What's New in Pro Tools 6.0

digidesign

contents

chapter 1

What's New in Pro Tools 6.0

This document is an overview of new features in Pro Tools 6.0. This version of Pro Tools software is designed for use with Pro Tools TDM and LE systems on Macintosh OS X v10.2.3.

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

Compatibility

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

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

Overview of New Features

Pro Tools 6.0 provides many new features for Pro Tools TDM and LE systems. Features available on all systems are introduced in "New Windows and User Interface" on page 2.

For new features specific to Pro Tools LE systems, see "Pro Tools LE Enhancements" on page 9.

For new features specific to Pro Tools TDM systems, see "Pro Tools TDM Enhancements" on page 10.

New Windows and User Interface

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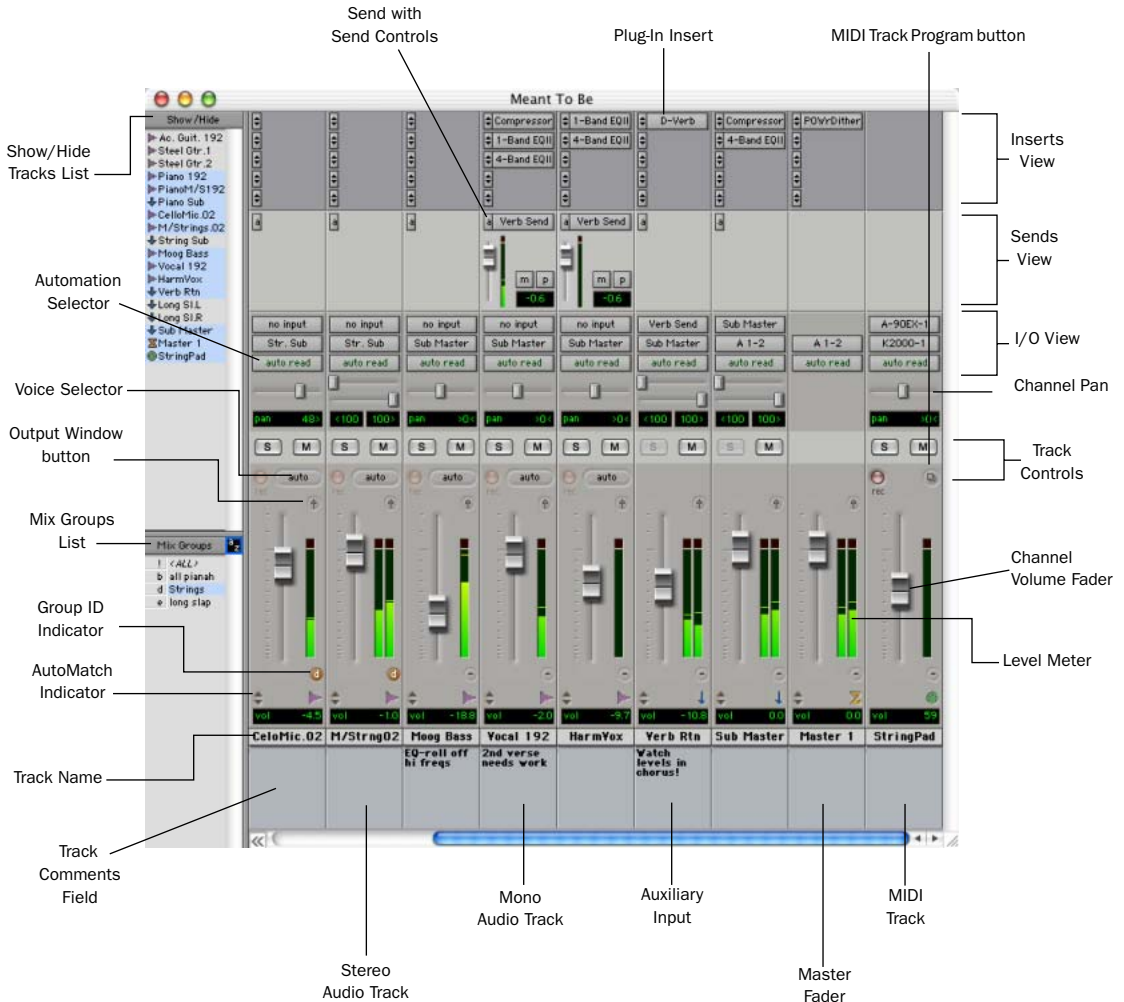
Mix Window

Figure 1. Pro Tools 6.0 Mix window
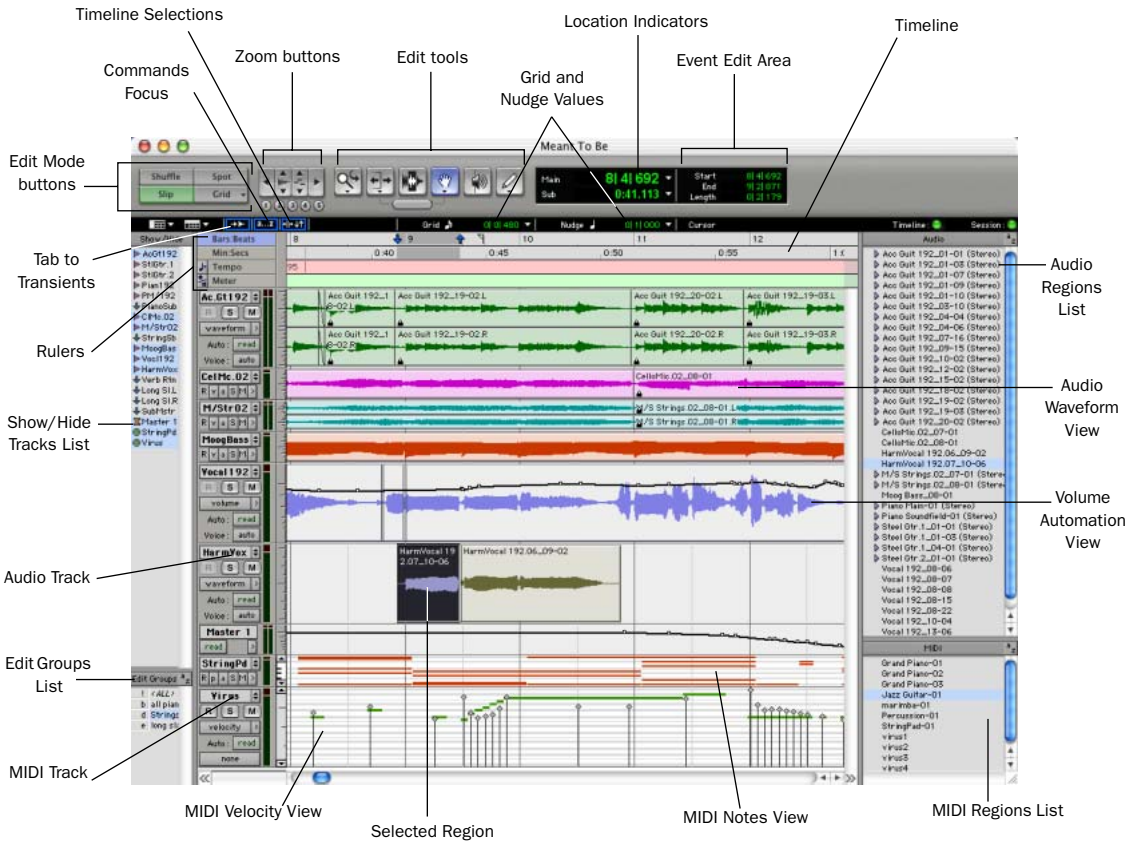
Edit Window

Figure 2. Pro Tools 6.0 Edit window

Transport Window
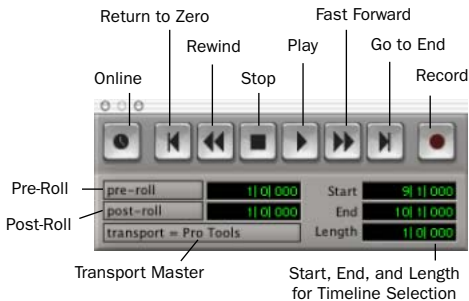
Pro Tools 6.0 Transport window

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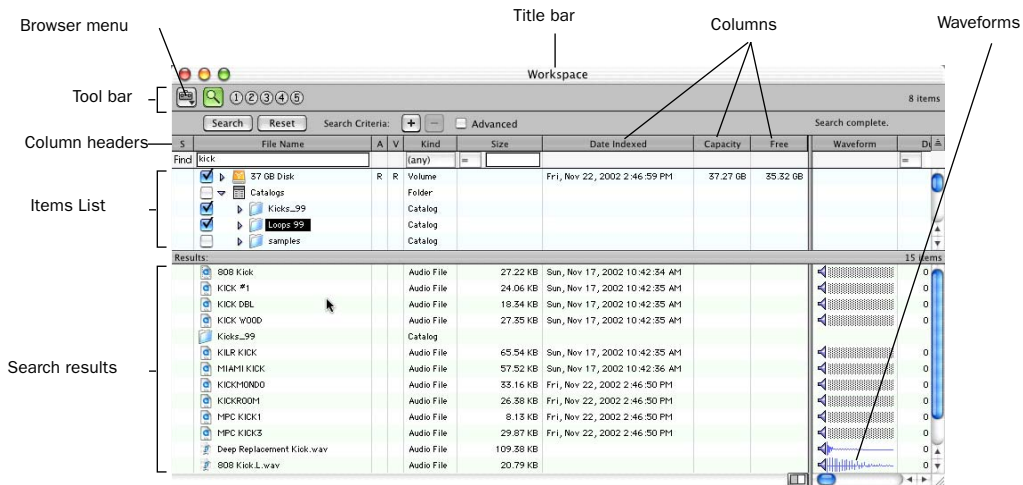
Figure 3. The DigiBase Workspace browser, showing Search tools and results

DigiBase

DigiBase adds the following capabilities to all Pro Tools systems:

- View, search, audition, and import media (audio and video files, regions, and samples), sessions, and other data.

- Manage file copying and other tasks in the background.

- Find missing files.

- Drag and drop items in browsers directly into the Timeline or Regions List of the current Pro Tools session.

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: Volume browsers, the Workspace browser, and the Project browser.

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

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

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

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

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

Task Window

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

Macintosh OS X Support

(Macintosh OS X v10.2.3)

Pro Tools on Macintosh OS X v10.2.3 provides improved performance, support for dual-processor Macintosh G4 computers, and the stability of the OS X Unix-based operating environment.

Editing Features

Relative Grid Mode

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

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

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

Suspend Grid Mode

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

Selector Tool

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

DigiGroove Templates

Beat Detective (TDM systems only) now allows the fine timing nuances of a rhythmic performance to be extracted and saved as a groove template, called a DigiGroove template.

Groove 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. For more details, see "DigiGroove Templates" on page 10.

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).
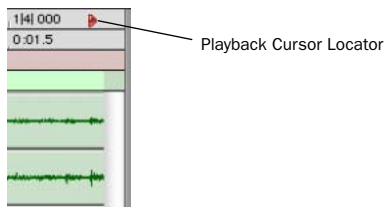
Locating the Playback Cursor

(Pro Tools 6.0 Only)

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

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

The Playback Cursor Locator will appear at the *right* edge of the Main Timebase Ruler after the playback cursor moves *after* 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

Pro Tools MIDI Services let you configure your system's MIDI routing and assignments, manage patches and names, and take advantage of Macintosh CoreMIDI services.

More MIDI Tracks

Pro Tools sessions now support up to 256 MIDI tracks.

Flatten and Restore MIDI Performance

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

MIDI Time Stamping

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

Trim Tool

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

Pencil Tool

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

MIDI Windows

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

Virtual MIDI Pro Tools Inputs

(Pro Tools 6.0 Only)

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

To record MIDI using Pro Tools Inputs:

1 In Pro Tools, enable Pro Tools Inputs (1-4) in MIDI > Input Devices.

2 Create a new MIDI track, record-enable it, and select one of the Pro Tools Inputs (1–4) in the Track Input Selector.

3 In the other MIDI application, select one of the Pro Tools Inputs (1–4) for the MIDI Output (consult the manufacturer's documentation for more information).

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

Plug-Ins and Processing Features

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

Inserting Plug-Ins During Playback

With Pro Tools 6.0, plug-ins can now 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 later 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.

- A plug-in cannot be dragged or copied to a different insert location 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.

- A plug-in cannot be replaced by a plug-in 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 now provides a built-in click generator, the DigiRack Click plug-in, available in RTAS and TDM formats. Click includes presets with different click sounds. Click supports accented and unaccented click sounds, and lets you adjust their individual volumes. Click output is integrated directly into Pro Tools (through Digidesign's DirectMIDI protocol), avoiding MIDI timing delays.

New DigiRack Plug-Ins

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

- Digidesign's D-fx plug-ins are now included as DigiRack Chorus, Flanger, Multi-Tap Delay, and Ping-Pong Delay

- Digidesign's DPP-1 plug-in, which provides real-time retuning and pitch correction, is now included as DigiRack Pitch.

- D-fx D-Verb, which provides non-real time reverb processing, is now included as D-Verb AudioSuite.

Track Height Enhancements

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

Toggling Track Height with Arrow keys

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

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

1 Place the Edit cursor in the track.

2 Press Control-Up Arrow key to increase, or Control-Down Arrow key to decrease track height.

Zoom Toggle Track Height

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.

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 now supports up to 32 voiceable tracks per session.

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

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

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

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

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

Pro Tools TDM Enhancements

The following features are available with Pro Tools|HD, Pro Tools|24 MIX, and Pro Tools|24 only.

New Beat Detective Features

The following features have been added to Beat Detective.

DigiGroove Templates

With Pro Tools 6.0, Beat Detective can extract and create groove templates, called Digi-Grooves, from an audio selection. DigiGrooves can be used to apply the groove, or feel of the captured passage to other audio selections using Groove Conform, or to MIDI using Groove Quantize.

Groove templates are "quantization maps" derived from real musical performances. The rhythmic character of each performance is analyzed and stored as a groove template. Beat Detective analyzes an audio selection for transient peaks according to a defined threshold and maps the rhythmic relationships to a 960 parts per quarter note (ppq) template.

When creating DigiGroove templates, Beat Detective also analyzes the dynamics of a performance. Accents and peak levels are incorporated into the groove template as velocity data, which can be applied to change the dynamics of MIDI tracks. Beat Detective translates amplitude to MIDI velocity according to a linear scale.

DigiGroove templates can be of any length and can be applied to any number of bars. Typically, you will apply DigiGroove templates to selections of the same length and meter. However, groove templates can be applied to different meters—for example, a groove template in 6/8 can be applied to a selection in 4/4.

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

Pro Tools TDM now includes an Import Session Data command. This 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.
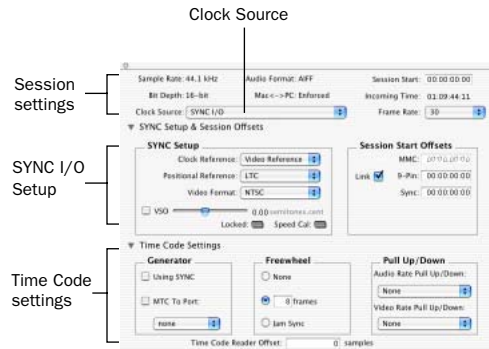
From the Import Session Data dialog, you can:

- 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 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 Synchronization & Session Offsets and Time Code Settings sections of this window can be shown or hidden by clicking the corresponding View triangle 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 position 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 now 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 now 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 (Universal Slave Driver), 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 Machine Control 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 now 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 Transport 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 and is now located in the Operations tab of the Preferences dialog (Setups > Preferences). Previously, this setting was located in the Machine Control tab of the Peripherals dialog.
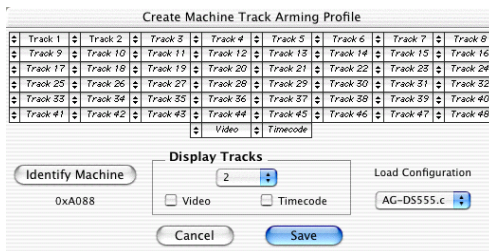
Track Arming Enhancements

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.
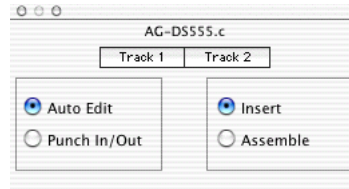
Track Arming

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