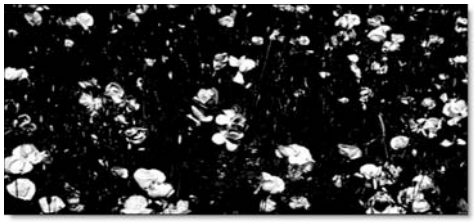
Selection with No Black Clip

Black Clip=50

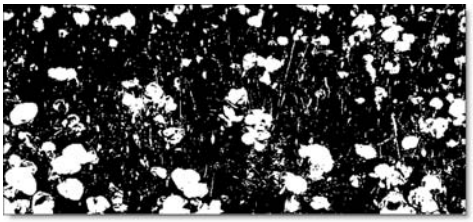
White Clip

Whites in the selection are made whiter by increasing the value of the slider. As the slider value increases, more values are clipped to white. This is helpful for getting rid of unwanted grey areas in what should be the white part of the selection.

Selection with No White Clip



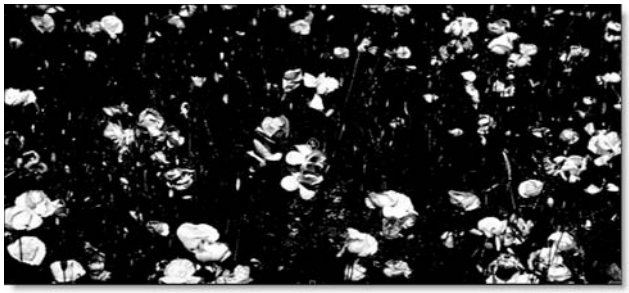
White Clip=50



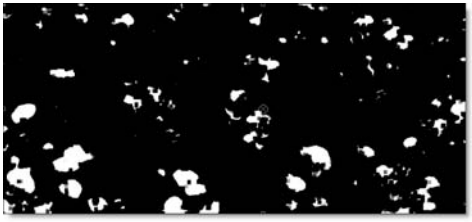
Shrink/Grow

Shrinks or grows the selection. Negative values shrink and positive values grow the selection.

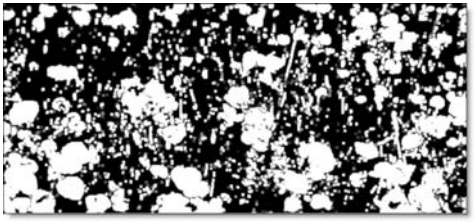
Original



Shrink=-2



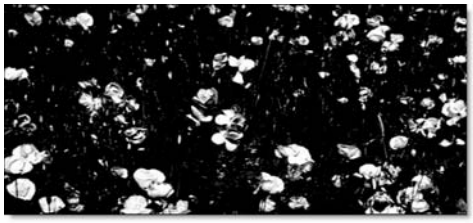
Grow=1.5



Blur

Blurs the selection.

No Blur



Blur=10

Invert

- **Off**

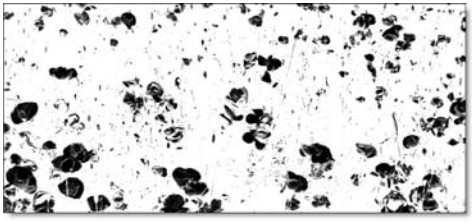
Does nothing to the selection.

- **On**

Inverts the luminance values of the selection.

Invert Off

Invert On



SELECTIVE SATURATION

Description

The saturation of the image can be adjusted independently in the shadows, midtones and highlights.

Before

After

Go to the **Selective Saturation Tutorial** to see how the filter works.

Category

Image.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Shadows

Saturation

Adjusts the saturation of the image in the shadows. Positive values saturate, negative values desaturate.

Position

Selects the shadow values to be adjusted.

Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

Midtones

Saturation

Adjusts the saturation of the image in the midtones. Positive values saturate, negative values desaturate.

Position

Selects the midtones values to be adjusted.

Range

Controls the range of values to be used for the midtones. A higher Range value considers more values as midtones.

Highlights

Saturation

Adjusts the saturation of the image in the highlights. Positive values saturate, negative values desaturate.

Position

Selects the highlight values to be adjusted.

Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the **Selection** section of Common Filter Controls to see how the Position and Range controls work.

SEPIA / 812® WARMING

Description

Sepia

Creates a warm brown tone for that nostalgic feeling.

812® Warming

The 812® Warming filter, a Tiffen exclusive, improves skintones and is ideal for portraits taken on a cloudy day or in outdoor shade on a sunny day.

Before After

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Go to the **Sepia / 812® Warming Tutorial** to see how the filters work.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Color

Amount

Determines the intensity of the color added to the image.

Opacity

Sets the opacity of the filter.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

Grad

Sepia and 812® Warming can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

SMOQUE®

Description

Mechanical smoke generators are often used to enhance realism where smoke is normally encountered. This can be difficult, costly and less desirable to work in a smoke-filled environment. The Smoque® filter creates the look of smoke without the cost and hassle of smoke generators.

Before After

Go to the **Smoque® Tutorial** to see how the filter works.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Smoke

Blend

Determines the blend mode to be used to create the smoke effect.

Add

The smoke is added to your image.

Screen

The smoke is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the smoke.

Blur

Sets the softness of the smoke.

Color

The Color parameter sets the color of the smoke through the use of a standard color picker. The default color is white.

Selection

A selection is used to create the smoke effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

SOFT CONTRAST

Description

Soft Contrast diminishes highlights while retaining the darker look of the shadows.

Before After

Go to the **Soft Contrast Tutorial** to see how the filter works.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Highlights

Lowers the brightness of the highlights.

Position

Selects the highlight values to be adjusted.

Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

SOFT/FX®, WARM SOFT/FX®

Description

Soft/FX®

Softens and minimizes facial imperfections while retaining overall image clarity. Ideal portrait filter.

Before

After

Warm Soft/FX®

Combines all of the benefits of Soft/FX® with a warming filter.

Before

After

Go to the **Soft/FX® / Warm Soft/FX® Tutorial** to see how the filters work.

Category

HFX Diffusion.

Presets

To select a preset, open the Dfx interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

Blur

Sets the softness of the image.

Opacity

Sets the amount of diffusion mixed into the original image. The higher the setting, the more the image is blurred.

Temperature

Applies a warming filter to the image. Go to the **Temperature** section of Common Filter Controls to see how the Temperature controls work.

SOFT LIGHT

Description

Provides soft, digitally diffused and virtually shadowless light.

Before After

Go to the **Soft Light Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Blend

Determines the blend mode to be used to add the light.

Add

The light is added to your image.

Screen

The light is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the light.

Blur

Sets the softness of the light.

GamColor Presets

Digital equivalents of the lighting gels created by Gamproducts can be applied to your light source. Select one of the GamColor presets from the pop-up list. For detailed information about Gamproducts gels, visit their website at **www.gamonline.com**.

Color

Sets the color of the light through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the GamColor Presets pop-up menu.

SPLIT FIELD

Description

Split Field splits the image with a line that can be positioned, rotated and blurred. On one side of the line, the image is blurred and on the other, it is in focus.

Before

After

Go to the **Split Field Tutorial** to see how the filter works.

Category

Lens.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Blur

Sets the softness of the split portion of the image.

Split

The Split controls manipulate the position, rotation and blur of the split line.

Position

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the split line can be adjusted.

Position X

The horizontal position of the split line.

Position Y

The vertical position of the split line.

Note: To see the on-screen control in After Effects, you may need to highlight Split Field in the Effect Controls window, and in Final Cut Pro, you will have to click on the crosshair icon to the right of the Position parameter. On Avid Editing Systems, the Position parameters are named only X and Y.

Rotate

Rotates the split line.

Blur

Blurs the split line using a quality blur.

SPLIT TONE

Description

Shadows, midtones and highlights can be individually tinted with the Split tone filter.

Before

After

Go to the **Split Tone Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Shadows

Opacity

Set the opacity of the tint color.

Tint

The Tint parameter sets the color of the shadow tint through the use of a standard color picker.

Position

Selects the shadow values to be adjusted.

Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

Midtones

Opacity

Set the opacity of the tint color.

Tint

The Tint parameter sets the color of the midtone tint through the use of a standard color picker.

Position

Selects the midtone values to be adjusted.

Range

Controls the range of values to be used for the midtones. A higher Range value considers more values as midtones.

Highlights

Opacity

Set the opacity of the tint color.

Tint

The Tint parameter sets the color of the highlight tint through the use of a standard color picker.

Position

Selects the highlight values to be adjusted.

Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the **Selection** section of Common Filter Controls to see how the Position and Range controls work.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the tinting.

STAR

Description

Six point star patterns are generated on highlights in the image.

Before

After

Go to the **Star Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Star

Brightness

Sets the intensity of the stars.

Size

Controls the size of the stars.

Color

The Color parameter sets the color of the stars through the use of a standard color picker. The default color is white.

Note: When adding stars to images with a lot of dark values, you may need to increase the Star > Brightness value.

Selection

A selection is used to create the star effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

STREAKS

Description

The Streaks filter creates horizontal or vertical streaks around highlights in the image.

Before

After

Go to the **Streaks Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Streaks

Blend

Determines the blend mode to be used to create the streak effect.

Add

The streaks are added to your image.

Screen

The streaks are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the streaks.

Streaks

Horizontal Streaks

Creates horizontal streaks.

Vertical Streaks

Creates vertical streaks.

Color

The Color parameter sets the color of the streaks through the use of a standard color picker. The default color is white.

Selection

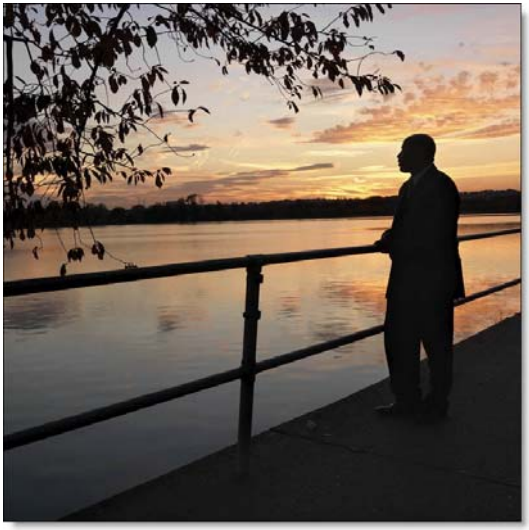
A selection is used to create the streak effect. Go to the **Selection** section of Common Filter Controls to see how the Selection controls work.

STRIP GRAD

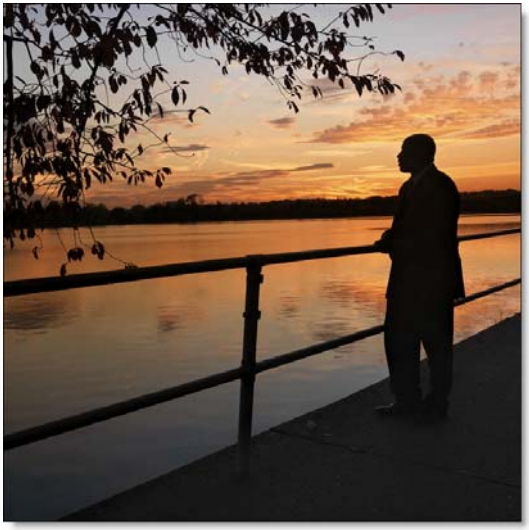
Description

Strip Grad colors only a portion of the image in the form of a narrow strip. Presets for your favorite Color-Grad® filters are provided as well as the ability to create custom colors. There is a graduated transition for a smooth color blend between the colored portion and the original image. Strip Grad is especially good for changing and enhancing a narrow portion of the sky.

Before



After



Go to the **Strip Grad Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Filters

Color

The Color parameter sets the color of the grad through the use of a standard color picker.

Opacity

Sets the opacity of the color filter.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

Grad

Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

SUNSET/TWILIGHT

Description

Sunset/Twilight applies three photographic filters to the image which are blended together with a gradient. Presets for your favorite Color-Grad® filters are provided as well as the ability to create custom colors.

Before

After

Go to the **Sunset/Twilight Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Color 1

Sets the color for the top third of the image. Select the desired color using the color picker or choose a filter preset.

Presets

Select one of the filters from the pop-up list.

Color

The Color parameter sets the color of the grad through the use of a standard color picker.

Note: The Color picker allows you to treat the image with a custom color, but is only active when the Custom option has been selected in the Presets pop-up menu.

Opacity

Sets the opacity of the color filter.

Color 2

The Color 2 controls are the same as the controls for Color 1 except it is applied to the middle third of the image.

Color 3

The Color 3 controls are the same as the controls for Color 1 except it is applied to the bottom third of the image.

Preserve Highlights

Preserves the white areas of the image.

Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

Grad

Grad is the combination of the three blended tints. Its direction, corners and size can be adjusted.Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

TEXTURE

Description

Applies textures to an image for a stylized look.

Before

After

Go to the **Texture Tutorial** to see how the filter works.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Amount

Sets the amount of texture applied to the image.

Complexity

Generates a more detailed, repetitive texture.

Randomize

Randomizes the texture.

DVE

The DVE allows you to transform your texture using Position, Scale, Rotation, Corner Pin, Shear and Crop controls. Why the name DVE? DVE is an acronym for digital video effects and refers to a real-time image manipulation device which does pans, rotations, flips as well as various hardware-specific effects such as page turns or customized wipes. In the film and video post production industry, DVE is frequently used in reference to transforming the image in some way. Go to the **DVE** section of Common Filter Controls to see how the DVE Controls work.

THREE STRIP / TWO STRIP

Three Strip

Known and celebrated for it ultra-realistic, saturated levels of color, the Technicolor® Three Strip process was commonly used for musicals, costume pictures and animated films. It was created by photographing three black and white strips of film each passing through red, green and blue filters on the camera lens and then recombining them in the printing process. Our Three Strip filter was created under the direction of Academy Award Winning Visual Effects Supervisor Rob Legato.

Before

After

Two Strip

The Technicolor® Two Strip process was the first stab at producing color motion pictures and consisted of simultaneously photographing two black and white images using red and green filters. This look creates an odd but pleasing hand-painted look where faces appear normal and green takes on a blue-green

quality, while the sky and all things blue appear cyan. Our Two Strip filter was created under the direction of Academy Award Winning Visual Effects Supervisor Rob Legato.

Before

After

Go to the **Three Strip / Two Strip Tutorial** to see how the filters work.

Category

Film Lab.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Opacity

Sets the intensity of the of the effect.

Strips

Red Intensity

Intensifies red values in the image.

Red Smooth

Blurs the red selection that is used to isolate the red values. Use this control to smooth out any noise that may appear if the Red Intensity is turned up to a high value.

Green Intensity

Intensifies green values in the image.

Green Smooth

Blurs the green selection that is used to isolate the green values. Use this control to smooth out any noise that may appear if the Green Intensity is turned up to a high value.

Blue Intensity

Intensifies blue values in the image when using the Three Strip filter, but darkens image areas that were blue in the source image when using the Two Strip filter.

Blue Smooth

Blurs the blue selection that is used to isolate the blue values. Use this control to smooth out any noise that may appear if the Blue Intensity is turned up to a high value.

Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

TINT

Description

Tints the entire image with a selected color.

Before

After

Go to the **Tint Tutorial** to see how the filter works.

Category

HFX Grads/Tints.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Tint

Color

Sets the color that the image will be tinted with. Select the desired color using the color picker. The default color is a sepia tone.

Opacity

Sets the opacity of the tint color.

Grad

Tint can optionally use a gradient that limits where the filter is applied. Grad is the transition area that goes from the tinted image to the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

ULTRA CONTRAST

Description

Tiffen was recognized with a Technical Achievement Award from the Academy of Motion Picture Arts and Sciences for the Ultra Contrast optical filter which redistributes ambient light to capture details that would be lost in shadows. Contrast is lowered evenly throughout the image with no flare or halation.

Before After

Go to the **Ultra Contrast Tutorial** to see how the filter works.

Category

HFX Diffusion.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Shadows

Shadows

Raises the brightness of the shadows.

Position

Selects the shadow values to be adjusted.

Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

Highlights

Highlights

Lowers the brightness of the highlights.

Position

Selects the highlight values to be adjusted.

Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the **Selection** section of Common Filter Controls to see how the Position and Range controls work.

VARI-STAR

Description

Variable multi-point star patterns are generated on highlights in the image.

Before After

Go to the **Vari-Star Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Star

The Star settings control the various qualities of the generated star patterns.

Blend

Determines the blend mode to be used when adding the stars.

Add

The stars are added to your image.

Screen

The stars are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Determines the brightness of the stars.

Spokes

Controls the number of star spokes.

Size

Sets the star size.

Angle

Rotates the stars.

Color

Sets the star color.

Threshold

Controls the amount of stars. The higher the threshold value, the less stars you will see.

VIGNETTE

Description

A vignette, or soft fade, is a popular photographic effect where the photo gradually fades into the background, usually in a circular or rectangular shape. The vignette can be any color as well as thrown out of focus.

Before

After

Go to the **Vignette Tutorial** to see how the filter works.

Category

Lens.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Vignette

Color

The Color parameter sets the color of the vignette through the use of a standard color picker. The default color is black.

Opacity

Sets the opacity of the colored vignette. For defocused vignettes, you may want to turn down the Opacity so you can see the defocused effect.

Blur

Sets the softness of the image in the area of the vignette.

Shape

Roundness

Sets the roundness of the vignette. The vignette can either be circular or square or anywhere in between.

Size

Sets the size of the vignette.

Aspect Ratio

Changes the aspect ratio of the vignette. A value of -100 would be wider, and 100 would be taller.

Rotation

Rotates the vignette.

Distortion

Distorts the edge of the vignette.

Distortion Size

Sets the size of the distortion.

Randomize

Randomizes the distortion.

Softness

The Softness parameters control the softness of the vignette edge.

WATER DROPLETS

Description

Simulates the circular, rainbow colored optical effects produced by tiny water droplets in clouds, mist and fog.

Before After

Go to the **Water Droplets Tutorial** to see how the filter works.

Category

Light.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Light

Blend

Determines the blend mode to be used to add the rainbow.

Add

The rainbow is added to your image.

Screen

The rainbow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

Brightness

Sets the intensity of the rainbow.

Displacement

Displaces the rainbow by the luminance values of the image. This “fakes” the effect of the rainbow wrapping over objects in the image.

Blur

Sets the softness of the rainbow.

Rainbow

Blend Mode

The rainbow can be added to the entire image or limited to a selection.

Rainbow Only

The rainbow is added to the entire image.

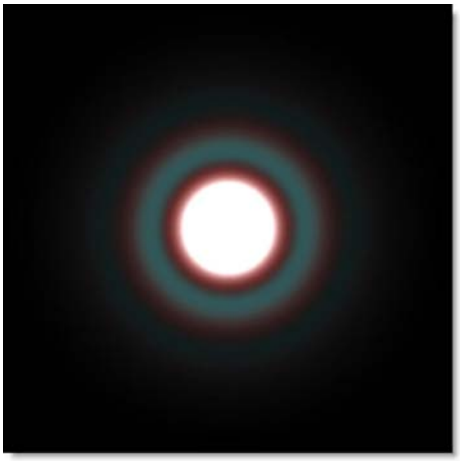
Selection

The rainbow is added only in areas of the selection.

Type

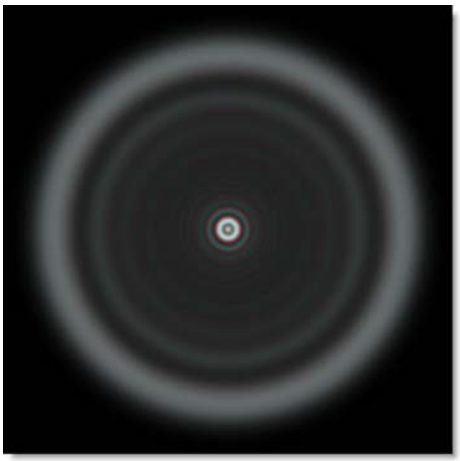
Corona

A corona has a bright center and is surrounded by a number of concentric colored rings.



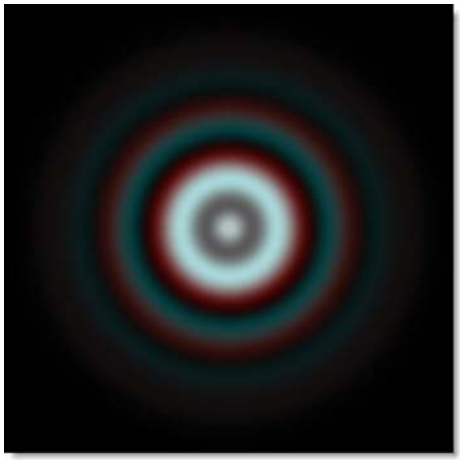
Fogbow

A fogbow is similar to a rainbow, but because of the very small size of water droplets that cause fog, the fogbow has little color and appears white.



Glory

Formed when light is scattered backwards by water droplets, glories have multiple colored rings with a bright center, but not as bright as a corona's. In addition, the rings dissipate much slower than those of the corona.



Position

The rainbow position can be adjusted by clicking and dragging an on-screen control in the center of the image.

Position X

The horizontal position of the rainbow.

Position Y

The vertical position of the rainbow.

Note: For Final Cut Pro, you must activate the cross hair icon next to the Position parameter.

Scale

Scale X

The horizontal scale of the rainbow.

Scale Y

The vertical scale of the rainbow.

Gang Scale

The Scale X and Scale Y slider values can be ganged together.

Note: When Gang is turned on, the Scale Y slider doesn't physically move. However, the Scale Y value will follow the value of the Scale X slider when Gang is turned on.

Selection

A selection can be used to limit where the rainbow will be placed. Wherever there is white in the selection is where the rainbow will be added. Go to the **Selection** parameters to see how they work.

Note: To use a selection to limit where the rainbow will be added, the Rainbow > Blend Mode must be set to Selection.

WIDE ANGLE LENS

Description

Simulates the effect of a wide angle lens.

Before

After

Go to the **Wide Angle Lens Tutorial** to see how the filter works.

Category

Lens.

Distortion

Pulls the corners of the image outward.

X and Y Correction

X and Y Correction compensate for the deformation introduced with the Distortion parameter.

X-RAY

Description

Simulates the look of X-Ray images.

Before

After

Go to the **X-Ray Tutorial** to see how the filters work.

Category

Special Effects.

Controls

Presets

To select a preset, open the Dfx interface and pick one from the Presets window.

Black and White

Filter

The Filter pop-up selects the type of black and white filter to be applied to your color image. Go to the **Black and White** section of Common Filter Controls to see how the Black and White controls work.

Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values darken the midtones, negative values lighten the midtones.

Color

Opacity

Sets the opacity of the color.

Color

The Color parameter sets the color of the x-ray through the use of a standard color picker and defaults to blue.

Blend Modes

Blend modes are used to combine images in a variety of different ways.

Normal

Edits each pixel to make it the result color. This is the default mode. Changing the opacity results in a mix between two layers.

Darken

Looks at the color information in each channel and selects the base or blend color—whichever is darker—as the result color. Pixels lighter than the blend color are replaced, and pixels darker than the blend color do not change.

Multiply

Looks at the color information in each channel and multiplies the base color by the blend color. The result color is always a darker color. Multiplying any color with black produces black. Multiplying any color with white leaves the color unchanged.

Color Burn

Looks at the color information in each channel and darkens the base color to reflect the blend color by increasing the contrast between the two. Blending with white produces no change.

Linear Burn

Looks at the color information in each channel and darkens the base color to reflect the blend color by decreasing the brightness. Blending with white produces no change.

Darker Color

Compares the total of all channel values for the blend and base color and displays the lower value color. Darker Color does not produce a third color, which can result from the Darken blend, because it chooses the lowest channel values from both the base and the blend color to create the result color.

Lighten

Looks at the color information in each channel and selects the base or blend color—whichever is lighter—as the result color. Pixels darker than the blend color are replaced, and pixels lighter than the blend color do not change.

Add

The pixels of one image are added to another image

Screen

Looks at each images color information and multiplies the inverse of the two images. This looks kind of like the Add blend mode, but highlights are retained.

Color Dodge

Looks at the color information in each channel and brightens the base color to reflect the blend color by decreasing contrast between the two. Blending with black produces no change.

Linear Dodge (Add)

Looks at the color information in each channel and brightens the base color to reflect the blend color by increasing the brightness. Blending with black produces no change.

Lighter Color

Compares the total of all channel values for the blend and base color and displays the higher value color. Lighter Color does not produce a third color, which can result from the Lighten blend, because it chooses the highest channel values from both the base and blend color to create the result color.

Overlay

Multiplies or screens the colors, depending on the base color. Patterns or colors overlay the existing pixels while preserving the highlights and shadows of the base color. The base color is not replaced, but mixed with the blend color to reflect the lightness or darkness of the original color.

Soft Light

Darkens or lightens the colors, depending on the blend color. The effect is similar to shining a diffused spotlight on the image. If the blend color (light source) is lighter than 50% gray, the image is lightened as if it were dodged. If the blend color is darker than 50% gray, the image is darkened as if it were burned in.

Hard Light

Multiplies or screens the colors, depending on the blend color. The effect is similar to shining a harsh spotlight on the image. If the blend color (light source) is lighter than 50% gray, the image is lightened, as if it were screened. This is useful for adding highlights to an image. If the blend color is darker than 50% gray, the image is darkened, as if it were multiplied. This is useful for adding shadows to an image.

Vivid Light

Burns or dodges the colors by increasing or decreasing the contrast, depending on the blend color. If the blend color (light source) is lighter than 50% gray, the image is lightened by decreasing the contrast. If the blend color is darker than 50% gray, the image is darkened by increasing the contrast.

Linear Light

Burns or dodges the colors by decreasing or increasing the brightness, depending on the blend color. If the blend color (light source) is lighter than 50% gray, the image is lightened by increasing the brightness. If the blend color is darker than 50% gray, the image is darkened by decreasing the brightness.

Pin Light

Replaces the colors, depending on the blend color. If the blend color (light source) is lighter than 50% gray, pixels darker than the blend color are replaced, and pixels lighter than the blend color do not change. If the blend color is darker than 50% gray, pixels lighter than the blend color are replaced, and pixels darker than the blend color do not change. This is useful for adding special effects to an image.

Difference

Looks at the color information in each channel and subtracts either the blend color from the base color or the base color from the blend color, depending on which has the greater brightness value. Blending with white inverts the base color values; blending with black produces no change.

Exclusion

Creates an effect similar to but lower in contrast than the Difference mode. Blending with white inverts the base color values. Blending with black produces no change.

Subtract

Looks at the color information in each channel and subtracts the blend color from the base color. In 8 and 16-bit images, any resulting negative values are clipped to zero.

Hue

Creates a result color with the luminance and saturation of the base color and the hue of the blend color.

Saturation

Creates a result color with the luminance and hue of the base color and the saturation of the blend color.

Color

Creates a result color with the luminance of the base color and the hue and saturation of the blend color. This preserves the gray levels in the image and is useful for coloring monochrome images and for tinting color images.

KEYBOARD SHORTCUTS

Help Shortcuts

Shortcut	Action
F1	Opens the Dfx User Guide

Viewer Keyboard Shortcuts

Shortcut	Action
Middle-mouse drag	Pans the image
Space Bar-drag	Pans the image
I Key	Zooms the image in
O Key	Zooms the image out
Zoom icon-Drag a square	Zooms into the defined area
Scroll wheel over image	Zooms the image in and out
Middle-mouse double click	Fits the image to the window
F	Fits the image to the window
H	Opens the Histogram window