



Apple Interactive Music Toolkit

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User's Manual

 Apple Computer, Inc.

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1

Setting Up



The Apple Interactive Music Tool and Apple Media Tool Music Engine let you create QuickTime Album Container (QuAC) files. A QuAC file can be placed on an enhanced CD or distributed on its own, to be played back with the AppleCD Player application along with the audio CD the file was made for.

In this chapter

- instructions for installing the Apple Interactive Music Tool and Apple Media Tool Music Engine
- suggestions for preparing the PICT files and QuickTime movie files that you want to include in your interactive multimedia presentation

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Installing the software

- 1 Insert the *Apple Interactive Music Toolkit* CD in the CD-ROM tray and close the tray.
- 2 If necessary, double-click the Music Toolkit CD icon to open it.
- 3 Double-click the Installer icon.
- 4 In the window that appears, read the software license agreement, then click Continue.
- 5 In the Installer dialog box, click Install.

Notice that by installing the software, you have accepted the terms of the software license agreement. If you do not wish to accept the terms of the agreement, you can click Quit.

- 6 The Installer installs the software you need for the toolkit.
- 7 When you see a message reporting that installation was successful, click Restart.

The tutorial

The CD contains a tutorial to give you some practice working with the Apple Media Tool Music Engine. If you plan to use the tutorial, you must install that yourself. Open the CD, find the Residents Tutorial folder, and drag it to your hard disk.

Inside the folder you will find:

- **Tutorial** A PDF file that walks you through creating an interactive presentation
- **MEDIA** A folder containing media items required for the tutorial
- **“My Freak Show”** A finished sample interactive presentation

Preparations

Before you can use the Apple Media Tool Music Engine and Apple Interactive Music Tool to organize the pieces of your interactive presentation and create a QuAC file, you must prepare the pieces. For example, you may want to include photographs of the artists in PICT file format and QuickTime movies containing music samples and bits of interviews. Here are some tips to help you assemble the media that will produce the results you want:

- Design QuickTime movies specifically to play well with CD ROM players.
- To avoid the need for custom color palettes, create images using thousands of colors (16-bit depth).
- A 2x or faster CD ROM drive is recommended.
- All text fields in the Apple Interactive Music Tool are limited to 256 characters (in accordance with Blue Book specifications).
- In the Apple Interactive Music Tool, the boxes provided for front and back jacket pictures measure 320 by 240 pixels. This height and width ratio is different from the size of the booklet contained in a CD jewel box. If you scan the image from the CD booklet and use it actual size, you may notice some distortion. To avoid distortion, use the scanning or other graphics software to crop the image to 320 by 240 pixels.
- In the Apple Interactive Music Tool, the boxes provided for Cast Card pictures measure 130 by 130 pixels. To avoid distortion of the images, use scanning or other graphics software to crop images to make them square.

2

Working With the Apple Media Tool Music Engine



The Apple Media Tool Music Engine lets you create multimedia presentations that you can include in your QuickTime Album Container (QuAC) files. The Music Engine is a specialized version of the full-featured Apple Media Tool. That is, because this version focuses on creating enhanced CDs, it does not support all the same features as Apple Media Tool 2.0. In addition, the Music Engine has some unique features not found in the standard Apple Media Tool. This chapter explains the differences.

In this chapter

- Apple Media Tool (AMT) features that are supported by the Music Engine
- features that are unique to the Apple Media Tool Music Engine
- reference section explaining the commands available

Learning to use the Apple Media Tool Music Engine

To practice creating an interactive multimedia presentation with the Music Engine, see the Residents Tutorial folder. The Installer does not install the tutorial for you. To install what you need, copy the folder to your hard disk. Inside the folder, you'll find the tutorial in PDF format, a MEDIA folder, and "My Freak Show", a sample presentation. To open the tutorial, double-click the Tutorial icon and follow the instructions. You may find it more convenient to print the tutorial before you start creating the presentation.

AMT features included in the Music Engine

These features are supported by the Apple Media Tool Music Engine.

Media types

- Picture—a QuickDraw picture (PICT) file
- Movie—a QuickTime movie file

Object types

- Picture—a QuickDraw picture (PICT) file
- Movie—a QuickTime movie file
- Movie Controller—a QuickTime movie with the addition of a standard QuickTime movie controller giving user direct control over movie playback
- Empty—an invisible object that can receive mouse events (useful in creating buttons that overlay other elements)

Event types

- Before Display—sent to objects before the screen is initially drawn
- After Display—sent to objects after the screen is initially drawn
- Mouse Down—sent to an object when the mouse is pressed while over the object's active area
- Mouse Up—sent to an object when the mouse is released while over the object's active area
- Finished—sent to an object when its duration or playback elapses
- Mouse Enter—sent to an object when the mouse enters the object's active area
- Mouse Leave—sent to an object when the mouse leaves the object's active area
- Track Changed—sent to an object when the specified track is played
- Track/Time Reached—sent to an object when the time specified within the track is reached

Action types

There are three kinds of actions: commands, links, and CD commands.

Command actions

- Show—display an object
- Hide—erase an object and remove it from the screen
- Show Hide—toggle between showing and hiding an object
- Enable—make an object responsive to mouse events
- Disable—make an object unresponsive to mouse events
- Enable Disable—toggle between enabling and disabling the responsiveness of an object
- Start—start playing a movie
- Stop—stop playing a movie
- Start Stop—toggle between playing or stopping a movie
- Go to Start—set the current time of a movie to the earliest time (doesn't start playing the movie)
- Go to End—set the current time of a movie to its duration
- Go to Time—set the current time of a movie to the time specified in the “time” parameter
- Find Text—in the text track of a movie, search for the text specified in the “textToFind” parameter, and set the time of a movie to the time when that text starts

Link actions

- Go to Screen—switch to the screen specified
- Go Back—go to previous screen, if any
- Quit—close the interactive experience

CD command actions

- Play—start playing of CD audio
- Pause—pause playing of CD audio
- Go to Track/Time—specify the track and the time within that track
- Next Track—set the current CD audio track to the next track
- Previous Track—set the current CD audio track to the previous track
- Show Interactive Window—run the interactive experience, if available
- Show Media Window—show or bring to the front the media window

Features unique to the Apple Media Tool Music Engine

The Apple Media Tool Music Engine allows authoring of two events and seven actions that are related to the AppleCD Player application.

Events

- CD Track Changed—sent to objects on the current screen when the current audio track being played changes
- CD Track/Time Reached—sent to objects on the current screen when the specified time is reached within the audio track being played

Actions

- Play—start playing CD audio if not already playing
- Pause—pause playing of CD audio
- Go to Track/Time—specify the track and the time within that track
- Next Track—set the current CD audio track to the next track (also affected by play mode)
- Previous Track—set the current CD audio track to the previous track (previous track may be determined by play mode, because a custom playlist affects the order of play)
- Show Interactive Window—run the interactive experience, if available
- Show Media Window—show or bring to the front the media window

Menu commands for the Music Engine

This section explains the commands available from the menu bar when you're using the Apple Media Tool Music Engine. For information on the commands that are available in the Browser when you are creating a presentation, see "Browser Menu Commands," later in this chapter.

File menu

File	
New	⌘N
Open...	⌘O

Close	⌘W
Save	⌘S
Save as...	
Save as Text...	
Revert to Saved	

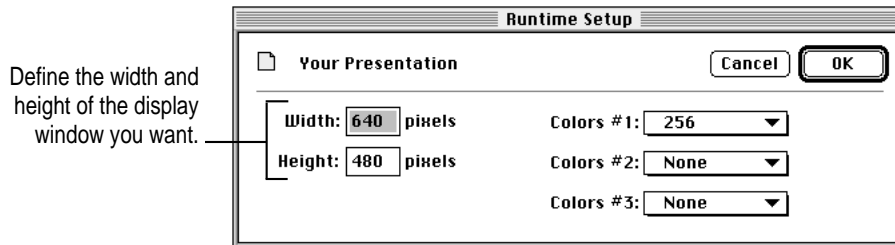
Runtime Setup...	
Preferences...	

Page Setup...	
Print...	⌘P

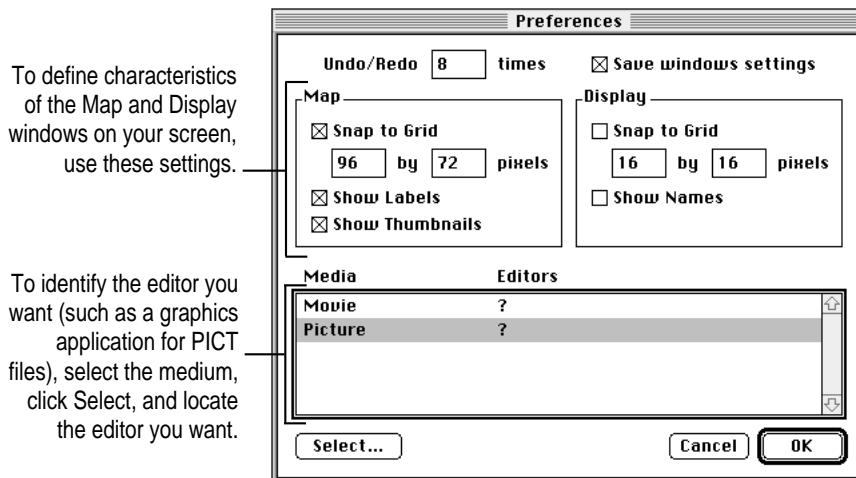
Quit	⌘Q

- **New** Brings up a blank map window.
- **Open** Brings up a dialog box that lets you locate and open files you've created with the Apple Media Tool Music Engine.
Note: You cannot open files created with other Apple Media Tool engines (such as the Standard Engine).
- **Close** Closes the active window. If you haven't saved the map or display in the window, an alert box appears asking you whether you want to save before closing the window.
- **Save** Saves the file you are working on, including any changes you've made to it. Use Save (rather than Save As) for routine saving of your project.
- **Save As** Saves the file you are working on. After the first time you save the file, Save As lets you save the file with a different name, or in a different folder, or on a different disk.

- **Save As Text** This command is irrelevant to the Music Engine. You don't need to save the file as text for use in a QuAC file.
- **Revert to Saved** Opens the most recently saved version of a project. If there haven't been any changes since the last time you saved the project, Revert to Saved is dimmed.
- **Runtime Setup** Determines the size of the display window used for a particular presentation or custom controller (that is, the size of the window on your monitor).



- **Preferences** Determines the appearance of the map and display windows you use while creating your project and lets you define the applications you use to edit the QuickTime movies and PICT files in your project.



- **Page Setup** Lets you set the page size, orientation, and other options for documents that you print in the Music Engine.

- **Print** Prints the contents of the active window. The Print dialog box that appears is similar to such dialog boxes in most Macintosh applications.
- **Quit** Ends a session with the Apple Media Tool Music Engine. If you haven't saved the most recent changes, a message appears asking you whether you want to save the project before quitting the application.

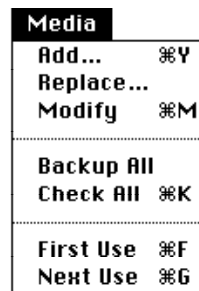
Edit menu

Edit	
Undo	⌘Z
Redo	⌘R
<hr/>	
Cut	⌘H
Copy	⌘C
Paste	⌘V
Paste into	⌘B
Clear	
Clear into	
<hr/>	
Select All	⌘A
Invert Selection	⌘I
<hr/>	
Parameters...	

- **Undo** Cancels your most recent changes to the file. For example, if you select and delete text from the Notes area, you can choose Undo to cancel the deletion. When an action cannot be undone, the command is dimmed.
- **Redo** Cancels an Undo.
- **Cut** Removes the item you have selected and places it on the Clipboard. Because items such as a screen in the map window are containers for other items such as PICT files, cutting removes the contents of the screen as well as the screen itself.
- **Copy** Copies the item you have selected to the Clipboard. The original item stays where it was when you selected it. As with the Cut command, copying an item also copies anything it contains.
- **Paste** Copies the item on the Clipboard to the location you indicate.
- **Paste into** Copies a media item on the Clipboard to an object you select in the Objects pane of the Browser. Use the command to replace a media item with one of the same type (such as a PICT file with another PICT file).

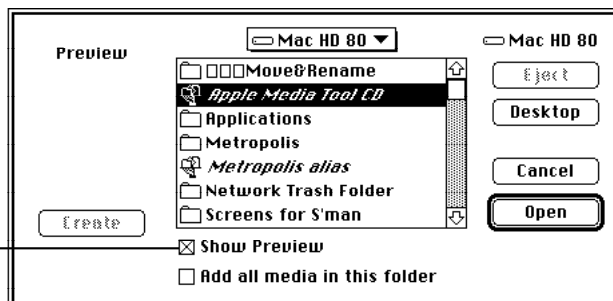
- **Clear** Removes the item you have selected without placing it on the Clipboard. (The contents of the Clipboard, if any, stay intact.) This command accomplishes the same objective as pressing the Delete key when text has been selected. As with the Cut and Copy commands, Clearing an item also clears anything it contains.
- **Clear into** Removes media from an item in the Objects pane of the Browser without removing the object itself. Leaves an item named *Empty*.
- **Select All** Selects everything in a particular container. Click the Browser pane that contains the items you want to select, then choose Select All.
- **Invert Selection** Selects items that are not selected and deselects those that are selected among a group of items in the same container.
- **Parameters** Lets you define some characteristics of a selected item. The options available vary depending on the item you select. Double-clicking the item is another way to bring up the Parameters dialog box.

Media menu



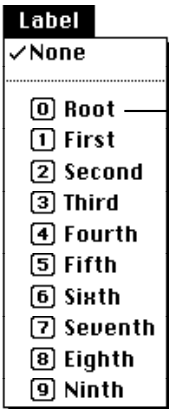
- **Add** Adds media to the Media miniwindow. You select PICT and QuickTime files from this source to include on the screens in your project.

To add all the media in a selected folder, click this checkbox. An X means the feature is on.



- **Replace** Replaces a PICT file or QuickTime movie you select in the Media miniwindow with another one you can choose from the dialog box that appears. You cannot use this command to replace more than one item at a time.
- **Modify** Lets you edit a selected PICT file or QuickTime movie. If you have previously specified (in the Preferences dialog box) the editor you intend to use, you can select a item in the Media miniwindow and choose Modify to edit the item. For details about the Preferences command, see the section “File Menu,” earlier in this chapter.
- **Backup All** Creates a folder named MEDIA that contains copies of all the media items you use in a project and puts the MEDIA folder into the same folder that contains the project.
- **Check All** Verifies that the items in your Media miniwindow are available. The files that appear in the Media miniwindow are not the actual PICT and QuickTime movie files. They are references to the files themselves, and occasionally the original files may be moved or deleted from the source. To make sure that the items in your Media miniwindow are available, click Check All. If all the files are where they were when you added them, a beep sounds. If a file is missing, a dialog box appears asking for the location of the file. Use the dialog box to find the file you want. To make such searches easier, you may want to keep together, in a folder named MEDIA, all PICT and QuickTime movie files you plan to use in presentations.
- **First Use** Identifies the object that uses a media item first in the sequence of the presentation. To learn which object uses a media item, click the item in the Media miniwindow and choose First Use. (See also the Select Media command in the section “Object Menu,” later in this manual.)
- **Next Use** Identifies the object that uses the media item you found using the First Use command. If the media item has been used only once, you hear a beep.

Label menu

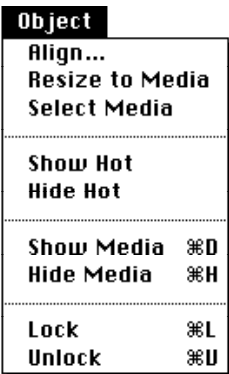


The root label (0) identifies the screen at which the presentation begins playing. If no screen is labeled 0, the presentation begins playing at the first screen listed in the Screens pane of the Browser.

Note: These labels are completely optional. Use them at your convenience, but they are not required for the presentation.

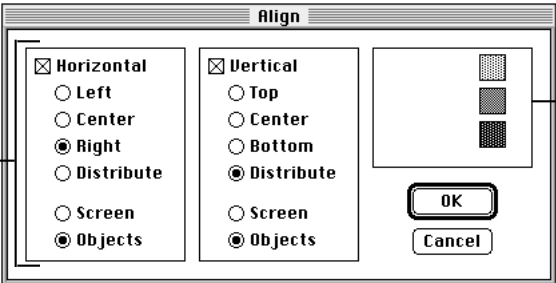
Use this menu to label a selected screen in the Map window.

Object menu



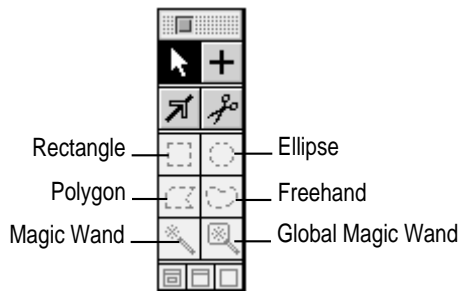
- **Align** Controls the positions of objects relative to each other.

To change the relative positions of objects, click the different horizontal and vertical options.



This panel shows a preview of the positions you define.

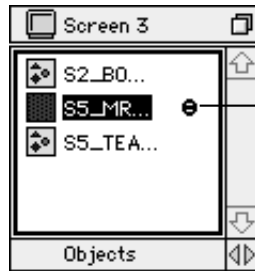
- **Resize to Media** Makes an object the size of the media it contains. This command is not available if the object and media are already the same size.
- **Select Media** Identifies the media item contained in the selected object. (See also the First Use command in the section “Media Menu,” earlier in this chapter.)
- **Show/Hide Hot** Reveals or hides the hot region of a selected object. You use specific tools from the Tool palette to create hot regions that can respond to mouse activities (such as clicks) when the pointer is within the hot region. By default, an object’s hot region is the entire rectangle it occupies, but the Tool palette lets you create custom hot regions, using the hot region tools identified in the illustration below.



The “shape” tools create hot regions in the shapes named. The Magic Wand lets you designate an area contiguous to a specific color as the hot region. The Global Magic Wand lets you designate all instances of a color within the object’s rectangle as hot regions.

Note: Hot regions you create with the Freehand tool, Magic Wand, and Global Magic Wand require more memory.

- **Show/Hide Media** Causes selected media items to be hidden from view or to be revealed again in the Display window. You may want to hide media if several items overlap in one screen. When a media item is hidden, a symbol appears next to its name in the Objects pane of the Browser.



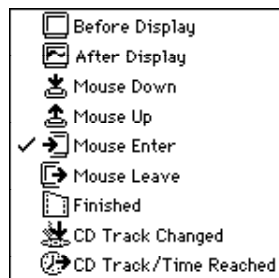
This symbol identifies a media item that's hidden from view in the Display window. You can select the item here and choose Show Media to reveal it again.

- **Lock/Unlock** Locks a selected object, preventing it from being deleted, cut, cleared, moved, resized, or aligned. Unlocks a selected locked object.

Action menu

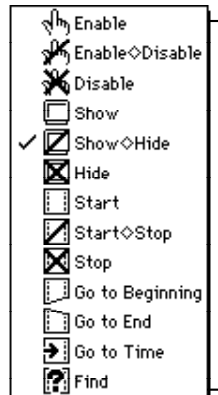
Action	
Add Event	⌘E
Add All Events	
<hr/>	
Add Command	⌘O
Add Link	⌘1
Add CD Command	⌘2

- **Add Event** Creates an event in the Browser's Events pane for a selected object.



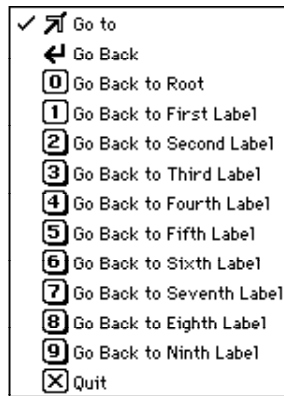
You can change the event, using this pop-up menu in the Events pane of the Browser. (For more information, see "Browser Menu Commands," later in this chapter.)

- **Add All Events** Lists all events in the Browser's Events pane for a selected object. You can delete any events you don't want.
- **Add Command** Adds specific actions associated with events. A list of options appears in the Actions pane of the Browser.



You can change the command, using this pop-up menu in the Actions pane of the Browser. (For more information, see "Browser Menu Commands," later in this chapter.)

- **Add Link** Adds a specific link when you want an event to take the presentation to another screen. A list of links appears in the Actions pane of the Browser.



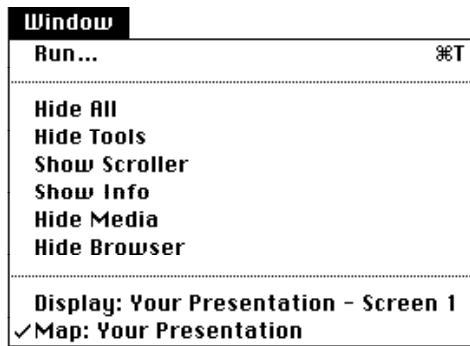
To specify the next place to go in your presentation, use this pop-up menu in the Actions pane of the Browser. (For more information, see "Browser Menu Commands," later in this chapter.)

- **Add CD Command** Adds a command for use with an audio CD player. You may use such commands in your presentation or in a custom controller you create to replace the standard controller in the AppleCD Player application.



Choose the command you want from this pop-up menu in the Actions pane of the Browser. (For more information, see “Browser Menu Commands,” later in this chapter.)

Window menu



- **Run** Previews your presentation. In the Map window (or in the Screens pane of the Browser), select the screen you want to start from (the first screen or any other screen in the presentation), and then choose Run from the Windows menu. The first screen of your presentation appears, and you can check out the actions and events you have defined with the Music Engine.
- **Hide/Show All** Hides or reveals the Browser and any other open miniwindows.
- **Hide/Show Tools** Hides or reveals the Tool palette.
- **Hide/Show Scroller** Hides or reveals the Scroller (a miniwindow that gives you an overview, in miniature, of the Map window).

- **Hide/Show Info** Hides or reveals the Info window. When you drag to change the size or position of an object, you can choose Show Info to get details of the change. The measurements are done in pixels. The X value specifies distance from the left edge of the Display window, and the Y value specifies distance from the top of the Display window.

Info	
X: 474	Current position of the pointer
Y: 127	
X: 325	Point at which you began dragging the object
Y: 60	
W: 200	Current height and width of the object
H: 150	

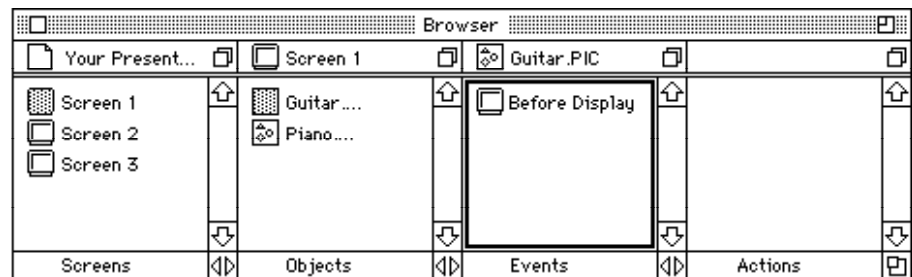
- **Hide/Show Media** Hides or reveals the Media miniwindow.
- **Hide/Show Browser** Hides or reveals the Browser.
- **Display and Map** Lists project windows currently open.

Browser menu commands

This section explains the commands available from the Browser's Events and Actions pop-up menus when you are creating a presentation. For information on the Music Engine menu commands, see "Menu Commands for the Music Engine," earlier in this chapter.

Events pop-up menu

To gain access to the Events pop-up menu, you must have created at least one screen and have selected at least one media object for that screen. Then you can choose Add Event from the Actions menu, and an event appears in the Events pane of the Browser.

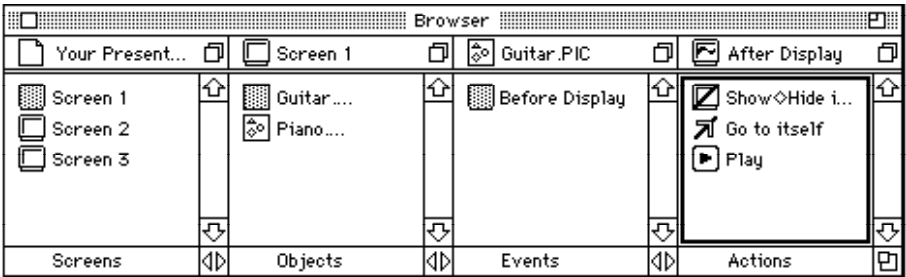


Each event that appears in the pane also acts as a pop-up menu. To see the pop-up menu, put the pointer on the event and press the mouse button. A list appears, showing the events available with the Music Engine.

Before Display	Sent by the Music Engine to each object in a screen before the screen is displayed
After Display	Sent by the Music Engine to each object in a screen immediately after the screen is displayed
Mouse Down	Sent to an object when the user presses the mouse button
Mouse Up	Sent to an object when the mouse button is released over the object
Mouse Enter	Sent to an object when the pointer moves into the object's hot region
Mouse Leave	Sent to an object when the pointer moves out of the object's hot region
Finished	Sent to an object when its duration or playback elapses
CD Track Changed	Sent to an object when a new track is played
CD Track/Time Reached	Sent to an object when the time specified within the track is reached

Actions pop-up menu

To gain access to the Actions pop-up menu, you must have added an action—a command, a link, or a CD command—to the Actions pane of the Browser.



There are three versions of pop-up menus in the Actions pane. The version depends on the action you choose from the Action menu in the menu bar.

Command actions in the pop-up menu

Each action that appears in the pane also acts as a pop-up menu. To see the pop-up menu, put the pointer on the action and press the mouse button. A list appears, showing the actions of this type available with the Music Engine.

Enable	Set the target to be enabled to receive mouse clicks
Enable Disable	Flip the enabled state of the target
Disable	Set the target to be disabled and invisible to mouse actions
Show	Set the target to be visible
Show Hide	Flip the visibility state of the target
Hide	Set the target to be invisible, perhaps revealing objects underneath.
Start	Start the duration timer of the target, playing its movie or sound if appropriate
Start Stop	Pause or restart the duration timer of the target
Stop	Stop the playback or duration timer of the target
Go to Beginning	Set the movie's current time to the beginning of the movie
Go to End	Set the movie's current time to its end
Go to Time	Set the movie's current time to a specified time
Find	Find the given text in the text track of the target movie and set its current time to the position of the text

Link actions in the pop-up menu

A link moves from one screen to another. After all other actions for the event have been performed, all objects on the current screen are hidden, the objects from the target screen are loaded, and the new screen is displayed.

There are three kinds of links: the Go To link, several Go Back links, and the Quit link. When executing a Go To link, Apple Media Tool shows the screen that is the target of the link. For Go Back links, Apple Media Tool returns to a previous screen. On a Quit link, Apple Media Tool shows a black screen and then quits the title, returning to the environment from which the title was run.

The Go To link can use as a target only those screens that are linked to the current screen in the Map window. If you assign a screen to be the target of a Go To link, but it is not connected to that screen in the Map window, the link appears crossed out. This helps the designer of a title to avoid errors. When you are constructing a title with buttons that move the user from screen to screen, follow these steps:

- 1 Lay out the screens.**
- 2 Link the screens together in the Map window in the order in which they will be traversed.**
- 3 Create a button on each screen with some event (such as Mouse Up) that executes a Go To link.**
- 4 Set the link to its correct target by dragging the target screen from the Screens pane of the Browser miniwindow to the Go To link.**

CD command actions in the pop-up menu

Each action that appears in the pane also acts as a pop-up menu. To see the pop-up menu, put the pointer on the action and press the mouse button. A list appears, showing the actions of this type available with the Music Engine.

Play	Start playing CD audio if not already playing
Pause	Pause playing of CD audio
Go To Track/Time	Specify the track and time within that track
Next Track	Set the current CD audio track to the next track (also affected by play mode)
Previous Track	Set the current CD audio track to the previous track (previous track may be determined by play mode, because a custom playlist affects the order of play)
Show Interactive Window	Run the interactive experience, if available
Show Media Window	Show or bring to the front the media window

3

Using the Lyric Synchronizer



The Lyric Synchronizer is an application you can use to create a file containing a song and its lyrics. When you play the song, the lines of lyrics appear as they are being sung. With the printed lyrics on the screen while you play an enhanced CD, you can select a particular lyric line you want to hear, and the AppleCD Player application will go to that line and play it for you.

In this chapter

- typing the lyrics
- preparing a flattened QuickTime sound movie
- synchronizing lyrics and sound

Typing the lyrics

- 1 **Using SimpleText or any word processor, type the lyrics, line by line.**

Do your best to match the phrasing of the song. When there's a significant pause in the singing, press Return and move to the next line.

If there's an instrumental solo longer than two or three seconds anywhere in the song, leave a blank line to represent the solo. This might mean you leave a blank line before the first line of lyrics, one or more blank lines as the song progresses, and a blank line after the last line is sung.

- 2 **When you have finished typing the lyrics, name and save the file.**

It's a good idea to save it in the same folder as the Lyric Synchronizer.

Preparing a flattened QuickTime sound movie

- 1 **Insert the music CD into the CD-ROM drive and close the tray.**

The CD icon appears on your desktop.

- 2 **Open the MoviePlayer application.**

If you don't already have the MoviePlayer application, a version came with your toolkit software on the *Apple Interactive Music Toolkit* CD. Find the MoviePlayer application in the Utilities folder on the CD. Then drag a copy of the application to your hard disk and double-click its icon to open it.

- 3 **Choose Import from the File menu.**
- 4 **In the dialog box that appears, locate the music CD and click Open.**
- 5 **In the next dialog box, select the song that you want and click Convert.**

6 In the **Save** dialog box, click **Options**.

7 In the **Options** dialog box, make the choices you want.

In the **Settings** area of the dialog box, choose:

- **Rate** 11.025 kHz
- **Size** 8 bit
- **Use** Mono

These settings work fine for synchronizing lyrics and use less space on your hard disk

In the **Audio Selection** area of the dialog box, notice that the entire song is selected, by default. If you want to capture only part of the song, use the markers on both ends of the slider to define the segment you want. To preview your selection, use the **Play** button.

8 When you've chosen the appropriate settings, click **OK**.

9 Name and save the file.

A small window shows the status of the process. Importing the movie can take a minute or two.

When the process is complete, a small player with the name you gave your sound movie appears.

10 Choose **Save As** from the **File** menu.

11 In the **Save As** dialog box, click **"Make movie self-contained"** and **"Playable on non-Apple computers."**

"Make movie self-contained" flattens the movie.

"Playable on non-Apple computers" means the song with synchronized lyrics can be played on other than Macintosh computers.

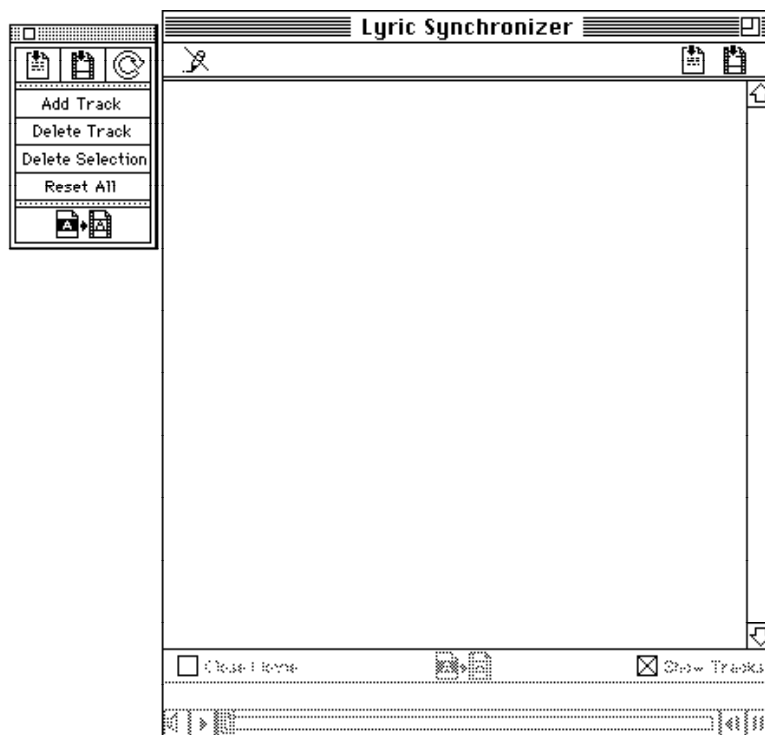
12 Name and save the file.

This is the file you use when you synchronize the lyrics and the song. It's a good idea to save it in the same folder as the **Lyric Synchronizer** and the text file containing the lyrics.

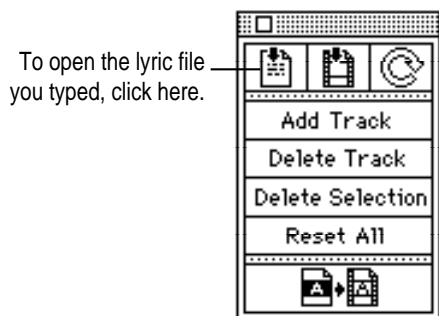
Synchronizing lyrics and sound

- 1 Open the Lyric Synchronizer.**

A window and a miniwindow appear.

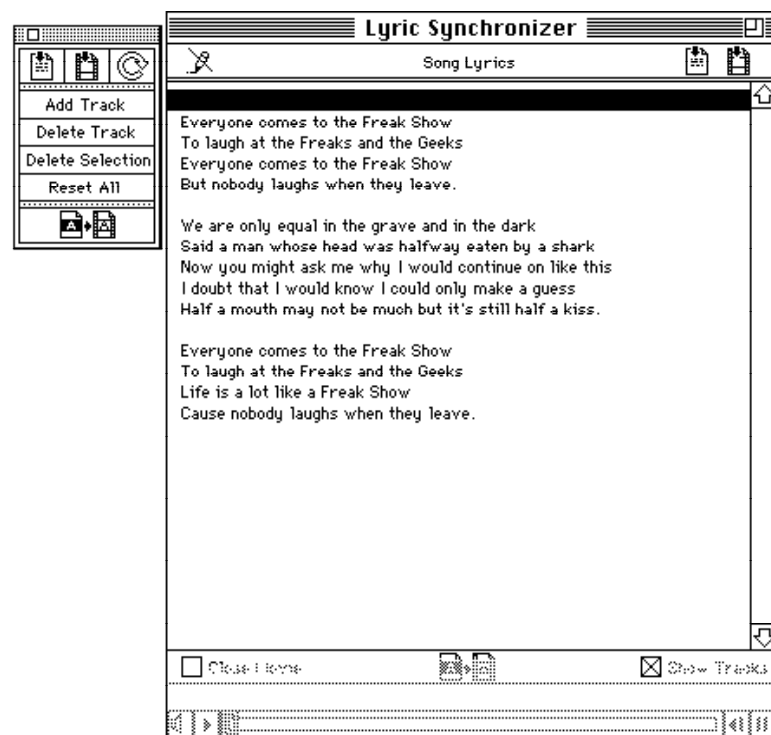


- 2** To open the lyric file, click the document icon in the miniwindow.

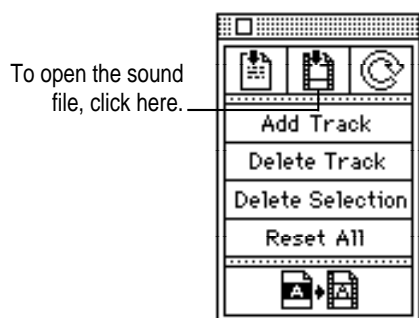


- 3 In the Open dialog box that appears, locate the lyric file and click Open.

Now the lyrics appear in the window.

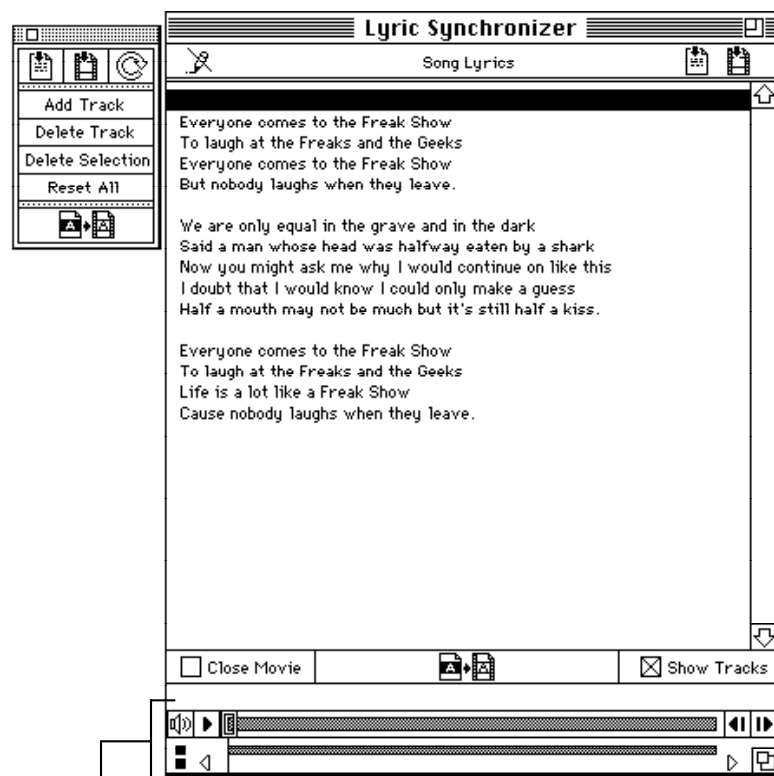


- 4 To open the sound movie file, click the movie icon in the miniwindow.



- 5 In the Open dialog box that appears, locate the sound movie file and click Open.

Notice that the player at the bottom of the window is now active.



The sound movie player

6 In the sound movie player, click the play button.

To start the song, click the play button.

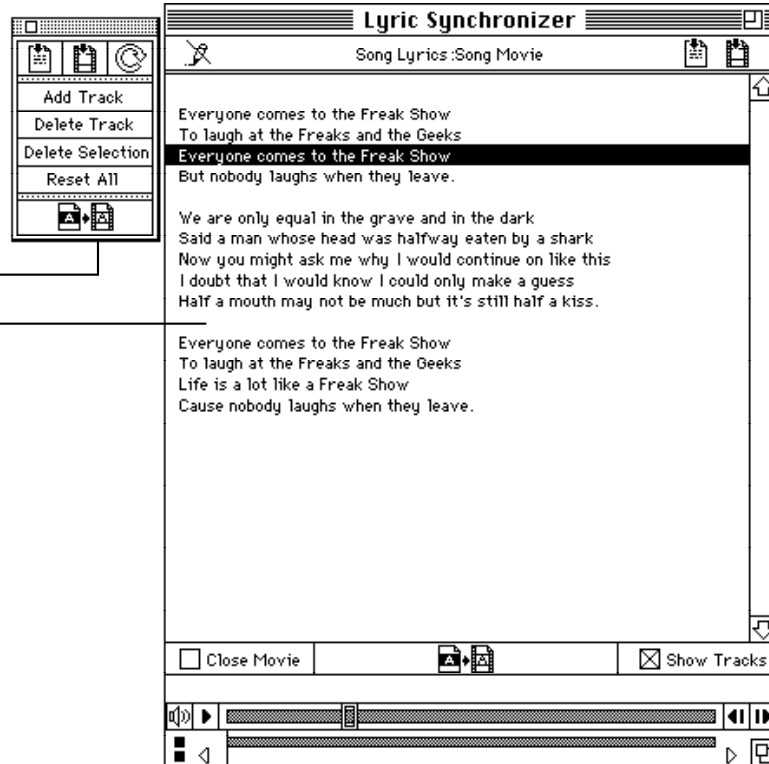


7 Each time a line of lyrics starts, click the text-to-movie icon in the miniwindow.

To move the selection bar to the next line of lyrics, click this icon.

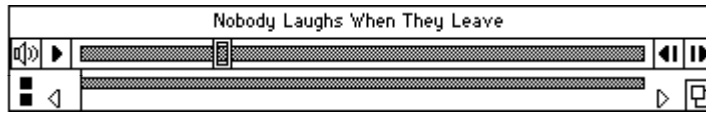
During an instrumental segment, with no singing, let the selection bar rest on a space between lines of lyrics.

Be prepared, when the singing starts again, to click the text-to-movie icon.



With practice, you should be able to synchronize lyrics to your own satisfaction. The most important factor in successful synchronizing is your familiarity with the song. Be sure to listen to the song and know the rhythm and verses well.

- 8 When the player reaches the end of the song and plays it again, you can watch the lyrics appear in the player.



If you are not satisfied with the result, click Reset All in the miniwindow and repeat the process, starting at step 2.

- 9 When you are satisfied with the synchronized music and lyrics, stop the player and choose Save from the File menu.
- 10 In the dialog box that appears, name and save the movie.

A sound movie can be used as one of the media items you add to the interactive multimedia presentation you create with the Apple Media Tool Music Engine. For more information about the Apple Media Tool Music Engine, see Chapter 2.

4

Using the Apple Interactive Music Tool

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You use the Apple Interactive Music Tool to create QuickTime Album Container (QuAC) files.

In this chapter

- entering information
- creating QuAC files

Entering information in the Apple Interactive Music Tool

You use the tool to enter information that describes the enhanced CD:

- Disc/File—information about the entire CD
- Tracks—information about all of the tracks on the CD, including the list of tracks, song titles, and details about each song.
- Internet—URLs for direct links to Internet sites
- AMT Files—access to interactive media presentations and custom controllers, prepared with the Apple Media Tool Music Engine for your CD

Most of the information is optional. You are required to enter:

- the album title (to meet Blue Book specifications)
- the name of the principal artist (to meet Blue Book specifications)
- a photo of the album's front jacket (to meet Blue Book specifications)
- song title for each track (to create a QuAC file)
- principal artist for each track (to create a QuAC file)

To open the Apple Interactive Media Tool:

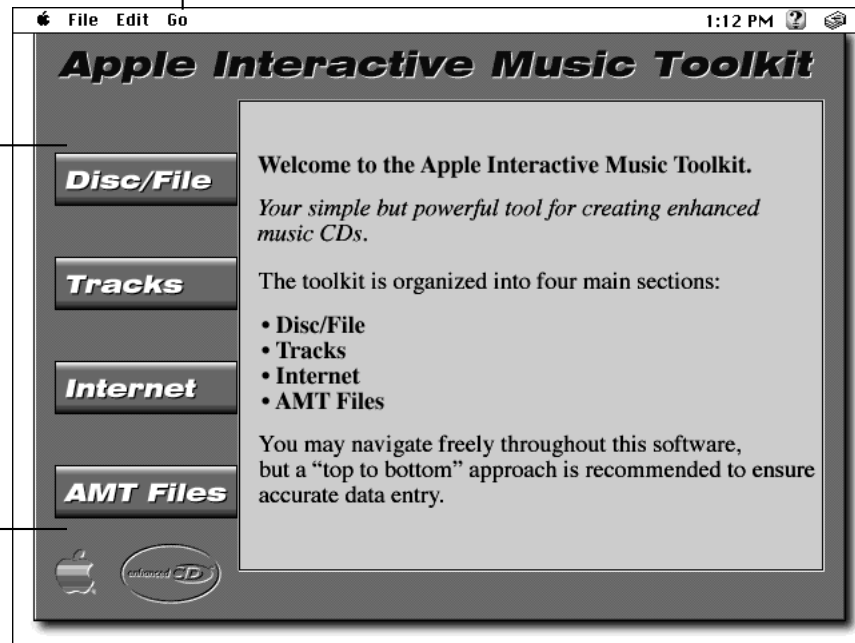
- **Double-click the Apple Interactive Music Tool icon.**

Introduction

In the Introduction card, you'll find a brief description of how to navigate.

If this card does not appear, choose Information from the Go menu.

To go to a section, click its button. It is recommended that you click Disc/File first.

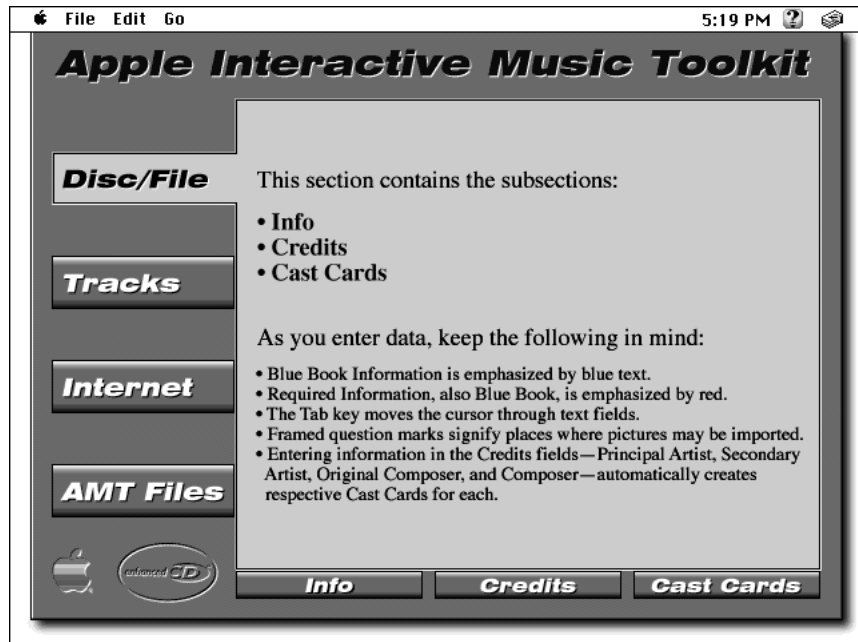


To go to one of the sections:

- **Click a section button on the Introduction card.**

Disc/File section

The introduction to the Disc/File section provides useful information about entering data.



Disc File Info—card 1

The Info subsection contains two cards. Enter the required information and any other information you want. What you enter here appears in the AppleCD Player application when you play the CD.

The screenshot shows the Apple Interactive Music Toolkit (AMT) application window. The title bar includes the Apple logo, menu items (File, Edit, Go), and the time (5:20 PM). The main window has a sidebar with buttons for "Disc/File", "Tracks", "Internet", and "AMT Files". The "Disc/File" card is active, displaying fields for "Principal Artist:", "Disc Title:", "Format:" (with radio buttons for ECD and UCD), "Disc:" and "of:" (for disc numbering), "Blue Book:", "QuAC File:", "UPC:", "ISBN:", and "Genre:" (with a dropdown menu). At the bottom of the card are buttons for "Info", "Credits", and "Cast Cards". A small "Versions" section is also visible. A callout line points from the "Cast Cards" button to a separate instruction.

To go to card 2, click here.

Required information

This close-up shows the "Principal Artist:" and "Disc Title:" input fields. A bracket on the right side of these fields points to a text box containing the following instruction:

Principal Artist and Disc Title must be filled in (required according to the Blue Book standard).

General information (optional)

If you plan to put the QuAC file on an enhanced CD, click ECD to select it.

To distribute the QuAC file separate from the disc, click VCD (virtual CD).

Format: ☒ ECD ☐ VCD

Disc: **Blue Book:**

of: **QuAC File:**

UPC:

ISBN:

Versions

Enter the number of discs in the album (optional). For example, some albums are a two-disc set.

Genre (optional)

Genre:

None

Adult Contemporary

Alternative Rock

Childrens Music

Classical

Contemporary Christian

Country

Dance

Easy Listening

Erotic

Folk

Gospel

Hip Hop

Jazz

Latin

Musical

New Age

Opera

Operetta

Pop Music

• **RAP**

Reggae

Rock Music

Rhythm & Blues

Sound Effects

Sound Track

Spoken Word

World Music

The genres listed are registered with the Recording Industry Association of America (RIAA).

You can choose up to four genres for one album. (In the Tracks section, you can also choose up to four genres for each track on the album.)

Disc File Info—card 2

The information on the second card is optional (not required to meet the Blue Book standard). If you enter information here, it appears when you play the CD in the Apple CD Player.



Language (optional)

Scroll to find the language used on the album and select the one you want.

Note: In this version of the software, only one language per QuAC file is supported.



File information details (optional)

Publisher:	<input type="text"/>
Publishing Date:	<input type="button" value="Today"/> <input type="text"/>
Creation Date:	<input type="button" value="Today"/> <input type="text"/>
Copyright:	<input type="text"/>

Disc File Credits—card 1

The Credits subsection contains two cards. Enter the required information and any other information you want. The information you enter appears when you play the CD with the AppleCD Player application.

The Disc Title and Principal Artist are required. If you have already entered the title on the Info card, that information appears here automatically.

Apple Interactive Music Toolkit

Disc/File

Disc Title:

Principal Artist:

Secondary Artist:

Composer:

Original Composer:

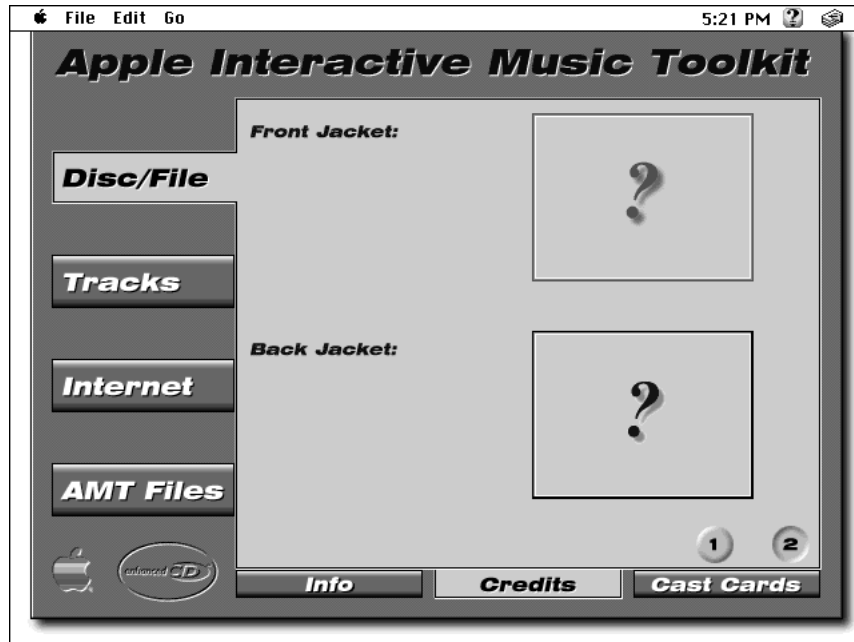
Info Credits Cast Cards

1 2

To go to card 2, click here.

Disc File Credits—card 2

To meet the Blue Book standard, the file must include the Front Jacket image.



Front Jacket and Back Jacket images

The Front Jacket image is required; the Back Jacket is optional.

- 1 Double-click the Front Jacket box.



The boxes here measure 320 by 240 pixels, **not** the same ratio as most front and back jackets. To avoid distortion, use graphics software to crop the image before you place the image here.

- 2 In the dialog box that appears, locate the PICT file you want and select it.
- 3 Click Open.

The image appears in the box you selected in step 1. You can repeat the process for the Back Jacket box if you want to.

Disc File Cast Cards

Use cast cards to enter information about the artists who appear on the album. This information is optional.



Artist's image (optional)

You can import a PICT file showing an image of the artist.

- 1 Double-click the box provided for the image.



- 2 In the dialog box that appears, locate the PICT file you want.
- 3 Click Open.

The image appears in the box.

Tracks section

The introduction to the Tracks section provides useful information about entering data.

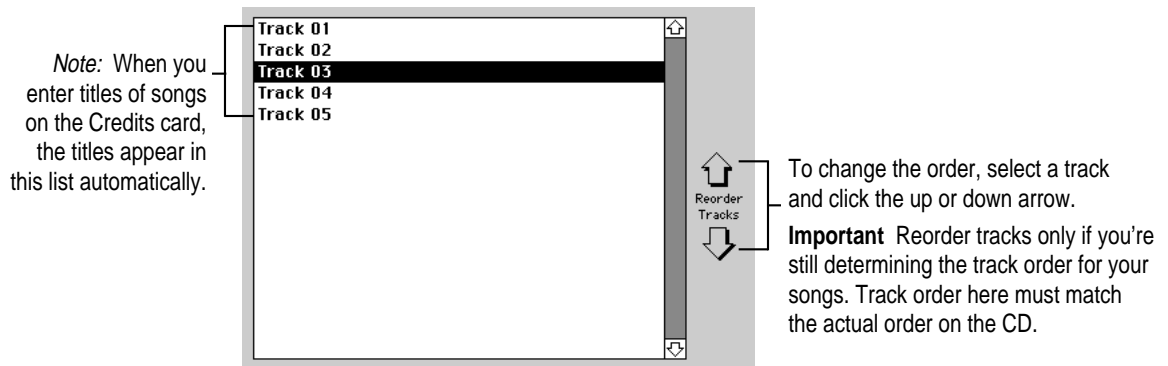


Track List

Use this card to list all the tracks on the album.



To change the order of tracks in the list, click a track to select it, and then click the up or down arrow to move the track to a different position.



To enter detailed information about each track, click Credits or double-click the track in the list.

Track Credits—card 1

Enter the information you want added to your QuAC file. What you enter here appears in the AppleCD Player application when you play the CD.

The screenshot shows the Apple Interactive Music Toolkit (AMT) application window. The title bar includes the Apple logo, menu items (File, Edit, Go), and the time (5:24 PM). The main window has a dark gray background with the title "Apple Interactive Music Toolkit" in a stylized font. On the left side, there are four buttons: "Disc/File", "Tracks", "Internet", and "AMT Files". The "Tracks" button is currently selected. The main area displays the "Track Credits" card for "Track 01". The card has a "Track" dropdown menu set to "Track 01" and a "01" label. Below this are input fields for "Song Title:", "Principal Artist:", "Secondary Artist:", "Composer:", "Original Composer:", "Publisher:", "Copyright:", and "ISRC:". The "Song Title" field is filled with "Track 01". At the bottom of the card, there are three buttons: "Track List", "Credits", and "Cast Cards". The "Credits" button is highlighted. There are also two small circular buttons labeled "1" and "2" at the bottom right of the card.

To go to card 2, click here.

Required information

This close-up shows the "Song Title:" and "Principal Artist:" labels on the left. The "Song Title:" input field is filled with "Track 01". The "Principal Artist:" input field is empty.

Song Title and Principal Artist must be filled in.

General information (optional)

Secondary Artist:	<input type="text"/>
Composer:	<input type="text"/>
Original Composer:	<input type="text"/>
Publisher:	<input type="text"/>
Copyright:	<input type="text"/>
ISRC:	<input type="text"/>

If the copyright for a song is different from the album's copyright, put the song's copyright information here.

Track Credits—card 2

Enter the information you want added to your QuAC file. This information is optional. If you enter information here, it appears when you play the CD with the AppleCD Player application.

Track tempo, length, and key (optional)

Enter the tempo
(beats per minute)
of the song.

The form consists of three fields: 'Tempo' with a text input box, 'Length' with a clock icon and a dotted line for a time value, and 'Key' with a dropdown menu.

To get an exact reading of the
track time, put the CD into the
CD-ROM tray, close the tray,
and click this clock.

Choose the key of
the song from the
pop-up menu.

Genre (optional)

A list of music genres with 'RAP' selected. The list includes: None, Adult Contemporary, Alternative Rock, Childrens Music, Classical, Contemporary Christian, Country, Dance, Easy Listening, Erotic, Folk, Gospel, Hip Hop, Jazz, Latin, Musical, New Age, Opera, Operetta, Pop Music, RAP (selected), Reggae, Rock Music, Rhythm & Blues, Sound Effects, Sound Track, Spoken Word, and World Music.

The genres listed are registered with
the Recording Industry Association
of America (RIAA).

You can choose up to four genres for
each track on the album.

Lyrics and MIDI information (optional)

To open a file of lyrics for this track, click here.

To open a standard MIDI file for this track, click here.

Lyrics...	
MIDI...	

Note: In this version of the software, the MIDI access is not supported by the current version of the AppleCD Player application.

To learn how to create a lyrics file, using Lyric Synchronizer, see Chapter 3.

Changing to a different track

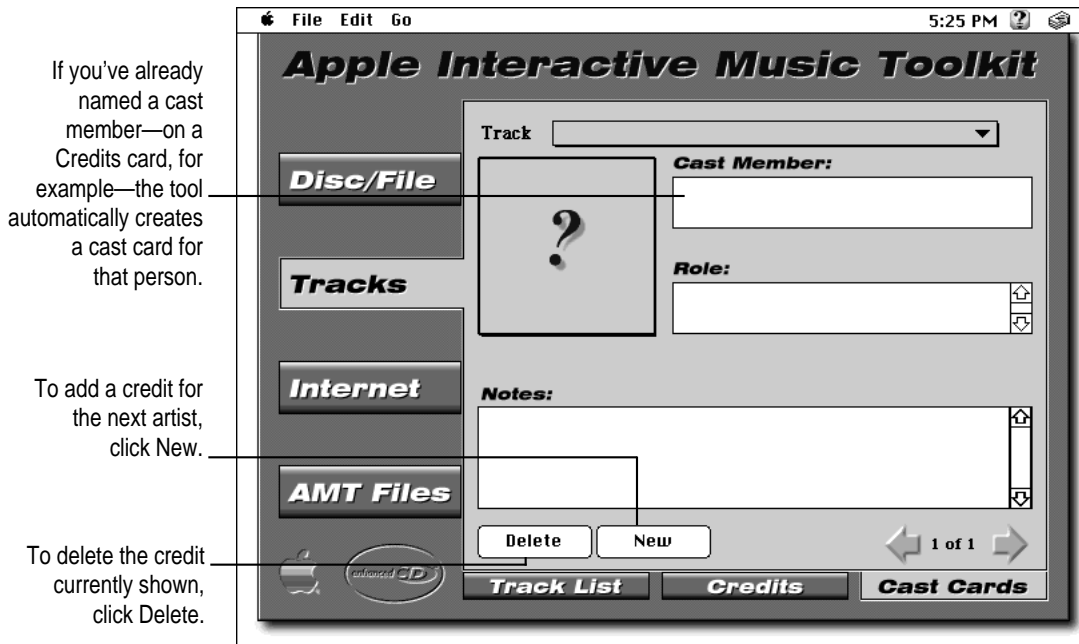
Use the pop-up menu to go to the information about any of the tracks listed.

Track	Track 01 ▼	01
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When a song title appears on the pop-up menu, this number tells you the song's position in the track list.

Cast Cards

Use these cards to enter information about the artists who appear on the album.



Artist's image (optional)

You can import a PICT file showing an image of the artist.

- 1 Click the box provided for the image.

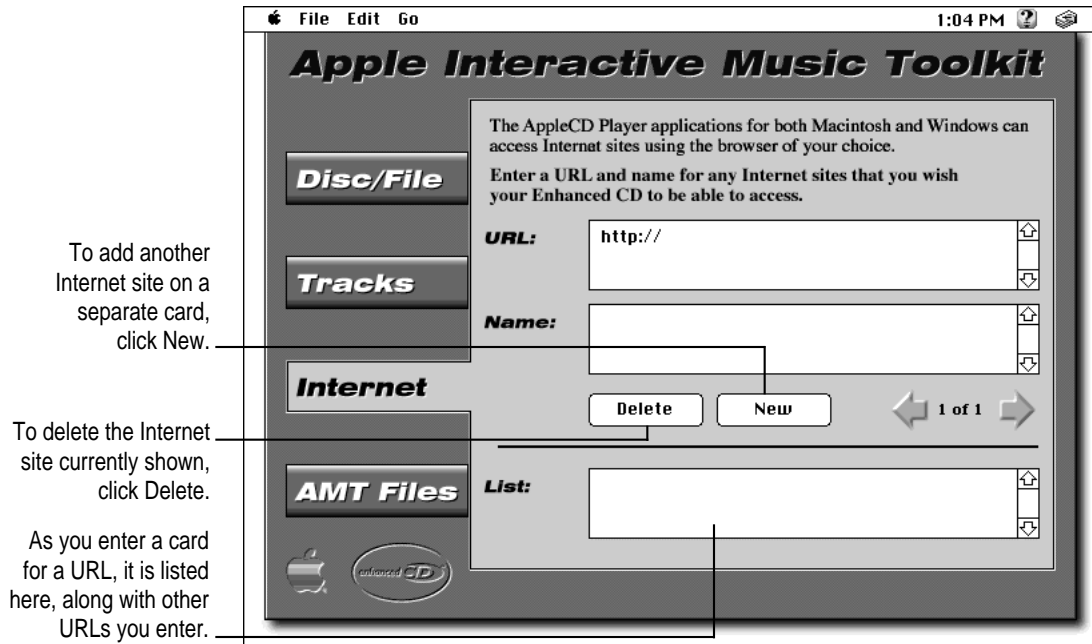


- 2 In the dialog box that appears, locate the PICT file you want and select it.
- 3 Click Open.

The image appears in the box.

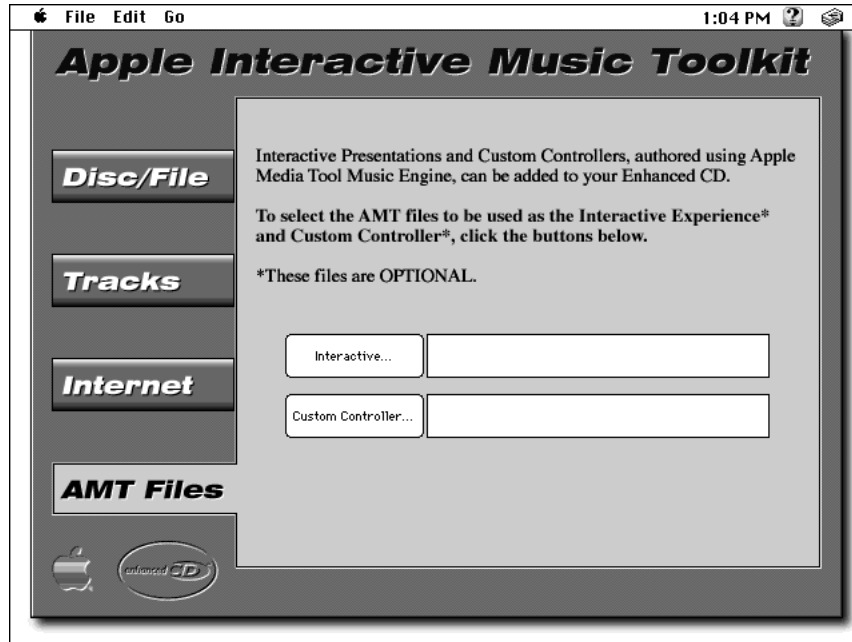
Internet

Use this card to enter information about an Internet site you want the CD to have access to. You can enter only one URL for each card, but you can add more than one card.



AMT Files

Use this card to identify the path to interactive presentations and custom controllers you want to include in the QuAC file you create.



- 1 Click the Interactive or Custom Controller button.
- 2 In the dialog box that appears, locate the file you want.
- 3 Click Open.

The pathname to the AMT file you've chosen appears in the scrolling box.

Using the Apple Media Tool Music Engine

For practice using the Apple Media Tool Music Engine to create interactive presentations, see “The Tutorial” in Chapter 1. For information on the menu commands available in the Apple Media Tool Music Engine, see Chapter 2.

Saving a work in progress

To save your work, choose Save As from the File menu at frequent intervals.

Making a QuAC file

When you have entered the information you want, you can create the QuAC file.

- 1 Select the appropriate type, enhanced CD (ECD) or virtual CD (VCD), for your QuAC file.

If you plan to put the QuAC file on an Enhanced CD, click ECD to select it.
To distribute the QuAC file separate from the disc, click VCD.

Deciding whether to select ECD or VCD

A VCD QuAC file contains only an interactive view, a full-screen, game-like experience. When you are looking at a VCD file, the AppleCD player ignores whatever CD is in the CD-ROM drive.

An ECD QuAC file contains media (such as lyrics, credits, and album art) and may contain the interactive view for a specific CD, but it does not contain the music from the audio tracks. If you have an ECD file but don't have the associated audio CD, you can still look at the media and the interactive view, but you can't listen to the audio tracks (on the CD you don't have). If you have the CD that goes with the QuAC file, AppleCD Player treats the two as an enhanced CD (or CD Extra) disc. You can, for example, see the lyrics from the ECD QuAC file displayed, synchronized with the music from the CD.

- 2 Choose Make QuAC File from the File menu.
- 3 In the dialog box that appears, type a name for the file.
- 4 Click Save.
- 5 You can start work on a new QuAC file or choose Quit from the File menu.

Making a master CD containing the QuAC file

If you have created and saved an ECD QuAC file and want to burn it onto a CD, you need to use Toast CD-ROM Pro by Astarte. Instructions for using Toast are provided with the software.

Menu Commands for the tool

This section explains the commands available from the menu bar when you're using the tool to create a QuAC file.

File menu

File	
New...	⌘N
Open...	⌘O
Save as...	⌘S
Make QuAC File	⌘M
Quit	⌘Q

- **New** Brings up a new project with no entries. If you choose New while you have an unsaved card open, a message asks whether you want to save the card you were working on.
- **Open** Brings up a dialog box that lets you locate and open files you've created with the Apple Interactive Music Tool. If you have a file open already, you'll be asked whether you want to save it. If you don't save it, the information is lost.

- **Save As** Saves the file you are working on. After the first time you save the file, Save As lets you save the file with a different name, or in a different folder, or on a different disk.
- **Make QuAC File** Creates the QuAC file made up of information you entered in the tool. You can burn the QuAC file onto a CD ROM, creating an enhanced music CD that can be played using the AppleCD Player application.
- **Quit** Ends a session with the Apple Interactive Music Tool.

Edit menu

Edit	
Undo	⌘Z
Cut Text	⌘H
Copy Text	⌘C
Paste	⌘V
Clear Text	

- **Undo** Cancels your most recent changes to the file. For example, if you select and delete some text from the Notes area, you can choose Undo to cancel the deletion. When an action cannot be undone, the command is dimmed.
- **Cut Text** Removes the text you have selected and places it on the Clipboard.
- **Copy Text** Copies the text you have selected and places it on the Clipboard. The original text stays where it was when you selected it.
- **Paste** Copies the text on the Clipboard to the location you indicate.
- **Clear Text** Removes the text you have selected without placing it on the Clipboard. (The contents of the Clipboard, if any, stay intact.) This command accomplishes the same objective as pressing the Delete key when text has been selected.

Go menu

Go	
Introduction	⌘1
Disc/File Info	
Disc/File Credits	
Disc/File Cast Cards	
Track List	
Track Credits	
Track Cast Cards	
Internet	
AMT Files	
Previous	⌘2
Next	⌘3
Last	⌘4

This menu provides another way to navigate among the cards.