



What's New in Pro Tools

version 2022.9

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Guide Part Number 9329-66412-00 REV A 09/22

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What's New in Pro Tools 2022.9

New Features and Enhancements

Pro Tools[®] software version 2022.9 provides the following new features and enhancements:

Pro Tools Intro

- Pro Tools Intro[™] is the new free tier of the Pro Tools product line.

Aux I/O

(Classic HDX Not Supported)

- You can use Aux I/O for streaming audio between Pro Tools software and other audio applications (such as Zoom or Apple Music) and Core Audio hardware with Pro Tools on all macOS systems (except for Classic HDX).

Celemony Melodyne Editing Integration

- Pro Tools provides improved integration with Celemony Melodyne[™] ARA (Audio Random Access[™]) editing tools for pitch analysis, editing, and audio to MIDI conversion.

Miscellaneous Features and Enhancements

- Increased marker count from 999 to 32,000.
- Quantize Toolbar controls in Edit and MIDI Editor windows.
- Clip Effects tab.
- Enhanced Edit Window Follows and Mix Window Follows preferences for control surfaces.
- Mic Preamp track control enhancements.
- Timecode Overlay X/Y settings for fine-tuning the Timecode Overlay position in the Video window.

System Requirements and Compatibility Information

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

For complete system requirements and a list of qualified computers, operating systems, hard drives, and third-party devices, visit:
www.avid.com/compatibility


Conventions Used in This Guide


Pro Tools documentation uses the following conventions to indicate menu choices, keyboard commands, and mouse commands:


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


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

The following symbols are used to highlight important information:

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

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

 *Shortcuts show you useful keyboard or mouse shortcuts.*

 *Cross References point to related sections in this guide and other Avid documentation.*

How to Use this PDF Guide

This PDF provides the following useful features:

- The Bookmarks on the left serve as a continuously visible table of contents. Click on a subject heading to jump to that page.
- Click a + symbol to expand that heading to show subheadings. Click the – symbol to collapse a subheading.
- The Table of Contents provides active links to their pages. Select the hand cursor, allow it to hover over the heading until it turns into a finger. Then click to locate to that subject and page.
- All cross references in **blue** are active links. Click to follow the reference.
- Select Find from the Edit menu to search for a subject.
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[Avid YouTube Channel](#) (all playlists and videos)

[Pro Tools Quick Tips](#) (playlist for the *Pro Tools Quick Reference Guide*, available from the Dashboard)

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Pro Tools Intro

Pro Tools Intro Features

Pro Tools Intro™ is a free, feature-reduced version of Pro Tools designed to introduce you to the Pro Tools product line. Visit www.avid.com to register, download, and install Pro Tools Intro. Pro Tools Intro lets you create beats, record performances, and have fun making music with the same tools used by professionals. Pro Tools Intro provides all the essential audio and MIDI tools you need to produce your own music and includes 36 core effects and instrument plug-ins.



All Pro Tools subscriptions and trials automatically default to Pro Tools Intro upon expiration, ensuring that you have some limited capabilities even if your license or trial expires.

Pro Tools Intro software provides the following capabilities, depending on your hardware configuration:

- Up to 4 channels of I/O depending on your system and audio hardware
- Up to a total of 8 mono or stereo audio tracks per session at all sample rates
- Up to 4 Auxiliary Input or Routing Folder tracks
- 1 Master Fader track
- Up to 8 MIDI tracks
- Up to 8 Instrument tracks
- 16-bit, 24-bit, or 32-bit floating point audio
- Support for sample rates up to 192 kHz
- Automatic Delay Compensation (up to 16,383 samples at 48 kHz)
- Non-destructive, random-access editing and mix automation
- Audio processing with up to 10 real-time plug-ins per track, depending on your computer's capabilities
- Up to 10 sends per track


Pro Tools Intro and Pro Tools | First Projects


If you have been using Pro Tools | First and plan to continue with Pro Tools Intro, be sure to save any cloud-based projects as local sessions. While you will still have 1 GB of Cloud space that will continue to host your Pro Tools | First projects, Pro Tools Intro does not support the creation of any new projects (unless you purchase an Avid Cloud plan). This means that you cannot create your own projects, but you can still be invited by others to collaborate on their projects.


Aux I/O

(macOS Big Sur or Later Only)

Pro Tools on macOS (Big Sur or later only) lets you use Aux I/O to extend your Pro Tools I/O capabilities through Core Audio routing on macOS. Choose any device that you prefer to use as your main Playback Engine, such as HDX (Hybrid Engine only) or Pro Tools | Carbon, and then add individual Aux I/O input and/or output devices in the I/O Setup (such as Zoom or your favorite sound library application). Each enabled device appears in I/O Setup as an additional interface that can be assigned to input or output of a track. Use Aux I/O with Pro Tools Audio Bridge to stream audio between Pro Tools and another DAW (such as Ableton Live) or virtual instrument and effects hosts like Apple MainStage, or use Aux I/O to stream audio out to Zoom or Microsoft Teams for production review.


 *While Aux I/O can use any Core Audio device on the system, it is recommended that you use Pro Tools Audio Bridge devices for optimal performance. Aux I/O devices should not be used interchangeably with your main playback engine as it incurs greater, non-deterministic latency (which means latency can change between playback and recording passes). Aux I/O is meant to be used as a utility to route signal through Pro Tools, but should not be relied upon for critical audio tasks.*

 *When streaming audio between Pro Tools and other audio applications and hardware, it is strongly recommended that they all use the same sample rate in order to avoid performance issues.*

 *Aux I/O is not supported with Pro Tools Intro and is not available with Classic HDX.*

Pro Tools Audio Bridge

Pro Tools Audio Bridge provides a set of Core Audio drivers with different I/O counts for streaming audio between Pro Tools software and other Core Audio-compatible applications.

 *Although Pro Tools Audio Bridge devices (just like any Core Audio Device) can be selected as the main Playback Engine, Pro Tools Audio Bridge was designed to be used for Aux I/O streaming only and should not to be used as the main Playback Engine.*

Pro Tools Audio Bridge provides a set of Core Audio drivers with different I/O counts for streaming audio between Pro Tools software and other Core Audio-compatible applications. It is recommended that you use a device with a channel count that is closest to your streaming requirements. Note that each device can only be used for either input or output, but not both.

Pro Tools Audio Bridge includes devices with the following channel counts:


Pro Tools Audio Bridge 16 Provides 16 channels of input or 16 channels of output to or from Pro Tools software.

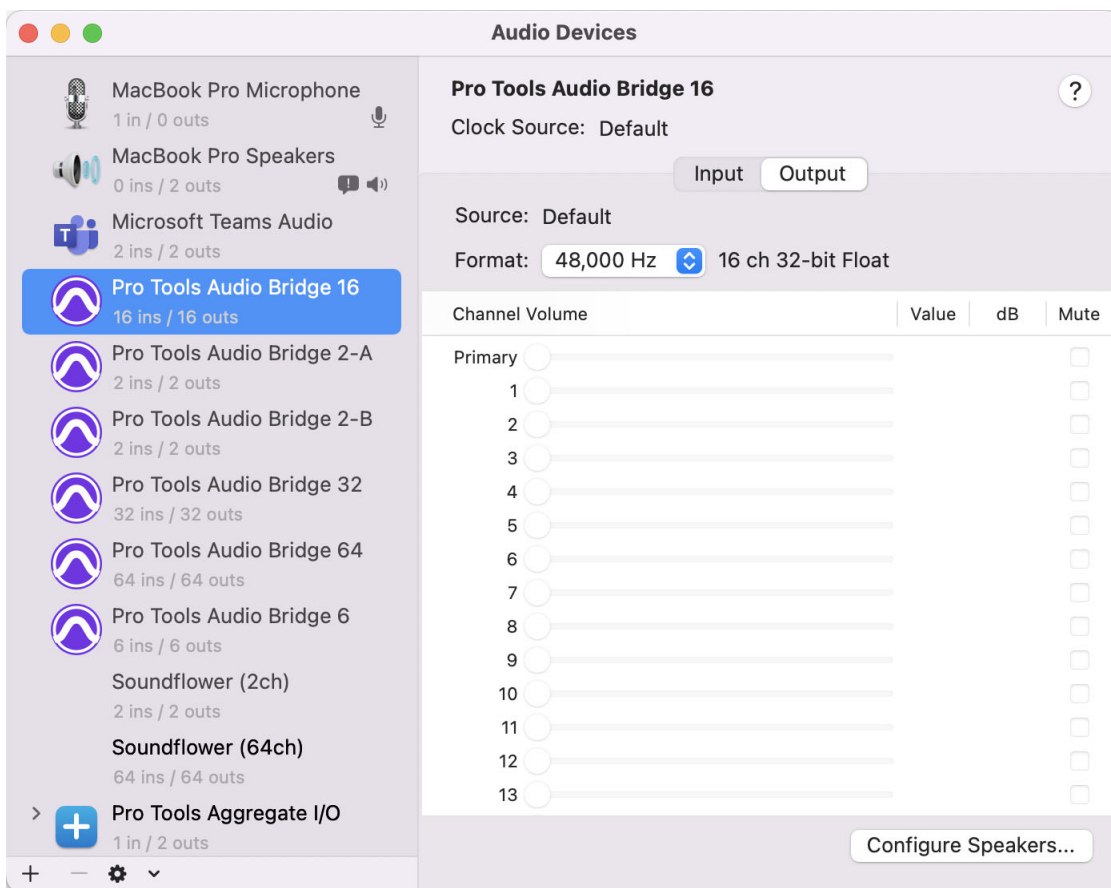
Pro Tools Audio Bridge 2-A and 2-B Two separate drivers that each provide 2 channels of input or 2 channels of output to and from Pro Tools software.

Pro Tools Audio Bridge 32 Provides 32 channels of input or 32 channels of output to or from Pro Tools software.


Pro Tools Audio Bridge 64 Provides 64 channels of input or 64 channels of output to or from Pro Tools software.

Pro Tools Audio Bridge 6 Provides 6 channels of input or 6 channels of output to or from Pro Tools software., which is useful for 5.1 routing.

 *Choose a Pro Tools Audio Bridge channel count closest to your needs. Pro Tools Audio Bridge devices can be manually reconfigured if you need a channel count that is not supplied (see [Customizing Pro Tools Audio Bridge Devices](#)).*



AMS Output, Pro Tools Audio Bridge 16 selected

 Pro Tools Audio Bridge drivers are installed with Pro Tools, or they can be installed separately for use with Core Audio applications other than Pro Tools using the `Install Pro Tools Audio Bridge.pkg` in the Driver Installers folder on the mounted Pro Tools disk image.

Customizing Pro Tools Audio Bridge Devices

(For Advanced Users Only)

You can create, edit, and delete Pro Tools Audio Bridge devices to match your specific needs using TextEdit. Note that the following should only be attempted by advanced users.

To change the configuration of Pro Tools Audio Bridge devices:

- 1 Quit any applications that are using Pro Tools Audio Bridge.
- 2 Open `ProToolsAudioBridge.config` with any text editor (such as Apple's TextEdit), which is located here:
`Macintosh HD/Library/Audio/Plug-Ins/HAL/ProToolsAudioBridge.driver/Contents/Resources/`
- 3 Add, remove, or modify an existing line to add, remove, or change the Pro Tools Audio Bridge devices listed in AMS. The first number is the channel count, followed by the name of the device.
- 4 Save the file and reboot your computer.

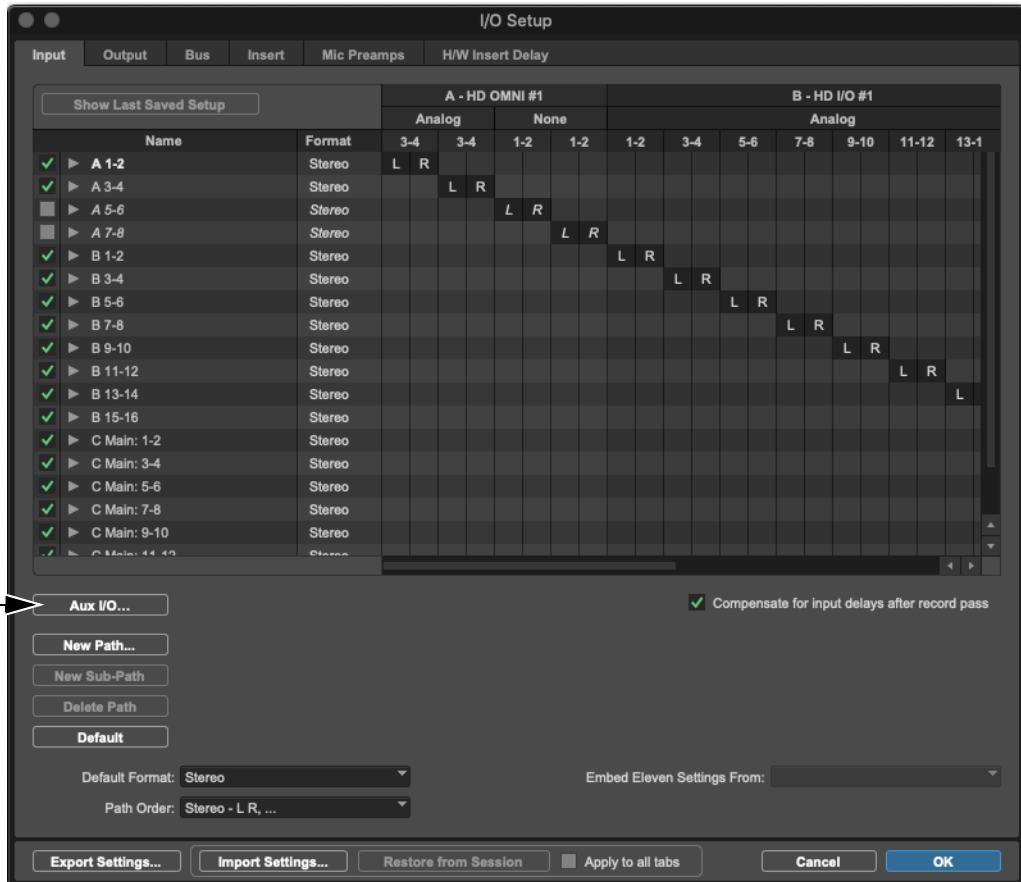
When you next launch Core Audio after rebooting, your changes appear in AMS.

Setting Up Aux I/O

The Input and Output pages of the Pro Tools I/O Setup window let you add any Core Audio device for use with Pro Tools as Aux I/O in addition to the I/O of the selected Playback Engine.


To add Core Audio devices as additional Auxiliary Inputs or Outputs to the Pro Tools mixer:

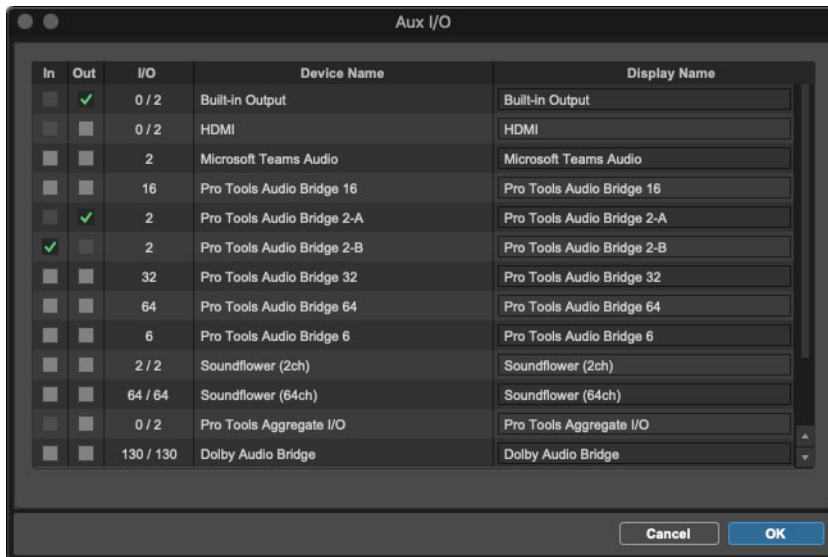
- 1 Choose Setup > I/O.
- 2 On either the Input or Output page of the I/O Setup, click the Aux I/O button.



I/O Setup, Input page

- 3 In the Aux I/O dialog, select the In or Out option for the Core Audio devices that you want to use as additional Input and Output Aux I/O with Pro Tools.

 Use Pro Tools Audio Bridge as the audio connection between Pro Tools and any other application to avoid clicks pops, errors, or other artifacts.



Aux I/O dialog

- 4 If desired, you can rename Aux I/O input and output devices in the Display Name column.
- 5 After you have selected In and Out for any Core Audio devices you want to use as Aux I/O with Pro Tools, click OK.
- 6 Click OK to close the I/O Setup window.

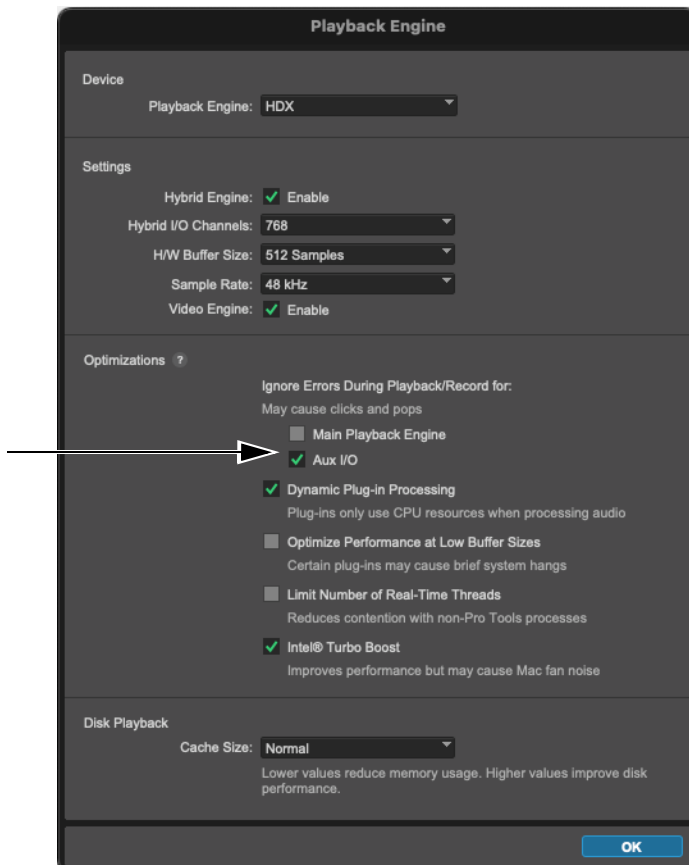
Any Core Audio devices selected as In or Out Aux I/O devices can be selected as the input or output for audio, Auxiliary Input, Routing Folder, Instrument, and Master Fader tracks, or as Outputs for Sends.

Playback Engine Changes

The Ignore Errors During Playback/Record section now include two options, one for the Main Playback Engine and one for Aux I/O. Note that, if enabled, audio artifacts may be heard (“clicks” and “pops”) for whichever is selected.

To ignore errors during playback and recording for any Aux I/O routing:

- 1 Choose Setup > Playback Engine.



Playback Engine, Ignore Errors During Playback/Record for Aux I/O option

- 2 Enable the Aux I/O option under Ignore Errors During Playback/Record for (this option is enabled by default).
- 3 Click OK.

⚠ *Aux I/O adds additional buffering on input and output, which scales relative to the H/W buffer size, resulting in additional non-deterministic latency.*

Aux I/O Workflow Examples

The following workflow examples merely hint at what you can do with Pro Tools and Aux I/O:

- Use Aux I/O output to the Built-in Speakers or Headphone on your Mac.
- Use Aux I/O output to Microsoft Teams or Zoom for review of projects and mixes.
- Use Aux I/O input from Soundminer, Soundly, or SoundQ for auditioning audio from sound libraries.
- Use Aux I/O to feed external meters for level referencing.
- Use Aux I/O input from Ableton Live or Apple Mainstage for music creation workflows.

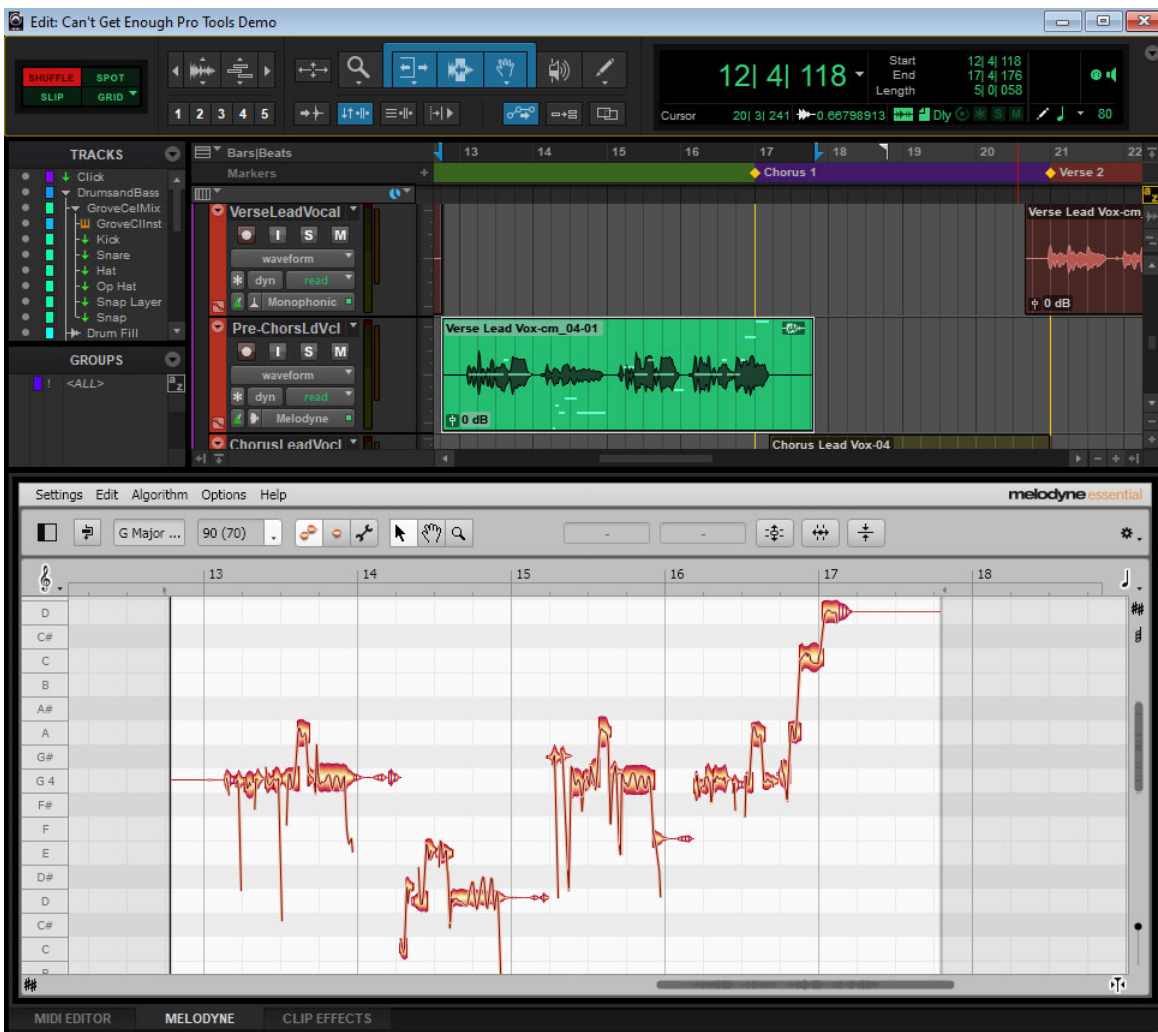
⚠ *Due to the non-deterministic latency inherent with Aux I/O, it is strongly recommended that you do not use it in punch recording workflows. Likewise, Aux I/O should not be used in any workflow where sample accurate playback and recording is required.*

Integrated Melodyne Editing

Pro Tools lets you edit audio with Melodyne ARA (Audio Random Access) by Celemony from within the Edit window. Pro Tools provides a docked Melodyne editor at the bottom of the Edit window along with the docked MIDI Editor and Clip Effects, each organized in tabs. You can analyze and edit whole audio tracks or single audio clips using Melodyne.

To show the Melodyne editor, do one of the following:

- Choose View > Other Displays > Melodyne.
- Click the Melodyne tab at the bottom of the Edit window.
- Press Option+8 (Mac) or Alt+8 (Windows).



Docked Melodyne editor for selected clip

Melodyne Essentials is installed with all tiers of Pro Tools, and a Melodyne Essentials license is included with all versions except Pro Tools Intro. You can upgrade to Melodyne Studio from Celemony for advanced Melodyne editing features in Pro Tools, including editing on multiple tracks at once in the Melodyne tab in the Edit window.

	Melodyne Essential (demo)	Melodyne Essential (with license)	Melodyne Studio Advanced Editing
Pro Tools Intro	✓		paid upgrade
Pro Tools Artist		✓	paid upgrade
Pro Tools Studio		✓	paid upgrade
Pro Tools Ultimate		✓	paid upgrade

Melodyne Analysis Display on Clips



Melodyne analyzed clip, note overlay and ARA analysis icon

Audio clips that have been analyzed by Melodyne display both an ARA icon in the upper right corner of the clip and transparent Melodyne note overlay on the audio clip representing the results of Melodyne pitch analysis. There are two different ARA icons, a slightly opaque one for a clip that is only analyzed and a solid one for when there are actually Melodyne audio modifications to the clip.

Melodyne Track and Clip Commands

Any audio track or clip can be analyzed by and edited in the Melodyne tab at the bottom of the Pro Tools Edit window.

To analyze an audio track and edit it with Melodyne, do one of the following:

- Select the audio track and choose Track > Melodyne > Edit.
- Right-click the audio track name and choose Melodyne > Edit.
- From the audio track Elastic Audio/ARA plug-in selector, choose Melodyne.



Selecting Melodyne from the Track Elastic Audio/ARA plug-in selector

⚠ Selecting Melodyne editing on Elastic Audio tracks changes the Elastic Audio plug-in to Melodyne.

To analyze an audio clip and edit it with Melodyne, do one of the following:

- Select the audio clip and choose Clip > Melodyne > Edit.
- Right-click the audio clip and choose Melodyne > Edit.
- Select the audio clip and press Control+Shift+A (Mac) or Start+Shift+A (Windows).

Editing Audio in Melodyne

For information about editing audio with Melodyne, please refer to documentation from [Celemony](#).

Once you start to make edits in Melodyne, Pro Tools provides the following commands:

Edit Analyzes the track or selected audio clip and opens the Melodyne editor at the bottom of the Edit window.

Clear Clears all Melodyne edits.

Bypass Bypasses Melodyne processing.

Render Renders Melodyne edits on the track or selected clip.

Melodyne edits are undoable and redoable using its own separate edit history (undo queue) from Pro Tools.



As with Elastic Audio, Clip effects are applied after Melodyne and before clip gain. The signal chain from an audio clip on a track to the track fader is as follows:

Audio File > Melodyne/Elastic Audio > Clip Effects > Clip Gain > Fades > Inserts > Fader



Melodyne editing cannot be previewed on tracks in DSP Mode (HDX and Carbon)—that is for Record or InputMonitor enabled tracks—since Melodyne is a Native-only plug-in.



Melodyne does not support mirrored clip editing

Importing and Exporting Audio with Melodyne

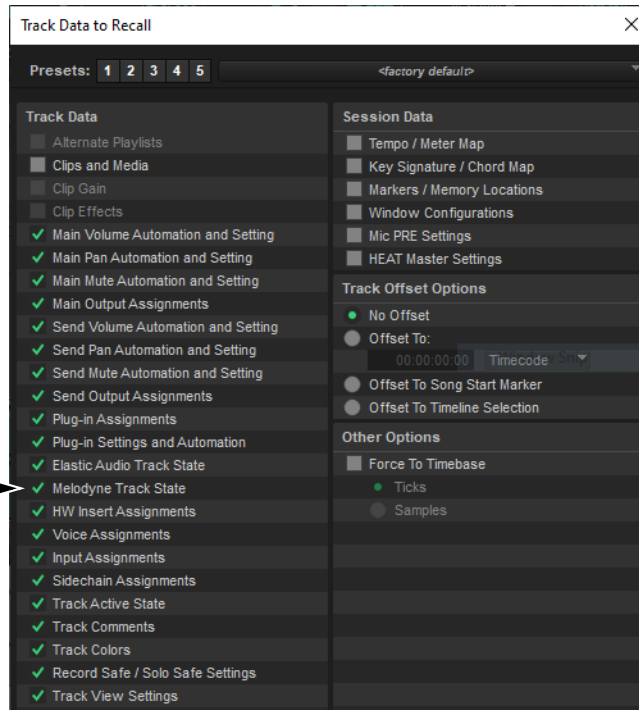
You can import audio containing Melodyne analysis, save and recall Melodyne Track State with Track Presets, and import Melodyne Track State using Import Session Data.

Importing Audio with Melodyne Analysis

When importing audio, Melodyne analysis persists as long as no sample rate conversion is applied.

Melodyne and Track Presets

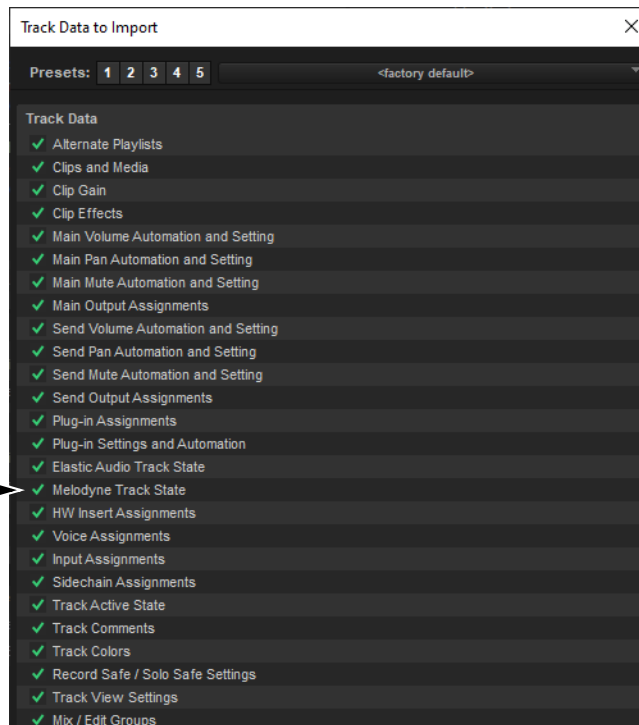
The Melodyne Track State can be saved and recalled with Track Presets.



Track Data to Recall, Melodyne Track State option

Melodyne and Import Session Data

You can import the Melodyne Track State of tracks when importing Session Data.



Track Data to Import (Import Session Data)

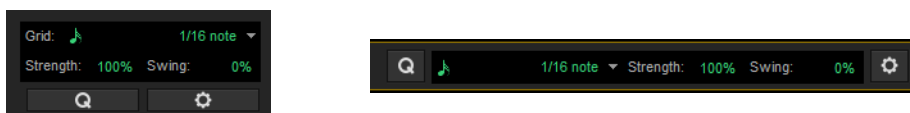
Miscellaneous Features and Enhancement

Increased Number of Markers

The number of Memory Location Markers available in Pro Tools has been increased from 999 to 32,000. When opening a session with more than 999 markers in an earlier version of Pro Tools, all markers past 999 are lost.

Quantize Tools in Edit and MIDI Editor Windows

The Edit and MIDI Editor windows provide a group of controls for Quantize functions in Pro Tools. These display and let you set certain quantization parameters (such as Grid, Strength, and Swing for note grids, and Groove, Timing, and Velocity for groove templates) that previously were only accessible in the Quantize page of the Event Operations window. Changes to Quantize settings in any of the toolbars or the Quantize page of the Event Operations window are mirrored in the others.



Quantize displays and tools in the Edit (left) and MIDI Editor (right) window toolbars

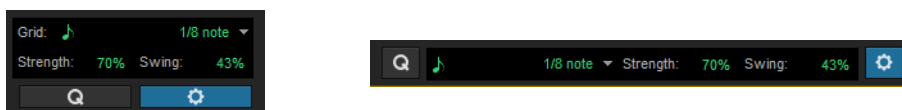
To quantize any selection using the current Quantize settings, do one of the following:

- Click the Q button.
- Press Command+Option+0 (Mac) or Control+Alt+0 (Windows).

To open the Quantize window:

- Click the Quantize Settings button (gear icon).

If any parameters not displayed in the toolbar (such as Offset or Randomize) are enabled, the Quantize Settings button (gear icon) lights blue.



Advanced Quantize settings indicated by blue Quantize Settings icon in the Edit (left) and MIDI Editor (right) window toolbars

Clip Effects Tab

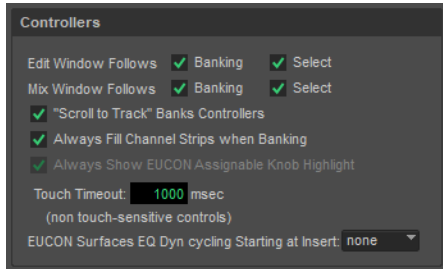
Clip Effects have been moved to the bottom of Edit window.

To open Clip Effects in the Edit window:

- 1 Select an audio clip.
- 2 Do one of the following:
 - Choose View > Other Displays > Clip Effects.
 - Click the Clip Effects tab at the bottom of the Edit window.
 - Press Option+6 (Mac) or Alt+6 (Windows).

Enhanced Controllers Preferences

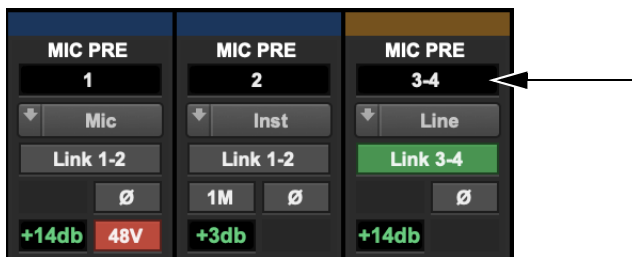
The Edit Window Follows and Mix Window Follows controllers preferences have been enhanced to include track selection in addition to controller banking. When the Edit Window Follows Select option is enabled, if you select a track on a control surface, Pro Tools scrolls the track into view as the top-most track in the Edit window. When the Mix Window Follows Select option is enabled, if you select a track on a control surface, Pro Tools scrolls the track into view as the left-most track in the Mix window.



Edit Window Follows and Mix Window Follows options

Mic Preamp Improvements

Mic Pre track controls in Pro Tools now show the slot number and mic preamp number for assigned devices (such as for Pro Tools | Carbon or mic preamps using the Avid | PRE protocol).

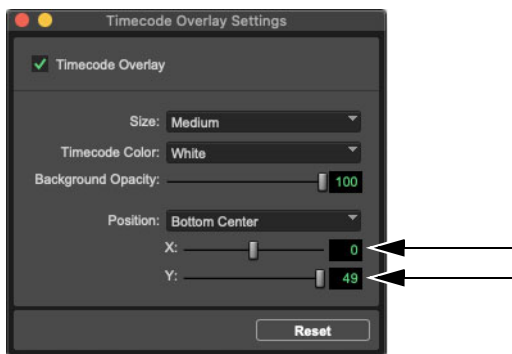


Pro Tools | Carbon Mic Preamp numbers

Timecode Overlay Enhancements

(Pro Tools Ultimate Only)

Pro Tools 2022.6 introduced preset locations for placement of the timecode overlay. Pro Tools 2022.9 now lets you further adjust the timecode overlay placement with X/Y location sliders.



Timecode Overlay Settings window, X/Y sliders



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