Media Station|PT Guide

Version 2.7

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chapter 1

Introduction

Avid Media Station|PT software is designed exclusively for audio-related post-production work either as a standalone application or in conjunction with Pro Tools and Avid Mojo SDI, Avid Mojo, or Digidesign AVoption|V10 (referred to here as *Avid video peripherals*).

Media Station|PT Limitations

Media Station|PT has the same basic engines and components as the full line of Avid editing applications (such as Media Composer and Avid Xpress Pro). However, it has been tailored to the needs of the audio post-production workflows described in this guide and therefore has the following limitations when compared to other non-linear video editing applications:

- Editing is limited to inserting, overlaying, lifting, and cutting.
- Effects can be rendered, but not added or edited.

Video Output Options

Media Station|PT lets you output video using either of the following configurations:

- Playback to an external video monitor (Avid video peripheral required)
- Full-screen playback on your primary or secondary computer monitor via DVI output

Playback to an External NTSC or PAL Video Monitor

(Avid Video Peripherals Only)

Media Station|PT requires an Avid video peripheral for high-quality, frame edge-aligned playback of SD video (or 1080 HD video converted to SD video) to an external NTSC or PAL monitor.

When outputting 1080 HD video using this configuration, you can either transcode an HD sequence to SD video or down-convert an entire HD project to SD video in real-time. Transcoding HD video can take some time but results in higher quality output, while down-converting is immediate but results in lower quality output.

⚠ *720p projects cannot be converted to SD.*

See "Transcoding HD Sequences" on page 66 or "Down-Converting an HD Project to SD Video" on page 54.

Full-Screen Playback via DVI Output to a Computer Monitor

With a supported video card installed, Media Station|PT provides full-screen playback of SD or HD video through a DVI port to your primary or secondary computer monitor.

When you play back video on a monitor with a refresh rate that differs from the video frame rate (as is often the case during playback of video through a DVI output), the output yields visual artifacts and offsets in synchronization between audio and video. For example, this occurs during playback of a 24 fps video clip on a DVI monitor with a refresh rate of 75 Hz.

If your workflow requires high-quality playback, you must output video through an Avid video peripheral to an NTSC or PAL monitor.

For detailed information on the quality of DVI output to your primary or secondary monitor, see "Video Frame Rate vs. Monitor Refresh Rate" on page 45.

Supported Video Resolutions

Media Station|PT supports the import, capture, and playback of all video resolutions and frame rates (including HD video) supported by Avid Media Composer:

- Avid DNxHD (10-bit and 8-bit 4:2:2) at 1080i at 59.94, 50 fps; 1080p at 25, 24, 23.976 fps; 720p at 59.94, 23.976 and 50 fps

  Media Station|PT supports the import, playback, and export of DNxHD video. DNxHD capture is not supported.

- Native DVCPRO HD support for 1080i 59.94, 50 fps; 720p at 59.94, 23.976 and 50 fps Native XDCAM HD support for 1080i at 59.94, 50 fps; 1080p at 25, 23.976 fps
- Native HDV support for 1080i at 59.94, 50 fps; 1080p; 720p at 29.976 fps
- All standard-definition Avid OMF and MXF video files

  The oldest class of ABVB files (ABVB "MFM" files) are not supported in Pro Tools. These files were created with versions of Media Composer lower than 7.0, and do not have the .omf extension.

- Avid IMX MPEG50, MPEG40, MPEG30, and OP1a files
- DV50, DV25 and DVC Pro 25 resolutions compressed with the Avid codec, including:
  - DV25 411: DV25 interlaced scan at 4:1:1 sampling (for NTSC 30i and PAL 25i projects)
  - DV25 420: DV25 interlaced scan at 4:2:0 sampling (for PAL 25i projects)
  - DV25p 411: DV25 progressive scan at 4:1:1 sampling (for NTSC 23.976p and NTSC 24p projects)

    - DV25p 420: DV25 progressive scan at 4:2:0 sampling (for PAL 25p and PAL 24p projects)
    - All standard-definition Avid Multi-Cam Resolution files
- The following video resolutions created with the Avid DV, JFIF or MXF video codecs:
    - 1:1 (Uncompressed JFIF/MXF)
    - DV50
    - DV25 4:1:1
    - DV25 4:2:0
    - DV25P 4:1:1
    - DV25P 4:2:0
    - 15:1s 4:2:2
    - 14:1P 4:2:2
    - 28:1P 4:2:2
    - 35:1P 4:2:2

For detailed information on supported resolutions and frame rates, see Avid Media Station|PT online help or visit the Avid website (www.avid.com).

To launch online help:

- Choose Help > Online Help (Windows) or Help > Avid Media Station|PT Help (Mac).

Supported Frame Rates and Avid Project Types

Media Station|PT supports the import, capture, and playback of video at the following rates:

- 23.976p NTSC
- 24p NTSC
- 30i NTSC
- 24p PAL
- 25p PAL
- 25i PAL
- 720p/23.976
- 720p/29.97 HDV
- 720p/50
- 720p/59.94
- 1080p/23.976
- 1080p/24
- 1080p/25
- 1080i/50
- 1080i/50 HDV
- 1080i/59.94
- 1080i/59.94 HDV

⚠ *HD projects that are interlaced have an actual frame rate that is half that implied by the format description. For example, a 1080i/50 project has a frame rate of 25 fps, so an AAF sequence destined for this project should be exported from Pro Tools at 25 fps. In a progressive HD project, the true frame rate is implied in the project name. For example, a 720p/59.94 project has a frame rate of 59.94 fps, so an AAF sequence destined for this project should be exported from Pro Tools at 59.94 fps.*

Support for Avid Interplay

Both Media Station|PT and Pro Tools support integration with Avid Interplay.

Avid Interplay lets Pro Tools and Avid editors integrate the complete workflow of each project by managing assets, tracking versions, and providing powerful metadata and commenting capabilities. Interplay also automates the data flow, eliminating errors and shielding users from complex import/export steps.

When connected to an Interplay system, Media Station|PT can:

- Check out projects and sequences from Interplay, and export media as needed for Pro Tools
- Check in projects and sequences, including final audio created in Pro Tools

When equipped with the Pro Tools Avid Interplay Option, Pro Tools can:

- Open AAF sequences formatted specifically for Pro Tools directly from Interplay.
- Export audio tracks directly back to the sequence on Interplay, either adding to or replacing existing audio tracks.

For detailed workflows, see the following sections:

- "Checking In a Sequence to Interplay for Pro Tools" on page 69
- "Importing a Sequence into Pro Tools from Interplay" on page 75
- "Exporting Edited Audio Tracks to Interplay from Pro Tools" on page 81
- "Importing Pro Tools Audio Files Back into Media Station|PT from Avid Interplay" on page 84

Support for Avid Unity ISIS and MediaNetwork Storage Systems

Avid Unity ISIS and Unity MediaNetwork are high-speed network storage systems that let multiple users store and share media through a gigabit Ethernet connection (for ISIS) or fibre channel connection (for MediaNetwork).

Media Station|PT and other Avid applications can use a Unity system to share the same media as follows:

- Stream audio and video media in real time
- Share Pro Tools, Avid, AAF, OMF, and MXF audio and video sequences
- Share AAF sequences using the Avid Interplay asset management system (Avid Interplay system required).

Avid Terminology

This section provides a brief glossary of Avid terms and, where applicable, their Pro Tools counterparts.

Clip A Clip references one or more media files which play in synchronization, for instance a video file and its two audio tracks. Clips are stored in bins.

Subclip A Subclip in Media Station|PT is like a region in Pro Tools: it is a shorter version of the clip from which it was created. Subclips are also stored in bins.

Avid Sequence An Avid sequence is equivalent to a Pro Tools session: It is a collection of clips and subclips organized in a Timeline. Sequences are stored in bins.

AAF/OMF Sequence AAF and the older OMF are standards designed specifically for exchanging sequences between applications.
Media Station|PT and Pro Tools can import and play AAF or OMF sequences. Media Station|PT can export Avid sequences as AAF or OMF sequences for import into Pro Tools. Pro Tools can export tracks from a session as an AAF or OMF sequence for import into Media Station|PT or other Avid editing applications.

Bins Bins are like folders where you organize clips and sequences. Bins are stored in the individual project folders.

Projects Projects are where you organize a number of bins. Bins can also be shared between projects.

In one project, you could create a new bin to hold all of your video clips and a bin to hold your sound effects, and a bin for sequences. You could close that project, open a new project and open the sound effects bin from the first project to use the same audio in a different sequence. Projects are stored at a user definable location.

Source Monitor The Source Monitor is the Video window above the Timeline (on the left). Use the Source Monitor to select what will be added to the sequence in the Timeline

Record Monitor The Record Monitor is the Video window above the Timeline (on the right). Playback of the sequence in the Timeline is viewed in the Record Monitor.

Timeline The Media Station|PT Timeline shows the assorted audio and video elements arranged in a linear sequence, as in Pro Tools.

Client Monitor The client monitor is an external NTSC, PAL, HD or DVI monitor used to display the video output of Media Station|PT.

Pro Tools and Avid Counterparts

Pro Tools and Avid use different terms to describe the same items. For example, a Pro Tools session is equivalent to an Avid sequence. The following table lists common Pro Tools elements and their Avid equivalents.

Pro Tools and Avid terminology counterparts

Pro Tools	Avid (AAF/OMF)
session	sequence
whole file region	master clip
region	subclip
plug-ins	real-time audio effects
automation	automation gain (clip-based gain or key-frame gain)
Bounce to Disk	Video Mixdown

Whole audio files in the Pro Tools Regions List normally appear in bold type. However, master clip audio files imported from AAF or OMF sequences into Pro Tools will not appear in bold type even though they are whole audio files.

AAF, OMF, and MXF Basics

AAF and OMF files are mechanisms for storing and retrieving media data and metadata so that projects can be freely exchanged between different applications and platforms (such as between Pro Tools and Avid video editing applications).

Media data and metadata enable an application that receives AAF and OMF sequence files to automatically and quickly reassemble the composition. A simple metaphor for this approach is that media data files are the pieces of a puzzle and metadata is the set of instructions for assembling the puzzle.

In the simplest case, only an AAF or OMF sequence is exchanged. If this sequence points to existing media files, the size of the sequence file is relatively small and the export/import process is relatively fast.

AAF and OMF sequences can also have media data embedded in them. This creates a single, larger file that is slower to export and import, but which may be easier to manage than thousands of files stored on different volumes.

Pro Tools supports AAF and OMF sequences that contain embedded audio media.

Pro Tools with DigiTranslator does not support AAF or OMF sequences containing embedded video media, except if you are importing such sequences into a video satellite track. In such cases, video metadata is imported into the track.

For the purposes of this user guide, AAF sequences are emphasized and referenced over the older OMF sequence standard.

MXF

MXF is a media file format. There are MXF video files and MXF audio files, but there are no "MXF sequences." An AAF sequence may refer to or include MXF media files, but OMF sequences cannot refer to or include MXF files.

Media Station|PT Support for MXF Media

Media Station|PT supports MXF media as follows:

- Create MXF media when capturing, transcoding, rendering, or using other methods to create media.
- Import of MXF media files created in other Avid applications
- Export of MXF audio and video files

Pro Tools Support for MXF Media

Pro Tools supports MXF media as follows:

- Import of MXF video and audio media
- Export of MXF audio media

Pro Tools cannot export video files of any type.

Video files digitized in Pro Tools are technically of the MXF format, but are intended only for use in Pro Tools and are not tested for compatibility with other applications.

AAF

AAF sequences are the best way to exchange projects and maintain valuable metadata. An AAF sequence can refer to OMF and/or MXF media files, or have OMF and MXF media files embedded within them. There is no such thing as an AAF audio or video media file.

Media Station|PT Support for AAF Sequences

Media Station|PT supports AAF sequences as follows:

- Import and export of AAF sequences with embedded video files (MXF or OMF) and/or audio files (MXF, WAV, or AIFF).
- Import and export of AAF sequences that refer to external (linked) video files (MXF or OMF) and/or audio files (MXF, WAV, or AIFF)

Pro Tools Support for AAF Sequences

With DigiTranslator 2.0, Pro Tools supports AAF sequences as follows:

- Import and export of AAF sequences that contain embedded or refer to external (linked) MXF, WAV, or AIFF audio files
- Import of AAF sequences that refer to external (linked) MXF or OMF video files
- Video satellite systems only: Import of AAF sequences containing embedded video to a satellite track, in which case Pro Tools imports only the metadata (cuts and clip names) and not the video

Pro Tools does not export video files, tracks or metadata as part of AAF sequences.

OMF

OMF is both a media file and sequence format. OMF media files can be audio or video.

Media Station|PT Support for OMF Media and Sequences

Media Station|PT supports OMF media and sequences as follows:

- Import and export of OMF sequences with embedded OMF video files and WAV or AIFF audio files
- Import and export of OMF sequences that refer to external (linked) OMF video files and WAV or AIFF audio files

Pro Tools Support for OMF Media and Sequences

With DigiTranslator 2.0, Pro Tools supports OMF media and sequences as follows:

- Import of OMF video files created by Media Station|PT or other Avid applications
- Export of OMF audio files
- Import and playback of OMF sequences that refer to external (linked) audio files or contain embedded audio files
- Import and playback of OMF sequences that refer to external (linked) OMF video files
- Export of OMF sequences that refer to external (linked) audio files or contain embedded audio files
- Video satellite systems only: Import of OMF sequences containing embedded video to a satellite track, in which case Pro Tools imports only the metadata (cuts and clip names) and not the video
- Pro Tools does not export video files, tracks or metadata as part of OMF sequences.

Embedded Media

Exporting to OMF or AAF with embedded media results in one large OMF or AAF file containing both the metadata and all associated media files. However, it is important to note that file size is limited to 2 GB.

Media Data (Media Files)

Media data represents raw audio or video material and is stored in individual media files. Every time you record a piece of video or audio material into an application, you are creating a media file containing media data. Audio media data is stored as samples (such as 44,100 or 48,000 samples per second of recording) while video media is typically stored as frames (24, 25, or 30 frames per second of recording).

The size of each media file depends on how much audio or video material it contains. For example, if you record ten minutes of continuous video material at a high resolution, you might end up with a video media file that is 1.8 GB in size, whereas a one minute recording at the same resolution might result in a 180 MB file. Media files tend to be large, since high quality audio and video signals are data intensive. Video data generally requires considerably more storage than audio data.

MXF Media Data Locations On the volumes you have designated for media storage, Media Station|PT stores all MXF media:

- When stored locally, MXF media is placed in the *Avid MediaFiles/MXF/1* folder. Media Station|PT can also read MXF media located at Avid MediaFiles/MXF/2, Avid MediaFiles/MXF/3, and so on.
- When stored in a shared environment, MXF media is placed in a folder called *Avid MediaFiles/MXF/client.1* (where *client* represents the name of the client computer).

This guide refers to the root folder name (*Avid MediaFiles*) whenever referencing this folder.

OMF Media Data Locations On the volumes you have designated, Media Station|PT stores all OMF media in the *OMFI MediaFiles* folder.

Metadata

Metadata is used to describe:

- Information about each media file. This may include sample rate, bit depth, region names, the name of the videotape from which the media file was captured, and even time code values that specify where a file was used in a Pro Tools session.
- Information about Pro Tools sessions or other sequences, including what files are used, where they appear in a Timeline, and automation.
- For AAF or OMF sequences, metadata also includes information about unrendered AudioSuite effects (such as real-time EQ) on Avid workstations. Pro Tools skips unrendered effects on import. Rendered effects are media files, that can be imported or skipped on import into Pro Tools.
- For AAF or OMF sequences, information about automation (clip-based gain or keyframe gain).

Embedded Media and Linked Media

There are two ways to handle media files when exporting AAF or OMF files:

- Embedded media (in which the media files are embedded in an AAF or OMF sequence)
- Linked media (in which media files are referenced by an AAF or OMF sequence)

Pro Tools with DigiTranslator 2.0 lets you import AAF or OMF sequences containing embedded audio files. You can also import AAF or OMF sequences containing embedded video files, but only if you are importing them to a video satellite track. In such a case, only the video metadata is imported.

Frame-Rate Accurate Video Editing and Sample-Rate Accurate Audio Editing

Media Station|PT edits with frame accuracy. This means that in a 30-fps project, you can edit at 30 different locations for every one second of video. Pro Tools edits with sample rate accuracy. In a 48-kHz session, there are potentially 48000 locations to edit for every second of audio.

When Pro Tools exports an AAF or OMF composition destined for an Avid application, it must ensure that the audio files line up on frame boundaries. To do this, it might have to split an existing audio region into three clips. For example, the following illustration shows a 5-frame video clip and a corresponding audio region. In Pro Tools, the audio regions might not line up on video frame boundaries.

In order to export frame accurate audio regions, Pro Tools splits the audio media on frame boundaries and fills any gaps with silence. The following illustration shows the resulting audio regions that are exported to Media Station|PT.

When you use Export Selected Tracks as OMF/AFF to export tracks from Pro Tools with Enforce Avid Compatibility enabled, a number of additional media files labeled Sample Accurate Edit appear in the Avid bins. These are the additional media files that Pro Tools creates to ensure that Media Station|PT receives frame-accurate audio. You also see the sample-accurate edit media files if you zoom in on the imported audio in the Timeline.

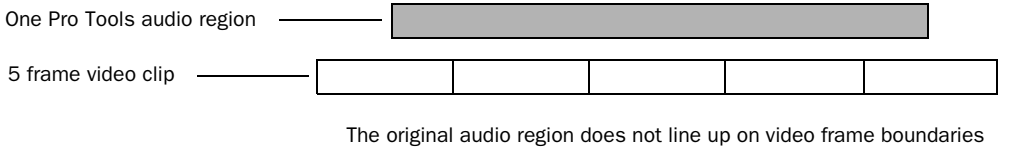

Figure 1. Original audio region

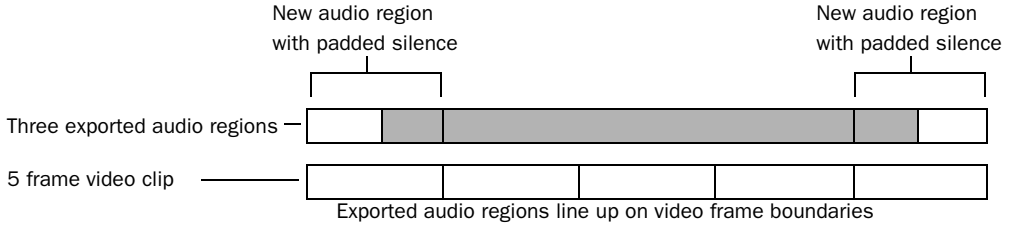

Figure 2. Exported audio region

System Requirements

System requirements vary depending on how Media Station|PT is installed:

- As a *video satellite* of a separate Pro Tools system
- As a *standard system*, which can be installed in either of the following ways:
  - As a standalone application
  - Installed on the same computer with your Pro Tools system

Requirements also vary depending upon the optional peripherals installed.

Video Satellite System Requirements

- Digidesign-qualified Windows computer
- iLok dongle for the related Pro Tools system
- Avid Application Key (dongle)
- Avid video peripheral (required for high-quality video output)

Standard System Requirements

- Digidesign-qualified Mac or Windows computer
- Avid Application Key (dongle)
- Avid video peripheral (required for high-quality video output)

Avid Video Peripherals

For high-quality frame edge-aligned playback of SD video (or 1080 HD video converted to SD video), you must add the I/O capabilities of an Avid video peripheral, which includes composite, component, S-Video and SDI.

Supported Avid Video Peripherals

Media Station|PT supports the following Avid video peripherals:

- Avid Mojo SDI
- Avid Mojo
- Digidesign AVoption|V10

When using an Avid video peripheral, the following is required:

- An NTSC/PAL black burst generator

Digidesign Audio Peripherals (Optional)

Media Station|PT plays audio via your computer's built-in audio outputs through Avid Mojo or Avid Mojo SDI's analog audio outputs, or through AVoption|V10's optical outputs, and can capture audio via the Avid Mojo or Avid Mojo SDI.

Supported Digidesign Audio Peripherals

For the highest-quality audio input and output, Media Station|PT supports the following Digidesign audio peripherals:

- 192 I/O
- 192digital I/O
- 96 I/O

Using Digidesign audio peripherals with Media Station|PT requires the following:

- Digidesign-qualified version of Pro Tools HD software
- Pro Tools HD Core Card
- Digidesign SYNC I/O or SYNC HD

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, as well as information about specific versions of ATTO and nVidia software, refer to the support pages at the Digidesign website (www.digidesign.com).

About the Pro Tools Guides

In addition to the printed guides that came with your system, PDF versions of the Pro Tools guides are installed automatically with Pro Tools. To view or print the PDF guides, you can use Adobe Reader or Apple Preview.

Conventions Used in This Guide

All Digidesign guides use the following conventions to indicate menu choices and key 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 following symbols are used to highlight important information:

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

Important Notices include information that could affect your data or the performance of your system.

Shortcuts show you useful keyboard or mouse shortcuts.

Cross References point to related sections in this guide or other Pro Tools Guides.

About www.digidesign.com

The Digidesign website (www.digidesign.com) is your best online source for information to help you get the most out of your system. The following are just a few of the services and features available.

Product Registration Register your purchase online. See the enclosed Digidesign Registration Information Card for instructions.

Support and Downloads Contact Digidesign Technical Support or Customer Service; download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Answerbase; join the worldwide Pro Tools community on the Digidesign User Conference.

Training and Education Become a certified Pro Tools Operator or Expert; study on your own using courses available online, or find out how you can learn in a classroom setting at a certified Pro Tools Training Center.

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To learn more about these and other resources available from Digidesign, visit the Digidesign website (www.digidesign.com).

chapter 2

Installing Media Station|PT

This chapter describes how to install Media Station|PT software and related peripherals.

Media Station|PT Configurations

You can use Media Station|PT in three different configurations, as follows:

Standalone Media Station|PT is installed on a computer without Pro Tools installed, and functions as a standalone application. When installed in this way on Windows XP, this configuration can easily be modified to become a video satellite.

Video Satellite (Windows XP Only)

Media Station|PT is installed on a computer that does not have Pro Tools installed, and functions as a *video satellite* of Pro Tools.

Co-installed with Pro Tools Media Station|PT is installed on the same computer with Pro Tools, and can be launched when Pro Tools is not running.

Upgrading Media Station|PT

This section describes how to prepare your system for upgrading from a previous version of Media Station|PT or Media Station|V10.

Preserving Existing User Settings Before Upgrading from Media Station|V10

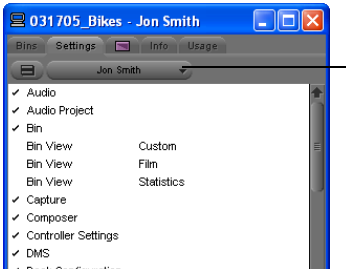
Media Station|PT handles user settings differently from Media Station|V10. For optimal performance, it is strongly recommended that you create a new user profile after upgrading to Media Station|PT.

If you have user settings in Media Station|V10 that you do not want to lose, you can preserve them before uninstalling Media Station|V10 and then copy them into your new user profile after installing Media Station|PT.

To preserve user profile settings before uninstalling Avid Media Station|V10:

1 Open the project in Media Station|V10.

2 In the Project window, click the Settings tab.



Project window (Settings tab)

3 Choose Special > Site Setting. The Site Setting window opens.

4 Drag the settings you want to preserve from the Project window to the Site Settings window.

5 Quit Media Station|PT. The contents of the Site Settings window are automatically saved.

The settings you have added to this window will now be available to copy back to the Settings tab after Media Station|PT is installed.

See "Creating a New User After Upgrading from Media Station|V10" on page 40 for more information.

Uninstalling Pro Tools and Avid-Related Software on Windows XP

Before upgrading, you must uninstall all earlier versions of Pro Tools and Avid-related software.

To uninstall software:

1 Choose Start > Control Panel.

2 Launch Add or Remove Programs.

3 From the Currently Installed Programs list, choose one of the following in any order:

- Digidesign Pro Tools HD
- AVoptionDNA
- Avid Media Station|PT or Avid Media Station|V10
- Avid DNADiags
- Avid Log Exchange
- EDL Manager

4 Click the Change/Remove button.

5 Follow the on-screen instructions to remove the software.

If uninstalling Pro Tools, choose Pro Tools and Digidesign Device Drivers when prompted.

6 Do one of the following:

- If you want to continue uninstalling additional software after the uninstall is complete, select "No, I will restart my computer later" and repeat this procedure until you have uninstalled all of the software.

– or –

- If you are finished uninstalling all of the software, restart the computer.

Uninstalling Pro Tools and Avid-Related Software on Mac OS X

Before upgrading, you must uninstall all earlier versions of Pro Tools and Avid-related software.

Uninstalling Media Station|PT 1.8.2 or Lower

The Media Station|PT 2.7 installer application is not the same as the installer application used with previous releases. Therefore, the 2.7 installer cannot successfully uninstall Media Station|PT 1.8.2 and lower. If you are upgrading from version 1.8.2 or lower, you must uninstall using a different installer on the Media Station|PT 2.7 installer disc.

To uninstall Media Station|PT 1.8.2 or lower:

1 Insert the Media Station|PT 2.7 installer disc into your computer's CD/DVD drive.

2 Locate and open the Other Installers folder.

3 Double-click the MediaStationPT Uninstaller.

4 Click Continue.

5 Select Uninstall from the pop-up menu.

6 Click Uninstall.

The older version of Media Station|PT is uninstalled. You can proceed with the installation of Media Station|PT 2.7.

Uninstalling Pro Tools 7.2 and Higher

To uninstall versions of Pro Tools 7.2 and higher on Mac OS X:

1 Make sure you have Administrator privileges for the computer where Pro Tools is installed.

For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.

2 Go to Applications/Digidesign/Pro Tools/Pro Tools Utilities and double-click the "Uninstall Pro Tools" file.

3 Click Continue to proceed with the uninstall.

4 Choose the type of uninstall you want to perform:

Safe Uninstall Leaves certain plug-ins and system files needed for compatibility with some Avid products.

Clean Uninstall Removes all Pro Tools files, including system files, Digidesign plug-ins, and MIDI patch names. This is the recommended option, especially when you are updating to the latest version of Media Station|PT.

5 Click Uninstall.

6 Enter your Administrator password and click OK.

7 Click Finish to close the Installer window.

Uninstalling Pro Tools 7.1 and Lower

To uninstall Pro Tools 7.1 and lower on Mac OS X:

1 Make sure you have Administrator privileges for the computer where Pro Tools is installed.

For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.

2 Do one of the following:

- Insert the Pro Tools Installer CD-ROM in your CD-ROM drive. Double-click "Install Pro Tools" or "Install Pro Tools TDM" (whichever is appropriate).

– or –

- Click on the downloaded installer file.

3 Enter your Administrator password and click OK to authenticate the installation.

4 In the Installer window, choose Uninstall from the pop-up menu, and click Uninstall.

5 Follow the on-screen instructions to remove Pro Tools.

6 When finished, click Quit to close the Installer window.

7 Restart your computer.

Uninstalling Avid Xpress Pro

To uninstall Avid Xpress Pro on Mac OS X:

1 Insert the installer disc into your computer's CD/DVD drive.

2 Locate and launch the Installer.

3 Click Uninstall.

4 Follow the instructions to remove Avid Xpress Pro from your computer.

5 Restart your computer.

Updating Avid Mojo Firmware for a PCIe-Based Mac

If you are using an Avid Mojo with an Apple PCIe-based computer (such as Apple Mac Pro or Mac G5 PCIe), the computer will not recognize the Avid Mojo firmware if you are upgrading from either of the following applications:

- Media Station|PT 1.6.1 or lower
- Pro Tools 7.0 or lower

If this is the case, you must update the Avid Mojo firmware on a different computer. The firmware cannot be updated on the PCIe computer. (This will be true for all Avid Mojo interfaces manufactured before January 2006.)

⚠ *If you attach an Avid Mojo to your PCIe-based Mac G5 or Mac Pro without following these steps, the system will not recognize the Avid Mojo and you will not be able to run Media Station|PT.*

To update the firmware:

1 Connect the Avid Mojo to a non-PCIe Mac or any Windows XP computer.

2 On the computer connected to the Avid Mojo, install Pro Tools 7.4 or Media Station|PT 2.7.

3 Launch Media Station|PT or Pro Tools. This updates the firmware in the video peripheral.

A message box opens informing you that you need to power cycle the Avid Mojo and quit the application.

4 Turn off the Avid Mojo, then connect it to the PCIe computer.

You are now ready to connect the Avid Mojo (with updated firmware) to your PCIe-based Power Mac G5 or Mac Pro system and install Media Station|PT 2.7.

⚠ *Using an updated Avid video peripheral with an earlier version of Media Station|PT or Pro Tools software downgrades the firmware, and you will need to update the firmware again as described in this procedure.*

See "Installing an Avid Video Peripheral" on page 22 and "Installing Media Station|PT Software on Mac OS X" on page 30.

Overview of Media Station|PT Installed as a Standalone Application

When installed as a standalone application, Media Station|PT comprises the following components:

- A dedicated Media Station|PT computer
- Local and/or shared storage for audio and video
- Avid video peripheral (required for playback to an external NTSC/PAL monitor, but not required for capture, export, or layback)
- Video reference (connected to the Avid video peripheral and the VTR if present)
- Optional VTR

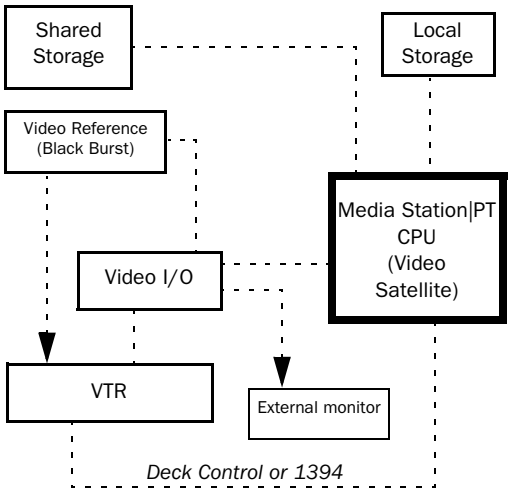


Figure 1. Diagram Media Station|PT installed as a standalone application (with required components connected via solid lines and optional components connected via dotted lines)

To install Media Station|PT as a standalone application, do the following:

1 Install any optional hardware: See "Installing Hardware" on page 22.

2 Install Media Station|PT software: See "Installing Media Station|PT Software on Windows XP" on page 26 or "Installing Media Station|PT Software on Mac OS X" on page 30.

When installed as a standalone application, Media Station|PT on Windows XP can easily be configured as a video satellite of Pro Tools. See "Overview of Media Station|PT Installed as a Video Satellite System" on page 20.

Overview of Media Station|PT Installed as a Video Satellite System

(Windows XP Only)

Pro Tools and a Media Station|PT video satellite are known collectively as a *video satellite system*, and comprise the following components:

- A dedicated Pro Tools computer with:
  - Pro Tools|HD card
  - Pro Tools|HD audio interface
  - SYNC HD or SYNC I/O
  - Video reference (connected to the SYNC HD or SYNC I/O)
  - Local and/or shared audio storage (local audio storage required and shared storage optional on Mac OS X)
  - Video Satellite Option installed
- A dedicated Media Station|PT computer with:
  - Local and/or shared storage for audio and video
  - Avid video peripheral
  - Video reference (connected to the Avid video peripheral and the VTR if present)
  - Optional VTR
- Ethernet connection, either directly through Ethernet hub or via a larger Ethernet network

To install Media Station|PT as a video satellite of Pro Tools:

1 Install any optional hardware: See "Installing Hardware" on page 22.

2 Make Ethernet connections between Pro Tools and the video satellite system: See "Making Ethernet Connections with Video Satellite Systems" on page 25.

3 Install Media Station|PT: See "Installing Media Station|PT Software on Windows XP" on page 26.

4 Authorize the Video Satellite option on any Pro Tools machine that will be used to interface with the video satellite: See "Authorizing the Video Satellite Option in Pro Tools" on page 32.

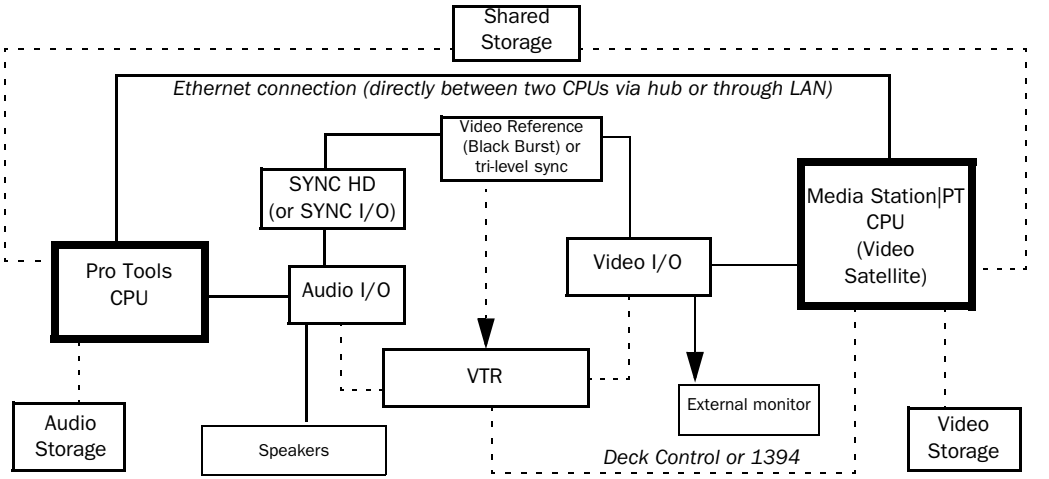


Figure 2. Diagram of Pro Tools and a Media Station|PT video satellite system (with required components connected via solid lines and optional components connected via dotted lines)

Overview of Media Station|PT Installed on the Same Computer as Pro Tools

When installed on the same computer, Pro Tools and Media Station|PT comprise the following components:

- Local and/or shared storage for audio and video
- Avid video peripheral
- Video reference (connected to the Avid video peripheral, SYNC HD or SYNC I/O, and the VTR if present)
- Optional VTR
- Pro Tools|HD card
- Pro Tools|HD audio interface
- SYNC HD or SYNC I/O
- Video Satellite option installed

Installing Media Station|PT on the Same Computer as Pro Tools

To install Media Station|PT on the same computer as Pro Tools:

1 Install all Pro Tools hardware. See the *Getting Started with HD Guide*.

2 Install optional hardware: See "Installing Hardware" on page 22.

3 Install Media Station|PT: See "Installing Media Station|PT Software on Windows XP" on page 26 or "Installing Media Station|PT Software on Mac OS X" on page 30.

4 Install Pro Tools HD. See the *Getting Started with HD Guide*.

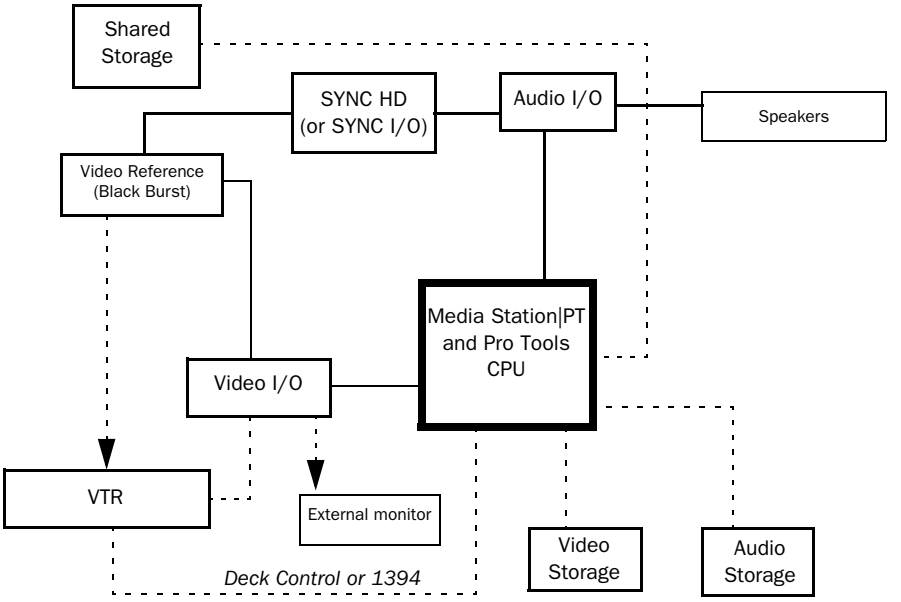


Figure 3. Diagram Media Station|PT installed as a standalone application (with required components connected via solid lines and optional components connected via dotted lines)

Using EQ II and Dynamics II Plug-Ins with Media Station|PT or Pro Tools

When you install Pro Tools after installing Media Station|PT on the same computer, EQ II and Dynamics II plug-ins are automatically moved to the Unused Plug-Ins folder. If you want to continue using either of these plug-ins with Pro Tools or Media Station|PT, you must manually move them back to the Plug-Ins folder

Installing Hardware

This section describes installation procedures for the following:

- Avid video peripheral
- Audio monitoring setups
- VTR

Installing an Avid Video Peripheral

To output high-quality video from Media Station|PT, an Avid video peripheral is required.

To connect Avid video peripheral hardware:

1 Ensure that the Avid video peripheral is turned off.

2 Connect the power cable for the Avid video peripheral.

3 Connect one end of the FireWire cable to the Host port on the Avid video peripheral, and connect the other end to any internal FireWire port on the computer.

⚠ *All FireWire ports on Digidesign-qualified computers are connected to the same bus, and the Avid video peripheral must be the only device attached to this bus. If it is not the only device attached to this bus, the Avid video peripheral will not be recognized. Therefore, you must install a PCI or PCIe FireWire card if you need to connect other FireWire devices. For more information on where to connect a PCI or PCIe FireWire card, follow the guidelines described for Pro Tools in the Avid Video Peripherals Guide (located on your Pro Tools installer disc) or on the Digidesign website (www.digidesign.com).*

Monitoring Audio from Media Station|PT

Monitoring audio from Media Station|PT is different depending on how the software is being used, as follows:

Standalone mode Use the audio I/O of your Avid video peripheral. If no video peripheral is present, use the I/O of your computer. Capture and layback of DV-stream format audio and video can be performed via the FireWire port.

Video satellite mode The timing of the audio output of Media Station|PT is plus or minus approximately 1/2 frame. While this is not as precise as the audio output of Pro Tools, it may still be useful to listen to the audio output from Media Station|PT in your Pro Tools session. If desired, route the audio outputs from the video peripheral into the analog or digital inputs of

your Pro Tools audio peripheral. If using digital inputs, be sure that the Pro Tools Clock Reference is set to the digital input, or pops and clicks may occur.

Installed on the same computer as Pro Tools Use the Digidesign audio peripheral as the audio I/O for Media Station|PT.

Connecting a VTR

You can use Media Station|PT for capturing audio and video from tape, or for laying audio and video back to tape. There are four types of connections which need to be made:

- Video I/O
- Audio I/O
- Deck Control
- Video reference (black burst)

Connecting Video I/O to the VTR

Connecting a VTR to an Avid Video Peripheral

If an Avid video peripheral is connected to the system, connect the VTR's video I/O to the Avid video peripheral.

To connect a VTR's video I/O to an Avid video peripheral:

1 Connect the Avid video peripheral Composite IN, Component IN, S-Video IN, or SDI IN connectors to the corresponding output or outputs on your VTR.

2 Connect the Avid video peripheral Composite OUT, Component OUT, S-Video OUT, or SDI OUT connectors to the corresponding inputs on your VTR.

Connecting a VTR with No Avid Video Peripheral Present

If no Avid video peripheral is connected to the system—but the VTR supports input and output of audio and video as a DV-stream via FireWire— connect the VTR directly to the Media Station|PT computer.

To connect a VTR's video I/O without an Avid video peripheral:

1 Connect one end of a 1394 (FireWire) cable to the 1394 connector on the VTR.

⚠ *This only supports DV video formats such as DV25, DVCPro 100 and HDV.*

2 Connect the other end of the 1394 (FireWire) cable to an available FireWire port on the Media Station|PT computer.

Connecting Audio I/O to the VTR

Media Station|PT Installed as a Standalone Application with an Avid Video Peripheral

If Media Station|PT is installed as a standalone application and connected to an Avid video peripheral, connect the audio inputs and outputs on the VTR to the audio inputs and outputs on the Avid video peripheral.

Media Station|PT Installed as a Standalone Application with no Avid Video Peripheral Present

If no Avid video peripheral is connected to the system—but the VTR supports input and output of audio and video as a DV-stream via FireWire— connect the VTR directly to the Media Station|PT computer.

Media Station|PT Installed as a Video Satellite or Installed on the Same Computer as Pro Tools

If Media Station|PT is installed as a video satellite of Pro Tools or installed on the same computer with Pro Tools, connect the audio inputs and outputs on the VTR to the audio inputs and outputs on the primary Pro Tools|HD audio interface.

Configuring MachineControl with a VTR

If the VTR is DV-based (which means it accepts Deck Control via FireWire), connect the VTR to the Media Station|PT computer via FireWire.

If the VTR requires 9-pin control, you need to set it up differently.

Connecting a Serial 9-Pin Cable from the Media Station|PT Video Satellite to the VTR

Because the VTR is always controlled by Media Station|PT in a video satellite system, you need to connect the video satellite computer directly to the VTR.

To connect a VTR via 9-pin to a Windows computer:

- Connect the computer's COM port to the deck, using a 9-pin RS-322 to RS-422 cable (not provided).

The 9-pin RS-322 to RS-422 cable is included with the Digidesign MachineControl option, which is available separately from Media Station|PT. See www.digidesign.com for details.

Connecting a serial 9-pin cable is not necessary if you are using a DV-based VTR that accepts deck control commands via FireWire.

In this case, the serial 9-pin cable is not necessary since the FireWire connection between the VTR and the Media Station|PT client computer is sufficient. (See your VTR documentation for detailed support information.)

Connecting a VTR to Mac OS X

To connect a deck to a Mac computer:

1 Connect a Keyspan USA28x USB serial adapter (not provided) to a USB port on the computer.

You may need to install a Keyspan driver to use the Keyspan USB serial adapter. See your Keyspan documentation for details.

2 Connect a male mini DIN-8 serial to male 9-pin D-sub Deck Control cable (not included) to the end of the adapter.

The male mini DIN-8 serial to male 9-pin D-sub Deck Control cable is included with the Digidesign MachineControl option, which is available separately from Media Station|PT. See www.digidesign.com for details.

3 Connect the end of the cable to the deck.

Connecting Video Reference

If an Avid video peripheral is connected to the Media Station|PT computer, it must have an appropriate video reference signal (black burst).

Always make sure to connect the proper black burst signal to your Avid DNA peripheral before opening a project.

To connect a video reference signal to your VTR:

- Connect a black burst or house sync output to a video input on your VTR (preferably a reference video input).

Making Ethernet Connections with Video Satellite Systems

(Video Satellite System Only)

To exchange transport commands and files on remotely mounted storage, the computers in a video satellite system communicate via Ethernet with the standard TCP/IP protocol using 100 Base-T or 1000 Base-T connections. The computers may either be connected directly or via a Local Area Network (LAN).

Using a Direct Connection

Use a direct connection for any of these reasons:

- When the satellite will always be connected to the same Pro Tools system
- When a LAN is not available
- To avoid possible conflicts on the LAN with other network traffic

To connect the systems directly

1 Connect a CAT5e Ethernet cable between the Pro Tools system and a standard Ethernet hub or switch.

2 Connect another CAT5e cable between the Media Station|PT system and the same hub or switch.

Direct connection using a crossover Ethernet cable without a hub or switch may work with some systems, but is untested.

Using a LAN connection

Use a LAN in any of the following conditions:

- If the video satellite is located in a separate room from the Pro Tools system
- If more than one Pro Tools system will be connecting to the video satellite
- If you want Pro Tools and Media Station|PT computers on a LAN to access the Internet or connect to other locations on your network

To connect a video satellite system to a LAN:

1 Connect both systems to a standard 100 Base-T or 1000-Base-T Ethernet network as you would any other computer.

By default, both systems communicate via TCP/IP port 28282, though that can be changed if necessary.

If you find you need to enter the IP address after each reboot, try turning off DHCP.

Full-Screen Playback of Video in Media Station|PT

With a supported video card installed, you can route HD or SD video to a DVI port and play back sequences in Media Station|PT using the full screen of your primary or secondary monitor.

⚠ *Due to limitations related to outputting video on a monitor with a refresh rate that differs from the video frame rate, the output quality may not be suitable. See "Video Frame Rate vs. Monitor Refresh Rate" on page 45.*

For detailed information on changing full-screen video playback options, see "Changing Video Output Settings for Full-Screen Playback" on page 44.

If you are using Media Station|PT on a Windows XP system and you want to configure more than one monitor for full-screen playback, see "Configuring More Than One Monitor for Full Screen Playback" on page 29

For detailed instructions on installing nVidia drivers for full-screen playback on Windows XP, see "Installing nVidia Drivers" on page 29.

Installing Media Station|PT Software on Windows XP

The Media Station|PT Installer DVD contains installers for the following optional software:

- Avid EDL Manager
- Avid LogExchange

⚠ *If you are installing Media Station|PT on the same computer as Pro Tools, install Media Station|PT before installing Pro Tools.*

To install Media Station|PT software on Windows XP:

1 Start your computer and log on to Windows with Administrator privileges.

2 If the Found New Hardware Wizard dialog appears (for any connected Pro Tools or Avid hardware), leave it open.

3 Insert the Avid Media Station|PT Installer DVD into your computer's DVD drive. The installer should automatically open and launch.

Avid Media Station|PT Main Installer window

If the installer does not automatically open and launch, locate the Launch.exe file on the Avid Media Station|PT Installer DVD.

4 Click Install Avid Editor Suite to display the next screen.

5 Click Next to begin installation of Avid Log Exchange.

6 If an Avid video peripheral is connected to the computer and turned on, the system prompts you to disconnect it. Turn off the Avid video peripheral. (It is not necessary to disconnect it.)

7 Choose a country, then click Next.

8 If you agree with the license agreement, click Yes.

9 Select the install location for Avid Log Exchange. For maximum reliability, select the default location on your system volume (*C:\Program Files\Avid\Avid Log Exchange*).

10 Click Next to install Avid Log Exchange to your system.

11 When Avid Log Exchange finishes installing, click Next to begin installation of EDL Manager.

12 Choose a country, then click Next.

13 If you agree with the license agreement, click Yes.

14 Select the install location for EDL Manager. For maximum reliability, select the default location on your system volume (*C:\Program Files\Avid\EDL Manager*).

15 Click Next to install EDL Manager to your system.

16 When EDL Manager finishes installing, click Next to begin installation of Media Station|PT.

17 Choose a country, then click Next.

18 If you agree with the license agreement, click Yes.

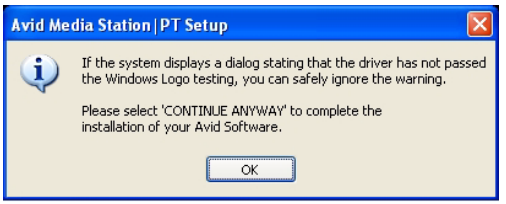
19 Select the install location for Media Station|PT. For maximum reliability, select the default location on your system volume (*C:\Program Files\Avid\Avid Media Station PT*).

20 Click Next.

21 Click Next to accept the default location for AVX plug-ins.

22 Select Typical for the Setup Type, then click Next to complete the installation.

23 If a dialog appears with a message about Windows Logo testing, click OK to accept.
(If another message appears indicating the test did not pass, click Continue Anyway. It does not affect the installation.)



Avid Media Station|PT Setup Message

24 Click Finish to restart your computer.

25 When the computer powers back on, log in as Administrator.

26 If an Avid video peripheral is connected to the system, turn it on.

The Found New Hardware Wizard appears.

⚠ *If the Found New Hardware does not appear, ensure that the Avid video peripheral is connected to your computer and turned on. For more information, see the Avid Video Peripherals Guide.*

27 If you see a message asking whether Windows can connect to Windows Update to search for software, select the "No, Not This Time" option, and click Next.

28 Click Next, and the Found New Hardware Wizard will automatically search for and locate the driver for the Avid video peripheral.

⚠ *If the Found New Hardware Wizard cannot find the driver for the Avid video peripheral, manually locate the Flamethrower.sys file at C:\Program Files\Common Files\Avid\SupportingFiles\WindowsXPDrivers\Win32.*

29 Click Finish to complete the installation.

Media Station|PT software will only run if an Avid Media Station|PT Key (dongle) authorized for this version of the software is connected to a USB port on your computer.

If you have purchased Media Station|PT new, the dongle is included in the box. If you are upgrading to the latest version of Media Station|PT, the box includes a card with dongle upgrading instructions.

Installing Windows Media Player 11 and QuickTime 7.1 or Higher after Media Station|PT

After installing Media Station|PT, the application checks to make sure that you have Windows Media Player 11 and QuickTime 7.1 or higher installed on the machine—and prompts you if one or the other is not installed.

To download the Windows Media Player 11 installer, visit www.microsoft.com. To download the QuickTime installer, visit www.apple.com.

Setting Power Options Control to Always On

After installing Media Station|PT, the application prompts you to set the Power Options control panel to the Always On setting.

To set the Power Options control panel to Always On:

1 Choose Start > Control Panel.

2 Double-click Power Options.

3 In the Power Options Properties dialog, select Always On from the Power Schemes pop-up menu.

4 Click OK.

Disabling Drive Indexing for External Audio and Video Storage

To use Media Station|PT with Avid video peripherals, it is strongly recommended that you disable drive indexing for external audio and video storage.

To disable drive indexing for external media drives:

1 Choose Start > My Computer.

2 Right-click the selected external drives and choose Properties.

3 In the Properties dialog, deselect "Allow Indexing Service to index this disk for fast file searching."

4 Click Apply.

5 When prompted to apply only to the volume or to all folders and subfolders, select all folders and subfolders, then click OK.

Disabling drive indexing for all folders and subfolders begins. This may take some time.

Disabling Simple File Sharing

Ensure that you have turned off Simple File Sharing in Windows.

To turn off Simple File Sharing in Windows:

1 Click Start, and double-click My Computer.

2 In the My Computer window, choose Tools > Folder Options.

3 In the Folder Options dialog, click the View tab.

4 In the View tab of the Folder Options dialog, deselect the Use Simple File Sharing option.

5 Click OK.

Performing this procedure should help remedy any issues that may occur if the Media Tool does not display media files. See "Restoring Invisible Media Files in the Media Tool" on page 83 for details.

Installing nVidia Drivers

Installing nVidia drivers is required for using Media Station|PT on Windows.

To install the nVidia drivers:

1 In Windows Explorer, navigate to: C:\Program Files\Avid\Utilities\nVidia.

2 Double-click the executable installer file.

3 Follow the instructions to install the nVidia drivers.

Disabling the nVidia Display Driver Service

To use Media Station|PT with Avid video peripherals, the nVidia Display Driver Service should be disabled.

To disable nVidia Display Driver Service:

1 Right-click My Computer, and choose Manage.

2 Double-click Services and Applications.

3 Double-click Services.

4 Right-click NVidia Display Driver or NVidia Driver Helper Service.

5 Click Properties.

6 Select Startup Type > Disable.

7 Click OK.

Every time you update or reload the driver, this service is enabled again.

Configuring More Than One Monitor for Full Screen Playback

If you have the correct hardware installed (see "Full-Screen Playback of Video in Media Station|PT" on page 26), you can configure more than one monitor for full-screen playback on Windows XP.

To configure more than one monitor for full screen playback on Windows XP:

1 Choose Start > Control Panel.

2 Double-click Display.

3 In the Display Properties dialog, click the Settings tab.

4 Set the resolution on both monitors to the same resolution (1280x1024 is recommended).

5 Click the Advanced button.

6 Click the specific nVidia tab.

7 Select nView Display Settings and choose Dualview under nView Display Mode.

8 Click Apply.

9 Click Performance & Quality Settings.

10 From the View pop-up menu, ensure that the Advanced Settings option is selected.

11 Ensure that the Hardware Acceleration option is set to Multi-Display Performance mode.

12 Confirm that Vertical Sync is set to Application-Controlled.

13 Click OK.

Supported Video Cards

See www.digidesign.com for detailed information on video cards that support full-screen playback.

DVI Signal Distance Limitations

Due to limitations with DVI signals, the signal may degrade if the monitor is more than a few meters away from the computer.

If you experience signal degradation, you may need to use a DVI extension booster or a DVI to HDMI converter.

Installing Media Station|PT Software on Mac OS X

⚠ *If you are installing Media Station|PT on the same computer as Pro Tools, install Media Station|PT before installing Pro Tools.*

To install Media Station|PT software on Mac OS X:

1 Make sure you are logged in as an Administrator for the account where you want to install Media Station|PT. For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.

2 Insert the Media Station|PT Installer DVD into your DVD drive.

3 On the Media Station|PT Installer DVD, locate and launch Media StationPT.mpkg.

4 Click Continue.

5 In the Installer window, click Continue.

6 If you agree with the license agreement, click Continue.

7 In the Select Destination page of the Installer window, make sure the destination volume is on your system drive.

8 Click Continue.

9 Click Install.

10 If you are prompted to authenticate the installation, type your password and click OK.

11 Click Continue Installation.

12 When installation is complete, click Restart.

Installing Optional Software on Mac OS X

The Media Station|PT Installer DVD contains installers for the following optional software:

- Avid EDL Manager
- Avid LogExchange

⚠ *Some optional software (such as EDL Manager) is required for certain tasks described in this guide (for example, "Digitizing from an EDL" on page 52).*

To install optional software on Mac OS X:

1 Make sure you are logged in as an Administrator for the account where you want to install Media Station|PT. For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.

2 Insert the Media Station|PT Installer DVD in your DVD drive.

3 On the Media Station|PT Installer DVD, navigate to the Other Installers folder, and launch Avid Log Exchange Install or EDL Manager(TM) Install.

4 Click Continue.

5 In the Installer window, click Continue.

6 If you agree with the license agreement, click Continue.

7 In the Select Destination page of the Installer window, make sure the destination volume is on your system drive.

8 Click Continue.

9 Click Install.

10 If you are prompted to authenticate the installation, type your password and click OK.

11 Click Continue.

12 When installation is complete, click Close.

See "Changing Video Output Settings for Full-Screen Playback" on page 44 for detailed information on switching between two monitors for full-screen playback.

Authorizing Media Station|PT

Use the included Avid Application key (USB dongle) to authorize Avid Media Station|PT.

If you have upgraded to Media Station|PT 2.7 from a previous version of Media Station|PT and you already have a dongle, see "Authorizing Media Station|PT After Upgrading from a Previous Version" on page 31.

To authorize Media Station|PT software:

▪ Before launching the application, insert the Avid Application Key (USB dongle) into an available USB port on your computer.

On Windows systems, a dialog displays a message indicating that the computer is identifying and recognizing the dongle.

Authorizing Media Station|PT After Upgrading from a Previous Version

After upgrading to Media Station|PT 2.7, you must update your Avid Application key (dongle). To do this, you will need to obtain an updater file from Avid's web page, www.avid.com.

⚠ *After upgrading the Avid Application key to authorize Media Station|PT 2.7, the updated dongle may not properly authorize previous versions of Media Station|PT.*

Obtaining the Dongle Updater

To obtain your updater file:

1 Install but do not start your Avid software.

2 Connect the Avid application key (dongle) to the USB port on your system.

3 Use one of the following methods to determine your system ID and serial number:

- The system ID and serial number are on the tag attached to your dongle. If you have a dongle labeled with both PC and Macintosh System IDs, use the PC system ID and serial number, even if you are using a Macintosh computer.
- If the tag is no longer attached to your dongle, run the DongleDumper program to obtain the System ID and Serial Number values. The DongleDumper program is located at *Program Files\Avid\Utilities\DongleDumper\DongleDumper.exe* (Windows) or *Applications/Utilities/Dongle Dumper/DongleDumperSuperPro* (Mac OS X).

4 Go to the following web page:
http://www.avid.com/upgrade

5 Follow the online instructions to obtain your dongle updater file. You will need to supply the system ID, serial number, and the upgrade key that is on the bottom of the upgrade activation card included in the Media Station|PT package.

You can download a dongle updater file (DBHelper.exf). It will also be e-mailed to you.

Updating the Avid Application Key (Dongle)

You only need to run the updater program on one platform (Windows or Macintosh). Once the dongle has been updated it will enable both the Windows and Macintosh versions of your Avid software.

The key on the upgrade activation card can only be used once. The DBHelper.exf file that you obtained via e-mail and download will only upgrade your specific dongle.

To update your dongle on Windows:

1 Place the DBHelper.exf file at:
Program Files\Avid\Utilities\DongleUpdater.

2 Run the DongleUpdater.exe file located in the same folder.

To update your dongle on Mac OS X:

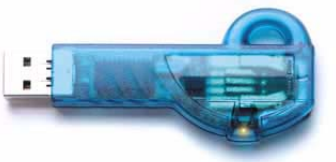
1 Place the DBHelper.exf file at:
Applications/Utilities/DongleUpdater.

2 In the same folder, launch DongleUpdater.

Authorizing the Video Satellite Option in Pro Tools

(Video Satellite System Only)

The Video Satellite option is authorized using the iLok USB Smart Key (iLok), manufactured by PACE Anti-Piracy, Inc.



iLok USB Smart Key

The iLok is similar to a dongle, but unlike a dongle, it is designed to securely authorize multiple software applications from a variety of software developers.

This key can hold over 100 licenses for all of your iLok-enabled software. Once an iLok is authorized for a given piece of software, you can use the iLok to authorize that software on any computer.

⚠ *The iLok USB Smart Key is not supplied with your plug-in or software option. You can use the one included with certain Pro Tools systems (such as Pro Tools|HD systems), or purchase one separately.*

If you have not already completed authorizing your software by following the instructions on the Activation Card, complete the steps in this section.

To authorize the Video Satellite Option using an Activation Code:

1 Locate the enclosed Activation Card. The unique code on this card will allow you to retrieve your iLok license.

2 If you do not have an existing iLok.com account, visit www.iLok.com and sign up for an iLok.com account.

3 Transfer the license for the Video Satellite Option to your iLok.com account by doing the following:

- Visit http://secure.digidesign.com/activation.
- Input your Activation Code (listed on your Activation Card) and your iLok.com User ID. Your iLok.com User ID is the name you create for your iLok.com account.

4 Transfer the license from your iLok.com account to your iLok USB Smart Key by doing the following:

- Insert the iLok into an available USB port on your computer.
- Go to www.iLok.com and log in.
- Follow the on-screen instructions for transferring your licence to your iLok.

5 Launch Pro Tools.

6 If you have any installed unauthorized plug-ins or software options, you are prompted to authorize them. Follow the on-screen instructions to complete the authorization process.

Formatting Video Storage

The following table describes requirements for formatting video storage drives for use with Media Station|PT:

Video Storage Formatting Requirements

Format	Media Station|PT System Requirements/Recommendations
HFS+	Required for Mac OS X
NTFS	Recommended for Windows XP
FAT 32	Supported only when using Satellite or Standalone mode (co-installed with Pro Tools not supported)
FAT 32	Supports playback but not record in Pro Tools
FAT 16	Not supported for either Media Station|PT or Pro Tools

Connecting and Configuring Media Station|PT to a Unity Storage System

Connecting and configuring a Media Station|PT workstation as a client of an Avid Unity ISIS or Avid Unity MediaNetwork system involves the same steps as setting up a similar Pro Tools workstation.

For detailed information, see the *Pro Tools Unity ISIS Guide* or the *Pro Tools Unity MediaNetwork Guide*. Both guides are available on the Pro Tools installer DVD.

Configuring Media Station|PT as a Client of an Avid Interplay System

(Windows XP Only)

Configuring a Media Station|PT workstation as a client of an Avid Interplay system involves the same process as configuring a Media Composer workstation as a client of such a system.

For detailed instructions on connecting and configuring a Media Station|PT workstation as a client of an Avid Interplay system, see your Avid Interplay administrator or refer to the Interplay installation instructions for Media Composer in the following user guides:

- Avid Interplay Software Installation and Configuration Guide
- Avid Interplay Best Practices Guide

Authorizing Media Station|PT After Installing for the First Time

Use the included Avid Application key (USB dongle) to authorize Avid Media Station|PT.

To authorize Media Station|PT software:

- Before launching the application, insert the Avid Application Key (USB dongle) into an available USB port on your computer.

On Windows systems, a dialog displays a message indicating that the computer is identifying and recognizing the dongle.

Launching Media Station|PT for the First Time

Updating Firmware When Launching Media Station|PT

(Avid Video Peripherals Only)

On launch, Media Station|PT checks that the appropriate version of the firmware is installed on any attached Avid video peripheral. If the correct version of the firmware is not installed, Media Station|PT automatically installs the correct version of the firmware. Once the update is complete, you will be prompted to quit Media Station|PT and power-cycle the Avid video peripheral before the update will take effect.

If you are upgrading from Media Station|PT 1.0 to Media Station|PT 2.7 with an AVoption|V10, you may be prompted twice to update the firmware. Ensure that you follow the steps to completely update the firmware.

Avid Mojo Firmware for PCIe Macs

If you attach your Avid Mojo to a PCIe-based Mac but Media Station|PT does not recognize the Mojo when launched, you need to properly update the Avid Mojo firmware.

See "Updating Avid Mojo Firmware for a PCIe-Based Mac" on page 18.

Selecting a Default Folder for Data Created by Media Station|PT

On launching the first time, Media Station|PT prompts you to define a location where application data will be stored by default. In order to allow users without administrator privileges to access this data, it is recommended that you choose the default location (*My Documents*).

chapter 3

Basic Media Station|PT Workflows

Avid Media Station|PT software is designed exclusively for audio-related post-production work using Pro Tools with or without Avid Mojo SDI, Avid Mojo, or AVoption|V10 (referred to here as *Avid video peripherals*).

This chapter describes workflows for all Media Station|PT configurations, which let you:

- Start a new project and adjust any necessary settings.
- Capture NTSC, PAL, or DV-based HD video directly from tape.
- Open and re-digitize an existing sequence from an Avid editing system (such as Media Composer Adrenaline).
- Digitize audio and video from an EDL by creating an Avid sequence with Avid EDL Manager™.
- Import QuickTime and other non-OMFI media files.
- Assemble clips into a sequence.
- Export an AAF sequence for import to Pro Tools, including:
  - Export templates
  - Manual export, including effects rendering and transcoding
  - Video mixdown
- Import an audio and video AAF sequence into Pro Tools.
- Export an audio AAF sequence from Pro Tools back to Media Station|PT.
- Synchronize imported audio with a clip or sequence.
- Lay back audio and video to tape.
- Export audio and video sequences as QuickTime or other format digital files.

Workflows that apply specifically to using Media Station|PT in video satellite mode are described in Chapter 4, "Media Station|PT Video Satellite Workflows."

Media Station|PT and Pro Tools cannot run simultaneously on the same computer. If both applications are installed on the same computer, quit Pro Tools before launching Media Station|PT, and quit Media Station|PT before launching Pro Tools.

Media Station|PT provides the same digitizing and batch digitizing capabilities as all Avid video editing systems.

⚠ *Media Station|PT software can output all frame rates of NTSC and PAL, but cannot output an NTSC master from a PAL source, or output a PAL master from an NTSC source.*

Getting More Information

For more information about specific features and functions of Media Station|PT, search the online help.

To launch online help:

- Choose Help > Online Help (Windows) or Help > Avid Media Station|PT Help (Mac OS X).

For more information about Avid media capture, layback, import, and export, see the *Avid Media Composer Adrenaline Input and Output Guide* available from the Avid Web site (www.avid.com).

Starting a New Project with Media Station|PT

Each project in Media Station|PT has a variety of settings for audio and video formats. These settings are stored on a per-project basis, and need to be set for each new project. One project can contain may sequences (the equivalent of a Pro Tools session) and the contents of each sequence is completely independent, but within a project each sequence must have the same video format and frame rate.

Setting up each project can be time-consuming, but once properly configured, projects can make working in Media Station|PT much faster.

If you consistently use the same audio and video settings, you may be able to set up one project which handles all of your sequences. This will save time configuring Media Station|PT. If you work with different video formats, you will need to configure a different project for each.

⚠ *If you installed Media Station|PT on the same computer as Pro Tools, ensure that Pro Tools is not running before launching Media Station|PT. Exit Pro Tools before launching Media Station|PT, and exit Media Station|PT before launching Pro Tools.*

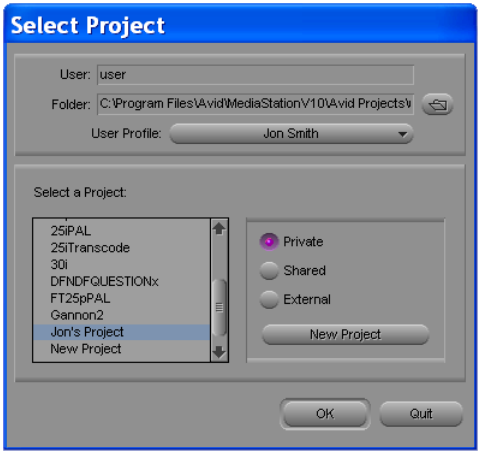
⚠ *When launching Media Station|PT on a computer that also has Pro Tools installed, it is recommended that you mute the audio monitors during launch to prevent pops and clicks that may occur while Media Station|PT is starting.*

⚠ *Running other applications simultaneously with Media Station|PT can cause unpredictable behavior, including AV sync problems, frame dropping and audio stuttering. It is suggested that you not launch other applications when Media Station|PT 2.7 is running. This can occur with or without the use of Satellite mode.*

To start a new project, or select an existing project:

1 Launch the Avid Media Station|PT software.

You will be prompted to create a new project or select an existing project.



Select Project dialog

2 Select a user profile by doing one of the following:

- Choose Create User Profile from the User Profile pop-up menu, and enter a new user name in the Create User Profile dialog.

– or –

- Choose an existing user profile from the User Profile pop-up menu.

If you have upgraded from Media Station|V10, user settings have changed. It is recommended that you create a new user and then copy any preserved settings from Media Station|V10 into your new user settings. See "Creating a New User After Upgrading from Media Station|V10" on page 40.

Each user can configure Media Station|PT to suit their needs without affecting other users' settings on the same workstation.

3 Do one of the following:

- To display projects that only the current user profile can access, select the Private option.

– or –

- To display projects which are accessible to all users, select the Shared option.

4 Do one of the following:

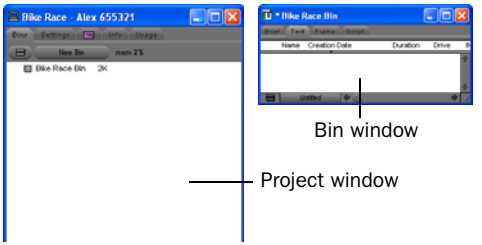
- Select the project and click OK.

– or –

- To create a new project, click the New Project button. In the New Project dialog, name the project, select the format appropriate for your video monitor and preferred frame rate, and click OK.

In Media Station|PT, 29.97fps is referred to as 30i. The "I" stands for interlaced. "P" stands for progressive scan.

The selected project opens. The name of the project appears in the upper left-hand corner of the Project window.



Project and Bin windows

To the right of the Project window is the first bin for the Project.

To view the bins in a project:

▪ Click the bins tab in the Project window. Double-click any listed bin to view its contents.

To view and edit Project Settings:

- Click the Settings tab to view the Project settings, including Audio and Export settings.

Creating a New User After Upgrading from Media Station|V10

Because user settings have changed from the last version of Media Station|V10, it is strongly recommended that you create a new user setting to achieve optimal performance.

If you preserved certain user settings before upgrading, you can copy those settings back into your new user profile.

To copy preserved user settings after installing Media Station|PT:

1 Launch Media Station|PT and create a new user. See "Starting a New Project with Media Station|PT" on page 38.

2 Click the Settings tab in the Project window.

3 Choose Special > Site Setting. The Site Setting window opens, displaying any user settings that you copied to it before uninstalling Media Station|V10.

4 Select all settings that you want to copy into your new user settings, and drag them to the Settings tab.

5 Click Replace to replace all existing settings.

Configuring Video Settings

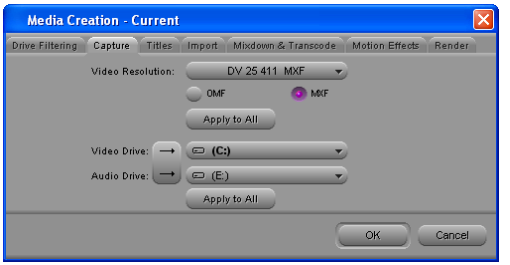
You can configure video settings that determine whether you capture MXF or OMF video.

To configure the video settings for a project:

1 Click the Settings tab in the Project window.

2 Double-click Media Creation in the Settings list.

3 Click the Capture tab.



Avid Media Station|PT Media Creation dialog

4 Select the MXF (or OMF) option, depending on the file type of video you want to capture. (Both types are compatible with Pro Tools, but MXF is recommended because it is more widely supported.)

5 Choose a video resolution from the Video Resolution pop-up menu.

6 If you want to apply the file type and resolution settings you made to all tabs on this dialog, click Apply to All.

Unless you click Apply to All, this setting will only affect video that you capture from tape—it will not force conversion of video that you import.

7 Click the Toggle Storage button so that two volumes are showing, and select the volumes where the audio and video media will be stored. (Bear in mind that while Media Station|PT is designed to play audio and video from the same drive, Pro Tools requires separate drives for audio and video.)

8 If you want to apply the audio and video media drive settings you made to all tabs on this dialog, click Apply to All.

9 Click OK to save your settings and close the window.

Media Creation settings are saved with the project. You will need to configure the Video Project Settings for each new project.

To save time, you can re-use the same project for all of your audio and video capturing, and simply create new bins and sequences as needed.

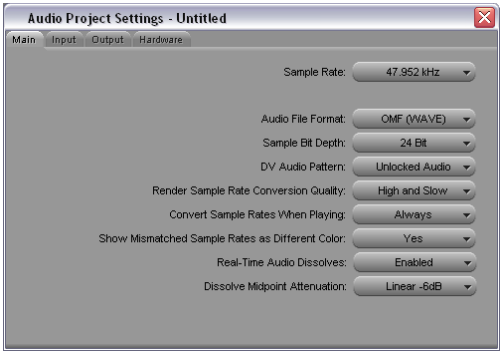
Configuring Audio Settings

To configure the audio settings for a project:

1 Click the Settings tab in the Project window.

2 Double-click Audio Project in the Settings list.

3 Click the Main tab in the Audio Project Settings window.



Audio Project Settings dialog, Main tab

4 Set the Sample Rate, Audio File Format, and Sample Bit Depth. MXF and OMF WAVE (BWF) are the recommended audio file formats because they are widely supported and maintain the most metadata.

5 Verify other settings as required. For most projects, the default settings are recommended.

6 After configuring the Audio Project Settings, close the window.

Audio Project Settings are saved with the project. You will need to configure the Audio Project Settings for each new project.

D-Control and D-Command Configuration Requirements

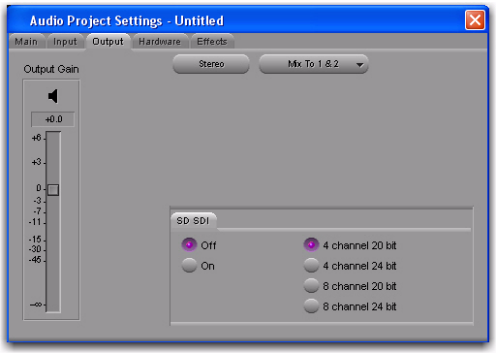
When monitoring the audio from Media Station|PT via a Digidesign audio peripheral and a D-Control or D-Command system, it is necessary to modify the Audio Project Settings in order to properly output audio.

To change Media Station|PT Audio Project Settings for D-Control or D-Command:

1 Start Media Station|PT and open a new project as described in “Starting a New Project with Media Station|PT” on page 38.

2 In the Project window, click the Settings tab and double-click Audio Settings.

3 In the Audio Project Settings dialog, click the Output tab.



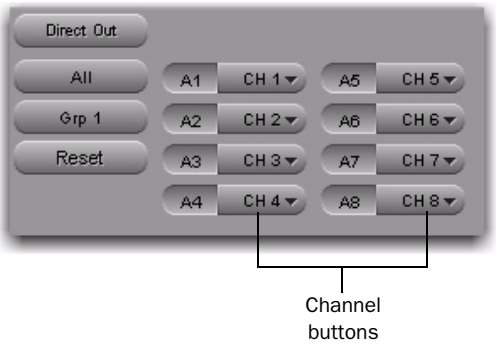
Media Station|PT Audio Project Settings dialog

4 Do one of the following:

- If the Stereo button is visible, click the Stereo button to reveal the Mono button, then click the Mono button to reveal tracks A1 through A8 in stereo pairs with their selected channels.

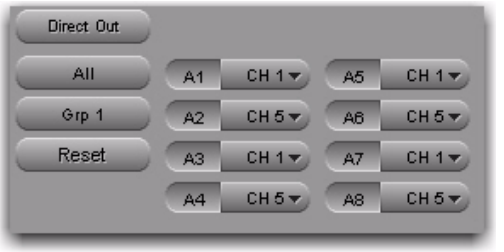
– or –

- If the Mono button is already visible, click the Mono button to reveal tracks A1 through A8 in stereo pairs with their selected channels.



Media Station|PT Audio Project Settings dialog

5 Click the channel pop-up menus, and change all stereo pairs so that tracks alternate top to bottom between channel 1 (CH1) and channel 5 (CH5).



Channel pop-up menus alternating top to bottom between channels 1 (CH1) and 5 (CH5)

6 Click the Grp 1 button to display the second group of tracks.

7 Just as you did in the Grp 1 channels, click the channel pop-up menus in the second group, and change all stereo pairs so that tracks alternate top to bottom between channel 1 (CH1) and channel 5 (CH5).

8 Click the Grp 2 button to display Grp 3 and repeat as above.

9 Close the Audio Project Settings dialog when you are finished.

Saving D-Command or D-Control Audio Project Settings

Once you have modified Audio Project Settings for optimal usage with D-Command or D-Control, it is recommended you save these settings so that they can be retrieved at any time. Otherwise, you will have to configure these settings each time you create a new project.

To save your D-Command or D-Control Audio Project configuration settings:

1 In the Project window, click the Settings tab.

2 Create and open a new settings file by choosing File > New Settings File. An “Untitled” settings file window opens.

3 Drag the Audio Project setting from the Project window to the untitled settings file window to copy it.

4 Choose File > Save Copy of File As.

5 In the Save As dialog, type a name for this settings file.

6 Navigate to a location where other users can easily locate this file. (The recommended location is the default Avid Users folder.)

7 Click Save.

To open and import D-Command or D-Control Audio Project settings into a new project:

1 In the Project window, click the Settings tab.

2 Choose File > Open Setting File.

3 Navigate to the location of the setting file (.avs), and select it.

4 Click Open. A window with the title of the saved D-Control or D-Command settings opens in Media Station|PT.

5 Drag the name of the setting from the new window to the list of settings beneath the Settings tab in the Project window.

6 In the dialog that appears, click Replace to overwrite the Audio Project setting in the current project with the setting you just opened.

Setting Sync Lock for Avid Mojo SDI

When you create a new project with Media Station|PT connected to an Avid Mojo SDI, Sync Lock in Media Station|PT defaults to Internal. It is recommended that Sync Lock be changed to Reference to allow the Avid Mojo SDI to lock to external video reference.

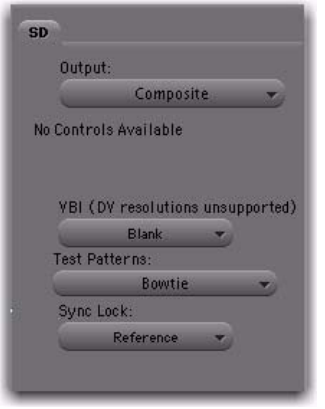
This setting will be retained for the duration of the project, but will need to be reset each time you start a new project.

It is not necessary to follow these steps when creating new projects with Avid Mojo or AVoption|V10

To change Sync Lock to Reference:

1 In Media Station|PT, choose Tools > Video Output Tool.

2 In the Sync Lock pop-up menu, select Reference.



Video Output Tool

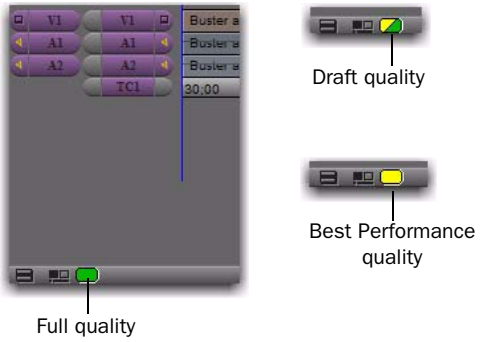
Changing Video Output Settings

This section describes how to change the following video output settings for projects in Media Station|PT:

- Video quality
- Full-screen playback settings

Changing Video Quality

The Media Station|PT Timeline includes a Video Quality icon that lets you change the video quality. This setting is saved for each project.



Video Quality icon (at the bottom of the Timeline)

Click the icon to change the video quality as follows:

Draft Quality (Yellow/Green) Outputs a 1/4-resolution picture to all the monitors, but allows more real-time video effects. This is the default setting for every new project.

Best Performance Quality (Yellow) Outputs 1/16-resolution and supports the most real-time effects, but is the lowest-quality output.

Full Quality (Green) 3 Outputs full resolution picture via the attached video peripheral. The DVI output is always Draft quality unless you select both Full Quality in the Video Quality Menu and Display both fields in the in the Full Screen Playback dialog. When combined with the Display Both Fields option in the Full Screen Playback Settings dialog (see "Changing Video Output Settings for Full-Screen Playback" on page 44), this setting provides full-resolution output to the DVI port.

Performing a Digital Cut always changes the output to the tape deck to Full Quality automatically.

Changing Video Output Settings for Full-Screen Playback

The Full Screen Playback Settings dialog lets you make the following optional changes for outputting full screen playback:

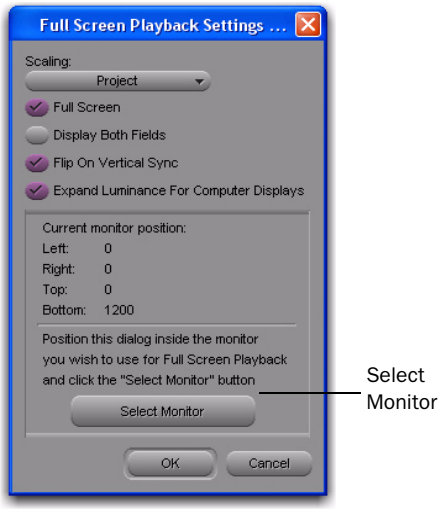
- Change the video output monitor (if you have more than one monitor connected)
- Prevent frame-tearing in full screen playback
- Adjust luminance for standard computer monitors

To change video output options:

1 In the Project window, click the Settings tab.

2 Double-click the Full Screen Playback setting.

3 To designate the video output monitors in a multiple monitor setup, drag the Full Screen Playback Settings dialog so that it is displayed on the monitor you want to designate as the video output monitor.



Full Screen Playback Settings dialog

4 Choose Select Monitor.

5 You can also change the following options:

Display Both Fields When combined with the Full Quality setting in the Video Quality icon (see "Changing Video Quality" on page 44), this setting provides full-resolution output to the DVI port.

Flip On Vertical Sync If you notice that your video output is "tearing" (horizontal distortion on rapidly moving or heavily edited sequences), select this option.

Changing these settings may cause sync issues or cause the video output to stutter.

Expand Luminance for Computer Displays If you are outputting full screen playback to a standard computer monitor, select this option for a more accurate video image. If you are outputting full screen playback to a professional quality monitor through Component, DVI, or HDMI outputs, you may want to deselect this option.

6 Click OK to save your changes and close the dialog.

Video Frame Rate vs. Monitor Refresh Rate

When you play back video on a monitor with a refresh rate that differs from the video frame rate (as is often the case during playback of video through a DVI output), the output yields visual artifacts and offsets in synchronization between audio and video. For example, this occurs during playback of a 24 fps video clip on a DVI monitor with a refresh rate of 75 Hz.

If your workflow requires high-quality playback, you must output video through an Avid video peripheral to an NTSC or PAL monitor.

The artifact and audio/video sync issues occur as follows:

Frame "Tearing" & Video "Stutter" Frame "tearing" is the horizontal distortion on rapidly moving or heavily edited sequences. Video "stutter" is the subtle shifting of video during playback.

You can remedy one of these issues at a time (but not simultaneously) using the Flip On Vertical Sync option, located in the Full Screen Playback Settings dialog.

See "Changing Video Output Settings for Full-Screen Playback" on page 44.

Audio/Video Synchronization Offset Audio/video synchronization varies slightly with each frame. Though usually not noticeable to the eye, more precise measuring devices cause offsets in AV sync of up to 1/2 frame or more. This is normal whenever using the output of a computer's monitor card, and does not affect capture, editing, or layback.

For more information, see "Changing Video Output Settings for Full-Screen Playback" on page 44.

Capturing Audio and Video

Media Station|PT lets you capture video and audio by:

- Manually capturing audio and video
- Re-digitizing an existing sequence
- Digitizing from an edit decision list (EDL)

Manually Capturing Audio and Video

Before capturing audio and video from tape, ensure that you have made the following connections:

For connections with an Avid video peripheral, do the following:

1 Connect the composite, component, S-Video, SDI or FireWire cables from the desired outputs of the video deck to the corresponding inputs on the video peripheral.

2 Connect the audio source to the inputs of your primary Pro Tools audio interface

For connections without an Avid video peripheral, do one of the following:

▪ For FireWire-based connections, connect the FireWire cable directly to the Firewire port on the Media Station system.

Since video and audio are streamed in one signal via FireWire connections, it is not necessary to connect any audio inputs.

If you are capturing HD video, the video source must be connected directly to the Media Station|PT computer via FireWire (1394) cable.

For more information, see the *Getting Started* guide and the guide for your Pro Tools audio interface.

Configuring the Capture Tool

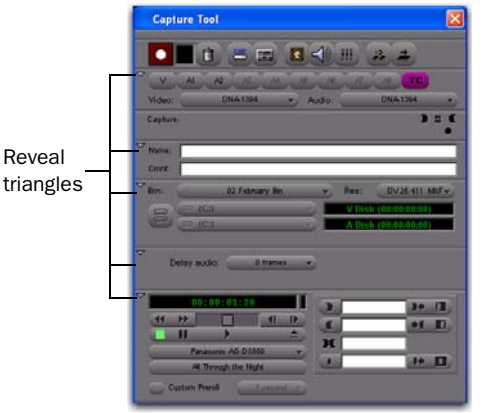
When using the Capture Tool, you may hear a variety of clicks or pops when doing any of the following:

- Changing Video Resolutions
- Logging clips
- Selecting Tape
- Going in/out of Batch Capture
- Opening/closing the Capture Tool.

In order to avoid these clicks and pops, it is best to lower the volume of your speakers.

To configure the Capture Tool for manual capture:

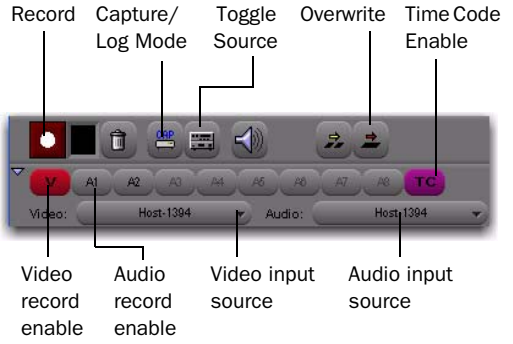
1 Choose Tools > Capture to open the Capture Tool.



Avid Media Station|PT Capture Tool

2 Ensure that all the reveal triangles on the left side of the Capture Tool window are pointing down so that all of the controls are visible.

3 If necessary, click the Capture/Log Mode button to select Capture mode (CAP).



Avid Media Station|PT Capture Tool (Record controls)

4 If necessary, enable control of the tape deck by clicking the Toggle Source button so that it does not display a circle with a slash.

5 Below the Record button, click the record enable buttons as needed to record your video, audio, and time code inputs. (V is for video, A1–A8 are for audio, and TC is the time code channel).

The TC (time code) button should always be enabled, even though no time code is being sent.

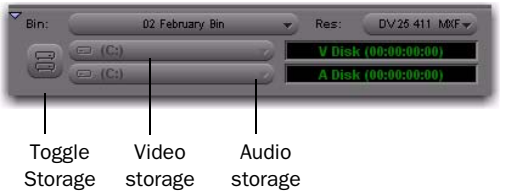
6 Choose the video and audio input sources from the Video Input and Audio Input pop-up menus.

7 Select the bin where you wish the captured clips to appear.

This setting does not affect where the captured files are stored. All captured media files are stored in the OMFI Media Files folder (for OMF media) or Avid MediaFiles folder (for MXF media) on the volumes determined in the Media Creation dialog. A bin in Media Station|PT is analogous to the Audio region lists in Pro Tools, except that a project in Media Station|PT may have an unlimited number of bins, and clips may be organized between the bins as best suits the user.

8 Choose the resolution of video you wish to capture from the Res pop-up menu. For example:

- 1:1 is uncompressed and has the best quality, but takes up the most storage space and requires several drives to play back correctly.
- 20:1 takes up the least amount of storage space, but has the lowest quality picture.
- DV25 has a good quality picture with a moderate level of compression.
- 10:1m and 4:1m are multi-cam resolutions and should not be used if the video will be exported to Pro Tools.
- Resolutions beginning with 720p, 1080i, or 1080p are all HD resolutions and should not be used if the video will be exported to Pro Tools.



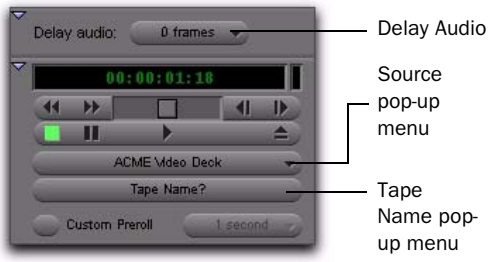
Avid Media Station|PT Capture Tool (Storage controls)

9 Click the Toggle Storage button so that two volumes are showing, and select the volumes where the audio and video media will be stored. The available recording time for each volume displays next to it.

> ⚠ *Media Station|PT can play audio and video from the same volume while Pro Tools requires audio and video to be stored on separate drives. When capturing on a computer that also has Pro Tools installed, ensure that you choose different drives for audio and video.*

On the video volumes you have selected, Media Station|PT stores captured video files in the Avid MediaFiles folder (for MXF video) or the OMFI MediaFiles folder (for OMF video).

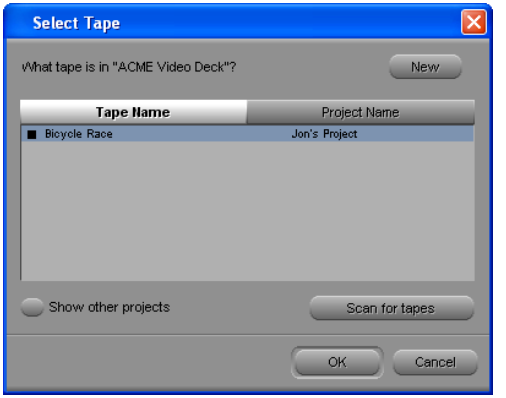
10 If the VTR is not correctly identified in the Capture Tool's Transport controls, choose Auto-Configure from the source pop-up menu. (Click Yes to auto-configure the VTR with the Capture Tool and display its name.)



Avid Media Station|PT Capture Tool (Transport controls)

11 Ensure that Delay Audio is set to 0 Frames.

12 Insert the tape into the VTR.
Media Station|PT will present a list of tapes already associated with this project and ask you which tape you have inserted.



Select Tape dialog

13 Do one of the following:

- Select one of the displayed tape names and click OK.

– or –

- Click New to add a new tape to the list.

14 To check your inputs and levels, do the following:

- Click Play on the transport controls. Video should appear in the Record Monitor and your client monitor.
- Choose Tools > Audio Tool to meter audio input levels.
- Adjust the audio output levels of your VTR if necessary.

You are now ready to capture.

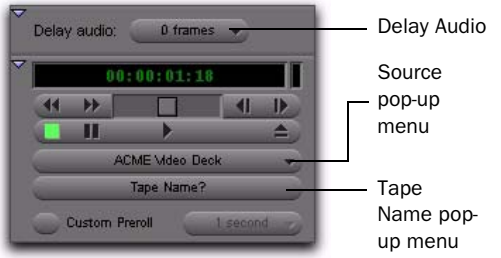
Capturing Audio and Video

To capture audio and video:

1 Ensure the Capture Tool has been configured for capturing. (See "Configuring the Capture Tool" on page 46.)

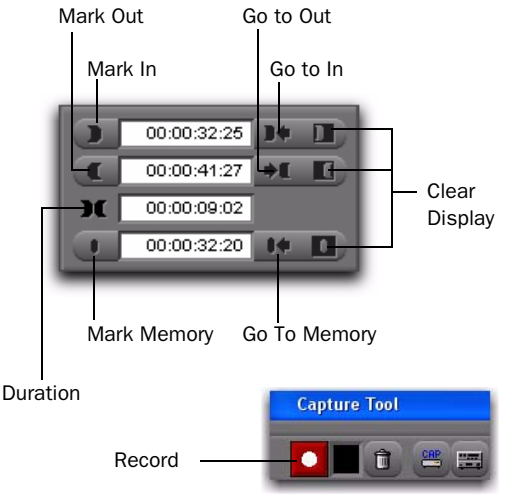
2 To record, do one of the following:

- Use the Transport Controls to queue the tape to the position at which you wish to start capturing, then click Record. The VTR will start playback, and Media Station|PT will begin capturing as soon as the tape comes up to speed.



Avid Media Station|PT Capture Tool (Transport controls)

- Use the Transport Controls to begin playback on the VTR, then click Record when you are ready.
- Use the Mark In and Mark Out controls to select a specific portion of video to capture and click Record. (See "Selecting a Portion of Video to Capture" on page 50.)



Mark In and Mark Out controls (and Record button)

The flashing red light indicates recording is in progress.

⚠ *During recording, video will appear out of synchronization with audio. However, audio and video will be synchronized during playback.*

⚠ *While capturing video from a VTR connected to the DV port, Media Station|PT does not output audio, but the audio will be included in the digitized clip.*

3 Click the Record button again (or press the ESC key) to stop.

4 Type a clip name and optional comments in the Name and Cmnt fields. These can be entered before recording is started, while recording, or by clicking on the clip's name or comment field in the bin after recording has completed.

Avid Media Station|PT Capture Tool (Name/Comments)

5 To view the captured clip, do one of the following:

- Double-click the captured clip in the bin to open it into a pop-up window.

– or –

- Drag the clip to the Source Monitor.

6 Preview the clip in any of the following ways:

- Click the Play button (or press the Spacebar) to play or pause.
- Click the Rewind button (or press the Home key) to return to the beginning.
- Drag the scrub cursor to move back and forth through the clip.

Selecting a Portion of Video to Capture

The Mark In and Mark Out controls in the Capture Tool let you select a portion of video to capture.

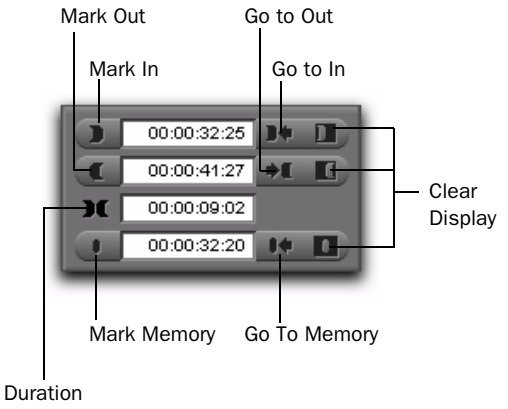
To select a portion of video to capture:

1 In the Capture Tool, use one of the following methods to mark the position where you want the capture to begin:

- Press the Spacebar (or click Play) to start playback on the VTR, and click Mark In at the desired position.
- Use the Transport controls to queue the tape to the position at which you wish to start capturing, and click Mark In.
- Type a time code value in the Mark In field.

2 Use one of the following methods to mark the position where you want the capture to end:

- If the VTR is playing back, click Mark Out at the desired position.
- Use the Transport controls to queue the tape to the position at which you wish to end capturing, and click Mark Out.
- Type a time code value in the Mark Out field.



Mark In and Mark Out controls

3 The exact length of the clip to be captured appears in the Duration display.

4 You can also do the following:

- To automatically queue the tape to the Mark In point, click Go to In.
- To automatically queue the tape to the Mark Out point, click Go to Out.
- To automatically mark a specific frame (not to be reflected in the capture), click Mark Memory.
- To clear any of the Mark In, Mark Out, or Mark Memory points, click Clear Display next to the appropriate button.

5 You are now ready to begin capturing, as described in "Capturing Audio and Video" on page 48. When you begin capturing, the VTR queues to the In point and begins capturing video, then stops automatically when it reaches the Out point.

Working with Captured Video

Once you have captured audio and video clips into a bin, you can:

- Create a sequence of clips to send to Pro Tools.
- Add captured clips to an existing sequence, then send that sequence to Pro Tools.
- Export the clips as media files for importing into Pro Tools.

For more information, see "Assembling Clips in a Sequence" on page 55 or "Exporting Audio and Video from Media Station|PT" on page 58.

Re-Digitizing an Existing Sequence

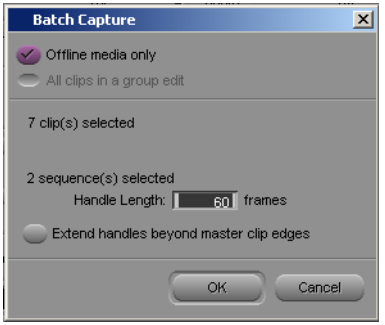
Media Station|PT can open sequences created on other Avid editing systems (such as Media Composer Adrenaline). However, you may want to re-digitize some or all of the media files because they were the wrong resolution, missing, or corrupted.

To re-digitize either a sequence or individual clips:

1 Choose Tools > Capture and configure or verify the settings as you would for manual capture (see "Configuring the Capture Tool" on page 46).

2 In the bin, select the sequence or clips to re-digitize.

3 Select Clip > Batch Capture.



Batch Capture dialog

4 Select or deselect the Offline Media Only option as required. The result of the batch capture depends on a combination of this setting and the resolutions for audio and video chosen in the Audio Project Settings and Media Creation dialogs:

- If the Offline Media Only option is selected, only those files which are offline will be re-digitized using the settings selected in the Audio Project Settings and Media Creation dialogs.
- If the Offline Media Only option is not selected and the resolution settings in the capture tool are the same as the original files, the original files will be discarded and replaced by the new files.
- If the Offline Media Only option is not selected and the resolution is different from the original files, new media will be recorded at the new setting and the original files will be left intact. The new files will be substituted for the old files in the sequence.

5 Type a handle length in the Handle Length field. This extends the beginning and end of the captured file by the specified number of frames.

Setting an adequate handle length is useful if you need to trim an edit past the end of the original clip boundaries. Adding handles creates a new, longer clip in the bin, even if you are using the same resolution as the original clip being re-digitized.

6 Click OK.

Media Station|PT prompts you to insert the required tapes as needed and notifies you when the capture is complete.

Digitizing from an EDL

Media Station|PT includes Avid EDL Manager software, which lets you open an EDL from another editing application, create a Media Station|PT sequence from that EDL, then re-digitize the sequence.

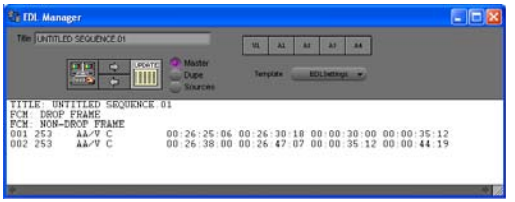
To create a sequence from an EDL, and digitize the sequence:

1 While Media Station|PT is still running, launch EDL Manager by choosing Start > All Programs > Avid > EDL Manager (Windows) or navigating to Applications/Avid EDL Manager (Mac).

2 Open the EDL to be digitized:

- If the EDL resides on a standard disk, select File > Open in EDL Manager, and navigate to the EDL.
- If the EDL is saved on an RT-11 disk in a CMX, GVG, or high-density GVG (HDGVG) edit controller format, insert the RT-11 disk and select File > Read from RT11 Disk.

3 Click the left-pointing arrow in the EDL Manger window. Media Station|PT will become the active application.



EDL Manager window

4 Select the bin where you wish to store the new sequence, and click OK.

5 In Media Station|PT, choose Tools > Capture to open the Capture Tool.

6 Verify the settings (input, resolution, and drive settings) for the clips to be digitized. For more information, see "Configuring the Capture Tool" on page 46

7 Select the sequence in the bin.

8 Choose Clip > Batch Capture.

Media Station|PT will prompt you to insert the first tape for the batch capture.

For more information, select Help > EDL Manager Help. Also, see the Avid® EDL Manager User's Guide available from the Avid Web site (www.avid.com).

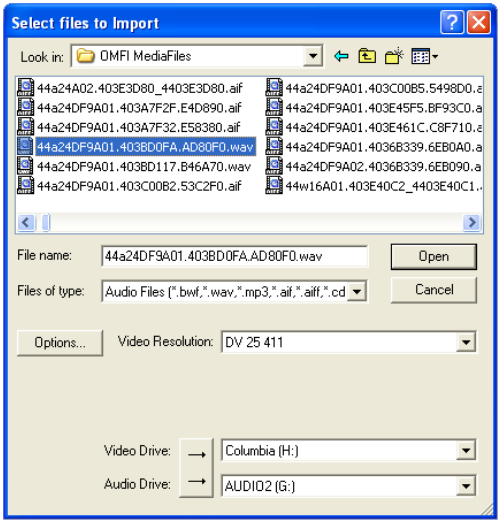
Importing Non-MXF and Non-OMFI Media Files

Media Station|PT can import many different types of graphics, audio and video files (such as QuickTime). On import, new MXF and OMF media files are created and stored on the specified volumes. You can select the video resolution in the Import dialog. Audio resolution is determined by the Audio Settings for the current project (see "Configuring Audio Settings" on page 41).

To import non-OMFI media files into Media Station|PT:

1 Open the bin where you want the imported file to be stored.

2 Select File > Import.



Select Files to Import dialog

3 In the Select files to Import dialog, locate and select one or more files to import.

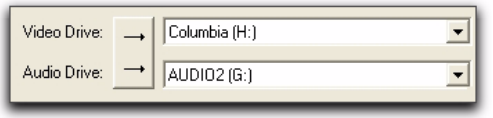
4 Select the video resolution for selected files.

When importing QuickTime DV25, you can save time by importing it as DV25. The process of converting Quicktime DV25 to Avid DV25 is optimized to be significantly faster than other conversions. Since both Media Station|PT and Pro Tools with Avid video peripherals support mixed video resolutions in the Timeline, it does not matter if the other video clips in your project are different formats, as long as they are the same frame rate.

5 Select the Audio Import Options.

Unlike Pro Tools, Media Station|PT supports audio files of mixed sample rate and bit depth in the same sequence. Therefore, it is not necessary to convert all audio files to the same sample rate and bit depth on import into Media Station|PT. You will have the option to convert audio files to a single sample rate and bit depth when you export them from Media Station|PT, and again when you import them into Pro Tools.

6 Select the volumes to store the new media files. Pro Tools requires that audio and video media must be stored on physically separate drives. Click the button to the left of the volume selector until there are separate selectors for audio and video, then select the desired drives for each.



Separate drives for audio and video

7 Click Open.

The selected files are imported into the selected bin.

Entering Full-Screen Playback Mode

If you have configured one or more monitors for full-screen playback through a DVI port, you can enter full-screen playback mode.

See "Full-Screen Playback of Video in Media Station|PT" on page 26 for details.

To enter full-screen playback mode:

1 In Media Station|PT, ensure that the DNA/1394 button in the timeline is set to 1394.

2 Do one of the following:

- Select Special > Full Screen Playback.

– or –

- Press Control+Shift+F (Windows) or Command+Shift+F (Mac).

If using two monitors, both monitors must be set to the same resolution when using this feature.

Down-Converting an HD Project to SD Video

(Media Station|PT with an Avid Video Peripheral Only)

If you want to output HD 1080 video, you can down-convert it in real-time to SD video and play it back through an Avid Mojo SDI, Avid Mojo, or AVoption|V10.

Avid video peripherals output only standard definition images with a 4:3 aspect ratio. When playing back files with different aspect ratios (such as 16:9), the image will be stretched to 4:3. Some professional monitors can compensate for this by letterboxing the image.

Down-converting HD video is faster than transcoding HD video or creating a video mixdown, but outputs video of lesser quality. If you see dropped frames during playback after down-converting HD video, you can remedy this by transcoding to an SD format or creating a video mixdown.

See "Transcoding HD Sequences" on page 66 or "Creating a Video Mixdown" on page 67.

To change an HD project's Project Type:

1 Open the Project in the Avid editing application.

2 In the Project window, click the Format tab.

3 Choose a corresponding SD resolution from the Project Type pop-up menu. For example, in an NTSC 1080i/59.94 project, switch to a 30i format and in a PAL 1080i/50 project, switch to a 25 format.

Project window, Format tab

Because no SD equivalent exists for 720p projects, they cannot be converted to SD prior to exporting. If you export an AAF sequence from a 720p project in Media Station|PT, Pro Tools can import only the video metadata. Or, you may wish to only export the audio.

Assembling Clips in a Sequence

Once you have used Media Station|PT to capture or import a clip, you can add it (or selected portions of it) into a new or existing sequence.

See "Exporting Audio and Video from Media Station|PT" on page 58 for information on exporting sequences from Media Station|PT.

You can export a captured clip directly from Media Station|PT without having to first add it to a new sequence. See "Exporting Audio and Video from Media Station|PT" on page 58.

Adding Clips to a New Sequence

You can add an entire clip (or a selected portion of it) to a new sequence.

To add clips to a new sequence:

1 Choose Clip > New Sequence to create a new sequence.

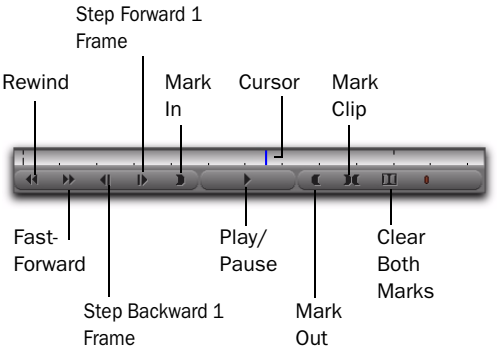
2 In the bin, name the sequence and drag it to the Record Monitor.

3 Drag the original clip to the Source Monitor.

Media Station|PT main window

4 Use the controls underneath the Source Monitor to locate the first frame of the portion of the clip that you want to edit into the sequence:

- To begin playing the clip, click Play (or press the Spacebar). (Click Play or press the Spacebar again to Pause.)
- To move to the beginning of the clip, click Rewind (or press the Home key).
- To move to the end of the clip, click Fast-Forward (or press the End key).
- To nudge by frame, click Step Forward 1 Frame or Step Backward 1 Frame (or press the Left/Right Arrow keys).
- To scrub, click and drag the cursor beneath the Source Monitor. (Enable the Caps Lock to hear audio while scrubbing.)



Source Monitor controls

5 Click Mark In to mark the *In point* (the first frame of the selected portion) at the current position of the cursor.

6 Using the same controls, locate the last frame of the portion of the clip that you want to edit into the sequence.

7 Click Mark Out to mark the *Out point* (the last frame of the selected portion) at the current position of the cursor.

You can also select the entire clip by clicking Mark Clip.

The portion of the clip between the In point and the Out point is now selected for editing into the sequence.

You can also click the Clear Both Marks button to clear the In and Out points.

8 Click the Record Monitor to select it, and press the Home key to move the cursor to the beginning of the new sequence.

9 Click the Overwrite button. The selected portion of the clip in the Source Monitor is edited over the new sequence in the Record Monitor.

Overwrite button

Adding Clips to an Existing Sequence

You can add a clip (or a portion of clip) to an existing sequence.

To add clips to an existing sequence:

1 Open the bin containing the existing sequence.

2 Drag the sequence from the bin to the Record Monitor. The sequence appears in the Timeline below the Source and Record Monitors. (If the Timeline does not appear, choose Tools > Timeline.)

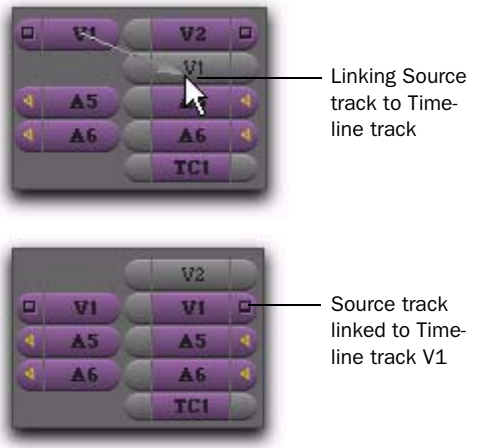
3 Drag the desired clip from the bin to the Source Monitor.

4 Under the Source Monitor, use the controls to set the In and Out points marking the portion of the clip that you want to edit into the existing sequence. (See "Adding Clips to a New Sequence" on page 55 for detailed information on using the controls.)

If the In or Out points have not been marked, the sequence will include everything after the cursor.

5 In the Timeline, ensure that the Source Track Enable buttons are properly aligned with the Timeline Track Enable buttons.

If it is necessary to align the Source and Timeline tracks, click on the Source track button and drag to the Timeline track button.



Aligning the "V1" Source video track with the "V1" Timeline video track

In order for a track in the clip to be edited into the linked track on the Timeline, both the Source Track Enable button and the Timeline Track Enable button must be enabled (purple).

6 In the existing sequence, choose any of the following methods to set the starting position at which the selection in the Source Monitor will be added:

- Drag the cursor in the Timeline to the desired position.
- In the Record Monitor, use the controls (similar to the Source Monitor controls) to queue to the desired position.
- In the Timeline or the Record Monitor, press the Home key to move to the beginning of the sequence, or press the End key to move to the end of the sequence.

7 Choose one of the following methods to add the selected portion of the clip at the location of the cursor:

- Click the Overwrite button to paste the selected clip over any existing material in the Timeline.

– or –

- Click the Splice-In button to paste the selected clip into the Timeline, and push all the clips which come after the insertion point later in the Timeline (analogous to a Shuffle edit in Pro Tools).

Overwrite and Splice-In buttons

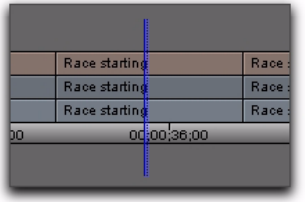
8 To add another clip to the sequence, repeat the preceding steps.

Deleting Clips from a Sequence

When you delete a clip from a sequence, all selected (purple) audio and video track layers of the clip are removed from the sequence.

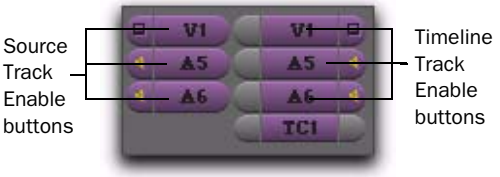
To delete clips from a sequence:

1 In the Timeline, click the clip you want to delete so that the cursor appears between its boundaries.



Cursor in clip boundaries in Timeline

2 Click the Track Enable buttons on the left side of the Timeline so that all audio and video tracks in the Timeline are selected (purple).



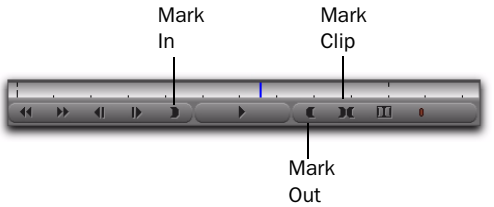
Track Enable buttons

3 Above the Timeline, do one of the following:

- Click the Mark In and Mark Out buttons to set the In and Out points.

– or –

- Click the Mark Clip button to automatically highlight the entire clip.



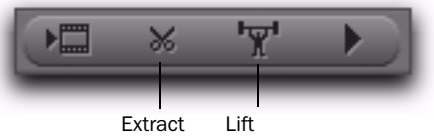
Record Monitor controls

4 Do one of the following:

- Click the Extract button (Scissors) to remove the clip and shuffle the following clips earlier to close the gap (analogous to a shuffle edit in Pro Tools).

– or –

- Click the Lift button to remove the clip and leave the following clips at their current time code location.



Extract and Lift buttons

To undo your last action, choose Edit > Undo, Control+Z (Windows), or Command+Z (Mac). Media Station|PT has 32 levels of Undo.

Deleting Clips, Sequences and Media

To delete a clip, sequence, or media file from Media Station|PT:

1 Select the item to delete in the bin.

2 Press the Delete key.

Use the Select Unreferenced Clips command in the menu at the bottom of the bin to select all clips which are not referenced by any sequence.

Exporting Audio and Video from Media Station|PT

To export sequences from Media Station|PT for import into Pro Tools, you can choose from the following methods:

- Using the Send To templates to export an AAF sequence
- Manually exporting an AAF sequence
- Creating a video mixdown
- Exporting an AAF sequence directly to an Interplay server (Avid Interplay system required)
- Checking a sequence into Avid Interplay for Pro Tools (Avid Interplay system required)

Using the Send To Templates to Export an AAF Sequence

The Send To Templates let you create an AAF sequence that references audio and video files.

To use the Send To Digidesign Pro Tools templates:

1 Select a sequence in a bin.

2 Choose File > Send To > Media Station|PT to Pro Tools, then choose one of the following options:

Link to Audio and Video Creates an AAF sequence that links to existing audio and video wherever possible and only creates new media files for effects that have not been rendered. This is the fastest and most storage-efficient way to export a sequence.

Choose this option for a scenario in which Pro Tools will link to the same media files as the current Media Station|PT sequence. Use this setting if the media files are currently stored on volumes that are suitable for Pro Tools media playback.

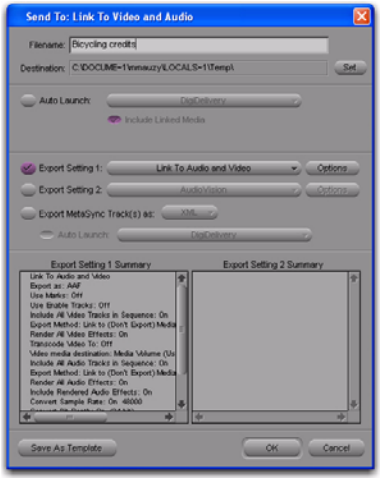
VIdeo Mixdown - Link to Audio Creates an AAF sequence that links to existing audio and includes editing metadata as well as a video mixdown in the video format defined by Media Creation settings. When imported into Pro Tools, the video mixdown and metadata are displayed in two separate video tracks on the Timeline.

Choose this option for any of the following scenarios, in which Pro Tools can link directly to audio files:

- Co-install system
- Video satellite system with video storage mounted on the Pro Tools computer
- Shared storage environment

Link to Video and Audio with QuickTime Creates an AAF sequence that links to existing audio, and creates a new QuickTime movie.

Choose this option when exporting a sequence for a Pro Tools system that does not have an Avid video peripheral attached.



Send To dialog (LInk to Audio and Video options shown)

3 If you want to view or change export settings, click the Options button, and then make any changes. If you make any changes, you can use the Save As Template button to create a new template.

This workflow assumes that you use the default values. This means that you are exporting using the Project sample rate, audio file format, and sample bit depth.

4 Click Set.

5 Navigate to the location where you want the AAF sequence to reside.

6 Click OK.

7 Media Station|PT exports the files to the destination folder. If Media Station|PT has to transcode video files to a new resolution, render effects or perform audio file conversions, a new sequence appears in the bin with the name *filename*.Export.01, and a new master clip appears in the bin with the name *filename*.new.01.

Manually Exporting an AAF Sequence

Manually exporting an AAF sequence from Media Station|PT involves more steps than using the Send To templates, but it provides more flexibility.

⚠ *You will need to render all video effects before manually exporting the sequence.*

Rendering All Effects

Though it is not possible to add or edit video or audio effects in Media Station|PT, you may need to export a sequence with effects that were created on another Avid editing system. Before you can export the sequence, you must render all effects. Media Station|PT can only render those effects which are currently installed.
Media Station|PT contains all of the standard Avid video effects. Third-party effects must either be installed for Media Station|PT by the user, or rendered by the Media Composer editor before opening the sequence in Media Station|PT.

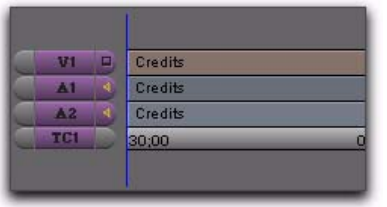
📄 *For more information on rendering effects in Avid products, see the Avid Effects Guide included in your Avid application package.*

To render all effects in Media Station|PT:

1 Drag the sequence to the Record Monitor. All elements of the sequence can be viewed in the Timeline. Unrendered effects appear in the Timeline as small squares with blue or green dots. Rendered effects appear in the Timeline as a square with no colored dot.

2 If there are any audio effects to render, choose Tools > AudioSuite to open the AudioSuite dialog, which can be left open in the background while you work.

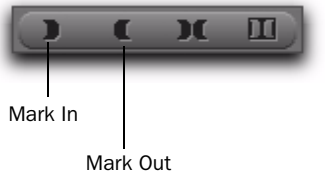
3 Click the Track Enable buttons on the left side of the Timeline so that all audio and video tracks in the Timeline are selected (purple).



Enabled tracks are colored purple

4 Click in the Timeline, and press the Home key to move the cursor to the beginning of the sequence.

5 Click the Mark In button to mark the In point at the beginning of the sequence.



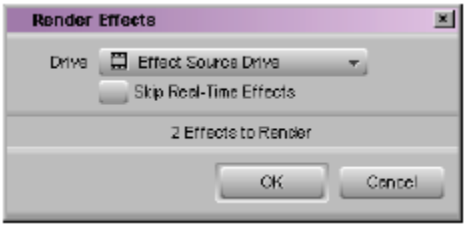
Mark In and Mark Out buttons

6 Press the End key to move the cursor to the end of the sequence.

7 Press the Mark Out button to mark the Out point at the end of the sequence.

8 Choose Clip > Render In/Out (if the command appears grayed out, click in the Timeline again).

9 In the Render Effects dialog, choose Effect Source Drive from the Drive pop-up menu. This will write the rendered effect to the same volume as the original files.



Render Effects dialog

⚠ *This selection keeps audio files on audio storage and video files on video storage. If you select only one volume, both the rendered audio and video files will be stored on the selected volume, which could cause playback errors with Pro Tools.*

10 Click OK.

11 To play the sequence with the rendered effects, press the Home key to move the cursor to the beginning of the sequence, then click the Play button (or press the Spacebar) to play.

Removing Third-Party Effects from a Sequence

If you open a sequence that has a third-party video or audio effect that you cannot render, you can remove the effect.

To remove an effect from a sequence:

1 Click the effect in the Timeline so that the cursor is placed over the small effect box.

2 Click the Track Enable button to select the track that holds the effect.

3 Click the Remove Effect button.

Remove Effect button

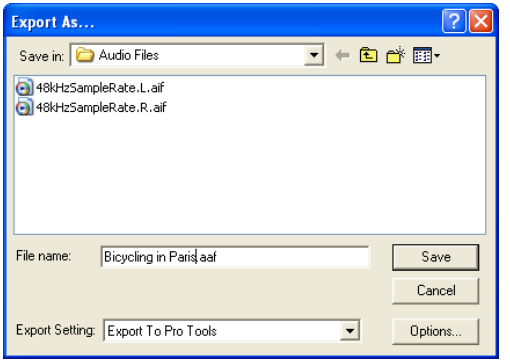
Exporting a Sequence

Once all effects have been rendered, export the sequence as an AAF sequence.

To manually export an AAF sequence:

1 Select the sequence in the bin.

2 Select File > Export.



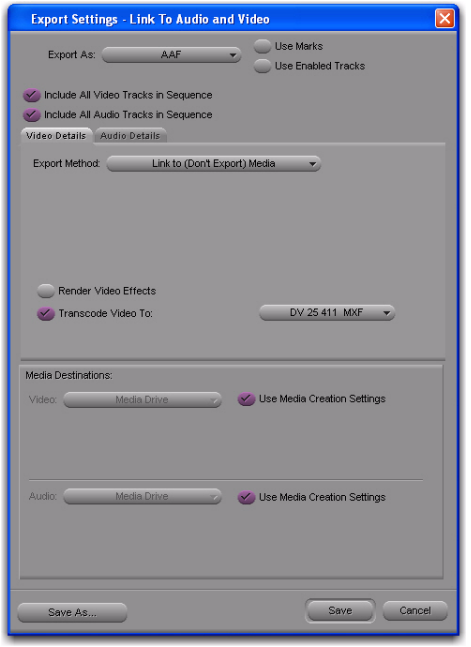
Export As dialog

3 Type a name and select a location for the exported sequence.

4 Select Export to Pro Tools from the Export Settings menu at the bottom of the Export As dialog.

5 Click the Options button to open the Export to Pro Tools Settings dialog. Verify the settings:

- For Export As, select AAF.
- Select the Include All Video Tracks in Sequence option. When the sequence is imported into Pro Tools. All of the video tracks will be "flattened" so that the imported sequence shows only a single video stream.
- Deselect the Include All Audio Tracks in Sequence option if you do not want to export any audio.



Export Settings – Export To Pro Tools dialog, Video Details tab

6 In the Video Details tab, select one of the following from the Export Method pop-up menu:

Link to (Don't Export) Media The Pro Tools session will link to the same video files as the current Media Station|PT sequence. Use this setting if the video files are currently stored on a volume suitable for Pro Tools video playback.

Copy All Media New complete video files will be created on the designated volume.

Consolidate Media Similar to Copy All Media, but only the parts of the video clips which are actually used in the Timeline are copied. Use this setting to copy the video files to a volume suitable for Pro Tools video playback.

Video Mixdown The exported AAF sequence will reference a video mixdown with or without its corresponding metadata for individual edits.

The following settings may also appear under the Video Details tab, depending on the selected export method:

Media Destinations Choose where to store copied video files.

Handle Length Extends the beginning and end of the consolidated file by the specified number of frames. This lets you trim edits later, though the sequence would need to be re-edited in Media Station|PT. (Pro Tools does not support trimming video regions, so you can save space and time by setting this to 0.)

Render Video Effects Always select Render Video Effects. If you already manually rendered effects, selecting this option will not create new files. It is highly recommended that all effects be rendered before exporting the sequence. (See "Rendering All Effects" on page 60.)

Transcode Video To Use this only if you need to change the video resolution. Pro Tools supports most SD resolutions supported by Media Station|PT, and even supports mixed resolutions in the Pro Tools Timeline, so in most cases there is no need to spend extra time transcoding the video. However, if you have video of a resolution which is not currently supported by Pro Tools (such as DVCPro HD or HDV) or you want to play back HD video to an external monitor via an Avid video peripheral, use this setting to transcode it to a supported resolution.

If your Pro Tools system is running on a slower computer, you may be able to reduce some of the CPU load in Pro Tools by transcoding the video to 1:1 on export. 1:1 video is uncompressed, and consequently it does not need to be decompressed before playing back. However, 1:1 video requires significant amounts of storage space.

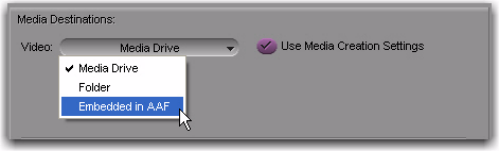
While new video files are typically stored in the OMFI MediaFiles folder (for OMF media) or the Avid MediaFiles folder (for MXF media), some workflows let you choose a different target destination for video in the Media Destination section of the Video Details tab, as follows:

Media Drive This option exports media to the OMFI MediaFiles folder or Avid MediaFiles folder on a connected storage drive. Select the Use Media Creation Settings option to use the default settings, or deselect that option to choose a media drive from the pop-up menu.

Folder This option exports video media to a specific folder. Select the Use Same Folder as AAF File option to export the video media into the same folder you designated for exporting the AAF sequence, or deselect this option to select a specific folder location for the media.

Embedded in AAF This option embeds the video media in the AAF sequence that is exported from Media Station|PT.

Pro Tools cannot play video that is embedded in an AAF sequence, but it can read the video editing metadata when imported into a satellite track. Do not use this option if you want to import the video itself into Pro Tools. (See "Opening an AAF Sequence for Playback on a Video Satellite System" on page 110.)



Media Destination section of the Video Details tab

7 Click the Audio Details tab, and select one of the following from the Export Method pop-up menu:

Link to (Don't Export) Media The Pro Tools session will link to the same audio files as the current Media Station|PT sequence. Use this setting if the audio files are currently stored on a volume suitable for Pro Tools audio playback.

Copy All Media New complete audio files will be created on the designated volume.

Consolidate Media Similar to Copy All Media, but only the parts of the audio which are actually used in the Timeline are copied. Use this setting to copy the audio files to a volume suitable for Pro Tools audio playback.

The following settings may also appear under the Audio Details tab, depending on the selected export method:

Render All Audio Effects Select the Render All Audio Effects option so that all audio effects are rendered before export. If you already manually rendered effects, selecting this option will not create new files. It is highly recommended that all effects be rendered before exporting the sequence. (See "Rendering All Effects" on page 60.)

Include Rendered Audio Effects Select the Include Rendered Audio Effects option. Otherwise, the exported sequence will include the original audio files without any AudioSuite effects from the original sequence—even if those effects were previously rendered.

Convert Audio Sample Rate/Bit Depth/File Format Select Project for any of these, and the current Audio Project Setting will be used. (See "Configuring Audio Settings" on page 41.)

While new audio files are typically stored in the OMFI MediaFiles folder (for OMF audio) or the Avid MediaFiles folder (for MXF audio), some workflows let you choose a different target destination for audio in the Media Destination section of the Audio Details tab, as follows:

Media Drive This option exports audio media to the OMFI or Avid MediaFiles folder on connected storage. Select the Use Media Creation Settings option to use the default settings, or deselect that option to choose a media drive from the pop-up menu.

Folder This option exports audio media to a specific folder. Select the Use Same Folder as AAF File option to export the media into the same folder you designated for exporting the AAF sequence, or deselect this option to select a specific folder location for the media.

Embedded in AAF This option embeds the audio media in the AAF sequence that is exported from Media Station|PT. Unlike embedded video, Pro Tools can import and play audio which is embedded in an AAF sequence. Embedding audio within the AAF sequence makes file management much simpler because there is only one file to move—the sequence. There is a limit of 2 GB for embedded AAF.

⚠ *Pro Tools cannot play video that is embedded in an AAF sequence, but it can read the video editing metadata when imported into a satellite track. Do not use this option if you want to import the video itself into Pro Tools. (See "Opening an AAF Sequence for Playback on a Video Satellite System" on page 110.)*

8 Click Save or Save As in the Export Settings dialog:

- Click Save to use the specified settings whenever Export to Pro Tools is selected from the Export Settings menu. These settings will also be used when choosing any of the options located at File > Send To > Media StationPT to Pro Tools.
- Click Save As to save these settings as a preset with a different name. These settings can then be recalled in the Export dialog. If you click Save As instead of Save, the Export to Pro Tools settings will not be changed.

9 Click Save in the Export As dialog. (The Export Settings cannot be saved until you have selected a target drive for both audio and video.)

When the export is complete, you are ready to import the file into Pro Tools.

For more information on opening and importing AAF sequences in Pro Tools, see "Importing Audio and Video into Pro Tools" on page 71. For more information on the Import Session dialog, see the Pro Tools Reference Guide.

To export only part of a sequence:

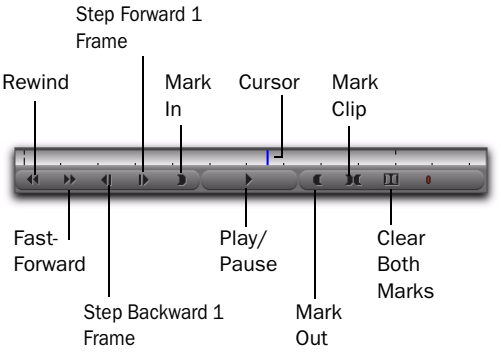
1 Choose Clip > New Sequence to create a new sequence.

2 In the bin, name the sequence and drag it to the Record Monitor.

Media Station|PT main window

3 Drag your original sequence to the Source Monitor.

4 Use the controls underneath the Source Monitor to locate the first frame of the portion of the clip that you want to edit into the sequence.



Source Monitor controls

See "Adding Clips to a New Sequence" on page 55 for detailed information on using these controls.

5 Click Mark In to mark the *In point* (the first frame of the selected portion of the clip) at the current position of the cursor.

6 Using the same controls, locate the last frame of the portion of the clip that you want to edit into the sequence.

7 Click Mark Out to mark the *Out point* (the last frame of the selected portion of the clip) at the current position of the cursor.

You can also select the entire clip by clicking Mark Clip.

8 Click the Record Monitor to select the empty sequence, then press the Home key to move the cursor to the beginning of the sequence.

9 Click the Overwrite or Splice-In button. The selected portion of old sequence is edited into the empty sequence in the Record Monitor.

Overwrite and Splice-In buttons

10 Follow the preceding steps for exporting the new sequence (see "Exporting a Sequence" on page 61).

Transcoding HD Sequences

You can use Media Station|PT to transcode a 1080 HD sequence to SD video for either of the following purposes:

Playback of HD Video in Pro Tools Pro Tools with an Avid video peripheral can import and display editing metadata in HD Avid video, but cannot play back or display HD video frames. For this reason, sequences exported from Media Station|PT HD projects should also include a video mixdown in an SD resolution corresponding to the original HD resolution if you need to view the video in Pro Tools. Changing the resolution of the video mixdown involves changing the project's Format type.

Playback of SD Video from HD Sequences

Media Station|PT with an Avid video peripheral can play back SD video to an external NTSC or PAL monitor, but cannot play back HD video to an NTSC or PAL monitor. However, if you first transcode an HD sequence to SD video, you can output the transcoded video to an external video monitor with frame edge-aligned accuracy.

Transcoding an HD sequence to SD video is a slower process than down-converting an HD project in real-time, but yields better video quality.

See "Down-Converting an HD Project to SD Video" on page 54 for details.

To transcode HD resolution video to SD resolution video:

1 Open the Project in Media Station|PT.

2 In the Project window, click the Format tab.

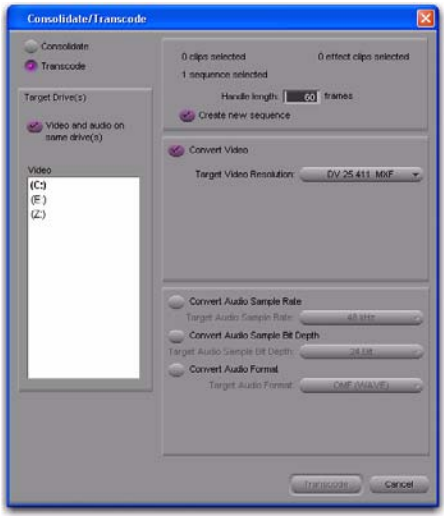
3 Choose a corresponding SD resolution from the Project Type pop-up menu. For example, in an NTSC 1080i/59.94 project, switch to a 30i format and in a PAL 1080i/50 project, switch to a 25 format.

Project window, Format tab

Because no SD equivalent exists for 720p projects, they cannot be converted to SD prior to exporting. If you export an AAF sequence from a 720p project in Media Station|PT, Pro Tools can import only the video metadata. Or, you may wish to only export the audio.

4 Open the bin containing the sequence you want to transcode, and select the sequence.

5 Choose Clip > Consolidate/Transcode.



Consolidate/Transcode dialog

6 In the Consolidate/Transcode dialog, do the following:

- Click the Transcode option.
- Select the Create New Sequence option.
- Choose the video resolution to which you want to transcode the sequence from the Target Video Resolution pop-up menu.
- Select the drive into which you want to save the transcoded media.

7 When you are ready, click Transcode.

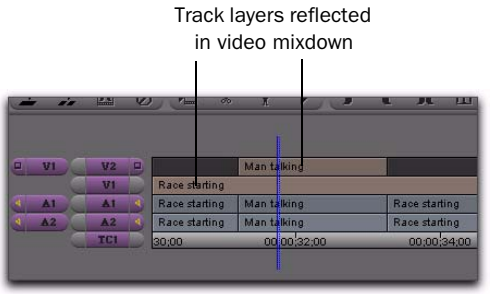
Media is transcoded to SD and SD sequence is created.

8 When Media Station|PT has finished transcoding media, export the new sequence as an AAF. (See "Exporting Audio and Video from Media Station|PT" on page 58.)

Creating a Video Mixdown

Video mixdown combines a sequence (or portion of a sequence) into one video file that reflects all edits and effects.

You can mix down multiple video tracks or a single track. For mixdowns of multiple tracks, the selected track and all tracks under it are combined into one file that always reflects the topmost visible track.



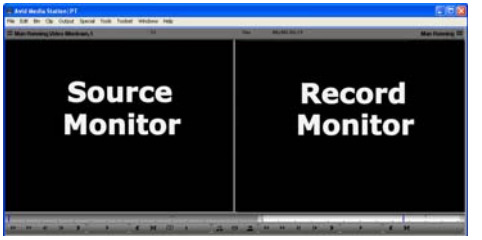
Layered video tracks in a video mixdown

Creating a video mixdown is analogous to bouncing to disk in Pro Tools, except that the video mixdown creates only video and no audio.

To create a video mixdown:

1 Open the bin containing the sequence you want to mix down.

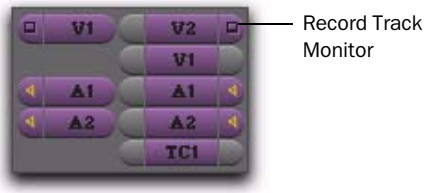
2 Drag the sequence to the Record Monitor. The tracks comprising the sequence display in the Timeline.



Record and Source Monitors

3 Do one of the following:

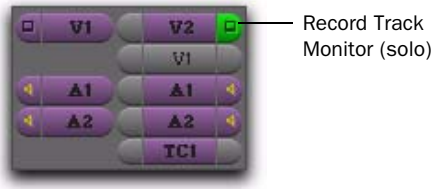
- To combine multiple video tracks into the mixdown, select a video track, then click the Record Track Monitor button next to the track. Video tracks above the selected track will not be included in the mixdown.



Record Track monitor

– or –

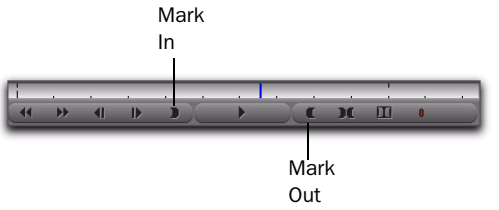
- To select only one video track for mixdown, Control-click (Windows) or Command-click (Macintosh) the Record Track Monitor button. The button will turn green.



Record Track monitor

4 On the Timeline or in the Record Monitor, drag the cursor to the position in the sequence at which you wish the mixdown to start. (Press the Home key to move the cursor to the beginning of the Timeline.)

5 Under the Record Monitor, click the Mark In button to mark the In point at the beginning of the sequence.



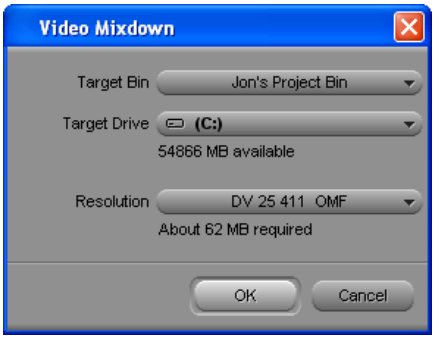
Record Monitor controls

6 Drag the cursor to the position at which you want the sequence to end. (Press the End key to move the cursor to the end of the sequence.)

7 Click Mark Out button to set the Out point.

The portion of the sequence you have selected will be mixed down.

8 Choose Special > Video Mixdown.



Video Mixdown dialog

9 From the Target bin pop-up menu, choose the bin where you wish to store the master clip of the video mixdown.

10 From the Target Drive pop-up menu, choose the volume where you wish to save the video mixdown. On the volume you select, MXF media are stored in the Avid MediaFiles folder, and OMF media are stored in the OMFI MediaFiles folder.

11 Choose a file resolution for the video mixdown from the Resolution pop-up menu.

12 Click OK.

A progress bar displays as Media Station|PT saves the video mix to the location and resolutions you have specified.

Checking In a Sequence to Interplay for Pro Tools

(Avid Interplay System Only)

This section describes how to use Media Station|PT to check in a sequence to Interplay for Pro Tools.

To check in a sequence to Interplay for Pro Tools:

1 In Media Station|PT, navigate to the bin containing the sequence you want to export.

Bin containing the sequence to export

2 Do one of the following:

- Select the sequence, and choose File > Check In to Interplay for Pro Tools.

– or –

- Right-click the sequence, and choose Check In to Interplay for Pro Tools.

If you have previously used the Interplay Administrator to set the Editor Export Settings for Pro Tools plug-in for the project folder, the Pro Tools Video Mixdown dialog appears.

Video Mix dialog

See the Pro Tools Avid Interplay Guide for detailed information.

3 Select one of the following options:

New Video Mixdown Includes a video mixdown in the exported sequence using the resolution set in the Project Type pop-up menu of the project window's Format tab. Select this option if you are working on an HD project. No video effects will be rendered in the project.

Link to Existing Video Media Use this option when effects have either been rendered or are unnecessary for working in Pro Tools. (Ensure that linked video can be played from the Pro Tools system.) With this option, Media Station|PT:

- Does not render any effects.

- Determines whether the current resolution matches the Transcode resolution in the Editor Export Settings for Pro Tools plug-in in the Interplay Administrator. Depending on whether the settings match, one of the following occurs:
  - If the settings either match or have not been created for the check-in folder, the system creates a sequence that links to the existing media and does not create a video mixdown or render any video effects.
  - If the settings do not match, the system transcodes the sequence according to the setting in the Export Settings for Pro Tools plug-in and links the sequence to this new media. The system also renders (or re-renders) all video effects to match the transcode resolution. The application overrides the "Link To" option in order to guarantee that you have access to a resolution supported by Pro Tools.

4 Click OK to check in the sequence to Interplay for Pro Tools.

After Checking In a Sequence to Interplay for Pro Tools

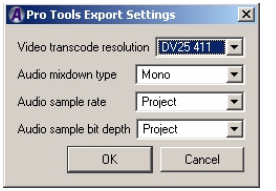
The system exports the sequence from Media Station|PT, and then checks in the sequence to Interplay.

If the Interplay folder containing the exported sequence has been configured with video and audio settings defined in the Editor Export Settings for Pro Tools plug-in, those settings are applied to the sequence. (These settings can apply to either the entire database or to one or more folders, depending on how they are configured.)

When you use Media Station|PT to check in a sequence to Interplay for Pro Tools, the system chooses a destination folder in the Interplay database based on the current Interplay view settings, with the default destination folder as follows:

Projects*project_name**bin_name*

If your check-in destination folder is a folder for which settings have not been defined, the system displays the Pro Tools Export Settings dialog so you can specify the settings.



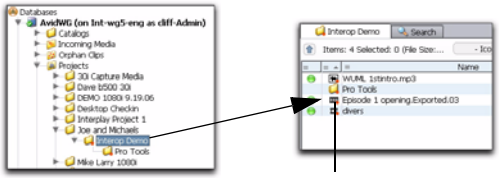
Pro Tools Export Settings dialog

Exported Files in Interplay

If this is the first time the you have checked in a sequence to Interplay for Pro Tools for this project, the system performs the following operations:

- Checks in the Avid sequence to the *bin_name* folder.
- Creates a Pro Tools folder within the *bin_name* folder.
- Checks in the files for the Pro Tools editor to the Pro Tools folder.

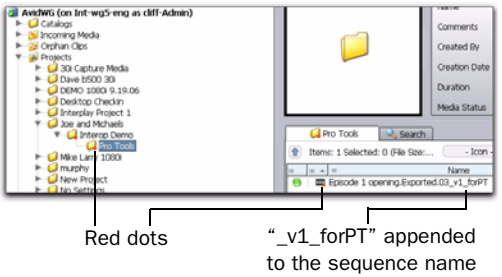
- Checks in a Pro Tools sequence to the Pro Tools folder.



Location of the Avid sequence and its associated Pro Tools folder

The first time the sequence is exported, the system appends the text "_v1_forPT" to the sequence name in the Pro Tools folder. Each subsequent time the sequence is exported, it uses the text "_v2_forPT," "_v3_forPT," and so on.

The following illustration shows the contents of the Pro Tools folder after the first export.



Contents of Pro Tools folder (left pane) and sequence listed in that directory (right pane)

The red dots in the illustration indicate that the system has placed a reservation on the files to prevent unauthorized deletion for a fixed period of time. For more information, see the Avid Interplay Access User's Guide.

Importing Audio and Video into Pro Tools

This section explains the basic steps of importing an AAF sequence into a Pro Tools session.

Importing an AAF Sequence as a Pro Tools Session

The easiest way of using Pro Tools to edit a sequence exported from Media Station|PT is to open it as a new session.

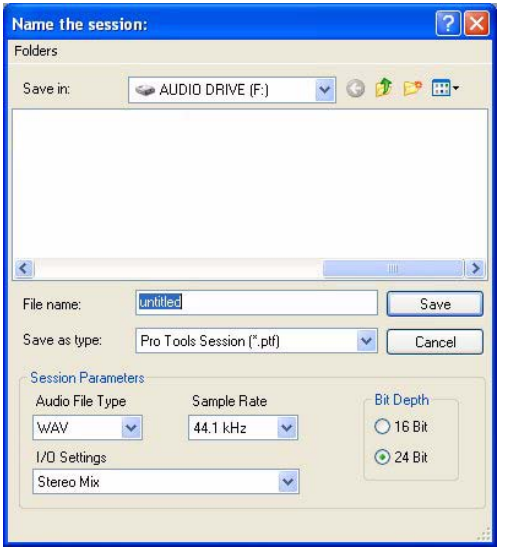
To open an AAF sequence as a Pro Tools session:

1 Launch Pro Tools.

2 Choose File > Open Session.

3 In the Open Session dialog, navigate to the AAF sequence you want to import.

4 Click Open.



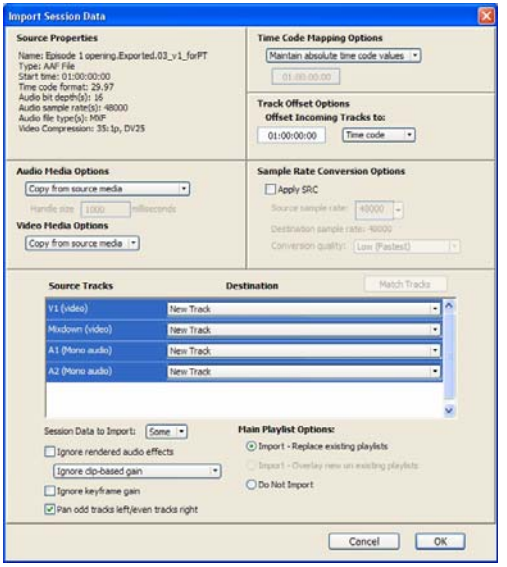
Pro Tools New Session dialog

5 Name your session in the File Name field.

6 Select the I/O Settings to use for the session. Several pre-configured I/O Settings are included with your system, or you can select a custom I/O Setting that you have created.

7 Click Save.

The Import Session Data dialog appears.



Import Session Data dialog

Pro Tools lets you open and import AAF sequences that reference audio files with mixed sample rates and/or bit depths. Audio files will be converted to the highest sample rate and bit depth of the files being imported (for new sessions) or to the current sample rate and/or bit depth (for existing sessions).

8 From the Audio Media Options pop-up menu, choose how you want to import audio files into Pro Tools:

- If the audio files reside on a volume from which Pro Tools can play back audio, select Link to Source Media (Where Possible).
- If the audio files reside on a volume from which Pro Tools cannot play back audio, select Copy from Source Media to copy all audio to the Pro Tools audio storage or Consolidate from Source Media to copy only the portions of the audio used in the Pro Tools Timeline to the Pro Tools audio storage.

9 From the Video Media Options pop-up menu, choose how you want to import video files into Pro Tools:

- If the video files reside on a volume from which Pro Tools can play back video, select Link to Source Media.
- If the video files reside on a volume from which Pro Tools cannot play back video, select Copy from Source Media to copy all video to the Pro Tools video storage.

10 Change other parameters as desired. For more information, see “Exporting Audio from Pro Tools for Media Station PT” on page 78.

11 Click OK.

Pro Tools will create a new Audio Files folder, a Fade Files folder, a Video Files folder, a cache.wfm file, and a session file at the designated locations. This session will match the audio file type, sample rate, and bit depth of the audio in the AAF sequence you selected.

Importing an AAF Sequence into an Existing Session

You can import an AAF sequence containing audio and video into an existing Pro Tools session.

⚠ *Any video imported into Pro Tools must be the same frame rate as video already placed in the Timeline.*

To open and import audio and/or video tracks from an AAF sequence:

1 Open an existing Pro Tools session.

2 Choose File > Import > Session Data, and choose the AAF sequence that you wish to import.

⚠ *Pro Tools cannot play video that is embedded in an AAF sequence, but it can read the video editing metadata when imported into a satellite track. Do not use this option if you want to import the video itself into Pro Tools. (See "Opening an AAF Sequence for Playback on a Video Satellite System" on page 110.)*

💡 *You can also open an AAF sequence by dragging it from any location on your computer or the DigiBase browser to the Pro Tools Timeline.*

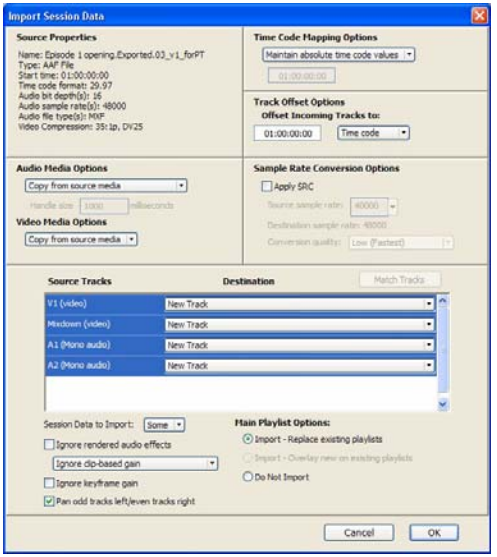
3 From the Audio Media Options pop-up menu, choose how you want to import audio files into Pro Tools:

- If the audio files reside on a volume from which Pro Tools can play back audio, select Link to Source Media (Where Possible).
- If the audio files reside on a volume from which Pro Tools cannot play back audio, select Copy from Source Media to copy all audio to the Pro Tools audio storage or Consolidate from Source Media to copy only the audio used in the session to the Pro Tools audio storage.

4 From the Video Media Options pop-up menu, choose how you want to import video files into Pro Tools:

- If the video files reside on a volume from which Pro Tools can play back video, select Link to Source Media.
- If the video files reside on a volume from which Pro Tools cannot play back video, select Copy from Source Media to copy all video to the Pro Tools video storage.

5 In the Import Session Data dialog, deselect any source tracks that you do *not* want to be imported. (If you are importing Session Data from AAF sequences, all tracks are selected by default. If you are importing tracks from a Pro Tools session, no tracks are selected by default.)



Import Session Data dialog

6 Click OK.

> ⚠ *If there are any errors or region name truncations, a dialog will appear asking you if you want a detailed report of the changes. Click Yes and choose where you want to save the log.*

7 If your audio or video is on a volume that is not suitable for playback (shown as a Transfer volume in the Workspace browser), Pro Tools displays a dialog that guides you to copy the media to a volume designated for Playback or Record. (Click Yes.)

Pro Tools imports the audio and video to the Timeline. Audio tracks with mixed sample rates and/or bit depth are automatically converted to the same sample rate and bit depth as the session.

Now you are ready to edit the audio files in Pro Tools.

Drive Selection When Importing Session Data

When using the Import Session Data dialog to import audio files with Copy or Consolidate Source selected in the Audio Media Options pop-up menu, all new audio files are stored on the volumes designated for their respective target tracks in the Disk Allocation dialog.

Importing Avid Video into Pro Tools

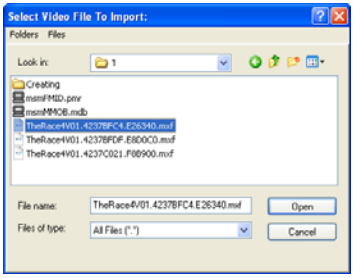
You can import an OMF or MXF video file into Pro Tools. You might do this, for example, to import a video mixdown created in Media Station|PT.

To import Avid video into Pro Tools:

1 Create a new Pro Tools session or open an existing session.

2 Choose File > Import > Video.

3 In the Select Video File to Import dialog, locate the video file.



Select Video Files to Import dialog

4 Click Open.

Pro Tools imports the video file into the Video track.

Importing a Sequence into Pro Tools from Interplay

(Avid Interplay System Only)

This section describes how to locate a sequence that has been exported to the Interplay database from Media Station|PT and import it into Pro Tools. This section assumes that you have already configured the Pro Tools Import settings in the Interplay Administration tool.

For more information, see the Pro Tools Avid Interplay Guide.

If you do not establish Pro Tools Import Settings before importing the sequence into Pro Tools, you can select the appropriate values in the Import Session Data dialog during the import process.

When importing a sequence from Interplay into Pro Tools, you can import into a new or existing session.

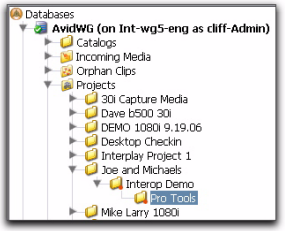
Importing a Sequence into Pro Tools from within Interplay

To check out the sequence and import it into Pro Tools from within Avid Interplay Access:

1 If you want to import the sequence into an existing session in Pro Tools, launch Pro Tools and open that session.

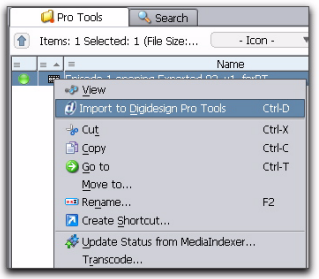
2 Start Avid Interplay Access.

3 Navigate to the Pro Tools folder containing the sequence you want to import.



Navigating to the sequence

4 Right-click the sequence, and choose Import to Digidesign Pro Tools.



Importing a sequence into Pro Tools from within Access

Importing a Sequence from Interplay from within Pro Tools

This section describes to how to use Pro Tools to import a sequence from Interplay. If you have not yet opened Interplay Access and specified a server to connect to, you must do that before performing this procedure.

See "Importing a Sequence into Pro Tools from within Interplay" on page 75 for detailed information.

To check out the sequence and import it into Pro Tools from within Pro Tools:

1 Start Pro Tools.

2 If you want to import the sequence into an existing session, open that session.

3 Choose File > Import > Sequence from Avid Interplay.

The Interplay Engine Browser appears.

Interplay Engine Browser

4 In the Interplay Engine Browser, expand the Interplay database by clicking the plus sign (+) next to it.

5 Expand the root folder of the database—usually titled *AvidWG* or a variation thereof—by clicking the plus sign (+) next to its name.

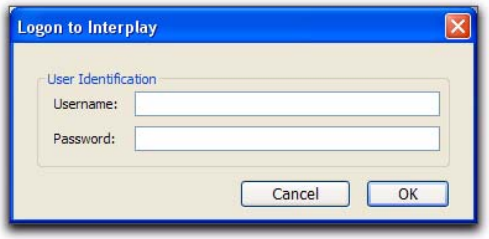
The folder structure matches the structure in Interplay Access.

6 Expand the Projects folder.

7 Expand the project containing the sequence you want to check out and import to Pro Tools.

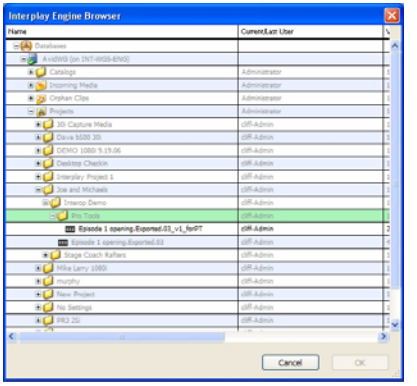
The Logon to Interplay dialog appears.

8 Enter your username and password, and click OK.



Logon to Interplay dialog

9 In the Interplay Engine Browser, locate and select the sequence that you want to import.

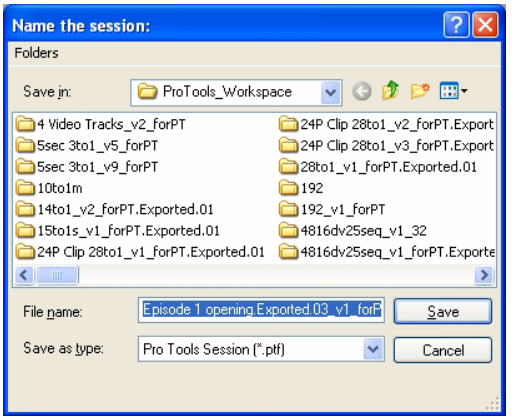


Interplay Engine Browser (folder structure displayed)

Files that appear in greyed out text out are not available for import into Pro Tools.

10 Click OK.

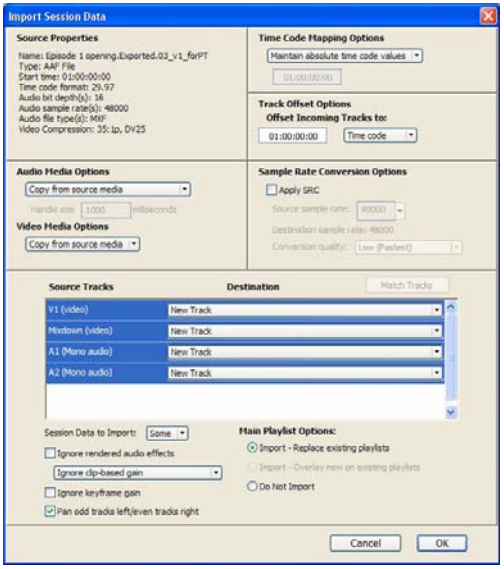
11 If the Name the Session dialog appears, navigate to the appropriate location either on local storage or on a dedicated Unity workspace, and click Save.



Name the Session dialog

This dialog does not appear if you are importing a sequence into an existing session.

12 If the Pro Tools Import Session Data dialog appears, select the appropriate options and click OK.

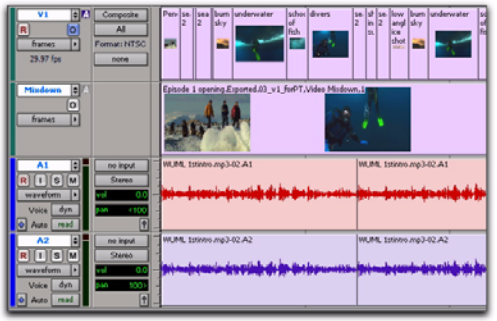


Import Session Data dialog

This dialog does not appear if you configured the Pro Tools Import Settings in the Avid Interplay Administrator. Pro Tools automatically uses those settings to import the sequence. (See the Pro Tools Avid Interplay Guide for detailed information on configuring Pro Tools Import Settings, and the DigiTranslator Guide for detailed information on setting options in this dialog.)

Pro Tools imports the sequence, copies any media (if the settings require copying), and displays the imported sequence within the Pro Tools session.

If the sequence was linked to media files on unmounted volumes, the system provides a warning and asks you to mount those volumes before you proceed with copying or linking to media.



Sequence imported from Interplay into the Timeline

Editing Audio in Pro Tools

Audio files created in Media Station|PT are either MXF files or OMF-wrapped AIFF or WAV files, which Pro Tools cannot edit destructively.

When you use Pro Tools to perform a destructive edit (such as using AudioSuite processing to replace the original sound), it creates a new copy of the file and leaves the original untouched.

See the Pro Tools Reference Guide for detailed information on editing audio files in Pro Tools.

Exporting Audio from Pro Tools for Media Station PT

In Pro Tools, you can export audio tracks for use in Media Station|PT using any of the following methods:

- Exporting selected tracks as an AAF sequence
- Bouncing to disk
- Exporting edited audio tracks to Interplay from Pro Tools (Avid Interplay system required)

For other export methods, see the *Pro Tools Reference Guide*.

Exporting Tracks as AAF Sequences

Use Export Selected Tracks as OMF/AAF to export individual tracks or an entire Pro Tools session in AAF format.

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

Volume and pan automation is not retained on export if Quantize Edits to Frame Boundaries is enabled (Avid Compatibility Mode).

The Movie track cannot be exported to AAF or OMF from Pro Tools.

To export selected audio tracks from Pro Tools as an AAF sequence:

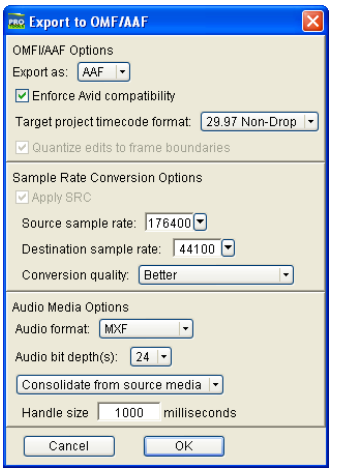
1 In Pro Tools, select the tracks you want to export in the Pro Tools session by Shift-clicking the names of each track.

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

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

4 Select Enforce Avid Compatibility.

Enforce Avid Compatibility creates frame-accurate 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.



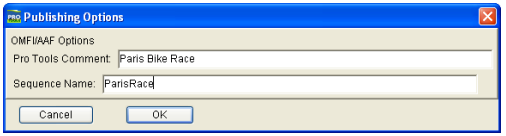
Export to OMF/AAF dialog

An OMF sequence cannot reference MXF media files. In the Export Selected Tracks as OMF/AAF dialog, MXF is only available when AAF is selected in the Export As pop-up menu

5 Ensure that the Target Project Time Code Format pop-up menu displays the correct frame rate for the Media Station|PT project.

6 Click OK.

7 In the Publishing Options dialog, type the Pro Tools Comment and Sequence Name.

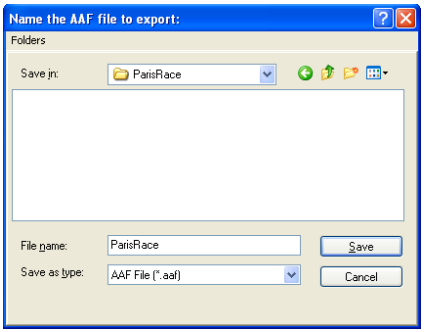


Publishing Options dialog

8 Click OK.

Pro Tools will create a sequence with the name you supply. (The Pro Tools comment appears in the Media Station|PT bin in a Pro Tools Comment column.)

9 In the Name the AAF/OMF File to Export dialog, navigate to a folder where you can easily locate the Pro Tools composition when it is time to import it into Media Station|PT.



Name the AAF File to Export dialog (OMF dialog not shown)

⚠ *Do not save the sequence to either the OMFI Media Files folder or the Avid Media Files folder.*

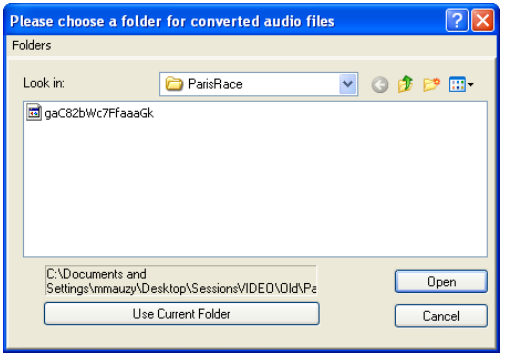
10 Click Save.

11 In the Please Choose a Folder for Converted Audio Files dialog, do one of the following:

- If you are exporting to the same storage that Media Station|PT will be accessing, navigate to the OMFI MediaFiles folder (AIFF or WAV files) or the Avid MediaFiles folder (MXF files).

– or –

- If you are exporting to a location that is not directly accessible to Media Station|PT, navigate to a location where you can easily find the audio files when you need to copy them over to the Media Station|PT computer.



Navigating to the OMFI MediaFiles folder (OMF media) or Avid MediaFiles/MXF/1 folder (AAF media)

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

Pro Tools exports the following files:

- The sequence is saved to the folder you designated.
- If you exported audio files directly to the Media Station|PT video storage, related media is saved to the appropriate volume and folder (OMFI MediaFiles or Avid MediaFiles/MXF/1) accessible to Media Station|PT.

13 Do one of the following:

- If you are using Media Station|PT on the same computer as Pro Tools and are ready to use it to import the files you just exported Media Station|PT, exit Pro Tools.
- If you were unable to save the audio portion of the AAF sequence to storage that is directly accessible from Media Station|PT, copy the audio files from their saved location to the OMFI MediaFiles folder (for AIFF or WAV media) or Avid MediaFiles folder (for MXF media) on a drive connected to your Media Station|PT system

Exporting Audio Files Using Bounce to Disk

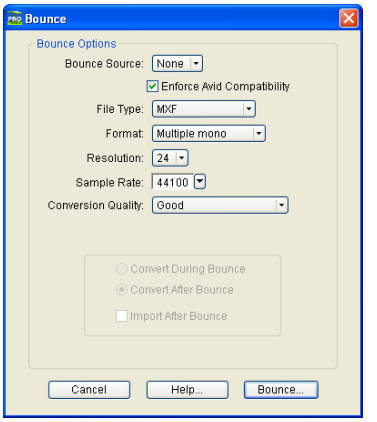
Use the Bounce to Disk command to create premixed files of the current Pro Tools session. This does not export the individual files on the Timeline, but it does guarantee that the mix you hear in Media Station|PT will be identical to the mix you hear in Pro Tools, including all panning, effects and automation.

To export audio files using Bounce to Disk:

1 In Pro Tools, finalize the mix.

2 Select the time range of the session that you want to export. (All audible tracks in that time range will be included in the bounce, whether they are selected or not.)

3 Choose File > Bounce to > Disk.



Bounce to Disk dialog

4 Select the Enforce Avid Compatibility option.

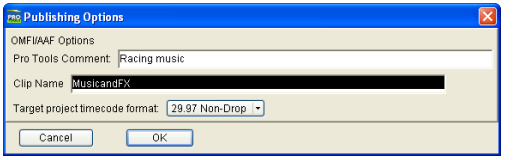
Enforce Avid Compatibility creates frame-accurate edits, wraps the files as OMFI (unless you choose MXF), and limits the sample rate options to 44.1 or 48 kHz. Dithering without noise shaping will be applied to files being bounced from 24-bit to 16-bit.

5 Choose a file type from the File Type pop-up menu.

6 Click Bounce.

7 In the Publishing Options dialog, type the Pro Tools Comment and Clip Name.

If you selected more than one region for export, the Clip Name field will not be available and the names of the regions will be used for the exported files.



Publishing Options dialog

8 Choose the Target Project Time Code Format.

9 Click OK.

10 In the Save Bounce As dialog, navigate to the volume you will use for audio playback in Media Station|PT.

- For MXF audio files, ensure the file is saved to the Avid MediaFiles/MXF/1 folder.
- For all other audio files, ensure the file is saved to the OMFI MediaFiles folder.

11 Click Save.

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

Exporting Edited Audio Tracks to Interplay from Pro Tools

(Avid Interplay System Only)

"Importing a Sequence into Pro Tools from Interplay" on page 75 describes using Interplay to import an AAF sequence created specifically for use in Pro Tools. This section describes how to use Interplay to export final audio from Pro Tools back to that same AAF sequence so that it may be easily imported into Media Station|PT, Media Composer, or other Avid editors.

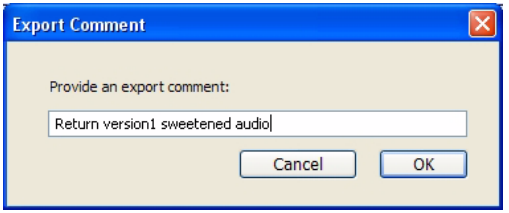
⚠ *It is recommended that you provide completed audio stems rather than audio tracks with edits.*

To export audio tracks from Pro Tools, and then check in audio tracks to Interplay:

1 In Pro Tools, select the tracks that you want to export into the Pro Tools sequence on Interplay.

2 Select File > Export > Selected Tracks to Sequence in Avid Interplay.

3 In the Export Comment dialog, type a comment and click OK.



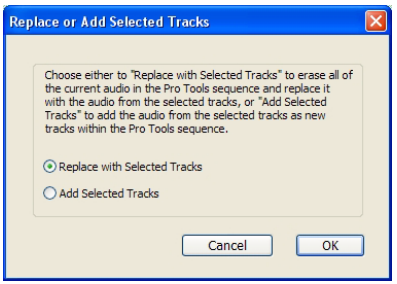
Export Comment dialog

4 In the Replace or Add Selected Tracks dialog, select a method for laying back edited audio material into the Pro Tools sequence residing on the Interplay server:

Replace with Selected Tracks Replaces the old audio tracks in the Pro Tools sequence with the edited audio tracks. Select this option if you do not want to preserve the original audio in the sequence.

Add Selected Tracks Adds the edited audio tracks to the Pro Tools sequence on the Interplay database. Select this option if you want to preserve the original audio in the sequence.

⚠ *When adding selected tracks, ensure that the total number of tracks in the sequence residing on the Interplay server does not exceed the total allowed number of tracks for Media Station|PT—24 audio and 24 video tracks.*



Replace or Add Selected Tracks

5 Click OK.

A confirmation message box appears.

6 Click OK.

The sequence in the Avid Interplay database is now ready to be checked out and imported by Media Station|PT.

Importing Audio into Media Station|PT from Pro Tools

Once you have exported audio files or sequences from Pro Tools, you may import them into a bin in Media Station|PT.

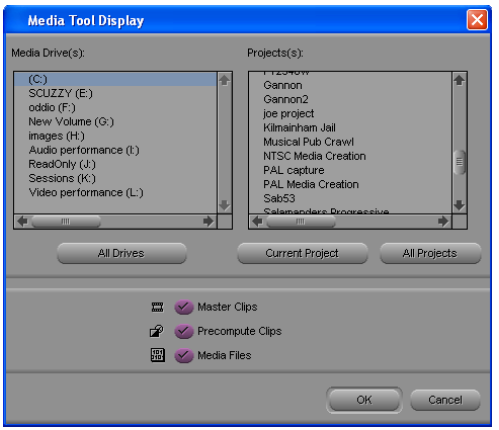
Importing Audio Files into a Bin

To import audio files into Media Station|PT:

1 Launch Media Station|PT, and open the desired project.

2 Open the bin into which you wish to import the audio files from Pro Tools.

3 Choose Tools > Media Tool.



Media Tool Display

The Media Tool Display lets you scan all media files in both the OMFI MediaFiles and Avid MediaFiles folders.

4 Select the Master Clips and the Media Clip options.

5 Under the Media Drives list, do one of the following:

- Select the drives that contain media files for your project.

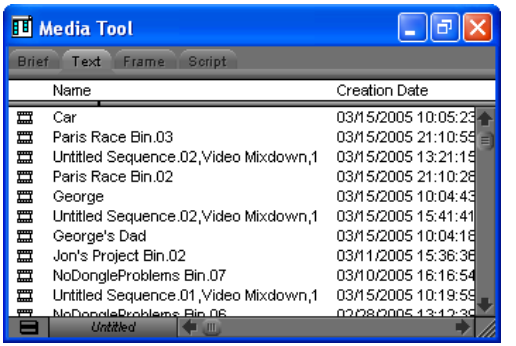
– or –

- Click All Drives to select all applicable drives for scanning.

6 Under the Projects list, click All Projects to scan all available media files.

7 Click OK.

The Media Tool window appears, displaying the media you selected.



Media Tool

8 To sort the files in the bin by a specific column (such as Name or Creation Date), right-click the column and select "Sort on Column, Ascending" or "Sort on Column, Descending."

9 In the Media Tool window, select the Stereo (or multi-mono) master clip exported from Pro Tools.

10 Drag the master clip to the bin.

11 Close the Media Tool.

12 To preview the contents of the imported audio clip, double-click the audio clip in the bin. The audio clip will open in a pop-up monitor.

Restoring Invisible Media Files in the Media Tool

(Media Station|PT on Windows XP Only)

If you have not disabled Simple File Sharing on Windows XP—and you have exported audio from Pro Tools to either the OMFI MediaFiles or Avid MediaFiles folder on a Windows-based Media Station|PT system—you may notice that those audio files or the entire contents of the media folder become invisible in the Media Tool.

If this occurs, you can repair the problem by following these steps.

To restore the visibility of media files in the Media Tool:

1 On the Media Station|PT machine, disable Simple File Sharing as described in "Disabling Simple File Sharing" on page 29.

2 Quit Media Station|PT.

3 In Windows Explorer, navigate to the OMFI MediaFiles or Avid MediaFiles folder (whichever folder you exported the audio files from Pro Tools), and move those files to another location (or delete them).

4 Launch Media Station|PT.

5 Do the following:

- Choose File > Refresh Media Directories.
- Choose Tools > Media Tool.

6 If the Media Tool does not display the media files, repeat the last step until the contents of the media folders are visible again. You may have to do this several times.

7 When the Media Tool displays the contents of the media folders again, you can transfer the exported Pro Tools audio back into the appropriate media folder.

Importing an AAF Audio Sequence into a Bin

To import an AAF sequence into Media Station|PT:

1 Launch Media Station|PT, and open the desired project.

2 Select the bin where you would like to import the sequence.

3 Choose File > Import.

4 In the Select Files to Import dialog, navigate to the sequence you wish to import, and ensure the correct drive is selected for audio.

5 Click Open. The new audio sequence appears in the selected bin, along with all related audio clips.

One of the following occurs:

- If you imported an AAF sequence containing embedded audio, Media Station|PT automatically copies the embedded audio to either the Avid MediaFiles folder or the OMFI MediaFiles folder.
- If you imported an AAF sequence that references audio—and Media Station|PT does not have direct access to the audio—you must copy the audio files from the Pro Tools audio storage to either the Avid Media Files folder or the OMFI MediaFiles folder.

6 To hear the contents of the imported audio sequence, double-click the audio sequence in the bin. The audio sequence opens in a pop-up monitor or in the Timeline (depending on your Bin settings). Press the Spacebar to play.

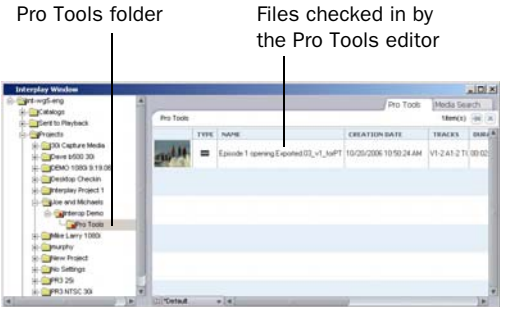
Importing Pro Tools Audio Files Back into Media Station|PT from Avid Interplay

(Avid Interplay System Only)

After you have checked the completed audio stems from Pro Tools back into the AAF sequence on the Interplay server, you must import the sequence back into Media Station|PT.

To import the sequence into Media Station|PT:

1 In Media Station|PT, open the Interplay Window and navigate to the location of the checked-in Pro Tools sequence.

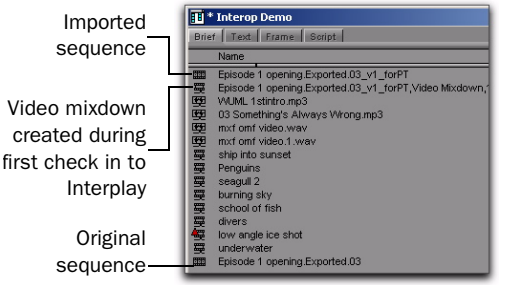


Interplay browser

Depending on edits made in Pro Tools, you might see several audio files with names containing the prefix "Sample accurate edit." For more information, see "Frame-Rate Accurate Video Editing and Sample-Rate Accurate Audio Editing" on page 85.

2 Drag the sequence into the bin.

Media Station|PT checks out the sequence and imports it and its related files into the bin.



Bin after import

3 You can now do one of the following:

- Add the new audio tracks into the original sequence.

– or –

- Work with the imported sequence.

In this example, the Pro Tools audio tracks are added into the original sequence.

If you plan to check in the sequence to Interplay for Pro Tools again, it is simpler to import the audio into the original sequence. Every time you export a sequence for Pro Tools, the system appends the text "_vx_forPT," where x is the number of times the sequence has been exported. It can become confusing if several similar text strings are appended to the name.

4 Load the imported sequence into the Source monitor.

5 Add the audio into the original sequence using standard editing techniques.

For more information, see the documentation (PDF or Help file) for Media Station|PT.

The following illustration shows the audio tracks cut into the original sequence. In this example, the original tracks are overwritten.

Sequence in the Avid Timeline after overwrite

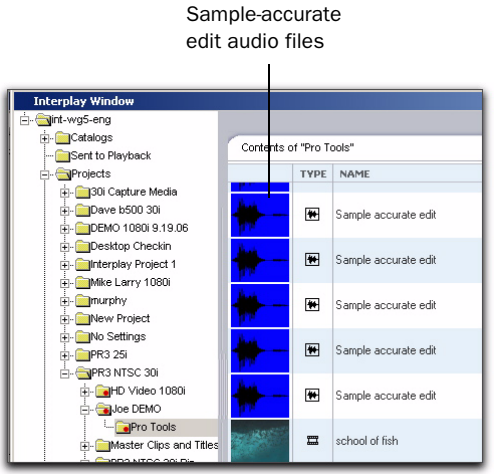
6 Now you can use Media Station|PT to make any adjustments to the sequence and do the following:

- Create a digital cut.
- Perform a Send to Playout operation.
- Check in the sequence to Interplay for Pro Tools if the Pro Tools editor needs to work on the sequence again.

Frame-Rate Accurate Video Editing and Sample-Rate Accurate Audio Editing

After a sequence has been exported back to Interplay from Pro Tools, a number of additional media files appear in the Interplay Window and in the bin. Some have names containing the prefix *Sample accurate edit*. These are the additional media files that Pro Tools creates to make sure that Media Station|PT receives frame-accurate audio. Sample-accurate edit media files are visible if you zoom in on portions of the imported audio in the Timeline.

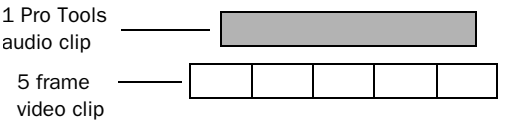
The following illustration shows Sample accurate edit files in the Interplay Window.



Sample-accurate edits in the Interplay window

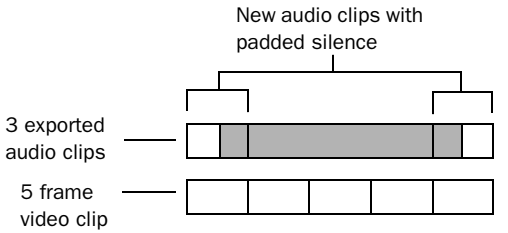
Avid video editing applications edit with frame accuracy. This means that when using Media Station|PT to work on a 30-fps project, you can edit at 30 different locations for every one second of video. Pro Tools edits with sample rate accuracy. In a 48 kHz session, there are potentially 48,000 locations to edit for every second of audio.

When Pro Tools exports a sequence, it must ensure that the audio media files line up on frame boundaries. To do this, it might have to split an existing audio clip into three clips. For example, the following illustration shows a 5-frame video clip and a corresponding audio clip. In Pro Tools, the audio clips might not line up on video frame boundaries.



The original audio clip does not line up on video frame boundaries

In order to export frame accurate audio clips, Pro Tools splits the audio media on frame boundaries and fills any gaps with silence. The following illustration shows the resulting audio clips that are exported to Media Station|PT.



Exported audio clips line up on video frame boundaries

To cut down on the number of sample accurate edit files, the Pro Tools editor can perform a Bounce to disk for each track (or a bus-record to an audio track) rather than exporting tracks that contain all of the audio edits.

Synchronizing Audio with a Media Station|PT Sequence

Once you have imported an audio file or sequence from Pro Tools into a bin in Media Station|PT, you can synchronize it with video. This is especially useful for verifying sync with the original video sequence, then laying audio and video back to tape or creating a digital movie with your final mix.

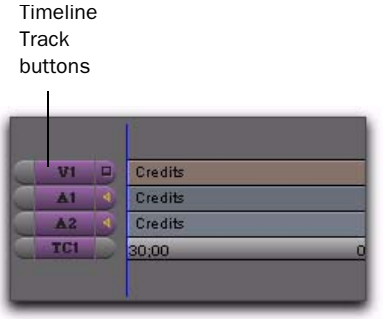
To synchronize an edited audio file or sequence with the original video sequence:

1 Ensure that the audio exported from Pro Tools is now residing in a bin within your current project.

2 Drag the original sequence to the Record Monitor to see all elements in the Timeline.

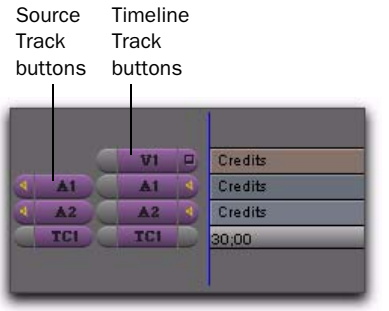
Record and Source Monitors

The original sequence displays in the Timeline.



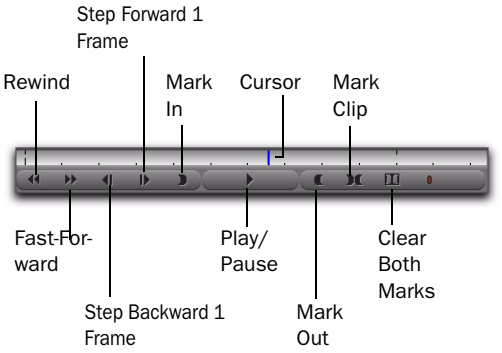
Original sequence displays in Timeline

3 Drag the imported audio clip or sequence from the bin to the Source Monitor. New Source Track buttons for the source appear to the left of the Track buttons for the Timeline.



New track buttons

4 Use the controls underneath the Source Monitor to locate the first frame of the portion of the clip that you want to edit into the sequence.



Source Monitor controls

See "Adding Clips to a New Sequence" on page 55 for detailed information on using these controls.

Enable the Caps Lock to hear audio while scrubbing.

5 Click Mark In to mark the *In point* (the first frame of the selected portion) at the current position of the cursor.

6 Using the same controls, locate the last frame of the portion of the source that you want to edit into the sequence.

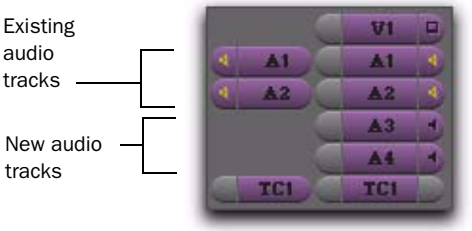
7 Click Mark Out to mark the *Out point* (the last frame of the selected portion) at the current position of the cursor.

You can also select the entire source clip or sequence by clicking Mark Clip.

The portion of the audio source between the In point and the Out point is now selected for editing into the sequence.

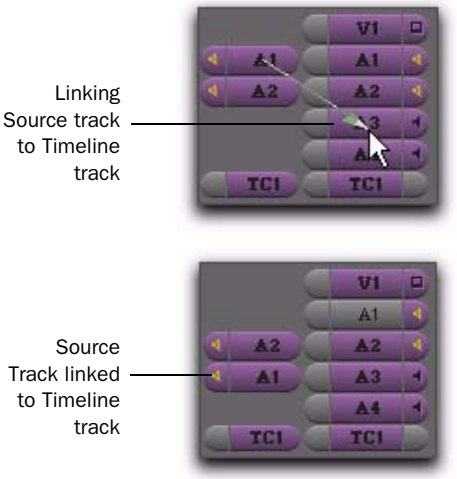
You can also click the Clear Both Marks button to clear the In and Out points.

8 Choose Clip > New Audio Track to add audio tracks to the sequence. (This leaves any original audio tracks in place to compare synchronization.) Add a new track for each channel of audio you want to add.



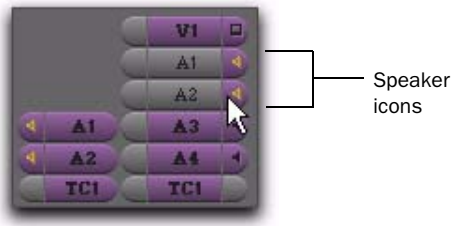
Audio tracks in the Timeline

9 If necessary, click on the Source track buttons and drag to the desired new Timeline track buttons so that the new media will be placed on the correct tracks in the Timeline.



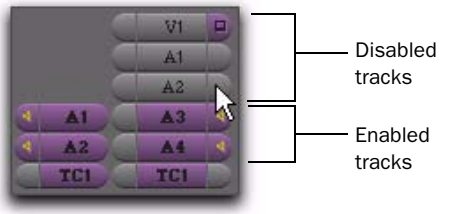
Aligning Source audio tracks with Timeline audio tracks

10 If the original audio tracks still display yellow speaker icons, click the speaker icons in the Track Enable button to mute them. The speaker icons for the original tracks will disappear, and the speaker icons should appear yellow in the new tracks, indicating that they will be heard.



Clicking the speaker icons to disable Source tracks

11 If the video track and the original audio tracks are enabled (gray), disable them and enable the new audio tracks (purple), by clicking the correct audio track buttons (A1–A24). This will ensure that only the new tracks will be affected by any editing commands.

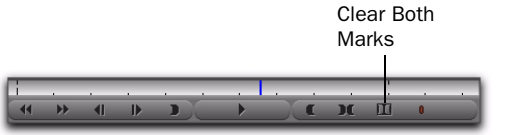


New audio tracks in Timeline

12 In the Timeline, place the cursor at the position where you want to lay the new audio into the Timeline. (Press Home to move to the beginning of the sequence.)

Timeline containing two empty audio tracks

13 Under the Record Monitor, click the Clear Both Marks button to remove any In and Out points (if present).



Record Monitor controls

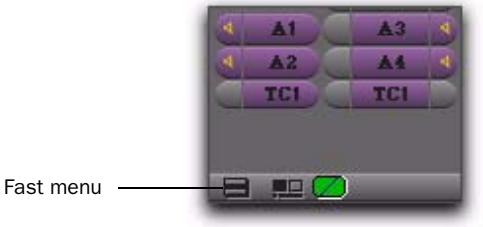
14 Click the Overwrite button to lay the audio into the Timeline.

Overwrite and Splice-In buttons

The audio selected between the In and Out points in the Source Monitor is laid into the Timeline at the position of the cursor.

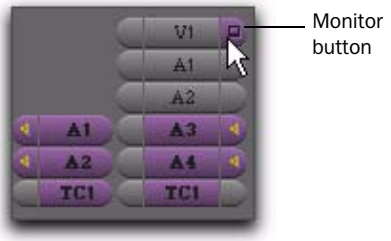
Timeline with new audio sequence

15 If you want to display audio waveforms in the Timeline, click the Fast Menu (located on the lower left hand corner of the Timeline), and choose Audio Data > Energy Plot. Ensure that the new audio tracks appear synchronized with the originals.



Fast menu

16 If necessary, make sure the video track's Monitor button is enabled (purple). This will allow you to view the video portion of the sequence in the Record Monitor (or client monitor).



Enabling the Video track

17 Press the Home key to move the cursor to the beginning of the sequence and press the Spacebar to play the sequence. The new audio should be synchronized with the video.

After verifying the new audio sequence is correctly synchronized, you can do either of the following:

- Lay audio and video back to tape using Digital Cut
- Export your sequence as a QuickTime, MPEG, or other format digital movie.

Methods of Exporting Media

This section covers the following methods of exporting media:

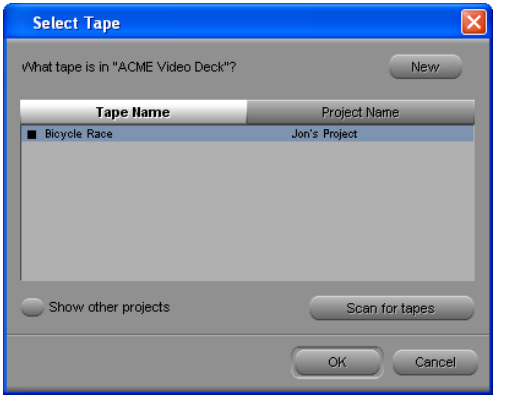
- Laying back audio and video to tape
- Exporting to XDCAM

Laying Back Audio and Video to Tape

Pro Tools video playback is intended for monitoring purposes only, and is not suitable for professional layback or broadcast, regardless of the resolution or frame rate of the video. However, video output from Media Station|PT is professional quality. Use Media Station|PT when you need to output both audio and video to tape. To avoid dropped frames, it is recommended that all effects be rendered before performing a layback.

To record audio and video to tape from Media Station|PT:

1 Insert a video tape into your VTR. In most cases, Media Station|PT will present a list of tapes already associated with this project and ask you which tape you have inserted.



Select Tape dialog

2 Do one of the following:

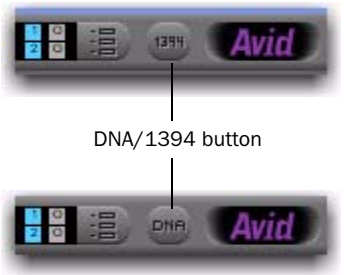
- Select one of the displayed tape names and click OK.

– or –

- Click New to add a new tape to the list.

3 Ensure that the Device setting is set to Avid DNA (if you are outputting through an Avid video peripheral) or IEEE 1394 (if you are outputting through FireWire) by doing one of the following:

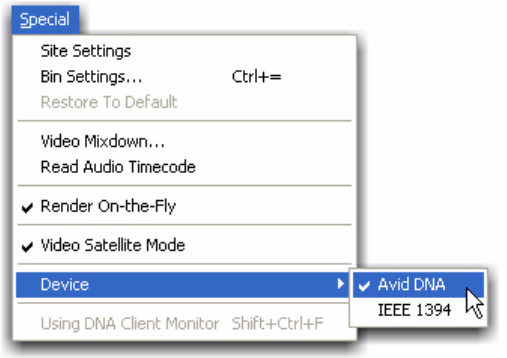
- Click the DNA/1394 button in the Timeline.



DNA/1394 button (showing both DNA and 1394 status)

– or –

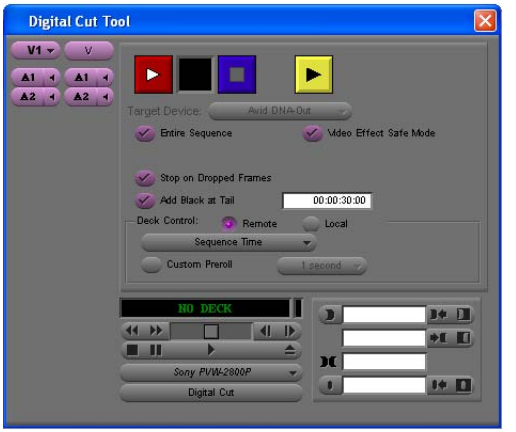
- Select Special > Device > Avid DNA or IEEE 1394.



Avid DNA and IEEE 1394 options in the Device pop-up menu

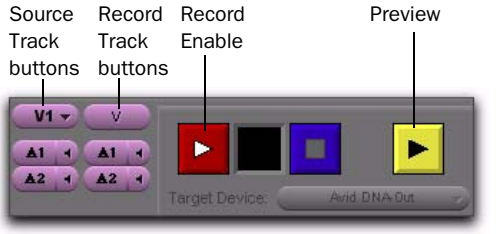
4 Set the In and Out points in the Timeline as desired.

5 Choose Output > Digital Cut. The Digital Cut Tool appears.



Digital Cut Tool

6 In the Source Track buttons on the far left, select the top video track. Only the selected track and the video tracks below it will be recorded.



Selected Source tracks

7 Select the audio tracks you want to include. Only the selected tracks will be included in the recording.

8 Use the Record Track buttons on the right to select which audio and video tracks to record on the tape.

9 Do one of the following:

- To record the entire sequence to tape, select the Entire Sequence option.

– or –

- To record the portions of the sequence you marked with In and Out points to tape, ensure that the Entire Sequence option is deselected.

10 If you are laying back via a FireWire (1394) connection (Special > Device > IEEE 1394), select the appropriate output mode from the Output Mode pop-up menu as follows:

- If all of the media on your Timeline is DV25, or if it is all DV50, and all of your effects are rendered, you can achieve a slightly higher quality of output by selecting DV25 or DV50 as appropriate.

– or –

- Otherwise, you must select the RT DV25 or RT DV50 options to render and transcode all of your video to that format.

11 Select the Video Effect Safe Mode option. This will warn you if any effects remain un-rendered.

12 Select the Stop on Dropped Frames option if you want Media Station|PT to automatically stop the tape if the audio and video does not record correctly.

13 Select the Add Black At Tail option.

14 Select one of the following modes from the Deck Control section:

Local Manually initiates record. This is useful if you are recording to a tape which does not already have time code.

Remote Records to a tape that already has time code. Media Station|PT will start the VTR and drop into record at the specified time code.

15 Specify the Sequence Time to start recording on the tape at the same time as the start of the sequence. For example, if the sequence starts at 1:00:00 in the Timeline, Media Station|PT will start recording when the tape reaches 1:00:00.

16 Specify the Record Deck Time to start recording wherever the VTR is currently parked.

17 Specify the Mark In Time to start recording at the address entered in the top window to the right of the transport controls.

18 Click the yellow Preview button to check that all of the tracks you selected are playing and that the insert points on the tape are correct.

19 To record using Local mode, press play on the VTR. When ready, click the Record button in the Digital Cut window.

– or –

To record using Remote mode, press Record in the Digital Cut window. Media Station|PT will queue the tape, play, then drop in at the appropriate location.

Be sure to record at least a few seconds of black to the tape before performing a digital cut. This will guarantee that the video tape is correctly formatted when your digital cut starts

Exporting to XDCAM

You can export NTSC and PAL projects. Depending on the format (SD or HD), you need to use the appropriate XDCAM device (if you export SD media, use an XDCAM SD device; if you export HD media, you must use an XDCAM HD device).

To export to an XDCAM device:

1 Connect your XDCAM device.

2 Select the appropriate mode on your XDCAM device that corresponds to the video format that you will be exporting.

For example, set your XDCAM device to 1080i 59.94 if you want to export a clip or sequence at XDCAM-35 1080I/59.94.

3 Select the sequence or clips to export.

4 With an XDCAM device connected to your system, do one of the following:

- Choose Output > Export to Device > XDCAM.

– or –

- Right-click the clip or sequence in a bin and select Export to Device.

If you have a sequence loaded in the Record monitor, the sequence is exported when you select Export to Device from the Output menu.

The XDCAM Export Settings dialog box opens.

5 Do one of the following:

- If you want to export only the portion of the selected clip or sequence marked by In and Out points, select Use Marks.
- If you want to export the entire selected clip or sequence, deselect Use Marks.

6 Do one of the following:

- If you want to export only enabled tracks in the Timeline, select Use Enabled Tracks.
- If you want to export all tracks in the sequence, deselect Use Enabled Tracks.

7 Select an XDCAM disk from the Target XDCAM Disk list.

If the target XDCAM disk you are exporting to already has other clips on it, you are only allowed to export a clip with the same number of audio tracks. For example, if the target XDCAM disk has a clip with 4 tracks of audio, you cannot export a new XDCAM clip with 2 tracks. You either have to reformat the disk and wipe it clean or add two dummy tracks to your 2-track sequence before you export.

8 Select a Video Format as follows:

- For SD projects, select: DV-25, IMX30, IMX40, or IMX50. For SD, a disk cannot have mixed formats. For example, in order to export IMX40, the disk must be formatted as IMX40.
- For HD projects, select XDCAM-35, XDCAM-25, or XDCAM-17. For HD, a single disk can have clips with mixed bit rates (17.5, 25, and 35 Mbits). Additionally, a sequence that is being exported to an HD XDCAM disk can have mixed bit rates as well.

If your exported sequence has more than two audio tracks, only two tracks are exported, even though the Sony XDCAM device is capable of handling 4 to 8 tracks. If your sequence has more than two tracks, they are mixed down during export.

9 Select a Sample Bit Depth: 16 or 24 bits. (For HD projects, select 16 bits—XDCAM HD devices are not capable of handling 24 bits.)

10 Click OK.

Sony applies its own file-naming convention. All exported clips are given a new sequential name of Cxxxx.mxf, for example, C0019.mxf.

A progress bar appears displaying the new Sony XDCAM sequential clip name. The sequence is exported.

chapter 4

Media Station|PT Video Satellite Workflows

This chapter describes the following workflows for using Pro Tools with Media Station|PT configured as a video satellite:

1 Cross-mounting media storage on remote systems

2 Opening Avid sequences that have been delivered to you in an Avid bin

3 Opening AAF sequences that have been exported from another Avid application or Pro Tools

4 Connecting Pro Tools to a satellite

5 Linking Pro Tools to a satellite

6 Capturing audio and video

7 Batch capturing audio and video

8 Laying back audio and video

9 Digitally exporting audio and video

Cross-Mounting Media Storage on Remote Systems

To simplify the transfer of sequence and media files between the Pro Tools and satellite systems, it is helpful to mount the media storage of one system on the desktop of the other system. This practice is known as *cross-mounting*, and the computer on which you are mounting that storage is known as the *remote system*.

For example, you most likely want the video storage—which is physically connected to the satellite system—to appear on the desktop of both the satellite and Pro Tools systems. However, some workflows are simpler if the audio storage—which is physically connected to the Pro Tools system—also appears on the desktop of the satellite system.

Cross-mounting audio or video storage on a remote system involves the following steps:

1 Choosing a storage configuration

2 Sharing the desired volume so that it can be mounted on the remote system

3 Mounting the shared volume on the remote system

Choosing a Storage Configuration

While it is possible to cross-mount both the audio and video storage on both systems at the same time, the workflows in this chapter only require that you cross-mount one or the other.

Mounting the video storage on the Pro Tools system is the preferred configuration for most common satellite workflows.

Mount the audio storage on the satellite system if you frequently use any of the following workflows:

- You receive updated versions of AAF sequences with additional audio files.
- You export audio from Pro Tools for import into Media Station|PT.
- Your satellite system is connected to a shared storage system, but your Pro Tools system is not.
- Your satellite system is connected to Avid Interplay, but your Pro Tools system is not.

Sharing Media Storage for Mounting on a Remote System

This section describes how to share media storage for mounting on remote computers.

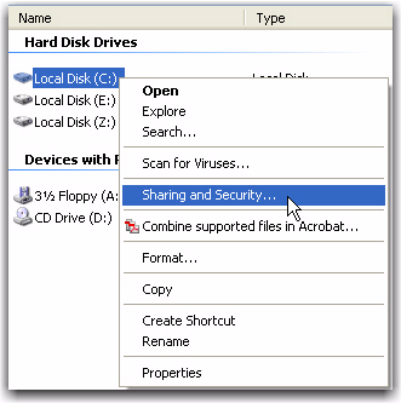
Sharing Windows XP Media Storage for Mounting on a Remote Computer

You can share a Windows XP volume for mounting on Mac OS X or another Windows XP system. The process is slightly different depending on whether the computer you are sharing is part of a domain or part of a workgroup.

To share a Windows XP volume that resides on a domain:

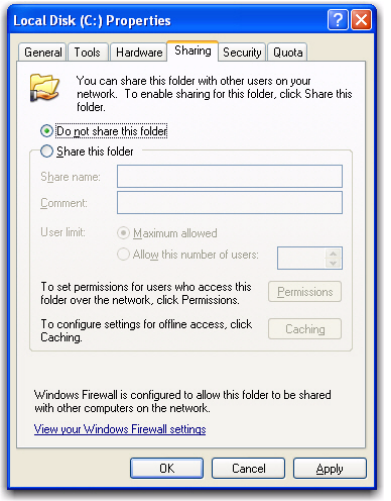
1 On the Windows XP computer containing the volume you want to share, double-click My Computer.

2 Right-click the volume that you want to share, and select Sharing and Security.



Selecting Sharing and Security

3 In the Properties dialog, click the Sharing tab.



Properties dialog, Sharing tab

4 Select the Share this Folder option.

5 Type a name in the Share Name field to identify this share. This name can be anything, but it is probably easiest if you use the name of the shared volume.

You should share the entire volume if possible and not just individual folders. This makes it easier for you to re-link files in your Pro Tools session.

6 Select any other options in this dialog.

7 Click OK to share this volume.

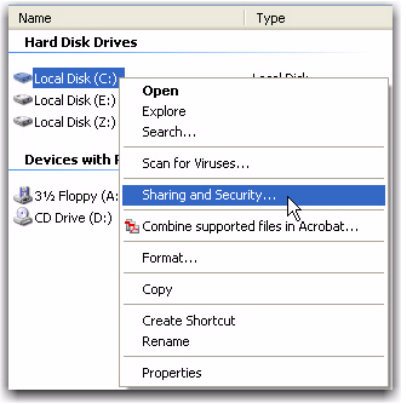
You are now ready to mount this shared volume on another computer. See "Cross-Mounting Shared Media Storage on a Remote System" on page 98.

When you manually copy files from a Mac volume to a mounted Windows XP volume, a "ghost" file appears for each file that you copy. The ghost file has a nearly identical name to the original file, except that it is prefixed with the characters ._ and a greyed out icon. For example, copying the filename Macintosh.doc would create another file called ._Macintosh.doc. These files do not affect anything and can be deleted without causing any issues.

To share a Windows XP volume that resides on a workgroup:

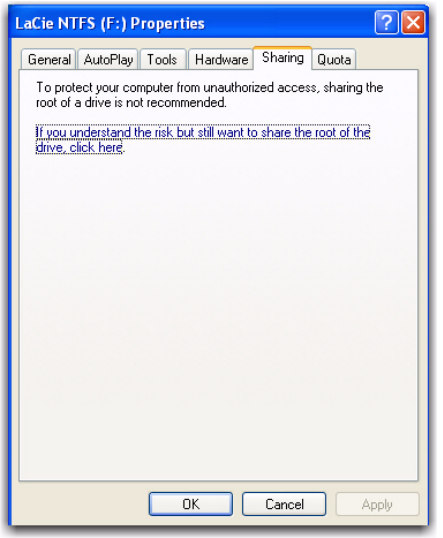
1 On the Windows XP computer containing the volume you want to share, double-click My Computer.

2 Right-click the volume that you want to share, and select Sharing and Security.



Selecting Sharing and Security

3 In the Properties dialog, click the Sharing tab.

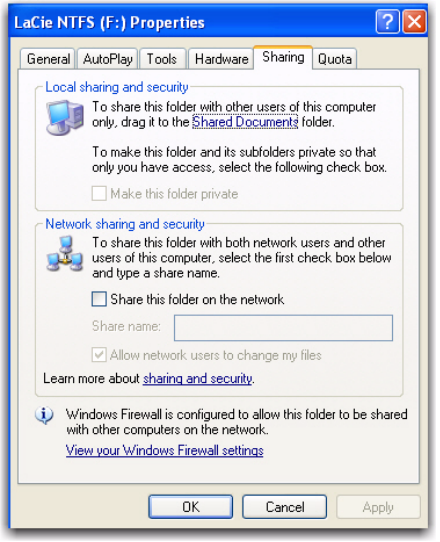


Properties dialog, Sharing tab

4 If you agree, click the option called, "If you understand the risk but still want to share the root of the drive, click here."

5 Select Share This Folder on the Network.

6 Type a name in the Share Name field to identify this share. This name can be anything, but it is probably easiest if you use the name of the shared volume.



Properties dialog, Sharing tab

You should share the entire volume if possible and not just individual folders. This makes it easier for you to re-link files in your Pro Tools session.

7 If you would like network users to be able to modify your files, select Allow Network Users to Change My Files.

8 Click Apply.

9 Click OK to share this volume.

You are now ready to mount this shared volume on another computer. See "Cross-Mounting Shared Media Storage on a Remote System" on page 98.

When you manually copy files from a Mac volume to a mounted Windows XP volume, a "ghost" file appears for each file that you copy. The ghost file has a nearly identical name to the original file, except that it is prefixed with the characters ._ and a greyed out icon. For example, copying the filename Macintosh.doc would create another file called ._Macintosh.doc. These files do not affect anything and can be deleted without causing any issues.

Sharing Mac OS X Media Storage for Mounting on Windows XP

You can share a Mac OS X volume so that it can be mounted on a remote Windows XP machine. Sharing Mac OS X media storage other than the boot drive with a Windows XP machine requires installing a third-party utility (such as SharePoints by Hornware).

Digidesign does not endorse or guarantee performance or availability of any third-party software. Instructions for using SharePoints are included below for your convenience only. Digidesign encourages everyone to support independent software developers appropriately.

To download and install SharePoints:

1 In Mac OS X, launch a web browser and navigate to:

http://www.hornware.com/sharepoints

2 Download the appropriate version of the software.

3 In the Mac Finder, copy the SharePoints application to a convenient location on the computer (such as the Applications/Utilities folder).

To set up shared volumes:

1 Open Mac OS X System Preferences.

Mac OS X System Preferences

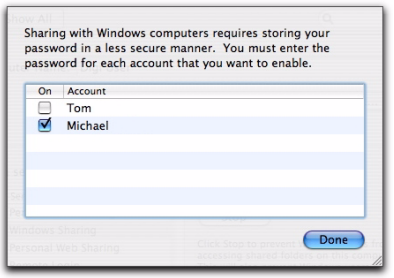
2 Click the Sharing icon.

3 Click Services, then select the Windows Sharing option.

Mac OS X Sharing Preferences

4 Click Accounts (or Enable Accounts).

5 In the accounts sheet, select the users who need to log into the shared folders. (In order for a user to have these privileges, they must have an account on the Mac, or at least the username and password for a common account.)

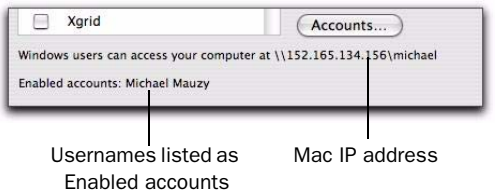


Enable Accounts sheet

6 Click Done.

7 Make a note of the following Mac OS X system information that appears near the bottom of the Share window:

- IP address (for example, *152.155.15.15*)

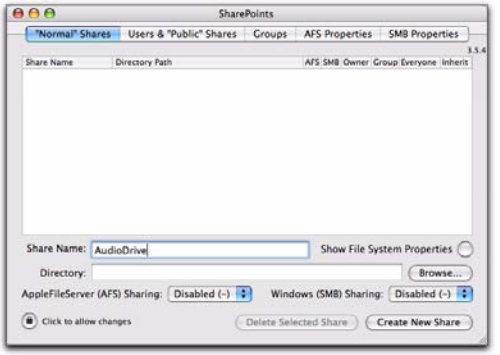


Portion of Sharing window

8 Close the Sharing window.

9 Launch SharePoints.

10 Ensure the “Normal” Shares tab is selected.



Portion of Sharing window

11 Type a name in the Share Name field to identify this share. This name can be anything, but it is probably easiest if you use the name of the shared volume. *Make a note of this share name*.

12 Click Browse, then locate and select the volume you want to share with the Windows XP system.

13 Click Open to select the volume and return to the SharePoints window.

Back in the SharePoints window, the pathname of the volume you selected appears in the Directory field.

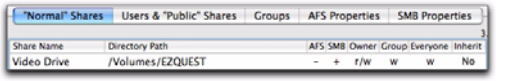
14 From the Windows (SMB) Sharing pop-up menu, select Shared (+).

15 Click Create New Share.

16 If prompted, type the username and password for the Mac OS X account with administrative privileges, and click OK.

Authenticate dialog in Mac OS X

The new share appears in the share list.



SharePoints List of Shares (new share)

You are now ready to mount the shared Mac OS X media storage on Windows XP.

Cross-Mounting Shared Media Storage on a Remote System

This section describes how to cross-mount a shared volume on a remote system.

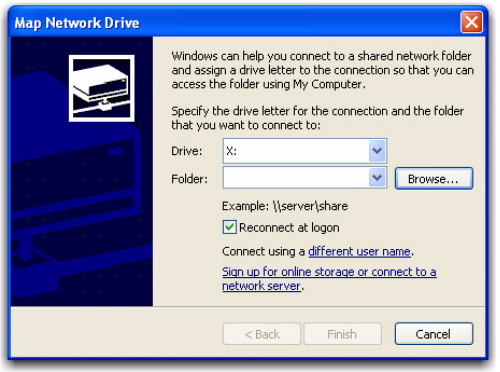
Cross-Mounting Mac OS X or Windows Media Storage on Windows XP

You can mount another computer’s shared volume on a Windows XP computer.

To mount the shared volume on Windows XP:

1 In Windows XP, right-click My Computer and choose Map Network Drive.

2 From the Drive pop-up menu, select the drive letter you want to assign to the volume from the other computer. (In order for files to relink correctly, all volumes mounted on a Windows XP system must be assigned a letter. For example, *e:\shared volume\media files*.).



Map Network Drive dialog

3 Do one of the following:

- In the Folder pop-up menu, type *\\IP address\Share*, where *IP address* represents the network address of the Mac OS X computer (displayed in Mac OS X System Preferences) and *Share* represents the name of the share set in SharePoints. For example: *\\152.164.34.23\Video Drive*.

– or –

- Click Browse to locate the shared volume you want to mount, then click OK.

4 In the Map Network Drive dialog, click Finish.

5 In the Logon window, enter the username and password of a valid account residing on the other computer.

6 Click OK.

Windows Explorer displays the root folder of the volume you have just mounted on the Windows XP computer. The Windows XP computer now has full read and write access to the shared volume.

To create a shortcut for the shared volume storage on the desktop, right-click the shared volume and select Create Shortcut. This will allow you to easily re-mount the shared volume after you reboot.

If you find you need to enter the IP address after each reboot, try turning off DHCP.

Mounting Windows XP Media Storage on Mac OS X

You can mount a shared Windows XP volume on Mac OS X.

To mount a shared Windows XP volume on Mac OS X:

1 In Mac OS X, go to the desktop.

2 Choose Go > Connect to Server.

Connect to Server dialog

3 In the Server Address field, type *SMB://computer*, where *computer* represents the name of the computer that contains or is connected to the desired volume.

To learn the name of the Windows machine: on the Windows computer, right-click My Computer and select Properties, then click the Computer Name tab in the Properties window.

For example, to connect to the Media Station|PT computer called *MyComputer*, you would type:

SMB://MyComputer

4 Click Connect.

5 In the system authorization dialog, enter the username and password information for the user who has share privileges on the Windows XP computer.

System authorization dialog

6 Click OK.

7 In the volume select dialog, select the volume you want to mount on the Mac OS X desktop.

The name shown in the menu is the Share name created in "Sharing Media Storage for Mounting on a Remote System" on page 94, and may not be the same as the actual volume name.

Select the volume dialog

8 Click OK.

Mac OS X mounts the volume on the desktop.

Opening Sequences for Playback on a Video Satellite System

To play back a video sequence on a video satellite system, you must first ensure that video files are placed on the video storage connected to the Media Station|PT system, and that audio files are placed on the audio storage connected to the Pro Tools system. The workflow you choose depends on two factors:

- Whether you are opening a native Avid sequence as opposed to an AAF sequence
- Whether the sequence you are opening resides on a volume which is suitable for direct playback

Before opening sequences for playback on a video satellite system, you must cross-mount storage. See "Cross-Mounting Media Storage on Remote Systems" on page 93.

To open a native Avid sequence, see one of the following sections:

- "Opening an Avid Sequence from a Volume Supporting Direct Playback" on page 101
- "Opening an Avid Sequence from a Volume Not Supported for Playback" on page 105

To open an AAF sequence, see "Opening an AAF Sequence for Playback on a Video Satellite System" on page 110.

Receiving Avid Sequences or AAF Sequences

The steps you use to open a sequence depend on which of the following you have received:

- An Avid bin containing a native Avid sequence (a sequence which has been created in an Avid editing application such as Media Composer)
- An AAF sequence which has been exported from an Avid application specifically for import into Pro Tools, Media Station|PT, or other applications.

Opening an Avid Sequence from a Volume Supporting Direct Playback

This section describes how to open a sequence that is currently stored on a volume suitable for playback in Media Station|PT (such as local video storage, Unity MediaNetwork or Unity ISIS).

For details on importing AAF sequences, see "Opening an AAF Sequence for Playback on a Video Satellite System" on page 110.

⚠ *If your Pro Tools session contains video regions of one frame rate, you cannot import a satellite video track that refers to video of a different frame rate—regardless of the fact that you're not playing the actual video. You must first delete the existing video regions. If you have a 1080 sequence at 50 fps and your Pro Tools session contains video clips at 25 fps, you can convert the project in Media Station|PT to SD (see "Down-Converting an HD Project to SD Video" on page 54) and re-export the AAF at 25 fps. You can use the same technique if you have a 1080 sequence at 59.94 fps and your Pro Tools session contains video clips at 29.97 fps.*

Opening an Avid Sequence on Local Storage or Unity with Pro Tools Not Playing from Unity

This section describes how to open a sequence with the following configuration:

- Media Station|PT will open the sequence either from the video storage volume or an Avid Unity system.
- Pro Tools is not connected to the Unity system (if any).

This workflow involves the following steps:

1 Open the sequence in Media Station|PT directly from the local storage or Unity workspace.

2 Create an AAF export from Media Station|PT, copying audio to the audio storage.

3 Import the AAF sequence into Pro Tools.

To open a sequence in Media Station|PT using this workflow, see “Exporting an Avid Sequence as an AAF Sequence with Audio Storage Mounted on the Satellite” on page 106.

Opening an Avid Sequence with Pro Tools Playing from Unity

(Windows Only)

This section describes how to open a sequence with the following configuration:

- Media Station|PT will open the sequence from a Unity system.
- Pro Tools will play the audio directly from the Unity system.

This workflow involves the following steps:

1 Open the sequence in Media Station|PT directly from the Unity workspace.

2 Create an AAF export from Media Station|PT, consolidating audio to the dedicated Unity audio workspace.

3 Open the AAF sequence in Pro Tools, linking to the audio on the Unity audio workspace.

To open and play back an Avid sequence with Pro Tools playing from Unity:

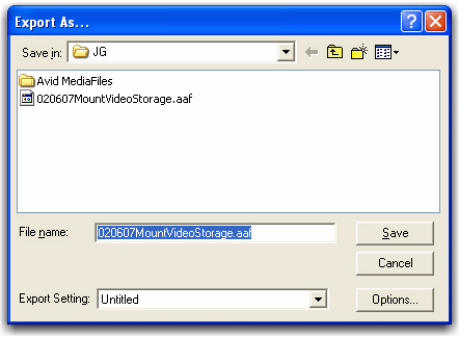
1 Launch Media Station|PT, and open the project containing the sequence.

2 Open the bin containing the sequence you are working with.

3 Drag the sequence into the Record Monitor to place it in the Timeline.

4 Select and right-click the sequence, and choose Export.

5 In the Export As dialog, click Options.

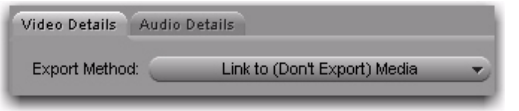


Export As dialog

6 In the Export Settings dialog, do the following:

- Make sure the Export As pop-up menu is set to AAF.
- Enable the options for Include All Video Tracks and Include All Audio Tracks in Sequence.

7 Click the Video Details tab, and select Link to (Don’t Export) Media from the Export Method pop-up menu.



Export Settings dialog (Video Details tab)

8 Click the Audio Details tab, and select Consolidate Media from the Export Method pop-up menu.

Export Settings dialog (Audio Details tab)

9 Click Save.

You can also click Save As to save the Export settings you just created. See "Saving, Recalling, and Using Export Settings to Export AAF Sequences" on page 109 for details.

10 In the Export As dialog, locate the desired folder on the dedicated Unity audio workspace.

11 Click Save.

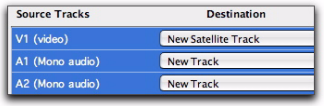
12 In Pro Tools, choose File > Open Session, and select the AAF in the Unity audio workspace.

13 In the Import Session Data dialog, do the following:

- Under Audio Media Options, select Link to Source Media.
- Under Video Media Options, select Link to Source Media.

14 Under the Source Tracks section of the Import Session Data dialog, do the following:

- To import the metadata (cuts and clip names) exported from a video satellite into a new video track, select New Satellite Track. (The video itself will not be imported.)
- To import SD video into a new video track in Pro Tools, select New Video Track.
- For each audio track you want to import, select New Track.



Source Tracks browser

15 Select any other options, and click OK.

The AAF sequence opens in Pro Tools.

Opening an Avid Sequence with Pro Tools Connected to Unity but Not Streaming

This section describes how to open a sequence with the following configuration:

- Media Station|PT will open the sequence from a Unity system.
- Pro Tools is connected to the Unity system but cannot play the media directly from Unity.

This workflow involves the following steps:

1 Open the sequence in Media Station|PT directly from the Unity workspace.

2 Create an AAF export from Media Station|PT, linking to existing audio files.

3 Open the AAF sequence in Pro Tools, copying the audio files to the local audio storage.

To open an Avid sequence by copying audio from shared workspaces:

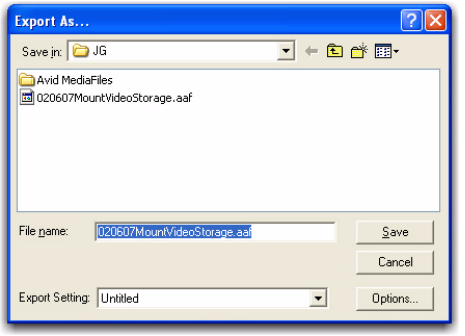
1 Launch Media Station|PT, and open the project containing the bin and sequence you wish to open.

2 Open the bin containing the sequence you are working with.

3 Drag the sequence into the Record Monitor to place it in the Timeline.

4 Select and right-click the sequence, and choose Export.

5 In the Export As dialog, click Options.

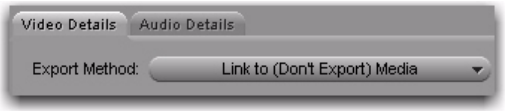


Export As dialog

6 In the Export Settings dialog, do the following:

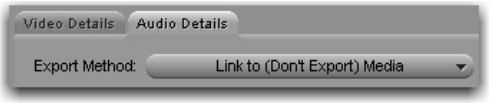
- Make sure the Export As pop-up menu is set to AAF.
- Enable the options for Include All Video Tracks and Include All Audio Tracks in Sequence.

7 Click the Video Details tab, and select Link to (Don't Export) Media from the Export Method pop-up menu.



Export Settings dialog (Video Details tab)

8 Click the Audio Details tab, and select Link to (Don't Export) Media from the Export Method pop-up menu.



Export Settings dialog (Audio Details tab)

9 Click Save.

You can also click Save As to save the Export settings you just created. See "Saving, Recalling, and Using Export Settings to Export AAF Sequences" on page 109 for details.

10 In the Export As dialog, locate any folder on the Unity workspace that is accessible to the Pro Tools system.

11 Click Save.

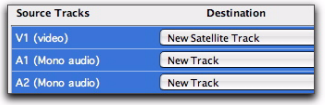
12 In Pro Tools, choose File > Open Session, and select the AAF sequence on the Unity workspace.

13 In the Import Session Data dialog, do the following:

- Under Audio Media Options, select Copy and Relink to Source Media.
- Under Video Media Options, select Link to Source Media.

14 Under the Source Tracks section of the Import Session Data dialog, do the following:

- To import the metadata (cuts and clip names) exported from a video satellite into a new video track, select New Satellite Track. (The video itself will not be imported.)
- To import SD video into a new video track in Pro Tools, select New Video Track.
- For each audio track you want to import, select New Track.



Source Tracks browser

15 Select any other options, and click OK.

The AAF sequence opens in Pro Tools. Audio files are copied in the background to the session's Audio Files folder.

Opening an Avid Sequence from a Volume Not Supported for Playback

This section describes how to open a sequence stored on a volume that is not suitable for playback in Media Station|PT (such as a DVD or Ethernet-mounted network volume). This workflow assumes you are receiving a bin from another Avid editing application.

For details on importing AAF sequences, see "Opening an AAF Sequence for Playback on a Video Satellite System" on page 110.

⚠ *If your Pro Tools session contains video regions of one frame rate, you cannot import a satellite video track that refers to video of a different frame rate—regardless of the fact that you're not playing the actual video. You must first delete the existing video regions. If you have a 1080 sequence at 50 fps and your Pro Tools session contains video clips at 25 fps, you can convert the project in Media Station|PT to SD (see "Down-Converting an HD Project to SD Video" on page 54) and re-export the AAF at 25 fps. You can use the same technique if you have a 1080 sequence at 59.94 fps and your Pro Tools session contains video clips at 29.97 fps.*

This workflow involves the following steps:

1 Copy the Avid bin to the desired Project folder.

2 Copy the media to the video storage.

3 In Media Station|PT, do one of the following:

- Open the project containing the bin.

– or –

- Create a new project and open the bin within the project.

4 Open the desired sequence within the bin.

5 Export an AAF sequence from Media Station|PT.

6 In Pro Tools, import the AAF sequence, making sure to copy the audio files to the audio storage.

Copying the Avid Sequence to the Satellite Video Storage

To copy an Avid sequence and its referenced video to the video storage drive on Media Station|PT:

1 Locate the bin containing the sequence on the hard drive, DVD, or generic network volume.

2 Copy the bin and the media to the satellite video storage, as follows:

- Copy all OMF video files and OMF-wrapped AIFF or WAV files to the OMFI MediaFiles folder.
- Copy all MXF files to the Avid MediaFiles folder.

3 Do one of the following:

- From within an Avid project, choose File > Open Bin, and select the bin you wish to open.

– or –

- Copy the bin containing the sequence to the desired project folder (the location of which depends on where you keep your project and whether the project is shared or private).

OMF video files have the .omf file extension and are usually stored in the OMFI MediaFiles folder. OMF-wrapped audio files have the .wav or .aif extension and are also stored in the OMFI MediaFiles folder. MXF files have the .mxf file extension and are usually stored in the Avid MediaFiles folder.

Exporting an Avid Sequence as an AAF Sequence with Audio Storage Mounted on the Satellite

This section describes how to export an AAF sequence for Pro Tools when the audio storage is mounted on the satellite.

To export an AAF sequence for Pro Tools with audio storage mounted on the satellite:

1 On the Pro Tools system, do one of the following:

- Create a session with the desired name and ensure that the frame rate matches the frame rate of the AAF sequence.

– or –

- Open an existing session into which you wish to import the AAF sequence.

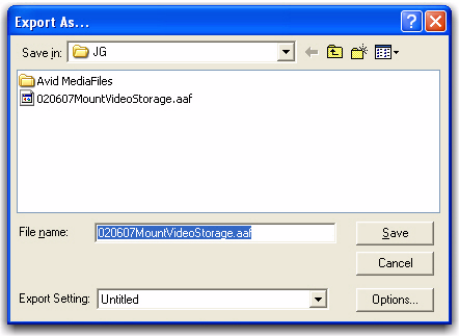
2 On the satellite system, open the project containing the sequence you wish to export.

3 Open the bin containing the sequence you wish to export.

4 Drag the sequence into the Record Monitor to place it in the Timeline.

5 Select and right-click the sequence, and choose Export.

6 In the Export As dialog, click Options.

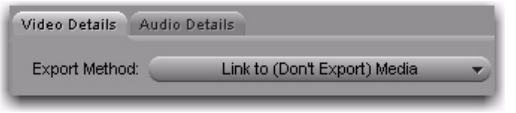


Export As dialog

7 In the Export Settings dialog, do the following:

- Make sure the Export As pop-up menu is set to AAF.
- Enable the Include All Video Tracks in Sequence and Include All Audio Tracks in Sequence options.

8 Click the Video Details tab, and select Link to (Don't Export) Media from the Export Method pop-up menu.

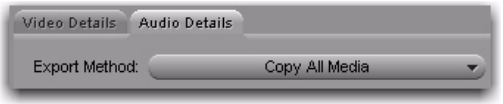


Export Settings dialog (Video Details tab)

9 Click the Audio Details tab, and select one of the following options from the Export Method pop-up menu:

Consolidate Media This option is faster and uses less storage because only those parts of the audio files which are actually used in the sequence are copied. You have the option to add "handles" on either end of the files in case you need to extend them once in Pro Tools.

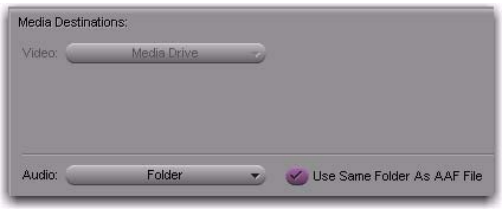
Copy All Media This option is slower and uses more storage, but allows you access to the full file once in Pro Tools. If this export is an update to an existing sequence where you copied instead of consolidated, only new files will be copied as long as you are exporting the AAF to the same session folder.



Export Settings dialog (Audio Details tab)

10 In the Media Destination section, do the following:

- Select Folder from the Audio pop-up menu.
- Select the Use Same Folder As AAF File option.



Export Settings dialog (Media Destination section)

11 Click Save.

You can also click Save As to save the Export settings you just created. See "Saving, Recalling, and Using Export Settings to Export AAF Sequences" on page 109 for details.

12 In the Export As dialog, select the desired session folder on the Pro Tools audio storage.

13 Click Save.

This creates an OMFI MediaFiles folder (for OMF media) or Avid MediaFiles folder (for MXF media) in the Pro Tools session folder on the audio storage. The AAF sequence will be also be created in the session folder. The AAF sequence must be in the same folder as the media folders in order to relink properly.

14 In Pro Tools, choose File > Import > Session Data.

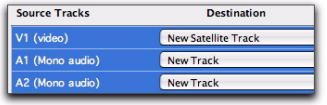
15 Locate the AAF sequence exported from Media Station|PT, and click Open.

16 In the Import Session Data dialog, do the following:

- Under Audio Media Options, select Link to Source Media (Where Possible).
- Under Video Media Options, select Link to Source Media.

17 Under the Source Tracks section of the Import Session Data dialog, do the following:

- To import the metadata (cuts and clip names) exported from a video satellite into a new video track, select New Satellite Track. (The video itself will not be imported.)
- To import SD video into a new video track in Pro Tools, select New Video Track.
- For each audio track you want to import, select New Track.



Source Tracks browser

18 Select any other options, and click OK.

The AAF opens in Pro Tools.

Exporting an Avid Sequence as an AAF Sequence with Video Storage Mounted on the Pro Tools System

This section describes how to export an AAF sequence for Pro Tools when the video storage is mounted on the Pro Tools system.

To export an AAF sequence for Pro Tools with video storage mounted on the Pro Tools system:

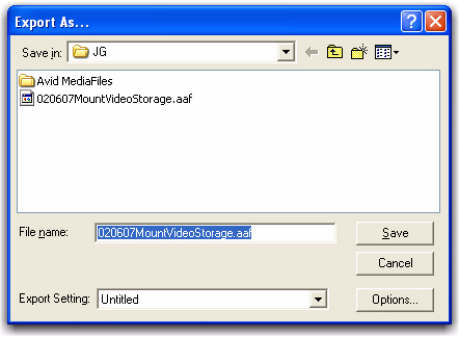
1 On the satellite system, open the project containing the sequence you wish to export.

2 Open the bin containing the sequence you wish to export.

3 Drag the sequence into the Record Monitor to place it in the Timeline.

4 Select and right-click the sequence, and choose Export.

5 In the Export As dialog, click Options.

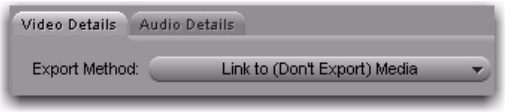


Export As dialog

6 In the Export Settings dialog, do the following:

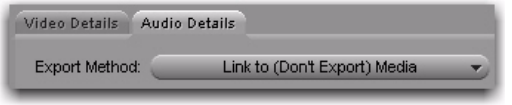
- Make sure the Export As pop-up menu is set to AAF.
- Enable the Include All Video Tracks in Sequence option.
- Enable the Include All Audio Tracks in Sequence option.

7 Click the Video Details tab, and select Link to (Don't Export) Media from the Export Method pop-up menu.



Export Settings dialog (Video Details tab)

8 Click the Audio Details tab, and select Link to (Don't Export Media) from the Export Method pop-up menu.



Export Settings dialog (Audio Details tab)

9 Click Save.

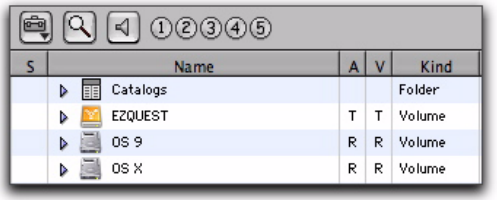
10 In the Export As dialog, save the AAF sequence to a convenient location on the video storage.

We recommend that you create a "Drop Box" folder on the root of the video storage for exchanging files. Do not save the AAF sequence in any of the media folders.

11 Click Save.

Media Station|PT saves the AAF sequence file to the destination folder.

12 On the Pro Tools computer, choose Windows > Workspace.



Pro Tools Workspace browser

13 Do one of the following:

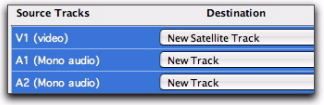
- If you have not opened a session in Pro Tools, navigate to the AAF sequence in the Workspace browser, and double-click it to open it.
- If you are creating a new session into which to import the AAF, select the file format, sample rate and bit depth matching those properties in the original files referenced by the AAF sequence. Name the Session and save it to your dedicated audio storage.

14 In the Import Session Data dialog, do the following:

- Under Audio Media Options, select Copy from Source Media.
- Under Video Media Options, select Link to Source Media.

15 Under the Source Tracks section of the Import Session Data dialog, do the following:

- To import the metadata (cuts and clip names) exported from a video satellite into a new video track, select New Satellite Track. (The video itself will not be imported.)
- To import SD video into a new video track in Pro Tools, select New Video Track.
- For each audio track you want to import, select New Track.



Source Tracks browser

16 Select any other options, and click OK.

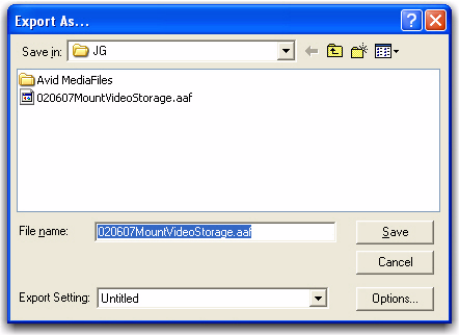
The AAF opens in Pro Tools.

Saving, Recalling, and Using Export Settings to Export AAF Sequences

To save Media Station|PT export settings:

1 In Media Station|PT, right-click a sequence in any bin and choose Export.

2 In the Export As dialog, click Options.

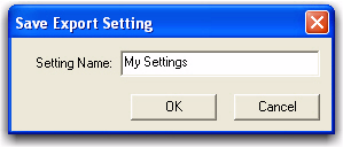


Export As dialog

3 In the Export Settings dialog, choose the desired export options.

4 Click Save As.

5 In the Save Export Setting dialog, type a name for your setting, and click OK.



Save Export Settings dialog

To recall Media Station|PT export settings:

1 In Media Station|PT, right-click a sequence in any bin and choose Export.

2 In the Export As dialog, select your customized Export Setting from the Export Setting pop-up menu.

Opening an AAF Sequence for Playback on a Video Satellite System

You can open an AAF sequence for playback on a video satellite system from volumes that do or do not support direct playback.

⚠ *If your Pro Tools session contains video regions of one frame rate, you cannot import a satellite video track that refers to video of a different frame rate—regardless of the fact that you're not playing the actual video. You must first delete the existing video regions. If you have a 1080 sequence at 50 fps and your Pro Tools session contains video clips at 25 fps, you can convert the project in Media Station|PT to SD (see "Down-Converting an HD Project to SD Video" on page 54) and re-export the AAF at 25 fps. You can use the same technique if you have a 1080 sequence at 59.94 fps and your Pro Tools session contains video clips at 29.97 fps.*

Importing an AAF Sequence into Media Station|PT from a Volume Supporting Direct Playback

Volumes supporting direct playback can include local video storage or Unity.

To import an AAF sequence into Media Station|PT from a volume supporting direct playback:

1 If the AAF sequence you received contains linked media, copy the media as follows:

- Copy all OMF video files and OMF-wrapped WAV or AIFF files to the OMFI MediaFiles folder.
- Copy all MXF files to the Avid MediaFiles folder.

2 Refresh the media database by doing one of the following:

- Launch Media Station|PT.

– or –

- Choose File > Refresh Media Directories

3 In Media Station|PT, open the bin where you want to import the AAF sequence. (If the bin is already open, click inside it to make it the active window.)

4 Choose File > Import.

5 Locate the AAF sequence on the volume supporting direct playback.

One of the following occurs:

- If you imported an AAF sequence that refers to external (linked) media, the sequence appears in the bin.
- If you imported an AAF sequence with embedded media, Media Station|PT automatically copies the embedded media to the designated media file folders.

6 When the sequence appears in the bin, drag the sequence into the Record Monitor to place it in the Timeline.

Importing an AAF Sequence into Media Station|PT from Volumes Not Supporting Direct Playback

This section describes how to import an AAF sequence stored on a volume that is not suitable for playback in Media Station|PT (such as a DVD or Ethernet-mounted network volume).

Importing an AAF Sequence with Linked Media in Media Station|PT

Before opening an AAF sequence that links to media which is not embedded in the sequence file, you must manually copy the media to the satellite video storage.

To copy an AAF sequence with linked media to the satellite video storage:

1 Copy all media files to the satellite video storage, as follows:

- Copy all OMF video files and OMF-wrapped WAV or AIFF files to the OMFI MediaFiles folder.
- Copy all MXF files to the Avid MediaFiles folder.

2 Refresh the media database by doing one of the following:

- Launch Media Station|PT.

– or –

- Choose File > Refresh Media Directories

3 Choose File > Import, and locate the AAF sequence on the video storage.

Importing an AAF Sequence with Embedded Media into Media Station|PT

To import an AAF sequence with embedded media from a volume that does not support direct playback:

1 In Media Station|PT, open the bin where you want to import the AAF sequence. (If the bin is already open, click inside it to make it the active window.)

1 Choose File > Import.

2 Locate the AAF sequence.

The media from the AAF is copied to the designated media files folder, and the sequence is ready to play back in Media Station|PT.

3 When the sequence appears in the bin, drag the sequence into the Record Monitor to place it in the Timeline.

Importing an AAF Sequence into Pro Tools from Volumes Supporting Direct Playback

This section describes how to use Pro Tools to import an AAF sequence from a volume suitable for direct playback (such as local audio storage or Unity).

To import an AAF sequence into Pro Tools from a volume supporting direct playback:

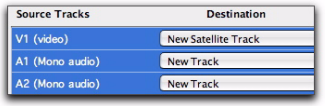
1 In Pro Tools, choose File > Open Session.

2 In the Open Session dialog, locate the AAF sequence you want to import.

3 Click Open.

4 Under the Source Tracks section of the Import Session Data dialog, do the following:

- To import the metadata (cuts and clip names) exported from a video satellite into a new video track, select New Satellite Track. (The video itself will not be imported.)
- To import SD video into a new video track in Pro Tools, select New Video Track.
- For each audio track you want to import, select New Track.



Source Tracks browser

5 If you are importing a sequence containing embedded media, select a volume that is suitable for playback (such as local audio storage or Unity) and click Save.

The AAF sequence is ready to play back in Pro Tools.

Importing an AAF Sequence into Pro Tools from Volumes Not Supporting Direct Playback

This section describes how to use Pro Tools to import an AAF sequence stored on a volume that is not suitable for direct playback (such as a DVD or Ethernet-mounted network volume).

To import an AAF sequence into Pro Tools from a volume not supporting direct playback:

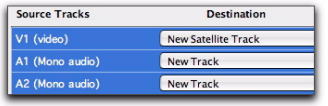
1 In Pro Tools, choose File > Open Session.

2 In the Open Session dialog, locate the AAF sequence you want to import.

3 Click Open.

4 Under the Source Tracks section of the Import Session Data dialog, do the following:

- To import the metadata (cuts and clip names) exported from a video satellite into a new video track, select New Satellite Track. (The video itself will not be imported.)
- To import SD video into a new video track in Pro Tools, select New Video Track.
- For each audio track you want to import, select New Track.



Source Tracks browser

5 Select a volume suitable for playback, and click Save.

Pro Tools copies the audio files to the audio drive where your session is saved.

The AAF sequence is ready to play back in Pro Tools.

Importing an AAF Sequence from a Volume that Cannot Be Mounted on Pro Tools

This section describes how to import an AAF sequence into Pro Tools from a volume that cannot be mounted on the Pro Tools computer.

To import an AAF sequence into Pro Tools from a volume that cannot be mounted on Pro Tools:

1 Mount the Pro Tools audio storage on the video satellite computer, as described in "Cross-Mounting Media Storage on Remote Systems" on page 93.

2 Export the AAF sequence from Media Station|PT to the Pro Tools audio storage, as described in "Exporting an Avid Sequence as an AAF Sequence with Audio Storage Mounted on the Satellite" on page 106.

Using a Video Satellite in an Avid Interplay Environment

Since Avid Interplay sequence exchange is based entirely on AAF sequences, opening and exchanging AAF sequences with a video satellite system connected to Avid Interplay requires the same steps as exchanging regular AAF sequences as described in "Exporting Audio and Video from Media Station|PT" on page 58 and "Importing Audio and Video into Pro Tools" on page 71.

For additional information on Pro Tools support for Interplay, see the *Pro Tools Avid Interplay Guide*.

Connecting Pro Tools and a Video Satellite

In order for Pro Tools and the video satellite to synchronize their transports, they must be *linked*. Before linking can occur, however, you must establish basic communication channels between them. When the Pro Tools and the video satellite systems have established this communication, they are *connected*.

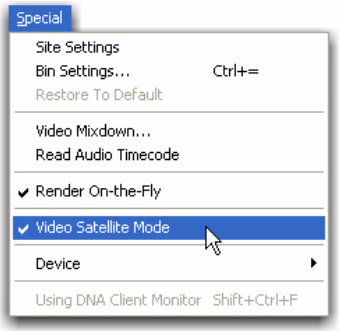
To connect the Pro Tools and video satellite systems, they must first be connected via Ethernet (as described in "Making Ethernet Connections with Video Satellite Systems" on page 25). In addition, the Video Satellite Option must be installed on the Pro Tools system (as described in "Authorizing the Video Satellite Option in Pro Tools" on page 32).

⚠ *Running other applications simultaneously with Media Station|PT can cause unpredictable behavior, including AV sync problems, frame dropping and audio stuttering. It is suggested that you not launch other applications when Media Station|PT 2.7 is running. This can occur with or without the use of Satellite mode.*

To connect to the video satellite from Pro Tools:

1 Launch Pro Tools and Media Station|PT.

2 In Media Station|PT, ensure that Special > Video Satellite Mode is selected.



Video Satellite Mode option in Special menu

3 In Pro Tools, choose Setup > Peripherals.

4 Click the Satellites tab.

5 From the Satellite pop-up menu, do one of the following:

- To connect to a video satellite, select the name of the computer on which the Media Station|PT is installed.

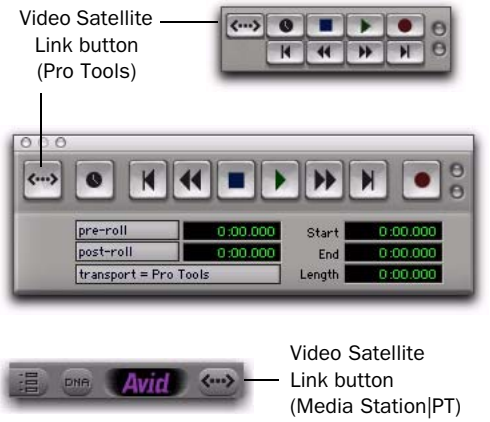
– or –

- To disconnect from a video satellite without connecting to another, select None.

Peripherals dialog, Satellite tab

If the Satellite pop-up menu does not display the Media Station|PT computer, see "Troubleshooting the Satellite Connection" on page 115

Pro Tools and the video satellite are now connected to each other. The Transport controls display the Video Satellite Link button to confirm this.



Video Satellite Link button in Pro Tools and Media Station|PT transports

Caveats for Connecting Pro Tools and a Video Satellite

The following caveats apply to connections between Pro Tools and video satellites:

- Only one Pro Tools system can connect to a satellite at a time. Once a satellite is connected to one Pro Tools system, its name appears grayed out in the Satellite menu of other Pro Tools systems.
- Quitting a Pro Tools application that is connected to a video satellite releases the video satellite so that it can connect to other Pro Tools systems.
- If you quit Pro Tools while a satellite is connected, Pro Tools attempts to re-connect to the same satellite on relaunch.
- When working with 24p and 23.976 projects, Media Station|PT defaults to displaying frames mapped to 29.97 fps timecode. In order to keep the Pro Tools and Media Station|PT time code displays in sync when working in 24p or 23.976 projects, click the time code display above the Record monitor and choose Sequence > Timecode > 24 > Mas.
- When used with a video satellite in Satellite Mode, Pro Tools does not chase MIDI Time Code (MTC).

Troubleshooting the Satellite Connection

If the satellite does not appear in the Satellite pop-up menu, verify the following:

1 Ensure that Media Station|PT is fully launched.

2 In Media Station|PT, ensure that Video Satellite Mode is enabled in the Special menu. (See "Connecting Pro Tools and a Video Satellite" on page 113.)

3 In the Satellite page of the Pro Tools Peripherals dialog, select a different Ethernet port from the Interface menu. Many computers have more than one Ethernet port or "interface". The interface selected here must be the one connected to the same network as the satellite.

4 In the Project window in Media Station|PT, click the Settings tab, then double-click Video Satellite Settings and check that the TCP/UDP Port is the same as the TCP/UDP Port shown in the Satellite pane in the Pro Tools Peripherals dialog. (Both ports default to 28282.)

5 If the TCP/UDP port settings are the same, verify with your network administrator that the port shown is not being blocked on the network.

6 Check that all Ethernet cables are completely plugged in and working. In most cases, there are LEDs the show activity at the Ethernet ports.

7 Video satellite playback will not function in the following conditions:

- Certain dialogs are open in either Pro Tools or Media Station|PT.
- Media Station|PT is not the active application.
- Pro Tools does not have an open session, or Media Station|PT does not have an open sequence.

Matching Media Station|PT and Pro Tools Settings in a Video Satellite System

In order to accurately synchronize playback between Pro Tools and Media Station|PT, the following parameters must be correctly matched:

- Media Station|PT Project Type and Pro Tools Time Code Rate, Clock Reference, and Video Format
- Pro Tools Audio Pull-Up setting and Media Station|PT Edit Play Rate
- Time Code Format (Drop Frame or Non-Drop Frame)
- Media Station|PT Starting TC time code setting and the Pro Tools session start

For Pro Tools to play in sync with Media Station|PT as a video satellite, all of these settings are interdependent. A mis-match in any of these settings will cause Pro Tools to display an error message.

⚠ *To avoid sync problems during later stages of post production, it is strongly recommended in most cases to change the settings in Pro Tools to match those of the sequence open in Media Station|PT.*

When playing back video on a monitor with a refresh rate that is different from the video frame rate, there may be some synchronization issues. See "Video Frame Rate vs. Monitor Refresh Rate" on page 45.

Matching the Media Station|PT Project Type to Pro Tools Time Code Rate, Clock Reference, and Video Ref Format

This section explains how to match the Media Station|PT Project Type to the Pro Tools Time Code Rate, Clock Reference, and Video Format (described in Table 1 on page 117).

To ensure that your video satellite system will play back or capture using the proper settings:

1 In Media Station|PT, click the Format tab in the Project window.

2 Select the desired setting from the Project Type pop-up menu.

In most cases, changing the Media Station|PT project type is not advisable and may not be possible. You should change the Pro Tools Time Code Rate unless you are creating an SD down-convert from an HD project. See "Transcoding HD Sequences" on page 66.

The Project Type setting is also determined when creating a new project in Media Station|PT.

3 In Pro Tools, choose Setups > Session.

4 Select a time code setting from the Time Code Rate pop-up menu that is compatible to Media Station|PT Project Type setting.

5 Select a compatible clock reference from the Clock Reference pop-up menu. When using a video satellite system, the SYNC HD or SYNC I/O must be locked to Video Reference (SD) or Video Reference (HD) at all times.

6 Select a compatible video format from the Video Ref Format pop-up menu.

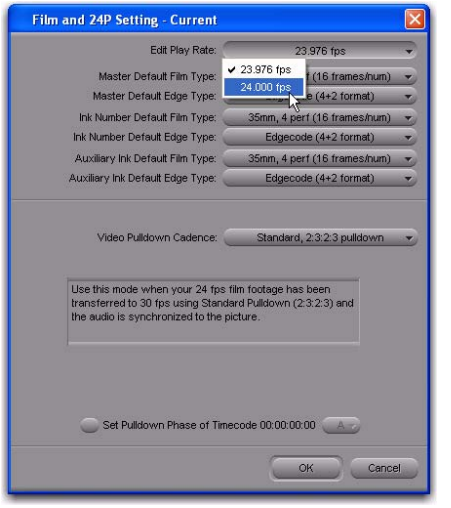
Matching Audio Pull-Up and Edit Play Rate

By default, Media Station|PT plays back sequences at the frame rate specified in the name of the project type. For example, a 25i PAL project plays at 25 fps. The notable exception is 30i NTSC, which actually plays at 29.97 fps.

When working with 23.976, 24p NTSC, 24p PAL, and 25p PAL projects, you can change the playback rate (known as the *Edit Play Rate*) without affecting other properties in order to slow down or speed up playback slightly. This is the video equivalent of the audio pull-up/down setting in Pro Tools.

To change the Edit Play Rate:

1 In the Settings tab of the Project window, open the Film and 24P setting.



Film and 24P Setting dialog

2 Select an Edit Play Rate matching your configuration according to Table 1 on page 117.

Compatibility Table

The following table describes compatibility between Avid Project Format and Edit Play Rate, and Pro Tools Time Code Rates, Audio Pull Up/Down Rate, Clock Reference, and Video Format.

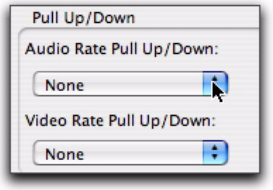
Table 1. Compatibility between Media Station|PT Project Types and Pro Tools Time Code Rates, Clock Reference, and VIdeo Format,

Avid Project Format	**Avid Edit Play Rate**	**Pro Tools Time Code Rate**	**Pro Tools Audio Rate Pull Up/Down**	Pro Tools SYNC Clock Reference	**Pro Tools SYNC Video Ref Format**
23.976p NTSC	23.976	23.976	None	SD	NTSC
	24	24	0.1% Up	SD	NTSC
24p NTSC	24	24	None	SD	NTSC
	23.976	23.976	0.1% Down	SD	NTSC
30i NTSC	29.97	29.97	None	SD	NTSC
24p PAL	24	24	None	SD	PAL
	25	25	4% Up	SD	PAL
25p PAL	25	25	None	SD	PAL
	24	24	4% Down	SD	PAL
25i PAL	25	25	None	SD	PAL
720p/23.976	23.976	23.976	None	SD	NTSC
720p/29.97 HDV	29.97	29.97	None	SD	NTSC
720p/50	50	25	None	SD	PAL
720p/59.94	59.94	29.97	None	SD	NTSC
1080p/23.976	23.976	23.976	None	HD or SD	1080i - 47.952 or NTSC
1080p/24	24	24	None	HD or SD	1080i - 48 or PAL
1080p/25	25	25	None	HD or SD	1080i - 50 or PAL
1080i/50	50	25	None	HD or SD	1080i - 50 or PAL
1080i/50 HDV	50	25	None	HD or SD	1080i - 50 or PAL
1080i/59.94	59.94	29.97	None	HD or SD	1080i - 59.94 or NTSC
1080i/59.94 HDV	59.94	29.97	None	HD or SD	1080i - 59.94 or NTSC

To change audio pull up/down settings in Pro Tools:

1 In Pro Tools, choose Setup > Session.

2 From the Time Code Settings section of the Session Setup window, select a rate from the Audio Rate Pull Up/Down pop-up menu.



Pull Up/Down section of the Session Setup window

3 Click OK to apply the new pull up/down rate to the session.

Matching Time Code Format (Drop Frame or Non-Drop Frame)

Pro Tools and Media Station|PT must be set to the same time code format (either Drop Frame or Non-Drop Frame).

To ensure time code format settings are compatible:

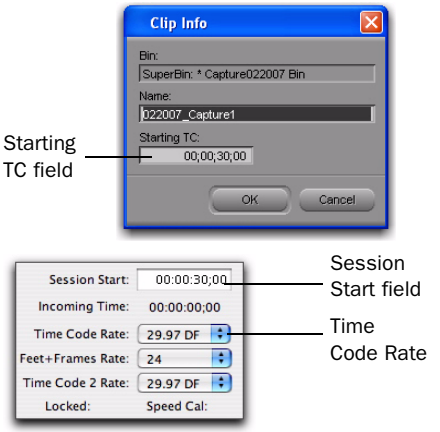
1 In Pro Tools, choose Setup > Session. If the Time Code rate pop-up menu displays "DF" after the frame rate, Pro Tools is set to Drop Frame.

2 In Media Station|PT, right-click the Record monitor, and choose Get Clip Info.

Right-clicking the Record monitor

In some project formats, Media Station|PT can be configured for Drop Frame or Non-Drop Frame, while the corresponding Pro Tools time code rate can only be set to Non-Drop Frame. In such cases, Media Station|PT sends Non-Drop time code information to Pro Tools, even if it is set to Drop Frame. The following project formats in Media Station|PT exhibit this behavior: 23.976p NTSC, 24p NTSC, and 720p/23.976.

If the numbers in the TC fields are separated by semi-colons instead of colons, the project is set to Drop Frame.



Clip Info dialog (Media Station|PT, top) and a portion of the Session Setup window (Pro Tools, bottom)

3 If both time code formats do not match, do one of the following:

- To force Pro Tools to match the time code format of Media Station, select the compatible time code format from the Time Code Rate pop-up menu.
- To force Media Station|PT to match the time code rate of Pro Tools, type semi-colons (Drop Frame) or colons (Non-Drop Frame) between the numbers in the Starting TC field, and press Enter.

Matching Media Station|PT Starting TC Time Code Setting and Pro Tools Session Start

In almost all cases, the first frame of video is located at the start of the Media Station|PT sequence. However, Pro Tools sequences often have silence at the head to create countoffs or silence.

For example, a Media Station|PT sequence may start at 1:00:00 while the matching Pro Tools session starts at 00:55:00—allowing five seconds of silence before the audio starts. In this case, Media Station|PT parks on the first frame of video and waits for Pro Tools to reach 1:00:00 before it begins to play the video. Regardless of their respective start times, Pro Tools and Media Station|PT will always play at the same time code values unless an offset has been entered in the Video Satellite Offset field in the Pro Tools Session Setup window.

Therefore, it is not required that the Media Station|PT sequence and Pro Tools session start at the same time in order to play in sync.

⚠ *In some cases, starting playback from Media Station|PT at a point which is more than a minute earlier than the start of the Pro Tools session may fail. Change the Pro Tools session start time to be earlier.*

To set the default start time for new sequences in Media Station|PT:

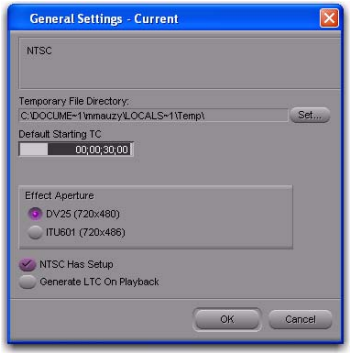
1 In the Project window, click the Settings tab and then double-click the General setting.

2 In the Default Starting TC field, do one of the following to set the default start time for a new sequence:

- If you want the sequence to begin capturing at the same time code location as the beginning of the Pro Tools session, set the start time of the capture to be equal to the Session Start in Pro Tools (Setup > Session in Pro Tools).

– or –

- If you want to sequence to begin capturing at a time code location that falls after the Pro Tools session start, set the start time of the capture to be later than the Session Start in Pro Tools.

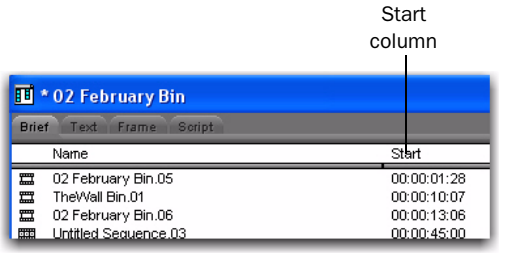


General Settings dialog

To change the start time of an existing sequence in Media Station|PT:

1 In Media Station|PT, open the bin containing the existing sequence.

2 If needed, re-size the bin window so that you can see the Start column of the bin window.



Bin window (Name and Start columns shown)

3 In the Start column for the sequence for which you want to set a new start time, type the new start time using semi-colons (for Drop Frame) or colons (for Non-Drop Frame), and press Enter.

4 Click OK to confirm.

Compensating for Different Sequence Start Times in Pro Tools and a Video Satellite

You can compensate for any offsets that might occur if the start times of an Avid sequence differ between Media Station|PT and Pro Tools.

To set the Video Satellite Offset:

1 In Pro Tools, choose Setup > Session.

2 In the Video Satellite Offset field, compensate for the offset between the Pro Tools and video satellite as follows:

- If the start time of the video satellite sequence falls before the start time of the Pro Tools sequence, type a positive time code value.
- If the start time of the video satellite sequence falls after the start time of the Pro Tools sequence, type a negative time code value.

Compensating for Monitor-Induced Output Delay

Many monitors add a delay to the video output of one or more frames. You can compensate for this delay by advancing the video output by the necessary number of frames.

To set the number of frames to offset video output:

1 Choose Setup > Set Video Sync Offset.

2 In the Satellite field, type the number of frames by which you want to offset video satellite playback.

3 Click OK.

Linking or Unlinking Pro Tools and a Video Satellite

After you have connected Pro Tools and a video satellite to each other, Link buttons appear in the Pro Tools and Media Station|PT transports.

Standard Pro Tools MachineControl Option functionality is unaffected and independent from the video satellite transport operations. However, chasing MIDI Machine Control or MIDI time code while linked to a video satellite is not supported.

The Link buttons let you use Pro Tools or Media Station|PT to temporarily “lock” the two applications to each other. Most playback or capturing actions performed on one system are automatically duplicated on the other.

When using Pro Tools with a video satellite, audio output from Media Station|PT is only accurate to +/- approximately 1/2 frame. Audio should only be monitored if the timing of the audio does not need to be more precise.

When linked, Pro Tools and Media Station|PT support the following transport operations:

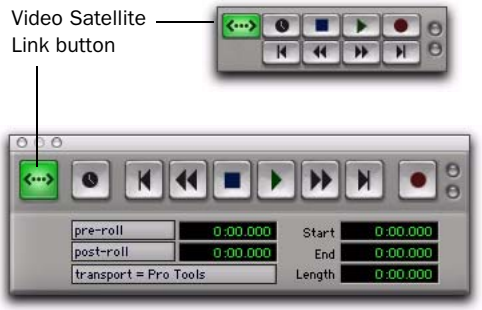
- With audio playback:
  - Play
  - Half-speed Play
  - Loop Play
  - Scrub
  - Record
  - Loop Record
- Without audio playback:
  - Locate
  - FF/REW
  - Shuttle
  - Nudge
  - Selecting and Trimming

To link or unlink the systems from within Pro Tools, do one of the following:

▪ In any of the Pro Tools Transport controls, click the Link button to change it from an unlinked (grey) or linked (green) state.

– or –

▪ Press Shift-Alt-L (Windows) or Shift-Option-L (Mac) to toggle between linked and unlinked.



Video Satellite Link buttons in Pro Tools Edit window Transport controls and Transport window controls

If Shift-Alt-L does not function correctly, ensure that the Windows Standard Alt Key Behavior option is unselected in the Media Station|PT Interface dialog settings (Project window > Settings tab > Interface setting).

To link or unlink the systems from within Media Station|PT, do one of the following:

▪ Click the Video Satellite Link button to change it to a linked (green) or unlinked (grey) state.

– or –

▪ Press Shift-Alt-L (Windows) to toggle the link state between linked and unlinked.

Video Satellite Link button in Media Station|PT

Link buttons flash briefly when establishing internal links.

Capturing Audio and Video with a Video Satellite System

You can use a video satellite system to capture audio and video media in a single pass.

Before Capturing Audio and Video

Before capturing audio and video from tape, ensure that you have made the following connections.

For connections with an Avid video peripheral, do the following:

1 Connect the composite, component, S-Video, SDI or FireWire cables from the desired outputs of the video deck to the corresponding inputs on the video peripheral.

2 Connect the audio source to the inputs of your primary Pro Tools audio interface

For connections without an Avid video peripheral, do one of the following:

▪ For FireWire-based connections, connect the FireWire cable directly to the Firewire port on the Media Station system.

Since video and audio are streamed in one signal via FireWire connections, it is not necessary to connect any audio inputs.

If you are capturing HD video, the video source must be connected directly to the Media Station|PT computer via FireWire (1394) cable. Because a single FireWire cable provides both video and audio, you must capture both audio and video into Media Station|PT and then export the audio portion over to Pro Tools if desired. The exception to this is that if the deck also has analog outputs, you could connect those outputs to your Pro Tools inputs.

⚠ *Due to variations in the analog and digital outputs of different decks, you may need to manually sync audio with video after capturing.*

For more information, see the *Getting Started with HD Guide* as well as the guide for your Pro Tools audio interface.

Capturing Audio and Video Caveats

The following caveats apply to capturing audio and video with a video satellite system:

- Due to technical limitations, when capturing video from a device being controlled via a 1394 connection, audio sync will be up to 3/4 of a frame out of sync.
- If you want to capture a 29.97 telecine video tape to a 24 fps project, you must first capture both audio and video on Media Station|PT and then export the audio back to Pro Tools. See "Capturing Audio and Video" on page 45 and "Manually Exporting an AAF Sequence" on page 60.

Configuring Pro Tools and a Media Station|PT Video Satellite for Capturing

Before configuring Pro Tools and Media Station|PT for synchronized capturing, ensure that the two applications have matching settings. For detailed information, see "Matching Media Station|PT and Pro Tools Settings in a Video Satellite System" on page 115.

Configuring Pro Tools for Capturing within a Video Satellite System

To configure Pro Tools for capturing audio:

1 In Pro Tools, choose Setup > Session, and ensure the following:

- Clock Source pop-up menu is set to SYNC.

– and –

- Clock Reference pop-up menu is set to Video Reference (SD) or Video Reference (HD).

2 Route the audio inputs to the desired tracks.

3 Record enable the audio tracks to which you want to capture audio.

4 Click the Record Enable button in the Transport.

You are now ready to configure Media Station|PT for capturing into a new or existing sequence.

Configuring Media Station|PT for Capturing into an Existing Sequence

To configure a Media Station|PT video satellite for capturing into an existing sequence:

1 In Media Station|PT, open the existing sequence into which you want to capture new media.

2 Use the Mark In control to set an In point on the Timeline at which you want to begin capturing.

Media Station|PT places captured video at the In point in the timeline. However, that may not equal the video's time code position on the tape, which is determined by the In point set in the Capture Tool. For example, if the In point on the Capture Tool is set to 1:00 and the In point in the timeline is set to 0:30, Media Station|PT starts capturing when the tape reaches 1:00—but places the captured video in the timeline beginning at 0:30—causing a 30-second offset.

To keep the captured video in sync with the source tape, the In point in the timeline should be the same as the In point in the Capture Tool.

You are now ready to configure the Capture Tool. See "Configuring the Capture Tool" on page 124.

If you want to capture to a location in a sequence that falls in the Timeline after the last frame of media, you need to artificially extend the sequence.

To artificially extend the sequence in the Timeline:

1 In Media Station|PT, open the existing sequence into which you wish to capture new media.

2 Add at least one frame of media to the end of the current Timeline.

3 Place the cursor at the leading edge of that media.

4 Choose Clip > Add Black and select 2 minutes.

5 Repeat as needed until the Timeline is long enough.

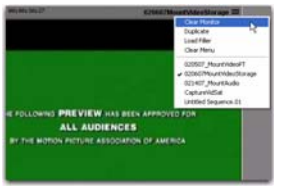
Once you have created this "filler" sequence, you can save it and use it for the same purpose on other projects.

Configuring Media Station|PT for Capturing Directly into an Empty Sequence

When you capture into an empty sequence, Media Station|PT uses the default start time set in the General setting of the Settings tab.

To configure a Media Station|PT video satellite for capturing directly into a new sequence:

1 If there is a sequence open, click above the Record Monitor to display a pop-up menu, and select Clear Monitor.



Pop-up menu above Record Monitor

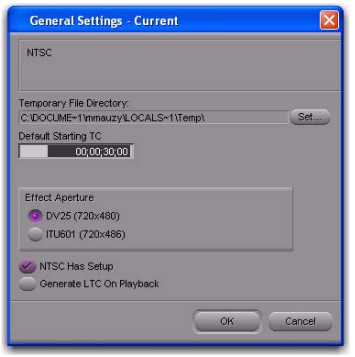
2 In the Project window, click the Settings tab and then double-click the General setting.

3 In the Default Starting TC field, do one of the following to set the default start time for a new sequence:

- If you want the sequence to begin capturing at the same time code location as the beginning of the Pro Tools session, set the start time of the capture to be equal to the Session Start in Pro Tools (Setup > Session in Pro Tools).

– or –

- If you want to sequence to begin capturing at a time code location that falls after the Pro Tools session start, set the start time of the capture to be later than the Session Start in Pro Tools.



General Settings dialog

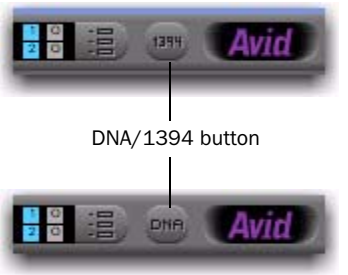
You are now ready to configure the Capture Tool. See "Configuring the Capture Tool" on page 124.

Configuring the Capture Tool

To configure the Capture Tool for manual capture:

1 If you are capturing via an Avid video peripheral, ensure that the Device setting is set to Avid DNA by doing one of the following:

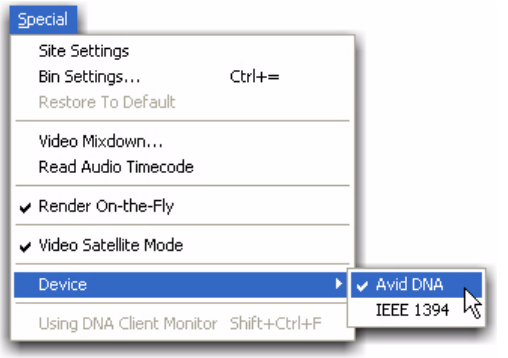
- Click the DNA/1394 button in the Timeline.



DNA/1394 button (showing both DNA and 1394 status)

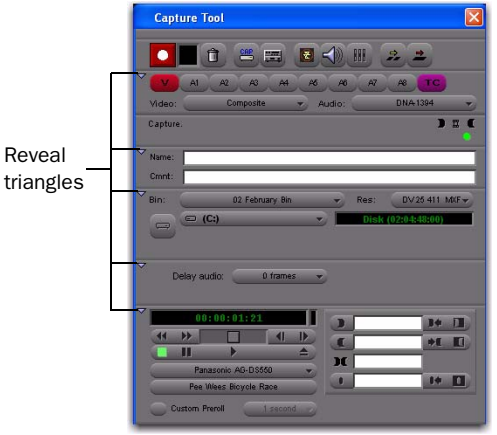
– or –

- Select Special > Device > Avid DNA.



Avid DNA option in the Device pop-up menu

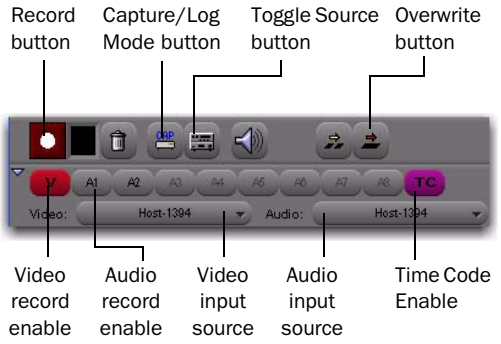
2 To open the Capture Tool, choose Tools > Capture.



Capture Tool

3 Ensure that all the reveal triangles on the left side of the Capture Tool window are pointing down so that all of the controls are visible.

4 If necessary, click the Capture/Log Mode button to select Capture mode (CAP).



Capture Tool (Record controls)

5 If necessary, enable control of the tape deck by clicking the Toggle Source button so that it does not display a circle with a slash.

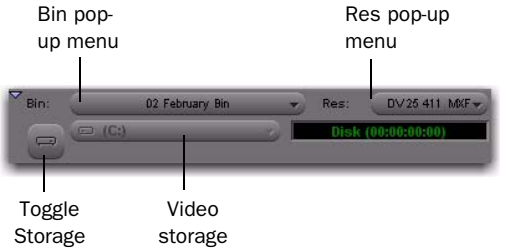
6 Below the Record button, click the record enable buttons for the video and time code inputs. (V is for video and TC is the time code channel).

⚠ *The TC (time code) button should always be enabled, even though no time code is being recorded.*

⚠ *Do not record enable the audio inputs unless you want to use Media Station|PT instead of Pro Tools to capture audio.*

7 To capture the clip directly into the Timeline without affecting the position of any existing material (analogous to Slip edit in Pro Tools), click Overwrite.

8 Choose the video input source from the Video Input pop-up menu.



Capture Tool (Storage controls)

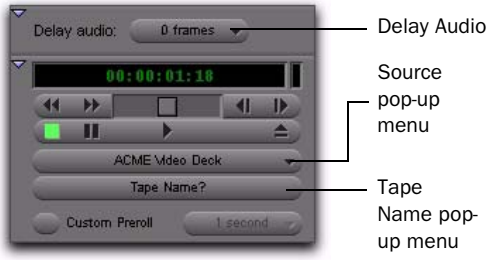
9 From the Bin pop-up menu, select the bin where you wish the captured clips to appear.

This setting does not affect where the captured files are stored. All captured media files are stored in the OMFI Media Files folder (for OMF media) or Avid MediaFiles folder (for MXF media) on the volumes selected in the storage pop-up menus. A bin in Media Station|PT is analogous to the Audio or MIDI region lists in Pro Tools, except that a project in Media Station|PT may have an unlimited number of bins, and clips may be organized between the bins as best suits the user.

10 From the Res pop-up menu, choose the resolution of video you wish to capture.

11 Click the Toggle Storage button so that one volume is showing, and select the volume where the video media will be stored. The available recording time for each volume displays next to it.

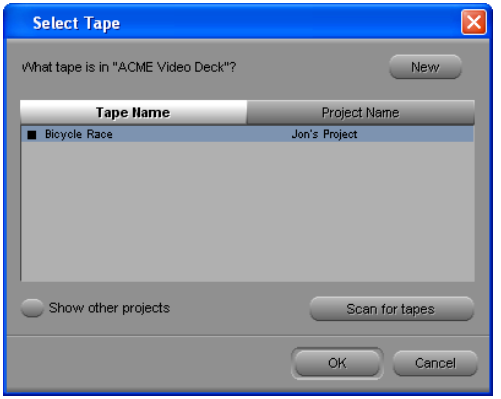
12 If the VTR is not correctly identified in the Source pop-up menu, choose Auto-Configure from the source pop-up menu, then click Yes to auto-configure the VTR with the Capture Tool and display the name of the VTR.



Capture Tool (Transport controls)

13 Ensure that Delay Audio is set to 0 Frames.

14 Insert the tape into the VTR.
Media Station|PT will present a list of tapes already associated with this project and ask you which tape you have inserted.



Select Tape dialog

15 Do one of the following:

- Select one of the displayed tape names and click OK.

– or –

- Click New to add a new tape to the list.

This will be helpful if you ever need to recapture the same video.

16 To check your inputs and levels, do the following:

- Click Play on the transport controls. Video should appear in the Record Monitor and your client monitor.

When digitizing DV25 video via the DV port, nothing will appear in the client monitor. However, the digitized clip will be captured correctly.

- Check audio input levels in Pro Tools.

You are now ready to capture.

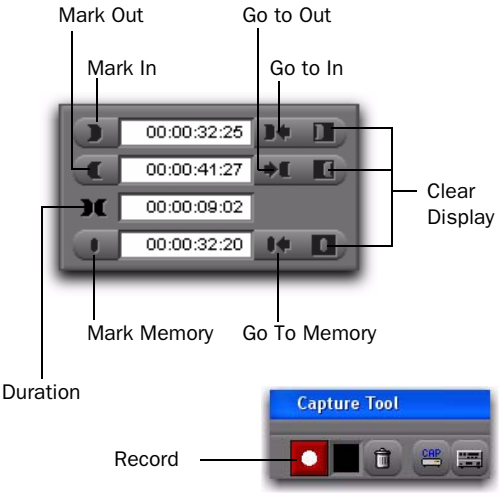
Capturing Audio and Video with a Video Satellite System

To capture audio and video:

1 Ensure the Capture Tool has been configured for capturing. (See "Configuring the Capture Tool" on page 124.)

2 Ensure that Pro Tools has been properly connected to the video satellite. (See "Connecting Pro Tools and a Video Satellite" on page 113.)

3 Use the Mark In and Mark Out controls to select a specific portion of video you want to capture from tape, and click Record. (See "Selecting a Portion of Video to Capture" on page 127.)



Mark In and Mark Out controls (and Record button)

⚠ *If Media Station|PT displays an error message regarding mis-matched frame rates, you may have mis-matched time code formats or play rates. See "Matching Media Station|PT and Pro Tools Settings in a Video Satellite System" on page 115 for detailed information on correcting the configuration.*

⚠ *You can capture without first entering an In point, but this is not advised because of unpredictable delays between clicking the Record button and actually capturing video.*

After you click Record, Media Station|PT cues the VTR. Media Station|PT and Pro Tools drop into record mode at the appropriate moment.

The flashing red light indicates recording is in progress.

⚠ *During recording, video may appear out of synchronization with audio. However, audio and video will be synchronized during playback.*

4 Click the Record button again (or press the ESC key) to stop.

Playing Back Captured Audio and Video with a Video Satellite System

Once you have finished capturing with a video satellite system, the captured clip appears in the Record Monitor and in the Timeline. Audio appears in the Pro Tools Timeline.

To view the captured clip, do the following:

- Click Play (or press the Spacebar) in Pro Tools or Media Station|PT.

Selecting a Portion of Video to Capture

The Mark In and Mark Out controls in the Capture Tool let you select a portion of video to capture from the tape.

To select a portion of video to capture:

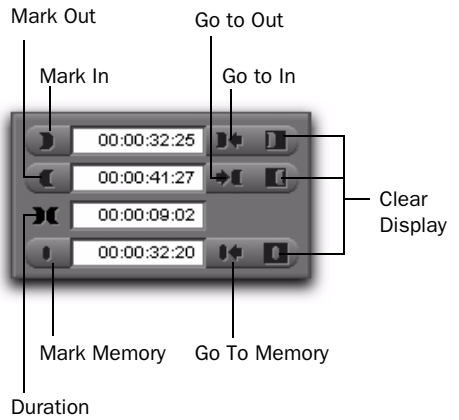
1 In the Capture Tool, use one of the following methods to mark the position where you want the capture to begin:

- Press the Spacebar (or click Play) to start playback on the VTR, and click Mark In at the desired position.
- Use the Transport controls to queue the tape to the position at which you wish to start capturing, and click Mark In.
- Type a time code value in the Mark In field.

⚠ *You can capture without first entering an In point, but this is not advised because of unpredictable delays between clicking the Record button and actually capturing video.*

2 Use one of the following methods to mark the position where you want the capture to end:

- If the VTR is playing back, click Mark Out at the desired position.
- Use the Transport controls to queue the tape to the position at which you wish to end capturing, and click Mark Out.
- Type a time code value in the Mark Out field.



Mark In and Mark Out controls

The exact length of the clip to be captured appears in the Duration display.

3 You can also do the following:

- To automatically queue the tape to the Mark In point, click Go to In.
- To automatically queue the tape to the Mark Out point, click Go to Out.
- To automatically mark a specific frame (not to be reflected in the capture), click Mark Memory.
- To clear any of the Mark In, Mark Out, or Mark Memory points, click Clear Display next to the appropriate button.
- To begin capturing at a specific point for a specific duration, type time code values in the Mark In and Duration fields.
- To end capturing at a specific point for a specific duration, type time code values in the Mark Out and Duration fields.
- To begin an open-ended capture with no definitive stopping point, type a time code value in the Mark In field.

4 You are now ready to begin capturing, as described in "Capturing Audio and Video with a Video Satellite System" on page 126. When you begin capturing, the VTR queues to the In point and begins capturing video, then stops automatically when it reaches the Out point.

Re-Digitizing an Existing Sequence

Media Station|PT can open sequences created on other Avid editing systems (such as Media Composer Adrenaline). However, you may want to re-digitize some or all of the media files because they were the wrong resolution, missing, or corrupted.

When using this procedure with a video satellite, you must capture the audio to Media Station|PT and then export an AAF sequence referencing or containing the embedded audio to Pro Tools.

See "Re-Digitizing an Existing Sequence" on page 51 for detailed information.

Digitizing from an EDL

Media Station|PT includes Avid EDL Manager software, which lets you open an EDL from another editing application, create a Media Station|PT sequence from that EDL, then re-digitize the sequence.

When using this procedure with a video satellite, you must capture the audio to Media Station|PT and then export an AAF sequence referencing or containing the embedded audio to Pro Tools.

See "Digitizing from an EDL" on page 52 for detailed information.

Laying Back Audio and Video to Tape

While Pro Tools video output is intended for monitoring purposes only and is not suitable for professional layback or broadcast, video output from Media Station|PT is full broadcast quality. You can use Media Station|PT linked to Pro Tools when you need to output both audio and video to tape.

⚠ *To minimize the chance of dropped frames, it is recommended that all effects be rendered before performing a layback.*

When laying back to an SDI VTR or 1394 device that requires audio and video to be combined in a single stream, you must export the audio to Media Station|PT from Pro Tools or combine audio and video signals using a third-party summing device, and then lay back the final sequence to tape.

To record audio and video to tape from Media Station|PT and Pro Tools simultaneously:

1 Make sure that your system is set up as follows:

- Pro Tools and the Media Station|PT video satellite computers are linked.
- Audio outputs on the Pro Tools|HD audio interface are connected to the appropriate audio inputs on the VTR.
- Video outputs from Media Station|PT system are connected to the VTR.
- If you are using deck control, the deck control cable from Media Station|PT is connected to the VTR, and the VTR is set to Remote mode.

When using Media Station|PT in Satellite mode for 24p and 23.976 projects, only the 24 and 23.976 Output Formats are supported. The 29.97 Output Format (+25% playback speed with no pulldown) is not supported in Satellite mode for 24p and 23.976p projects.

2 Insert a video tape into your VTR.

3 To ensure that the tape deck is properly configured, refer to the following topic in Media Station|PT Help (Help > Avid Media Station|PT Help): *Configuring a Deck or Multiple Decks*.

4 Do one of the following:

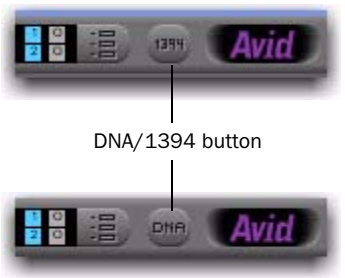
- Select one of the displayed tape names and click OK.

– or –

- Click New to add a new tape to the list.

5 Ensure that the Device setting is set to Avid DNA (if you are outputting through an Avid video peripheral) or IEEE 1394 (if you are outputting through FireWire) by doing one of the following:

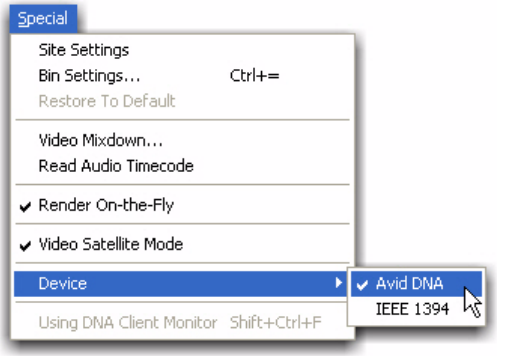
- Click the DNA/1394 button in the Timeline.



DNA/1394 button (showing both DNA and 1394 status)

– or –

- Select Special > Device > Avid DNA or IEEE 1394.

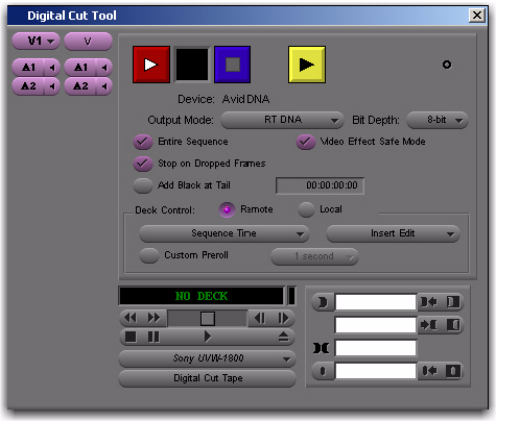


Avid DNA and IEEE 1394 options in the Device pop-up menu

6 Drag the sequence you want to record to tape from the bin to the Record Monitor.

7 Drag the sequence from the bin to the Record Monitor.

8 Select Output > Digital Cut. The Digital Cut Tool appears.



Digital Cut Tool

9 If you want to set In and Out points for a digital cut.

10 Do one of the following:

- Select the Entire Sequence option to record the entire sequence.

– or –

- Deselect the Entire Sequence option and set the In and Out points in the Timeline.

11 If you are laying back via a FireWire (1394) connection (Special > Device > IEEE 1394), select the appropriate output mode from the Output Mode pop-up menu as follows:

- If all of the media on your Timeline is DV25, or if it is all DV50, and all of your effects are rendered, you can achieve a slightly higher quality of output by selecting DV25 or DV50 as appropriate.

– or –

- Otherwise, you must select the RT DV25 or RT DV50 options to render and transcode all of your video to that format.

12 Select the Stop on Dropped Frames option if you want Media Station|PT to automatically stop the tape if the audio and video does not record correctly.

13 Select the Add Black At Tail option, and type the amount of black you want added to the end of the sequence.

14 Select one of the following from the Deck Control options:

Local mode You will initiate recording manually.

Remote mode Media Station|PT will start the VTR and drop into record at the specified time code.

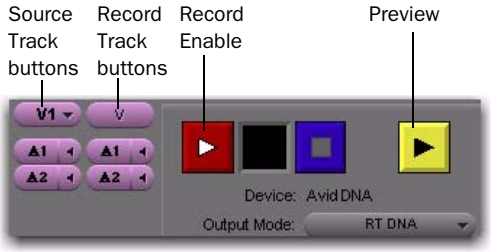
15 If you chose Remote mode, select one of the following options:

Sequence Time Starts recording based on sequence time. For example, if the sequence starts at 1:00:00 in the Timeline, Media Station|PT will start recording when the tape reaches 1:00:00.

Record Deck Time Starts recording wherever the VTR is currently parked.

Mark In Time Starts recording at the address entered in the top window to the right of the transport controls.

16 In the Source Track buttons, select the top video track. Only the selected video tracks and the video tracks below it will be recorded.



Selected Source tracks

17 If you selected Remote mode, use the Record Track buttons on the right to select which audio and video tracks to enable for recording on the tape.

18 Click the yellow Preview button to check that all of the tracks you selected are playing and that the insert points on the tape are correct.

19 Do one of the following:

- To record using Local mode, press play and record on the VTR. When ready, click the Record button in the Digital Cut window.

– or –

- To record using Remote mode, press Record in the Digital Cut window.
  Media Station|PT will queue the tape, play, then drop in at the appropriate location.

Be sure to record at least a few seconds of black to the tape before performing a digital cut. This will guarantee that the video tape is correctly formatted when your digital cut starts

Exporting Audio and Video as a Digital Movie from a Video Satellite

If you have audio and video media with a video satellite system and you want to create a QuickTime or Windows Media digital movie, you must first get the audio from Pro Tools into Media Station|PT.

Exporting audio and video from a video satellite system to a digital movie involves the following steps:

1 Get the audio to the Media Station|PT machine and cut it into the video sequence.

2 Export the sequence as a digital movie.

To get the audio from Pro Tools to the Media Station|PT video satellite:

1 Ensure that the Pro Tools system can deliver files easily to the Media Station|PT video satellite computer through shared storage (such as Unity or Ethernet-mounted network volume), a mounted audio or video storage drive, or a DVD.

See "Cross-Mounting Media Storage on Remote Systems" on page 93.

2 Export audio files from Pro Tools using one of the following methods:

- Bounce the audio tracks to disk.
- Mix back to internal tracks.
- Export the selected tracks as an AAF with audio embedded.

See "Exporting Audio from Pro Tools for Media Station PT" on page 78.

3 Import the Pro Tools audio into the Media Station|PT sequence, and integrate it into the track. See the following procedures:

- "Importing Audio into Media Station|PT from Pro Tools" on page 82
- "Synchronizing Audio with a Media Station|PT Sequence" on page 86

To export a sequence as a digital movie:

1 Select the sequence you want to export in the bin and drag it to the Record Monitor.

2 Render all effects in the Timeline as described in "Rendering All Effects" on page 60.

3 Select the Track Enable buttons for the video and audio tracks to export.

4 Choose File > Export.

5 Type a name and select the destination.

6 Choose the type of file you want to export from the Export Setting pop-up menu.

7 Click Options, and configure the settings as desired.

8 Click Save or Save As.

9 In the Export As dialog, click Save.

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