

Getting Started with Digi 002

Addendum

Version 6.0.2 for LE Systems on Macintosh

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Installing Pro Tools LE 6.0.2

This document is an addendum to the *Getting Started with Digi 002 Guide*. It explains how to install and configure Pro Tools LE 6.0.2 on a Digidesign-qualified Macintosh computer and version of Mac OS X.

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/compto).

For an overview of new features introduced in Pro Tools 6.0, refer to Chapter 2.

Configuring Mac OS X for Pro Tools

To ensure optimum performance and compatibility, configure the following settings for Mac OS X before you install Pro Tools LE 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 in as an Administrator for the account where you want to install Pro Tools LE. For details on Administrator privileges in Mac OS X, refer to your Mac 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 Return to the System Preferences and click Software Update.
- 6 Deselect “Automatically check for updates when you have a network connection.”
- 7 Close the Software Update dialog.


Installing Pro Tools LE

To install Pro Tools LE 6.0.2 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 Mac OS X documentation.
- 2 Insert the Pro Tools LE 6.0.2 Installer CD-ROM in your CD-ROM drive. Double-click “Install Pro Tools LE.”
- 3 Enter your Administrator password and click OK to authenticate the installation.
- 4 In the installer window, select “Pro Tools LE for Digi 002.”
- 5 Select your Startup hard drive as the install location and click Install.
- 6 When installation is complete, click Restart.

– or –

Click Continue to install any additional software or documentation, and restart your computer when you are finished.

 *If installing additional plug-ins or Pro Tools software options, refer to their accompanying documentation for specific installation instructions.*

If you plan to use any MIDI devices with Pro Tools, configure your MIDI setup with the Apple Audio MIDI Setup (AMS) utility. See Chapter 3, “Configuring AMS” for details.

Removing Pro Tools LE on Mac OS X

If you need to remove Pro Tools LE 6.0.2 from your computer, use the Installer CD-ROM.

To remove Pro Tools LE 6.0.2 from your computer:

- 1 Make sure you are logged in as an Administrator for the account where Pro Tools LE is installed. For details on Administrator privileges in Mac OS X, refer to your Mac OS X documentation.
- 2 Insert the Pro Tools LE 6.0.2 Installer CD-ROM in your CD-ROM drive. Double-click “Install Pro Tools LE.”
- 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 Click Quit to close the Installer window.

Installing the Demo Session

(Optional)

The Pro Tools LE 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 LE Installer CD in your CD-ROM drive. Locate and double-click the demo session installer icon.
- 2 Select your audio drive as the install location and click Install.
- 3 When installation is complete, click Quit.

Launching Pro Tools LE

When launching Pro Tools LE 6.0.2 the first time, you are prompted to enter an authorization code to validate your software.

The authorization code is located on the inside cover of the Getting Started with Digi 002 Guide.

With new Digi 002 systems, the authorization code is located on the inside cover of the *Getting Started with Digi 002 Guide*. With software upgrades, the authorization code is located on the inside cover of the *Upgrading Guide*.

To validate Pro Tools LE software:

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

Configuring Pro Tools LE System Settings


You can adjust the performance of your system by changing Pro Tools LE *system settings*, which 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.

Hardware Buffer Size

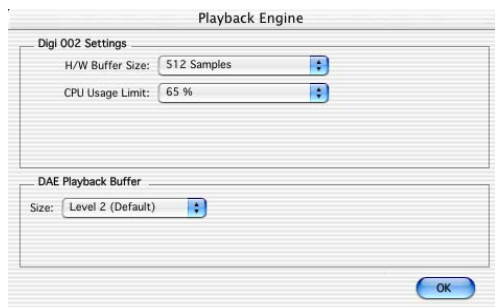
The Hardware Buffer Size (H/W Buffer Size) controls the size of the hardware cache used to handle host processing tasks such as Real-Time AudioSuite (RTAS) plug-ins.

- ◆ Lower Hardware Buffer Size settings reduce monitoring latency, and are useful when you are recording live input.
- ◆ Higher Hardware Buffer Size settings allow for more audio processing and effects, and are useful when you are mixing and using more RTAS plug-ins.

 *In addition to causing slower screen response and monitoring latency, higher Hardware Buffer Size settings can affect the accuracy of plug-in automation, mute data, and timing for MIDI tracks.*

To change the Hardware Buffer Size:

- 1 Choose Setups > Playback Engine.
- 2 From the H/W Buffer Size pop-up menu, select the audio buffer size, in samples.



Playback Engine dialog for Digi 002

- 3 Click OK.

CPU Usage Limit

The CPU Usage Limit controls the percentage of CPU resources allocated to Pro Tools host processing tasks.

- ◆ Lower CPU Usage Limit settings limit the effect of Pro Tools processing on other CPU-intensive tasks, such as screen redraws, and are useful when you are experiencing slow system response, or when running other applications at the same time as Pro Tools.
- ◆ Higher CPU Usage Limit settings allocate more processing power to Pro Tools, and are useful for playing back large sessions or using more real-time plug-ins.

⚠ *Increasing the CPU Usage Limit may slow down screen responses on slower computers.*

With Pro Tools LE 6.0.2, the maximum CPU Usage Limit is 85 percent for single-processor computers, and 99 percent for multi-processor computers. (The 99 percent setting dedicates one entire processor to Pro Tools.)

To change the CPU Usage Limit:

- 1 Choose Setups > Playback Engine.
- 2 From the CPU Usage Limit pop-up menu, select the percentage of CPU processing you want to allocate to Pro Tools.
- 3 Click OK.

DAE Playback Buffer Size

The DAE Playback Buffer Size determines the amount of memory DAE uses to manage disk buffers, which affects system performance.

- ◆ Lower DAE Playback Buffer Size settings can improve playback and recording initiation speed. However, a lower setting can make it difficult for slower hard drives to play or record tracks reliably.
- ◆ Higher DAE Playback Buffer Size settings can allow for a higher density of edits in a session. However, a higher setting can cause a time lag to occur before playback or recording begins. It can also cause a time lag to occur when you are editing during playback.

To change the DAE Playback Buffer Size:


- 1 Choose Setups > Playback Engine.
- 2 From the DAE Playback Buffer pop-up menu, select a buffer size.
- 3 Click OK.

Pro Tools Hardware Settings

From the Hardware Setup dialog, you can select the default sample rate, input format, and clock source for your system.

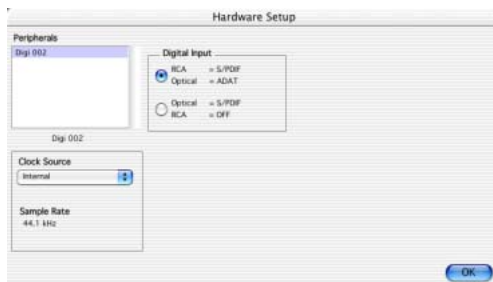
Default Sample Rate

The Sample Rate setting appears as the default sample rate when you create a new session. (This setting is available in the Hardware Setup dialog only when no session is open.)

 You can change the sample rate when creating a new Pro Tools session by selecting a different sample rate in the New Session dialog. (Refer to the Pro Tools Reference Guide for details.)

To change the default Sample Rate:

- 1 Make sure that no Pro Tools session is open.
- 2 Choose Setups > Hardware Setup.
- 3 Choose the sample rate from the Sample Rate pop-up menu.
- 4 Click OK.



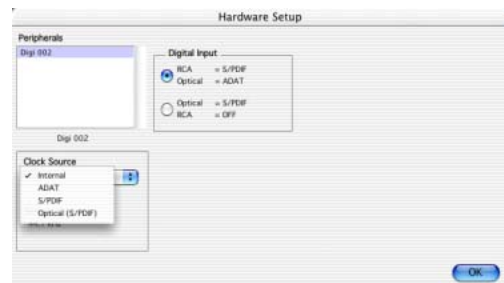
Hardware Setup dialog for Digi 002

Clock Source

From the Hardware Setup dialog, you can select the Clock Source for the system. If you are recording directly into Pro Tools, you will usually use the Internal setting. If you are transferring material from an external digital device, select a digital input and corresponding clock source. (See “Using a Digital Source” on page 5.)

To select the Clock Source:

- 1 Choose Setups > Hardware Setup.
- 2 Select a clock source.
- 3 Click OK.



Selecting a clock source for Digi 002

Using a Digital Source

If you are recording from an Optical or S/PDIF device, you will need to choose clock source settings. In most cases, you will synchronize the Pro Tools clock to the external device.

To configure Pro Tools LE for a digital source:

- 1 Connect an ADAT or Optical S/PDIF format device to the Optical In connector, or an RCA S/PDIF format device to the RCA S/PDIF In connector on the back of the Digi 002.
- 2 Choose Setups > Hardware Setup.

3 Make sure the correct digital input option is selected for your setup. When you select RCA S/PDIF, the Optical ports are available for standard ADAT Optical (or “Lightpipe”) input. When you select Optical S/PDIF, the RCA digital input connector is inactive.

⚠ You can use only one pair of S/PDIF inputs (either RCA or Optical) at a time.

4 From the Clock Source pop-up menu, select Internal if you are synchronizing the external device to Digi 002. If you are synchronizing the Pro Tools clock to the external device, select ADAT, RCA (S/PDIF) or Optical (S/PDIF), depending on which external device is providing the digital clock.

⚠ Your digital input device must be connected and powered on. If your input device is not powered on, leave the Clock Source set to Internal.

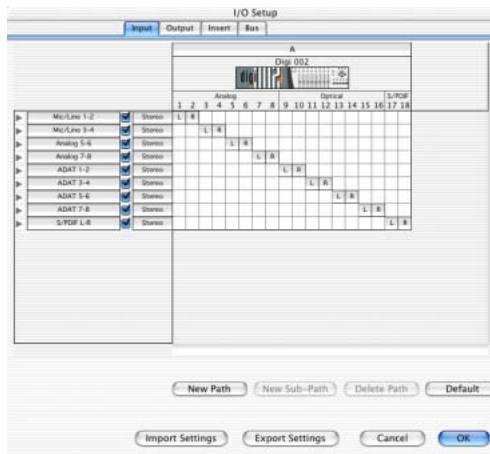
Configuring I/O Setup

From the I/O Setup dialog, you can label Pro Tools LE input, output, insert, and bus *signal paths*. The I/O Setup dialog provides a graphical representation of the inputs, outputs, and signal routing of the Digi 002.

Pro Tools LE has default I/O Setup settings that will get you started. Use the I/O Setup dialog only if you want to rename the default I/O paths.

To rename I/O paths in I/O Setup:

1 Choose Setups > I/O Setups.




I/O Setup dialog for Digi 002, Input tab

2 Click the Input, Output, Insert, or Bus tab to display the corresponding paths.

3 To change the name of a path or subpath, double-click directly on the Path Name, type a new name for the path, and press Return.


4 Click OK when finished.

 Refer to the Pro Tools Reference Guide for more information on renaming I/O paths.

chapter 2

What's New in Pro Tools LE 6.0

Pro Tools LE 6.0.2 software includes features that were new with Pro Tools LE 6.0. If you are updating or upgrading to Pro Tools LE 6.0.2 from Pro Tools LE 5.3.2, these features will be new to you. Following is an overview of the Pro Tools LE 6.0 features.

 *For details on new DigiBase file management features, refer to the separate DigiBase and DigiBase Pro Guide. For detailed information on all other features, refer to the Pro Tools Reference Guide, or the appropriate product guide. Features can be located by name in the guide's index.*

Compatibility

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 third-party devices, refer to the latest compatibility information available on the Digidesign Web site (www.digidesign.com).

New Windows and User Interface

The Pro Tools user interface has been redesigned, giving a new look to many familiar Pro Tools windows. This new interface is easy to learn and use because it retains the most important and familiar elements of previous versions of Pro Tools. The illustrations show the new Mix, Edit, and Transport windows.

Mix Window

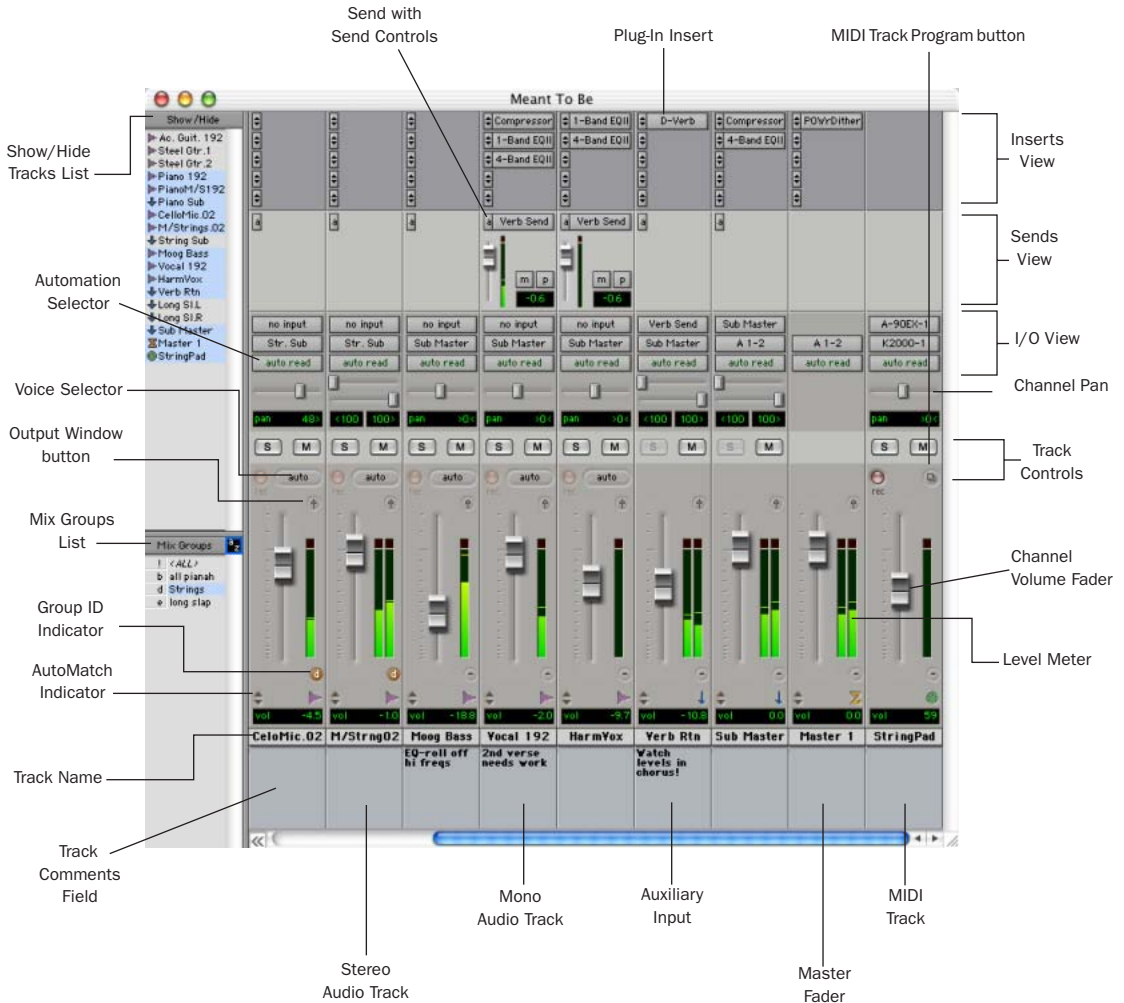


Figure 1. Pro Tools 6.0 Mix window

Edit Window

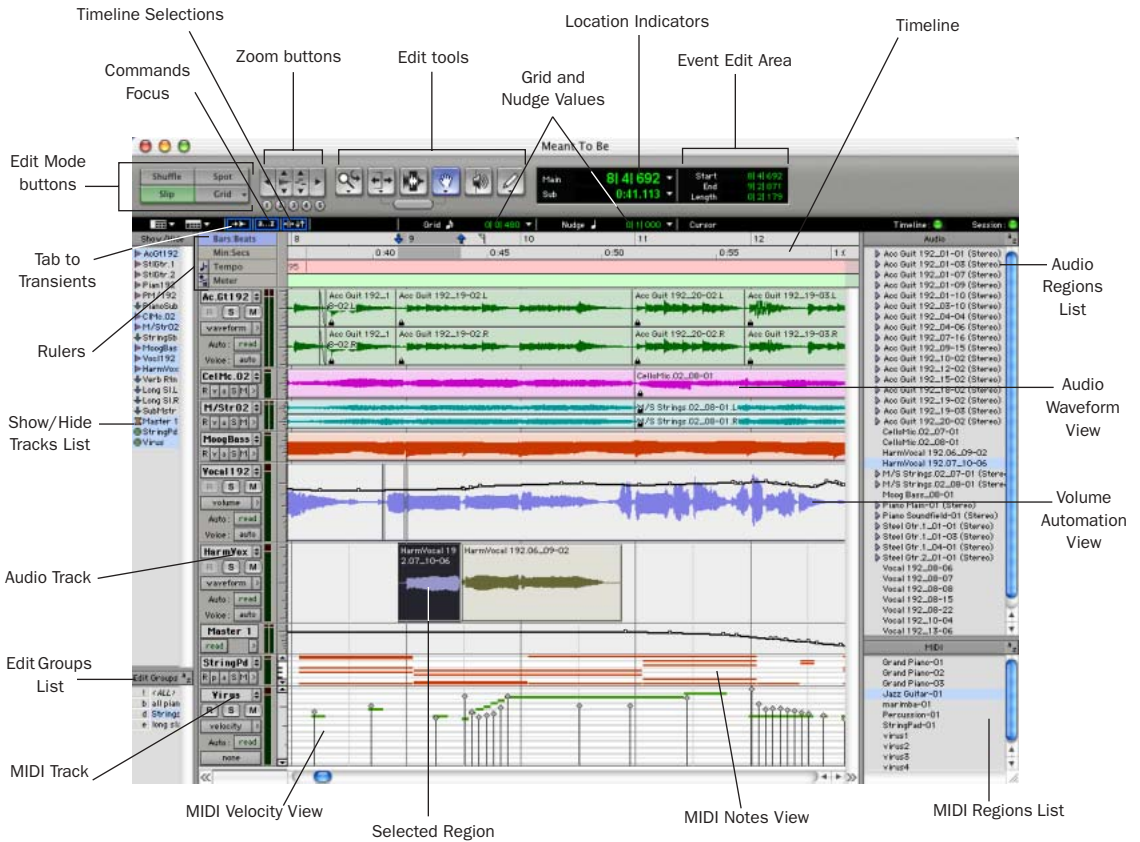
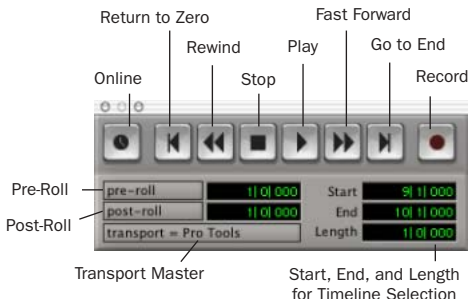


Figure 2. Pro Tools 6.0 Edit window

Transport Window



Pro Tools 6.0 Transport window

DigiBase for File Management

DigiBase combine an intuitive, browser-style interface with an integrated databasing engine, optimized for Pro Tools data and media management. DigiBase browsers provide extensive databasing tools for searching, sorting, auditioning, and importing audio, session, OMF and other types of files. Multiple browsers can be displayed and arranged, with custom display settings provided to optimize your work environment.

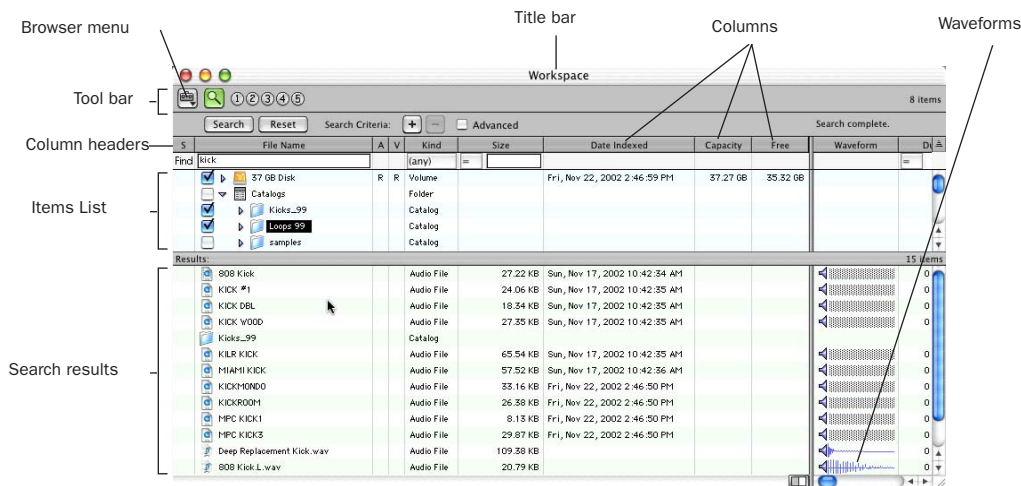


Figure 3. The DigiBase Workspace browser, showing Search tools and results

DigiBase

DigiBase adds the following capabilities to all Pro Tools systems:

- View, search, audition, and import media (audio and video files, regions, and samples), sessions, and other data.
- Manage file copying and other tasks in the background.
- Find missing files.
- Drag and drop items in browsers directly into the Timeline or Regions List of the current Pro Tools session.

Browsers

There are three types of browsers provided on all Pro Tools systems: the Workspace browser, Volume browsers, and the Project browser.

Each browser is designed to serve a specific type of file management task:

The Workspace Browser Provides tools to perform file management tasks you would otherwise perform in the Macintosh Finder. These include tasks such as finding, copying, and deleting files, and creating folders. The Workspace browser is the starting point for setting up and utilizing DigiBase.

Volume Browsers Provide databasing and file management for local and network volumes (if available). In sessions, use Volume browsers to manage files on mounted local and network volumes.

The Project Browser Provides searching and management tools for files referenced in your current session, regardless of where they are stored.

Task Window

With the Task window, you can view and pause background tasks initiated in Pro Tools, such as file conversion, copying, and relinking.

Macintosh OS X Support

Pro Tools on a Digidesign-qualified version of Mac OS X provides improved performance, support for dual-processor Macintosh G4 computers, and the stability of the OS X Unix-based operating environment.

Editing Features

Relative Grid Mode

This is a powerful new mode for editing audio and MIDI regions not aligned with Grid boundaries.

In standard (Absolute) Grid mode, moving a region snaps the region start to Grid boundaries. For example, if a region's start point falls between beats, and the Grid is set to 1/4 notes, dragging the region snaps its start time to the nearest 1/4 note (the current absolute Grid value).

In Relative Grid mode, if a region's start point falls between beats and the Grid is set to 1/4 notes, dragging the region will preserve the region's position relative to the nearest beat.

Suspend Grid Mode

You can now temporarily suspend Grid mode and switch to Slip mode by holding down the Command key while trimming audio or MIDI regions.


Selector Tool

The Selector tool now selects horizontally and vertically, allowing selections across multiple tracks with a single click and drag.

Groove Quantize

With the new Groove Quantize MIDI editing feature you can:

- ◆ Conform MIDI to DigiGrooves, which transfers the rhythmic nuances of an audio performance to MIDI tracks

 *Several DigiGroove templates are included with Pro Tools LE. They can also be generated using Beat Detective (Pro Tools TDM systems only). Refer to the Pro Tools Reference Guide.*

- ◆ Capture and apply dynamics from a DigiGroove to a MIDI track as velocity data



Groove Quantize window

The Groove Quantize command adjusts MIDI note locations and durations according to a DigiGroove template rather than a strict quantization grid. DigiGroove templates extract the particular rhythmic feel of a recorded performance so that it can be applied to a MIDI sequence.

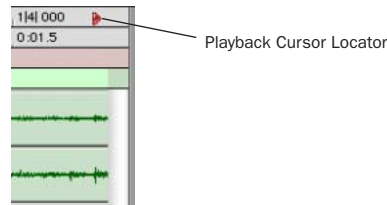
Locating the Playback Cursor

Pro Tools 6.0 introduces the Playback Cursor Locator, which lets you locate the playback cursor when it is off-screen.

For example, if page scrolling is set to No Auto-Scrolling, the playback cursor will move off-screen after it has played past the location currently visible in the Edit window.

The Playback Cursor Locator will appear at the *right* edge of the Main Timebase Ruler whenever the playback cursor moves beyond the visible range of the Edit window. The Playback Cursor Locator will appear on the *left* edge of the Main Timebase Ruler if the playback cursor is located *before* the visible range of the Edit window.

Clicking the Playback Cursor Locator moves the Edit window's waveform display to the Playback Cursor's current on-screen location.



Playback Cursor Locator

The Playback Cursor Locator is red when a track is record enabled and blue when no tracks are record enabled.

To locate the Playback Cursor when it is off-screen:

- Click the Playback Cursor Locator in the Main Timebase Ruler.

The Edit window's waveform display jumps to the Playback Cursor's current on-screen location.

MIDI Features

Pro Tools 6.0 provides the following new MIDI features.

New MIDI Services

You can manage MIDI patch names in Pro Tools, taking advantage of Macintosh Core-MIDI services. Use Apple's Audio MIDI Setup application to configure your system's MIDI routing and port assignments for use with Pro Tools.

More MIDI Tracks

Pro Tools sessions now support up to 256 MIDI tracks.

Flatten and Restore MIDI Performance

The new Flatten and Restore Performance commands let you lock the current state of selected MIDI notes (Flatten), or restore the original performance of selected MIDI notes (Restore).

MIDI Time Stamping

When using the Digidesign MIDI I/O and other supported MIDI Time Stamping-capable interfaces, you can achieve up to sub-millisecond-accurate MIDI timing.

Trim Tool

The Trim tool can now trim MIDI note durations when a MIDI track is set to Velocity view.

Pencil Tool

You can now draw and trim MIDI note and controller data with the Pencil tool.

MIDI Windows

The MIDI Operations, Tempo, and Meter dialogs are now floating windows.

Virtual MIDI Pro Tools Inputs

Pro Tools now has four virtual MIDI inputs, called Pro Tools Inputs, that let you receive MIDI data from other supported applications (such as Ableton Live).

To record MIDI using Pro Tools Inputs:

- 1 In Pro Tools, enable Pro Tools Inputs (1–4) in MIDI > Input Devices.
- 2 Create a new MIDI track, record-enable it, and select one of the Pro Tools Inputs (1–4) in the Track Input Selector.
- 3 In the other MIDI application, select one of the Pro Tools Inputs (1–4) for the MIDI Output. (Consult the manufacturer's documentation for more information.)



MIDI Patchbay is a useful application for routing MIDI between applications that support virtual MIDI inputs (such as Pro Tools), and applications that do not (such as Reason). For more information, see <http://pete.yandell.com/software>.

Plug-Ins and Processing Features

All Digidesign plug-ins are now copy-protected using the iLok USB Hardware Key. See your *Digidesign Plug-Ins Guide* for details on software installation and copy protection.

New DigiRack Click Plug-In

Pro Tools now provides a built-in click generator, the DigiRack Click plug-in, available in RTAS and TDM formats. Click includes presets with different click sounds. Click supports accented and unaccented click sounds, and lets you adjust their individual volumes. Click output is integrated directly into Pro Tools (through Digidesign's DirectMIDI protocol), avoiding MIDI timing delays.

New DigiRack Plug-Ins

The following Digidesign plug-ins are now included with Pro Tools as part of the DigiRack plug-ins set.

- Digidesign's D-fx plug-ins are included as DigiRack Chorus, Flanger, Multi-Tap Delay, and Ping-Pong Delay.
- D-fx D-Verb and D-Verb, which provide non-real time and real-time reverb processing, are included as D-Verb for AudioSuite and RTAS.

Track Height Enhancements

Pro Tools 6.0 provides the following new track height display enhancements.

Toggle Track Height with Arrow Keys

You can now toggle track height using the Up and Down Arrow keys.

To increase or decrease track height of the currently selected track or tracks:

- 1 Place the Edit cursor in the track.
- 2 Press Control+Up Arrow key to increase, or Control+Down Arrow key to decrease track height.

Zoom Toggle Track Height

With the Zoom Toggle track height preference setting, you can specify a default track height when using Control+Minus (-) to toggle audio tracks between Waveform and Volume view, or to toggle MIDI tracks between Notes and Regions view.

Additional Enhancements

The following features have also been added to Pro Tools LE software.

32 Voiceable Tracks Pro Tools LE now supports up to 32 voiceable tracks per session.

Increased Tracks Pro Tools LE sessions can now include as many as 128 audio tracks (with 32 voiceable tracks maximum), 128 Auxiliary Input tracks, 64 Master Fader tracks, and 256 MIDI tracks.

Inactive Tracks Pro Tools LE now supports inactive tracks for voice, track, and DSP management. When opening sessions with track counts that exceed the 32 voice maximum, unvoiceable tracks are opened as inactive (in previous versions of Pro Tools LE, unvoiceable tracks were removed).

Time Trimmer Pro Tools LE now supports the Time Trimmer for dragging a region's start or end to time-expand or time-compress a region.

Commands Focus Shortcuts Pro Tools LE now supports Commands Focus, providing a wide range of single key shortcuts from the alpha keyboard for editing and playback.

QuickTime DV Playback Pro Tools LE now provides the Play QuickTime DV Through Firewire option.

chapter 3

Configuring AMS

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.

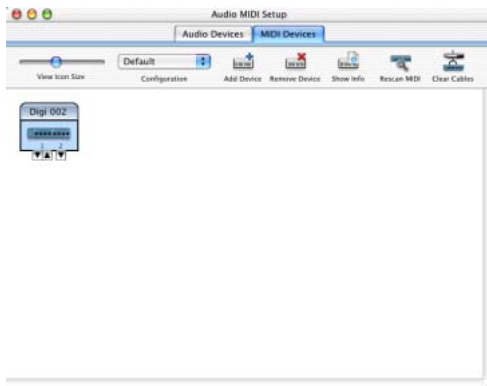
To configure your MIDI studio in AMS:

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.

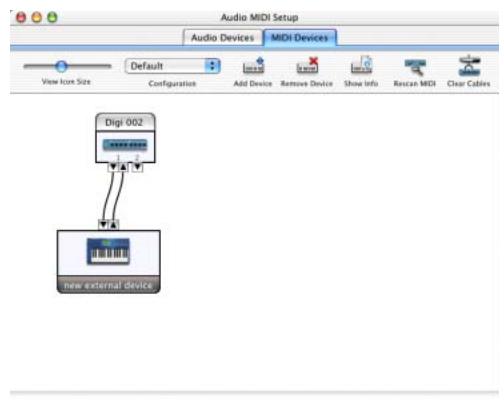


Audio MIDI Setup (MIDI Devices tab)

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

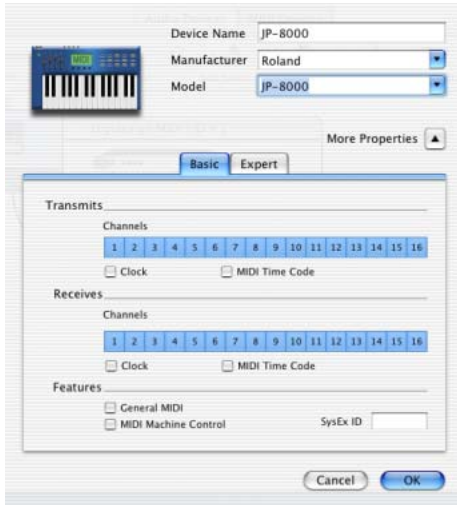
2 Select a manufacturer and model for the new device from the corresponding pop-up menus. (If the Manufacturer and Model pop-up menus do not provide a name for your particular device, you can type a name.)



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 icon. The window expands to show icons 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.

