What's New in Pro Tools TDM 6.9

For HD Systems on Windows or Macintosh

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chapter 1

Introduction

This document describes new features in Pro Tools TDM 6.9 for Pro Tools HD systems on Windows XP or Mac OS X.

System Requirements

For complete system requirements, visit the compatibility page of the Digidesign Web site (www.digidesign.com/compato).

Compatibility Information

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

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

Pro Tools TDM 6.9 New Features

Pro Tools TDM 6.9 includes the following new or enhanced features:

System Configuration Updates

- Increase in total number of buses to 128
- Increase in total number of auxiliary tracks to 160

Session and Track Features

- Track selection enhancements:
 - Selecting a range of tracks
 - Selecting or deselecting non-contiguous tracks
- Show/Hide Track List selection enhancements:
 - Show a range of tracks
 - Show or hide non-contiguous tracks
- Regions List selection enhancements:
 - Selecting a range of regions
 - Selecting or deselecting non-contiguous regions
- Track View enhancements:
 - Changing to the next or previous Track View

I/O Setup Updates

- I/O Setup dialog interface changes:
 - Renamed I/O Setup options and Path tools
 - New Track Default Output option supports bus paths
- Path selection enhancements in I/O Setup:
 - Selecting a range of paths in I/O Setup
 - Selecting or deselecting non-contiguous paths in I/O Setup

Navigation Features

- Back/Forward commands:
 - · Back command
 - · Back and Play command
 - · Forward command
 - · Forward and Play command
 - Back/Forward Amount preference
 - Repeating Back/Forward commands
 - · Extending selections with Back/Forward commands

Playlists and Groups Enhancements:

 Improved grouped playlist synchronization

New Plug-Ins and Plug-In Features

- EQ III DigiRack plug-in
- Plug-In menu organization enhancements:
 - Organize plug-ins in a Flat List, or by Category, Manufacturer, or Category and Manufacturer
 - "Organize Plug-In Menus By" pop-up menu (Display Preference)
 - Effects Category

New or Enhanced Soloing Features

- New Solo modes:
 - SIP (Solo In Place)
 - AFL (After Fader Listen)
 - PFL (Pre-Fader Listen)
- I/O Setup options for AFL/PFL modes:
 - AFL/PFL Path Selector
 - AFL/PFL Mutes (Output Path) Selector (for systems without a D-Control or D-Command control surface)

Modified Solo Latch Options

- Latch
- X-OR (Cancels Previous Solos)
- Momentary

New or Enhanced Automation Features

- "After Write Pass, Switch To..." Automation preference:
 - Touch
 - Latch
 - None
- "After Write Pass, Switch To..." Support in Trim Modes
- "Stop" Mutes Audio Inputs (When in Auto Input)" now called "Mute Record-Armed Tracks While Stopped"
- AutoMatch for Latch and Write Automation modes (supported Digidesign control surfaces only)
- Automation Enable window updates
- Suspend automation on-the-fly updates:
 - Switching to any Automation mode from Off during playback or record
 - Suspending automation on-the-fly
 - · Track View Selector turns grey when suspending automation.

- Automation fader improvements:
 - Stationary faders in all Trim modes
 - Join and AutoJoin, for automatic punch-in support in Latch mode (with supported Digidesign control surfaces)
 - Join/AutoJoin indicator in Pro Tools Edit window
- Constrain new breakpoints to next or previous automation value
- Glide Automation
- Automation Write on Stop modes enhancements
- Automation Mute Overwrite/Extend command
- Write automation to the next breakpoint

Surround Features

- Combined Panning mode buttons
- AutoGlide mode

Changes to Avid Compatibility

- Support for MXF audio import and playback
- Support for MXF audio export (DigiTranslator 2.0 required)
- Removal of "Publish as OMFI" command from audio export and Bounce to Disk dialogs

New Localization Support

- Full Korean and Simplified Chinese localization
- Multilingual application support for Pro Tools LE systems (Localized OS on Mac OS X only)

New Machine Control Preference

• Set Servo Lock bit at Play (Tamura Support)

Pro Tools TDM 6.9 Control Surface Features

Pro Tools TDM 6.9 includes new or enhanced support for the following control surfaces:

- D-Command
- D-Control
- ProControl
- Control|24
- Command|8

D-Command

Pro Tools TDM 6.9 adds support for D-Command, Digidesign's new mid-sized control surface.

D-Control

Pro Tools TDM 6.9 adds support for the following features with D-Control:

Channel Strip Features

- Option to suppress display of parameter values when channel encoders or faders are touched
- Control of PRE phantom power from encoder knob or switch
- Inline Console mode allows control of input levels and monitoring levels from a single channel strip
- Global controls changed to affect all tracks in a session
- Return of controls to default settings

Automation Features

- · Automation Mode controls changed to follow Do To All and Do To Selected modes on D-Control
- Access to Automation Write to Start/End/All commands from Soft Keys
- Access to Automation Write on Stop modes from Auto Write and Soft Keys sections
- Enabling of plug-in automation for all plug-in parameters

Plug-In Features

- Toggling of plug-in active/inactive status directly from channel strips
- Changing plug-in presets directly from channel strips
- · Copying and pasting of plug-in settings directly from channel strips
- Saving of plug-in settings directly from D-Control EQ and Dynamics sections
- Export, storage, and import of session-independent Custom Fader Plug-In maps
- One-step clearing of Custom-Fader Plug-In maps

Transport and Navigation Features

- Option to focus Transport controls on Timeline or Edit selections (from Miscellaneous Controls)
- Latching behavior for Fast Forward switch and Rewind switch
- Nudging of track focus in Focus Channel Strip
- Support for selection of multiple tracks, track ranges, and non-contiguous tracks (following new Pro Tools 6.9 behavior)
- Dedicated switches for Back, Back and Play, Forward, and Forward and Play commands

Custom Fader Features

- Support for up to 48 Custom Groups
- Dual, independent Custom Fader Banks
- Control of all Custom Fader Bank types from Bank Select Matrix and Soft Keys
- Full display of plug-in names or folders
- New Custom Fader Tracks switch allows display of different track types in Custom Faders
- Insertion of new Custom Group channels at any location in a Custom Group
- Option to display hidden tracks in Custom Faders section
- Entering Custom Fader Plug-In mode directly from top level plug-in view

Soft Keys Section Features

- New Select/MIDI Soft Keys
 - · Bank Select switch
 - Memory Location switch
 - · MIDI switch
- New Console Preferences Soft Keys
 - · User switch
 - Meter switch
 - Operation switch
- New Automation Soft Keys
 - AutoMatch switch
 - · Ioin switch
 - · AutoJoin switch
 - Action switch (for Write to Start/End/All/Next commands and Snap Back function)
 - Modes switch (for Auto Write to Start/All/End/Next On Stop modes)
 - Preferences switch (for Match Time and Glide Time)

- Show/Hide Soft Key supports new Show/Hide options by track type
- Soft Key quick exit command

Display and Metering Features

- Gain Reduction Priority meter preference
- Display of full Input, Output, Insert or Send Names in Assign Mode
- Close all Workspace Browsers command
- Flop Mode expanded to allow transfer of controls between any two rows of channel strip encoders

Monitoring Features

- Dedicated Solo mode controls (AFL/PFL and SIP switches)
- Dedicated Solo Latch option controls (Latch, Momentary, and X-OR switches)

ProControl Features

Pro Tools TDM 6.9 adds support for the following features with ProControl:

- Keyboard shortcuts for Back, Back and Play, Forward, and Forward and Play commands
- Keyboard shortcuts for AutoMatch, Snap Back, Join and AutoJoin functions
- Keyboard shortcuts for Auto Write to Start/All/End On Stop modes
- Support for Pro Tools Solo Latch options

Control|24 Features

Pro Tools TDM 6.9 adds support for the following features with Control|24:

- Keyboard shortcuts for Back, Back and Play, Forward, and Forward and Play commands
- Keyboard shortcuts for AutoMatch, Snap Back, Join and AutoJoin functions
- Keyboard shortcuts for Auto Write to Start/All/End On Stop modes
- Support for Pro Tools Solo Latch options

Command|8 Features

Pro Tools TDM 6.9 adds support for the following features with Command 8:

- · Keyboard shortcuts for Back, Back and Play, Forward, and Forward and Play commands
- Keyboard shortcuts for AutoMatch and Snap Back functions
- Support for Pro Tools Solo Latch options

Support for Avid Video on Pro Tools|HD Systems

Pro Tools TDM 6.9 includes new support for Avid video on Pro Tools|HD systems with AVoption|V10 or Avid Mojo with Avid Media Station|PT.

New Features for Avid DNA Video Peripherals (AVoption|V10 and Avid Mojo)

- New Movie track options
 - Addition of Record Enable and Offline buttons to Movie track
 - Additions to Input/Output View for Movie track
- Digitize video to Pro Tools Timeline
 - Hardware requirements and options
 - Configuring the Movie track for digitizing
- Import, playback, and export MXF audio files
 - Importing MXF audio into Pro Tools
 - Editing MXF audio in Pro Tools
 - MXF audio metadata display in DigiBase browsers
 - Exporting Pro Tools tracks as MXF audio
- Support for AAF sequences referencing Sound Designer II audio files
- Import OMF/AAF files with mixed sample rates and/or bit depths
- Optimizations for synchronization, Remote mode, and record allocation
 - Redefine External Time Code Offset command
 - Changes to minimum sync delay

New AVoption V10 Features

- Import and playback of any standard-definition Avid MXF Video file
- Import and playback of IMX MPEG50 video files
- Optical connections between AVoption|V10 and audio interface no longer required

New Avid Mojo Features

- Windows XP TDM support
- Avid Unity support for Avid Mojo on Windows XP
 - Recording to and Streaming Media from Unity
 - Digitizing Video Directly to Unity

New Avid Media Station|PT Features

- Send to Pro Tools Export templates
- · Video mixdown
- MXF audio support
- Import, playback, and export of all MXF video resolutions
- Support for Avid Mojo on Windows XP and Mac OS X, including:
 - Capture and playback of Mojo-supported resolutions
 - Capture audio from 192 I/O audio interface
 - Transcode non-Avid Mojo resolutions to DV25 for import to Pro Tools

chapter 2

What's New In Pro Tools TDM 6.9

System Configuration Updates

Increase in Total Number of Busses to 128

Pro Tools TDM 6.9 provides a total of 128 buses for routing signals internally.



Bus paths are defined in the I/O Setup dialog, and are available in all supported channel formats (mono, stereo, or multichannel).

Increase in Total Number of Auxiliary Tracks to 160

Pro Tools TDM 6.9 provides up to 160 Auxiliary Input tracks (aux inputs), which can be used for effects returns, external inputs, or submixers.

Session and Track Features

Track Selection Enhancements

Pro Tools 6.9 lets you select a range of contiguous tracks in the Mix or Edit window. In addition, the keyboard commands for selecting or deselecting non-contiguous tracks have changed.

Selecting a Range of Tracks

To select a range of tracks:

- 1 Click the name of an unhighlighted track in its track channel strip.
- 2 Shift-click an additional track name.

All tracks that occur between the first track selected and the additional track will also be selected.

Selecting or Deselecting Non-Contiguous Tracks

To select or deselect non-contiguous tracks, do the following:

- Control-click (Windows) or Command-click (Macintosh) track names that are unhighlighted to select them.
 - or –
- Control-click (Windows) or Command-click (Macintosh) track names that are highlighted to deselect them.



(i) In previous versions of Pro Tools, non-contiguous tracks were selected or deselected using Shift-click.

Show/Hide Track List Selection Enhancements

Pro Tools 6.9 provides new keyboard commands for selecting and deselecting a range of track names in the Show/Hide Track List. In addition, the keyboard commands for selecting and deselecting non-contiguous track names in the list have changed.

Show a Range of Tracks:

To show a range of tracks:

- 1 Click the name of an unhighlighted track name in the Show/Hide Track List.
- 2 Shift-click an additional track name.

All track names that occur between the first track name selected and the additional track name will also be selected.



You can also select a range of tracks by moving the cursor to the left of the track names until the Marquee appears, and dragging the Marquee around the track names you want to select.

To show or hide a range of tracks in the Show/Hide List with the Marquee:

- 1 Press and hold Control (Windows) or Command (Macintosh).
- 2 Move the cursor to the left of a track name until the Marquee with a small "+" symbol appears.
 - To show tracks, the Marquee should be to the left of an unhighlighted track name.
 - To hide tracks, the Marquee should be to the left of a highlighted track name.
- 3 Click on the track name and drag up or down (to show or hide the track and the tracks immediately above or below it).

Show or Hide Non-Contiguous Tracks

To show or hide non-contiguous tracks, do the following:

- Control-click (Windows) or Command-click (Macintosh) track names that are unhighlighted to select them.
 - or –
- Control-click (Windows) or Command-click (Macintosh) track names that are highlighted to deselect them.



In previous versions of Pro Tools, non-contiguous track names were selected or deselected using Shift-click.

Regions List Selection Enhancements

Pro Tools 6.9 provides new keyboard commands for selecting and deselecting a range of contiguous regions in the Audio or MIDI Regions List. In addition, the keyboard commands for selecting and deselecting non-contiguous regions have changed.

Selecting a Range of Regions

To select a range of regions in a Regions List:

- 1 Click the name of a region in a Regions List.
- 2 Shift-click an additional region name.

All regions that occur between the first region selected and the additional region will also be selected.



You can also select a range of regions by moving the cursor to the left of the region names until the Marquee appears, and dragging the Marquee around the regions vou want to select.

To select or deselect a range of regions with the Marguee:

- 1 Press and hold Control (Windows) or Command (Macintosh).
- 2 Move the cursor to the left of the region name until the Marquee icon with a small "+" symbol appears.
 - To select regions, the Marquee should be to the left of an unhighlighted region name.
 - To hide regions, the Marquee should be to the left of a highlighted region name.
- **3** Click on the region name and drag up or down (to select or deselect regions immediately above or below the region name).

Selecting or Deselecting Non-Contiguous Regions

To select or deselect non-contiguous regions, do the following:

■ Control-click (Windows) or Command-click (Macintosh) region names that are unhighlighted to select them.

– or –

■ Control-click (Windows) or Command-click (Macintosh) region names that are highlighted to deselect them.



In previous versions of Pro Tools, noncontiguous regions were selected or deselected using Shift-click.

Track View Enhancements

Changing to the Next or Previous Track View

For audio, Auxiliary Input, and MIDI tracks, you can change to the next or previous Track View.



Track View set to Waveform for audio track

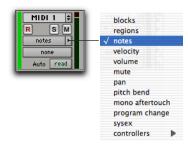


Toggling between pre-defined common Track Views is still supported. See the Pro Tools Reference Guide.

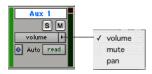
When changing to the next or previous Track View. Track View list ordering is maintained as shown in the Track View Selector.



Audio Track View Selector list



MIDI Track View Selector list



Auxiliary Track View Selector list

A *Track Views at the beginning of the list* (such as Blocks for audio or MIDI tracks) cannot be changed to the previous Track View. Tracks Views at the end of the list (such as a MIDI controllers option) cannot be changed to the next Track View.

To change to the previous or next Track View:

1 Click in the track you want to change. To change views on multiple tracks, Shift-click or drag the Selector to select additional tracks, or select a group.

2 Do one of the following:

- To change to the previous or next Track View on all selected tracks, press Control+Start (Windows) or Control+Command (Macintosh) and the Left or Right Arrow.
- or –
- To change to the previous or next Track View on all tracks, press Control+Alt+Start (Windows) or Control+Option+Command (Macintosh) and the Left or Right Arrow.

I/O Setup Updates

I/O Setup Dialog Interface **Changes**

The I/O Setup dialog has been updated to support new AFL/PFL output choices (see "New Solo Modes" on page 15).

I/O Setup options and path tools in the I/O Setup dialog have been repositioned, and the following controls have been renamed:

- Meter Path Selector is now called Controller Meter Path.
- · Audition is now called Audition Paths.
- Default Output is now called New Track Default Output.



I/O Setup options and path tools

New Track Default Output Supports Bus Paths

The New Track Default Output assignment can now be set to bus paths, as well as output paths.



New Track Default Output pop-up menu (bus selected)

Path Selection Enhancements in I/O Setup

Pro Tools 6.9 lets you select a range of contiguous paths in the I/O Setup dialog. In addition, the keyboard commands for selecting or deselecting non-contiguous paths have changed.

Selecting a Range of Paths

To select a range of paths in the I/O Setup dialog:

- **1** Click the path name.
- 2 Shift-click an additional path name.

All paths that occur between the first path name selected and the additional path name will also be selected.

Selecting or Deselecting Non-Contiguous Paths

To select or deselect non-contiguous paths, do the following:

■ Control-click (Windows) or Command-click (Macintosh) path names that are unhighlighted to select them.

– or –

■ Control-click (Windows) or Command-click (Macintosh) path names that are highlighted to deselect them.



The previous versions of Pro Tools, noncontiguous paths were selected or deselected using Shift-click.

Navigation Features

Back/Forward Commands

Pro Tools provides four Back/Forward commands (sometimes called "rollback") for moving the playback location in the Edit window. The length of the move is defined by the Back/Forward Amount set in the Operation page of the Setups > Preferences window.

You can also move the playback location in multiple increments by repeating the command (See "Repeating Back/Forward Commands" on page 12).



Back/Forward commands also work when controlling a 9-pin device. See the Machine-Control Guide for details.

Back Moves the playback location backwards by the Back/Forward Amount.

Back and Play Moves the current playback location backwards by the Back/Forward Amount and automatically begins playback.

Forward Moves the playback location forwards by the Back/Forward Amount.

Forward and Play Moves the current playback location forward by the Back/Forward Amount and automatically begins playback.

Setting the Back/Forward Amount

The length of the Back/Forward move is determined by the Back/Forward Amount in the Operation page of the Setups > Preferences window.

To configure the Back/Forward Amount:

1 Choose Setups > Preferences and click the Operation tab.

The timebase of the Back/Forward Amount settings follows the main time scale by default, or you can uncheck Follow Main Time and select any of the following timebase formats:

- Bars:Beats
- Min:Sec
- · Time Code
- Feet+Frames
- Samples

- **2** Do one of the following:
 - Select a preset amount in the Back/Forward Amount pop-up menu.
 - or –
 - In the Back/Forward Amount field, enter in a custom amount.

Using Back or Forward Commands

To move the playback location backwards by the **Back/Forward Amount:**

■ Press Control (Windows) or Command (Macintosh), and click Rewind in the Transport window.

To move the playback location forwards by the **Back/Forward Amount:**

■ Press Control (Windows) or Command (Macintosh), and click Fast Forward in the Transport window.

To move the playback location backwards by the Back/Forward Amount and then begin playback:

■ Press Control+Alt (Windows) or Command+Option (Macintosh), and click Rewind in the Transport window

To move the playback location forwards by the Back/Forward Amount and then begin playback:

■ Press Control+Alt (Windows) or Command+Option (Macintosh), and click Fast Forward in the Transport window

Repeating Back/Forward Commands

All the Back/Forward commands can be repeated in order to increase the amount of the total Back or Forward move.

To repeat Back/Forward moves:

- 1 Press and hold Control (Windows) or Command (Macintosh).
- 2 Click Rewind or Fast Forward the number of times you want to repeat moving the playback location backwards or forwards by the Back/Forward Amount.

Extending Selections with Back or Back and Play Commands

The Back or Back and Play commands can be used to extend a selection backwards by the length of the Back/Forward Amount.



Although you cannot extend a selection with the Forward or Forward and Play commands, you can use the following procedures with Forward or Forward and Play to move the start point of a current selection.

To extend a selection with Back or Back and Play commands:

- **1** Configure the Back/Forward Amount. (See"Setting the Back/Forward Amount" on page 11.)
- 2 With the Selector, drag within a track to make a selection.
- **3** Do one of the following:
 - · To extend the selection backwards by the Back/Forward Amount, press Shift+Control (Windows) or Shift+Command (Macintosh) and click Rewind in the Transport window.
 - or -
 - To extend the selection backwards by the Back/Forward Amount and then begin playback, press Shift+Control+Alt (Windows) or Shift+Command+Option (Macintosh) and click Rewind in the Transport window.

Improved Grouped Playlist Synchronization

Creating new playlists with grouped tracks automatically increments the suffixes of the playlist names for each track of the active group. This lets you revert back to an earlier take by switching the playlist takes by group.

Using this method, you can add new tracks to the existing group and the suffixes for their playlist names will be synchronized with the original tracks.

In Pro Tools 6.9, "empty" playlists will be automatically created to keep the playlist takes in sync when switching back to the earliest playlist takes in the group.

To keep your playlist names and performances synchronized (sample workflow):

- **1** Create new tracks and group them together.
- **2** Make sure the group is enabled.
- **3** Create a new playlist (by clicking the Playlist Selector in one of the tracks in the group and choosing New). The default suffix will now be ".01"—signifying take 1.
- 4 Record take 1, then create a new playlist. The playlists on all tracks in the group will be incremented to ".02."
- 5 Create new tracks (for example, for an additional musician or microphones), then add these tracks to the group.
- 6 Increment all the playlists by clicking the Playlist Selector in one of the tracks in the group and choosing New.

All the playlists will now have the same suffix appended to them. (Creating additional playlists in any of the group tracks will increment their playlists to keep them in sync.)

7 If you want to hear the .01 take on the first group of tracks, you can switch any playlist in the group back to playlist .01.

All tracks in the group have playlists numbered with .01 suffixes (even those tracks that were added to the original group after the earlier takes). Empty playlists are automatically created on these newly-added members so that playlist numbers match across all members of the group.

New EQ III DigiRack Plug-In

EQ III is a new DigiRack EQ plug-in that provides the following features:

1 Band, 2-4 Band, and 7 Band Operation Flexible EQ types for maximum CPU and DSP efficiency.



EQ III plug-in (7-band shown)

Interactive Display Editable frequency display for quickly viewing or editing the EO curve.

Double Precision Arithmetic Enhanced 48-bit processing dithered to 24-bit output.

Control Surface Support Designed to fully compliment the EQ sections of supported Digidesign control surfaces.

EQ III is available in TDM, RTAS, and AudioSuite formats as a mono or multi-mono plug-in.

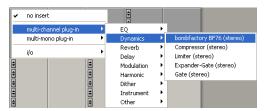


For more information, see the DigiRack Guide.

New Plug-In Features

Plug-In Menu Organization Enhancements

In Pro Tools 6.9, you can customize how plug-in lists (plug-in menus) are organized in the Insert Selector or Plug-In Selector.



Plug-ins organized by Category (using the Insert Selector)



Plug-ins organized by Manufacturer (using the Plug-In Selector)

Use the "Organize Plug-In Menus By" pop-up menu in the Display Preferences page to organize plug-in menus in a Flat List (with plug-ins in alphabetical order), or by Category, Manufacturer, or Category and Manufacturer.



The "Organize Plug-In Menus By" pop-up menu has replaced the "Organize Plug-Ins By Category" option.

"Organize Plug-In Menus By Pop-Up Menu"

Flat List Organizes plug-ins in a single list, in alphabetical order.

Category Organizes plug-ins by process category (such as EQ, Dynamics, and Delay), with individual plug-ins listed in the category submenus. Plug-ins that do not fit into a standard category (such as the DigiRack Signal Generator), or third-party plug-ins that have not had a category designated by their developers, appear in the Other category. Plug-ins can appear in more than one category.

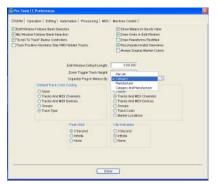
Manufacturer Organizes plug-ins by their manufacturer (such as Digidesign, Eventide, Line 6, and McDSP), with individual plug-ins listed in the manufacturer submenus. Plug-Ins that do not have a Manufacturer defined will appear in the "Other" manufacturer folder.

Most Digidesign-distributed third party plug-ins will be grouped under Digidesign when view by Manufacturer is enabled.

Category and Manufacturer Organizes plug-ins in two levels of menus. The top menus display plug-ins by process category (such as EQ, Dynamics, and Delay), with individual plug-ins listed in the category submenus. The bottom menus display plug-ins by manufacturer (such as Digidesign, Eventide, Line 6, and McDSP), with individual plug-ins listed in the manufacturer submenus.

To select how plug-ins are organized:

- 1 Open or create a session.
- 2 Choose Setups > Preferences, and click the Display tab.



Display page of the Setups > Preferences window

- 3 Click the "Organize Plug-In Menus By" popup menu, and select one of the view options.
- 4 Click Done.

The current "Organize Plug-In Menus By" setting determines how plug-ins will be organized for all sessions.

Control Surface Support

Digidesign control surfaces with multi-color LCDs (such as D-Control) indicate plug-ins as follows:

- Plug-in categories (such as EQ) and plug-in manufacturers (such as Digidesign) are indicated in green text.
- Specific plug-ins located in the plug-in subfolders (such as EQ III in the EQ subfolder) are indicated in yellow (amber) text.

Control surfaces with single-color displays (such as Command 8) do not indicate plug-in view choices. They display contents of a plug-in folder as a single list of plug-ins. (While control

surfaces with single-color displays do not indicate plug-in choices, Pro Tools software continues to display plug-ins according to the "Organize Plug-Ins Menu By" setting.)

New Effects Category

When the "Organize Plug-In Menus By" option is set to Category or Category and Manufacturer, an Effects subfolder appears in the plug-ins menu if you have any Effect plug-ins installed.

The Effects subfolder organizes special effects, multi-effect processors, and other plug-ins. All plug-ins that specify their plug-in category as an "Effects" type will be displayed within the Effects subfolder.



A The Effects subfolder only appears on systems that have Effects plug-ins installed.



Plug-ins can appear in more than one category.

New or Enhanced Soloing Features

New Solo Modes

In previous versions of Pro Tools, the Solo function works by muting other tracks. In Pro Tools 6.9, the Solo button isolates signals for monitoring in three different modes, as follows:

SIP (Solo In Place) This is how the Solo button worked in previous versions of Pro Tools. The Solo button mutes other tracks. When this mode is enabled, tracks can be solo safed (see the Pro Tools Reference Guide for details on using solo safe).

AFL (After Fader Listen) The Solo button routes the track's post-fader/post-pan signal to the AFL/PFL Path output. The AFL/PFL Path is configured in the Output page of the I/O Setup dialog (see "AFL/PFL Path Selector" on page 17).

With AFL, the level you hear is dependent on the fader level for that track. Additionally, there is a separate master level setting for AFL that affects the output of any or all tracks you solo in AFL mode (see "Setting AFL or PFL Path Levels" on page 17). This level setting is independent of the PFL level setting.

A AFL and PFL Solo mode require the Surround Mixer plug-in (see the Pro Tools Reference Guide for installation information).

PFL (Pre-Fader Listen) The Solo button routes the track's pre-fader/pre-pan signal to the AFL/PFL Path output. The AFL/PFL Path is configured in the Output page of the I/O Setup dialog (see "AFL/PFL Path Selector" on page 17).

With PFL, the fader level and pan are ignored, and the level you hear is dependent on the signal's recorded level. Additionally, there is a separate master level setting for PFL that affects the output of any or all tracks you solo in PFL mode (see "Setting AFL or PFL Path Levels" on page 17). This level setting is independent of the AFL level setting.

A AFL and PFL Solo mode require the Surround Mixer plug-in (see the Pro Tools Reference Guide for installation information).

▲ If Mutes Frees Assigned Voice is enabled, muted tracks will not be audible in PFL mode.

To select a Solo mode:

1 Choose Operations > Solo Mode, and select SIP, AFL, or PFL.



The Solo mode for all soloed tracks can be changed "on-the-fly" from any Solo mode to either SIP or AFL. Previously soloed tracks will switch their solo behavior to the new mode.

Switching the Solo mode for all soloed tracks "on-the-fly" to PFL will clear all previously soloed tracks before entering PFL mode. This will prevent potentially large boosts in level.

DSP Usage when Using AFL or PFL Mode

AFL and PFL are accomplished by Pro Tools creating a "behind the scenes" mixer to route the signal to the chosen AFL/PFL Path. Depending on the size of your main mixer, Pro Tools will devote a substantial portion of its available DSP when using AFL/PFL mode.

Un-declaring the AFL/PFL Path will free up all DSP resources previously used for AFL/PFL mode.

Using AFL/PFL on Pro Tools Systems with a D-Control or D-Command

AFL/PFL is optimized for Pro Tools systems using a D-Command or D-Control control surface, where the XMON automatically switches its monitor source between the main output and the AFL/PFL output from Pro Tools.



For more information on using XMON and AFL/PFL, see your control surface guide.

Using AFL/PFL on Pro Tools Systems without D-Control or D-Command

If you are not using a D-Control or D-Command control surface, your regular Pro Tools output path is not necessarily muted when you send a signal to the AFL/PFL Path. If you need the main signal to automatically mute when an AFL/PFL signal is invoked, you need to do the following:

- 1 Configure the output path for AFL or PFL soloed tracks ("AFL/PFL Path Selector" on page 17).
- **2** Select the main output path that will mute when you solo a track in AFL or PFL mode (see "AFL/PFL Mutes (Output Path) Selector" on page 18).
- **3** Set up your hardware to monitor both the main and AFL/PFL paths simultaneously.

When AFL or PFL is selected as a Solo mode and a track is soloed, the main output path will mute and the AFL/PFL signal will appear at the AFL/PFL Path for monitoring.

I/O Setup Options for AFL/PFL

I/O Setup provides two selectors for configuring AFL/PFL solos: AFL/PFL Path Selector and AFL/PFL Mutes (Output Path) Selector.

A separate master AFL/PFL Path level for all AFL solos and all PFL solos is set in the Mix or Edit window.

The current AFL/PFL settings (including the path level) are saved with the Pro Tools session file, and are also the default settings for new sessions.

AFL/PFL Path Selector

Tracks soloed in AFL or PFL Solo mode are routed to the current AFL/PFL Path, as set with the AFL/PFL Path Selector.

To select the AFL/PFL Path output:

- **1** Choose Setups > I/O Setup.
- 2 Click the Output tab to display the Output page.



A If you do not see the AFL/PFL Path Selector, check that you have installed the Surround Mixer.

3 Select a path from the AFL/PFL Path Selector.



A Selecting None as the AFL/PFL Path disables AFL and PFL Solo modes. When None is selected, AFL and PFL cannot be used.

4 Click OK to close the I/O Setup dialog.

Setting AFL or PFL Path Levels

You can set a separate master AFL/PFL Path level for all AFL solos and all PFL solos.



Tracks do not need to be soloed to have the master AFL/PFL Path level adjusted.

To set the AFL/PFL Path level for AFL or PFL solos:

- 1 Choose Operations > Solo Mode, and select a Solo mode, as follows:
 - If you want to set the level for AFL solos, select AFL.
 - or –
 - If you want to set the level for PFL solos, select PFL.
- **2** In the Mix or Edit window, Control-click (Windows) or Command-click (Macintosh) a Solo button on any track.

- 3 Adjust the AFL/PFL Path fader.
- **4** Click on the new fader position (or press Esc) to close the fader display.
- The maximum fader gain for the AFL/PFL Path is either +6 dB or +12 dB, based on the session's Fader Gain setting (which is set when you create a session).
- To set the AFL/PFL Path level to 0 dB, Control-Start-click (Windows) or Control-Command-click (Macintosh) any Solo button.

AFL/PFL Mutes (Output Path) Selector (Systems without a D-Control or D-Command Control Surface)

If you are not using a D-Control or D-Command control surface, your regular Pro Tools output path can be muted when you send a signal to the AFL/PFL Path. The muted path is set with the AFL/PFL Mutes (Output Path) Selector.

To set which output path is muted when tracks are solved in AFL or PFL Solo mode:

- 1 Choose Setups > I/O Setup.
- **2** Click the Output tab to display the Output page.
- **3** Select a path from the AFL/PFL Mutes (Output Path) Selector.
- 4 Click OK to close the I/O Setup dialog.

Solo Latch Options

In the Operation page of the Setups > Preferences window, the Latch Solo Buttons option has been replaced with the Solo Latch section, as follows:

Latch When this option is selected, pressing subsequent Solo buttons does not cancel previously pressed solos.

X–OR (Cancels Previous Solos) When this option is selected, pressing subsequent Solo buttons cancels previous solos.



To override X–OR mode and solo more than one track at a time, press and hold the Solo button on the first track. Subsequently pressed Solo buttons will latch.

Momentary (Pro Tools TDM Only with Supported Control Surfaces Only) When this option is selected, the Solo button is not sticky. When the Solo button is held down, the track is soloed. Additional tracks can be soloed by touching their Solo buttons (as long as at least one Solo button is held down). When no Solo button is held down, all soloed tracks will unsolo.

To select a Solo Latch option:

1 Choose Setups > Preferences and click the Operation page.



Operation page of the Setups > Preferences window

2 Select a Solo Latch option.

Using Momentary Solo Latch

(Pro Tools TDM Systems with Supported **Control Surfaces Only)**

In Momentary Solo Latch mode, you can temporarily latch solos (adding them to the mix of soloed tracks), then quickly unlatch them without having to deselect each soloed track.

To temporarily latch solos:

- 1 Choose Setups > Preferences and click the Operation page.
- 2 In the Solo Latch section, select Momentary, and click Done.
- **3** Press and hold the Solo button on the first track that will be soloed.
- 4 While still holding the first Solo button, press additional Solo buttons, Solo buttons will remain soloed as long as one Solo button is held.



As long as at least one Solo button is held down, all the solos will remain latched.

New or Enhanced Automation Features

Automation Preferences

"After Write Pass, Switch To" **Preference**

In the Automation Preferences page, the "After Write Pass, Switch To" preference has replaced the "Write Switches To Touch After Pass" preference.



Automation page of the Setups > Preferences window

"After Write Pass, Switch To" selects the Automation mode that Pro Tools tracks automatically switch to after an automation pass in Write mode. You can choose to switch to Touch or Latch mode, or stay in Write mode by selecting No Change.

To configure "After Write Pass, Switch To":

- 1 Choose Setups > Preferences and click the Automation tab.
- 2 Select an "After Write Pass, Switch To" option (Touch, Latch, or No Change).
- Click Done.

"After Write Pass, Switch To" Support in Trim Modes

"The After Write Pass, Switch To" setting also affects Write/Trim mode. After a Write/Trim automation pass, the Write/Trim tracks automatically switch to Latch/Trim, Touch/Trim, or remain in Write/Trim.



🕅 In previous versions of Pro Tools, tracks did not switch to the Trim version of Touch when "Write Switches To Touch After Pass" was enabled.

"Mutes Record-Armed Tracks While Stopped" Option

In the Operation page of the Setups > Preferences windows, the "Stop" Mutes Audio Inputs (When in Auto Input)" option is now called "Mute Record-Armed Tracks While Stopped."

AutoMatch for Latch and Write **Automation Modes**

(Supported Digidesign Control Surfaces Only)

In Pro Tools 6.9, an AutoMatch Time can be applied to Latch or Write automation modes (supported Digidesign Control Surfaces only). Refer to Chapter 3, "What's New In Pro Tools 6.9 Control Surfaces."



In previous versions of Pro Tools, Auto-Match could only be applied to Touch mode.

AutoMatch Time is the amount of time it takes for a fader to return (by ramping up to down) to the level of automation still on the track, as the automation pass ends.

The AutoMatch Time value is set in the Automation Preferences page.

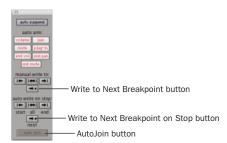
The triangular AutoMatch indicators at the bottom left of each channel strip in the Mix window light to indicate the direction the fader will automatically move.



See the Pro Tools Reference Guide for more details on AutoMatch.

Automation Enable Window **Updates**

The Automation Enable window has been updated with the following buttons:



New buttons in the Automation Enable window

AutoJoin Button (Latch Mode Only with Supported Digidesign Control Surfaces) Lets you automatically resume recording in Latch mode. AutoJoin can be enabled from a supported Ethernet-based control surface, or from Pro Tools if a supported control surface has been declared. See "AutoJoin with Latch Mode" on page 21.

Write to Next Breakpoint Buttons Let you write current automation values from the insertion point to the next written breakpoint, while performing an automation pass. See "Writing Automation to the Next Breakpoint" on page 27.

Suspend Automation Updates

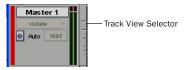
Suspending Automation On-The-Fly

Pro Tools 6.9 lets you suspend or unsuspend automation on-the-fly (without having to stop the transport), as follows:

- Any automation mode can be switched from Off to another automation mode during playback or record.
- Playback of automation can be suspended or unsuspended on-the-fly.

Track View Selector Enhancement when Suspending Automation

In Pro Tools 6.9, the Track View Selector turns a darker grey when Automation is suspended.



Track View Selector with automation suspended



See the Pro Tools Reference Guide for details on suspending automation.

Automation Fader Improvements

Stationary Faders in All Trim Modes

Read/Trim, Touch/Trim, and Latch/Trim have been updated with trim features that were previously only available with Write/Trim.

In Pro Tools 6.9, all Trim modes behave the same when they are first enabled (before the automation pass). The volume and send level faders are disengaged from displaying and following existing automation data, so you do not have to chase them during playback or recording. Faders are automatically positioned at 0 dB, where no trimming occurs (they start with a delta value of zero).

If you invoke an AutoMatch command once you have moved the fader in Latch/Trim or Write/Trim mode, the fade will glide out, but the fader position represents the delta being applied to the underlying automation already on the track. See the *Pro Tools Reference Guide* for more information on Trim modes and AutoMatch.

AutoJoin with Latch Mode

(Latch Mode with Supported Digidesign Control Surfaces Only)

Pro Tools provides two different methods to resume writing automation on controls that were active at the point where the transport stopped:

AutoJoin Lets you automatically resume writing automation in Latch mode. AutoJoin can be enabled from a supported Ethernet-based control surface, or from Pro Tools if a supported control surface has been declared.

Join Lets you manually resume writing automation in Latch mode. Join is available only with Digidesign-supported control surfaces.

To enable AutoJoin from a control surface or manually resume writing with Join, see "What's New In Pro Tools 6.9 Control Surfaces" on page 33.

To enable AutoJoin from Pro Tools:

- 1 Open the Automation Enable window.
- **2** Click AutoJoin in the Automation Enable window.



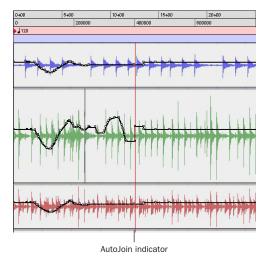
AutoJoin button in the Automation Enable window



See "What's New In Pro Tools 6.9 Control Surfaces" on page 33 for details on using Join and AutoJoin with a control surface.

AutoJoin Indicator

After a Latch automation pass with AutoJoin enabled, the AutoJoin indicator appears in the Pro Tools Edit window.



AutoJoin indicator in the Edit window (Middle track active at time of stop)

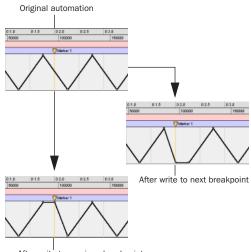
The AutoJoin indicator is a red line that signifies the point where the last automation pass was stopped, and the point where the "join" will automatically occur on all tracks that were writing during that previous pass. When automation writing is resumed from this point, the line disappears.



A To use Join or AutoJoin to resume writing on controls that were writing when the transport stopped, restart the transport before the AutoJoin indicator.

Constrain New Breakpoints to Next or Previous Automation Value

In Pro Tools 6.9, new automation breakpoints can be constrained and written to the same value as the next or previous breakpoint.



After write to previous breakpoint

Constraining and writing new breakpoints (at Marker 1)

To write a new breakpoint to the next automation value:

■ Press and hold Control (Windows) or Command (Macintosh) while writing a breakpoint (by clicking with the Grabber in a track's Automation Playlist).

To write a new breakpoint to the previous automation value:

 Press and hold Control+Alt (Windows) or Command+Option (Macintosh) while writing a breakpoint (by clicking with the Grabber in a track's Automation Playlist).

Glide Automation

The Glide Automation commands let you manually create an automation transition (or glide) from an existing automation value to a new one, over a selected area.



When gliding multiple parameters at the same time, such as with the Surround Panner or plug-ins, use the Glide Automation > To All Current Parameters option.

To apply a Glide Automation to the current automation parameter type:

- 1 In the Automation Enable window, make sure the automation type is write-enabled.
- 2 Click the Track View Selector to choose the automation type you want to automate.
- **3** Drag with the Selector in the track to select the area you want to write the glide to.
- **4** Change the automation parameter to the value desired at the end of the selection. For example, to glide automation volume to -Infinity, move the Volume Fader to -Infinity.
- **5** Choose Edit > Glide Automation > To Current Parameter.
- You can also press Alt+ Forward Slash ("/") (Windows) or Option+Forward Slash ("/") (Macintosh).

To do a Glide Automation to all current enabled parameters:

- 1 In the Automation Enable window, make sure the automation types are write-enabled.
- 2 In each track you want to automate, click the Track View Selector and select from the pop-up menu the automation type you want to automate.

- **3** With the Selector, click and drag horizontally to include all the tracks you want to automate in a selection (drag vertically to define the time range).
- 4 In each track you want to automate, change the automation parameter to the value desired at the end of the selection.
- 5 Choose Edit > Glide Automation > To All Current Parameters.
- You can also press Alt+ Shift+Forward Slash ("/") (Windows) or Option+Shift+Forward Slash ("/") (Macintosh).

Glide Automation Considerations

When an Glide Automation is applied to automation data, it behaves as follows:

- When a selection is made, the automation value at the start of the selection is the start point of the Glide Automation and the end of the selection is the end point of the Glide Automation. The Glide Automation that is created between the two is based on the length of the selection and the end value that is selected.
- If a selection is made and automation data exists before the start of the selection, automation breakpoints are written at the start and end points of the Glide Automation.
- If automation breakpoints follow the selection, they are not changed, but the value selected for the end of the selection is written from the end point up until the next breakpoint.
- If no automation breakpoints follow the selection, the value selected for the end of the selection is written to the end of the track.

• If no selection is made, a breakpoint is written to the current location, and the value selected for the Glide Automation is written to the next breakpoint.

Automation Write on Stop Modes Enhancements

In Pro Tools 6.9, when Write to Start, End, or All On Stop mode is enabled, the chosen action will be performed automatically after a valid automation pass, and the Write On Stop mode will then be disabled.

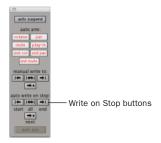
Write on Stop modes can also be configured to remain enabled after a valid automation pass.



🏋 In previous versions of Pro Tools, Write On Stop always remained enabled after a valid automation pass.

To configure Write on Stop modes to disable after an automation pass

- **1** Open the Automation Enable window.
- 2 Click to enable one of the Write On Stop modes (Start, End, or All).



Write on Stop buttons in the Automation Enable window

The enabled Write on Stop arrow will appear in blue.

To configure Write on Stop modes to remain enabled after an automation pass:

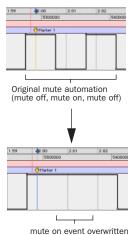
- **1** Open the Automation Enable window.
- 2 Press Alt (Windows) or Option (Macintosh) and click one of the Write On Stop modes (Start, End, or All) to enable the Write On Stop mode.

The enabled Write on Stop arrow will appear in red.

Mute Automation Overwrite/Extend Command

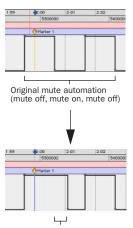
The Mute Overwrite/Extend command lets you overwrite or extend an existing mute event in real-time, without changing the current mute state.

A mute event can be overwritten when the automation pass begins before the first mute event and ends after the second event. In this case, the current on/off state of the mute is maintained.



Overwriting a mute automation event

A mute event can be extended when the automation pass begins before an on or off event and stops before the end of the second event.



mute off event extended (up to automation pass end)

Extending a mute automation event

Mute Overwrite/Extend is supported in Touch and Latch mode, as follows:

Touch Mode Writes the current state as long as the mute button is held.

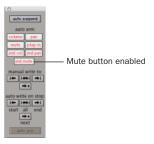
Latch Mode Writes the current state until you stop or AutoMatch out (with supported Digidesign control surfaces only).



Mute Overwrite/Extend is supported by Write To Start/End/All commands. For more information on Write to Start/End/All commands, see the Pro Tools Reference Guide.

To overwrite a mute state on one or more tracks:

- 1 Choose Windows > Automation Enable.
- 2 Make sure mute is write-enabled.



Mute button in the Automation Enable window

3 In the Mix or Edit window, click the Automation Mode Selector of the track you want to overwrite the mute state, and set the Automation mode to Touch or Latch mode.



To overwrite mute states on multiple tracks, set all tracks to the same Automation mode.

- **4** In each track you want to automate, click the Track View Selector and select mute.
- **5** Place the cursor before the start of the mute event you want to overwrite.

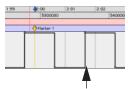


Example: Place cursor here, before start of mute event

Placing the cursor before the start of a mute event

6 Begin playback.

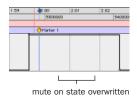
- **7** Press Control (Windows) or Command (Macintosh) and the track Mute button before the start of the mute event you want to overwrite.
 - To overwrite mute states on multiple tracks, press Alt+Control (Windows) or Option+Command (Macintosh) and the Mute button on one of the tracks to be automated.
- **8** After the end of the second mute event, release the key and the Mute button.
 - With Touch mode, you have to hold the Mute button for the duration of the write.



Example: Stop automation pass here, after end of mute event

Stopping automation after the end of a mute event

9 When you have finished the automation pass, click Stop.



Example of mute state overwritten

To extend a mute state on a track:

- 1 Choose Windows > Automation Enable.
- 2 Make sure mute is write-enabled.

- **3** In the Mix or Edit window, click the Automation Mode Selector of the track you want to automate, and select Touch or Latch mode.
 - To extend mute states on multiple tracks, set all the tracks to the same Automation mode.
- **4** In each track you want to automate, click the Track View Selector and select mute.
- **5** Place the cursor before the start of the mute event you want to extend.



Example: Place cursor here, before start of mute event

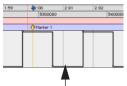
Placing the cursor before the start of a mute event

- 6 Begin playback.
- **7** Press Control (Windows) or Command (Macintosh) and the track Mute button before the start of the mute event you want to extend.
 - To extend mute states on multiple tracks, press Alt+Control (Windows) or Option+Command (Macintosh) and the Mute button on the track.

8 Before the end of the second mute event, release the key and the Mute button.



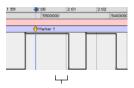
If you extend past the subsequent on or off event, the entire event will be changed.



Example: Stop automation pass here, before end of mute event

Stopping automation before the end of a mute event

9 When you have finished the automation pass, click Stop.



mute off state extended (up to automation pass end)

Example of mute state extended

Writing Automation to the Next Breakpoint

While performing an automation pass, Pro Tools lets you write current automation values from the current insertion point to the next (similar) automation breakpoint.

Like the Write to Start, End, and All commands, the standard Write to Next Breakpoint command does not operate when the Pro Tools transport is stopped. It only affects automation for those parameters that are currently write-enabled and currently writing automation data.

Optionally, Write to Next Breakpoint can be configured to be applied automatically after a valid automation pass has been performed. See "Write to Next Breakpoint On Stop" on page 28

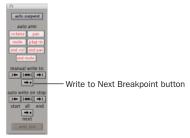


Write to Next Breakpoint has the same requirements as Write to Start, End, and All commands. Refer to the Pro Tools Reference Guide for more information.

Write to Next Breakpoint remains enabled after a valid automation pass. Unlike Automation Write to Start, End, and All, it cannot be configured to disable after an automation pass.

To write current automation values to the next breakpoint:

- **1** In the Automation Enable window, make sure that the automation type is write-enabled.
- **2** Click in a track at an insertion point.
- 3 Click Play to begin playback.
- **4** Make sure you are actively writing on the appropriate track if you are in Latch or Touch mode.
- **5** When you are satisfied with the controller data you are writing, and you want to apply it, click Write to Next in the Automation Enable window.



Write to Next Breakpoint button in the Automation Enable window

The current values of all controls being written at that point are written up to the next breakpoint, and the transport will automatically stop.

Trim Mode for Write To Next Breakpoint

Using Trim mode, it is also possible to write trim delta values for track volume and send levels to the next written breakpoint.

To write current trim delta values to the next breakpoint:

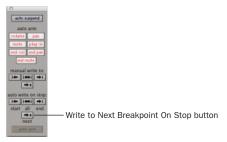
- **1** In the Automation Enable window, make sure that the automation type (track volume or send level) is write-enabled.
- **2** In the Mix or Edit window, click the Automation Mode Selector and select Trim. The track volume and send level faders turn yellow.
- **3** Do one of the following:
 - Click in a track at an insertion point.
 - or -
 - Drag with the Selector to select a portion of the track.
- 4 Click Play to begin playback.
- **5** When you are satisfied with the controller data you are writing, and you want to apply it, click the Write to Next Breakpoint button in the Automation Enable window.

The relative changes to the track volume and send levels at that point are written to the corresponding area of the track/selection.

Write to Next Breakpoint On Stop

The Automation Enable window provides an option for automatic Write to Next Breakpoint on Stop.

Write to Next Breakpoint on Stop remains enabled after a valid automation pass. Unlike Auto Write on Stop Modes (Write to Start, End, and All On Stop), it cannot be configured to disable after an automation pass.



Write to Next Breakpoint on Stop button in the Automation Enable window

To configure Write to Next Breakpoint on Stop:

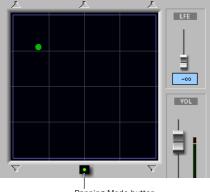
- **1** Open the Automation Enable window.
- **2** Click to enable Write to Next Breakpoint on Stop.

When this option is enabled, automation writing will be performed automatically after a valid automation pass has been performed.

Surround Enhancements

Combined Panning Mode Button

In the Surround Panner, the three Panning Mode buttons (X/Y Mode, Divergence Editing, and 3-Knob Mode) have been replaced with a single Panning Mode button.



Panning Mode button

Panning Mode button (X/Y mode shown)

The Panning Mode button cycles through all the Panning Modes (including the new Auto-Glide mode).

To enable a Panning Mode:

1 Click the Panning Mode button in the Surround Panner until the desired mode is displayed.

AutoGlide Mode

AutoGlide mode lets you quickly write Surround Panner automation by clicking new locations in the Surround Panner window, instead of manually moving the Surround Panner controls.



▲ When writing automation in AutoGlide mode, the Pan Location cursor cannot be dragged from its location.

The time it takes to glide from point to point (from the Pan Location cursor to the new destination) is called the AutoGlide Time. This time is set in the Automation Preferences page and has a range of 1 mSec to 10000 mSec (10 seconds).

To set the AutoGlide Time

- 1 Choose Setups > Preferences and click the Automation tab.
- 2 Set the AutoGlide Time.

To do an AutoGlide automation pass:

1 Click the Panning Mode button until the AutoGlide mode icon is displayed.

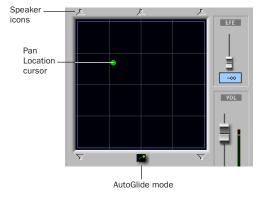


Panner Mode button set to AutoGlide mode

The Panning Mode button displays a slanted dotted line that ends with a filled in dot (representing a cursor) at its top right corner.

- 2 In the Mix or Edit window, click the Automation Mode Selector and select an Automation mode for the track you want to automate.
- **3** Press Play to begin playback.

- 4 Set a new destination for the cursor by doing one of the following:
 - Click a speaker icon to glide to a speaker location.
 - or –
 - Click in the pan window to glide to a specific location in the X/Y Grid.



Panning Mode button (AutoGlide mode shown)

The Pan Location cursor will begin to move towards the new destination at the time it takes to travel the AutoGlide Time. When the new destination point is reached, a new breakpoint will be written at the new location.

- **5** Repeat the previous step if you want to write additional panning moves.
- **6** Stop the transport when finished.

Changes to Avid Compatibility

MXF Audio Import, Playback, and Export

In Pro Tools 6.9, Pro Tools supports import, playback, and export of MXF audio.



See "Importing, Editing, and Exporting MXF Audio Files" on page 71 for more details.

Publishing OMFI/MXF in Audio Export and Bounce to Disk Dialogs

In the following dialogs, the Publish as OMFI option has been removed:

- Export to OMF/AAF dialog
- Export Selected dialog
- Bounce to Disk dialog

Checking "Enforce Avid Compatibility automatically exports all files as either OMFI or MXF.



For more information, see Chapter 4, "Support for Avid Video on Pro Tools|HD Systems with Pro Tools 6.9."

New Localization Support

Full Korean and Simplified Chinese Localization

Pro Tools software and documentation are now available in Korean and Simplified Chinese, as well as Japanese.

Multilingual Application Support for Pro Tools TDM Systems

(Localized OS on Mac OS X Only)

An English and localized version of Pro Tools (such as Pro Tools Korean, simplified Chinese, or Japanese) can now be opened on a Digidesign-qualified Macintosh that can run English and the localized language versions of Mac OS X.



A Only one language version of Pro Tools can be open at a time.

To change to a different language version of Pro Tools:

- **1** Close Pro Tools if it is currently open.
- 2 Launch Apple System Preferences.
- **3** Double-click International (the "flag" icon).
- 4 Click the Language tab if the Language page is not the current page.
- 5 In the Languages column, click the language you want to change to, and drag the language to the top of the list.
- **6** Close the International window.
- **7** Do one of the following:
 - If you are changing from a localized language to English, launch Pro Tools.
 - or -
 - If you are changing from a localized language to another localized language (or from English to a localized language), log out and log in from the Apple menu, then launch Pro Tools.

A If you want your computer to boot up with the previous language, after working on a different language version, follow the above steps and change the International preference back to the previous language.

Set Servo Lock Bit at Play (Tamura Support) Preference

The Machine Control Preferences page has a new option field, Set Servo Lock Bit at Play (Tamura Support).

Enable this option when using a Tamura synchronizer to control Pro Tools in Remote mode to minimize lock-up times during recording.

chapter 3

What's New In Pro Tools 6.9 Control Surfaces

Support for D-Command

Pro Tools 6.9 provides support for D-Command, Digidesign's new mid-sized control surface.

D-Command is a tactile worksurface for Pro Tools|HD systems that provides controls for almost every Pro Tools recording, editing and mixing task, and a versatile monitoring system based on the XMON interface.



For more information, refer to the *D-Command Guide*.

Control Features

- Touch-sensitive, motorized 100mm faders
- Touch-sensitive, multi-purpose rotary controls
- Dedicated controls for assignment and activation of inputs, outputs, inserts and sends
- Flexible display of pan, insert, send, plug-in and mic pre controls
- Dedicated EQ and dynamics plug-in control sections
- Dedicated controls for all channel strip functions including recording and input monitoring modes, mute, solo, and channel select
- Dedicated controls for automation mode, enable and safe status

- Custom Faders Mode for flexible channel and parameter mapping
- Full transport and navigation controls, including location commands and scrub/shuttle capability

Monitoring Features

- 6-channel control room monitoring system supports mono through 5.1 surround monitoring, with up to 5 possible input sources and 3 selectable output paths.
- 2-channel headphone cue system with 4 separate outputs and selectable talkback feed.
- Built-in talkback microphone and external talkback mic Input.
- Standalone mode for monitoring without Pro Tools.
- · External source metering.

D-Control New Features and Enhancements

Pro Tools 6.9 includes many new features and enhancements for D-Control, in the following areas:

- Channel Strip Controls
- Automation
- Plug-In Controls
- Transport and Navigation
- Custom Fader Modes
- Soft Keys
- Display and Metering
- Monitoring

D-Control Channel Strip Features

Suppressing Value Display When Touching a Fader or Encoder

When you touch a channel fader or rotary encoder on D-Control, the corresponding display temporarily shows the value of the parameter you are adjusting.

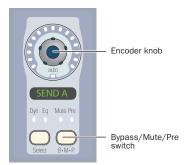
In Pro Tools 6.9, you can suppress this temporary value display with the Touch Value Operation preference.

To toggle value display on and off:

- **1** In the Soft Keys section, press the Operation switch repeatedly to display the page that includes Touch Value ("TchVal").
- **2** Press the switch that corresponds to "TchVal" to toggle value display On and Off.

Controlling Phantom Power in Mic Pre Mode

In Pro Tools 6.9, you can control mic pre phantom power using either the top rotary encoder knob or the top B/M/P switch on a channel.



D-Control channel strip rotary encoder

To toggle phantom power on or off:

- **1** Press the Mic Pre switch in the Channel Strip Mode controls section. The Encoder displays on each channel show the controls for the corresponding Mic Pre channel.
- **2** Do one of the following:
 - Turn the top rotary encoder knob.
 - Press the top encoder B/M/P switch.

The B/M/P switch lights to indicate that phantom power is on.

Send Pre/Post Indication

In Pro Tools 6.9, when Send Assignments are shown in the D-Control channel strip encoder displays and you press the Switch Info switch, the display shows "PrePst" to indicate the function of the B/M/P switch, which is to toggle the Send between pre- and post-fader operation.



In previous versions of Pro Tools, the name of this function appeared as "Pre."

Inline Console Mode

Many traditional consoles provide the ability to control an input channel and its corresponding monitor channel from a single channel strip.

In Pro Tools 6.9, you can simulate this inline console behavior with *Inline mode*, which lets you control an Auxiliary Input track and an Audio track from a single channel strip on D-Control.

An input signal (for example, from a Digidesign PRE) is brought into an Auxiliary Input track, and routed to an Audio track for recording and monitoring. Inline mode on D-Control is then used to control each of these elements from a single channel strip: the PRE and Auxiliary Input level controls are controlled with the channel strip encoders, and the record track levels are controlled with the channel strip fader.

To control an Auxiliary Input track and Audio track from a single D-Control channel strip:

- **1** Assign the output of a Digidesign PRE (optional) or other audio source to an Auxiliary Input track.
- **2** Assign the output of the Auxiliary Input track to an Audio track.
- **3** On D-Control, press the Input switch in the Channel Strip Mode controls for the Audio channel.
- **4** On the Audio channel, press the encoder Select switch on the lowest row of encoders and turn the encoder knob to select the Auxiliary Input track.
- **5** Press Select to confirm the choice.

The controls for the PRE and the Auxiliary Input appear on the Audio channel's rotary encoders as follows, from top to bottom:

- Encoder 1 Knob/Switch: PRE Phantom Power
- Encoder 2 Knob/Switch: PRE Polarity
- Encoder 3 Knob/Switch: PRE Impedance/Pad
- Encoder 4 Knob/Switch: PRE Source/Insert
- Encoder 5 Knob/Switch: PRE Gain/HPF
- Encoder 6 Knob/Switch: Aux Gain/Aux Mute
- **6** (Optional) Hide the Auxiliary Input channels using the Show/Hide Soft Keys.
- **7** Adjust the PRE gain using Encoder 5.
- **8** Fine tune the input gain by adjusting the Auxiliary Input level using Encoder 6.
- **9** Press the Sends switch in the Channel Strip Mode controls and configure any cue mixes or effects sends for the channel.
- **10** Adjust the monitoring level with the Audio channel fader.

To view the hidden Auxiliary Input channel while in Inline mode:

■ Press Control (Windows) or Command (Macintosh) and press the encoder Select switch on Encoder 6 of the Audio channel.

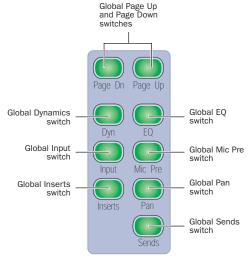
The Auxiliary Input channel is focused in the Focus Channel strip.

Global Controls Affect Off-Bank Tracks

In Pro Tools 6.9, global controls on D-Control affect all tracks in a session, not just the ones currently displayed on the control surface. The controls affected by this change include the following:

Global Channel Strip Mode Controls

- · Global Page Up and Page Down switches
- Global Dynamics and EQ switches
- Global Input switch
- Global Mic Pre switch
- Global Inserts switch
- Global Pan switch
- Global Sends switch



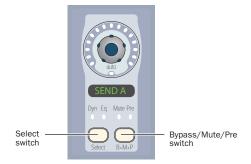
D-Control Global Channel Strip Mode controls

Channel Strip Mode Controls in Do To All Mode

- Dynamics and EQ switches
- · Input switch
- Mic Pre switch
- · Inserts switch
- · Pan switch
- · Sends switch

Channel Encoder Controls

- Encoder Select switch (to view all plug-ins or sends)
- Encoder B/M/P switch (to bypass all plug-ins or mute all sends)



D-Control channel strip rotary encoder

Returning Controls to Their Default Settings

In Pro Tools 6.9, you can return controls such as channel volume, channel pan, send volume, send pan, and PRE gain to their default settings from D-Control in two ways: using the Alt (Windows) or Option (Macintosh) switch on any Fader Module unit, or the Set to Default switch on the Main Unit.

To return a control to its default setting, do one of the following:

■ Hold Alt (Windows) or Option (Macintosh) and press the control's switch or touch its fader or encoder.

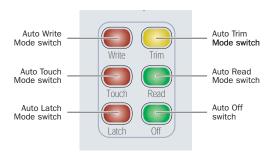
– or –

■ Hold the Set to Default switch and press the control's switch or touch its fader or encoder.

D-Control Automation Features

Automation Mode Controls

In Pro Tools 6.9, to change the automation mode of multiple channels from D-Control, the Do To Selected or Do To All functions must be used with the Automation Mode controls in the Channel Strip Master section.



D-Control Automation Mode controls

To set the automation mode on multiple channels:

- 1 Press the Do To Selected switch.
- 2 Press the Select switches on the channels whose automation you want to set.
- 3 Press an Automation Mode switch (Write, Touch, Latch, Trim, Read, or Off).
- **4** Press the flashing Do To Selected switch.

To set the automation mode on all channels:

- 1 Press the Do To All switch.
- 2 Press an Automation Mode switch (Write, Touch, Latch, Trim, Read, or Off).
- **3** Press the flashing Do To All switch.

Automation Write To Start/End/All/Next Commands

In Pro Tools 6.9, the Write To Start, End. All, or Next commands can be invoked from the Soft Keys section of D-Control.

To use Automation Write To Start/End/All/Next:

- 1 Press the Action switch in the Soft Keys Automation section.
- **2** Click in a track to set an insertion point.

- or -

Drag with the Selector to select a portion of the track.

- 3 Start playback.
- 4 When you reach a point in the track that contains the automation values you want to apply, press the Soft Key corresponding to Start, End, All or Next.

The current values of all write-enabled automation are written to the corresponding area of the track or selection.

Automation Write On Stop Modes

In Pro Tools 6.9, when any of the Write On Stop modes (Write to Start, End, All, or Next On Stop) is enabled, the chosen action is performed automatically after a valid automation pass, and the Write On Stop mode is then disabled.

Write On Stop modes can also be configured to remain enabled after a valid automation pass.

On D-Control, Write on Stop modes can be configured from the Auto Write section and from the Soft Keys section.

To configure Automation Write On Stop modes to disable after an automation pass:

1 Hold Start (Windows) or Control (Macintosh) and press the Start, End, or All switch in the Auto Write section. The switch flashes to indicate that Write On Stop is enabled.

- or -

Press the Modes switch in the Soft Keys Automation section, and press the Soft Key corresponding to Start, End, All or Next. The switch flashes to indicate that Write On Stop is enabled.

2 Click in a track to set an insertion point.

- or -

Drag with the Selector to select a portion of the track.

- 3 Start playback.
- 4 When you reach a point in the track that contains the automation values you want to apply, stop playback.

The current values of all write-enabled automation are written to the corresponding area of the track or selection, and the Write on Stop mode is then disabled. The Start, End, All, or Next switch stops flashing to indicate that the Write on Stop mode is disabled.

To configure Automation Write On Stop modes to remain enabled after an automation pass:

1 Hold Alt (Windows) or Option (Macintosh) and press the Start, End, or All switch in the Auto Write section. The switch lights to indicate that Write on Stop is enabled.

– or –

Press the Modes switch in the Soft Keys Automation section, then hold Alt (Windows) or Option (Macintosh) and press the Soft Key corresponding to Start, End, All or Next. The switch lights to indicate that Write on Stop is enabled.

2 Click in a track to set an insertion point.

– or –

Drag with the Selector to select a portion of the track.

- 3 Start playback.
- 4 When you reach a point in the track that contains the automation values you want to apply, stop playback.

The current values of all write-enabled automation are written to the corresponding area of the track or selection, and the Write on Stop mode stays enabled. The Start, End, All, or Next switch remains lit to indicate that Write on Stop mode is enabled.

Enabling Automation for All Plug- In Parameters

In Pro Tools 6.9, you can enable all parameters of a plug-in for automation at once from the EQ or Dynamics section, from a channel strip, or from Custom Fader Plug-In mode.

To enable all parameters of a plug-in from the EQ or Dynamics section:

- **1** Focus the plug-in in the EQ or Dynamics section.
- **2** Press the Auto switch in the EQ or Dynamics section.

– or –

Press the Enable Parameter ("Enab Para") switch in the Plug-In Automation section of the Channel Strip Master section.

- **3** Hold Alt (Windows) or Option (Macintosh) and touch any encoder assigned to a plug-in parameter in the EQ or Dynamics section.
- **4** Press the lit Auto switch or the lit Enable Parameter switch to take D-Control out of the corresponding mode.

To enable all parameters of a plug-in for automation from a channel strip:

1 Focus the plug-in in the channel strip so its controls are visible on the channel strip encoders.

– or –

Focus the plug-in you want to automate in the Custom Fader channel strips using Custom Fader Plug-In mode.

- **2** Press the Do To All switch in the Global Controls section of the Channel Strip Master section.
- **3** Hold Control+Alt+Start (Windows) or Control+Option+Command (Macintosh) and touch any channel strip encoder showing a plug-in control.
- **4** Press the lit Do To All switch to take D-Control out of Do To All mode.

To enable all parameters of a plug-in for automation from Custom Fader Plug-In mode:

- **1** Press and hold the Plug-In switch in the Custom Fader section to enter Custom Fader Expanded Plug-In mode.
- **2** In the bottom row of Custom Fader channel encoders, press the Automation Enable ("Auto En") switch.
- **3** Press the Do To All switch in the Global Controls section of the Channel Strip Master section.
- **4** Touch any assigned encoder or switch in the Custom Faders section.
- **5** Press the lit Do To All switch to take D-Control out of Do To All mode.
- **6** Press the Custom Fader Plug-In switch to exit Custom Fader Plug-In mode.

D-Control Plug-In Features

Setting Plug-In List Display Options

In Pro Tools 6.9, you can choose how plug-in lists are organized in the Insert Selector and Plug-In Selector. Available choices include: Flat List (by Name); by Category; by Manufacturer; by Manufacturer and Category.

When selecting a plug-in on D-Control, these additional plug-in category sub-menus are displayed in yellow in the rotary encoder displays.

Closing AudioSuite Plug-In Windows

In Pro Tools 6.9, you can close all open Audio-Suite plug-in windows along with any real-time plug-in windows from D-Control.

To close all open plug-in windows:

■ Hold Alt (Windows) or Option (Macintosh) and press the Plug-In switch in the Window Management section.

Making Plug-ins Inactive or Active from Channel Strips

In Pro Tools 6.9, you can toggle the active/inactive status of a plug-in directly from a channel strip without putting D-Control into Make Inactive mode.

To toggle a plug-in active/inactive directly from a channel strip:

1 Press the Inserts switch on a channel strip to display the names of the plug-ins on that channel's encoders.

2 Hold Control+Start (Windows) or Control+Command (Macintosh) and press the encoder Select switch for the plug-in.

Changing Plug-In Presets from Channel Strips

In Pro Tools 6.9, you can activate next or previous settings in the Plug-In Librarian menu directly from any channel strip on D-Control. These commands mirror the Next and Previous Setting buttons in the plug-in header.

To enable the next or previous plug-in setting from a channel strip:

- **1** Focus the plug-in in a channel strip so its controls are visible on the channel strip encoders.
- 2 Hold Control (Windows) or Command (Macintosh) and press the Page Up (Next) or Page Down (Previous) switch in that channel strip's Channel Strip Mode controls.

Copying and Pasting Plug-In Settings

In Pro Tools 6.9, you can copy plug-in settings from a plug-in and paste them in another instance of the same plug-in directly from a channel strip on D-Control, from either the top-level view or the focused view of the plug-in.

To copy and paste plug-in settings from the top level plug-in view:

- **1** On channel strips where you want to copy and paste the plug-in settings, press the Inserts switches to display the names of the plug-ins on the channel encoders.
- **2** Copy the settings of a plug-in by holding Shift+Control (Windows) or Shift+Command (Macintosh) and pressing the Select switch under the name of the plug-in.

3 Paste the settings into another instance of the same plug-in by holding Shift+Control (Windows) or Shift+Command (Macintosh) and pressing the B/M/P switch under the name of that plug-in.



You can use the Do To All and Do To Selected Global Controls to copy and paste settings to all plug-ins at the same insert position on all or all selected tracks.

To copy and paste settings from the focused plugin view:

- **1** On channel strips where you want to copy and paste the plug-in settings, focus the plug-ins on the channels so their controls are visible on the channel strip encoders.
- **2** Copy the settings of a plug-in by holding Shift+Control (Windows) or Shift+Command (Macintosh) and pressing the Select switch under the bottom row of encoders for the plug-in.
- 3 Paste the settings into another instance of the same plug-in by holding Shift+Control (Windows) or Shift+Command (Macintosh) and pressing the B/M/P switch under the bottom row of encoders for that plug-in.

Saving Dynamics and EQ Plug-In Settings

In Pro Tools 6.9, you can confirm or cancel the Save Settings dialog from the Dynamics or EQ sections of D-Control.

To save plug-in settings from D-Control:

- **1** Adjust the settings of a plug-in from the Dynamics or EQ section of D-Control.
- **2** Press the Save As switch in that section. The switch flashes to indicate the Save Settings dialog is open on-screen.
- **3** Enter a name for the setting.
- **4** Do one of the following:
 - Press the flashing Save As switch to save the setting.
 - or –
 - Press the Escape switch (in the Channel Strip Master Control section or the Soft Key section) to cancel the save operation.

Storing Custom Fader Plug-In Maps

In Pro Tools 6.9, Custom Fader Plug-In Maps are no longer stored in the Pro Tools session file. Instead, plug-in mapping information is stored in a separate Plug-In Map (".pim") file. This lets you retain plug-in maps across multiple sessions, and lets you transfer plug-in maps between systems.

To export plug-in maps:

- 1 In Custom Fader Plug-In Map mode, create a map for each plug-in you want to use.
- **2** In the Soft Keys section, press the Operation switch repeatedly to display the page that includes Export Plug-In Maps ("Export PIMaps").
- 3 Press the Soft Key that corresponds to "Export PIMaps."
- 4 Enter a name for the Plug-In Map file, choose a location, and press the Soft Key that corresponds to Enter.

To import plug-in maps:

- 1 In the Soft Keys section, press the Operation switch repeatedly to display the page that includes Import Plug-In Maps ("Import PIMaps").
- 2 Press the Soft Key that corresponds to "Import PIMaps."
- 3 Choose a Plug-In Map (.pim) file and click Open.

Clearing Custom Fader Plug-In Maps

In Pro Tools 6.9, you can clear the Custom Fader Plug-In maps for a plug-in with a single command.

To clear maps for a plug-in currently displayed in **Custom Fader plug-in mode:**

- 1 In Custom Faders Plug-In Map mode, display the plug-in whose map you want to clear.
- 2 Press the Set to Default switch.
- 3 Press the Do To All switch.
- 4 Press the Select switch on any of the Custom Fader channel strips.
- **5** Press the flashing Do To All and Set To Default switches.

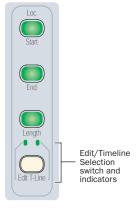
D-Control Transport and Navigation Features

Focusing Transport Control On Timeline or Edit Selections

In Pro Tools 6.9, when the Timeline and Edit selections in the Edit window are unlinked, you can set the D-Control Transport to control playback of either the Timeline selection or the Edit selection. (



In previous versions of Pro Tools, the control surface transport always controlled the Timeline selection.



D-Control Edit/Timeline switch in the Misc Controls

To focus the D-Control Transport on the Timeline selection:

■ Press the Edit/Timeline Selection switch in the Miscellaneous Controls section so that the Timeline LED is lit.

To focus the D-Control Transport on the Edit selection:

■ Press the Edit/Timeline Selection switch in the Miscellaneous Controls section so that the Edit LED is lit.

Latching Behavior for Fast Forward Switch and Rewind Switches

In Pro Tools 6.9, you can set Fast Forward or Rewind to follow latched behavior from the D-Control Transport section.

To set Fast Forward to latch:

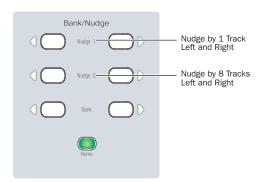
■ Hold the Fast Forward switch and momentarily press the Rewind switch.

To set Rewind to latch:

• Hold the Rewind switch and momentarily press the Fast Forward switch.

Nudging the Track Focus

In Pro Tools 6.9, you can nudge the display of the Focus Channel Strip forward or backward in 1-channel or 8-channel increments.



D-Control Nudge switches

To nudge the track focus forward or backward by one channel:

■ With a track focused in the Focus Channel Strip, hold Control (Windows) or Command (Macintosh) and press the left or right Nudge 1 switch in the Bank/Nudge section.

To nudge the track focus forward or backward by eight channels:

■ With a track focused in the Focus Channel Strip, hold Control (Windows) or Command (Macintosh) and press the left or right Nudge 8 switch in the Bank/Nudge section.

Selecting Multiple Tracks

In Pro Tools 6.9, you can quickly select a range of track (or contiguous tracks) directly from the control surface. In addition, the shortcuts for selecting and de-selecting non-contiguous tracks have changed.

To select a range of tracks:

- **1** Press the Select switch on the first channel in the range you want to select.
- **2** Hold Shift and press the Select switch on the last channel in the range you want to select.

All tracks between the first channel and last channel (inclusive) are selected.

To select or deselect multiple, non-contiguous tracks:

■ Hold Control (Windows) or Command (Macintosh) and press the Select switches on multiple channels.

Changing Playback Location with Locate Switches

In Pro Tools 6.9, the following commands are available from the Transport section of D-Control.

Back Moves the playback location backward by the Back/Forward Amount.

Back and Play Moves the current playback location backward by the Back/Forward Amount and automatically begins playback.

Forward Moves the playback location forward by the Back/Forward Amount.

Forward and Play Moves the current playback location forward by the Back/Forward amount and automatically begins playback.

To move the playback location backward:

■ Press the Back switch in the Transport section.

To move the playback location backward and begin playback:

• Press the Back and Play switch in the Transport section.

To move the playback location forward:

■ Hold Alt (Windows) or Option (Macintosh) and press the Back switch in the Transport section.

To move the playback location forward and begin playback:

■ Hold Alt (Windows) or Option (Macintosh) and press the Back and Play switch in the Transport section.

D-Control Custom Fader Features

Dual Custom Fader Banks

In Pro Tools 6.9, D-Control has available two independent banks of Custom Faders, controlled by the Custom Fader Control sections on the left and right sides of the Main Unit.



In previous versions of Pro Tools, the two Custom Fader Control sections provided redundant control of a single Custom Fader bank.

Each of the Custom Fader banks can be controlled from the Bank Select Matrix, one at a time. The currently targeted Custom Fader bank is indicated by yellow text in the Custom Fader display.

Custom Groups In Custom Groups mode, each of the two banks of Custom Faders can control any of the 48 available Custom Groups.

Mix/Edit Groups In Mix/Edit Groups mode, each of the two banks of Custom Faders can control any of the 26 Mix/Edit Groups.

Tracks Mode In Tracks Mode, each of the two banks of Custom Faders can control any of the track types (Master Faders, Audio Tracks, Auxiliary Inputs, MIDI Tracks, or Hidden Tracks).

Plug-In Mode In Plug-In mode, each of the two banks of Custom Faders can control separate plug-ins.

Configuring Custom Fader Banks

In Pro Tools 6.9, you can independently set the location of each bank of Custom Faders, and decrement or increment the number of Custom Fader channels in each bank.

To configure the distribution of Custom Faders on the control surface:

■ Press the Operation switch in the Soft Keys section. The following Soft Keys control the arrangement of the Custom Fader banks:

Left Custom Fader Justification Determines whether the Custom Faders controlled by the left Custom Faders section are placed at the left, left center, right center, or right of the Main Unit.

Right Custom Fader Justification Determines whether the Custom Faders controlled by the right Custom Faders section are placed at the left, left center, right center, or right of the Main Unit.

Left Maximum Custom Fader Bank Size Determines the number of channels to be used when displaying channels in the Left Custom Fader Bank. Options are multiples of 8 channels, from zero (no Left Custom Fader Bank) up to the maximum number of channels on the system.

Right Maximum Custom Fader Bank Size Determines the number of channels to be used when displaying channels in the Right Custom Fader Bank. Options are multiples of 8 channels, from zero (no Right Custom Fader Bank) up to the maximum number of channels on the system.

To set the maximum Custom Fader bank size:

- **1** Press the Operation switch in the Soft keys section.
- **2** Do one of the following:
 - To increment the number of channel strips, press the Soft Key that corresponds to "LMax CF" or "RMax CF."
 - To decrement the number of channel strips, hold Shift and press the Soft Key that corresponds to "LMax CF" or "RMax CF."

Each of the Max CF values increments or decrements in multiples of 8 channels.

Controlling Custom Fader Banks

The Bank Select Matrix on D-Control is used in Custom Fader mode to create and select Custom Groups and Mix/Edit Groups. In Pro Tools 6.9, it can also be used to select tracks by type or to view plug-in control pages.

To target a Custom Fader bank in the Bank Select Matrix:

■ Press any Custom Fader mode switch in the Custom Fader Control section that corresponds to the bank you want to control.

Mix/Edit Groups

When viewing Mix/Edit Groups in Custom Faders mode, you can create, display and edit Pro Tools Mix or Mix/Edit Groups from the Bank Select Matrix.

Mix or Mix/Edit groups are accessible in the Bank Select Matrix in three banks of 12 (All–k, l–w, and x–z.). This functionality is the same as in previous versions of Pro Tools.

In Pro Tools 6.9, Mix/Edit Group names can also be shown in the Soft Keys by pressing the Bank Select switch in the Soft Keys section.

Custom Groups

When viewing Custom Groups in Custom Faders mode, you can create, display and edit Custom Groups from the Bank Select Matrix. In Pro Tools 6.9, the number of available Custom Groups on D-Control increases to 48.

Custom Groups are accessible in the Bank Select Matrix in four banks of 12 (1–12, 13–24, 25–36, and 37–48). You can cycle though banks of Custom Groups by holding Shift and pressing the Bank/Cycle switch in the Custom Faders section.

In Pro Tools 6.9, Custom Groups can also be shown in the Soft Keys by pressing the Bank Select switch in the Soft Keys section.

Track Types

In Pro Tools 6.9, the D-Control Custom Faders switch formerly named "Master" changes to "Tracks." You can display tracks on the Custom Faders according to their track type by pressing the Tracks switch. You can then select the track type from the Bank Select Matrix, as follows:

- Bank Select 1= Master Faders
- Bank Select 2 = Audio Tracks
- Bank Select 3 = Auxiliary Inputs
- Bank Select 4 = MIDI Tracks
- Bank Select 5 = Hidden Tracks

The name of the track type is shown in the Custom Faders display.

If the number of tracks exceeds the number of Custom Fader channel strips, the tracks can be banked with the Bank/Cycle switch in the Custom Faders section.

The track types can also be displayed in the Soft Keys section by pressing the Bank Select switch in the Soft Keys section.

Plug-In Pages

When viewing Plug-In parameters on Custom Faders, you can select pages of parameters from the Bank Select Matrix.

If a plug-in has more than 12 pages, you can cycle though banks of pages by holding Shift and pressing the Bank/Cycle switch in the Custom Faders section.

The plug-in pages can also be displayed in the Soft Keys section by pressing the Bank Select switch in the Soft Keys section.

Arranging Channels in Custom Groups

You can insert new Custom Group channels at any location in the Custom Fader channel display. By default, new Custom Group channels are added to the end of the Custom Faders.

To add new channels to a Custom Group:

- **1** Press the Custom switch in the Custom Faders section to enter Custom Groups mode.
- **2** Press the Bank Select switch (1–12) to recall the Custom Group you want to edit.
- **3** Press the Edit switch in the Bank Select section. The Edit switch flashes to indicate Custom Groups Edit mode.
- **4** On a currently assigned Custom Fader channel strip, press the Select switch so that it is lit.
- **5** Press the Select switch on each Normal channel you want to add to the Custom Group.

The new channels are added the Custom Group, to the left of the selected Custom Fader channel strip.

To remove channels from a Custom Group:

■ While editing the Custom Group, hold Control+Start (Windows) or Control+Command (Macintosh) and press the Select switch on the Custom Fader channel you want to remove.

– or –

■ Hold the Set To Default switch and press the Select switch on a track you want to remove.

Display of Hidden Tracks in Custom Faders

You can set D-Control to show hidden tracks in the Custom Fader views. You can then mix those hidden tracks, but you cannot select or record-enable them. Hidden track names are displayed in yellow in the Custom Faders.

To make hidden tracks visible in Custom Fader views:

- **1** In the Soft Keys section, press the Operation switch repeatedly to display the page that includes Custom Fader Tracks ("CFTrks").
- 2 Press the Soft Key that corresponds to "CFTrks" to toggle the setting between Show Hidden Tracks ("ShwHdn") and Hide Hidden Tracks ("HidHdn").

Displaying A Plug-In in Custom Fader Plug-In Mode

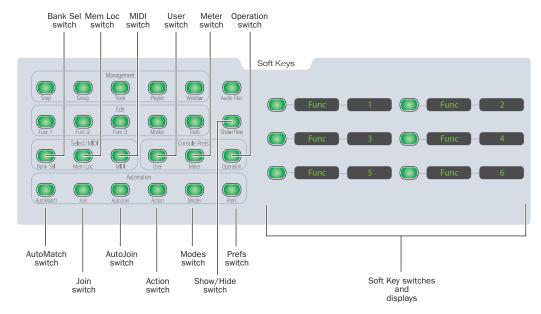
In Pro Tools 6.9, you can enter Custom Fader Plug-In mode and focus a plug-in on the Custom Fader channels directly from the top level plug-in view.

To display a plug-in in Custom Fader Plug-In mode:

■ In top level plug-in view, hold Control (Windows) or Command (Macintosh) and press the Encoder Select switch for the plug-in you want to display.

D-Control Soft Keys Section Features

In Pro Tools 6.9, the Soft Keys section has been changed to consolidate existing switch functions and add switches for new Automation functions.



D-Control Soft Keys section showing new keys

Select/MIDI Soft Key Functions

Bank Select Switch

The Bank Select switch ("Bank Sel") sets the Soft Keys to mirror the selection in the Bank Select Matrix. When Bank Select is enabled, the Soft Keys show the names of the Mix/Edit Groups, Custom Groups, track types, or plug-in page numbers being controlled by the Bank Select Matrix.

Memory Location Switch

The Memory Location switch ("Mem Loc") sets the Soft Keys to display the names of Memory Locations in pages of 6. The Soft Key display is Because the Bank Select Matrix has 12 switches, the Soft Keys display each bank of twelve in two pages of 6. The Soft Key display is paged by repeatedly pressing the Bank Select switch in the Soft Keys section.

To page through the currently displayed bank in the Soft Keys:

■ Press the Bank Select switch ("Bank Sel") repeatedly to page through the current bank.

paged by repeatedly pressing the Memory Location switch in the Soft Keys section.

MIDI Switch

The MIDI switch sets the Soft Keys to display the following MIDI commands, in two pages of 6:

- · Wait for Note
- Countoff
- · Merge Record
- Transpose
- Change Velocity
- · Click On/Off
- · Change Tempo
- Change Meter
- Split Notes
- Select Notes
- Quantize
- Input Quantize

Console Prefs Soft Key Functions

User Switch

The User switch lets you assemble a custom set of up to 12 Soft Key operations (6 on each of two pages), providing quick access to frequently used commands or modes. You can add operations to either of the two available pages.

To add a Soft Key operation to the User Soft Key set:

- **1** In the Soft Keys section, press the User switch repeatedly to display the page (Page 1 or Page 2) where you want to add the operation.
- **2** Press another Soft Key switch to enter the Soft Key mode containing the operation you want to add.
- **3** Hold Control (Windows) or Command (Macintosh) and press the Soft Key for the operation.

The operation is appended to the list of User Soft Key operations on the chosen User page.

To remove a Soft Key operation from the User set:

- **1** In the Soft Keys section, press the User switch repeatedly to display the operation you want to remove.
- **2** Hold Control (Windows) or Command (Macintosh) and press the Soft Key for the User operation.

Meter Switch

The Meter switch sets the Soft Keys to display the D-Control metering preferences, in pages of six. The Soft Key display is paged by repeatedly pressing the Meter Prefs switch in the Soft Keys section.

In Pro Tools 6.9, a new Meter preference is available. See "Gain Reduction Priority Meter Preference" on page 53.

Operation Switch

The Operation switch sets the Soft Keys to display the D-Control preferences for Custom Fader arrangement, fader and rotary encoder behavior, channel strip display, and on-screen interaction.

In Pro Tools 6.9, the following preferences have been added:

- Import Plug-In Maps
- Export Plug-In Maps
- · Touch Value On/Off
- Custom Faders Show/Hide Hidden Tracks
- · Broadcast On/Off

Automation Soft Key Functions

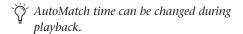
AutoMatch Switch

In Pro Tools 6.9, the AutoMatch feature can be applied to Write and Latch automation modes as well as Touch automation mode.

During playback, the AutoMatch switch is used to stop writing of automation on Write-enabled or Latch-enabled tracks and return automation to previously written levels by ramping up or down according to the AutoMatch time.

To set the AutoMatch time:

- **1** Press the Prefs switch in the Soft Keys Automation section.
- **2** Press the Soft Key that corresponds to Match Time.
- **3** Turn the jog wheel to adjust the Match Time.
- 4 Press the lit Soft Key to exit.



To end an automation pass on a single Write- or Latch-enabled track with AutoMatch:

■ During playback, at the point where you want to stop writing automation on a track, press the Automation Mode switch ("Auto") on the channel.

The track stops writing automation and ramps back to the previous automation level. The length of the automation ramp is determined by the AutoMatch Time preference.

To end an automation pass on all tracks with AutoMatch:

 During playback, at the point where you want to stop writing automation, press the Auto-Match switch.

All tracks in Write or Latch mode stop writing automation and ramp back to previous automation levels. The length of the automation ramp is determined by the AutoMatch Time preference.

Snap Back Function

During playback, the Snap Back function is used to stop writing of automation on Write-enabled or Latch-enabled tracks and return automation instantly to previously written levels, ignoring any AutoMatch or AutoGlide settings.

To end an automation pass and return instantly to previously written automation levels:

- Press the Action switch.
- **2** During playback, at the point where you want to stop writing automation, press the Soft Key corresponding to Snap Back.

Join Switch

The Join switch is used in Latch mode to manually resume writing of automation after the transport is stopped and started again during an automation pass.

The Join function can be used while working continuously in Latch mode, or after the automation mode changes to Latch mode from Write mode or Touch mode.

To manually resume writing automation in Latch mode:

- 1 After writing an automation pass, stop the transport. The Join switch flashes when the automation for one or more controls can be resumed in Latch mode.
- **2** Use the Rewind button or the Selector tool to move the cursor back so that it is just before the stop location.
- 3 Resume playback.
- 4 At the point where you want to start writing automation, press the flashing Join switch.

Automation recording continues for all controls in Latch mode.

AutoJoin Switch

The AutoJoin switch is used in Latch mode to automatically resume writing of automation after the transport is stopped and started again during an automation pass.

The AutoJoin function can be used while working continuously in Latch mode, or after the automation mode changes to Latch mode from Write mode or Touch mode.

To automatically resume writing automation in Latch mode:

- **1** After writing an automation pass, stop the transport. The Join switch flashes when the automation for one or more controls can be resumed in Latch mode.
- 2 Press the AutoJoin switch so that it is lit. A red line, the AutoJoin Indicator, appears in the Edit window to show the stop location.
- **3** Use the Rewind switch or the Selector tool to move the cursor back so that it is just before the stop location.
- **4** Resume playback.

At the AutoJoin Indicator, automation recording resumes automatically for all controls in Latch mode.

Action Switch

The Action switch sets the Soft Keys to display the following commands:

Write to Start Performs a manual Write to Start command (mirrors the corresponding button in the Automation Enable window).

Write to All Performs a manual Write to All command (mirrors the corresponding button in the Automation Enable window).

Write to End Performs a manual Write to End command (mirrors the corresponding button in the Automation Enable window).

Write to Next Performs a manual Write to Next command (mirrors the corresponding button in the Automation Enable window).

Snap Back During playback, stops writing of automation in Write or Latch mode and returns automation instantly to previously written levels, without applying any AutoMatch or AutoGlide ramping.

Modes Switch

The Modes switch sets the Soft Keys to display the following modes:

Auto Write to Start Enables Auto Write to Start On Stop mode (mirrors the corresponding button in the Automation Enable window).

Auto Write to All Enables Auto Write to All On Stop mode (mirrors the corresponding button in the Automation Enable window).

Auto Write to End Enables Auto Write to End On Stop mode (mirrors the corresponding button in the Automation Enable window).

Auto Write to Next Enables Auto Write to Next On Stop mode (mirrors the corresponding button in the Automation Enable window).

Prefs Switch

The Prefs switch sets the Soft Keys to display the following preferences:

Match Time Determines the AutoMatch Time, or the amount of time it takes for automation values to return to the previously written value after an automation pass stops.

Glide Time Determines the AutoGlide Time, or the amount of time it takes for surround pan values to move between two points in an automation pass performed with the optional D-Control surround panner.

Show/Hide Switch

The Show/Hide Switch in the Soft Keys section displays track type choices in the Soft Key display.

The Soft Key display is paged by repeatedly pressing the Show/Hide switch.

The following Show/Hide categories are available in the Soft Key display:

- Show/Hide All Tracks
- Show/Hide Only Selected Tracks
- Show/Hide Inactive Tracks
- Show/Hide Audio Tracks
- · Show/Hide Aux Tracks
- Show/Hide MIDI Tracks

You can select multiple Show/Hide categories by holding Shift while pressing the corresponding Soft Key.

Exiting from Soft Key Modes

Instead of cycling through all pages of a Soft Key mode, you can exit and return to the default Soft Key display by holding Control (Windows) or Command (Macintosh) and pressing the currently lit Soft Key mode switch.

Closing On-Screen Dialog Boxes

When Pro Tools has a dialog on-screen, the Soft Key section temporarily displays "Escape" (when applicable) and "Enter," letting you cancel or confirm the dialog from the control surface.

D-Control Display and Metering Features

Gain Reduction Priority Meter Preference

When encoder LED rings and channel meters are set to display dynamics plug-in gain reduction, you can set which function has priority when multi-function Compressor/Gate plug-ins are used.

To set the gain reduction metering priority:

- 1 In the Soft Keys section, press the Meter Prefs switch repeatedly to display the page that includes Gain Reduction Priority ("GRPrio").
- 2 Press the Soft Key that corresponds to "GRPrio" to toggle the setting between Compressor/Limiter ("CompLm") and Expander/Gate ("ExpGat").

Metering priority is assigned to the corresponding function.

Full Display of Names In Assign Mode

When assigning Input, Outputs, Inserts, or Sends, four adjacent encoder displays are used to spell out the name of the element being assigned. In Assign mode, when an encoder is touched or a Select switch is pressed, the displays temporarily show the full name of the input, output, insert, plug-in category, or plug-in.

Closing Workspace Browser Windows

You can close all open Workspace Browser windows at once from D-Control.

To close all Workspace Browser windows:

■ Hold Alt (Windows) or Option (Macintosh) and press the Workspace switch in the Window Management section.

(Normal) Flop Mode Update

In Pro Tools 6.9, Flop mode can be used to transfer or "flop" controls between any two rows of rotary encoders.



n previous versions of Pro Tools, Flop mode transferred controls to the bottom row of encoders only.

To flop controls between rows of encoders:

- 1 Hold the Start (Windows) or Control (Macintosh) and repeatedly press the Flip switch on the row of encoders where you want transfer the controls.
- 2 Continue to hold Start (Windows) or Control (Macintosh) and repeatedly press the same Flip switch to cycle through the encoder rows. The Flip switches on each row light to indicate which controls are being transferred.

3 When you reach the row you want to transfer, release Start (Windows) or Control (Macintosh). The flopped controls are indicated by yellow text in the encoder displays.

To return flopped controls to their original positions:

■ Press either of the lit Flip switches.

D-Control Monitoring Features

Solo Mode Controls

In Pro Tools 6.9, the Solo function has three available modes: Solo in Place (SIP). After-Fader Listen (AFL) and Pre-Fader Listen (PFL).

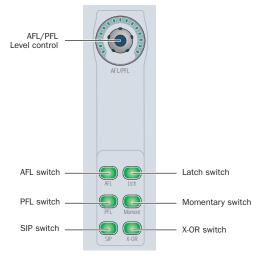
- SIP mode mutes all unsoloed tracks, causing the soloed tracks to be auditioned alone in the main mix. The XMON Control Room Input source remains unchanged, so you can monitor the soloed channels in the Main control room monitors.
- AFL and PFL modes send signal to a separate output path with independently adjustable levels for each mode. The XMON Control Room Input source is automatically changed to monitor the AFL/PFL input. This lets you monitor the soloed channels in the Main control room monitors or in a dedicated solo monitoring system.



A AFL and PFL Solo modes require the use of the Surround Mixer plug-in.

To select the Solo mode:

■ Press the SIP, AFL, or PFL switch in the D-Control Monitor section to select the corresponding Solo mode.



Solo Mode controls in the D-Control Monitor section

Setting AFL and PFL Levels

Levels can be set separately for AFL and PFL modes from the D-Control Monitor section.



AFL or PFL levels can be adjusted even if no channels are currently soloed.

To set the AFL or PFL level:

- 1 Press the AFL or PFL switch in the D-Control Monitor section.
- 2 Turn the AFL/PFL rotary encoder. The AFL/PFL level is shown in the Monitor displays.

To set the AFL or PFL level to its default setting:

- 1 Press the AFL or PEL switch in the D-Control Monitor section.
- 2 Hold Alt (Windows) or Option (Macintosh) and touch the AFL/PFL rotary encoder.

Broadcast Mode for AFL and PFL Monitoring

You can put the D-Control monitoring system in Broadcast Mode, which prevents AFL and PFL solo modes from changing the XMON Control Room Input source.

This lets you monitor the AFL/PFL input on a separate set of speakers or headphones, leaving the main monitor mix undisturbed, for purposes of live recording or broadcast feeds.

To put the XMON monitoring system in Broadcast

- 1 Press the Operation switch in the Soft Key section.
- 2 Press the Soft Key that corresponds to "Broadcast" to set the option to "On."

While in Broadcast mode, any channels soloed while in AFL or PFL are sent to the dedicated monitor path. Any channels soloed in SIP mode will still cause all other tracks to be muted.

Solo Latch Options

In Pro Tools 6.9, three solo latch options can be selected directly from the D-Control Monitor section. These latching options apply to all three Solo modes (SIP, AFL and PFL).

Latch When this option is selected, pressing subsequent channel Solo switches adds the channels to the Solo output.

X-OR When this option is selected, pressing a channel Solo switch unsolos any other channels.



To solo more than one track at the same time in X-OR mode, press and hold a single Solo switch, then press additional Solo switches to latch them on.

Momentary When this option is selected, you can temporarily solo any number of channels by holding a single channel Solo switch and pressing any additional channel Solo switches. When you release the held Solo switch, all solos are cleared.

ProControl Features

Pro Tools 6.9 includes the following new features and enhancements for ProControl:

Changing Playback Location

In Pro Tools 6.9, the following commands are available from ProControl:

Back Moves the playback location backward by the Back/Forward Amount.

Back and Play Moves the current playback location backward by the Back/Forward Amount and automatically begins playback.

Forward Moves the playback location forward by the Back/Forward Amount.

Forward and Play Moves the current playback location forward by the Back/Forward amount and automatically begins playback.

To move the playback location backward:

■ Hold Control (Windows) or Command (Macintosh) and press the Rewind switch in the ProControl Transport.

To move the playback location backward and begin playback:

■ Hold Control+Alt (Windows) or Command+Option (Macintosh) and press the Rewind switch in the ProControl Transport.

To move the playback location forward:

■ Hold Control (Windows) or Command (Macintosh) and press the Fast Forward switch in the ProControl Transport.

To move the playback location forward and begin playback:

■ Hold Control+Alt (Windows) or Command+Option (Macintosh) and press the Fast Forward switch in the ProControl Transport.

Automation Commands

In Pro Tools 6.9, the following commands are available from ProControl:

AutoMatch Function

During playback, you can stop writing of automation on Write-enabled or Latch-enabled tracks and return automation to previously written levels by ramping up or down according to the AutoMatch time.

To end an automation pass on a single Write- or Latch-enabled track with AutoMatch:

■ During playback, at the point where you want to stop writing automation on a track, press the Automation switch ("Auto") on the channel.

The track stops writing automation and ramps back to the previous automation level. The length of the automation ramp is determined by the AutoMatch Time preference.

To end an automation pass on all tracks with AutoMatch:

 During playback, at the point where you want to stop writing automation, hold Alt (Windows) or Option (Macintosh) and press the Automation switch ("Auto") on a Write- or Latch-enabled channel.

All tracks in Write or Latch mode stop writing automation and ramp back to previous automation levels. The length of the automation ramp is determined by the AutoMatch Time preference.

Snap Back Function

During playback, you can stop writing of automation on Write-enabled or Latch-enabled tracks and return automation instantly to previously written levels, ignoring any AutoMatch or AutoGlide settings.

To end an automation pass on a single Write- or Latch-enabled track with Snap Back:

 During playback, at the point where you want to stop writing automation on a track, hold Control (Windows) or Command (Macintosh) and press the Automation switch ("Auto") on the channel.

To end an automation pass on all tracks with Snap Back:

■ During playback, at the point where you want to stop writing automation, hold Control+Alt (Windows) or Command+Option (Macintosh) and press the Automation switch ("Auto") on a Write- or Latch-enabled channel.

Join Function

The Join function is used in Latch mode to manually resume writing of automation after the transport is stopped and started again during an automation pass.

The Join function can be used while working continuously in Latch mode, or after the automation mode changes to Latch mode from Write mode or Touch mode.

To manually resume writing automation in Latch mode:

- 1 After writing an automation pass, stop the transport. The master Latch switch flashes when the automation for one or more controls can be resumed in Latch mode.
- **2** Use the Rewind button or the Selector tool to move the cursor back so that it is just before the stop location.
- 3 Resume playback.
- 4 At the point where you want to start writing automation, hold Control (Windows) or Command (Macintosh) and press the flashing master Latch switch.

Automation recording continues for all controls in Latch mode.

AutoJoin Function

The AutoJoin function is used in Latch mode to automatically resume writing of automation after the transport is stopped and started again during an automation pass.

The AutoJoin function can be used while working continuously in Latch mode, or after the automation mode changes to Latch mode from Write mode or Touch mode.

To automatically resume writing automation in Latch mode:

- 1 After writing an automation pass, stop the transport. The master Latch switch flashes when the automation for one or more controls can be resumed in Latch mode.
- 2 In the Automation Enable window, click the AutoJoin button. A red line, the AutoJoin Indicator, appears in the Edit window to show the stop location.
- 3 Use the Rewind switch or the Selector tool to move the cursor back so that it is just before the stop location.
- 4 Resume playback.

At the AutoJoin Indicator, automation recording resumes automatically for all controls in Latch mode.

Automation Write On Stop Modes

In Pro Tools 6.9, when any of the Write On Stop modes (Write to Start, End, All, or Next On Stop) is enabled, the chosen action is performed automatically after a valid automation pass, and the Write On Stop mode is then disabled.

Write On Stop modes can also be configured to remain enabled after a valid automation pass.

On ProControl with Edit Pack, the Write to Start, End, and All On Stop modes can be configured from the Auto-Write section of the control surface.

To configure Automation Write On Stop modes to disable after an automation pass:

- **1** Hold Start (Windows) or Control (Macintosh) and press the Start, End, or All switch in the Auto Write section on the Edit Pack. The switch flashes to indicate that Write On Stop is enabled.
- **2** Click in a track to set an insertion point.

- or -

Drag with the Selector to select a portion of the track.

- 3 Start playback.
- **4** When you reach a point in the track that contains the automation values you want to apply, stop playback.

The current values of all write-enabled automation are written to the corresponding area of the track or selection, and the Write on Stop mode is then disabled. The Start, End, or All switch stops flashing to indicate that the Write on Stop mode is disabled.

To configure Automation Write On Stop modes to remain enabled after an automation pass:

- **1** Hold Start+Alt (Windows) or Control+Option (Macintosh) and press the Start, End, or All switch in the Auto Write section on the Edit Pack. The switch lights to indicate that Write on Stop is enabled.
- 2 Click in a track to set an insertion point.

– or –

Drag with the Selector to select a portion of the track.

- 3 Start playback.
- **4** When you reach a point in the track that contains the automation values you want to apply, stop playback.

The current values of all write-enabled automation are written to the corresponding area of the track or selection, and the Write on Stop mode stays enabled. The Start, End, or All switch remains lit to indicate that Write on Stop mode is enabled.

Pro Tools Solo Latch Options

ProControl supports the Solo Latch options in Pro Tools:

Latch When this option is selected, pressing subsequent channel Solo switches adds the channels to the Solo output.

X-OR When this option is selected, pressing a channel Solo switch unsolos any other channels.



To solo more than one track at the same time in X-OR mode, press and hold a single Solo switch, then press additional Solo switches to latch them on.

Momentary When this option is selected, you can temporarily solo any number of channels by holding a single channel Solo switch and pressing any additional channel Solo switches. When you release the held Solo switch, all solos are cleared.

Control 24 Features

Changing Playback Location

In Pro Tools 6.9, the following commands are available from Control|24:

Back Moves the playback location backward by the Back/Forward Amount.

Back and Play Moves the current playback location backward by the Back/Forward Amount and automatically begins playback.

Forward Moves the playback location forward by the Back/Forward Amount.

Forward and Play Moves the current playback location forward by the Back/Forward amount and automatically begins playback.

To move the playback location backward:

■ Hold Control (Windows) or Command (Macintosh) and press the Rewind switch in the Control|24 Transport.

To move the playback location backward and begin playback:

■ Hold Control+Alt (Windows) or Command+Option (Macintosh) and press the Rewind switch in the Control|24 Transport.

To move the playback location forward:

■ Hold Control (Windows) or Command (Macintosh) and press the Fast Forward switch in the Control|24 Transport.

To move the playback location forward and begin playback:

■ Hold Control+Alt (Windows) or Command+Option (Macintosh) and press the Fast Forward switch in the Control|24 Transport.

Automation Commands

In Pro Tools 6.9, the following commands are available from Control 24:

AutoMatch Function

During playback, you can stop writing of automation on Write-enabled or Latch-enabled tracks and return automation to previously written levels by ramping up or down according to the AutoMatch time.

To end an automation pass on a single Write- or Latch-enabled track with AutoMatch:

■ During playback, at the point where you want to stop writing automation on a track, press the Automation switch ("Auto") on the channel.

The track stops writing automation and ramps back to the previous automation level. The length of the automation ramp is determined by the AutoMatch Time preference.

To end an automation pass on all tracks with AutoMatch:

■ During playback, at the point where you want to stop writing automation, hold Alt (Windows) or Option (Macintosh) and press the Automation switch ("Auto") on a Write- or Latch-enabled channel.

All tracks in Write or Latch mode stop writing automation and ramp back to previous automation levels. The length of the automation ramp is determined by the AutoMatch Time preference.

Snap Back Function

During playback, you can stop writing of automation on Write-enabled or Latch-enabled tracks and return automation instantly to previously written levels, ignoring any AutoMatch or AutoGlide settings.

To end an automation pass on a single Write- or Latch-enabled track with Snap Back:

■ During playback, at the point where you want to stop writing automation on a track, hold Control (Windows) or Command (Macintosh) and press the Automation switch ("Auto") on the channel.

To end an automation pass on all tracks with Snap Back:

■ During playback, at the point where you want to stop writing automation, hold Control+Alt (Windows) or Command+Option (Macintosh) and press the Automation switch ("Auto") on a Write- or Latch-enabled channel.

Join Function

The Join function is used in Latch mode to manually resume writing of automation after the transport is stopped and started again during an automation pass.

The Join function can be used while working continuously in Latch mode, or after the automation mode changes to Latch mode from Write mode or Touch mode.

To manually resume writing automation in Latch mode:

1 After writing an automation pass, stop the transport. The master Latch switch flashes when the automation for one or more controls can be resumed in Latch mode.

- **2** Use the Rewind button or the Selector tool to move the cursor back so that it is just before the stop location.
- 3 Resume playback.
- 4 At the point where you want to start writing automation, hold Control (Windows) or Command (Macintosh) and press the flashing master Latch switch.

Automation recording continues for all controls in Latch mode.

AutoJoin Function

The AutoJoin function is used in Latch mode to automatically resume writing of automation after the transport is stopped and started again during an automation pass.

The AutoJoin function can be used while working continuously in Latch mode, or after the automation mode changes to Latch mode from Write mode or Touch mode.

To automatically resume writing automation in Latch mode:

- **1** After writing an automation pass, stop the transport. The master Latch switch flashes when the automation for one or more controls can be resumed in Latch mode.
- 2 In the Automation Enable window, click the AutoJoin button. A red line, the AutoJoin Indicator, appears in the Edit window to show the stop location.
- **3** Use the Rewind switch or the Selector tool to move the cursor back so that it is just before the stop location.
- 4 Resume playback.

At the AutoJoin Indicator, automation recording resumes automatically for all controls in Latch mode.

Automation Write On Stop Modes

In Pro Tools 6.9, when any of the Write On Stop modes (Write to Start, End, All, or Next On Stop) is enabled, the chosen action is performed automatically after a valid automation pass, and the Write On Stop mode is then disabled.

Write On Stop modes can also be configured to remain enabled after a valid automation pass.

On Control 24, the Write to Start, End, or All On Stop modes can be configured from the Write Automation To section of the control surface.

To configure Automation Write On Stop modes to disable after an automation pass:

- 1 Hold Start (Windows) or Control (Macintosh) and press the Start, End, or All switch in the Write Automation To section. The switch flashes to indicate that Write On Stop is enabled.
- **2** Click in a track to set an insertion point.

- or -

Drag with the Selector to select a portion of the track.

- 3 Start playback.
- 4 When you reach a point in the track that contains the automation values you want to apply, stop playback.

The current values of all write-enabled automation are written to the corresponding area of the track or selection, and the Write on Stop mode is then disabled. The Start, End, or All switch stops flashing to indicate that the Write on Stop mode is disabled.

To configure Automation Write On Stop modes to remain enabled after an automation pass:

- 1 Hold Start+Alt (Windows) or Control+Option (Macintosh) and press the Start, End, or All switch in the Write Automation To section. The switch lights to indicate that Write on Stop is enabled.
- **2** Click in a track to set an insertion point.

- or -

Drag with the Selector to select a portion of the track.

- 3 Start playback.
- 4 When you reach a point in the track that contains the automation values you want to apply, stop playback.

The current values of all write-enabled automation are written to the corresponding area of the track or selection, and the Write on Stop mode stays enabled. The Start, End, or All switch remains lit to indicate that Write on Stop mode is enabled.

Pro Tools Solo Latch Options

Control|24 supports the Solo Latch options in Pro Tools:

Latch When this option is selected, pressing subsequent channel Solo switches adds the channels to the Solo output.

X-OR When this option is selected, pressing a channel Solo switch unsolos any other channels.



To solo more than one track at the same time in X-OR mode, press and hold a single Solo switch, then press additional Solo switches to latch them on.

Momentary When this option is selected, you can temporarily solo any number of channels by holding a single channel Solo switch and pressing any additional channel Solo switches. When you release the held Solo switch, all solos are cleared.

Command 8 Features

In Pro Tools 6.9, the following commands are available from Command|8:

AutoMatch Function

During playback, you can stop writing of automation on Write-enabled or Latch-enabled tracks and return automation to previously written levels by ramping up or down according to the AutoMatch time.

To end an automation pass on a single Write- or Latch-enabled track with AutoMatch:

■ During playback, at the point where you want to stop writing automation on a track, hold Ctrl/Clutch and press the F4 switch on the channel.

The track stops writing automation and ramps back to the previous automation level. The length of the automation ramp is determined by the AutoMatch Time preference.

To end an automation pass on all tracks with AutoMatch:

■ During playback, at the point where you want to stop writing automation, hold Alt +Ctrl/Clutch (Windows) or Option+Ctrl/Clutch (Macintosh) and press the F4 switch on a Writeor Latch-enabled channel.

All tracks in Write or Latch mode stop writing automation and ramp back to previous automation levels. The length of the automation ramp is determined by the AutoMatch Time preference.

Snap Back Function

During playback, you can stop writing of automation on Write-enabled or Latch-enabled tracks and return automation instantly to previously written levels, ignoring any AutoMatch or AutoGlide settings.

To end an automation pass on a single Write- or Latch-enabled track with Snap Back:

■ During playback, at the point where you want to stop writing automation on a track, hold Ctrl/Clutch+Command and press the F4 switch on the channel.

To end an automation pass on all tracks with Snap Back:

■ During playback, at the point where you want to stop writing automation on a track, hold Ctrl/Clutch+Command+Alt (Windows) or Ctrl/Clutch+Command+Option (Macintosh) and press the F4 switch on a Write- or Latch-enabled channel.

Pro Tools Solo Latch Options

Command | 8 supports the Solo Latch options in Pro Tools:

Latch When this option is selected, pressing subsequent channel Solo switches adds the channels to the Solo output.

X-OR When this option is selected, pressing a channel Solo switch unsolos any other channels.



🌣 To solo more than one track at the same time in X-OR mode, press and hold a single Solo switch, then press additional Solo switches to latch them on.

Momentary When this option is selected, you can temporarily solo any number of channels by holding a single channel Solo switch and pressing any additional channel Solo switches. When you release the held Solo switch, all solos are cleared.

chapter 4

Support for Avid Video on Pro Tools HD **Systems with Pro Tools 6.9**

New Features for Avid DNA Video Peripherals (AVoption|V10 and Avid Mojo)

Pro Tools 6.9 adds the following new features for Pro Tools users with either the Digidesign AVoption|V10 or the Avid Mojo™ (referred to here as Avid DNA video peripherals):

- New Movie track options
- Digitize video to Pro Tools Timeline
- Import, playback, edit, and export MXF audio files
- AAF sequences may reference Sound Designer II audio files
- Import OMF/AAF files with mixed sample rates and/or bit depths
- Optimizations for synchronization, Remote mode, and record allocation
- Support for new Avid Media Station|PT software

New Movie Track Options

In Pro Tools 6.9, the Movie Track includes the following:

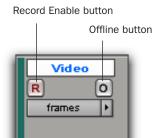
- Record Enable and Offline buttons
- Video Selectors and displays in the Input/Output View



See "Digitizing Video to the Pro Tools Timeline" on page 67 for more details on capturing video in Pro Tools.

Addition of Record Enable and Offline Buttons to Movie Track

In Pro Tools 6.9, the Movie track includes Record Enable and Offline buttons.



Movie Track

Record Enable Button

The Record Enable button lets you arm the Movie Track for digitizing video to the Timeline.



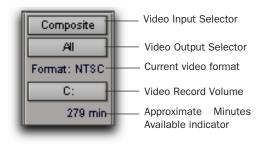
▲ Control-clicking (Windows) or Optionclicking (Macintosh) an audio track's Record Enable button does not arm the Movie track for recording.

Offline Button

The Offline button duplicates the function of the Offline command in the Movie Menu. Clicking the Offline button lets you play back the audio in your session without playing back the video. When the video is offline, the Offline button changes to orange so you can tell at a glance whether your video is offline or simply playing black fill. Both the Offline button and the Offline menu command are disabled while your session is playing.

Additions to Input/Output View for Movie Track

In Pro Tools 6.9, the I/O View for the Movie track has Input, Output, and Video Record Volume Selectors, as well as a display for the current video output format (NTSC or PAL) and available record time.



Movie Track Input/Output View

To show the I/O View:

• Choose Display > Edit Windows Shows > I/O View.



For details on using the Input/Output view with the Movie track, see "Digitizing Video to the Pro Tools Timeline" on page 67.

Video Input Selector

The Video Input Selector lets you choose from the following video inputs on an Avid DNA video peripheral:

- Component
- Composite
- S-Video
- SDI (AVoption|V10 only)

Video Output Selector

The Video Output Selector lets you choose from the following video outputs for an Avid Mojo:

- Component
- S-Video + Composite



▲ For AVoption | V10, all outputs are active at all times.

Current Video Format

The I/O View displays the current session's video format (NTSC or PAL) as designated in the Session Setup window.

Video Record Volume Selector

The Video Record Volume Selector lets you select one volume at a time for video recording. Volumes that are not designated as record volumes in the V column of the Workspace browser will not be available in this list.

Approximate Minutes Available

When the Record Enable button is enabled in the Movie track, this indicator shows the approximate recording time (in minutes) available on the volume shown in the Video Record Volume Selector. This display does not update while video is being digitized.

Digitizing Video to the Pro Tools Timeline

Pro Tools 6.9 with Avid DNA video peripherals lets you digitize video directly to the Movie track for use in the Pro Tools editing environment.

Video is digitized in the Avid DV25 file format, and may be used in the Movie track along with OMF and MXF video clips of other resolutions that are from other sources. Though the video files which are captured in Pro Tools are technically MXF files, they are intended only for use in Pro Tools. They have not been tested for import into other applications, and may not be of standard broadcast quality.

▲ QuickTime video clips cannot be mixed with OMF or MXF video clips in the Movie track.



A Up to six hours of video can be digitized in a single record pass.



A Each record pass can only record to a single volume (or a set of striped drives). One video file cannot be recorded across multiple volumes.

Hardware Requirements and Options

SYNC I/O Requirement

For digitizing video, Pro Tools 6.9 requires a SYNC I/O locked to video reference.

For information about setting up SYNC I/O hardware and locking the SYNC I/O to video reference, see the SYNC I/O User's Guide.

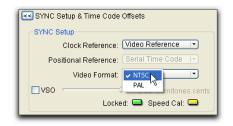
To configure SYNC I/O for digitizing video in Pro Tools:

- **1** Ensure that the SYNC I/O is locked to the appropriate video reference for your system setup. For more information, see the SYNC I/O Guide or the MachineControl Guide.
- 2 In the Session Setup window (Windows > Session Setup), select SYNC I/O from the Clock Source pop-up menu.



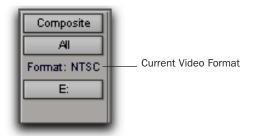
Session Setup window Clock Source selection

3 Under the SYNC Setup & Time Code Offsets section, ensure that Video Reference is displayed in the Clock Reference pop-up menu.



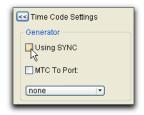
Session Setup window Video Format selection

4 Choose NTSC or PAL from the Video Format pop-up menu. The Video format you choose is reflected in the Movie track's I/O View.



Movie Track Input/Output View

5 Under the Time Code Settings section, ensure the Using SYNC option is deselected for digitizing video.



Session Setup window Time Code Settings section

Timebase Correction

Avid DNA video peripherals require that all sources be timebase corrected. Most professional video decks have built-in timebase correction. To find out if your video deck has built-in timebase correction, refer to the manufacturer's documentation.

MachineControl

You can use Digidesign MachineControl software (purchased separately) to remotely control your external video deck during Pro Tools capture. When recording to the Movie track with MachineControl, it is recommended that the Track View be set to Blocks.



▲ Digidesign MachineControl does not control FireWire-connected devices. For automated capture with FireWire devices, use Avid Media Station|PT software.



For more information, see the Machine-Control Guide.

Configuring the Movie Track for Digitizing

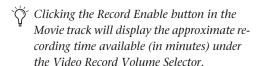
To configure the Movie track for digitizing:

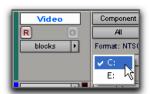
- 1 Choose Movie > New Avid Movie Track to create a new Movie track.
- 2 In the Edit window, with I/O View enabled, use the Movie track's Input Selector to assign one of the following video inputs:
 - Component
 - Composite
 - S-Video
 - SDI (AVoption|V10 only)



Selecting Video Input from the Video Input Selector

- **3** For Avid Mojo, use the Movie track's Output Selector to assign one of the following video outputs.
 - Component
 - or –
 - S-Video + Composite.
- For AVoption|V10, all outputs are active at all times.
- **4** Select the video record volume from the Video Record Volume Selector.





Selecting drives for video capture

Pro Tools will create a Video Files folder in the session folder on the video record volume. If this volume is different than the volume on which your session was originally saved, Pro Tools will also create a new session folder on the target volume matching the name of the current session.

To digitize video to the Movie track:

- **1** In the Edit window, do one of the following:
 - Place the Playback cursor where you want to start recording.
- If you want to digitize video without specifying a selection in the Timeline, the video record volume must have at least 200 MB of available space. You can also limit the amount of recording time by changing the Open Ended Record Allocation settings (located in Setups > Preferences > Operations).
 - or –
- Make a selection on a Timebase Ruler or on a track to select a range of time for the recording. (To make a selection on a track, Operations > Link Edit and Timeline Selection must be enabled.)
- Because it is not possible to record a partial frame of video, selections in the Movie track are rounded to the frame boundaries. This means that the start of the selection is moved earlier to the nearest frame boundary and the end of the selection is moved later to the next frame boundary.
- 2 Record enable the Movie track by clicking the Record Enable button. The approximate recording time available on the selected video record volume will be displayed (in minutes) below the Video Record Volume Selector. This display does not update while video is being digitized.

- **3** Do one of the following:
 - To record with the video's time code synchronized to the session time code when the MachineControl option is installed. click the Online button in the Transport window to enable it, then click Record in the Transport window. The VTR will locate to the correct time code and begin recording.
 - To record with the video's time code synchronized to the session time code when the MachineControl option is not installed, first slave Pro Tools to incoming LTC or VITC time code, then click the Online and Record buttons in the Transport window. Manually start playback on the VTR to begin recording.
- See the Pro Tools Reference Guide for information about slaving to LTC or VITC time code.
 - · To record video without synchronizing to time code, ensure the Online button in the Transport window is not enabled. Manually start playback on the VTR, then click Record and Play in the Transport window to begin recording.



Transport window

4 When you have finished recording, click Stop in the Transport window.



A *If you record over existing clips in the Movie* track, the actual video files remain intact. All video recording in Pro Tools is non-destructive.

To abort a record pass:

• Press Control+period (Windows) or Command+period (Macintosh) to abort a record pass in progress and restore the Movie track to its original state. The video that you digitized before aborting will be deleted from disk.

To undo a record pass:

• Choose Movie > Undo Capture to undo a record pass after it has completed. The digitized video will be removed from the Movie track, and any video clips that were overwritten in the Movie track will be restored.

When you undo a record pass, the digitized video will be removed from the Movie track, but will not be removed from disk.

Dropouts During Video Digitize

When recording video, a dropout may occur in the video signal. Dropouts can be caused by bad cable connections, dropouts in the source tape, or other problems. When Pro Tools detects a dropout in the video signal while recording, a warning dialog appears. The recording will continue as specified and may still be usable.

Because the Location Indicators freeze when the warning dialog appears, it is recommended that you make a note of the location shown in the indicators before dismissing the dialog, then do the following:

- Check the recorded video near that location to see if the error caused an unacceptable dropout.
- Check the video recorded after the initial dropout, as the warning is only posted for the first occurrence and there may be other errors later in the recording.

Importing, Editing, and **Exporting MXF Audio Files**

Pro Tools 6.9 adds the following support for MXF audio:

- · Import and play back MXF audio and video files
- Export MXF audio files (DigiTranslator 2.0 required)

MXF (Material Exchange Format) is a media file format that includes both video and audio files, and is designed for the interchange of audio-visual material with associated data and metadata. It was designed for improving file-based interoperability between servers, workstations, and other content creation devices.

AAF sequence files can refer to MXF media files. For AAF or OMF sequence information and requirements, see the DigiTranslator 2.0 Guide, or the Avid DNA Video Peripherals Guide.



▲ Pro Tools cannot play MXF audio or video files embedded in an AAF sequence.

Importing MXF Audio into Pro Tools

Pro Tools 6.9 now lets you import MXF audio files using any of the following procedures:

- File > Import Audio to Track
- Import Audio command in the Audio menu from the Audio Regions List
- Drag files to the Pro Tools application icon or alias
- Drag from a DigiBase browser



🌣 DigiTranslator is not required to import and play back MXF audio.

For information on importing audio files, see the Pro Tools Reference Guide.

Editing MXF Audio in Pro Tools

MXF audio can be edited in the same way as other types of audio files, with some minor limitations. MXF audio does not support:

- Destructive editing
- Editing with the Pencil tool
- AudioSuite plug-ins Overwrite Files option

MXF Audio Metadata Display in DigiBase Browsers

In Pro Tools 6.9, DigiBase browsers display the same types of metadata for MXF-wrapped audio and video files that are displayed for OMF media files.



For more information on using the Pro Tools DigiBase browsers, see the DigiBase Guide.

Exporting Pro Tools Tracks as MXF Audio Files

With the DigiTranslator 2.0 option installed, you can choose to export MXF audio files using the following commands:

- Export Selected Tracks as OMF/AAF
- Export Selected Regions as Files
- Bounce to Disk

Exporting Tracks with MXF Audio Files

Use Export Selected Tracks as OMF/AAF to export individual tracks or an entire Pro Tools session as an AAF sequence referring to MXF audio files.



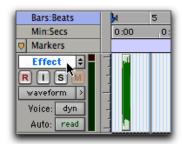
Tracks are exported in their entirety and time selections are ignored.



Volume and pan automation is not exported if Quantize Edits to Frame Boundaries or Avid Compatibility Mode are enabled.

To export selected audio tracks from Pro Tools as an AAF sequence referring to MXF audio files:

1 In Pro Tools, select the tracks you want to export.



Selecting a track in Pro Tools

2 Choose File > Export Selected Tracks as OMF/AAF.

3 Under OMF/AAF Options, choose AAF from the Export As pop-up menu.

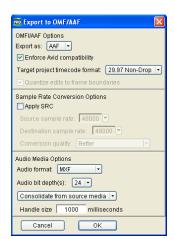


A An OMF sequence cannot reference MXF media files. When using the Export Selected Tracks as OMF/AAF dialog, choose AAF in the Export As pop-up menu to enable MXF in the Audio Format menu.

4 Select Enforce Avid Compatibility.



Enforce Avid Compatibility creates frameaccurate edits, wraps the files as OMFI (unless you choose MXF), and limits the sample rate options to 44.1 or 48 kHz. Dithering without noise shaping will be applied to files being exported from 24-bit to 16-bit.

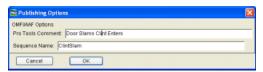


Pro Tools Export to OMF/AAF dialog

- **5** Ensure the Target project time code format is correct for the Avid application project to which you are exporting the AAF sequence.
- 6 Under the Audio Media Options section, select MXF from the Audio Format pop-up menu.

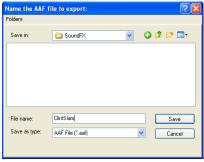
- 7 Verify the Audio Bit-Depth setting is acceptable for the recipient of this export. Many versions of Avid editors only support 16-bit audio. However, all versions of Media Composer Adrenaline editors and Avid Xpress Pro versions 4.5 or later support 24-bit audio.
- 8 Click OK.
- **9** In the Publishing Options dialog, type the Pro Tools Comment and Sequence Name.

Pro Tools will create a sequence with the name you supply. The comment appears in the Avid application bin in the Pro Tools Comment column.



Pro Tools Publishing Options dialog

- 10 Click OK.
- **11** In the Name the AAF File to Export dialog, navigate to a folder where you can easily locate the AAF sequence when it is time to import it into the Avid application.



Pro Tools Name the AAF File to Export dialog (OMFI dialog not shown)

12 Click Save.

13 In the Please Choose a Folder for Converted Audio Files dialog, ensure that the audio files are being saved to the OMFI MediaFiles folder (OMF files) or the Avid MediaFiles folder (MXF files) on a suitable drive for use with the target Avid application.



Navigating to the OMFI MediaFiles folder

14 Click Use Current Folder (Windows) or Choose (Macintosh).

Pro Tools exports the AAF sequence to the desired folder, and exports the related media to the OMFI MediaFiles folder (OMFI files) or the Avid MediaFiles folder (MXF files).

15 If you are ready to import the files into the Avid application, exit Pro Tools.



For more information on working in Avid applications, see the appropriate Avid application guide or the Avid Media Station|PT Guide.

Exporting a Region as a New MXF File

You can export regions as MXF audio files with the Export Selected As Files command. Use this command if you intend to use a region in other sessions or other audio applications without using its parent source file.

This command also provides a way to convert regions to a different sample rate or bit depth.

To export regions as new MXF files:

- 1 In the Audio Regions List, select the regions you want to export.
- 2 From the Audio Regions List pop-up menu, choose Export Selected As Files.



Export Selected dialog

3 In the Export Selected dialog, select the Enforce Avid Compatibility option.



Enforce Avid Compatibility creates frameaccurate edits, wraps the files as OMFI (unless you choose MXF), and limits the sample rate options to 44.1 or 48 kHz. Dithering without noise shaping will be applied to files being exported from 24-bit to 16-bit.

- **4** Select MXF from the File Type pop-up menu.
- 5 Set the bit resolution and sample rate. In addition, specify the Conversion Quality and Destination Directory.

6 In the Rename By section, click one of the following options to indicate how Pro Tools should resolve duplicate file names:

Prompting for Each Duplicate Prompts you for a file name for any file that has the same name as a file in your destination directory.

Auto Renaming Automatically changes the name of any duplicate file by adding a number at the end of the file name (such as file_01).

Replacing with New Files Replaces files with the same name with the new files.

7 Click Export to export the new audio files.



When you use the Export Selected As Files command with a lower bit rate, Dither (and Noise Shaping) may be applied as shown in Table 5.

Table 5. Dither and Noise Shaping with Export Selected dialog

Bit Rate	Dither	Noise Shaping
24-bit to 24-bit	No	No
16-bit to 24-bit	No	No
24-bit to 16-bit	Yes	Yes
16-bit to 16-bit	No	No
24-bit to 8-bit	Yes	No
16-bit to 8-bit	Yes	No



For more information about using Dither, see the Pro Tools Reference Guide.

Exporting MXF Audio Files Using Bounce to Disk

Use the Bounce to Disk command to create premixed MXF audio files of the current Pro Tools session. This does not export all of the individual files on the Timeline, but it does guarantee that the mix you hear in another application will be identical to the mix you hear in Pro Tools, including all panning, effects and automation.

To export to MXF using Bounce to Disk:

1 After you have finished recording and mixing a session in Pro Tools, highlight the length of the session in the timeline ruler (or on a track), plus an additional amount of time to avoid cutting off any reverb tails that might continue past the end of the region.



Audio session highlighted and ready to bounce

2 Choose File > Bounce to Disk.

3 In the Bounce Options dialog, choose your Bounce Source.



Pro Tools Bounce to Disk dialog

4 Select Enforce Avid Compatibility.



Enforce Avid Compatibility creates frameaccurate edits, wraps the files as OMFI (unless you choose MXF), and limits the sample rate options to 44.1 or 48 kHz. Dithering without noise shaping will be applied to files being exported from 24-bit to 16-bit.

- **5** Choose MXF for the File Type.
- **6** Choose a Sample Rate and Bit Depth.
- **7** Click Bounce.
- **8** In the Publishing Options dialog, type the Pro Tools Comment and Clip Name.

All audible audio in the selection will be exported to two multi-mono audio files.

- **9** In the Save Bounce As dialog, choose the drive where you want to save the files.
- **10** Click Save.

Pro Tools will begin bouncing to disk. Pro Tools bounces are done in real time, so you hear audio playback of your mix during the bounce process (though you cannot adjust it).



Bouncing to Disk dialog

Support for AAF Sequences Referencing SDII Audio Files

Pro Tools can now import an AAF sequence that references Sound Designer II (SDII) audio files.



A Pro Tools cannot import any audio or video files embedded in AAF sequences.



For more information on importing and exporting AAF sequences, see the Pro Tools Reference Guide or the Avid Media Station|PT Workflow Guide.

Importing OMF/AAF Audio Files with Mixed Sample Rates and/or Bit Depth

With the DigiTranslator 2.0 option, you can open and import OMF or AAF sequences with mixed audio sample rates and/or bit-depths into Pro Tools.

Audio files that are not of the same bit depth or sample rate as a session must be converted to be used with the session. When an audio file is converted, a new file with the correct bit depth, file type, and sample rate is created and placed in a folder vou choose.



You can use the Source Sample Rate settings to compensate for any pull up or pull down factors that may have been applied to the audio prior to importing. (See the Pro Tools Reference Guide for more information on using the Sample Rate Conversion settings.) *In a sequence with files of mixed sample* rates, set the Source Sample Rate in proportion to the Target sample rate of the session, and the pull up or pull down compensation will be applied correctly to all files in proportion with their original sample rate.

Optimizations for Synchronization, Remote Mode, and Record Allocation

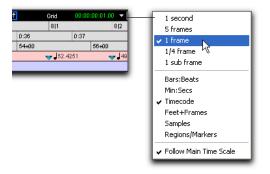
Pro Tools 6.9 contains enhancements that improve lock time and reliability when synchronizing to external time code. In addition, record start times are improved in non-synchronized workflows.

Redefine External Time Code Offset Command

The new Redefine External Time Code Offset command (located in the Setup menu) makes it easy to recalculate time code offsets based on the current selection. This is particularly useful when synchronizing to a new picture cut that may have different time code from the original session.

To redefine the external time code offsets:

- 1 Set the Edit mode to Grid.
- 2 Set the Grid value to Timecode, with a unit setting of 1 frame.



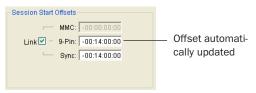
- 3 Click the selector at a frame boundary where you can easily identify a picture sync point (for example, at the start of picture or an edit).
- 4 Choose Setups > Redefine External Time Code Offset.
- **5** Enter the new time code position for the picture sync point you chose.



Redefine External Time Code Offset dialog

6 Click OK.

After you redefine the time code offset, the offset automatically updates in the Sync field under the External Time Code Offsets section of the Session window.



External Time Code Offsets section in Session Setup window

Changes to Minimum Sync Delay

The Minimum Sync Delay preference (located in Setups > Peripherals > Synchronization) should not have to be adjusted during normal use, as Pro Tools will now automatically adjust for optimal lock times.

Pro Tools now keeps track of lock time "history," then automatically optimizes play and record "priming" (pre-loading audio or pre-allocating disk space for recording) in order to get the fastest, most consistent lock time possible.

The Minimum Sync Delay preference now sets the minimum time for only the first learning pass.

Pro Tools will reset its lock time to the Minimum Sync Delay amount when there have been significant changes in the amount of recordenabled tracks, or if video is taken online or offline. Pro Tools then re-optimizes for best and most consistent lock times and ignores the Minimum Sync Delay until there is another reset.



In order to maintain acceptable lockup times, do not TrackPunch-enable more tracks than necessary.

New Avid Media Station|PT Software

Avid Media Station|PT software is designed especially for Pro Tools post-production workflows with AVoption V10 and Avid Mojo. Media Station|PT replaces Media Station|V10 and adds the following features:

- Send to Pro Tools Export templates
- Video mixdown
- MXF audio support
- Import, playback, and export of all MXF video resolutions
- Support for Avid Mojo on Windows XP and Mac OS X, including:
 - Capture and playback of Mojo-supported resolutions
 - Capture audio from 192 I/O audio interface
 - Transcode non-Avid Mojo resolutions to DV25 for import to Pro Tools



For more information about these features, see the Media Station|PT Guide.

New AVoption V10 Features

(Windows XP Only)

Pro Tools 6.9 with the 192 I/O or 192 Digital I/O audio interface supports the following Avid video features for AVoption|V10:

- · Import and playback of any standard-definition Avid MXF Video file
- Import and playback of IMX MPEG50 video files
- Optical connections between AVoption|V10 and audio interface no longer required

Import and Playback of Any Standard-Definition Avid MXF Video File

Pro Tools 6.9 with AVoption V10 adds the ability to import and play back any resolution of MXF video.

For information on importing and playing back video files in Pro Tools, see the Pro Tools Reference Guide.

Importing and Playing Back IMX MPEG50 Video Files

Pro Tools 6.9 with AVoption V10 lets you import and play back IMX MPEG50 video with an OMF or MXF metadata wrapper.

OMF- or MXF-wrapped IMX MPEG50 video files can also be imported as part of an AAF file that is referencing audio and video media.

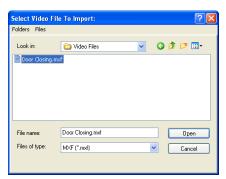


▲ MPEG40, MPEG30, and OP1a format IMX files are not supported.

To import an IMX video file into Pro Tools:

- **1** Launch Pro Tools and create a new session, or open an existing one.
- 2 Check the time code settings of the session to make sure they match those of the movie you want to import, and save the session.

3 Choose Movie > Import Movie.



Import Movie dialog

- **4** In the Select Video File to Import dialog, select OMF or MXF in the Files of Type menu, and navigate to the drive and folder that contains the file you want to import.
- **5** Select the movie and click Open. Pro Tools imports the movie and displays it in its own Movie track in the Edit window.



Movie track above an audio track in the Edit window

Optical Connections Between AVoption|V10 and Audio Interface No Longer Required

To capture and play back audio with Media Station|V10 software, it was necessary to connect the OPTICAL In and Out ports on the AVoption|V10 to the OPTICAL In and Out ports on the Pro Tools audio interface.

With Media Station|PT, these optical cable connections are no longer required. Audio is now captured directly through the audio peripheral.

New Avid Mojo Features

Pro Tools 6.9 with the 192 I/O or 192 Digital I/O audio interface adds the following Avid video features for Avid Mojo:

- Windows XP TDM support
- Avid Mojo support on Windows XP, including streaming audio and video with Avid Unity MediaNetwork

Windows XP TDM Support

Avid Mojo is now supported by Pro Tools|HD on both Windows XP and Mac OS X.

Avid Unity Support for Mojo

(Windows XP Only)

Pro Tools 6.9 with AVoption|V10 or Avid Mojo supports Avid Unity™ MediaNetwork, which provides integrated high-speed network storage systems for Avid and Pro Tools workstations.

For detailed information on configuring your Pro Tools system with AVoption | V10 or Avid Mojo as an Avid Unity MediaNetwork client, see the *Pro Tools Client Avid Unity* TM *MediaNetwork Guide*. Also, refer to the Avid Unity compatibility pages of the Digidesign Web site (www.digidesign.com/compato), as well as your Avid Unity MediaNetwork documentation.

Recording to and Streaming Media from Unity

Both audio and video media can be recorded to and played back from Avid Unity storage volumes.

Digitizing Video Directly to Unity

You can digitize video directly to Avid Unity MediaNetwork by designating a Unity volume as the video record volume. For more information, see "Digitizing Video to the Pro Tools Timeline" on page 67.

Video Rate Pull Up/Down No Longer Supported for Avid Video

When working with Avid video in previous versions of Pro Tools, the Video Rate Pull Up/Down pop-up menu located in the Session Setup window let you apply pull up or pull down factors to the frame rate of video playback independently from the audio pull ups (if any).

This feature is not supported in Pro Tools 6.9 with Avid video, and displays "None" in the Video Rate Pull Up/Down pop-up menu.