Pro Tools
Addendum

Version 5.1.3 for TDM on Macintosh
Version 5.1.1 for Windows and Macintosh

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A division of **Avid**

contents

chapter 1

Introduction

Pro Tools 5.1.3 includes new features and improved functionality for DigiTranslator, Avid Unity™ MediaManager, and AVoption|XL, to improve the workflow between Pro Tools and other OMFI applications such as Avid video workstations.

About This Guide

This *5.1.3 Addendum* is a supplement to the *Pro Tools 5.1 Guides*. It documents the new features in Pro Tools 5.1.3, as well as in Pro Tools 5.1.1, and AVoption|XL.

This release of Pro Tools is intended for existing users upgrading from:

■ Pro Tools 5.1 TDM systems on Macintosh

■ Pro Tools 5.1U TDM systems on Macintosh

■ Pro Tools 5.1.1 TDM systems on Macintosh

✧ *A serial number from your current version of Pro Tools is required to upgrade to Pro Tools 5.1.3. If you do not have a serial number, or are currently running 5.0.1 or lower, contact your local Digidesign Pro Dealer for upgrade information.*

5.1.3 System Requirements

Pro Tools 5.1.3 requires:

■ Digidesign-qualified Power Macintosh running OS 9.0.4, 9.1, 9.2, or 9.2.1 with a minimum of 256 MB of RAM.

■ A minimum of 40 MB of RAM allocated to the Pro Tools application (70 is recommended).

■ A minimum of 50 MB of RAM allocated to the DAE (60 is recommended).

✧ *Additional RAM may be required if you are running large sessions with high edit density, a high volume of automation data, a large number of plug-ins, or options such as DigiTranslator and AVoption|XL.*

5.1.1 System Requirements

Pro Tools 5.1.1 supports the following computer platforms.

Pro Tools TDM systems:

• Digidesign-qualified Power Macintosh running OS 9.0.4, 9.1, 9.2, or 9.2.1, with 192 MB of RAM

• Digidesign-qualified computer running Windows 2000 Professional Edition, with at least 256 MB of RAM

Pro Tools LE systems:

- Digidesign-qualified Power Macintosh running OS 9.0.4 or 9.1, 9.2, or 9.2.1, with 128 MB of RAM (192 MB recommended)

- Digidesign-qualified computer running Windows Millennium Edition or Windows 98, 2nd Edition, with at least 256 MB of RAM

Compatibility Information

Digidesign can only assure compatibility and provide support for devices it has tested and approved. For a list of Digidesign-qualified computers, SCSI accelerator cards, hard drives, diskette drives, and serial port adapters, refer to the latest compatibility information on the Digidesign Web site (www.digidesign.com).

Pro Tools Authorization

The Pro Tools application for TDM systems no longer uses disk-based copy protection. You will, however, be prompted to enter a serial number when first launching the program. See "Launching Pro Tools the First Time" on page 6 for details.

Launching Pro Tools the First Time

Serial Number Entry

Launching Pro Tools the first time prompts you to enter a serial number.

Please enter the serial number provided with this version of Pro Tools. The serial number can be found on the inside cover of the Pro Tools TDM Installation Guide (TDM) or the Toolbox/Digi 001 Getting Started Guide (LE).

[   ]   Cancel   Validate
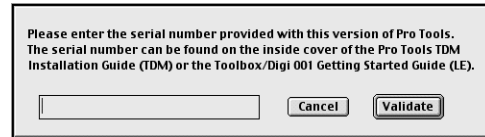
Serial number entry for Pro Tools

Enter your serial number in the dialog when prompted, making sure to observe any spaces, then click Validate.

⚠ You must have a Pro Tools 5.1 or higher serial number to authorize Pro Tools 5.1.3.

chapter 2

What's New in Pro Tools 5.1.3

New Support for DigiTranslator and MediaManager

Pro Tools 5.1.3 includes new features and support for AVoption|XL, DigiTranslator 2.0, and MediaManager, providing an integrated workflow between Pro Tools and other OMFI applications. For more information on the DigiTranslator option and MediaManager, see the *DigiTranslator Integrated Option Guide.*

New AVoption|XL Features

24P Avid Video Playback Capability

AVoption|XL now plays back 24P format video files imported from Avid editing systems. 24P files may be played and edited, just like video clips in other formats, but they cannot be recorded directly to the Pro Tools Timeline.

To play back 24P format video files, you will need:

■ AVoption|XL

■ Pro Tools 5.1.3 software

■ FilmFrame

FilmFrame

(AVoption and AVoption|XL Only)

FilmFrame is an add-on to AVoption and AVoption|XL that supports true 24 fps (frames per second) picture media. Using FilmFrame, you can import and play back 24 fps material captured in Avid video workstations.

When using FilmFrame, all clips in the Movie Track should be 24 fps. This is because the first frame in the Movie Track sets the video engine to the appropriate speed. If the first clip is 24 fps, the entire Movie Track will play at 24 fps. This will effect the playback speed of any subsequent clips of different fps speeds.

FilmFrame Workflows

The following are three workflow scenarios and the steps to complete them.

Typical Usage

1 Edit your project in an Avid video workstation.

2 Export an OMFI sequence that references the 24 fps media. Do not embed the video files in the sequence.

3 Open the OMFI sequence with the Open Session command in the File menu of Pro Tools 5.1.3.

4 The video track will open and you can start working immediately.

Adding a Movie

1 Edit your project in an Avid video workstation.

2 Export a video-only OMFI sequence that references the 24 fps media. Do not embed the video files in the sequence.

3 Import the video-only OMFI Composition into Pro Tools using the "Import Movie" menu item.

4 The video composition will be imported to the video track and you can start working immediately.

Importing a Video Track

In this scenario, the workflow is similar to the one for typical usage, except that you would only want the video from the OMFI sequence.

1 Choose Import Track from the File Menu.

2 Select the OMFI sequence, then select the video track.

3 The video composition will be imported to the video track and you can start working immediately.

Audio Layback to Video

Although you cannot output 24 fps video to a video recorder with Pro Tools, you can "Punch Down" by adding audio that has been posted to a 24P video clip in Pro Tools to videotape that was created on another video system.

Playing in Sync with 24 fps Video Tapes

You can play in sync with a video transport playing at 24P. To do so, set the session rate to 24 fps, and slave Pro Tools to the video transport. Or, if you have the MachineControl option, you can select the appropriate profile to control the video transport.

Playing in Sync with 29.97 fps (NTSC) Video Tapes

To play in sync with a 29.97 fps video created from a 24 fps source:

1 Slave Pro Tools to the VTR. (For more information on slaving Pro Tools to the VTR, see the Synchronization chapters of the *Pro Tools Reference Guide*.)

2 Change the session frame rate to 29.97.

3 Enable Pull Down in the Sessions Setup window.

⚠ *Audio pull-down is required when you are posting to a 29.97 fps video clip made from a 24 fps source. This is because the 24 fps source is also "pulled down" by the telecine process which produces the 29.97 fps tape.*

24P Clips and Pull Down When the USD is set to pull down, the playback of the 24P clip is pulled down along with the audio. This way, when laying back audio to an NTSC video tape running at 29.97 fps, the Pro Tools video display and the output of the video deck will remain in sync. Other types of video clips are not affected by pull down settings.

Playing in Sync with 25 fps (PAL) Video Tapes

Pro Tools cannot currently lay back a 24P session directly to a 25 fps (PAL) tape.

For details of approved workflows for 24P to 25 fps transfers, go to www.digidesign.com

Converting Sessions From 24 FPS to 29.97 FPS

When changing a session frame rate from 24 to 29.97, or when importing a track from a 24 fps session to a 29.97 fps session, you must turn audio pull-down on in the 29.97 fps session for the files to import to the correct time.

Conversely, for a 29.97 track or session to translate correctly to a 24 fps session, it has to have been edited with audio pulled down. The 24 fps session should not be pulled down.

USD Support Update

Pro Tools defaults to "Limit Pull Ups to NTSC Film Standards," limiting pull up and pull down when operating at either 30 or 29.97 fps. However, you can set the USD to pull up or down, regardless of frame rate.

To set the USD to pull up or down, regardless of frame rate:

■ Uncheck the "Limit Pull Ups to NTSC Film Standards" box in the Operations pane of the Preferences window.

MachineControl Update

With Pro Tools 5.1.3 and the MachineControl option, you can control video transports operating at 24 fps.

Running Pro Tools 5.1.3 and Pro Tools 5.2 on the Same System

Pro Tools 5.1.3 and 5.2 each contain unique features. Pro Tools 5.2 provides DigiStudio online collaboration capabilities, while Pro Tools 5.1.3 has enhancements for AVoption|XL, Media-Manager, DigiTranslator, and Avid Unity™ MediaNet users. Both Pro Tools 5.1.3 and 5.2 can reside on the same hard drive, but cannot be launched at the same time.

To install 5.1.3 and 5.2 on the same hard drive:

■ Run the installation disk on a machine currently installed with the other version.

In this case, running the installation disk will not disrupt the previously installed version.

Both versions will be added to the Pro Tools application folder (with version numbers clearly stated) within the Digidesign folder.

If both versions of Pro Tools are installed on your hard drive, you do not open a session by double-clicking on it (you will not be able to choose which version you want to work with).

To open a session when both versions (5.1.3 and 5.2) are present:

■ Launch the Pro Tools version that contains the features you intend to use, then open the session through the file menu.

– or –

1 Drag and drop your session onto the icon of the desired version.

If you open and save a Pro Tools 5.2 session in Pro Tools 5.1.3:

■ You will lose the Local > Online track associations.

If you open a Pro Tools 5.1.3 session in Pro Tools 5.2:

■ You will loose the ability to work with the DigiTranslator option, MediaNet storage and 24P video clips.

■ You will be unable to play audio imbedded in an OMFI sequence file.

■ Pull-downs will only be allowed at the standard frame rates.

Pro Tools AVoption and AVoption|XL users:

You will have the full capabilities of your video system while using Pro Tools 5.2 online with DigiStudio, with the exception of 24P support.

Voice Load Balancing and PCI Optimization

Voice Load Balancing is implemented to allow the PCI load to be balanced when running sessions with larger numbers of voices, edits and crossfades. Splitting the voices between DSPs helps manage the amount of PCI bus traffic.

Although manual voice assignment is still possible, the auto-assignment algorithm has been changed to balance the load between DSPs. For example, if 24 voices are being used and all have been automatically assigned, there will be 12 voices per DSP. This auto-assign algorithm will also take into account other load factors on the DSP such as manually assigned tracks or plug-in usage.

With Pro Tools|24 MIXplus and MIX^3 systems, Pro Tools 5.1.3 further improves PCI Bus performance by placing the second 32-voice Playback Engine on the first MIX Farm card instead of on the MIX Core card.

Calculate Overviews for Exported Files

Pro Tools calculates waveform overviews and stores them as part of the file, in all audio files created by bouncing to disk or exporting (OMFI or not).

However, If you Convert During Bounce, Pro Tools will not calculate and store overviews because this CPU-intensive procedure may slow the bounce function.

.WAV Now BWF (.WAV)

Pro Tools can read and play any standard WAVE (.WAV) format files. However, it saves files exclusively in the Broadcast WAV or BWF (.WAV) format. BWF (.WAV) files store their time stamps in a consistent way that makes them ideal for interchange operations.

Display MAC/PC Compatibility Mode

If you receive a session from another editor, you need to determine if the session was created in Mac/PC Compatibility mode.

If a session was created in Mac/PC Compatibility mode (set in the New Session window) "Mac <-> PC: Enforced" will be displayed in the Session Setup window.

If the session is not Mac/PC compatible, "Mac <-> PC: Not Enforced" will be displayed in the Session Setup window.

Opening Pro Tools 5.1.3 Sessions in 5.1.1

You can open a Pro Tools 5.1.3 session in Pro Tools 5.1.1.

When you open a Pro Tools 5.1.3 session in Pro Tools 5.1.1, you will lose some information:

■ MediaManager Login Preferences

■ OMFI settings

■ If your 5.1.3 session points to audio files that are embedded in an OMFI file, you won't be able to "find" the audio files, since 5.1.1 does not support embedded audio
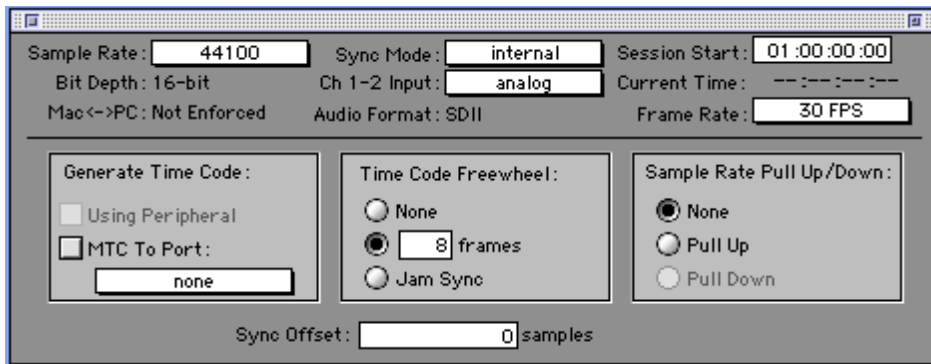
Figure 1. Mac/PC Compatibility mode

chapter 3

What's New in Pro Tools 5.1.1

Pro Tools 5.1.3 software includes features that were new with Pro Tools 5.1.1. If you are updating/upgrading to Pro Tools 5.1.3 from Pro Tools 5.1, these features will be new to you. Following is an overview of the Pro Tools 5.1.1 features.

Show/Hide Tracks List Enhancements

Track Names and Track Type Icons

Each track name in the Show/Hide Tracks List now includes a track icon identifying the track type (audio, MIDI, Auxiliary Input, or Master Fader). Icons are shown before the track name and are the same as those used in the Mix window. Track names are now left justified.

Track icons and track names

Multichannel Track Display

The Show/Hide Tracks List now features hierarchical menu-style display of stereo and multichannel tracks. To view the individual tracks that make up a multichannel track, click the icon next to a master track's name.

Show/Hide Track Type

New Show Only and Hide options in the Show/Hide menu allow you to show or hide specific track types (audio, MIDI, Auxiliary Input or Master Fader).
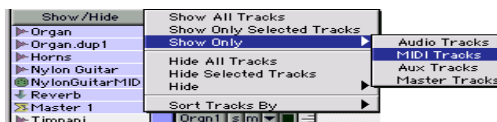
Show Only option

Track Order Sorting Option

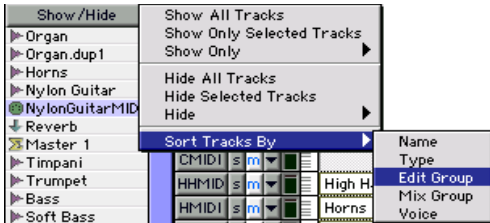The new Sort Tracks By menu allows you to set the track order according to Name, Type, Edit Group, Mix Group or Voice. The new sort order will be reflected in the Show/Hide Tracks List in the Edit Window and the Mix Window.

Sort Tracks By option

Group List Enhancements

Pro Tools 5.1.1 includes the following changes in the Groups List:

• The Group ID display has been moved to the left of the group name line separator.

• A new pop-up menu allows you to show or hide tracks in a group, or show only tracks in a group. Click and hold on the group name to display the pop-up menu, then select the option.

New Groups List

Zoom Tool Enhancements

Single Zoom Mode

Pro Tools 5.1.1 adds a Single Zoom mode to the Zoomer Tool option that returns you to the previously selected tool after a zoom has been performed.

For example, when using the Smart Tool you can click on the Single Zoom Tool mode and once the Zoom operation has been performed, Pro Tools automatically switches back to the Smart Tool.

To use Single Zoom mode:

1 Click on the Zoom tool to toggle between Normal and Single Zoom modes.

Single Zoom is identified with an arrow to the right of the Zoomer Tool icon. Normal Zoom mode doesn't have the arrow.

Single Zoom mode

Normal Zoom mode

Horizontal and Vertical Zoom Buttons

Pro Tools 5.1.1 provides continuous zoom control using the mouse and the Horizontal and Vertical Zoom buttons.

To zoom continuously:

1 Click and drag on the Horizontal or Vertical icons.


New Horizontal and Vertical Zoom buttons

Playlist Auto-Naming

New and Duplicate Playlists are now auto-named with the track name, followed by a period and the playlist number (such as the first playlist for a "Kick" track being auto-named "Kick.01"). In this example, subsequent playlists would be auto-named "Kick.02," "Kick.03," and so on.

POW-r Dither Plug-In

(TDM Systems on Macintosh and Windows)

The POW-r Dither plug-in is an advanced type of dither that provides optimized word length reduction. It is designed for critical mixdown and mastering tasks where the highest possible fidelity is desired when reducing bit depth.
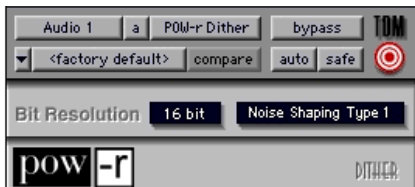
POW-r Dither plug-in

Dither is a form of randomized noise used to minimize quantization errors, which can result in unwanted audio artifacts and distortion. Quantization distortion is most audible when an audio signal is near the low end of its dynamic range, such as during a quiet passage or fade-out.

The most common application of dithering is to use it on a master output mix as the last processor in the signal path when preparing a 24-bit session for CD mastering. In such a case, you would place the POW-r Dither plug-in on a Master Fader as a post-fader Insert to reduce session bit-depth from 24-bits to 16-bits.

Proper use of dithering allows you to squeeze better subjective performance out of 16-bits (or whatever your destination bit-depth is).

Because dither introduces a small amount of noise into a signal, there is a trade-off between signal-to-noise performance and less-apparent distortion.

☀ *If you are outputting audio to an analog destination with a 24-bit-capable Pro Tools system and an 888/24 I/O, do not use dither. This allows maximum output fidelity from the 888/24 I/O's high-performance 24-bit digital-to-analog convertors.*

⚠ *The POW-r Dither plug-in does not run on third party software applications that use DAE.*

POW-r Dither Parameters

Bit Resolution

This pop-up menu allows you to choose either 16- or 20-bit resolutions for POW-r Dither processing. Set this parameter to the maximum bit resolution of your destination.

16-bit Recommended for output to devices with a maximum resolution of 16-bits, such as DAT and CD recorders.

20-bit Recommended for output to devices that support a full 20-bit recording data path.

Noise Shaping

Noise shaping improves audio performance and lessens our perception of the noise inherent in dithering schemes by shifting audible noise components into a less audible range.

The POW-r Dither plug-in provides three types of noise shaping, each with its own characteristics.

It is recommended that you try each noise shaping type and choose the one that adds the least amount of coloration to the audio being processed.

Type 1 Selects the gentlest dither curve. Recommended for less stereophonically complex material such as solo instrument recordings.

Type 2 Selects a slightly steeper dither curve. Recommended for material of greater stereophonic complexity.

Type 3 Selects the steepest dither curve. Recommended for full-spectrum, wide-stereo field material.

See the Pro Tools Reference Guide for details on using the Dither plug-in during mixdown.

Table 1. Maximum instances of POW-r Dither plug-in per DSP chip for a Pro Tools|24 MIX card

Plug-In	Mono	Stereo	LCR	Quad & LCRS	5.0	6.0	7.0	7.1	DSP chips per Mix card
POW-r Dither	8	4	2	2	1	1	1	1	6

Table 2. Maximum instances of POW-r Dither plug-in per DSP chip for a DSP Farm card

Plug-In	Mono	Stereo	LCR	Quad & LCRS	5.0	6.0	7.0	7.1	DSP chips per DSP Farm
POW-r Dither	3	1	1	0	0	0	0	0	6

⚠ *Instances of POW-r Dither on a DSP Farm beyond LCR multichannel tracks require more than one DSP.*

MultiShell Compatibility

POW-r Dither is MultiShell II compatible. Digidesign's Multishell II technology allows different types of TDM plug-ins to share the same DSP chip at the same time. This allows you to simultaneously use a greater variety of plug-ins by efficiently managing the DSP available on each chip in your system.

New SurroundScope Feature

Phase Meter

The SurroundScope Phase Meter now indicates the phase coherency of any two channels of a multichannel signal. This enables you to see at a glance if a signal is in or out of phase.

Phase Meter

The Phase Meter is green when the signal is positively out of phase (values from 0 to +1) and red when the signal is negatively out of phase (values from 0 to –1).

At center or zero position, the signal is a perfect stereo image. At the +1 position, the signal is a perfect mono image. At the –1 position, the signal is 100% out of phase.

By default, the meter displays the phase of the left and right channels. However, you can select any two channels for comparison by clicking them.

To choose the channels you want to compare on the phase meter:

1 With SurroundScope inserted on a track, click in the surround display on the letter corresponding to the desired speaker channel.

2 Click the letter corresponding to the second desired speaker channel.
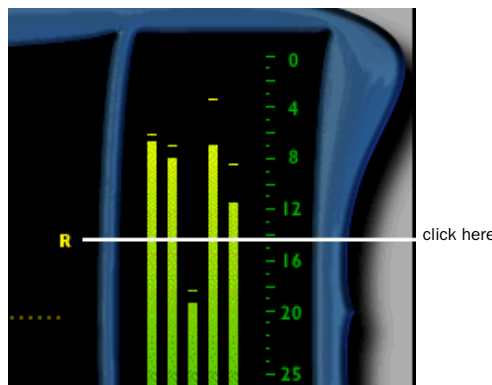
Selecting a channel for the phase meter

Once selected, the speaker labels are highlighted for easy visual reference.

3 Begin audio playback.

4 Watch the Phase Meter to monitor the signal.

RTAS Trim Plug-In

Pro Tools 5.1.1 supports an RTAS version of the DigiRack Trim plug-in. Fore more information, refer to the *Pro Tools DigiRack Plug-Ins Guide*.

Importing QuickTime and Other Compressed Video Files

Pro Tools now supports the following Quick-Time and compressed video file formats:

◆ MP3

◆ QDesign

◆ uLaw 2:1

◆ aLaw 2:1

◆ Intel ADPCM

◆ Microsoft ADPCM

◆ IMA 4:1

◆ 32-bit floating point

◆ 64-bit floating point

◆ 16-bit Big Endian

◆ 16-bit Little Endian

◆ MACE 6:1

◆ MACE 3:1

QuickTime files can be imported into sessions using either Import Audio from Other Movie or Import Audio from Current Movie menu commands.

Support For New Magma 7-Slot Chassis

(Macintosh Only)

The Magma 7-Slot Expansion Chassis (models P7R-D1 and P7RQ-D1) are supported with the following systems:

Pro Tools|24 MIX, MIXplus, and MIX[3]:

◆ Power Macintosh G3 (Blue and White)

◆ Power Macintosh G4

⚠ *Magma models P7R-D1 andP7RQ-D1 require DAE/DSI 5.01.*

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

MachineControl Features

(Macintosh Only)

For users of MachineControl option, Pro Tools now allows you to select profiles of other machines in order to improve performance.

To change the profile of a MachineControl device:

1 Configure your MachineControl device to run auto-detection, according to the instructions in the *MachineControl Guide*.

2 After the machine is recognized, or the machine isn't recognized and the Generic personality is loaded, click Node and select a different profile from the pop-up menu.

Control|24 Features

Control|24 is a 24-channel control surface from Digidesign and Focusrite. Control|24 now supports extended surround features and other new functionality enhancements for use directly from Control|24. Refer to the *Control|24 Guide* for more details.

Expanded Pan View

Expanded Pan View lets you do multichannel (surround) panning on track outputs or sends.

Expanded Plug-In View

When working with multi-mono plug-ins, individual "sides" (or channels) of the multi-mono plug-in can be selected from Expanded Plug-In View.

Plug-In Settings Copy and Paste

Settings can be copied from one plug-in to another with key commands from Control|24.

Return to Home (F1 Button)

The F1 button is a shortcut to return Control|24 to the Home condition. The encoders will set to Pan mode and the scribble strips will show channel names regardless of whether you were editing a plug-in or working with an edit group.

Return to Home does not affect banking. If you were looking at channels 24–48, when you pressed the F1 button, you will see the Home condition for channels 25–48.

Re-Focus Target (F10 Button)

The F10 button brings the Target plug-in or panner window back into focus from Control|24.

Pan and Plug-In Window Button Enhancements

With Pro Tools 5.1.1, the Pan and Plug-In buttons in the Windows section of Control|24 offer increased functionality in targeting and controlling multiple windows, and offer additional keystroke options.

On Stop Auto Write To Start/End/All

On Stop mode lets you specify an Auto Write To command that will be executed when the transport is stopped.

To use On Stop:

1 Press CTL/CLUTCH and one of the switches to write automation to (Start, End, or All).

The LED for the switch will flash, indicating that it is armed and automation will be written automatically. This mode can be entered and exited at any time. Additionally, a manual Auto Write To command can be performed during playback.

ProControl Features

(TDM Systems on Macintosh and Windows)

The following topic is new to ProControl.

Using Multichannel Solo with Metering

Multichannel tracks can be metered in an expanded view by soloing them from ProControl, as described below.

To meter a multichannel path:

1 Start Pro Tools playback.

2 Press SHIFT/ADD+SOLO on the multichannel track.

The multichannel track is now metered using multiple, adjacent pairs of channel meters. Track layout is determined by the path definition in the I/O Setup dialog. The first side is displayed in the left meter of the soloed track. Remaining channels are displayed in the adjacent meters to the right, up to a maximum of eight.

3 Release SHIFT/ADD and SOLO to return to normal metering.

chapter 4

What's New in Pro Tools 5.1.1 TDM Systems on Windows

Following is an overview of new features included with Pro Tools 5.1.1 TDM Systems on Windows. For more details on each feature, refer to the *Pro Tools Reference Guide.* Features can be located by name in its index and table of contents.

Surround Mixing and Panning

(Pro Tools|24 MIX-Series Systems Only)

Pro Tools 5.1.1 features integrated multichannel mixing, panning and processing, with support for all standard multichannel mixing formats, including LCR, Quad (2+2), LCRS (3+1), 5.0, 5.1, 6.0, 6.1, 7.0, and 7.1.
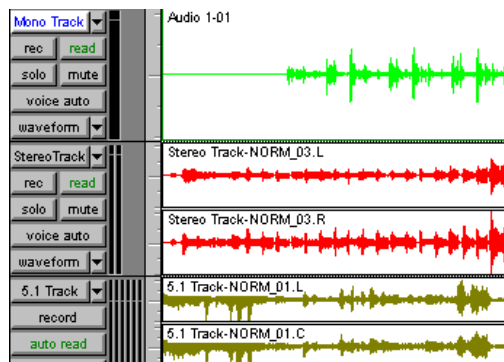
Mono, stereo, and multichannel track formats

Mono, stereo, and multichannel track formats

Output Window

Surround Panning

Surround pan controls are integrated into the Pro Tools interface, with each track supporting independent panning on its outputs and sends.

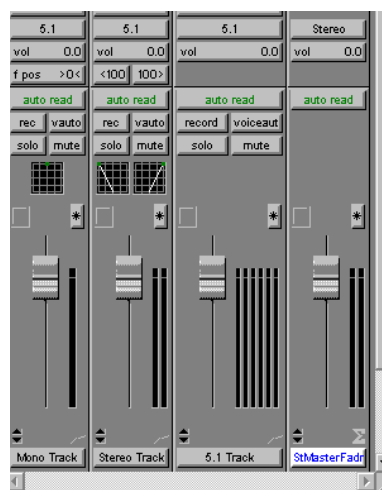The Output window lets you view and control the panning of each track with its own full-size X-Y panner display, and switch intelligently between X-Y and 3-knob panning modes. The surround panner also features fully automatable controls for front, front-rear, front-to-rear, and center percent divergence.

Output window

SurroundScope Metering Plug-In

(Pro Tools|24 MIX-Series Systems Only)

SurroundScope is a new surround metering plug-in that can be purchased from Digidesign to provides real-time, highly accurate display of a stereo or multichannel track's phase, surround position, and decibel levels in a single window.

SurroundScope automatically detects the multi-channel format of a Pro Tools track and displays the channels in a circle around the surround display's center. To see the location of audio within the sound field, observe how the circular sound pattern moves. A perfect circle in the center of the surround display denotes a perfectly centered surround signal, while a signal that balloons toward the outer edges of the display indicates which channels emanate the strongest signal.
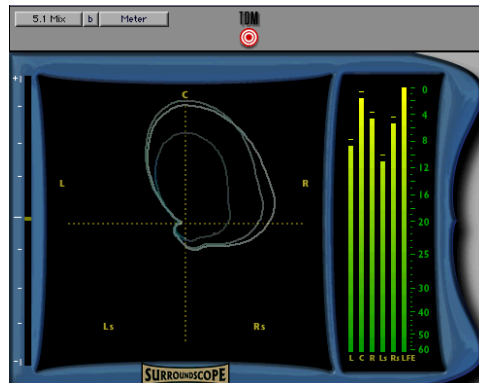
SurroundScope metering plug-in

ProControl Surround Mixing

ProControl supports all new Pro Tools 5.1.1 multichannel features, including:

- control of multi-mono and multichannel plug-ins
- control of up to 3 RTAS plug-ins on audio tracks
- multichannel surround panning
- multiple output assignments
- multiple plug-in and Output windows

# Mixer Enhancements

Stereo and Multichannel Tracks

Pro Tools 5.1.1 now allows for individual stereo audio tracks on all systems and multichannel audio tracks on Pro Tools|24 MIX-series systems on Windows. This greatly simplifies the grouping, display and editing of stereo and multichannel audio data. Multichannel audio files and regions are automatically grouped and displayed hierarchically in the Audio Regions List.

Multichannel Regions in Audio Regions List

The Audio Regions List now features hierarchical menu-style display of stereo and multichannel regions. To view the individual regions that make up a multichannel region, click the arrow next to a master region's name.
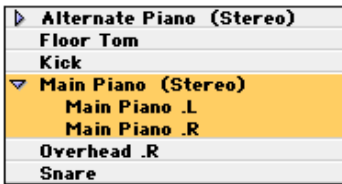
Audio Regions List

Multiple Output Assignments

Pro Tools 5.1.1 allows more than one destination for each output or send on a channel. This lets you mix to multiple formats simultaneously and create, for example, a 7.1 surround mix, a 5.1 surround mix and a stereo mix at the same time.

Multichannel Plug-Ins

Plug-ins are now provided in mono, multi-mono, and multichannel formats (as well as mono-to-stereo and stereo), depending on the type of plug-in and whether the destination is a mono or multichannel track.

Multichannel Bouncing

Bounce to Disk now features bouncing of multichannel format tracks. Sample rate and bit rate conversion can be performed during or after the bounce for enhanced automation playback accuracy.

I/O Setup Dialog

The I/O Setup dialog allows you to define custom I/O routings for inputs, outputs, inserts, and busses that best fit your workflow. This provides greater signal routing flexibility by giving you the ability to create, recall, and import custom I/O setups. All connected audio interfaces appear in the I/O Setup dialog for easy visual reference.
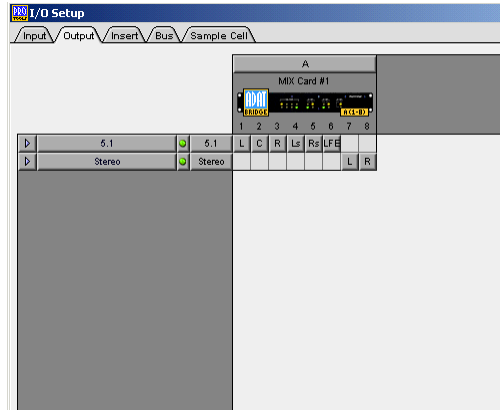
I/O Setup dialog

Auto-Voicing for TDM Systems

Auto-voicing automatically assigns and allocates voices where and when they are needed. Track voices can still be manually assigned if desired, using a track's Voice selector to ensure particular tracks are guaranteed a voice.

Linked Record and Play Levels

A new Operation Preference for "Link Record And Play Faders" automatically sets record and playback fader levels to the same value for monitoring convenience.

Automatic Write on Stop

A new Automatic Write on Stop option writes automation data (such as Write to Start, End, or all) when the Transport is stopped.

Plug-In and Processing Features

Pro Tools 5.1.1 adds many significant plug-in and DSP-processing related enhancements.

POW-r Dither Plug-In

The POW-r Dither plug-in is an advanced type of dither that provides psychoacoustically optimized word length reduction. It is designed for critical mixdown and mastering tasks where the highest possible fidelity is desired when reducing bit depth of audio signals.

For a complete description of the POW-r Dither plug-in and its parameters, refer to "POW-r Dither Plug-In" on page 15.

RTAS Plug-Ins in TDM Sessions

TDM-equipped Pro Tools systems can now run both TDM and Real-Time AudioSuite (RTAS) plug-ins, allowing you to use both dedicated TDM hardware and the processing capacity of your computer to get more real-time signal processing

Up to five RTAS plug-ins can be used on each audio track in Pro Tools TDM systems, increasing the number and variety of plug-ins that can be used simultaneously in a session.

RTAS plug-ins are limited to use on auto-voiced audio tracks, must be inserted before (or "above") TDM plug-ins, and cannot be inserted on auxiliary inputs, master faders, or virtual tracks. Mono-to-stereo plug-ins are not supported.

MultiShell II TDM Plug-Ins

New MultiShell II technology allows DSP chip sharing by all DigiRack TDM plug-ins and other MultiShell II-compatible plug-ins from Digidesign and Digidesign's Development Partners. This enables several different types of plug-ins to share a single DSP chip, increasing the number and variety of plug-ins you can use simultaneously in a session.

To check if a third-party plug-in is MultiShell II compatible, contact its developer.

Multiple Plug-In Windows

You can now have multiple plug-in windows open at the same time in a session for immediate on-screen access to any plug-in controls.

Plug-In Safing

You can enable Automation Safe in plug-ins to protect existing automation from being over-written during subsequent automation passes.

Re-Ordering Inserts

You can drag a plug-in insert to a new position on the same track or a different track. Dragging an insert on top of an existing insert will replace it. Moved inserts retain their settings and auto-mation.

Duplicating Inserts

You can duplicate an insert by Alt-dragging it to a different location on the same track or onto a different track. Duplicated inserts retain their settings and automation.

Trim Plug-In

A new mono-only Trim plug-in increases gain as much as +6 dB on an audio track, auxiliary in-put, or master fader.

Third-Party Time Compression and Expansion Plug-Ins

Pro Tools 5.1.1 supports third-party time com-pression and expansion plug-ins with its time compression and expansion-based editing fea-tures. This provides increased performance with the TCE Trimmer and auto-fit-to-selection op-tions.

Track and Session Features

Pro Tools 5.1.1 has many new features for creat-ing and managing sessions and tracks.

Auto-Save Session

Pro Tools can automatically save sessions while you work. You can select how often the session is saved and the total number of incremental backups that are kept.

Cross-Platform Support

Pro Tools 5.1.1 features a cross-platform session file format that lets you open sessions on both Macintosh and Windows platforms without first converting them. AIFF and WAV format au-dio files can be recorded and played on either platform.

Import Tracks from Sessions

You can now import any track (audio, MIDI, video, Auxiliary Input, or Master Fader) from version 5.1.1 or earlier Pro Tools sessions. Im-ported track properties include: track names, track comments, plug-in assignments, signal routing assignments, regions, fades, and auto-mation playlists.

Offline Media

You can now open and work with offline media. Pro Tools 5.1.1 can open and modify a session even if all the audio or video files for that session are not currently available. Any edits that you make to tracks containing offline media are re-flected in the session when the files are available again. This greatly enhances the portability of Pro Tools sessions by allowing you to work with the same session on different systems.

This feature is limited to sessions created with Pro Tools version 5.1.1 or later.

Inactive Tracks, I/O, and Plug-Ins

To conserve DSP resources in a session, tracks, I/O assignments, and plug-ins can now be set to *inactive*. Inactive items retain their various settings, routings, and assignments, but are taken out of operation, freeing the DSP they consume for other uses.

When you move a Pro Tools session to a system that has different plug-ins and I/O configurations, Pro Tools 5.1.1 will automatically deactivate tracks, plug-ins, sends, or I/O channels as necessary so you can work on the session and preserve the original session settings.

⚠ *Inactive tracks are only supported on Pro Tools TDM systems.*

Enhanced Import Audio Dialog

A new Import Audio dialog simplifies the task of importing audio files. It consolidates functions previously found in the Import Audio and Convert and Import Audio dialogs and allows you to view an audio file's properties before importing.

Displayed properties include:

- audio file type
- file length
- file size
- number of channels
- bit depth
- sample rate
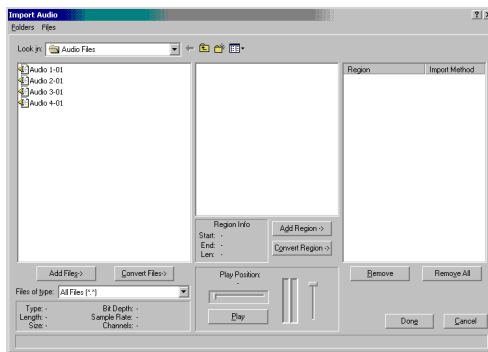
Import Audio dialog

Audio File Formats

Pro Tools now supports the following audio file formats:

- RealAudio G2 export
- MP3 import and export
- Windows Media export
- QuickTime Audio import and export

Split Multichannel Tracks

You can split stereo or multichannel tracks into their individual mono track components with the Split Selected Tracks to Mono command. The tracks can then be individually edited.

Duplicate Selected Tracks

You can duplicate a track and all of its properties (regions, settings, inserts, and automation) with the Duplicate Selected Tracks command.

Editing Features

Many significant new features have been added to improve editing speed and flexibility in Pro Tools 5.1.1.

Multiple Undo

Pro Tools can now undo up to 16 of your last actions, allowing you to easily return to a previous editing state.

Universe Window

(TDM Systems Only)

The new Universe window gives you a global, visual overview of your entire session at a glance, allowing you to click and go to sections quickly without scrolling or zooming.
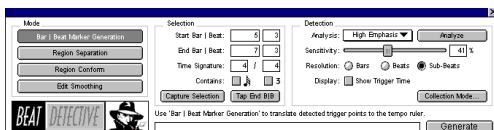

Universe window

Beat Detective

(TDM Systems Only)

Beat Detective performs groove extraction, automatic tempo map creation, quantization of regions to a groove, automatic region trimming, and edit smoothing through crossfading.
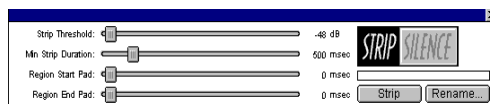
Use Beat Detective to make one performance match another or to clean up audio performances while preserving their feel.

Beat Detective window

Strip Silence Enhancements

Pro Tools now provides a visual preview of the audio regions that will be created when silence is stripped out at the current settings.

Strip Silence window

Tabbing to Transients

With the Tab to Transients option, you can automatically navigate to transients in audio waveforms, placing the cursor just before the detected transient peak. This allows you to easily define selections and play ranges, as well as start and end points for new regions, without having to zoom in on the waveform.

Multiple Track Support for Playlist Switching and Alternate Takes

Audio playlist switching and matching start time Takes List features now work on multiple tracks, including groups and selections. This increases flexibility when comping tracks and auditioning alternate takes.

Separate Enhancements

The Separate command now operates on multi-regions and multitrack selections.

Grabber Tool Enhancements

The Time Grabber now moves only whole-region selections. The Separation Grabber now moves either whole-region or discontiguous-region selections—separating the latter when moving them.

Track View Toggle

The Track View Toggle lets you easily switch between Waveform and Volume view for audio tracks, and Notes and Regions view for MIDI tracks.

Zoom Toggle

The Zoom Toggle can zero in on a selection, adjusting the zoom level and track height automatically. The selection is zoomed to fill the Edit window, and the tracks containing the selection are set to a Track Height of Large. MIDI tracks automatically toggle to Notes view.

MIDI Features
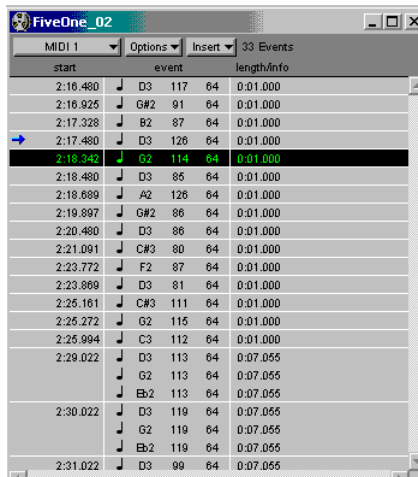
Many significant new MIDI features have been added to Pro Tools 5.1.1.

Recording to Multiple MIDI Tracks

You can now record to multiple MIDI tracks simultaneously in Pro Tools. The track's MIDI Input Selector determines which channels are recorded.

MIDI Event List

The MIDI Event List window shows the contents of a MIDI track in a single, easy to read list. Using this event list, you can quickly and precisely insert, edit, or locate any type of MIDI data using your computer keyboard.
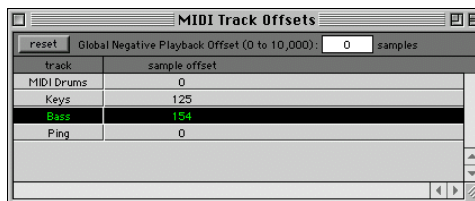
MIDI Event List

MIDI Offset for Each Track

With the MIDI Track Offsets command you can create timing offsets for individual MIDI tracks. This is useful for compensating for MIDI-to-audio latencies in hardware or software-based MIDI synthesizers.

MIDI Track Offsets window

Default Thru Instrument

You can now route MIDI to the Default Thru Instrument. This saves you the trouble of creating and record enabling a MIDI track to hear a particular MIDI device and channel.

Control Surface Features

Several new features have been added for enhanced support of control surfaces.

Support for Multiple Fader Packs

Pro Tools 5.1.1 supports up to five Digidesign Fader Pack control surfaces with ProControl for a total of 48 faders.

Support for Edit Pack

Pro Tools 5.1.1 supports Digidesign's Edit Pack option for ProControl. Edit Pack features two touch-sensitive motorized joystick panners; a QWERTY keyboard and track ball; dedicated edit switches and encoders; and 8-channel, high-resolution, multichannel metering.

Support for Control 24

Pro Tools 5.1.1 supports Control 24, a 24-channel control surface from Digidesign and Focusrite. Control 24 provides precise, tactile control over the functions and automatable controls of TDM-equipped Pro Tools systems. The unit also includes 16 premium microphone preamps.

Support for JL Cooper MCS 3000 MIDI Panner

Pro Tools 5.1.1 supports the JL Cooper's MCS 3000 MIDI panner (MIDI joystick for surround panning).

Plug-In Flip Mode

Plug-in Flip mode on ProControl and Control 24) lets you adjust, automate, and edit plug-in parameters from the faders.

Alpha Lock Mode

ProControl's Alpha switch now locks when pressed, making it easier to perform keyboard shortcuts, Commands Focus functions, and other commands.

MachineControl

For owners of the Pro Tools MachineControl option, Pro Tools 5.1.1 supports track arming on more devices than before.

Slaving Pro Tools to External Machines with Remote Mode

Remote Mode, as described in the *MachineControl Guide* for Pro Tools 5.1 (PN 932108446-00 REV A 01/01) is not supported on Pro Tools 5.1.1 systems on Windows.

Support For SBS 13-Slot Expansion Chassis

The SBS 13-Slot Expansion Chassis (models DD23, 240-2-2, and 240-2-201), with Bridge Chip version Intel/DEC 2.1, are compatible with the following systems:

Pro Tools|24 MIXplus and Pro Tools|24:

• Windows 2000, IBM Intellistation E Pro, model 6846

• Windows 2000, IBM Intellistation M Pro, model 6889

For the latest compatibility information, visit the Digidesign Web site (www.digidesign.com).

Slot Layout for SBS 13-Slot Expansion Chassis

Most SBS 13-Slot chassis, including the newer models, have slots that are numbered sequentially, left-to-right, from the front. These chassis have serial number 198487 or higher.
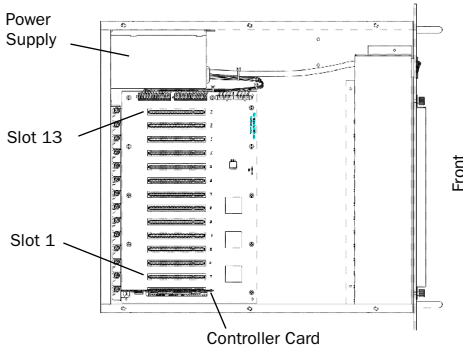
Slot numbering for newer SBS 13-Slot chassis

Older SBS 13-Slot chassis have slots that are numbered sequentially, right-to-left, from the front. These chassis have serial numbers 198486 or lower.

To verify the slot numbering for your chassis, refer to the SBS guide.

Configuring the SBS 13-Slot Expansion Chassis

System Performance and Clock Skew

To ensure the maximum track count with expanded Pro Tools|24 MIX-series systems and Pro Tools|24 systems, you may need to adjust the clock skew on the chassis host card.

This is accomplished by changing a jumper switch on the host card. Locate the set of jumper pins marked "J2" on the host card. If the jumper cap spans pins 2–3, it should be moved to span pins 1–2.

Connecting the Expansion Chassis

Before installing any of the following hardware, turn off the expansion chassis, your computer, and any peripherals. Leave your computer's power cable plugged in so the computer is grounded.

Do not remove cards from their antistatic bags until you have discharged static electricity by touching a grounded object (such as the power supply of your computer).

Install the chassis host card:

1 Install the SBS Host Card in the first available PCI slot.

2 Attach a 2- or 4-foot expansion chassis cable to the host card. If necessary, refer to the SBS guide for specific instructions.

⚠ *6-foot expansion chassis cables are not supported.*

3 If using a SCSI HBA, install it in the highest numbered remaining slot in your computer.

Install the chassis controller card:

1 Install the SBS Controller card in the Backplane Controller slot of the expansion chassis.

2 Attach the other end of the expansion chassis cable to the controller card. If necessary, refer to the SBS guide for specific instructions.

Installing the Digidesign Cards

Install the Digidesign audio cards:

1 Install the primary Core card (clock master with primary audio interface) in a slot of the expansion chassis:

2 If using a Pro Tools|24 MIX system, install the remaining cards in successive chassis slots in the following order:

- MIX Core cards

- MIX Farm cards

- MIX I/O cards

- DSP Farm cards

☼ *See "Example 1, SBS 13-Slot" on page 32*

⚠ *d24 cards are currently not supported in systems that have MIX Core cards.*

– or –

If using a Pro Tools|24 system, install the remaining cards in successive chassis slots in the following order:

- d24 cards

- DSP Farm cards

☼ *See "Example 2, SBS 13-Slot" on page 33.*

Connect all TDM-equipped cards with a TDM ribbon cable:

1 Connect the first node of the TDM ribbon cable to the first Digidesign card. Make sure the TDM cable is facing the right direction—align the white triangle on the cable plug with the triangle on the card.
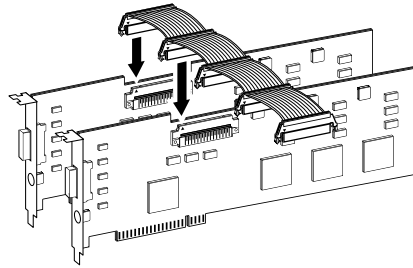
Attaching a TDM ribbon cable

2 Push down gently but firmly until the node is fully connected to the card. When the plug is properly seated, the two tabs on the side of the cable's TDM connector click shut. To detach the ribbon cable, squeeze the tabs on the TDM connector inward.

3 Attach the remaining nodes on the TDM cable to subsequent cards. Make sure that the last node on the cable is connected to the last card in your system. Unused nodes, if any, should reside toward the middle of the cable.

Connecting Audio Interfaces

Connect the Digidesign audio interfaces:

1 Connect the primary audio interface to the primary Core card with the provided interface cable. The primary audio interface functions as the clock master.

2 Connect additional audio interfaces to subsequent Digidesign audio cards.

You can use Digidesign's 16-channel peripheral cable adapter (optional) to connect two audio interfaces to a MIX Core, MIX I/O, d24, or Mix Farm card.

16-channel peripheral cable adapter

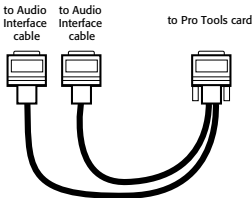💡 *See "Example 1, SBS 13-Slot" on page 32, and "Example 2, SBS 13-Slot" on page 33.*

3 If using multiple audio interfaces, connect the Slave Clock Out of the primary interface to the Slave Clock In of the second interface with the provided BNC cable.
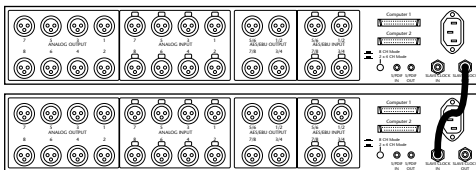
Connecting multiple audio interfaces

4 Connect the Slave Clock Out of the second interface to the Slave Clock In of the next audio interface (and so forth).

Example 1, SBS 13-Slot

Pro Tools|24 MIX-Series System

Chassis cards with multiple audio interfaces:

Slot	Card
Slot 0	Chassis Controller Card
Slot 1	MIX Core (Interface #1 and #2)
Slot 2	MIX Farm (interface #3 and #4)
Slot 3	MIX Farm (interface #5 and #6)
Slot 4	MIX I/O (Interface #7 and #8)
Slot 5	DSP Farm (Interface #9)
Slot 6	DSP Farm
Slot 7	DSP Farm
Slot 8	DSP Farm
Slot 9	DSP Farm
Slot 10	DSP Farm
Slot 11	Available for non-bus master card
Slot 12	Available for non-bus master card
Slot 13	Available for non-bus master card

Example 2, SBS 13-Slot

Pro Tools|24 System

Chassis cards with multiple audio interfaces:

Slot	Card
Slot 0	Chassis Controller Card
Slot 1	Empty
Slot 2	Empty
Slot 3	Empty
Slot 4	d24 (Interface #1 and #2)
Slot 5	d24 (Interface #3)
Slot 6	DSP Farm (Interface #4)
Slot 7	DSP Farm (Interface #5)
Slot 8	DSP Farm (Interface #6)
Slot 9	DSP Farm (Interface #7)
Slot 10	DSP Farm (Interface #8)
Slot 11	DSP Farm (Interface #9)
Slot 12	DSP Farm
Slot 13	DSP Farm

⚠ *Windows: Slots 1–3 should be empty, with the d24 card installed in slot 4.*

chapter 5

Corrections to the 5.1 Guides

This chapter lists corrections to the Pro Tools 5.1 user guides, and also documents some items not covered in those guides.

Pro Tools 5.1 Reference Guide

PN 932708437-00 Rev A 01/01

Enabling MIDI Merge

Page 38 of the *5.1 Reference Guide* says that Macintosh users, who want to merge recorded MIDI data with existing track material, can enable MIDI Merge by pressing Option+A.

Correction:

To enable MIDI Merge with a keyboard shortcut, set the Numeric Keypad Mode to Transport, and press the 9 key on the numeric keypad.

Creating Windows Templates

On page 56 of the *5.1 Reference Guide,* the second step for creating a custom session template in Windows is "Choose File > Save Session."

Correction:

The second step for creating a custom session template in Windows should be "Choose File > Save Session As."

Auto Assigning Track Outputs for Direct Out (Windows Only)

Page 72 of the *5.1 Reference Guide* documents how to Auto Assign track outputs for Direct Out, and step 3 states that Windows users should Control-Start-click "the Output Selector of the left-most track and assign it to the subpath for Output #1."

Correction:

To Auto Assign track outputs, Control-Alt-click the Output Selector of the left-most track and assign it to the subpath for Output #1.

Assigning Inputs and Outputs to Audio Tracks

Page 79 of the *5.1 Reference Guide* states that "when adding tracks to a new session, outputs are automatically assigned in ascending order" and that "the inputs automatically assigned to new tracks is determined by the Default Output defined in the I/O setup dialog."

Correction:

When adding tracks to a new session, *inputs* are automatically assigned in ascending order.

The *outputs* automatically assigned to new tracks is determined by the Default Output defined in the I/O setup dialog.

Importing Audio into the Audio Regions List

Page 91 of the *5.1 Reference Guide* says "to import into the Audio Regions List, choose Convert & Import Audio from the Audio Regions pop-up menu.

Correction:

To import audio into the Audio Regions List, choose Import Audio from the Audio Regions pop-up menu.

Loading Audio Files with Drag & Drop

Page 96 of the *5.1 Reference Guide* says to start batch loading of audio files by opening the Pro Tools session.

Correction:

To batch load audio files into a session:

1 Open or create a new session.

2 From the desktop, locate the audio files you want to import. Make sure the files match the session's file type, bit depth, and sample rate.

Audio files must be in WAVE, SDII, or AIFF/AIFC format in order to be dropped into Pro Tools.

Audio files will be converted if they are not of the correct bit depth or number of channels.

Audio files, if converted, will be converted to mono files of the default audio file format, with the session's bit depth and sample rate.

3 Drag the audio files onto the Pro Tools icon.

Assigning Multiple Destinations to a Single MIDI Track

Page 146 of the *5.1 Reference Guide* says "to assign multiple destinations to a single MIDI track, Shift-click the MIDI Output Selector and select additional channels from any device."

Correction:

To assign multiple destinations to a single MIDI track, Control-click the MIDI Output Selector and select additional channels from any device.

Operations that Clear the Undo Queue

Page 174 of the *5.1 Reference Guide* states that deleting a playlist clears the Undo queue and that "when the Undo queue will be cleared by an operation, Pro Tools will warn you."

Correction:

In Pro Tools 5.1.1. deleting a playlist no longer clears the Undo queue.

For operations that do clear the Undo queue, Pro Tools will not warn you.

Operations that clear the Undo queue include:

◆ Deleting a track, or clearing a region from the Audio or MIDI Regions List

◆ Selecting "Select Unused" in the MIDI region list pop-up

◆ Selecting "Select Unused Regions," or "Select Unused Regions Except Whole Files" in the Audio Region List pop-up

Selecting Across Multiple Tracks (TDM on Macintosh Only)

Page 201 of the *5.1 Reference Guide* says "to select across all tracks," you can "with the Selector, Option-Shift-drag (Macintosh) or Alt-Shift-drag (Windows) in any track."

Correction:

Pro Tools 5.1.1 does not support selecting across all tracks using Option-Shift-drag (Macintosh).

However, you can select material across all tracks in the Edit window by dragging the Selector in any Timebase Ruler. To include the Conductor tracks (for Temp, Meter, and Markers) in the selection, press Option (Macintosh) or Alt (Windows) while dragging.

Editing Automation on Grouped Tracks

On page 388 of the *5.1 Reference Guide,* the third bulleted procedure "to individually edit a member of a group without affecting the other members" is "press Control (Macintosh) or the Start key (windows) while you perform the edit." The subsequent warning states that "when editing automation, audio and MIDI Pan controls work opposite from the way all other controls work."

Correction

The third procedure and warning apply only to audio tracks. For MIDI tracks, the procedures work the opposite.

To individually edit a member of a group without affecting the other members:

◆ For audio tracks, press Control (Macintosh) or the Start key (Windows) while you perform the edit.

◆ For MIDI tracks, do not press Control (Macintosh) or the Start key (Windows) while you perform the edit.

To edit all members of a group:

◆ For audio tracks, do not press Control (Macintosh) or the Start key (Windows) while you perform the edit.

◆ For MIDI tracks, press Control (Macintosh) or the Start key (Windows) while you perform the edit.

⚠ *When editing automation, audio and MIDI Pan controls work opposite from the way all other controls work.*

For audio tracks, when you edit or trim Pan breakpoints, Edit Groups are not obeyed. For grouped behavior, press Control (Macintosh) or the Start key (Windows) while trimming.

For MIDI tracks, when you edit or trim Pan breakpoints, Edit Groups are obeyed. For individual behavior, press Control (Macintosh) or the Start key (Windows) while trimming.

Bounce To Disk and MPEG Layer 3 (MP3)

Page 404 of the *5.1 Reference Guide* states that when you Bounce To Disk and select the MP3 file type, "the Resolution and Sample Rate pop-up menus in the Pro Tools Output Options dialog are unavailable. The resolution and sample rate are set by the encoder."

Correction:

This should instead say that when you select this format, the Resolution pop-up menu in the Pro Tools Output Options dialog is unavailable, and that the resolution is set by the encoder.

The sample rate chosen is given to the codec as a "base" sample rate for operations; the actual sample rate of the resulting file is determined in the MP3 Encoder Options dialog. For example,

if a base sample rate of 48000 Hz is chosen, the MP3 Encoder Options dialog will allow output streams in 48, 24 or 12 kHz, depending on encoding quality.

Saving Customized Sample Rates

Page 407 of the *5.1 Reference Guide* implies that the Pro Tools Sample Rate option includes a Custom selection that lets you select a sample rate other than one of the common ones in its option list.

Correction:

The Sample Rate option does not have a Custom selection.

To get a custom sample rate (such as 22050kHz):

1 Click in the Sample Rate window.

2 Manually enter in a value.

Defining an LCRS Path

On page 428 of the *5.1 Reference Guide*, the third step for defining an LCRS path is "select 3+1 from the Path Format Selector."

Correction:

The third step for defining an LCRS path should be "select LCRS from the Path Format Selector."

5.1 Manual Ommisions

The following topics were not covered in the *Pro Tools Reference Guide.*

Creating Summed Mono Files

When bouncing to mono (summed) files, the output may clip. For example, when bouncing stereo tracks to mono (summed) files, clipping occurs if the original left and right signals exceed –3 dB below maximum, or full code (0 dBfs).

Default Audition Path (TDM Only)

In TDM systems with more than one audio interface, you can only have one path selected as your audition path, and that path must be on the first interface. Select the Audition Path from the Audition pull down menu in I/O Setup.

Number of Busses (TDM Only)

Pro Tools 5.1 supports up to 64 busses for TDM systems. However, when opening 5.0.1 (or earlier) sessions, only 32 busses are initially available. To make 64 busses available in these sessions, open the I/O Setup dialog, click the Bus tab in the upper left, then click the Default button.

Japanese and Non-ASCII Characters

To use Japanese or non-ASCII characters in track and region names, or track comments, the option for "Enforce Mac/PC Compatibility" must be disabled when creating a new session (this unfortunately means the session cannot be transferred to another platform). Similarly, if you attempt to save a session copy with the "Enforce Mac/PC Compatibility" option enabled, all Japanese and non-ASCII characters will be lost.

Disk Allocation and Full Hard Drives

Hard drives that are full are greyed out in the Disk Allocation dialog and cannot be selected.

Digi 001 and Powering Up/Down

When powering up or shutting down your computer, the Digi 001 may emit an audible "pop." Before powering up or shutting down, make sure to first adjust the volume control on the front panel of the Digi 001 I/O Box.

Digi 001 and MIDI Applications (Macintosh Only)

When Digi 001 is configured as a MIDI interface in OMS, Pro Tools LE must be launched before other MIDI applications, such as OMS Setup and the SampleCell Editor.

OMS IAC Driver (Macintosh Only)

If the IAC bus is enabled as a MIDI input and you attempt to record to a MIDI track assigned to IAC Midi Channel 2 or higher, Pro Tools will freeze because of a MIDI feedback loop. Disable the IAC bus as an input source in MIDI > Input Devices, or turn off MIDI Thru.

How to Customize OMS Names (Macintosh Only)

To enter your own list of customized names:

1 Choose Setups > OMS Names.

2 Click on the Patch Name Document in the Patch Name Document column for the desired OMS Device, or if there is no document present yet, click into the empty space next to the OMS device.
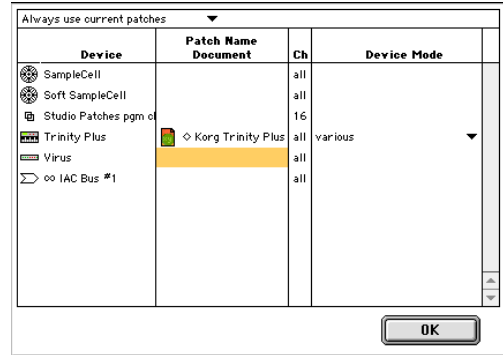
OMS Name dialog

3 Choose Names > View/Edit Patch Names to open the Patch Name window. Note that the Names menu item has changed to Patches.

4 Type in your patch names for the corresponding program numbers. If you are using a third party librarian software, or if you have a list of patch names in your word processor, you can quickly copy and paste these names into this window, as described below.

To copy names from another application into OMS Names:

1 If you are using a word processor, make sure that the names in the list are separated by a carriage-return (Return key).

2 If you are using a third party patch name librarian software, make sure that it allows you to copy from its list of patch names.

3 Select the desired names, then choose Copy in your word processor or librarian software to copy the list of names to the clipboard.

4 If you haven't done so already, launch Pro Tools and choose Setups > OMS Names.

5 Click on the Patch Name Document in the Patch Name Document column for the desired OMS Device, or if there is no document present yet, click into the empty space next to the OMS device.

6 Choose Names > View/Edit Patch Names to open the Patch Name window. Note that the Names menu item has changed to Patches.

7 Choose Patches > Paste Patch Names to paste your patch names from the clipboard into the Patch Name Document list. Click OK to confirm the changes.

8 Press Save in the Save Changes dialog that comes up. In the following file dialog, navigate to System Folder > OMS Folder > Factory Presets and save your list of patch names under a new name.

9 Click OK in the OMS Names dialog. You should now see your patch names instead of numbers for your device in the Pro Tools patch dialog once the MIDI track's output has been set to the corresponding OMS device.

For more details on using the OMS Names window, please refer to OMS documentation.

MIDI Offset and the Metronome Click

The metronome click is not affected by the MIDI Global Offset preference.

Scrolling with Zoomed Displays

Regardless of which Scrolling Option is selected in the Operations menu, Pro Tools does not scroll when zoomed down to the sample level.

Bouncing with Mute Frees Assigned Voice (TDM Systems Only)

When bouncing sessions that include muted tracks, enabling "Mute Frees Assigned Voice" can in some instances increase the number of tracks that can be successfully bounced.

Replacing Fades with Crossfades

Pro Tools does not allow you to replace fade-ins and fade-outs with crossfades. To add a crossfade between regions, any existing fade-ins and fade-outs between the regions must first be deleted.

RTAS Plug-Ins on TDM Systems

When using RTAS plug-ins on TDM systems, you may encounter DAE -6031 or -9128 errors. In these instances, you can increase the H/W Buffer Size and CPU Limit percentage in the Hardware Setup dialog (refer to the *Pro Tools Reference Guide* for details) to get better system performance. With slower CPUs, you may also need to reduce the number of RTAS plug-ins used in the session to get acceptable results.

⚠ *In addition to slower screen redraws and UI responsiveness, larger Hardware Buffer sizes can affect automation accuracy for plug-in parameters and mute data, as well as timing for MIDI tracks.*

AudioSuite Processing and Side-Chain Inputs

Side-chain inputs for plug-ins (such as d3, Compressor, and Limiter) have no effect on AudioSuite processes when the Selection Reference is set to Region List.

Beat Detective (TDM Systems Only)

The following details on Beat Detective are not covered in the *Pro Tools 5.1 Reference Guide*.

Trigger Pad

In Region Separation mode, the Beat Detective window displays an option called Trigger Pad. You can enter a value in this field (between 0 and 50 ms) to pad region start points when the separate point (the beat trigger) falls on the attack of the audio material. This results in an amount of space between the region start point and the region sync point, thereby ensuring that the attack portion of the material remains intact.

Sync Points

If the Trigger Pad value is greater than zero, sync points corresponding to the beat triggers are created when separating regions with Beat Detective. In this case, when the regions are conformed, the region's sync point (not the *start point*) determines where the region is placed.

To install and configure the MacOpener demo included with Pro Tools:

1 Double-click the macopener5001.exe file in MacOpener Demo folder (located in the Pro Tools Utilities folder inside the Digidesign folder) to launch the installer. Follow the on-screen instructions. After installation is complete, restart your computer.

2 After restarting, from the Start menu, choose Programs > MacOpener 5.0 > MacOpener Driver Preferences.

3 Verify the MacOpener Driver is enabled. Under Driver Settings, select "Enable MacOpener Driver."

4 Under Extension Mapping, select "Do not add the PC extension to the Mac file name."

⚠ *All formatting and drive maintenance for HFS/HFS+ drives should occur on the Macintosh.*

MacOpener Performance Limitations

◆ To open a session from an HFS/HFS+ drive, the session must be created with Pro Tools 5.1 or later for LE systems, or Pro Tools 5.0 or later for TDM systems. In addition, the session must not be of mixed file formats. To use mixed-format sessions in Pro Tools, first save a session copy in the desired file format (make sure to select the option for "All Audio Files" under What To Copy).

◆ When using the Bounce To Disk command, the bounce destination must be a FAT/FAT32 drive. TDM systems also support NTFS. Bouncing to HFS/HFS+ drives is not supported.

◆ Operations such as opening sessions, initiating playback, drawing waveforms when zoomed, and allocating record files are slower on HFS/HFS+ drives than on FAT/FAT32 or NTFS drives.

◆ Because MacOpener must clear the disk cache after copying between HFS/HFS+ and FAT/FAT32 drives or NTFS drives (TDM only), Pro Tools will launch very slowly after performing these disk copies.

◆ For SDII files to appear in the Import Audio dialog, you must set the File Of Type pop-up menu to "All Files."

◆ On Windows LE, when selecting all files in the Import Audio dialog, and some of these files have names with 13 or more characters, none will be added to the import list when clicking Convert All. The files can be added to the list if they are selected individually by Shift-clicking.

DigiRack Plug-Ins Guide

Parameters for Normalize AudioSuite Plug-In

Pages 46 and 47 of *DigiRack Plug-Ins Guide* states that "when multiple regions are selected across multiple tracks, the Normalize plug-in can search for peaks in two different modes: Peak On Each Track and Peak From All Tracks. These modes are also described on page 20, as an example of a typical plug-in Process Mode Selector.

Correction

In order to more clearly denote how individual channels of a multichannel track will be handled, the two parameter modes have been renamed: Peak On Each Chan/Track and Peak From All Chan/Tracks.

Digidesign Plug-Ins Guide

Recti-Fi Examples and Slam Kit Loop (TDM Only)

On page 38 of the *Digidesign Plug-Ins Guide*, step 2 of the Slam Kit Loop example tells you to choose "Trash Kit."

Correction

Step 3 should instruct you to choose the "Trasho Kit."

DINR and Scroll Left/Right Parameter (Macintosh Only)

Page 72 of *Digidesign Plug-Ins Guide* states the Left Arrow and Right Arrow keys on your computer keyboard can also be used to scroll the Spectral Graph.

Correction

To scroll the Spectral Graph, use Control-Option-Left Arrow or Control-Option-Right Arrow.

MachineControl Guide

PN 932108446-00 REV A 01/01

Running MachineControl on Windows

Page 1of the *Machine Control Guide* provides system requirements for Windows NT, and throughout the manual are references to Windows NT.

Correction

Machine Control instead requires Windows 2000, when running Pro Tools 5.1.1 for Windows TDM systems.

Slaving Pro Tools to External Machines with Remote Mode Not Supported

(Windows Only)

Remote Mode, as described in the *MachineControl Guide* is not supported on Pro Tools 5.1.1 systems on Windows.

Machine IDs for 48-Track Arming

Appendix C in the *MachineControl Guide* doesn't include special IDs to support 48-track arming support.

Correction

The following figure provides special IDs to support 48-track arming support.

IDs for 48-Track Capable Machines

ID	Machine
0x6007	3348HR
0x6005	3348HRV
0x6003	3324

Control|24 Guide

The corrections in this section is for an older version of the Control|24 Guide (as noted with the part number). This correction has since been applied to the newest guide, printed in May, 2001.

PN 932708328-00 REV A 01/01

Mic Inputs for Listenback and Talkback Channels

Page 18 of the *Control|24 Reference Guide* says that "Control|24 provides a phantom powered input to accommodate condenser mics on both the talkback and listenback channels. This phantom power is always on and cannot be disabled." Additionally, there's a warning saying "do not connect ribbon microphones to these powered inputs."

Correction

Control|24 mic inputs for Listenback and Talkback channels are not phantom powered. These inputs are safe for any dynamic microphones, or ribbon microphones.

Control|24 and LCRS Monitoring

The LCRS monitoring example on page 25 of the *Control|24 Reference Guide* (PN 932708328-00 REV A) is incorrect.

Correction

To monitor LCRS mixes, the S speaker (mono, surround), must be connected to Monitor Output channel 4, not channel 5 as shown in the diagram.

If you want to switch between 5.1 and LCRS, you should leave the S speaker connected at channel 5 and adjust your I/O Setup mappings.

ProControl Guide (First Printing)

PN 932707442-00 REV A 11/99

💡 *The corrections in this section are for an older version of the ProControl Guide (as noted with the part number). These corrections have since been applied to the newest guide, printed in May 2001, and available from Digidesign's Web site.*

Running ProControl on Windows

Page 6 of the *ProControl Guide* provides "additional software instructions for Windows NT," and throughout the manual are references to Windows NT.

Correction

ProControl instead requires Windows 2000, running Pro Tools 5.1.1 for TDM systems.

Removing Windows 2000 Ethernet Support

Page 6 of the *ProControl Guide* provides Windows NT instructions for removing the ethernet driver.

Correction

Instructions should be for Windows 2000 platform.

To remove Windows 2000 Digidesign ethernet support:

1 Right click My Network Place, and choose Properties.

2 Right click on the appropriate Local Area Connection, then choose Properties.

3 Select Digidesign Ethernet Support, choose Uninstall, and click Yes.

Cancelling out of Recording

Page 110 of the *ProControl Guide* states that "to cancel out of a recording and discard the current take, hold CTL (CLUTCH) and press STOP in the ProControl Transport section." Additionally, it says that "to use the CPU keyboard, hold Control/Ctrl and press the Space bar."

Correction

To cancel out of a recording and discard the current take:

◆ Press Shift + Stop in the ProControl Transport section. To use the CPU keyboard, hold Control/Ctrl (Windows) or Command key (Macintosh) and press "." (period key).

ProControl Guide (Second Printing)

PN 932709087-00 Rev A 3/01

💡 *The corrections in this section are for the newest version of the ProControl Guide (as noted with the part number).*

Audio Connections for Cue Mix

Page 20 of the *ProControl Guide* for PT5.1.1 provides instructions for connecting a discrete cue mix to/through ProControl. Step 2 under "Discrete Cue Mix Connections" states:

■ Connect the Pro Tools outputs you have designated as the cue mix bus to the ProControl AUX IN inputs (Audio Input 1, channels 1 & 2).

Correction

■ Use Audio Input 1, channels 8 and 7 (L/R), not 1&2.

The table on page 18 for stereo monitoring *does* list this correctly.

AVoption & AVoption|XL Guide

Omissions to the AVoption & AVoption|XL

The following topics were not covered in the *AVoption & AVoption|XL Guide*.

Using Pro Tools AV Captured Video in MediaComposer

The import function in MediaComposer won't work with Pro Tools captured video. However, you can play, edit, and work on Pro Tools video in MediaComposer by using the Media Tool and dragging the video files to your work bin.

Importing OMFI with AVoption and AVoption|XL

(Pro Tools 5.1.1)

Importing OMFI files with embedded video media is not supported by AVoption. For information on preparing media for interchange with AVoption, refer to the *Pro Tools AVoption & AVoption|XL Guide* or the *DigiTranslator Integrated Option Guide*.