

# Avid Xpress™

## *Getting Started Guide*

### *Release 2.0*

*for the Windows NT® Operating System*

**Avid**<sup>®</sup>  
*tools for storytellers™*





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# CHAPTER 1

## *Introduction*

This chapter explains how to use this guide and work through the tutorial sections that teach you the basics of your Avid Xpress system. This chapter contains the following sections:

- [Using the Tutorial](#)
- [Turning On Your Equipment](#)
- [Installing the Avid Xpress Tutorial Files](#)
- [Starting Avid Xpress](#)
- [Electronic Licensing](#)
- [How to Proceed](#)
- [Using Help](#)
- [Using Online Documentation](#)

# Using the Tutorial

The self-paced tutorial sections included in this guide are designed as guided Avid edit sessions using the basic features of the Avid Xpress system. In the tutorial, you're going to edit a 1-minute sequence about a company in Amesbury, Massachusetts that makes small fishing boats called *dories*.

The footage for the sequence is on the Avid Xpress Tutorial CD-ROMs that came with your system. They contain digitized media that is ready for you to use.

The instructions in the tutorial sections take you through each step of the editing process. The tutorial is divided into the following sections:

- Starting a project (in Chapter 3)
- Getting ready to edit (in Chapter 5)
- Editing a rough cut (in Chapter 6)
- Refining the edit (in Chapter 7)
- Adding effects, titles, and other finishing touches to the sequence (in Chapter 8 and Chapter 9)
- Preparing output (in Chapter 10)
- Backing up (in Chapter 11)

The tutorial assumes a basic familiarity with the Windows NT® operating system. If you have never used a Windows NT system, refer to your Windows NT documentation.

You don't need any previous experience with the Avid Xpress system to use this guide. The terms and techniques needed for each tutorial section are in each chapter. However, it will help to read Chapter 2 of this guide before starting any of the tutorial sections. You can also use the Avid Xpress Help (see [“Using Help” on page 17](#)) and online books (see [“Using Online Documentation” on page 20](#)) for more information.

Completing all the tutorial sections takes approximately 4 hours. Before you begin, you need:

- An installed Avid Xpress system

See the *Avid Xpress Setup Guide* if you have not yet set up your Avid Xpress system. See the *Avid Xpress Release Notes* if you need to install the Avid Xpress software.

- The Boat Shop media and project files on the Avid Xpress Tutorial CD-ROM

Depending on your level of expertise in editing on Avid systems, you may choose to go through the tutorial in either of two ways.

- If you have no experience with Avid Xpress or other Avid systems, you should go through the entire tutorial.
- If you have used other Avid systems, you may want to read certain chapters to understand the specific features of Avid Xpress, and complete the tutorial in that chapter. Each tutorial is self-contained.

## What You Need

The CD-ROMs packaged with your Avid Xpress system include all files necessary to complete this tutorial. They are:

- **OMFI MediaFiles folder** — contains the digitized files you need for the tutorial. You need to copy these files onto your external media drive.
- **Avid Projects folder** — contains the project and bins you need for the tutorial. You need to copy these files onto your internal hard drive.

# Turning On Your Equipment

Begin your edit session by turning on the various components of your Avid Xpress system. If any part of your system fails to turn on, make sure its electrical cord is plugged snugly into an appropriate electrical outlet or power strip. See the *Avid Xpress Setup Guide* for information on setting up your system.



**If you fail to follow the proper sequence for starting up your system, you could damage your computer or storage drives.**

Always turn on the devices as follows:

1. **Fixed-storage drives:** Turn on fixed-storage drives before starting the computer. Allow 10 to 15 seconds for the drives to spin up to speed before starting your personal computer (PC).
2. **Other peripheral hardware:** Turn on all other peripheral units except the PC. These include:
  - Monitors and speakers.
  - Meridien I/O box.
  - Tape decks and additional autoassembly configurations (switcher, time-base corrector, and so on) if you plan to digitize or conduct an autoassembly.
  - Black burst generator (to maintain proper sync between audio and video while digitizing and editing).
3. **The PC:**
  - a. Turn on the PC.

The computer goes through a self-check routine, and the Windows NT startup screen appears.
  - b. Press Ctrl+Alt+Delete and log on.

For information on Windows NT features, such as the desktop and icons, see your Windows NT documentation.

The Windows NT desktop appears.



To avoid damage, do not disconnect or turn off hard disks or individual disk drives while the PC is on.

## Installing the Avid Xpress Tutorial Files

The Avid Xpress Tutorial CD-ROMs contain all of the files you need for the tutorial sections of this guide. It takes about 30 minutes to copy the media files from the CD-ROM to the external hard drive.

The CD-ROMs contain an NTSC version and a PAL version of the tutorial media files digitized at a 4:1s compression ratio. You need approximately 1 GB of free space on your external hard drive to accommodate the media.

The tutorial files require two CD-ROMs for NTSC and two for PAL. The procedure is the same for installing either type.



*For instructions on installing the tutorial media files and the Boat Shop project, see "Installing the Tutorial Files" in the Avid Xpress Release Notes.*

# Starting Avid Xpress

To start Avid Xpress:

1. Click the Start button.
2. Point to Programs.
3. Point to the Avid folder.
4. Select Avid Xpress.

The Avid splash screen appears, then the License Agreement dialog box appears.



*To start Avid Xpress from the desktop, Avid recommends that you create a shortcut and place it there. For more information on creating a shortcut, see your Windows NT documentation.*

## Electronic Licensing

To accept your Avid Xpress product license electronically:

1. Read the License Agreement, then click the Accept button or the Decline button at the bottom of the screen.

The agreement appears the first several times you start Avid Xpress. After several starts, a new button appears at the bottom of the screen.

2. If you do not want to see the license agreement again, click the Accept and Don't Show Again button.

A dialog box appears.

3. Enter the name of your organization in the dialog box, and click OK.

After Avid Xpress starts, the Open Project dialog box appears, as described in [“Opening a Project” on page 35](#).

## How to Proceed

The following are a few tips for taking full advantage of the Avid Xpress documentation and other resources:

- Complete the tutorial sections in this book before starting a project.
- Begin learning about basic procedures by using the default settings. As your confidence builds, begin to explore additional procedures and settings.
- Instead of using the standard menus to find the command you need in a window, try using shortcut menus. Using the right mouse button, click on a window to bring up a shortcut menu that shows the most frequently used commands for that window.
- Keep the *Avid Xpress Quick Reference* on hand during editing sessions.
- Make a habit of reading Avid's newsletters, mailings, and other trade publications.
- Make use of additional training resources provided by Avid whenever possible, such as classes and instructional videotapes. For more information, contact Avid at 800-867-2843.
- Check the Avid Web site at [www.avid.com/services/training/training.html](http://www.avid.com/services/training/training.html) for listings of courses, schedules, and locations.

## Using Help

Help for your Avid Xpress system is automatically installed with Avid Xpress. Help includes all reference and procedural information for Avid Xpress.

You can access Help in two ways:

- From the Help menu, choose Avid Xpress Help.

- As context-sensitive Help:
  - a. Position the cursor on the window for which you want Help.
  - b. Press the F1 key on the keyboard or right-click and choose What's This? from the shortcut menu.

A window opens with information about the tool or feature for which you want Help.
  - c. Click on different areas of the tool or feature to see pop-up Help.



*If no specific Help for the window exists, the Help Topics window opens.*

Procedures are displayed in yellow How To windows; background information and illustrations are displayed in white Reference windows.

To find a topic in Help:

1. Open the Help Topics window.
2. Do one of the following:
  - Click the Contents tab to view lists of topics in the main Help window.
  - Click the Index tab to open the Index window and view a list of index entries.
  - Click the Find tab to search for words or phrases that might be contained in a Help topic.

## Finding Topics with the Index

To find topics using keywords in the Index:

1. Click the Index tab to display the Index panel.
2. In the text box, type the keyword you are interested in or choose a topic from the list.

3. Click the Display button to view the topic or double-click the topic name in the Index scroll list.

## Searching with the Find Feature

To search for words in a Help file:

1. Click the Find tab to display the Find panel.
2. In the text box, type the word or phrase you want to find.  
A list shows topics that contain the words you searched for. As you type additional words, the list updates.
3. To change the way in which you search for a word or words, click Options and select your preferences.
4. Select a topic in the list and then click the Display button or double-click the topic.
5. The topic is displayed, and the words you searched for are highlighted.

## Adding a Note to a Help Topic

To add a note to a Help topic:

1. In the Help topic window, click Options.
2. Choose Annotate.  
A dialog box appears.
3. Type your note in the dialog box.
4. Click Save.

For more information about using Help, see “Help:overview” in the Help index.

A paper clip icon appears at the top of the topic. Click this icon to see, edit, or delete your note.

# Using Online Documentation

The *Avid Xpress Online Publications* CD includes:

- *Avid Xpress Effects Guide*
- *Avid Xpress Getting Started Guide* (this book)
- Avid Xpress Help system

The books are PDF files. You can view them with the Adobe® Acrobat Reader®, which you can install from the CD-ROM.

The online version of the books enables you to:

- Navigate through books by using bookmarks and hyperlinks.
- Speed up information retrieval by performing keyword searches.
- Annotate the books with your own notes.
- Zoom in on a page, enabling closer review of text and images.
- Print any or all pages.
- View the books with full-color graphics.
- View movies that illustrate Avid Xpress effects.



*Avid gives you permission to print up to three complete copies of each book.*



## CHAPTER 2

# *About Avid Xpress*

Welcome to the world of nonlinear digital video editing, in which you can create professional-quality video programs from your desktop. The Avid Xpress system allows you to change any part of your video program at any time, until you create your final program on tape. With Avid Xpress, you can be as flexible and as creative as possible when editing your video programs.

This chapter explains the basic concepts and terminology that you need to be familiar with to edit video with Avid Xpress. This chapter contains the following sections:

- [Video Editing with Avid Xpress](#)
- [Avid Xpress Essentials](#)
- [The Avid Xpress File System](#)

# Video Editing with Avid Xpress

In traditional video editing, you electronically copy video from a source tape to an edit master tape. The process is tedious, and it is difficult to make changes to your work.

By contrast, when you edit with Avid Xpress, you don't have to dub footage onto a master videotape. Instead, you manipulate Avid Xpress "clips" that reference your digitized audio and video material. This allows you to experiment with every edit you make through multiple generations. You can trim, move, delete, duplicate, or modify individual frames or entire segments, and immediately see the results.

When you play back your work, the system accesses and plays the appropriate portions of the digitized video and audio.

The following is a summary of the Avid Xpress editing process:

1. Collect source material for your project

Collect your source video and audio. You can start with any video format — Beta SP, 3/4 inch, 8mm, Hi 8, VHS, S-VHS, or any other. You can also incorporate still images or other computer-generated files, including computer graphics, still-image files, animations, sound effects, or AVI movies.

2. Digitize your source material

Play your source videotapes on a video deck, and digitize them right onto your hard disk. Import computer-generated files into your project — graphics, still images, animations, sound effects, synthesized music, AVI movies, and special effects.

3. Create a rough cut of your video

Play your digitized source material in Avid Xpress. Organize your sources, and lay out a storyboard using representative clip frames. Mark sections of your digitized sources, and edit them together. Reorder your material, cut and paste sections, and trim the transitions between clips. Immediately view each change you make.

Save the changes that you like; easily undo the changes that you don't like.

#### 4. Refine your edits

Use Avid Xpress to enhance your program with special effects, such as dissolves, wipes, filters, and video overlays. Add graphics and animations, CD-quality sound, and a voice-over. Incorporate titles and credits.

#### 5. Record your finished program

Record your final program from Avid Xpress onto videotape. Save a copy of your program in AVI format for CD-ROM or network distribution. Modify and record a new version of your program at any time.

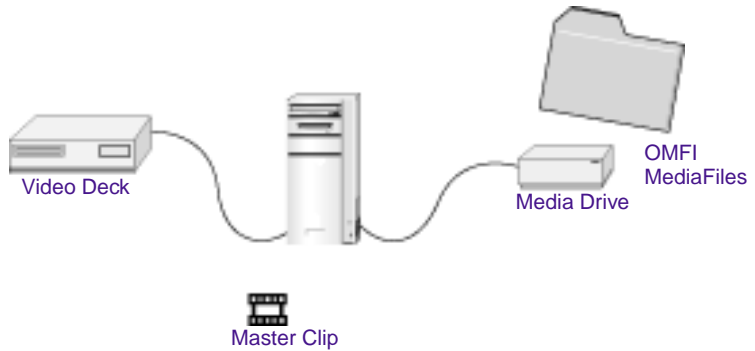
## Avid Xpress Essentials

This section explains the terms and concepts that you will need to know in order to understand the Avid Xpress editing process.

## Media Files

Material is stored in media files.

When you digitize source material from a video or audio deck, or when you import computer graphic files into your Avid Xpress project, the material is saved in *media files* on your system's external hard disk. One media file is created for each track of video or audio. Three media files — for one track of video and two tracks of audio — are created for a video with a stereo sound track.



## Clips

Clips point to media files.

You do not manipulate media files directly. Avid Xpress creates another file, called a *master clip*, on your system's internal disk when you digitize media. The master clip is simply a pointer to its corresponding media file.

While editing your video, you create other clips, such as graphic clips and effects clips. You make your edits by modifying clips — the corresponding media files remain unchanged. This allows you to easily create and undo edits without destroying your original material.

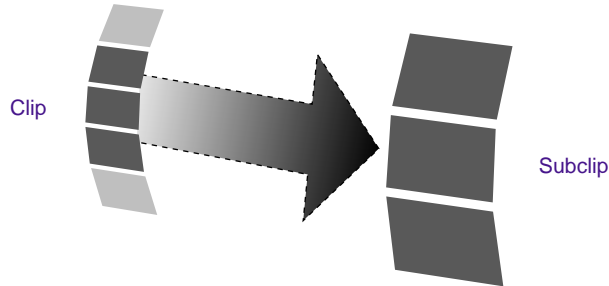
Because you work with clips instead of media files, you can create virtually unlimited versions of a program without creating multiple copies of the extremely large source material.

## Subclips

Subclips are sections that you mark within clips.

*Subclips* are specific sections of clips that you want to use in your program. You create a subclip by marking IN and OUT points in a clip and then dragging this material to the bin. The subclip is composed of the material between the IN and OUT points.

A subclip points to a media file's master clip. You must not delete the master clip from which a subclip was created. If you delete the master clip, you will lose the information in the subclip.



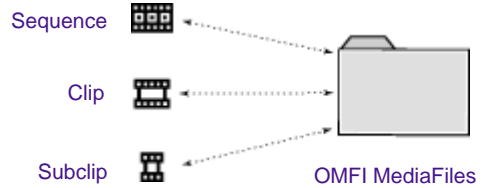
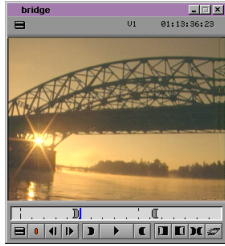
## Sequences

A sequence is a program created from one or more clips and subclips.

You can join different clips and subclips to create a *sequence*. A sequence can include edited material from source clips and subclips, new clips created when you add effects during the editing process, and material from other sequences. Your final program will be composed of one or more sequences, depending on how it's most convenient for you to work.

A sequence is composed of marked material from clips, subclips, and other sequences. The material outside the IN and OUT points remains in the media file's master clip. This material is very important, because you need it to trim cuts and create transition effects between segments. See [“Trimming” on page 102](#) for more information about trimming cuts. See the *Avid Xpress Effects Guide* for information about creating transition effects.

Like a clip, a sequence contains pointers to media files. If you delete one of the clips used to create a sequence, the sequence still works, because the sequence contains its own pointers to the media files.



## Your Program

The program is your final video creation.

A *program* consists of one or more sequences. You use clips, subclips, and sequences to build a program. Your program is represented by the Timeline. A program is your final creation; you can output your program to tape when you are finished.

Even though your media files contain the actual source material for the program, you never manipulate the media files directly. Instead, you move, copy, and edit clips, subclips, and sequences.

## Bins

You organize your footage in bins.

Clips, subclips, and sequences are organized and stored in *bins*. Traditionally, a bin is a place where film editors store reels of film. In Avid Xpress, bins are tools for organizing the material for a project.

## Your Project

You edit within a project. A project consists of one or more bins, normally containing footage for a specific program.

You gather the material you need to create a program in a *project*. Each project contains information about bins, clips, subclips, sequences, and the program in the Timeline. You may have several projects on your system, but you can only work on one project at a time.

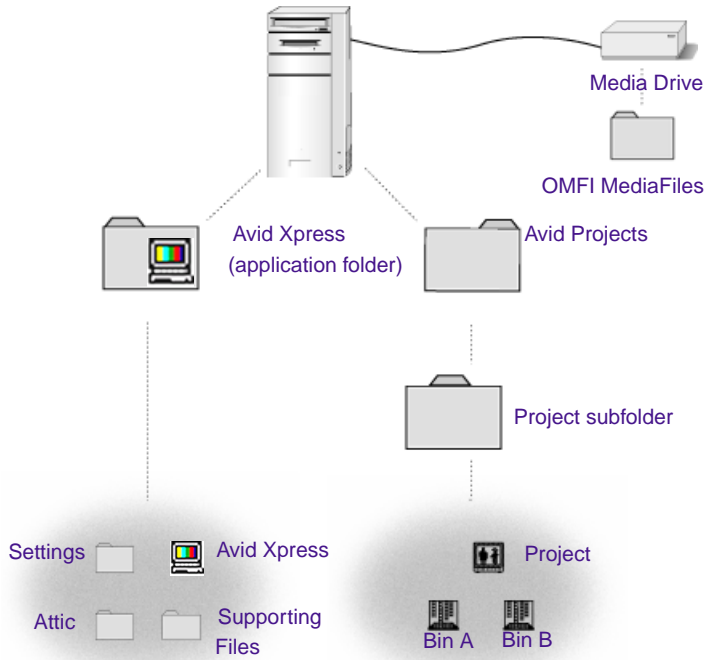
## The Attic Folder

For a complete description of retrieving bins from the Attic folder, see “Attic folder: retrieving bins from” in the Help index.

Avid Xpress saves copies of your current project and its bins at regular intervals and whenever you save or close a project or bin. These auto-save files are stored in the *Attic folder* at the base level of the internal hard drive. If at any time you lose work due to a power outage or system error, open the Attic folder and look for a project or bin of the same name.

## The Avid Xpress File System

The following illustration shows the different kinds of Avid Xpress files and where they are stored. The Avid Xpress application folder is stored on your computer’s internal hard drive. The Avid Projects folder is stored on the same disk as the Avid Xpress application folder. Media files must be stored on a separate, Avid-approved media drive, which is guaranteed to be fast enough to support real-time video playback.





# CHAPTER 3

## *Starting a Project*

The Project window provides controls in three different display modes for structuring and viewing important information about your current project. These include a display of bins and folders associated with the project, a list of all settings, and basic information about the format of the project and use of system memory and hardware.

Starting a project is described in the following sections:

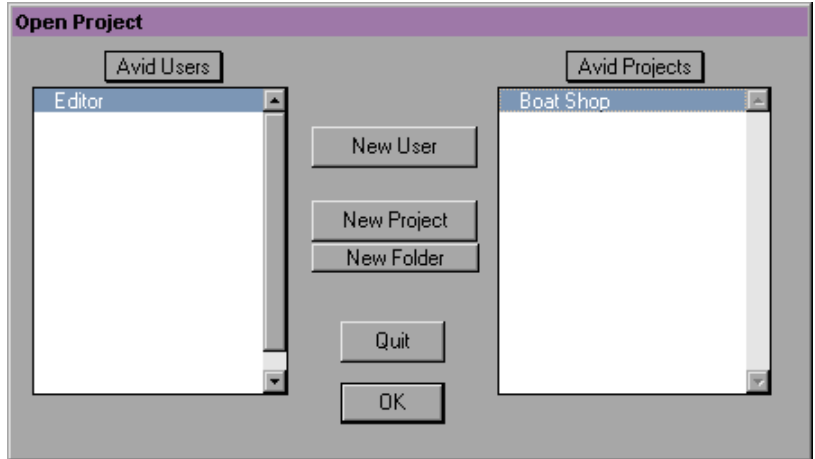
- [About Avid Projects and Avid Users Folders](#)
- [Using the Bins Display](#)
- [Using the Settings Display](#)

[Tutorial: Starting a Project](#) contains the following sections:

- [Starting Avid Xpress](#)
- [Opening a Project](#)

# About Avid Projects and Avid Users Folders

Avid Projects and Avid Users folders allow you to move whole projects or selected project and user settings between systems by copying and moving files on your desktop.



When you create a new project or user, the system creates the following files and folders:

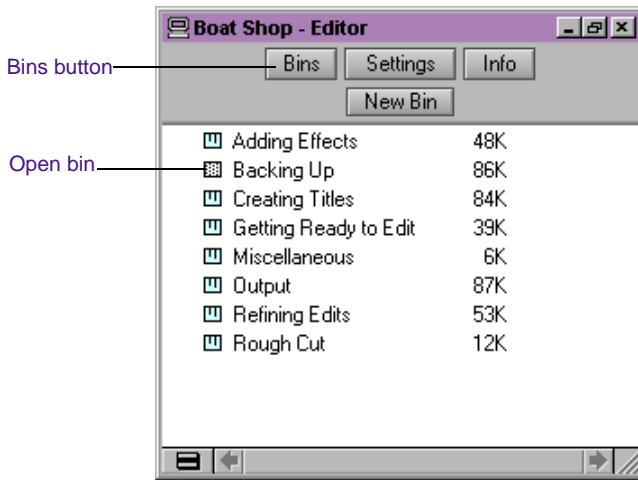
- When you create a new user, the system creates three items: a user profile file, a User settings file, and a user folder containing the two. Each item is given the user name you provide. This new folder is stored in the Avid Users folder on the internal hard drive.
- When you create a new project, the system creates three items: a project file, a Project settings file, and a folder containing the two, each of which is given the project name you provide. This new folder is stored in the Avid Projects folder on the internal hard drive.

Your settings are initially set to the default values. As you work, the files maintain current settings, while the project folder fills with bin files.

# Using the Bins Display

Bins are windows that store titles, “thumbnails,” and information about the materials you digitize. These editable files are called master clips. They refer to the actual media files created when you digitize source material. While the physical media are stored on external hard drives, the master clips that refer to that media reside in the bin. Bins also store the sequences, subclips, group clips, and effect clips that you create during a project. The Project window allows you to make a new bin, close it, reopen it, and move clips among these bins. You can also open bins created for different projects.

After you select a user and project in the Open Project dialog box, the Project window opens. To view a complete list of bins associated with the project, click the Bins button in the Project window. A list of bins appears.



From the Bins list you can examine the number, names, size, and location of bins, and you can also open bins. Dotted bin icons next to bin names indicate bins that are currently open; solid icons indicate closed bins.

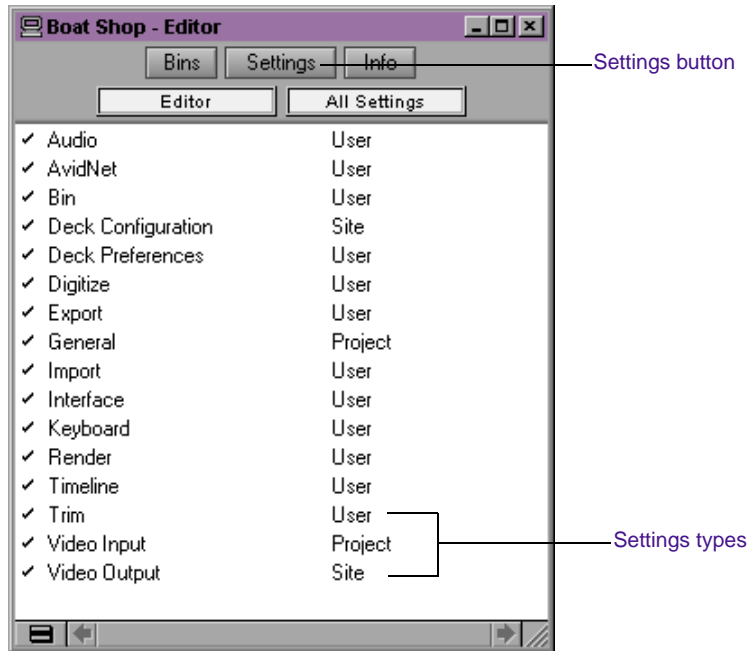


The Trash icon appears in the Bins setting window when you delete a bin. You can use the Trash to retrieve bins you deleted by mistake, or empty the Trash to create more disk space. To empty the contents of the Trash, right-click the Trash icon and choose Empty Trash from the shortcut menu.

## Using the Settings Display

From the Settings display you can view, select, open, and alter various User, Project, and Site settings, as described in this section.

To view the Settings display, click the Settings button in the Project window.



Three types of settings are displayed in the Settings scroll list: User, Project, and Site settings.

- **User settings** are specific to a particular editor. In general, User settings reflect individual preferences for adjusting the way you view the Avid Xpress system. Individual User settings are stored in each user folder within the Avid Users folder on the internal hard drive.
- **Project settings** are directly related to individual projects. When a Project setting is changed, it affects all editors working on the project. Specific Project settings are stored in each project folder within the Avid Projects folder on the internal hard drive.
- **Site settings** establish default parameters for all new users and projects on a particular system. These can apply to particular configurations of equipment installed at the site, for example, spec and node settings for an external switcher. They can also include other User or Project settings that you copy into the Site Settings window. Site settings are stored in a separate Settings folder in the Avid Xpress folder on the internal hard drive.

For a complete description of all settings and their options, see “Settings:described” in the Help index.

# Tutorial: Starting a Project

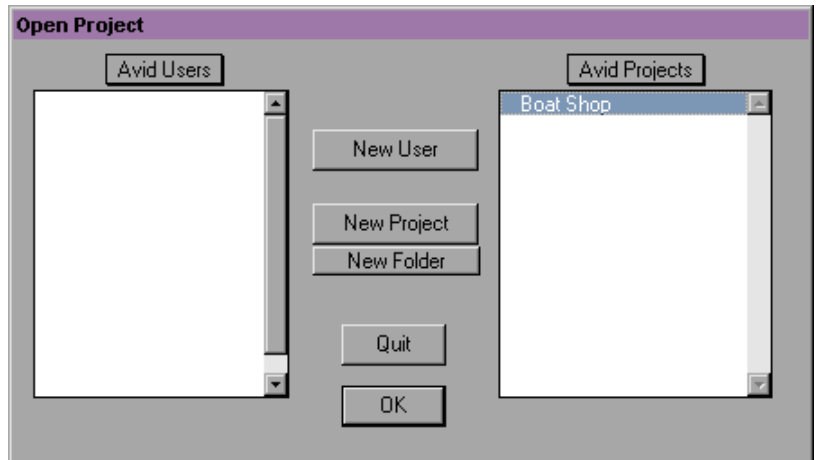
In this tutorial, you start Avid Xpress, create a user, and select a project. Before starting this procedure, make sure you have installed the Tutorial files (see [“Installing the Avid Xpress Tutorial Files” on page 15](#)).

## Starting Avid Xpress

To start Avid Xpress:

1. Click the Start button, and then point to Programs.
2. Point to the Avid Xpress folder.
3. Select Avid Xpress.

The Avid splash screen appears, and then the Open Project dialog box appears.



For this tutorial, you will use the Boat Shop project (along with its settings file) that you copied into the Avid Projects folder in [Chapter 1](#).

# Opening a Project

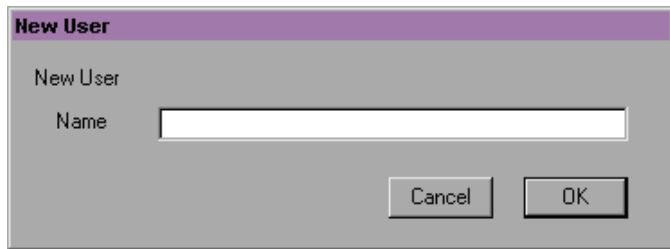
To open a project, you create a new user and select an existing project.

## Creating a User

To create a new user:

1. Click the New User button on the Open Project dialog box.

The New User dialog box appears.



2. Type **Editor** and click OK.

The Open Project dialog box reappears with Editor highlighted in the list of users.

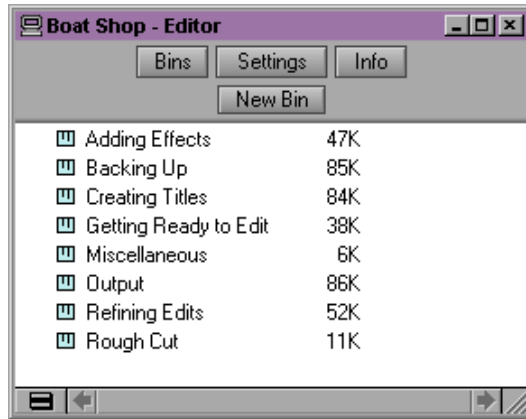
## Selecting a Project

To select a project:

1. Select Boat Shop from the Avid Projects list and click OK.

The Project window opens. It lists the bins, or storage areas, created to hold the clips and sequences you will need for this tutorial.

Click on the Project window and press F1 to bring up the context-sensitive Help for the Project window.



2. Double-click the icon to the left of **Getting Ready to Edit** to open the bin.

This bin contains the clips of the source footage you will use to begin to build the Boat Shop sequence.

You've finished this tutorial. The next tutorial is "[Tutorial: Getting Ready to Edit](#)" on page 55. Be sure to read Chapter 4 and the introductory material in Chapter 5 before continuing the tutorial.



# CHAPTER 4

## *Digitizing*

This chapter discusses the digitizing process and related tools.

Digitizing is described in the following sections:

- [Selecting Settings](#)
- [About the Digitize Tool](#)
- [About the Audio Tool](#)
- [About the Video Input Tool](#)
- [Digitize Preparations Check List](#)
- [Digitizing](#)

# Selecting Settings

For more information on the selecting settings, see “Digitizing: settings for” in the Help index.

A number of settings have a direct bearing on the digitizing process. Before digitizing, review the following options for General settings, Deck settings, and Digitize settings:

- **Drive Filtering Based on Resolution** causes the system to dim all drives for which speed capabilities are unknown or untested in a particular resolution. This setting is selected by default in the General Settings dialog box.



**The Avid Xpress system does not prevent you from using non-Avid drives, but their reliability cannot be assured.**

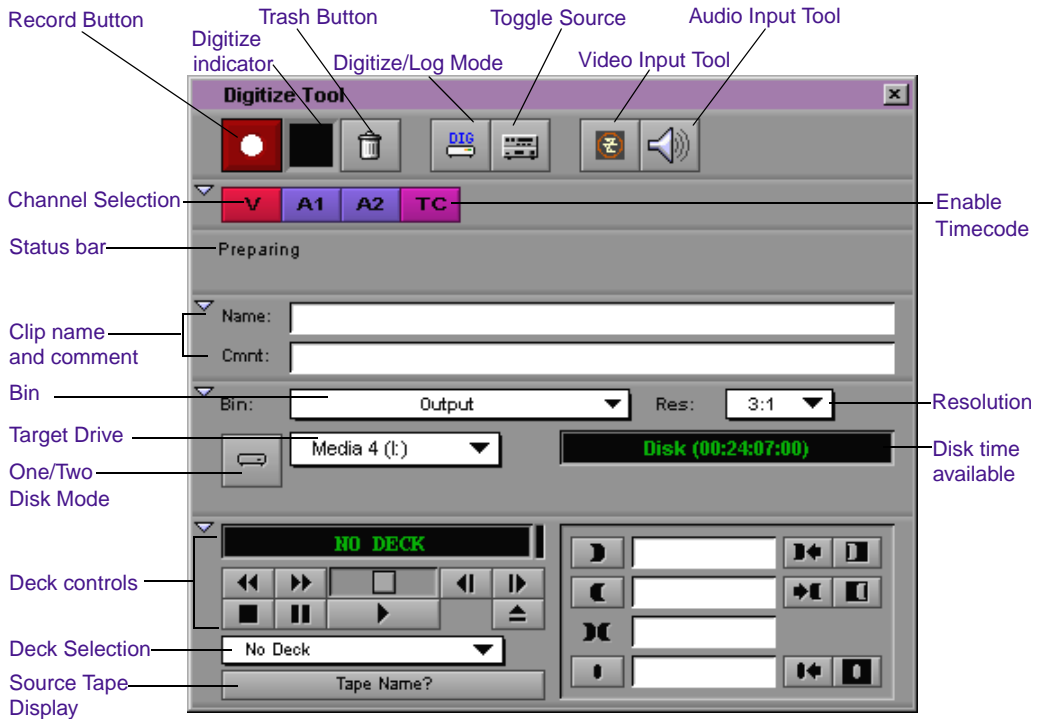
- **Deck Configuration Settings** allow you to establish deck control parameters.
- **Deck Preferences** include various options for source deck, sync mode, preroll, drop/non-drop-frame preference, and deck control.
- **Digitize Settings** include essential options for digitizing and batch-digitizing, including general parameters for capture of the source material, and special conditions such as digitizing across timecode breaks or capturing a single video frame.

# About the Digitize Tool

For more information on the Digitize Tool, see “Digitize Tool” in the Help index.

The Digitize Tool provides controls for digitizing your footage.

To open the Digitize Tool, choose Digitize from the Tools menu. The Digitize Tool window opens.



The Digitize Tool has the following controls:

- **Channel Selection panel** lets you choose which video and audio tracks you want to digitize from the source tape and whether you want to record timecode.
- **Bin pop-up menu** lets you choose a target bin as the destination for the master clips created when you digitize on-the-fly. You can

also choose a target bin containing the logged clips you will use to batch-digitize your media.

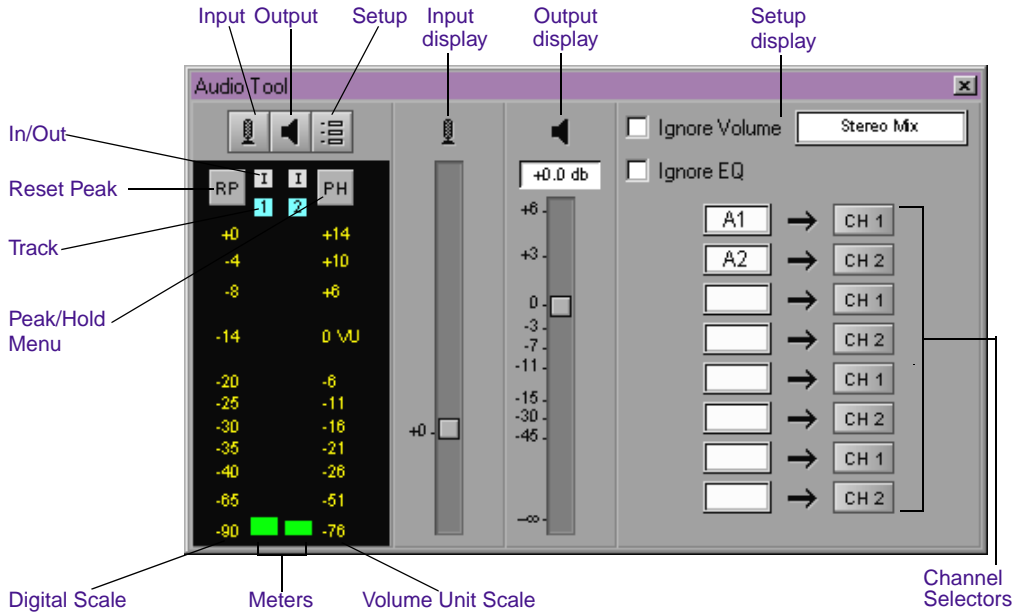
- **Resolution pop-up menu** next to the Bin pop-up menu lets you choose a resolution.
- **Digitize indicator** flashes on and off while you are digitizing.
- **Record button** begins the digitizing process.
- **Digitize/Log Mode button** lets you switch between Digitize mode and Log mode.
- **One/Two Disk Mode button** lets you target a single or separate media drive volumes for digitizing the audio and video for each clip.
- **Target Drive pop-up menu** lets you choose the target drive volumes.
- **Disk time available** is displayed after you select a video resolution and target a drive or drives for the digitized media.
- **Trash button** stops the digitizing process and deletes the digitized media.
- **Status bar** displays information on the current status of the tool.
- **Toggle Source button** switches between the deck being online or offline. When the deck is offline, the software ceases to recognize the deck.
- **Deck controls** operate the deck.
- **Deck Selection pop-up menu** lets you choose the deck you want to play from. It also lets you check and reset serial port connections to decks.
- **Source Tape display** shows the name of the source tape.

# About the Audio Tool

For more information on the Audio Tool, see “Audio Tool” in the Help index.

The Audio Tool controls parameters for audio input and output.

To open the Audio Tool, choose Audio Tool from the Tools menu or click the Audio Tool icon in the Digitize Tool window. Click the Input, Output, and Setup buttons to fully open the Audio Tool.



The Audio Tool has the following controls:

- **Input display** lets you adjust the input level.
- **Output display** contains a single slider control for raising or lowering global audio output.
- **Setup display** contains information and controls for adjusting audio output.
- **Reset Peak button** resets the current maximum peak measurements. It also stops the playback of the internal calibration tone.

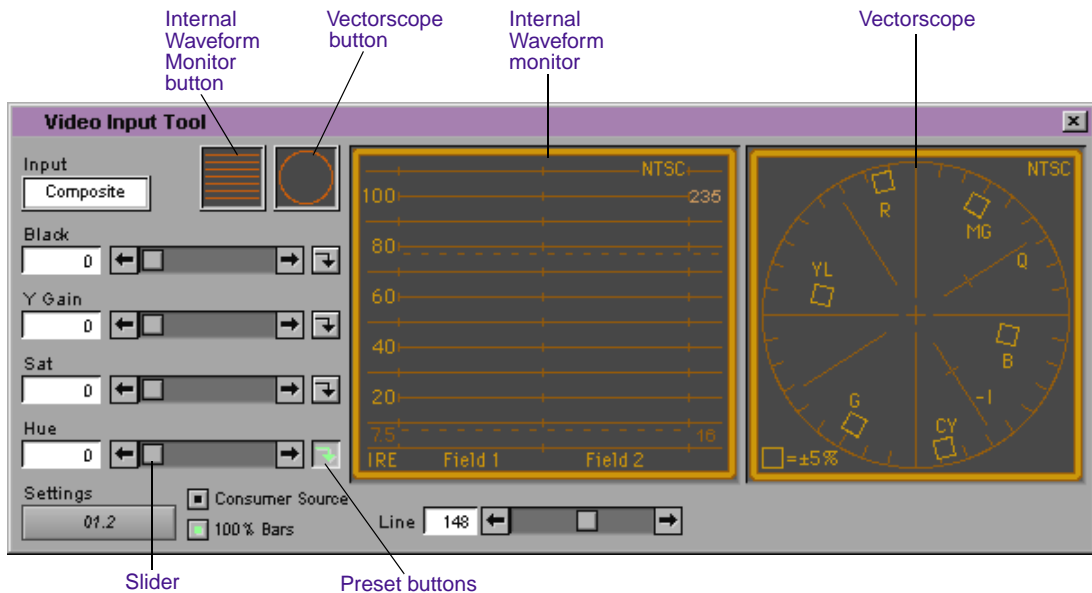
- **In/Out buttons** switch the meter displays for each channel between input levels from a source device and output levels to the speakers and record devices. I indicates input, and O indicates output.
- **Peak Hold menu** allows you to choose options for customizing the meter displays, and setting and playing back the internal calibration tone.
- **Digital scale** to the left of the meters displays a fixed range of values from 0 to -90 decibels (dB), according to common digital peak meter standards.
- **Volume Unit scale** to the right of the meters displays a fixed range of values that you can conform to the headroom parameters of your source audio.
- **Meters** dynamically track audio levels for each channel as follows:
  - Meters show green below the target reference level (the default reference level is -14 on the digital scale).
  - Meters show yellow for the normal headroom range, above the reference level to approximately -3 dB.
  - Meters show red for peaks approaching overload, between -3 dB and 0 (zero) dB.
  - Thin green lines at the bottom indicate signals below the display range.
- **Channel Selector** pop-up menus let you map tracks in the sequence to output channels.

# About the Video Input Tool

For more information on the Video Input Tool, see “Calibrating: video input” in the Help index.

The Video Input Tool controls parameters for incoming video.

To open the Video Input Tool, choose Video Input Tool from the Tools menu or click the Video Input Tool icon in the Digitize Tool window. Click the Internal Waveform Monitor button and Vectorscope button to fully open the tool.



The Video Input Tool has the following options:

- **Input pop-up menu** lets you choose either a Composite, Component, or S-Video input source.
- **Sliders** let you change the value for Black, Y Gain, Saturation, and Hue.
- **Preset buttons** are highlighted when the factory preset levels are displayed. When you click a lit Preset button, it turns gray and the slider returns to the most recent manual level setting.

- **Settings pop-up menu** lets you save the settings for an individual tape each time you calibrate bars.
- **Consumer Source** is selected if you are using a consumer-grade video deck (VCR), or a deck that has no built-in time-based corrector.
- **100% Bars** is used if the source displays 100% bars for calibration.
- **Internal Waveform monitor** lets you adjust luminance values.
- **Vectorscope monitor** lets you adjust hue and saturation.

## Digitize Preparations Check List

- 1. Check your hardware configurations: power switches, cable connections, and remote switch on the source deck for deck control (see the *Avid Xpress Setup Guide* for hardware configurations).
- 2. In the Project Settings scroll list, make sure you have the desired options selected in the General Settings, Deck Settings, Deck Preferences, Deck Configuration, and Digitize Settings dialog boxes.
- 3. Make sure your drives are striped according to the *Avid Xpress Setup Guide* if you are working on a complex project with multiple streams of video and high-resolution images.
- 4. Consider labeling each of your external disk drives with a meaningful name to help identify the information on the drive.
- 5. Insert a tape into the deck and set up the Digitize Tool for track selection, target bin, target drives, source tape, and source deck.
- 6. Use the Audio Tool to set the audio input levels.
- 7. Use the Video Input Tool to set the video input levels; save your video settings for future use.

# Digitizing

You can digitize your source material in one of the following ways:

- Digitize and log at the same time
- Batch digitize
- Redigitize

## Digitizing and Logging at the Same Time

When you digitize without entering log information in a bin ahead of time, the system creates clips and associated media files while you digitize. Digitizing in this manner involves manually cueing source footage with an Avid-controlled deck using the deck controls in the Digitize Tool.

For more information on digitizing, see “Digitizing” in the Help index.

There are several ways to digitize and log at the same time. They are:

- **Digitizing from a mark IN to a mark OUT.** This method lets you specify the exact timecode location to begin and end digitizing. You can also specify only a mark IN or mark OUT, and enter the other mark on-the-fly.
- **Digitizing on-the-fly.** This method is easier than setting marks, but it is less precise. It involves using the deck controls in the lower left corner of the Digitize Tool to cue, play, and stop the source footage manually while digitizing.
- **Autodigitizing.** This method requires the least amount of supervision and effort, but usually calls for more digitizing time and disk storage space. It involves playing each source tape from a cue point near the beginning and letting the system digitize the entire tape, automatically naming and entering each clip into the bin.

## Batch Digitizing

For more information and procedures, see “Batch Digitizing” in the Help index.

Once you have imported a log or manually logged a group of clips into a bin, you can automate the digitize process by using the Avid Xpress batch digitizing capabilities. To batch digitize, source tapes must have timecode.

## Redigitizing

For more information and procedures, see “Redigitizing” in the Help index.

Redigitizing is the process of capturing previously digitized source footage based on existing clips and sequences. Redigitizing uses the batch digitize process and does not require extra logging time because the clip information for such things as source tracks, timecodes, and resolutions already exists in the bin.



# CHAPTER 5

## *Getting Ready to Edit*

Before starting an editing session, you need to understand how to organize and manipulate your clips.

Preparing to edit is described in the following sections:

- [About Bin Display Modes](#)
- [Controlling Playback](#)
- [Marking IN and OUT Points](#)
- [Creating Subclips](#)

[Tutorial: Getting Ready to Edit](#) contains the following sections:

- [Viewing Clips](#)
- [Playing Clips](#)
- [Marking Edit Points](#)
- [Subclipping](#)

# About Bin Display Modes

You can use two display modes for viewing and working with clips in a bin: Text mode and Frame mode.

The Bin Fast menu displays the same menu as the Bin menu on the toolbar along the top of your screen.

- In *Text mode*, clips are displayed in a database text format using columns and rows, with icons representing the various objects. You can save various arrangements of columns, text, and objects as customized *views* by using the Bins settings in the Project window and the Bin Fast menu.

To enter Text mode, click the Text Mode button (T) in the lower left corner of the bin.

Column headings	Name	Tracks	Start	End	Duration	T
Object icons	Untitled Sequence.01	V1 TC1	01:00:00:00	01:00:13:12	13:12	
	ducks	V1	01:20:31:16	01:20:42:00	10:14	
	dories ws	V1	01:06:27:25	01:06:50:18	22:23	
	bridge	V1	01:13:31:21	01:13:48:00	16:09	
	rowing in mist	V1	01:01:45:23	01:03:12:22	1:26:29	
	two dories	V1	01:10:57:00	01:11:13:22	16:22	
	planing ms	V1 A1-2	04:09:19:18	04:09:33:07	13:19	
	dories to models	V1 A1-2	04:25:13:08	04:25:31:16	18:08	
	chiseling	V1 A1-2	04:11:26:29	04:11:42:10	15:11	
	planing cu	V1 A1-2	04:10:00:02	04:10:14:14	14:12	
	hammering	V1 A1-2	04:05:10:08	04:05:11:11	1:03	
	drilling	V1 A1-2	04:04:47:25	04:05:01:26	14:01	
	wood burning	V1 A1-2	04:13:43:24	04:15:15:19	1:31:25	
	tools	V1 A1-2	04:04:43:17	04:05:27:26	44:09	
	sanding	V1 A1-2	04:06:44:16	04:07:01:04	16:18	
	drawknife cu	V1 A1-2	05:01:55:23	05:02:15:23	20:00	
	sign	V1 A1-2	05:06:40:00	05:07:20:00	40:00	

- In *Frame mode*, each clip is represented by a single picture frame, with the name of the clip. You can play back the footage in each frame, change the size of frames, and rearrange frames in any order within the bin.

To enter Frame mode, click the Frame Mode button (F) in the lower left corner of the bin.



## Controlling Playback

There are several ways to play, view, and cue clips. You can:

- Instantly access frames or move through footage by using the *position indicator* within the position bar under the Composer and Source pop-up monitors
- Play, step (jog), or shuttle through footage by using the buttons that appear below the Composer and Source pop-up monitors
- Play, step, or shuttle by using keyboard equivalents

## Using Position Bars and Position Indicators

You can quickly access frames within a clip that's been loaded into a monitor or move through the footage by using the position indicators that appear in the position bars under the Composer or Source pop-up monitors, and in the Timeline when you are viewing a sequence.

- You can move the position indicator within the position bar under the Composer or Source pop-up monitors by clicking anywhere in

the position bar, or by dragging the position indicator to the left or right. The speed with which you drag the position indicator determines the speed at which you move through the footage.



- In the Timeline, the position indicator shows your position within the sequence. It is always in the same position as the position indicator in the Composer monitor's position bar, and works in the same way. You can click anywhere in the Timeline to relocate the position indicator, or you can drag the position indicator through footage at varying speeds.



- You can go directly to the beginning or end of a clip or sequence by clicking at the far left or far right of the clip or sequence.

## Using Buttons

You can use the buttons that appear below the Composer and Source pop-up monitors to play and step through your footage. You can also use the keyboard to manipulate footage.

## Play Button



The Play button works like the Play button on a VCR. With a clip loaded in a monitor, the Play button plays your footage at a normal rate. During playback, the Play button acts as a Pause button.

The Play button appears by default in the buttons below the Composer and Source pop-up monitors.

For more information on using the Play button, see “Play Button:using” in the Help index.

When viewing sequences in the Composer monitor, you can play only video and audio tracks that are currently monitored in the Track Selector panel.

## Step Buttons



You can also use the Step buttons under either monitor to jog or play the clip backward or forward in 1-frame increments.

If you press the Alt key as you click either button, you can advance ten frames forward and ten frames backward.

## Using the Tool Palette

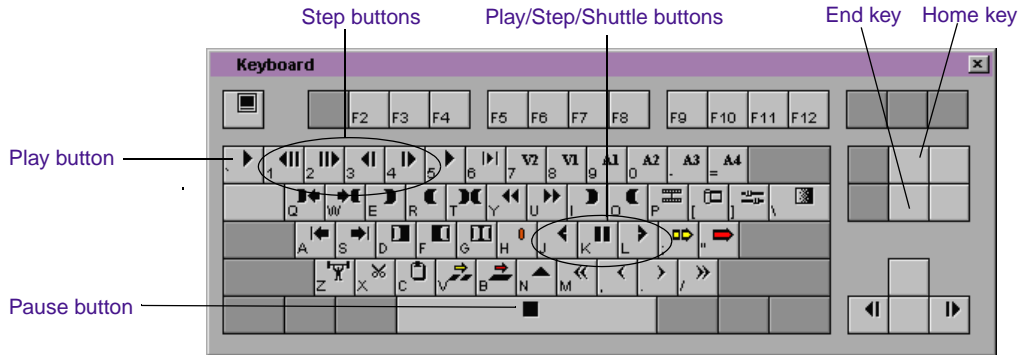
The Tool Palette provides additional buttons for editing and navigating.



You can view the Tool Palette by clicking the Fast Menu button under the Composer or Source pop-up monitors. Drag the Tool Palette to any other location on the screen for easy access. If necessary, resize the Tool Palette so that it displays both rows of buttons.

# Using the Keyboard

The default keyboard contains all of the buttons discussed so far as well as several additional ones. To access the keyboard, choose Keyboard from the Project Window Settings scroll list.



## J-K-L Keys (Three-Button Play)

The J-K-L keys on the keyboard allow you to play, step, and shuttle through footage at varying speeds. This feature, also referred to as *three-button* or *variable-speed* play, allows you to use three fingers to manipulate the speed of playback for greater control.

To shuttle through the footage using the J-K-L keys on the keyboard:

1. Load a clip or sequence into the Composer or Source pop-up monitors.
2. Use the following keys to shuttle at varying speeds:
  - Press the L key to move forward through the footage at normal speed. Press once to increase the forward speed 2 times, twice to increase it 4 times, and three times to increase it 8 times normal speed.
  - Press the J key to move backward at the same shuttle speed increments.

- Press and hold the K and L keys together for slow forward.
  - Press and hold the K and J keys together for slow backward.
3. To pause the shuttling, press the K key or the space bar.

## Home, End, and Arrow Keys

You can also use the Home, End, and arrow keys on the keyboard to move through footage when a clip is loaded in a monitor.

- The Home key takes you to the beginning of a clip or sequence.
- The End key takes you to the end of a sequence.
- The Left Arrow key moves the footage one frame forward.
- The Right Arrow key moves the footage one frame backward.

## Marking IN and OUT Points

You can mark IN and OUT points for your clips in advance, which provides several advantages:

- You can quickly build a sequence by splicing the marked clips into place one after another.
- You can use the process of rough-cut or *storyboard* editing, which allows you to instantly splice several prepared clips into a sequence (see [“Storyboarding” on page 94](#)).
- You can play back and mark clips in the bin before loading a single clip, saving several steps.
- Even if your marks are not accurate now, the Avid Xpress system allows you to trim the edit points and fine-tune the sequence later without reediting the material.

# Creating Subclips

When you mark footage with IN and OUT points, you can either save the entire clip along with the new marks, or you can create subclips based on the marks you set to break up longer master clips into smaller segments of selected footage.

This is similar to creating selects of all your best footage before editing. Unlike selects, however, subclips do not directly reference the original media. Subclips remain linked to the master clips from which they are created, and the master clips in turn reference the digitized media files located on your storage drives. As a result, none of the original footage is lost.

You can create subclips directly from the marked section of material in the monitors by using one of the following methods:

- **Alt key:** Press and hold the Alt key, then drag the picture from the monitor to the bin in which you want to store the subclip.
- **Subclip button:** Click the Subclip button located on the Tool Palette to create the subclip and place it into the active bin by default. If you press the Alt key as you click the Subclip button, the Bin Selection dialog box appears, enabling you to choose the destination bin for the subclip.



The new subclip is listed in the bin, preceded by a subclip icon and identified with a numbered.*Sub* suffix.

Subclips do not limit your access to the original, digitized master clip material when trimming. Therefore, if you must trim beyond the marked IN to OUT boundaries of the subclip to make it longer or shorter, your system does accommodate the boundary adjustments during the trim.

# Tutorial: Getting Ready to Edit

The following tutorial steps correspond to the clips and sequence in the bin titled **Getting Ready to Edit**:



*Be sure to read [Chapter 2](#) and the preceding overview sections of this chapter before you start the tutorial.*

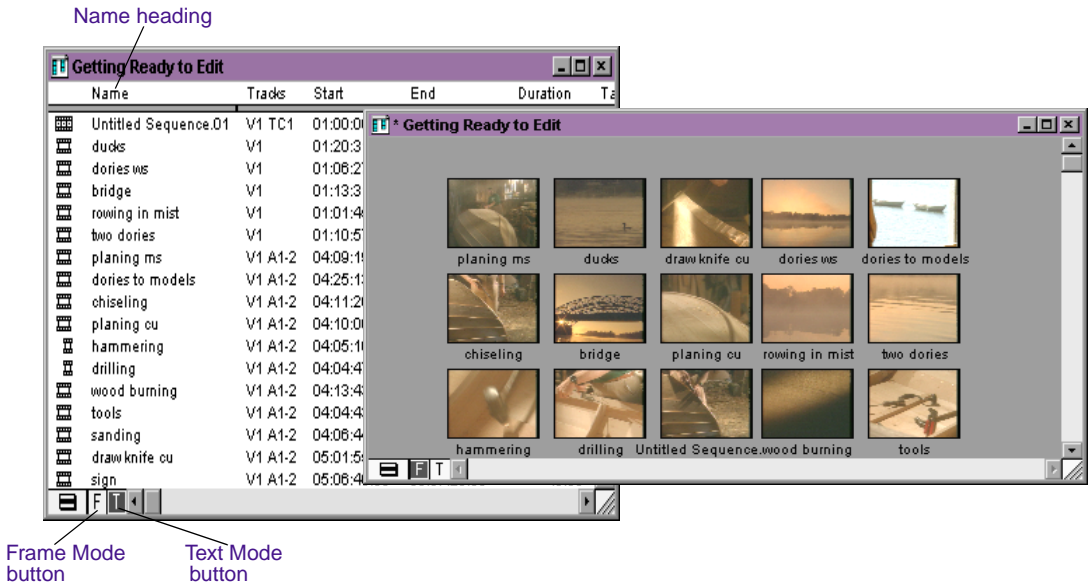
1. If Avid Xpress is not already running, start it by double-clicking the Avid Xpress icon.
2. From the Boat Shop Project window, double-click the **Getting Ready to Edit** bin.

The clips associated with the tutorial are displayed in the bin.

## Viewing Clips

The information in a bin can be viewed in several ways:

- Text mode displays columns of information about your clips.
- Frame mode displays each clip as a single representative image.



## Viewing in Text Mode

Let's look at Text mode.

1. Click the Text Mode button (T) in the lower left corner of the bin to view information about clips in the **Getting Ready to Edit** bin.

If the button is dark, you are already in Text mode.

You can rearrange the clips in the bin by sorting on a particular column. Let's sort by clip name so we can easily locate any clip.

2. Click the Name heading in the bin.
3. Choose Sort from the Bin menu along the top of the screen.

The clip names are rearranged in alphabetical and numerical order.

## Viewing in Frame Mode

Now let's look at Frame mode.

1. Click the Frame Mode button (F) to see a pictorial representation of each clip in the bin.



*The sorted order of clips does not carry over to Frame mode.*

You can also press Ctrl+K (Reduce Frame) and Ctrl+L (Enlarge Frame) to change frame size.

2. Choose Reduce Frame or Enlarge Frame from the Edit menu.
3. Click the Maximize button at the right of the title bar.

The bin enlarges to enclose all the clips. However, they might be scattered randomly in the bin window. Let's fix that.

4. Choose Fill Window from the Bin menu.

The clips are arranged in neat rows and columns in the bin.

Now you can adjust frame size so the clips are “readable” but not so large that they won't fit in the bin window.

## Playing Clips

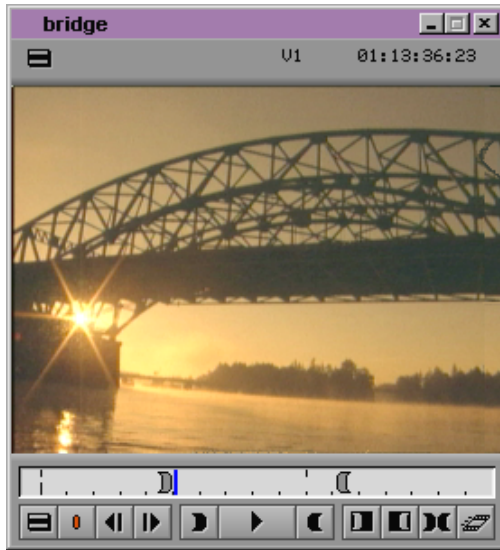
Your Avid Xpress system offers a variety of ways to play clips. The more you practice the various methods, the more control you will have over the editing process.

### Playing Clips in a Source Pop-up Monitor

A Source pop-up monitor is a window in which you can play clips.

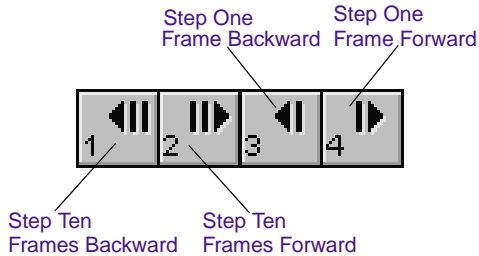
1. In the **Getting Ready to Edit** bin, select the clip named **bridge** by double-clicking anywhere in the frame.

The **bridge** clip appears in a Source pop-up monitor.



2. Press the Play (5) key on the keyboard to play the clip at normal speed.
3. Press the Play (5) key again (or press the space bar on the keyboard) to pause playback at any point.
4. Press the Home key (between the main keyboard and the numeric keypad) to go to the start of the clip.  
The End key, just below the Home key, moves the position indicator to the end of the clip.
5. Press the Play (L) key on the keyboard to play the clip forward at normal speed. Press the key repeatedly to play the clip forward at 60, 90, 150, and 240 frames per second (fps).
6. Press the Reverse Play (J) key to play the clip backward at normal speed. Press the key repeatedly to play the clip backward at 30, 60, 90, 150, and 240 frames per second (fps).
7. Press the Pause (K) key to stop playback.
8. To move forward or backward at slow speed, press the Pause (K) key as you press the Play (L) or Reverse Play (J) key.

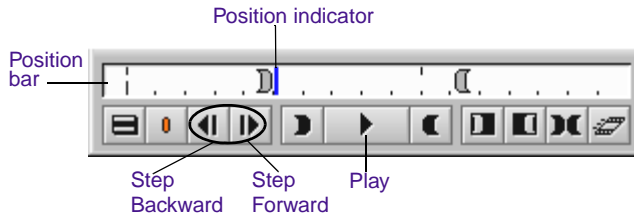
9. Use the 4, 3, 2, and 1 keys to step through the footage forward or backward in 1-frame or 10-frame increments.



## Controlling Playback

In a Source pop-up monitor, you can use:

- Playback control keys
- Equivalent buttons below a Source pop-up monitor
- Blue position indicator to go to a specific position or scroll (move) through a clip



1. Double-click the **tools** clip in the **Getting Ready to Edit** bin.

The clip appears in a Source pop-up monitor.

You can also press the 5 key on the keyboard to play.

2. Click the Play button.
3. Click the Play button again (or press the space bar on the keyboard) to pause playback at any point.

4. Step through the footage forward or backward in 1-frame increments using the Step Forward and Step Backward buttons under the Source pop-up monitor. You can also use the 4, 3, 2, and 1 keys on your keyboard.
5. Locate the vertical blue position indicator in the position bar in the Source pop-up monitor.
6. Click to the left of the position indicator to step several frames back in the clip.
7. Press the Home key to go to the beginning of the clip.
8. Step through the clip by clicking different spots in the position bar.
9. Drag the position indicator to the left, then to the right, to scroll through the clip.

To step several frames forward, click just to the right of the position indicator.

Press the End key to go to the end of the clip.

## Marking Edit Points

Before making your first edit, you can mark the segments of the clips you want to use in your sequence. You can mark clips in a Source pop-up monitor.

In this section, you:

- Mark IN and OUT points in a Source pop-up monitor.
- Locate IN and OUT points by timecode in a Source pop-up monitor.

## Marking the *planing ms* Clip

Let's first display clips in a Source pop-up monitor, and then mark a couple of clips you will use when you edit the sequence.

1. Activate the **Getting Ready to Edit** bin by clicking anywhere in it or by choosing **Getting Ready to Edit** from the Windows menu.

The bar above the active window turns purple.

2. Double-click the **planing ms** clip to open it.

The clip name is highlighted and the clip appears in the Source pop-up monitor.

3. Play the clip from the head by pressing the Home key and then the Play (5) key, and find the approximate place where the boatbuilder begins to plane. Then use the Step Forward and Step Backward (3 and 4) keys to locate the frame where he starts the first planing stroke.



4. Mark an IN point by pressing the Mark IN (I) key.



A white sawtooth pattern appears on the left edge of the Mark IN frame.

5. Step forward two full strokes of the plane.



6. Mark an OUT point by pressing the Mark OUT (O) key.

Avid Xpress remembers your IN and OUT points until you change them.

## Marking the *ducks* Clip

Now mark the IN and OUT points for the **ducks** clip. This time, instead of using the 5 key, use the J-K-L keys to play the clip.

1. Double-click the **ducks** clip to open it.
2. Locate the frame where the second duck enters the right edge of the frame behind the duck swimming in the foreground.

Use the 3 and 4 keys to locate the precise frame.

3. Mark an IN point by pressing the I key.

A white sawtooth pattern appears on the left edge of the Mark IN frame.

4. Step forward to locate the first frame where the same duck flies beyond the left edge of the screen.

5. Mark an OUT point by pressing the O key.

A white sawtooth pattern appears on the right edge of the Mark OUT frame.

## Marking the *draw knife cu* Clip

Let's mark another clip we'll use in the sequence.

1. Open the **draw knife cu** in a Source pop-up monitor by double-clicking it in the **Getting Ready to Edit** bin.

When you edit the sequence, you want to show just three strokes of the knife.

2. Place the position indicator around the midpoint of the clip, and play forward until just after the first fairly large wood chip falls off.

Use the Play button (or J-K-L keys) to get close to the frame, and then use the Step buttons to locate the frame you want to use as your IN point.

3. Mark an IN point by clicking the Mark IN button under the monitor.

A white sawtooth pattern appears on the left edge of the Mark IN frame.

4. Step forward and locate a frame just after three strokes of the knife.

5. Mark an OUT point by clicking the Mark OUT button under the monitor.

A white sawtooth pattern appears on the right edge of the Mark OUT frame.

## Using Timecode to Find a Frame

You can mark IN and OUT points by using timecode as your reference point. If you know the timecode for the frame you want to mark, you can go to that frame instantly by typing it on the numeric keypad.

In this section, you will use visual cues to mark an IN point, and then locate a specific timecode. First, you need to display the appropriate timecode information.

1. Double-click the **chiseling** clip to open it.
2. Place the cursor in the gray title bar area over the timecode information displayed above the Source pop-up monitor.
3. When the cursor changes to a downward arrow, click to display the pop-up menu, then choose TC, V1 (timecode for track V1) from the menu. A check mark means it is already selected.

Mas	
Dur	1:31:25
I/O	1:03
Abs	1:12:16
Rem	19:09
TC	
✓ V1	04:14:56:10
A1	04:14:56:10
A2	04:14:56:10
None	

Timecode shows the following:

Hours

Minutes

Seconds

Frames

One second holds 30 frames

The timecode references the frame displayed in the Source pop-up monitor.

4. Use the Play and Step buttons to locate the frame where the boat-builder begins one of the first strokes of the chisel.
5. Click the Mark IN button.
6. Read the timecode in the Timecode display at the IN point. Add 15 frames (13 frames PAL) to the timecode number. (Remember, there are 30 frames in a second.)

For example, if the timecode is 04:11:34:15, adding 15 frames gives you a result of 04:11:35:00.

7. Type the resulting number on the numeric keypad and press the Enter key on the numeric keypad. The system inserts the colons for you.

As you start typing, a window opens in the middle of the Source pop-up monitor, showing the numbers you type. When you press the Enter key, the position indicator locates the specified frame.

The Timecode window displays the current number.



*To locate frames using the numeric keypad, you must show the appropriate timecode in the Timecode display. For example, the timecode display must show track V1 to go to a specific frame on the V1 track.*



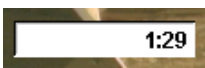
8. Click the Mark OUT button.

## Using Frame Offset

Whenever you use the numeric keypad, you must press the Enter key on the numeric keypad after typing the number.

You can also use the numeric keypad to move the position indicator forward or backward a specified number of frames, with the frame offset feature. Let's mark an IN point for the **planing cu** clip and then use frame offset to locate the OUT point.

1. Double-click the **planing cu** clip to open it in a Source pop-up monitor.
2. Use the Play and Step buttons to locate the frame where the boat-builder begins making the first stroke of the plane.
3. Click the Mark IN button.
4. To advance two seconds, type **+129 (+124 PAL)** on the numeric keypad and press the Enter key on the numeric keypad. The system inserts the colons for you.



Since Avid Xpress counts the frame it is parked on, you type one frame less than two seconds.

When using frame offset, type one frame less than the number of frames you want to advance.

If you want to move back a certain number of frames, type a minus sign (-) instead of a plus sign (+) in front of the number.

5. Mark that frame as the OUT point.

## Subclipping

Now you will copy portions of one clip into shorter clips, called subclips. Subclipping is a great way to organize your footage into manageable units.

1. Double-click the **tools** clip in the **Getting Ready to Edit** bin.
2. Press the Home key to go to the start of the clip.
3. Scroll through the clip by clicking the Play button or dragging the blue position indicator. Notice there are two separate actions that can be copied into separate subclips.
4. Mark an IN point when the boatbuilder begins turning the auger drill.
5. Mark an OUT point 14 seconds later by typing **+1400** on the numeric keypad and pressing the Enter key on the numeric keypad.

Actually, you have marked an OUT after 14 seconds and 1 frame, but that's okay because you need not be so precise here.

6. Press and hold the Alt key, and drag the picture from the monitor to the **Getting Ready to Edit** bin.

As you begin dragging, the pointer changes to a hand attached to a small box.

The subclip has the name of the original clip, followed by **Sub.n**, where **n** is the number of times the master clip has been cataloged to that bin.

A new item called **tools.Sub.01** appears in the **Getting Ready to Edit** bin. The name is highlighted.

7. Type **drilling** and press the Enter key to name the subclip.

## Clearing IN Points and OUT Points

Now you will clear previous IN and OUT points, mark new IN and OUT points, and create a new clip.



1. With the **tools** clip in a Source pop-up monitor, click the Clear Both Marks button in the Tool Palette to clear IN and OUT points.
2. Mark an IN point in the clip when the boatbuilder begins hammering, after he takes a few practice swings.
3. Mark an OUT point at the end of the clip.
4. Press and hold the Alt key, and drag the clip from the Source pop-up monitor to the **Getting Ready to Edit** bin.

The clip name is highlighted in the **Getting Ready to Edit** bin.

5. Type **hammering** and press the Enter key.

You've finished this tutorial. You can go on to [“Tutorial: Rough Cut” on page 76](#), or end the session.

## Closing the Project

To close the project:

1. Choose Close Bin from the File menu.
2. Choose Close from the File menu.

The system saves and closes the project. A dialog box appears.

3. Do one of the following:
  - Select an existing project.
  - Create a new one.
  - Click Quit.

## Ending the Session

To end the session:

1. Choose Save Bin or Save All Bins from the File menu.
2. Click the Project window labeled Boat Shop and choose Save All from the File menu.
3. Do one of the following:
  - Go to the next tutorial.
  - If you are ready to take a break, choose Exit from the File menu to quit Avid Xpress.
  - The system returns to the desktop.



# CHAPTER 6

## *Editing a Rough Cut*

Beginning to edit involves working with various elements of the Avid Xpress interface.

Editing a rough cut is described in the following sections:

- [Viewing Methods](#)
- [Navigating in the Timeline](#)
- [Displaying More or Less Detail](#)
- [Using the Track Selector Panel](#)

[Tutorial: Rough Cut](#) contains the following sections:

- [Making the First Edit](#)
- [Splicing Video into the Sequence](#)

# Viewing Methods

You can work with clips and sequences in several different ways, depending upon your needs and preferences. Each method has its own uses and advantages, as follows:

- **Viewing in bins:** Frame mode shows you pictorial images of the clips in your bins; Text mode shows you the clips listed by name.
- **Viewing in a Source pop-up monitor:** You can load clips and sequences into a Source pop-up monitor to view and mark or sub-catalog shots for use in a sequence that you build in the Composer monitor.
- **Viewing in the Composer monitor:** You can load a sequence into the Composer monitor to view, mark, or modify an existing sequence.
- **Viewing in the Timeline:** Use the Timeline to view individual tracks for either a sequence or a source clip.

## Navigating in the Timeline

The Timeline window provides various controls for quickly moving through a sequence and adjusting your view of details displayed in the tracks while editing. You can change Timeline views by using the Timeline Fast menu.

## Using the Position Indicator

The position indicator (the vertical blue line) in the Timeline marks your place in the sequence. It also determines how some of your commands are interpreted. For example, when you perform an edit, the

system takes the location of the position indicator as the Mark IN in the absence of established marks.

When you move the position indicator in the Timeline, the smaller position indicator within the Composer monitor's position bar also moves.

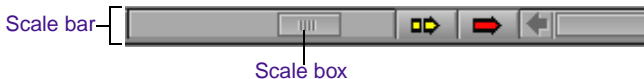
## Using the Scroll Bar

The scroll bar functions like any standard Windows scroll bar. Click the arrows or drag the scroll box to scroll left or right.



## Displaying More or Less Detail

The scale box on the scale bar stretches and contracts the Timeline area centered around the blue position bar, allowing you either to zoom in, focusing on a specific area of your sequence, or to zoom out to see your whole sequence. This is especially useful when you have a lengthy sequence with many edits.

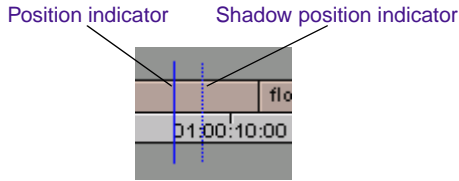


The Timeline always expands or contracts proportionally on both sides of the position indicator.

- To see more detail, click the scale box and drag it to the right.

As the Timeline expands, a second “shadow” position indicator appears next to the blue position indicator showing the end of a

single frame, and the two continue to move apart as you expand the Timeline.



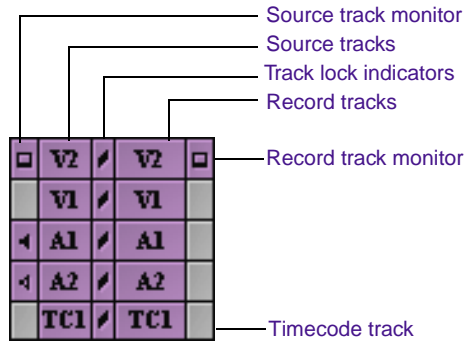
The position indicator and its shadow mark the beginning and end of each frame.

- To contract an expanded Timeline to see less detail but more of the sequence, click the scale box and drag it to the left.

## Using the Track Selector Panel

The Track Selector panel provides numerous controls for working effectively with multiple tracks. With this one resource you can select, delete, monitor, enlarge, reduce, lock, patch, and move any video or audio track.

The Track Selector panel also provides a quick display of track information. You can see which tracks (on the source or record side) are available, active, patched, monitored, or locked. The following configuration shows just one example. The Track Selector panel may look very different depending on the nature of the source material or the work underway in the sequence.



The source side (left side) of the panel displays only those tracks available for the clip currently loaded and displayed in the Source pop-up monitor. For instance, a clip that has audio digitized for track A1 only does not display an A2 track in the Track Selector panel.

The record side of the panel displays only those tracks currently in use for the sequence and displayed in the Composer monitor. However, if you edit source material with a track selected that does not yet exist on the record side (A3 or V2, in the previous example), by default the track appears on the record side after the edit takes place.

## Selecting Tracks

You can select tracks on either the record side or the source side as follows:

- You can edit selected tracks on the source side directly into the sequence, assuming you have selected parallel tracks on the record side.
- You cannot edit deselected tracks on the source side into the sequence, regardless of record track selections.
- You cannot edit deselected tracks on the record side, regardless of source track selections.

There are three methods for selecting tracks:

- Click any deactivated Track Selector button to select it. Click any activated Track Selector button to deselect it.
- Drag a lasso around multiple Track Selector buttons to select them at once.
- With the Timeline window active, choose Select All Tracks from the Edit menu to select all tracks on the record and source side.

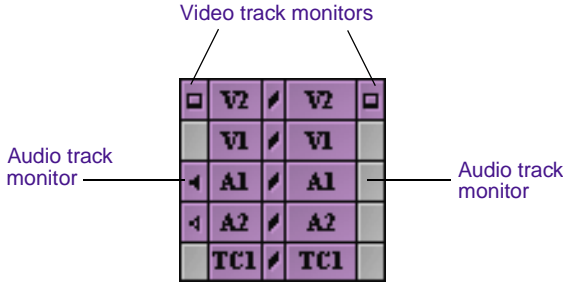
For example, you might select the source and record tracks for V1, A1, and A2 to edit video and audio from the source clip into the sequence. Select only V1 source and record tracks to edit the video without the sound. Or select only A1 and A2 to edit the sound without the video.



*There are also keyboard equivalents for selecting tracks. Check your keyboard or the Keyboard settings in the Project window Settings scroll list.*

# Monitoring Tracks

You determine the monitoring of tracks by clicking the monitor column of either the source- or record-side tracks to activate or deactivate the monitor icons.



# Monitoring Video

The video track monitor determines whether you see video during playback. You can turn it off at any time to monitor only audio during editing. When there are multiple video tracks, all tracks below the monitored track are active during playback.

When you edit with multiple tracks, you can activate the monitor on a lower track to monitor only the video on that track. This is especially useful when you have multiple layers of video effects and need to see one track without the additional layers.



*If you reposition the video monitor, be sure to return it to the topmost track to view, render, or record all the tracks together. Unmonitored tracks are not included in playback.*

# Tutorial: Rough Cut

In this tutorial you begin editing the Boat Shop sequence. This section corresponds to the clips and sequence in the bin titled **Rough Cut**. See Table 6-1.



*Be sure to read the preceding overview sections of this chapter before you start this tutorial.*

**Table 6-1 Starting the Tutorial: Rough Cut**

**If you have worked on the previous tutorial and Avid Xpress is still running:**

1. Double-click the **Rough Cut** bin to open it.

2. Click the **Rough Cut Sequence** clip and drag it into the Composer monitor to begin the tutorial.

**If you have worked on the previous tutorial but have quit the Avid Xpress system:**

1. Start Avid Xpress by double-clicking the Avid Xpress icon.

2. Click the **Rough Cut Sequence** clip and drag it into the Composer monitor to begin the tutorial.

**If you are just starting out with this tutorial and haven't completed the previous tutorials:**

1. Start Avid Xpress by double-clicking the Avid Xpress icon.

2. Click the **Rough Cut Sequence** clip and drag it into the Composer monitor to begin the tutorial.

## Making the First Edit

In this section, you lay down the audio clip, which contains the sequence's music and narration. You learn how to mark exactly 1 minute of the clip, which will be the duration of your finished sequence. First, you play the clip.

1. Double-click the **Audio Track** clip and play the clip in a Source pop-up monitor.

The clip displays as black because it's audio only.

2. Go to the head of the clip by pressing the Home key on your keyboard.

## Using Digital Audio Scrub

Use digital audio scrub to locate a specific frame of audio. Use it now to locate the first frame of music in the audio clip.

1. Press the Caps Lock key to activate digital audio scrub.
2. Play the clip again and click the Play button to stop at the approximate place where the music begins.
3. Press the Step (jog) keys (1, 2, 3, 4 on the keyboard) to locate the first frame of the music and click the Mark IN button.

When you use the Step keys, a frame of music or speech sounds scratchy or buzzlike. You might want to increase the volume of your speakers to hear the first frame of music.

4. Press the End key on the keyboard.
5. Press the Step Backward key to find the last frame of music.
6. Mark that frame as the OUT point.
7. Press the Caps Lock key again to close digital audio scrub.

## Splicing an Audio Clip



Click the yellow Splice-in button on the Tool Palette to copy the clip into the Composer monitor.

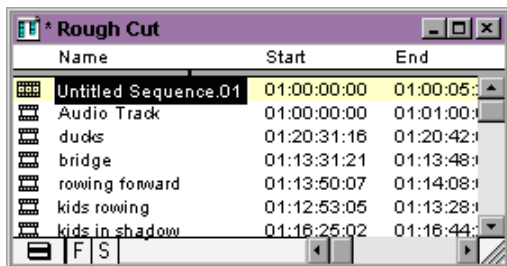
If no points are selected, the entire clip is edited into the Timeline.

The clip is edited onto track A1 of the Timeline. The first frame is the IN point you marked in the clip; the last frame is the OUT point you marked in the clip.

The audio track appears in the Timeline. The sequence also appears in the Composer monitor.

## Playing a Sequence

The **Rough Cut** bin contains your newly created sequence. By default, Avid Xpress names it **Untitled Sequence.01**. Let's change this name.



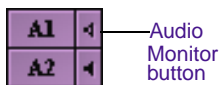
1. Click the name **Untitled Sequence.01** to select it; do not click the sequence icon.

The name is highlighted in black.

2. Type **Boat Shop Cut** and press the Enter key.

3. Click the position bar beneath the Composer monitor or anywhere near the left side of the Timeline, then click the Play button to play the audio.

This audio track should run the length of the sequence, and its duration should be approximately 1 minute.



The Audio Monitor button appears when a speaker is activated.

## Confirming the Duration

The next steps explain how to confirm the duration by displaying the master timecode, which is the timecode of your sequence.

1. If Master timecode is not displayed, click and pull down the Timecode display from the gray area above the Composer monitor and select Mas (Master) timecode.

The master timecode displays the location of the position indicator in your sequence.

2. Move the position indicator in the Timeline or the Composer monitor to the last frame of the sequence.

The master timecode should read approximately 01:01:00:00.

## Splicing Video into the Sequence

Now we'll start laying some video over the audio. For the opening shot in the sequence, use the **bridge** clip.

1. From the **Rough Cut** bin, double-click the **bridge** clip to display it in a Source pop-up monitor.
2. Mark an IN point midway through the clip, about 2 seconds after the camera begins to pan left. Watch the timecode at the top of the Source pop-up monitor to determine 2 seconds after the camera pans left.
3. Mark an OUT point 3 seconds and 6 frames (5 frames PAL) later, at approximately 01:13:43:23.

Play the whole clip through once first to get a sense of the material.



*If you do not mark an IN point and OUT point, the entire clip will be edited into the sequence.*

4. Move the position indicator in the Timeline or Composer monitor to the head of the sequence.
5. Deselect record track A1.

A track changes color when it is selected; it is gray when it is deselected.



6. Press the Splice-in (V) key on the keyboard or click the yellow Splice-in button on the Tool Palette.

The **bridge** clip is edited into the V1 track in the Timeline and is displayed in the Composer monitor. The position indicator rests on the first frame of black following the splice.

When you want to bring an open bin or monitor to the foreground, you can click anywhere in it or choose its name from the Windows menu.

7. Click anywhere in the Composer monitor to activate it.
8. Do one of the following to move to the head of the sequence:
  - Press the Home key.
  - Click the beginning of the Timeline.
9. Click the Play button to play the shot in the sequence.
10. Choose Clear Monitor from the clip name pop-up menu above the Source pop-up monitor to close the clip.

## Splicing the *ducks* clip

Previously, you entered IN and OUT points, but we need to create different ones. It's not necessary to clear the IN and OUT points. When you create a new IN point and OUT point, the system automatically clears previously set points.

1. From the bin, double-click the **ducks** clip to open it in a Source pop-up monitor.
2. Locate a frame in the Source pop-up monitor just after the clip's midway point where the duck that has been sitting in the water is about to take off. Mark an IN point five frames before the duck begins to move its wings to fly.
3. Mark an OUT point in the first frame after the duck leaves the monitor to the left.

## Playing IN to OUT

Now you can take a look at the marked portion of the clip to make sure it is what you want.

1. Press the Play IN to OUT (6) key on the keyboard.

The clip plays from the IN point to the OUT point.

If possible, it would be nice to provide a little “breathing space” before the next shot.

2. Play the rest of the clip to see if there are several frames of water after the duck leaves the shot.

## Using the Go to OUT Key

You can snap the position indicator to an OUT (or IN) point.



1. Click the Go to OUT button on the Tool Palette or press the Go to OUT (W) key on the keyboard.
2. Type +6 on the numeric keypad and press the Enter key on the numeric keypad to add 7 frames to the shot.
3. Mark that frame as the OUT point.

The OUT point automatically moves to the new position.

Whenever you use the numeric keypad, you must press the Enter key on the numeric keypad after typing the number.



*You can also press and hold the Alt key, and click the Mark IN button to go to the IN mark. Press and hold the Alt key, and click the Mark OUT button to go to the OUT mark.*

## Moving to the Head and Tail of a Shot

Before splicing in the next shot, make sure the position indicator is on the first frame of black after the **bridge** edit.

1. Move the position indicator anywhere to the right of the **bridge** clip in the Timeline.
2. Press and hold the Ctrl key, and click the mouse between the transition and the position indicator. The position indicator snaps to the first frame of the shot.
3. Select source and record tracks V1 in the Timeline.

The selected tracks appear bright, not gray.

## Using the Splice-in Button

To splice a shot:



1. Click the yellow Splice-in button on the Tool Palette.

The second shot is now edited into the sequence.

2. Go to the head of the sequence and play through the first two shots.

## Splicing a Shot into the Middle of a Sequence

With nonlinear editing, you can splice a shot anywhere in your sequence.

1. From the **Rough Cut** bin, open the **kids rowing** clip.
2. Mark IN and OUT points to mark 4 seconds of the camera panning from the girl to the boy.

Let's see what this shot looks like between the first and second shots.

3. Click in the middle of the **ducks** clip, between the position indicator and the **bridge** clip.
4. Press and hold the Alt key, and click the mouse within the **ducks** clip in the Timeline to place the position indicator on the first frame of the **ducks** clip.
5. Press the Splice-in (V) key on the keyboard.

Wherever you splice a shot into the middle of a sequence, the rest of the sequence moves down. Splicing lengthens the material on the track.

6. Play the sequence so far to see what you have done.

## Undoing an Edit

The **kids rowing** shot doesn't seem to fit here. Let's undo the last step.

Choose Undo Splice-in from the Edit menu or press Ctrl+Z.

Use the Undo feature whenever you feel you have made a mistake or want to go back a step. You can undo or redo up to 32 previous actions.

## Using the I/O (IN Point / OUT Point) Tracking Display

Now, you will add two more shots to the sequence.

1. Open the **kids in shadow** clip.



2. Click the Clear Both Marks button on the Tool Palette.

3. Mark an IN point in the first half of the clip, one frame before the second boat enters screen left.

4. Mark an OUT point 3 seconds and 17 frames later (PAL: 3 seconds and 14 frames) by doing the following:

a. Choose I/O from the Tracking Information pop-up menu in the gray area above the Source pop-up monitor.

The I/O option displays the duration from the IN to OUT points. If you only mark the IN point, the I/O displays the duration from the IN point to the position indicator.

b. Step forward until the I/O display reaches 3:17, and mark the OUT point.

5. Move the position indicator to the first black frame.

6. Press the Splice-in (V) key on the keyboard to splice the clip into the Timeline as the third shot.

7. Open the **rowing forward** clip and mark an IN point a little less than halfway through the clip, when the dory is evenly centered between the right and left edges of the frame.
8. Mark an OUT point 5 seconds later.
9. Splice the clip into the Timeline as the fourth shot.
10. Choose Save All Bins from the File menu.

You've finished this tutorial. You can go on to [“Tutorial: Refining Edits” on page 92](#), or quit Avid Xpress.



# CHAPTER 7

## *Refining the Edit*

Refining edits tightens and improves the relationship between pictures and sound.

Refining edits is described in the following sections:

- [Using Segment Mode](#)
- [Basic Trim Procedures](#)
- [Audio Editing](#)

[Tutorial: Refining Edits](#) contains the following sections:

- [Overwriting Shots into a Sequence](#)
- [Storyboarding](#)
- [Rearranging Shots](#)
- [Removing Footage from a Sequence](#)
- [Trimming](#)
- [Working with Audio](#)

# Using Segment Mode

Segment mode provides editing controls for moving, deleting, marking, and editing entire segments in the Timeline. A *segment* is a portion of the sequence that includes two or more transitions. There are two modes for editing segments or adding shots: Extract/Splice-in, indicated by a yellow arrow, and Lift/Overwrite, indicated by a red arrow.

Unlike traditional editing, Segment mode allows you to instantly reposition entire segments using visual controls as though you were physically “dragging” portions of your sequence around on a tape. You can move clips separately or together, on one track or across tracks.

## Editing in Segment Mode

Observe the following guidelines when editing in Segment mode:

- Transition effects on either side of a moved selection are deleted. Transition effects inside the selection are preserved.
- You can track the audio while moving segments by pressing the Caps Lock key to enable audio scrub.
- When you are finished, Segment mode continues to affect your editing unless you click the active Segment Mode button to deactivate it.

## Distinguishing Two Types of Buttons

In [Chapter 6](#), you used the Splice-in button. The Splice-in button and the Overwrite button (see [“Overwriting Shots into a Sequence” on page 93](#)) take clips from a Source pop-up monitor and places them into the Timeline. The Segment Mode buttons, Extract/Splice-in and Lift/Overwrite, move segments around within the Timeline. The names are similar but you use them for different purposes.

# Basic Trim Procedures

You can enter Trim mode in several different ways, depending on the type of trim you expect to perform. Once in Trim mode you can:

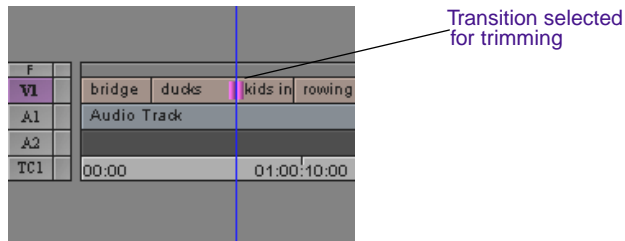
- Select additional tracks
- Switch between trim sides
- Perform and play back the trim

## Entering Trim Mode

There are two methods for entering Trim mode. They are:

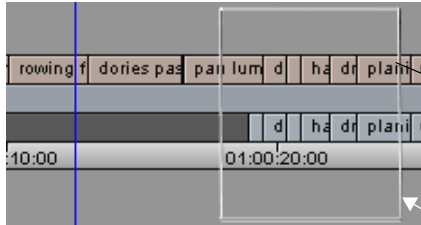


- **Clicking the Trim Mode button in the Tool Palette.** By default the system enters Trim mode and selects the tracks nearest the position indicator for dual-roller trimming. This method is useful for selecting straight-cut transitions on one track or across video and audio tracks.

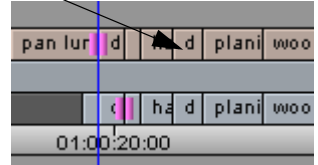


When you deselect one or more tracks in the Track Selector panel, by default only the transitions in the highlighted tracks are selected for trimming. If the transitions are not straight cuts (overlap cuts or L-edits), the system highlights the topmost track nearest the position indicator.

- **Lassoing the transitions in the Timeline.** Draw the lasso by clicking at a point above the top track in the Timeline and dragging to surround the transitions. This method is useful when you need to select multiple transitions staggered across parallel tracks (overlap cuts) for simultaneous trimming.



Lasso drawn across three tracks



Transitions are selected for dual-roller trim

You can drag from right to left, or left to right, and you can lasso single transitions across several contiguous tracks. However, avoid lassoing more than one transition from left to right on a single track, because this activates Segment mode.



*To select transitions located below several track layers, draw a lasso within the Timeline by pressing the Ctrl key as you drag.*

## Leaving Trim Mode

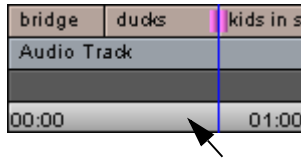
You can leave Trim mode at any time in one of several ways:



- Click the Trim Mode button on the Tool Palette.

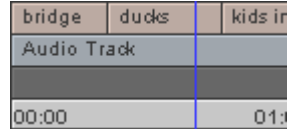


- Press the Esc (Escape) key on the keyboard.
- Click a specific location in the Timecode (TC1) track at the bottom of the Timeline to leave Trim mode. The position indicator moves to that location.



The system leaves Trim mode and relocates the position indicator

Click in the TC track at a selected location



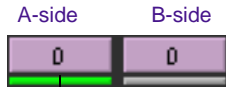
- Press the Left Bracket key on the keyboard.

## Selecting Between Trim Sides

A-side B-side A and B



To select sides of a transition to trim, click the outgoing (A-side) or incoming (B-side) monitor to define which side of the transition to trim. Notice that the pointer changes to a single-roller A-side, single-roller B-side, or double-roller icon depending on position.



Highlight indicates active sides

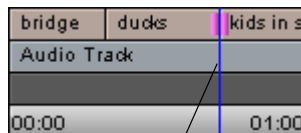
The selected parts of the transition are highlighted, and the corresponding rollers appear in the Timeline. Also, one or both of the frame counter indicators below the monitors are highlighted to reflect the active trim sides: A-side, B-side, or both. The number indicates how many frames have been added or subtracted (-) from the transition.

# Performing a Basic Trim

With your transitions and trim sides selected, you can perform a basic trim using one of the following procedures:



- Use the Trim buttons to trim forward or backward by 1- or 10-frame increments.
- Use the numeric keypad at the right side of the keyboard, as follows:
  - To move the transition a specific number of frames, type a plus sign (+) or minus sign (-) and the number of frames (from 1 to 99) you want to move forward or backward. Then press the Enter key on the numeric keypad. If the number of frames is larger than 99, type an F after the number to indicate frame count. For example, to enter 200 frames, type **200F** and press the Enter key.
  - To move the transition to an exact timecode, type a timecode number larger than 99, including frames. For example, type **102** to enter 1 second and 2 frames.
- Use controls in the Timeline by clicking a roller at the selected transition and dragging forward or backward in the sequence.



Click and drag a transition in the Timeline

- For greater control:
  - Press the Alt key as you drag to move one frame at a time.
  - Press the Ctrl key to snap to other transition points.

As you trim, all selected transitions in the Timeline move in unison. The Frame counter displays the frame count backward or forward for

one or both trim sides, and the monitors display the new incoming or outgoing frames.

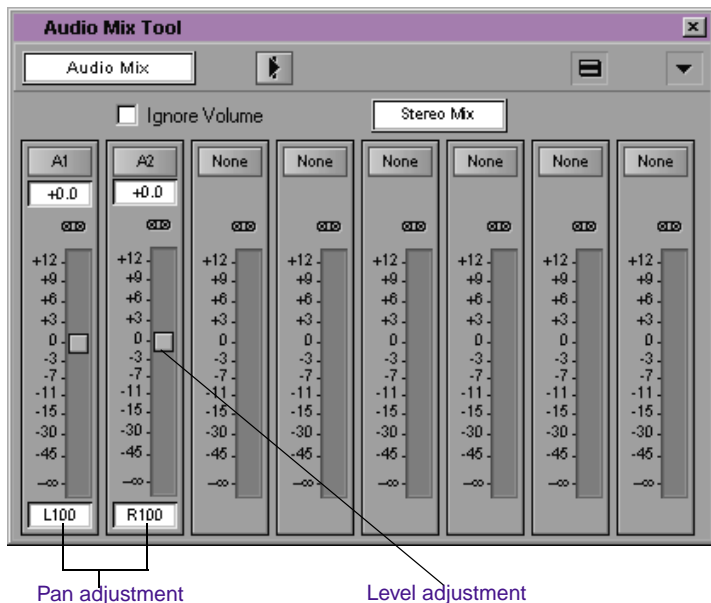


*To trim successfully, the clips must have available frames on either side of the IN and OUT points. These frames must be more or the same in number as frames you are going to trim.*

## Audio Editing

The Avid Xpress system provides audio scrub features and waveform plots specifically designed for frame-accurate cueing, marking, and editing of audio. You can use these features at any time during editing or while making adjustments with the audio tools.

You can use the Audio Mix Tool to adjust volume (level) and balance (pan).



# Tutorial: Refining Edits

In this tutorial you refine and trim edits and adjust audio levels. This section corresponds to the clips and sequence in the bin titled **Refining Edits**. See Table 7-1.



*Be sure to read the preceding overview sections of this chapter before you start this tutorial.*

**Table 7-1 Starting the Tutorial: Refining Edits**

<b>If you have worked on the previous tutorial and Avid Xpress is still running:</b>	<b>If you have worked on the previous tutorial but have quit the Avid Xpress system:</b>	<b>If you are just starting out with this tutorial and haven't completed the previous tutorials:</b>
<ol style="list-style-type: none"><li>1. Double-click the <b>Refining Edits</b> bin to open it.</li><li>2. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the <b>Refining Edits</b> bin. Close the <b>Rough Cut</b> bin.</li><li>3. Drag the sequence you were working on from the <b>Refining Edits</b> bin into the Composer monitor.</li></ol>	<ol style="list-style-type: none"><li>1. Start Avid Xpress by double-clicking the Avid Xpress icon.</li><li>2. From the Boat Shop Project window double-click the <b>Rough Cut</b> bin and the <b>Refining Edits</b> bin to open them.</li><li>3. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the <b>Refining Edits</b> bin. Close the <b>Rough Cut</b> bin.</li><li>4. Drag the sequence you were working on from the <b>Refining Edits</b> bin into the Composer monitor.</li></ol>	<ol style="list-style-type: none"><li>1. Start Avid Xpress by double-clicking the Avid Xpress icon.</li><li>2. Click the <b>Refining Edits Sequence</b> clip and drag it into the Composer monitor to begin the tutorial.</li></ol>

# Overwriting Shots into a Sequence

In addition to splicing, you can overwrite shots into a sequence. An overwrite edit replaces a section of a sequence with other source footage. An overwrite edit does not affect the length of the sequence.

The **rowing forward** shot is too long. In this section you will edit the next shot into the sequence before the end of the **rowing forward** clip.

1. Make sure the Composer monitor is active.
2. Place the position indicator in the Timeline on the first frame of **rowing forward**.
3. Advance 3 seconds by typing **+229 (+224 PAL)** on the numeric keypad, and pressing the Enter key on the numeric keypad.
4. Mark an IN point.
5. Open the **dories passing** clip.
6. Mark an IN point in the first half of the clip, 18 frames (4 frames PAL) after the tips of the two boats seem to touch in the middle of the screen.
7. Mark an OUT point a few frames less than 7 seconds later, when the girl's oars are both out of the water, and her left oar just catches the light.
8. Click the red Overwrite button on the Tool Palette or press the B key on the keyboard.



The shot overwrites the end of the **rowing forward** clip and extends beyond it, thus lengthening the video portion of the sequence.

You should now be at about 19:20 into the sequence, with five video clips in it.

# Storyboarding

Storyboarding allows you to set up a group of clips in a sequence of events and then load them into the Composer monitor all at once.

In this section, you mark a group of clips using the instructions in [Table 7-2](#). The table provides a timecode to set the IN point, and based on the duration, you can use the numeric keypad to determine the OUT point.

## Marking Clips for Storyboarding

Use the following procedure to set your IN and OUT points for each clip in the table:

1. Open each clip listed in [Table 7-2](#) into a Source pop-up monitor.
2. Choose V1 in the Tracking Information display above the Source pop-up monitor.

You use the V1 numbers to go to the IN point.

3. Mark your IN point.

In [Table 7-2](#), the clips you have already marked are followed by an asterisk. You may simply want to check the IN and OUT points and reset them only if necessary.

4. To set the OUT point, type the duration (from [Table 7-2](#)) on the numeric keypad and press the Enter key on the numeric keypad.
5. Mark the OUT point.
6. Continue marking IN and OUT points for the remaining clips — but do not edit the clips into the sequence yet.

**Table 7-2 Mark Points for Boat Shop Clips**

<b>Clip Name</b>	<b>Mark IN Point</b>	<b>Duration</b>
draw knife cu*	05:02:08:09	1:16 (NTSC) 1:13 (PAL)
chiseling*	04:11:34:22 (NTSC) 04:11:36:21 (PAL)	00:16 (NTSC) 00:13 (PAL)
hammering*	04:05:10:08	1:00
drilling*	04:04:47:25 (NTSC) 04:04:48:21 (PAL)	1:00
planing cu*	04:10:05:17 (NTSC) 04:10:07:04 (PAL)	2:00
planing ms*	04:09:24:00 (NTSC) 04:09:25:14 (PAL)	3:19 (NTSC) 3:16 (PAL)
sanding	04:06:52:03	3:12 (NTSC) 3:10 (PAL)
wood burning	04:14:24:02	6:15 (NTSC) 6:12 (PAL)
two dories	01:11:03:03 (NTSC) 01:11:04:10 (PAL)	1:22 (NTSC) 1:18 (PAL)
rowing in mist	01:02:38:29	1:22 (NTSC) 1:18 (PAL)
dories ws	01:06:38:26	4:00
dories to models	04:25:22:28	3:23 (NTSC) 3:19 (PAL)
sign	05:06:52:01 (NTSC) 05:06:44:07 (PAL)	10:00 (NTSC) 10:00 (PAL)

\*You might have set the IN and OUT points for these clips in the previous tutorial. Check them to see whether or not they need to be reset.

# Storyboard Editing the Clips

To arrange the clips as a storyboard:

1. Display the **Refining Edits** bin in Frame mode and click the zoom box so the bin fills the screen, or click the lower right corner of the bin and drag it to enlarge the window.
2. Choose Fill Window from the Bin menu to arrange the clips in the bin.
3. Drag the **draw knife cu** clip to a clear space in the lower left area of the bin.
4. Arrange the following clips (after **draw knife cu**) in two or three rows, from left to right, and top to bottom, to form the storyboard. Make sure you maintain the order of clips:
  - **chiseling**
  - **hammering**
  - **drilling**
  - **planing cu**
  - **planing ms**
  - **sanding**
  - **wood burning**
  - **two dories**
  - **rowing in mist**
  - **dories ws**
  - **dories to models**
  - **sign**



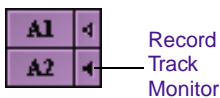
Now you're ready to load the marked clips into the sequence.

5. Place the position indicator in the Timeline on the first frame of black following the **dories passing** clip and press the Ctrl key as you click the mouse.
6. Select only record track V1 and deselect A1 in the Timeline.
7. Select the storyboarded clips all at once:
  - a. Position the mouse pointer in the bin in the blank area just to the left of the **draw knife cu** clip.
  - b. Lasso the clips by dragging the pointer to the right and down, making sure to select all of the storyboarded clips.

A box forms as you move the mouse, starting next to the **draw knife cu** clip and ending at the last pointer position. All the names are highlighted in blue.
8. Click the mouse on one of the clips (on the image, not the name), and drag the group into the Timeline. Release the mouse when a yellow arrow appears in the Timeline.

The shots are spliced into the sequence in the order you specified.

9. To play the sequence:
  - a. Move the position indicator to the head of the sequence.
  - b. Activate the speaker icons for tracks A1 and A2 by clicking the record track monitors (only one record track monitor can be activated at a time).



Track A2 contains sound for several clips.



- c. Click the Play button under the Composer monitor.

## Rearranging Shots

You can rearrange shots by overwriting material, lifting material, or removing material. Overwriting material doesn't change the length of the sequence. Lifting material leaves filler and doesn't affect the length of the sequence. Removing material shortens the length of the sequence.

## Overwriting with the Three-Point Edit

The three-point edit is an excellent way to replace a shot in a sequence. Use the Mark Clip button to select the shot in the sequence (or mark an IN and OUT point for a segment that's not a single shot), and mark either the IN or OUT point in the source clip. The system calculates the exact duration of the source clip to insert.

Let's replace the **chiseling** shot with **draw knife ms** to create a smoother movement across the cut.

1. To enlarge this area, in the Timeline:
  - a. Press the Home key.
  - b. Click the scale box and drag it to enlarge the Timeline.
  - c. Click the scale box and drag it to the right until you see the entire **chiseling** clip.
2. Move the position indicator to the **chiseling** clip.
3. Select only record tracks V1 and A2.





4. Click the Mark Clip button in the row of buttons below the Composer monitor, or press the T key on the keyboard.

The IN and OUT points appear at the head and tail of the clip in the TC1 track of the Timeline; the marked segment turns purple.

The IN and OUT points also appear in the Composer monitor's position bar.

5. Open the **draw knife ms** clip in a Source pop-up monitor and mark an IN point around 2.5 seconds (7.5 seconds for PAL) into the clip, when the boatbuilder's motions become smooth.



6. Click the red Overwrite button on the Tool Palette (the B key on the keyboard) to make the three-point edit.

The shot **draw knife ms** replaces the **chiseling** shot.

7. Click the scale box and drag it to the left to return to the previous Timeline view.

## Rearranging Footage with Extract/Splice-In

Extract/Splice-in is a great tool for changing the order of shots in a sequence. Let's see what it looks like if we reverse the position of two shots in the sequence, **rowing in mist** and **two dories**.

1. Expand the Timeline again with the scale bar. Click the scroll box and drag it toward the end of the sequence until you reach the **rowing in mist** clip.



2. Click the yellow Segment Mode (Extract/Splice-in) button below the Timeline.

When the button is activated, its background turns light gray.



**Don't confuse the Extract/Splice-in and Splice-in buttons. The Extract/Splice-in button is located below the Timeline; the Splice-in button is located on the keyboard and on the Tool Palette (see [“Distinguishing Two Types of Buttons” on page 86](#)).**

3. Select only track V1. Deselect all audio tracks.
4. Press and hold the Alt key, and click the **rowing in mist** shot. Drag it to the left, so it is completely over the **two dories** shot, and release the mouse.

**Two dories** should now follow **rowing in mist**.

5. Click the Extract/Splice-in button again to deselect it.
6. Click the Timeline in front of the two shots and play the shots.

The edit works.

## Removing Footage from a Sequence

You can remove footage from your sequence, and either close or retain the gap that results. Extract/Splice-in closes the gap, and Lift/Overwrite retains the gap.

## Removing Footage with Extract/Splice-In

The **planing ms** shot breaks up the feeling of being close to the action. Let's remove it from the sequence and close the gap that results.

1. Use the scroll bar to locate the **planing ms** clip.
2. Click the yellow Segment Mode (Extract/Splice-in) button below the Timeline.
3. Click anywhere in the **planing ms** clip on V1, then Shift+click the audio portion of the clip in track A2.

The clip is highlighted in both tracks.



To eliminate footage that does not start and end at a transition, use IN and OUT points to delimit the segment that you want to extract.

4. Press the Delete key on the keyboard.

The selected shot is eliminated and the surrounding shots close the gap.

5. Click the Extract/Splice-in button again to deselect it.

## Removing Footage with Lift

Lift retains the gap after lifting footage from the sequence. Use Lift if you want to maintain the rhythm of a sequence or the synchronization of the video and audio tracks.

The **dories passing** shot plays for too long, but we want the next shot, **draw knife cu**, to remain in sync with the audio. We will use Lift to shorten **dories passing**, but maintain the same entrance point for the next shot. Later, we'll determine what to put in its place.

1. Display the master timecode in the Composer monitor's timecode display by choosing Mas from the Timecode menu.
2. Turn off track A2.
3. Mark an IN point in the sequence at master timecode 01:00:17:29 (01:00:17:24 PAL) by using the Mark IN button below the Composer monitor.
4. Go to the last frame of the **dories passing** segment by placing the position indicator in the next clip beyond **dories passing**. Press and hold the Alt key, and click the mouse.
5. Mark an OUT point.

You must mark an IN and OUT point in the sequence.



6. Press the Lift key (Z) on the keyboard to remove the segment.

The selected segment lifts out and leaves black filler in its place.

7. Play the entire sequence in the Composer monitor.

# Trimming

Trimming allows you to adjust incoming and outgoing frames of your clip. There are two types of trims: dual-roller and single-roller.

## Dual-Roller Trimming

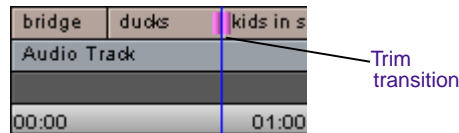
Use a dual-roller trim to adjust both sides of a transition simultaneously, adding frames to one shot while subtracting frames from the adjacent shot. The total duration of the sequence does not change.

Let's cut the **kids in shadow** shot right on the beat of the music.

1. Select record track V1 and deselect the audio tracks. Make sure the A1 speaker is turned on in the Timeline.
2. Place the position indicator near the **ducks/kids in shadow** transition, and click the Trim Mode button on the Tool Palette.

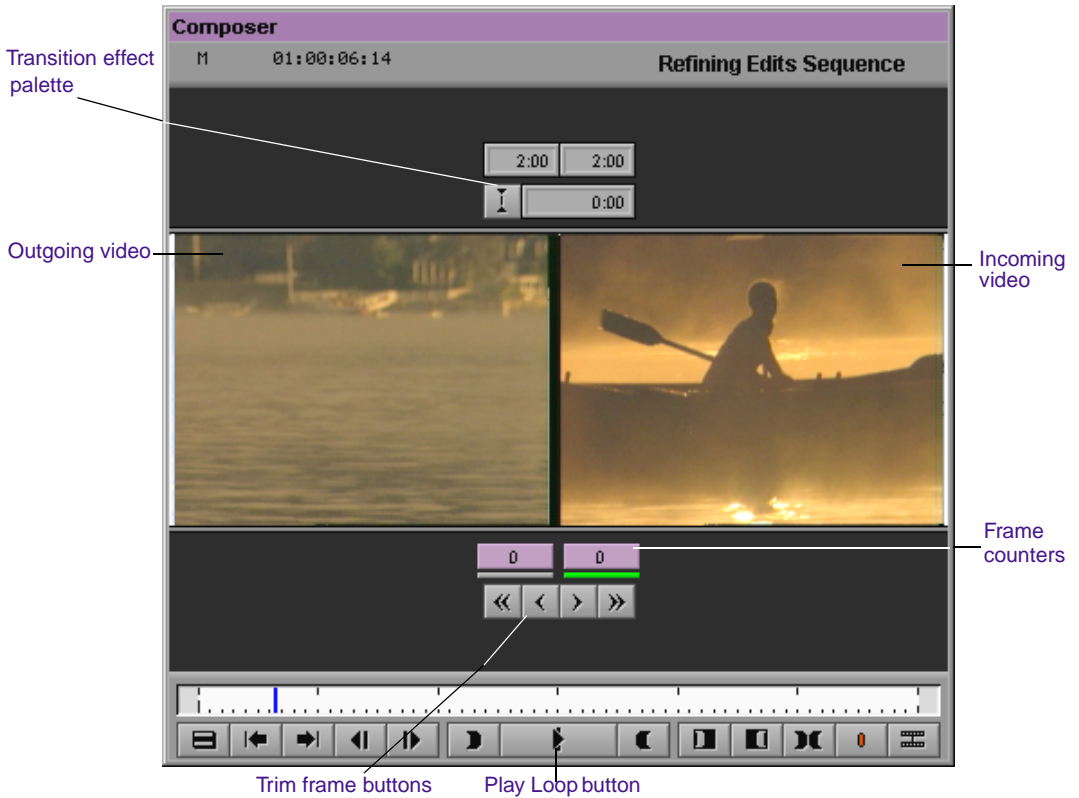


The position indicator snaps to the transition.



The Composer monitor shows the last (tail) frame of the **ducks** shot on the left and the first (head) frame of the **kids in shadow** shot on the right.

New buttons appear below the trim windows. Note that during dual-roller trim mode, both frame counters are purple.



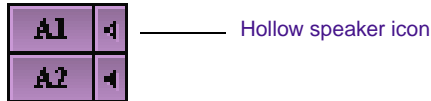
3. Play the transition by clicking the Play Loop button.

The transition plays repeatedly.

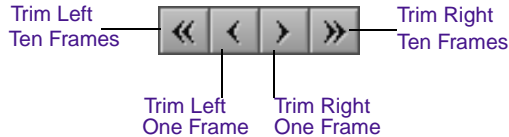
4. To stop the playback loop, click the Play Loop button again.
5. Press the Caps Lock key on the keyboard so you can hear the audio as you trim.

To use digital audio scrub, make sure the speaker icon for record track A1 is hollow and increase the speaker volume, if necessary.

6. Press and hold the Alt key, and click the speaker icon for track A1 if it is not hollow.



- Click the Trim Right One Frame button under the Frame counters until you hear a change in loudness around the seventh frame (sixth frame PAL).



This adds frames to the tail of the outgoing shot and removes them from the head of the incoming one. The duration of the video track remains unchanged.

- Play the transition again by using the Play Loop button.
- Do one of the following to leave Trim mode:



- Click the Trim Mode button in the Tool Palette.
- Press the Left Arrow key on the keyboard.

## Using Dual Rollers to Trim the Outgoing Shot

Let's insert a shot to take the place of the filler we left in the sequence. You replace the filler with **pan lumber**, because this shot provides continuity of movement from the previous shot. Once you overwrite the shot into the sequence, you trim it.

- Place the position indicator within the filler between the **dories passing** and the **draw knife cu** clips.
- Select record tracks V1 and A2 in the Timeline, and deselect A1.
- Click the Mark Clip button under the Composer monitor or press the T key on the keyboard.



4. Open the **pan lumber** clip and mark an OUT point where the lumber is in sunlight and the camera stops panning. Do not mark an IN point.
5. Select record tracks V1 and A2.
6. Click the red Overwrite button on the Tool Palette.



**Don't confuse the Lift/Overwrite and Overwrite buttons. The Lift/Overwrite button is located below the Timeline; the Overwrite button is located on the keyboard (the B key) and on the Tool Palette.**

## Trimming the *pan lumber* Shot

In the next steps, you will trim the **pan lumber** shot so it enters a little earlier.

1. Enter Trim mode by lassoing the Timeline tracks:
  - a. Click the cursor above all the Timeline tracks just to the left of the **dories passing/pan lumber** transition.
  - b. Drag the mouse down and to the right to surround the transition.

The trim rollers appear.



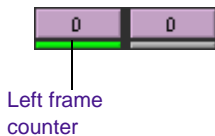
2. Move the transition 74 frames earlier by clicking the Trim Left Ten Frames button 7 times and the Trim Left One Frame button 4 times.

You see the numbers change in the purple frame counters.

## Single-Roller Trimming

In the trims you made so far, you trimmed both the head and the tail shots an equal number of frames, adding to one side and subtracting from the other. Now let's trim the tail of the **pan lumber** shot without affecting the head of the **draw knife cu** shot.

1. While still in Trim mode, advance to the **pan lumber/draw knife cu** transition by pressing the S key on the keyboard.
2. Select track A2 in addition to V1 in the Timeline so you can trim both the audio and video of the shot.
3. Click the left frame counter (A-Side Trim counter).



Your trim will only affect the outgoing shot, which is in the left Trim monitor. The left frame counter remains purple, while the right one is deselected.

4. Type **-10** and press the Enter key on the numeric keypad to subtract 10 frames from the outgoing shot.

This moves the transition 10 frames to the left.

5. Leave Trim mode by pressing the Left Arrow key on the keyboard or by clicking the Trim Mode button on the Tool Palette.

## Adding Synced Audio

Now we'll add some synced audio to the sequence.

1. Open the **intervu: Lowell's Boat Shop** clip.  
Be sure the volume on the speakers is turned up.
2. Mark the IN point at the start of the first phrase, "Lowell's Boat Shop isn't quite the same as it always has been..." and mark the OUT point at the end of the last phrase, "...a great symbol of New England."



3. Click the Play IN to OUT (6) button on the keyboard to play the clip from the IN to OUT marks.

The audio is on track A1 in the source clip, but we want to add it to the end of track A2 in the Timeline.

First we patch from source track A1 to record track A2.

4. To patch the track, drag the cursor from the A1 source track icon to the A2 record track icon.



5. Display the master timecode (Mas) in the timecode display above the Composer monitor.
6. In the sequence, place the Mark IN point at master timecode 01:00:41:00 (01:00:40:25 PAL), in the middle of the **dories ws** clip.
7. Make sure source track A1 and record tracks V1 and A2 are selected.



8. Click the yellow Splice-in button on the Tool Palette.

The audio is patched into the sequence.

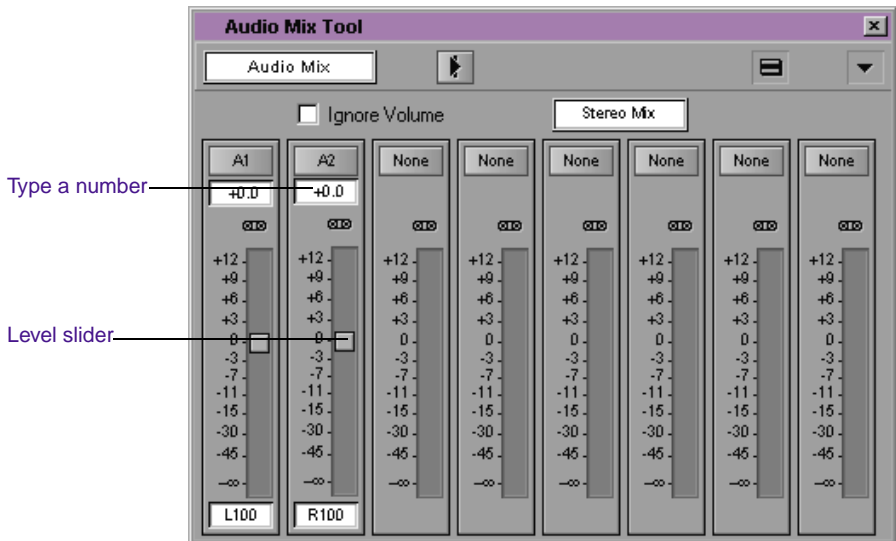
# Working with Audio

In this section, you adjust audio levels to the already placed **intervu: Lowell's Boat Shop** clip.

## Adjusting Audio Level

The volume in the **intervu: Lowell's Boat Shop** shot is noticeably lower than in the rest of the sequence. Let's make this shot louder.

1. Select record track A2 and deselect track A1.
2. Place the position indicator anywhere within the **intervu: Lowell's Boat Shop** shot.
3. Choose Audio Mix from the Tools menu.



4. In the A2 area, move the A2 Audio Level slider to level +6 by doing one of the following:
  - Drag the slider to level +6.
  - Type 6.
  - Press the Up or Down Arrow key on the keyboard to reach level +6.
5. Play a portion of the shot.

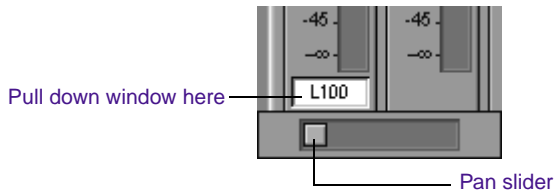
The volume is still too low.
6. Activate the Audio Mix Tool by clicking in it, and move the slider to level +10.

## Adjusting Audio Pan

Most of the audio for the sequence plays only out of the left speaker; the **interview: Lowell's Boat Shop** shot plays only out of the right speaker. You can adjust the audio pan (balance) so the sound plays equally from both speakers.

1. Clear any IN or OUT points from the sequence by pressing the G key on the keyboard.
2. Select record tracks A1 and A2.
3. Activate the Audio Mix Tool by clicking anywhere in it.
4. Click the Timeline's position indicator at a point that has audio on track A1.
5. Pull down the Pan Adjustment window for track A1.

The Pan slider appears.



To snap the slider to MID, press and hold the Alt key, and click the slider.

6. Drag the Pan slider to the middle of the scale until it reads MID.
7. Pull down the Pan Adjustment window for track A2 and drag the Pan slider until it reads MID.
8. Play a portion of the sequence to check speaker balance.
9. Click the Close button to close the Audio Mix Tool.
10. Play your sequence through and save it.

You've finished this tutorial. You can go on to [“Tutorial: Adding Effects” on page 117](#), or quit Avid Xpress.



# CHAPTER 8

## *Adding Effects*

Adding an effect to a clip enhances your sequence by fading in or out of a scene or adding video or a graphic on top of a clip.

Adding effects is described in the following sections:

- [Effects Editing](#)
- [Displaying the Effect Palette](#)
- [Effect Categories](#)
- [Effect Types](#)
- [Applying Effects to a Sequence](#)
- [Working in Effect Mode](#)
- [Rendering an Effect](#)

**Tutorial: Adding Effects** contains the following sections:

- [Adding Transition Effects](#)
- [Adding a Picture-In-Picture Effect](#)
- [Screening the Sequence](#)

# Effects Editing

The Avid Xpress system offers many effects that you can apply to your sequences. The effects that are available on your Avid Xpress system depend on the model and options that you purchased. For the list of effects available for your model, see the *Avid Xpress Release Notes*.

This chapter explains how to apply effects to transitions or segments (clips) in your sequence. After you have selected the effect and applied it to a transition or segment, you can adjust the effect parameters to meet your requirements.

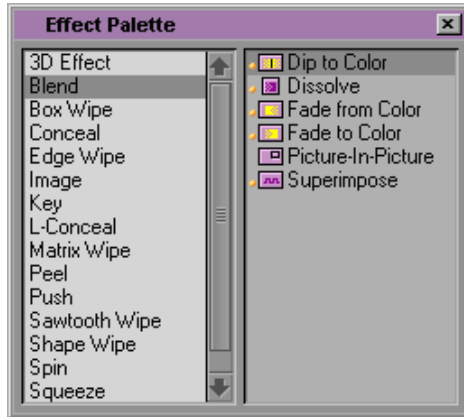
Many effects are *real time*, which means you do not have to render them before you play them. You can preview effects that are not real time before rendering. Rendering an effect creates a media file that plays with the sequence.

After you create an effect, you can save it as an effect template and reapply the template to other transitions or segments in your sequence. Some effects can be applied only to transitions, other effects can be applied only to segments, and some effects can be applied to both transitions and segments. In addition, some effects can be applied to a single video layer, and others to multiple video layers.

For an explanation of particular effects and the effect parameters, see “2D Effects Reference” and “3D Effects Editing” in the *Avid Xpress Effects Guide*.

# Displaying the Effect Palette

You select most effects from the Effect Palette in the Tools menu. The exceptions are Motion effects that you access from the Fast menu on a Source pop-up monitor, the Freeze Frame effect that you access from the Clip menu, and titles that you create with the Title Tool.



## Effect Categories

The effects available through the Effect Palette are grouped by effect category:

- Blend
- Box Wipe
- Conceal
- Edge Wipe
- Image
- Key
- L-Conceal

- Matrix Wipe
- Peel
- Push
- Sawtooth Wipe
- Shape Wipe
- Spin
- Squeeze

Each of these effect categories contains multiple effects.

## Effect Types

There are two primary effect types that are defined by where you use them in a sequence:

- Transition effects
- Segment effects (single-layer and multilayer)

## Transition Effects

A transition is the point where two clips meet. You apply a transition effect to the cut point between two clips on the same video track. After you apply a transition effect, you can adjust its relative position and duration. Depending on the specific effect, other effect parameters may apply.

Transition effects are included in all effect categories on the Effect Palette except the Image effect category.

For an explanation of the transition effects in each effect category, see the *Avid Xpress Effects Guide*.

## Segment Effects

You apply a segment effect to an entire clip or a group of clips. There are two types of segment effects:

- A single-layer segment effect, such as a Mask, is applied to a segment on one video track.
- A multilayer segment effect, such as a Picture-In-Picture effect, is applied to the top layer of segments that contain two or more video tracks that will be played simultaneously.

All of the Avid effects and their effect types are listed in the *Avid Xpress Effects Guide*.

## Applying Effects to a Sequence

This section explains how to apply an effect to a sequence in the Composer monitor. You can apply an effect:

- To one transition or segment on a single video layer
- To multiple transitions or segments on a single video layer
- To multiple transitions or segments on multiple video layers

The effect type (transition or segment) determines where you can place the effect in the sequence.

After you apply an effect, the next step is to adjust the effect's parameters.

## Working in Effect Mode

After you have created an effect and applied it to a transition or segment in your sequence, you can adjust its appearance and operation by changing its effect parameters in Effect mode.

Not all effect parameters apply to all effects. Parameters that do not apply to an effect do not appear in the Effect Mode window. To determine which parameters pertain to an effect, refer to the effect's description in the *Avid Xpress Effects Guide*.

## Rendering an Effect

You must render a non-real-time effect before it can be played. When an effect is rendered, the system stores the effect and its media file as a precomputed master clip (often referred to as a precompute). The system uses the precompute to play the effect at its normal speed.

# Tutorial: Adding Effects

In this tutorial you add dissolves and a Picture-In-Picture effect. This section corresponds to the clips and sequence in the bin titled **Adding Effects**. See Table 8-1.



*Be sure to read the preceding overview sections of this chapter before you start this tutorial.*

**Table 8-1 Starting the Tutorial: Adding Effects**

<b>If you have worked on the previous tutorial and Avid Xpress is still running:</b>	<b>If you have worked on the previous tutorial but have quit the Avid Xpress system:</b>	<b>If you are just starting out with this tutorial and haven't completed the previous tutorials:</b>
<ol style="list-style-type: none"><li>1. Double-click the <b>Adding Effects</b> bin to open it.</li><li>2. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the <b>Adding Effects</b> bin. Close the <b>Refining Edits</b> bin.</li></ol>	<ol style="list-style-type: none"><li>1. Start Avid Xpress by double-clicking the Avid Xpress icon.</li><li>2. From the Boat Shop Project window double-click the <b>Refining Edits</b> bin and the <b>Adding Effects</b> bin to open them.</li><li>3. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the <b>Adding Effects</b> bin. Close the <b>Refining Edits</b> bin.</li></ol>	<ol style="list-style-type: none"><li>1. Start Avid Xpress by double-clicking the Avid Xpress icon.</li><li>2. Click the <b>Adding Effects Sequence</b> clip and drag it into the Composer monitor to begin the tutorial.</li></ol>
<ol style="list-style-type: none"><li>3. Drag the sequence you were working on from the <b>Adding Effects</b> bin into the Composer monitor.</li></ol>	<ol style="list-style-type: none"><li>4. Drag the sequence you were working on from the <b>Adding Effects</b> bin into the Composer monitor.</li></ol>	

# Adding Transition Effects

Transition effects are added in between two clips. Effects you can use include: Blend, Box Wipe, Conceal, Edge Wipe, L-Conceal, Matrix Wipe, Peel, Push, Sawtooth Wipe, Shape Wipe, Spin, and Squeeze.

## Adding Fade In

Now you'll add a fade in to a transition.

1. If you don't see any video in the Composer monitor, click the check box to the right of V1 so a square (tiny monitor) appears.

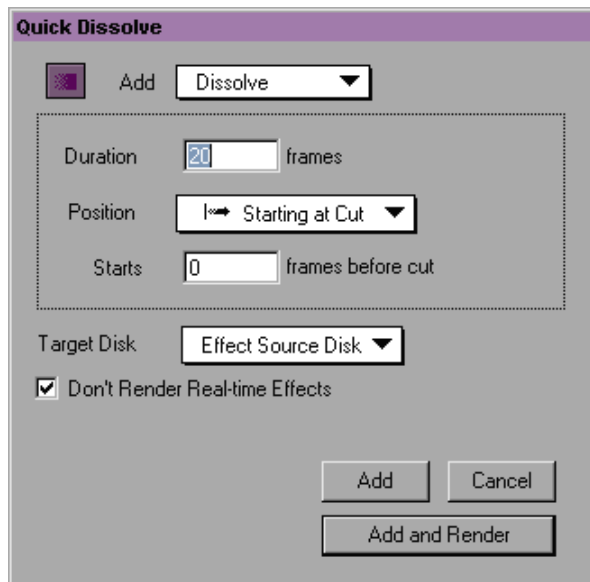
The video appears in the Composer monitor.

2. Select the V1 record track and click the head of the sequence.

3. Click the Add Dissolve button on the Tool Palette.



The Quick Dissolve dialog box appears.



4. Create a 20-frame dissolve (fade in), starting at the cut, by doing the following:
  - a. Choose Dissolve from the Add pop-up menu.
  - b. Type 20 in the Duration text box.
  - c. Choose Starting at Cut from the Position pop-up menu.
5. Choose the disk on which the effect media file should be stored from the Target Disk pop-up menu.

The default disk is Effect Source Disk.
6. Click the Add and Render button to render the effect.

The system creates the media file of the video effect during the rendering process. It also places a box in the Timeline where you added the effect.
7. Play the effect. Press the space bar to stop playback.

## Dissolving Between Shots

You can create a nice effect by adding a dissolve between the first two shots of the sequence.

1. Select the V1 record track and click the first frame of the **ducks** clip.
2. Click the Add Dissolve button in the Fast menu.
3. Create a 20-frame dissolve, centered on the cut by doing the following:
  - a. Choose Dissolve from the Add pop-up menu.
  - b. Type 20 in the Duration text box.
  - c. Choose Centered on Cut from the Position pop-up menu.
4. Choose the disk on which the effect media file should be stored from the Target Disk pop-up menu.

5. Click the Add and Render button to render the effect.
6. Play the effect. Press the space bar to stop playback.

## Creating a Series of Dissolves

After you create one dissolve, you can quickly add it to other transitions in a sequence. In this section, you add a series of dissolves in the middle of the sequence to smooth the transition between several short shots.

1. Place the position indicator at the transition between **dories passing** and **pan lumber**.
2. Create a 10-frame dissolve, centered on the cut.
3. Repeat steps 1 and 2 for all transitions through **sanding/wood burning**.

If you can't see the clips in the Timeline, use the scale bar to expand the Timeline.



*You do not have to change any dissolve parameters when you make these dissolves.*

4. Play the sequence through to see your work.

## Creating Audio Dissolves

It's just as easy to add audio dissolves, and the procedure is the same as adding video dissolves.

As an exercise, create audio dissolves for every audio transition on track A2 up through **sanding/woodburning**, except the beginning and the end of the sequence.

Use 10-frame dissolves, centered on the cut. Be sure to select track A2 and deselect other tracks.

## Adding a Fade Within the Sequence

Now we'll create a fade to black within the sequence after the **dories passing** shot, to cut more forcefully on the words, "wooden boat building." Notice that the transition already has a 10-frame dissolve.

1. Place the position indicator on the last frame of the **dories passing** shot.

2. Select only track V1.



3. Click the Remove Effect button on the Tool Palette.

The dissolve is removed from the transition.

4. Without moving the position indicator, mark both an IN and an OUT point on that frame. Use the Mark In and Mark Out buttons, not the Mark Clip button.



5. Click the red Segment Mode (Lift/Overwrite) button below the Timeline.

6. Press Ctrl+X.

A single frame is lifted from the sequence, leaving one frame of black.

7. Deselect the Lift/Overwrite button.

8. Add a 20-frame dissolve, ending at the cut.

9. Select the disk drive and click the Add and Render button to add and render the dissolve.

## Adding a Picture-In-Picture Effect

Let's make one final change to increase the impact of the last part of the sequence. Using a Picture-In-Picture effect, you'll squeeze the image of the boat shop owner into the lower left corner of the screen, and lay some other images behind him.

## Using the Second Video Track

This effect takes up two video tracks: V1 for the shots of boats and boating and V2 for the interview. First, you have to move the interview shot from track V1 to V2.

1. Select the V1 track only.



2. On the V1 track, place the position indicator within the **interview: Lowell's Boat Shop** shot in the Timeline and click the Mark Clip button under the Composer monitor.

The **interview: Lowell's Boat Shop** shot is highlighted.

3. To add a new video track, choose New Video Track from the Clip menu on the toolbar.



4. Click the red Segment Mode (Lift/Overwrite) button below the Timeline.

5. Press and hold the Ctrl key, and click the **interview: Lowell's Boat Shop** clip. Drag it to the track above, V2.

The clip appears on track V2.

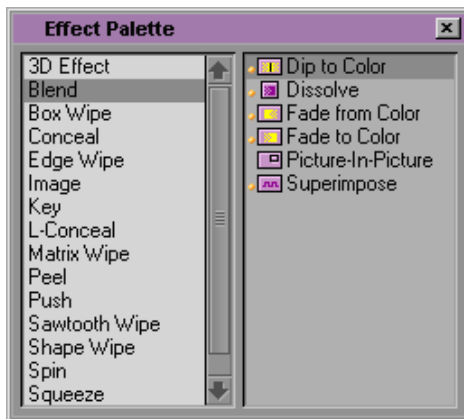
6. Click the Segment Mode (Lift/Overwrite) button again to deselect it.
7. Select track V2 and its monitor.

## Creating the Picture-In-Picture Effect

To create the Picture-In-Picture effect:

1. Choose Effect Palette from the Tools menu.

The Blend effects, including the Picture-In-Picture effect, are displayed in the right window.



2. Place the position indicator anywhere in the **intervu: Lowell's Boat Shop** clip on V2.



3. Click the Picture-In-Picture Effect icon from the Effect Palette and drag it to the **intervu: Lowell's Boat Shop** shot on track V2.

The Effect icon appears in the Timeline.



The boat shop owner appears in a box midscreen.



Foreground  
image (V2)

Background  
filler (V1)

## Repositioning the Image

Let's move the image to the lower left corner of the screen.

1. In the Timeline, move the position indicator directly over the Effect icon.



2. Click the Effect Mode button on the Tool Palette to enter Effect mode.

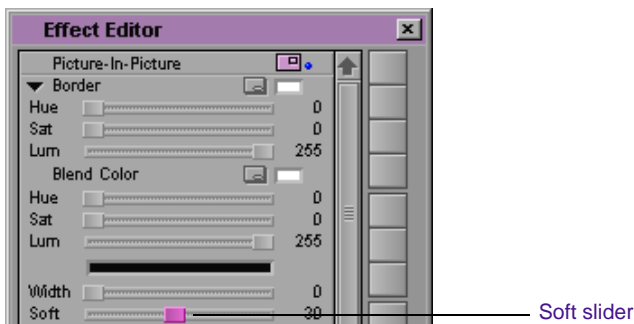
Parameters for the Picture-In-Picture effect appear in the Effect Editor.

3. Click the image of the boat shop owner. Drag handles (the dots at the edges and in the middle of the box) appear, and a white hand appears when the mouse is over a handle.
4. Click the drag handle in the middle of the picture and drag the image to the lower left corner of the screen.

## Adjusting a Parameter

Now let's use one of the Picture-In-Picture effect parameters to soften the edge of the image.

1. Click the Soft slider in the Effect Editor.



2. Drag the Soft slider to the right to a value of 30.

You can also type **30** on the numeric keypad.

3. Click the Play Preview button in the Effect Editor to view an outline of the effect.



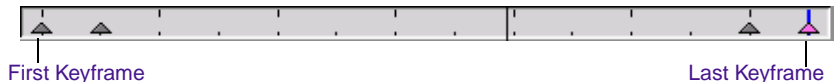
You can click the mouse button or press the space bar at any time to stop the preview.

## Adding Keyframes

To add dissolves within the Picture-In-Picture effect, you need to add keyframes. These let the system know this is the location in the Picture-In-Picture effect where you want to start the dissolve.

1. Choose V1 from the timecode track menu.

2. Click the first keyframe in the Composer monitor.
  3. Drag the Level slider all the way to the left to display 0.
  4. Type +1.00 on the numeric keypad and press the Enter key on the numeric keypad to move the position indicator 1 second after the first keyframe.
- ▲
5. Click the Add Keyframe button in the Effect Editor.
  6. Drag the Level slider all the way to the right to display 100.
  7. Click the mouse button on the last keyframe.
  8. Drag the Level slider all the way to the left to display 0.
  9. Type -15 on the numeric keypad and press the Enter key on the numeric keypad to move the position indicator 15 frames before the last keyframe.
  10. Click the Add Keyframe button.
  11. Drag the Level slider all the way to the left to display 0.



12. Click Close to close the Effect Editor.

## Adding Background Images

In this section you add a background image on track V1, below the **intervu: Lowell's Boat Shop** image.

1. Select track V1 and its monitor and deselect V2.
2. Place the position indicator in the filler just above and below the **intervu: Lowell's Boat Shop** image.
3. Click the Segment Mode (Extract/Splice-in) button.
4. Press Ctrl+X.

This removes the filler and adds the three clips at the end of the sequence as your background for the Picture-In-Picture effect.

5. Select the V2 track.
6. Click the **dories to model** and Shift+click the **sign** clips on the A2 track.
7. Press Ctrl+X to delete the excess audio.
8. Click the Segment Mode (Extract/Splice-in) button again to deselect it.
9. Play your sequence through.

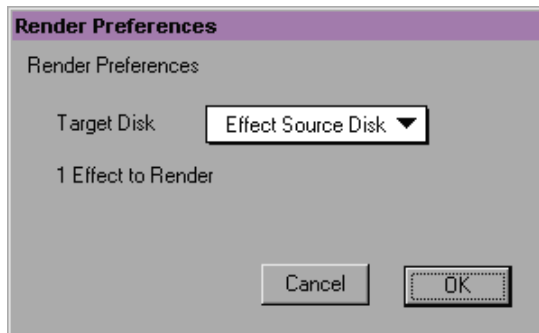
## Rendering the Effect

You must render the Picture-In-Picture effect to play it at full speed.

1. Place the position indicator on the Effect icon in the **intervu: Lowell's Boat Shop** clip.
2. Select track V2.
3. Click the Render Effect button in the Tool Palette or choose Render at Position from the Clip menu.



The Render Preferences dialog box appears.



4. Select a disk from the Target Disk pop-up menu and click OK.

The Effect Source Disk is the default disk for storing the rendered effect.

5. After the effect is rendered, close the Effect Palette.
6. To save your work, choose Save All Bins from the File menu.

## Screening the Sequence

You've done a lot of work. Now take a look at the sequence.

1. Move the position indicator to the beginning of the sequence.
2. Select the V2 monitor.
3. Click the Play button.

You've finished this tutorial. You can go on to [“Tutorial: Creating Titles” on page 137](#), or quit Avid Xpress.



# CHAPTER 9

## *Creating Titles*

You can create a new title with the Title Tool and save the title in a bin, or add a new video track to the Timeline if you want the title to appear over video.

Creating titles is described in the following sections:

- [Creating New Titles](#)
- [Understanding the Title Tool Window](#)
- [Working with Text](#)
- [Text Formatting Tools](#)
- [Choosing Colors and Setting Transparency](#)
- [Adjusting the Color](#)
- [Saving Titles](#)
- [Editing a Title into a Sequence](#)

[Tutorial: Creating Titles](#) contains the following sections:

- [Adding a Title](#)
- [Saving a Title](#)
- [Editing the Title into the Sequence](#)
- [Adding Rolling Credits](#)

# Creating New Titles

You can create a new title with or without a sequence in the Timeline. However, if you want to create a title with a video background, you can load a video clip into the Composer monitor to use as a reference frame while you create the title. The video reference frame you select appears in the background of the Title Tool while you create the title. The reference frame makes it easier to position text and objects exactly where you want them and to select colors from the frame to use in the text and objects.

You can easily load the new title into a Source pop-up monitor and use the standard editing procedures to edit the title into your sequence.



*After you create a title with a particular video format (PAL or NTSC), if you want to create a title for a project using the other video format, you must quit and restart the Avid Xpress system.*

Avid Xpress saves into a bin each title you create. You can load a title into a Source pop-up monitor at any time or drag the Title Effect icon from the bin to a segment in the Timeline. You can also drag a title from the bin onto an existing title in the Timeline; this causes the existing title to be replaced.



*The procedures described in this section use a video reference frame to create a title.*

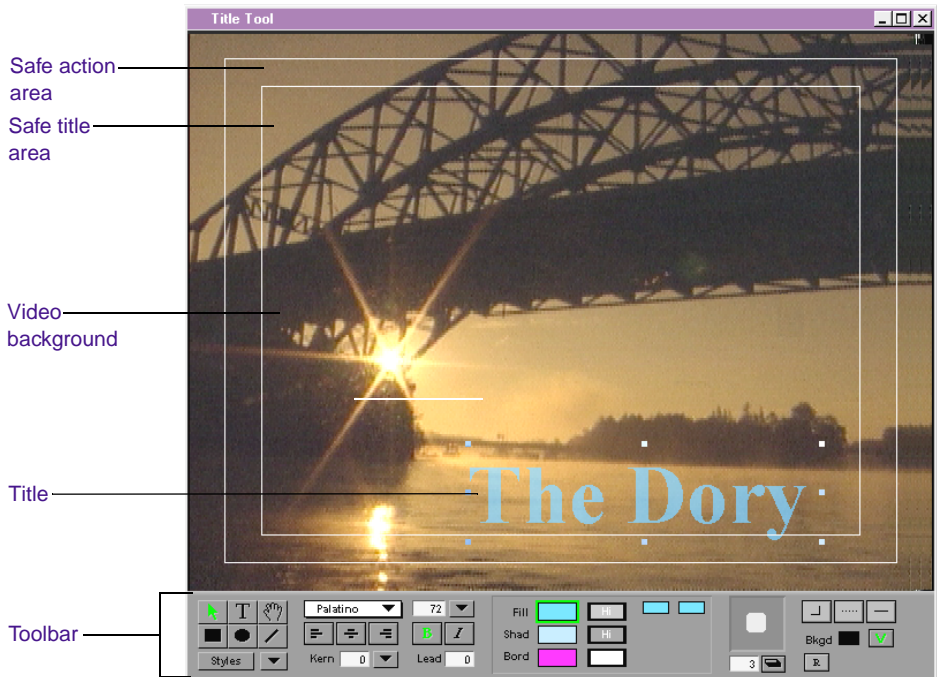
# Understanding the Title Tool Window

The Title Tool window has several major components:

- The toolbar at the bottom of the screen
- A video or color background
- The title that you create
- The safe title and safe action area guidelines

For more information, see “Safe Title/Action area” in the Help index.

The following illustration shows a title over a video background:



# Working with Text

By default, the Text Tool is active when you open the Title Tool. Click in the window at the position where you want to enter text.

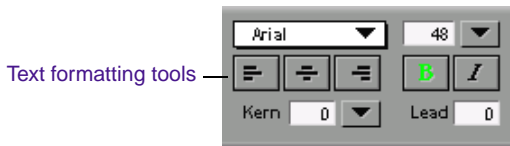


To use the Text Tool at any other time, click the Text Tool icon, click anywhere within the title frame, and begin typing. A blinking vertical bar indicates your cursor position in the frame.

The Text Tool remains selected until you select another tool.

## Text Formatting Tools

The text formatting tools control the appearance of text. If a text object is selected when you change an attribute, Avid Xpress automatically applies the attribute to the object.



The text formatting tools allow you to change the following text characteristics:

- Current font
- Bold and italic
- Point size
- Justification

- Kerning
- Leading

For more information, see “Titles;text for: overview” in the Help index.

This section describes how to change these characteristics on a text string basis. You can also change these attributes on a character-by-character basis by editing the text string.

You can also modify the following text attributes on a text string basis:

- Color
- Transparency
- Drop and depth shadows
- Outlines surrounding text

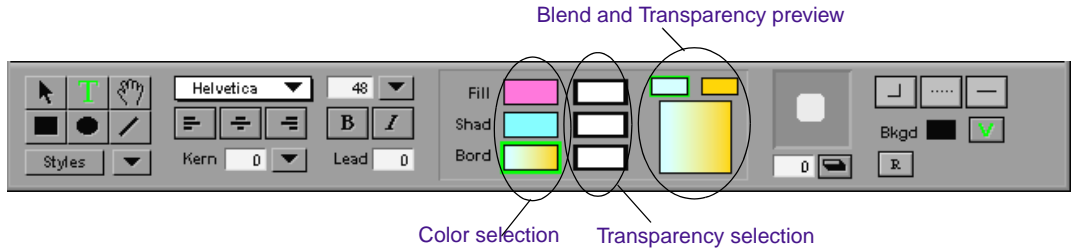
While you type text, only the text color is apparent. Shadows, outlines, and other color attributes appear when you finish typing the text and click the Selection Tool.



*If you have multiple text elements in a title, and you want to give each element a different appearance, create separate text strings.*

# Choosing Colors and Setting Transparency

You can select the color and transparency for objects, shadows, and borders.



- The Color selection boxes control the fill (Fill), shadow (Shad), and border (Bord) color selection.
- The Transparency selection boxes control the fill, shadow, and border transparency selection.
- The Blend and Transparency preview windows appear when you select the fill or border color or transparency selection box.

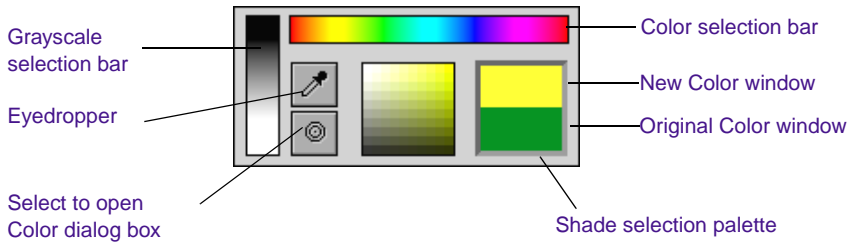
If you select a color selection box, the top windows show the two colors that are used to create the blend. The bottom window shows the blended color and allows you to control the direction of the blend or transparency.

If you select a transparency selection box, the top windows show the two transparency values that are used to create the blend. The bottom window allows you to control the direction of the transparency blend.

## Adjusting the Color

To select a color from the Title Tool Color Picker, use an eyedropper to select a color from any open application on your computer or use the

Color dialog box to select a color. All of these features are available through the Title Tool Color Picker.



The Title Tool Color Picker allows you to select object, shadow, or outline color. The box you use controls whether the color applies to an object, creates a colored shadow, or places a colored outline around the selected object.

## Saving Titles

There are three basic ways to work with titles:

- Create a new title by choosing New Title from the Clip menu.
- Edit an existing title by pressing the Ctrl key and double-clicking a Title Effect icon in a bin.
- Edit an existing title that is in a sequence.

The main difference between the three methods is that you can use Save As for the first two but you cannot use Save As for the third method.

# Editing a Title into a Sequence

After you have created a title with the Title Tool, you can use one of the following two methods to edit the title into your sequence:

- **Method 1:** Add a new video track, load the title into a Source pop-up monitor, mark an IN point and an OUT point, and splice/overwrite the title into the sequence.
- **Method 2:** In Segment mode, drag the Title Effect clip from the bin to an existing segment in the Timeline between the edit points.

You edit titles into a sequence by using the same editing procedures you use for video. The only difference is that if you want to key the title over video, you must add a new video track.

# Tutorial: Creating Titles

In this tutorial you create a title, and edit and add a rolling credit to the end of the sequence. This section corresponds to the clips and sequence in the bin titled **Creating Titles**. See Table 9-1.



*Be sure to read the preceding overview sections of this chapter before you start this tutorial.*

**Table 9-1 Starting the Tutorial: Creating Titles**

<b>If you have worked on the previous tutorial and Avid Xpress is still running:</b>	<b>If you have worked on the previous tutorial but have quit the Avid Xpress system:</b>	<b>If you are just starting out with this tutorial and haven't completed the previous tutorials:</b>
1. Double-click the <b>Creating Titles</b> bin to open it.  2. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the <b>Creating Titles</b> bin. Close the <b>Adding Effects</b> bin.	1. Start Avid Xpress by double-clicking the Avid Xpress icon.  2. From the Boat Shop Project window double-click the <b>Adding Effects</b> bin and the <b>Creating Titles</b> bin to open them.	1. Start Avid Xpress by double-clicking the Avid Xpress icon.  2. Click the <b>Creating Titles Sequence</b> clip and drag it into the Composer monitor to begin the tutorial.
3. Drag the sequence you were working on from the <b>Creating Titles</b> bin into the Composer monitor.	3. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the <b>Creating Titles</b> bin. Close the <b>Adding Effects</b> bin.  4. Drag the sequence you were working on from the <b>Creating Titles</b> bin into the Composer monitor.	

# Adding a Title

Once you create and add a title to your sequence, you can reposition it, change the text color, adjust the font and point size, add a shadow or border, adjust levels and kerning, and **bold** or *italicize* it.

## Creating a New Title

To create a new title:

1. In the Timeline, place the blue position indicator on the **bridge** clip in the sequence.
2. Choose New Title from the Clip menu.

The Title Tool window opens.



3. The Text Tool button is already selected. Click in the Title Tool window.

The cursor becomes an I-beam.

4. Click in the water below the bridge.

A blinking insertion point appears.

5. Type **The Dory**.



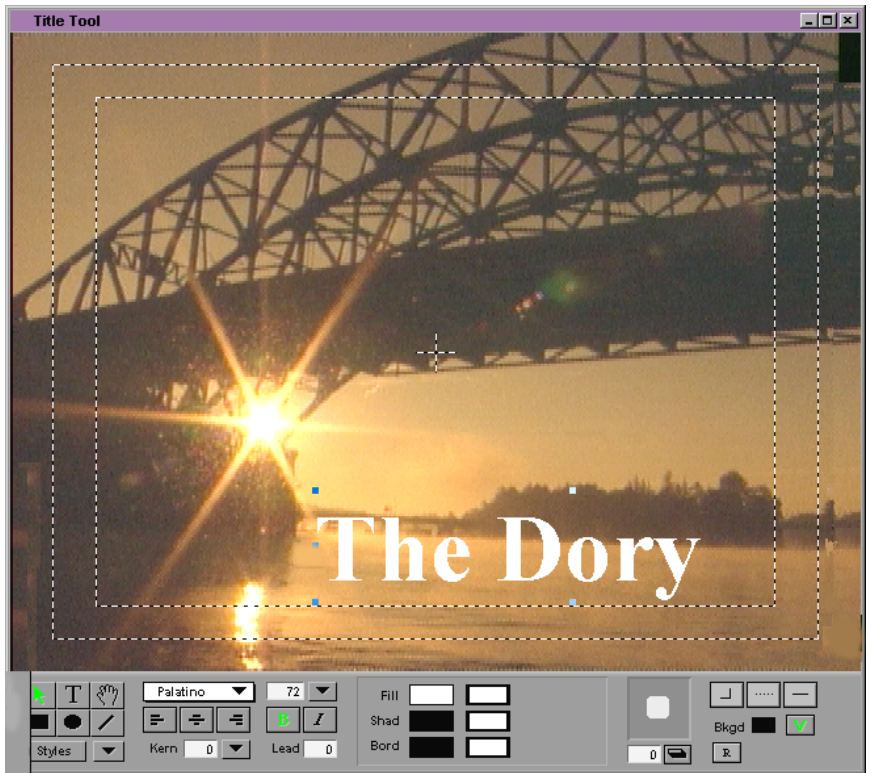
6. Click the Selection Tool on the toolbar.

Object selection handles surround the title.

7. Choose 72 from the point size pop-up menu.

8. Choose Palatino from the font pop-up menu.

9. Click the B button for bold if it's not already selected.



*You might want to drag the right side of the text selection box to eliminate any unused space, especially if you want to use the Alignment menu commands. To drag the right side, click the middle handle on the right side of the text selection box and drag it to the left until it is closer to the text.*

## Repositioning Text

To reposition the title text:

1. With the Selection Tool selected, click the title and drag it so that it appears across the water.
2. Use the arrow keys to move the title more precisely.

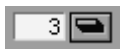
## Changing Color



To change the color of the title text:

1. Click and hold the Fill box.  
The Color dialog box appears.
2. Click a blue color.  
The color is applied to the title.

## Adding a Shadow



To add a shadow to the title text, do one of the following:

- Enter a value in the Shadow Depth text box.
- Drag the shadow icon in the direction you want the shadow to fall.

## Saving a Title

To save your title:

1. Choose Save Title from the File menu.  
A dialog box appears.
2. Type **The Dory** in the top text box.
3. Choose the **Creating Titles** bin and a target disk to store your title.
4. Click OK.  
The Title appears in the **Creating Titles** bin.
5. Click Close to close the Title Tool.

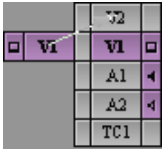
# Editing the Title into the Sequence

To add your title to your sequence:

1. Double-click the title in the bin.

The title opens in a Source pop-up monitor.

2. Turn the V2 track on and turn V1, A1, and A2 off.



3. Click the V1 source track and drag it to the V2 record track.

4. In the Source pop-up monitor, set an IN mark at the beginning of the clip and an OUT mark at 1:00:02:15.

5. In the Timeline, move the position indicator to 1:00:00:06.



6. Click the red Overwrite button on the Tool Palette.

This adds the title to the V2 video track.

7. Play the sequence to see your title.

## Adding Rolling Credits

You can create a title in the Title Tool and then make it scroll vertically; this is known as a rolling title.

## Editing the Title

To edit the existing title:

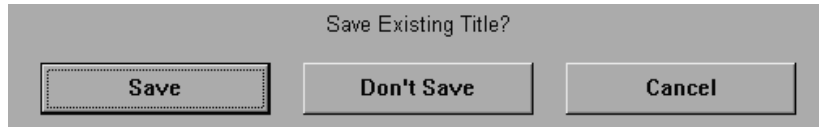
1. In the bin, press and hold the Ctrl key, and double-click the **RollingTitle: Credits** clip to open it in the Title Tool.

The text cursor appears.

2. Drag the cursor over the entire **Your Name** text to select it.
3. Type in your name.

4. Click Close.

A confirmation dialog box appears.



5. Click Save.

Two titles appear in the bin (the old title and the new title you just edited).

## Adding Video Background

To add video background to your title:

1. Double-click the **rowing in mist** clip.
2. Clear any IN and OUT marks.
3. Turn on the V1 record track and turn off all others.
4. Drag the V1 source track to the V1 record track.
5. In the Timeline, move the position indicator to the end of the **sign** clip.
6. Click the yellow Splice-in button on the Tool Palette.



The **rowing in mist** clip is added to the sequence.

## Viewing the Creation Date

Your edited title has the same name as the version originally in the bin. To distinguish the two, you can look at the creation date.

1. Click the **Creating Titles** bin to select it.
2. Choose Headings from the Bin menu.

3. Select creation date and click OK.

The clips now appear with their creation dates. The new credits clip you created has the later creation date.

## Splicing the Title into a Sequence

To splice the title into your sequence:

1. Double-click the new **Rolling Title: Credits** title clip to load it into a Source pop-up monitor.
2. From the Source pop-up monitor, click the Play button to play through the rolling credit.

Black appears at first, then eventually the credits appear.

3. Set an IN mark at 00:00:02:12 (NTSC) or at the beginning of the clip (PAL).
4. From the numeric keypad type +33:09 and press the Enter key on the numeric keypad, then click the Mark OUT button.
5. Drag the position indicator to the end of the **intervu:Lowell's Boat Shop** clip on the V2 record track.
6. Select the V2 record track and turn off all other tracks.
7. Drag the V1 source track to the V2 record track.
8. Click the yellow Splice-in button on the Tool Palette.



The **Rolling Title: Credits** clip appears over the **rowing in mist** clip.

9. Click the Play button to view the rolling title over video.

## Deleting Excess Footage

There is excess footage continuing beyond the rolling title. To delete the excess:

1. Turn on the V1 record track.
2. In the Timeline, move the position indicator to the end of the **Credits** clip.
3. Press the Add Edit key (P) on the keyboard.

This creates a transition.



4. Click the red Segment Mode (Lift/Overwrite) button below the Timeline.
5. On the V1 track, click the last clip (the second **rowing in mist** clip) in the Timeline to select it.
6. Press the Delete key.  
The clip is deleted.
7. Save your project and bins and play the sequence.

## Closing the Title Tool

To close the Title Tool after creating a new title, click Close.

You've finished this tutorial. You can go on to [“Tutorial: Output” on page 149](#), or quit Avid Xpress.



# CHAPTER 10

## *Output*

The Avid Xpress system provides tools for generating output for individual tracks or entire sequences to various videotape or audiotape formats.

Preparing for output and exporting is described in the following sections:

- [Output Options](#)
- [Preparing for Output](#)
- [Digital Cut](#)
- [Supported File Types for Export](#)
- [Preparing to Export](#)

**Tutorial: Output** contains the following section:

- [Recording a Digital Cut to Tape](#)

# Output Options

Avid Xpress provides tools for generating output for individual tracks or entire sequences to various videotape or audiotape formats. You can also use VTR emulation for direct playback of sequences using an edit controller in an analog editing suite.

## Preparing for Output

Preparing for video output involves the following procedures:

- Render all non-real-time effects, as described in the *Avid Xpress Effects Guide*.
- Calibrate and adjust video output levels.
- Calibrate and adjust audio output levels.
- Decide whether you want to generate stereo or mono audio.
- Mix down multiple audio tracks if necessary. Systems equipped with a two-channel audio board can generate a maximum of two channels.
- Prepare the record tapes.
- (Optional) Record reference bars and tone to tape.

For more information on calibrating and adjusting video and audio output levels, see “Video output:calibrating” and “Audio output:calibration tone:setting” in the Help index.

## Digital Cut

The Digital Cut Tool provides frame-accurate control when recording a sequence to tape. You can also use the Digital Cut Tool to preview the sequence with a computer-generated countdown.

The Digital Cut Tool provides several options for managing the recording of your sequence. For example, you can:

- Record using either assemble or insert edits.
- Record a selected portion of the sequence or selected tracks.
- Record according to different timecode parameters.

## Supported File Types for Export

There are several reasons why you might want to export video, audio, or both from Avid Xpress:

- You can export audio files for audio sweetening in compatible applications.
- You can export video files for touching up or creating special effects in third-party applications.
- You can export files compatible with CD-ROM for use in multimedia projects.
- You can export files to be viewed as an AVI Codec movie.

You can export files in the following formats:

- Shot log
- PICT
- AVI
- OMF Interchange®

# Preparing to Export

If you are exporting part or all of a sequence, you can speed the export process by preparing the sequence in advance as follows:

See the *Avid Xpress Effects Guide* for more information on rendering.

- Render all effects in advance. Although any unrendered effects are rendered on export (except for an OMF® export), rendering effects in advance saves you time.
- Consider mixing down additional tracks in advance; see “Video mixdown:performing” and “Mixing down audio tracks” in the Help index.
- Check and adjust all pan and audio levels in advance; see “Audio Mix Tool” in the Help index. All current pan and level settings in the sequence are carried through to the exported media.
- If you are exporting an OMF file, remember that OMF does not mix down the tracks in a sequence during export. OMF maintains all editing information in your sequence, allowing changes later. Avid Xpress mixes down video for PICT and AVI formats and audio for PICT formats.
- If you are exporting an OMF file, consider consolidating the media to save time and disk space. See “Consolidating:media:described” and “Transferring OMF files to Pro Tools” in the Help index.

# Tutorial: Output

In this tutorial you create a digital cut. This section corresponds to the clips and sequence in the bin titled **Output**. See Table 10-1.



*Be sure to read the preceding overview sections of this chapter before you start this tutorial.*

**Table 10-1 Starting the Tutorial: Output**

**If you have worked on the previous tutorial and Avid Xpress is still running:**

1. Double-click the **Output** bin to open it.
2. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the **Output** bin. Close the **Creating Titles** bin.
3. Drag the sequence you were working on from the **Output** bin into the Composer monitor.

**If you have worked on the previous tutorial but have quit the Avid Xpress system:**

1. Start Avid Xpress by double-clicking the Avid Xpress icon.
2. From the Boat Shop Project window double-click the **Creating Titles** bin and the **Output** bin to open them.
3. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the **Output** bin. Close the **Creating Titles** bin.
4. Drag the sequence you were working on from the **Output** bin into the Composer monitor.

**If you are just starting out with this tutorial and haven't completed the previous tutorials:**

1. Start Avid Xpress by double-clicking the Avid Xpress icon.
2. Click the **Output Sequence** clip and drag it into the Composer monitor to begin the tutorial.

# Recording a Digital Cut to Tape

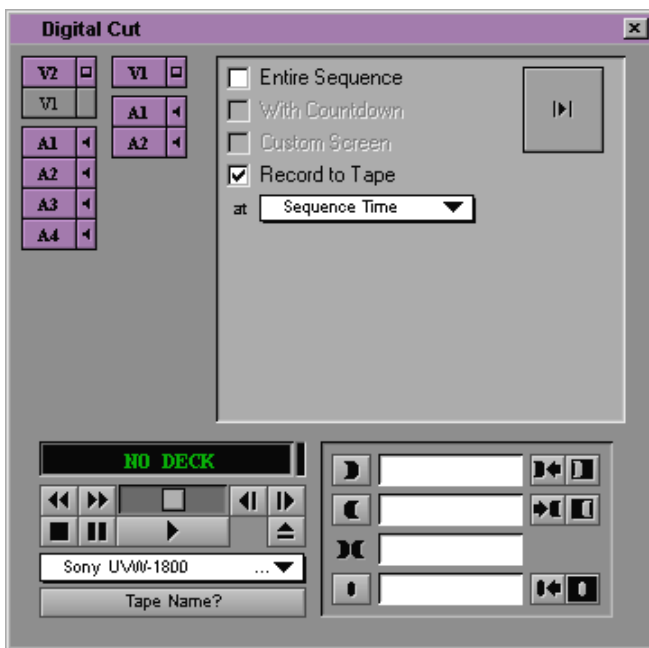
To record a digital cut to tape:

1. Load the **Boat Shop** sequence (or **Output Sequence**) into the Composer monitor.

2. Choose Digital Cut from the Clip menu.

The Digital Cut dialog box appears.

3. Use the deck controller to cue and record tape during Digital Cut recording.



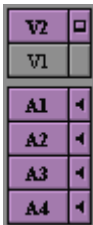
4. If you want the system to ignore any IN or OUT marks and play the entire sequence from start to finish, select Entire Sequence

If you have established IN or OUT marks for recording a portion of the sequence, deselect Entire Sequence.

5. Choose an option from the Record to Tape pop-up menu as follows:



- Choose Sequence Time to start the recording at a timecode existing on tape that matches the start timecode of the sequence. If you intend to record several sequences to tape one after another, this option requires resetting the start timecode on each sequence to match appropriate IN points on the tape.
- Choose Record Deck Time to ignore the timecode of the sequence, and start the recording wherever the record deck is currently cued.
- Choose Mark In Time to ignore the sequence timecode and establish a specific IN point on the record tape. Enter the new value in the Mark In text box.



6. Select the audio and video tracks you want represented in the digital cut. Only those tracks beside and beneath the speaker icon and the monitor icon are included in the digital cut.

The display of tracks in the Digital Cut window varies according to the tracks existing in the sequence.



7. Click the Play button.

The system cues the record deck, then plays and records the digital cut. The playback appears in the Record monitor and the full-screen monitor.

8. To stop the recording at any time, press the space bar.



*After assemble-edit recording, a freeze frame is usually added after the OUT point for one or more seconds, depending upon the record deck model. This provides several frames of overlap for the next IN point, before control track and timecode break up.*

You've finished this tutorial. You can go on to [\*\*“Tutorial: Backing Up”\*\*](#) [\*\*on page 161\*\*](#), or quit Avid Xpress.



# CHAPTER 11

## *Backing Up*

When you digitize footage, the system creates digital media files for the video and audio tracks on the media drives attached to your system. The Avid Xpress system provides useful tools and features for directly managing media files for storage, playback, backup, and transfer between systems.

Backing up is described in the following sections:

- [About Media Files](#)
- [Basic Media Tool Features](#)
- [Freeing Storage Space](#)
- [Consolidating Media](#)
- [Backing up Media Files](#)
- [Backing up Project Folders](#)

**Tutorial: Backing Up** contains the following sections:

- [Consolidating the Boat Shop Sequence](#)
- [Saving Your Work on a Drive or Diskette](#)
- [Restoring from a Backup](#)
- [Quitting and Shutting Down](#)
- [Summary](#)

# About Media Files

The system stores the media files created during digitizing in folders on your media drives labeled OMFI MediaFiles.

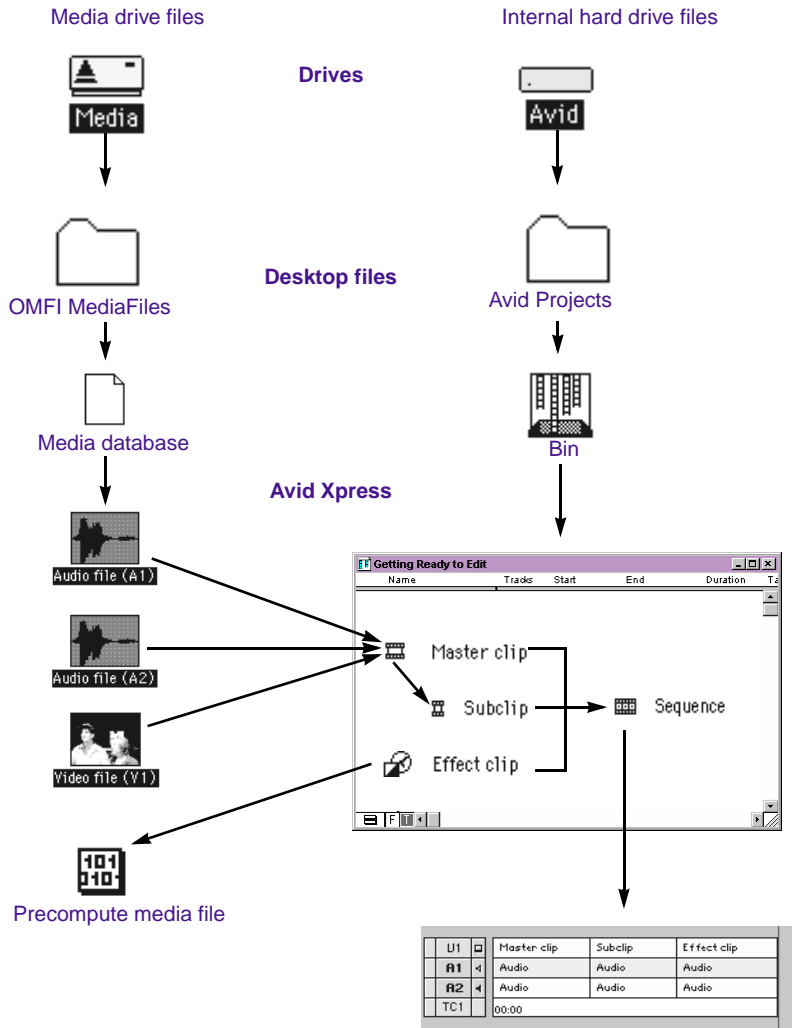
Media files are created in the following circumstances:

- During digitizing, a media file is created for each selected track (for example, V1, A1, A2), and they all are linked to the master clip.
- When you render effects, the system creates effect media files, otherwise known as *precomputes*, that are linked to the effect clip.
- When you create subclips and sequences, you do not create new media files. These refer to the media files for the source master clips.

To manage media files, the system also creates a *Database file* that is stored in each MediaFiles folder. The system updates the Database file each time you make a change to a media file.

The following illustration shows the links among media files (stored on the media drives), the various clips (stored in the bin files in the Avid Projects folders on the internal hard drive), and an edited sequence (shown in the Timeline and stored in the bin).










# Media Objects and Files



# Media Relationships

Table 11-1 displays the Media File icons and a description of each icon.

**Table 11-1 Media Objects and Files**

Object Icon	Object Description
 Source clip	A clip that references the original videotape source footage for master clips.
 Master clip	A clip that references audio and video media files formed from digitized footage or imported files.
 Subclip	A clip that references a selected portion of a master clip.
 Sequence	A clip that represents an edited program, partial or complete, that you create from other clips.
 Group clip	A file in the bin that combines two or more clips based on marks or tracking info sync points.
 Motion effect	A file in the bin that references effect media files generated when you create motion effects.
 Rendered effect	A clip that references an effect media file generated when you render an effect.
 Effect and Title	A clip that references an unrendered effect that you create.
 Media file	A file on the media drive containing digital audio or video material. Media files are formed when you digitize footage or import files, mix down audio or video tracks, create an effect (precompute media file), or render an effect.

# Basic Media Tool Features

The Media Tool provides many of the same controls for viewing and managing information that you use with bins, including the following:

- The two display modes in the Media Tool function like those in bins: Text mode and Frame mode.
- The Media Tool Fast menu gives you quick access to all the same commands available in the Bin Fast menu.
- You can highlight, move, copy, duplicate, delete, and sift clips. You can also select media relatives, sources, and unreferenced clips.
- You can use Text mode headings and display options for columns of clip and media file data. You can also use procedures such as customizing the display of columns, moving within columns, and sorting information described in “Media Tool” in the Help index.
- You can use the same Frame mode display options described in [“About Bin Display Modes” on page 48.](#)
- You can print Media Tool data using the same procedures for printing bins, described in “Bins:printing” in the Help index.

In addition to the procedures just described, the Media Tool has a number of unique functions, described in this section. These include the following:

- Unlike bins, the Media Tool displays all the tracks digitized for each clip as separate media files. Therefore, when you view, delete, and manipulate files, you have the added option of specifying individual video and audio tracks.
- The Media Tool does not display sequences and subclips. Only master clips, precompute (rendered effect) master clips, and associated media files are displayed.
- The following Bin menu commands do not apply to the Media Tool: Modify, Select Offline Items, and Relink. You must perform these functions from the bin.

- The Media Tool database and display options are not saved as they are with bins. Instead they are re-created each time you open the tool. Likewise, closing the Media Tool deletes any customization of columns or other view elements.

## Freeing Storage Space

Unlike the bin files stored in project folders on the internal hard drive, media files require considerable storage space. To maximize your use of storage during larger projects, you can abridge or convert media files. You can perform these procedures on clips selected in either the Media Tool or in bins.

In addition, you can delete unreferenced media files for a finished sequence. This procedure is performed on clips selected in bins only.

## Consolidating Media

When you consolidate media files, the system finds the media files or portions of media files associated with selected clips, subclips, or sequences. It then makes copies of them, and saves the copies on a target disk that you specify. Because the Media Tool displays only master clips, you cannot consolidate subclips or sequences with the Media Tool. You can consolidate master clips, subclips, and sequences in the bin.

The Consolidate feature operates differently depending upon whether you are consolidating master clips, subclips, or sequences. There are also different advantages in each case, as follows:

- **Master clips:** When you consolidate a master clip, the system creates exact copies of the media files. If you link the original master clip to the new files, the system creates a master clip with the extension *.old* that remains linked to the old files. If you choose to

maintain the link between the original master clip and the old media files, the system creates a new master clip with the extension *.new* that is linked to the new files. The new clips are also numbered incrementally beginning with *.01*. Consolidating master clips does not save storage space because the system copies the same amount of media for each clip.

- **Subclips:** When you consolidate a subclip or group of subclips, the system copies only the portion of the media files represented in the subclip, and creates a copy of both the master clips and the subclips. The suffix *.new* is attached, along with incremental numbering beginning with *.01*.
- **Sequences:** When you consolidate a sequence, the system copies only the portions of media files edited into the sequence, and creates new master clips for each shot in the sequence. The suffix *.new* is attached to the master clips, along with incremental numbering beginning with *.01*. The sequence is not renamed, but is automatically relinked to the new media files.



*Because a consolidated sequence is linked to the new files by default, consider duplicating the sequence each time you consolidate if you need to maintain links to the original files.*

# Backing up Media Files

The MediaFiles folders on your external media drives contain the individual media files created when you digitize source material. Unlike the smaller Avid Projects and Avid Users folders, these folders are too large to back up onto diskettes.

For backing up media files:

- You can use the Consolidate feature, described in [“Consolidating Media” on page 158](#), to make copies of selected media files on a target hard drive connected to the system.
- You can archive larger media files and folders to a dedicated mass-storage system.
- You can consolidate or make copies of media files for transfer to another system. For more information, see “Consolidating:media:described” in the Help index.

# Backing up Project Folders

To back up the larger media files that are created when you digitize footage, you must use a mass-storage device.

Although Avid Xpress automatically saves your bins, projects, and settings, you should back up these items frequently to avoid losing any of your work in case of a hard drive crash or corruption of the files.

Because the storage requirements are minimal, you can back up these files easily to a variety of storage devices, such as:

- Diskette
- Network storage device, such as a file server
- Mass storage device

# Tutorial: Backing Up

In this tutorial you learn to back up and free up space on your media drive. This section corresponds to the clips and sequence in the bin titled **Backing Up**. See Table 11-2.



*Be sure to read the preceding overview sections of this chapter before you start this tutorial.*

**Table 11-2 Starting the Tutorial: Backing Up**

<b>If you have worked on the previous tutorial and Avid Xpress is still running:</b>	<b>If you have worked on the previous tutorial but have quit the Avid Xpress system:</b>	<b>If you are just starting out with this tutorial and haven't completed the previous tutorials:</b>
1. Double-click the <b>Backing Up</b> bin to open it.	1. Start Avid Xpress by double-clicking the Avid Xpress icon.	1. Start Avid Xpress by double-clicking the Avid Xpress icon.
2. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the <b>Backing Up</b> bin. Close the <b>Output</b> bin.	2. From the Boat Shop Project window double-click the <b>Output</b> bin and the <b>Backing Up</b> bin to open them.	2. Click the <b>Backing Up Sequence</b> clip and drag it into the Composer monitor to begin the tutorial.
3. Drag the sequence you were working on from the <b>Backing Up</b> bin into the Composer monitor.	3. Press and hold the Alt key, and drag the sequence you were working on from the previous tutorial into the <b>Backing Up</b> bin. Close the <b>Output</b> bin.	
	4. Drag the sequence you were working on from the <b>Backing Up</b> bin into the Composer monitor.	

# Consolidating the *Boat Shop* Sequence

To consolidate the **Boat Shop** sequence:

For more information on rendering effects, see the *Avid Xpress Effects Guide*.

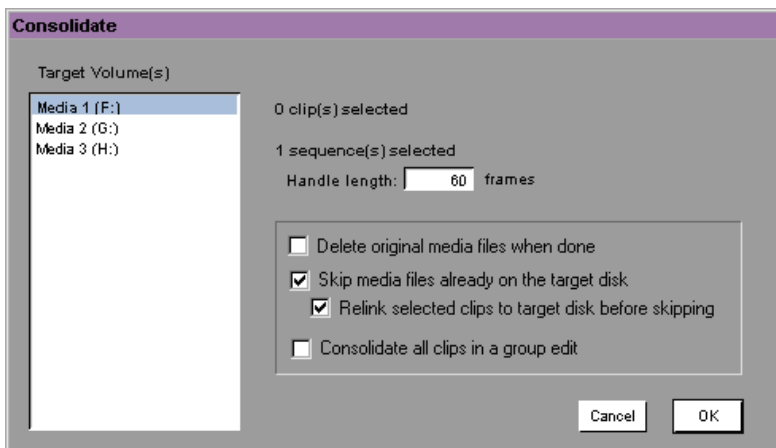
1. Select the **Boat Shop** sequence (or **Backing Up Sequence**).

2. Choose Duplicate from the Edit menu.

This allows you to maintain links to the original files, if necessary, and render any unrendered effects.

3. Choose Consolidate from the Bin menu.

The Consolidate dialog box appears.



4. Click one of the following:

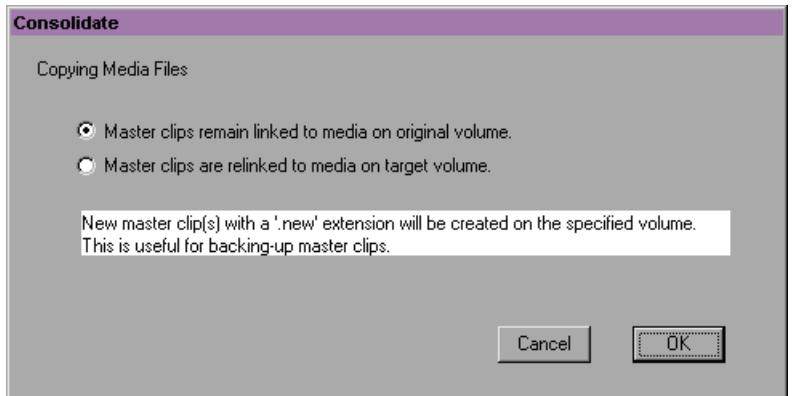
- “Delete original media files when done” to delete original media files automatically.
- “Skip media files already on the target disk” if some related media files are already located on the target disk.
- “Relink selected clips to target disk before skipping” to ensure that all selected clips are linked to media on the target drive. This option appears when you click “Skip media files already on the target disk.”

5. Choose a target disk from the pop-up menu.

Make sure that you choose a target disk with enough storage space for all the consolidated media files.

6. Enter a handle length for the new clips in the text box, or leave it at 60 frames to accept the default.
7. Click OK.

If you did not choose to delete the original media files, a second dialog box appears and offers you a choice.



8. Link the original master clips to the new or old media files, according to preference.
9. Click OK.

Another way to back up media files is to copy them directly onto another hard drive on the desktop. You cannot, however, take advantage of the storage-saving features of the Consolidate command, and it is more difficult to identify particular media files when searching directly through folders.



**Do not make copies of media files on the desktop while Avid Xpress is running. Also, do not keep duplicate copies of media files online; either delete the originals, take the backups offline, or store the backups in a folder with a different name.**

# Saving Your Work on a Drive or Diskette

To save your work on a drive or diskette:

1. Mount the drive or insert the diskette.
2. Double-click the icon for the targeted storage drive or diskette to open it. Double-click any additional folders to target the appropriate storage location.
3. Double-click the internal hard drive to open it.
4. Drag a project folder, user folder, or Settings file to the targeted storage location.
5. When the system finishes copying the files, eject the diskette or unmount the drive.

# Restoring from a Backup

To restore a project, user profile, or settings from a backup storage device:

1. Mount or insert the drive or diskette as appropriate.
2. Open the drive or diskette, and the internal hard drive.
3. If you are restoring an individual bin or bins, you must relink them to the project from within the Project window. For more information, see “Media files:relinking” in the Help index.
4. Drag the copies from the storage device to the appropriate folder on the internal hard drive:
  - Project folders and Settings files go in the Avid Projects folder.
  - User folders and Settings files go in the Avid Users folder.
  - Site settings files go in the Avid Xpress folder.
5. Start Avid Xpress. The restored project/user profile appears in the Open Project dialog box.

# Quitting and Shutting Down

To quit and shut down:

1. Click Quit in the Open Project dialog box.
2. Choose Leave when the system prompts you.
3. Choose Shut Down from the Start menu.
4. After a few seconds, turn off the rest of your hardware.

## Summary

Congratulations on completing the Avid Xpress Tutorial! We hope you've enjoyed this introduction to the Avid editing process. After mastering these skills, you can proceed to learn more advanced techniques for inputting media, adding other effects and titles, and outputting work for digital cuts.

For further information about any Avid Xpress techniques or features, see the Help index.

Avid also recommends that you consult the latest Avid Training Catalog for complete descriptions and schedules of Avid's course offerings. All classes are led by trained, experienced professionals. A variety of hands-on student activities encourage participant learning. Call 800-867-2843 for more information.



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