

Upgrading to Pro Tools 6.6

Version 6.6 for HD and HD Accel Systems on Macintosh

Digidesign

2001 Junipero Serra Boulevard
Daly City, CA 94014-3886 USA
tel: 650-731-6300
fax: 650-731-6399

Technical Support (USA)

tel: 650-731-6100
fax: 650-731-6384

Product Information (USA)

tel: 650-731-6102
tel: 800-333-2137

International Offices

Visit the Digidesign Web site
for contact information

Web Site

www.digidesign.com



digidesign

Copyright

This guide is copyrighted ©2004 by Digidesign, a division of Avid Technology, Inc. (hereafter "Digidesign"), with all rights reserved. Under copyright laws, this guide may not be duplicated in whole or in part without the written consent of Digidesign.

DIGIDESIGN, AVID and PRO TOOLS are trademarks or registered trademarks of Digidesign and/or Avid Technology, Inc. All other trademarks are the property of their respective owners.

Product features, specifications, system requirements, and availability are subject to change without notice.

PN 932914139-00 REV A 9/04

contents

Chapter 1. Introduction	1
System Requirements	1
Chapter 2. Installing Pro Tools 6.6 on Macintosh	3
Apple System Settings for Mac OS X	3
Installing Pro Tools TDM Software	4
Optional Software	5
Digidesign CoreAudio Driver	5
Pro Tools Demo Session	5
Checking Your Pro Tools System	5
Launching Pro Tools	6
Configuring Pro Tools	6
Removing Pro Tools on Mac OS X	6
Appendix A. Digidesign CoreAudio Driver (Macintosh Only)	7
Introduction	7
What are the Limitations of the Digidesign CoreAudio Driver?	8
Compatibility	8
Compatible Software	8
Installing the Digidesign CoreAudio Driver	8
Removing the CoreAudio Driver	9
Configuring the Digidesign CoreAudio Driver	9
Digidesign CoreAudio Manager	9
Configuring the Apple Sound Preferences or Apple Audio MIDI Setup	12
Appendix B. Configuring AMS (Mac OS X Only)	15

chapter 1

Introduction

This guide documents how to upgrade to Pro Tools 6.6 for Pro Tools|HD and HD Accel systems on a Digidesign-qualified Macintosh computer.



If you are configuring a new Pro Tools system, follow the complete hardware and software installation steps in the Getting Started Guide.

System Requirements

Pro Tools 6.6 can be used on Pro Tools|HD and HD Accel systems on a Digidesign-qualified Macintosh.

This software requires specific versions of many third-party components, including SCSI drivers and disk management utilities.

For complete system requirements, visit the Digidesign Web site (www.Digidesign.com).

Compatibility Information

Digidesign can only assure compatibility and provide support for hardware and software it has tested and approved.

For a list of Digidesign-qualified computers, operating systems, hard drives, and third-party devices, refer to the latest compatibility information on the Digidesign Web site (www.digidesign.com/compato).

chapter 2

Installing Pro Tools 6.6 on Macintosh

This chapter explains how to install and configure Pro Tools 6.6 for Pro Tools|HD and HD Accel systems on a Digidesign-qualified Macintosh computer.

For complete system requirements and compatibility information, visit the Digidesign Web site (www.digidesign.com/compto).

Apple System Settings for Mac OS X

To ensure optimum performance and compatibility, configure the following settings for Mac OS X before you install Pro Tools software.

⚠ *Do not use the Mac OS X automatic Software Update feature, as it may upgrade your system to a version of Mac OS that has not yet been qualified for Pro Tools. For details on qualified versions of Mac OS, refer to the latest compatibility information on the Digidesign Web site (www.digidesign.com).*

To configure Mac OS X for Pro Tools:

- 1 Turn on your computer.
- 2 Make sure you are logged into an administrator account where you want to install Pro Tools. For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.
- 3 Choose System Preferences from the Apple Menu and click Energy Saver.
- 4 Click the Sleep tab and turn off the Energy Saver feature by setting the sleep feature to Never.
- 5 Click the Option tab and select Highest from the Processor Performance pop-up menu.
- 6 Return to the System Preferences and click Software Update.
- 7 Deselect “Automatically check for updates when you have a network connection.”
- 8 Close the Software Update dialog box.

Installing Pro Tools TDM Software

To install Pro Tools TDM on Mac OS X:

1 Make sure you are logged in as an Administrator for the account where you want to install Pro Tools. For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.

2 Insert the Pro Tools 6.6 Installer CD-ROM in your CD-ROM drive. Double-click “Install Pro Tools.”

– or –

If you downloaded the Pro Tools 6.6 Update from our Web site, follow the instructions provided with it to expand and launch the installer.

3 Enter your Administrator password and click OK to authenticate the installation.

4 Follow the on-screen instructions to continue and accept installation.

5 In the Installer window, make sure the Install Location is on your Start-up hard drive.

6 In the Installer window, choose Custom Install from the pop-up menu, and enable the DigiTranslator 2.0 and Avid Video options. When choosing Custom Install, you can select from a list of components to install along with Pro Tools. Click the name of each component for a description of its contents.

7 Click Install.

8 Select your work environment. This loads an initial set of Pro Tools Preferences that include some of the more popular settings for post production, audio, or audio with MIDI.



Preference settings can be customized at any time in Pro Tools. See the Pro Tools Reference Guide for more information about Preferences.

9 Select whether to install the Surround Mixer plug-in. This plug-in is required for mixing, mastering, and monitoring in surround:

- For Surround systems, select “Yes – Monitoring Pro Tools Film Format” if your monitoring is configured for Film Format.
- Select “Yes – Monitoring in ProControl (DTS Format)” if you are using a ProControl dedicated controller.
- Select “No – Stereo mixing only” if your monitoring is configured for Stereo.



The Surround Mixer can be installed at any time. For more information, see the Pro Tools Reference Guide.

10 Click Continue.

11 When installation is complete, click Restart.

Audio MIDI Setup (AMS)

If you plan to use any MIDI devices with Pro Tools, configure your MIDI setup with the Apple Audio MIDI Setup (AMS) utility. See Appendix B, “Configuring AMS (Mac OS X Only)” for details.


Optional Software

Your Pro Tools Installer CD-ROM includes several software options.

Digidesign CoreAudio Driver


The Digidesign CoreAudio Driver is a multi-client, multichannel sound driver that allows CoreAudio-compatible programs to record and play back through Digidesign hardware.

The CoreAudio Driver is automatically installed when you install Pro Tools.

 *For detailed information on installing and using the Digidesign CoreAudio Driver, see Appendix A, “Digidesign CoreAudio Driver (Macintosh Only).”*

Stand-Alone CoreAudio Driver Installer

This version of Digidesign CoreAudio Driver can be installed on Digidesign-qualified Pro Tools systems running on Macintosh (for example, if the CoreAudio Driver was uninstalled), or it can be installed as a stand-alone driver on Macintosh systems that do not have Pro Tools installed.

 *For detailed information on installing and configuring CoreAudio Driver on systems with or without Pro Tools, see the electronic pdf of the CoreAudio Usage Guide.*

Pro Tools Demo Session

The Pro Tools Installer CD-ROM includes a demo session that you can use to verify that your system is working.


To install the demo session:

- 1** Insert the Pro Tools Installer CD in your CD-ROM drive. Locate and double-click the demo session installer icon.
- 2** Set the install location to your audio drive, and click Install.
- 3** When installation is complete, click Quit.

Checking Your Pro Tools System

Before you launch Pro Tools, start your system and run the DigiTest diagnostic application to ensure that all TDM cards in the system are recognized, installed in the proper order, and have valid TDM FlexCable connections.

 *After running DigiTest, be sure to restart your computer.*

 *Refer to the Getting Started Guide with HD Guide for details on starting up your system and running DigiTest.*

Launching Pro Tools

When launching Pro Tools 6.6 the first time, you are prompted to enter an authorization code to validate your software.

To validate Pro Tools software:

- 1 Double-click the Pro Tools application, located in the Pro Tools folder, inside the Digi-design folder.
- 2 Enter the authorization code in the dialog when prompted, making sure to observe any spaces, then click Validate.

The authorization code is located on the inside cover of this guide.

Configuring Pro Tools

Pro Tools lets you adjust the performance of your system by changing *system settings* that affect its capacity for processing, playback, and recording.

In most cases, the default settings for your system provide optimum performance, but you may want to adjust them to accommodate large or processing-intensive Pro Tools sessions.

Refer to the *Getting Started Guide* that came with your system for instructions on configuring the Number of Voices, Hardware Buffer Size, CPU Usage Limit, the DAE Playback Buffer Size, System Memory Allocation, and other Pro Tools settings.

Removing Pro Tools on Mac OS X

If you need to remove Pro Tools from your computer, you can use the Installer CD-ROM or the downloaded Installer file.

To remove Pro Tools from your computer:

- 1 Make sure you are logged in as an Administrator for the account where Pro Tools is installed. For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.
- 2 Insert the Pro Tools 6.6 Installer CD-ROM in your CD-ROM drive. Double-click "Install Pro Tools TDM."

– or –

Click on the downloaded installer file.

- 3 Enter your Administrator password and click OK to authenticate the installation.
- 4 In the Installer window, choose Uninstall from the pop-up menu, and click Uninstall.
- 5 Follow the onscreen instructions to remove Pro Tools.
- 6 When finished, click Quit to close the Installer window.

Digidesign CoreAudio Driver (Macintosh Only)

Introduction


The Digidesign CoreAudio Driver is a multi-client, multichannel sound driver that allows CoreAudio compatible applications to record and play back through the following Digidesign audio interfaces.


- Pro Tools|HD audio interfaces
- Digi 002
- Digi 002 Rack
- Mbox

Full-duplex recording and playback of 24-bit audio is supported at sample rates up to 96 kHz, depending on your Digidesign hardware and CoreAudio client application.

The Digidesign CoreAudio Driver will provide up to 18 channels of input and output, depending on your Pro Tools hardware:

- Up to 8 channels of input and output with Pro Tools|HD systems
- Up to 18 channels of input and output with Digi 002 and Digi 002 Rack
- Up to 2 channels of input and output with Mbox

 *For Pro Tools TDM systems with more than one card and multiple I/Os, only the primary I/O connected to the first (core) card can be used with CoreAudio.*

 *Check the Digidesign Web site (www.digidesign.com) for the latest third-party drivers for Pro Tools hardware, as well as current known issues.*

What are the Limitations of the Digidesign CoreAudio Driver?

The Digidesign CoreAudio Driver has the following limitations:

- ◆ Pro Tools is not a CoreAudio application and therefore requires exclusive access to Digidesign hardware. You cannot use CoreAudio applications and Pro Tools at the same time. To use Pro Tools, make sure you quit any CoreAudio applications before starting Pro Tools. To use a CoreAudio application, make sure you quit Pro Tools before starting any CoreAudio application.
- ◆ The Digidesign CoreAudio Driver cannot be used to preview sound files from the Finder. When a sound file is located in the Mac OS X navigation window, a QuickTime transport bar is displayed next to it. The QuickTime transport bar lets you audition the sound file. The sound will always play back through the Macintosh's built-in audio controller (through the Macintosh's speaker or headphone jack). However, if you double-click a sound file, the QuickTime application will launch, and can use the Digidesign CoreAudio Driver for playback.
- ◆ The Digidesign CoreAudio Driver cannot be used for playback of System Sounds.

Compatibility

This version of Digidesign CoreAudio Driver can be used on Digidesign-qualified Pro Tools systems running on Macintosh, or it can be used as a stand-alone driver on Digidesign-qualified Macintosh systems that do not have Pro Tools installed.

Compatible Software

For a list of CoreAudio Driver-compatible software, refer to the Digidesign Web site (www.digidesign.com/compato).

Digidesign can only assure compatibility and provide support for hardware and software it has tested and approved.


For a list of Digidesign hardware systems, Digidesign-qualified computers, operating systems, and devices, and Digidesign-qualified third-party CoreAudio-compatible applications, refer to the compatibility page of the Digidesign Web site (www.digidesign.com/compato).

Installing the Digidesign CoreAudio Driver

The Core Auto Driver is installed by default when you install Pro Tools.

Stand-Alone CoreAudio Driver Installer

This version of Digidesign CoreAudio Driver can be installed on Digidesign-qualified Pro Tools systems running on Macintosh (for example, if the CoreAudio Driver was uninstalled), or it can be installed as a stand-alone driver on Macintosh systems that do not have Pro Tools installed.

 For detailed information on installing and configuring CoreAudio Driver on systems with or without Pro Tools, see the electronic pdf of the CoreAudio Usage Guide.

Removing the CoreAudio Driver

To uninstall the Digidesign CoreAudio Driver:

- 1 Power on your system.
- 2 Do one of the following:
 - On the Pro Tools Installer CD, locate and double-click the Install CoreAudio file.
 - or –
 - From the Digidesign Web site, download, locate, and double-click the Install CoreAudio file.
- 3 In the Install CoreAudio window, select Uninstall from the Custom Install pop-up menu.
- 4 When the uninstall is complete, quit the CoreAudio Installer.

Configuring the Digidesign CoreAudio Driver

You can configure the Digidesign CoreAudio Driver using Digidesign CoreAudio Manager, or from within most third-party CoreAudio-compatible client applications (such as BIAS Peak or Logic Audio). Consult the manufacturer's documentation for more information.

Some applications (such as Apple's iTunes or QuickTime Player), also require that you configure either the Apple Sound Preferences or Apple Audio MIDI Setup to use the Digidesign CoreAudio Driver.

Digidesign CoreAudio Manager

Use Digidesign CoreAudio Manager to change the CoreAudio Buffer Size setting, access the Hardware Setup dialog for your Digidesign hardware and control volume and mute for the CoreAudio driver. Digidesign CoreAudio Manager also identifies your Digidesign hardware, the supported number of Input and Output Channels and the number of attached clients (applications).

Digidesign CoreAudio Manager cannot be accessed under the following circumstances:

- When Pro Tools is running
- When another application is using Direct IO (such as the Ableton Live Digi Edition)

The Digidesign CoreAudio Manager application launches automatically when the first client application accesses the CoreAudio driver. You can prevent an application from accessing the CoreAudio driver by holding down the Shift key just before the application would access the CoreAudio driver, typically during launch of the application. Certain applications (such as Apple Mail and iChat), do not access the CoreAudio application until they first play a sound, so you will need to hold down the Shift key just prior to sound playback in order to “opt-out” of using Digidesign hardware for playback.

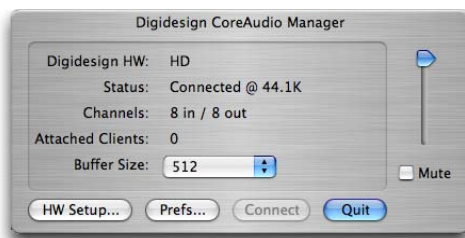


Figure 1. Digidesign CoreAudio Manager

Buffer Size

You may select from the following buffer sizes (depending on your Digidesign hardware):

- 64 samples
- 128 samples
- 256 samples
- 512 samples
- 1024 samples
- 2048 samples

Small buffers have the advantage of low latency in the record monitor path, but also are more taxing on your computer's CPU and could contribute to dropouts in your audio during record or playback. (Latency is the time delay between a signal entering the audio inputs and leaving the outputs during recording.)

Larger buffers have the advantage of making the Digidesign CoreAudio Driver more immune to audio dropouts during playback and recording, but can cause a noticeable delay when monitoring your inputs in the recording process. In some CoreAudio-client applications, performing various tasks will interrupt the CoreAudio Driver and may result in clicks and pops in audio playback or recording. Choosing medium or large buffers (such as 512 or 1024) can help alleviate this problem.

Changing the Buffer Size for the Digidesign CoreAudio Driver does not affect the H/W Buffer Size settings in the Pro Tools Playback Engine dialog.

To configure Digidesign CoreAudio Hardware Buffer Size:

- 1 Launch Digidesign CoreAudio Manager (located in /Applications/Digidesign).

- 2 From the Buffer Size pop-up menu, select the desired CoreAudio buffer size (in samples). Generally, smaller buffer sizes are preferable. However, if you experience any problems with performance (such as clicks and pops during recording or playback), try increasing the CoreAudio Buffer Size setting. You can also change the buffer size from within the client application if it is the only client attached to the CoreAudio driver. Once two or more clients are active, you will not be able to change the sample rate or the buffer size.

HW Setup Button

The HW Setup button opens the Hardware Setup dialog for your Digidesign hardware. For more information, refer to the *Getting Started Guide* for your Pro Tools system or the *Pro Tools Reference Guide*.

To configure Digidesign CoreAudio HW Setup:

- 1 Launch Digidesign CoreAudio Manager (located in /Applications/Digidesign).
- 2 Click the HW Setup button to open the Hardware Setup dialog. The HW Setup button will only be available when no clients are using the CoreAudio driver.

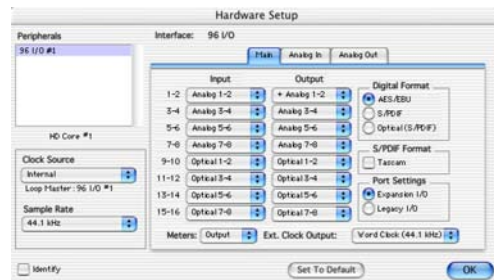



Figure 2. Hardware Setup dialog, 96 I/O

3 Configure the Hardware Setup dialog for your Digidesign hardware. If you have more than one audio interface connected to your Pro Tools TDM system, be sure to select and configure only the primary audio interface connected to the core card.

 *For more information on the Hardware Setup dialog, refer to your Getting Started Guide or the Pro Tools Reference Guide.*

4 When you are finished, click OK to close the Hardware Setup dialog.

Prefs Button

The Prefs button opens the Digidesign CoreAudio Manager Preferences dialog for the Manager application. There are several options available for control and configuration of the Manager application. When finished setting these options, click OK to close the Digidesign CoreAudio Manager Preferences windows.

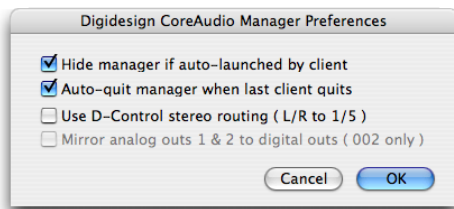


Figure 3. Digidesign CoreAudio Manager

Hide Manager if Auto-Launched by Client Enable this option to hide the Manager panel after the first client application accesses the CoreAudio driver. To open the Manager panel, click on the Digidesign CoreAudio Manager application icon in the Dock.


Auto-Quit Manager when Last Client Quits Enable this option to make the Manager application quit when there are no longer any clients using the CoreAudio driver.

Use D-Control Stereo Routing (L/R to 1/5) Enable this option to configure the CoreAudio driver to output through the D-Controls standard stereo routing outputs 1 and 5.

Mirror Analog Outs 1 & 2 to Digital Outs (002 Only) When using Digi 002 or Digi 002 Rack, enable this option to mirror the main outputs through the digital outputs that are selected in the HW Setup panel.

Connect Button

The Connect button is available when the Digidesign CoreAudio Manager is launched and cannot connect with the Digidesign hardware (such as when Pro Tools is launched and the hardware is disconnected or disabled). Before trying to connect, make sure to quit Pro Tools and make sure that your hardware is connected and turned on. You can then click on the Connect button to acquire the hardware.

 *If any application is launched prior to pressing the Connect button and you want that application to use the CoreAudio driver for playback, you will need to quit and re-launch the application for it to connect properly to the Digidesign CoreAudio Manager.*

Quit Button

Use the Quit button to quit the Digidesign CoreAudio Manager. Be sure to quit any client applications before using the Quit button in the Manager. If any applications are currently attached to the Manager application when quitting, you may get an error message indicating that the Digidesign hardware is no longer available. You may have to change the application's preferences to use different hardware for playback or possibly quit and relaunch the application for proper playback to be resumed.

Configuring the Apple Sound Preferences or Apple Audio MIDI Setup

To use your Digidesign hardware with common CoreAudio-compatible playback applications (such as Apple iTunes or QuickTime Player), you will need to configure either Sound Preferences or Audio MIDI Setup, in addition to Digidesign CoreAudio Manager. However, for most CoreAudio-compatible client applications (such as BIAS Peak or Cubase SX) this is unnecessary because you can configure the CoreAudio Buffer Size setting and input and output channels from within the application.

Apple Sound Preferences

To configure the Apple Sound Preferences:

- 1 Launch System Preferences (Apple menu > System Preferences).
- 2 Click Sound.
- 3 Click the Output tab and select Digidesign HW as the device for sound output.



Sound Preferences, Output tab

- 4 Click the Input tab and select Digidesign HW as the device for sound input.



Sound Preferences, Input tab

- 5 Quit System Preferences.

Apple Audio MIDI Setup

To configure the Apple Audio MIDI Setup:


- 1 Launch Audio MIDI Setup (located in Home/Applications/Utilities).
- 2 Select the Audio Devices tab.



Apple Audio MIDI Setup application, Audio tab

3 From the System Settings Default Input pop-up menu, select Digidesign HW.

4 From the System Settings Default Output pop-up menu, select Digidesign HW.

 *Leave System Output and Selected Audio Device set to Built-in audio controller. The Digidesign CoreAudio Driver cannot be used for system sounds.*

appendix b

Configuring AMS (Mac OS X Only)

Pro Tools recognizes the ports on your MIDI interface as generic ports. With Mac OS X, you use Apple's Audio MIDI Setup (AMS) utility to identify external MIDI devices connected to your MIDI interface and configure your MIDI studio for use with Pro Tools.

To configure your MIDI studio in AMS:

1 Launch Audio MIDI Setup (located in Applications/Utilities).

– or –

In Pro Tools, choose Setups > Edit MIDI Studio Setup.

2 Click the MIDI Devices tab. AMS scans your system for connected MIDI interfaces. If your MIDI interface is properly connected, it appears in the window with each of its ports numbered.

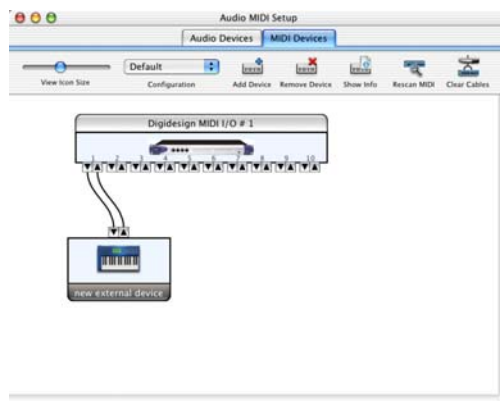


Audio MIDI Setup (MIDI Devices tab)

3 For any MIDI devices connected to the MIDI interface, click Add Device. A new external device icon with the default MIDI keyboard image will appear.


4 Drag the new device icon to a convenient location within the window.

5 Connect the MIDI device to the MIDI interface by clicking the arrow for the appropriate output port of the device and dragging a connection or "cable" to the input arrow of the corresponding port of the MIDI interface.



Making MIDI input and output connections

6 Click the arrow for the appropriate input port of the device and drag a cable to the output arrow of the corresponding port of the MIDI interface.

 To remove a connection, select the cable and press Delete. To delete all connections, click Clear Cables.

7 Repeat steps 3–6 for each MIDI device in your MIDI setup.

To configure an external MIDI device:

1 Select the external device icon and click Show Info (or double-click the new device icon).




External Device Icon

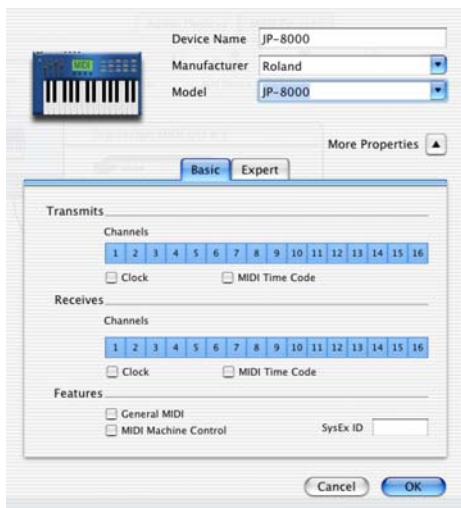
2 Select a manufacturer and model for the new device from the corresponding pop-up menus. (If the Manufacturer and Model pop-up menus do not provide a name for your particular device, you can type a name.)



Naming a new MIDI device

 AMS refers to one or more files with the suffix “.middev” in the directory Root/Library/Audio/MIDI Devices for Manufacturer and Model names. Pro Tools installs two such files that contain information for many commercially available MIDI devices, “Legacy Devices.middev” and “Digidesign Devices.middev.” If the Manufacturer or Model names for any of your external MIDI devices are not available in the AMS Manufacturer and Model pop-up menus, you can add them by editing any of the current .middev files in any text editor (such as TextEdit).

3 Click the More Properties arrow to expand the dialog, then enable the appropriate MIDI channels (1–16) for the Transmits and Receives options. (These determine which channels the device will use to send and receive MIDI.)




Enabling MIDI channels

4 Click the device image. The window expands to show images for various MIDI devices (such as keyboards, modules, interfaces, and mixers). Select an icon for your device.



Selecting a device icon

 *To use your own custom icons, you can place TIFF image files in /Library/Audio/MIDI Devices/Generic/Images, and they will appear as choices in the AMS device window.*

5 Click OK.

The device names you enter appear as MIDI input and output choices in Pro Tools.