

# PRO TOOLS | SYNC X

## Precision synchronizer for audio post production



Keep your Pro Tools® system and connected devices in sync—no matter how complex your setup. Pro Tools | Sync X™ serves as the backbone of modern audio post production, providing reliable low-jitter clocking and near sample-accurate lock with frame edge alignment. It's a critical component for dubbing, ADR, Foley, and other precision workflows and a must-have in every room of your facility that requires audio sync to picture.

### THE ULTIMATE SYNC FOR POST

Leveraging the patented DigiSerial Port technology connection to Pro Tools | HDX™ or Pro Tools | HD™ Native, Sync X enables precise sync between audio sample position and video frame edge. In multi-operator mixing environments, where dialogue, music, and sound effects are handled by separate systems, that means all of your audio and video devices will sync and play at precisely the exact same spot you intended. Every time you press play or record.

### SYNC UP ALL YOUR DEVICES

With support for all industry-standard clock sources (including Word Clock, Loop Sync, and AES3), positional reference formats (including LTC, Serial Timecode, and Bi-Phase/Tach), SD and HD reference formats, and pull-up/pull-down rates for film and video, Sync X is an easy fit into any studio environment. Plus, six Word Clock outputs make syncing to Pro Tools interfaces and devices easy.

### CUT COSTS WITH THE BUILT-IN VIDEO REFERENCE GENERATOR

No need to rely on video reference from an external device. Sync X provides an onboard video reference generator with four outputs to distribute signals to other peripherals, cutting complexity and costs. If you already have an external video reference generator, Sync X can receive video reference too, with automatic format detection.

### STREAMLINE DUAL OPERATOR WORKFLOWS

Sync X enables multiple Satellite-linked Pro Tools systems to sync in tandem to support multi-operator mixing environments, where dialogue, music, and sound effects are handled by separate systems. This eliminates any possible drift to maintain near sample-accurate lock to frame edge.

### CONTROL SYNC X AND OTHER DEVICES FROM PRO TOOLS

From configuring your audio clock and video reference sources, to selecting pull down rates and fine-tuning device speeds, all Sync X settings can be controlled directly in Pro Tools | Ultimate™. It also offers a 9-pin connection, enabling you to control other devices from Pro Tools, like a video deck.

### LOCK TO SOURCES FAST AND FLAWLESSLY

With exceptionally low jitter JetPLL clocking technology, Sync X locks to external sources faster and more accurately than its predecessor, Pro Tools | SYNC HD™. Its master oscillator runs at 100 MHz—a double resolution implementation that's twice as fast as typical JetPLL-based clocks. And twice as accurate.

### GET FLEXIBILITY WITH 10 MHZ AND AES3ID I/O

When working on scoring stages and other demanding recording situations where immaculate sound is a mandate, Sync X easily locks to high-end atomic master clocks through its 10 MHz clock input. In environments that require long cable runs, such as across large post facilities, you can send or receive AES3 or AES3id signal to supported devices, giving you greater flexibility.

## KEY FEATURES

- › Maintain precise sync across your Pro Tools systems, audio interfaces, and video playback devices, with near sample-accurate lock and precision frame edge alignment
- › Connect with a wide range of devices with support for all industry-standard clock sources, pull up/down rates, timecode rates, and HD/SD formats
- › Cut costs and complexity with the onboard video reference generator, eliminating the need for an external device
- › Lock to external sources faster and more accurately than SYNC HD with exceptionally low-jitter JetPLL clocking
- › Sync multiple Pro Tools systems in tandem to support dual operator workflows
- › Gain flexibility with Word Clock, LTC, 10 MHz, AES3, AES3id, Loop Sync, GPIO, Bi-Phase / Tach, Pilot, 9-pin, and MIDI I/O
- › Get highly reliable and accurate master clocking and sync for mission critical environments



FOR MORE INFORMATION, VISIT  
[avid.com/sync-x](http://avid.com/sync-x)



# Pro Tools | Sync X—Precision synchronizer for audio post production

## KEEP COOL WHEN PRODUCTION GETS HOT

Temperature fluctuations can affect a device's pitch. With a temperature-compensated oscillator, Sync X always provides reliable clocking—even as temperatures vary—maintaining frequency accuracy to within  $\pm 1$  part per million over its rated temperature range to keep things pitch perfect. And it can be racked up with other gear without fear that the heat will cause it to drift.

## GET PEACE OF MIND WITH MINIMAL DOWNTIME

For those who operate on constant deadlines, Avid offers an Extended Hardware Support Plan that extends your 1-year hardware warranty to 3 years. Available for purchase within the first 90 days of registration in your Avid® Account, it also provides zero-downtime advanced hardware replacement with overnight shipping, so you can keep working—not waiting on a repair.

## SPECIFICATIONS

### SAMPLE RATES

Supported sample rates 44.1, 48, 88.2, 96, 176.4, and 192 kHz

### VIDEO REFERENCE

Video reference I/O 1 x BNC input, 2 x BNC outputs

Video reference generator 4 x BNC outputs

Supported formats Sync X supports the following HD/SD formats when using the internal or an external video reference generator, with automatic format detection:

- > NTSC
- > PAL
- > Slow PAL—23.976, 24
- > 720p—23.976, 24, 25, 29.97, 30, 50, 59.94, 60
- > 1080i—47.95/1080psf - 23.976, 48/1080psf - 24, 50/1080psf - 25, 59.94/1080psf - 29.97, 60/1080psf - 30
- > 1080p—23.976, 24, 25, 29.97, 30, 50\*, 59.94\*, 60\*

\* Format not supported for internal video reference generation.

### CLOCK REFERENCE AND POSITIONAL REFERENCE

Word Clock I/O 1 x BNC input, 6 x BNC outputs

10 MHz/AES3id Input 1 x BNC

AES3id Output 1 x BNC

AES3 I/O 1 x DB25 port

Loop Sync I/O 1 x BNC input, 1 x BNC output

Video Reference I/O 1 x BNC input, 2 x BNC outputs

LTC I/O 1 x XLR input, 1 x XLR output

GPIO, Bi-Phase / Tach, Pilot 1 x DB25 port (specific cables required for different applications)

MIDI Output 1 x DB9 port

### MEASUREMENTS

Average long-term jitter 79 ps

Measured at 1 ms interval as specified in AES-12id-2020. Jitter will vary slightly based on sample rate and video reference format.

Clock accuracy  $\pm 1$  ppm

Drift with temperature variation  $\pm 1$  ppm over  $-4^{\circ}$ – $158^{\circ}$  F ( $-20^{\circ}$ – $70^{\circ}$  C)

### ADDITIONAL SPECIFICATIONS

Host connection 1 x DigiSerial Port (Mini DIN 8-pin)

Machine Control 1 x DB9 port

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Machine Control 1 x DB9 port

Front panel display 2 OLEDs (256 x 64) to display reference info, audio sample rate, timecode, and other details  
Navigational buttons (6)  
ID button (to easily identify the unit in a rack)  
Status LEDs (3)

Form factor Rackmount (1U)

## WHAT'S INCLUDED

- > Pro Tools | Sync X interface
- > Power cable
- > Serial cable
- > BNC cables (2)
- > MIDI breakout cable
- > Rackmount screws and desktop feet

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