



What's New in Pro Tools and Pro Tools | Ultimate

version 2021.3

Legal Notices

© 2021 Avid Technology, Inc., ("Avid"), all rights reserved. This guide may not be duplicated in whole or in part without the written consent of Avid.

For a current and complete list of Avid trademarks visit: www.avid.com/legal/trademarks-and-other-notice

This product may be protected by one or more U.S. and non-U.S. patents. Details are available at www.avid.com/patents.

Product features, specifications, system requirements, and availability are subject to change without notice.

Bonjour, the Bonjour logo, and the Bonjour symbol are trademarks of Apple Computer, Inc.

Thunderbolt and the Thunderbolt logo are trademarks of Intel Corporation in the U.S. and/or other countries.



Confidential unpublished works. Copyright 2020 Dolby Laboratories. All rights reserved.

Dolby, Dolby Atmos, and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation.

Guide Part Number 9329-66247-00 REV A 3/21

Contents

- What's New in Pro Tools 2021.3 1
 - New Features and Enhancements 1
 - System Requirements and Compatibility Information 2
 - Conventions Used in This Guide 2
 - Resources 3
- New and Improved Features in Pro Tools 2021.3 4
 - HD Driver Update 4
 - Import Stereo m4a Files Containing Apple Lossless ALAC Media 4
 - MIDI Keyboard Window 4
 - Dynamic Transport Improvements 5
 - Display Waveforms in Low Resolution While Loading Preference 6
 - Bounce Improvements 6
 - Include Instrument/MIDI Output Option 7
 - Dolby Atmos Improvements 9
 - Pro Tools | SYNC X 10

What's New in Pro Tools 2021.3

New Features and Enhancements

Pro Tools® and Pro Tools | Ultimate™ software version 2021.3 provides the following new features and enhancements.

HD Driver Update

(Pro Tools | Ultimate with HDX or HD Native Only)

- Pro Tools | Ultimate 2021.3 requires HD driver and firmware updates for Pro Tools | HDX™ and HD Native systems.

Import Stereo m4a Files Containing Apple Lossless ALAC Media

- Pro Tools lets you import stereo .m4a files that contain Apple Lossless ALAC media.

MIDI Keyboard Window

- The MIDI Keyboard window lets you play MIDI notes from your computer keyboard.

Dynamic Transport Improvements

- The Dynamic Transport Follows Timeline Selection During Playback preference lets you switch between moving the Playhead or not when changing the timeline selection during playback in Dynamic Transport mode.

Display Waveforms in Low Resolution While Loading Preference

- Enable the While loading waveforms, display in low resolution preference to improve speed and performance when opening and working with large sessions.

Bounce Mix Improvements

- The Use Local Cache when Bouncing to Network Volume preference can significantly improve the speed of bouncing ADM BWF or multi-stem WAV BWF files to a network volume.
- Bounce Mix to MOV provides more audio channel formats.

Include Instrument/MIDI Output Assignments

- Track Presets let you include Instrument/MIDI Output assignments for Instrument and MIDI tracks. You can also import Instrument/MIDI Output assignments from Instrument and MIDI tracks using Import Session Data.

Dolby Atmos Improvements

(Pro Tools | Ultimate Only)

- Use Dolby Atmos® Renderer Stereo option.
- Bed/Object Fold Down Path improvements.

Pro Tools | SYNC X

(Pro Tools | Ultimate with HDX or HD Native Only)

- Pro Tools | Sync X is a versatile master synchronization and clock peripheral for use with Pro Tools | Ultimate software on HDX and HD Native systems.

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.
- When viewing this PDF on an iPad, it is recommended that you open the file using iBooks to take advantage of active links within the document. When viewing the PDF in Safari, touch the screen, then touch Open in “iBooks”.

Resources

The Avid website (www.avid.com) is your best online source for information to help you get the most out of Pro Tools.

Account Activation and Product Registration

Activate your product to access downloads in your Avid account (or quickly create an account if you do not have one). Register your purchase online, download software, updates, documentation, and other resources.

www.avid.com/account

Support and Downloads

Contact Avid Customer Success (technical support), download software updates and the latest online manuals, browse the Compatibility documents for system requirements, search the online Knowledge Base or join the worldwide Avid user community on the User Conference.

www.avid.com/support

Training and Education

Study on your own using courses available online, find out how you can learn in a classroom setting at an Avid-certified training center, or view video tutorials and webinars.

www.avid.com/education

Video Tutorials

The *Get Started Fast with Pro Tools* series of online videos provide tutorials to help if you are new to Pro Tools. They also provide videos for the experienced user that introduce new features found in the latest versions of Pro Tools.

www.avidblogs.com/get-started-fast-with-pro-tools/

View [Pro Tools Tech Tips](#) on YouTube for the latest tips and tricks with Pro Tools.

Products and Developers

Learn about Avid products, download demo software, or learn about our Development Partners and their plug-ins, applications, and hardware.

www.avid.com/products

New and Improved Features in Pro Tools 2021.3

HD Driver Update

(Pro Tools | Ultimate with HDX or HD Native Only)

Pro Tools | Ultimate 2021.3 provides a new HD driver and requires a firmware update for HDX and HD Native systems. These updates provide improved performance for Pro Tools | HDX and HD Native systems on all supported operating systems, and are required for macOS 11.x “Big Sur” support.

Install Pro Tools 2021.3. On Mac, you must install the HD driver separately using the Avid HD Driver Installer (included in the Driver Installers folder on the Pro Tools 2021.3 installer disc image). On Windows, the HD driver is installed with Pro Tools automatically. When you launch Pro Tools, you are prompted to update the firmware for the HDX or HD Native hardware in your system.

Import Stereo m4a Files Containing Apple Lossless ALAC Media

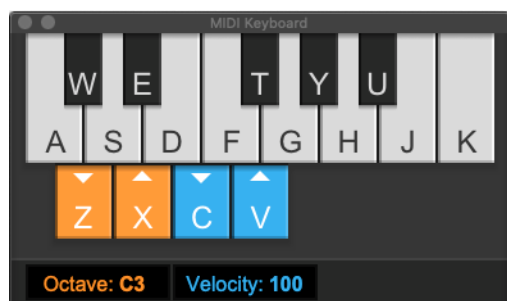
Pro Tools lets you import stereo .m4a files that contain Apple Lossless ALAC media using Import Audio (File > Import > Audio), or drag and drop from the Desktop or from a Workspace browser. Media is converted to the session audio file format on import.

MIDI Keyboard Window

The Pro Tools MIDI Keyboard window lets you play MIDI notes from your computer keyboard. For example, if you press A on your computer keyboard, it plays C; if you press T on the keyboard, it plays F#/Gb. You can also click in the MIDI Keyboard window to play notes. The key-to-note mappings are shown on the keyboard itself. The range is restricted to one octave since it is being played by your computer keyboard, but you can transpose that octave range down or up from –C2 to C8 using the Z and X keys. You can change the MIDI note velocity from 1–127 using the C and V keys.

To open (or close) the MIDI Keyboard window, do one of the following:

- Select (or deselect) Window > MIDI Keyboard.
- Press Shift+K.



MIDI Keyboard window

You can use the MIDI Keyboard window to play MIDI Thru, record MIDI, or enter MIDI using Step Input on MIDI and Instrument tracks.

To play MIDI Thru or record MIDI on an Instrument or MIDI track using the MIDI Keyboard window:

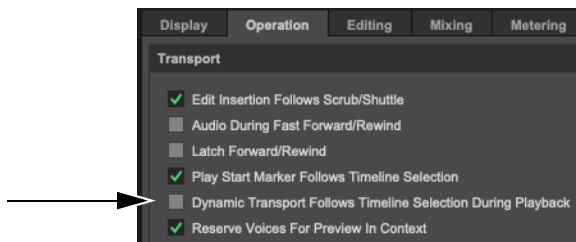
- 1 Open the MIDI Keyboard window (Window > MIDI Keyboard or press Shift+K).
- 2 Ensure that MIDI Thru is enabled (Options > MIDI Thru).
- 3 Ensure that All is selected as the MIDI Input for the MIDI or Instrument track you want to play.
- 4 Ensure that the MIDI Output for the track is assigned to the MIDI instrument you want to play (either an Instrument plug-in or an external MIDI device).
- 5 Record enable the track.
- 6 Press the keys on your computer keyboard corresponding to the notes you want (or click keys in the MIDI Keyboard window).
- 7 To record, record arm the transport and press play.

Dynamic Transport Improvements

The Dynamic Transport Follows Timeline Selection During Playback option (Setup > Preferences > Operation) lets you switch between moving the Playhead or not when changing the timeline selection during playback in Dynamic Transport mode.

When this option is enabled, the Playhead behaves as follows when changing the timeline selection in Dynamic Transport mode with Loop Playback:

- When making a new timeline selection during playback, the Playhead jumps to the new timeline selection instantly without waiting for playback of the current loop to complete, and begins to loop within the boundaries of the new selection.



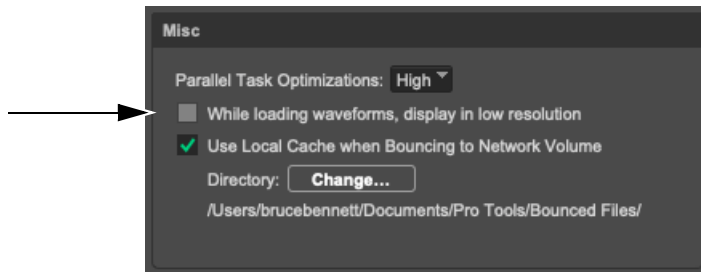
Dynamic Transport Follows Timeline Selection During Playback option disabled

When this option is disabled, the Playhead behaves as follows when changing the timeline selection in Dynamic Transport mode with Loop Playback:

- If a new timeline selection is made during playback that is later than the current location of the Playhead, the Playhead continues uninterrupted without jumping to the new selection.
- If the Playhead enters the new selection, it resumes loop playback between the loop points of the selection.
- If a new timeline selection is made before the location of the Playhead during playback, the Playhead continues uninterrupted without jumping back to the start of the new selection. You will need to manually relocate the Playhead to the new timeline selection to loop playback within the selection boundaries.
- If a new timeline selection is made during playback that does not contain the Playhead, stopping and restarting the transport moves the Playhead to the beginning of the selection and loops within the selection boundaries.

Display Waveforms in Low Resolution While Loading Preference

Enable the While loading waveforms, display in low resolution option in the Processing Preferences to improve speed and performance when opening large sessions and when performing actions such as continuous scrolling at extreme zoom levels. This can be especially helpful when working with network storage or using older non-solid-state drives. Waveforms will be rendered in low resolution until Pro Tools is able to complete reading the file from the cache, after which waveforms are displayed in full resolution.



Misc Processing Preferences, While loading waveforms, display in low resolution option disabled

To enable the While Loading Waveforms, Display in Low Resolution option:

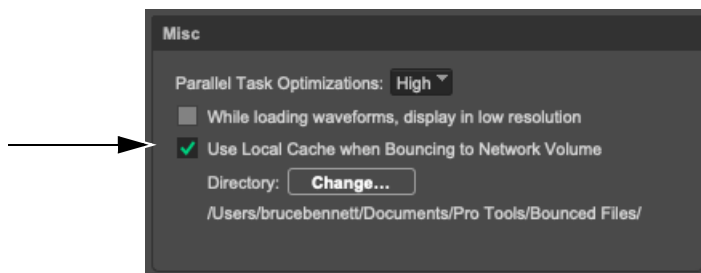
- 1 Choose Setup > Preferences > Processing.
- 2 In the Misc section, select While loading waveforms, display in low resolution.
- 3 Click OK to save your changes and close the Preferences dialog.

Bounce Improvements

Use Local Cache when Bouncing to Network Volume Preference

When bouncing ADM BWF or multi-stem WAV BWF to a network volume with the Single File Delivery Format option enabled, consider enabling the Use Local Cache when Bouncing to Network Volume option in the Processing Preferences (this option is enabled by default). Doing so should significantly improve the bounce speed to a network location.

When enabled, the Use Local Cache when Bouncing to Network Volume option caches the bounce locally and then copies it to the network location (and then deletes the local cache).



Misc Processing Preferences, Use Local Cache when Bouncing to Network Volume option enable

To enable the Use Local Cache when Bouncing to Network Volume option and specify the local directory for the bounce cache:

- 1 Choose Setup > Preferences > Processing.
- 2 In the Misc section, select Use Local Cache when Bouncing to Network Volume.
- 3 To specify the local bounce cache directory, click the Change button, navigate to and select the directory you want on a local volume with sufficient storage, and click OK.
- 4 Click OK to save your changes and close the Preferences dialog.

More Audio Channel Formats for Bounce to MOV

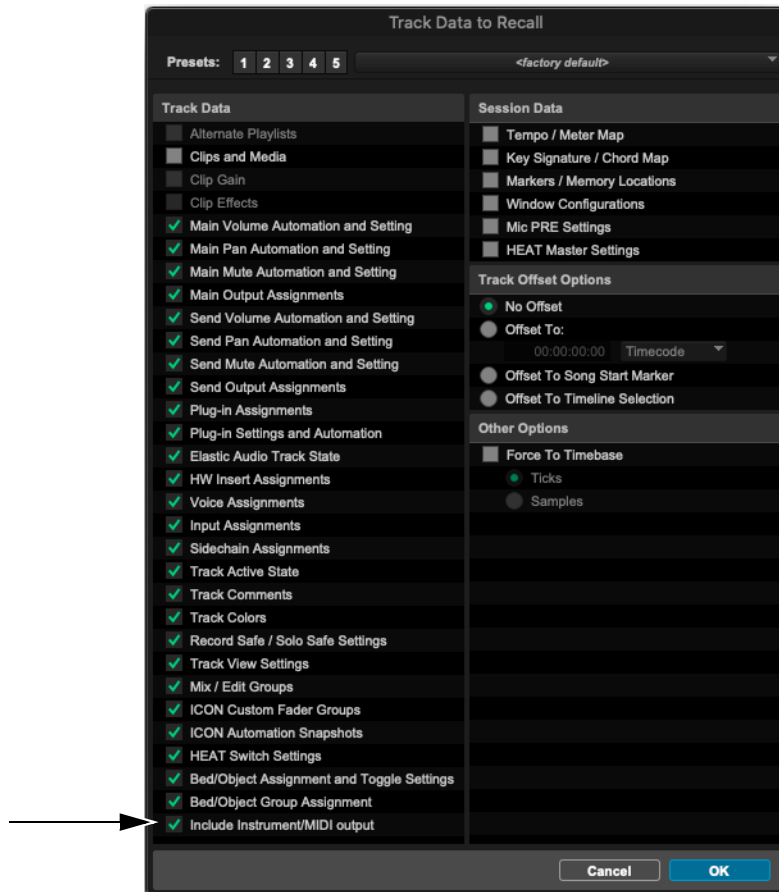
Bounce Mix to MOV increases the number of supported audio channel formats. In addition to Mono, Stereo, 5.1, and 7.1, the following formats are also now available:

- 5.0
- 6.0
- 6.1
- 7.0
- 7.1
- 7.1 SDDS

Include Instrument/MIDI Output Option

Saving and Recalling MIDI Output Assignments with Track Presets

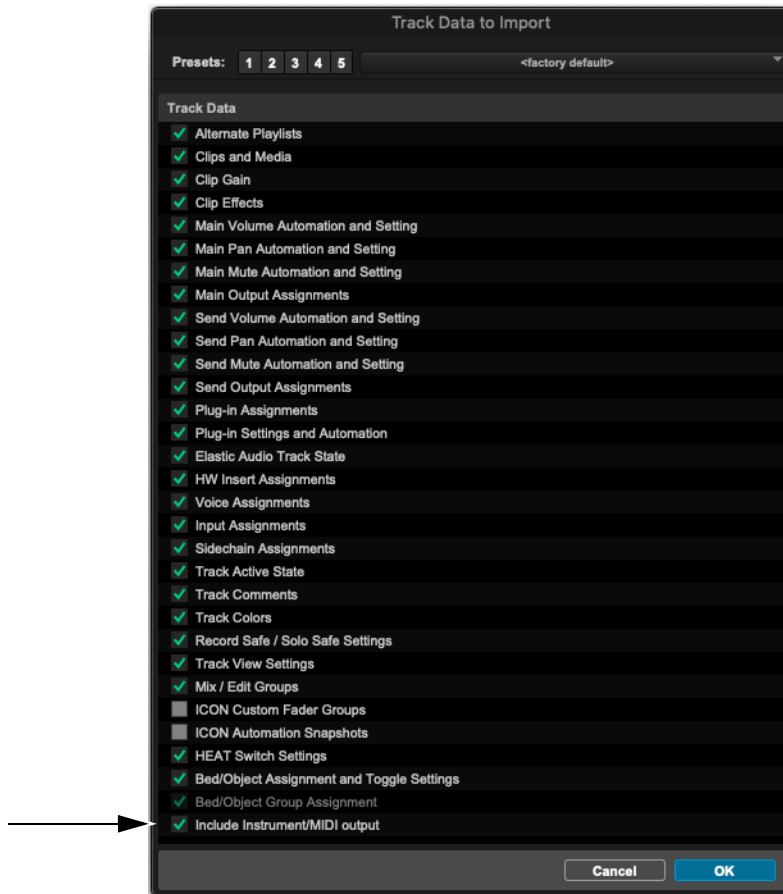
Track Presets let you include the MIDI output assignment for Instrument and MIDI tracks. When creating a Track Preset, enable the Include Instrument/MIDI output option the Track Data to Recall dialog. When recalling a track preset to an existing track, if this option was enabled the MIDI output assignment in the destination track is replaced with the assignment included in the preset. New tracks created from the track preset recall the saved MIDI output assignment.



Track Data to Recall dialog, Include Instrument/MIDI output option enabled

Importing Track MIDI Output Assignments with Import Session Data

When importing a MIDI or Instrument track using Import Session Data, enable the Include Instrument/MIDI output option in the Track Data to Import dialog to recall the source track's MIDI output assignment for Instrument and MIDI tracks. When importing to an existing track, the MIDI output assignment in the destination track is replaced.



Track Data to Import dialog, Include Instrument/MIDI output option enabled

Dolby Atmos Improvements

(Pro Tools | Ultimate Only)

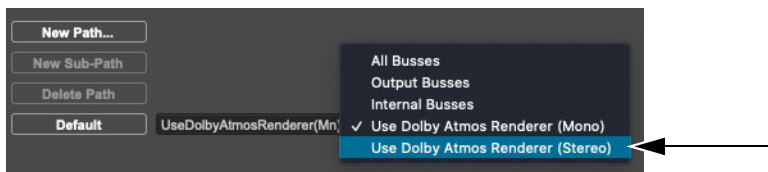
Create Default Stereo Object Busses from the Dolby Atmos Renderer

Pro Tools lets you use Dolby Atmos Renderer Settings to configure your session and I/O to match your Renderer configuration. This now includes Stereo Objects as well as Mono Objects.

The Use Dolby Atmos Renderer (Stereo) option reads the attached renderer input configuration and creates stereo object mapped busses and outputs from consecutive objects. If there are an odd number of objects, or the bed/object group names are different between two objects, those objects remain mono.

To automatically create outputs and busses in Pro Tools that match the Dolby Atmos Renderer configuration:

- 1 Configure the Dolby Atmos Renderer.
- 2 In Pro Tools, ensure that Dolby Atmos is enabled (Setup > Peripherals > Dolby Atmos).
- 3 Open the I/O Setup (Setup > I/O) and click the Bus tab.
- 4 Delete any existing busses.
- 5 From the Default Busses selector, enable one of the following:
 - Use Dolby Atmos Renderer (Mono)
 - Use Dolby Atmos Renderer (Stereo)



Selecting Use Dolby Atmos Renderer (Stereo) on the Bus page of the I/O Setup

- 6 Click the Default button.
- 7 Click OK.

All Outputs and Busses in the session now match the Renderer configuration.

Bed/Object Fold Down Path

Full Dolby Atmos mixes are monitored from the Renderer. Pro Tools lets you separately monitor a rough channel based mix of your beds and panned objects using the assigned Bed/Object Fold Down Path. In previous versions of Pro Tools, only Object Output paths could be monitored using the Object Fold Down Path. Pro Tools also lets you monitor the Bed/Object Fold Down Path regardless of whether or not Pro Tools is connected to the Renderer, whereas in previous versions you can only use the Object Fold Down Path when connection to the Renderer is lost.

The Dolby Atmos mix is folded down to the channel format of the assigned Bed/Object Fold Down Path Output using built-in coefficients for down mixing. Since it is not a true render of the Dolby Atmos mix, never use the Bed/Object Fold Down Path for Dolby Atmos mixing.

To assign an available Output path for the Bed/Object Fold Down Path:

- 1 Open the I/O Setup (Setup > I/O) and click the Output tab.
- 2 On the Output page, ensure that there is an available output path with the channel format that you want. If not, create one.
- 3 Select the Output path with the appropriate channel format that you want to use to monitor downmixed bed and panned object audio for the Bed/Object Fold Down Path.

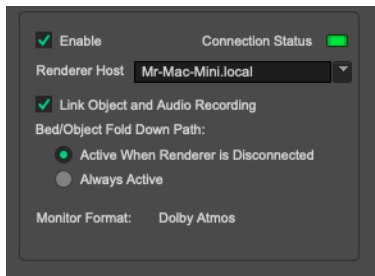
Only outputs that are not already mapped to a Bed or Object are available. If an assigned Fold Down output is subsequently mapped to a Bed or Object, it is automatically unassigned from the Bed/Object Fold Down Path and made unavailable.



Output page of the I/O Setup, Bed/Object Fold Down Path selector

4 Click OK to save your changes and close the I/O Setup.

New Peripherals Dolby Atmos Options



Dolby Atmos page in the Peripherals dialog, Bed/Object Fold Down Path options

Bed/Object Fold Down Path

You can monitor your Dolby Atmos mix in Pro Tools though the assigned Bed/Object Fold Down Path (configured in the Output page of the I/O Setup).

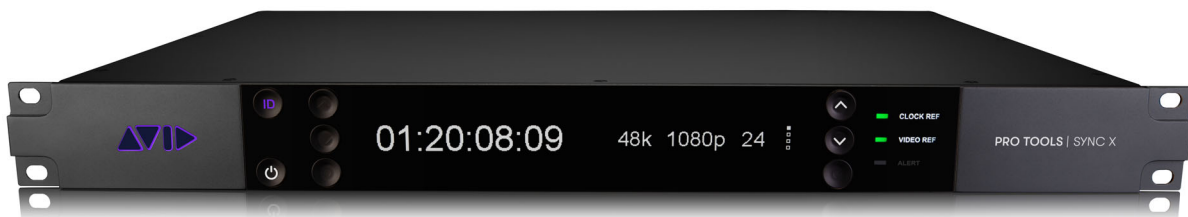
Active When Renderer Disconnected When selected, Pro Tools will only use the Bed/Object Fold Down Path when the Renderer is disconnected.

Always Active When selected, Pro Tools can use the Bed/Object Fold Down Path whether or not the Renderer is connected. With the Render connected, you can use the Render for monitoring the full Dolby Atmos mix and the Bed/Object Fold Down Path for separately monitoring the mix folded down for non-mixing tasks (such as editing).

Pro Tools | SYNC X

(Pro Tools | Ultimate with HDX or HD Native Only)

Pro Tools | Sync X is a versatile master synchronization and clock peripheral for use with Pro Tools | Ultimate software on Pro Tools | HD Native and Pro Tools | HDX systems.



Pro Tools | Sync X

 For detailed information about Pro Tools | Sync X, refer to the Pro Tools | Sync X Guide.



Technical Support (USA)
Visit the Online Support Center
at www.avid.com/support

Product Information
For company and product information,
visit us on the web at www.avid.com