Preditor Manual

PLAY®

Printed in USA

Preditor Table of Contents

Chapter 1

Document Overview

This chapter provides information on how this manual is organized. It also introduces conventions used within the manual, and provides information on how to get in touch with Trinity Tech Support and Play, Inc.

The following topics are covered:

Introduction

This manual explains how to use Preditor, Trinity's linear and non-linear (if Time Machine is installed) editor. It details how to use buttons, panels, and pop-up menus. It also includes tutorials. You will find the following sections in the manual:

- Quick Start

A guided tour of Preditor that helps new users get a feel for the application. It shows you how to add stills and effects to a timeline, and how to play them back.

- Reference

A description of all the buttons, panels, and pop-up menus in Preditor. There are also explanations about the interface, such as how to customize the layout or the parts of the timeline. It also explains functions you can perform with mouse or keyboard actions. You will also find instructions on how to use Time Machine to digitize clips in this chapter.

- Tutorials

Step-by-step instructions and graphics show you how to perform basic to advanced editing tasks in Preditor. You learn the basics of linear and non-linear editing, as well as how to create specific types of projects.

- Appendices

A collection of information, including keyboard shortcuts and FAQ's.

Conventions

Before you get too far into the manual, here are some of the conventions that appear within.

General Conventions

The following formats are used to identify special instructions or important points in this manual.

1. (numbered)	Indicates step-by-step instructions to follow.
Bold Type	Indicates words you should type, buttons you should click, names of menus or windows, and file path names.
Italic Type	Indicates emphasis of important points.
2.1 only	This manual covers both versions 1.3 and 2.1. When a feature is only available in 2.1, this icon appears in the margin to let you know that this feature is not available in the 1.3 software. If you decide later you would like these features, your Trinity dealer can sell you the Trinity 2.1 software upgrade kit. Version 2.1 is required for Time Machine users, and it includes many new features for users without Time Machine as well. Contact your dealer for more information.

The Trinity software version 1.3 is a free upgrade available on the Play web site (www.play.com) or from your Trinity dealer. The 1.3 software patch upgrades version 1.2 to 1.3. It includes many enhancements and bug fixes, and is recommended for all 1.2 users.

Mouse Conventions

Trinity is designed for use with a two-button mouse. The following table explains mouse commands used in this manual.

Click	Place the mouse pointer over an object. Press the *left* mouse button and immediately release.
Click-and-drag	Place the mouse pointer over an object. Press the *left* mouse button. While holding the button down, move the mouse around. This is used mainly to draw boxes over objects to select them.
Double-click	Place the mouse pointer over an object. Press the *left* mouse button twice quickly and immediately release.
Drag-and-drop	Place the mouse pointer over an object. Press the *left* mouse button and hold it down. Drag (move) the object anywhere on your screen. When you release the mouse button, the object is dropped where the mouse pointer is aimed.
Right-click	Place the mouse pointer over an object. Press the *right* mouse button and immediately release.

Contact Information

If you have questions about Trinity and its applications or hardware, there are a number of ways to contact Play's friendly, knowledgeable support staff.

Email	General Questions:	customerservice@play.com
	Trinity Support:	trinitysupport@play.com
Mail	Play's Intergalactic Headquarters	Play Incorporated 2890 Kilgore Road Rancho Cordova CA 95670-6133
Phone & Fax	Technical Support:	916.636.2444 Monday-Friday, 7:00 AM to 6:00 PM PST
	Corporate Office:	916.851.0800
	General Fax:	916.851.0801
	Customer Support Fax:	916.853.9831
	Sales Department Fax:	916.631.0705
Web Pages	Trinity Updates:	http://www.play.com/trinity/updates
	Main Page:	http://www.play.com
	Contact Page:	http://cf.play.com/play/trinity/phone.cfm
	Knowledge Base and FAQ:	http://www.play.com/cgi-bin/rightnow
	Trinity Forum:	Go to cf.play.com/play/trinity, click on Discussion Forum in left column under User Resources
	Trinity Q & A	cf.play.com/play/support

Chapter 2

Quick Start

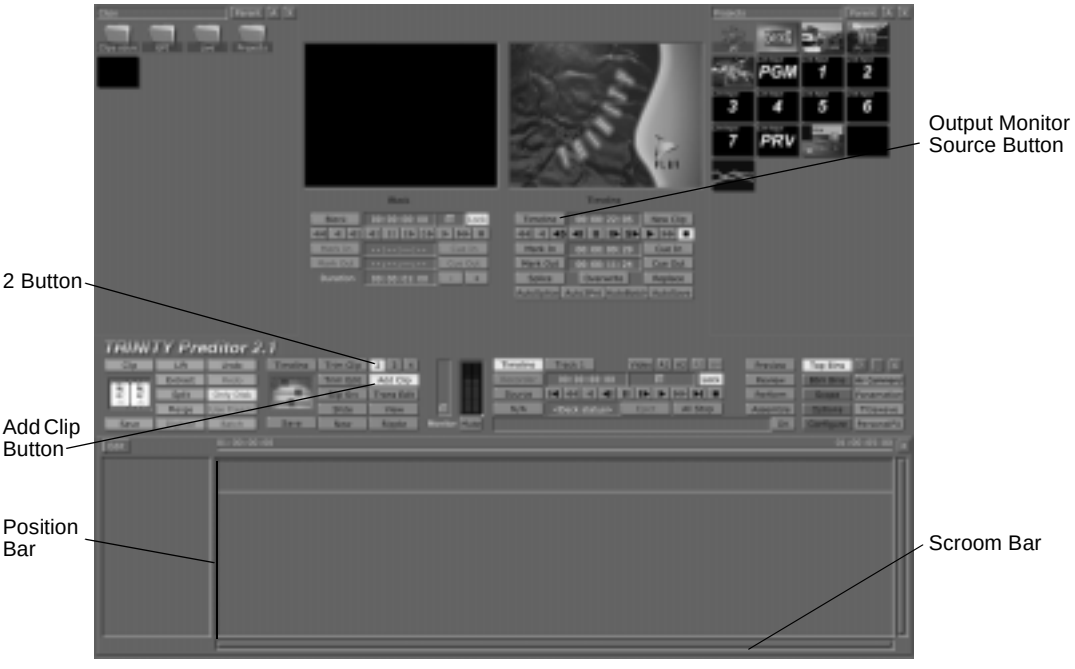
This section introduces you to editing on the Preditor timeline. The timeline provides a graphical representation of your projects, which makes it easy to trim or move events, such as clips and effects. While editing with Preditor, you can scrub through your timeline and see every non-linear clip, dissolve, wipe, digital video effect, graphic, title, and still instantly in its full resolution without rendering.

In order to get you up and running so you can get a feel for how the Preditor timeline works, in this Quick Start you will use some of the framestores provided with Trinity to place dissolves, wipes, digital video effects, and an overlay on your timeline. When you are ready to work with your own video sources, the tutorials in this book give you step-by-step directions on how to assign decks and tape names, log clips, build a timeline, and digitize clips (if you have Time Machine installed).

This Quick Start walks you through the following:

Adding Events

The first thing you'll do is add an event to the timeline. Events can be stills, linear or digital clips, transitions, or effects. But before you begin, let's take a quick look at the Preditor interface (following figure).



The Preditor Interface

When you first open Preditor, by default it has the settings you need to dive in and do this Quick Start. But if you or someone else has been exploring in it, check to see that the 2 button and Add Clip button are on (they are yellow when they are on). Also, make sure the right output monitor source button says Timeline. If it says Recorder or Off, right-click on it and select Timeline from the pop-up menu.

OK, you're ready to start having fun. Here's how to add an event to the timeline:

1. Find the following picon in the \Trinity\Bins\Stills\Manmade bin. (For instructions on how to navigate through the bins, see the *Trinity 2.1 User Guide*.)

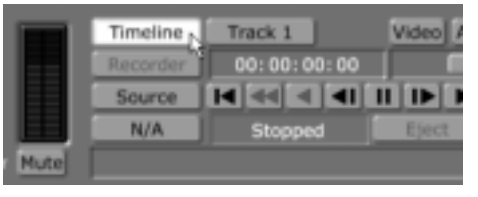
Still Picon

2. Double-click on the picon.

   It is loaded onto the timeline. You can also drag-and-drop picons onto the timeline.

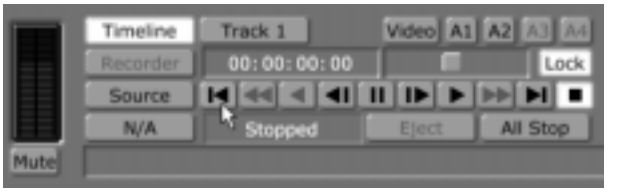
Picon on the Timeline

3. Click on the **Timeline** button on the toolbar (following figure).



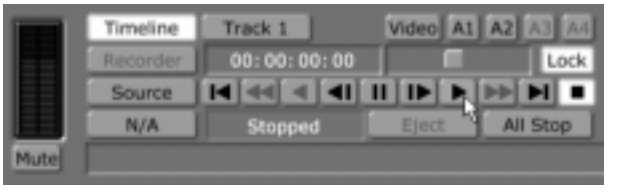
The Timeline Button

4. Click the **First Frame** button in the transport controls on the toolbar (following figure).



The First Frame Button

5. Click the **Play** button in the transport controls on the toolbar (following figure).



The Play Button

You see the image on the right (output) monitor. You also see the Position Bar, a thin, black vertical line, move across the timeline while the timecode above the Position Bar changes, reflecting its current position.

You can also scrub through the timeline by clicking-and-dragging the Position Bar through the timeline. Preditor instantly shows you the video at whatever position you move to.

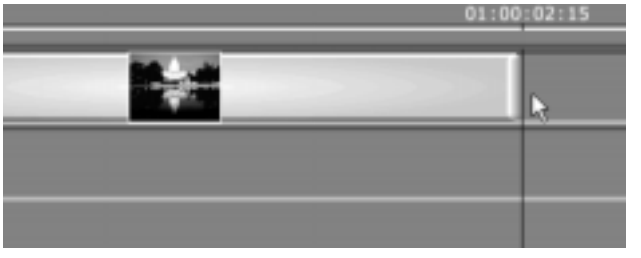
TIP The following functions help you move around on the timeline:

- Scroom (scroll and zoom) bar - Located at the bottom of the timeline, the scroom bar moves the timeline horizontally when you drag it to the left or the right, and zooms in and out when you drag it up or down.
- Sizing the timeline - You can also zoom in and out by right-clicking on any gray area of the timeline. This brings up a pop-up menu with zoom selections. This pop-up menu also contains a Fit All option, which is handy for sizing the timeline so you can see everything on it.
- Position Bar - You can place the Position Bar anywhere on the timeline by clicking where you would like it to appear.

Changing The Duration Of Events

Next you'll change the duration of the event you placed on the timeline. Trimming clips is easily done by clicking-and-dragging the trimming handles on the ends of each clip. Here's how to shorten the event you placed on the timeline:

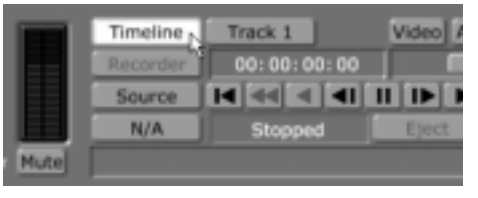
1. Click on the trimming handle (the raised bar at the end of the clip) on the right side of the event and drag left to shrink the event bar (following figure).



Trimming the Event

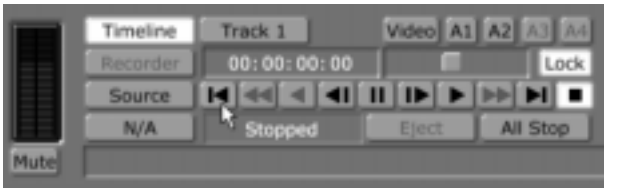
The event is now shortened. To watch it, proceed to the next steps.

2. Click on the **Timeline** button on the toolbar (following figure).



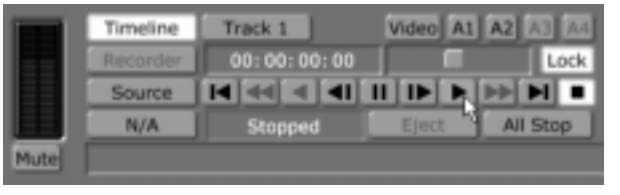
The Timeline Button

3. Click the **First Frame** button in the transport controls on the toolbar (following figure).



The First Frame Button

4. Click the Play button in the transport controls on the toolbar (following figure).



The Play Button

The length of time the still image is on the screen decreases.

Now you're ready to add another event to the timeline and create some transitions.

Creating Cuts

Next you'll add another event and watch the cut between the two events.

1. Locate another still, such as the following one from the \Trinity\Bins\Stills\Manmade bin.

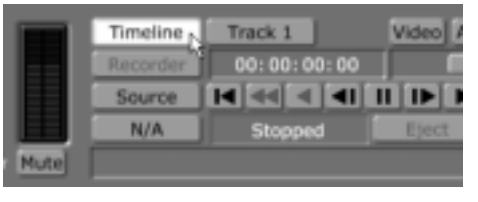
Still Picon

2. Double-click on the picon to load it into the timeline (following figure). You can also drag the picon from the bin to the timeline.

Two Clips on the Timeline

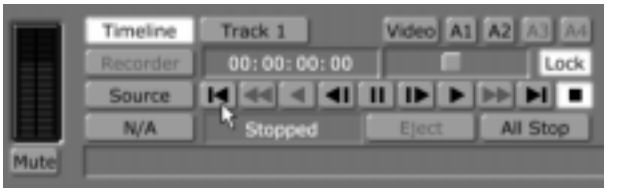
TIP If the timeline is zoomed out and you want to see all of your clips, right-click in a gray area of the timeline and choose Fit All from the pop-up menu.

3. Click the Timeline button on the toolbar (following figure).



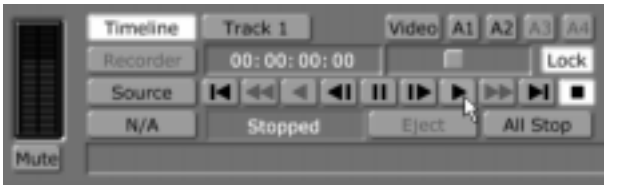
The Timeline Button

4. Click the **First Frame** button in the transport controls on the toolbar (following figure).



The First Frame Button

5. Click the **Play** button in the transport controls on the toolbar (following figure).



The Play Button

This time, as you watch the right (output) monitor, Preditor performs a cut as it reaches the end of the first event and the beginning of the next.

Creating Dissolves

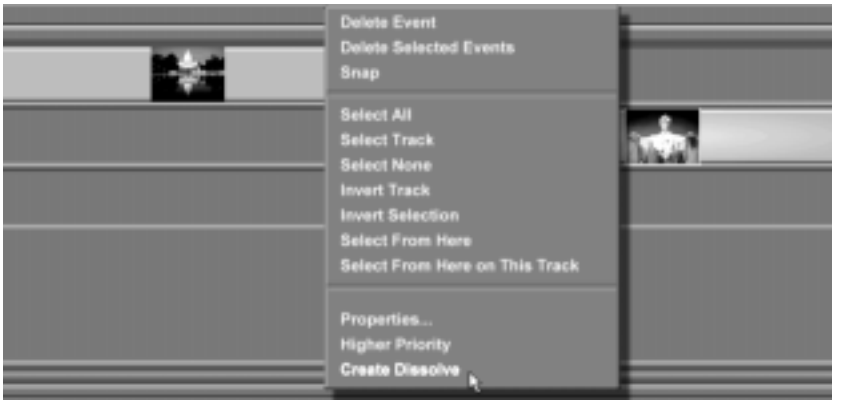
Next you'll create a dissolve between the two events. One of the great things about Preditor is that it makes it easy to create this common transition.

To create a dissolve, do the following:

1. Click on the second event, drag it to the track below, and drop it. Drag the second clip to the left so that the two clips overlap (following figure).

Second Event In Place

2. In the overlapped area, right-click on either event and choose **Create Dissolve** from the pop-up menu (following figure).



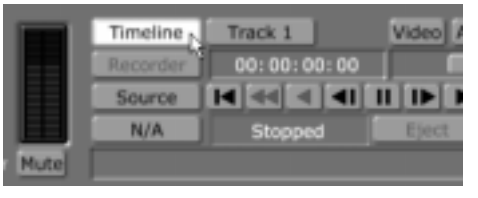
Choosing Create Dissolve

A new track called FX (effects) appears directly below the two video tracks (following figure). The tan bar that appears in this track represents the transition between the two events.

The FX Track with a Dissolve

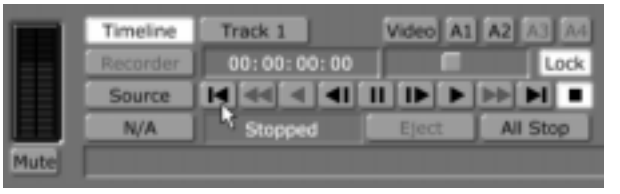
NOTE A simple dissolve appears in the FX track as a tan-colored bar. If you drag one of Trinity's effects into the FX track (which we will do shortly), the effect's picon is displayed. The numbers on the bar, such as1>2, indicate the transition will switch from the image source on the Video 1 (top) track to the image on the Video 2 (second) track.

3. Click the **Timeline** button on the toolbar (following figure).



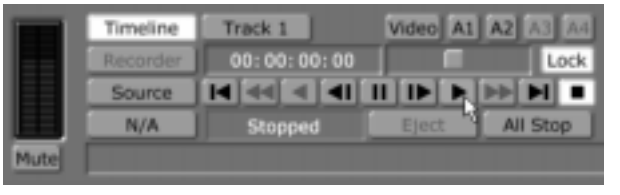
The Timeline Button

4. Click the **First Frame** button in the transport controls on the toolbar (following figure).



The First Frame Button

5. Click the **Play** button in the transport controls on the toolbar (following figure).



The Play Button

On the right (output) monitor, you see a smooth dissolve between the two events instead of the cut you saw before.

At this point you have already mastered some of the basics of editing in the Preditor timeline: adding events, changing their duration, and creating transitions. The next section shows you how to easily jazz up your project by dropping effects into the timeline.

Adding Effects

In this section, you will use effects instead of dissolves to transition between events. First, you will add two more events. Then, you will add three effects. Here's how to add effects to the timeline:

1. Choose two more picons from the \Trinity\Bins\Stills\Manmade bin.

Two Events to Add to the Timeline

2. Drag the picons into the timeline, placing them in alternating video tracks (following figure). Place them so the events overlap.

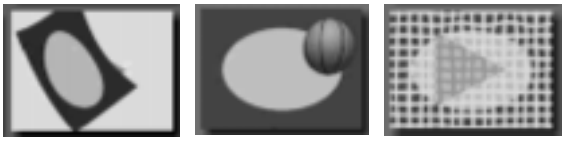
TIP If the timeline is zoomed in and you want to see all of your clips, right-click in a gray area of the timeline and choose Fit All from the pop-up menu.

Four Events with Dissolves

3. Right-click on an event in each overlap area, and select Create Dissolve from the pop-up menu.

   You should have three dissolves on your timeline (previous figure).

4. Locate the following picons in the \Trinity\Bins\Fx\Sampler bin.



Effect Picons

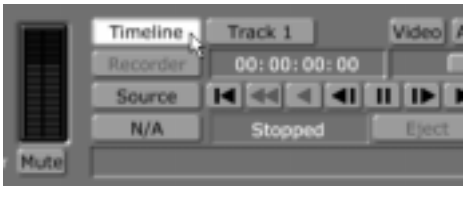
5. Drag-and-drop each picon onto a dissolve event on the FX track (following figure).

Three Effects in Timeline

You see the effects picons replace the tan-colored bars.

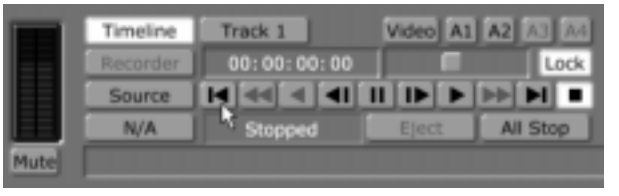
NOTE Preditor scales the duration of any effect you drop on an existing transition event if it can. Some effects are a fixed length. In this case the length of the effect may not match the length of the overlap between the events, and you need to scale the lengths of the clips or move them on the timeline to fit the effect. For information on how to trim or move clips, see “Building A Timeline” on page 201.

6. Click the **Timeline** button on the toolbar (following figure).



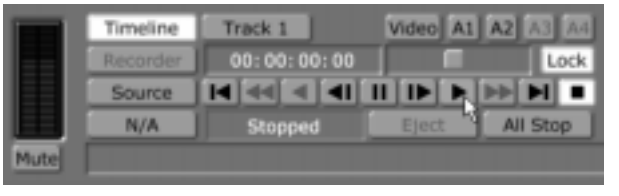
The Timeline Button

7. Click the **First Frame** button in the transport controls on the toolbar (following figure).



The First Frame Button

8. Click the **Play** button in the transport controls on the toolbar (following figure).

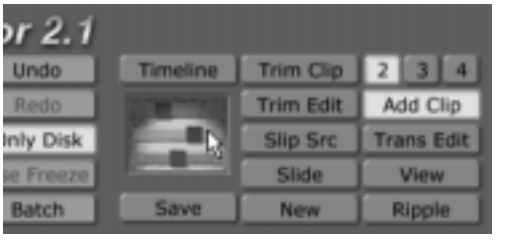


The Play Button

In the right (output) monitor, you see Preditor play through the timeline, performing the effects between each event.

If you want to save your timeline at this point, do the following:

1. Click on the Timeline Picon in the toolbar (following figure).



The Timeline Picon

2. Drag the picon into the bin where you want to save it.

   Your timeline is saved. To clear the timeline, click the New button to the right of the Timeline Picon. To reload your saved timeline, double-click on its picon in the bin or drag it onto the timeline area.

Now that you've learned how to include effects in your projects, feel free to experiment with the other effects included with Trinity to see what they do. When you're ready, the next section shows you how to add a graphic overlay to this timeline.

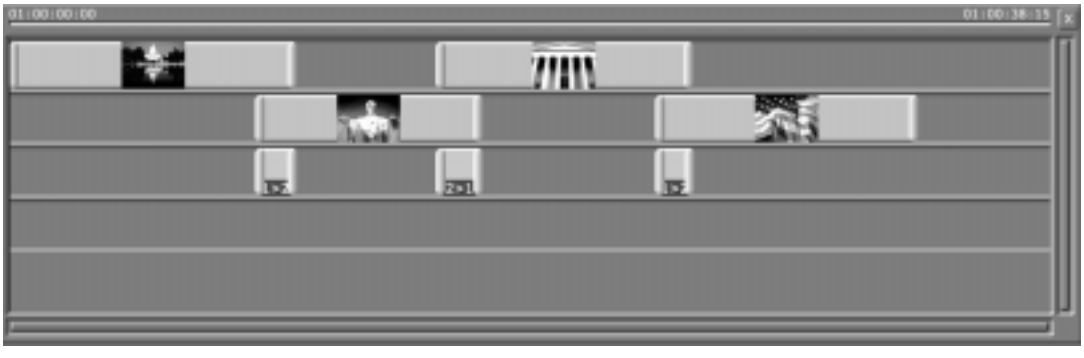
Adding A Graphic Overlay

An overlay event combines with video events, rather than replacing them. In this section, you will add a spinning globe lower third overlay to your timeline.

First, you will change the effects you added in the last section to dissolves (some of them use the downstream key that the overlay will need). Here's how:

1. Right-click on the effects and choose **Replace with Dissolve** from the pop-up menu.

   The effects are replaced with dissolves (following figure).



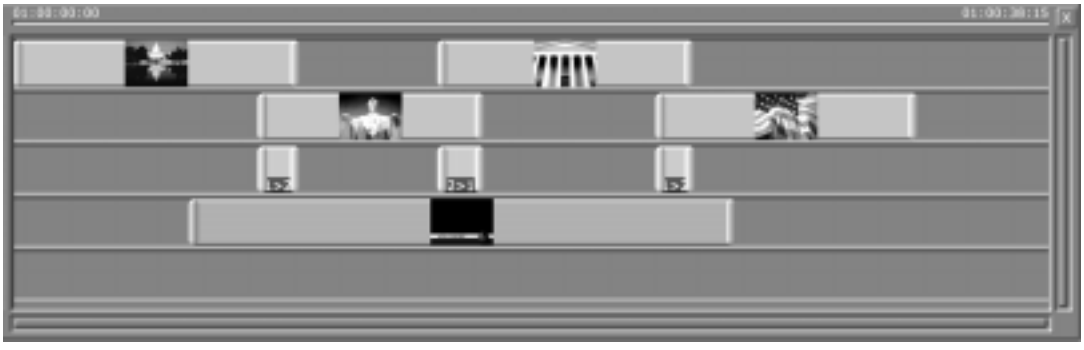
Dissolves on Timeline

2. Locate the following picon in the **\Trinity\Bins\Fx\Sampler** bin.

Overlay Effect Picon

3. Drag the picon into the timeline and drop it anywhere.

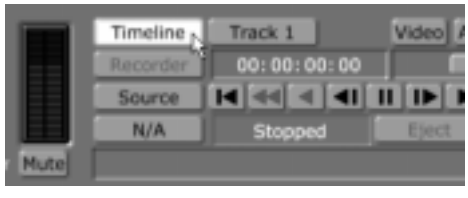
A new track labeled DSK (downstream key) appears on the timeline, and the picon is located on this track.



Graphic Overlay on Timeline

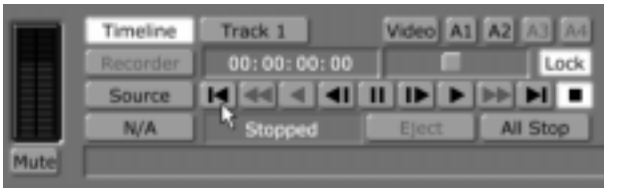
You can move this event around and increase or decrease its duration as you wish. An overlay element appears on the video at the point in the timeline where its left edge appears, and goes away when the right edge is reached. The video is not otherwise affected. This means that the graphic overlay can appear on top of one or more video events.

4. Click the **Timeline** button on the toolbar (following figure).



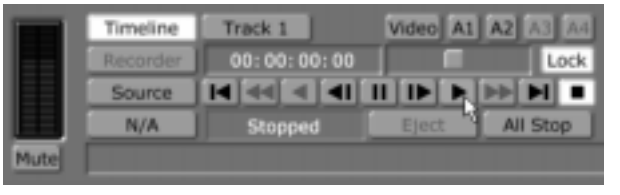
The Timeline Button

5. Click the **First Frame** button in the transport controls on the toolbar (following figure).



The First Frame Button

6. Click the **Play** button in the transport controls on the toolbar (following figure).



The Play Button

In the right (output) monitor, you see Preditor play through the timeline with the overlay appearing over the events where you placed it.

At this point, you've gotten a feel for working in the Preditor timeline. If you'd like to try working with live video rather than stills, go on to the next section.

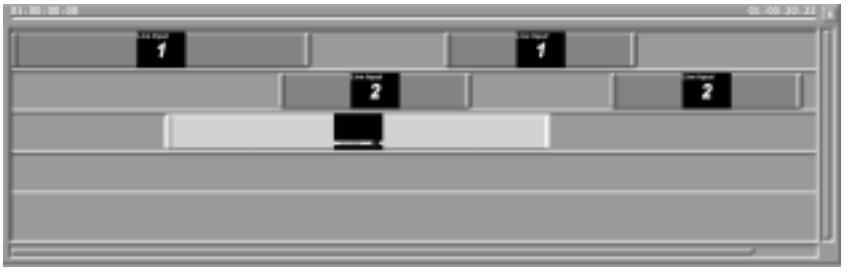
Live Input Events

So far, you have been using stills rather than tape or live sources. You can replace these still images with live video inputs quite easily. If your Trinity has video sources connected to inputs, do the following:

1. Locate the following picons in the \Trinity\Bins\Clips\Live bin.

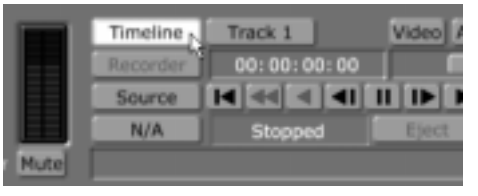
Input Picons

2. Drag-and-drop the picons for the inputs you have video sources connected to onto the stills on your timeline, alternating between them. For example, if you have sources connected to inputs 1 and 2, your timeline looks like this:



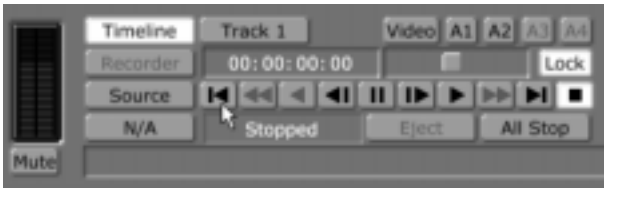
Live Events on the Timeline

3. Click the **Timeline** button on the toolbar (following figure).



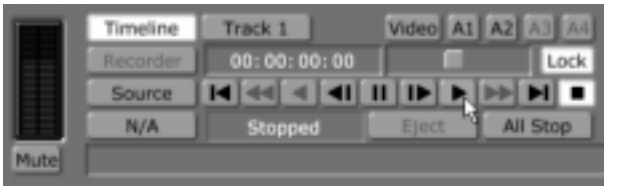
The Timeline Button

4. Click the **First Frame** button in the transport controls on the toolbar (following figure).



The First Frame Button

5. Click the **Play** button in the transport controls on the toolbar (following figure).



The Play Button

You see the transitions between the live video in the right (output) monitor.

In this Quick Start, you have learned the basics of working on the Preditor timeline. When you're ready to work with your own clips, try the tutorials in this book. They teach you to assign your decks, log clips, build more complicated timelines, and batch digitize your clips (if you have Time Machine installed).

Chapter 3

Reference

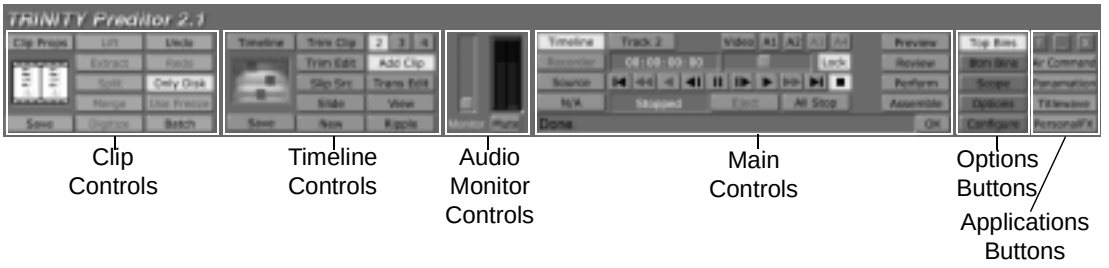
This section of the manual documents how each button, panel, and pop-up menu of the Preditor software operates. The explanations of these functions are grouped according to the following topics:

Introduction To The Interface

When you first open Preditor, you see two monitors in the middle of the top of the screen, with bins next to them on the sides of the screen (following figure). For information on changing the interface, see “Customizing The Interface” on page 32.

The Preditor 2.1 Interface

The main toolbar for Preditor is across the middle part of the screen (following figure).



The Preditor Toolbar

Buttons on the toolbar are grouped according to function, as shown in the previous figure. Options that are not currently available are grayed out. This includes buttons for non-linear editing if Time Machine is not installed.

In addition to the toolbar buttons, there is a set of transport controls under each monitor. These controls change for some editing modes.

As well as the toolbar and transport control buttons, there are a number of panels and pop-up menus that are accessed by right-clicking.

The following sections begin with an explanation of how to customize the Preditor interface, and then describe the functions of each group of buttons on the interface, as well as associated panels and pop-up menus. For information on how to use the bins and general information on navigating in Trinity, see “The Trinity Interface” and “Basic Functions” chapters in the *Trinity 2.1 User Guide*.

Customizing The Interface

The Preditor interface layout is flexible, and the default layout that you see when you first open Preditor can be modified in several ways to suit your needs. You can choose to display one, two, three, or four monitors; change the size and number of open bins; and change the size of the timeline.

Monitors

You can choose to display two, three, or four monitors by clicking on the blue 2, 3, or 4 buttons in the Timeline Controls on the toolbar.

The Preditor Interface with Four Monitors Displayed

The right monitor displays the output (timeline or record deck), and the left monitors display inputs. When three or four monitors are displayed, they replace the bin windows at the top of the screen.

In most of the six editing modes you can select the number of monitors you wish to view, but in the Trans Edit (Transition Edit) mode four monitors are required and are automatically displayed.

NOTE Your PC monitor must be set to 1280-by-1024 resolution to see all four monitors. This is the minimum resolution required for Trinity 2.1.

To return to the layout you saw when you opened Preditor, with two monitors and bins at the top, click on the blue Add Clip button on the toolbar. Add Clip is the default editing mode.

You can also choose to display one large monitor by clicking on the blue View button in the Timeline Controls on the toolbar.

The Preditor Interface with the View Monitor Displayed

This monitor displays the output, and is useful for reviewing the final output of your project.

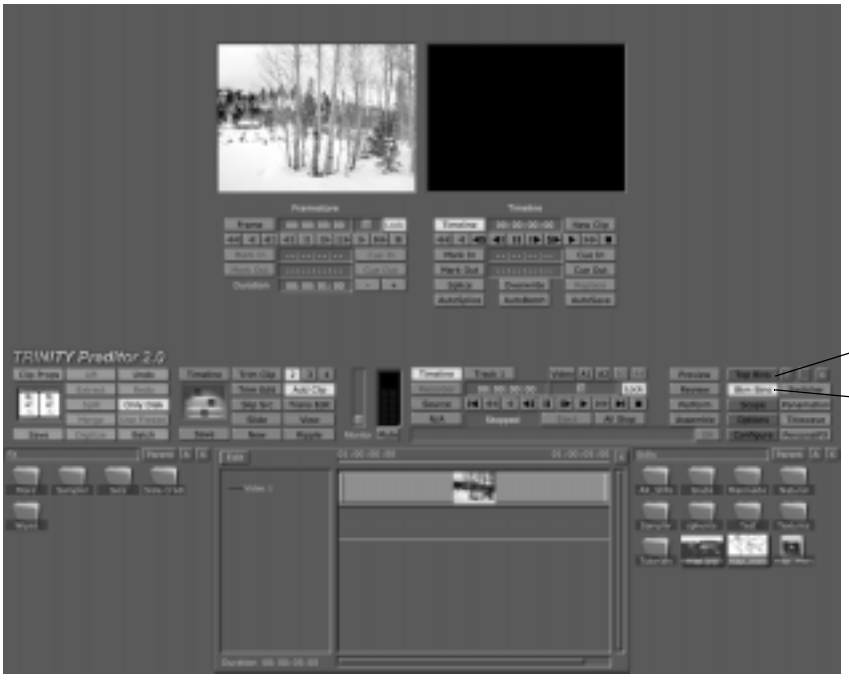
To return to the layout you saw when you opened Preditor, with two monitors and bins at the top, click on the blue Add Clip button on the toolbar.

Bins You can also change the layout of the interface by changing the number of bins open. One way to do this is to toggle on or off the bins at the top and bottom

of the screen. Another way to do this is to resize bins and open new bin windows.

Toggling Top and Bottom Bins On and Off

To toggle on and off the bins at the top and bottom of the screen, click on the gray Top Bins or Btm Bins buttons on the right side of the toolbar. The following figure shows Preditor with top bins off and bottoms bins on.



The Preditor Interface with Bottom Bins Open and Top Bins Closed

To return to the default layout, click on the Btm Bins button to toggle the bottom bins off and the Top Bins button to toggle the tops bins on.

Resizing Bins and Opening New Bins

You can also resize bins and open new ones. To do this, do the following:

1. Click on a corner of the bin so that the border turns white (following figure).

Clicking on the Corner of a Bin

2. Drag your mouse upward to move the bottom edge of the bin up.

   You see dark stripes in the blank area below the bin (following figure).

3. Right-click in the blank area.

   You see a pop-up menu (following figure).

The Bin Pop-Up Menu

4. Select **New Bin Window** from the pop-up menu.

   A new bin appears in the space that previously was blank (following figure).

The New Bin

You can open new bins in the bin windows at the top and bottom of the screen. The following figure shows the Preditor interface with four bins open in the top bin windows.

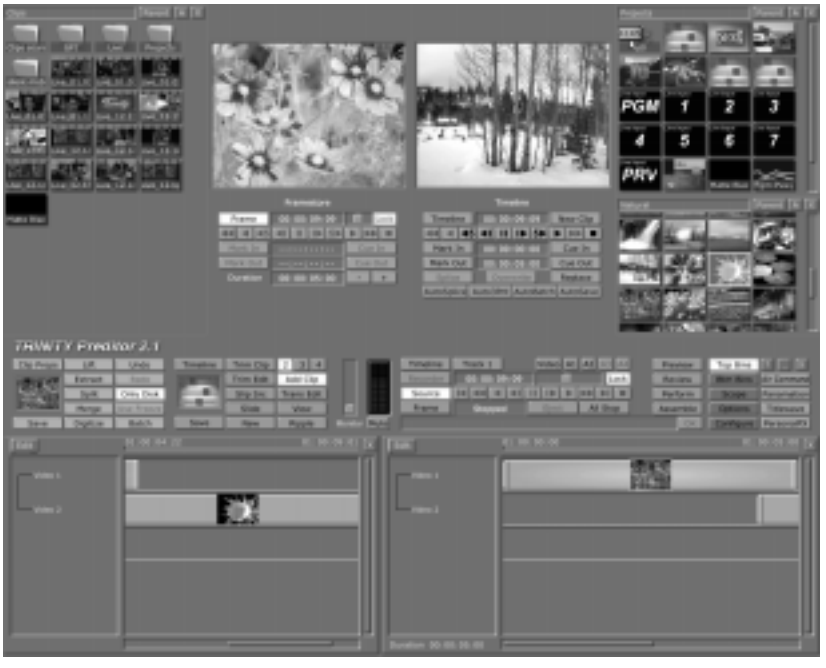
The Preditor Interface with Four Bins Open

Timelines

You can also change the size of the timeline on the interface. You might want to do this if you want to open only one bottom bin. To do this, click on the corner of the timeline window and drag it to resize the timeline smaller. Then right-click in the blank area and choose New Bin Window from the pop-up menu.

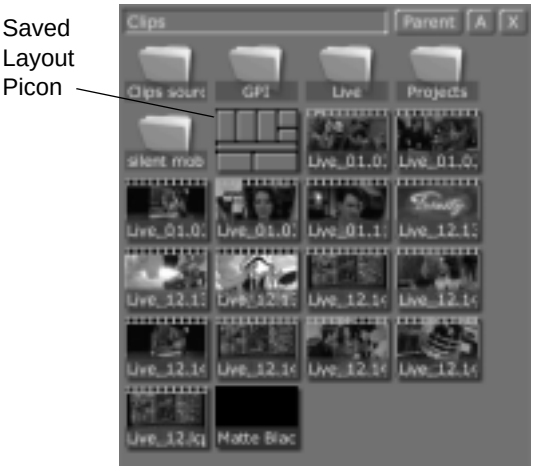
You can open more than one timeline window at once, but both show the currently loaded timeline. This could be handy if you want to see two sections of a single timeline on the screen at the same time. To do this, repeat the steps above, except select New Timeline Window from the pop-up menu. You can open timelines in the bin areas at the top of the screen, but because this space is narrower it is more likely that you'll want to open them in the bin/timeline area across the bottom of the screen.

The following figure shows the Preditor interface with two windows of the same timeline open.



The Preditor Interface with Two Views of the Timeline

Once you have the interface set up the way you want, you can save the layout (as you can in all Trinity applications). To do this, right-click in the gray area at the bottom of a bin and select Save Layout from the pop-up menu. A picon representing the layout appears in the bin (following figure). Saving the layout also saves any bin sorting and picon display options you have selected. (For information on how to set bin properties, see the *Trinity 2.1 User Guide*.)



Picon for a Saved Layout

As in all Trinity applications, you can set up any number of layouts, one for each project if you want. Preditor opens with the last layout you saved. If you want a different layout, double-click on the picon for that layout.

Now that you know how to set up the interface to suit your needs, the following sections will explain the functions of the buttons on the interface, as well as associated panels and pop-up menus.

Using Monitor And Transport Controls

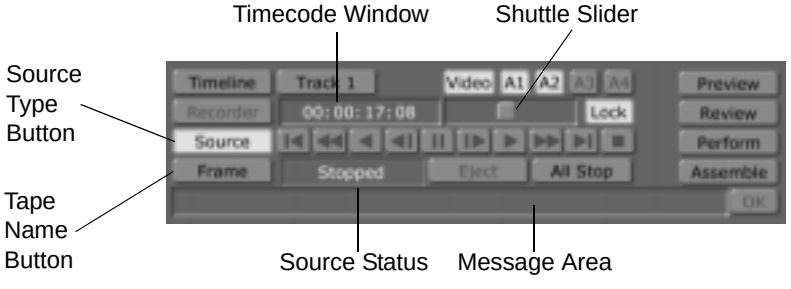
Control buttons under each monitor and on the toolbar allow you to create and edit clips. Transport controls allow you to control your RS-422a decks and to play digitized clips if you have Time Machine installed.

The Main Controls on the toolbar control the source that is selected there: Timeline, Recorder, or Source. If Source is chosen here, and you have three or four monitors displayed, the Main Controls manipulate the active source. Select which one is active by clicking on the monitor panel's Source Type button.

The right monitor is the output monitor. The controls under that monitor control either the timeline or record deck, and are the same for both outputs. The other monitors display input sources, which you select from a pop-up menu. The controls under these monitors change depending on which editing mode is selected. The following sections explain how to use the various monitor and transport controls.

Main Controls

The Main Controls are the blue buttons (yellow when they are turned on) in the center of the toolbar. They control the source you select, Timeline, Recorder, or Source.



The Main Controls

Here's how the Main Control buttons work:

Timeline

Selects the timeline as the source controlled by these transport buttons, allowing you to play through the timeline. Selects program out to be played on the external monitor and on the on-screen monitor. Fades out audio from other sources that may be playing at the same time.

If you are doing non-linear editing (you have Time Machine installed), you can scrub through everything on the timeline. If you are doing linear editing, these buttons allow you to see transitions and stills. The clips themselves, however, do not play in order to save wear and tear on your VTRs. However, if you would like to scrub through your clips, you can do so by turning on **Tape Scrub** in the **Editor Options** panel (see "Tape Scrub" on page 100 for information on how to do this).

Recorder

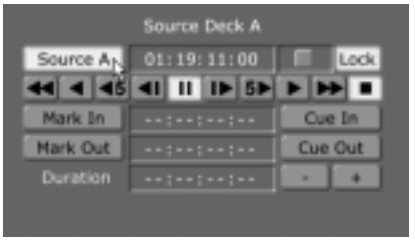
Selects a record deck as the source controlled by these transport buttons. Selects the video from the record deck's input module to be played as program out on the external monitor and the on-screen monitor. Plays audio from the record deck.

If you have more than one record deck, right-click on the **Recorder** button to select the record deck you want to activate from the pop-up menu. (If you do not see the deck you want listed, check its configuration in the **Serial Devices** panel. Since it is a record deck, make sure you have assigned it an output slot. For more information on the **Serial Devices** panel, see the "Using Configure Panels" chapter in the *Trinity 2.1 User Guide*.)

Source

Sets the active input source as the source controlled by these Main Controls. Selects that source as program out to be played on the external monitor. Fades in audio of the source has audio.

When you click on this **Source** button in the Main Controls, the Source Type button under the left monitor(s) lights up (following figure).



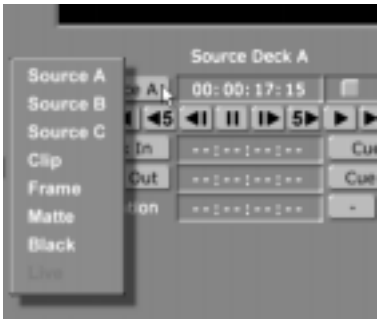
The Source Type Button Under the Left Monitor

Whichever source you have the Source Type button under the left monitor set to (**Source A**, **Source B**, **Source C**, **Clip**, **Frame**, **Matte**, or **Black**), is now the source controlled by the Main Controls.

Source A, **Source B**, and **Source C** are your input decks. Before you can switch between them here, you need to assign which deck is Source A, B, or C. To assign decks as Source A, B, or C, first right-click on the Source Type button (upper left button) under one of the left monitors and choose **Source A** (or B or C) from the pop-up menu. Then move down to the Main Controls and right-click on this **Source** button. From the pop-up menu, choose the deck you would like to assign.

For example, to assign a deck as **Source A**, do the following:

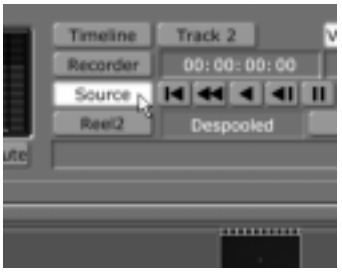
1. Right-click on the Source Type button under one of the left monitors (following figure.



Right-Clicking on the Source Type Button Under a Left Monitor

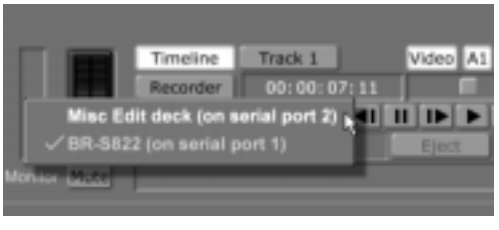
2. Select Source A from the pop-up menu.

3. Right-click on the Source button in the Main Controls (following figure).



The Source Button in the Main Controls

A pop-up menu listing your decks appears.



The Source Button Pop-Up Menu

If the deck you want is not listed, check its configuration in the Serial Devices panel. For more information on the Serial Devices panel, see the "Using Configure Panels" chapter in the *Trinity 2.1 User Guide*.

4. Select the deck you wish to assign as Source A from the pop-up menu.

The deck you selected is now assigned as Source A. Once you have assigned your source decks, you can switch between them by choosing Source A, B, or C from the Source Type buttons under the left monitors.

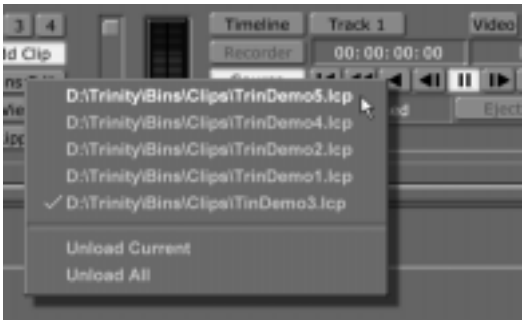
TIP: Preditor disables all controls on the source panel if it is unable to use the deck. It displays a message indicating the nature of the problem. After assigning a deck to a source, the controls may remain disabled if, for example, the deck has no tape in it or the tape needs to be named.

Tape Name (Frame, Record #, Reel #, Clip)

Lists the name of the active source/output. Click on it to see a pop-up menu listing the loaded sources.

In the example at the beginning of this section, the source is an unnamed framestore, and the default name is **Frame**. Other defaults are **Record #** for a record tape, **Reel #** for a source tape, and **Clip** for a digitized clip. To choose an input or record tape already used, click on this **Tape Name** button and choose the item from the pop-up menu.

You can click on this button to see a pop-up menu listing the sources of the active type (selected with the Source Type button; see previous definition) loaded into each monitor (following figure). Load files into a monitor by clicking on them or dragging them from a bin into a monitor. (Whether you single-click or double-click to load files into monitors depends on the setting you select for **Load files to source** in the **Editor Options** panel. For information on this function, see "Editor Options Panel" on page 97.) For framestores, matte colors, and digitized clips, each monitor has a separate list of files loaded into it. For deck sources, however, all tapes assigned for a project are listed so you can swap tapes around in your decks as you wish.



Digitized Clips Listed in the Tape Name Pop-Up Menu

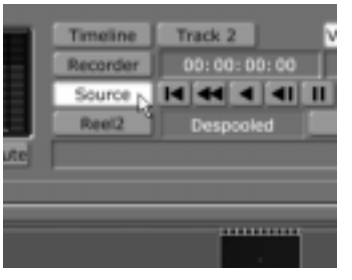
TIP: You can quickly switch between loaded files by selecting them from this pop-up menu. Then, you can adjust their length by using the Duration timecode box, and click Splice to place them on the timeline.

You can replace the default names of tapes and clips. It is particularly important to name source tapes so Preditor (and you) can keep track of them. If several of your source tapes are named Reel 2, for example, Preditor assumes they are the same tape and cannot distinguish between them when assembling a timeline. To avoid this, it is best to give the tape the same name in Preditor as the name that appears on the spine of the tape.

To name a source tape, do the following:

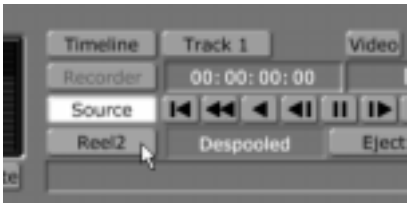
1. Set the Source Type button under the left monitor (following figure) to one of your source decks, Source A, Source B, or Source C.

2. Make sure the Source button (see the previous definition for an explanation of this button) is on.



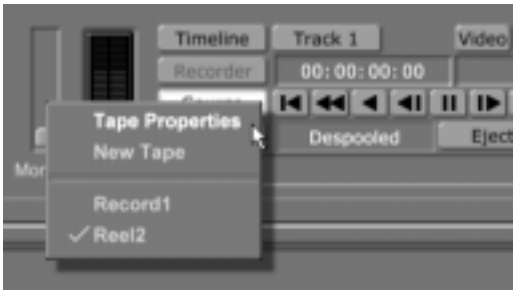
The Source Button in the Main Controls

3. Click on the Tape Name button (following figure).



Clicking on the Tape Name Button

The Tape Properties pop-up menu appears (following figure).



The Tape Properties Pop-Up Menu

4. Choose **New Tape** from the pop-up menu.

   Preditor assigns a default name to the tape (**Reel #**), which appears on the Tape Name button.

5. To change the default name, click on the Tape Name button again and choose **Tape Properties** from the pop-up menu.

   The **Tape Properties** panel appears (following figure). See “Tape Properties Panel” on page 54 for information on how to use this panel.

The Tape Properties Panel

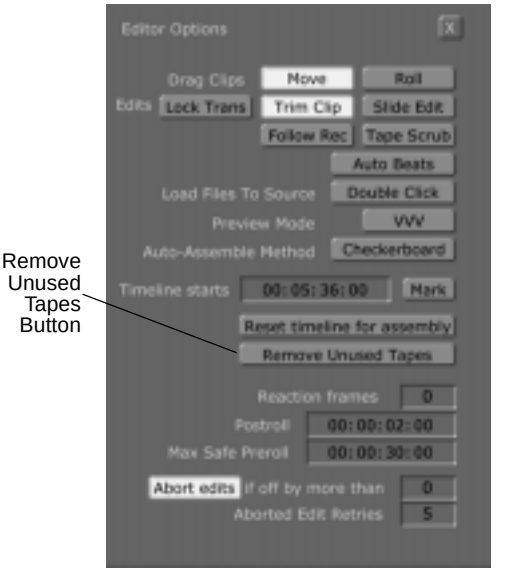
6. Type in the name of the tape (the example uses DemoTape) in the box above Tape Name.

   The name of the tape appears on the Tape Name button.

   The tape name is also now listed on the pop-up menu (following figure).

The Tape Name on the Pop-Up Menu

To delete the name of a tape from the Tape Properties pop-up menu, click on the Options button on the right side of the Preditor toolbar. This opens the Editor Options panel (following figure).



The Editor Options Panel

Click on the Remove Unused Tapes button.

For information on how to rename a clip, see “Current Clip Picon Pop-Up Menu” on page 73.

Track 1, Track 2, Track 3	Determines which track of the timeline clips are placed on when you use the Splice, AutoSplice, or Overwrite buttons. (For an explanation of these buttons, see “Right Monitor Controls” on page 57.) Click on the Track button and select the track you want from the pop-up menu. (You only see the pop-up menu if you are using more than one video track on the timeline.) You can also use this feature if you want to split a clip on the timeline where there are clips in more than one track. Click on this button to select the track of the clip you want to split from a pop-up menu. Then place the Position Bar where you want to split the clip, and click the Split button or press Control + s on the keyboard. Or, you can right-click on the clip you want to split, and choose Split at PosBar from the pop-up menu. In this case, you do not need to use the Track buttons, because the clip you right-click on is the one that is split.
Video, A1, A2, A3, A4	These are master record safes, turning off the ability to record to the record tape. If these buttons are lighted, that channel is recorded over. For most applications, these buttons should be left on, or your master won't match your timeline. Turning these buttons off could be useful if, for example, you already have audio laid down on the record tape and want to prevent recording over the audio. Buttons that are grayed out are not active for your deck configuration. Turn them on in the Serial Devices configure panel (for information on how to use this panel, see the *Trinity 2.1 User Guide*).
Timecode Window	Displays the position of the current source.
Shuttle Slider, Lock Button	Used just like a shuttle control on a deck. The further the slider is pulled from the center, the faster the tape travels. Tapes can be shuttled backward or forward. If the Lock button is on, the slider snaps back to center (and pauses the tape) when you stop dragging it.

Transport Controls

Control the selected device. The buttons, in order from left to right, are:

- First Frame

  Moves to the first frame.

- Rewind

  Rewinds

- Reverse Play

  Plays in reverse

- Jog Back 1 Frame

  Moves back one frame at a time

- Pause

  Puts deck in Pause mode, pausing playback if the deck is rolling, or spooling the tape so it is ready to play if the deck is stopped.

- Jog Forward 1 Frame

  Moves ahead one frame at a time

- Play

  Plays normally

- Fast Forward

  Fast forwards

- Last Frame

  Moves to the last frame

- Stop

  One click stops the current source; two clicks despools the tape

	TIP: Usually the space bar acts as All Stop for all decks or processes in progress. However, if the Timeline is selected as your output, it toggles between Play and Pause.
Source Status (Stopped)	Displays the status of the selected source. In the example at the beginning of this section, this is Stopped.
Eject	Ejects the tape in the deck currently being controlled.
All Stop	Stops all controlled equipment or processes in progress, such as timeline assembly or digitizing clips.
Message Area	Lists important messages. If your decks don't respond properly, check here to see what the problem is and how to resolve it. This is also where you see prompts to swap source tapes. If the message is too long to read all of it, right-click on the message area and it brings up the message in a pop-up box.
OK	Clears messages in the Message Area.
Preview	Shows what an edit looks like without actually recording it. The type of preview performed depends on the Preview Mode selected in the Editor Options panel (see "Editor Options Panel" on page 97). To use this, select one or more events on the timeline, then click Preview. You must have a striped tape in the record deck and set the in point for the record deck in order to use this function. (See "Striping A Tape" on page 189 and "Setting the Recorder's In Point" on page 201 for instructions on how to do these.)
Review	Plays back and reviews the edit that was just laid down onto the master tape. Or, reviews the spot on the record tape that is about to be recorded over. To check what is on your record tape before laying down a clip in that spot, click on a clip on the timeline to select it, then click the Review button. On the output (right) monitor, you see what is on the record tape at the timecode where the new clip would be recorded.

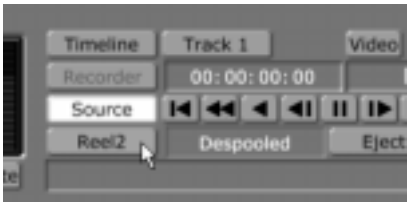
Perform Records individual edits to the master tape. When you select clips or effects and click **Perform**, Preditor records just those events from the timeline. (To select multiple clips or events, hold down the **Control** key and click on the items.) As edits are performed, the Validation Bar at the top of the Timeline changes color to reflect the sections that have already been laid down to the master. Green sections have been recorded, red sections have not.

Assemble Assembles (records) the entire timeline, or whichever events haven't already been recorded. You can tell which events have been recorded by looking at the Validation Bar above the timeline. Green sections have been recorded, red have not.

If you have already recorded some events on the timeline, but you want them to be re-recorded the next time you assemble the timeline, you can click on **Reset timeline for assembly** in the **Editor Options** panel. In this panel you can also choose between two modes for assembling timelines, **Sequential** or **Checkerboard** (see "Editor Options Panel" on page 97 for information on how to use this panel).

Tape Properties Panel

In the **Tape Properties** panel, you can name tapes, record data about them, or access the **Tape Audio Properties** panel. To access the **Tape Properties** panel, click on the Tape Name button in the Main Controls (following figure).



Clicking on the Tape Name Button

Select **Tape Properties** from the pop-up menu. The **Tape Properties** panel appears.

The Tape Properties Panel

Here's how to use the panel:

Tape Name

Type in the name of the tape and press **Enter** in your keyboard. It appears on the Tape Name button, and on the Tape Properties pop-up menu.

After you change a tape's name, Preditor searches the current project and changes all clips logged from that tape so that your clips remained linked to the correct tape.

Recordable

Designates a tape as a record tape. This light must be on in order to record to a tape. However, if you use the default **Record1** name for the tape in your record deck, this button is automatically turned on.

Turning on this button also adds the name of the record tape from the current timeline to the tape list when you create a new timeline.

Audio Properties

Opens the **Tape Audio Properties** panel, where you can set the audio levels the tape (see “Tape Audio Properties Panel” on page 160). The levels you set here apply to all clips made from the tape, unless you set different levels for individual clips in the Clip Audio Properties panel (see “Clip Audio Properties” on page 163).

Be sure to set the audio properties *before* you log clips. Changing the properties does not affect clips that have already been logged.

Name, Value These fields give you a place to record notes about your tapes. You can create any category you want in the **Name** field, and enter your notes in the **Value** field.

To use this feature, in the **Name** field type in the name of attributes regarding the tape, such as Date, Created By, Project Name, Storage Location, etc. Then, type in the information for the attribute in the **Value** box. For example, if you typed in Date in the **Name** field, enter the date, such as 2/29/00, in the **Value** field.

The attribute from the **Name** field appears in the display window above these two fields. Click on an attribute to select it. The selected attribute has a check mark next to it, and you see the information entered in the **Value** box. A scroll bar appears to the right of the window if needed.

The Name and Value Fields and Display Window

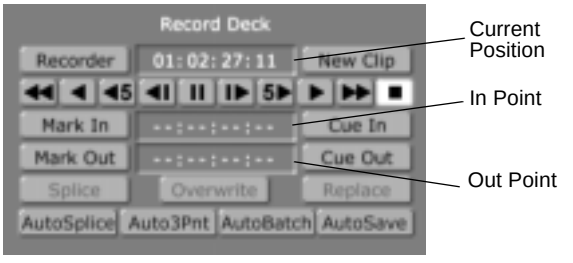
Delete Deletes the selected attribute. The selected attribute has a check mark next to it in the display window above the **Name** box.

Right Monitor Controls

Generally, the right monitor displays your output. The transport controls under the right monitor allow you to control the source you select there, **Recorder** or **Timeline**. You can also set it to **Off**. In the advanced editing modes, the right monitor displays frames from your clips to assist in specific

editing tasks. In this case, the controls also change according to the function of the editing mode (see “Using Advanced Editing Modes” on page 122 for information on the monitor controls in these modes).

The following figure shows the right monitor controls in the default editing mode, Add Clip.



The Right Monitor Transport Controls

Here's how these buttons work:

Timeline/ Recorder/ Off	Selects which output is displayed by the monitor and controlled by its buttons. The right monitor displays the timeline or the record deck. Right-click on the button to select Timeline, Recorder, or Off from the pop-up menu. The Off option is provided in case you do not want to watch the tapes shuttling while the timeline is assembled.
Timecode Window	Indicates the timecode on the VTR currently being controlled. Timecode is in standard SMPTE format (HH:MM:SS:FF).

Mark In/ Mark Out

Used to mark the in and out point of the timeline timecode where a clip will go (similar to **Rec In** and **Rec Out** in the 1.2 version of Preditor). The timeline timecode should be the same as the timecode on your record tape.

For example, you may know you want a 2-second clip at a certain point in your timeline. To set this, place the Position Bar where you want the clip to start in the timeline. Do this by dragging the Position Bar. If you have **Timeline** selected as the source in the Main Controls (see "Timeline" on page 42 for information on this function), you can fine tune the location of the Position Bar by using the left and right arrow keys on your keyboard. When it is at the point in the timeline where you want the clip to begin, click the **Mark In** button under the output (right) monitor. Then move the Position Bar down the timeline 2 seconds, and click the **Mark Out** button. Then click the **Splice** button. The clip appears in the designated spot on the timeline. Use the **Track 1/Track 2/Track 3** button in the Main Controls to select which track of the timeline the clip is placed on. (See "Track 1, Track 2, Track 3" on page 51 for an explanation of these buttons.)

You can use the **Mark In/Mark Out** buttons in conjunction with the **Auto3Point** button to do three-point editing. See "Auto3Pnt (Auto 3 Point)" on page 60 for information on this function.

In Point/Out Point Timecode

Displays the in and out points of a selected item, or the timecode of the in and out points on the timeline that you mark with the **Mark In**, **Mark Out** buttons. You can also enter the desired timecode here and press the **Enter** button on your keyboard to set the in and out points.

Splice	This button becomes active when a clip is created. Clicking this places the newly created clip into the timeline at the position of the Position Bar. It splits any existing clip, placing the remainder of the existing clip at the end of the new clip. If the Ripple button on the toolbar is turned on, any existing clips beyond the spliced one are moved down the timeline (see “Ripple” on page 93 for information on this function).
AutoSplice	Automatically places clips onto the timeline at the Position Bar as you log them. You can use this when logging clips from either linear or digitized sources. Click the Mark In and Mark Out buttons to log the clips. Your clips appear on the timeline as you mark them.
Overwrite	Splices in a newly created clip at the Position Bar, but instead of moving existing clips down the timeline, it overwrites what was after the Position Bar for the duration of the clip being added.
Auto3Pnt (Auto 3 Point)	Used for three-point editing. This means that once you define three of the four timecode points relating to the clip (in and out point on the source tape, and in and out point on the timeline), Preditor automatically places the clip on the timeline. Preditor always calculates the fourth point, but when Auto 3 Point is on it automatically places the clip on the timeline after you mark the third point. For example, you can mark the in and out points of your clip, and then mark the in point on the timeline where you want it to start. Since Preditor already knows the duration, it can calculate the out point on the timeline and place the clip in the correct spot. Or, you can mark the in and out points on the timeline where you want the clip to go, and then mark the in or out point of the clip. Since Preditor knows the duration from the timeline timecode, it can calculate the other point for the clip and place it on the timeline.

AutoBatch	Automatically adds clips to the Batch List in the Batch Digitize window for later digitizing as you mark them. When using AutoBatch, you must click the New Clip button (top right) in order to clear the previous clip before logging the next clip, unless you click Splice or Overwrite. Sending your clips to the Batch Digitize window does not save them. To save them, you must open the Batch Digitize window and either digitize the clips or save the To do list before exiting Preditor. See “Digitizing With Time Machine” on page 134 for information on how to use the Batch Digitize window.
New Clip	Clears the settings so you can create a new clip. If you are logging clips from a source deck, this resets the Clip Properties to the default for the tape. You must click this button if a source panel contains information about an event selected on the timeline and you wish to mark a new clip.
Cue In	Shuttles the Position Bar in the timeline or moves the record tape to the timecode in the window to the left. Or, you can enter a timecode in the timecode display window to the left, then click Cue In. The Position Bar jumps to this point.
Cue Out	Shuttles the Position Bar in the timeline or moves the record tape to the timecode in the window to the left. Or, you can enter a timecode in the timecode display window to the left, then click Cue Out. The Position Bar jumps to this point.

Replace

Replaces the selected clip in the timeline with one that you mark. For example, you can click on a clip on the timeline so that it is selected, adjust the in or out point of the clip, then click Replace. The new version of the clip replaces the original one on the timeline.

This is different in the 1.2 version, in which the changes to the in and out points are applied to the clip on the timeline as they are marked.

You can also use the Replace button in conjunction with a source's Duration timecode to trim an event on the timeline. When you click on an event on the timeline, the Source Type button under the active left monitor changes to match the event type: Source A (or B or C) for a linear clip, Clip for a digitized clip, Frame for a framestore, etc. You can type in the duration you want for the event in the Duration timecode box under the left monitor and click the Replace button. The new version of the event, of the duration you specified, replaces the previous one on the timeline. This method is convenient when you want to trim an event to a precise length.

AutoSave

Automatically saves clips in the default clips bin (set under Global Settings) as they are marked. Mark the in point of the clip, then the out point, and it appears in the designated bin. Then click the New Clip button before logging your next clip. (For information on how to use the Global Settings panel, see the “Using Configure Panels” chapter in the *Trinity 2.1 User Guide*.)

Right Monitor Transport Controls

Control the selected device. The buttons, in order from left to right, are:

- Rewind

  Rewinds

- Reverse Play

  Plays in reverse

- Jog Back 5 Frames

  Moves back five frames at a time

- Jog Back 1 Frame

  Moves back one frame at a time

- Pause

  Puts deck in Pause mode, pausing playback if the deck is rolling, or spooling the tape so it is ready to play if the deck is stopped

- Jog Forward 1 Frame

  Moves ahead one frame at a time

- Jog Forward 5 Frames

  Moves ahead five frames at a time

- Play

  Plays normally

- Fast Forward

  Fast forwards

- Stop

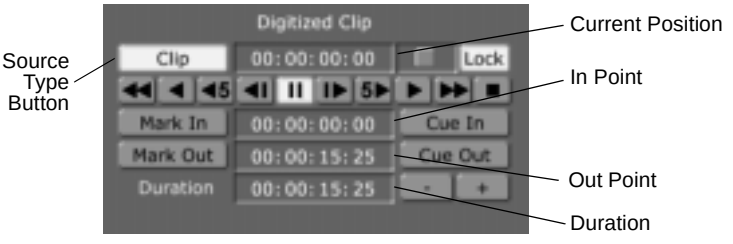
  One click stops the current source; two clicks despools the tape

Left Monitor Controls

The left monitors display input sources, whether tapes in your source decks, digitized clips (if Time Machine is installed), framestores, matte color, or black. The controls for the left monitor change depending on which of the six editing modes is selected. This section describes the controls for Add Clip mode, the default editing mode. This mode functions similar to the Preditor 1.2 version, and is used for logging clips and building timelines.

The advanced editing modes, Trim Clip, Trim Edit, Slip Source, Slide, and Transition Edit, are used for fine-tuning and precision editing. For information on the monitor controls in the advanced editing modes and how to use these editing modes, see “Using Advanced Editing Modes” on page 122.

The following figure shows what the left monitor controls look like in Add Clip mode with a digitized clip selected as the source.



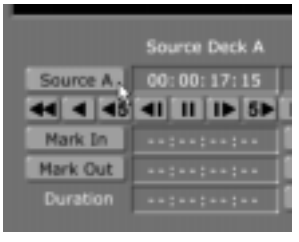
The Left Monitor Controls in Add Clip Mode

Here's how the left monitor control buttons work in Add Clip mode:

Source Type Button (Source A, Source B, Source C, Clip, Frame, Matte, Black)	Selects which source is displayed by the monitor and controlled by its buttons. Right-click on the button to select Source A, Source B, or Source C (for source decks), Clip (for digitized clips, if Time Machine is installed), Frame (for framestores), Matte, or Black from the pop-up menu. (Live, grayed out on the pop-up menu, is for a future feature).

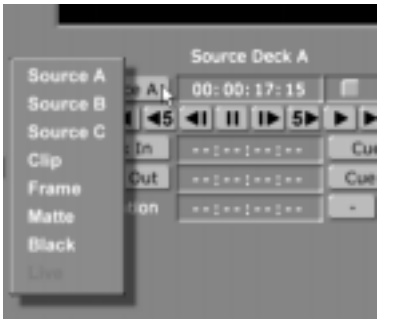
To assign a deck as Source A, Source B, etc., do the following:

1. Right-click on the Source Type button under one of the left monitors.



Clicking on the Source Type Button Under the Left Monitor

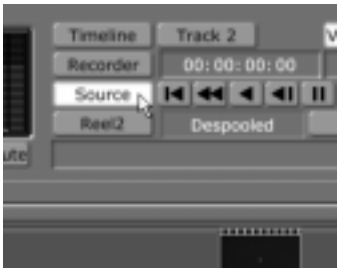
A pop-up menu appears (following figure).



The Monitor Source Type Pop-Up Menu

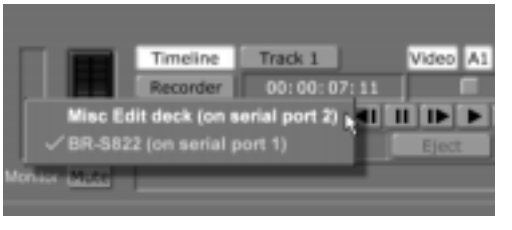
2. Select Source A from the pop-up menu.

3. Right-click on the Source button in the *Main Controls* (following figure).



Right-Clicking on the Source Button in the Main Controls

A pop-up menu appears.



The Main Source Pop-Up Menu

4. Select the deck you want to assign as Source A from the pop-up menu.

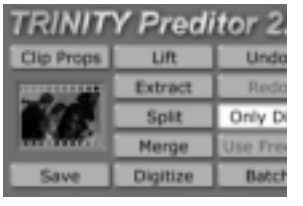
If you do not see the source you want listed, check its configuration in the Serial Devices panel. For more information on the Serial Devices panel, see the "Using Configure Panels" chapter in the *Trinity 2.1 User Guide*.

Once you have assigned your source decks at the beginning of your editing session, you can switch between them by simply choosing Source A, B, or C from the Source Type button under the left monitors.

Timecode	Displays current timecode of the selected source.
Shuttle Slider, Lock Button	Used just like a shuttle control on a deck. The further the slider is pulled from the center, the faster the tape travels. Tapes can be shuttled backward or forward. If the Lock button is on, the slider snaps back to center (and pauses the tape) when you stop dragging it. You can also use the slider in the Main Controls to shuttle the active source.

Mark In/ Mark Out

Used for logging clips. As a source (tape or digitized file) is played, clicking **Mark In** logs the in point, and clicking **Mark Out** logs the out point. When using a tape as the source, the tape must be named before these buttons function (see "Tape Name" on page 46 for instructions on how to name tapes). When you click **Mark In**, a picon of the first frame appears in the Current Clip picon in the toolbar (following figure).



The Current Clip Picon

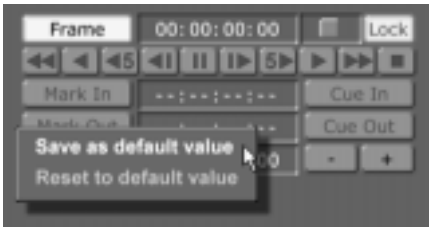
In Point/Out Point Timecode

Displays the in and out points of a selected item. Mark the in and out points of a clip by cueing to the desired point and clicking the **Mark In**, **Mark Out** buttons. Or, you can enter the desired timecode here and press the **Enter** button on your keyboard to set the in and out points.

Duration

Displays the length of the selected source in timecode. Type in a timecode and press **Enter** on your keyboard to change the duration.

For framestores, matte color, and black, you can set a default length. To do this, right-click on the **Duration** timecode box. A pop-up menu appears.



The Duration Box Pop-Up Menu

Choose **Save as default value** to set the default length for framestores, matte color, and black. Choose **Reset to default value** to change a duration you modified back to the default.

Cue In

Shuttles the source to the position shown in the In Point timecode box.

Cue Out

Shuttles the source to the position shown in the Out Point timecode box.

-/+

Increases or decreases the length of the source by 1 second.

Left Monitor Transport Controls

Control the selected device. The buttons, in order from left to right, are:

- Rewind
  Rewinds
- Reverse Play
  Plays in reverse
- Jog Back 5 Frames
  Moves back five frames at a time
- Jog Back 1 Frame
  Moves back one frame at a time
- Pause
  Puts deck in Pause mode, pausing playback if the deck is rolling, or spooling the tape so it is ready to play if the deck is stopped
- Jog Forward 1 Frame
  Moves ahead one frame at a time
- Jog Forward 5 Frames
  Moves ahead five frames at a time
- Play
  Plays normally
- Fast Forward
  Fast forwards
- Stop
  One click stops the current source; two clicks despools the tape

Working With Clips

Settings affecting clips can be adjusted using the Clip Controls, the Clip Main Properties panel, and the Color Correction panel. This section explains how to access and use these functions.

Clip Controls

The Clip Controls are the green buttons (yellow when they are turned on) on the left side of the toolbar. They are used to save clips, move them on the timeline, digitize them, and open other panels for working with clips.

The Clip Controls

Here's what these buttons do:

Clip Props (Properties) Brings up the Clip Main Properties panel, where you can set basic properties of the clip, such as play speed, which audio and video channels are recorded, and color correction. See "Clip Main Properties Panel" on page 75 for information on how to use this panel.

Current Clip Picon The picon of the currently selected clip. When a clip is first generated, the first frame of the clip is turned into a picon to represent the clip. This picon can be dragged into a bin or dropped right onto the timeline. By right-clicking on the Current Clip Picon, you can choose a new frame to represent this clip by selecting Set Picon from the pop-up menu. You can also rename or delete the clip from this pop-up menu. See the next section, "Current Clip Picon Pop-Up Menu," for information on how to do this.

Save	Saves the current clip in the Trinity\Bins\Clips directory, or whatever directory you set in the Global Settings panel. For information on how to use the Global Settings panel, see the “Using Configure Panels” chapter in the *Trinity 2.1 User Guide*.
Lift	Removes the selected clip from the timeline, leaving a space.
Extract	Removes the selected clip and closes the gap in the timeline where the clip was.
Split	Splits the selected clip or still at the Position Bar. Same as Split at PosBar on the timeline pop-up menu, or Control + s on the keyboard. TIP: You can use Control + s to split clips and stills as the timeline plays back.
Merge	If two clips are from the same source tape and have contiguous timecode (as the halves of a split clip would), this merges the clips back together. To use this, click on the first clip to select it, then click on the Merge button.
Digitize	Digitizes selected clips (if Time Machine is installed). Each clip has a default of 1 second of trim room at the head and tail of the clip. Digitized clips are shown as dark blue on the timeline. They are saved on the Time Machine hard drives. You can create shortcut picons for Time Machine clips and save them in any bin by dragging the clip picon into the bin.
Undo	Undoes any timeline change and most Clip Properties panel changes, in reverse sequence.
Redo	Redoes undone timeline changes and most Clip Properties panel changes, in reverse sequence.

2.1 only

Only Disk, Use Freeze

Only Disk limits the extension of a digitized clip to the length of the 1-second trim room at each end of the clip. In other words, it cannot extend past the information saved to disk. If this is turned off, the clip can be extended beyond the trim room. However, the clips must then be re-digitized from its original source tape.

Use Freeze allows a digitized clip to be extended beyond the trim room by using a freeze-frame of the first or last frame to fill the extra time.

2.1 only

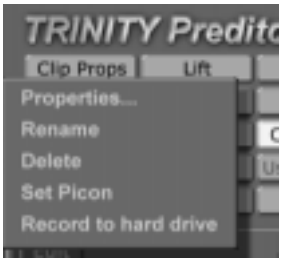
Batch

Opens the Batch Digitize window, where you can select settings for individual clips and digitize selected clips in a batch. See “Digitizing With Time Machine” on page 134 for information on how to do this.

Current Clip Picon Pop-Up Menu

The Current Clip Picon pop-up menu has options that allow you to rename or delete a clip, create a new picon to represent the clip, or open the Clip Main Properties panel.

To access the panel, right-click on the Current Clip picon in the Clip Controls.



The Current Clip Picon Pop-Up Menu

The pop-up menu has the following options:

Properties...	Brings up the Clip Main Properties panel, where you can set basic properties of the clip, such as play speed, which audio and video channels are recorded, and color correction. See the following section for information on how to use this panel.
Rename	Allows you to assign a new name to the selected clip. Once you select this option from the pop-up menu, a cursor appears at the end of the name of the clip on the Current Clip picon. You can add to the existing name, or you can use the backspace delete key to delete the existing name and type in a new one. Up to two lines of a clip name are displayed at a time. As with any file, you can also rename clips by right-clicking on the picon in the bin and selecting Rename from the pop-up menu, but be careful not to delete the file name extension. NOTE: File names starting with an underscore (_) are hidden names and are not displayed on the picon in the bin.
Delete	Deletes the selected clip.
Set Picon	Creates a new picon to represent the clip. If your Trinity has a ClipGrab card, the new picon is taken from the active monitor on the interface, giving you flexibility to choose the image. If you do not have a ClipGrab card, the frame displayed on the Program monitor when this button is clicked is the new image for the picon. If an event is selected on the timeline, its picon is also updated.

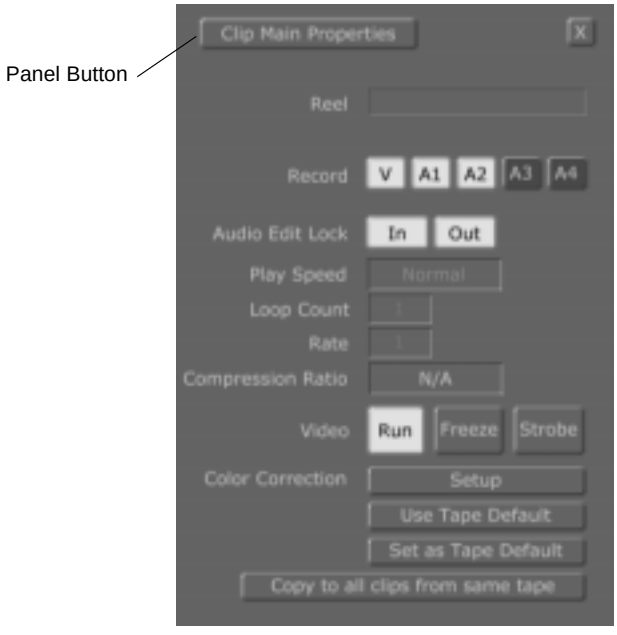
Record to hard drive

This option appears if the clip is a linear clip. It creates a ClipMem, a bit of digitized video recorded to the RAM on the Warp Engine card and stored on the PC hard drive. This is useful if you do not have a Time Machine. It allows you to store a short clip of uncompressed digitized video and then use it for rotoscoping, animation, transitions between clips on the same source tape, etc. The amount of video storage you have depends on the amount of RAM on your Warp Engine. With 128 MB of RAM (the maximum) you can record just over 6 seconds of video. The standard 16 MB of RAM records 20 frames, or 2/3 of a second. If the clip you want to record to the hard drive is longer than the capacity of the RAM, Preditor creates multiple ClipMems.

This option is the same as the **Record to Harddrive** option on the Timeline pop-up menu (see "Timeline Pop-Up Menu" on page 104).

Clip Main Properties Panel

The **Clip Main Properties** panel is where you set the basic properties of a clip, such as play speed, which audio and video channels are recorded, and color correction. Access the panel by clicking on the **Clip Props** button in the Clip Controls, or by right-clicking on a clip on the timeline or the Current Clip picon and choosing **Properties** from the pop-up menu.



The Clip Main Properties Panel

Here's how to use the panel:

Panel Button	Click on this to bring up a pop-up menu. You can choose Clip Main Properties (the current panel) or Clip Audio Properties to open that panel. For information on the Clip Audio Properties panel, see “Clip Audio Properties” on page 163.
Reel	Lists the name of the tape that the clip was recorded from.

Record	Sets which channels of the clip are recorded. Only V affects what appears in the timeline. To create an audio-only clip, turn off the V (video) button. To see the audio tracks, click on the + next to the name of the video track to the left of the timeline. To disable audio for the clip, turn off the A1 and A2 buttons (and A3 and A4 if applicable). This also turns them off on the Clip Audio Properties panel (see “Clip Audio Properties” on page 163 for information on this panel). Once the video is turned off, to turn it back on right-click on the audio clip on the timeline and select Properties to open the Clip Main Properties panel.
Audio Edit Lock	Locks or unlocks the audio track with the video. Turning this off allows you to move the audio independently of the video in order to do split audio edits. To see the audio tracks, click on the + next to the name of the video track to the left of the timeline. When the Audio Edit Lock buttons are off, you see grab bars on the ends of the audio clips on the timeline. You can unlock either the beginning (In) or end (Out) of an audio track, or both. Turning these buttons off also turns the channel buttons off on the Clip Audio Properties panel (see “Clip Audio Properties” on page 163 for information on how to use this panel).
Play Speed	Adjusts the playback speed and direction for non-linear clips. Clicking on the button brings up a pop-up menu with the following options: 8x Rev (Reverse), 4x Rev, 2x Rev, Reverse, Half Rev, Quarter Rev, Quarter Fwd (Forward), Half Fwd, Normal, 2x Fwd, 4x Fwd, 8x Fwd.
Loop Count	An easy way to repeat a non-linear clip over and over. Enter the number of loops you want, and the clip automatically loops that many times. The new duration is automatically reflected in the length of the clip on the timeline.
Rate	Sets the strobe rate for a clip, either linear or non-linear (see Strobe below).

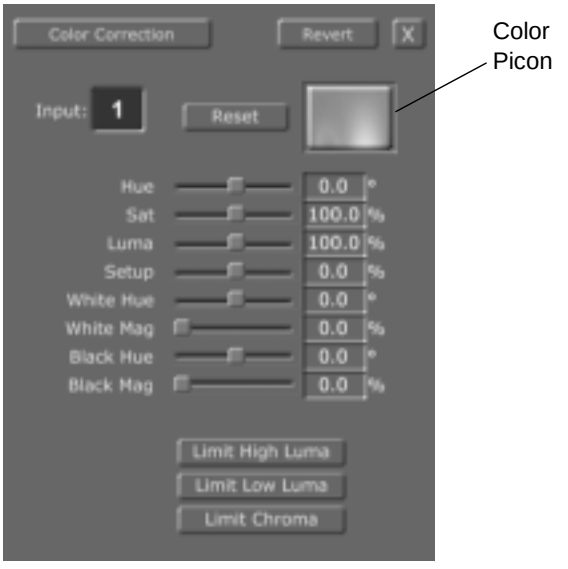
2.1 only

Compression Ratio	Displays the compression level used for Time Machine clips. This is the relative compression setting (Default, 1, 2, 3, 4, 5, or 6) selected when the clip was digitized. For more information on compression levels, see "Digitizing With Time Machine" on page 134.
Run	Default setting, which plays the clip normally.
Freeze	Freezes the first frame of a clip and holds it for the duration of the clip.
Strobe	Stutter-steps the clip as if a strobe light was going off. The rate can be set in the Rate window (see above).
Setup	When a clip is selected, clicking on this brings up the Color Correction panel, where you can correct color problems in the clip or create special color effects. Changes you make are saved for this clip when you close the panel. See the following section for information on how to use this panel.
Use Tape Default	Resets color correction settings to the default settings. Use this if you tried to adjust the color for a clip but decide the default color looked better.
Set as Tape Default	Applies current color correction settings to all clips *subsequently* made from a given tape.
Copy to all clips from same tape	Applies current color correction settings to *all* clips (both those already made and those made subsequently) from a given tape.

Color Correction Panel

This panel is used to correct for inconsistencies in the colors of your inputs. If videotape on input 3 looks too dark, this is the place to correct it. Color correction settings can also be used to create all kinds of special effects, such as posterization and solarization.

To access the Color Correction panel, click on the Setup button on the Clip Main Properties panel, or click on the Configure button in either Air Command or Preditor and select Color Correction from the pop-up menu.



Color Correction Panel

To save the values you set as the default settings, close the panel. The settings are automatically saved.

To save the values as a separate file to be used on a special-case basis, drag the color picon to a bin and save it. The values can then be called up by dragging the picon onto an input module number (1-8) on one of the busses in the Air Command. Or, you can open the Color Correction panel, select the input module number you want, and then drag the picon from the bin back onto the color picon on the panel.

To get rid of the changes you made, click on the Reset button. The values return to the original defaults. Or, click on the Revert button. The values revert to the last settings you saved.

Here's how to use the settings:

Input	Indicates the number of the input source being adjusted. Each input can be adjusted independently. To select another input to adjust, click on the box with the number and select the input number you want from the pop-up menu.

Reset	Resets values to the original defaults.
Revert	Resets values to the last settings you saved.
Color Picon	The square to the right of the Reset button is the Color Picon. You can drag-and-drop this picon into a bin to save color correction settings. This makes it easy to apply the same settings to multiple inputs. To load the saved settings into an input, drag the picon onto an input module number (1-8) on one of the busses in Air Command. Or, you can open up the Color Correction panel for the desired input, drag the picon from the bin, and drop it on the Color Picon window.
Hue	Changes the color values of the video input. If images have an unwanted color, or hue, adjust the Hue value to compensate for it.
Sat (Saturation)	Increases or decreases the amount of color, or saturation, in the picture. If the colors seem too vivid, lower the Saturation value. If the colors are washed out, increase the Saturation value.
Luma	Controls the contrast of the picture. To make the picture look crisper, increase the Luma value. In the broadcast industry, this is sometimes referred to as gain.
Setup	Controls the brightness of the picture. In the broadcast industry, this is also called pedestal.
White Hue, White Mag	White Hue and White Mag (Magnitude) adjust the color of the whitest parts of the signal. You may run across a piece of video that has whites that don't look white. If you see something on a tape that should be white but has a red or green tinge, the camera was not properly white balanced when the video was shot. White Hue defines the color added to the white parts of the signal, and White Mag determines how much color is added. To remove a color from the white parts of the image, set White Hue to the opposite color, and adjust White Mag to the appropriate level to cancel out the offending color.

Black Hue, Black Mag	If the black areas of the video have an unwanted tint, the Black Hue and Black Mag (Magnitude) settings can correct this. They operate the same way as White Hue and White Mag. Black Hue defines the color added to the black parts of the image. Black Mag sets the level of the color added. If the black areas of the video have a green tinge, try adding a little red.

Sometimes adjusting these values can result in a color signal that is too hot or too low for the average transmitter to transmit, or the average television to display properly. When this happens, we refer to the video signal as being illegal. To prevent this from happening, the bottom of the panel contains three buttons that limit the video signal. Each one, when turned on, acts as a video police officer and makes sure values are within CCIR-601 specifications.

Limit High Luma	Limits the upper end of the luma value to prevent the whites from being illegal values.
Limit Low Luma	Limits the lower end of the luma value to prevent the blacks from being illegal values.
Limit Chroma	Limits the color signals, keeping them within legal values.

Working With Timelines

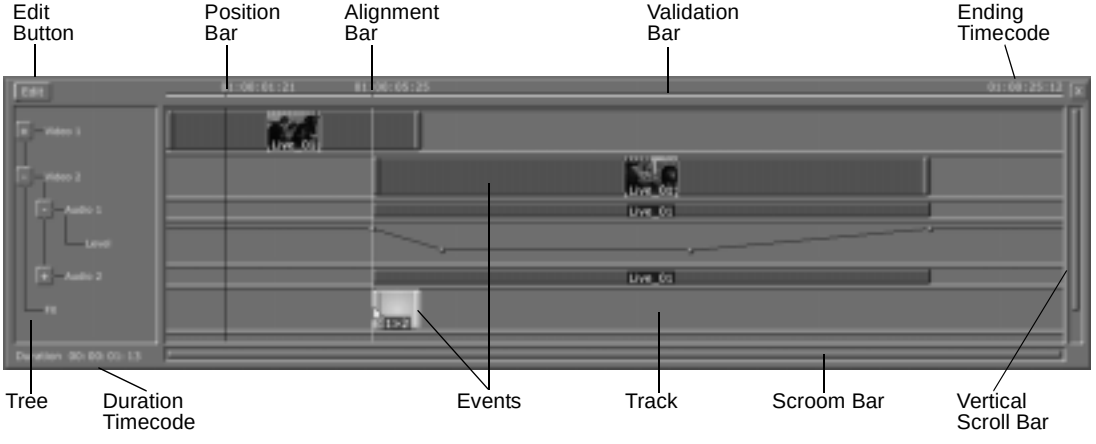
The Preditor timeline is where you put together all the pieces of your project. When building timelines, you choose settings that affect how clips on the timeline behave by using the Timeline Controls buttons, the **Timeline Properties** panel, the **Editor Options** panel, and pop-up menus that appear when you right-click on various parts of the timeline. You can use Preditor's clip priority rules to quickly perform some types of edits. You can also append a timeline to one that is already loaded.

This section of the chapter covers the following topics:

- Parts of the timeline
- Selecting clips on the timeline
- Using clip priority
- Appending a timeline
- Functions of buttons, panels, and pop-up menus

Parts Of The Timeline

The following figure shows the parts of the timeline.



The Preditor Timeline

Following is an explanation of how the parts of the timeline work:

Edit Button	Brings up a pop-up menu with the following options: Cut, Copy, and Paste. To use these options, click on an event on the timeline to select it. Then, click on the Edit button and choose the option you want.
Timecode	When you start a new timeline, you see two timecode numbers at the top of the timeline, one at each end. These represent the points on the master tape where Preditor will lay down the timeline. To set the timecode for the beginning of the timeline, click on the Options button on the right side of the screen to open the Editor Options panel. Next to Timeline Starts At, type in the timecode you want. Or, click Mark, and the current timecode on your record tape is imported. As the Position Bar moves through the timeline, the timecode for its location is displayed. Timecode is also displayed when you click on an event to move it on the timeline. Beginning and ending timecode are both displayed for the event, unless the event is of such a short duration that there is not room for both to be displayed. In that case, only the beginning timecode is displayed.
Validation Bar	The red bar at the top of the timeline. Parts of the bar turn green as edits have been recorded to the master tape. If you add elements to the timeline after recording to the master, the bar above these elements is red. The next time you click on Assemble, Preditor adds the changed sections of the timeline to the master (see “Assemble” on page 54 for information on how to use the Assemble function).
Tree	Expands or shrinks the display of tracks on the timeline. Clicking on a plus sign displays that track’s child track(s), and clicking on a minus sign hides that track and its child tracks.

Position Bar	The vertical black bar on the timeline depicts the position on the timeline of the output you are seeing. You can scrub through the timeline by dragging the position bar through it, or you can skip to a part of the timeline by dragging the position bar there. The timecode of the position bar's location is displayed above it. You can quickly place this bar anywhere on the timeline by clicking in the spot where you would like it to appear. While scrubbing through a clip, you can stop the playback and freeze the position of the Position Bar by pressing the space bar on your keyboard. (When Timeline is the active source, the space bar toggles between Play and Stop.) You can fine tune the location of the Position Bar by using the left and right arrow keys on your keyboard. This is handy for marking the spot where you want to trim or split a clip, start or end a transition, start or end an audio track, etc.
Tracks	A track on the timeline represents a chronological sequence of events. Multiple tracks make it possible to switch between images and effects. A timeline can have up to five tracks: Video 1, Video 2, Video 3, FX (effects), and DSK (downstream key). Each video track also has child Audio tracks, which in turn have child Levels tracks. Split audio edits can be performed in the Audio tracks, and audio levels are controlled in the Levels tracks. (You must first animate audio levels before changing them in the Levels tracks. For information on how to do this, see “Animating Audio On The Timeline” on page 149.)
Events	Video clips, audio clips, and effects that are placed on the timeline.

Scroom Bar	Scrolls and zooms the timeline. To scroll the timeline left or right, click on the Scroom bar and drag left or right. To zoom the timeline in and out, click on the Scroom bar and drag up or down. To do both at once, click on the Scroom bar and drag diagonally. You can also zoom by right-clicking on the timeline and selecting a zoom setting from the pop-up menu.
Vertical Scroll Bar	Scrolls the timeline up and down. Click on the bar and drag it up or down.
Alignment Bars	These vertical blue bars assist in aligning events. They appear when you move an event on the timeline or change its duration. The bars are located at the beginning and end of the event. They turn yellow when they coincide with the beginning or end of another event, so you can see when the events are exactly adjoined.
Duration Timecode	Displays the length of the selected event.

Selecting Clips On The Timeline

Before performing a number of operations, such as digitizing clips, changing clip properties, or using the **Preview** or **Perform** functions, you need to select the clips on the timeline that you want to affect with that action.

You can select multiple events by holding down the **Control** key on your keyboard and clicking on the events, or you can right-click on an event in the timeline and choose one of the selection options, such as **Select All**, **Select Track**, **Select From Here**, etc. (see “Timeline Pop-Up Menu” on page 104 for all of the selection options).

Using Clip Priority

Priority of clips on the timeline is a powerful way to control which source appears. The general rule for priority of the video tracks is the top track gets priority. In other words, if there is more than one clip at a point in the timeline, the clip in the highest track is played.

Here are the specific priority rules:

- If there is no clip, Preditor plays black.
- If there is one clip, Preditor plays that clip.

- If there are two or more clips that overlap, Preditor plays the one on the highest track.

As the timeline plays through, if the clip on top runs out, Preditor “drops down” to the clip on the next highest track. This is in effect a cut edit. If a clip begins again on a higher track, Trinity “jumps up” to that clip, also creating a cut.

If the clip on the higher track is shorter than the clip on the lower track (overlapped on both sides), then Preditor begins with the lower clip, and the higher, shorter clip is seen as an insert or cut-away. This is a quick way to perform an L-cut (also called a split audio edit), where the audio for the bottom clip continues as the video cuts to the upper clip and then back.

Occasionally it's inconvenient to move a clip from track to track just to change its priority, so Preditor provides a handy way to break the priority rule. To do this, right-click on a clip and choose Higher Priority from the pop-up menu. This tells Preditor to play the entire clip from start to finish, even if there are clips on the higher priority tracks. If two clips overlap and both have Higher Priority turned on, then the old rule applies: the clip on the higher track plays throughout.

Where two clips overlap, you can cut back and forth between them by adding “fake dissolves.” If you have overlapping clips on the Video 1 and Video 2 tracks, for example, you can create dissolves and set them to go from the Video 2 track to the same Video 2 track. Because the dissolve is from and to the same video source, it simply plays that source. This way, Preditor plays the video on the Video 1 track until it comes to the dissolve. Then it plays the clip on the Video 2 track for the length of the dissolve, after which it goes back to the clip on the Video 1 track.

To use dissolves to cut between overlapping video sources, do the following:

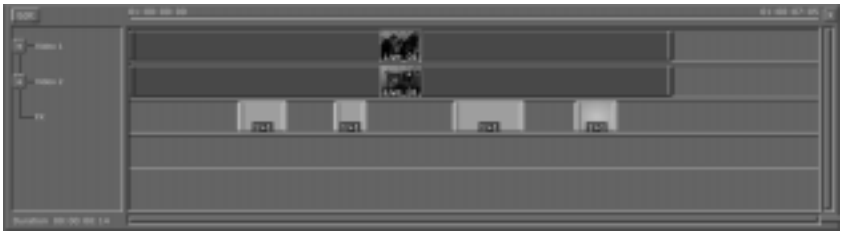
1. Right-click on the overlapping area of one of the clips and choose Create Dissolve from the pop-up menu.

   A dissolve appears in the FX track (following figure).

Timeline with Dissolve in the FX Track

2. Adjust the dissolve to the duration you want the clip on the **Video 2** track to play.

3. Repeat this until you have all your dissolves in place (following figure).



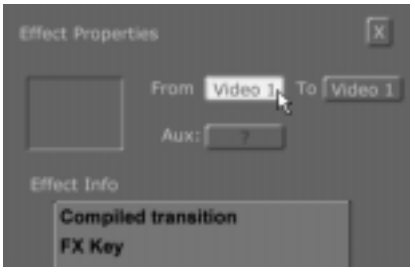
Timeline with Dissolves

4. Right-click on the first dissolve and choose **Effect Properties** from the pop-up menu.

   The Effect Properties panel appears in the upper left of your screen (following figure).

The Effect Properties Panel

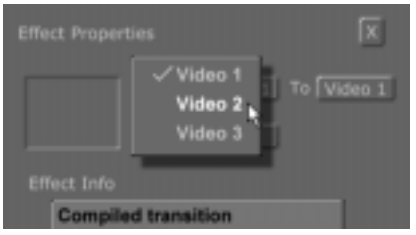
5. Click on the video track button (it says Video 1) next to From at the top of the panel (following figure).



The Video Track Button

A pop-up menu appears. Use this menu to select which track the dissolve starts from.

6. Choose Video 2 from the pop-up menu.



Choosing the Video 2 Track

7. Click on the Video Track button next to **To** and choose **Video 2** from the pop-up menu.

   The dissolve on the timeline has the numbers 2>2 on it, indicating the dissolve goes from the **Video 2** track to the **Video 2** track.

8. With the **Effect Properties** panel still open, click on the next dissolve on the timeline to select it.

9. Set **From** and **To** to the **Video 2** track.

   Your timeline now has two overlapping clips with a series of dissolves set from the **Video 2** track to the **Video 2** track (following figure).

2>2 Dissolves on the Timeline

That's it, you have set up the dissolves so they will act as cuts between the two clips. Preditor will play the clip in the **Video 1** track, except where the dissolves are, where it will play the clip in the **Video 2** track.

Appending A Timeline

If you have a timeline loaded in Preditor, you can append another timeline to it. This feature is convenient if you are creating a lengthy project.

TIP To speed the time it takes to navigate around the timeline, you can cut a large project into smaller sections, then paste all the timelines together when you're ready to record the project.

To append a timeline, do the following:

1. Load the first timeline by double-clicking on its picon or dragging the picon to the timeline.

2. Click in a blank area of the bin to deselect the picon for the first timeline.

3. Click on the picon for the second timeline so that it is selected (yellow).

4. Holding down the Control key on your keyboard, drag the picon for the second timeline to the timeline area on the interface. When the Position Bar is where you want the second timeline to begin, release the mouse button. Watch for the appended timeline to appear *before* releasing the Control button.

Dragging the Second Timeline Picon to the Timeline

TIP Be sure to release the mouse button, wait for the appended timeline to appear, then release the Control button.

The second timeline appears, beginning where the Position Bar was located when you released the mouse button.

The Second Timeline is Appended after the Position Bar

The timeline begins at the point where the Position Bar was when you released the mouse button. You can place the Position Bar in the midst of the first timeline. If you do this, the second timeline will overwrite the remainder of the first timeline.

Timeline Controls

You can use the Timeline Controls to save a timeline, select one of six edit modes, open additional monitors, or set special properties for the timeline. These controls are the blue buttons (yellow when they are turned on) on the left side of the toolbar.

The Timeline Controls

Here's what these buttons do:

Timeline Opens the **Timeline Properties** panel, where you can record information about your timelines. See "Timeline Properties Panel" on page 96 for information on how to use this panel.

Timeline Picon	This picon represents the entire timeline. The picon can be dragged and dropped into a bin to save your project. When Preditor is busy loading events on the timeline, you see a horizontal status bar go up and down on this picon. Right-clicking on the picon brings up the Timeline Picon Pop-Up Menu, where you can rename the timeline, create picons for it, or open the Timeline Properties Panel. See the following section for information on how to use the Timeline Picon Pop-Up Menu.
Save	Saves the timeline in the Bins\Clips\Projects directory, or whatever default path you set in the Global Settings panel. For information on how to use the Global Settings panel, see the “Using Configure Panels” chapter of the *Trinity 2.1 User Guide.*
Trim Clip	An editing mode for trimming single clips that displays the first frame of the selected clip in the left monitor, and the last frame of the clip in the right monitor. The controls trim or add time to the beginning or end of the clip. See “Trim Clip Mode” on page 125 for information on this editing mode.
Trim Edit	An editing mode for adjusting edits between two clips. This is useful for precision editing down to individual frames. You can trim time off or add to the clips. See “Trim Edit Mode” on page 127 for information on this editing mode.
Slip Src (Source)	An editing mode used to adjust the in and out points of a clip without changing its duration or position on the timeline. It “slips” the video forward or backward, in effect trimming one end and extending the other simultaneously. This is useful, for example, if you finish building a timeline but decide you wish one clip started a few frames earlier. See “Slip Source Mode” on page 129 for information on this editing mode.

Slide	An editing mode that locks the selected clips into a single series. You can then adjust the in and out points of the entire series. This mode is similar to Slip Source, except the overall length of the series *changes* as you adjust the in and out points of the series. See “Slide Mode” on page 131 for information on this editing mode.
New	Clears the timeline and starts a new one. If you have unsaved changes in the currently loaded timeline, Preditor asks whether you want to save them before opening a new one.
2, 3, 4	Selects two-, three-, or four-monitor display.
Add Clip	The default editing mode. Used when logging clips or adding clips to a timeline project. The right monitor displays the timeline or record deck, and the left monitor displays the selected input source.
Trans (Transition) Edit	An editing mode used to adjust the beginning and ending of transitions. Adjustable transitions, such as wipes and dissolves, automatically adjust in length to match the overlap of the two clips. When Preditor is in Trans Edit mode, it automatically goes to a four-monitor display. See “Transition Edit Mode” on page 132 for information on this editing mode.
View	A single-monitor mode. This larger monitor is useful for viewing the final output. To exit this mode, click on the edit mode you wish to return to (Add Clip is the default).
Ripple	When this is on, Preditor automatically shifts the elements of a timeline to compensate for any changes you make. If you insert a clip, for example, clips farther down the timeline shift over to make room for the new clip.

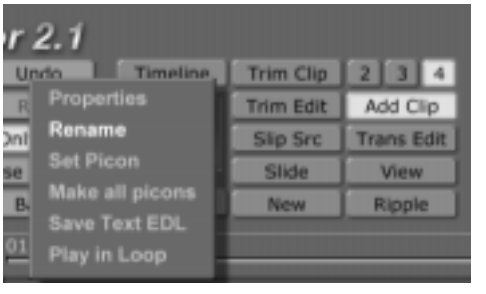
Timeline Picon Pop-Up Menu

The Timeline Picon pop-up menu allows you to manage picons for your timelines, open the Timeline Properties panel (see “Timeline Properties Panel” on page 96), or save the timeline information as a text edit decision list (EDL).

To access it, right-click on the timeline picon in the Timeline Controls.

Right-Clicking on the Timeline Picon

The Timeline Picon pop-up menu appears (following figure).



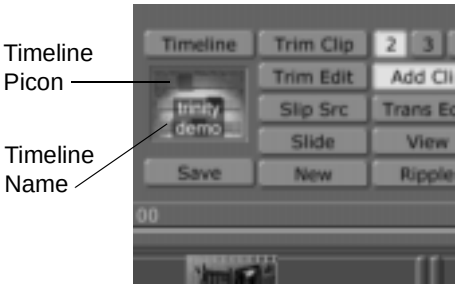
The Timeline Picon Pop-Up Menu

The pop-up menu has the following options:

Properties	Brings up the Timeline Properties panel, where you can record information about your timelines (see following section).

Rename

Allows you to assign a new name for the timeline. To do so, select **Rename** from the pop-up menu. Then type in the name for the timeline. It is displayed on the timeline picon on the toolbar (following figure). Changing the name on the timeline picon does not change the name of the timeline already saved in the bin, but if you drag the timeline picon from the toolbar to the bin, a new copy appears in the bin with the new name.



Naming a Timeline

As with any file, you can also rename timelines by right-clicking on the picon in the bin and selecting **Rename** from the pop-up menu, but be careful not to delete the file name extension (.ptl).

Set Picon

Creates a new picon for the timeline, using whatever image is on your Program monitor screen.

Make all picons

If you build a timeline in Air Command, this creates picons for all the clips.

Save Text EDL (Edit Decision List)

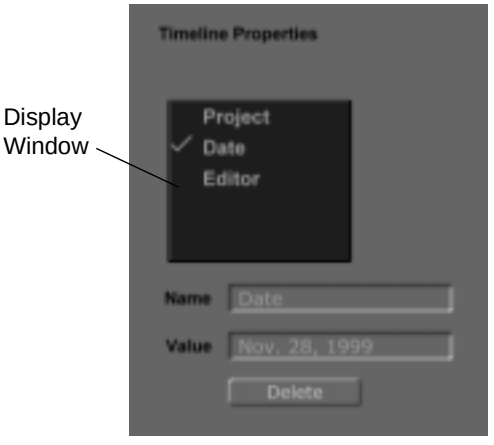
Changes the format in which the timeline is saved. When this is selected, dragging the picon into a bin saves a CMX 3600 text EDL. Any CMX editor can then use this edit decision list.

Play in Loop

Plays the timeline in a loop, returning to the beginning and playing it through again each time it reaches the end.

Timeline Properties Panel

The **Timeline Properties** panel provides a place to record information about your timelines. Access it by clicking on the **Timeline** button or right-clicking on the Timeline Picon and choosing **Properties**.



The Timeline Properties Panel

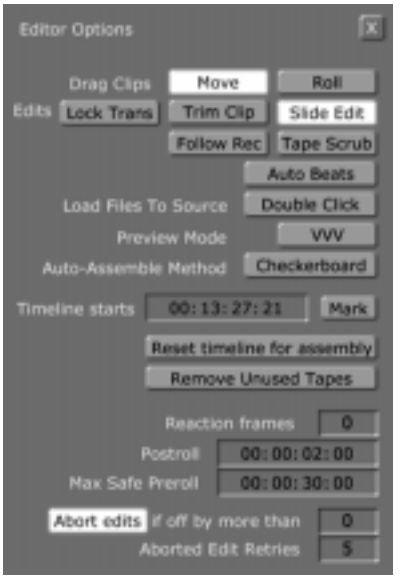
Here's how to use the panel:

Display Window	Displays the names of properties you created. To view information about a property, click on it in this window to select it. A check mark appears next to it, and the information is displayed in the **Value** window.
Name	Type in the name of properties you would like to record information about, such as name of the project, date, number of source tapes, etc. Then press **Enter** on the keyboard.
Value	Type in the information for the properties you created, then press **Enter** on the keyboard.
Delete	Deletes the selected property.

Editor Options Panel

In the Editor Options panel, you can choose settings related to editing on the Preditor timeline. The settings affect the way clips on the timeline behave, how Preditor assembles clips, and how your decks behave.

To access the panel, click on the gray Options button on the right side of the toolbar. The Editor Options panel appears in the upper left corner of the screen.



The Editor Options Panel

Here's how to use the Editor Options panel:

Drag Clips: Move/Roll

Click on Move or Roll to determine how clips behave when you drag them.

The default mode, Move, allows you to move a clip by dragging it in the timeline. Click on the clip anywhere, except on the trim handles (the raised bars at the end), and drag it where you want.

Roll allows you to move the "window" of the clip on the source tape. This changes the in and out points of the clip, without moving the clip on the timeline or changing its length. This accomplishes the same function as the Slip Src (Slip Source) editing mode (see "Slip Src (Source)" on page 92 for information on this mode), but by dragging the mouse instead of using the interface transport controls. This Roll button is automatically turned on when you open Slip Source mode.

To use the Roll function, do the following:

1. Click on the Roll button.

   Your mouse pointer turns into the roll cursor, a circular yellow arrow over the selected clip (following figure).

The Roll Cursor

2. Drag the roll cursor to the left to make the clip begin and end earlier on the source tape, and to the right to make the clip begin and end later on the source tape.

As you drag the roll cursor, you see the In Point and Out Point timecode under the left monitor change. The clip does not move on the timeline.

Edits: Lock Trans(ition)/ Trim Clip/ Slide Edit

Click on either **Lock Trans**, **Trim Clip**, or **Slide Edit** to determine how clips behave when you move the edit points between two clips.

Lock Trans locks the in or out points of a transition with the in or out points of the clips when you drag the clips on the timeline. So, if you make the overlap area of the clips shorter, the transition is also shorter. This contrasts to **Slide Edit** option, in which the length of the transition remains the same although its starting or ending point is changed. The **Lock Trans** button is automatically turned on in Transition Edit mode. See "Transition Edit Mode" on page 132 for information about this editing mode.

Trim Clip is the default setting. When in **Trim Clip** mode, clips are trimmed when you move the edit point. This can also be done using the transport controls when in Trim Clip editing mode. See "Trim Clip Mode" on page 125 for information on this editing mode.

When in **Slide Edit** mode and you move the edit point between two clips, length is added to or subtracted from the clips to keep the transition the same length. This mode moves neighboring effects at the same time to keep the effects lined up with the clip. The **Slide Edit** function performs the same function as the **Trim Edit** editing mode (see "Trim Edit Mode" on page 127 for information on this editing mode), but by dragging the mouse instead of using the interface transport controls.

Follow Rec (Recorder)

When this button is on and the recorder deck is played, the Position Bar on the timeline follows the timecode on the recorder deck.

Tape Scrub	Turns on the ability to scrub through linear tape sources in the timeline. Tape Scrub mode gives linear editing in Preditor the feel of a non-linear system. It does, however, put a little more wear on the tapes, so we left it as an option. With this option on, scrub through your tapes either by moving the Position Bar or by using the Main Controls.
Auto Beats	Auto Beats is an easy way to match edits to beats on a music track. Play the record deck and click on Mark In each time you want to create a new clip. Preditor inserts alternating black and white placeholders into the timeline. You can use the shuttle control (or Play Speed in the Clip Main Properties panel) to play the tape slowly to capture the beat points precisely on the timeline. After marking the beats, rewind the tape and play it back while Preditor cuts between black and white on the beats. This makes it easy to see whether you've missed any beats. When the timing is perfect, drop your source clips or stills from the bin onto each black or white clip. Preditor automatically trims the source clip out points. See “Cutting With Auto Beats” on page 293 for a tutorial on using this function.

Load Files To Source

Sets whether Single Click or Double Click loads framestores, matte color, or digitized clips into a monitor. Click on this button, and choose Single Click or Double Click from the pop-up menu.

In the default mode, Single Click, clicking once on a file's picon in a bin loads that picon into a monitor. Double-click on the picon to load the file onto the timeline.

Sometimes you may not want files to load into the monitor when you single-click on them. In this case, select Double Click, and the file won't load unless it is double-clicked. Drag the picon to load it onto the timeline.

You can also drag picons to load them into the monitor. When you load a file, the Source button changes to the appropriate source type (Clip, Frame, Matte, or Black). See "Source Type Button" on page 65 for information on this button.

TIP: If the monitor is grayed out, it means a complete source has not been designated, and you cannot drag-and-drop files into it (although you can still click on files to load them into such a monitor). Examples of incomplete sources are Source A, Source B, or Source C if no deck has been assigned to them, or if the deck has no tape or the tape has not been named, or Clip if no digitized clip is selected on the timeline.

Preview Mode

Sets how an edit is previewed. Clicking on this button brings up a pop-up menu with the following options: VVV, VBV, BVB.

VVV (video video video) shows the video already on the record tape before the edit in point, the edit, and the video after the edit out point.

BVB (black video black) blacks out the video already on the record tape before and after the edit, showing only the edit.

VBV (video black video) shows the video on the tape before and after the edit, but blacks out the edit.

Auto-Assemble Method

Sets the method Trinity uses to assemble clips on a timeline. Clicking on this button brings up a pop-up menu with the following options: Sequential or Checkerboard.

Sequential runs the clips in order on the timeline. This allows you to see the timeline assembled in order.

Checkerboard mode analyzes the timeline and lays down every clip from each source tape in one pass by skipping down the timeline and performing edits out of sequence. This saves time and tape swapping because each tape source needs to be inserted only once. Trinity even checks whether needed source tapes are already in the decks at the beginning of the Auto-Assemble and lays down the clips from those tapes first.

Timeline starts, Mark

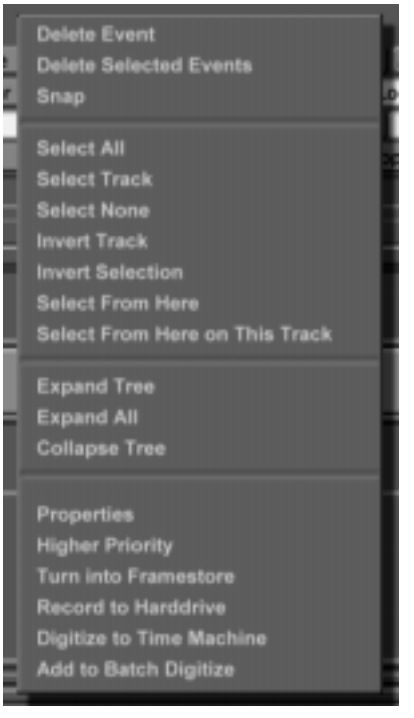
Allows you to match the timeline start time to a specified timecode start time on your master tape. When you click the Mark button, Preditor reads the current time on the selected record deck, and starts the timeline at that point. Or, you can type in the timecode of the starting point you desire and press Enter on your keyboard.

Reset timeline for assembly	Resets the Validation Bar at the top of the timeline so that all the elements of the timeline are recorded to the master tape then next time you click Assemble. The Validation Bar is a line across the top of the timeline that indicates which sections have been laid down to the master. Green sections have been recorded, red have not. If you don't click this button, only new elements are added to the master when you click Assemble. This option is handy if for some reason you want to re-record a clip that has already been laid down to the master.
Remove Unused Tapes	Removes the name of tapes not required for the current timeline from the Tape Name button pop-up menu (for information on using this button, see “Tape Name” on page 46).
Reaction Frames	Compensates for user reaction time when using the Mark In or Mark Out buttons. If you type 5 here, for example, Preditor marks the in and out points 5 frames earlier than where you hit the mark buttons.
Postroll	Sets the amount of time the deck rolls after an edit.
Max Safe Preroll	Sets the maximum time before an event that Preditor prerolls. Default is 30 seconds. Adjusting this setting could be handy if you need frames right at the beginning of a tape. If you decrease this number or set it to 0, Preditor won't try to back up past the beginning of the tape.
Abort edits if off by more than	Sets the degree of accuracy Preditor requires. Preditor is a frame-accurate editor, but allows you the flexibility of using decks that are less than frame accurate. This setting is the number of frames within which Preditor requires all edits to be accurate. All VTRs occasionally miss an edit by not syncing up during the preroll. If the edit is off by more than the number of frames specified, Preditor stops before the edit begins and tries it again.
Aborted Edit Retries	Sets the number of times Preditor tries to perform an edit.

Timeline Pop-Up Menu

The Timeline pop-up menu appears when you right-click on an area of the timeline. It is context sensitive, so the options you see depend on what is on the timeline and whether you right-click on a clip, effect, or blank area of the timeline. In general, the features on the pop-up menu allow you to delete or select events, make choices about how the timeline is displayed, set properties for clips, animate audio levels, digitize clips, or perform specialized functions.

For example, if you have Time Machine installed and you right-click on a clip, the Timeline pop-up menu looks like this:

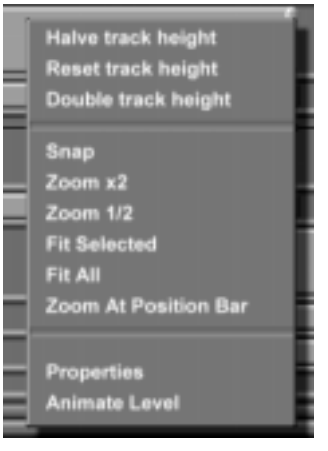


The Timeline Pop-Up Menu for a Clip

If you right-click on a blank area of the timeline, the pop-up menu looks like this:

The Timeline Pop-Up Menu For a Blank Area of the Timeline

If you right-click in an open audio track, the pop-up menu looks like this:



The Timeline Pop-Up Menu For an Open Audio Track

Following is an explanation of the options that may appear on the Timeline pop-up menu, listed in alphabetical order.

2.1 only

Add to Batch Digitize

Available when you right-click on an event. Adds selected events to a list to be digitized later. First, select the event or events you want to digitize. Do this by clicking on the event, or by holding down the Control key on your keyboard and clicking on multiple event. Or, right-click on an event and choose one of the select options, such as Select All or Select From Here, from the pop-up menu. Once you have selected the events, right-click on one of them and choose Add to Batch Digitize from the pop-up menu. When you're ready to batch digitize the events, click on the Batch button in the Clip Controls to open the Batch Digitize window. (For information on how to use the Batch Digitize window, see "Digitizing With Time Machine" on page 134.)

Adjust color

Available when you right-click on matte color clip on the timeline. Choosing this option opens the Matte Color panel, where you can change the color of the clip. For information on how to use this panel, see "Effect Border Color And Matte Color Panels" on page 119.

Animate Level

Available if you right-click on a gray area of a Level track between the start and end of an audio clip, or if you right-click on the audio clip on the Audio track.

Turns animation on so you can adjust the volume level of the audio tracks, creating fade ins, fade outs, peaks, and dips. You see the Animate Level option when you right-click in a gray area of an Audio Level track between the in and out points for the audio. (You can also turn on Animate Level by clicking on the Animate button in the Clip Audio Properties panel. See “Clip Audio Properties” on page 163 for information on how to do this.)

Once you have selected Animate Level, you can adjust the volume levels on the timeline. Right-click on a gray area of the timeline again. Now you see the following options at the bottom of the pop-up menu: Add Keyframe, Add Dip, Add Fade In, and Add Fade Out.

NOTE: You must first turn on Animate Level, either by choosing this pop-up menu option or by clicking on the Animate button in the Clip Audio Properties panel, in order for the levels you set in the Levels tracks to be used.

For information on how to animate audio, see “Animating Audio On The Timeline” on page 149.

Collapse Tree

Available if you right-click in a Video or Audio track. Hides child tracks of the selected track. Audio 1-4 are child tracks of the Video tracks, and one Level track is a child track of each Audio track.

Choosing Collapse Tree is the same as clicking on the - sign next to the name of the parent tracks.

Create Dissolve	Available if you right-click on a clip in an area where it overlaps with another clip. Creates a dissolve transition where two clips overlap.
Delete Event	Available if you right-click on an event. Removes the event that you right-clicked on from the timeline.
Delete Selected Events	Available if you right-click on an event. Removes selected events from the timeline. Select multiple events by holding down the Control key and clicking on the events.
2.1 only Digitize to Time Machine	Available if you have Time Machine installed and you right-click on an event. Digitizes selected clips. Digitized clips are saved onto your Time Machine hard drives. Digitized clips are indicated on the timeline by a dark blue color. To save a picon of the clip as a shortcut, click on the clip on the timeline to select it, then drag the Current Clip picon into a bin.
Double track height	Available if you right-click in an open Level track. Displays the selected Level track at twice its current height. This is useful for precisely editing audio level keyframe positions.
Effect Properties	Available if you right-clicked on a transition, such as a dissolve. Brings up the Effect Properties panel, where you can set properties that allow you to tailor effects to your needs. See “Effect Properties Panel” on page 115 for information on how to use this panel.
Expand All	Available if you right-click on a Video or Audio track. Displays all child tracks belonging to the selected track.

Expand Tree	Available if you right-click on a Video or Audio track. Displays child tracks of the selected track. Audio 1-4 are child tracks of the Video tracks, and one Level track is a child track of each Audio track. Choosing this pop-up menu option is the same as clicking on the + sign next to the name of the parent track.
Fit All	Available if you right-click in a gray area of the timeline (not on an event). Sizes the timeline so that the entire timeline fits into the window.
Fit Selected	Available if you right-click in a gray area of the timeline (not on an event). Sizes the timeline so that all selected items fit into the window.
Halve track height	Available if you right-click in an open Level track. Displays the selected Level track at half its current height.
Higher Priority	Available if you right-click on an event. If two or more clips or effects are in the same area on a timeline, Trinity applies a top-down prioritization. In other words, it plays back the clip on the highest track in the timeline. Occasionally, however, it's inconvenient to move a clip from track to track just to change its priority, so Preditor provides a handy way to break the priority rule. Right-click on a clip and choose Higher Priority. This tells Preditor to play the entire clip even if there are overlapping clips on the higher priority tracks. If two overlapping clips both have Higher Priority turned on, then the old rule applies: the clip on the higher track plays.
Invert Selection	Available if you right-click on an event. Selects the items on the entire timeline that previously were not selected, and deselects those that were.
Invert Track	Available if you right-click on an event. Selects the items on a single track that previously were not selected, and deselects those that were.

Make A/V Edit

Available if you create a dissolve between two linear clips from the same source tape, then right-click on one of the clips in the area where they overlap. Creates an A/V roll edit, a type of edit unique to Trinity. Instead of using a single frame to perform a transition between two clips on the same source tape, as in the A/X roll edit described below, the A/V roll edit converts a portion of one of the clips to a ClipMem. A ClipMem is a bit of digitized video recorded to the RAM on the Warp Engine. In essence, you are transitioning between two video sources, and the resulting edit is indistinguishable from a standard A/B roll edit, although you use only one source deck.

To create an A/V roll edit, right-click on one of the clips where they overlap and select Make A/V Edit from the pop-up menu. (The clip you right-click on is the one Preditor makes the ClipMem of.) Preditor creates a ClipMem for the length of the transition. If the transition is longer than the maximum length for a ClipMem in your system, Preditor creates as many ClipMems as are needed to cover the transition. The ClipMems are saved in Bins\Clips. The next time you click on Assemble, Preditor loads the ClipMem file into the Warp Engine, and records the transition in one pass and the other video clip in the next pass. If the edit uses multiple ClipMems, Preditor makes multiple passes. Preditor matches frames to make the finished edit look seamless (you must have decks capable of match-frame editing for this to work).

Keep in mind that the Warp Engine is being used as a video recording and playback device, so you cannot use warp effects at the same time. Wipe and dissolve effects (with or without graphics) work great with a ClipMem, but not warping digital video effects. For these type of effects, use the A/X roll edit described below.

See “Creating A/V And A/X Edits” on page 210 for more detailed instructions on creating an A/V edit.

Make A/X Edit

Available if you create a dissolve between two linear clips, then right-click on one of the clips in the area where they overlap. Creates an A/X roll edit, which is a transition between two clips on the same tape. Trinity does this by using a single frame for one of the clips during the transition.

To create an A/X roll edit, right-click on the clip you want to "freeze" during the effect, and select **Make A/X Edit** from the pop-up menu. Preditor automatically selects the correct frame of the transitional effect, and splits the clip into a video clip leading up to the transition and a framestore lasting the precise length of the transition. When you next click **Assemble**, Preditor lays the first clip onto the master, and then cues up the framestore and the second clip for the second pass. Match-framing is done automatically, so the edit looks seamless (you must have decks capable of match-frame editing for this to work). The framestores are saved in **Trinity\Bins\stills\AX_stills**, if you ever want to use them again.

See "Creating A/V And A/X Edits" on page 210 for more detailed instructions on creating an A/X edit.

Properties

Available when you right-click in a gray area of an Audio Level track between the in and out points for the audio; when you right-click on the audio clip on the Audio track; or when you right-click on the clip in the Video track.

Brings up the **Clip Main Properties** panel, where you can set the basic properties of a clip, such as play speed, which audio and video channels are recorded, and color correction. You can also access the **Clip Audio Properties** panel, where you can set the audio levels for a clip. See "Clip Main Properties Panel" on page 75 and "Clip Audio Properties" on page 163 for information on how to use these panels.

Record to Harddrive	Available if you right-click on a linear clip. It creates a ClipMem, a bit of digitized video recorded to the RAM on the Warp Engine card and stored on the PC hard drive. This is useful if you do not have a Time Machine. It allows you to store a short clip of uncompressed digitized video and then use it for rotoscoping, animation, transitions between clips on the same source tape, etc. The amount of video storage you have depends on the amount of RAM on your Warp Engine. With 128 MB of RAM (the maximum) you can record just over 6 seconds of video. The standard 16 MB of RAM records 20 frames, or 2/3 of a second. If the clip you want to record to the hard drive is longer than the capacity of the RAM, Preditor creates multiple ClipMems.
Redo	Available if you used the Undo function. Redoes undone actions in reverse sequence.
Remove Gap	Available if you right-click in a gray area where there are no events in any tracks on the timeline. Removes dead time from a timeline, such as a space that is left when you delete a clip. Selecting Remove Gap moves clips on the right side of the timeline to the left in order to close the gap.
Replace with Dissolve	Available if you right-click on a transition. Replaces the current effect with a dissolve.
Reset track height	Available if you right-click on an open Level track. Resets the selected Level track height to its original height.
Select All	Available if you right-click on an event. Selects all events on the timeline.
Select From Here	Available if you right-click on an event. Selects the event you right-clicked on and all following events on the timeline.
Select From Here on This Track	Available if you right-click on an event. Selects the event you right-clicked on and all following events on that track of the timeline.

Select None	Available if you right-click on an event. Deselects all events on the timeline.
Select Track	Available if you right-click on an event. Selects all events on a track of the timeline.
Snap	Available if you right-click anywhere on the timeline. Brings up the Snap Frames pop-up menu, where you can turn the Snap feature on or off, or choose the number of snap frames. (See “The Snap Frames Pop-Up Menu” on page 114 for information on how to use this pop-up menu.)
Split at PosBar (Position Bar)	Available if the Position Bar is over a clip you right-clicked on. Splits the clip at the location of the position bar. This is useful when trimming clips. Scrub through the clip, stopping at the frame where you would like the clip to end. The position bar is located at this frame. Right-click on the clip and choose Split at PosBar. Delete the new clip created to the right of the Position Bar to get rid of the extra footage. The clip you want, trimmed to the exact ending frame you want, remains to the left of the Position Bar. TIP: You can also press Control + s on your keyboard to split clips and stills at the Position Bar. You can use this method to split clips and stills as the timeline plays back.
Turn into Framestore	Available if you right-click on a clip. Creates a framestore (still) of the clip, using the first frame.
Undo	Available if you have just performed an action on the timeline. Undoes actions in reverse sequence.
Zoom 1/2	Available if you right-click in a gray area of the timeline (not on an event). Displays the timeline at half its current length, if the timeline is zoomed out. If it is not zoomed out, this function does not shrink the length of the timeline.

Zoom All	Available if you right-click in a gray area of the timeline (not on an event). Enlarges the display of the entire timeline.
Zoom at Position Bar, Zoom at PosBar	Available if you right-click in a gray area of the timeline (not on an event). Enlarges the display of the area of the timeline where the position bar is.
Zoom x2	Available if you right-click in a gray area of the timeline (not on an event). Displays the timeline at twice its current length. You can select this multiple times.

The Snap Frames Pop-Up Menu

Similar to those in graphics programs, the snap function aids in lining up clips precisely on the timeline. When Snap is turned on, the alignment bar turns yellow when it is within the set number of frames. You can then release the event, and it jumps into place. The Snap Frames pop-up menu is where you can set the margin within which clips snap into place, and where you can turn this function on or off.

The Snap function works for audio events if the Levels tracks are open. If the Levels tracks are not open, Snap functions for the Video tracks only.

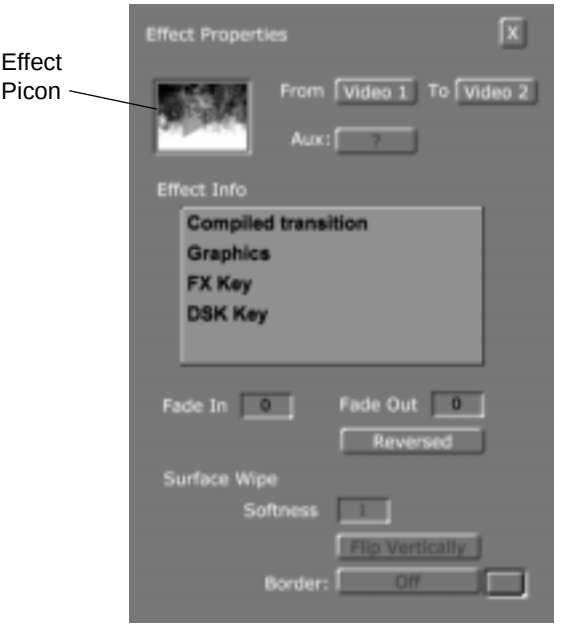
Access the Snap Frames pop-up menu by right-clicking in a gray area of the timeline to bring up the Timeline pop-up menu (see previous section), and selecting Snap. The Snap Frames pop-up menu appears.

The Snap Frames Pop-Up Menu

To turn the snap function on or off, choose Snap Off. Or select the number of frames you want as the snap margin.

Effect Properties Panel

With the Effects Properties panel, you can tailor effects to your needs by adjusting attributes such as softness, duration, direction, etc. To access the panel, right-click on an effect in the timeline, bringing up the Timeline pop-up menu. Choose Effect Properties. The Effect Properties panel appears in the upper left corner of the screen.



The Effect Properties Panel

Some of the values in the panel are for wipes or downstream effects. Values and buttons are grayed out when they don't apply to the selected effect.

Here's how to use the Effect Properties panel:

Effect Picon	Displays the picon of the selected effect.
From, To	Designates which track a transition starts from and moves to. Clicking on these buttons brings up a pop-up menu with the options Video 1, Video 2, and Video 3 (if you have all three video tracks open on your timeline). This is a handy way to change the effect without having to move clips on the timeline.

Aux (Auxiliary)	Use this button in conjunction with the Border button at the bottom of the panel to create wipes with a third video source as the border for the wipe. First, click on the Border button and select Auxiliary Source from the pop-up menu. Next, click on this Aux button near the top of the panel. You see a pop-up menu listing the video tracks of the timeline: Video 1, Video 2, and Video 3. Choose the track that has the video source you want to use as the border for the wipe. For example, if you have a wipe that transitions from the Video 1 track to the Video 2 track, place the source you want to use as the border on the Video 3 track underneath the wipe, and set this button to Video 3.
Effect Info	Displays information about the effect, including its type.
Fade In	Sets how long (in frames) it takes for an effect to fade in. Set this value by highlighting the number in the box, typing in the desired number, and pressing Enter on your keyboard. You can also click on the number and drag your mouse up or down.
Fade Out	Sets how long (in frames) it takes for an effect to fade out. Set this value by highlighting the number in the box, typing in the desired number, and pressing Enter on your keyboard. You can also click on the number and drag your mouse up or down.
Reversed	Reverses the direction of an effect. Click on this button to turn it on.
Surface Wipe: Softness	Adjusts the softness of the edges of the effect. Set this value by highlighting the number in the box, typing in the desired number, and pressing Enter on your keyboard. You can also click on the number and drag your mouse up or down. Try 25 for a soft edge for your wipe without losing the shape of the wipe.
Flip Vertically	Flips a transition vertically. For example, if a wipe transitions from the top, clicking Flip Vertically makes it transition from the bottom.

Border

Brings up a pop-up menu with the following options: Off, Solid Color, Graphics, and Auxiliary Source. These options allow you to apply a border to wipes. If you cannot apply a border to the effect selected, this button is grayed out.

Use this Border setting in conjunction with the Surface Wipe: Softness setting. If the Softness setting is left on the default setting of 1, the wipe has a hard edge with very little border, and you won't be able to see the border you assign. Try setting the Softness at 25 for a soft edge and a visible border.

Here's what the Border choices do:

Off gives the effect no border.

Solid Color adds a colored border to the effect (following figure). The color can be changed by clicking on the mini color picon next to the Border button. This brings up the Effect Border Color panel (see the following section for information on how to use this panel).

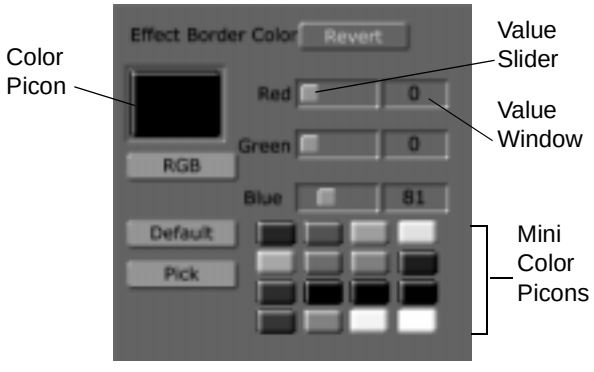
A Clockwise Wipe with a White Border

Graphics allows you to select the graphics from the current DSK (downstream key) as a border.

Use this button in conjunction with the Aux button at the top of the panel to create wipes with a third video source as the border for the wipe. First, click on this Border button and select Auxiliary Source from the pop-up menu. Next, click on the Aux button near the top of the panel. You see a pop-up menu listing the video tracks of the timeline: Video 1, Video 2, and Video 3. Choose the track that has the video source you want to use as the border for the wipe. For example, if you have a wipe that transitions from the Video 1 track to the Video 2 track, place the source you want to use as the border on the Video 3 track underneath the wipe, and set this button to Video 3.

Effect Border Color And Matte Color Panels

The Effect Border Color and Matte Color panels look and function the same. The Effect Border Color panel gives you a place to select the color of a border for an effect. The Matte Color panel is used to select the color of a matte clip on the timeline.



Effect Border Color Panel

The Effect Border Color panel is used in conjunction with the Solid Color option for Border on the Effect Properties panel. If you choose Solid Color, you can set the color here. You can select a color from a set of pre-mixed colors, or mix your own color.

To access the Effect Border Color panel, right-click on an event to bring up the Event pop-up menu, and choose Effect Properties. This opens the Effect

Properties panel (see previous section for information on how to use the Effect Properties panel). On this panel, click on the mini color picon next to the Border button at the bottom right of the panel. The Effect Border Color panel appears.

To access the Matte Color panel, right-click on a matte clip on the timeline, and choose Adjust color from the pop-up menu.

Here's how to use the Effect Border Color and Matte Color panels:

Revert	Resets settings to the original color.
Color Picon	Displays the current color. As you edit the color, the picon changes to show the new color. Drag this picon into a bin to save the current color.
RGB/HSV	Sets the color format. Clicking this button brings up a pop-up menu with the options RGB (red green blue) or HSV (hue saturation value). Choose RGB to adjust the colors of the picon, and HSV to adjust the hue, saturation, and value. Then use the sliders and value windows on the top right of the panel to adjust the properties you chose.
Red, Green, Blue/Hue, Saturation, Value Sliders and Windows	Clicking-and-dragging these three sliders changes the color values. If you selected RGB, the sliders adjust red, green, and blue values. If you selected HSV, the sliders adjust hue, saturation, and value. You can also adjust these values by typing a number into the value windows to the right of the sliders and pressing Enter on your keyboard.
Mini Color Picons	These small color picons in the lower right corner of the panel serve as a palette of pre-mixed colors. They can be selected by dragging-and-dropping them into the color picon on the panel, or by double-clicking on them. The color of a mini color picon can also be changed by dragging-and-dropping the color picon onto it, allowing you to customize the colors in the mini picon palette. Like the color picon, the color of a mini color picon can be saved by dragging it into a bin.

Default	Resets the mini color picons to the default colors. Any custom color picons you created are lost unless you saved them by dragging their picons to a bin.
Pick	Allows you to pick a color from any image on the screen and match it exactly. To do this, click on the Pick button. The video on the on-screen monitor freezes so you can pick a color from the current frame. Still holding down the mouse button, drag the mouse over the color you want. Release the mouse button. The color that the mouse is over loads as the color picon, and its values are displayed as the color values.

Using Advanced Editing Modes

2.1 only

Preditor has five advanced editing modes that help you fine-tune your edits quickly and precisely. These editing modes are Trim Clip, Trim Edit, Slip Source, Slide, and Transition Edit. In these editing modes, the frames displayed in the monitors and the controls under the monitors are tailored for specific tasks. This section explains the purpose of each mode and the functions of its buttons.

To activate one of the advanced editing modes, click on its button in the Timeline Controls on the toolbar (following figure).

The Timeline Controls

Or, use the keyboard shortcuts:

1	Trim Clip
2	Trim Edit
3	Slip Source
4	Slide
5	Trans Edit
6	Add Clip
7	View
Shift + 2	Two-monitor mode
Shift + 3	Three-monitor mode
Shift + 4	Four-monitor mode

The default editing mode is Add Clip. This is the general-purpose editing mode for logging clips and building a timeline. In this mode, the left monitors

display sources and the right monitor displays the output, the timeline or record deck. To return to this mode, click on the Add Clip button in the Timeline Controls on the toolbar.

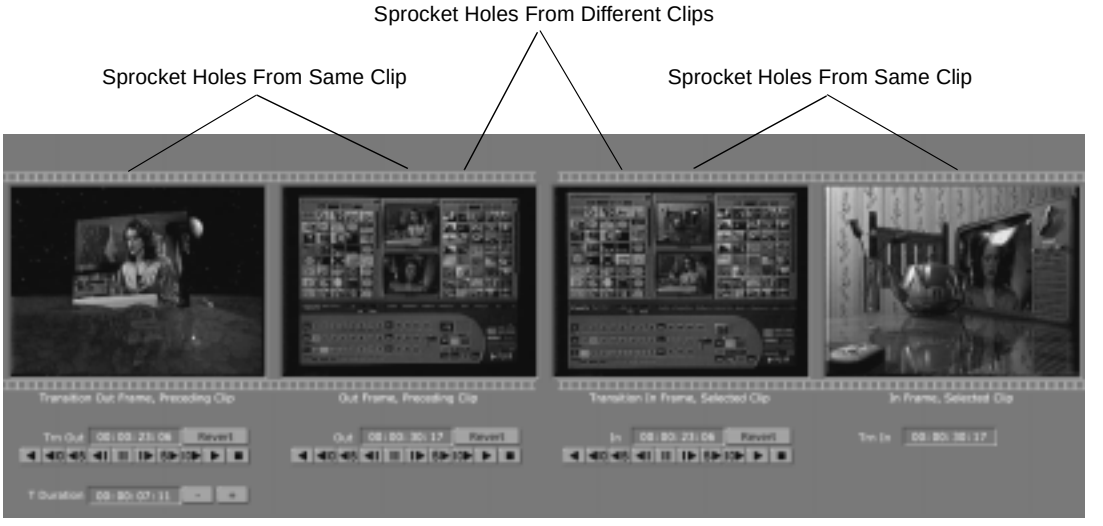
The advanced editing modes can be used for linear or non-linear editing. When working with linear clips, turn on Tape Scrub in the Editor Options panel if you want the monitors to update as you adjust the clips (see “Editor Options Panel” on page 97 for information on how to do this).

The advanced editing modes are useful when working with digitized clips, as Time Machine automatically adds 1 second of trim room on each end of the clip. The advanced editing modes let you see the true in and out points of the clips.

For all but one of the editing modes, you can choose whether to view two, three, or four monitors. The exception to this is Transition Edit mode. This mode requires a four-monitor display and opens four monitors automatically when you click the Trans Edit button.

Slip Source and Slide modes work differently in the two-monitor display, but if you open four monitors these two modes are the same. In four-monitor mode, both Slip Source and Slide function as Slip Source for the clip in the middle two monitors and Slide for the clips in the end monitors. Both the Slip Src and Slide buttons on the interface light up to remind you that both modes are active. This allows you access to both functions at once, so you can choose to adjust the in and out points without changing the clip's duration or position on the timeline (Slip Source mode), *or* by adjusting the duration of the clip and adjusting neighboring clips to compensate (Slide mode).

In the advanced editing modes, gray tracks that simulate the sprocket holes on the edge of film appear above and below the monitors (following figure). These are a visual cue to help you see which frames are on the same clip. If the sprocket holes are continuous between two monitors, the frames displayed by the monitors are on the same clip. If there is a break between the sprocket holes, the frames are from different clips.



Film Sprocket Holes in Transition Edit Mode

In each editing mode, transport controls appear under appropriate monitors. These controls are similar to the controls on a VTR.

Following is a description of the transport controls:

Transport Controls

Control the selected device. The buttons, in order from left to right, are:

- Jog Back 10 Frames
  Moves back or trims 10 frames at a time

- Jog Back 5 Frames
  Moves back or trims five frames at a time

- Jog Back 1 Frame
  Moves back or trims one frame at a time

- Pause
  Puts deck in Pause mode, pausing playback if the deck is rolling, or spooling the tape so it is ready to play if the deck is stopped.

- Jog Forward 1 Frame
  Moves ahead or trims one frame at a time

- Jog Forward 5 Frames
  Moves ahead or trims five frames at a time

- Jog Forward 10 Frames
  Moves ahead or trims 10 frames at a time

The following sections explain the functions of the other monitor controls in the advanced editing modes, as well as the purpose of each mode.

Trim Clip Mode

2.1 only

Trim Clip mode is designed for trimming single clips. It displays the first frame of the selected clip in the left monitor, and the last frame of the clip in the right monitor (following figure). The controls trim or add time to the beginning or end of the clip. There is an option, Loop Clip, that allows you to play the clip repeatedly in a loop so you can see the in and out points as you adjust them.

Trim Clip Mode

Following is an explanation of the control buttons in Trim Clip mode:

In/Out Timecode	Displays the timecode of the selected clip's in point and out point. To set a specific timecode as the in or out point, type in the timecode and press Enter on your keyboard.
Revert	Undoes changes to the selected clip and reverts to the clip settings from the last saved version of the timeline. The timeline must have been saved at least once in order for this to work. To use this function, click on the desired clip to select it, then click on the Revert button. The clip may not be able to revert if you have trimmed it and moved another clip into its spot on the timeline.
Loop Clip	Plays the selected clip in a continuous loop. You can use this feature to repeatedly play a clip as you fine-tune its in and out points. To stop the loop, click this button again, or click the stop or pause buttons in the transport controls.

Loop Clip Timecode	Sets the amount of the timeline that is included in the loop before and after the clip. If you type 00:00:01:00, for example, and press Enter on your keyboard, the loop begins playing 1 second before the clip and continues playing 1 second after the clip. Use the -/+ buttons to the right to decrease or increase this time by 1 second.
Duration	Displays the duration of the clip. Change the duration of the clip by typing in a timecode and pressing Enter on your keyboard. Use the -/+ buttons to the right to decrease or increase the duration by 1 second.

Trim Edit Mode

2.1 only

Trim Edit mode helps you adjust edits between two clips. It is designed for precision editing down to individual frames. The left monitor displays the last frame of the preceding clip and the right monitor displays the first frame of the selected clip. You can trim time off or add to the clips. There is an option, Loop Edit, that allows you to play the transition between the clips repeatedly in a continuous loop, and an option, Loop Clip, that allows you to play the selected clip in a loop.

The following figure shows Preditor in Trim Edit mode.

Trim Edit Mode

NOTE Click on the second clip of the edit to select it in order to load the monitors properly.

In Trim Edit mode, you can also choose to display four monitors if you want to see the first frame of the first clip and the last frame of the selected clip.

Following is an explanation of the buttons in Trim Edit mode:

Out/In Timecode	Displays the timecode of the last and first frames of the edit. To set a specific timecode as the last or first frame of one of the clips, type in the timecode and press Enter on your keyboard.
Revert	Undoes changes and reverts to the properties set for the clip in the last saved version of the timeline.
Loop Edit	Plays the selected portion of the timeline in a loop. This allows you to watch the edit repeatedly and see the new in and out points as you change them. To stop the loop, click this button again, or click the stop or pause buttons in the transport controls.

Loop Edit Timecode	Sets the amount of the timeline that is included in the loop before and after the edit. If you type 00:00:01:00, for example, and press Enter on your keyboard, the loop begins playing 1 second before the edit and continues playing 1 second after the edit. Use the -/+ buttons to the right to decrease or increase this time by 1 second.
Loop Clip	Plays the selected clip in a continuous loop. You can use this feature to repeatedly play a clip as you fine-tune its in and out points. To stop the loop, click this button again, or click the stop or pause buttons in the transport controls.
Loop Clip Timecode	Sets the amount of the timeline that is included in the loop before and after the clip. If you type 00:00:01:00, for example, and press Enter on your keyboard, the loop begins playing 1 second before the clip and continues playing 1 second after the clip. Use the -/+ buttons to the right to decrease or increase this time by 1 second.
Duration	Displays the duration of the clip. Change the duration of the clip by typing in a timecode and pressing Enter on your keyboard. Use the -/+ buttons to the right to decrease or increase the duration by 1 second.

Slip Source Mode

2.1 only

Slip Source edit mode is used to adjust the in and out points of a clip without changing its duration or position on the timeline. It “slips” the video forward or backward, in effect trimming one end and extending the other simultaneously. This is useful, for example, if you finish building a timeline but decide you wish a clip started a few frames earlier.

In Slip Source mode, the monitors and controls look like the following figure:

Slip Source Mode

You can also open four monitors in Slip Source mode. If you do this, you see the Slide mode button on the toolbar also turn on. This indicates that the selected clip, shown in the middle monitors, is in Slip Source mode, and the neighboring clips, shown in the monitors on the ends, are in Slide mode. This is the same when you open four monitors in Slide mode.

In Slip Source mode, the Roll and Slide Edit buttons in the Editor Options panel are on by default. These options allow you to perform the same options with the mouse as with the transport controls. Roll causes the mouse to behave like Slip Source when you click on a clip, and Slide Edit causes the mouse to behave like Trim Edit mode when you click on the trimming handle of a clip. To change these options, open the Editor Options panel by clicking on the Options button on the right side of the toolbar. See “Editor Options Panel” on page 97 for more information about this panel.

Following is an explanation of the controls in Slip Source mode:

Src In/Src Out Timecode	These boxes display the timecode on the source tape. This is different than timecode displays in the other editing modes, which display either the timecode of the timeline or the output tape.

Revert	Undoes changes and reverts to the properties set for the clip in the last saved version of the timeline.

Slide Mode

2.1 only

Slide editing mode is designed to adjust cut edits. In Slide mode, you can extend the length of a clip, and the neighboring clip is automatically trimmed to compensate.

The following figure shows the monitors and controls in Slide mode.

Slide Mode

You can also open four monitors in Slide mode. If you do this, you see the Slip Source mode button on the toolbar also turn on. This indicates that the selected clip, shown in the middle monitors, is in Slip Source mode, and the neighboring clips, shown in the monitors on the ends, are in Slide mode. This is the same when you open four monitors in Slip Source mode.

When four monitors are open in Slide mode, the Roll and Slide Edit buttons in the Editor Options panel are on by default. These options allow you to perform the same options with the mouse as with the transport controls. Roll causes the mouse to behave like Slip Source when you click on a clip, and Slide Edit causes the mouse to behave like Trim Edit mode when you click on the trimming handle of a clip. To turn these options off, open the Editor Options panel by clicking on the Options button on the right side of the

toolbar. See “Editor Options Panel” on page 97 for more information about this panel.

Following is an explanation of the controls in Slide edit mode:

Out/In Timecode	Displays the timecode of the last and first frames of the clips. To set a specific timecode as the last or first frame of one of the clips, type in the timecode and press Enter on your keyboard.
Revert	Undoes changes and reverts to the properties set for the clip in the last saved version of the timeline.

Transition Edit Mode

2.1 only

Transition Edit mode (Trans Edit on the button face) is used to adjust the beginning and ending points of transitions. Adjustable transitions, such as wipes and dissolves, automatically adjust in length to match the overlap of the two clips.

When Preditor is in Transition Edit mode, it automatically goes to a four-monitor display. If you do not see frames from your clips displayed in all four monitors, click in the timeline on the second clip of the transition to load them into the monitors.

In Transition Edit mode, the Lock Trans button in the Editor Options panel is on by default. This locks the in and out points of a transition to the in and out points of a clip when you drag the trimming handles of the clip. So, if you make the overlap area of the clips shorter, the transition is also shorter. To turn this option off, open the Editor Options panel by clicking on the Options button on the right side of the toolbar. See “Editor Options Panel” on page 97 for more information about this panel.

The following figure shows the monitors and transport controls in Transition Edit mode.

Transition Edit Mode

Following is an explanation of the controls in Transition Edit mode:

Trn (Transition) Out	Displays the timecode for the first frame of the transition on the first clip.
Out	Displays the timecode for the last frame of the first clip.
Trn (Transition) In	Displays the timecode for the first frame of the second clip.
In	Displays the timecode for the last frame of the transition on the second clip.
Revert	Undoes changes and reverts to the properties set for the clip in the last saved version of the timeline.
T (Transition) Duration	Displays the length of the transition.
-/+	Decreases/increases the length of the transition by 1 second.

Digitizing With Time Machine

2.1 only

This section of the chapter explains how Preditor's digitizing functions work. If you have Time Machine installed, there are several ways to digitize clips. You can digitize clips on the timeline, or send clips to a queue to be digitized in a batch. The Batch Digitize window allows you to adjust settings, such as compression level and color correction, for individual or groups of clips.

You can also digitize your program out in Air Command by using the VTR Transport/Sync Roll/Live Digitize panel. See the *Air Command 2.1 Manual* for information on how to do this.

You can digitize WAV and AVI files by dragging them onto the timeline, or by adding them to the Batch Digitize list.

Each digitized clip has a default of 1 second of trim room at the head and tail of the clip. This is so you can make minor adjustments in the in and out points without having to re-digitize the clip from the source tape.

When you are working with non-linear clips, Preditor automatically accounts for changes you make to the playback speed and loop count. For example, say you set the playback speed for a clip to play in reverse. When you scrub through that clip on the timeline, you see the end of the clip first. Then it plays back to the beginning of the clip as you scrub through the clip on the timeline. And, if you open an advanced editing mode, such as Trim Clip, what you see in the monitor labeled First Frame, Selected Clip is actually the last frame of the clip, since that is what you see first when the clip is played in reverse.

You can re-digitize a clip if you want to change its properties, such as the compression level used. You can, for example, initially digitize all your clips for a project at a high compression level, giving you smaller file sizes. Then, when you have built your timeline and know which clips you actually want to use, you can delete the extras and re-digitize the ones you want at a lower compression level for better image quality.

Where Are The Clips Saved?

Time Machine saves digitized clips to your dedicated Time Machine hard drives inside your Trinity unit. You can also create shortcut picons for Time Machine clips and save them in any bin by dragging the clip picon into the bin.

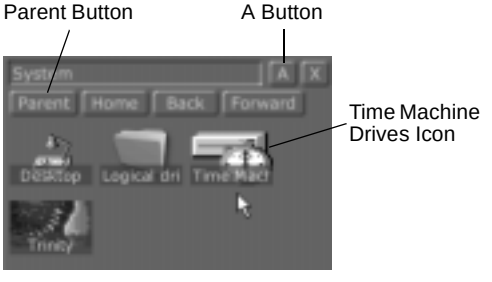
For most practical purposes, the shortcut picons act just like clips. This is *not* true, however, when it comes to deleting the clips. You can delete shortcuts to the clips in the bins where they are located, but to delete the clips themselves you must navigate to the Time Machine hard drives.

NOTE If you delete the clips from the Time Machine hard drives, the shortcuts in the bins will be useless unless you re-digitize them. Don't make the mistake of thinking you have a copy of a clip saved in a bin. The picon in a bin is only a shortcut, as the clips are saved *only* on the Time Machine hard drives.

NOTE You can save as many shortcuts to Time Machine clips in bins as you want. Multiple shortcuts can reference the same audio and video footage on the Time Machine hard drives. Each shortcut can contain different clip properties, such as in and out points, strobe rate, etc.

You can access the Time Machine hard drives by parenting up through your bins. This allows you to delete clips or load clips directly from the hard drive. To access the Time Machine hard drives, do the following:

1. In one of the open bins on your screen, click the A button in the upper right corner of the bin (following figure).



The System Bin

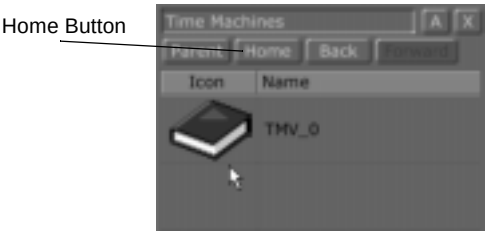
This opens additional options for bin navigation.

2. Click on the Parent button until you get to the System bin.

   You see four options in the system bin: Desktop, Logical drives, Time Machine, and Trinity (previous figure).

3. Double-click on the Time Machine picon.

You see an icon of a book (following figure). This represents the “volume” of Time Machine you are using. Currently there is only one volume.



Volume Icon in Time Machine Bin

4. Double-click on the volume icon.

You see a bin containing picons of your digitized clips (following figure).

Digitized Clips on Time Machine Hard Drives

To load your digitized clips into a monitor or onto the timeline, drag the picon from this bin to where you want to load it.

This is where you delete your clips from the Time Machine drives. To do this, right-click on a clip picon and choose **Delete** from the pop-up menu.

NOTE

These clips are the actual audio and video data only. The Time Machine hard drives do not contain clip properties, such as in and out points, strobe rate, etc. These clip properties are saved in the shortcuts for the clips in the bins on your PC.

When you want to return to the bin you started from, click the **Home** button.

Digitizing A Clip On The Timeline

To digitize a clip on the timeline, (left-)click on the clip to select it. Then, right-click on the clip and choose **Digitize to Time Machine** from the pop-up menu, or click on the **Digitize** button on the toolbar. You see a horizontal bar go up and down in the picon for the clip, telling you that Time Machine is digitizing the clip. The bar containing the clip picon on the timeline turns dark blue, indicating it is digitized

You can select multiple clips to digitize on the timeline. There are two ways to do this. One is to hold down the **Control** key on your keyboard and click on the clips to select them. The other is to right-click on a clip and choose one of the select options, such as **Select All**, **Select Track**, **Select From Here**, etc., from the pop-up menu (see “Timeline Pop-Up Menu” on page 104 for information on all the selection options). Once you select the clips, digitize them the same way as single clips, by choosing **Digitize to Time Machine** from the pop-up menu, or by clicking on the **Digitize** button on the toolbar.

Selecting Clips For Batch Digitizing

There are three ways you can add clips to the Batch Digitize bin. You can select them from the timeline, you can use **AutoBatch** to automatically send them to the Batch Digitize bin as you log them, or you can drag picons from a bin into the Batch Digitize window **To do list**.

Sending your clips to the Batch Digitize window does not save them. To save them, you must open the Batch Digitize window and either digitize the clips or save the **To do list** before exiting Preditor.

You can send clips from as many tapes as you want to the Batch Digitize window. Once you open that window, you can select all the clips from each tape by clicking on the tape name in the Tape List. Or, you can digitize the whole batch, and Time Machine prompts you to change tapes as needed.

Selecting Clips to Batch Digitize from the Timeline

To queue clips for batch digitizing from the timeline, select the clips you want to digitize. Do this by holding down the Control key on your keyboard and clicking on the clips you want, or by right-clicking on a clip and choosing one of the select options, such as Select All or Select From Here, from the pop-up menu. Then, right-click on one of the selected clips and choose Add to Batch Digitize from the pop-up menu.

Using AutoBatch

To automatically send clips to the Batch Digitize bin as you log them, click on the AutoBatch button under the right monitor. Log your clips by marking the in and out points, and clicking the New Clip button under the right monitor between each clip.

Dragging Picons to the To do list

When the Batch Digitize window is open (open it by clicking on the Batch button on the left side of the toolbar), you can add clips to the queue by dragging them from a bin to the To do list. You can also drag clips from the To do list to a bin to save a shortcut for that clip in the bin.

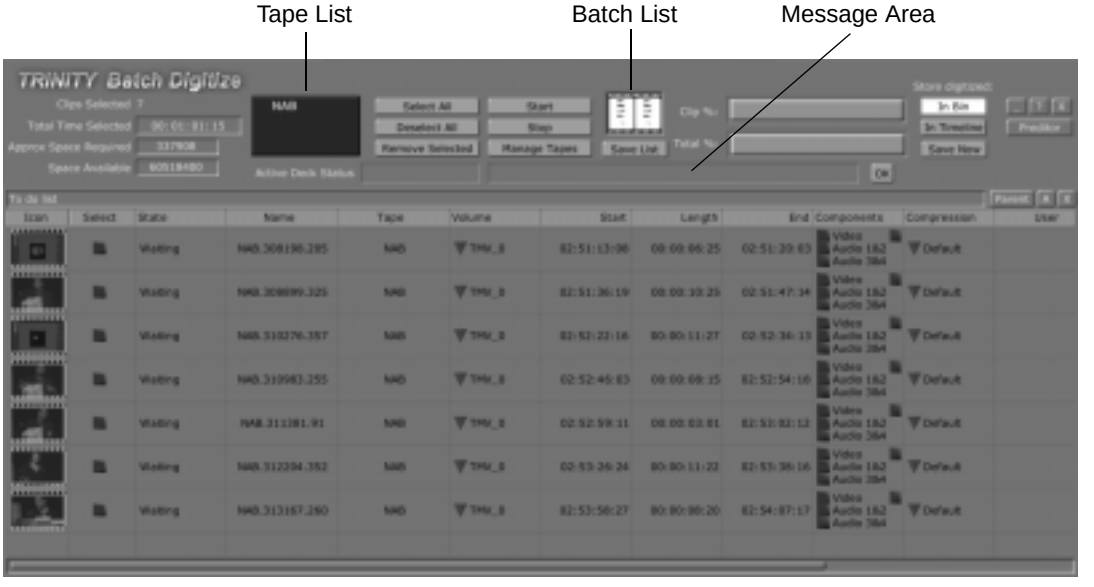
Digitizing AVI And WAV Files

There are two ways you can digitize AVI and WAV files. You can drag an AVI or WAV file from the bin onto the timeline in Preditor, and if you have Time Machine installed, it is instantly digitized. Or, you can add it to the To do list in the Batch Digitize window. Do this by clicking on the Batch button on the left side of the toolbar to open the Batch Digitize window, then either dragging the AVI or WAV file picon from a bin into the To do list or double-clicking on the picon.

Using The Batch Digitize Window

Time Machine's batch digitizing function is controlled through the Batch Digitize window. In this window, you can set properties for individual clips and select clips to digitize in a batch.

To access this window, click on the Batch button on the left side of the toolbar. The Batch Digitize window opens.



The Batch Digitize Window

Here's how the functions in this window work:

Clips Selected	Displays the number of clips selected in the To do list. A clip is selected if the square button in the Select column is on (blue), and is not selected if this button is off (gray). Select clips by clicking on this button. Or, select all clips by clicking on the Select All button. Or, select all clips from a single tape by clicking on the name of the tape in the Tape List.
Total Time Selected	Displays the total length of the clips selected in the To do list.
Approx Space Required	Displays the approximate amount of space (in bytes) on your hard drive that the selected clips require.
Space Available	Displays the amount of available space (in bytes) on your hard drive.

Tape List	Lists the tapes from which the selected clips are taken. To select all clips from a single tape for digitizing, click on the name of the tape in the Tape List.
Select All	Selects all the clips in the To do list.
Deselect All	Deselects all the clips in the To do list.
Remove Selected	Removes the selected clip from the To do list.
Active Deck Status	Displays messages, such as Playing or Cueing, regarding the status of the active deck.
Start	Begins digitizing the selected clips.
Stop	Halts the digitizing process.
Manage Tapes	Tells Time Machine which tape is currently in a source. This allows you to tell Time Machine that a new tape is in the deck before the tape is requested. To do this, click on the button. Select the deck you want from the pop-up menu. Another pop-up menu appears. Select the new tape you just placed in the selected deck.
Batch List Picon	This picon represents the Batch List (the clips listed in the To do list bin). You can save the list and digitize some or all of the clips later by dragging this picon into a bin. When you are ready to work in it again, double-click on it and it loads into the To do list. To set the image for this picon, select one (make sure only one clip is selected) clip in the To do list. Then right-click on this picon, and choose Set Picon to selected clip from the pop-up menu. As you digitize the batch, you see a white status bar go up and down in this picon until the digitizing is complete.

Save List	Saves the list of clips in the To do list so you can return to it later. The default bin these lists are saved in is Trinity\Bins\Clips. The picon has a Play logo (unless you set a picon), and the default name is Batch followed by a four-digit number. The file extension is .pbl (Preditor batch list). To open a list saved in a bin, open the Batch Digitize window and double-click on the picon. The list is loaded as the current To do list.
Clip %	A visual status bar that indicates how far the digitizing of a clip has proceeded. The bar turns green from the left.
Total %	A visual status bar that indicates how far the entire digitizing process (of all selected clips) has proceeded. The bar turns green from the left.

In Bin/In Timeline

Use these buttons in conjunction with the **Save Now** button to designate where picons of digitized clips are saved.

(All digitized clips are actually saved on the Time Machine hard drives, but picons representing shortcuts to these clips can be saved in any bin. So, what you are actually designating with these buttons is where the shortcuts are saved. In practice these picons behave as if they were the actual clips, except that if you want to delete the clip, and not just the shortcut, you must navigate to the Time Machine hard drives to do so. For information on how to do this, see “Where Are The Clips Saved?” on page 134.)

In Bin stores picons of the clips in the bin designated for **Unsaved TM** in the **Global Settings** panel. The default is **Trinity\Bins\Clips**. For more information on how to set paths in the **Global Settings** panel, see the “Using Configure Panels” chapter in the *Trinity 2.1 User Guide*.

In Timeline places picons of the digitized clips directly in the timeline you are building. If you already have a timeline loaded, you are prompted to save.

After choosing **In Bin** or **In Timeline**, click the **Save Now** button.

You can save clip picons to both the timeline and the bin by choosing first one and clicking **Save Now**, and then choosing the other and clicking **Save Now**.

Save Now

Used in conjunction with the **In Bin** or **In Timeline** buttons (see explanation above).

Message area, OK	Displays messages regarding the status of the digitizing process. If there are errors, a message is displayed here. If the message is too long to see all of it, right-click on it and it is displayed in a pop-up window. Click OK to clear the message area.
_, ?, X	As in other Windows applications, _ minimizes the application, ? opens a help window, and X closes the application.
Preditor	Closes the Batch Digitize window and returns you to the Preditor interface. If you want to save your To do list, click Save List before clicking on this button to exit the Batch Digitize window. Otherwise, when you restart or reset Trinity the To do list will be lost.

To Do List

Across the bottom portion of the Batch Digitize window is the To do list. This not only acts as a bin, but also allows you to set certain features for individual clips. Here's how to use it:

A

Toggles the navigation buttons (Back, Forward, Home, and Close) and long path name on and off. Note that the Parent button, which takes you up one level in the directory, is always available, whether A is toggled on or off. Right-clicking the A button brings up a pop-up menu with options that change how picons are displayed in the bin. These options are Large, Small, List, Detail, and Clip.

- Large: Displays the picons at a larger size.
- Small: Displays picons at a smaller size.
- List: Displays the picons and their names.
- Detail: Displays the picons and the following information: Name, Size, Type, Modified, and Attrib (attributes).
- Clip: Displays the picons and the following information: Name, Length, Source In (in point), Source Out (out point), and Comments.

NOTE: If some of the fields of information in the bin do not appear in the display as you change the type of view, you can recover those fields by clicking the Parent button to go up one level in the directory, and then reopening the To do list folder.

X

Closes the bin. Open a new bin by right-clicking in the empty space on the screen and choosing New Bin from the pop-up menu.

Parent	Takes you one level higher in the directory. If you click on this, you see the following folders, To do list, Tapes, and Volumes. To do list is the list of clips waiting to be digitized. It is the default folder that is open when you open the Batch Digitize window. The Tapes folder contains a folder for each tape, and clips from each tape. This allows you to quickly find and digitize clips from a specific tape. Volumes is for a future enhancement.
Path box	Shows exactly where on your hard drive a bin is found. Navigate through bins by typing a new path in this box.
Back	Takes you to the previous bin. If you haven't opened any bins before the current one, this is grayed out. Right-clicking on the Back button brings up a navigation history pop-up menu for navigating without intervening stops.
Forward	Takes you to the bin that you navigated to after the current one, when navigating through a series of bins. If you haven't opened any bins since you opened the current bin, this tool does not function. Right-clicking on the Forward button brings up a navigation history pop-up menu for navigating without intervening stops.
Home	Opens the bin that was open when a layout was last saved. There can be as many different Home bins as there are layouts for each application.
Close	Closes the bin. Another bin is opened in this space by right-clicking in the space and choosing New Bin from the pop-up menu. Or you can expand another bin into the empty space by dragging it out to a new size.
Icon	Displays a picon of the clip. Drag the picon to a bin to save a shortcut for the clip.

Select, State	Click on the square button in the Select column to select whether or not a clip is included in the batch to be digitized. If the square is dark blue, the clip is selected for digitizing; if the square is gray, the clip is not selected for digitizing. Clicking on this square also toggles the status of the clip in the State column between an active and inactive one. If the clip is a linear clip, its State toggles between Waiting and Ignored. If the state is Waiting, it means the clip is waiting to be digitized, and it will be included in the batch when you click Start. If the state is Ignored, the clip will be omitted from the batch. Sometimes you will want to re-digitize clips that have already been digitized in order to change their settings. If the clip has already been digitized, its State toggles between Digitized and Rescheduled. If the state is Digitized, Trinity recognizes that the clip has already been digitized, and it will be omitted from the next batch. If the state is Rescheduled, the clip has been scheduled to be re-digitized, and it will be included in the next batch. NOTE: If you are re-digitizing a clip and you do not want to overwrite the previously digitized version, be sure to change the name of the clip before you re-digitize it.
Name	Displays the name of the clip.
Tape	Displays the name of the tape from which the clip is taken.
Volume	Indicates the Time Machine “volume” number where the clip is saved. Currently there is only one Time Machine volume.
Start	Displays the starting timecode of the clip.

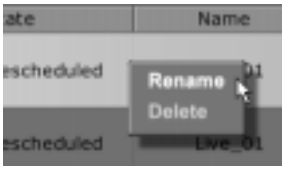
Length	Displays the length of the clip in timecode.
End	Displays the ending timecode of the clip.
Components	Allows you to select the components you want: Video, Audio 1 & 2, or Audio 3 & 4.
Compression	Allows you to select the relative level of compression for the clip. To do this, click on the button. A pop-up menu appears. Default, the automatically selected setting, gives the highest image quality. Moving from Default toward 6 gives you progressively more compression and, thus, less quality. You can set a different compression level for each clip to be batch digitized. The compression ratio can also be changed in the Digitize Settings panel. Access this panel by clicking on the Configure button on the Preditor toolbar and selecting Digitize Settings from the pop-up menu. For information on this panel, see the “Using Configure Panels” chapter in the *Trinity 2.1 User Guide*. NOTE: The Trinity Time Machine uses wavelet compression to digitize video. Wavelet compression offers better video quality for less hard drive space than the standard M-JPEG compression, which most other non-linear editing systems use. A compression ratio of about 5:1 with Time Machine is visually unchanged, and is roughly equivalent to a 1.5:1 ratio on an M-JPEG system. Another advantage of wavelet compression is that you won't see any digital artifacts, such as the pixel blocks that may show up on M-JPEG compressed video. Wavelet compression, even at high compression ratios, retains the look of analog tape.
User	Enter a user name for the clip here. This is convenient if your Time Machine is used by more than one person, and you want to keep track of your digitized clips. To enter a user name, click once on the clip to select it, then click in the User box. A cursor appears and you can type in the name.

Project	Enter the name of the project which the clip is part of. To do so, click once on the clip to select it, then click in the Project box. A cursor appears and you can type in the name of the project.
Comments	Enter comments here. To do so, click once on the clip to select it, then click in the Comments box. A cursor appears and you can type in your comments.
Size	Displays the size (in bytes) of the clip after it is digitized. This changes according to the compression level you choose.

NOTE As in other bins in Trinity, right-clicking in a blank area of the To do list in the Batch Digitize window brings up a pop-up menu. The items on this menu allow you to manage the items in your bins. For information on how to use bin functions, see the "The Trinity Interface" chapter in the *Trinity 2.1 User Guide*.

Rename/Delete Pop-Up Menu

You can use the Rename/Delete pop-up menu to rename or delete a clip. To do this, select the clip. Then, right-click in the row of the selected clip. The Rename/Delete pop-up menu appears.



The Rename/Delete Pop-Up Menu

Select the desired option from the pop-up menu. If you select Delete, the clip is deleted from the To do list bin, but not from other bins where you have saved it. If you select Rename, the yellow band across the row of the clip you selected turns purple, and a cursor appears at the beginning of the clip name. Type in a new name for the clip and press Enter.

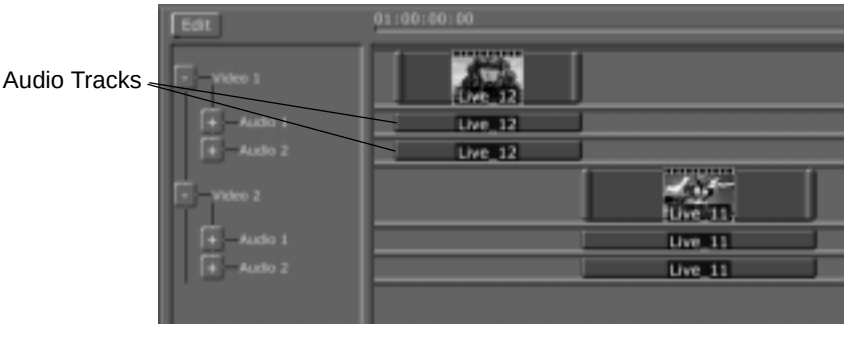
Animating Audio On The Timeline

The timeline audio tracks and pop-up menus give you the ability to adjust audio levels while working in the timeline. This is an easy way to sync the audio levels with the clips on your timeline.

When you first place clips on the timeline, only video tracks are visible (following figure).

Video Tracks on the Timeline

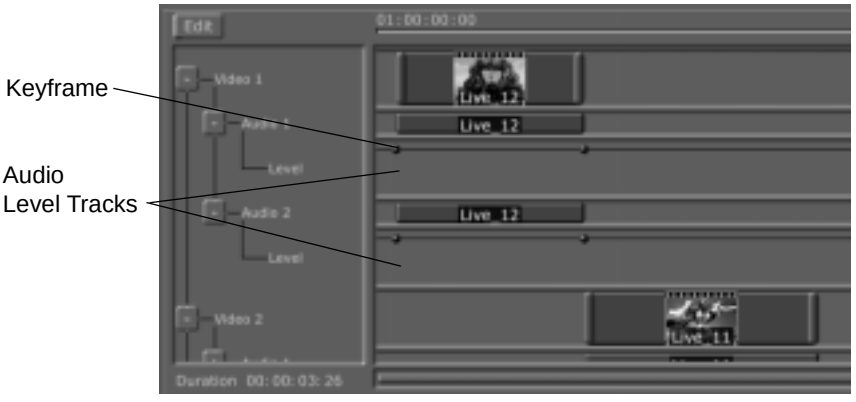
To open the audio tracks for a video track, click on the plus sign next to the name of the video track, or right-click in a blank spot in the timeline and choose **Expand Tree** or **Expand All** from the pop-up menu. You see two audio tracks for each video track (following figure).



Video and Audio Tracks on the Timeline

In addition to the audio tracks, which can be used to adjust the length of the audio clip, there is a Level track for each audio track. The Level track can be used to animate the volume level of the audio. To open the Level track, click

on the plus sign next to the name of the audio track, or right-click in a gray area of the timeline and choose Expand All from the pop-up menu.



Video, Audio, and (Audio) Level Tracks on the Timeline

To hide the tracks, click on the minus sign next to the name of the track. This hides the child tracks. In other words, if you click on the minus sign next to Audio 1, its child Level track is hidden. If you click on the minus sign next to Video 1, its two audio tracks and two levels tracks are all hidden.

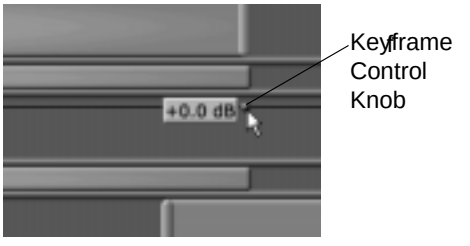
Right-clicking in the Level track brings up the Timeline pop-up menu (see “Timeline Pop-Up Menu” on page 104 for information on how to use this menu). The following options allow you to adjust the height of the Level tracks so you can edit precisely.

Halve track height	Displays the selected audio track at half its current height.
Reset track height	Resets the selected audio track height to its original height.
Double track height	Displays the selected audio track at twice its current height. (You may want to do this if you want to drag a level all the way down to Off. Or, you can right-click on a keyframe to open the Edit Key panel and use the slider to set the level to off. See the following section, “Edit Key Panel,” for more information on this.)

Adjustments to the audio tracks are made by clicking-and-dragging on the audio clips or the audio keyframes, or via several pop-up menus. The pop-up menus are described in the following sections.

Decibel Level

When you left-click on a keyframe control knob (following figure) on a Level track, a box appears that indicates the decibel level of the audio in that track.



Decibel Level

0 dB represents an unchanged audio level. Audio engineers may find it helpful to know that the settings in the Level track act as an attenuator, and every -6 dB halves the audio level (-6 dB is half the original level, -12 dB is a quarter, -18 dB is an eighth, etc.).

You can change the decibel level by dragging the keyframe down, or by typing in a number in the Edit Key pop-up box (see following section). You can also drag keyframes left or right, except for the beginning and ending keyframes, which are fixed at the ends of the audio clip.

Edit Key Panel

The Edit Key panel allows you to fine tune the volume levels of the audio tracks. To access it, right-click on a keyframe. Select Edit Key from the pop-up menu (see the following section, “Audio Tracks Pop-Up Menu,” for information on how to use this menu). The Edit Key panel appears.

The Edit Key Panel

The Edit Key panel is a floating window, so you can drag it where you want it on the screen.

Here's how to use the Edit Key panel:

Delete Event	Deletes the selected keyframe. However, because each audio track must have a beginning and ending keyframe, you cannot delete these keyframes.
Linear	The default mode, this makes the transition from one keyframe to the next a straight line.

Keyframes Set to Linear

This means the audio level changes at a constant rate from one keyframe to the next.

Cubic

Makes the transition from one keyframe to the next a curved line.

Keyframes Set to Cubic

This “rounds out” the transitions between keyframes by varying the rate at which the audio level changes.

Hold

Maintains the value of the previous keyframe until the next keyframe.

Keyframes Set to Hold

This means the audio level jumps from the setting of one keyframe to the setting of the next.

Decibel Slider

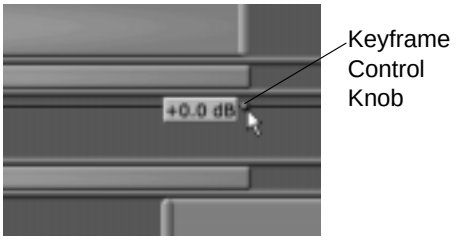
Adjusts the decibel level of the selected keyframe. 0 dB represents an unchanged audio level. The settings in the Level track act as an attenuator, and every -6dB halves the audio level (-6 dB is half the original level, -12 dB is a quarter, -18 dB is an eighth, etc.)

TIP: To turn the volume Off at the selected keyframe, drag the slider all the way to the left. This may be easier than dragging the keyframe to the bottom of the track on the timeline.

Event Value	Displays the decibel level of the selected keyframe. To set this level precisely, click on this box and type in a number. 0 dB represents an unchanged audio level. The settings in the Level track act as an attenuator, and every -6dB halves the audio level (-6 dB is half the original level, -12dB is a quarter, -18 dB is an eighth, etc.)
Time Slider and Timecode	The timecode of the location of the keyframe on the timeline is displayed in the timecode box. It can be adjusted with the slider, or by typing a number into the box and pressing Enter on your keyboard. You cannot, however, move the beginning and ending keyframes with this, as they must match the length of the audio clip.

Audio Tracks Pop-Up Menu

The Audio Tracks pop-up menu appears when you right-click on a keyframe control knob (following figure) on a Level track of the timeline.



Keyframe Control Knob

The Audio Tracks pop-up menu appears. It has settings that allow you to manipulate the volume of your audio tracks.

The Audio Tracks Pop-Up Menu

Following is an explanation of the options on the Audio Tracks pop-up menu:

Linear	The default mode, this makes the transition from one keyframe to the next a straight line.

Keyframes Set to Linear

This means the audio level changes at a constant rate from one keyframe to the next.

Cubic	Makes the transition from one keyframe to the next a curved line.

Keyframes Set to Cubic

This “rounds out” the transitions between keyframes by varying the rate at which the audio level changes.

Hold	Maintains the value of the previous keyframe until the next keyframe.

Keyframes Set to Hold

This means the audio level jumps from the setting of one keyframe to the setting of the next.

Delete Key	Deletes the selected keyframe.
Edit Key	Opens the Edit Key panel, where you can precisely adjust the level of the selected keyframe (see the previous section for information on how to use this panel).
Properties	Opens the Clip Main Properties panel, from where you can access the Clip Audio Properties panel. In the Clip Audio Properties panel, you can adjust the levels of the audio channels and open the Equalizer panel. See “Clip Main Properties Panel” on page 75, “Clip Audio Properties” on page 163, and “Equalizer Panel” on page 165 for information on how to use these panels.

Animate Level Allows you to adjust the volume level of the audio tracks, creating fade ins, fade outs, peaks, and dips. To do this, either click-and-drag the keyframes or use the options on the Animate Level pop-up menu (see "Animate Level Pop-Up Menu" on page 157). You must select **Animate Level** and right-click to bring up the pop-up menu again before you see all of the options for adding keyframes, dips, and fades.

NOTE The **Properties** and **Animate Level** options can also be found on other pop-up menus. Right-click on the audio clip in the Audio track or in a gray area of the Level track between the beginning and ending of the clip to bring up the Timeline pop-up menu (see "Timeline Pop-Up Menu" on page 104). **Animate Level** can also be turned on by clicking on **Animate** in the **Clip Audio Properties** panel (see "Clip Audio Properties" on page 163).

Animate Level Pop-Up Menu

The Animate Level pop-up menu has options that let you add keyframes to the audio level tracks or automatically create dips or fade ins and outs. To access this menu, right-click on a keyframe in the audio level tracks and select **Animate Level** from the Audio Tracks Pop-Up menu, or click on **Animate** in the **Clip Audio Properties** panel. Then, right-click on the keyframe. A pop-up menu appears that is similar to the Audio Tracks pop-up menu, except it has options on the bottom of the list for adjusting the audio levels (following figure).

The Animate Level Pop-Up Menu

The Animate Level pop-up menu works the same as the Audio Tracks pop-up menu (“Audio Tracks Pop-Up Menu” on page 154), with the addition of these options:

Add Keyframe	Adds a keyframe to the audio track of the timeline. This keyframe allows you to adjust the level up or down. Transitions between keyframes are represented by lines in the audio track.
Add Dip	Adds several keyframes to make the audio drop out momentarily. The dip can be modified by moving the keyframes.

A Dip Added to an Audio Level Track

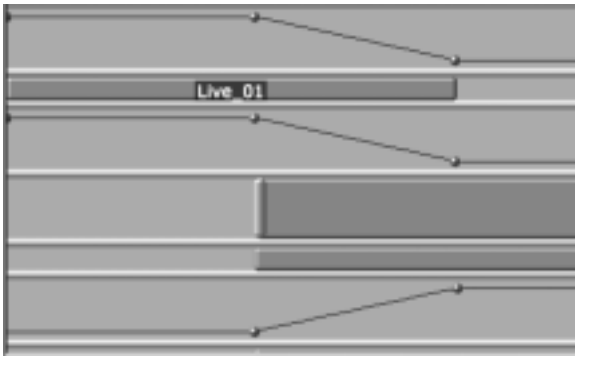
Add Fade In Adds a keyframe to form a fade in.

A Fade In Added to an Audio Level Track

Add Fade Out Adds a keyframe to form a fade out.

A Fade Out Added to an Audio Level Track

Create Cross-Fade You see this option when two clips overlap. It creates fade ins and fade outs on both audio tracks of both clips. Preditor fades out the audio on the first clip on the timeline, and fades in the second clip.



A Cross-Fade Added to an Audio Level Track

Mixing Audio

In addition to adjusting the level of audio tracks on the timeline, with Trinity's optional audio system you can mix your audio sources. Preditor's audio controls are designed for post-production work, while Air Command's Audio Mixer is designed for live audio mixing. Some audio controls in Preditor appear on the toolbar. Other adjustments can be made in the Tape Audio Properties panel, the Clip Audio Properties panel and the Equalizer panel for each channel.

Audio Controls

The Audio Monitor Controls on the toolbar are to the right of the Editing Controls. These controls adjust the monitor audio only, and do not affect the program out audio.

The Audio Monitor Controls

Here's what these controls do:

Monitor Slider	Controls the volume on the monitor outputs.
VU Meter	Mimics an LED level readout.
Mute Button	Turns off the volume for the monitors.

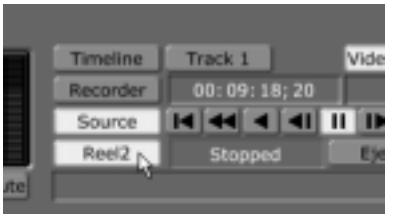
Tape Audio Properties Panel

The Tape Audio Properties panel allows you to adjust your audio sources for a tape. The settings you adjust are applied to all clips from that tape, unless you set properties for individual clips in the Clip Audio Properties panel (see “Clip Audio Properties” on page 163 for information on how to use this panel).

Be sure to set the audio properties *before* you log clips. Changing the properties does not affect clips that have already been logged.

To access the Tape Audio Properties panel, do the following:

1. Click on the **Tape Name** button in the Main Controls in the toolbar (following figure).



The Tape Name Button

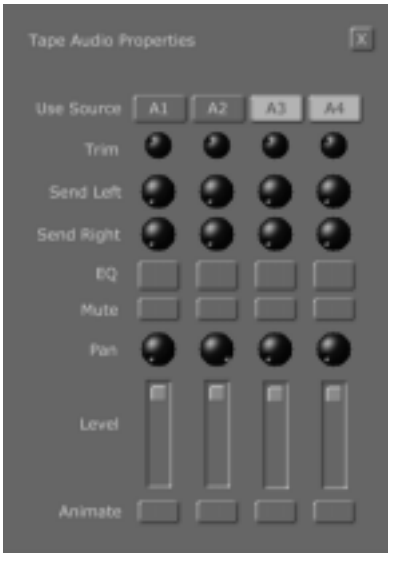
2. Choose **Tape Properties** from the pop-up menu.

   The **Tape Properties** panel appears in the upper left of your screen (following figure).

The Tape Properties Panel

3. Click on the **Audio Properties** button.

   The **Tape Audio Properties** panel appears (following figure).



The Tape Audio Properties Panel

Here's how to use the panel:

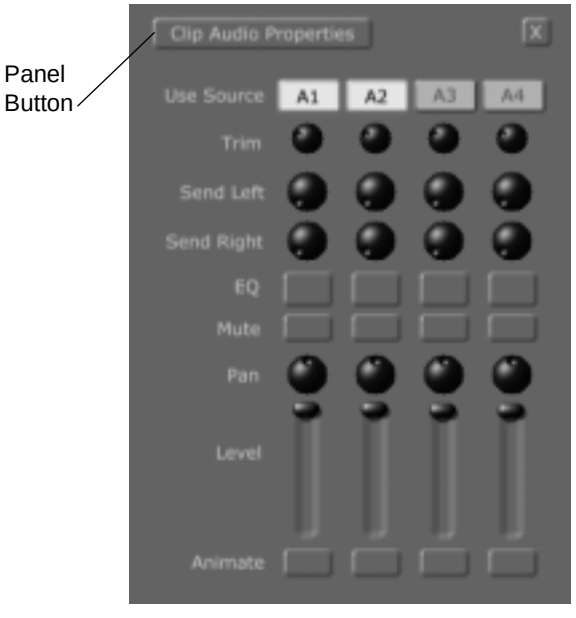
Use Source	These buttons, A1, A2, A3, and A4, select which source channel is used. They can be mixed to record channels. Turn off all these buttons if you want to use video only from a tape. With these buttons off, all clips are added to the timeline without audio tracks.
Trim	A master gain control for the input. It is used to calibrate the input using reference tone levels.
Send Left	Controls the level of the left channel. Used in conjunction with external audio processing systems.
Send Right	Controls the level of the right channel. Used in conjunction with external audio processing systems.
EQ	Opens the Equalizer panel (see “Equalizer Panel” on page 165 for information on how to use this panel) for the channel.
Mute	No function for this panel.

Pan	Controls the left-right output of the audio track.
Level	Controls the actual level of the audio.
Animate	No function for this panel.

Clip Audio Properties

The Clip Audio Properties panel allows you to adjust your audio sources for individual clips. To set audio properties for all clips from a tape, use the Tape Audio Properties Panel (see “Tape Audio Properties Panel” on page 160 for information on how to use this panel).

To access it, click on the Clip Props button in the Clip Controls on the left end of the toolbar. Or, right-click either in a Level track or on an audio clip in an Audio track and choose Properties from the pop-up menu. All three of these actions bring up the Clip Main Properties panel (see “Clip Main Properties Panel” on page 75). On this panel, click on the panel button in the upper left corner that says Clip Main Properties, and choose Clip Audio Properties from the pop-up menu.



The Clip Audio Properties Panel

Here's how to use the panel:

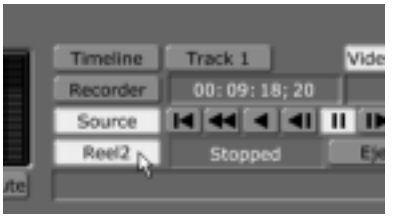
Use Source	These buttons, A1, A2, A3, and A4, select which source channel is played. They can be mixed to record channels. Turning these buttons on or off also turns them on or off on the Clip Main Properties panel, and vice versa. (See "Clip Main Properties Panel" on page 75 for information on this panel.)
Trim	A master gain control for the input. It is used to calibrate the input using reference tone levels.
Send Left	Controls the level of the left channel. Used in conjunction with external audio processing systems.
Send Right	Controls the level of the right channel. Used in conjunction with external audio processing systems.
EQ	Opens the Equalizer panel (see following section) for the channel.
Mute	Mutes the input.
Pan	Controls the left-right output of the audio track.
Level	Controls the actual level of the audio.
Animate	Allows the level of the audio track to be controlled in the timeline. Turn this on by clicking on the button. A Level track appears below each Audio track on the timeline. In this track you can add keyframes and adjust their positions, creating dips and fade ins or outs (see "Animating Audio On The Timeline" on page 149 for information on how to do this). If this light is not on, the levels set in the Levels track on the timeline for that channel are ignored. This means you can experiment with the levels, and you can turn off Animate without losing your track changes. This is different in 1.2, which resets the Level tracks when this Animate button is turned off.

Equalizer Panel

The Equalizer panel for each channel controls a three-band parametric equalizer.

To access it to adjust settings for all clips from a tape (from the Tape Properties panel), do the following:

1. Click on the Tape Name button in the Main Controls in the toolbar (following figure).



The Tape Name Button

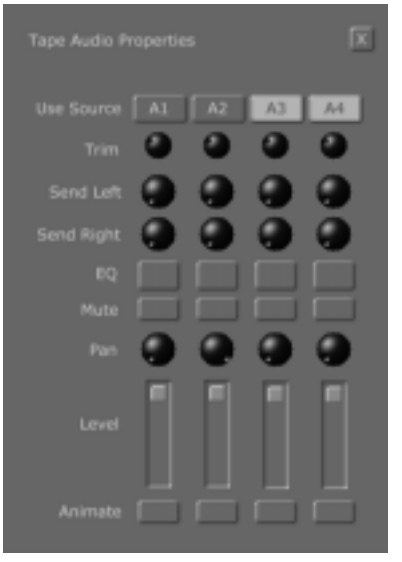
2. Choose Tape Properties from the pop-up menu.

   The Tape Properties panel appears in the upper left of your screen (following figure).

The Tape Properties Panel

3. Click on the Audio Properties button.

   The Tape Audio Properties panel appears (following figure).

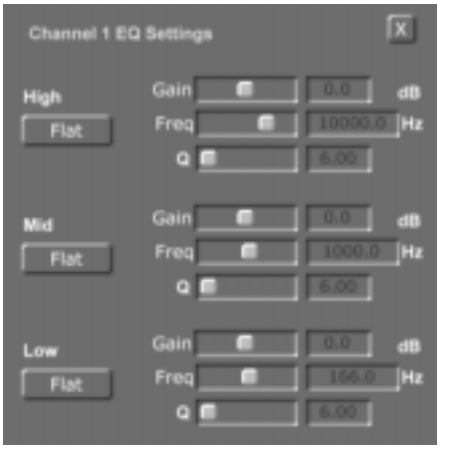


The Tape Audio Properties Panel

4. Click on the EQ button for the desired channel.

   The Equalizer panel appears.

You can also access the Equalizer panel to adjust settings for a single clip (from the Clip Audio Properties panel). To do this, click on the Clip Props button in the Clip Controls on the left end of the toolbar. Or, right-click either in a Level track or on an audio clip in an Audio track and choose Properties from the pop-up menu. All three of these actions bring up the Clip Main Properties panel (see “Clip Main Properties Panel” on page 75 for details on this panel). On this panel, click on the panel button in the upper left corner that says Clip Main Properties and choose Clip Audio Properties from the pop-up menu. The Clip Audio Properties panel appears. Click on the EQ button for the desired channel to open the Equalizer panel. It appears in the upper right corner of the screen.



The Equalizer Panel

Changes you make are applied to the selected channel when you close this panel.

Here's how to use the panel:

High/Mid/Low	Determines the settings for each range of the equalizer. Clicking on the button under these words brings up a pop-up menu with the options Flat, Notch, Peak, High Shelf (for the High range), and Low Shelf (for the Low range). Flat doesn't make any modification to the sound. This is the default setting. Notch cuts (lowers) the selected frequency (-14dB) at the selected Q (.26-5.00). Peak boosts (raises) or cuts (lowers) the selected frequency (+/-14dB) at the selected Q (.26-5.00). High Shelf and Low Shelf set an upper or lower limit to the frequencies passed through the mixer. The setting you choose here determines which, if any, slider frequencies on the right side of the panel can be adjusted. If you select Flat, for example, none of the sliders can be adjusted. If you select Notch, you can adjust Freq and Q. If you select Peak, you can adjust Gain, Freq, and Q. And if you select High Shelf or Low Shelf, you can adjust Gain, Freq, and Slope, which replaces Q.
Gain	Sets the amount of EQ boost or cut to the frequencies in the selected range.
Freq (Frequency)	Sets the center frequency that the setting is applied to. This frequency is at the top of the Peak or at the bottom of the Notch, or set at the High Shelf or Low Shelf level.

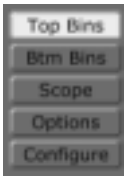
Q	Sets the bandwidth of the EQ effect. In other words, it determines the range of frequencies around the selected frequency that are affected. A high value causes a very sharp drop-off before or after the selected frequency, and a low Q value causes the EQ to affect a larger range of frequencies around the selected frequency.

Using Options And Applications Buttons

Located on the Preditor toolbar are buttons that allow you to control the layout of the interface, access the vector scope/waveform monitor, access settings panels, and close Preditor and open other Trinity applications. The following sections explain the functions of these buttons.

Options Buttons

The Options buttons are the gray buttons on the right side of the toolbar.



The Options Buttons

Here's what the Options buttons do:

Top Bins	Toggles on and off the display of bins you have open at the top of the screen. When you open extra monitors, they replace the display of these bins. To see the bins again, click on Top Bins.
Btm (Bottom) Bins	Toggles on and off the display of bins you have open at the bottom of the screen. When you click on this button, the timeline shrinks and a bin appears on each side of it. Click this button again to close the bins and expand the timeline.
Scope	Opens the vector scope/waveform monitor, if you have the ClipGrab card. See the following section for information on how to operate it.
Options	Opens the Editor Options panel, where you can set properties for working with timelines. See “Editor Options Panel” on page 97 for information on how to use this panel.

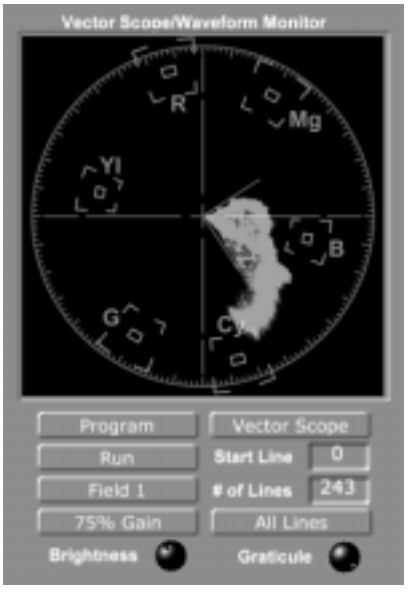
Configure	Brings up a pop-up list of the configure panels: Digitize Settings (if Time Machine is installed), Installed Cards, Keyer Settings, Color Correction, ProColor Correction, GPI Settings, Serial Devices, Input Sources, Input Settings, Output Settings, and Global Settings. VTRs are configured in the Serial Devices configure panel. For a comprehensive explanation of these panels, see the “Using Configure Panels” chapter in the *Trinity 2.1 User Guide*.

Vector Scope

The vector scope/waveform monitor analyzes details of the internal signal waveforms. It is available if you have a ClipGrab card installed.

The Trinity vector scope/waveform monitor is useful for analyzing picture content information, such as color correction, setup level, and peak signal levels, but not timing information. Because the internal signals in Trinity are digital, there is no viewable timing data for the vector scope/waveform monitor to display.

To access the scope, click on the Scope button in the gray Options Buttons on the toolbar. The vector scope appears (following figure).



The Vector Scope

The scope can also be accessed from Air Command by clicking on the **Outputs** button above the Program monitor and choosing **Scope** from the pop-up menu. When accessed from Air Command, the layout of the scope is slightly different than when accessed from Preditor, but they function the same way.

To turn the scope on, click the **Run** button on the left side of the scope. When this button is on, the scope updates as the video plays. If this button is not on, the scope displays color information from a frozen frame. This can be useful if you want to look at the information from a particular section of video. To do this, click the **Run** button off at the desired point, and it freezes the scope output.

When viewing the scope, the letters stand for the following colors:

R	Red
Mg	Magenta
B	Blue
Cy	Cyan
G	Green
Yl	Yellow

Colors show up on the scope as illuminated areas in a position on the display that is proportional to their color. The distance of the illuminated area from the center of the scope is proportional to the saturation, and the position in the arc of the circle (at which degree it shows up) is proportional to the hue. White and black both show up as dots in the center of the scope.

To close the scope, click on the Scope button in the Options buttons on the toolbar.

Here's how to use the options on the scope:

Program (Source Button)	Selects the source of the video to be analyzed. Click on the button and select the desired source from the pop-up menu. The options are: Program, Preview, Input 1-Input 8. The default is Program.
Run	Turns the scope on. Click this button if you want the scope to update as video plays. If this button is off, the scope analyzes a frozen frame.
Field 1, Field 2	Selects which video field of each frame, Field 1 or Field 2, is analyzed. The button displays the field currently selected. To switch to the other field, click on the button. It toggles to the other field. For more information on video fields, see “Field” in the glossary of the *Trinity 2.1 User Guide*.
75% Gain	Allows PAL users to adjust 100% color values to 75% color values.

Vector Scope

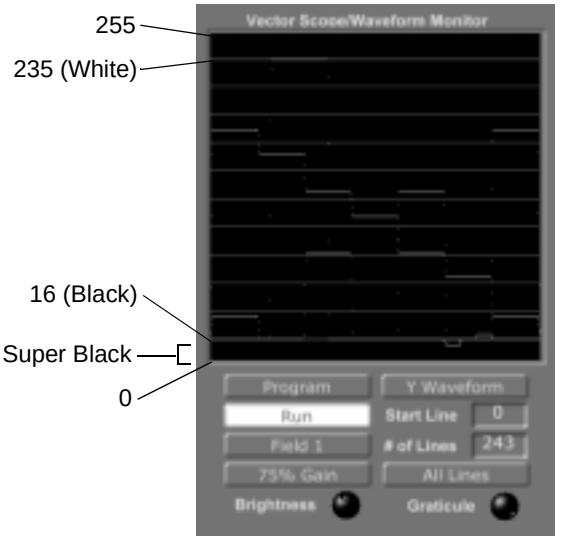
Click this button to choose from the following types of scopes: Vector Scope, Y Waveform, Cb Waveform, Cr Waveform, or Parade. The default is Vector Scope.

- Vector Scope: Analyzes color information.

The Vector Scope, Analyzing Color Bars

With the color bars loaded, the dots line up into boxes. The dots are sharp points, indicating the source is a sharp signal. For the color bars, hazy, scattered dots indicate the signal has a lot of noise. For other images, which don't have only pure colors as the color bars do, a pattern of scattered dots is normal.

- Y Waveform: Analyzes levels of brightness.

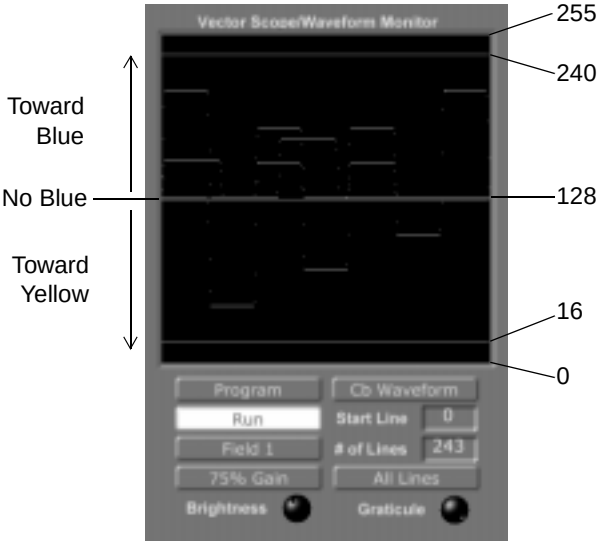


The Y Waveform Monitor, Analyzing Color Bars

The horizontal axis of the display represents the position of the signal on the screen from left to right.

The vertical axis represents luminance values from 0 (bottom) to 255 (top).The top line represents a digital value of 235 (which corresponds to about 100 IRE for NTSC), and represents the whites in the picture. The bottom line represents a digital value of 16 (which corresponds to about 7.5 IRE for NTSC), and represents the blacks in the picture. Anything below this line is considered super black.

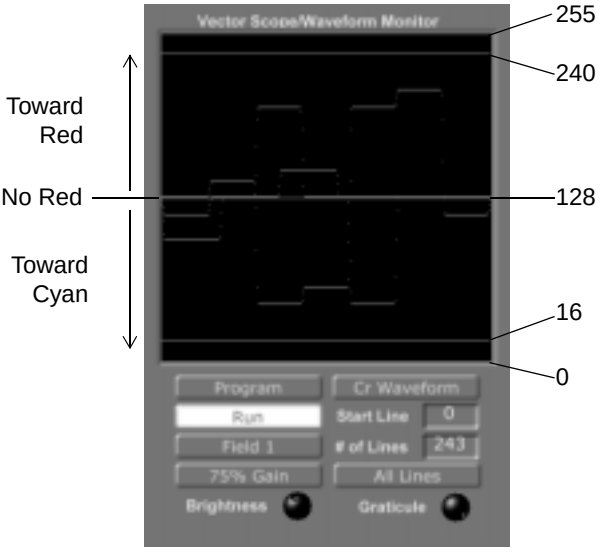
- Cb Waveform: Measures the relative blueness of the picture.



The Cb Waveform Monitor, Analyzing Color Bars

The line in the center is a value of 128, which represents zero color (no blue). Dots above the line represent blues in the picture. Dots below the line represent yellows.

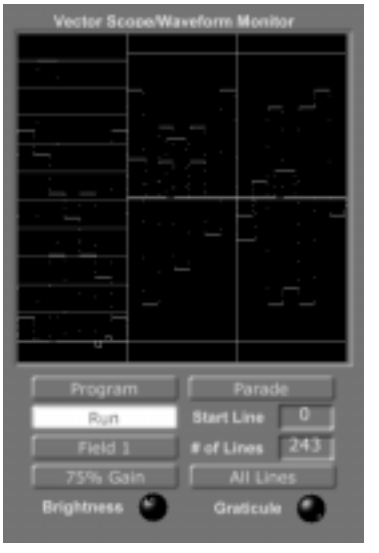
- Cr Waveform: Measures the relative redness of the picture.



The Cr Waveform Monitor, Analyzing Color Bars

The line in the center is a value of 128, which represents zero color (no red). Dots above the line represent reds in the picture. Dots below the line represent cyans.

- **Parade**: Displays the Y Waveform, Cb Waveform, and Cr Waveform monitors in the same panel, from left to right.



Start Line	Sets the horizontal line of the picture at which the scope begins analyzing color information. The top of the screen is line 0, and the bottom is line 243 for NTSC, 288 for PAL.
# of Lines	Sets the size of the vertical band that the scope analyzes. The entire screen is 243 lines for NTSC, 288 for PAL.
All Lines	Resets **Start Line** to 0 and **# of Lines** to 243 for NTSC, 288 for PAL, so that all lines of the picture are analyzed.
Brightness	Adjusts the brightness of the picture information the scope displays.
Graticule	Adjusts the brightness of the scope overlay.

Applications Buttons

The **Applications** buttons are the tan buttons on the right end of the toolbar.

The Applications Buttons

Here's what the Applications buttons do:

_, ?, X	These work as they do in other Windows applications: _ minimizes Preditor, ? opens a help window, and X closes Preditor.
Air Command	Changes to the Air Command control panel. Air Command and Preditor are really two heads of the same application, so you can switch freely between them without losing information on the timeline. The Scroll Lock button is a keyboard shortcut to do this.
Panamation	Exits Preditor; you are prompted to save any work on the timeline. Opens the Panamation interface.
Titlewave	Exits Preditor; you are prompted to save any work on the timeline. Opens the Titlewave interface.
PersonalFX	Exits Preditor; you are prompted to save any work on the timeline. Opens the PersonalFX interface.

TIP Clicking on the Shift button and one of the Applications buttons opens the application without closing Preditor.

Chapter 4

Tutorials

This chapter introduces you to the basics of working in Preditor, doing both linear and non-linear editing (if Time Machine is installed). Keep in mind that the buttons, panel settings, and pop-up menu options are explained in the previous chapter. If you need further explanation of one of these, please refer to Chapter 3. Rather than explaining system functions, this chapter focuses on giving you step-by-step instructions on how to put those functions together to accomplish basic editing tasks. The following topics are covered:

Linear Editing

This tutorial introduces you to the basics of linear editing in Preditor. You will learn how to set up your decks and tapes for editing, log clips, work with timelines, and use some of Preditor's special functions.

The following topics are covered:

- Setting up decks and tapes for editing
- Striping a tape
- Logging clips
- Setting clip properties
- Building a timeline
- Appending a timeline
- Creating A/V and A/X edits
- Setting the record deck in-point
- Getting your timeline to tape

Setting Up Decks And Tapes

Before you start editing the first time, you need to set up your decks and tapes. You need to assign your decks as record and source decks, and name your tapes. Once you have assigned your decks, Preditor remembers this for future editing sessions.

Tapes need to be named for new projects as each new tape is inserted in a deck. For existing projects, the list of tapes for the project is automatically loaded when you load the timeline. You just need to tell each source which tape is currently in its deck.

When you open Preditor for the first time, you see the default layout with a bin in each of the upper corners, two monitors in between the bins, a toolbar across the middle of the screen, and the timeline at the bottom (following figure).

The Default Preditor Layout

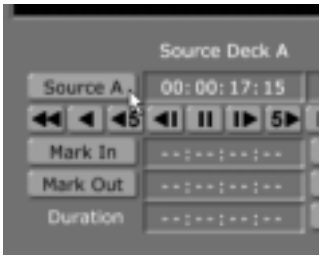
TIP Once you get the layout set up the way you want, with the appropriate number of monitors and the bins you need, you can save the layout. Do this by right-clicking in an empty space in a bin and choosing Save Layout from the pop-up menu. A picon representing the layout appears in the bin. If you're working on more than one project, you can save a layout for each project. Preditor opens to the last layout you saved. Load a different layout by double-clicking on its picon.

The right monitor is the output monitor and can be set for either Timeline, Recorder, or Off. The left monitor displays the input source you select. Below each monitor is a set of controls.

Assigning Source Decks

The first thing you'll do is assign your source decks. Here's how:

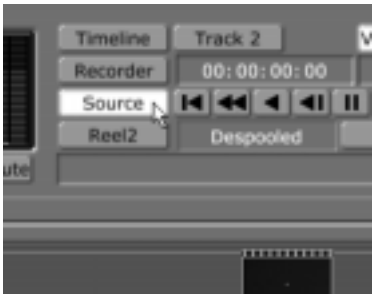
1. Below the left monitor, right-click on the Source Type button, the upper left button.



The Source Type Button Under the Left Monitor

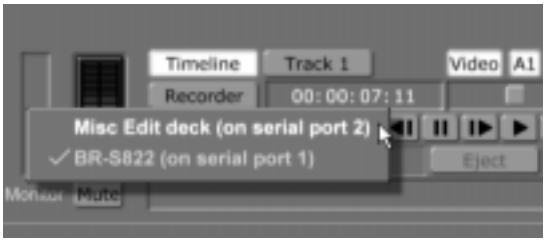
2. Choose Source A from the pop-up menu.

3. In the Main Controls in the middle of the toolbar (blue buttons), right-click on the Source button (following figure).



The Source Button in the Main Controls

You see a pop-up menu listing your decks (following figure).



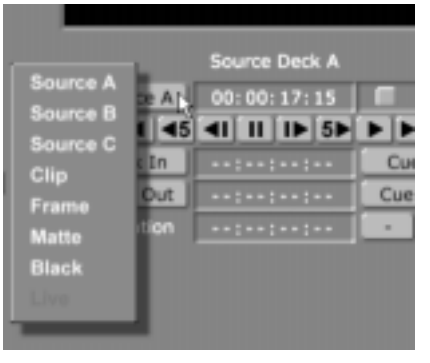
The Source Button Pop-Up Menu

In order for your decks to appear on this list, you must have configured them on the Serial Devices panel. For information on how to do this, see the “Using Configure Panel” chapter in the *Trinity 2.1 User Guide*.

4. Select the deck you want to assign as Source A.

5. If you have additional source decks, repeat these steps, except choose Source B or Source C in step 2.

Now your source decks have been assigned, and you can choose the deck you want by right-clicking on the Source Type button below the left monitor and choosing Source A, Source B, or Source C from the pop-up menu (following figure).



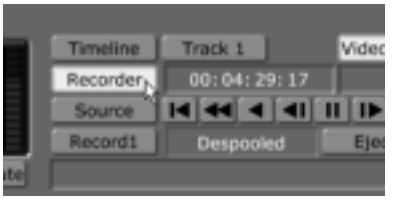
Choosing Source Decks from the Pop-Up Menu

The deck assignments you have made as Source A, Source B, and Source C are saved until you change them.

Assigning A Record Deck

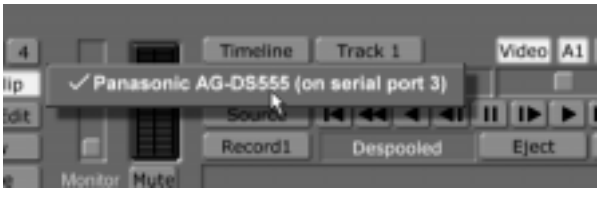
Next you'll assign your record deck. Here's how:

1. Right-click on the **Recorder** button in the Main Controls.



The Recorder Button in the Main Controls

2. From the pop-up menu, select the deck you want to use as your record deck for this project.



Recorder Pop-Up Menu

In order for your deck to appear on the pop-up menu, it must be configured as a record deck in the Serial Devices panel. For information on how to do this, see the "Using Configure Panel" chapter in the *Trinity 2.1 User Guide*.

That's it. Your record deck is set.

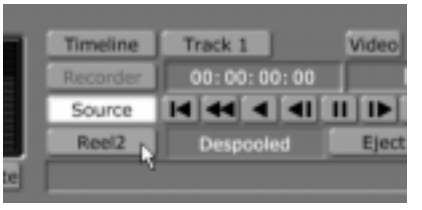
Naming Tapes

Next you'll tell Preditor which tapes you are using. It is important to label each of your source and record tapes with a name and to tell Preditor these names. That way, it can keep track of which tape each clip comes from. If you come back to a project later, for example, and want to use material from a timeline you have already made, Preditor tells you which tapes to insert to re-create the timeline.

Here's how to name your tapes in Preditor:

1. Place the tape in the appropriate source or record deck.

2. Click on the Tape Name button, below the Source button (following figure). The text on this button changes depending on the selected source. In this case, for an unnamed tape, it should say Reel #. For more information on this button, see “Tape Name” on page 46.



The Tape Name Button

A pop-up menu appears.

Tape Name Pop-Up Menu

3. Select New Tape from the pop-up menu.

   This assigns a default name to the tape. The default name for source tapes is Reel # and the default name for record tapes is Record #. This name now appears on the Tape Name button.

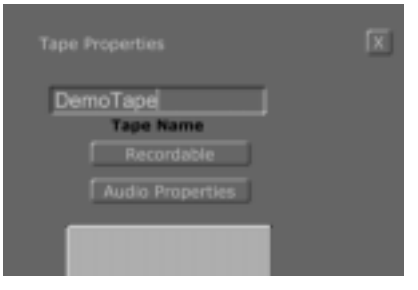
4. To assign a specific name to the tape, click on the Tape Name button again.

5. Select Tape Properties from the pop-up menu.

This opens the Tape Properties panel in the upper left corner of the screen (following figure).

The Tape Properties Panel

6. In the first field, above Tape Name, type in the name of the tape (following figure) and press Enter on your keyboard.



Typing in a New Tape Name

7. Close the panel by clicking on the X in the upper right corner.

The name of the tape now appears on the Tape Name pop-up menu (following figure), and on the face of the Tape Name button.

The New Name on the Tape Name Pop-Up Menu

8. Repeat this process until you have named all your tapes for the project in Preditor, or whenever you add another tape in the midst of a project.

   Now all your tapes appear on the Tape Name pop-up menu.

Each time you swap tapes (unless prompted to do so by Preditor), let Preditor know which tape you have inserted by clicking on the Tape Name button and selecting the tape from the pop-up menu.

To remove tape names from the pop-up menu, you can click on the Remove Unused Tapes button in the Editor Options panel (see “Editor Options Panel” on page 97 for information on this panel). This removes the names of tapes that are not associated with clips on the current timeline.

Striping A Tape

In order to edit with Trinity, your record tapes must use be striped (black with timecode). This ensures that there is continuous timecode from start to finish. When Trinity edits, it performs insert edits, which use the existing timecode on the record tape as reference points for where to make the edits. It does not record over this timecode as it edits; the timecode remains intact.

Because of this, if you are restriping a previously used tape, we recommend you rewind the tape to the beginning and restripe the entire tape. Avoid striping only a portion of a previously striped tape.

If you try to edit onto a tape that is not striped, your record deck fast forwards and rewinds back and forth until you click All Stop. Preditor is telling the

deck to go to a specific timecode, and the deck is searching in vain for this timecode.

You can stripe a tape using the VTR Transport/Sync Roll/Live Digitize panel in Air Command.

TIP To toggle between Preditor and Air Command, press the Scroll Lock key on your keyboard.

To stripe a tape, do the following:

1. Check your deck for a switch that can be set to Preset or Regen. If your deck has this switch, set it to Preset.

TIP During editing you want to reset this switch to Regen.

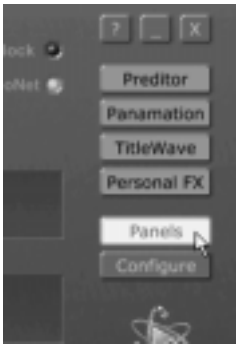
Your deck uses its preset timecode number, such as 01:00:00:00, as the beginning timecode number.

2. Open Air Command and click on the Fade button in the group of buttons to the right of the T-bar (following figure).

The Fade Button

This fades the Program out to black, and provides a consistent, dark black for striping tapes. (The on-screen monitor is not affected by the Fade button, but you see black on your external monitor.)

3. Click on the Panels button (following figure) and choose VTR Transport from the pop-up menu.

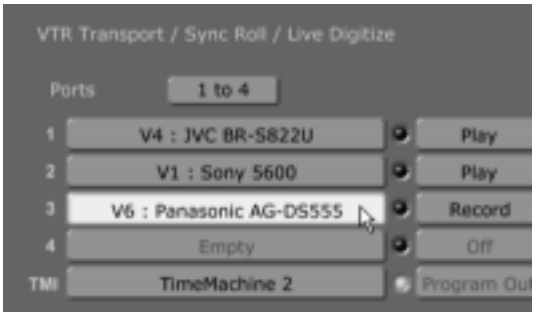


The Panels Button

The VTR Transport/Sync Roll/Live Digitize panel appears in the upper right corner of the screen (following figure).

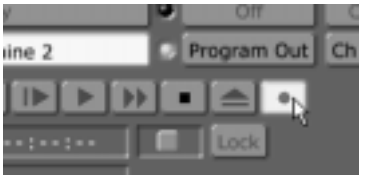
The VTR Transport Panel

4. Click on the button that lists your record deck to turn it on (the button turns yellow).



Selecting the Record Deck

5. Click on the record button, the one with the red dot (following figure).



The Record Button

6. If you see a warning message asking whether you want to erase existing timecode, click Yes.

   Your tape is striping. Let it run for the length of the tape, or for as long as you need for the project you plan to record to the tape.

7. When your tape is striped, click the stop button (following figure).

The Stop Button

Now that your tape is striped, you are ready to record to it. If your record deck has a **Preset/Regen** switch, change it back to **Regen**.

At this point your decks and tapes are squared away, and you're ready to start logging clips in Preditor.

TIP To toggle between Air Command and Preditor, press the **Scroll Lock** key on your keyboard.

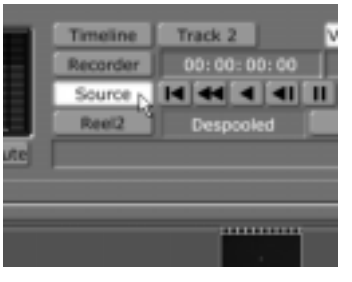
Logging Clips

Now that your decks are assigned, you're ready to log clips. In order for Preditor to know which portions of your tapes you want to use, you must designate the in points and out points of the clips. To log clips in Preditor, do the following:

1. Under the left monitor, right-click on the Source Type button to select your source deck (**Source A**, **B**, or **C**).

The Source Type Button Under the Left Monitor

Clicking on the Source Type button under the left monitor also turns on the **Source** button in the Main Controls on the toolbar (following figure).



The Source Button in the Main Controls

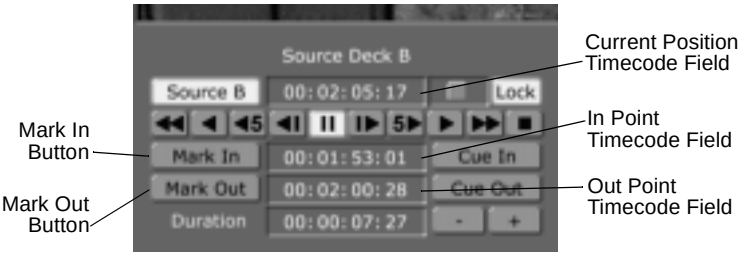
Once this button is on, you can use the transport controls under the left monitor to control the selected source deck. If you find that the transport controls under the left monitor are not functioning at some point during your session logging clips, make sure that this **Source** button is on.

2. Using the **Tape Name** button in the Main Controls, select the name of the tape you are using.

Choosing the Tape Name

3. Use the transport controls or shuttle slider under the left monitor to cue your tape up to your first in point.

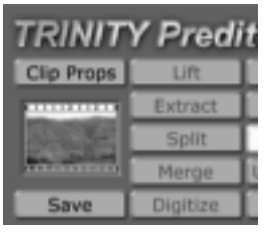
4. When you find the place you want the clip to begin, click the **Mark In** button (or press **m** on the keyboard).



The Mark In and Mark Out Buttons

Once you begin creating a clip by clicking the **Mark In** button, you see a picon for the clip in the Clip picon window on the left side of the toolbar.

TIP To mark clips, you can type in the timecode in the in point and out point timecode fields (previous figure), then click the Mark In and Mark Out buttons. If you want the first frame of the clip to be the picon for the clip, be sure to cue the deck to the first frame before clicking the Mark In button. To cue the deck to the place where you want to begin logging clips, you can type in the desired timecode in the current position timecode field (previous figure), then press Enter on your keyboard. The deck cues to that frame.



The Clip Picon

TIP Preditor uses the first frame of the clip as the picon. To assign a different picon to the clip, shuttle the tape until the image you want to use is displayed on the right monitor. Right-click on the Clip picon and choose Set Picon from the pop-up menu. The image on the active monitor is now the picon for the clip.

5. Continue playing the tape or shuttle it to the place where you want the clip to end, and click the Mark Out button (or press the comma on the keyboard).

6. Drag-and-drop the Clip picon into an appropriate bin to save the clip, or drag the Clip picon onto the timeline for immediate use.

7. Repeat the steps above, clicking on the Mark In and Mark Out buttons and saving your clips.

Using Automated Features

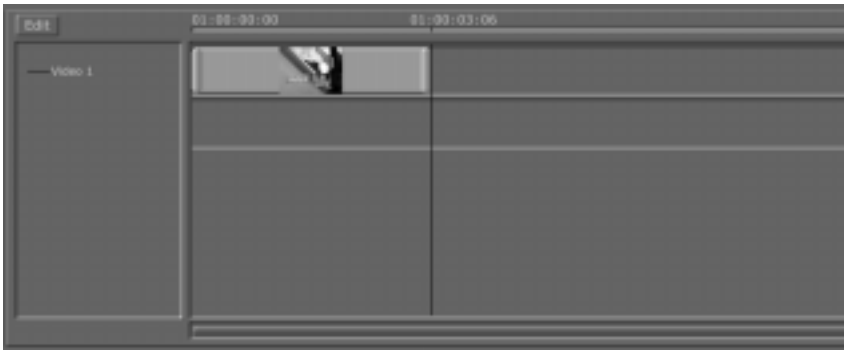
Preditor also has functions that make logging clips easier. Splice, Auto Splice, Auto 3 Point, Overwrite, and Auto Save help you place your logged clips where you want them. The buttons for these functions are under the output (right) monitor. (Auto Batch is for non-linear editing. See “Using AutoBatch” on page 224 for a tutorial on this function.)

Splice

To place a logged clip on the timeline, click the **Splice** button under the output (right) monitor (following figure), or press j on your keyboard.

The Splice Button

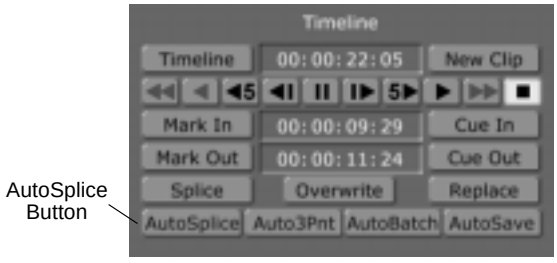
The clip appears in the timeline, with the Position Bar at the last frame, ready to splice the next clip.



The Spliced Clip on the Timeline

AutoSplice

If you are logging a series of clips that you want on a timeline, turning the Auto Splice function on automatically places clips on the timeline as you mark them. Click on the **AutoSplice** button under the output (right) monitor (following figure) to turn it on.

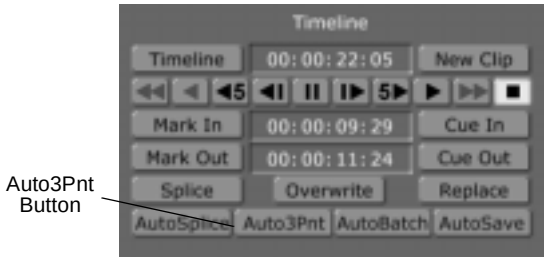


The AutoSplice Button

As you mark your clips they appear on the timeline at the location of the Position Bar.

Auto 3 Point

The Auto 3 Point feature is designed for three-point editing. The Auto3Pnt button is located under the output (right) monitor (following figure).



The Auto3Pnt Button

Three-point editing means that once you define three of the four timecode points relating to the clip (in and out point on the source tape, and in and out point on the timeline), Preditor automatically places the clip on the timeline. Preditor always calculates the fourth point, but when Auto 3 Point is on it automatically places the clip on the timeline after you mark the third point.

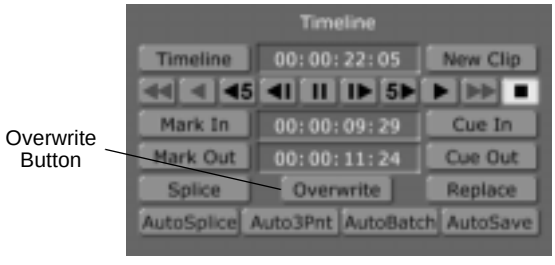
For example, you can mark the in and out points of your clip, and then mark the in point on the timeline where you want it to start. Since Preditor already knows the duration, it calculates the out point on the timeline and places the clip in the correct spot. Or, you can mark the in and out points on the timeline where you want the clip to go, and then mark the in or out point of the clip.

Since Preditor knows the duration from the timeline timecode, it calculates the other point for the clip and places it on the timeline.

Overwrite

The Overwrite function splices in a newly created clip at the Position Bar, but instead of moving existing clips down the timeline, it overwrites what was after the Position Bar for the duration of the clip being added.

The **Overwrite** button is under the output (right) monitor (following figure).



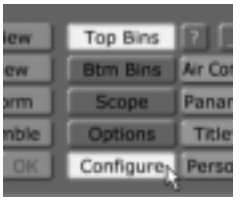
The Overwrite Button

AutoSave

If you are saving a number of clips to the same folder, using **AutoSave** spares you the step of manually saving your clips. You tell Preditor the path to the bin, and then every time you define a clip (mark its in point and out point) it is automatically saved to the bin. You can use this in conjunction with the other buttons to save clips to a bin at the same time you create a timeline.

Here's how to use **AutoSave**:

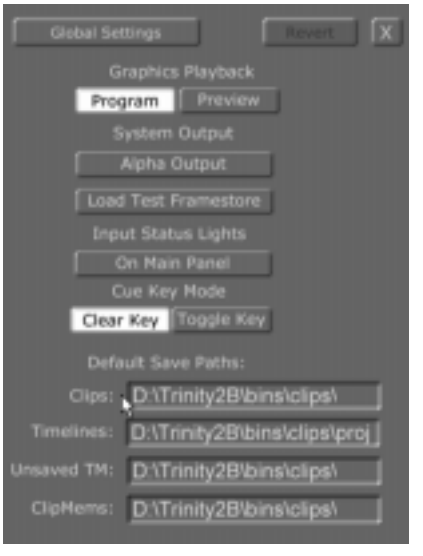
1. Click on the **Configure** button on the right side of the toolbar (following figure).



The Configure Button

2. Select Global Settings from the pop-up menu.

   The Global Settings panel appears (following figure). This is where you set the default path for files to be saved.



The Global Settings Panel

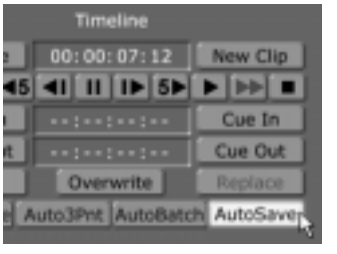
3. In the Clips field, type in the path for your project bin.

NOTE Be sure to end path names in the Global Settings panel with a backslash (\). Phrases after the last backslash are used as prefixes for file names. For example, if the Clips path name is set to D:\Trinity2B\bins\clips (with no final backslash), the default bin for clips is D:\Trinity2B\bins, and clips saved here are named clips# (numbers are assigned automatically).

For a full explanation of the Global Settings panel, see the “Using Configure Panels” chapter in the *Trinity 2.1 User Guide*.

4. Close the Global Settings panel by clicking on the X in the upper right corner of the panel.

5. Click on the AutoSave button at the bottom of the right monitor controls to turn it on.



The AutoSave Button

AutoSave is now on, and each time you define a clip (mark both an in and an out point) it is automatically saved to the specified bin. Be sure to click the New Clip button under the right monitor between marking each clip.

Setting Clip Properties

By using the Clip Main Properties and Clip Audio Properties panels, you can set properties of individual clips. The properties you set in these panels apply only to clips you have selected. Select a clip by clicking on it in the timeline.

In the Clip Main Properties panel, you can choose which audio or video channels are recorded, set audio tracks so they can be trimmed independently of their video tracks, or access the Color Correction panel. To access the Clip Main Properties panel, click on the Clip Props button in the Clip Controls on the toolbar, or right-click on a clip on the timeline or the current clip picon and choose Properties from the pop-up menu. For a complete explanation of this panel, see “Clip Main Properties Panel” on page 75.

In the Clip Audio Properties panel, you can change the audio levels or open the Equalizer Panel. To access it, click on the Clip Props button in the Clip Controls on the left end of the toolbar. Or, right-click either in a Level track or on an audio clip in an Audio track and choose Properties from the pop-up menu. All three of these actions bring up the Clip Main Properties panel. On

this panel, click on the panel button in the upper left corner that says Clip Main Properties, and choose Clip Audio Properties from the pop-up menu. For a complete explanation of this panel, see “Equalizer Panel” on page 165.

Building A Timeline

Once you've logged your clips, you're ready to put them together, along with any graphics or effects you've created in Trinity's other applications. The Preditor timeline is where you put all the pieces together.

Setting the Recorder's In Point

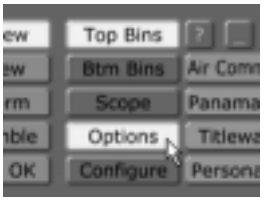
When you build a timeline, it's a good idea to start by setting the recorder's in point. This tells Preditor where you wish to begin recording on your record tape. By doing this when you begin building a timeline, you can use the Preview function to check sections of the timeline as you go.

NOTE

Preview functions the same as Perform, which records portions of the timeline to tape, except Preview does not enable the insert mode on the record deck. So, in order to use Preview, you must have a striped tape in your record deck and have set the in point on the record tape.

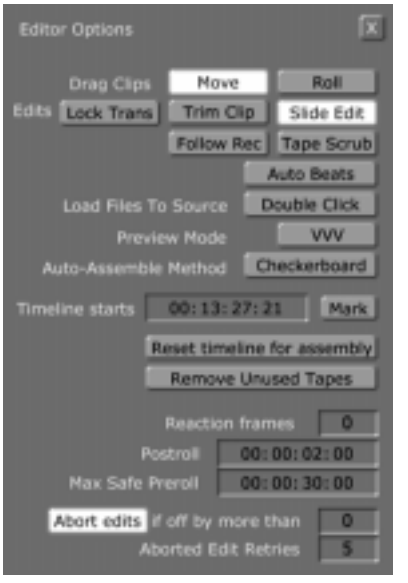
To set the recorder's in point, do the following:

1. Click on the Options button on the toolbar (following figure).



The Options Button

The Editor Options panel appears in the upper left corner of the screen (following figure).

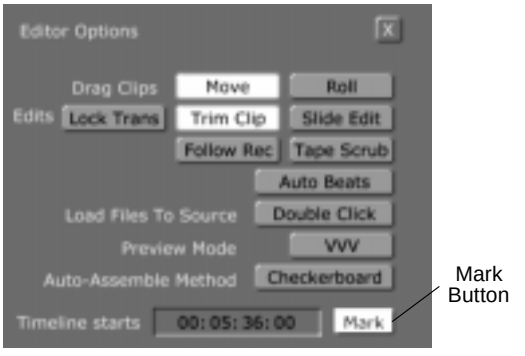


The Editor Options Panel

2. You can set the in point for the record tape two ways. Do *one* of the following:

   a. If you know the timecode where you want the record tape to start, type the timecode in the Timeline starts field and press Enter on your keyboard.

   b. Using the transport controls, cue up your record tape to the point where you want your timeline to begin. Then, click on the Mark button to the right of the Timeline starts field (following figure).



The Mark Button

The **Timeline starts** field now displays the current timecode on your record tape. When you **Assemble** the timeline, it begins recording at this point on the record tape.

Adding Clips to the Timeline

Now that you set the recorder's in point, you are ready to place events on the timeline.

NOTE This part of the tutorial requires two source decks so you can transition between clips. If you have only one source deck, you can substitute framestores for clips on one of the video tracks.

Here's how to add clips to a timeline:

1. Drag-and-drop a clip from one of your bins onto the timeline.

   The clip appears on the timeline as a colored bar with the clip's picon in the middle of it.

The First Clip on the Timeline

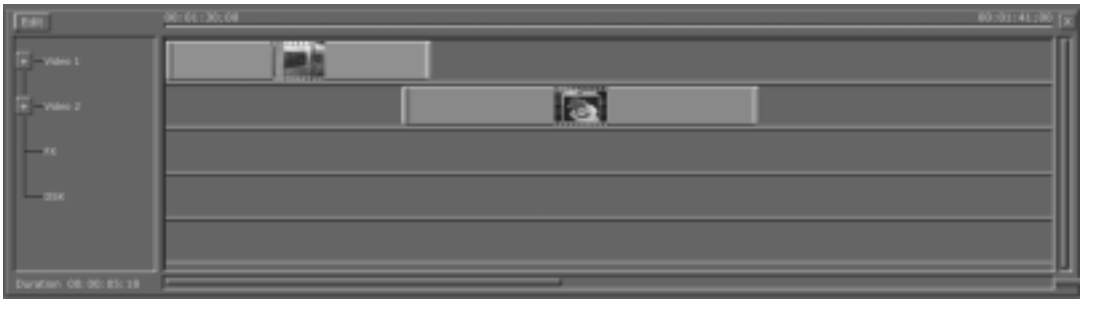
The colored bar represents the length of the clip. You can change the duration of the clip (and also its in and out points on the source tape) by dragging left or right on the trimming handles on the end of the clip. You can move the clip by clicking on it anywhere except the trimming handles and dragging.

2. Double-click on a clip picon from a different tape in your bins. If you have only one source deck, use a framestore instead of a clip.

   The clip automatically appears at the end of the timeline.

3. Click-and-drag the first clip all the way to the left end of the timeline.

4. Click-and-drag the second clip and place it on the second (Video 2) track of the timeline so that the two clips overlap slightly (following figure).



Overlapping Clips on the Timeline

5. Right-click on either clip in the overlapped area and choose **Create Dissolve** from the pop-up menu.

   This creates a dissolve between the two clips. It appears as a tan bar in the FX track of the timeline (following figure).

Dissolve on the Timeline

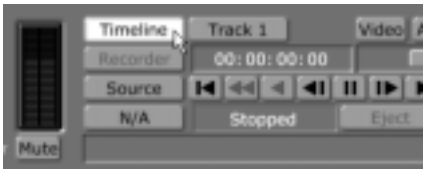
The dissolve is the same length as the overlapped area of the clips. Like the clips, its length can be adjusted by clicking-and-dragging on the trimming handles.

Previewing The Timeline

You now have a timeline with a dissolve transition between two clips. If you want to see the timeline play through, do the following:

1. Make sure your source tapes are in your decks, your decks are assigned, and your tapes are named. (If you have not yet done so, see the previous sections of this tutorial for instructions on how to do this.)

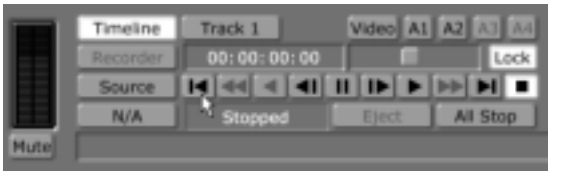
2. In the Main Controls, click on the **Timeline** button (following figure).



The Timeline Button in the Main Transport Control

This allows you to use the Main Controls to move through the timeline. This also turns on the **Timeline** button under the right monitor, setting the right monitor to display the timeline as the output.

3. In the Main Controls, click the **First Frame** button (following figure).



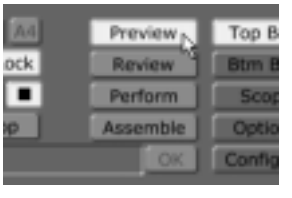
The First Frame Button in the Main Controls

This resets the timeline to play from the beginning.

4. Click on the clips and events you want to preview to select them (hold down the **Control** key and click on events to select multiple ones), or right-click on an event on the timeline and choose **Select All** from the pop-up menu.

NOTE You must select the events you want to preview.

5. Still in the Main Controls, click the **Preview** button.



The Preview Button in the Main Controls

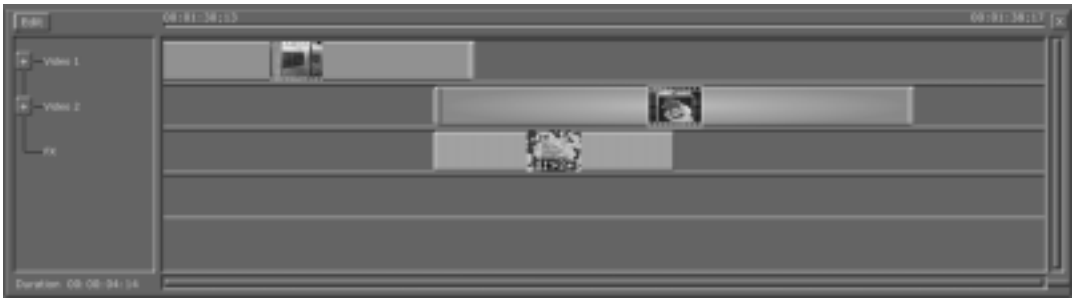
On the right on-screen monitor you see Preditor play the clips and dissolve between them.

NOTE In order to use the Preview function, you must have a striped tape in your record deck and must have set the in point for the record tape. If you have not done this yet, see “Setting the Recorder's In Point” on page 201.

Adding Effects And DSK's

You've just learned the basics of linear editing on the Preditor timeline. If you'd like to experiment, try replacing the dissolve with some of the effects provided with Trinity.

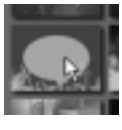
To do this, drag-and-drop a picon from the Trinity\Bins\FX\Sampler bin onto the dissolve event. The effect picon appears on the transition event.



An Effects Picon on the Timeline

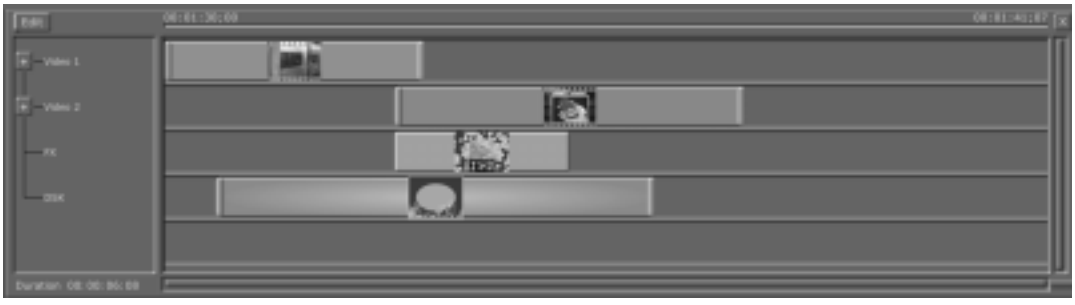
Some effects, such as the one in the previous figure, are fixed-length effects, in which case you need to adjust the length of the transition (the overlap area of the clips) to fit the effect. Other effects, such as wipes and dissolves, can vary in length, and automatically load onto the timeline at the correct length to fit the transition.

You can also try placing a downstream key on the timeline. The following DSK is in the Trinity\Bins\FX\Sampler bin. It is the picon with flames along the bottom. The file name is _FlamAlf.tfx.



The Flames DSK Picon

The downstream key event appears in a separate DSK track (following figure).



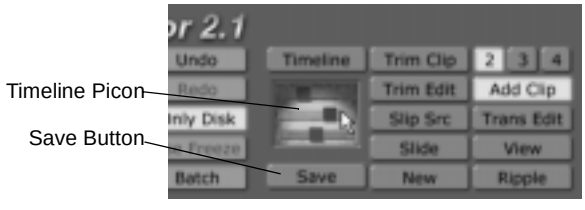
The Downstream Key on the Timeline

You can change the length of the DSK independently of the length of the video clips.

Saving Your Timeline

At this point, you may want to save the timeline you created. First, it is helpful to name it. Here's how:

1. Right-click on the Timeline Picon (following figure) in the Timeline Controls.



The Timeline Picon

2. Choose **Rename** from the pop-up menu.

3. Type in the name and press **Enter** on your keyboard.

The timeline is renamed. Now you are ready to save it. To do so, drag the Timeline Picon into a bin. Or, click the **Save** button (previous figure) in the Timeline Controls. The timeline is saved in the path designated in the **Global Settings** panel. (For information on how to access the panel, see page 199.)

Appending A Timeline

If you have a timeline loaded in Preditor, you can append another timeline to it. This feature is convenient if you are creating a lengthy project. To speed the time it takes to navigate around the timeline, you can cut the project into smaller sections, then paste all the timelines together when you're ready to record the project.

To append a timeline, do the following:

1. Load the first timeline by double-clicking on its picon or dragging the picon to the timeline.

2. Click on the picon for the second timeline so that it is selected (yellow).

3. Holding down the Control key on your keyboard, drag the picon for the second timeline to the timeline area on the interface. When the Position Bar is where you want the second timeline to begin, release the mouse button. Watch for the appended timeline to appear *before* releasing the Control key.

Dragging the Second Timeline Picon to the Timeline

TIP Be sure to release the mouse button, wait for the appended timeline to appear, then release the Control key.

The second timeline appears, beginning where the Position Bar was located when you released the mouse button.

The Second Timeline is Appended after the Position Bar

The timeline begins at the point where the Position Bar was when you released the mouse button. You can place the Position Bar in the midst of the first timeline. If you do this, the second timeline overwrites the remainder of the first timeline.

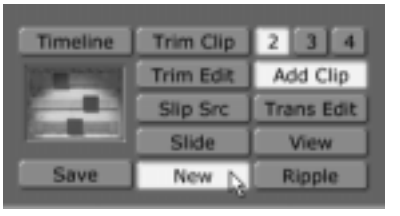
Creating A/V And A/X Edits

There may be times when you want to transition between two clips from the same source tape. This is especially true if you are working with only one play deck. Trinity has two functions that allow you to do this with linear clips. One, the A/X edit, uses a single frame for one of the clips during the transition. The other, the A/V edit, is unique to Trinity. It uses a ClipMem, a short bit of digitized video, during the transition. You do not need to have a Time Machine in order to use the A/X or A/V edit. (If you do have a Time Machine, you do not need to use A/V or A/X edits; you can digitize one or both clips instead.) See “Make A/X Edit” on page 111 and “Make A/V Edit” on page 110 for more information on these types of edits.

A/X Edit

To create an A/X edit, do the following:

1. Click on the **New** button in the Timeline Controls (following figure).



The New Button

This clears the timeline so you can build a new one.

2. Place two clips from the same source tape on the timeline so that they overlap.

3. Right-click in the overlap area of the clip you want to transition to and choose Create Dissolve from the pop-up menu.

   You now have two clips from the same tape and a dissolve between them on the timeline (following figure).

Two Clips with Dissolve

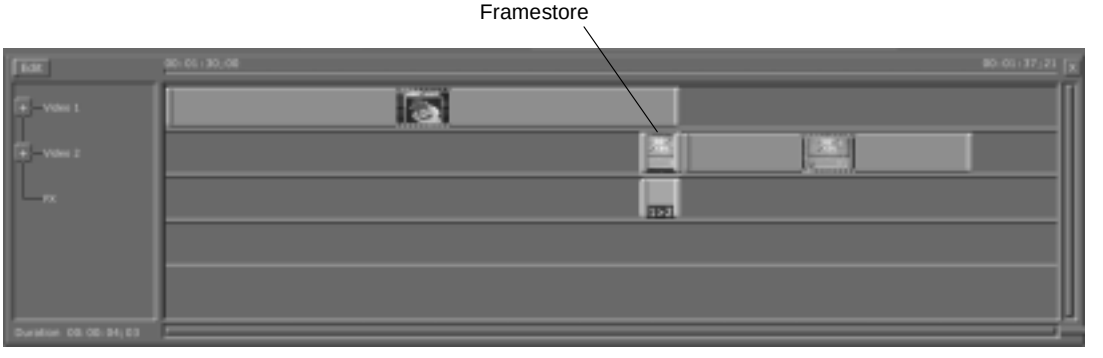
If you wish to use a wipe instead of a simple dissolve, drag a wipe picon on top of the dissolve on the timeline. (You do not need to create a dissolve first to place an effect as a transition. You can drag-and-drop a wipe, or any effect, on the overlapped area of the two clips and it appears in the FX track.)

If you try to **Preview** this timeline at this point, you get an error message telling you it is not possible to mix two clips from the same tape. To make that possible, you will create the A/X edit.

4. Right-click on the clip you want to “freeze” during the transition and choose **Make A/X Edit** from the pop-up menu.

   Your deck scrubs through the clip to obtain the correct frame for the freeze. While it is doing this you see a loading bar going up and down in the Timeline Picon, indicating that Preditor is busy.

   Preditor selects the correct frame of the transition, and splits the clip into a video clip leading up to the transition and a framestore lasting the length of the transition (following figure).



The A/X Edit on the Timeline

   The framestore is saved in **Trinity\Bins\Stills\AX_stills** in case you wish to use it again.

5. Click **Assemble** in the Timeline Controls.

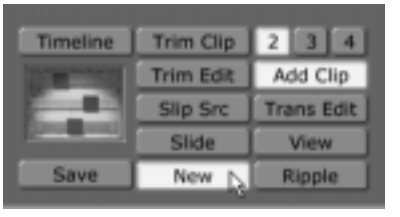
   Preditor lays the first clip to your master record tape, and then cues up the framestore and the second clip for the second pass.

   When you play back your record tape, you see a seamless transition between the two clips.

A/V Edit

Creating an A/V edit is similar, except neither clip is “frozen” during the transition. Instead of using a framestore, Preditor creates a ClipMem, a bit of digitized video recorded to the RAM on the Warp Engine. By creating a ClipMem, you are essentially transitioning between two video sources, and the resulting edit is indistinguishable from a standard A/B roll edit. To create an A/V edit, do the following:

1. Click on the New button in the Timeline Controls (following figure).



The New Button

   This clears the timeline so you can build a new one.

2. Place two clips from the same source tape on the timeline so that they overlap.

3. Right-click in the overlap area of the clip you want to transition to and choose Create Dissolve from the pop-up menu.

   You now have two clips from the same tape and a dissolve between them on the timeline.

Two Clips with Dissolve

If you wish to use a wipe instead of a simple dissolve, drag a wipe picon over the dissolve on the timeline.

NOTE Keep in mind that the Warp Engine is being used as a video recording and playback device, so it cannot create warp effects at the same time. Wipe and dissolve effects (with or without graphics) work great with a ClipMem, but not warping digital effects. For these type of effects, use the A/X roll edit described above.

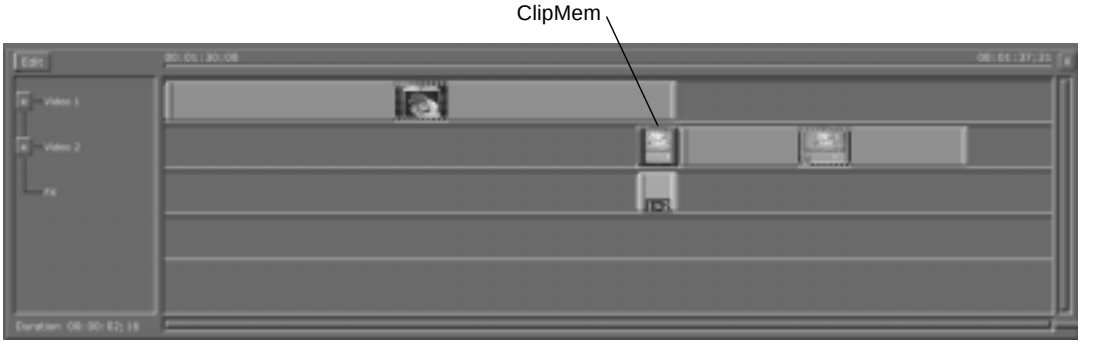
If you try to **Preview** the timeline at this point, you get an error message telling you it is not possible to mix two clips from the same tape. To make this possible, you will create the A/V edit.

4. Right-click on the clip you want to transition to (the clip you right-click on is the one Preditor makes a ClipMem of) and choose **Make A/V Edit** from the pop-up menu.

NOTE The clip you right-click on will not have audio during the transition. Preditor cannot digitize audio unless a Time Machine is installed.

Your deck scrubs through the clips so Trinity can digitize the require data.

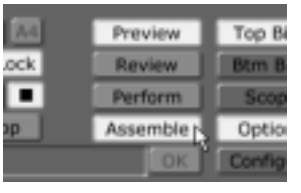
You see the overlapping section of one clip is separate from the rest of the clip and is blue (following figure). This indicates it has been stored as a digitized clip in system memory.



The A/V Edit on the Timeline

If the dissolve is longer than the maximum length for a ClipMem (this depends on the amount of RAM on your Warp Engine), Preditor creates as many ClipMems as needed to cover the transition. The ClipMems are saved in Bins\Clips\ClipMem.

5. Click Assemble in the Main Controls (following figure).



The Assemble Button

Preditor loads the ClipMem file(s) into the Warp Engine and records the transition in one pass and the other video clip in the next pass.

When you play back your record tape, you see a seamless transition between the two clips.

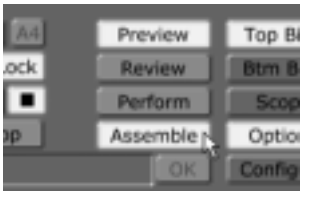
At this point, you have learned how to log clips, build a timeline, and work with some of Trinity's special effects. You are ready to record your timeline to tape. The next section shows you how.

Getting Your Timeline To Tape

Once you have previewed your edits and have fine tuned your timeline, you are ready to record the entire timeline to tape.

To record the timeline to tape, do the following:

1. Click the **Assemble** button in the Main Controls in the toolbar (following figure).



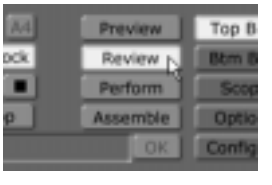
The Assemble Button

The entire timeline is recorded to tape.

NOTE If some events have already been recorded to the master, only those that have not been recorded or have been changed are recorded.

TIP If you want to record everything to the master, including events that have already been recorded, you can click the **Reset timeline for assembly** button in the **Editor Options** panel (see “Editor Options Panel” on page 97 for information on this panel). If you wish to record only some events or clips, click on them to select them and then click **Perform**.

2. Once you have recorded to tape, you can click on the events on the timeline to select them, then click the **Review** button to view them and confirm they are OK.



The Review Button

The Review function shows you the events you selected on the timeline.

That's it, you now know the basics of linear editing with Preditor. This tutorial taught you how to assign your decks, stripe a tape, log clips, build a timeline, and record your timeline to tape. More information on specific functions can be found in Chapter 3, “Reference.” Other tutorials in this chapter address different types of editing, such as editing to audio or L-cuts, as well as non-linear editing.

Non-Linear Editing With Time Machine

2.1 only

This tutorial is designed to assist you in non-linear editing with Time Machine. The following topics are covered in this section:

- Digitizing clips
- Batch Digitizing
- Looking at source deck vs. clip timecode
- Logging clips from a digitized clip
- Digitizing AVI and WAV files
- Changing loop count and playback speed
- Building a hybrid (linear/non-linear) timeline

Working with non-linear clips in Preditor is similar to working with linear clips. Preditor is designed so that you don't have to worry about whether the clips you are using are linear or non-linear. You use the same tools to edit both. In fact, the last section of this tutorial shows you how to work with both on the same timeline, a hybrid timeline.

However, there are of course advantages to working with non-linear clips. The greatest of these is increased speed. Preditor with Time Machine can instantly cue your clips to the timecode or Position Bar location you specify. When you use the advanced editing modes, the on-screen monitors update instantly as you edit. With non-linear clips, you can also change the playback speed and direction. In general, digitizing your video and audio information gives you greater speed, flexibility, and versatility when working in your timeline. This tutorial shows you how to take advantage of some of these benefits.

If you need information on assigning your decks, naming tapes, and logging clips, see the previous tutorial on linear editing. This tutorial assumes you have already learned these skills, and that you have linear clips to work with.

Digitizing With Time Machine

If you have Time Machine installed, there are several ways to digitize clips. You can digitize clips on the timeline, or send clips to a queue to be digitized in a batch. The Batch Digitize window allows you to adjust settings, such as compression level, for individual or groups of clips.

You can also digitize your program out in Air Command by using the VTR Transport/Sync Roll/Live Digitize panel. See the *Air Command 2.1 Manual* for information on how to do this.

Each digitized clip has a default of 1 second of trim room at the head and tail of the clip. Digitized clips are saved on the Time Machine hard drives. You can also create shortcut picons for Time Machine clips and save them in any bin by dragging the clip picon into the bin.

You can digitize AVI and WAV files by dragging them onto the timeline, or by adding them to the Batch Digitize list.

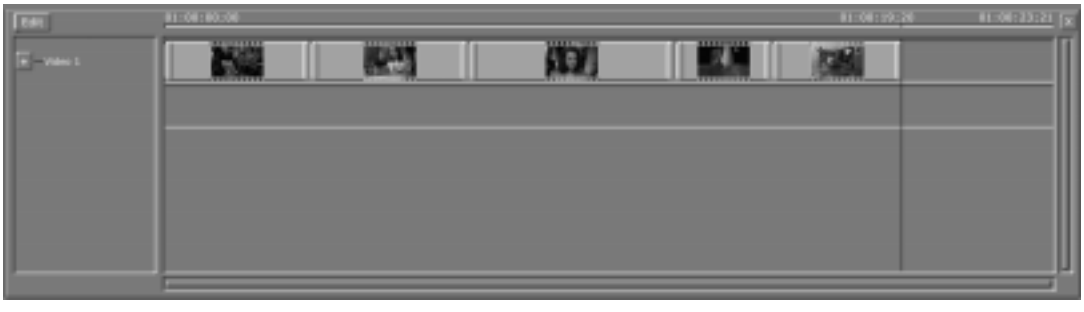
NOTE

You can re-digitize a clip that has already been digitized. Doing this allows you to change the settings, such as the compression level.

Digitizing Clips On The Timeline

This section tells you how to digitize clips on the timeline:

1. Place five linear clips on the timeline.



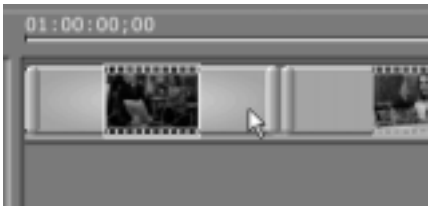
Five Linear Clips on the Timeline

2. Make sure that the original tape is in the source deck it was assigned to.

3. Click on the first linear clip on the timeline to select it.

   The clip is highlighted in yellow (following figure)

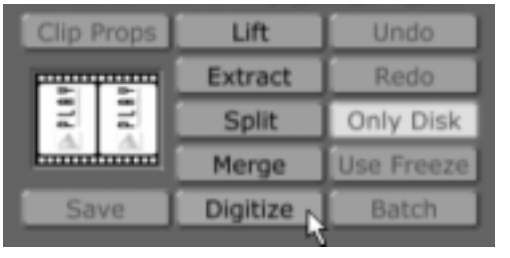
.



The Clip Highlighted in Yellow

4. Do *one* of the following:

   a. Click on the Digitize button on the toolbar (following figure).



Digitize Button

   b. Right-click on the clip and select Digitize to Time Machine from the pop-up menu.

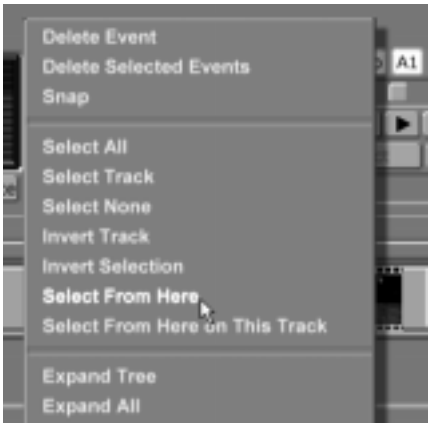
   You see a horizontal status bar go up and down in the clip picon, telling you that Time Machine is digitizing the clip. You know Time Machine is finished digitizing when the status bar stops, your deck stops playback, and your clip turns dark blue on the timeline. Digitized clips are designated by dark blue.

Next you will select more than one clip on the timeline to digitize. To do so, do the following:

1. Select the other four clips on the timeline. To do this, do *one* of the following:

   a. Hold down the Control key on your keyboard and click on each clip.

b. Right-click on the second clip, and choose **Select From Here** from the pop-up menu (following figure).



Choosing Select From Here

The second clip and those after it are selected.

2. Repeat step 4 from above, either clicking on the **Digitize** button, or right-clicking on one of the clips and choosing **Digitize to Time Machine** from the pop-up menu.

   Time Machine digitizes each clip.

Selecting Clips For Batch Digitizing

The Batch Digitize window provides a convenient way to digitize groups of clips in a batch. You can see the clips in the Batch List displayed in a bin window. There, you can adjust settings for the clips and select which ones to include in the batch.

There are several reasons why you may want to use the Batch Digitize window instead of digitizing clips on the timeline. You may want to view information about the clips or adjust settings, such as compression level. You may want to use **AutoBatch** to select the clips for digitizing as you log them. Or, you may want to log a large number of clips, then decide later which ones to digitize and use in your timeline.

NOTE Sending your clips to the Batch Digitize window does not save them. To save them, you must open the Batch Digitize window and either digitize the clips or save the To do list before exiting Preditor.

There are three ways you can add clips to the Batch Digitize bin. You can select them from the timeline, you can use AutoBatch to automatically send them to the Batch Digitize bin as you log them, or you can drag picons from a bin into the Batch Digitize window To do list. You will try each one of these.

Selecting Clips to Batch Digitize from the Timeline

Selecting clips for batch digitizing from the timeline is similar to digitizing from the timeline, except you choose a different pop-up menu option. To do this, do the following:

1. Place five linear clips on the timeline.

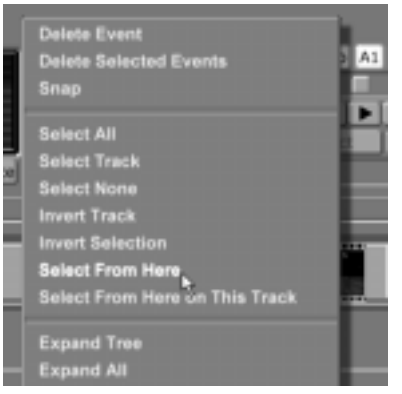
Five Linear Clips on the Timeline

2. Make sure that the original tape is in the source deck it was assigned to.

3. Select the last three clips on the timeline. To do this, do *one* of the following:

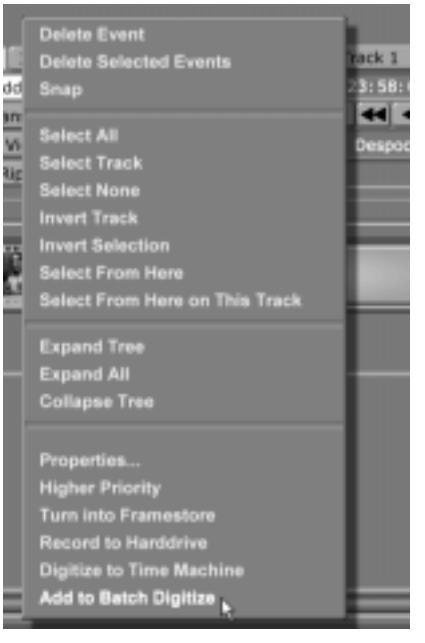
   a. Hold down the Control key on your keyboard and click on the clips.

   b. Right-click on the third clip, and choose Select From Here from the pop-up menu (following figure).



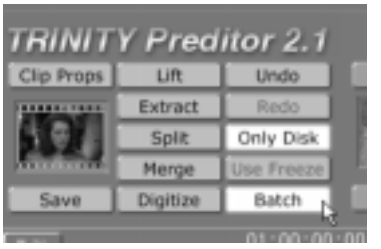
Choosing Select From Here

4. Right-click on one of the selected clips and choose Add to Batch Digitize from the pop-up menu (following figure).



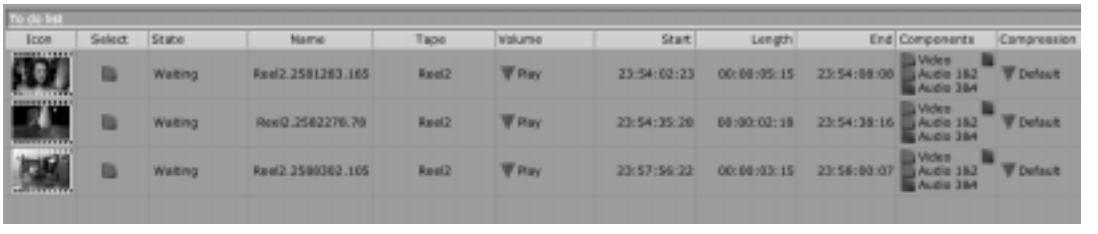
Choosing Add to Batch Digitize

5. Click on the Batch button on the toolbar (following figure).



The Batch Button

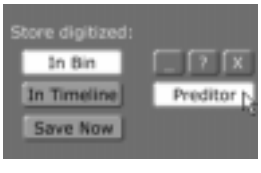
The Batch Digitize window opens across the lower part of the screen (following figure).



The Batch Digitize Window

You see the clips you selected in the To do list bin.

6. Click the Preditor button (following figure) to close the Batch Digitize window and return to the main Preditor interface for the next phase of this tutorial.



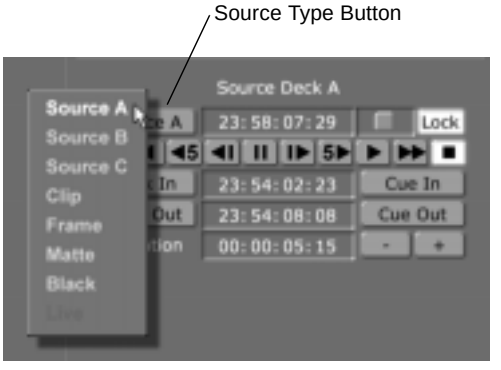
The Preditor Button

Using AutoBatch

Turning on the AutoBatch button automatically sends clips to the Batch Digitize bin as you log them. To do this, do the following:

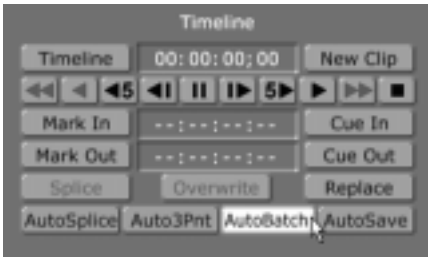
1. Place a tape in your source deck. Use a different one than the one for the clips you used in the previous section. (Later in the tutorial you will want clips from two tapes.)

2. Select your source deck by right-clicking on the Source Type button under the left monitor (following figure).



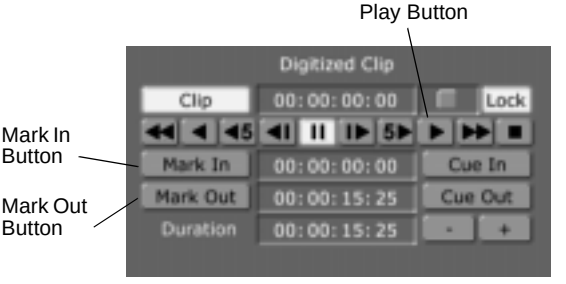
The Source Type Button

3. Under the right monitor, click on the AutoBatch button (following figure) to turn it on.



The AutoBatch Button

4. Cue your tape to your start point, and click on the play button under the left monitor (following figure).



The Left Monitor Controls

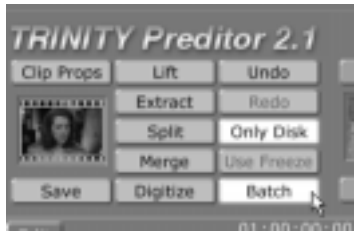
5. Mark a clip by clicking the **Mark In** and **Mark Out** buttons (previous figure), or press **m** for mark in and the comma key for mark out.

6. Under the right monitor, click on the **New Clip** button (following figure), or press the period key on the keyboard.

The New Clip Button

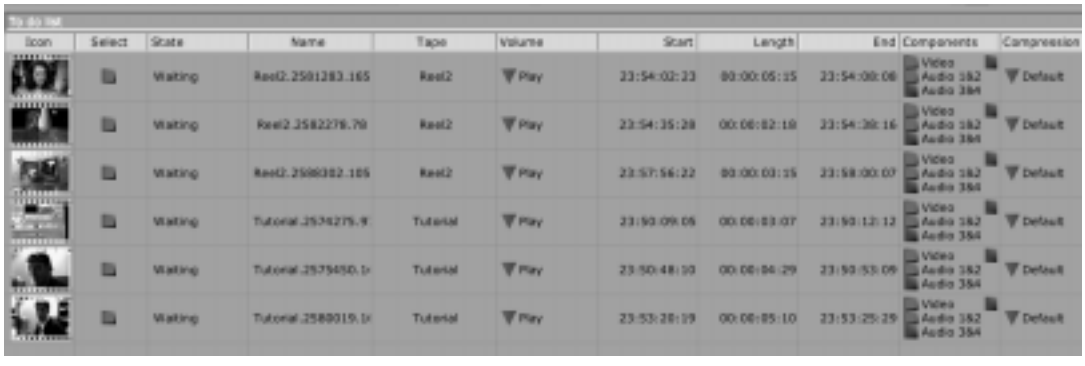
7. Repeat steps 5 and 6 to mark two more clips.

8. Click on the **Batch** button on the toolbar (following figure).



The Batch Button

The Batch Digitize window opens across the lower part of the screen (following figure).



The Batch Digitize Window

You see the clips you logged in the To do list bin.

Leave the Batch Digitize window open. You will work in it in the next section of the tutorial.

Dragging Picons to the To do list

When the Batch Digitize window is open, you can add clips to the list to be digitized by dragging them from a bin to the To do list. You can also drag clips from the To do list to a bin to save a shortcut for the clip.

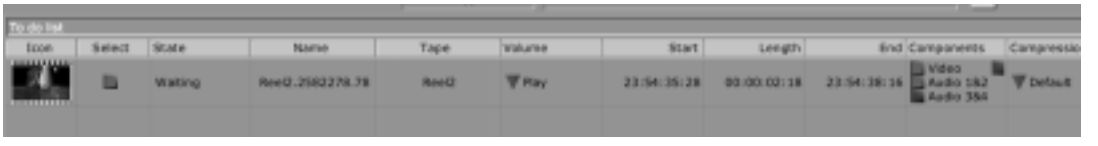
To add clips to the Batch Digitize list, do the following:

1. Locate a linear clip in one of your bins (following figure).

Linear Clip in a Bin

2. Drag-and-drop the clip picon from the bin to the To do list.

   The clip is listed in the To do list, and can be selected for digitizing.



The Clip Added to the To do list

At this point, you have a number of clips from at least two different tapes in the To do list. You will use these in the next section, so this is a good time to save the batch list. To do this, do the following:

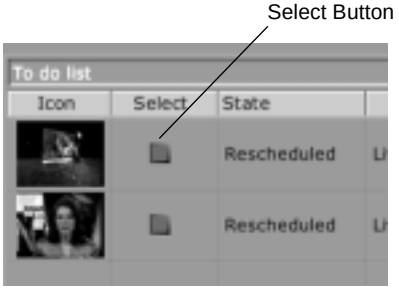
1. Locate the Batch List picon in the Batch Digitize window (following figure).

The Batch List Picon

You will use this picon to save the list. But first you will set this picon to display an image you can recognize.

2. Choose the clip that you want to represent this Batch List.

3. Click on the button in the **Select** column (following figure) to select the clip. Make sure only one clip is selected.

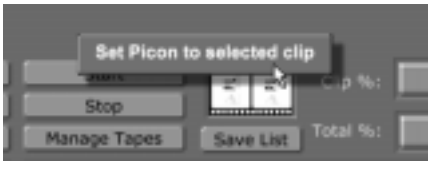


The Select Button

The row for that clip is highlighted in yellow.

4. Right-click on the Batch List picon.

A pop-up menu appears (following figure).



Batch List Picon Pop-Up Menu

5. Select **Set Picon to selected clip**.

The picon for the clip you selected is now used as the picon for the Batch List (following figure).

The New Batch List Picon

Now you are ready to save the Batch List.

6. Drag the Batch List picon to the bin where you want to save the list.

   The list is saved in the bin.

The Batch List in the Bin

Now you can reload the list into the To do list at any time by double-clicking on its picon in the bin.

You can also save the Batch List by clicking on the Save List button under the Batch List picon (previous figure). It is saved to the bin designated for Unsaved TM in the Global Settings panel. For information on the Global Settings panel, see the "Using Configure Panels" chapter of the *Trinity 2.1 User Guide*.

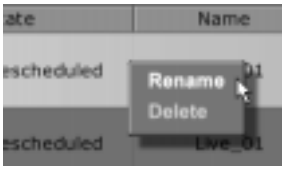
Using The Batch Digitize Window

Once your clips are added to the To do list, the Batch Digitize window is a handy way to organize them and digitize groups of clips. In this part of the tutorial, you will use this window to rename your clips, set compression levels, turn off the audio on one clip, and digitize all the clips from one tape in a group. You will save your digitized clips in a bin.

First you will rename all of your clips that are from a single source tape. You may find it easier to remember names that you give your clips rather than the default names Preditor assigns when you create them. Here's how to rename them:

1. Right-click in the Name column for the first clip from the tape you are using.

   A pop-up menu appears (following figure).



The Rename/Delete Pop-Up Menu

2. Choose **Rename** from the pop-up menu.

   The yellow band across the row of the clip you selected turns purple, and a cursor appears at the beginning of the clip name.

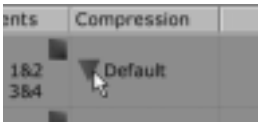
3. Type in a new name for the clip and press **Enter**.

   The new name appears in the **Name** column.

4. Repeat this process for all of the clips from this same tape.

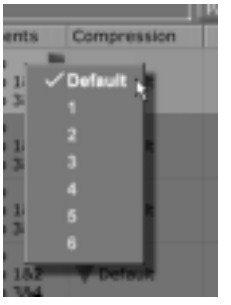
Next you will set the compression level for three clips from a single tape. Here's how:

1. Click on the triangular button in the **Compression** column for one of your renamed clips (following figure).



The Compression Button

A pop-up menu listing the compression levels appears (following figure).



The Compression Pop-Up Menu

Time Machine compression levels range from Default to 6. Default gives the highest image quality. Moving from Default toward 6 gives you progressively more compression, and, thus, less quality.

NOTE The Trinity Time Machine uses wavelet compression to digitize video. Wavelet compression offers better video quality for less hard drive space than the standard M-JPEG compression, which most other non-linear editing systems use. Another advantage of wavelet compression is that you won't see as many digital artifacts, such as the pixel blocks that may show up on M-JPEG compressed video. Wavelet compression, even at high compression ratios, retains the look of analog tape.

TIP The varying compression levels are provided so you can make choices about image quality versus file size. When you begin a project, you can digitize your clips at a high compression level. Then, once you finish the project and have selected the clips you will actually use, you can re-digitize them at a lower compression level before recording them to your master tape.

2. Choose 2 from the pop-up menu.

   Time Machine will use a compression level of 2 when it digitizes this clip.

3. Click on the compression button for the next renamed clip in the To do list.

4. Choose 4 for the compression level.

5. Click on the compression button for the next renamed clip in the To do list.

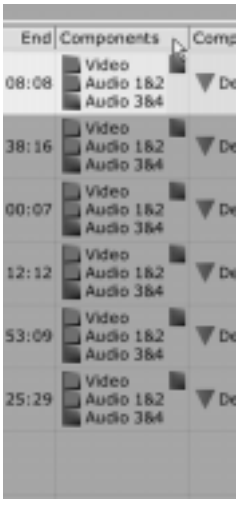
6. Choose 6 for the compression level.

You have set compression levels of 2, 4, and 6 for three clips. After you digitize them, you can compare the quality from the different levels of compression. Don't forget to look at one digitized with the Default setting, too.

NOTE The compression ratio can also be changed in the Digitize Settings panel. Access this panel by clicking on the Configure button on the Preditor toolbar and selecting Digitize Settings from the pop-up menu. For information on this panel, see the "Using Configure Panels" chapter in the *Trinity 2.1 User Guide*.

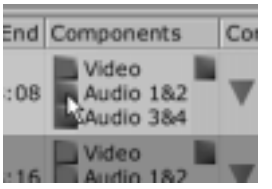
Before you digitize these clips, you will learn how to choose *not* to record the audio for a clip. Here's how:

1. Find the Components column of the Batch Digitize window (following figure).



The Components Column

2. Click on the button labeled Audio 1&2 (following figure).

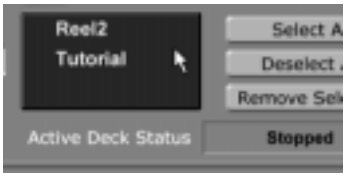


The Audio 1&2 Buttons

The button turns gray, indicating it is turned off. By default, the Audio 3&4 button is turned off. When you digitize this clip, the audio tracks will not be included. You could also digitize only the audio and not the video for a clip by clicking on the Video button to turn it off and leaving the audio buttons on.

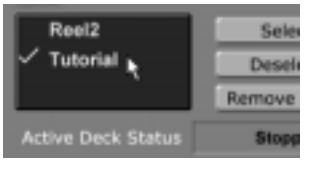
Next you will select all of the clips from the source tape you are working with for digitizing. Here's how:

1. Find the Tape List at the top of the Batch Digitize window (following figure).



The Tape List

2. Click on the name of the tape you have been working from (following figure). In this tutorial, the example tape is Tutorial.



Choosing the Tape Name

All the clips from that tape are selected in the To do list (following figure).

Clips from Tutorial Tape Selected

You can tell which clips are selected for digitizing by looking at the square buttons in the Select column. If the button is blue, the clip is selected; if it is gray, the clip is not selected. Also, the State of the selected clips is Waiting. The State of the non-selected clips is Ignored.

Another way to select clips is to click the Select All button to select all clips in the To do list. You can also hold down the Control key on your keyboard and click on the Select button for the clips you want to select.

Now that you have renamed your clips, set the compression levels, turned off the audio for one clip, and selected all the clips from the tape you are working with, you are ready to digitize this batch of clips. Here's how:

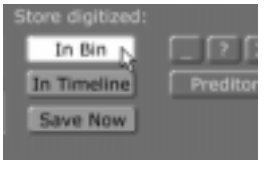
1. Make sure the source tape is in the deck you assigned it to.

2. Click the Start button (following figure).

The Start Button

Time Machine begins digitizing the clips. Two status bars, Clip % and Total %, tell you the progress of digitizing the current clip and the total batch.

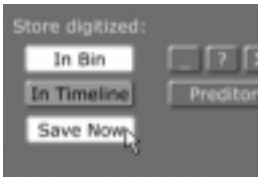
3. When Time Machine finishes digitizing, click on the In Bin button in the upper right of the Batch Digitize window.



The In Bin Button

This tells Time Machine to save shortcuts to your clips into a bin. You must choose either In Bin or In Timeline each time you save a batch of digitized clips. In Timeline places them on a timeline in Preditor. If you want to save the batch to both places you can do so, one at a time.

4. Click on the Save Now button (following figure).



The Save Now Button

Shortcuts for the digitized clips are saved to the bin set for Unsaved TM in the Global Settings panel. For information on how to use this panel, see the “Using Configure Panels” chapter in the *Trinity 2.1 User Guide*.

Where Are The Clips Saved?

Time Machine saves digitized clips to your dedicated Time Machine hard drives inside your Trinity unit. However, shortcuts to the clips can be saved in any bin you wish. When you selected In Bin above, for example, shortcuts to the clips were saved in the bin designated in the Global Settings panel. You can also drag digitized clip picons from the timeline or the To do list to any bin where you want to save a shortcut for the clips.

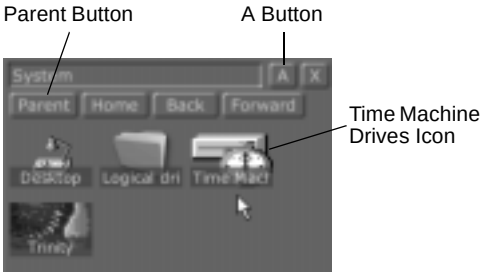
For most practical purposes, the shortcut picons act just like clips. This is *not* true, however, when it comes to deleting the clips. You can delete shortcuts to the clips in the bins where they are located, but to delete the clips themselves you must navigate to the Time Machine hard drives.

NOTE If you delete the clips from the Time Machine hard drives, the shortcuts in the bins will not function on their own; you will have to re-digitize them from the source tape. Don't make the mistake of thinking you have a copy of a clip saved in a bin. The picon in a bin is only a shortcut, as the clips are saved *only* on the Time Machine hard drives.

NOTE You can save as many shortcuts to Time Machine clips in bins as you want. Multiple shortcuts can reference the same audio and video footage on the Time Machine hard drives. Each shortcut can contain different clip properties, such as in and out points, strobe rate, etc.

You can access the Time Machine hard drives by parenting up through your bins. This allows you to delete clips or load clips directly from the hard drive. To access the Time Machine hard drives, do the following:

1. In one of the open bins on your screen, click the A button in the upper right corner of the bin (following figure).



The System Bin

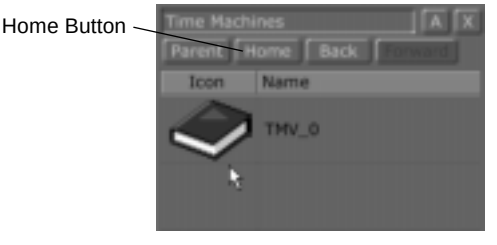
This opens additional options for bin navigation.

2. Click on the **Parent** button until you get to the **System** bin.

   You see four options in the system bin: **Desktop**, **Logical drives**, **Time Machine**, and **Trinity** (previous figure).

3. Double-click on the **Time Machine** icon.

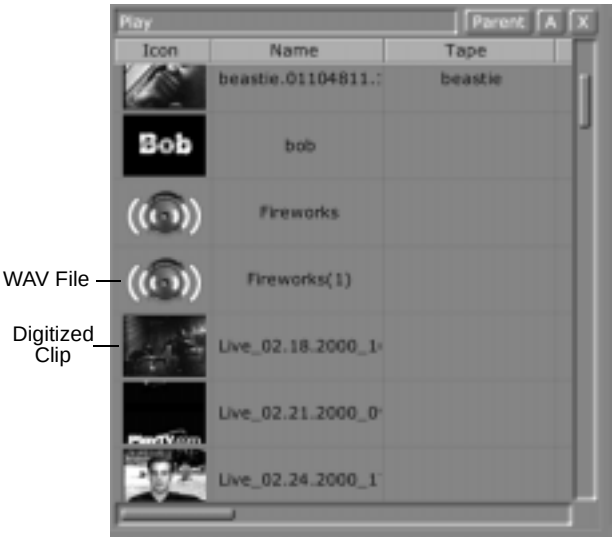
   You see an icon of a book (following figure). This represents the “volume” of Time Machine you are using. Currently there is only one volume.



Volume Icon in Time Machine Bin

4. Double-click on the volume icon.

   You see a bin containing picons of your digitized clips (following figure).



Digitized Clips on Time Machine Hard Drives

To load your digitized clips into a monitor or onto the timeline, drag the picon from this bin to where you want to load it.

NOTE

These clips are the actual audio and video data only. The Time Machine hard drives do not contain clip properties, such as in and out points, strobe rate, etc. These clip properties are saved in the shortcuts for the clips in the bins on your PC.

This is where you delete your clips from the Time Machine drives. To do this, right-click on a clip picon and choose **Delete** from the pop-up menu.

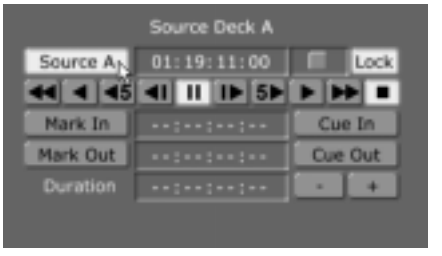
When you want to return to the bin you started from, click the **Home** button.

Using Automated Features

Now that you know the basics of digitizing from the timeline and batch digitizing, this section of the tutorial will show you how to put some of these features together and quickly build a digitized timeline from a linear source tape. You will use the **AutoBatch** and **AutoSplice** features to automatically queue clips for digitizing and build a timeline as you log clips.

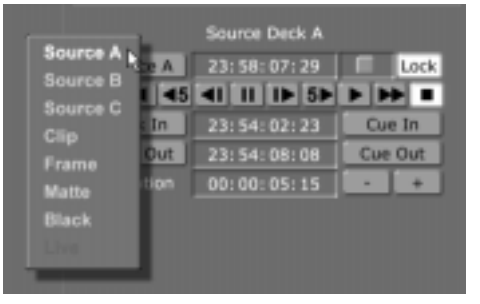
Here's how:

1. Place a linear tape in your source deck and select that deck for the Source Type button under the left monitor. To do this, right-click on the Source Type button (following figure).



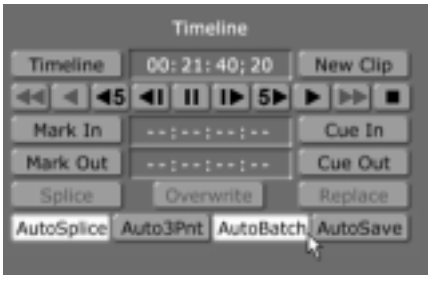
The Source Type Button Under the Left Monitor

Choose the source deck from the pop-up menu (following figure).



The Source Type Pop-Up Menu

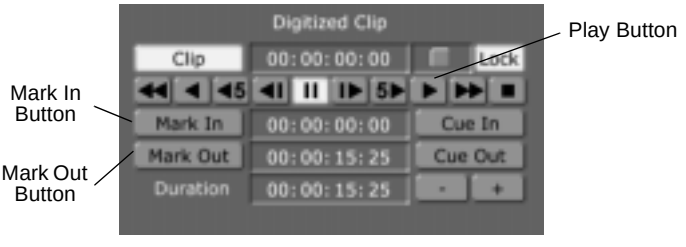
2. Under the right monitor, click on the AutoBatch and AutoSplice buttons (following figure) to turn them on.



The AutoSplice and AutoBatch Buttons

Turning on AutoBatch causes clips to be automatically added to the Batch List in the Batch Digitize window as you log them. Turning on the AutoSplice button causes clips to be automatically added to the timeline as you log them.

3. Cue your deck up to the place where you want to log clips and click the play button under the left monitor (following figure).



The Left Monitor Controls

4. Log a clip by clicking the Mark In and Mark Out buttons (previous figure), or by pressing m and the comma on your keyboard.

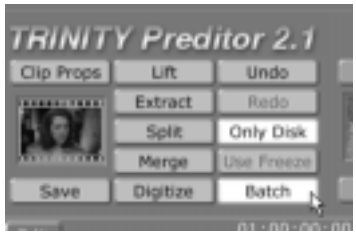
   As you log each clip, it appears on the timeline and is sent to the To do list in the Batch Digitize window.

5. Repeat step 4 to log four more clips.

   You see five clips on the timeline (following figure).

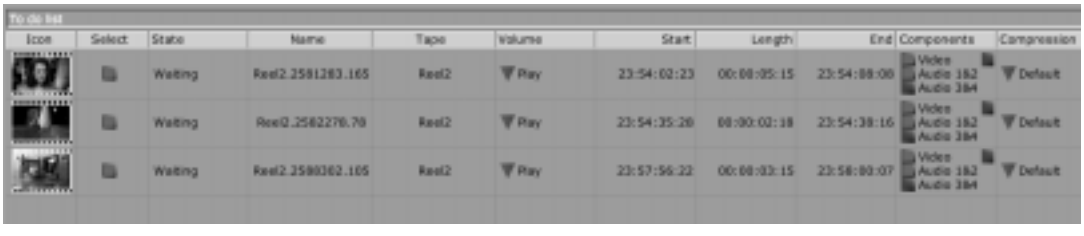
Five Clips on the Timeline

6. Click the Batch button on the toolbar (following figure).



The Batch Button

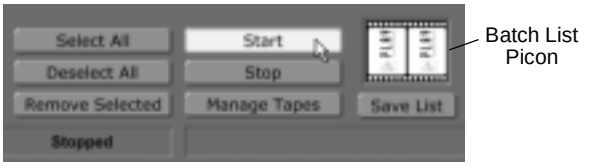
The Batch Digitize window opens across the bottom of the screen (following figure).



The Batch Digitize Window

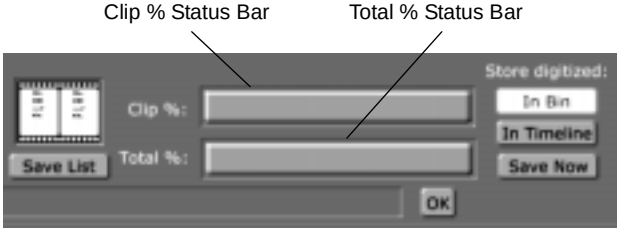
You see the clips you logged in the To do list.

7. Click the Start button (following figure).



The Start Button

Time Machine digitizes your clips. As it digitizes you see a loading bar going up and down in the Batch List picon and in the picon for each clip as it is digitized. You also see the green status bar for Clip % and Total % (following figure) telling you how far digitizing has progressed for the current clip and the batch as a whole.



The Clip % and Total % Status Bars (Solid Green)

When these bars are solid green and the loading bar disappears from the Batch List picon, digitizing is completed.

8. When Time Machine finishes digitizing your clips, click the **Preditor** button on the right side of the screen to return to the main Preditor interface.

Digitized Clips on the Timeline

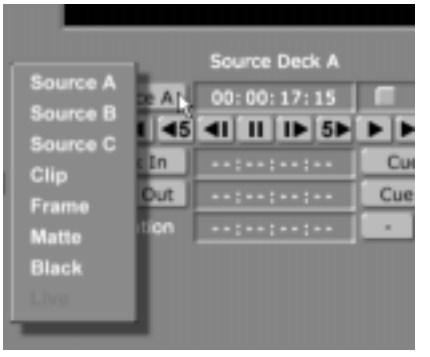
Your clips on the timeline are now digitized. You can tell this because they are now dark blue. You can now edit the timeline like any other non-linear timeline.

9. Save the timeline. Neither the timeline or batch list has been saved yet.

Clip Versus Source Timecode

Under the left source monitors, you see a set of timecode numbers for the active source. There is an important difference between the timecode of a digitized clip when you select Clip as the source and the timecode you see when you select your source deck as the active source. This section explains that difference.

Right-clicking on the Source Type button under the left monitor(s) brings up the Source Type pop-up menu (following figure).



Source Type Pop-Up Menu

From here, you select which source type you want to edit in the source monitor.

To understand the difference between Clip and Source timecode, do the following:

1. Drag-and-drop a digitized clip onto the timeline.

2. Be sure the digitized clip's source tape is in the deck.

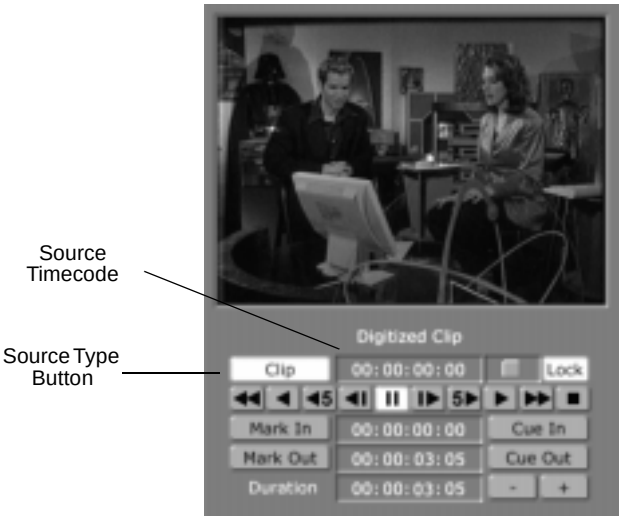
3. Click the digitized clip in the timeline to select it.

4. Right-click the Source Type button under the source monitor.

   The Source Type pop-up menu appears.

5. Select Clip.

   The Source Timecode sets itself to 00:00:00:00. This represents an absolute timecode for that digitized clip file (following figure).



Timecode With Clip Selected

This absolute timecode is here to make editing digitized clips easier. However, the timecode that represents the portion of the linear source from which the digitize clip was taken is still present. You can view this timecode by doing the following:

1. Click the Source Type button.

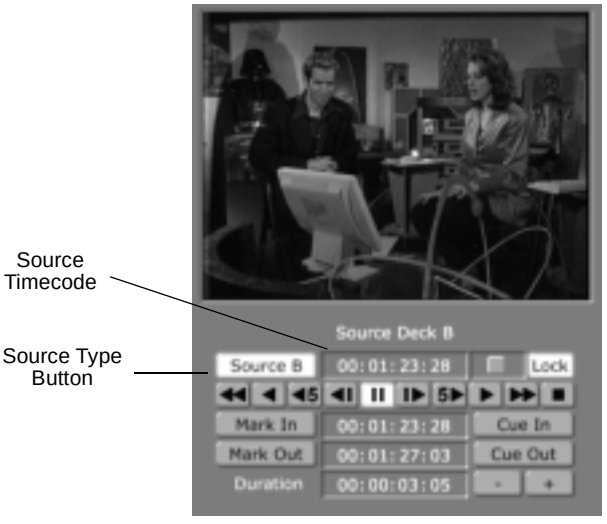
2. Select the source deck in which your tape is located (Source A, Source B, or Source C).

   A frame from your source tape appears in the source monitor.

3. Click the digitized clip in the timeline to select it.

4. Click the Cue In button under the source monitor.

   Preditor tells your deck to scrub to the Mark In point for the clip on your source tape. The frame you see on the source monitor is the same frame you saw as the first frame of the digitized clip (following figure).



Timecode With Source Selected

Notice that the Source Timecode is the timecode from the linear source, and not the absolute timecode displayed when Clip is selected for Source Type.

This feature exists so that you can automatically cue a source tape up to the original in point from which the digitized clip was taken. This way you can re-digitize the clip if you need to, or adjust the in and out points to digitize a portion of source tape you may have missed the first time.

Logging Sub-clips From A Digitized Clip

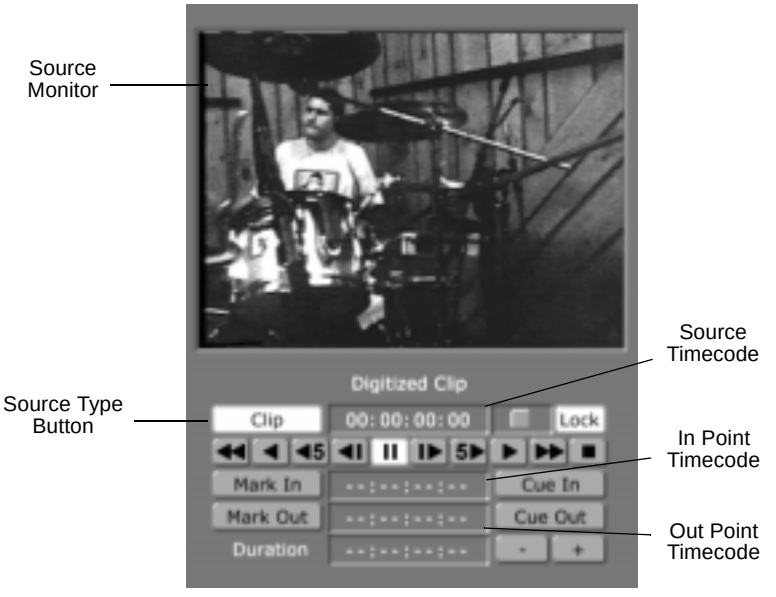
Once you have a digitized clip, you can log sub-clips from it as though it were a linear source.

Here's how:

1. Navigate to the bin containing your digitized clip.

2. Drag-and-drop the clip's picon into the source monitor (one of the left monitors).

   The clip loads. The first frame of the clip appears in the source monitor. The Source Type button changes to read Clip (following figure).



The Loaded Digitized Clip

This makes the digitized clip a source. You can now log clips from it as though you were logging clips from a linear source.

3. Click the Play button.

   The clip plays.

4. Click the Mark In button a little bit before the point where you want the clip to begin.

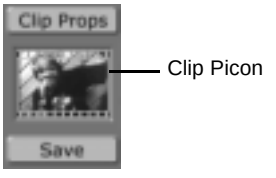
   Leaving a little bit of lead in time on your clip is optional. It can make for easier editing later.

   If you know the timecode where you want the clip to begin, you can also mark the in point by typing the timecode into the In Point timecode field and then clicking the Mark In button. Preditor instantly cues the clip to that frame.

5. Click the Mark Out button a little bit after the point where you want the clip to end.

If you know the timecode where you want the clip to end, you can also mark the out point by typing the timecode into the Out Point timecode field and then clicking the **Mark Out** button. Preditor instantly cues the clip to that frame.

A picon of the clip appears as the Clip picon in the toolbar (following figure).



The Clip in the Toolbar

The picon is the first frame of the clip.

6. Drag-and-drop the Clip picon onto the timeline.

   The clip appears in the timeline (following figure).

The Clip in the Timeline

You can edit the clip just like any other clip.

NOTE

You do not create new clip files when you log sub-clips from a digitized source clip. You are only creating shortcuts that point back to the digitized clip. Because of this, *do not* delete the digitized source clip. If you do, the sub-clips you created revert to linear clips. You then must re-digitize these clips from the linear source.

Digitizing AVI And WAV Files

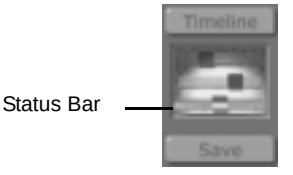
Preditor can digitize AVI and WAV files, and use them just like any other clip in the timeline.

Here's what you do:

1. Navigate to the bin containing your AVI or WAV file.

2. Drag-and-drop the file's picon into the timeline.

   The file begins to digitize. As it digitizes, a status bar goes up and down in the Timeline picon (following figure).



The Timeline Picon

   Once the file finishes, it appears in the timeline. The clip appears in the Video 1 track in the timeline.

NOTE If you are digitizing a WAV file, no event is visible. Click the + button to the left of the Video 1 track name. Audio tracks appear below the Video 1 track. These are your digitized audio tracks.

You can edit digitized AVI and WAV clips the same way you edit any other digitized clips.

Changing The Playback Speed

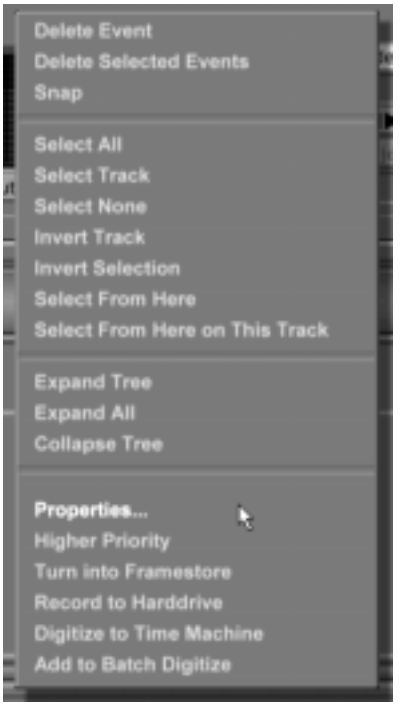
You can change the playback speed of a digitized clip. This is something you can't do with linear clips.

Here's what you do:

1. Load your digitized clip into the timeline.

2. Right-click on the clip.

   The Timeline pop-up menu appears (following figure).

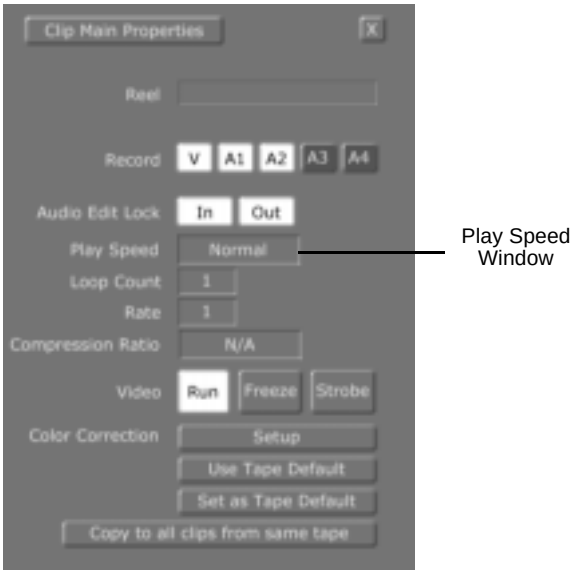


The Timeline Pop-up Menu

Use this pop-up to edit various properties of the timeline and change timeline viewing options.

3. Select Properties.

The Clip Main Properties panel appears in the upper left corner of the interface (following figure).

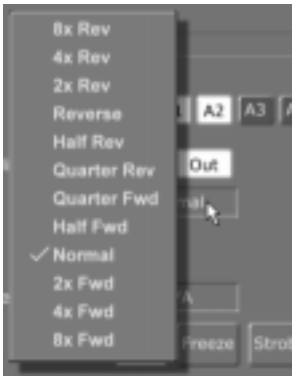


The Clip Main Properties Panel

Use this panel to edit properties of a selected clip. In this case, you want to change this clip's playback speed.

4. Click in the **Play Speed** window (previous figure).

   The **Play Speed** pop-up menu appears (following figure).



The Play Speed Pop-Up Menu

Use this pop-up to select the playback speed for the selected digitized clip. The first six options, from 8x Rev (eight times faster than normal speed in reverse) to Quarter Rev (one-fourth normal speed in reverse), play the clip in reverse. The last six options, from Quarter Fwd (one-fourth normal speed) to 8x Fwd (eight times faster than normal) play the clip forward.

5. Select the playback speed you want.

   The clip automatically changes its length on the timeline to match the new playback speed.

NOTE When you are working with non-linear clips, Preditor automatically accounts for changes you make to the playback speed and loop count. For example, say you set the playback speed for a clip to play in reverse. When you scrub through that clip on the timeline, you see the end of the clip first. Then it plays back to the beginning of the clip as you scrub through the clip on the timeline. And, if you open an advanced editing mode, such as Trim Clip, what you see in the monitor labeled First Frame, Selected Clip is actually the last frame of the clip, since that is what you see first when the clip is played in reverse.

Looping A Clip

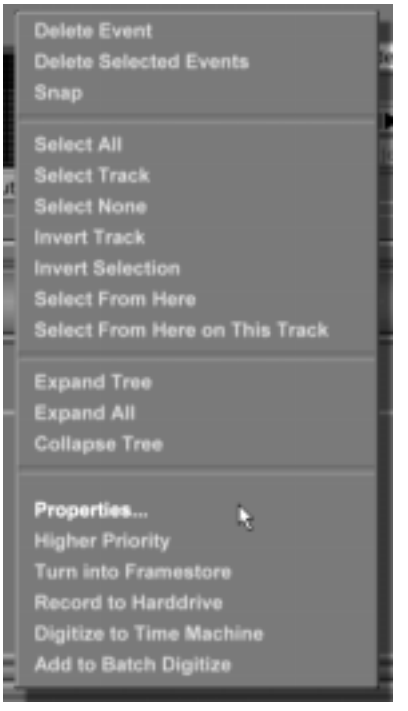
You can make a digitized clip play in a loop. This is something you can't do with a linear clip.

Here's what you do:

1. Load your digitized clip onto the timeline.

2. Right-click on the clip.

   The Timeline pop-up menu appears (following figure).

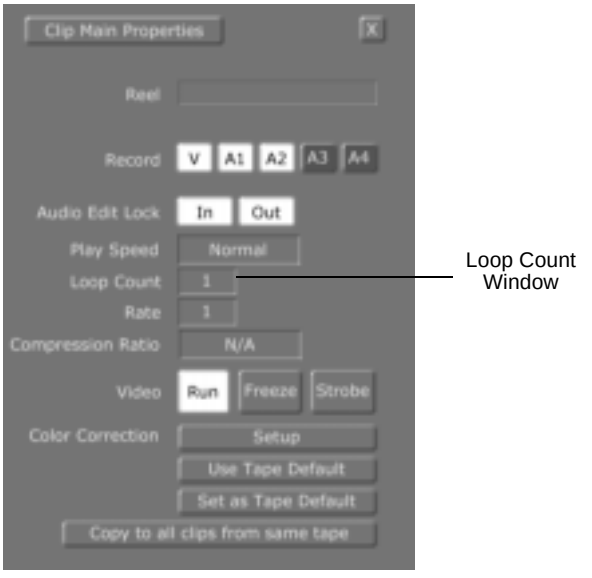


The Timeline Pop-Up Menu

Use this pop-up to edit various properties of the timeline and change timeline viewing options.

3. Select Properties.

   The Clip Main Properties panel appears in the upper left corner of the interface (following figure).



The Clip Main Properties Panel

Use this panel to edit properties of a selected clip. In this case, you want to change this clip's Loop Count.

To make a clip loop, you change the value in the Loop Count window (previous figure). The number you enter is the number of times the clip plays. The default is 1.

4. Change the value in the loop count window to 2.

   Preditor sets the clip to play in a loop twice. Notice the clip in the timeline doubles in size.

Building A Hybrid Timeline

In some situations, you may want to build a timeline that uses both non-linear clips (digitized on Time Machine) and linear clips (from one of your source decks). This type of timeline is called a hybrid timeline. Preditor is designed so that you can use the same tools to edit linear and non-linear clips.

One situation where you may want to build a hybrid timeline is when you want to use a long segment of tape without digitizing it, but you want to add effects and transitions at the beginning or end of the timeline. This is the type of timeline you will build in this part of the tutorial.

What You Will Need

You'll need to make sure you have a few things ready so you can follow along with the project:

- At least one source VTR connected.

  You'll be working with clips from tape, so this is a must.

- At least one source tape with timecode and video recorded.

  You'll be using this to provide linear clips for your timeline.

- At least one digitized clip on your Time Machine hard drives.

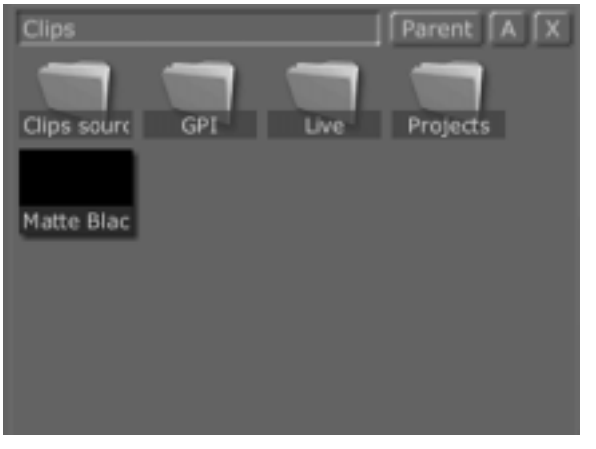
You'll also use a couple of video stills and DSKs (downstream keys). You can find some examples of these in the bins, or you can use your own.

Building The Timeline

In this tutorial, the example timeline has stills and non-linear clips at the beginning and the end, and a linear clip in the middle. There is also an overlay in the form of a credit roll on top of the linear clip.

Begin the timeline with a fade up from black, so matte black is the first item on the timeline.

1. Navigate to the Trinity\Bins\Clips bin, and find the picon labeled Matte Black (following figure).



The Matte Black Picon in the Clips Bin

2. Double-click the Matte Black picon to add it to the timeline (following figure).

Matte Black Added to the Timeline

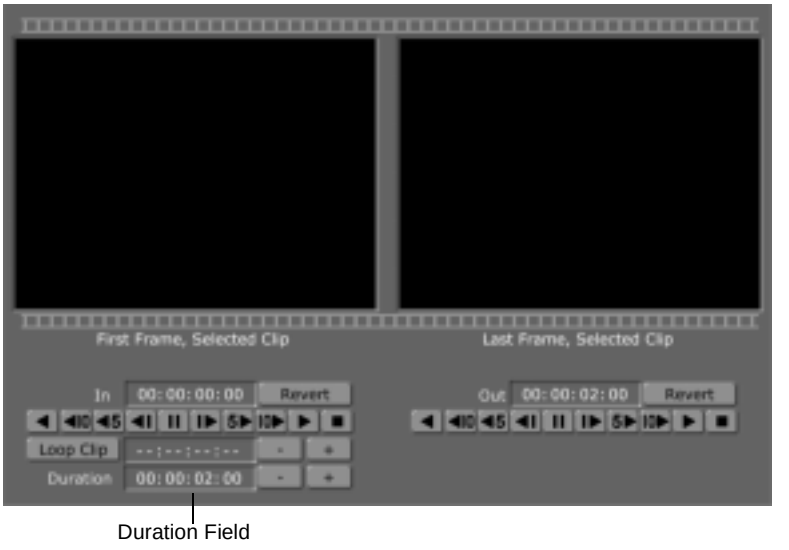
You only need this clip to last for 1 second. If you see a different duration for the clip on your timeline, you'll need to trim the clip with Preditor's Trim Clip editing feature. Here's how:

1. If the Matte Black clip is not selected, click on it to select it.

2. Click the Trim Clip button (following figure) on the Preditor toolbar.

The Trim Clip Button

The Trim Clip monitors and controls appear (following figure).



The Trim Clip Monitors and Controls

3. Adjust the duration of the clip to 1 second by typing 00:00:01:00 into the Duration field under the left monitor, or clicking on the + or - buttons next to the Duration field.

4. Click the Add Clip button to return to the default editing mode.

TIP

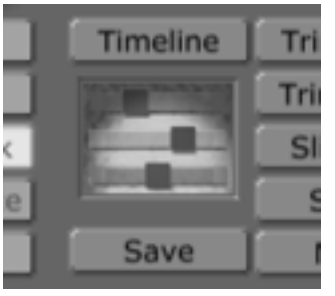
The keyboard shortcut for placing a 1 second matte black clip on the timeline is the k key. Make sure you are in Add Clip mode, press the k key, and the matte black clip appears on the timeline at the location of the Position Bar.

Saving The Timeline

This is a good time to save the timeline. Saving your work frequently is a good habit to develop. If a project doesn't seem to be heading in the right direction, you can simply go back to an earlier version and start from there.

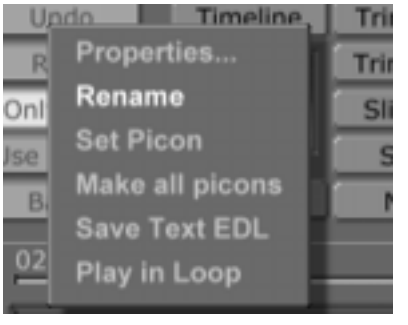
Before you save the timeline, rename it.

1. Find the Timeline picon in the blue Timeline Controls on the toolbar (following figure).



The Timeline Picon

2. Right-click on the picon and choose **Rename** from the pop-up menu (following figure).

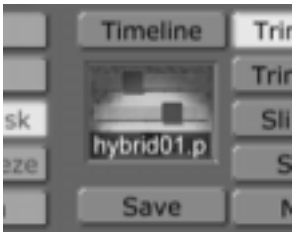


Choosing Rename from the Pop-Up Menu

A cursor appears in the name on the Timeline picon in the toolbar.

3. Type in **hybrid01** and press **Enter** on your keyboard

The new timeline name appears on the Timeline picon (following figure).



The New Name for the Timeline

The file extension .ptl (Preditor timeline) is added to the file name.

4. Navigate to a bin where you would like to save the timeline (Use the Top Bins and Btm Bins buttons to quickly open bins if necessary).

5. Drag the timeline picon to the bin and drop it.

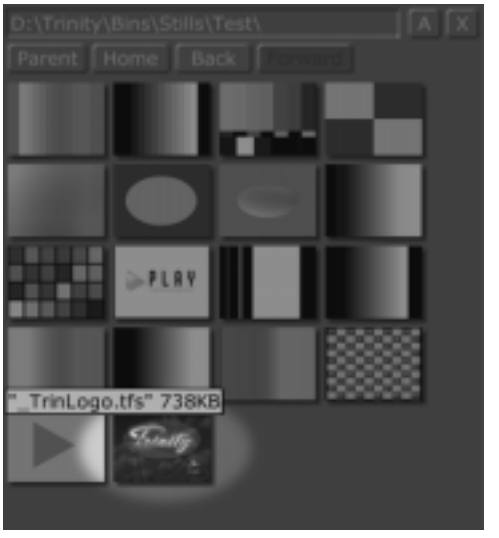
   The timeline is saved there.

As you continue to work on the project, you can save future versions as hybrid02, hybrid03, etc.

Adding The Next Clip

At this point you are ready to add the next clip. The example uses a digitized clip that's an animated version of one of the stills found in the bins. Feel free to use a digitized clip of your own if you have one, or you can use any still. If you use a digitized clip, make sure it has a duration of at least 5 seconds.

1. Navigate to the Bins/Stills/Test folder, and find the _TrinLogo.tfs picon (following figure).



Picon for the Trinity Logo Still

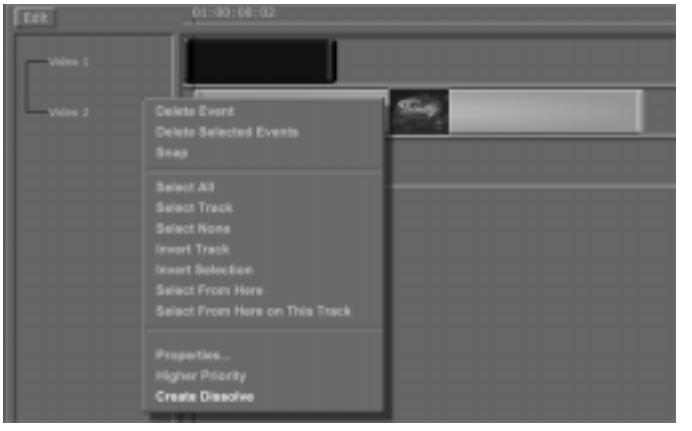
2. Drag- and-drop the picon onto the Video 2 track of the timeline, dropping it so that it begins at 01:00:00:02 (following figure).

Adding the Second Clip to the Timeline

3. If necessary, click the Trim Clip button again and adjust the duration of the clip until it is at least 2 seconds.

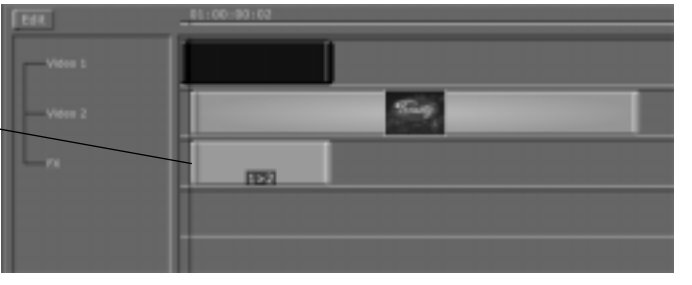
Now you will add a dissolve.

4. Right-click on the clip you just dragged onto the timeline and choose Create Dissolve from the pop-up menu (following figure).



Creating a Dissolve from the Pop-Up Menu

You see a dissolve from black to the clip on the FX track of the timeline (following figure).



The Dissolve Added to the Timeline

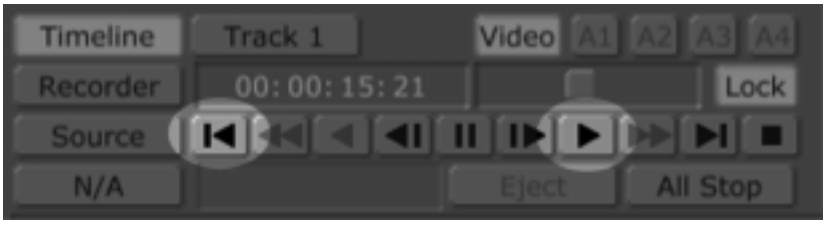
Checking The Edit

Before going any further, check this edit.

1. Turn on View mode by clicking the **View** button (following figure).

The View Button

2. Click the First Frame button to rewind the timeline, then press the Play button (following figure).



The First Frame and Play Buttons

When you select View and play back the timeline, you see selected events that involve non-linear clips only, as this timeline does so far. After you view the edit, return to the default editing mode by clicking on the Add Clip button.

Adding A Linear Clip

At this point, you are ready to add your clip from tape. If you need more information on topics such as logging clips, naming tapes, and assigning source decks, see “Linear Editing” on page 182.

We worked with the Source A deck in this project. To make it easy to follow along, you may want to also assign your source deck as Source A. (For information on how to do this, see “Assigning Source Decks” on page 183).

1. Make sure you are in Add Clip mode (click on the button on the toolbar if it is not on).

2. Put the tape with your footage into your source deck (making sure that it is powered up and connected to Trinity, of course).

3. Use the transport controls under the monitor labeled Source A to play back the source tape (following figure).

The Transport Controls for the Source A Deck

4. When you see a good place to start the clip, press the Mark In button.

5. Continue playback of the tape, then press Mark Out to end the clip.

   Make sure your clip has duration of at least 20-25 seconds.

Source Versus Timeline Timecode

Next to the Mark In and Mark Out buttons under the Source Deck A monitor, you see timecode numbers. These timecode numbers are the actual location of the clip on the *source tape*. Be sure not to confuse these timecode numbers with those under the output (right) monitor, which represent the position of clip on the *timeline*.

When you click the Mark In button, Preditor creates a picon for the clip using the first frame of the clip (following figure).

The Clip Picon

Before you add this clip to the timeline, rename it.

6. Right-click on the Clip picon, and select **Rename** from the pop-up menu (following figure).

Choosing Rename from the Pop-Up Menu

A cursor appears at the bottom of the picon.

7. Type in a new name for the clip, such as B Roll, and press **Enter** on your keyboard.

The Clip Picon displays the new name (following figure).

The Renamed Clip Picon

At this point, you are ready to add the clip to your timeline.

8. Drag-and-drop the clip picon onto the Video 1 track of the timeline, making sure it overlaps the previous clip by about 1 second (following figure).

Adding the New Clip

Next, add a SMPTE wipe to this edit.

9. Navigate to the Trinity\Bins\FX\Wipes\ folder.

10. Select the _SMPTE0011NTSC.tfs picon (following figure).

The Picon for the SMPTE Wipe

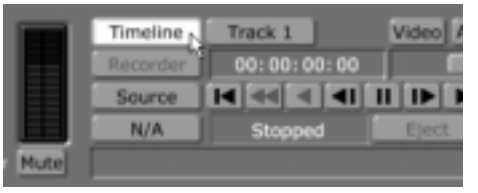
11. Drag the picon to the FX track of the timeline, and drop it at the in point of the B roll you just added (following figure).

Adding the SMPTE Wipe

Checking The Edit

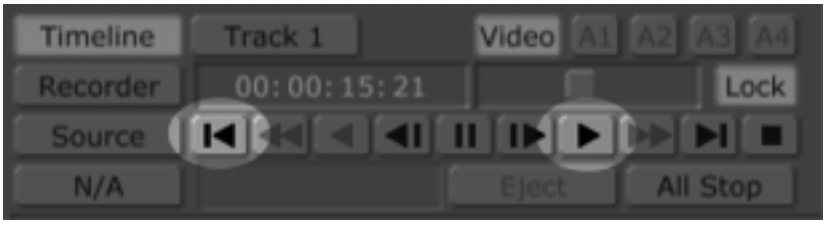
Go ahead and take a look at this edit. Since this edit involves a clip from a tape machine, the process is a little different than with the last edit you reviewed.

1. Click on the **Timeline** button in the Main Controls (following figure) to turn it on.



The Timeline Button

2. Click on the First Frame button to rewind the timeline, then click on the Play button (following figure).



The First Frame and Play Buttons

The timeline plays back, except for the B roll clip, which is replaced by that deck's current output.

Adding Elements

To complete the project, you will add a few more non-linear events. First, add an overlay to the B roll clip.

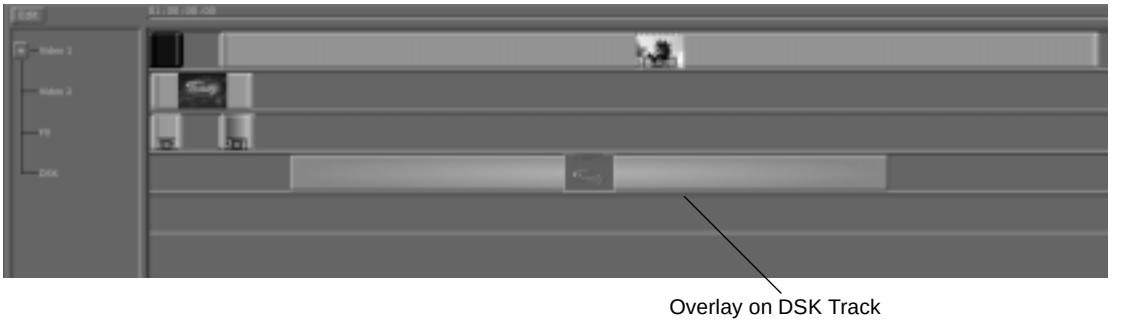
1. Navigate to the Trinity\Bins\CG\Projects folder.

2. Find the _PAGE0004.tfx picon (following figure).

The Title Roll Picon

This picon represents an overlay that lasts 16 seconds and 25 frames (for NTSC; the PAL version is slightly longer).

3. Drag-and-drop the picon onto the timeline a second or two after the previous effect ends (following figure).

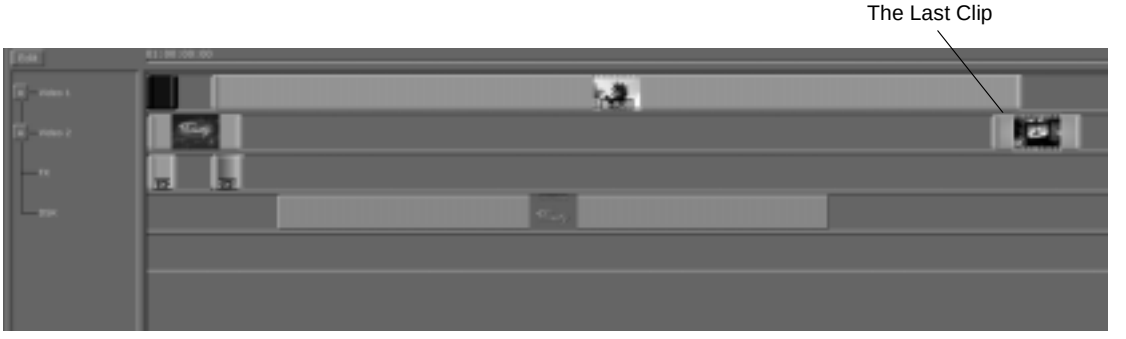


Adding the Overlay to the Timeline

The effect appears on a new track labeled DSK (downstream key).

Next you will add one more clip and effect.

4. Drag-and-drop a digitized clip (or a still from the Trinity\Bins\Stills directory) onto the Video 2 track. Make sure it overlaps the end of the B Roll clip for 1 second (following figure).

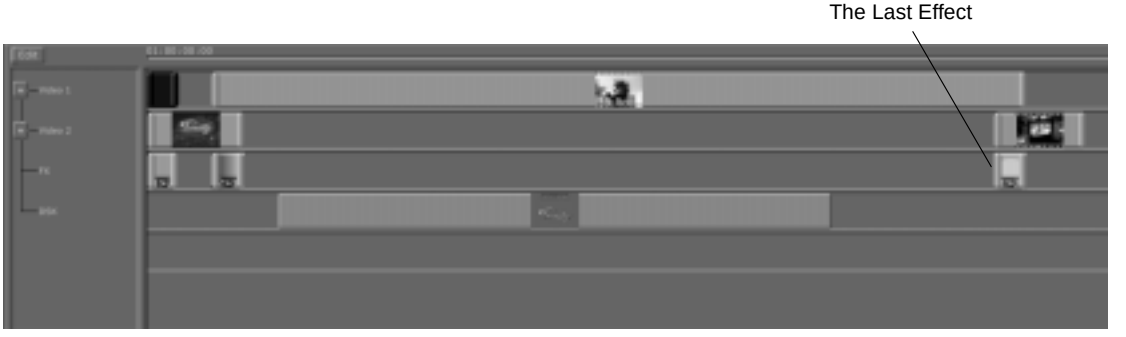


Adding the Last Clip

5. Navigate to the Trinity\Bins\FX\Wipes bin, and find the FlashWhite Wipe (following figure).

The Flash White Wipe Picon

6. Drag the picon to the FX track and drop it at the in point of the previous track (following figure).

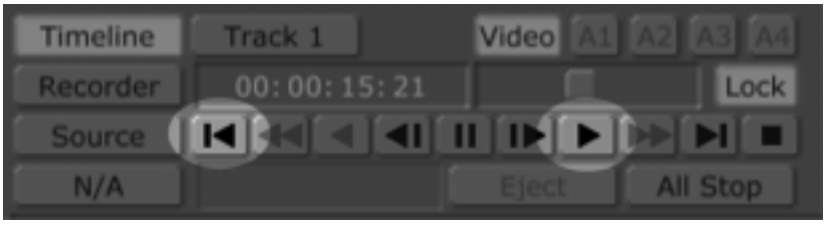


Adding the Last Effect

Final Check

This completes the timeline, so you will review it one final time.

Click on the First Frame button in the Main Controls to rewind the timeline, then click on the Play button (following figure).



The First Frame and Play Buttons

The timeline plays back, except for the B roll clip, which is replaced by that deck's current output.

You have now built a hybrid timeline, and seen how to combine non-linear and linear clips. Aside from the physical limitations imposed by playback from a tape source, Preditor allows you to use the same set of tools for both linear and non-linear clips.

Wrapping Up

In this tutorial, you learned how to digitize clips on the timeline, how to use the Batch Digitize window, how to log sub-clips from a digitized clip, how to digitize AVI and WAV files, how to change playback speed and loop count for a

clip, and how to build a hybrid timeline. You now are familiar with the basics of editing in Preditor. To polish off your editing skills, read the tutorial “Using Advanced Editing Modes” on page 343. Other tutorials teach you how to do specific kinds of projects, such as “Editing To Audio: Creating A Commercial With Voiceover” on page 273 or “L-Cuts: Complete Voiceover” on page 326.

Editing To Audio: Creating A Commercial With Voiceover

Most of the time, an editor begins with the video for a project and selects audio to go along with it. There are quite a few cases, however, where just the opposite is true. Examples include music videos and commercials or documentaries with narration. In these cases, you need to cut the video to best match the existing audio.

Preditor and Time Machine offer a suite of tools for editing to audio, and this tutorial takes a look at how you can use them to create a 30-second commercial with voiceover.

The following concepts are covered:

- Setting up bins for a project
- Stripping video from a clip
- Saving timelines
- Monitoring audio
- Using Auto Beats
- Using Trim Edit mode
- Animating and adjusting audio levels
- Adding and editing keyframes
- Using linear, cubic, and hold keyframe settings
- Reinserting video by performing a split audio edit
- Using Trim Clip mode
- Working with clip priority on the timeline

What You Will Need

This project requires several elements to complete. You will need to provide the following elements in order to complete this project:

- A script for the voiceover
- One or more video clips
- Narration
- Music for the soundtrack

You can find many video stills in the Trinity bins, but if you have others you would like to use, you need to provide those as well.

Getting Started

This project provides you with the opportunity to play the client as well as the editor — it is up to you to decide what you want to advertise in your commercial.

Before you begin the tutorial, you should do the following:

- Write a script for your commercial.

  You'll be recording yourself, so you'll want to come up with something that you enjoy talking about.

- Gather content.
  - You may want to take a look at some of the content included with Trinity, such as the stills included in the Bins folder.
  - If you have any existing footage that you'd like to use, set those tapes aside; you'll need to digitize them later.
  - Find some music that you would like to use for the soundtrack.
- Record the script.

When you have created a script you feel comfortable with, it's time to step in front of the camera for a little while.

If you just want to use your voice for the commercial, you won't need to worry about the video. If you want to use a shot of yourself as one of the cuts, that will work just as well.

Record as many takes as you like, you'll be able to choose your favorite and log it shortly.

Setting Up The Bins

With any project, it is always a good idea to organize your source material so that everything you need is close at hand. The best way to do this is to personalize a bin structure for the way you prefer to work with your project material.

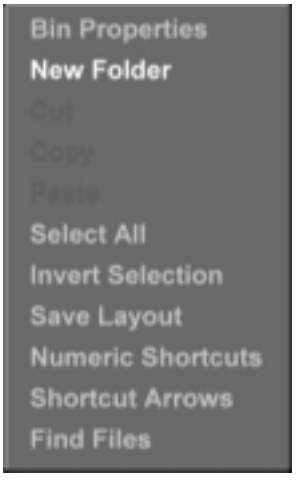
For now, create a new bin called **Projects** in the **Bins** folder. When you are familiar with the bins, you may want to use an entirely different organization for your own projects, but this will give you an idea of what you can do.

Make sure that Preditor is running, then:

1. Navigate to the **Trinity\Bins** folder (following figure).

Opening the Bins Bin

2. Right-click on an empty area of the bin and select **New Folder** from the pop-up menu (following figure).



Selecting New Folder from the Popup Menu

A new folder appears in the bin (following figure).

New Folder Added

Creating a folder automatically places the new folder in rename mode.

3. Type **Projects** and press **Enter** on your keyboard.

   You see a new bin named **Projects** in the Bins folder (following figure).

The New Projects Bin

Organizing Content

Now that you have a Projects bin, you can create new bins for the various components that will go into your new project.

1. Double click on the **Projects** folder.

   You see an empty bin with the title **Projects** at the top (following figure).

Opening the Projects Bin

2. Next, you should create three new bins, using the same procedure you used to create the Projects bin. Name these new bins: **Digitized**, **Timelines**, and **Used Clips**.

NOTE You'll use the **Timelines** bin to save the project in process, the **Digitized** bin to store clips that have been digitized, and the **Used Clips** bin to keep clips you want to use for the project, but have not yet digitized.

When you finish your Projects bin contains three new bins (following figure).

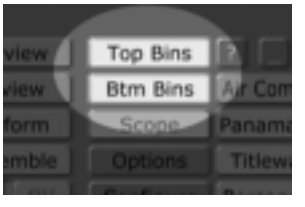
The Project Bin with the Digitized, Timelines, and Used Clips Bins

TIP

You can change the way bins display files by right-clicking on an empty area of the bin and selecting Bin Properties from the pop-up menu. There you can choose different display options. For more information, see the "Trinity Interface" chapter in the *Trinity 21. User Guide*.

Multiple Bin Views

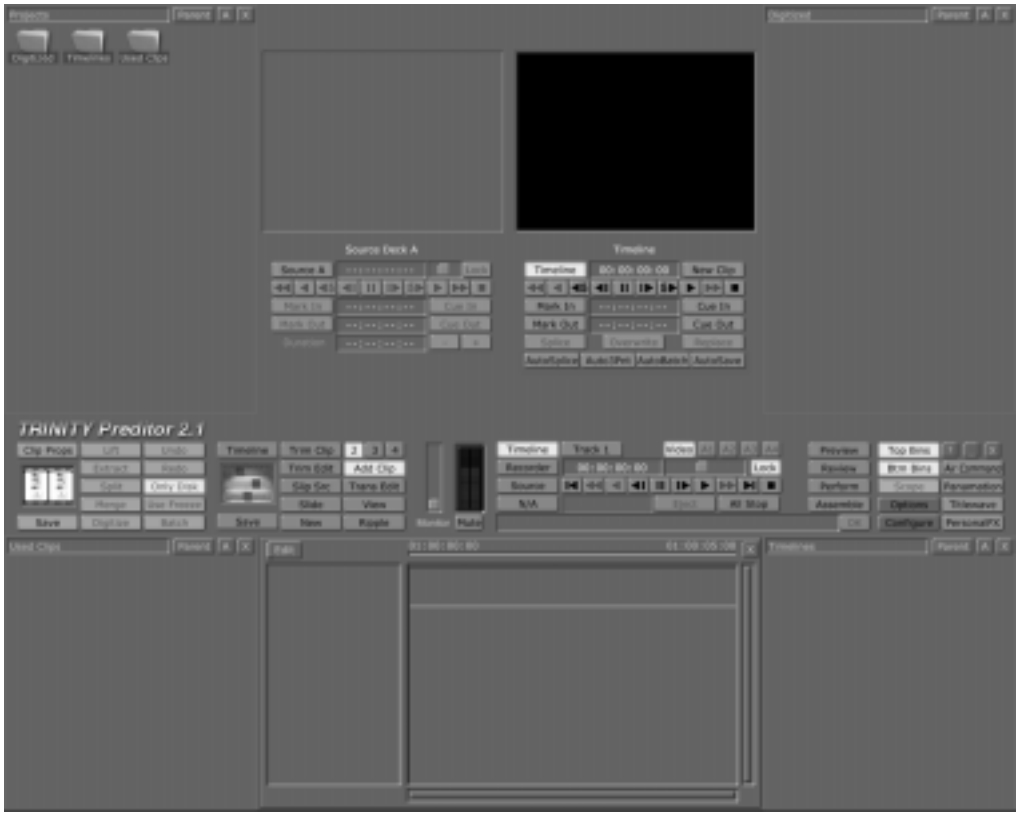
As you work on a project, you may wish to have several bins open at once. There are two buttons, Top Bins and Btm Bins (Bottom Bins), on the right side of the Preditor toolbar that quickly open or close two bin windows at once (following figure).



The Top Bins and Btm Bins Buttons

You can click on these buttons to open bin windows. Then you can navigate to the bins you need.

For example, you might decide to open the Digitized and Projects bins at the top, and the Timelines and Used Clips bins at the bottom (following figure).



Top and Bottom Bins Open

Now if you close these bin windows and reopen them by clicking on the Top Bins and Btm Bins buttons, the bin windows reopen to these same bins.

Logging The Clips

Once you have recorded your voiceover and gathered any video clips you want to use, it's time to log the clips so that they can be added to the timeline and digitized. This process is documented in detail in the tutorial on Linear Editing on page 182.

Be sure to name your clips. In this tutorial, the clip with the audio is called Voiceover.

Digitizing The Clips

Now that you logged the clips you want to use, it's a good time to digitize them for storage on Time Machine. It is not necessary to digitize a clip before using

it in the timeline, but by doing so, you eliminate the need for shuttling the VTR and ensure that the proper reels are loaded.

If you have not yet looked at the tutorial on non-linear editing, “Non-Linear Editing With Time Machine” on page 218, you might want to go back and work through it now. It explains how to digitize and batch digitize clips.

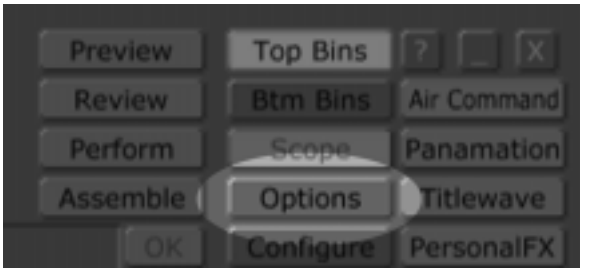
Once you digitize the clips, drag the clip picons into the Digitized bin folder you just created.

Preparing The Timeline

Now that you know where to put the various pieces of our project, it’s time to get to work on the actual timeline.

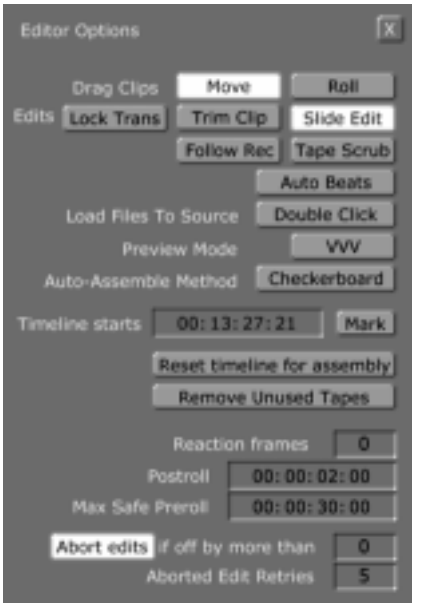
Before you add anything to the timeline, change the starting timecode number. By default, new timelines begin at 01:00:00:00, or at exactly 1 hour. You can change this number by using the Editor Options panel.

1. Click on the Options button in the toolbar (following figure).



The Options Button

The Editor Options panel opens in the upper left of the screen (following figure).



The Editor Options Panel

Use this panel to set global options for Preditor and apply them to any project you work on.

In the center of the panel, you see a field labeled Timeline starts (following figure).

The Timeline Starts Field

2. Select the 1 in 01:00:00:00 by highlighting it with the mouse.

3. Type the number 2 and press Enter on your keyboard.

   The Timeline starts timecode is updated to 02:00:00:00, and the timecode at the beginning of the timeline on your screen is also updated to 02:00:00:00.

Building The Timeline

Next you'll add 2 seconds of matte black. Put this clip on the Video 1 track by itself for now, for reasons that we'll get to later in the project.

1. Navigate to the Clips bin, and find the picon labeled Matte Black (following figure).

The Matte Black Picon in the Clips Bin

2. Double-click the Matte Black picon.

   It loads onto the timeline (following figure).

Adding Matte Black to the Timeline

   There should now be a matte black clip at the beginning of the timeline on the Video 1 track.

TIP The keyboard shortcut for placing a matte clip on the timeline is the k key. Select Matte or Black as the source for the left monitor. Press the k key, and the matte clip appears on the timeline at the location of the Position Bar. The length of the matte clip is whatever you set as the default. Set the default by

typing in the length you want in the Duration timecode field and pressing Enter on your keyboard. Then, right-click on the Duration timecode field, and choose Save as default value from the pop-up menu. The default setting is 1 second. (You can also set a default length for framestores if Frame is selected as your source.)

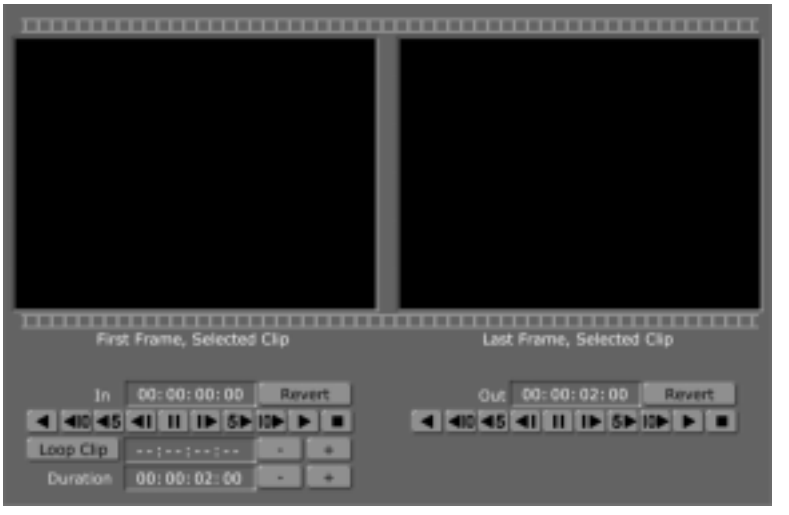
You'll want to adjust the duration of the matte black to 2 seconds. To do this, use Preditor's Trim Clip editing feature.

1. If the matte black clip is not selected, click on it to select it.

2. Click the Trim Clip button on the Preditor toolbar (following figure).

The Trim Clip Button

The Trim Clip monitors and controls appear (following figure).



The Trim Clip Monitors and Controls

Since this clip is matte black, each monitor is black. Not very interesting, but in this case just what you want.

3. Adjust the duration of the clip to 2 seconds by typing 00:00:02:00 into the Duration field directly under the left monitor, or by clicking on the + or - buttons next to the Duration field (following figure).

Changing the Clip Duration

You can also change the duration of the matte black clip by clicking-and-dragging on its trimming handle until the timecode reads 00:00:02:00.

Adding The Voiceover Clip

At this point, you will drop the voiceover clip onto the timeline so that you can begin choosing the edit points.

1. Open the Projects/Used Clips bin where you saved the Voiceover clip, or the Digitized bin if you already digitized the Voiceover clip.

2. Drag-and-drop the Voiceover clip picon to the beginning of the timeline on the track below the matte black clip.

   You can be sure that you are dropping the clip at the very beginning of the timeline when the Position Bar turns yellow.

   Now the timeline contains the Voiceover clip and the matte black clip (following figure).

Timeline with Voiceover Clip Added

3. Click the + button next to the Video 2 track to display the audio tracks of the Voiceover clip (following figure).

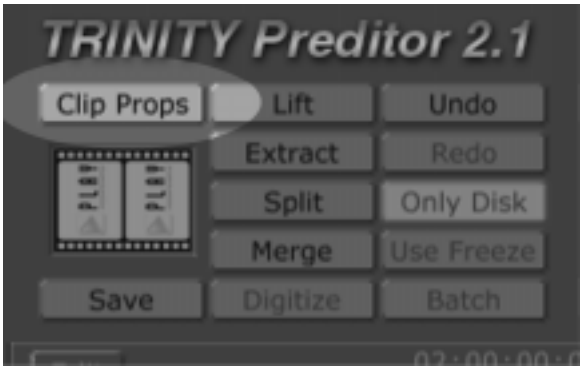
Audio Tracks of Voiceover Clip

Stripping The Video

For the time being, you aren't interested in the video part of the voiceover clip. You can strip the video by changing the clip properties in the Clip Main Properties panel.

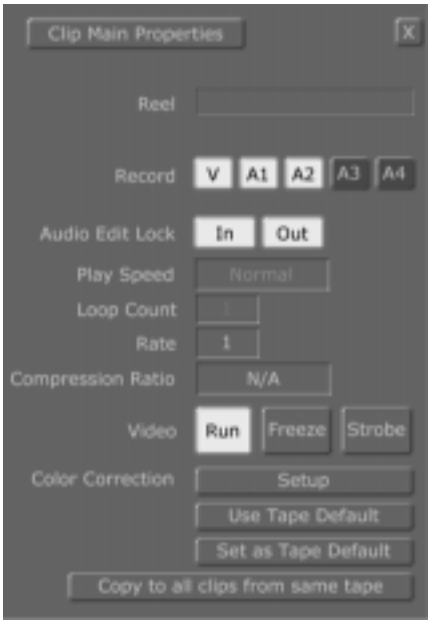
1. If it is not already highlighted, select the Voiceover clip by clicking on it.

2. Click the Clip Props button in the toolbar (following figure).



The Clip Props Button

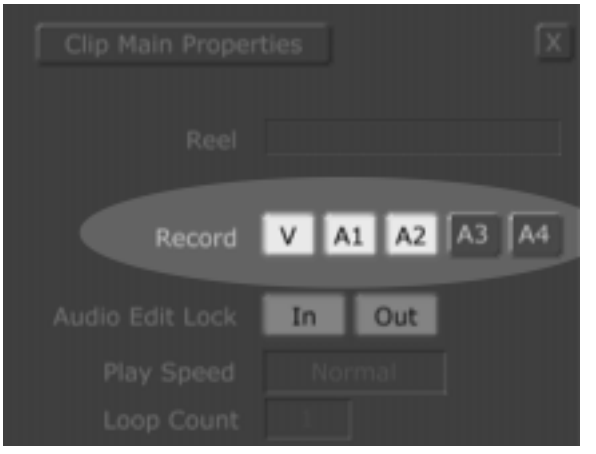
The Clip Main Properties panel opens (following figure).



The Clip Main Properties Panel

TIP You can also open the Clip Main Properties panel by selecting a clip, right-clicking on it, and selecting Properties from the pop-up menu.

Just below the Reel Name is a row of buttons labeled Record (following figure).



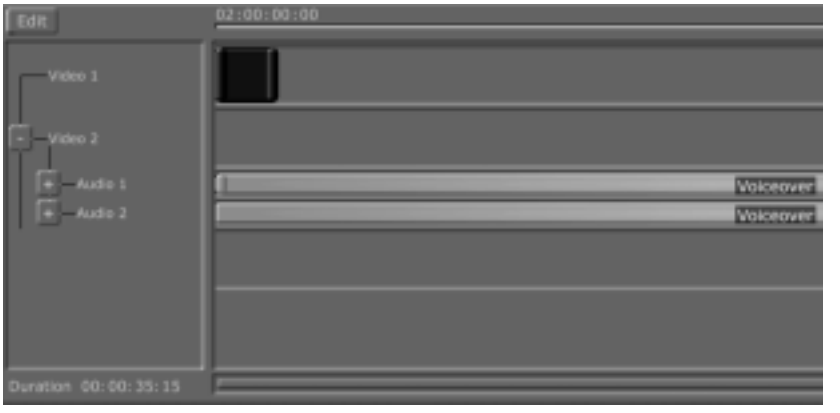
The Clip Record Buttons

These buttons tell Preditor which components of the clip (Video and Audio tracks 1-4) you wish to record.

3. Click the V (video) record button to turn off the video portion of the Voiceover clip.

4. Close the Clip Main Properties panel by clicking on the X button in the upper right corner.

   Notice that the Voiceover track on the timeline now has no video track (following figure).



Voiceover Clip with Video Turned Off

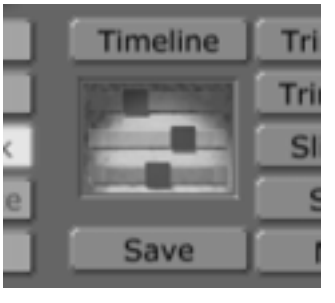
Now as you work with the clip, you will use only the audio portion.

Saving The Timeline

This is a good time to save the current timeline. Saving your work frequently is a good habit to develop. If a project doesn't seem to be heading in the right direction, you can simply go back to an earlier version and start from there.

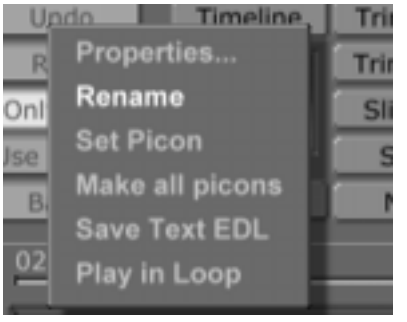
Before you save the timeline, rename it.

1. Find the timeline picon in the Timeline Controls on the toolbar (following figure).



The Timeline Picon

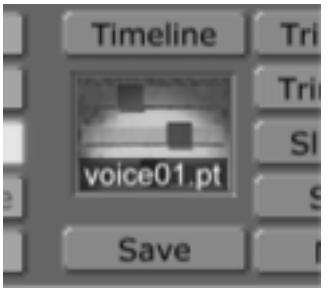
2. Right-click on the picon and choose **Rename** from the pop-up menu (following figure).



Choosing Rename from the Pop-Up Menu

A cursor appears in the name on the Timeline Picon in the toolbar.

3. Type in voice01 and press Enter on your keyboard to name the timeline (following figure).



The New Name for the Timeline

The file extension .ptl (Preditor timeline) is added to the file name.

4. Open the Timelines bin folder you created earlier. Use the Top Bins or Btm Bins buttons to quickly display bins if necessary.

5. Drag-and-drop the timeline picon into the Timelines bin.

   You see a picon labeled voice01.ptl in your Timelines bin (following figure).

The New Picon in the Timelines Bin

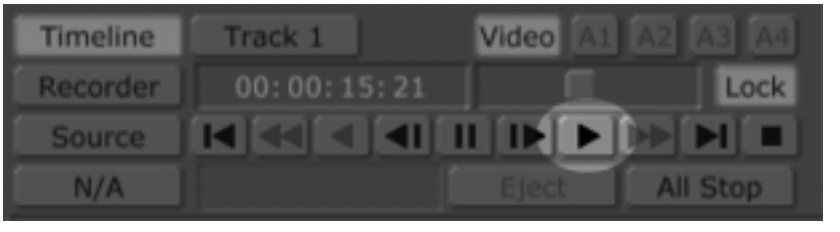
As you continue to work on the project, you can save future versions as voice02, voice03, etc.

Monitoring The Audio

You are almost ready to begin editing, but first listen to your audio. Do this by playing back the timeline and using the Audio Monitor feature.

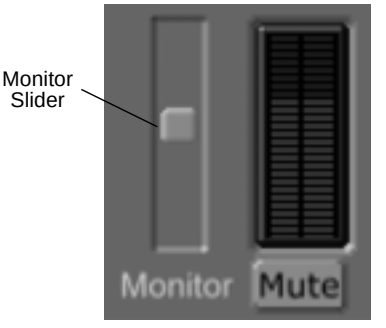
1. Make sure that the reel with the Voiceover clip is in the source VTR.

2. With the Timeline button on in the Main Controls, press the Play button (following figure).



The Play Button

The timeline plays, but you may not hear the audio. You need to adjust the Audio Monitor level (following figure).



The Audio Monitor Slider

3. Move the Monitor slider up until you can hear the Voiceover audio.

   The slider ranges from a value of Off at the bottom to +0.0dB at the top.

NOTE The monitor slider affects only the audio volume from the monitor outputs of the Trinity audio mixer.

Cutting With Auto Beats

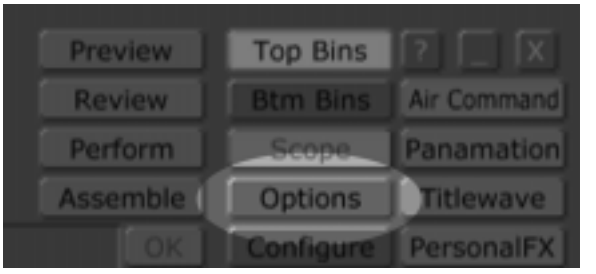
Once you have determined that the audio portion of the project meets your requirements, it is time to begin editing.

For projects cut to audio, Preditor has a feature called Auto Beats.

With Auto Beats, you can listen to the audio and press a key whenever you reach a place where you want an edit to occur. This puts a placeholder on the timeline. Once you have the edits timed to the audio, you can replace the placeholders with video clips.

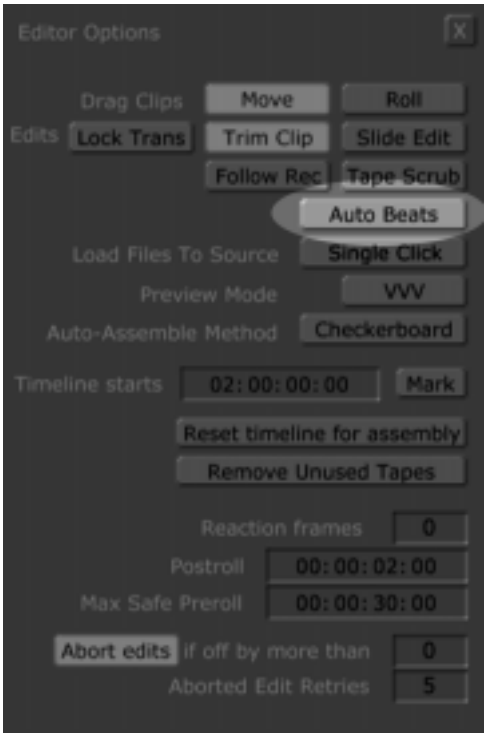
To use Auto Beats, do the following:

1. Click on the Options button (following figure).



The Options Button

The Editor Options panel opens in the upper left of the screen (following figure).

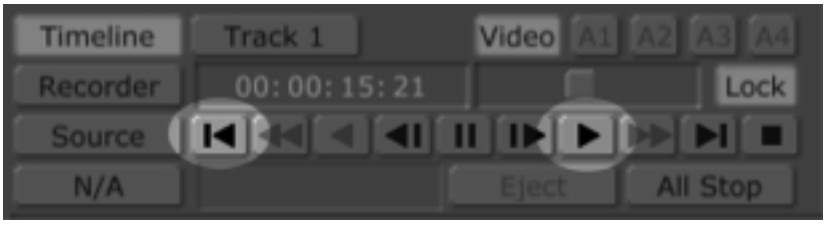


The Editor Options Panel

2. Click on the Auto Beats button (previous figure) to turn it on.

Now you'll begin making edits. You'll need to play the timeline again.

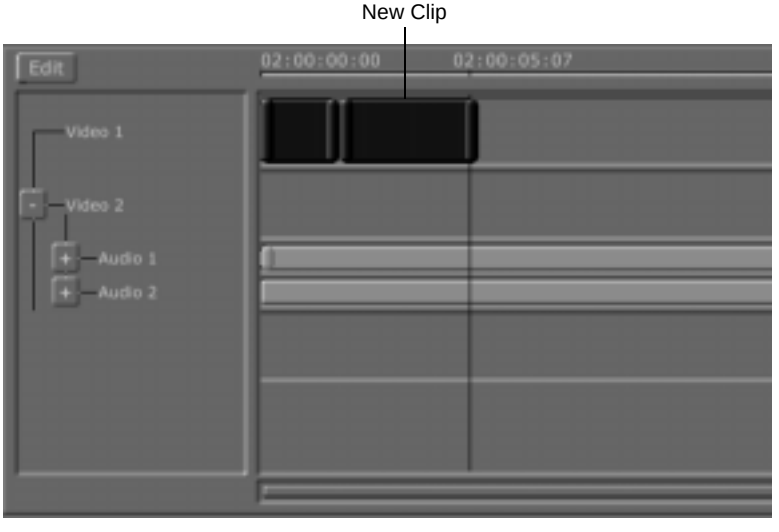
1. Make sure the timeline is at the beginning (press the **First Frame** button if necessary), then press the **Play** button (following figure).



The First Frame and Play Buttons

2. Listen to the audio as the timeline plays back. When you hear a place where an edit should occur, press the **m** key on the keyboard.

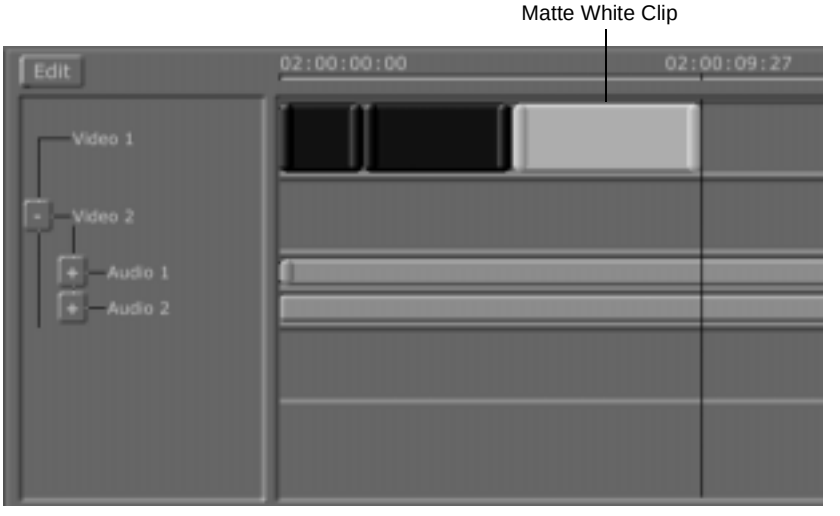
   A new clip of matte black appears on the timeline (following figure).



Adding a Clip Using Auto Beats

3. Continue playing back the timeline, pressing the **m** key when you hear where the next edit should take place.

You see a clip of matte white next to the clip of matte black (following figure).



Adding the Second Clip

4. Continue playing back the timeline, pressing the **m** key at each edit point.

   When you reach the end of the timeline, you see a track of alternating clips of matte black and matte white (following figure).

The Finished Timeline

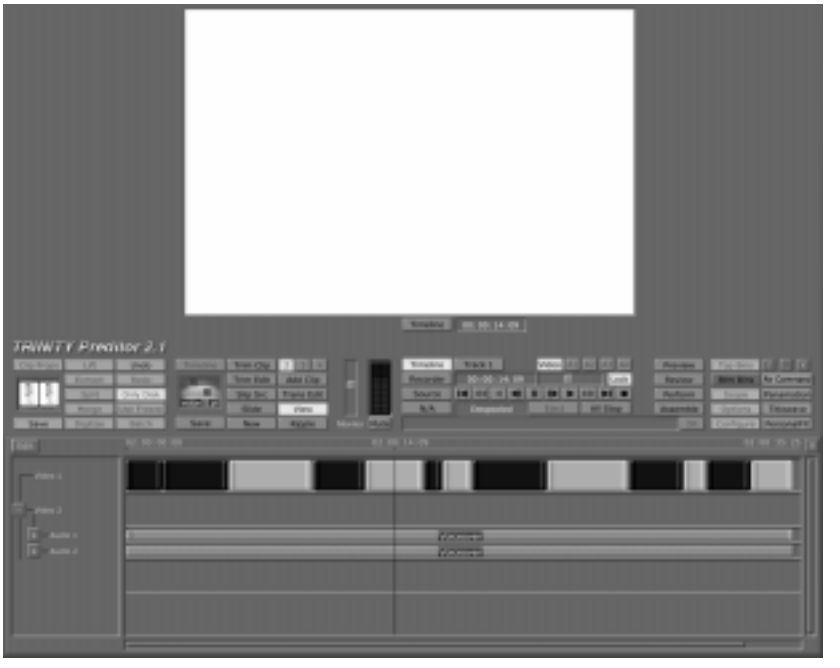
5. Save the timeline as **voice02** and drag it into the **Timelines** bin.

Next, you'll check to see how well your edits match up. To do this, you'll play the timeline again and view the cuts between the matte black and matte white clips.

1. First, turn on View mode by clicking the **View** button on the toolbar (following figure).

The View Button

This opens View mode, which has a large on-screen monitor so you can get a good look at your output (following figure).



Preditor in View Mode

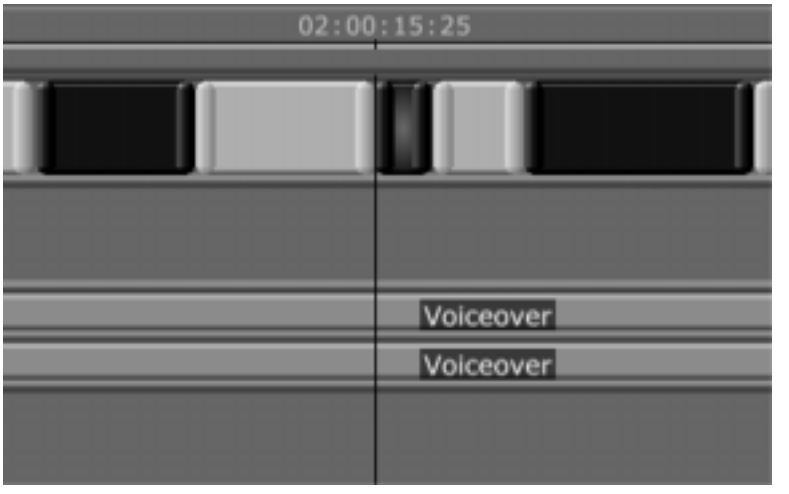
2. From the timeline controls, press the **Play** button again.

   The timeline plays back once more, but this time you can watch the cuts between the black and white clips to see if they occur at the correct times in the voiceover.

Trimming Edits

As you play back the timeline, you may notice that some of the edits (in this case a cut between matte black and matte white) don't occur quite when you want them to. There's nothing to worry about if this is the case — it's easy to fix.

When we played back the timeline we made, we noticed that the cut between the two clips at 02:00:15:25 (following figure), would match up better with the voiceover if it happened 3 frames later in the timeline.



Timeline Detail at 02:00:15:25

Although your edits will be at different timecode numbers, you can follow the same procedure to adjust them.

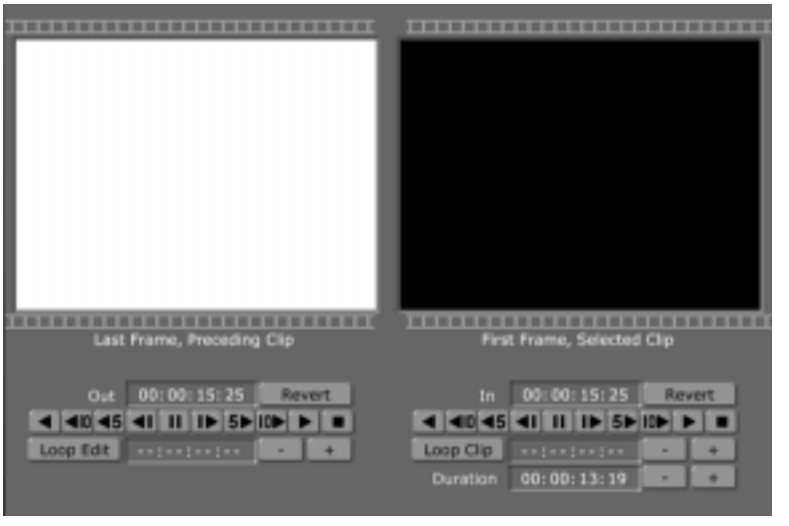
In this example, we move this edit ahead three frames, to 02:00:15:28, by using Preditor's Trim Edit feature. To do this, do the following:

1. Click on the second clip of the edit (in this case the black one) to select it.

2. Click the Trim Edit button on the toolbar (following figure).

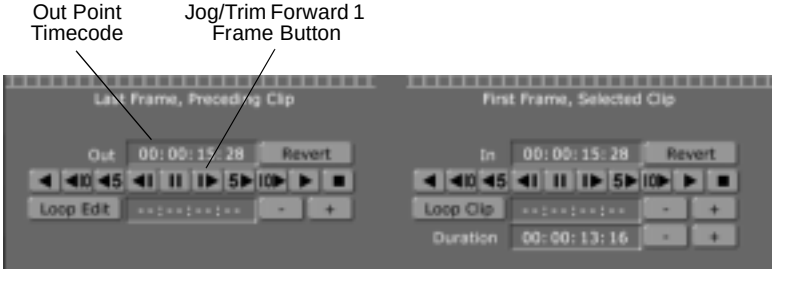
The Trim Edit Button

You see two monitors (following figure), one displaying a matte white clip (ours has an *out* point of 02:00:15:25), and one displaying matte black (ours has an *in* point of 02:00:15:25).



The Trim Edit Mode Displaying a Matte White and Matte Black Clip

3. Under the monitor labeled **Last Frame, Preceding Clip**, click the **Jog/Trim Forward 1 Frame** button three times (see figure).



The Jog/Trim Forward 1 Frame Button

The out point timecode for the preceding (white) clip now reads 00:00:15:28. The in point of the selected (black) clip has also changed to read 00:00:15:28.

4. Change any edits on your timeline that need it, checking the timeline by playing it back as you go. Be sure to save the timeline again when you finish.

Adding Clips

When you get the timing of your edits right, it's time to add some visual elements. To do this, you will replace the matte black and matte white clips with your video clips.

To add your video clips to the timeline, drag the picons of your video clips from your **Digitized** or **Used Clips** bins and drop them on the matte clips. The video clips replace the matte clips (following figure).

Video Clips Replace the Matte Clips on the Timeline

NOTE You can drop live clips or stills onto the matte clips, and they are automatically trimmed to the length of the clips they replace.

As you continue to build your project, remember to save your timeline frequently.

Adding A Soundtrack

One important element of the project that has yet to be addressed is the soundtrack. Most commercials have some kind of music, and yours should be no exception.

Next you will add the Soundtrack clip you chose earlier.

1. Open the **Used Clips** bin where you saved the Soundtrack clip, or the **Digitized** bin if you have already digitized it.

2. Click on the Soundtrack picon and drag it to the beginning of the timeline on the track below the Voiceover clip and drop it.

You can be sure that you are dropping the clip at the very beginning of the timeline when the Position Bar turns yellow.

The timeline now contains the Soundtrack clip in addition to the Voiceover track and video clips (following figure).

Timeline with Soundtrack Clip Added

3. Click the + button next to the Video 3 track to display the audio tracks of the Soundtrack clip (following figure).

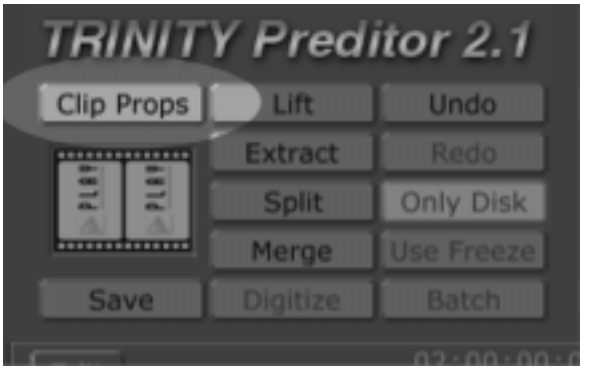
Soundtrack with Audio Tracks Visible

Stripping The Video

Once again, you aren't interested in the video part of this clip. You can get rid of it by changing the clip properties.

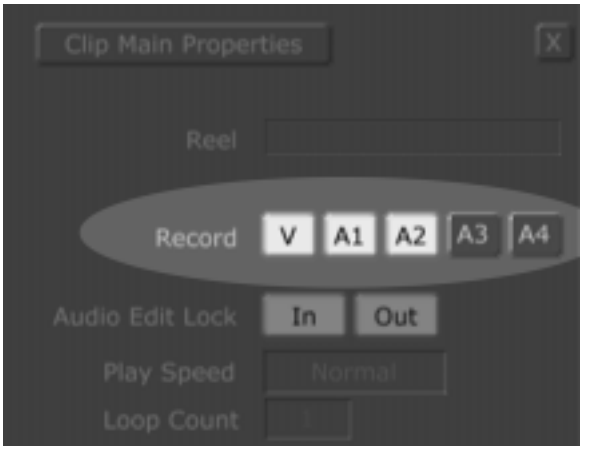
1. If it is not already highlighted, select the Soundtrack clip by clicking on it.

2. Click the Clip Props button (following figure) to open the Clip Main Properties panel.



The Clip Props Button

Just below the Reel Name is a row of buttons labeled Record (following figure).



The Clip Record Buttons

These buttons tell Preditor which components of the clip (Video and Audio tracks 1-4) you wish to record.

3. Click the V Record button to turn off the video portion of the Soundtrack clip.

4. Close the **Clip Main Properties** panel by clicking on the X in the upper right corner.

   The Soundtrack clip now appears just below the Voiceover clip with no video track present (following figure).

The Soundtrack Clip Stripped of Video

5. Save the timeline.

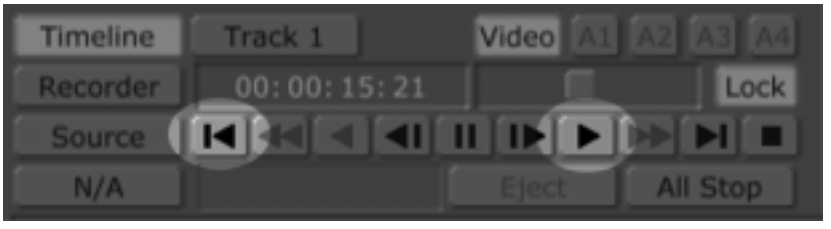
Checking The Timeline

It's time to review the project again now that the soundtrack has been added.

1. Turn on View mode by clicking the **View** button (following figure).

The View Button

2. Press the **First Frame** button to rewind the timeline, then press the **Play** button (following figure).



The First Frame and Play Buttons

Adjusting Audio Levels

As you play back the project, you will probably notice that the voiceover and soundtrack are competing with each other — meaning that the levels on the soundtrack need to be reduced.

You will correct this by adding keyframes for the Soundtrack audio and adjusting the behavior of those keyframes.

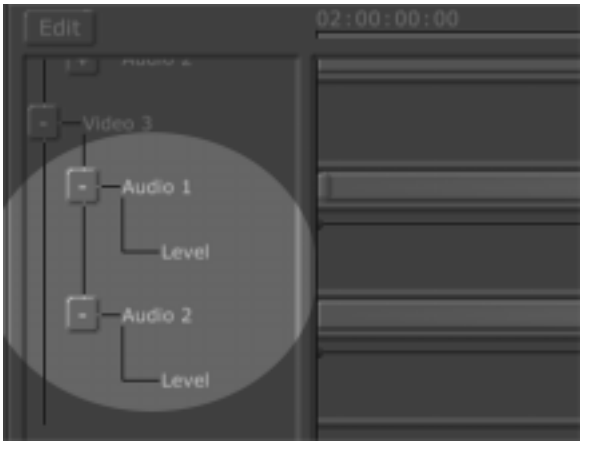
First you need to expand the audio tracks on the Soundtrack clip.

1. Under the **Video 3** track, click on the + next to the **Audio 1** and **Audio 2** tracks (following figure).

Expanding the Audio Tracks of the Soundtrack Clip

2. Use the timeline scroll bar to move to the bottom of the timeline if the tracks are not visible.

   Once you have expanded the Audio 1 and Audio 2 tracks, you see a new track called Level for each (following figure).



The Levels Tracks of the Soundtrack Clip on the Timeline

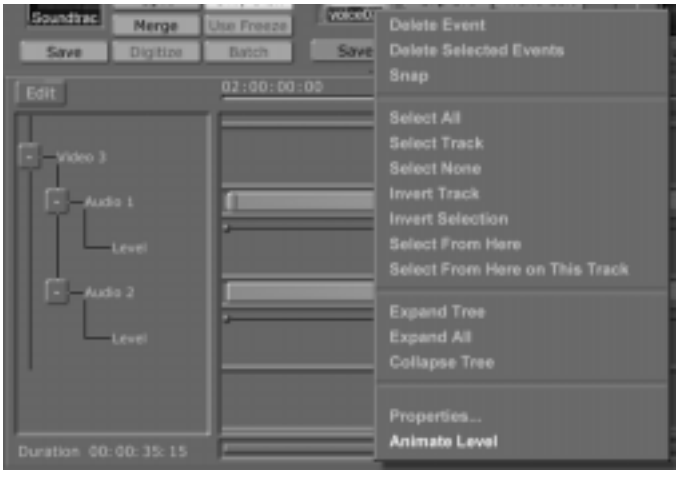
If you look at each Level track on the timeline, you see a dot at each end of the track, connected by a straight black line (following figure). The dots on the track represent the keyframes that are automatically inserted at the beginning and ending of each clip.

Close Up of the Levels Track

In this case, you want to lower the audio levels for the soundtrack, so that it doesn't overwhelm the voiceover. You can do this by changing the value of the keyframes at each end of the Levels tracks for Audio 1 and Audio 2.

The first step is to animate the Levels values of the Soundtrack clip. This tutorial covers the Audio 1 track here; you'll need to repeat these steps for the Audio 2 track as well.

1. Right-click on the Audio 1 track of the Soundtrack clip and select Animate Level from the pop-up menu (following figure).



Animating Level from the Pop-Up Menu

By selecting Animate Level, you have made it so that you can change the Levels values for the Audio 1 track.

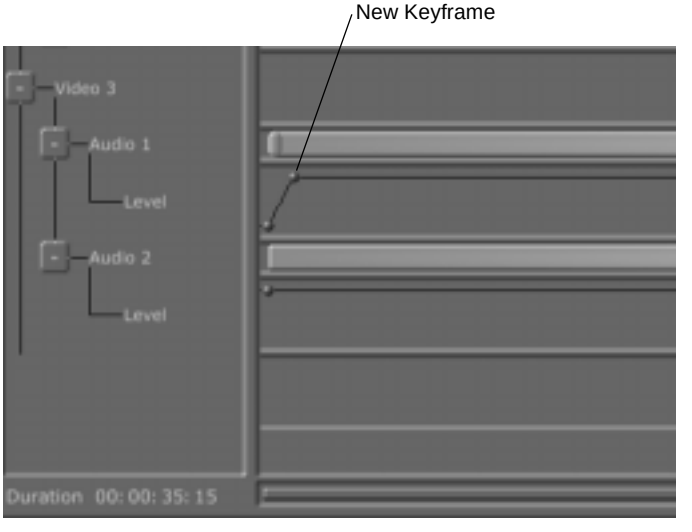
For this project, the Soundtrack audio fades up to full value for a few seconds, then fades down to background levels as the voiceover begins.

Next you will add a fade in.

1. Right-click in the Audio 1 track of the Soundtrack clip again, but this time choose Add Fade In from the pop-up menu (following figure).

Adding a Fade In from the Pop-Up Menu

You see that a new keyframe has been added to the Audio 1 track (following figure)



Fade In Added

Now that you set the soundtrack to fade in at the beginning of the clip, you need to move the levels down where the voiceover begins.

You will do this by adding a dip. But first, we need to talk about selecting a single keyframe.

Selecting A Keyframe

Keyframes are red unless they are selected. When they are selected, they are blue. When you select a clip, all of its keyframes are automatically selected, meaning they all turn blue. If you want to work with one keyframe on a clip at a time, you must first deselect the clip by clicking somewhere else in the timeline.

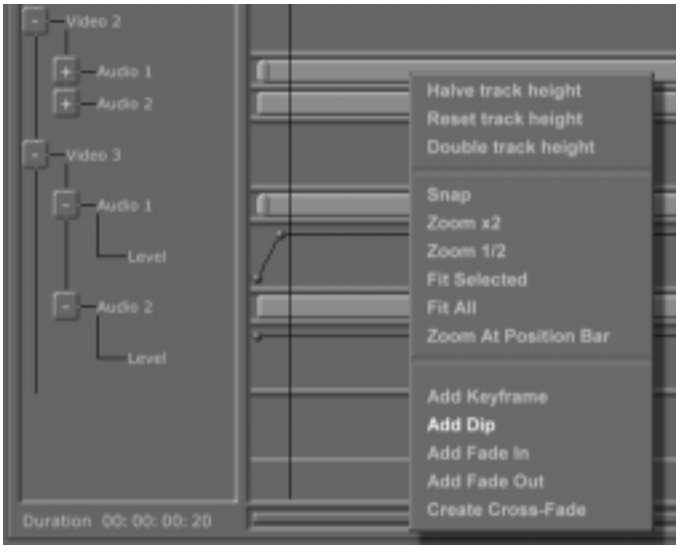
1. Click in the timeline to deselect the soundtrack clip.

2. Click on the second keyframe on the Audio 1 track (following figure).

Selecting a Keyframe

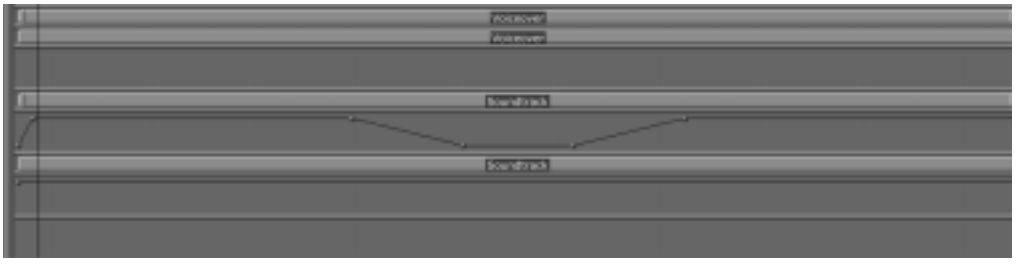
The keyframe turns from red to blue and you see a pop-up window displaying the audio level at that keyframe.

3. Right-click on the same keyframe and select Add Dip from the pop-up menu (following figure).



Selecting Add Dip

4. The level for the Audio 1 track now dips down after the initial fade in (following figure).



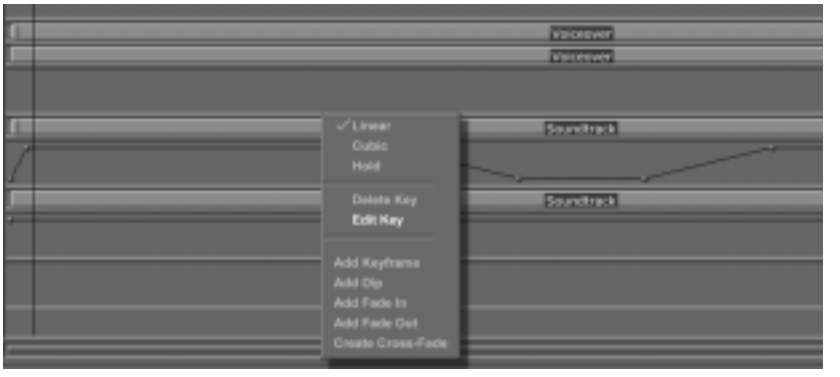
The Dip in the Levels Track

Editing Individual Keyframes

Although there is now a very handy dip in your timeline, you may want to adjust it. You will do that next with the Edit Key panel.

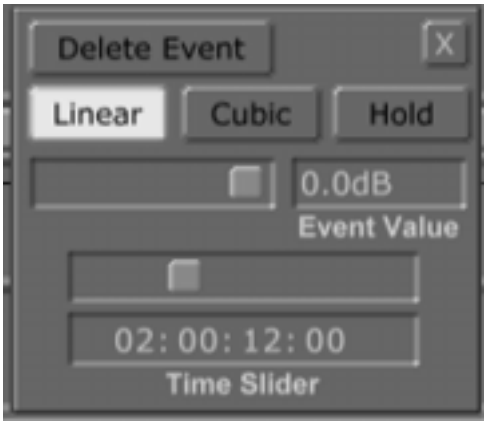
1. Select the third keyframe (it's the first keyframe of the dip).

2. Right-click on it and select Edit Key from the pop-up menu (following figure).



Selecting Edit Key

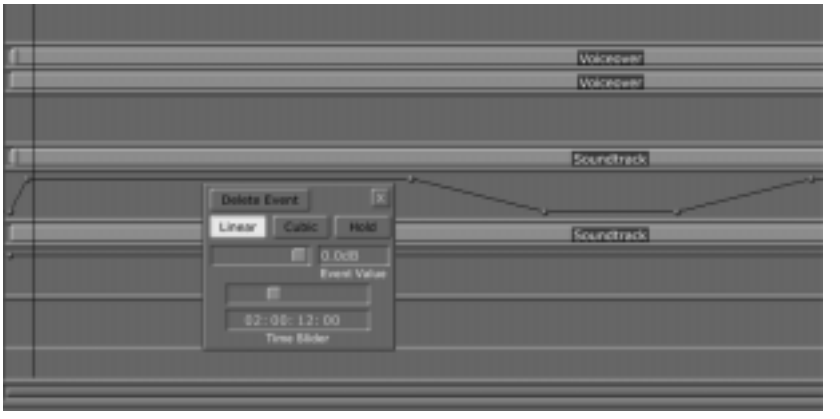
The Edit Key panel appears in the upper left of the timeline window (following figure).



The Edit Key Panel

This panel provides tools to fine-tune keyframes. It is a floating panel, so it can be dragged anywhere on the interface.

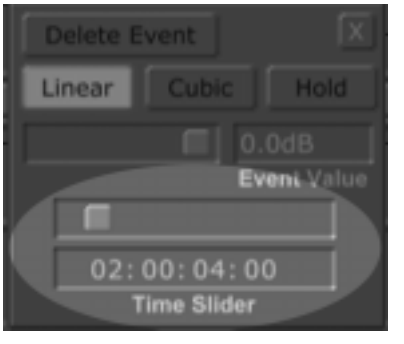
3. Click at the top of the Edit Key panel and drag it to a convenient place on the timeline (following figure).



Repositioning the Edit Key Panel

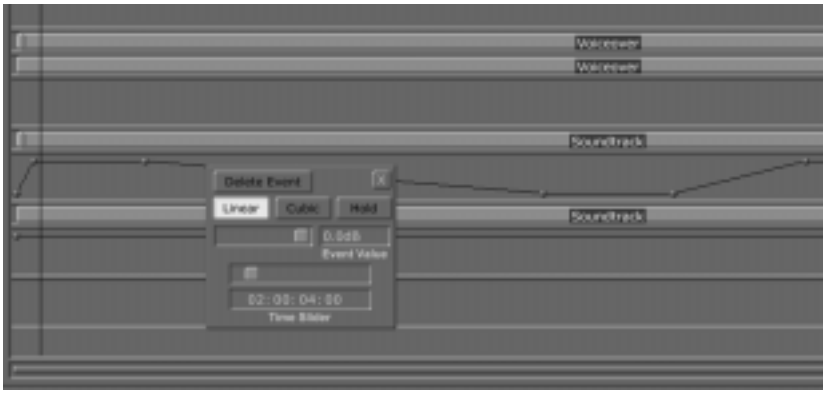
The first thing you will do is move the keyframe back on the timeline.

4. Making sure the first keyframe of the dip is still selected, click on the timeline slider of the Edit Key panel and drag it to the left. Or, type in the timecode number where the keyframe should appear (following figure) and press Enter on your keyboard.



The Time Slider

In this example, the keyframe position is changed from 02:00:12:00 to 02:00:04:00 (following figure).

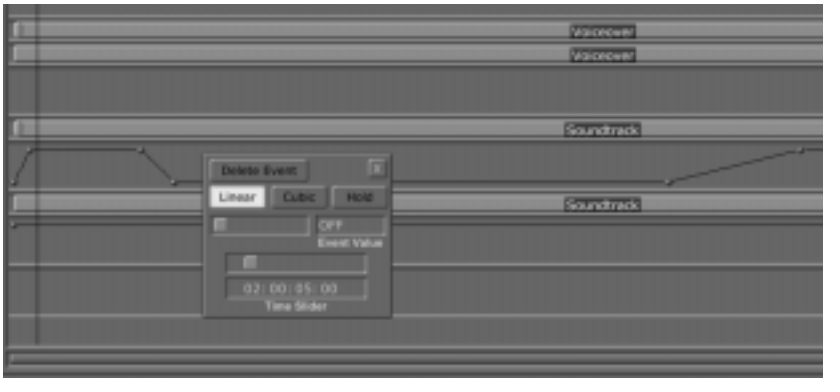


Repositioning a Keyframe

For the second keyframe of the dip, you will change both its position on the timeline and its value.

1. Click on the second keyframe of the dip to select it.

2. Move the second keyframe of the dip until it is about 1 second after the previous keyframe (following figure)



Repositioning the Second Keyframe of the Dip

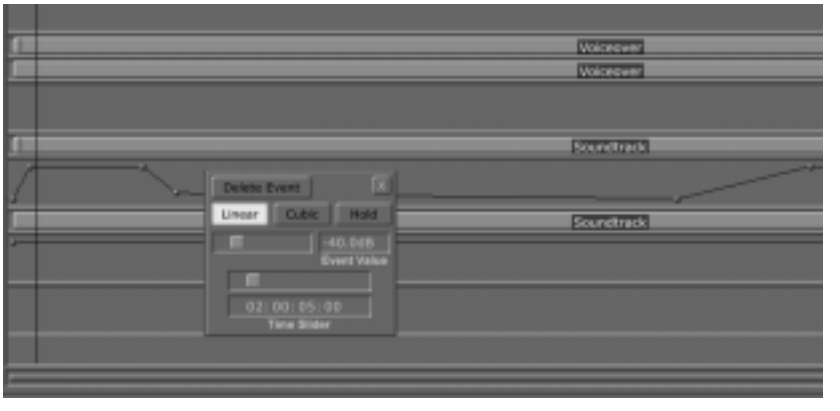
In the example, that puts the second keyframe at 02:00:05:00. But it's still not quite right. Look at the middle of the Edit Key panel (following figure).

The Event Value and Slider on the Edit Key Panel

You see a slider and a field labeled Event Value. The field reads Off, meaning that at this keyframe the soundtrack is not heard at all. But you don't want the level set to Off, you just want to lower it to background levels.

3. Click on the slider and drag it to the right until the Event Value is approximately -40.0dB.

   Now when the dip starts, the audio fades from full to background levels during a 1-second fade (following figure).



The First Part of the Dip with the New Values

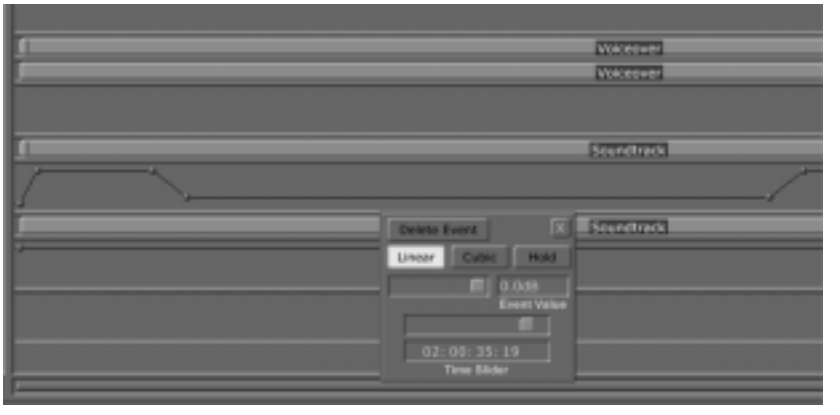
Finally, you just need to tidy up the last two keyframes in order to finish the job.

1. Click on the next keyframe, and move it about 17 seconds after the first one (in the example this puts it at 02:00:22:00).

2. Set its value to approximately -40dB.

3. Click on the next keyframe of the dip and move it about 1 second later than the previous keyframe (02:00:23:00 in the example). Do not alter the value from 0.0dB.

   The dip now resembles the one in the following figure.



The Finished Dip

That's one channel of the soundtrack done; to finish, repeat this procedure for the Audio 2 track.

NOTE You can also adjust keyframes by clicking-and-dragging them with the mouse. You can both drag them back and forth to change their position in time and up and down to change the audio level.

Fine Tuning For some projects, you may choose to use only one track for your audio. For example, our voiceover track could have voice in the right channel and soundtrack in the left. Using two channels each for the soundtrack and the voiceover as you did gives you a lot of flexibility when it comes time to add stereo effects, incidental sound, etc.

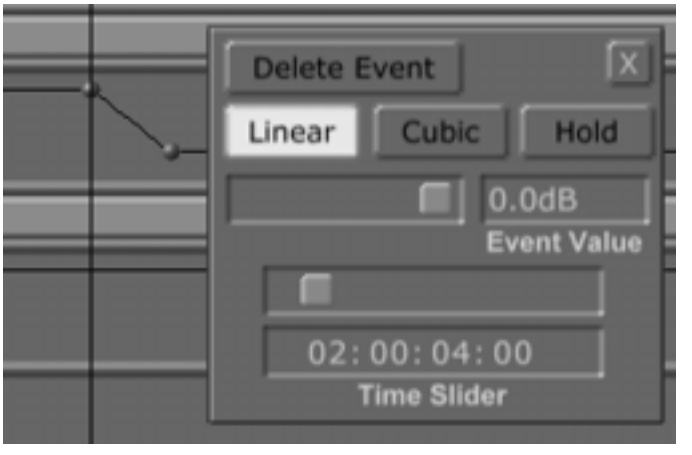
Keyframe Types

One setting you can adjust is the rate of transition between keyframe levels. You do this in the Edit Key panel using three buttons labeled Linear, Cubic, and Hold. These buttons assign different rates of transitions to keyframes.

The following illustrations show what these settings do.

Linear Keyframes

This is the default keyframe setting (following figure). The value changes from one keyframe to the next at a constant rate.

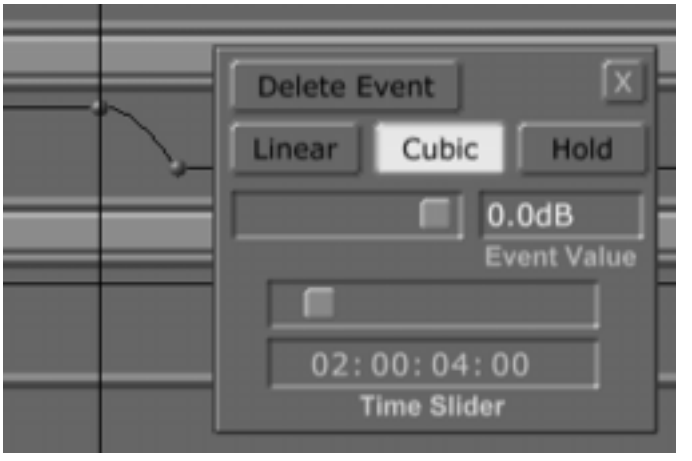


Keyframe with Linear Setting

The Linear setting works well with faster editing styles.

Cubic Keyframes

The Cubic keyframe setting (following figure) provides a more gradual transition between one keyframe and the next.



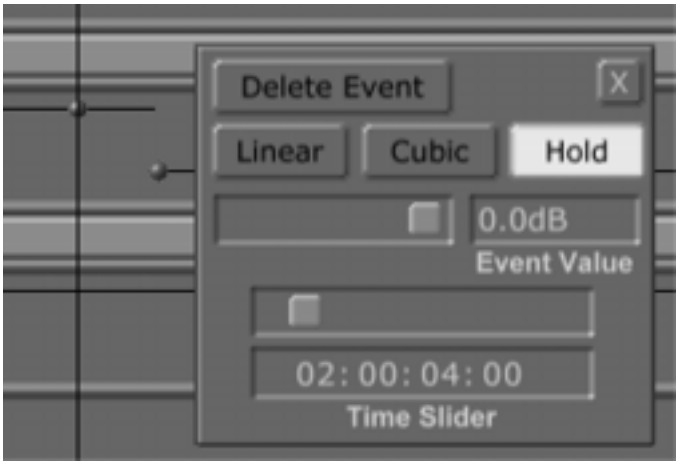
Keyframe with Cubic Setting

The exact behavior of the keyframe is affected by the setting (Linear, Cubic, or Hold) of the previous and following keyframes.

The Cubic setting lends itself to a slower style of editing where more dissolves or wipes are employed.

Hold Keyframes

The hold keyframe setting (following figure) locks a keyframe to the Event Value you set until the next keyframe is encountered.



Keyframe with Hold Setting

There is no transition between the two values when using Hold. At one frame the value is at the first level, and at the next it jumps to the new level. This setting works well when an especially jarring effect is desired.

Using Audio Edit Lock

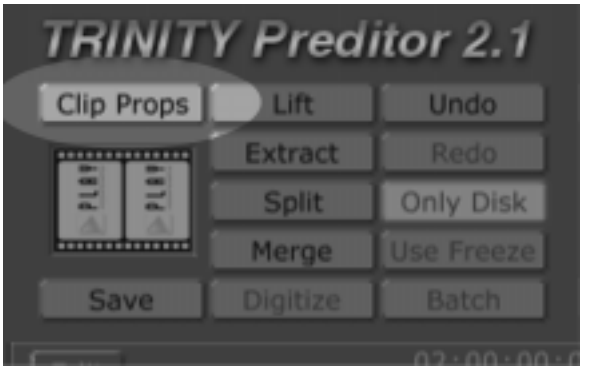
Before closing this project, take a look at a trick you might find useful. At the beginning of the project, you did not use the video track of the Voiceover clip.

But what if you want to use only a part of it? Is there a convenient way to do this? Yes. You can put any portion of the Voiceover track back in the project by using the Clip Main Properties panel again. Before you try this, you must make sure that none of your video clips are in the Voiceover (Video 2) track.

1. Be sure to save the timeline if you haven't done so recently.

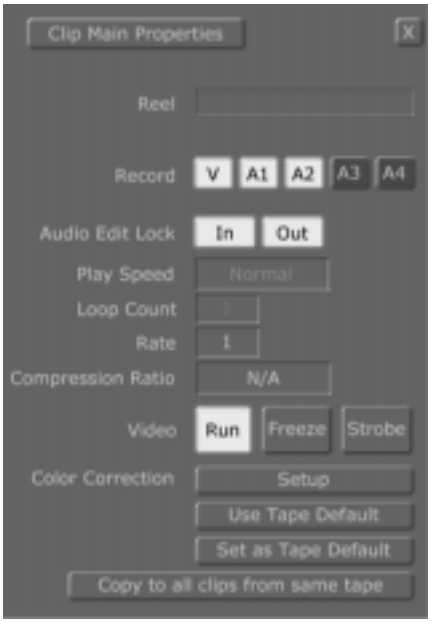
2. If it is not already highlighted, select the Voiceover clip by clicking on it.

3. Click the Clip Props button (following figure).



The Clip Props Button

The Clip Main Properties panel opens (following figure).



The Clip Main Properties Panel

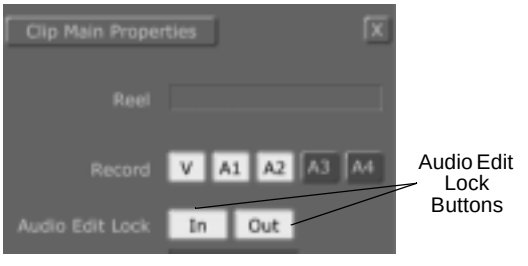
4. Click on the V button to turn back on the video track.

You see the video portion of the Voiceover clip re-appear in the Video 2 track (following figure).

Restoring the Video for the Voiceover Clip

Keep the Clip Main Properties panel open. Next you will use it to unlock the audio tracks from the video track.

1. Click on the Audio Edit Lock In and Out buttons (following figure) to turn them off.

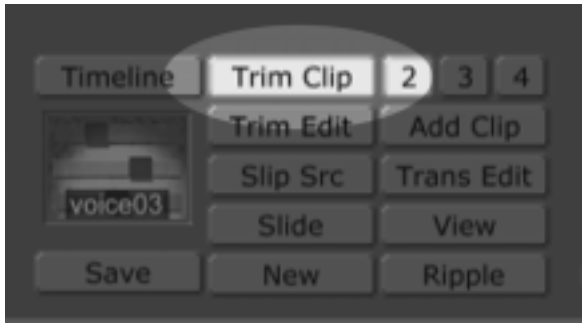


Audio Edit Lock Buttons

This allows you to change the length of the video clip without affecting the length of the audio.

Use a portion of the video track of the Voiceover clip at the beginning of the timeline. Once you have turned off the Audio Edit Lock In and Out buttons, you can trim the clip to fit your needs.

2. Click the Trim Clip button (following figure) to put Preditor in Trim Clip editing mode.



The Trim Clip Button

You want the video to accompany the voiceover from approximately 1 second into the timeline to approximately 8 seconds in, or roughly 7 seconds worth.

3. Click and drag the left trimming handle of the video track of the Voiceover clip to approximately 02:00:01:00.

4. Click and drag the right trimming handle of the video track of the Voiceover clip to approximately 02:00:08:00.

   You now have only a portion of the Voiceover clip in the timeline (following figure).

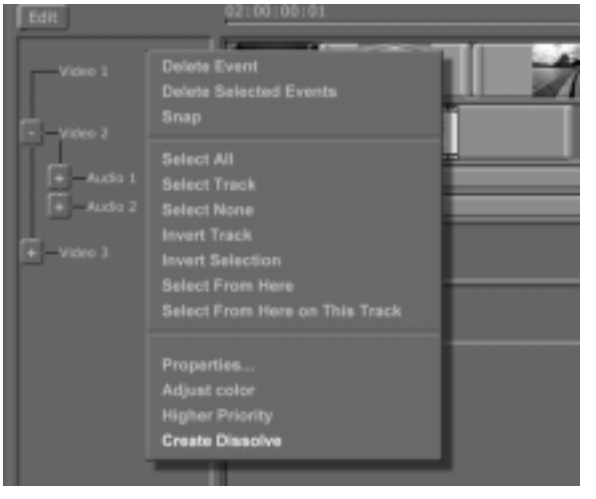
The Trimmed Video Track of the Voiceover Clip

TIP If you need to use more than one (non-contiguous) portion of a video track with the Audio Edit Lock features turned off, you can divide the clip by moving the Position Bar to a place where the clip can be safely split, right-clicking and selecting Split at PosBar from the pop-up menu. You then have two clips which occupy the same space on the timeline as the original clip. You can then drag the in and out points of each of the new clips independently. (See the tutorial on “Unlocking The Reporter Clip’s Audio” on page 336 for instructions on how to use the Audio Edit Lock buttons.)

Next you will add a dissolve between the matte black clip and the Voiceover clip.

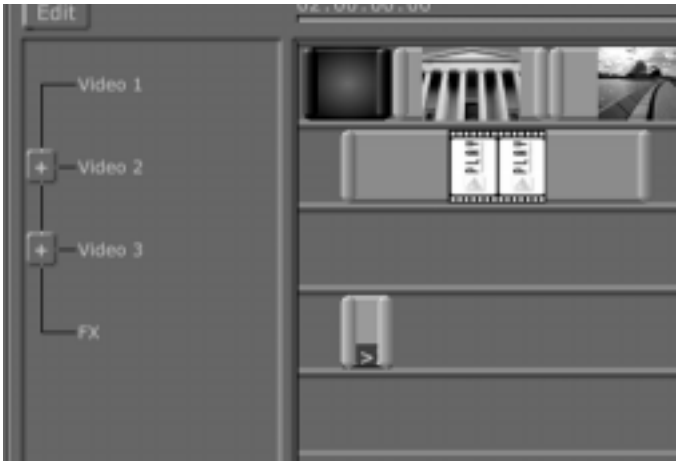
1. Click on the matte black clip at the beginning of the Video 1 track to select it.

2. Right-click on the matte black clip and select Create Dissolve from the pop-up menu (following figure).



Adding a Dissolve from the Pop-Up Menu

There is now an FX track on the timeline with a dissolve (following figure).



Dissolve Added to the Timeline

3. Click the Voiceover clip and select Create Dissolve again.

   This adds another dissolve to the FX track at the end of the clip (following figure).

Adding a Second Dissolve

You placed part of the Voiceover video clip back on the timeline, but the way the timeline is now, it still won't play. That's because there are other clips on

the track above. So, there's one more concept you should know, and it's an important one: priority.

Understanding Priority

When two events of the same kind are on the timeline at a given time, the one that is closer to the top has higher priority. This means that the clip at the top is played and recorded, and the clip below is ignored. You can change the priority for a clip.

To change a clip's priority, do the following:

1. Click on the Voiceover clip on the timeline to select it.

2. Right-click on the Voiceover clip and choose **Higher Priority** from the pop-up menu (following figure).

Setting Higher Priority

By setting higher priority for the Voiceover clip, you tell Preditor that this clip takes precedence over any other clip at the same position on the timeline. In the example, if higher priority is not set for the Voiceover clip, the clip on the Video 1 track begins playing at the conclusion of the dissolve. This creates a nasty jump cut, with another when the second dissolve begins.

Wrapping Up

In this tutorial, you learned how to edit video to fit an audio track, as well as some of the basics of editing in Preditor.

In terms of working with audio, you learned how to strip out the video from a clip, monitor audio, use the Auto Beats function, animate and adjust audio levels, adjust keyframes, use different types of keyframes, and perform split audio edits by unlocking the Audio Edit Lock In and Out buttons.

General editing concepts you learned are setting up bins for a project, saving timelines, using Trim Clip and Trim Edit modes, and working with clip priority on the timeline.

L-Cuts: Complete Voiceover

This tutorial shows you how to create L-cuts with clips in Preditor's timeline. L-cuts are edits that cut from one video source to another while continuing to use the audio track from the first video source. There are two parts to this tutorial. The first part shows you how to create a complete voiceover using an L-cut. The second part shows you how to create a partial voiceover with an audio transition.

You can see a good example of an L-cut being used for a complete voiceover in a pre-produced news segment. In this situation, the cut begins with a shot of the reporter introducing a scene. The video then cuts to the scene while the reporter continues speaking over the scene's footage. Once the scene finishes, the video returns to the reporter.

The tutorial edits two digitized clips. One clip is the clip that has footage of the reporter. The other clip has footage from a scene. The clip that contains the scene footage is called the scene clip. The clip containing the footage of the reporter is called the reporter clip.

NOTE Everything that you do in this tutorial can also be done with linear clips. The use of digitized clips is just an example.

Loading The Scene Clip

The first thing you will do is drag the scene clip into the timeline.

Here's what you do:

1. Navigate to the bin containing the digitized clip you want to use.

2. Drag-and-drop the digitized clip into the Video 1 track (the first track) of the timeline.

   The digitized clip appears in the timeline as a blue event (following figure).

The Scene Clip in the Timeline

If the scene clip is on the Video 1 track, Preditor automatically assigns that clip the highest priority during playback. Preditor assigns priority to clips on tracks from the top down. So, when you play back a timeline that has clips in multiple tracks and no transitions, Preditor plays the clip on the top most track and ignores those beneath.

TIP

Priority can be changed for a specific clip. Right-click on the clip. Select Higher Priority from the pop-up menu. For more information on priority, see "Using Clip Priority" on page 85.

Next, you want to edit the audio properties of the scene clip.

Turning Off Audio For The Scene Clip

You want the scene clip to play over the reporter clip. Because you want to hear the audio from the reporter clip playing over the scene clip, you will turn off the audio for the scene clip. You do this in the Clip Audio Properties panel.

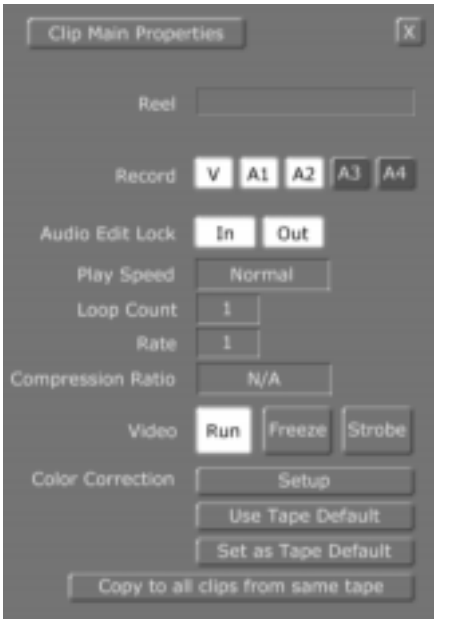
Here's how to turn off the audio for the scene clip:

1. Click on the scene clip to select it.

2. Click the Clip Props button (following figure).

The Clip Props Button

The Clip Main Properties panel appears (following figure).



The Clip Main Properties Panel

You can also access this panel by right-clicking on a clip and selecting Properties from the pop-up menu that appears.

3. Click on the A1 and A2 buttons to turn them off.

   These buttons determine which sources are recorded. Each button represents one of the audio channels of the selected clip. Preditor supports four audio channels per clip. A1 and A2 (the left and right audio

channels) are turned on (lit up). By default, A3 and A4 are off because most clips have only two audio channels. If a clip has four channels, these buttons are also lit up.

Turning the A1 and A2 buttons off on the Clip Main Properties panel also turns them off in the Clip Audio Properties panel. For information on how to use this panel, see “Clip Audio Properties” on page 163.

As you click each button, the button light turns off. Now, Preditor ignores the left and right audio channels for the scene clip.

4. Click the X button in the top right of the Clip Main Properties panel to close the panel.

That’s all there is to editing this clip. Your next step is to edit the reporter clip.

Loading The Reporter Clip

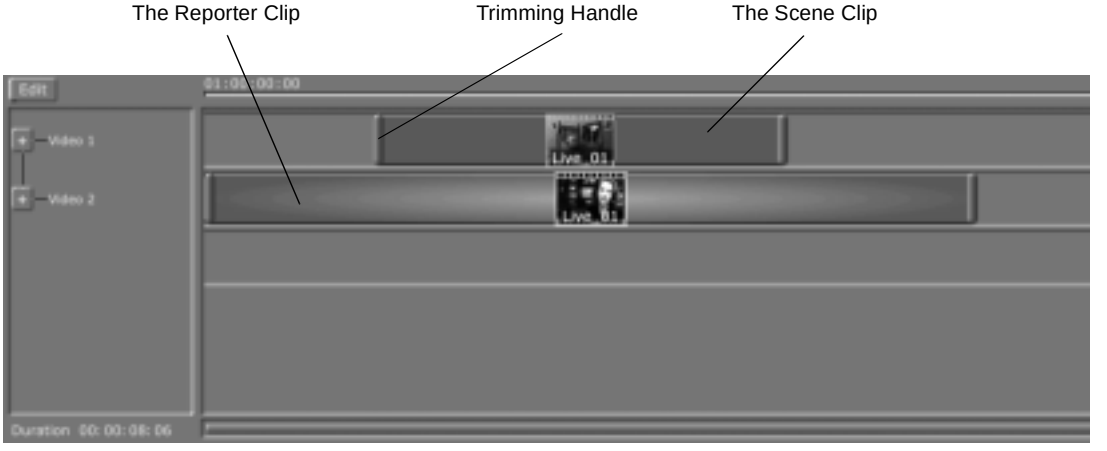
Next you will work with the reporter clip (the second clip needed for this cut). You will load it into the timeline and edit it.

Here’s what you do:

1. Navigate to the bin containing your digitized reporter clip.

2. Drag-and-drop the reporter clip into the Video 2 track of the timeline.

   An event for the clip appears in the timeline (following figure).



Dropping in the Reporter Clip

3. Position the reporter clip as needed. In this example, it starts at the beginning of the timeline.

4. Position the scene clip as needed. You need to find the frame in the reporter clip where you want the video to switch to the scene clip. Then, you position the scene clip so it starts at that frame. To do this, do one of the following:

   a. Drag the Position Bar through the timeline to scrub through the reporter clip to find the frame you want. (For linear editing, turn on Tape Scrub in the Editor Options panel to scrub through your clips on the timeline. See “Tape Scrub” on page 100 for information on how to do this.) Then click-and-drag on the trimming handle of the scene clip and use the alignment bars to match the in point with the location of the Position Bar.

   b. Play the timeline and press the space bar to stop the Position Bar at the frame in the reporter clip where you want the video to switch. Then click-and-drag on the trimming handle of the scene clip and use the alignment bar to match the in point with the location of the Position Bar.

   c. Type in a timecode in the timecode window in the Main Controls (following figure) and press **Enter** on your keyboard.

The Main Controls Timecode Window

The Position Bar jumps to that spot. Click-and-drag the trimming handle of the scene clip and use the alignment bar to match the in point with the location of the Position Bar.

5. Repeat step 4 to adjust the outpoint of the scene clip.

   Your timeline is set. When you play it back, the reporter clip is played until the beginning of the scene clip. At this point, because it is on a higher track, the video output cuts to the scene clip. But, with the audio for the scene clip turned off, the audio for the reporter clip continues to play. When Preditor comes to the end of the scene clip, it drops back down to the reporter clip and plays that. So, the end result is that the audio from the reporter clip plays throughout, but the video switches to the scene clip for its duration.

That's it for creating this cut. There is some fine-tuning you can do, such as adding a transition between the clips. You can, for example, add a fade between the audio for the two clips by clicking on the + button to the left of the Audio 1 and Audio 2 tracks. (See “Animating Audio On The Timeline” on page 149.)

The next part of this tutorial tells you how to create a different form of the L-cut.

L-Cuts: Partial Voiceover With Audio Transition

Another use for an L-cut is to carry the audio from the first clip into the second clip. The audio from the first clip plays for a little while then switches over to the audio of the second clip. You can see an example of this once again in a pre-produced news segment. The reporter introduces a scene. Then there is a transition to the scene, while the reporter continues to speak. At some point, the reporter stops speaking, and the scene's audio begins. This sort of L-cut is best used when you have some portion of the second clip's audio that you want to use (for instance, an interviewee's comments).

This section of the tutorial explains how to create one of these cuts.

Loading The Reporter and Scene Clips

The first thing you want to do for this tutorial is load your clips. This way, you can edit the clips together.

Here's what you do:

1. Navigate to the bin containing your digitized reporter clip.

2. Drag-and-drop the reporter clip into the Video 1 track in the timeline.

   The clip appears in the timeline (following figure).

The Loaded Reporter Clip

Because the clip is digitized, it is dark blue.

3. Navigate to the bin containing your digitized scene clip.

4. Drag-and-drop the scene clip into the **Video 1** track in the timeline so that its in point is next to the out point of the reporter clip (following figure).

Dropping in the Scene Clip

With the two clips dropped into the timeline, you can begin to edit them.

Preparing The Reporter and Scene Clips

Before you begin to create the L-cut, you want to roughly adjust the length of the reporter clip. The purpose of this step is to set the event's out point to the position at which you want the scene video to begin. Once this is set, you can adjust the audio.

Here's what you do to prepare the reporter clip:

1. Click on the reporter clip to select it.

2. Find the frame in the reporter clip where you want the video to switch to the scene clip. To do this, do one of the following:

   a. Drag the Position Bar through the timeline to scrub through the reporter clip to find the frame you want.

   b. Play the timeline and press the space bar on your keyboard to stop the Position Bar at the frame in the reporter clip where you want the video to switch.

TIP When the timeline is your active source, the space bar toggles between stop and play.

c. Type in a timecode in the timecode window in the Main Controls (following figure) and press **Enter** on your keyboard.

The Main Controls Timecode Window

The Position Bar jumps to that spot.

Next, you want to shorten the length of the clip so you can drag out the audio tracks later on.

3. Do one of the following to trim the clip:

   a. Click-and-drag the trimming handle of the clip and use the alignment bar to match the out point with the location of the Position Bar.

   b. Right-click on the clip and choose **Split at PosBar** from the pop-up menu. This splits the clip in two at the location of the Position Bar. You can then delete the right clip, and you are left with a clip trimmed to the location of the Position Bar.

   c. Open Trim Clip mode and use the transport controls to trim the clip. See the tutorial in this chapter for instructions on how to use this editing mode, or see “Trim Clip Mode” on page 125.

4. Drag the scene clip so that it butts up against the shortened reporter clip (following figure).

Moving the Scene Clip

The alignment bar turns yellow when the two events are flush together.

Because you want to edit the audio for these clips, you want to open the audio tracks in the timeline.

5. Click the + button to the right of the Video 1 track name (following figure).

The Plus Button

The Audio 1 and Audio 2 tracks for the Video 1 track appear in the timeline (following figure).

The Audio Tracks

Notice that the audio tracks have no trimming handles. That's because the audio tracks are locked with their video and can't be adjusted. You want to unlock them.

Unlocking The Reporter Clip's Audio

For the L-cut, you want to adjust the audio of the reporter clip so that it continues to play into the scene clip. To do this, you have to unlock the out point of the reporter clip's audio, and the in point of the scene clip's audio so you can adjust them independently of the video.

Here's what you do:

1. Click the reporter clip to select it.

2. Click the Clip Props button in the toolbar (following figure).

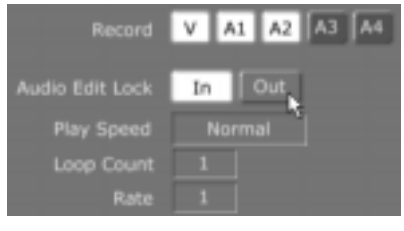
The Clip Props Button

The Clip Main Properties panel appears (following figure).

The Clip Main Properties Panel

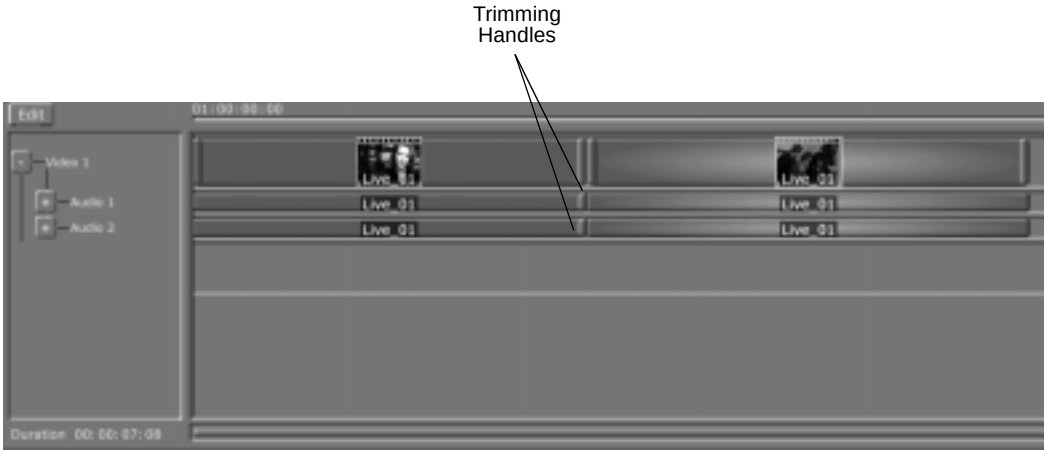
3. Locate the Audio Edit Lock buttons in the Clip Main Properties panel (previous figure).

4. Click the Out button to turn off the lock on the out point of the reporter clip (following figure).



Turning Off Lock

The Out button is no longer lit. Trimming handles appear on the out points of the audio tracks (following figure). You can now adjust the clip's audio out points independently of the clip's video out point.



Trimming Handles for Reporter Clip's Audio Out Points

Next, you want to unlock the scene clip's audio in point.

Unlocking The Scene Clip's Audio

With the reporter clip's audio out points unlocked, you want to unlock the scene clip's audio in points. This allows you to adjust the audio in points independently of the video in point.

Here's what to do:

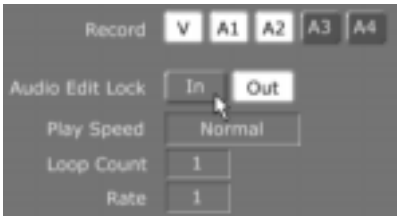
1. Click on the scene clip to select it.

2. Click the Clip Props button in the toolbar.

   The Clip Main Properties panel appears.

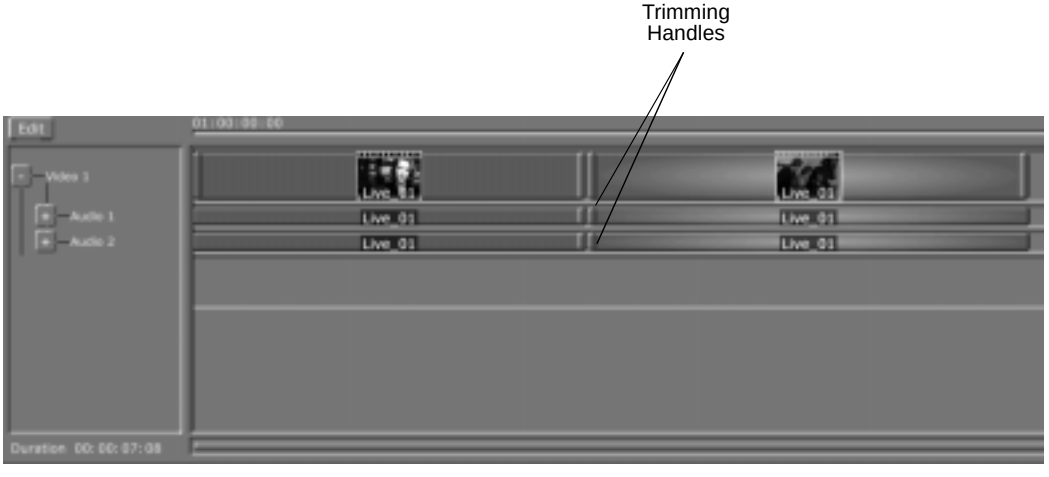
3. Locate the Audio Edit Lock buttons.

4. Click the In button to turn off the lock on the audio in point (following figure).



Unlocking the In Point

The **In** button is no longer lit. Trimming handles appear on the in points of the audio tracks (following figure). You can now adjust the clip's audio in points independently of the clip's video in point.



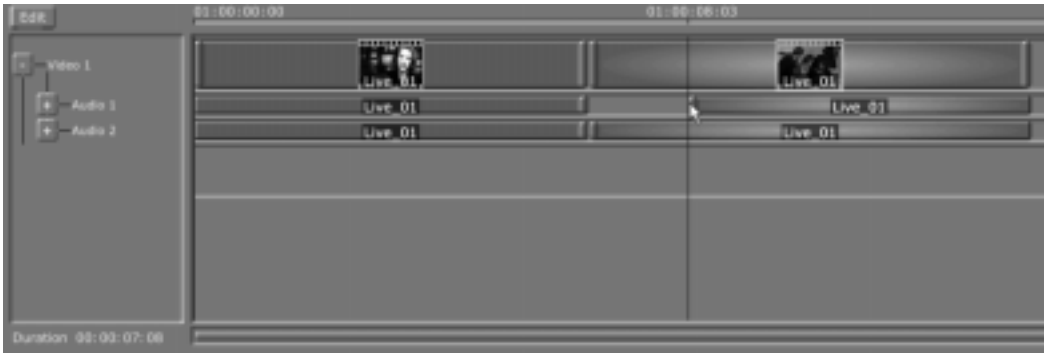
Trimming Handles for Scene Clip's Audio In Points

Next, you will adjust the audio tracks for each clip.

Setting Up The L-Cut

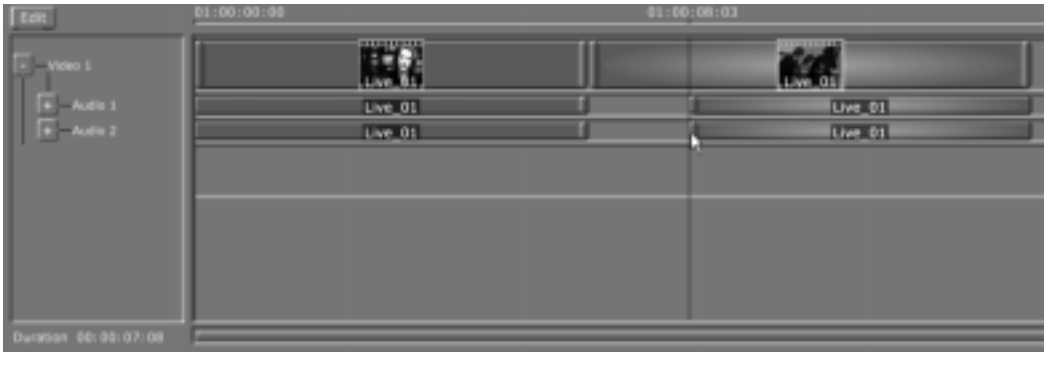
This portion of the tutorial shows an example of how to edit audio for an L-Cut. You can adapt the cut to meet your needs.

1. Drag the scene clip's **Audio 1** in point until it reaches the point at which you want the audio for the scene to begin (following figure).



Dragging the Scene Clip's Audio 1 In Point

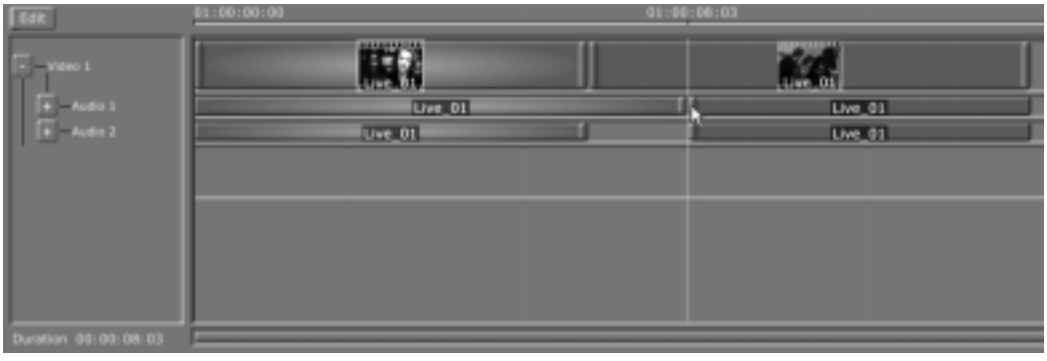
2. Drag the scene clip's Audio 2 track until it reaches the point at which you want the audio for the scene to begin (following figure).



Dragging the Scene Clip's Audio 2 In Point

With the in points of the scene clip's audio adjusted, you next want to extend the reporter clip's audio.

3. Drag the reporter clip's Audio 1 out point until it butts up against the Audio 1 track of the scene clip (following figure).



Dragging the Reporter Clip's Audio 1 Out Point

The alignment bar turns yellow.

NOTE You can't make audio tracks longer than the length of the original clip. If the clip's original length is 5 seconds, you cannot lengthen the audio tracks to more than 5 seconds.

4. Drag the reporter clip's Audio 2 out point until it butts up against the Audio 2 track of the scene clip (following figure).

Dragging the Reporter Clip's Audio 2 Out Point

The alignment bar turns yellow.

When you play the timeline, the reporter appears, introducing the scene. The video then cuts to the scene footage, while the reporter continues to talk.

Finally, the reporter stops speaking, and audio from the scene picks up already in progress.

That's the basics of setting up an L-cut. You can also add a fade in or fade out to either audio track, or a cross-fade. See “Animating Audio On The Timeline” on page 149 or the tutorial on Editing to Audio for more details on editing the audio clips.

Using Advanced Editing Modes

When you log clips or build a timeline with Preditor, usually you have the Add Clip button selected (following figure).

The Add Clip Button

This is Preditor's default editing mode, which is similar to the 1.2 version of Preditor. But Trinity 2.1 has added five advanced editing modes designed for quick and precise editing. Generally you use these modes once you already have clips on a timeline and want to fine tune your edits.

This tutorial teaches you how to use the five editing modes:

- Trim Clip
- Trim Edit
- Slip Source
- Slide
- Transition Edit

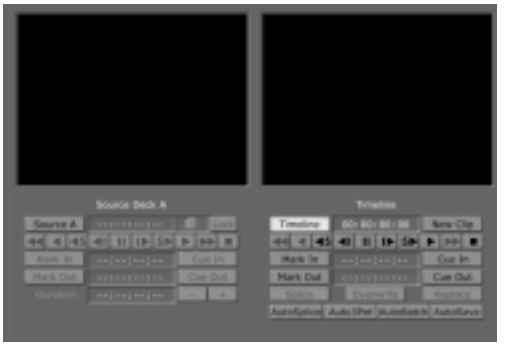
The advanced editing modes are used for linear or non-linear editing. When working with linear clips, turn on Tape Scrub in the Editor Options panel if you want the monitors to update as you adjust the clips (see “Editor Options Panel” on page 97 for information on how to do this).

When you digitize clips with Time Machine, 1 second is added to each end of the clip to give you trimming room. In the advanced editing modes, the monitors display the true in and out frames of the clip as marked, not the frames from the extra trimming room.

In this tutorial you will work with each advanced editing mode. The tutorial also explains when to use each mode, and how to use some of the other tools you will encounter when using the editing modes.

How Many Monitors Should I Use?

When you open Preditor, you see two monitors at the top of the screen (following figure).



Preditor with Two-Monitor View Selected

By default, Preditor starts up in Add Clip mode. The two monitors are set to display Source (Deck) A and the Timeline, along with transport controls appropriate for the display.

Preditor allows you to see three or four monitors, which you may want to do if you have multiple source VTRs. You can switch these monitors on and off with the Monitor View Buttons (following figure).

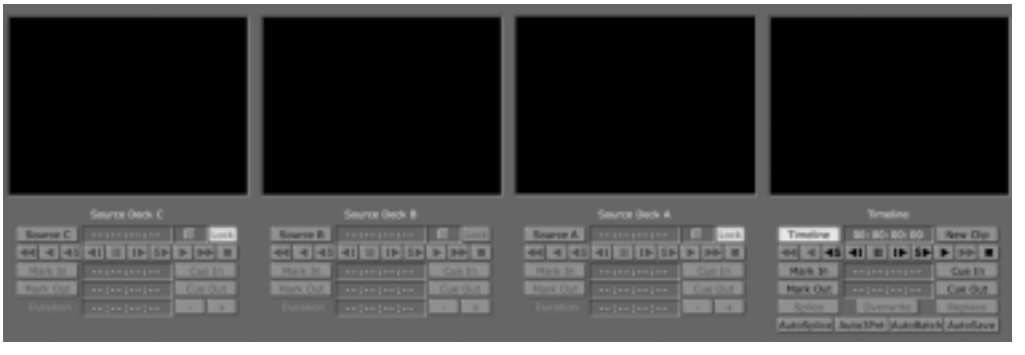
The Monitor View Buttons

When you select 3, Preditor displays the output (the default is Timeline) in the right monitor and your selected input sources in the other monitors (following figure).

Preditor with Three-Monitor View Selected

The third monitor opens over the top left bin.

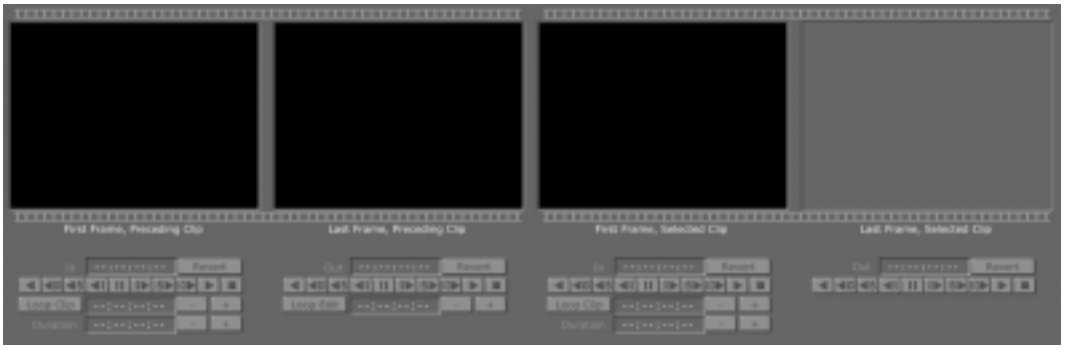
When you select 4, Preditor displays the output (the default is Timeline) in the right monitor and your selected input sources in the other monitors (following figure).



Preditor with Four-Monitor View Selected

The fourth monitor opens over the top right bin.

So far, this tutorial has only looked at the monitors while Preditor is in Add Clip mode. If you select a different mode, such as Trim Edit, the functions of the monitors change (following figure).



Four-Monitor View in Trim Edit Mode

In this case, the monitors now work in pairs. The two monitors on the right show you the first and last frame of a clip you have selected on the timeline, while the two monitors on the left show you the first and last frame of the preceding clip.

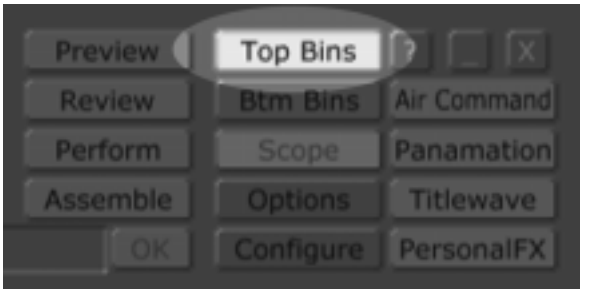
Furthermore, the monitors that are both ends of a clip are joined by a continuous line of sprocket holes (following figure).

Sprocket Holes Displaying the Beginning and End of a Clip

Viewing Bins

Seeing all four monitors at once is usually more convenient, but sometimes you may need quick access to the bins that the two extra monitors replace.

You can quickly open these bins by clicking the Top Bins button (following figure).



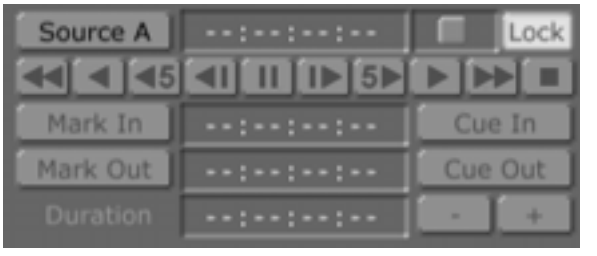
The Top Bins Button

When you click the Top Bins button, Preditor returns to two-monitor view mode, and the top left and right bins reappear. When you finish with the bins, you can click the Top Bins button again to return Preditor to the three- or four-monitor view mode.

TIP If your monitor and video card support it, you might consider using a larger screen size (1600x1200 or larger) for your Preditor display. This allows you to use the three- or four-monitor view modes all the time, while still leaving space for open bins, and even a larger timeline.

Transport Controls

Regardless of how many monitors you choose to display, there is always a set of pale red buttons directly below some or all of the monitors (following figure).



Transport Controls

These are the transport controls. These controls function slightly differently in the various editing modes. This is explained in the following sections about each editing mode. Controls that are ghosted out do not function in the editing mode you selected.

Here are descriptions of the basic controls and how they function (in order from left to right):

- Jog Back 10 Frames—Moves back or trims 10 frames at a time

- Jog Back 5 Frames—Moves back or trims five frames at a time

- Jog Back 1 Frame—Moves back or trims one frame at a time

- Pause—Puts deck in Pause mode, pausing playback if the deck is rolling, or spooling the tape so it is ready to play if the deck is stopped

- Jog Forward 1 Frame—Moves ahead or trims one frame at a time

- Jog Forward 5 Frames—Moves ahead or trims five frames at a time

- Jog Forward 10 Frames—Moves ahead or trims 10 frames at a time

Trim Clip Mode

Trim Clip mode is designed for trimming the in and out points of a single clip.

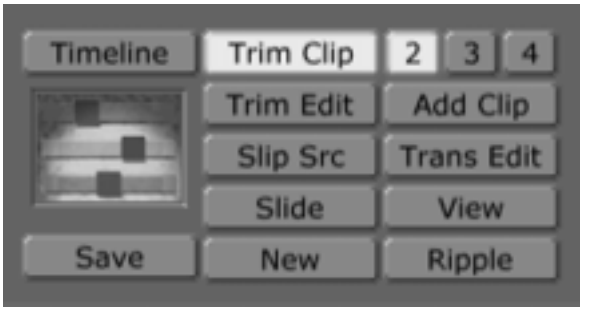
In this section of the tutorial, you will build a simple timeline, then experiment with the Trim Clip controls.

1. Start with a new timeline, and drag two clips back-to-back on to the Video 1 track (following figure).

Adding Clips to the Timeline

2. Select the second clip you added by clicking on it.

3. Click the Trim Clip button (following figure).



The Trim Clip Button

When you click the button, the monitors switch from displaying sources to displaying the first and last frames of the clip you selected (following figure).

Trim Clip Mode

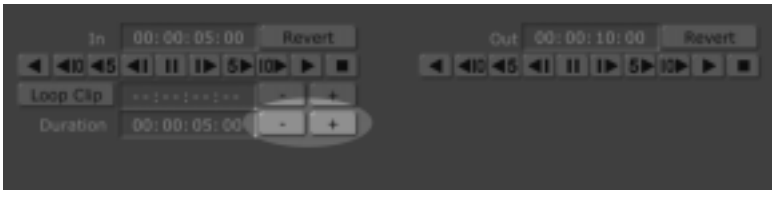
If you look at the transport controls, you can tell quite a bit about your clip.

Under the left monitor is a field labeled **In**, and under the right monitor is one labeled **Out**. These are your in and out timecode numbers for the clip on the current timeline.

Also under the left monitor is a field labeled **Duration**. This represents the amount of time the clip occupies on your timeline.

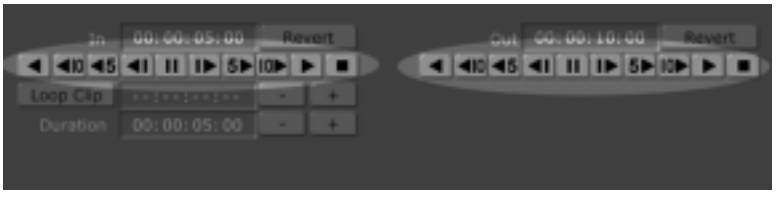
To trim the clip, do one of the following:

- Click the - or + buttons next to the **Duration** field to change the duration of the clip in 1 second (30 frame) intervals (following figure).



Changing the Duration of a Clip

- Click one of the Jog/Trim buttons to increase or decrease the in and out points by 1, 5 or 10 frames at a time (following figure).



Changing the In and Out Points with the Jog/Trim Buttons

- Type in a new duration directly by clicking in the **Duration** field, typing the new duration, and pressing **Enter** (following figure).

Changing the Duration of a Clip from the Duration Field

Under the left monitor is the **Loop Clip** button. This is a tool that allows you to play non-linear clips in a continuous loop so you can see them repeatedly as you adjust the in and out points. You can use the - or + buttons or type a number into the timecode field to set how much time before and after the clip the loop plays. For example, if the clip duration is 5 seconds and you type in 1 second in the Loop Clip timecode field, the loop plays the clip plus 1 second before and 1 second after the clip, for a total of 7 seconds. After you have set the length of the loop, click the **Loop Clip** button to play the loop. To stop the loop playing, click the **Loop Clip** button again, or click the stop or pause buttons in the transport controls.

NOTE The Loop Clip function does not work for linear clips.

So far, you have worked on the second clip on the timeline. Now you will play with the first one a bit.

1. Click on the first clip on the timeline.

2. Click on the + button next to the Duration field.

   Hmm. Nothing happens. That is because increasing this clip's duration would cause its out point to be *after* the second clip's in point. Since Trim Clip mode is for trimming one clip at a time, it does not allow you to affect the duration of clips other than the selected clip.

   Next you will look at what happens when the clips are on different tracks. First, you need to add a third clip to the timeline.

3. Drag another clip and drop it onto the Video 2 track so that its in point is the same as the previous clip's out point (following figure).

Adding the Third Clip to the Video 2 Track

4. Click the third clip to select it.

5. Click the Jog/Trim 10 Frames Back button (following figure).

Moving the Clip's In Point

You should have no trouble moving the third clip's in point to before the second clip's out point since they occupy different tracks.

Trim Edit Mode

When you need to change the edits between two clips you may want to use Trim Edit mode.

1. Start with a new timeline, and drag two clips back-to-back onto the Video 1 track (following figure).

Adding Clips to the Timeline

2. Select the second clip by clicking on it.

3. Click the Trim Edit button (following figure).

The Trim Edit Button

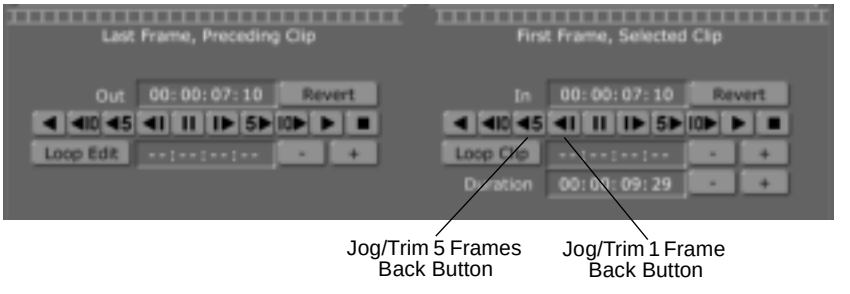
The left monitor shows the last frame of the previous clip, and the right monitor shows the first frame of the selected clip (following figure).

Trim Edit Mode

NOTE Switching to three-monitor view adds the first frame of the previous clip. Four-monitor view adds both the previous clip's first frame and the selected clip's last frame.

In this example, you will move the edit by making the selected clip begin 8 frames earlier.

4. Under the right monitor, labeled First Frame, Selected Clip, click on the Jog/Trim 5 Frames Back button (following figure).



The Jog/Trim 5 Frames Back and Jog/Trim 1 Frame Back Buttons

The edit moves back 5 frames. In the example, the in timecode of the selected clip goes from 00:00:07:10 to 00:00:07:05. The out timecode of the preceding clip also changes to 00:00:07:05.

NOTE The monitors update to show you the new in and out frames. In this case, however, because you are working with matte clips you do not see a change.

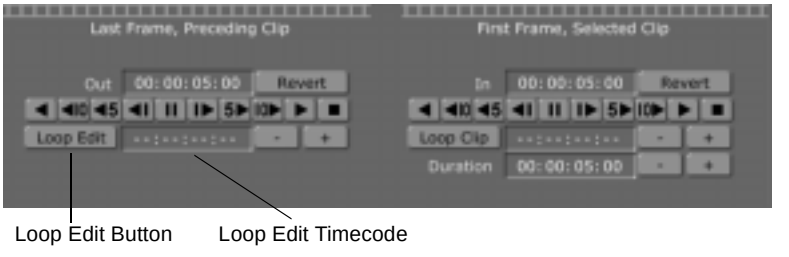
5. Click three times on the Jog/Trim 1 Frame Back button (previous figure).

   The in timecode for the selected clip and the out timecode of the preceding clip now read 00:00:07:02.

You have moved the edit 8 frames earlier.

Looping Edits

If you look at the transport controls (following figure), you see that they are different than in Trim Clip mode.



Trim Edit Mode Transport Controls

Under the left monitor there is a button called Loop Edit (previous figure). When working with non-linear clips, this feature allows you to view the edit repeatedly as you adjust it.

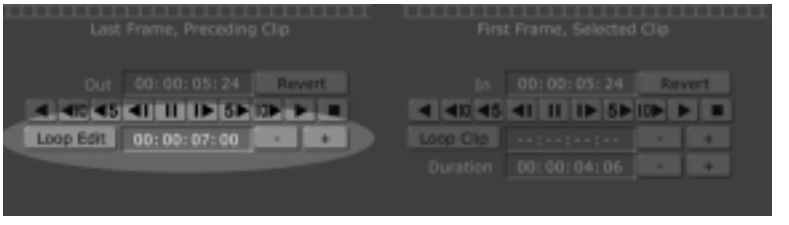
NOTE The Loop Edit function does not work for linear clips.

To use the Loop Edit button, do the following:

1. Click on the second clip of the edit you want to loop.

2. In the Loop Edit timecode field, type in the length of time that you want to include in the loop before and after the edit itself. Or, use the - and + buttons to decrease or increase the length by 1-second intervals.

   For example, we typed in 00:00:07:00 for our Loop Edit timecode. This means the loop plays 7 seconds before and 7 seconds after the edit.



Setting the Loop Edit Time

3. Click the Loop Edit button.

   The button lights up and the selected portion of the timeline, including the edit, plays in a continuous loop.

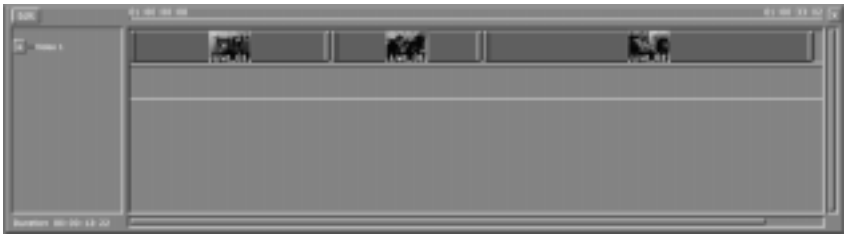
4. To end the loop, click the Loop Edit button again, or click the stop or pause buttons in the transport controls.

Slip Src (Source) Mode

If you get all your clips on the timeline and then decide you want a clip to start or end several frames earlier or later, you can use Slip Source mode to adjust it. In Slip Source, you can change the in and out points of the clip without changing its duration or position on the timeline. It works by changing which part of a clip is used, slipping it forward or backward.

To use Slip Source mode, do the following:

1. Start with a new timeline and drag three clips back-to-back onto the Video 1 track (following figure).



Adding Clips to the Timeline

2. Select one of the clips by clicking on it.

3. Click the Slip Src button (following figure).

The Slip Src Button

Preditor enters Slip Source mode, and you see the first and last frames of the selected clip in the monitors (following figure).

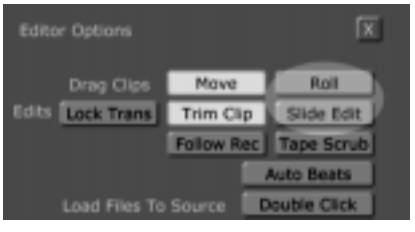
Slip Source Mode

4. Click one of the Jog/Trim buttons to change the in point of the clip's source timecode.

   You see the in point and out point of the clip change together. The duration and the rest of the timeline are not affected.

The Roll And Slide Edit Buttons

By default, when you activate Slip Source mode the Roll and Slide Edit options from the Editor Options panel (following figure) are selected.



The Roll and Slide Edit Buttons on the Editor Options Panel

These buttons affect the behavior of the mouse, so that you can perform the same action with the mouse as with the transport controls. The Roll button causes the mouse to behave like Slip Source mode, slipping the in and out points of the clip without changing its length or position on the timeline.

Slide Edit causes the mouse to behave like Slide mode when you click on the trimming handle of a clip.

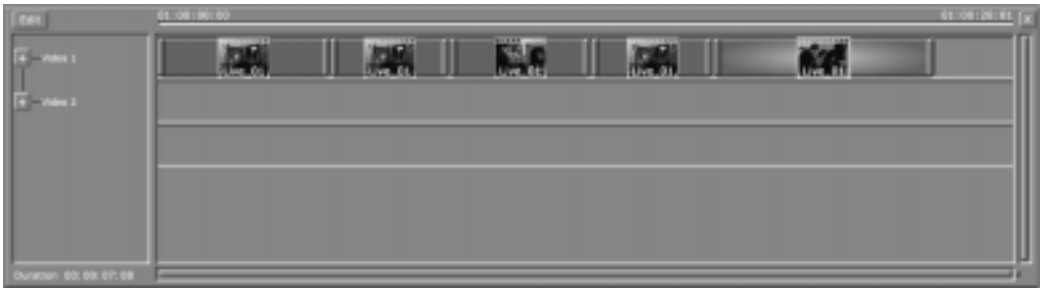
If you don't want to use the mouse this way, you can change the Roll setting to Move and the Slide Edit function to Trim Clip on the Editor Options panel (see "Editor Options Panel" on page 97 for more information on these functions).

NOTE Slip Source mode requires only the two-monitor view. If you select the four-monitor view, the middle two monitors are in Slip Source mode and the outer two monitors are in Slide mode.

Slide Mode

Sometimes you may want to change the clips immediately preceding and following the selected clip, without changing the duration of the selected clip. This is easy to do with the Slide editing mode.

Start with a fresh timeline once again, and drag five clips back-to-back on to the Video 1 track (following figure).



Adding Clips to the Timeline

1. Select the middle clip by clicking on it.

2. Click the Slide button (following figure).

The Slide Button

This puts Preditor into **Slide** mode (following figure).

Slide Mode

You see transport controls, a **Revert** button, a field displaying the out point of the preceding clip under the left monitor, and another field with the in point of the following clip under the right monitor. Also notice that the clip you selected does not appear at all.

3. Click the Jog/Trim 10 Frames Forward button.

   The selected clip moves 10 frames forward on the timeline. This makes the preceding clip 10 frames longer, and the following clip 10 frames

shorter. The duration of the selected clip is not changed. The rest of the timeline is also unchanged.

Using Four Monitors In Slide Mode

If you use the four-monitor view in Slide mode, Preditor actually provides a combination of Slide and Slip Source functions (following figure).

Using Four Monitors in Slide Mode

The middle two monitors are in Slip Source mode, and the outer two monitors are in Slide mode. So, you can perform Slide functions by using the transport controls under the first (far left) monitor, and Slip Source functions on the selected clip by using the transport controls under the second monitor.

Trans(ition) Edit Mode

So far this tutorial has covered a wide variety of editing tools, but it hasn't yet covered timelines that contain effects other than cuts, such as dissolves, wipes, or warps. There is an editing mode designed specifically to adjust such edits, and it is called Transition Edit mode (Trans Edit).

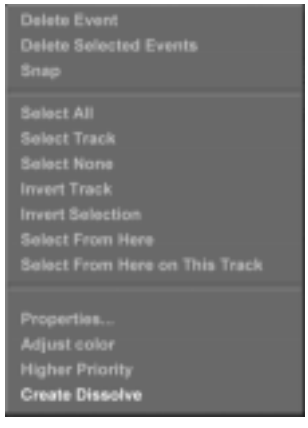
To experiment with Transition Edit mode, you need a simple timeline.

1. Start with a new timeline and drag three clips to alternating tracks, making sure the clips overlap (following figure).

Adding Clips to the Timeline

Next, you will create a dissolve between the first two clips.

2. Right-click the first clip in the overlapped area and choose **Create Dissolve** from the pop-up menu (following figure).



Choosing Create Dissolve

A dissolve appears on the FX track (following figure).

The New Dissolve on the Timeline

If you look carefully at the dissolve, you see that it begins exactly where the clips begin to overlap on the timeline, and ends exactly where the clips stop overlapping.

3. Click the Trans Edit button.

The Trans Edit Button

Preditor enters Transition Edit mode (following figure).

Transition Edit Mode

NOTE The four-monitor mode is required to use Transition Edit mode, and is automatically selected when you click the Trans Edit button.

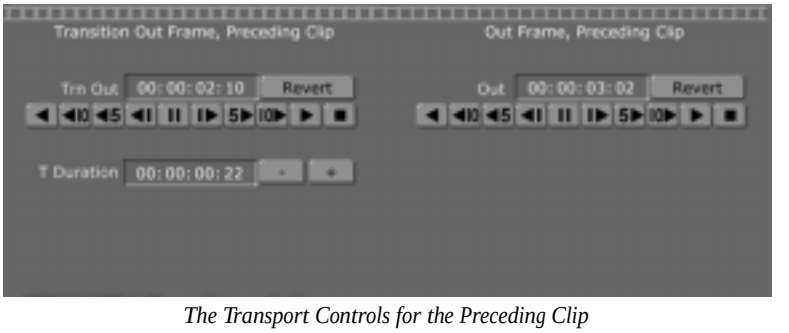
Next you will adjust the dissolve you created.

4. Click the second clip to select it.

NOTE When editing a transition in Transition Edit mode, the clip that *begins* at the transition must be the selected clip, and the clip that *ends* at the transition is the preceding clip. Therefore, the selected clip must be at least the second one on the timeline.

Transport Controls, Part I

Following is an explanation of the transport controls for the preceding clip (following figure).



The Transport Controls for the Preceding Clip

The first (left-most) monitor displays the frame of the preceding clip at the beginning of the transition. This is called the Transition Out Frame.

The second monitor displays the last frame of the preceding clip. This is the Out Frame.

There are three ways to edit the effect with these controls:

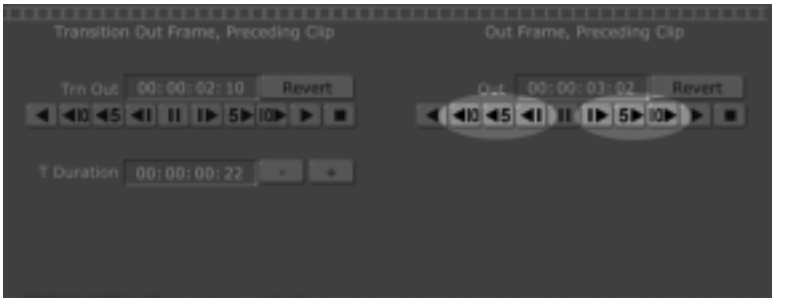
- Click one of the Jog/Trim buttons under the Transition Out (far left) monitor (following figure).

The Jog/Trim Buttons Under the Transition Out Monitor

These buttons make the effect happen earlier or later on the timeline. The preceding clip's duration and out point stay fixed, while the in point of the selected clip and duration of the transition change.

You can also set a new Transition Out frame by typing a timecode in the Trn Out (Transition Out) field and pressing Enter on your keyboard.

- Click one of the Jog/Trim buttons under the Out (second from left) monitor (following figure).

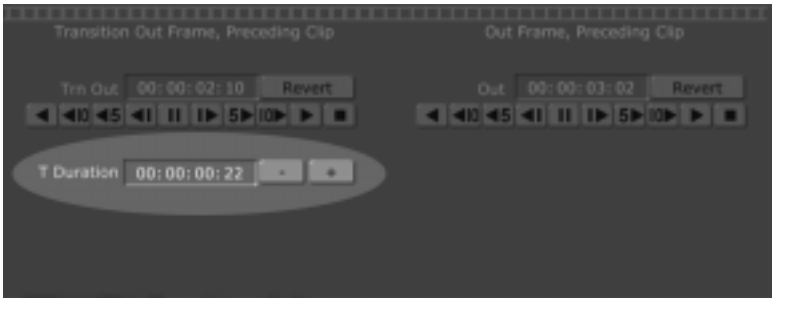


The Jog/Trim Buttons Under the Out Monitor

These buttons increase or decrease the duration of the transition. The duration and in point of the selected clip remain the same, while the out point of the preceding clip and duration of the transition change.

You can also set a new Out frame by typing a timecode in the Trn Out (Transition Out) field and pressing Enter on your keyboard.

- Type a new number into the T Duration (Transition Duration) field (following figure).



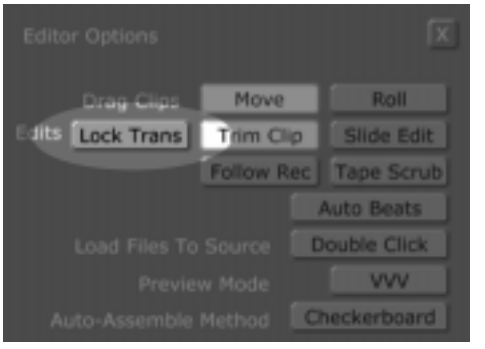
The T Duration Field

The duration of the transition is shown in the T Duration Field.

To change the duration, type the timecode into the field, or use the + or - buttons next to it. The in point of the transition and selected clip are not affected, but the duration of the preceding clip and the transition change.

Lock Trans Button

When you enter Transition Edit mode, the Lock Trans button on the Editor Options panel is turned on by default (following figure).



The Lock Trans Button

As long as this option is selected, you can use the mouse to change the in and out points of a transition between two clips and the clips automatically follow the changes. In other words, the effect always covers exactly the overlapped area of the clips.

NOTE This works only for transitions that do not have fixed lengths. If the transition on the timeline does not have trimming handles, it cannot be resized.

Transport Controls, Part II

The transport controls for the selected clip (following figure) are similar to those for the preceding clip.

The Transport Controls for the Selected Clip

The third monitor from the left displays the **Transition In Frame** for the selected clip. This is the first frame where the selected clip begins to transition in.

The fourth monitor, on the far right, displays the **In Frame** for the selected clip. This is the frame where the transition ends and

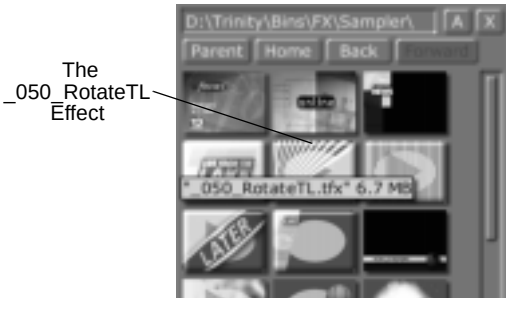
Use these controls to change the in point on the timeline for the selected clip. The in point and duration of the effect change accordingly.

Fixed Duration Effects

Next you will add another transition to the timeline, this time between the second and third clips. But you will use a different type of effect.

1. From the home bin (**Trinity\Bins**), navigate to the **Fx\Sampler** bin.

2. Find the picon for the **_050_RotateTL.tfx** effect (following figure).

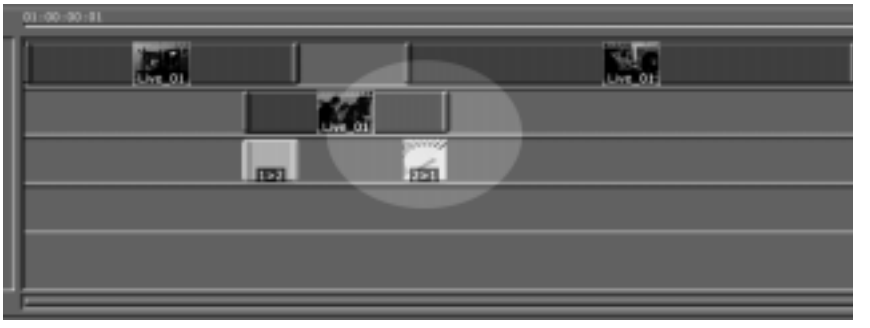


Finding an Effect Picon

TIP When you move your mouse over a picon, its name appears in a pop-up box.

3. Drag the picon from the bin and drop it at the in point of the third clip on the timeline. Remember that a yellow position indicator appears when the clip is lined up exactly.

   You now have a new transition between the second and third clips (following figure).

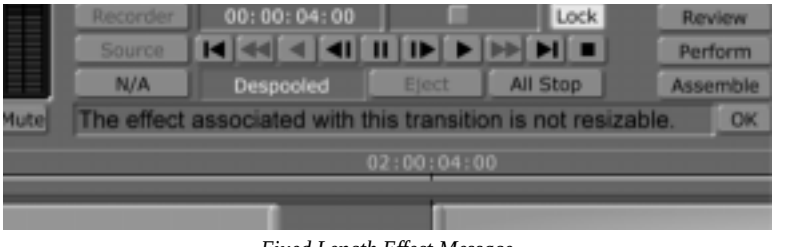


Adding the New Effect to the Timeline

4. Click the third clip to select it.

   Notice that the effect has no trimming handles, unlike the previous dissolve. This means that this effect has a fixed duration.

   If you try to use the transport controls, you cannot adjust the effect, only the in and out points of the clips. You also see a message in Preditor's Message Field (following figure).



Fixed Length Effect Message

If the duration of the fixed-length effect does not work for the transition between your clips, you have two choices:

- If you are flexible about the duration of the transition between the clips, you can change the in and out points of the clips to match the fixed-length effect you selected.
- If you don't have a lot of flexibility on the duration, you can replace the fixed-length effect with one with a more suitable duration, or with a variable-length effect.

TIP You can quickly replace a fixed-length effect with a dissolve. To do this, right-click on the effect, and choose **Replace with Dissolve** from the pop-up menu.

Wrapping Up

In this tutorial, you learned how and when to use each of Preditor's five advanced editing modes: Trim Clip, Trim Edit, Slip Source, Slide, and Transition Edit. You also learned what the monitors show you in these modes. And, you practiced adjusting clips by using the transport controls, by dragging clips with the mouse, and by typing in timecode numbers.

Sync Roll Editing

2.1 only

In this tutorial, you will learn how to perform a sync roll edit using the functions of the VTR Transport/Sync Roll/Live Digitize panel in Air Command and then digitize the clips of this sync roll in Preditor.

Sync roll editing is a technique typically used when two or more cameras were set up at a live event, such as a wedding, and the feed from each camera was recorded to a different tape. The tapes are then brought back to the studio, synchronized to the same point in time, and played back simultaneously while the editor switches the tapes as if they were on location switching cameras live.

Sync roll editing works in conjunction with the timeline building function of the VTR Transport/Sync Roll/Live Digitize panel. With this panel, you can create a timeline as you switch these tapes. That way, you can bring your timeline into Preditor and make adjustments or corrections.

By following this tutorial, you will get a feel for how to use the functions of the VTR Transport/Sync Roll/Live Digitize panel to sync roll edit and build a timeline that can be edited in Preditor.

This tutorial is broken up into six steps. These steps are:

1. Setting up the VTR Transport/Sync Roll/Live Digitize panel
2. Marking the starting points for your video sources
3. Sync roll editing and building a timeline
4. Setting picons for your timeline clips
5. Importing the timeline into Preditor
6. Digitizing the timeline clips

Setting Up The VTR Transport/ Sync Roll/Live Digitize Panel

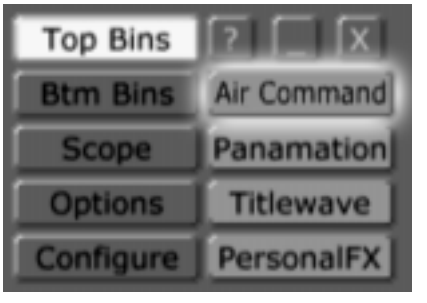
Before you can begin sync roll editing, you need to first set whether your RS-422 decks are play or record decks in the VTR Transport/Sync Roll/Live Digitize panel. By doing this, you will get a feel for one of this panel's functions, which is controlling decks from Air Command. Only RS-422 compatible decks can be controlled from this panel.

To set up the VTR Transport/Sync Roll/Live Digitize panel, follow these steps:

1. From Preditor, toggle to Air Command by pushing the Scroll Lock button on your keyboard.

   You can use the Scroll Lock button to toggle between Preditor and Air Command without losing your work in either application.

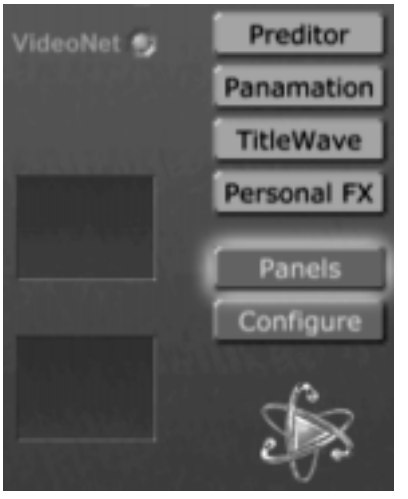
   The Air Command program can also be opened by clicking the Air Command button (following figure) in the toolbar.



The Air Command Button

   You see the Air Command program on your screen.

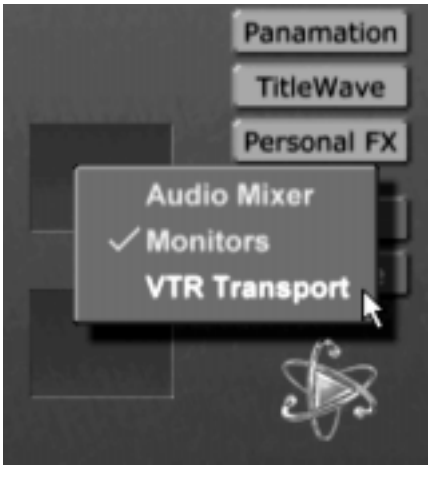
2. Click on the Panels button (following figure).



The Panels Button

A pop-up menu appears.

3. Choose VTR Transport from the pop-up menu (following figure).



Choosing VTR Transport from the Pop-Up Menu

You see the VTR Transport/Sync Roll/Live Digitize panel (following figure) in the upper right corner of your screen. With this panel, you can

control VTRs directly from the Air Command interface. This panel also gives you the flexibility to digitize live clips or build timelines that can be played back from Air Command or edited in Preditor. In this tutorial, you will use the Build Timeline function to create a timeline that can be edited in Preditor.

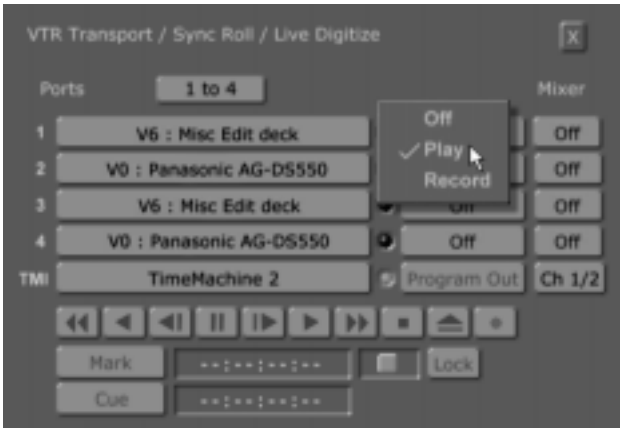
The VTR Transport/Sync Roll/Live Digitize Panel

4. In the VTR Transport/Sync Roll/Live Digitize panel, set the source type for each deck to Play by clicking the Source Type button next to the source (following figure). In the example, Source 1 is used.

The Source Type Button for Source 1

A pop-up menu appears.

5. Choose **Play** from the pop-up menu (following figure).

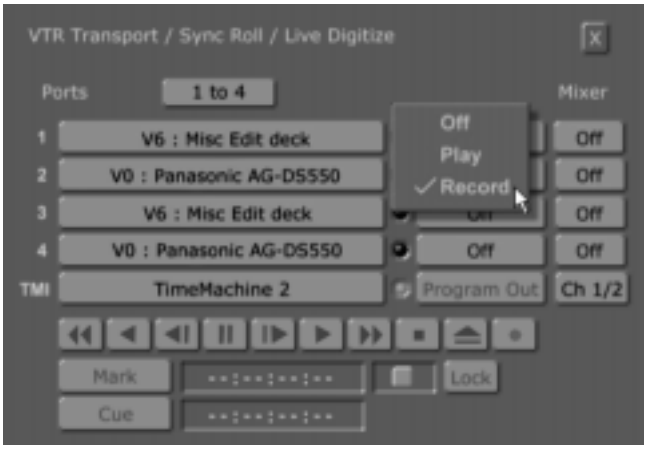


Choosing Play from the Pop-Up Menu

By doing this, you have set up the Source 1 deck as a play deck. Choosing **Record** from the pop-up menu makes the deck a record deck, which records your edits to tape as you sync roll edit. Since in this tutorial you will build a timeline and bring it into Preditor, you do not need to set a record deck. Choosing **Off** from the pop-up menu turns off record and play functions for the deck.

6. Since you want all of your source decks to be play decks for this tutorial, repeat step 5 for each source deck.

TIP If you want to crash record your project as you sync roll edit it and build a timeline, you can do this by setting a deck as a record deck. Do this by clicking the Source Type button for the desired deck and choosing Record from the pop-up menu (following figure).



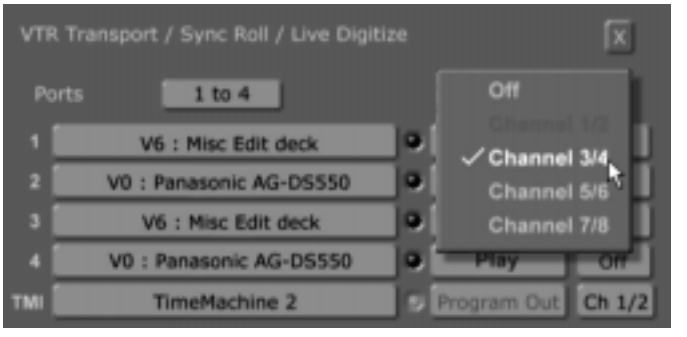
Choosing Record from the Pop-Up Menu

7. In the VTR Transport/Sync Roll/Live Digitize panel, select audio tracks in the mixer for your Source 1 deck by clicking the Mixer button (following figure) next to the source.

The Mixer Button for Source 1

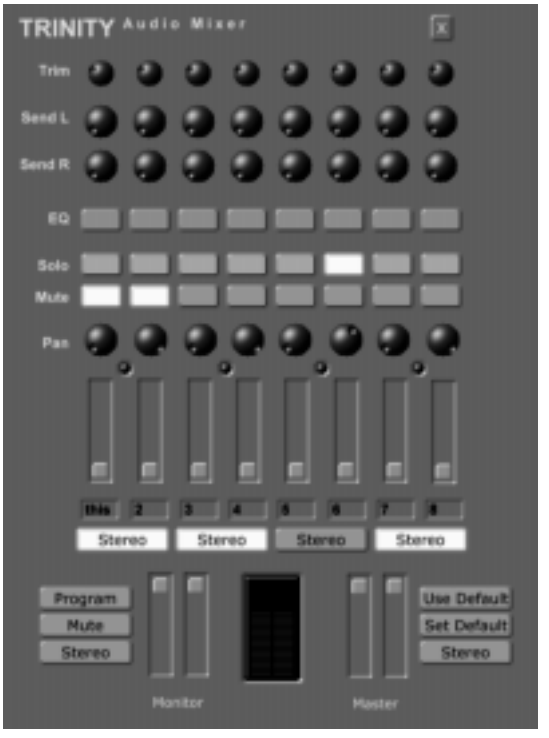
A pop-up menu appears.

8. Choose a mixer channel from the pop-up menu (following figure). This tutorial illustrates 3/4 being selected, but you could choose any pair of mixer channels.



Choosing a Mixer Channel from the Pop-Up Menu

By setting the mixer channels to 3/4 for your first source deck, you can control the audio coming from the source deck with the level sliders labeled 3 and 4 in the Audio Mixer panel (following figure). Choosing 5/6 from the pop-up menu sets the audio to correspond to the level sliders labeled 5 and 6 in the Audio Mixer panel. For more information on using this panel, see the *Air Command 2.1 Manual*.



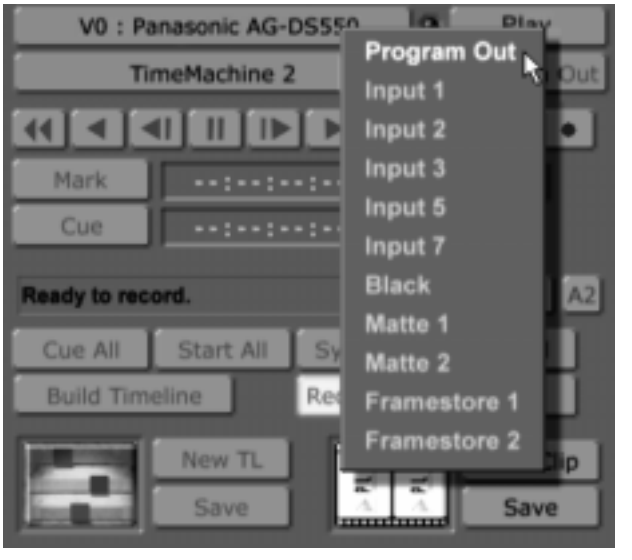
The Audio Mixer Panel

9. Select a mixer channel for each source deck by repeating steps 7 and 8 for each deck.

   Leave the VTR Transport/Sync Roll/Live Digitize panel open for now, you will use it again later in this tutorial.

NOTE If Time Machine is installed in your Trinity, you can digitize the program out as you switch your video. Do this by clicking on the TimeMachine button (following figure), then clicking the Source Type button and choosing Program Out from the pop-up menu (next figure). Because in this tutorial you will digitize the clips after you bring your timeline into Preditor, you do not need to digitize the program out video.

The Time Machine Button



Choosing Program Out from the Pop-Up Menu

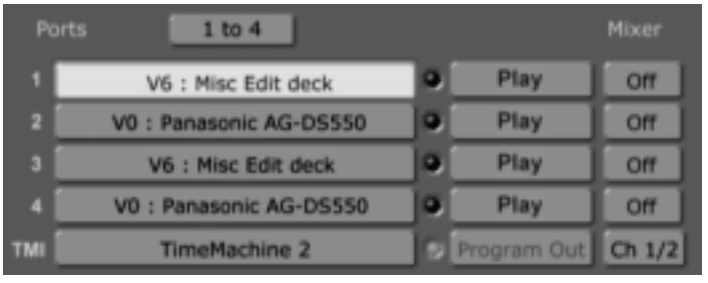
Now that you've set up the decks for your project, it's time to mark in points for your sources.

Marking Starting Points For Video Sources

In this section of the tutorial, you will mark the starting point for each video source. The starting point will be where you want the tape to start playing when you click the Sync Roll button in the VTR Transport/Sync Roll/Live Digitize panel. Clicking this button cues up all decks and starts them playing, so you want to make sure to set in points for each tape.

Follow these steps to mark the starting points for your video sources:

1. Select a source deck by clicking on the Source button for the desired deck (following figure).



The Selected Source Button

2. With the transport controls in the VTR Transport/Sync Roll/Live Digitize panel (following figure), shuttle to where you want the tape to begin when you start sync roll editing. This is where you mark the start point.

The Transport Controls

NOTE When performing a sync roll, you want the in points on the video tapes marked at a reference point that denotes an instant in time. For example, many wedding videographers use multiple cameras to record the wedding from various angles. To synchronize the tapes from these cameras, a white flash is often used at the beginning. Once the in points for all of the tapes is set to the flash, they are synchronized in time.

3. When you get to where you want your tape to start, click the Mark button (following figure).

The Mark Button

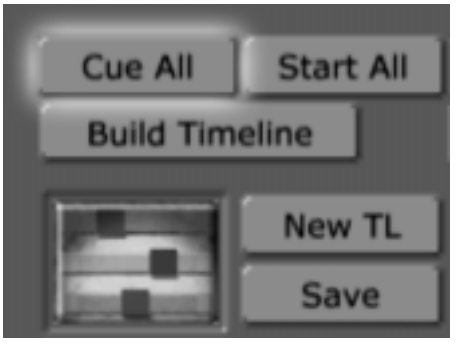
By doing this, you have marked an in point on your tape.

Now, when you click the Cue button (following figure) with that source deck selected, the tape is cued to this point.

The Cue Button

4. Repeat steps 1 to 3 for each source deck until you have marked in points for each tape.

5. In the VTR Transport/Sync Roll/Live Digitize panel, cue up all of your decks by clicking the Cue All button (following figure).



The Cue All Button

Once you click the button, all of your tapes are cued to where you marked in points.

Leave the VTR Transport/Sync Roll/Live Digitize panel open for now, as you will use it later in this tutorial.

TIP

Individual tapes can be cued by selecting the Source button for the desired deck, then clicking the Cue button (following figure).

The Cue Button

You are now ready to move to the next section of the tutorial.

Sync Roll Editing And Building A Timeline

Now that you have set in points for your tapes and have cued them up, you're ready to begin sync roll editing. In this section of the tutorial, you will edit your video by switching your video sources as you would switch a live show. Using the functions of the VTR Transport/Sync Roll/Live Digitize panel, you will set it up so that a timeline is built as you switch your video. Later in this tutorial, you will bring this timeline into Preditor and digitize the clips from the timeline.

To sync roll edit and build a timeline, follow these steps:

1. In the VTR Transport/Sync Roll/Live Digitize panel, turn on the automatic timeline building function by selecting the Build Timeline button (following figure).

The Build Timeline Button

By doing this, you are telling Trinity to automatically build a timeline as you are switching your video sources. This is necessary if you wish to fine tune the projects or digitize the individual clips in Preditor.

2. In the VTR Transport/Sync Roll/Live Digitize panel, start a new timeline by clicking the New TL button (following figure).

The New TL Button

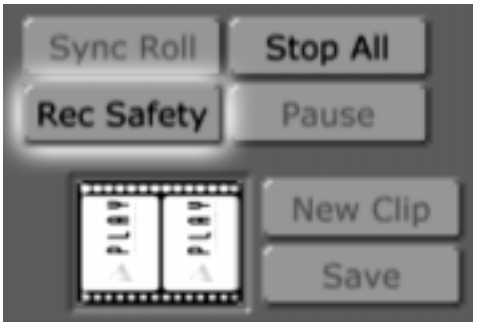
NOTE If you have a timeline loaded into Preditor, and you do not start a new timeline, the timeline you create as you sync roll is automatically added to the end of the loaded timeline.

3. If there is an unsaved timeline loaded into Preditor, you see a window that says, “Current Preditor project is not saved. Save changes now?” (following figure). If you want to save the project, click Yes. If you do not want to save the project, click No.

The Save Project Window

4. In the VTR Transport/Sync Roll/Live Digitize panel, take note of the Rec Safety button (following figure). Select this button if you have assigned a deck as a record deck and are crash recording as you sync roll edit.

   The Rec Safety button offers a safety net for when you have assigned a deck as a record deck and are crash recording. With Rec Safety selected, when you click the Sync Roll, Start All, or Record buttons, a menu pops up asking if you really want to crash record.

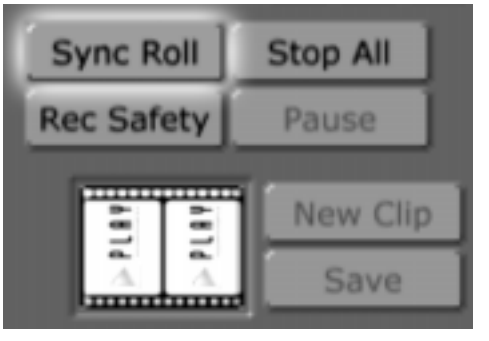


The Rec Safety Button

The next step is to begin your sync roll editing. Before you do this, you may want to set up Air Command so that you can begin switching your video once you tell the VTR Transport/Sync Roll/Live Digitize panel to begin your sync roll. For example, you may want to load some transition effects and set your program out source before you begin your sync roll.

1. In the VTR Transport/Sync Roll/Live Digitize panel, begin your sync roll. There are two ways to do this:

   a. Click the Sync Roll button (following figure) to begin your sync roll.

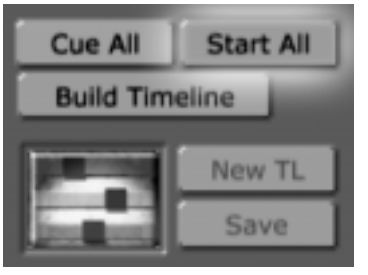


The Sync Roll Button

When you click this button, Air Command first cues up your tapes to the in points you marked earlier and starts the record deck recording (if you assigned a record deck). If you have a Time Machine installed and selected

the TimeMachine button, Time Machine begins digitizing a clip as you switch your video.

b. Click the Start All button (following figure)



The Start All Button

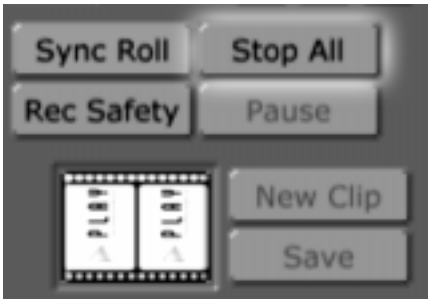
Clicking this button starts all the tapes playing and recording from wherever their current point is (if you assigned a record deck). If you have a Time Machine installed and selected the TimeMachine button, Time Machine begins digitizing a clip as you switch your video.

An example of when you would use the Start All button is if you specifically need to start all your decks without cueing them up first.

2. Now that you've clicked the Sync Roll or Start All button, you can begin switching your project. For more information on switching video, see the *Air Command 2.1 Manual*.

   As you switch your video, Trinity assembles your timeline in Preditor. When you finish your sync roll, you can go into Preditor to work with this timeline.

3. When you have finished switching your project, click the Stop All button (following figure) in the VTR Transport/Sync Roll/Live Digitize panel to stop all of your decks. Clicking this button also stops the build timeline function.



The Stop All Button

Once you have stopped all of your decks, your timeline is complete and you can save it to a bin or toggle to Preditor to edit the event on the timeline.

4. Save the timeline to a bin by dragging-and-dropping the Timeline picon (following figure) from the VTR Transport/Sync Roll/Live Digitize panel to a bin.

The Timeline Picon

TIP A Timeline picon that is saved to a bin can be loaded and played back in Air Command by double-clicking it. This loads the timeline into the FX window. This timeline is played by clicking the Auto button or by pushing the Space Bar on your keyboard. This timeline can also be loaded into Preditor as you would any timeline.

5. Close the VTR Transport/Sync Roll/Live Digitize panel by clicking the X button in the upper right corner of the panel.

You're now ready to move on to the next section.

Bringing The Timeline Into Preditor

Now that you've finished your sync roll, you can bring the timeline you created into Preditor for further editing or for digitizing your clips (if you have a Time Machine installed). After building a timeline in Air Command, there are two ways to bring a timeline into Preditor. They are:

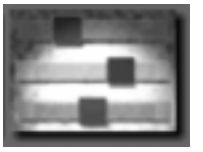
1. If you saved the timeline picon into a bin, then worked on other projects, and then came back to Air Command, do this:

   a. Bring up Preditor by clicking the **Preditor** button (following figure), or by pressing the **Scroll Lock** button on your keyboard.

The Preditor Button

You see the Preditor program on your screen.

   b. Locate the timeline picon (following figure) in the bin where you saved it.



The Timeline Picon

c. Load this timeline into Preditor by double-clicking it.

You see the timeline opened up in Preditor (following figure). Your timeline will look different than the following figure, since you switched your own video.

The Timeline in Preditor

2. If you've just finished your sync roll and want to go directly to Preditor to edit the timeline, press the Scroll Lock button on your keyboard. This is the hot key to toggle from Air Command to Preditor.

   You see the timeline open in Preditor (following figure). Your timeline will look different than the following figure, since you switched your own video.

The Timeline in Preditor

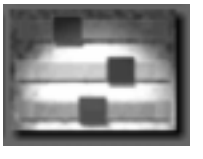
You are now ready to move on to the next step.

Setting Picons For Timeline Clips

Before you begin editing or digitizing anything on your timeline, it is a good idea to first set picons for all of your timeline clips. When a timeline that was built in Air Command is brought into Preditor, all of the clips have a generic Play picon on them. Setting picons for the clips puts a still from the clip on the clip's picon. This makes it easier to determine what is on each clip.

To set picons for your timeline clips, follow these steps:

1. In the toolbar, right-click on the Timeline picon (following figure).



The Timeline Picon

A pop-up menu appears.

2. Choose **Make all Picons** from the pop-up menu (following figure).

Choosing Make All Picons from the Pop-Up Menu

Once you choose this option, Preditor shuttles through the tapes and sets a picon for each clip in the timeline. On the timeline, you see a status bar moving up and down in each clip's picon. This indicates that Preditor is setting picons for each clip.

With picons set for your clips, you are ready to digitize the clips.

Digitizing The Timeline Clips

Now that you have a timeline of your sync roll in Preditor, you can edit the timeline as you would any project. You can also digitize your clips to Time Machine if you have one installed in your Trinity. You do this by selecting the clips you want to digitize on the timeline, or by digitizing the clips in a batch using the Batch Digitize window. In this section of the tutorial, you will learn several ways to digitize clips.

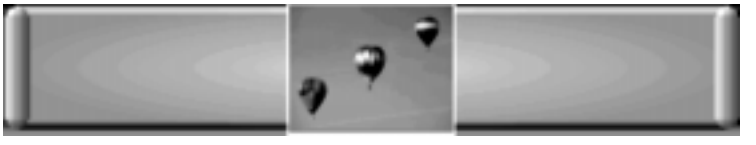
NOTE When Time Machine digitizes clips, an extra second is digitized at the beginning and end of the digitized clip. This gives you extra video to fine-tune your edits.

To digitize all of the clips on the timeline, follow these steps:

Digitizing all Clips Using the Pop-Up Menu

1. In the timeline, select the first clip you wish to digitize by clicking on it.

   You see the event highlighted, indicating that it is selected (following figure).



The Selected Clip

2. Digitize the selected clip by right-clicking on it and choosing Digitize to Time Machine from the pop-up menu (following figure).

Choosing Digitize to Time Machine from the Pop-Up Menu

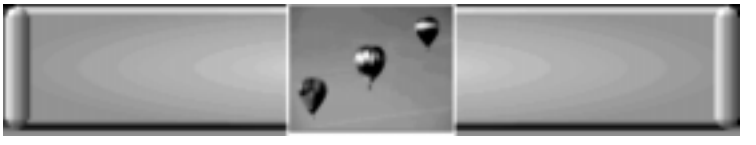
Once you choose this option, Preditor cues up your decks and then begins digitizing the clip. You see a white status bar moving up and down in the clip's picon, indicating that the clip is being digitized.

3. Repeat steps 1 and 2 for each clip in your timeline until all of your clips have been digitized to Time Machine.

Digitizing Selected Clips with the Digitize Button in the Toolbar

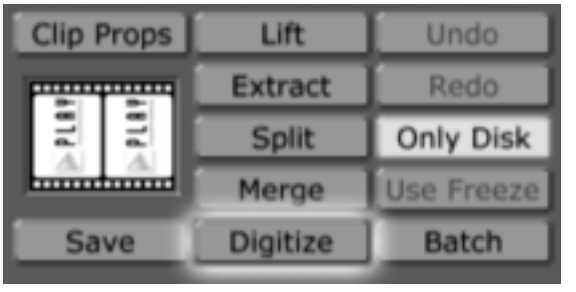
1. In the timeline, select the first clip you wish to digitize by clicking on it.

   You see the event highlighted, indicating that it is selected (following figure).



The Selected Clip

2. In the Clip Controls, click the **Digitize** button (following figure) to digitize the selected clip.



The Digitize Button

Once you choose this option, Preditor cues up your decks and then begins digitizing the clip. You see a white status bar moving up and down in the clip's picon, indicating that the clip is being digitized.

3. Repeat step 2 for each clip in your timeline until all of your clips have been digitized to Time Machine.

Digitizing Clips Using the Batch Digitize Window

1. Select all of the clips in your timeline by right-clicking on an event in the timeline and choosing Select All from the pop-up menu (following figure).

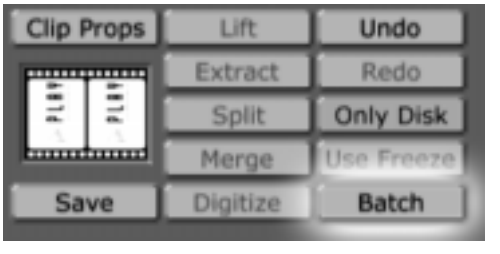
Choosing Select All from the Pop-Up Menu

In the timeline, you see that all of the events are selected.

2. Add all of the events to the Batch Digitize list by right-clicking on an event in the timeline and choosing Add to Batch Digitize from the pop-up menu (following figure).

Choosing Add to Batch Digitize from the Pop-Up Menu

3. On the toolbar, bring up the Batch Digitize window by clicking the Batch button (following figure) on the toolbar.



The Batch Button

You see the Batch Digitize window (following figure) in the bottom half of your screen. From this window, you can set the properties for each clip, and digitize selected clips in a batch. For more information on using the Batch Digitize window, see “Using The Batch Digitize Window” on page 138 and the tutorial on non-linear editing in this chapter.

The Batch Digitize Window

NOTE If you are logging clips, there is a fourth way to digitize them. You can turn on the AutoBatch button under the right monitor, and the clips are automatically sent to the Batch Digitize list as you mark them. When using the AutoBatch button, be sure to click on the New Clip button under the right monitor to clear the Clip picon between each clip. In this tutorial, you have already marked your clips using the VTR Transport/Sync Roll/Live Digitize panel, so you won't use AutoBatch. For more information on the AutoBatch feature, see the tutorial on non-linear editing in this chapter, or “AutoBatch” on page 61.

Once you've digitized all of your clips, you can edit your timeline as you would any project. This timeline can also be dropped into the FX picon in Air Command and played back. By completing this tutorial, you now have the skills to perform a sync roll edit and digitize timeline clips in Preditor.

Appendix 1: Keyboard Commands

Keyboard commands are a quick way to navigate through applications. In this appendix, you find keyboard commands for Preditor:

0	Change reel, make new reel, or do reel properties on currently active source.
1	Enter trim clip mode.
2	Enter trim edit mode.
3	Enter slip source mode.
4	Enter slide clip mode.
5	Enter transition mode.
6	Enter add clip mode.
7	Enter view mode.
<shift>+2	Two monitor mode (actually @ sign).
<shift>+3	Three monitor mode (actually # sign).
<shift>+4	Four monitor mode (actually $ sign).
q	Perform.
w	Review.
e	Preview.
a	Select record deck.
s	Select source A.
d	Select source B (must be in 3 or 4 panel mode).
f	Select source C (must be in 4 panel mode).
g	Cue in.
h	Cue out.
j	Splice.
k	Creates a 1-second black clip.
l	Replace.

z	Rewind current deck.
x	Fast-forward current deck.
c	Play current deck.
v	Pause/stop current deck.
b	Slow current deck.
n	Go to current timecode on current deck.
m	Mark in.
, (comma)	Mark out.
. (period)	New clip.
<Insert>	Enter duration timecode on active source.
<Home>	Enter in point timecode on active source.
<End>	Enter out point timecode on active source.
+ (plus)	Increase duration on active source.
- (minus)	Decrease duration on active source.
left arrow	Move position bar in timeline 1 frame left.
right arrow	Move position bar in timeline 1 frame right.
<space>	All stop.
Ctrl + s	Split.
Ctrl + m	Merge.
Ctrl + l	Lift.
Ctrl + e	Extract.
Ctrl + d	Digitize.
Ctrl + r	Ripple.
Ctrl + b	Batch.

Appendix 2: Trinity Technical Support

Play has spent a lot of effort to make Trinity durable and reliable, and you should expect to spend many happy years with it. But because we are aware that things go wrong from time to time, we have established a support system for Trinity owners that puts help close at hand.

If you should ever need technical support for your Trinity, you should contact your Trinity dealer. We understand that you can't afford any downtime with your Trinity, so we have empowered the Trinity Dealer Network to directly provide you with rapid service for any problem that may occur.

Each Trinity dealer has been through extensive training on all aspects of Trinity, and has at his or her disposal a wealth of resources to quickly handle all your technical support requirements.

Should you find it necessary to contact Play directly, there are several methods at your disposal.

- Via the Internet

  For updates on Trinity documentation and software, point your browser to:

  www.play.com/products/trinity/updates

  For answers to FAQ's (frequently asked questions) or to contact the Trinity technical wizards via e-mail, go to the following web page:

  www.play.com/cgi-bin/rightnow

- By Phone:(916) 636-2444

  Trinity technical experts are on hand from 7:00AM to 6:00PM Pacific Time, Monday thru Friday, excluding major national holidays.

- By Mail or Fax

  Play Incorporated
  Attn: Trinity Support
  2890 Kilgore Road
  Rancho Cordova, CA 95670-6133
  Fax: (916) 853-9831

Appendix 3: Troubleshooting Guide

This section is a troubleshooting guide to problems and possible solutions for Preditor.

I don't see video on the monitor in the Preditor interface.

In serial devices, check that the correct input numbers are dedicated to the correct decks or other video equipment.

Preditor won't import my EDL.

- The file doesn't end in .edl. Solution: rename it so the extension is .edl.
- Or the EDL isn't in CMX 3400 or 3600 format. Solution: save the EDL in that format in whichever tool you are saving the EDL.

Preditor EDLs don't look the same when loaded back in.

This is because Preditor can't save all the transitions, downstream keys, color corrections, audio settings, etc. in a text EDL. It may also have to alter the data slightly so that the timeline can be understood by a CMX editor. If you want all your settings saved, don't save your timeline as an EDL until you want to take it to another system.

"Whip" Edits. There is a jump in the image for the first frame or two at the in point of the edit on the record tape.

This is called a "whip" edit. We know of two potential causes and their corresponding solutions.

- Old media. If the tape is highly used, or if an edit has been done at that point several times, the area of the tape could get tired. Solution: Try newer media.
- The heads on the deck have seen a lot of action. The heads may not switch cleanly from playing to insert editing. Solution: get the deck(s) serviced.

When I am editing in Preditor, the system aborts the edit.

Several possible problems can cause aborted edits. Two things to look at right off the bat are:

- If you have a Panasonic DVC Pro 640, 650, or 750, check the CF or CAP.LOCK menu setting. If there is a choice between 2F and 4F, set it to 2F. Setting it to 4F can cause some edits to be off by one frame EVERY time.
- Is the timecode continuous during the preroll of the edit on all the tapes involved? If not, this can cause the editor to believe the edit will be wrong and therefore abort the edit. Try running decks using Timer1 timecode, which you can set in serial device properties (see the chapter on "Serial Devices" in the User's Guide for more information on setting serial device properties).

If neither of these things is causing the problem, try the following:

- In Edit Options turn OFF Abort Inaccurate Edits.
- For all playback decks involved in the edit, go to Deck Properties Panel and turn ON Disable Bumps. Also set Play Delay to zero (0).
- Use the superimpose video out of all playback decks, so you can see a timecode window on the screen for each deck you look at.
- Run simple cuts-only edits from each playback deck.
- Cue to the in point of the edit on the record deck (after it's been performed) and look at the timecode in the superimpose text. Compare this time to the actual IN point for the source deck.

There can be multiple problems observed, and they should be fixed in this order:

- If in the previous step you didn't see anything from the source clip you marked, then it may mean that the edit deck didn't start recording at the right time. Although this wouldn't cause an edit to abort, it will make it more difficult to diagnose and fix that problem.

Solution: Count out how many frames pass on the record deck before you see a frame from the source clip (including the one at the record in point). Multiply this number by 2 (to get fields) and call that the "edit delay adjustment." (Note: if the edit actually started recording BEFORE the in-

point this would be a negative number, the number of frames of source that were recorded before the in point multiplied by -2).

Go to Configure--Serial Devices panel and select Properties for this edit deck. Add this “edit delay adjustment” to the number in the Edit Delay box and enter the result there. If the Edit End Delay was the same as the Edit Delay before you changed it, put the same result into Edit End Delay that you put into Edit Delay.

Remember to go into Properties for the source decks and turn off the Disable Bumps button which you turned on at the beginning of this solution. It should improve the accuracy of the edits with most tape decks.

- If the record tape correctly shows the source material starting at the record in frame, and ending on (but not including) the out frame, then do this:

Look at the recorded timecode overlay at the in point on the record deck, and subtract that timecode from the actual source in-point for the clip. Multiply this number by 2 to get fields and enter it in the Play Delay number box in the Properties window for the source deck that the clip came from. (Get Serial Device Properties from Configure--Serial Devices panel). You may have to do this fix for each playback deck. At this point, you should be able to run an edit and have it be frame-accurate at least some of the time. If you go into Properties for the source decks and turn off the Disable Bumps button, it should improve the accuracy of the edits with most tape decks.

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