



User Guide

Pro Tools® M-Powered™ Essential

Version 8.0.2

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Documentation Feedback

We're always looking for ways to improve our documentation. If you have comments, corrections, or suggestions regarding our documentation, email us at techpubs@digidesign.com.

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chapter 1

Welcome to Pro Tools M-Powered Essential

Welcome to Pro Tools® M-Powered™ Essential. This guide provides step-by-step instructions to install and configure Pro Tools M-Powered Essential software.

Pro Tools M-Powered Essential Systems

The basic components of a Pro Tools M-Powered Essential system are as follows:

- M-Audio interface qualified for Pro Tools M-Powered Essential (included)
- Mac or Windows computer qualified for Pro Tools M-Powered Essential (not included)
- Pro Tools M-Powered Essential software (included)

A *For a list of qualified M-Audio interfaces and minimum system requirements, refer to the compatibility information on the Digidesign website: (www.digidesign.com/compatibility).*

Pro Tools M-Powered Essential Capabilities

Pro Tools M-Powered Essential software provides the following capabilities:

- 24-bit audio resolution, at sample rates up to 96 kHz (depending on the M-Audio interface)
- Up to 16 total mono/stereo audio tracks, 4 Aux tracks, 8 Instrument tracks, 8 MIDI tracks, 1 Master Fader
- Playback of up to 16 tracks of mono or stereo digital audio, and playback of up to 15 tracks while recording 1 track (stereo or mono), or up to 14 tracks while recording 2 mono or stereo tracks.
- Normal and loop recording
- Up to 4 internal mix busses
- Up to 5 sends per track
- Processing with up to 3 plug-ins per track
- Undo or redo up to 10 operations
- Comprehensive set of RTAS effects and virtual instrument plug-ins
- Big collection of loops for music creation
- Torq LE, DJ software with ReWire technology

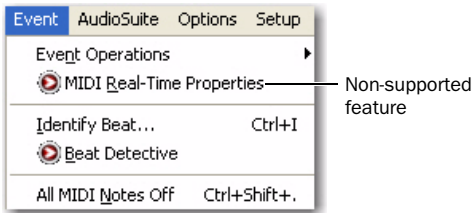
A *Pro Tools uses your computer's CPU to mix and process audio tracks (host processing). Computers with faster clock speeds yield the best performance and more plug-in processing.*

How Pro Tools M-Powered Essential Differs from Pro Tools M-Powered

Pro Tools M-Powered Essential is a powerful, easy-to-use software application that allows you to create and mix music on your Mac or PC. You get to experience the look and feel of Pro Tools M-Powered with the simplified workflow of Pro Tools M-Powered Essential.

What Menus with Icons Mean

Certain Pro Tools M-Powered features are not available in Pro Tools M-Powered Essential. These features have an icon before their menu name in Pro Tools menus. This icon helps you identify them as non-supported features.




Menu items with non-supported feature icons

When you select the menu item, you'll see a dialog that tells you more about the feature. In the dialog you can move up and down between topics, or click Learn More to learn about other features in Pro Tools M-Powered.

 *To disable the non-supported feature icons, choose Help > Display M-Powered Purchase Reminders.)*



Display M-Powered Information dialog

 *Shuffle mode and Spot mode are the equivalent of menu items that have the non-supported feature icon.*

Learning About Pro Tools M-Powered

You can learn more about Pro Tools M-Powered by going to:

<http://www.digidesign.com/mpowered>

System Requirements and Compatibility

Pro Tools M-Powered Essential can be used with a qualified M-Audio interface, running on a qualified Windows or Mac computer that meets the minimum system requirements.


A DVD drive is required to use the Pro Tools Installer disc.

For complete system requirements and a list of operating systems, hard drives, and third-party devices, refer to the latest information on the Digidesign website:

www.digidesign.com/compatibility

MIDI Requirements

USB MIDI interfaces work effectively with Pro Tools systems on Mac or Windows. Serial MIDI interfaces are supported on Windows systems only.

 *Only USB MIDI interfaces are compatible with Pro Tools systems for Mac OS X. Modem-to-serial port adapters and serial MIDI devices are not supported.*

For a list of supported adapters, visit the Digidesign website at:

www.digidesign.com/compatibility


Hard Drive Requirements


Pro Tools M-Powered Essential can be used on your system drive. For optimal audio recording and playback, all Pro Tools systems require one or more Digidesign-qualified drives.

For a list of minimum system requirements, visit the Digidesign website:

www.digidesign.com/compatibility

If you are using an ATA/IDE or FireWire hard drive, initialize your drive with the Disk Utility application included with Apple System software (Mac) or the Windows Disk Management (Windows).

 *Always back up any important data on your drive before formatting it, as it will erase all data on the drive.*

 *For more information, see Appendix A, "Hard Drive Configuration and Maintenance."*


Conventions Used in This Guide


This guide uses the following conventions to indicate menu choices and key commands:


| Convention | Action |
|---------------|--|
| File > Save | Choose Save from the File menu |
| Control+N | Hold down the Control key and press the N key |
| Control-click | Hold down the Control key and click the mouse button |
| Right-click | Click with the right mouse button |


The names of Commands, Options, and Settings that appear on-screen are in a different font.

The following symbols are used to highlight important information:

 *User Tips are helpful hints for getting the most from your Pro Tools system.*

 *Important Notices include information that could affect your data or the performance of your system.*

 *Shortcuts show you useful keyboard or mouse shortcuts.*

 *Cross References point to related sections in this guide and other Pro Tools or M-Audio guides.*

chapter 2

Installing Pro Tools on Mac

This chapter contains information for Mac systems only. If you are installing Pro Tools M-Powered Essential on a Windows computer, see Chapter 3, “Installing Pro Tools on Windows.”


Installation Overview

Installation of Pro Tools M-Powered Essential on a Mac includes the following steps:

- 1 Installing your M-Audio drivers and connecting the M-Audio interface to your computer. (See the instructions that came with your M-Audio interface.)
- 2 “Installing Pro Tools M-Powered Essential Software” on page 5.
- 3 “Launching Pro Tools M-Powered Essential” on page 7.
- 4 Configuring your system for improved performance (see Chapter 4, “Configuring Your System”).


Installing Pro Tools M-Powered Essential Software

Make sure you’ve installed your M-Audio interface drivers and connected the interface to your computer. Once that’s done, you’re ready to install Pro Tools.

 For information on connecting your M-Audio interface, see the printed M-Audio hardware interface guide that came with it.

To install Pro Tools M-Powered Essential:

- 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, see your Apple OS X documentation.

- 2 Insert the Pro Tools M-Powered Essential Installer disc in your DVD drive.
- 3 On the Installer disc, locate and double-click Install Pro Tools MP Essential.mpkg.



Install Pro Tools MP Essential.mpkg icon

4 Follow the on-screen instructions to proceed with installation.

5 Click Continue each time you are prompted.

6 At the “Installation Type” dialog, do the following:

- To install all Pro Tools application files (which includes the free plug-in suite and associated content), leave the Pro Tools box checked.

– and –

- To install additional loops and demo songs, check the Essential Audio Loops and Demo Song box. For more information, see “Essential Audio Loops and Demo Songs” on page 6.



Installation Type dialog


7 Click Continue.

8 Click Install.

9 If prompted, enter your Administrator password and click OK to authenticate the installation.

10 Follow the remaining on-screen instructions.

11 When installation is complete, click Restart.

 *The Pro Tools Installer disc includes additional software for your system. For more information, see “Additional Software on the Pro Tools Installer Disc” on page 7.*


Essential Audio Loops and Demo Songs

Pro Tools M-Powered Essential installation includes an option to install Essential Audio Loops and Demo Songs.

The audio loops are pro-quality audio loops that you can use to quickly sketch out musical ideas. The demo songs let you see and hear many of the things you’ll soon be doing in Pro Tools.

Once these loops and demo songs are installed, they can be found in the following locations:

- Applications/Digidesign/Pro Tools Essential Loops
- Applications/Digidesign/Pro Tools Essential Demo Songs


 *You also have the option of choosing the location where the loops and demo songs are installed.*

Launching Pro Tools M-Powered Essential

- 1 Click the Pro Tools M-Powered Essential icon in the Dock (or double-click the application icon in the Pro Tools folder inside the DigiDesign folder).
- 2 Use the Quick Start dialog to do one of the following:
 - Create a new session from template.
 - Create a new blank session.
 - Open any other session on your system.



Quick Start dialog

 For more information on creating and saving Sessions, see the Pro Tools Reference Guide.

Additional Software on the Pro Tools Installer Disc

The Pro Tools M-Powered Essential Installer disc provides additional software for your system, including Torq LE, DJ software and the MP3 Export option. Once you've completed your Pro Tools installation, you can install them separately. Go to the Additional Files/3rd Party Content folder on the Pro Tools M-Powered Essential Installer disc.

Torq LE, DJ Software

Your Pro Tools package also includes Torq LE, DJ software. You can use Torq LE with Pro Tools using ReWire technology.

MP3 Export Option


The MP3 Export Option lets you create MP3 files from Pro Tools sessions when using Bounce to Disk or exporting a region as a new audio file.

Uninstalling Pro Tools

If you need to uninstall Pro Tools software from your computer, use the Uninstaller application.

To uninstall 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, see your Apple OS X documentation.*

2 Go to Applications/Digidesign/Pro Tools/Pro Tools Utilities and double-click Uninstall Pro Tools.

3 Click Continue to proceed with the uninstall.

4 Choose the type of uninstall you want to perform:

Safe Uninstall Leaves certain plug-ins and system files needed for compatibility with some Avid products. Use Safe Uninstall if you are using an Avid application or preparing to update to a CS (customer support) release.

Clean Uninstall Removes all Pro Tools files, including system files, Digidesign plug-ins, and MIDI patch names. Use Clean Uninstall whenever you are preparing to upgrade, or to troubleshoot from a clean system.

5 Click Uninstall.

6 Enter your Administrator password and click OK.

7 Click Finish to close the Installer window.

chapter 3

Installing Pro Tools on Windows

This chapter contains information for Windows systems only. If you are installing Pro Tools M-Powered Essential on a Mac computer, see Chapter 2, “Installing Pro Tools on Mac.”


Installation Overview

Installing Pro Tools M-Powered Essential on a Windows computer includes the following steps:

- 1** Installing your M-Audio drivers and connecting the M-Audio interface to your computer. (See the instructions that came with your M-Audio interface.)
- 2** “Installing Pro Tools M-Powered Essential Software” on page 10.
- 3** “Launching Pro Tools M-Powered Essential” on page 11.
- 4** Configuring your system for improved performance (see Chapter 4, “Configuring Your System”).

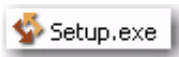
Installing Pro Tools M-Powered Essential Software

Make sure you've installed your M-Audio interface drivers and connected the interface to your computer. Once that's done, you're ready to install Pro Tools.


 For information on connecting your M-Audio interface, see the printed M-Audio hardware interface guide that came with it.

To install Pro Tools M-Powered Essential:

- 1 Start Windows, logging in with Administrator privileges. For details on Administrator privileges, refer to your Windows documentation.
- 2 Insert the Pro Tools M-Powered Essential Installer disc for Windows in your DVD drive and do one of the following:
 - If Windows AutoRun is enabled, a splash screen pic appears. Follow the on-screen instructions.
 - or –
 - If Windows AutoRun is disabled, locate and double-click Setup.exe on the Installer disc.



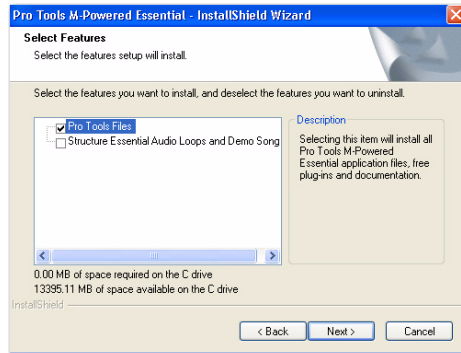
Setup.exe icon

 In Vista, if the User Account Control dialog appears, click Allow.

- 3 When the InstallShield Wizard appears, follow the on-screen instructions to proceed with installation and click Next when prompted.


- 4 At the “Select Features” dialog, do the following:


- To install all Pro Tools application files (which includes the free plug-in suite and associated content), leave the Pro Tools box checked.
- To install additional loops and demo songs, check the Essential Audio Loops and Demo Song box. For more information, see “Essential Audio Loops and Demo Songs” on page 11.



Select Features dialog

- 5 Click Next.
- 6 Click Install.

 In Windows Vista, a series of Windows Security dialogs may appear. Click “Install” on each one until they go away.

 In Windows XP, a series of Software Installation dialogs about the driver not passing Windows Logo testing may appear. Click Continue Anyway on each one until they go away.

- 7 Wait for the installer to finish installing all components before proceeding to the next step.
- 8 When installation is complete, click Finish.


Essential Audio Loops and Demo Songs

Pro Tools M-Powered Essential installation includes an option to install Essential Audio Loops and Demo Songs.

The audio loops are pro-quality audio loops that you can use to quickly sketch out musical ideas. The demo songs let you see and hear many of the things you'll soon be doing in Pro Tools.

Once these loops and demo songs are installed, they can be found in the following locations:

- Programs\Digidesign\Pro Tools Essential Loops
- Programs\Digidesign\Pro Tools Essential Demo Songs


 *You also have the option of choosing the location where the loops and demo songs are installed.*

Launching Pro Tools M-Powered Essential

- 1 Double-click the Pro Tools M-Powered shortcut on your desktop (or the application in Program Files\Digidesign\Pro Tools).
- 2 Use the Quick Start dialog to do one of the following:
 - Create a new session from template.
 - Create a new blank session.
 - Open any other session on your system.



Quick Start dialog

 *For more information on creating and saving Sessions, see the Pro Tools Reference Guide.*

Additional Software on the Pro Tools Installer Disc

The Pro Tools M-Powered Essential Installer disc provides additional software for your system, including Torq LE, DJ software and the MP3 Export option. Once you've completed your Pro Tools installation, you can install them separately. Go to the Additional Files/3rd Party Content folder on the Pro Tools M-Powered Essential Installer disc.

Torq LE, DJ Software

Your Pro Tools package also includes Torq LE, DJ software. You can use Torq LE with Pro Tools using ReWire technology.

MP3 Export Option

The MP3 Export Option lets you create MP3 files from Pro Tools sessions when using Bounce to Disk or exporting a region as a new audio file.

Uninstalling Pro Tools

Use the Uninstall Pro Tools application to uninstall Pro Tools software from your computer.

To uninstall Pro Tools from your computer:

- 1** Start Windows, logging in with Administrator privileges. For details on Administrator privileges, refer to your Windows documentation.
- 2** Go to C:\Program Files\Digidesign\Pro Tools\Pro Tools Utilities and double-click Uninstall Pro Tools.exe.
- 3** Click Next.
- 4** Click Uninstall to proceed with the uninstallation.

chapter 4

Configuring Your System

After you have connected your system and installed Pro Tools software, you are ready to start up and configure your Pro Tools system.

Starting Up or Shutting Down Your System

To ensure that the components of your Pro Tools system communicate properly with each other, you need to start them in a particular order.

Start up your Pro Tools system in this order:

- 1 Lower the volume of all output devices (such as speakers and headphones) in your system.
- 2 Turn on any external hard drives. Wait approximately ten seconds for them to spin up to speed.
- 3 Turn on any control surfaces, such as Command|8.
- 4 Turn on any MIDI interfaces, MIDI devices, or synchronization peripherals.
- 5 For Pro Tools M-Powered Essential systems that use hardware requiring external power, turn on the hardware.
- 6 Turn on your computer.
- 7 Launch Pro Tools or any third-party audio or MIDI applications.

Shut down your Pro Tools system in this order:

- 1 Quit Pro Tools and any other running applications.



To quit Pro Tools, choose File > Exit (Windows) or Pro Tools > Quit (Mac).

- 2 Turn off or lower the volume of all output devices (such as speakers and headphones) in your system.
- 3 Turn off your computer.
- 4 For Pro Tools M-Powered Essential systems that use hardware requiring external power, turn off the hardware.
- 5 Turn off any MIDI interfaces, MIDI devices, or synchronization peripherals.
- 6 Turn off any control surfaces.
- 7 Turn off any external hard drives.

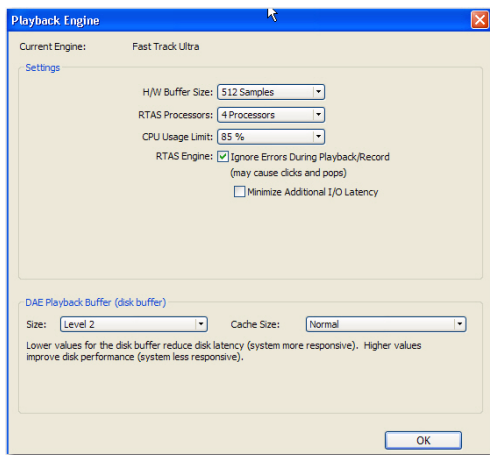
Configuring Pro Tools M-Powered Essential Software

Pro Tools System Settings

In the Playback Engine dialog, 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.

For some M-Audio interfaces, you can only change the Hardware Buffer Size in M-Audio interface's control panel (while Pro Tools is closed). For more information, see "Pro Tools Hardware Settings and M-Audio Control Panel" on page 18.



Playback Engine dialog for Pro Tools M-Powered Essential, with Structure Essential plug-in installed. (M-Audio Fast Track Ultra shown)

Hardware Buffer Size

The Hardware Buffer Size (H/W Buffer Size) controls the size of the buffer used to handle host processing tasks such as Real-Time AudioSuite (RTAS) plug-ins. The H/W Buffer setting can also be used to manage monitoring latency.

- ◆ 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 increase the latency caused by RTAS plug-ins, and affect the accuracy of plug-in automation, mute data, and MIDI track timing.*

To change the Hardware Buffer Size:

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

RTAS Processors

The RTAS Processors setting determines the number of processors in your computer allocated for RTAS (Real-Time AudioSuite) plug-in processing.

With computers that have multiple processors, or that feature multi-core processing or hyper-threading, this setting lets you enable multiprocessor support for RTAS plug-ins. Used in combination with the CPU Usage Limit setting, the RTAS Processors setting lets you control the way RTAS processing and other Pro Tools tasks are handled by the system.

For example:

- For sessions with large numbers of RTAS plug-ins, you can allocate 2 or more processors to RTAS processing and set a high CPU Usage Limit.
- For sessions with few RTAS plug-ins, you can allocate fewer processors to RTAS processing and set a low CPU Usage Limit to leave more CPU resources available for automation accuracy, screen response, and video.
- Depending on the importance of video and overall screen response, and on the density of automation being employed, try different combinations of RTAS Processors and CPU Usage Limit settings to achieve the best results. For example, to improve screen response in a medium-sized session using a moderate number of RTAS plug-ins, try reducing the number of RTAS plug-ins, but keep the CPU Usage Limit set to the maximum (up to 99% on a single processor system).

To set the number of RTAS Processors:

- 1 Choose Setup > Playback Engine.
- 2 From the RTAS Processing pop-up menu, select the number of available processors you want to allocate. The number of processors available varies depending on how many processors are available on your computer:
 - Select 1 Processor to limit RTAS processing to one CPU in the system.
 - Choose 2 Processors to enable load balancing across two available processors.
 - On systems running four or more processors, choose the number of processors for RTAS processing.
- 3 Click OK.

System Usage Window and RTAS Processing

The System Usage window (Windows > System Usage) displays the combined amount of RTAS processing occurring on all enabled processors with a single indicator, regardless of how many processors are available in the system. If the System Usage Window shows that you are at the limit of available resources, increase the number of RTAS processors and adjust the CPU Usage Limit setting.


CPU Usage Limit

The CPU Usage Limit setting controls the percentage of CPU resources allocated to Pro Tools host processing tasks. Used in combination with the RTAS Processors setting, the CPU Usage Limit setting lets you control the way Pro Tools tasks are carried out by the system.

- 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 RTAS plug-ins.

The maximum available CPU Usage Limit depends on the number of processors in your computer and on the number of processors you specify for RTAS processing. This value can range from 85% for single-processor computers, and 99% for multiprocessor computers (which dedicate one entire processor to Pro Tools).

On multiprocessor computers, the maximum CPU Usage Limit is reduced when you use all your processors (as selected in the RTAS Processing pop-up menu). For example, on dual-processors, the limit is 90%. On four-processor computers, the limit is 95%.

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

To change the CPU Usage Limit:

- 1 Choose Setup > 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.

RTAS Engine (RTAS Error Suppression)

The RTAS Engine option determines RTAS error reporting during playback and recording. This is especially useful when working with instrument plug-ins.

You should only enable RTAS error suppression if you are experiencing frequent RTAS errors that are interrupting your creative workflow. When RTAS error suppression is enabled, you can experience a degradation of audio quality. However, this may be acceptable in order to avoid interrupting playback and recording when working with instrument plug-ins. Be sure to disable RTAS error suppression when you need to ensure the highest possible audio quality, such as for a final mix.

To enable RTAS error suppression:

- 1 Choose Setup > Playback Engine.
- 2 Select Ignore Errors During Playback/Record.
- 3 On Mac, you can also select Minimize Additional I/O Latency.
- 4 Click OK.

RTAS Error Suppression Options

Ignore Errors During Playback/Record When enabled, Pro Tools continues to play and record even if the RTAS processing requirements exceed the selected CPU Usage Limit. This can result in pops and clicks in the audio, but does not stop the transport.

Minimize Additional I/O Latency When enabled, any additional latency due to suppressing RTAS errors during playback and record is minimized to 128 samples. Suppressing RTAS errors requires at least 128 samples of additional buffering on some systems. If this option is disabled, the buffer is half the H/W Buffer Size, or at least 128 samples (whichever is greater). If you are on an older, slower computer, you may want to disable this option to avoid adverse performance.


This option is only available if the Ignore Errors During Playback/Record option is enabled.

DAE Playback Buffer Size

The DAE Playback Buffer Size setting determines the amount of memory DAE allocates for disk buffers. In addition to levels, the DAE Playback Buffer Size shows values in milliseconds, which indicate the amount of audio buffered when the system reads from disk.

The optimum DAE Playback Buffer Size for most disk operations is 1500 msec; Level 2 (Default).

- DAE Playback Buffer Size settings lower than 1500 msec; Level 2 (Default) may improve playback and recording initiation speed, as well as preview in context in DigiBase browsers. However, a lower setting may make it difficult to play or record tracks reliably with sessions containing a large number of tracks or a high density of edits, or with systems that have slower or heavily-fragmented hard drives.
- DAE Playback Buffer Size settings higher than 1500 msec; Level 2 (Default) allow higher track count, higher density of edits in a session, or the use of slower hard drives. However, a higher setting may increase the time lag when starting playback or recording, starting preview in context from DigiBase browsers, or cause a longer audible time lag while editing during playback.

 *Using a larger DAE Playback Buffer Size leaves less system memory for other tasks. The default setting of 1500 msec (Level 2) is recommended unless you are encountering -9073 (“Disk too slow or fragmented”) errors.*

To change the DAE Playback Buffer Size:

- 1 Choose Setup > Playback Engine.
- 2 From the DAE Playback Buffer pop-up menu, select a buffer size. Memory requirements for each setting are shown at the bottom of the Playback Engine dialog.
- 3 Click OK.

If Pro Tools needs more system memory for the DAE Playback Buffer, it will prompt you to restart your computer.


Cache Size

The Cache Size setting determines the amount of memory DAE allocates to pre-buffer audio for playback and looping when using Elastic Audio.

Minimum Reduces the amount of system memory used for disk operations and frees up memory for other system tasks. However, performance when using Elastic Audio features may decrease.

Normal Is the optimum Cache Size for most sessions.

Large Improves performance when using Elastic Audio features, but it also decreases the amount of memory available for other system tasks, such as RTAS processing.

 *Using a larger Cache Size leaves less system memory for other tasks. The default setting of Normal is recommended unless you are encountering -9500 (“Cache too small”) errors.*

To change the Cache Size:

- 1 Choose Setup > Playback Engine.
- 2 From the Cache Size pop-up menu, select a disk cache size.
- 3 Click OK.

Pro Tools Hardware Settings and M-Audio Control Panel

The Hardware Setup dialog in Pro Tools (Setup > Hardware) displays the name of your M-Audio peripheral, and tells you that various hardware functions can be changed in the M-Audio Control Panel.

Using the M-Audio Control Panel, you can change settings in the following areas:

- Mixer Settings
- Output Settings
- Hardware Settings (including sample rate, hardware buffer size, and sync source).



You can set 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 M-Audio Control Panel settings:

- 1** If Pro Tools M-Powered Essential is running, exit Pro Tools.
- 2** Launch the M-Audio Control Panel as follows:
 - For FireWire interfaces, launch M-Audio FW Audio.
 - For PCI interfaces, launch M-Audio Delta Audio.
 - For USB Interfaces, launch the M-Audio control panel with the name of your interface.
- 3** To change settings in the M-Audio Control Panel, refer to the documentation that came with your M-Audio interface.
- 4** When finished, close the M-Audio Control Panel.

Clock Source (Sync Source)

If your M-Audio interface has digital I/O (such as S/PDIF I/O), you need to set the Clock Source (called Sync Source in the M-Audio Control Panel).

With Pro Tools M-Powered Essential, you cannot set the Clock Source in the Pro Tools Session Setup window. Instead, you must set the Sync Source in the M-Audio Control Panel.

To select the Clock Source:

- 1** If Pro Tools M-Powered Essential is running, exit Pro Tools.
- 2** Launch the M-Audio Control Panel as follows:
 - For FireWire interfaces, launch M-Audio FW Audio.
 - For PCI interfaces, launch M-Audio Delta Audio.
 - For USB Interfaces, launch the M-Audio control panel with the name of your interface.
- 3** Click the Settings tab.
- 4** Select a Sync Source.



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



For more information on selecting the Sync Source for your M-Audio interface, refer to your M-Audio interface documentation.

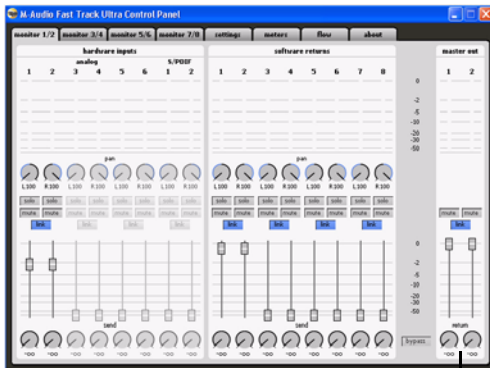
- 5** Click OK.

M-Audio Mixer Direct Monitoring

Direct or low-latency monitoring is not available from within Pro Tools M-Powered Essential. However, with M-Audio devices that have Control Panel mixers with a direct monitoring feature, it is possible to create a low-latency monitoring path while recording in Pro Tools M-Powered Essential.

To create a low-latency monitoring path:

- 1 In Pro Tools, record-enable the tracks you want to record and mute their output.
- 2 Open the M-Audio Control Panel for your M-Audio interface.
- 3 In the Control Panel mixer for your interface, route the input channels you want to monitor to the main outputs of the mixer by clicking the corresponding output control.




Master out 1-2 control

Control Panel mixer for M-Audio Fast Track Ultra


- 4 Adjust the output level and balance with the Control Panel mixer volume and pan controls.
- 5 In Pro Tools, begin recording.
- 6 To listen back to the recorded tracks, unmute the tracks in Pro Tools and begin playback.

7 When you are finished recording, turn off the mixer output control in the Control Panel mixer.

 You can leave the M-Audio Control Panel open while working in Pro Tools M-Powered Essential.

Configuring I/O Setup

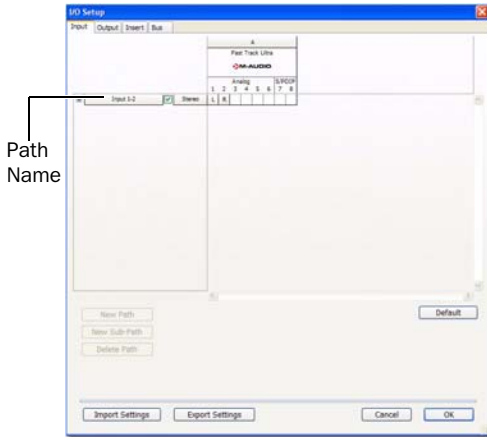
Using the I/O Setup dialog, you can label Pro Tools input, output, insert, and bus *signal paths*. The I/O Setup dialog provides a graphical representation of the inputs, outputs, and signal routing of the M-Audio interface.

 Pro Tools M-Powered Essential bypasses the M-Audio mixer that is displayed in the M-Audio Control Panel. The interface's hardware inputs and outputs show up directly in Pro Tools I/O Setup.

Pro Tools M-Powered Essential has default I/O Setup settings that will get you started. Use the I/O Setup dialog only if you want to rename or remap the default I/O paths.


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

- 1 Choose Setup > I/O.



I/O Setup dialog for Pro Tools M-Powered Essential (M-Audio Fast Track Ultra shown)

- 2 Click the Input, Output, Insert, or Bus tab to display the corresponding connections.
- 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 Enter.
- 4 Click OK.


 See the *Pro Tools Reference Guide* for more information on renaming I/O paths.

Backing Up Your System Configuration


After configuring your system and Pro Tools, you should save an image of your system drive using a backup utility (such as Norton Ghost). By doing this, you can quickly restore your system configuration and settings if you encounter any problems.

Optimizing a Mac System for Pro Tools

To ensure optimum performance with Pro Tools, configure your computer before using Pro Tools software.

 For Windows System Optimization, see “Optimizing a Windows System for Pro Tools” on page 22.

Before configuring your computer, 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.

 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 website (www.digidesign.com/compatibility).

Turning Off Software Update

To turn off the Software Update feature:

- 1 Choose System Preferences from the Apple menu and click Software Update.
- 2 Click the Software Update tab.
- 3 Deselect Check for Updates.

Turning Off Energy Saver

To turn off the Energy Saver feature:

- 1 Choose System Preferences from the Apple menu and click Energy Saver.
- 2 Click the Sleep tab and do the following:
 - Set the computer sleep setting to Never.
 - Set the display sleep setting to Never.
 - Deselect Put the hard disk(s) to sleep when possible option.

Setting Processor Performance

To set the Processor Performance:

- 1 Choose System Preferences from the Apple menu and click Energy Saver.
- 2 Click the Options tab and set Processor Performance to Highest.

Disable or Reassign Mac Keyboard Shortcuts Used by Pro Tools

To have the full complement of Pro Tools M-Powered Essential keyboard shortcuts, you need to disable or reassign any conflicting Mac OS X Keyboard Shortcuts in the Apple System Preferences, including the following:

- “Show Help menu”
- Under “Keyboard Navigation”
 - “Move focus to the window drawer”
- Under “Dock, Exposé, and Dashboard”
 - “Automatically hide and show the Dock”
 - “All windows”
 - “Application windows”
 - “Desktop”
 - “Dashboard”
 - “Spaces”

- Under “Spotlight”
 - “Show Spotlight search field”
 - “Show Spotlight window”



For a complete list of Pro Tools keyboard shortcuts, see the Keyboard Shortcuts Guide (Help > Keyboard Shortcuts).

To disable or reassign Mac OS X keyboard shortcuts:

- 1 Choose System Preferences from the Apple menu and click Keyboard & Mouse.
- 2 Click the Keyboard Shortcuts tab.
- 3 Do one of the following:
 - Deselect the Mac OS X options that conflict with Pro Tools keyboard shortcuts.
 - or –
 - Assign different, non-conflicting keyboard shortcuts to the corresponding Mac OS X options.

Reassign Spaces Keyboard Shortcuts

If you want to use Spaces, you should reassign the Spaces keyboard shortcuts to avoid conflicts with important Pro Tools keyboard shortcuts. You can reassign Spaces keyboard shortcuts to use a combination of modifier keys (Command+Option+Control+Shift) in addition to the default Spaces keyboard shortcut assignments to avoid these conflicts.

To reassign Spaces keyboard shortcuts to use modifier key combinations that do not conflict with Pro Tools keyboard shortcuts:

- 1 Choose System Preferences from the Apple menu and click Exposé & Spaces.
- 2 Click the Spaces tab.
- 3 Ensure that Enable Spaces is selected.


4 Press and hold Command+Option+Control+Shift and select “Control+Option+Shift+Command+F8” from the “To activate Spaces” pop-up menu.

5 Press and hold Command+Option+Control+Shift and select “Control+Option+Shift+Command+Arrow Keys” from the “To switch between spaces” pop-up menu.

6 Press and hold Command+Option+Control+Shift and select “Control+Option+Shift+Command+Number Keys” from the “To switch directly to a space” pop-up menu.

Disabling Spotlight Indexing

The Mac OS X Spotlight feature automatically indexes files and folders on local hard drives in the background. In most cases, this is not a concern for normal Pro Tools operation. However, if Spotlight starts indexing drives while recording in a Pro Tools session with high track counts for an extended period of time, it can adversely affect Pro Tools system performance. You may want to disable Spotlight indexing for all local drives before using Pro Tools for big recording projects.

 *Disabling Spotlight indexing also disables the Find function in Mac OS X.*

To disable Spotlight indexing:

- 1 Choose System Preferences from the Apple menu and click Spotlight.
- 2 In the Spotlight window, click the Privacy tab.
- 3 To prevent indexing of a drive, drag its icon from the desktop into the list.

Enabling Journaling for Audio Drives


To yield higher performance from audio drives, enable journaling.

To enable journaling:

- 1 Launch the Disk Utility application, located in Macintosh HD/Applications/Utilities.
- 2 Select the volume in the left column of the Disk Utility window.
- 3 Click Enable Journaling in the toolbar.

Optimizing a Windows System for Pro Tools


To ensure optimum performance with Pro Tools M-Powered, configure your computer before using Pro Tools hardware and software.

 *For Mac System Optimization, see “Optimizing a Mac System for Pro Tools” on page 20.*

Before configuring your computer, make sure you are logged in as an Administrator for the account where you want to install Pro Tools. For details on Administrator privileges, see your Windows documentation.

Required Optimizations

To ensure optimum performance with Pro Tools, configure the following settings before using Pro Tools hardware and software.

 *When you are finished changing Windows system settings, restart your computer.*

Enabling DMA

Enabling your computer's DMA (Direct Memory Access) frees up CPU bandwidth so your computer can do other Pro Tools tasks.

In most cases the DMA option will already be set correctly, as Windows detects and activates DMA mode by default.

To enable DMA for any IDE hard drives:

- 1 Right-click Computer (Windows Vista) or My Computer (Windows XP).
- 2 In the left-hand pane of the Computer Management window under System Tools, click on Device Manager.
- 3 In the right-hand pane, click the plus (+) sign to expand IDE ATA/API Controllers.
- 4 Right-click on the Primary IDE Controller and select Properties.
- 5 Click the Advanced Settings tab.
- 6 For each device, do one of the following:
 - Check the box Enable DMA (Windows Vista)
 - or –
 - Set the Transfer Mode to DMA if available (Windows XP)
- 7 Click OK.
- 8 Repeat the above steps for any additional IDE Channels.
- 9 Close the Computer Management window.

Disabling System Standby and Power Management

When using Pro Tools, the Windows System Standby power scheme must be set to Always On. This helps prevent long record or playback passes from stopping due to system resources powering down.

To configure Windows Power Management (Windows Vista):

- 1 Choose Start > Control Panel.
- 2 Double-click Power Options.
- 3 In the Power Options window, select High Performance.
- 4 Click Change plan settings.
- 5 In the Edit Plan Settings window, click Change advanced power settings.
- 6 In the Power Options dialog, reveal Hard disk > Turn off hard disk after.
- 7 Click the Setting option.
- 8 Select the value in the Setting (Minutes) field and press Backspace on your computer keyboard.
- 9 Press Enter. The hard disk setting changes to Never and the Power Options dialog closes.
- 10 In the Edit Plan Settings window, click Save changes and close the window.

To configure Windows Power Management (Windows XP):

- 1 Choose Start > Control Panel.
- 2 Double-click Power Options.
- 3 Click the Power Schemes tab.
- 4 From the Power Schemes pop-up menu, select Always.
- 5 Verify that the following settings are set to Never:
 - Turn off hard disks
 - System standby
 - System hibernates
- 6 Click OK.

Disabling User Account Control

(Windows Vista Only)

For optimal performance with Pro Tools on Windows Vista, disable User Account Control (UAC).

To disable User Account Control (UAC):

- 1 Choose Start > Control Panel.
- 2 Double-click User Accounts.
- 3 Click Turn User Account Control on or off.
- 4 Deselect the Use User Account Control (UAC) to help protect your computer option.
- 5 Click OK.

Recommended Optimizations

Pro Tools can also be affected by other software and hardware drivers installed on your computer. For best possible performance, it is recommended (but not required) that you do the following:

- Avoid running any unneeded programs at the same time as Pro Tools.
- Turn off any software utilities that run in the background, such as Windows Messenger, calendars, and disk maintenance programs.
- Turn off any non-essential USB devices while running Pro Tools.
- If your video display card supports it, enable Bus Mastering in the manufacturer's Control Panel. See the manufacturer's instructions for details.

Disabling System Startup Items

The fewer items in use by your computer, the more resources are available for Pro Tools. Some startup applications may be consuming unnecessary CPU resources, and can be turned off.

If you disable any of the following startup items, do so carefully:

- Portable media serial number (required for some applications that utilize a copy protection key)
- The Plug and Play service
- Event log
- Cryptographic services

To Disable System Startup Items:

- 1 From the Start menu, type "msconfig" in Start Search (Windows Vista) or in Run (Windows XP) and click OK to open the System Configuration Utility.
- 2 Under the General tab, choose Selective Startup.
- 3 Deselect Load Startup Items and click OK.
- 4 Click Restart to restart the computer.
- 5 After restarting, the computer displays a System Configuration message. Check to see if Pro Tools performance has increased before you deselect the Don't show this message again option. If performance has not changed, run "msconfig" and return your computer Startup Selection back to Normal Startup - load all device drives and services. Alternatively, try disabling Startup items and non-essential processes individually.

appendix a


Hard Drive Configuration and Maintenance

Pro Tools M-Powered Essential software must be installed on your system drive.

Session files (the documents you create for each song or project) and *audio* (the files you record or import into each session) can then be created and recorded to your system drive or to an external (or secondary internal) hard drive. For small, simple sessions (loops, MIDI, or only a few tracks), you can probably use your system drive. For best performance, however, we recommend using one or more hard drives that you dedicate to be your audio drives.

For example, it's OK to install and play back the included demo session on your system drive (assuming there is enough space available). However, if you plan to record and play back many tracks simultaneously, or if you are using an older or slower computer, you should use an external or secondary internal audio drive to store your Pro Tools M-Powered Essential sessions and audio.


If you use an external or secondary internal audio drive, it is recommended that you start with a newly formatted one. You should also periodically defragment your audio drive to ensure continued system performance.

 *Always back up any important data on your drive before formatting it, as it will erase all data on the drive.*


Supported Drive Formats and Drive Types

Drive Formats

Mac Mac systems should use drives formatted with HFS+ or HFS file system only.

 *HFS drives are supported as Transfer drives only.*

Windows Windows XP systems should use drives formatted as NTFS only.

 *Windows systems can also support Mac drives formatted with HFS+ system (also commonly referred to as Mac OS Extended). Refer to the Pro Tools Reference Guide for more information.*

Hard drive performance depends on factors including system configuration, number of tracks, session sample rate, density of edits, and the use of crossfades and other processes such as Beat Detective in a session.

For complete hard drive requirements, visit the Digidesign website at:

www.digidesign.com/compatibility

FireWire Hard Drives

Digidesign recommends qualified FireWire drives and (on Windows systems) a qualified FireWire host adapter.

For complete information on track count and the supported number and configuration of FireWire drives, visit the Digidesign website at: www.digidesign.com/compatibility

IDE/ATA/SATA Hard Drives

A qualified internal IDE/ATA/SATA drive may be used as a dedicated audio drive.

For complete information on track count with internal drives, visit the Digidesign website at: www.digidesign.com/compatibility

Formatting an Audio Drive

⚠ Always back up any important data on your drive before formatting it, as it will erase all data on the drive.

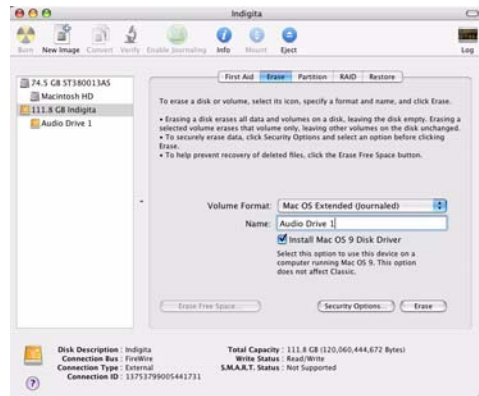
Formatting Mac Audio Drives

For optimum performance, audio drives should be formatted as Mac OS Extended (Journaled).

To format an audio drive:

1 Launch the Disk Utility application, located in Macintosh HD/Applications/Utilities.

2 Click the Erase tab.



Disk Utility (Mac OS X)

3 Select the drive you want to initialize in the column on the left side of the window.

4 Choose the Mac OS Extended (Journaled) format.

⚠ Do not choose the “Case-Sensitive” format option. Pro Tools will not operate properly with case-sensitive formatted drives.

5 Type a name for the new volume.


6 If you plan to connect the drive to a Mac OS 9 computer, select Install Mac OS 9 Drivers.

7 Click Erase.

The drive appears on the Desktop with the new volume name.

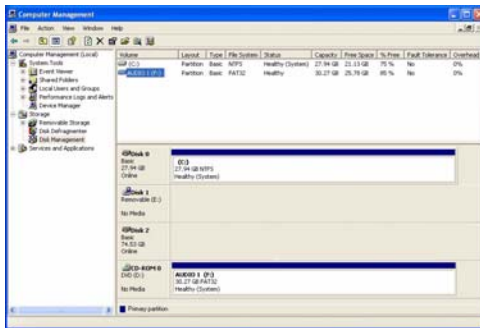
Formatting Windows Audio Drives

For optimal performance, audio drives should be formatted as NTFS.

 *Pro Tools only supports Basic drive types. Do not convert the drive to a Dynamic type.*


To format an audio drive:

- 1 Right-click Computer (Windows Vista) or My Computer (Windows XP) and choose Manage.
- 2 Under Storage, choose Disk Management.



Disk Management window (Windows XP)


- 3 If the volume is “Healthy,” do the following:

 *Healthy volumes are volumes that have previously been partitioned and formatted.*

- In the Disk Management window, right-click the hard drive you will use for audio and choose Format.
- In the Format window, name the volume.
- Choose a file system. For optimum performance, audio drives should be formatted as NTFS.
- Select Perform a quick format.
- Make sure Enable file and folder compression is not selected.
- Set the Allocation unit size to Default.
- Click OK.

- 4 If the volume is “Unallocated,” do the following:


- In the Disk Management window, Right-click the hard drive you will use for audio and choose New Partition.
- In the New Partition Wizard window, click Next.
- When prompted, select the partition type.


 *Digidesign recommends using Primary partitions, instead of Extended partitions.*

- Follow the on-screen instructions to select a partition size and other partition settings.
- When prompted, choose a file system. For optimum performance, audio drives should be formatted as NTFS.
- Select Perform a quick format.
- Make sure Enable file and folder compression is not selected.
- Set the Allocation unit size to Default.
- Click OK.

Partitioning Drives

Partitioning creates a logical volume or volumes on a physical drive, almost as if you were creating virtual hard drives. Partitions can then be formatted with the appropriate file system (NTFS for Windows, HFS+ for Mac).

 *Mac OS allows drives larger than 4096 MB to be seen as whole volumes. Drives must be initialized with a disk utility that recognizes the 2 terabyte limit. Single Pro Tools audio files cannot exceed 3.4 GB in size.*

 *Windows XP allows drives formatted with the NTFS file system to be seen as whole volumes. Single Pro Tools audio files cannot exceed 3.4 GB in size.*

Seek Times on Partitioned Drives

Seek times are actually faster on partitioned drives (assuming that reads and writes are performed on a single partition), since the heads only have to seek within the partition boundaries, rather than the whole capacity of the drive.

Smaller partitions perform faster than larger partitions, but this comes at the expense of contiguous storage space. When you partition a drive, you will need to find the compromise that best suits your performance and storage requirements.

⚠ *Avoid distributing audio files within a session over different partitions on the same drive since this will adversely affect drive performance.*

Mac Systems

When working with larger files (such as video), you can limit fragmentation by backing up your important files to another disk, erasing the files from the original hard disk, then copying the files back, instead of doing a defragmentation.

Window Systems

Periodically *defragment* audio drives to maintain system performance.

For maximum recording and playback efficiency, data should be written to your hard drive in a contiguous fashion—minimizing the seek requirements to play back the data. Unfortunately, your computer can't always store the sound files in this way and must write to disk wherever it can find space.

In multitrack recording, audio tracks are written in discrete files, spaced evenly across the disk. While fragmentation of individual files may be zero, the tracks may be far enough apart that

playback will still be very seek-intensive. Also, the remaining free space on the disk will be discontinuous, increasing the likelihood of file fragmentation on subsequent record passes.

Increased fragmentation increases the chance of disk errors, which can interfere with playback of audio, and result in performance errors.



On Windows, to avoid fragmentation, format drives with higher cluster sizes (such as 32K).

Optimizing (Defragmenting) Drives

To prevent fragmentation, you can optimize your drive, which rearranges your files into a contiguous format. Most optimizing software lets you run a check on a drive to find out the percentage of fragmentation. If your drive shows moderate to heavy fragmentation, you should consider optimizing it.

If you use your system for intensive editing, or if you frequently delete audio or fade files from your hard drive, you may need to optimize your drives on a weekly basis, or even every few days, since it doesn't take long for even a large hard drive to become fragmented.


Backing Up Data Before Optimizing

Since your files will be rewritten by the optimization process, always make a backup copy of the data on your hard drive before you optimize it. You should also use a hard drive utility to find and repair any problems before optimizing data or re-initializing your drives. If there is any damage to your hard drive's directories prior to optimizing, serious data loss may result.

Defragmenting Windows Audio Drives

To defragment an audio drive (Windows Vista):

- 1 Choose Start > Control Panel.
- 2 Click System and Maintenance.
- 3 Click Performance Information and Tools.
- 4 Click Advanced Tools.
- 5 Click Open Disk Defragmenter.
- 6 In the Disk Defragmenter window, click the Defragment Now button.

 *The Defragment Now command defragments all your hard drives. This can take a lot of time, especially on systems with multiple drives.*

Advanced users can use the command line tool Defrag.exe to defragment individual drives. See your Windows Vista documentation for more information.

To defragment an audio drive (Windows XP):

- 1 Right-click My Computer and choose Manage.
- 2 Under Storage, choose Disk Defragmenter.
- 3 In the Disk Defragmenter window, choose the drive you want to defragment
- 4 Click the Defragment button and follow the on-screen instructions.

When defragmenting is complete, close the Computer Management window.

Hard Disk Storage Space

Mono audio tracks recorded with 16-bit resolution at 44.1 kHz (CD quality) require approximately 5 MB of hard disk space per minute. The same tracks recorded with 24-bit resolution require about 7.5 MB per minute.

Stereo audio tracks recorded with 16-bit resolution at 44.1 kHz (CD quality) require approximately 10 MB of hard disk space per minute. The same tracks recorded with 24-bit resolution require about 15 MB per minute.

Table 2 lists the required disk space for certain track numbers and track lengths, to help you estimate your hard disk usage.

Table 2. Required hard drive space for audio tracks (44.1 kHz and 48 kHz sessions shown)

| Number of Tracks and Length | 16-bit at 44.1 kHz | 16-bit at 48 kHz | 24-bit at 44.1 kHz | 24-bit at 48 kHz |
|---|---------------------------|-------------------------|---------------------------|-------------------------|
| 1 mono track, 1 minute | 5 MB | 5.5 MB | 7.5 MB | 8.2 MB |
| 1 stereo track (or two mono tracks), 5 minutes | 50 MB | 55 MB | 75 MB | 83 MB |
| 1 stereo track (or two mono tracks), 60 minutes | 600 MB | 662 MB | 900 MB | 991 MB |
| 24 mono tracks, 5 minutes | 600 MB | 662 MB | 900 MB | 991 MB |
| 24 mono tracks, 60 minutes | 7 GB | 7.8 GB | 10.5 GB | 11.6 GB |
| 32 mono tracks, 5 minutes | 800 MB | 883 MB | 1.2 GB | 1.3 GB |
| 32 mono tracks, 60 minutes | 9.4 GB | 10.4 GB | 14 GB | 15.4 GB |

appendix b

Resources

Whether you are new to Pro Tools or just starting out with your new system, we encourage you to read and utilize the many guides that Pro Tools provides. There are also useful online resources available, giving you everything from Pro Tools tips to Pro Tools answers.

About the Pro Tools Guides

In addition to any printed guides included with your system, PDF versions of the printed guides and many additional Pro Tools guides are installed automatically during Pro Tools installation (see “Documentation Installed Automatically with Pro Tools” on page 32).



Printed copies of the Pro Tools Reference Guide and other guides in the Pro Tools guide set can be purchased separately from the DigiStore (www.digidesign.com).

Printed Guides

A printed M-Audio hardware interface guide is included for your respective M-Audio interface. It gives you detailed instructions for setting up and configuring hardware for optimum performance.



*You can download the manual for whatever interface you have. Go to:
<http://www.m-audio.com/manuals>*

Guides Accessible in Pro Tools

The main Pro Tools guides are accessible from the Pro Tools Help menu. (Choose Help, then select a guide.)

These include:

- *Intro to Pro Tools*, which has tutorials on using Pro Tools
- *Essential User Guide*, which gives you detailed instructions for setting up and configuring software and hardware for optimum performance.
- *Essential Plug-ins Guide*, which describes the plug-ins included with Pro Tools for both real-time and file-based audio processing.
- *Essential Menus Guide*, which covers all the Pro Tools on-screen menus.
- *Pro Tools Shortcuts Guide*, which provides a complete list of keyboard and Right-click shortcuts for Pro Tools.

Documentation Installed Automatically with Pro Tools

In addition to the guides in the Help menu, you get useful PDF versions of many Pro Tools guides (such as the *Pro Tools Reference Guide*) when you install Pro Tools.



Usually, references to Pro Tools M-Powered in the guides are synonymous with Pro Tools M-Powered Essential.

This documentation can be found in the following locations:

Mac Applications/Digidesign/Documentation

Windows C:\Program Files\Digidesign\Documentation



To view or print PDF guides, you can use Adobe Reader or Apple Preview (Mac only).

About www.digidesign.com

The Digidesign website (www.digidesign.com) is your best online source for information to help you get the most out of your Pro Tools system. The following are just a few of the services and features available.

Product Registration Register your purchase online.

Support and Downloads Contact Digidesign Technical Support or Customer Service; download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Answerbase; or join the worldwide Pro Tools community on the Digidesign User Conference.

Training and Education Study on your own using courses available online or find out how you can learn in a classroom setting at a certified Pro Tools training center.

Products and Developers Learn about Digidesign products; download demo software or learn about our Development Partners and their plug-ins, applications, and hardware.

News and Events Get the latest news from Digidesign or sign up for a Pro Tools demo.

Pro Tools Accelerated Videos Watch the series of free tutorial videos. Accelerated Videos are designed to help you get up and running with Pro Tools and its plug-ins quickly.

Helpful Online Resources

Once you get going, here are some helpful online resources:

- Get useful information, help, and tips from the worldwide community of Pro Tools users at Digidesign User Conference (DUC). Go to: <http://duc.digidesign.com>
- For questions about installation, visit Digidesign's online Answerbase. Go to: <http://www.digidesign.com/answerbase>
- If you can't find your answer on the DUC or Answerbase, contact Digidesign email support. Go to: <http://www.digidesign.com/tsr>

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www.digidesign.com

DIGIDESIGN

2001 Junipero Serra Boulevard
Daly City, CA 94014-3886 USA

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