

What's New in Pro Tools 6.1?

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contents

Chapter 1. Introduction	1
New Features	2
Chapter 2. What's New in Pro Tools 6.1 on Windows XP	3
New Windows and User Interface	4
DigiBase and DigiBase Pro for File Management	6
Support for Advanced Authoring Format (AAF)	7
Editing Features	8
MIDI Features	10
Plug-Ins and Processing Features	10
Track Height Enhancements	12
New Beat Detective Features	13
Import Session Data	13
Time Code and Synchronization Enhancements	14
MachineControl Enhancements	15
Pro Tools LE Enhancements	16
DV Toolkit Option for Pro Tools LE	17
Up to 32 Levels of Undo	18
Support for Multiprocessor Computers	18
Digidesign ASIO Driver	18

Chapter 3. What's New in Pro Tools 6.1 on Mac OS X	19
AVoption XL and FilmFrame	19
DigiBase Browsers Display OMF Video Metadata	19
Support for Advanced Authoring Format (AAF)	19
Plug-Ins and Processing Features	20
DV Toolkit Option for Pro Tools LE	21
Support for DigiTranslator 2.0 with Pro Tools LE on Digi 002 and Digi 002 Rack	22
Ignore Buffer Underrun Errors (-6086)	22
Up to 32 Levels of Undo	22
Scroll Wheel Navigation	23
Chapter 4. What's New in Pro Tools 6.0 (Mac OS X Only)	25
Mac OS X Support	25
New Windows and User Interface	26
DigiBase and DigiBase Pro for File Management	28
Editing Features	29
MIDI Features	31
Plug-Ins and Processing Features	32
Track Height Enhancements	33
New Beat Detective Features	33
Improved Session Import Options	34
Time Code and Synchronization Enhancements	34
MachineControl Enhancements	35
Pro Tools LE Enhancements	36

chapter 1

Introduction

This document is an overview of new features in Pro Tools 6.1. This version of Pro Tools software is designed for use with Pro Tools TDM and LE systems on Windows XP or a Digidesign-qualified version of Mac OS X.

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

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

Pro Tools 6.1 on Windows XP

◆ If you are new to Pro Tools on Windows XP, or are upgrading from Pro Tools 5.3.x or lower on Windows, read Chapter 2, “What’s New in Pro Tools 6.1 on Windows XP.”

Pro Tools 6.1 on Mac OS X

◆ If you are upgrading from Pro Tools 6.0 on Mac OS X, read Chapter 3, “What’s New in Pro Tools 6.1 on Mac OS X.”

◆ If you are new to Pro Tools on Mac OS X, or are upgrading from Pro Tools 5.3.x or earlier, start by reading Chapter 4, “What’s New in Pro Tools 6.0 (Mac OS X Only).” Then read Chapter 3, “What’s New in Pro Tools 6.1 on Mac OS X.”

New Features

Pro Tools 6.1 includes the following new or enhanced features.

New on Windows XP

- New windows and user interface
- DigiBase and DigiBase Pro file management
- Support for Advanced Authoring Format (AAF) with DigiTranslator 2.0
- New editing features
 - Relative Grid Mode
 - Playback Cursor Locator
 - Scroll Wheel navigation and zoom control
- New MIDI features
 - Groove Quantize
 - Restore and Flatten Performance
- New plug-ins and processing features
 - New DigiRack Click plug-in
 - New DigiRack ReWire plug-in
 - Other new DigiRack plug-ins
 - Waves Time Shifter and TC/E Plug-In Preference
 - Inserting plug-ins during playback
- Track height enhancements
- Beat Detective Groove Template Extraction and Groove Conform (TDM systems only)
- Import Session Data
- Time code and synchronization enhancements
- MachineControl™ enhancements

- Pro Tools LE enhancements (such as increased track counts, and support for DigiTranslator 2.0 on Digi 002 and Digi 002 Rack systems)
- DV Toolkit Option for Pro Tools LE
- Up to 32 levels of Undo
- Multiprocessor support
- Digidesign ASIO Driver


New on Mac OS X

- AVoption|XL and FilmFrame 2.0 support (Pro Tools TDM systems only)
- DigiBase browser display of OMF video metadata
- Support for Advanced Authoring Format (AAF) with DigiTranslator 2.0
- New plug-ins and processing features
 - New interface for DigiRack plug-ins
 - New DigiRack ReWire plug-in
 - Waves Time Shifter and TC/E Plug-In Preference
- Support for DigiTranslator 2.0 on Digi 002 and Digi 002 Rack systems
- DV Toolkit Option for Pro Tools LE
- Up to 32 levels of Undo
- Scroll Wheel navigation of Pro Tools windows

chapter 2

What's New in Pro Tools 6.1 on Windows XP

This chapter provides an overview of features that are specifically new in Pro Tools 6.1 TDM and LE systems on Windows XP.

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

New Windows and User Interface

The Pro Tools user interface has been redesigned, giving a new look to many familiar Pro Tools windows. This new interface is easy to learn and use because it retains the most important and familiar elements of previous versions of Pro Tools. Figures 1–4 show the new Mix, Edit, Transport, and Plug-In windows.

Mix Window

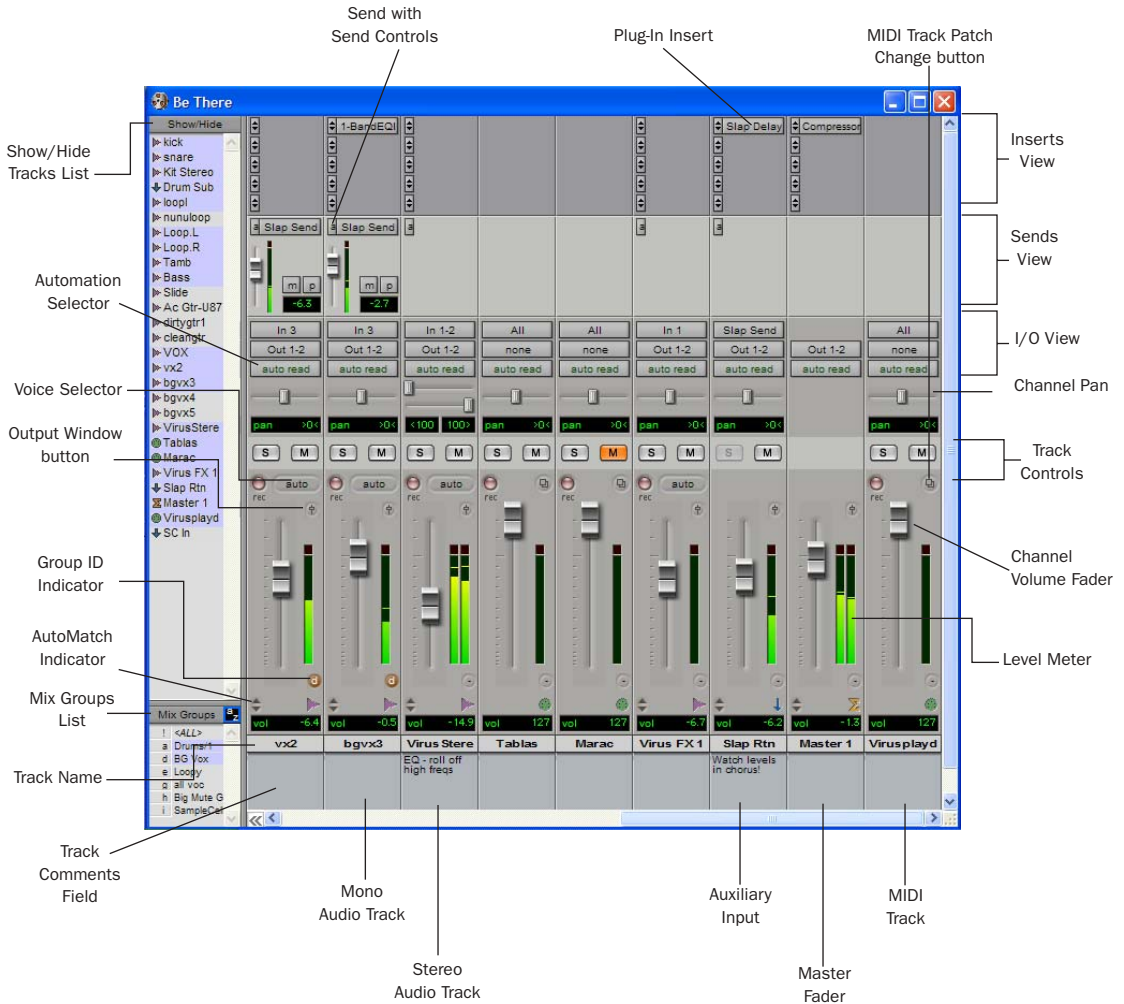


Figure 1. Pro Tools 6.1 Mix window

Edit Window

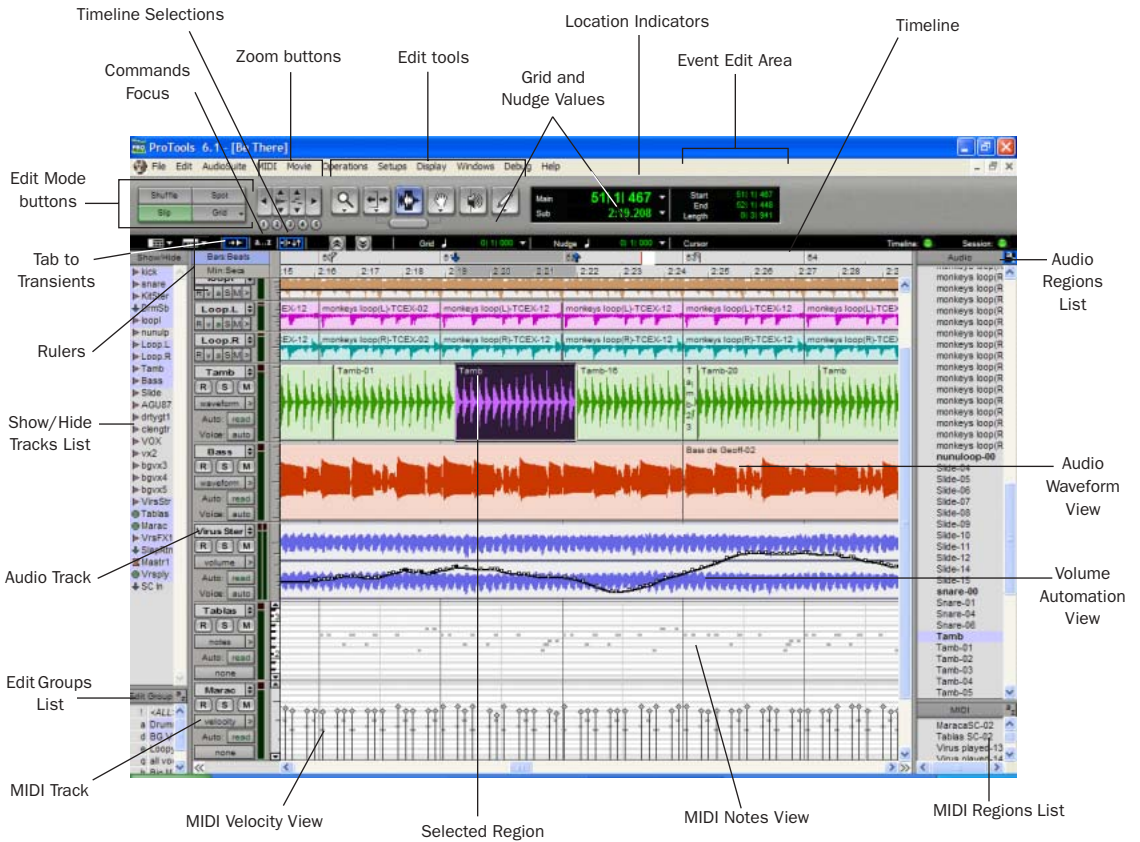


Figure 2. Pro Tools 6.1 Edit window

Transport Window

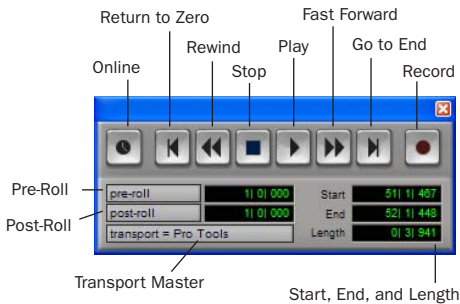


Figure 3. Pro Tools 6.1 Transport window

DigiRack Plug-In Windows



Figure 4. Pro Tools 6.1 Plug-In window (Mod Delay II)

DigiBase and DigiBase Pro for File Management

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

⚠ *DigiBase Pro is only included with TDM systems.*

📖 *For more information on DigiBase and DigiBase Pro, refer to the DigiBase Guide.*

DigiBase

DigiBase adds the following capabilities to all Pro Tools systems:

- View, search, audition, and import audio files, AAF sequences, OMF sequences and files, and other data.
- Manage file copying and other tasks in the background.
- Find missing files.
- Drag and drop items from browsers directly to the Timeline or Regions List of the current Pro Tools session.

DigiBase Pro

(TDM Systems Only)

DigiBase Pro adds the following capabilities:

- Create and share custom Catalogs that reference files wherever they are stored.
- Search on any combination of file metadata.
- View, search, and spot files from offline volumes.

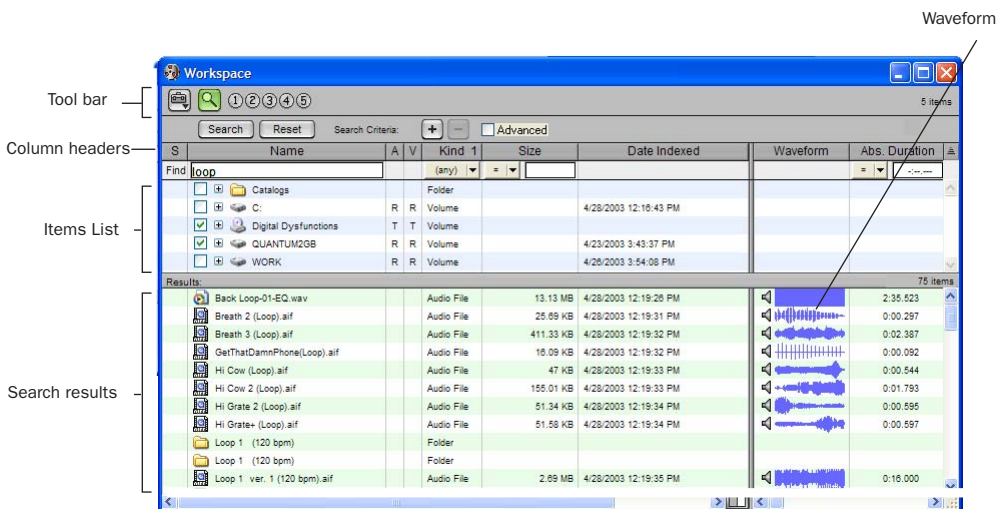


Figure 5. The DigiBase Workspace browser, showing Search tools and results

Browsers

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

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

The Workspace Browser Shows all the volumes mounted on your desktop, and is the starting place for setting up your Pro Tools environment. Like all DigiBase browsers, you can create folders and organize, search, edit, or delete files of all types. Use the Workspace browser to search multiple volumes simultaneously, to unmount volumes from your desktop, and to determine which volumes you can record to, and which are for playback only.

Volume Browsers Display the contents of a particular drive or folder. Changes made with Volume browsers are reflected on the disk. Use Volume browsers to search and organize the contents of a single volume, including network volumes.

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

Catalogs (TDM Systems Only) Are custom databases you create to store snapshots (aliases) of volumes, folders, and files. Catalogs can include a wide range of media, including online and offline items. Catalog files can also be shared between systems and users.

Browsers Display OMF Metadata

Pro Tools 6.1 with the DigiTranslator 2.0 Option displays OMF metadata in DigiBase browsers for sequences, and audio and video files.

Relink Window

The Relink window provides tools and features for relinking sessions and catalogs to media files.

Task Window

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

Support for Advanced Authoring Format (AAF)

(DigiTranslator 2.0 Required)

Advanced Authoring Format (AAF) is a new interchange format sponsored by the Advanced Authoring Format Association (a large group of professional media manufacturers). AAF works much like the OMFI interchange format.

Pro Tools 6.1 with the DigiTranslator 2.0 Option can import AAF sequences, import tracks from an AAF sequence with the Import Session Data command, and use DigiBase to display relevant AAF sequence metadata.

Pro Tools 6.1 also supports export of AAF sequences.

Browsers will display the following columns for AAF sequences:

- Name
- Kind
- Format
- Sample Rate
- Bit Depth
- Time Code Format

 For more information on AAF, refer to the *DigiTranslator Guide*.

Editing Features

Relative Grid Mode

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

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

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

Suspending Grid Mode

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

Selecting Multiple Tracks with the Selector Tool

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

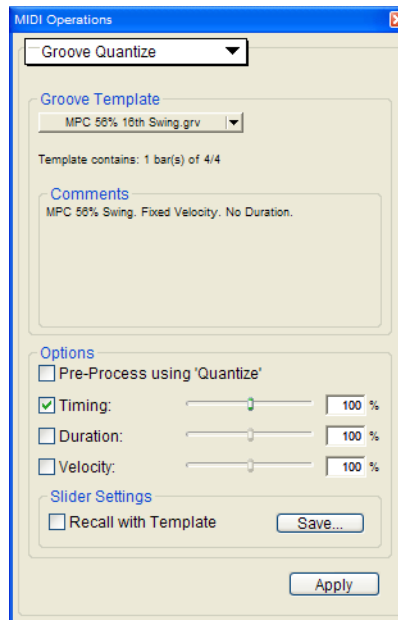
Groove Quantize

Groove Quantize is a powerful new MIDI editing feature for Pro Tools TDM and LE. Groove Quantize lets you:

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

- ◆ Capture and apply dynamics from an audio track to a MIDI track as velocity data.

⚠ *DigiGroove templates can be generated using Beat Detective (TDM systems only). For more information, see “DigiGroove Templates” on page 13.*



Groove Quantize window

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

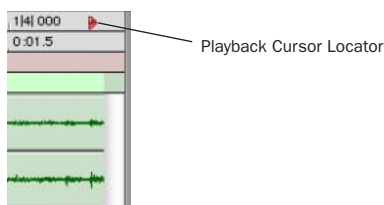
Playback Cursor Locator

Pro Tools 6.1 introduces the Playback Cursor Locator, which lets you locate the playback cursor when it is off-screen.

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

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

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



Playback Cursor Locator

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

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

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

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

Scroll Wheel Navigation and Zooming

If you have a mouse with a scroll wheel, you can use the scroll wheel to scroll vertically or horizontally in any Pro Tools window that has a scroll bar (such as the MIDI Event List). In the Edit window, the scroll wheel can also be used to zoom in and out, both vertically and horizontally.

To scroll a Pro Tools window vertically:

- 1 Place the mouse over the window you want to scroll (for example, in the Edit window you might want to scroll either the tracks display or the Regions List).
- 2 Scroll the scroll wheel up or down to scroll the window up or down.

To scroll a Pro Tools window horizontally:

- 1 Place the mouse over the window you want to scroll (for example, in the Edit window you might want to scroll either the tracks display or the Regions List).
- 2 Shift-scroll the scroll wheel up or down to scroll the window to the left or right.

To zoom in and out horizontally in the Edit window:

- 1 Place the mouse over the tracks display in the Edit window.
- 2 Alt-scroll the scroll wheel up or down to zoom in or out horizontally.

To zoom audio tracks vertically in the Edit window:

- 1 Place the mouse over the tracks display in the Edit window.
- 2 Alt-Shift-scroll the scroll wheel up or down to zoom audio tracks in or out vertically.

To zoom MIDI tracks vertically in the Edit window:

- 1 Place the mouse over the tracks display in the Edit window.
- 2 Alt-Start-Shift-scroll the scroll wheel up or down to zoom MIDI tracks in or out vertically.

To scroll the Notes display of a MIDI track:

- 1 Place the mouse over a MIDI track in the Edit window.
- 2 Alt-Start-Control-scroll the scroll wheel up or down to scroll the Notes display for that MIDI track.

MIDI Features

Pro Tools 6.1 provides the following new MIDI features on Windows XP.

More MIDI Tracks

Pro Tools sessions support up to 256 MIDI tracks.

Flatten and Restore MIDI Performance

The Restore Performance command lets you restore the original performance of selected MIDI notes. The new Flatten Performance command lets you lock the current state of selected MIDI notes.

Pencil Tool

The Pencil tool lets you draw and trim MIDI note and controller data.

Custom Note Duration

The Pencil Tool's Custom Note Duration command lets you define the note duration for inserting notes manually.

Trimmer Tool

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

MIDI Windows

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

Plug-Ins and Processing Features

All Digidesign plug-ins (except DigiRack plug-ins included with Pro Tools) are copy-protected using the iLok USB Smart Key. See your *Digidesign Plug-Ins Guide* for details on software installation and copy protection.

New DigiRack Plug-Ins

DigiRack Click Plug-In

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



Click TDM plug-in

DigiRack ReWire Plug-In

Pro Tools 6.1 supports the ReWire technology developed by Propellerhead Software as an RTAS plug-in on Pro Tools TDM and LE systems. ReWire provides real-time audio and MIDI streaming between applications, with sample accurate synchronization and common transport functionality.



ReWire RTAS plug-in

Using ReWire, Pro Tools can send MIDI to a ReWire-client application, such as a software synthesizer like Propellerhead's Reason, and receive audio back from the ReWire-client.


Any compatible ReWire-client applications on your Pro Tools system will be detected automatically, and will be available in the RTAS Plug-Ins Inserts menus in Pro Tools. Selecting a ReWire-client application from within Pro Tools will automatically launch that application; and any corresponding MIDI nodes for that application will be available in the MIDI Track Output selector.

Additionally, any audio output paths from a compatible ReWire client will become available in Pro Tools for Input on any audio or Auxiliary Input track. The audio or Auxiliary Input track must have the same number of channels as the output path from the ReWire client.

Other New DigiRack Plug-Ins

The following Digidesign plug-ins are included with Pro Tools 6.1 as part of the DigiRack plug-ins set.

- Digidesign's D-fx AudioSuite plug-ins are included as DigiRack Chorus, Flanger, Multi-Tap Delay, and Ping-Pong Delay
- Digidesign's DPP-1 TDM plug-in, which provides real-time retuning and pitch transposition, is included as DigiRack Pitch for TDM.
- D-fx D-Verb and D-Verb, which provide non-real time and real-time reverb processing, are included as D-Verb for AudioSuite, RTAS, and TDM.

 For more information, see the *DigiRack Plug-Ins Guide*.

Waves Time Shifter and TC/E Plug-In Preference

Waves Time Shifter has been added to the Pro Tools TC/E Plug-In pop-up menu in Setups > Preferences > Processing. If you own the Waves Time Shifter plug-in, you can use this setting to make the Waves Time Shifter the default application for Pro Tools time compression and expansion processes.

Inserting Plug-Ins During Playback

Plug-ins can be inserted or removed “on-the-fly” during playback on Pro Tools|HD and Pro Tools|24 MIX systems. (Pro Tools LE 5.1 and higher already support inserting or removing RTAS plug-ins during playback.) The following limitations apply when inserting plug-ins on-the-fly:

- Plug-ins cannot be inserted or removed during recording.
- Plug-ins cannot be dragged or copied to different insert locations during playback or recording.
- Plug-ins that change a track’s format (a mono-to-stereo plug-in, for example) cannot be inserted or removed during playback.
- Plug-ins cannot be replaced by other plug-ins of a different format. (A TDM plug-in cannot be replaced by an RTAS plug-in, for example.)
- Plug-ins that contain automation cannot be removed during playback.
- Side-chain inputs cannot be created during playback.
- Playback must be stopped when enabling plug-in parameters for automation.

Track Height Enhancements

Pro Tools 6.1 provides the following new track height display enhancements on Windows XP.

Toggle Track Height with Arrow Keys

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

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

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

Zoom Toggle Track Height

The new Zoom Toggle track height preference setting lets you specify a default track height when using Control+Minus to toggle audio tracks between Waveform and Volume view, or to toggle MIDI tracks between Notes and Regions view.

New Beat Detective Features

(TDM Systems Only)

The following features have been added to Beat Detective:

DigiGroove Templates

Beat Detective allows the fine timing nuances of a rhythmic performance to be extracted and saved as a groove template, called a DigiGroove template.

DigiGroove templates can be used to transfer the feel of a particular performance to:

- Selected audio regions using Groove Conform in Beat Detective (TDM systems only).
- Selected MIDI data using Groove Quantize (all Pro Tools systems).

DigiGrooves can be saved in the Groove Clipboard or saved to disk.

Additional Beat Detective Features

In addition to DigiGroove Templates, other new features for Beat Detective improve tempo mapping, and make it easier to use Beat Detective across multiple tracks. Features and enhancements include:

- Improved trigger detection through new automatic Extrapolation
- Enhancements to Collection mode (Add Unique Triggers)
- Scroll to Next Trigger and Zoom enhancements for Beat Detective editing

Import Session Data

(TDM Systems Only)

The Import Session Data command lets you import entire tracks or specific playlists, (audio, automation, Auxiliary Input), or routing assignments of a track.

This ability to filter imported session data makes it easier to use existing session material in other sessions on the same system.

From the Import Session Data dialog, you can:

- Maintain the current session's routing assignments and bring in new audio (similar to changing a reel of tape in a tape-based system).
- Maintain the current session's audio and import only the routing from a different session.
- Import an entire session.

While importing, you have control on a per-track basis to specify what is imported. For example, you can specify whether you want new audio added as new tracks, overlaid onto existing tracks, or imported into the Audio Regions List only.



DigiBase and DigiBase Pro let you import media, tracks, and sessions by dragging items from browsers into the current session timeline. Dragging a session from a browser to the timeline will display the Import Session Data dialog, where you can configure options for importing tracks from the session.

Time Code and Synchronization Enhancements

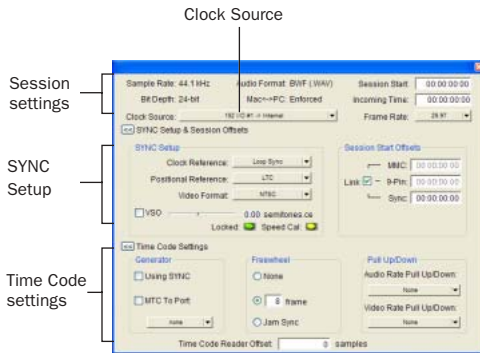
(TDM Systems Only)

Redesigned Session Setup Window

The Session Setup window provides a new layout for specifying various synchronization parameters, including time code and SYNC I/O or USD (Universal Slave Driver) settings.

The new layout provides three main areas in the Session Setup window:

- ◆ The standard Session Setup with displays and controls at the top of the window.
- ◆ Synchronization & Session Offsets in the middle section.
- ◆ Additional Time Code Settings in the lower section.



Session Setup window, full view

The SYNC Setup & Session Offsets and Time Code Settings sections of this window can be shown or hidden by clicking the corresponding Expand/Collapse icon.

Redefine Current Time Code Position

The new Redefine Current Time Code Position command (located in the Edit menu) lets you redefine the session start time.

By creating an insertion point (or selection) then entering a new time code value for that location, the session start time will be recalculated based on the new, relative time code location.

For example, place an insertion point at 01:02:04:11, choose Edit > Redefine Current Time Code Position, and enter 01:00:08:00 (in the Desired Time Field) to correspond to the first frame of picture.

This adjusts the session start time such that the insertion point's location is 01:00:08:00, and the session start time is correspondingly earlier. (Exactly how much earlier depends on the current location of the insertion point.)

Time Code Session Start Offsets

To compensate for time code offsets (such as small offsets produced during tape-based video color correction, or large offsets when using the same basic session to layback to multiple versions of the same television spot), Pro Tools provides three different Session Start offsets (time code offset settings). Offsets can be set individually, or linked by checking the Link checkbox.

Session Start Offset choices include:

MMC – MIDI Machine Control

9-Pin – Serial machine control

Sync – The current synchronization peripheral, such as the SYNC I/O, USD, or MTC from MIDI interfaces.

Offsets and Time Code Displays

The SYNC I/O (and USD) Time Code Display continues to display actual incoming time code, regardless of any Session Start Offset applied in Pro Tools.

MachineControl Enhancements

(TDM Systems Only)

The following enhancements are available for Pro Tools systems with the Digidesign MachineControl Option software installed.

Remote 9-Pin Deck Emulation Mode Enhancements

When using the MachineControl Option in Remote 9-Pin Deck Emulation mode, Pro Tools can generate time code or chase LTC.

Generate Time Code

Pro Tools with MachineControl and the SYNC I/O can generate frame-edge-aligned time code at 1x play speed while in Remote 9-Pin Deck Emulation mode.

Chase LTC

Remote 9-Pin Deck Emulation mode lets a master device configure Pro Tools track and Track Arming. In standard Remote 9-Pin Deck Emulation mode, Pro Tools serves as the time code master device while simultaneously responding to 9-pin transport and track arming commands.

When Chase LTC is enabled, Pro Tools can still respond to 9-pin track arming and record commands, but slaves to (chases) incoming LTC instead of being the time code master device.

By slaving Pro Tools to the LTC source instead of slaving the machine to Pro Tools time code, you can avoid Pro Tools repeatedly relocking when working with unpredictable master devices.

MachineControl Preferences

The Ignore Track Arming Preference setting has been moved to the Operations tab of the Preferences dialog (Setups > Preferences). Previously, this setting was located in the Machine Control tab of the Peripherals dialog.

Track Arming Enhancements

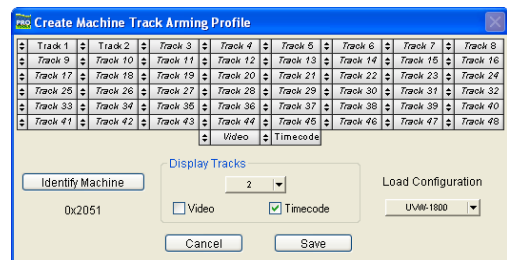
MachineControl provides the following new features for Pro Tools Track Arming.

Create Track Arming Profile

The new Create Track Arming Profile window provides extensive control over Pro Tools Track Arming.

Use the Create Track Arming Profile dialog to create and customize track arming and mapping, and save configurations for any 9-pin-capable machine as Track Arming Profile files.

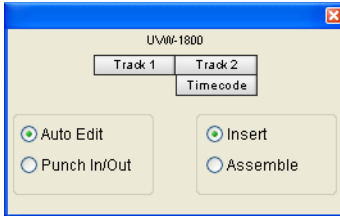
Saved Profiles can then be imported into other sessions to efficiently reconfigure Track Arming as needed.




Create Track Arming Profile

Enhanced Track Arming Window

The Track Arming window lets you configure track arming during sessions, using the settings appropriate for the current Track Arming Profile. This may include arming time code tracks or video tracks on machines with custom profiles.



Track Arming window

 *The preference to Ignore Track Arming has been moved, and is located in the Operations tab of the Preferences dialog.*

Pro Tools LE Enhancements

The following features have been added to Pro Tools LE 6.1 software.

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

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

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

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

DigiTranslator 2.0 Pro Tools LE on Digi 002 and Digi 002 Rack systems provides support for DigiTranslator 2.0. DigiTranslator 2.0 enables AAF and OMF import and export with Pro Tools.

DV Toolkit Option for Pro Tools LE

The new DV Toolkit Option enables the following time code features for working with film, video, or digital video in Pro Tools LE:

- Time Code Timebase Ruler
- Feet.Frames Timebase Ruler
- Audio Rate Pull Up and Pull Down
- Video Rate Pull Up and Pull Down
- Limit Pull Ups to NTSC/PAL Film Standards Preference

The DV Toolkit Option for Pro Tools LE can be purchased separately and is authorized using an iLok USB Smart Key.

Timebase Rulers

Use the Time Code and Feet.Frames Timebase Rulers in Spot mode to spot audio to Time Code or Feet.Frames.

Time Code Displays the Time Scale in SMPTE frames. The Frame Rate and Session Start time are set from the Session Setup window. Pro Tools supports the following frame rates: 24, 25, 29.97 Non-Drop, 29.97 Drop, 30 Non-Drop, and 30 Drop frames per second.

Feet.Frames Displays the Time Scale in feet and frames for referencing audio-for-film projects. The Feet.Frames time display is based on the 35 millimeter film format.

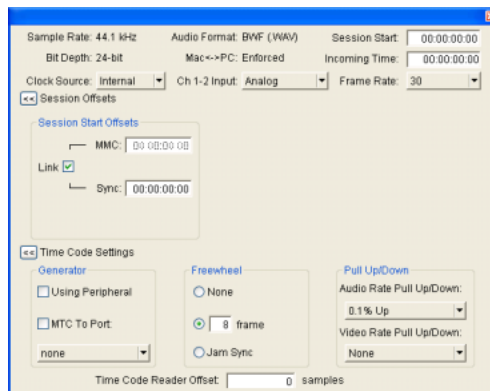
With this Time Scale, you can enter a Start Frame based on an appropriate frame location at the beginning of your project tape. The Feet.Frames Ruler will then use this value as its start reference.

Pull Up and Pull Down

Use Audio Rate Pull Up/Down and Video Rate Pull Up/Down for audio layback to film or video, or when recording audio for film or video.

Audio Rate Pull Up/Down Applies pull up or pull down factors to session audio record and playback. The Audio Rate Pull Up/Down pop-up menu is located in the Session Setup window. Choices are determined by the Limit Pull Up to NTSC/PAL Film Standards preference (Setups > Preferences > Operation).

Video Rate Pull Up/Down Lets you change the frame rate of video playback independently from the audio pull-ups (if any). The Video Pull Up/Down pop-up menu is located below the Audio Rate Pull Up/Down pop-up menu in the Session Setup window.



Session Setup window with DV Toolkit Option

Limit Pull Ups to NTSC/PAL Film Standards Preference Filters the list of pull up and pull down rates to only those which apply to approved NTSC/PAL film standards. This preference is enabled by default (Setups > Preferences > Operation).

When this preference is not enabled, the Audio Rate Pull Up and Down menu offers all possible combinations of pull ups and pull downs for the audio sample rate, regardless of the session frame rate.

Up to 32 Levels of Undo

Pro Tools 6.1 supports up to 32 levels of undo (increased from 16).

Support for Multiprocessor Computers

Pro Tools 6.1 supports multiprocessor computers, and can take full advantage of both processors for host-based operations.

Digidesign ASIO Driver

The Digidesign ASIO Driver is a multichannel, multimedia sound driver that allows third-party audio programs that support the ASIO standard to record and play back through Digidesign hardware on Windows XP. The Digidesign ASIO Driver is not required to use Pro Tools or Pro Tools LE.

chapter 3

What's New in Pro Tools 6.1 on Mac OS X

This chapter provides an overview of features that are specifically new in Pro Tools 6.1 TDM and LE systems on Mac OS X.

AVoption|XL and FilmFrame


(Pro Tools|HD Systems Only)

With Pro Tools 6.1, AVoption|XL is supported on Mac OS X, including the same features of Pro Tools 5.3.1 on Mac OS 9. Additionally, Pro Tools 6.1 with AVoption|XL includes FilmFrame, which provides full 24P and 25P playback functionality, and does not require a separate authorization.

DigiBase Browsers Display OMF Video Metadata

(DigiTranslator 2.0 Option Required)

Pro Tools 6.1 with the DigiTranslator 2.0 Option displays the following metadata for OMF video files in DigiBase browsers: frame rate (24, 25, 29, 30, drop, non-drop), absolute duration, tape name, original timestamp, clip name, and unique ID.

 *For more information, refer to the DigiBase and DigiBase Pro Guide.*

Support for Advanced Authoring Format (AAF)

(DigiTranslator 2.0 Required)

Advanced Authoring Format (AAF) is a new interchange format sponsored by the Advanced Authoring Format Association (a large group of professional media manufacturers). AAF works much like the OMFI interchange format.

Pro Tools 6.1 with the DigiTranslator 2.0 Option can import AAF sequences, import tracks from an AAF sequence with the Import Session Data command, and use DigiBase to display relevant AAF sequence metadata.

Pro Tools 6.1 also supports export of AAF sequences.

Browsers will display the following columns for AAF sequences:

- Name
- Kind
- Format
- Sample Rate
- Bit Depth
- Time Code Format

 *For more information on AAF, refer to the DigiTranslator Guide.*

Plug-Ins and Processing Features

All Digidesign plug-ins (except DigiRack plug-ins included with Pro Tools) are copy-protected using the iLok USB Smart Key. See your *Digidesign Plug-Ins Guide* for details on software installation and copy protection.

New DigiRack Plug-In Interface

Pro Tools 6.1 includes a new interface for all DigiRack TDM, RTAS, and AudioSuite plug-ins.



Mod Delay II plug-in

New DigiRack ReWire Plug-In

Pro Tools 6.1 supports the ReWire technology developed by Propellerhead Software as an RTAS plug-in on Pro Tools TDM and LE systems. ReWire provides real-time audio and MIDI streaming between applications, with sample accurate synchronization and common transport functionality.



ReWire RTAS plug-in

Using ReWire, Pro Tools can send MIDI to a ReWire-client application, such as a software synthesizer like Propellerhead's Reason, and receive audio back from the ReWire-client.

Any compatible ReWire client applications on your Pro Tools system will be detected automatically, and will be available in the RTAS Plug-Ins Inserts menus in Pro Tools. Selecting a ReWire-client application from within Pro Tools will automatically launch that application; and any corresponding MIDI nodes for that application will be available in the MIDI Track Output selector.

Additionally, any audio output paths from a compatible ReWire client will become available in Pro Tools for input on any audio or Auxiliary Input track. The audio or Auxiliary Input track must have the same number of channels as the output path from the ReWire client.

Waves Time Shifter and TC/E Plug-In Preference

Waves Time Shifter has been added to the Pro Tools TC/E Plug-In pop-up menu in Setups > Preferences > Processing. If you own the Waves Time Shifter plug-in, you can use this setting to make the Waves Time Shifter the default application for Pro Tools time compression and expansion processes.

DV Toolkit Option for Pro Tools LE

The new DV Toolkit Option enables the following time code features for working with film, video, or digital video in Pro Tools LE:

- Time Code Timebase Ruler
- Feet.Frames Timebase Ruler
- Audio Rate Pull Up and Pull Down
- Video Rate Pull Up and Pull Down
- Limit Pull Ups to NTSC/PAL Film Standards Preference

The DV Toolkit Option for Pro Tools LE can be purchased separately and is authorized using an iLok USB Smart Key.

Timebase Rulers

Use the Time Code and Feet.Frames Timebase Rulers in Spot mode to spot audio to Time Code or Feet.Frames.

Time Code Displays the Time Scale in SMPTE frames. The Frame Rate and Session Start time are set from the Session Setup window. Pro Tools supports the following frame rates: 24, 25, 29.97 Non-Drop, 29.97 Drop, 30 Non-Drop, and 30 Drop frames per second.

Feet.Frames Displays the Time Scale in feet and frames for referencing audio-for-film projects. The Feet.Frames time display is based on the 35 millimeter film format.

With this Time Scale, you can enter a Start Frame based on an appropriate frame location at the beginning of your project tape. The Feet.Frames Ruler will then use this value as its start reference.

Pull Up and Pull Down

Use Audio Rate Pull Up/Down and Video Rate Pull Up/Down for audio layback to film or video, or when recording audio for film or video.

Audio Rate Pull Up/Down Applies pull up or pull down factors to session audio record and playback. The Audio Rate Pull Up/Down pop-up menu is located in the Session Setup window. Choices are determined by the Limit Pull Up to NTSC/PAL Film Standards preference (Setups > Preferences > Operation).

Video Rate Pull Up/Down Lets you change the frame rate of video playback independently from the audio pull-ups (if any). The Video Pull Up/Down pop-up menu is located below the Audio Rate Pull Up/Down pop-up menu in the Session Setup window.



Session Setup window with DV Toolkit Option

Limit Pull Ups to NTSC/PAL Film Standards Preference Filters the list of pull up and pull down rates to only those which apply to approved NTSC/PAL film standards. This preference is enabled by default (Setups > Preferences > Operation).

When this preference is not enabled, the Audio Rate Pull Up and Down menu offers all possible combinations of pull ups and pull downs for the audio sample rate, regardless of the session frame rate.

Support for DigiTranslator 2.0 with Pro Tools LE on Digi 002 and Digi 002 Rack

Pro Tools LE on Digi 002 and Digi 002 Rack systems provides support for DigiTranslator 2.0. DigiTranslator 2.0 enables AAF and OMF import and export with Pro Tools.

Ignore Buffer Underrun Errors (-6086)

(Pro Tools LE 6.1 for Digi 002 and Digi 002 Rack on Mac OS X Only)

Buffer Underrun Error Messages can occur during a session if more buffer time is required for processing audio and applying real-time effects than what is currently available. These messages interrupt both playback and record, prompting you to increase the H/W Buffer Size. In most cases, this is not a problem. But with lengthy recording passes, for example, you may prefer to ignore these messages, and not interrupt the recording session. The Pro Tools Ignore Buffer Underrun Errors (-6086) feature in the H/W Setup dialog provides options for ignoring these messages during playback and record. When enabled, Pro Tools sends an audible pop to the Digi 002 or Digi 002 Rack hardware outputs, instead of displaying a buffer underrun error message. These pops are not written to disk.

To Ignore Buffer Underrun Errors (-6086)

- 1 Choose Setups > Hardware Setup.
- 2 From the Ignore Buffer Underrun Errors (-6086) section, do the following:
 - Select During Playback to ignore -6086 error messages during playback.
 - Select the During Record to ignore -6086 error messages during recording.
- 3 Click OK.

Up to 32 Levels of Undo

Pro Tools 6.1 supports up to 32 levels of undo (increased from 16).

Scroll Wheel Navigation

If you have a mouse with a scroll wheel, you can use the scroll wheel to scroll vertically or horizontally in any Pro Tools window that has a scroll bar (such as the MIDI Event List). In the Edit window, the scroll wheel can also be used to zoom in and out, both vertically and horizontally.

To scroll a Pro Tools window vertically:

- 1 Place the mouse over the window you want to scroll (for example, in the Edit window you might want to scroll either the tracks display or the Regions List).
- 2 Scroll the scroll wheel up or down to scroll the window up or down.

To scroll a Pro Tools window horizontally:

- 1 Place the mouse over the window you want to scroll (for example, in the Edit window you might want to scroll either the tracks display or the Regions List).
- 2 Shift-scroll the scroll wheel up or down to scroll the window to the left or right.

To zoom in and out horizontally in the Edit window:

- 1 Place the mouse over the tracks display in the Edit window.
- 2 Option-scroll the scroll wheel up or down to zoom in or out horizontally.

To zoom audio tracks vertically in the Edit window:

- 1 Place the mouse over the tracks display in the Edit window.
- 2 Option-Shift-scroll the scroll wheel up or down to zoom audio tracks in or out vertically.

To zoom MIDI tracks vertically in the Edit window:

- 1 Place the mouse over the tracks display in the Edit window.
- 2 Control-Option-Shift-scroll the scroll wheel up or down to zoom MIDI tracks in or out vertically.


To scroll the Notes display of a MIDI track:

- 1 Place the mouse over a MIDI track in the Edit window.
- 2 Command-Control-Option-scroll the scroll wheel up or down to scroll the Notes display for that MIDI track.

chapter 4

What's New in Pro Tools 6.0 (Mac OS X Only)

Pro Tools 6.1 software includes features that were new with Pro Tools 6.0. If you are updating or upgrading to Pro Tools 6.1 from Pro Tools 5.3.x or earlier, these features will be new to you. Following is an overview of the Pro Tools 6.0 features.

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

Mac OS X Support

Pro Tools 6.0 provides improved performance, support for dual-processor Macintosh G4 computers, and the stability of the Mac OS X Unix-based operating environment.

New Windows and User Interface

The Pro Tools user interface has been redesigned, giving a new look to many familiar Pro Tools windows. This new interface is easy to learn and use because it retains the most important and familiar elements of previous versions of Pro Tools. Figures 6–8 show the new Mix, Edit, and Transport windows.

Mix Window

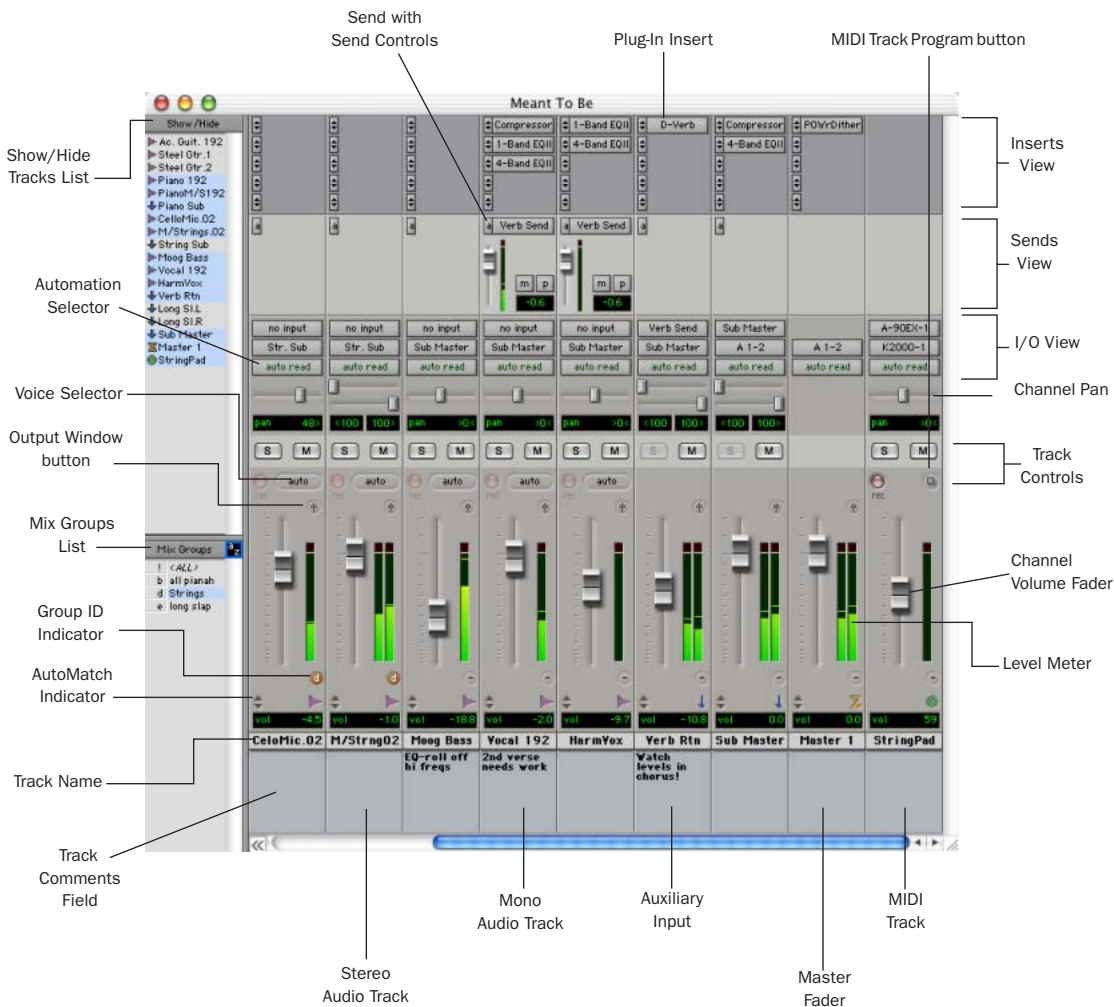


Figure 6. Pro Tools 6.0 Mix window

Edit Window

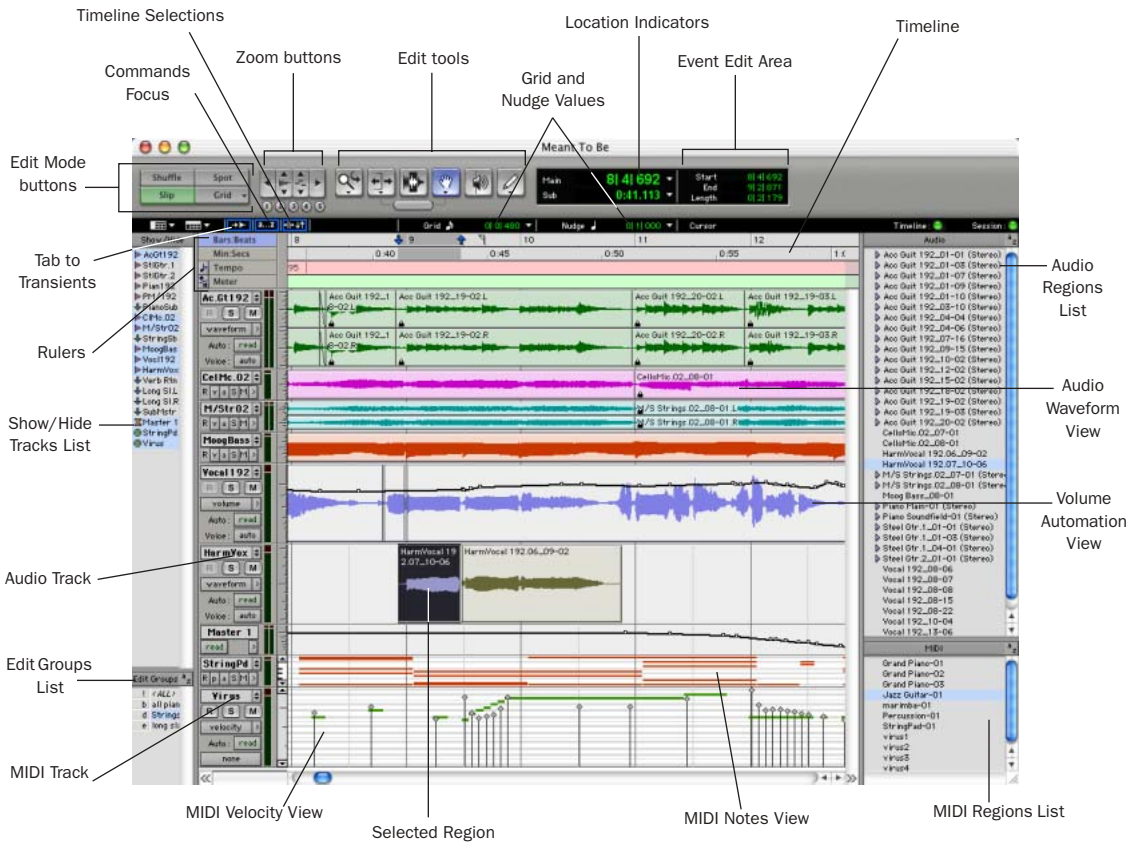


Figure 7. Pro Tools 6.0 Edit window

Transport Window

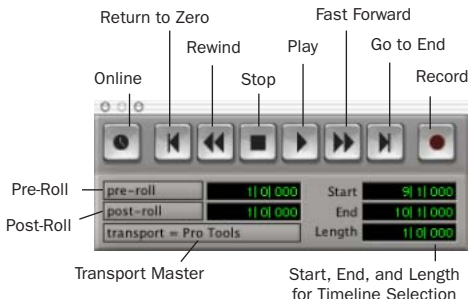


Figure 8. Pro Tools 6.0 Transport window

DigiBase and DigiBase Pro for File Management

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

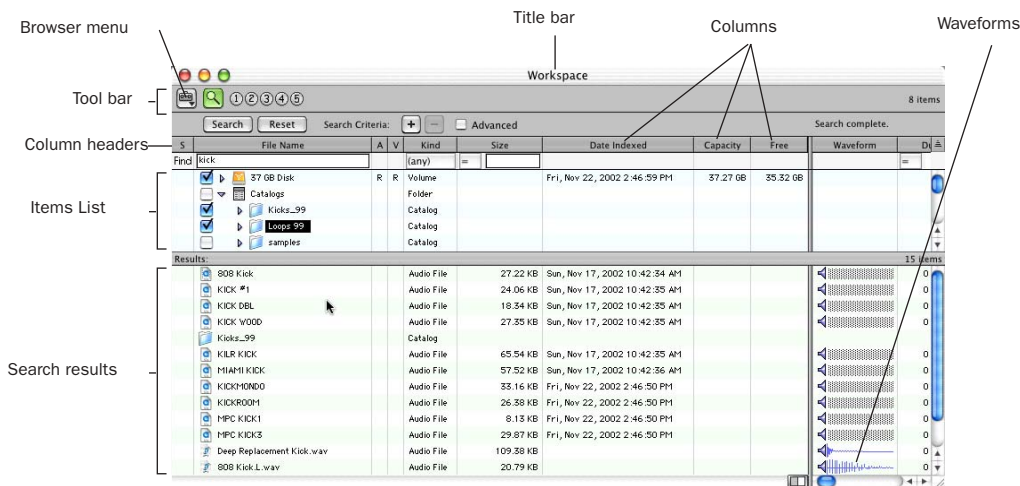


Figure 9. The DigiBase Workspace browser, showing Search tools and results

DigiBase

DigiBase adds the following capabilities to all Pro Tools systems:

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

DigiBase Pro

DigiBase Pro (TDM systems only) adds the following capabilities:

- Create and share custom catalogs that reference files wherever they are stored.
- Search on any combination of file metadata.
- View, search, and spot files from offline volumes.

Browsers

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

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

The Workspace Browser shows all the volumes mounted on your desktop, and is the starting place for setting up your Pro Tools environment. Like all DigiBase browsers, you can create folders and organize, search, edit, or delete files of all types. Use the Workspace browser to search multiple volumes simultaneously, to unmount volumes from your desktop, and to determine which volumes you can record to, and which are for playback only.

Volume Browsers Display the contents of a particular drive or folder. Changes made with Volume browsers are reflected on the disk. Use Volume browsers to search and organize the contents of a single volume, including network volumes.

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

Catalogs (DigiBase Pro TDM Systems Only) Are custom databases you create to store snapshots (aliases) of volumes, folders, and files. Catalogs can include a wide range of media, including online and offline items. Catalog files can also be shared between systems and users.

Relink Window

The Relink window provides tools and features for relinking sessions and catalogs to media files.

Task Window

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

Editing Features

Relative Grid Mode

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

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

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

Suspending Grid Mode

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

Selecting Multiple Tracks with the Selector Tool

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

Groove Quantize

Groove Quantize is a powerful new MIDI editing feature for Pro Tools TDM and LE. Groove Quantize lets you:

- ◆ Conform MIDI to DigiGrooves, which transfers the rhythmic nuances of an audio performance to MIDI tracks.
- ◆ Capture and apply dynamics from an audio track to a MIDI track as velocity data.



Groove Quantize window

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

DigiGroove templates can be generated using Beat Detective (TDM systems only).

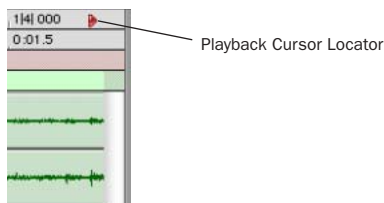
Playback Cursor Locator

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

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

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

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



Playback Cursor Locator

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

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

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

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

MIDI Features

Pro Tools 6.0 provides the following new MIDI features.

New MIDI Services

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

More MIDI Tracks

Pro Tools sessions support up to 256 MIDI tracks.

Flatten and Restore MIDI Performance

The Restore Performance command lets you restore the original performance of selected MIDI notes. The new Flatten Performance command lets you lock the current state of selected MIDI notes.

MIDI Time Stamping

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

Pencil Tool

The Pencil tool lets you draw and trim MIDI note and controller data.

Custom Note Duration

The Pencil Tool's Custom Note Duration command lets you define the note duration for inserting notes manually.

Trimmer Tool

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

MIDI Windows

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

Virtual MIDI Pro Tools Inputs

(Pro Tools 6.0 Only)

Pro Tools has four virtual MIDI inputs, called Pro Tools Inputs, that let you receive MIDI data from other supported applications (such as Ableton Live), including MIDI Time Code or MIDI Machine Control.

To record MIDI using Pro Tools Inputs:

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



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

Plug-Ins and Processing Features

All Digidesign plug-ins (except DigiRack plug-ins included with Pro Tools) are copy-protected using the iLok USB Smart Key. See your *Digidesign Plug-Ins Guide* for details on software installation and copy protection.

Inserting Plug-Ins During Playback

With Pro Tools 6.0, plug-ins can be inserted or removed “on-the-fly” during playback on Pro Tools|HD and Pro Tools|24 MIX systems. (Pro Tools LE 5.1 and higher already support inserting or removing RTAS plug-ins during playback.) The following limitations apply when inserting plug-ins on-the-fly:

- Plug-ins cannot be inserted or removed during recording.
- Plug-ins cannot be dragged or copied to different insert locations during playback or recording.
- Plug-ins that change a track’s format (a mono-to-stereo plug-in, for example) cannot be inserted or removed during playback.
- Plug-ins cannot be replaced by other plug-ins of a different format. (A TDM plug-in cannot be replaced by an RTAS plug-in, for example.)
- Plug-ins that contain automation cannot be removed during playback.
- Side-chain inputs cannot be created during playback.
- Playback must be stopped when enabling plug-in parameters for automation.

New DigiRack Click Plug-In

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

New DigiRack Plug-Ins

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

- Digidesign’s D-fx AudioSuite plug-ins are included as DigiRack Chorus, Flanger, Multi-Tap Delay, and Ping-Pong Delay
- Digidesign’s DPP-1 TDM plug-in, which provides real-time retuning and pitch transposition, is included as DigiRack Pitch for TDM.
- D-fx D-Verb and D-Verb, which provide non-real time and real-time reverb processing, are included as D-Verb for AudioSuite, RTAS, and TDM.

Track Height Enhancements

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

Toggling Track Height with Arrow Keys

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

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

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

Zoom Toggle Track Height

The new Zoom Toggle track height preference setting lets you specify a default track height when using Control+Minus to toggle audio tracks between Waveform and Volume view, or to toggle MIDI tracks between Notes and Regions view.

New Beat Detective Features

(TDM Systems Only)

The following features have been added to Beat Detective:

DigiGroove Templates

Beat Detective allows the fine timing nuances of a rhythmic performance to be extracted and saved as a groove template, called a DigiGroove template.

DigiGroove templates can be used to transfer the feel of a particular performance to:

- Selected audio regions using Groove Conform in Beat Detective (TDM systems only).
- Selected MIDI data using Groove Quantize (all Pro Tools systems).

DigiGrooves can be saved in the Groove Clipboard or saved to disk.

Additional Beat Detective Features

In addition to DigiGroove Templates, other new features for Beat Detective improve tempo mapping, and make it easier to use Beat Detective across multiple tracks. Features and enhancements include:

- Improved trigger detection through new automatic Extrapolation
- Enhancements to Collection mode (Add Unique Triggers)
- Scroll to Next Trigger and Zoom enhancements for Beat Detective editing

Improved Session Import Options

(TDM Systems Only)

The Import Session Data command lets you import entire tracks or specific playlists, (audio, automation, Auxiliary Input), or routing assignments of a track.

This ability to filter imported session data makes it easier to use existing session material in other sessions on the same system.

From the Import Session Data dialog, you can:

- Maintain the current session's routing assignments and bring in new audio (similar to changing a reel of tape in a tape-based system).
- Maintain the current session's audio and import only the routing from a different session.
- Import an entire session.

While importing, you have complete control on a per-track basis to specify what is imported. For example, you can specify whether you want new audio added as new tracks, overlaid onto existing tracks, or imported into the Audio Regions List only.



DigiBase and DigiBase Pro let you import media and sessions (tracks) by dragging items from browsers into the current session timeline. Doing so will display the Import Session Data dialog, where you can configure options for importing tracks.

Time Code and Synchronization Enhancements

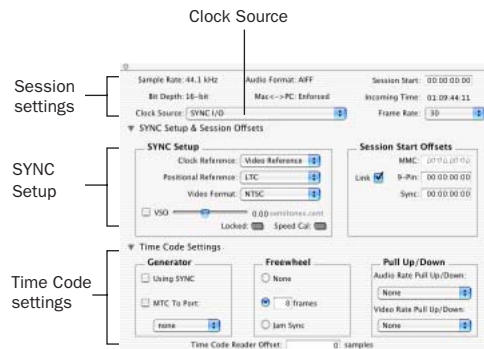
(TDM Systems Only)

Redesigned Session Setup Window

The Session Setup window provides a new layout for specifying various synchronization parameters, including time code and SYNC I/O or USD (Universal Slave Driver) settings.

The new layout provides three main areas in the Session Setup window:

- ◆ The standard Session Setup with displays and controls at the top of the window.
- ◆ Synchronization & Session Offsets in the middle section.
- ◆ Additional Time Code Settings in the lower section.



Session Setup window, full view

The SYNC Setup & Session Offsets and Time Code Settings sections of this window can be shown or hidden by clicking the corresponding Expand/Collapse icon.

Redefine Current Time Code Position

The new Redefine Current Time Code Position command (located in the Edit menu) lets you re-define the session start time.

By creating an insertion point (or selection) then entering a new time code value for that location, the session start time will be recalculated based on the new, relative time code location.

For example, place an insertion point at 01:02:04:11, choose Edit > Redefine Current Time Code Position, and enter 01:00:08:00 (in the Desired Time Field) to correspond to the first frame of picture.

This adjusts the session start time such that the insertion point's location is 01:00:08:00, and the session start time is correspondingly earlier. (Exactly how much earlier depends on the current location of the insertion point.)

Time Code Session Start Offsets

Pro Tools 6.0 provides three different time code-based Session Start offsets:

MMC – MIDI Machine Control

9-Pin – Serial Machine Control

Sync – The current synchronization peripheral, such as the SYNC I/O, USD, or MTC from MIDI interfaces.

These offsets can be used to compensate for changes to time code position introduced in the production process, or to lay back your session to different time code positions on the same tape. Offsets can be set individually, or linked by selecting the Link option.

Offsets and Time Code Displays

The SYNC I/O (and USD) Time Code Display continues to display actual incoming time code, regardless of any Session Start Offset applied in Pro Tools.

MachineControl Enhancements

(TDM Systems Only)

The following enhancements are available for Pro Tools systems with the Digidesign MachineControl Option software installed.

Remote 9-Pin Deck Emulation Mode Enhancements

When using the MachineControl Option in Remote 9-Pin Deck Emulation mode, Pro Tools can generate time code or chase LTC.

Generate Time Code

Pro Tools with MachineControl and the SYNC I/O can generate frame-edge-aligned time code at 1x play speed while in Remote 9-Pin Deck Emulation mode.

Chase LTC

Remote 9-Pin Deck Emulation mode lets a master device configure Pro Tools track and Track Arming. In standard Remote 9-Pin Deck Emulation mode, Pro Tools serves as the time code master device while simultaneously responding to 9-pin transport and track arming commands.

When Chase LTC is enabled, Pro Tools can still respond to 9-pin track arming and record commands, but slaves to (chases) incoming LTC instead of being the time code master device.

By slaving Pro Tools to the LTC source instead of slaving the machine to Pro Tools time code, you can avoid Pro Tools repeatedly relocking when working with unpredictable master devices.

MachineControl Preferences

The Ignore Track Arming Preference setting has been moved to the Operations tab of the Preferences dialog (Setups > Preferences). Previously, this setting was located in the Machine Control tab of the Peripherals dialog.

Track Arming Enhancements

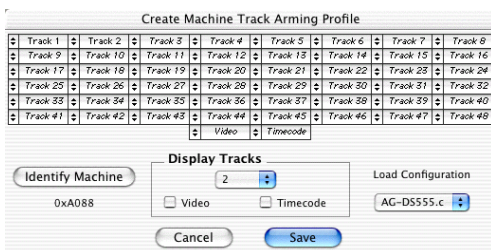
MachineControl provides the following new features for Pro Tools Track Arming.

Create Track Arming Profile

The new Create Track Arming Profile window provides extensive control over Pro Tools Track Arming.

Use the Create Track Arming Profile dialog to create and customize track arming and mapping, and save configurations for any 9-pin-capable machine as Track Arming Profile files.

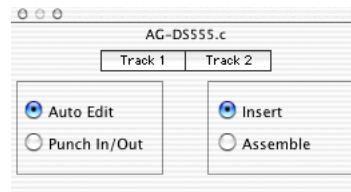
Saved Profiles can then be imported into other sessions to efficiently reconfigure Track Arming as needed.




Create Track Arming Profile

Enhanced Track Arming Window

The Track Arming window lets you configure track arming during sessions, using the settings appropriate for the current Track Arming Profile. This may include arming time code tracks or video tracks on machines with custom profiles.



Track Arming window

 The preference to Ignore Track Arming has been moved, and is located in the Operations tab of the Preferences dialog.

Pro Tools LE Enhancements

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

32 Voiceable Tracks Pro Tools LE on Digi 001, Mbox, and Toolbox supports up to 32 voiceable tracks per session.

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

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

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

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

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