



What's New in Pro Tools[®] | Software and Pro Tools | HD Software

Version 12.4

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Chapter 1: What's New in Pro Tools and Pro Tools | HD Software Version 12.4

New Features and Improvements in Pro Tools

Pro Tools® and Pro Tools | HD Software version 12.4 provide the new Track Freeze feature for qualified versions of Mac OS X and Windows:

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 Pro Tools Documentation

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 session 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.*

Chapter 2: Track Freeze

Track Freeze

Pro Tools lets you “freeze” audio, Auxiliary Input, and Instrument tracks. When you freeze a track, the source material (audio and MIDI) on the track is replaced with audio that has been processed by all of the plug-ins on the track (or only up to a specified insert), including instrument plug-ins. This process is reversible, so you can “unfreeze” frozen tracks.

Freezing tracks is useful for freeing up processing power in your session for other tracks and processing tasks. It is especially useful for exchanging sessions with other systems that may not have all of the same plug-ins as your system. Rather than committing tracks as final print tracks, you can freeze tracks that you want to share but might want to keep editing while that track is shared or out for review.

The ability to unfreeze a track lets you go back and adjust plug-in settings or edit track material (such as audio or MIDI data to correct a note or rhythm) and then re-freeze the track.

⚠ *Editing is disabled on frozen tracks. To make edits, unfreeze the track, make the edits you want, and then re-freeze the track. For more information, see “Editing Restrictions on Frozen Tracks” on page 4.*

To freeze (or un-freeze) one or more tracks, do one of the following:

- Select one or more tracks and choose Track > Freeze (or Unfreeze).
- Click the Track Freeze icon in the Track controls so that it is highlighted (or unhighlighted).
- Right-click on the track name and select Freeze (or Unfreeze).

 *Option-Shift-Click (Mac) or Alt-Shift-Click (Windows) to freeze all selected tracks. Option-Click (Mac) or Alt-Click (Windows) to freeze all audio, Auxiliary Input, and Instrument tracks.*

When a track is frozen, any plug-ins on the track are made inactive. On Instrument tracks, the waveform of the frozen audio is superimposed over the MIDI data on the track as a visual cue.



Frozen Instrument track, Freeze icon highlighted

On Auxiliary Input tracks, the waveform of the frozen audio is shown as a visual cue.



Frozen Auxiliary Input track with source audio track shown—Freeze icon highlighted

On audio tracks, any plug-ins on the track are made inactive and the waveform updates to show the processed, or “frozen” audio.



Frozen audio track, before and after—Freeze icon highlighted

What Gets Frozen

The following track data is rendered when freezing a track:

- Plug-ins and automation for all plug-ins (except for any plug-ins remaining active when using Freeze to Insert)
- Clip Gain
- HEAT (if set to pre-insert)
- Elastic audio

The following track controls are maintained and are not rendered with track freeze:

- Volume
- Volume Trim
- Mute
- Pan
- Send Level
- Send Level trim
- Send Mute
- Plug-in automation for plug-ins that are not frozen (when using Freeze to Insert)

Freezing Audio and Instrument Tracks

When freezing audio and Instrument tracks, the rendered (“frozen”) audio starts at the beginning of each clip on the track and ends either at each clip end point or after the processed audio of the clip (such as with time-based plug-in processing like reverb or delay) falls below -144 dBFS for at least 60 seconds. Muted clips are not rendered.

Freezing Auxiliary Input Tracks

When freezing Auxiliary Input tracks, audio is rendered (“frozen”) starting when audio is detected at the track input. Audio stops rendering when the audio signal drops below -144 dBFS for 60 seconds.

Freezing Tracks with Inserts that Have Auxiliary Output Sends

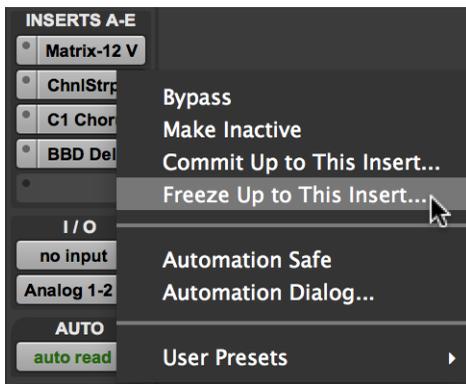
Some plug-ins, such as Pro Multiband Dynamics and many Virtual Instrument plug-ins, let you assign Auxiliary Output Stems (AOS) from the plug-in to track inputs of other tracks (such as audio or Auxiliary Input tracks). When freezing a track that has a plug-in that is assigned to Auxiliary Output Stems, you are prompted to also freeze any tracks that are assigned to the plug-in Auxiliary Outputs. Choose Yes to freeze those tracks as well or No to freeze only the source track.

Freeze Up To This Insert

Pro Tools lets you freeze a track up to an individual plug-in insert on the track. For example, you might want to freeze a virtual instrument plug-in, but continue to adjust processing plug-ins, like EQ or dynamics.

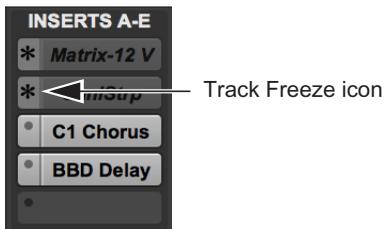
To freeze a track up to a single insert:

- 1 Ensure that Inserts view is shown in either the Edit or Mix window.
- 2 Right-click on the insert up to which you want to freeze the track and choose Freeze Up To This Insert.



Freeze Up To This Insert (Freezing up to insert B)

When any plug-in processing on a track is frozen, frozen inserts are italicized and grayed out. They also display the Track Freeze icon.



Track frozen through inserts A and B

Editing Restrictions on Frozen Tracks

Frozen tracks disallow most editing functions. To edit a frozen track, unfreeze it, make your edits, and then re-freeze the track.

The following editing actions are *not* allowed on frozen tracks:

- Editing clips or clip contents is disallowed.
- Elastic Audio is disallowed.
- AudioSuite rendering is disallowed on frozen tracks.
- Tempo changes, Song Start changes, and enabling or disabling the Conductor Track are not allowed when there are frozen tracks in the session.
- Insert and Cut Time operations are disallowed in a session if there are frozen tracks.
- HEAT is unavailable for frozen Auxiliary Input and Instrument tracks.
- Instrument Tracks are removed from the MIDI Editor window while frozen and MIDI parameters including Real Time Quantize settings cannot be adjusted until the track is unfrozen.
- Clips used on a source playlist for a frozen track cannot be removed from the session until the track is unfrozen.

The following editing actions are allowed on frozen tracks:

- Editing and writing of all basic track automation parameters including sends.
- Editing and writing of automation on unfrozen plug-ins as well as addition and removal of plug-ins on unfrozen inserts (when using the Freeze Up to This Insert functionality)
- Changing the track output path.



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