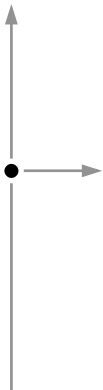


Profile Tool Box

PROFILE TOOL BOX & LIST MANAGER

User Guide



071-8009-01
MARCH 2004

the most watched worldwide

Copyright

Copyright © 2004 Thomson Broadcast and Media Solutions, Inc. All rights reserved. Printed in the United States of America.

This document may not be copied in whole or in part, or otherwise reproduced except as specifically permitted under U.S. copyright law, without the prior written consent of Thomson Broadcast and Media Solutions, Inc., P.O. Box 59900, Nevada City, California 95959-7900

Trademarks

Grass Valley, Profile, and Profile XP are either registered trademarks or trademarks of Thomson Broadcast and Media Solutions, Inc. in the United States and/or other countries. Other trademarks used in this document are either registered trademarks or trademarks of the manufacturers or vendors of the associated products. Thomson Broadcast and Media Solutions, Inc. products are covered by U.S. and foreign patents, issued and pending. Additional information regarding Thomson Broadcast and Media Solutions, Inc. trademarks and other proprietary rights may be found at www.thomsongrassvalley.com.

Disclaimer

Product options and specifications subject to change without notice. The information in this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Thomson Broadcast and Media Solutions, Inc. Thomson Broadcast and Media Solutions, Inc. assumes no responsibility or liability for any errors or inaccuracies that may appear in this publication.

**U.S. Government
Restricted Rights
Legend**

Use, duplication, or disclosure by the United States Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7013 or in subparagraph c(1) and (2) of the Commercial Computer Software Restricted Rights clause at FAR 52.227-19, as applicable. Manufacturer is Thomson Broadcast and Media Solutions, Inc., P.O. Box 59900, Nevada City, California 95959-7900 U.S.A.

Revision Status

Rev Date	Description
March 2000	Initial release of the Profile Toolbox User Guide, 071-8009-00.
5 March 2004	Updated to include all versions up to 5.4. 071-8009-01.

Contents

Preface

About Tool Box	5
Selecting a version of Tool Box	5
Configuring resources (2.2.X, 2.4.X, 2.5.X, 3.X)	6
Assigning channels (4.X, 5.X)	6
Selecting a channel	6

Using the Tool Box Editor

Starting and exiting the Tool Box Editor	10
Project files	11
Connecting to a remote Profile machine	13
Selecting a current bin	14
Opening a bin	15
Creating a new bin	15
Record time remaining	15
Renaming media	16
Viewing media properties	16
Deleting media	17
Emptying the recycle bin	17
The capture timeline	18
Capturing a new clip	19
Loop recording	21
Playing a clip	21
Trimming a clip	22
Creating a subclip	22
User marks	23
Event and frame controls	23
Shuttle controls	23
Creating subclips on the fly	24
The edit timeline	24
Creating a new master	25
Adding media to a master	26
Playing a master	26
Using the audio controls	27
Tool Box Editor keyboard shortcuts	29

Using the List Manager

List Manager overview	31
Starting List Manager	33
Viewing Help	34
Closing List Manager	34
Connecting to a remote Profile machine	35
Building a playback list	36
Adding media for playback	36
Changing event settings	38
Optional columns	40
Settings unique to transfer events	40
Settings unique to archive events	41
Monitoring a list as it runs	41
Validating a list	41
Scheduling a new play event	42
Scheduling recording operations	43
Scheduling rules and constraints	44
Using a live feed	45



Scheduling a transfer event	46
Scheduling an archive event	47
Editing event lists	48
Changing the order of events	48
Inserting events	48
Removing events from a list	48
Using the edit window	49
Creating a new list	49
Saving a list	49
Reusing a list	50
Closing a list	50
Exporting a list	50
List file ASCII text format	50
Importing a list	52
Deleting an entire list	52
Overriding events in a list	52
Taking an event	52
Stopping an event	53
Customizing your list display	53
Using the event log	56

Index

Preface

About Tool Box

Tool Box consists of a pair of Profile applications: Tool Box Editor, and List Manager.

The Tool Box Editor is a graphical user interface that lets you create digital media by capturing video and audio clips while also providing an inexpensive, cuts-only editing system. It lets you log video and audio material from a variety of sources, such as a satellite feed, live camera, VTR, CD player, or microphone. You can assemble material on disk and then send it back out to tape, broadcast, or archive.

The Profile List Manager lets you automate your use of the Profile video disk recorder. You'll probably want to use List Manager to schedule playback of clips or masters created in the Tool Box Editor on designated outputs. List Manager also lets you record incoming video at predetermined times or send incoming video directly to an output. You can also set up times to switch a live connection, transfer media between Profile systems connected via Fibre Channel, or even archive a clip on a library unit. You can combine these functions to increase the automation level of your station operations.

Selecting a version of Tool Box

When you install Tool Box, you must choose a version that matches your current version of Profile System Software. The Tool Box CD-ROM contains version of Tool Box for the 2.2.X, 2.4.X, 2.5.X, 3.X, 4.X and 5.X versions of Profile System Software.

Table 1 lists some of the features that are included in each version of Tool Box. You may find this list helpful when selecting which version of Profile System Software to install.

NOTE: *You must install the appropriate version of Profile System Software before installing Tool Box.*

Table 1. Tool Box features by Profile System Software version

Profile System Software Version	Tool Box Features
4.X, 5.X	Uses Channels defined in Configuration Manager Profile XP support only
3.X	Only for use on Profile systems with DVCPRO support (includes Profile PRO series)
2.5.X	Full MPEG support (PDR300 and PDR200)
2.4.X	Improved resource management. PDR 100 and PDR 200 (JPEG) only
2.2.X	First version of Tool Box



Configuring resources (2.2.X, 2.4.X, 2.5.X, 3.X)

Before you can make use of a Profile application, you must allocate Profile resources such as video inputs and outputs for its use. These resources are assigned to channels for use by the application. Once the resources are allocated, they are unavailable for other applications. You must manage Profile resources to ensure that each application is able to use the required resources when it needs them.

To gain access to Resource Manager and configure Profile resources:

- In Tool Box Editor choose **Config | Resources**.
- In List Manager choose **Project | Configure**.

The Resource Manager is available when an application is running, unless media is loaded on a timeline.

Assigning channels (4.X, 5.X)

Before you can use a Profile application, you must first select the channels to use with your application. A channel assigns resources such as video audio, and timecode inputs and outputs, as well as encoders and decoders to the panel. Channels are created or modified by Configuration Manager. See the *Profile XP System Guide* for more information about creating and modifying channels in Configuration Manager.

Selecting a channel

1. Click a Tool Box Editor panel or a List Manager channel to make it active.
2. Right-click a panel name and choose **Select Channel** to open the Channel Configuration dialog box for an existing panel (Figure 1). You can also choose **Config | Add Panel** to open a new panel and select a channel.

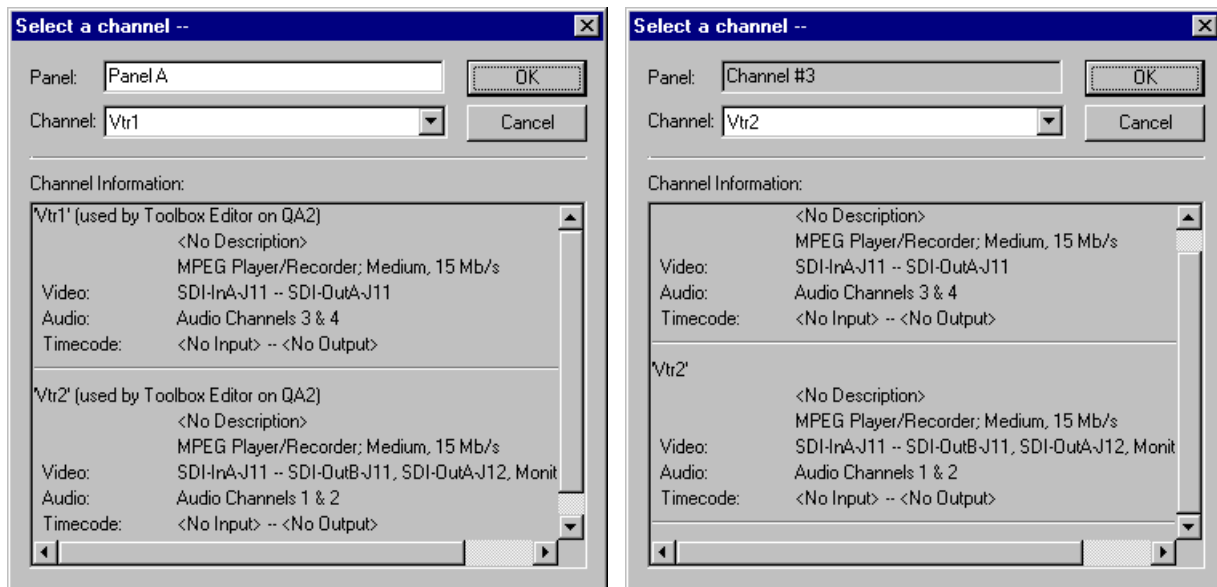


Figure 1. Channel selection dialog boxes for Tool Box Editor and List Manager

3. Select a channel for use with the panel from the Channel drop-down list box. You can scroll through the Channel Information list to see what resources are specified by each channel.
4. Name the panel according to your needs.
5. Click **OK** to have your channel selection take effect.

If you use Configuration Manager to change a channel's name or resources, you must reselect the modified channel in Tool Box Editor or in List Manager for the change to take effect. You may also choose **Config | Reacquire Channel** to update the channel for the current panel.



Using the Tool Box Editor

Storing media on a Profile system rather than on tape opens the door to almost instant access to video and audio material. Media is available to all of Profile's channels at once, so you can play a video on more than one channel at the same time. Since each of the channels (up to four) is independent, playback can start at a different time and place in a clip. One of the best features of the Profile system is that you can start playing material while it's still being recorded.

The basic element of digitally stored video and audio is the *clip*. A clip is a reference to video, audio, and timecode material recorded in media files on Profile disks. A clip has a beginning and an end, and, when first recorded, the beginning and end correspond to the first and last frames stored in the media file. A clip may refer to the entire media file or just part of it. When you delete a clip, the media file that the clip referred to remains on disk—only the reference to the media file is deleted, not the media itself.

The Tool Box Editor is a graphical user interface that lets you create digital media by capturing video and audio clips while also providing an inexpensive, cuts-only editing system. It lets you log video and audio material from a variety of sources, such as a satellite feed, live camera, VTR, CD player, or microphone. You can assemble material on disk and then send it back out to tape, broadcast, or archive.

After launching the Tool Box Editor (see Figure 2), the first step you must take is to acquire resources—such as codecs and audio channels—with the Resource Manager. Then you can capture a new clip or play an existing one. Other common tasks include creating new masters, playing masters, creating subclips, trimming clips, and deleting media.



Starting and exiting the Tool Box Editor

To start the Tool Box Editor:

- Double-click the Tool Box Editor shortcut icon on the desktop.
- Choose **Start | PDR Applications | Tool Box Editor**.

NOTE: *The Tool Box Editor may be restarted at any time. Multiple instances are allowed.*

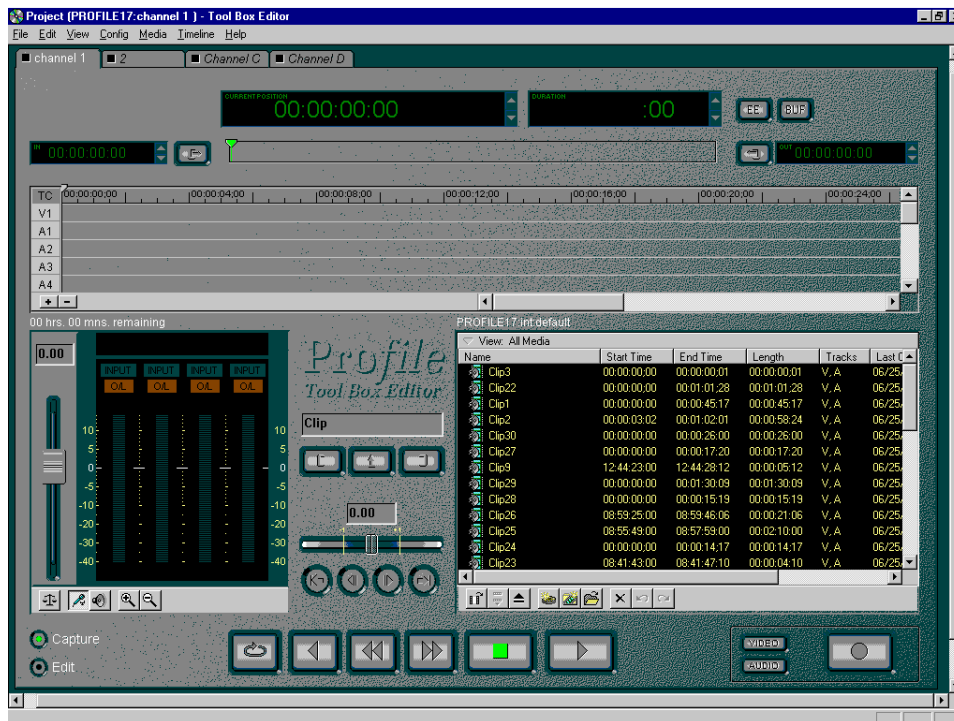


Figure 2. Tool Box Editor window

You can start the Tool Box Editor from a command line, provided that *c:\profile* is in the path, by typing:

```
tbxedit.exe
```

You can also specify a project file name when you start the Tool Box Editor from a command line:

```
tbxedit.exe myproject.tbx
```

You can start Tool Box Editor while also connecting to a named Profile unit on the network:

```
tbxedit.exe -m profile7
```

NOTE: *You cannot specify both a project file and a remote Profile machine in a command line at the same time.*

Whenever you start the Tool Box Editor, a Hardware Communication Monitor is also started, if it is not already running. This program keeps track of the Profile host file (*profile.hst*) which lists Profile systems on the network, as well as remoting activities.

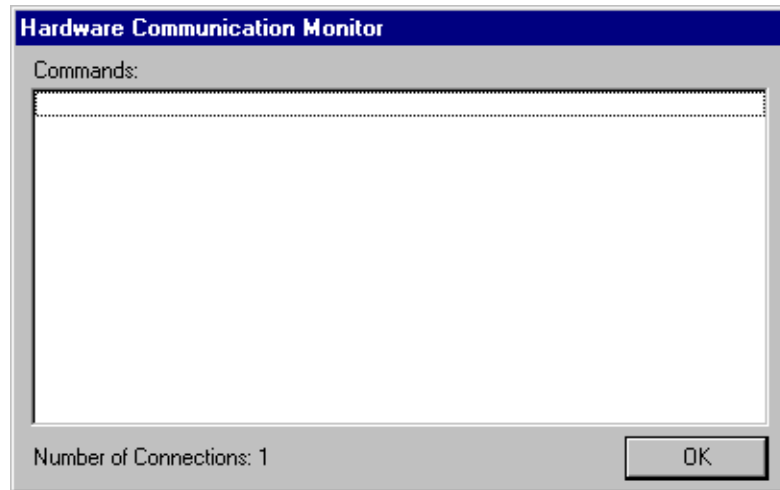


Figure 3. Hardware Communication message box

The Hardware Communication Monitor tries to connect to a machine in the project file (see “Project files” on page 11). If there is no project file present, you will automatically connect to the local machine. Otherwise, you will go to the Connect to Machine dialog box (see Figure 4).

To exit the Tool Box Editor:

- Choose **File | Close**.

A message box is displayed, asking you to confirm that you really want to exit the application. Click on the **Yes** button to confirm the exit or the **No** button to cancel the quit command.

Project files

You can save your work environment into a project file (*.tbx*). A project file stores allocated resources and the current bin. Saving your environment eases the transition of set-ups between users. A descriptive project title is displayed in the title bar of the Tool Box application, including the current machine name and channel.

A project file contains the following information for the last Profile machine connected to:

- What the last machine was.
- The Resource Manager configuration.
- The current bin.

If you connect to a new remote Profile machine during a session, the default settings for that Profile machine (saved by Resource Manager) are used for that machine. If no defaults have been saved, factory defaults are used.



To save the current work environment in a project file in the current working directory:

- Choose **File | Save**.

To open an existing project file:

- Choose **File | Open**.

You can also specify a project file name when you start the Tool Box Editor from a command line:

```
tbxedit.exe myproject.tbx
```

To create a new project file:

- Choose **File | New**.

You are asked to save the current project file (if necessary) and then if you are connected to a local machine, the Tool Box Editor caches media and is set up using a default configuration. If you are connected remotely, you are also asked which machine to connect to in the Connect to Machine dialog box.

To save an existing project file under a different name:

- Choose **File | Save As**.

Connecting to a remote Profile machine

You can connect from your local machine to any remote Profile machine in your network. A local Profile machine refers to a Profile system to which you are directly attached. A remote Profile machine refers to a Profile system that is connected to your local system via an Ethernet local area network (LAN).

To connect to a remote Profile machine:

1. Choose **File | Remote Machine**. The Connect to Machine dialog box appears. The label *Local* appears after the name of the local Profile machine.

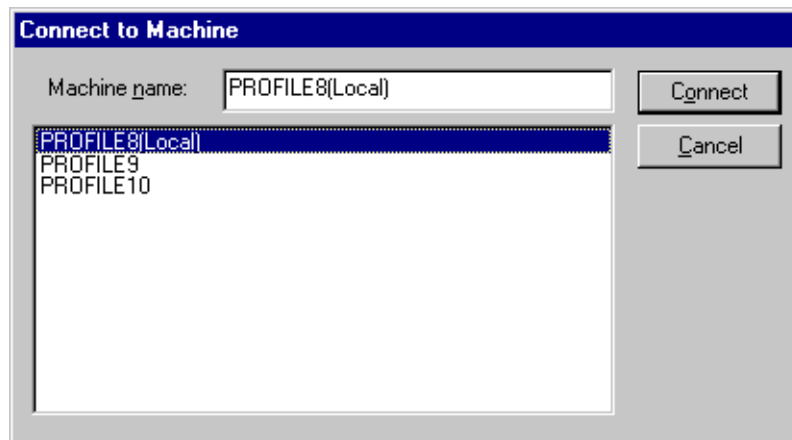


Figure 4. Remote Machine dialog box

To connect a Profile machine from the network host list:

1. Select the name of the machine in list box.
2. Click **Connect**.
3. The Connecting to Machine dialog box is displayed. If the connection is unsuccessful, you are given the opportunity to retry the connection or to cancel the operation.

NOTE: To add a Profile machine to the network host list, refer to the Profile User Manual for versions 2.X or 3.X, or to the System Guide for version 4.X or 5.X.



Selecting a current bin

After you have acquired resources and chosen operational settings, you are ready to start editing. First, let's discuss some basics.

With the Tool Box Editor, you edit media such as clips and masters. The capture timeline lets you capture video and audio clips while the edit timeline allows you to edit a sequence clips into a master.

A bin is simply a collection of masters and clips. The current bin is the set of media displayed in the current bin display. (See Figure 5) By default, the current bin is the first or top bin displayed in Media Manager.

The current bin display helps you focus on and work with a set of clips and masters. Above the display, the column headers are shown. Click on the column header bar by pointing the mouse pointer at the header and pressing the left mouse button. The media files are then sorted according the criteria of the columns.

You can also view (sort) media in the current display in several other ways—showing all media at once (default), clips only, or masters only.

To select a view, simply click on the view bar above the contents pane and choose a menu item. You can also customize how you sort the media by name, type, or date—or all three at once. Selecting and sorting views is useful when you have a lot of media on disk.

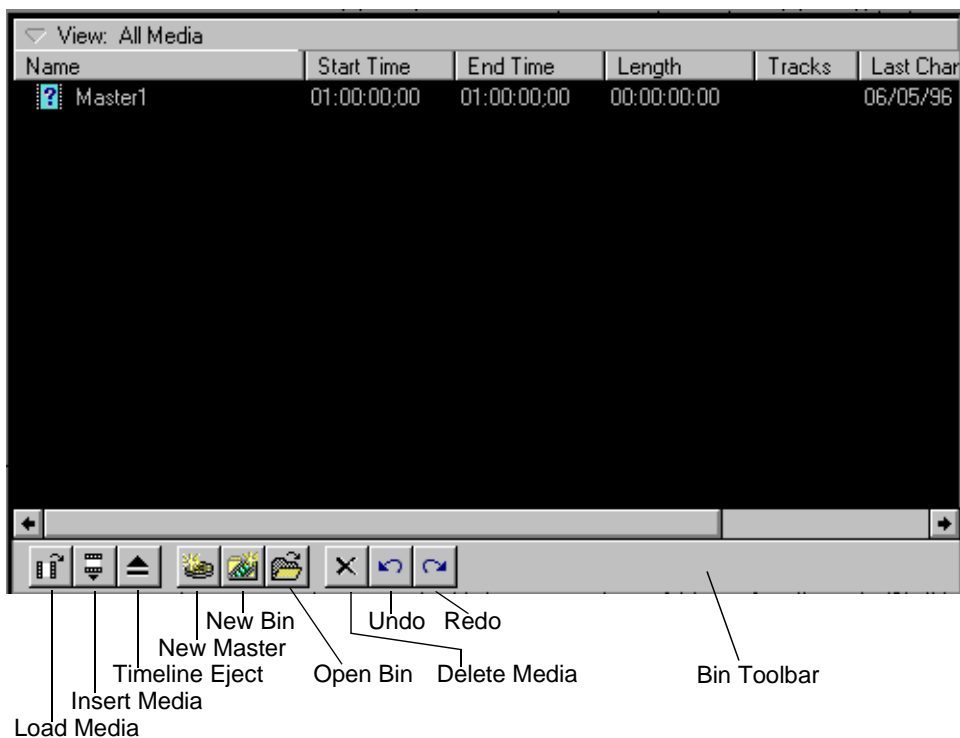


Figure 5. Current bin display

Below the current bin display is a set of buttons (from left to right):

- **Load Media:** Loads a selected master onto the edit timeline or a selected clip onto the capture timeline.
- **Insert Media:** Inserts a selected clip into the currently loaded master on the edit timeline near the location of the current timeline cursor.
- **Timeline Eject:** Ejects media from the active timeline.
- **New Master:** Creates a new, empty master, ready to receive clips.
- **New Bin:** Creates a new bin within a volume and displays it in the current bin display.
- **Open Bin:** Opens an existing bin and displays it on the current bin display.
- **Delete Media:** Deletes selected media.

Opening a bin

To open or change the current bin:

1. Click the **Open Bin** button.
2. Enter the name in the text box or select the desired bin from the list box and press **OK**.
3. The selected bin is loaded into the current bin display.

Creating a new bin

You will often want to create a new bin to store and organize new media. To create a new bin:

1. Click the **New Bin** button below the current bin display and the new bin dialog box is displayed.
2. Enter the name of new bin in the text box, or accept the default name.
3. Click **OK** to accept the new bin name.

The new bin automatically appears in the current bin display.

Record time remaining

Below the edit timeline (lower-left) is the record time remaining, in the form **00:00** (Hours:Minutes). This indicates the amount of storage remaining in the current Profile volume. The amount varies based on the current video quality. Generally, the higher the quality of video, the more disk space is used, thus leaving less time remaining.



Renaming media

To rename a clip or master:

1. Select the clip or master in the current bin.
2. Choose **Rename** from the **Media** menu or from the shortcut menu with a right-click. You can also select the bin or master again in the current bin.
3. Type a new name, then press Enter.

Viewing media properties

You can view the media properties for clips and masters. To view these properties:

1. Select a clip or master in the current bin.
2. Choose **Properties** from the **Media** menu or from the shortcut menu with a right-click. You can also double-click the clip or master in the current bin. The Properties dialog box appears (see Figure 6).

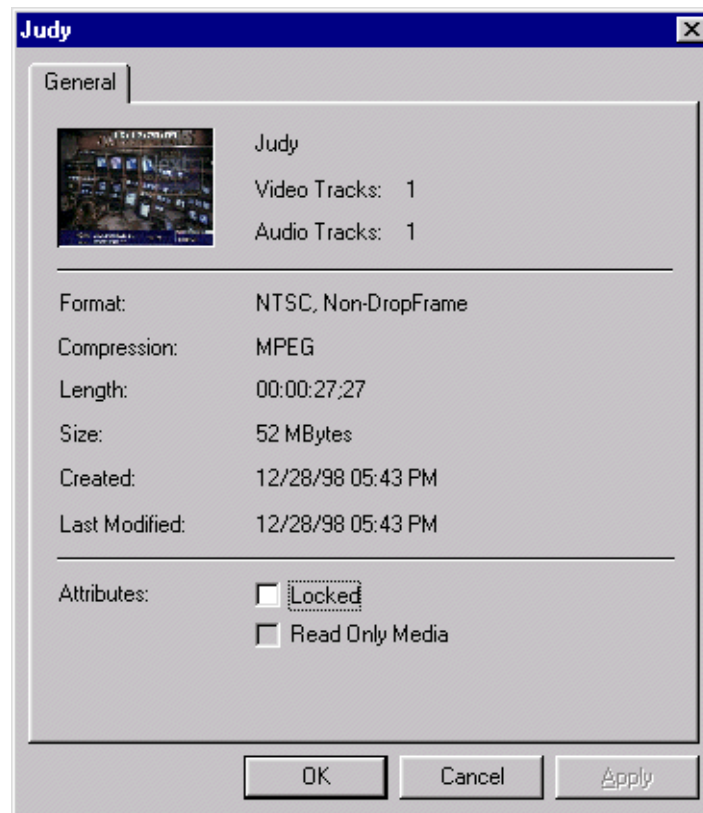


Figure 6. Properties dialog box

In this dialog box, you can view:

- A preview frame of the clip or master to help identify it. Preview frames are not available for MPEG masters.
- The name of the clip or master.
- How many tracks the clip or master uses for both audio and video.
- The media format, either NTSC or PAL. NTSC clips are recorded with either drop-frame or non-drop-frame timecode.
- The length of the clip or master. The length is shown in timecode format: **00:00:00:00** (Hours:Minutes:Seconds:Frames).
- The date and time that the media was created and the date and time it was last changed. The date and time the media was created or last changed is shown in the form: **12/2/94 9:40 PM**
- The read-only attribute, which you can change by clicking the Read Only box. Clips and masters with the read-only attribute cannot be renamed, deleted, or modified in any way.

Deleting media

When the amount of remaining disk storage begins to get low (the time remaining is displayed below the edit timeline), you can free space by deleting unused media.

1. Select media from the current bin display. You can select either clips or masters; you can also select several clips or masters at a time.
2. Choose **Delete** from the **Media** menu or from the shortcut menu with a right-click. Press the **Delete** key or the **Delete** button on the bin toolbar.
3. A dialog box asks you to confirm that you want to delete the selection. If you click on **Yes**, the media is deleted; if you click on **No**, the operation is cancelled.
4. When media is deleted, it is moved to the Recycle bin until the Recycle bin is emptied.

***NOTE:** If a clip is locked, you cannot delete it. When a clip is deleted, its source material is not deleted if any other clips or masters reference that material. Only after the last clip is deleted is any disk storage freed.*

Emptying the recycle bin

When a clip or master is deleted, it is moved to the **Recycle** bin and is permanently deleted when the **Recycle** bin is emptied. If an item of the same name is in the **Recycle** bin, the new item is automatically renamed.

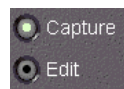
To empty the **Recycle** bin:

- Choose **File | Empty Recycle Bin**.

***NOTE:** If the Recycle bin contains no deleted media, the Empty Recycle Bin menu item is dimmed.*



The capture timeline



The capture timeline allows you to capture and trim clips. You can set the current time position and adjust mark in or mark out points. Click on the **Capture** button below the audio controls to activate the Capture timeline without changing the current time position.

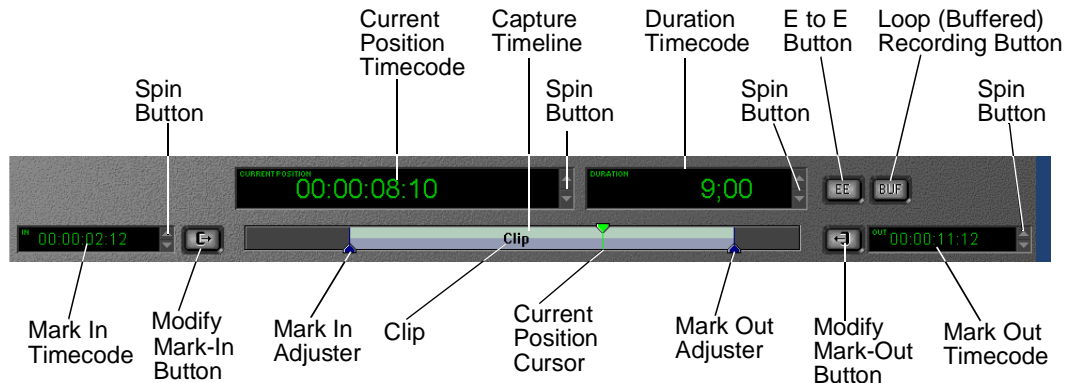


Figure 7. Capture timeline

When recording a clip on the capture timeline, you see the clip name and its record status. With normal recording, you see a *Recording* label. With loop recording, you see a *Buffer Recording* label. If a clip is being recorded on another channel simultaneously, the **Mark-in** and **Mark-out** buttons are disabled and the *Read Only* label is displayed.

The Tool Box Editor displays four timecode indicators: current position, duration, mark-in, and mark-out. The timecode indicators display hours, minutes, seconds, and frames in the form **00:00:00:00**. The duration displays the minimum number of digits. Drop-frame timecode is indicated by a semicolon (;) before the frame number.

Each part of the timecode—frames, seconds, etc.—can be selected by a click of the left mouse button and then changed separately. To the right of each indicator are the spin buttons with an arrow pointing up or down. Click on the up arrow and the time is increased, or decrease it by clicking the down arrow.

When a clip is loaded onto the capture timeline, the current position timecode indicator shows the frame-accurate cursor position in the clip. To move the current position cursor, click anywhere on the capture timeline. The updated timecode is displayed in the indicator as you move the cursor.

To adjust a clip's mark in or out point, move the current position cursor to the desired location and then click on the **Modify Mark-In** or **Modify Mark-Out** button. The mark in and mark out timecode indicators are displayed on either side of the capture timeline. The mark in and mark out markers on the capture timeline indicate where these marks lie on the clip. To move the mark in or mark out, grab the mark in or mark out marker on the capture timeline by clicking on it with the left mouse button and holding the button down while you move it.

To bring up the timecode entry window, click in a timecode indicator and then press + (plus sign), – (minus sign) on the keypad or = (equal sign) on the keyboard. To add to a timecode, click inside a timecode indicator, press + and the timecode entry window appears. Enter the desired value in the form **00:00:00:00** and press Enter. (Only numbers need to be typed.) The value is added to the timecode.

To subtract from a timecode, click inside a timecode indicator press – and the timecode entry window appears. Enter the desired value in the form **00:00:00:00** and press Enter. The value is subtracted from the timecode. To change the value of the timecode, click inside a timecode indicator press = and the timecode entry window appears. Enter the desired value in the form **00:00:00:00** and press Enter. The value is changed to the desired timecode. If an entry in the timecode entry window is out of bounds, it is ignored.

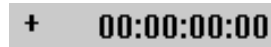


Figure 8. Timecode entry window

The **E to E** (Electronics to Electronics) button is to the right of the duration timecode indicator. By default, E to E is off. If you click on this button, E to E is activated. When E to E is off, the monitor shows the active timeline’s current position. When it is on and no clips are playing or recording, the Profile channel’s live video input bypasses the codec and is directly connected to the outputs.



Figure 9. E to E button

Capturing a new clip

Now you are ready to capture or record a new clip.

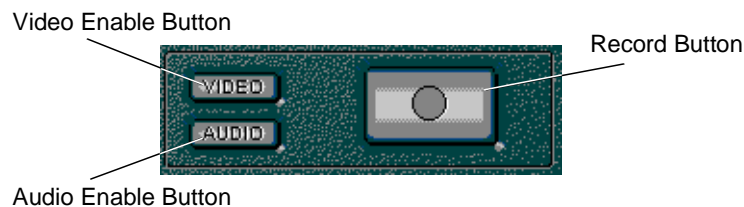


Figure 10. Record buttons

1. First, you need to enable video and/or audio for recording. To enable inputs for recording, you can click on video or audio buttons. The buttons are lit when activated.
2. All acquired audio channels may be used when recording new clips. However, you need to select a set of audio channels. To select a set of audio channels for recording:
 - Click the **Audio Enable** button.
 - Enable audio channels by clicking on the channel selection button above the appropriate audio meter. (See Figure 17)



3. Enter the new clip name in the Clip Name text box, or simply accept the default. The default name automatically increments to a unique name. With a right-click in the text box, you can choose from several editing commands.



Figure 11. Clip Name text box

4. Click on the **Record** button. You can also choose **Record** from the **Media** menu or from the shortcut menu with a right-click.
5. When you are done recording, click on the **Stop** button. (See Figure 12)

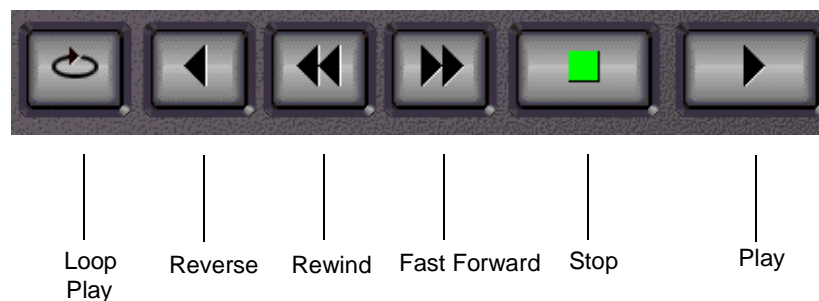


Figure 12. Transport controls

The transport controls are:

- **Loop Play:** Plays the active timeline at normal speed. When the end of the media is reached, play begins again at the beginning of the media.
- **Reverse:** Plays the active timeline in reverse.
- **Rewind:** Rewinds the active timeline or returns the current position to the beginning of the clip.
- **Play:** Plays the active timeline at normal speed.
- **Fast Forward:** Fast forwards the active timeline.
- **Stop:** Stops play on the active timeline.

Loop recording

You can also loop record material. To loop record material, you set up a record buffer that will allow you to record for a length of time. When you reach the end of the record buffer, the current position moves back to the beginning of the buffer and previously recorded material is overwritten. The steps for loop recording are as follows:

1. Choose **Config | Record Buffer** and the Record Buffer dialog box appears. The maximum record time reflects time allocated to all activated buffers and time allocated to the channel and available record time on the Profile unit.

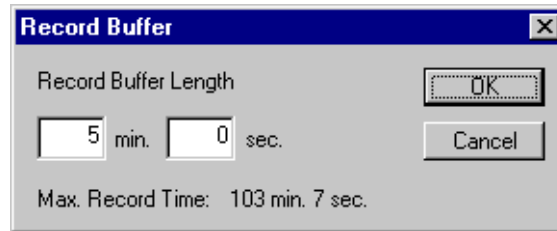


Figure 13. Record Buffer dialog box

2. Enter the length of the record buffer and click **OK**.
3. Click **BUF** in the upper-right corner of the screen to activate this feature. When activated, the button is lit.
4. Follow the steps in “Capturing a new clip” on page 19.

Playing a clip

Now that you have recorded a clip, you can play it back:

1. Select a clip in the current bin.
2. Choose **Load** from the **Media** menu or from the shortcut menu with a right-click. You can also click on the **Load** button on the current bin toolbar. The clip is loaded onto the capture timeline.
3. Click on the **Play** button.

You can also drag and drop a clip onto the capture timeline. To drag and drop a clip:

1. Select a clip by clicking the left mouse button while the mouse pointer is over the desired clip and hold the button down.
2. Drag the clip to the capture timeline and release the mouse button.



Trimming a clip

Trimming a clip means changing the mark-in and/or mark-out points so that the clip duration becomes shorter. To trim a clip:

1. Select the clip you want to trim in the current bin.
2. Load the clip onto the capture timeline.
3. Do one of the following:
 - Drag the mark-in or mark-out cursors to a new position on the timeline (see the mark-in and mark-out cursors in Figure 7, page 18).
 - Drag the current time cursor to a new location and click on the **Modify Mark-in** button or **Modify Mark-out** button. The current position is taken as the new mark position.
 - Adjust the in and out marks by entering the new timecodes in the boxes provided (see the timecode entry boxes in Figure 7, page 18).

Even when trimmed, media remains on disk. Choose **Media | Cleanup** to remove excess media permanently from a trimmed clip. The trimmed portions are removed from disk, thus freeing space for more clips.

NOTE: Media | Cleanup works only if no subclips have been created from a clip. If subclips have been created, or if the clip is referenced by a master, Cleanup will fail.

Creating a subclip

A subclip is a portion of an existing clip. Subclips can help you order your material when creating masters. The buttons that allow you to create subclips are the **Create Mark-in** and **Create Mark-out** buttons. With the **Create Mark-in** button, you mark where you want to start the subclip; with the **Create Mark-out** button, you specify where you want to end the subclip.

In addition, you can set user marks as points of interest that you can jump to at a later time.

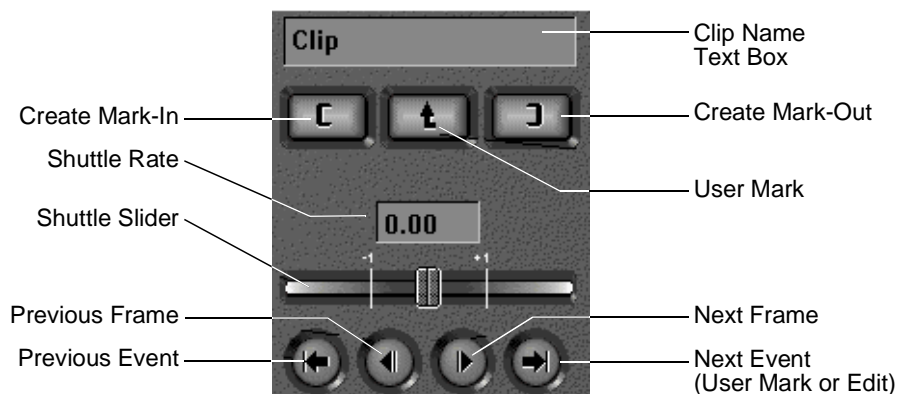


Figure 14. Create and User Mark buttons, plus event and frame controls

To create a subclip:

1. Select the clip in the current bin from which you want to create a subclip.
2. Choose **Load** from the **Media** menu or from the shortcut menu with a right click. You can also click the **Load** button on the current bin display toolbar. The clip is loaded onto the capture timeline.
3. Enter a name for the subclip in the Clip Name text box. This is optional as a default name is automatically generated.
4. Move the current position cursor to the desired starting location.
5. Click on the **Create Mark-in** button.
6. Move the current position cursor to the desired ending location.
7. Click on the **Create Mark-out** button. The subclip is added to the current bin.

User marks

You can insert a user mark into a clip so that you can easily jump to that mark later in the editing process. You insert the mark by placing the current position cursor and then clicking on the **User Mark** button. A user mark is inserted at the current time cursor position. You can jump to user marks by clicking on the **Previous Event** and **Next Event** buttons.

To remove the current user mark:

1. With the clip loaded on the capture timeline, locate the exact frame where the user mark is located using the event and frame controls.
2. Choose **Timeline | Remove Current User Mark**.

To remove *all* user marks:

1. Load the clip onto the capture timeline.
2. Choose **Timeline | Remove All User Marks**.

Event and frame controls

The event and frame controls let you navigate the active timeline in forward or reverse direction (see Figure 14). The **Previous Frame** and **Next Frame** buttons display the last or next frame. The **Previous Event** and **Next Event** buttons move the current position to the next user mark, mark-in, or mark-out points.

Shuttle controls

The shuttle rate slider sets the play speed in the range -16 to +16. The play speed increases as you move the slider to the right and decreases you as you move the slider to the left. You can also adjust the play speed with the shuttle rate input box. Simply type in the rate in the range -16 to +16 and press Enter. The selected clip begins playing automatically whenever you adjust the shuttle rate.

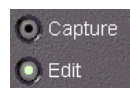


Creating subclips on the fly

To create a subclip on the fly, either while recording a new clip or by playing an existing clip:

1. To start recording, choose **Record** from the **Media** menu or from the shortcut menu with a right-click. You can also click the **Record** button. A new clip appears in the current bin display whose duration grows longer with each new frame recorded.
2. To play an existing clip, select a clip in the current bin display, choose **Load** from the **Media** menu or from the shortcut menu with a right-click. You can also click the **Load** button on the current bin toolbar. Then click the **Play** button.
3. Enter a new subclip name in the clip name field or accept the default name.
4. To create a clip on the fly, click **Create Mark-in**. This starts the new clip. A new clip name appears in the current bin display with a duration of only one frame.
5. Click **Create Mark-out**. The new clip's duration is updated.
6. Repeat steps 2–4.
7. Click the **Stop** button when done.

The edit timeline



The edit timeline lets you edit masters and their tracks of video and audio (up to sixteen tracks of audio). The current frame is indicated by the placement of the current position (time) cursor. The horizontal scroll bar allows you to scroll through time, and the vertical scroll bar allows you to scroll through tracks. Select the **Edit** button beneath the audio controls to activate the edit timeline without changing the current time position.

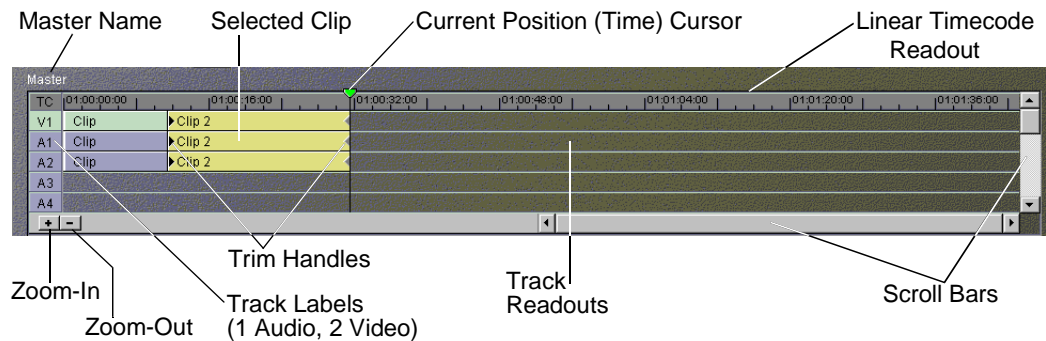


Figure 15. Edit timeline

Beneath the edit timeline is a toolbar displaying these buttons:

- **Zoom-in:** Zooms in the track scale.
- **Zoom-out:** Zooms out the track scale.

You can insert clips at the edit closest to the current time position by choosing **Insert** from the **Media** menu or from the shortcut menu with a right-click, or by clicking **Insert Media** on the current bin toolbar.

After you have inserted material onto the edit timeline, you can trim source material. You can trim clips directly with trim handles. To make the trim handles appear, select the clip while it is on the edit timeline (see Figure 16). You can drag the trim handles to the left or right to make the clips shorter or longer, to the limit of the beginning and ending of the source material.

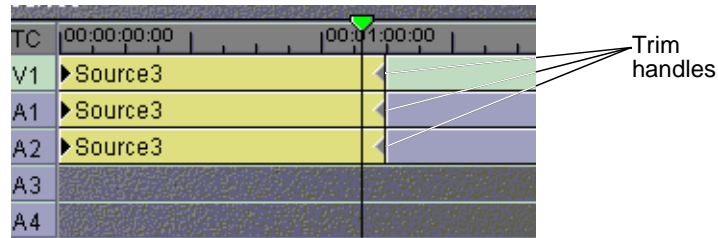


Figure 16. Trim handles on the edit timeline

As you trim a clip, the current channel output plays source material from the trim position rather than the current time position. Timecode for the trim position is shown at the bottom of the timeline, with the amount of time added or removed from the clip below that.

A few keyboard shortcuts are available for trimming:

- Select trim handle head: **Ctrl-h**
- Select trim handle tail: **Ctrl-t**
- Trim left 10 frames: **Shift-z**
- Trim left 1 frame: **z**
- Trim right 1 frame: **x**
- Trim right 10 frames: **Shift-x**

Creating a new master

A master is a sequence of clips. To create a new master:

1. Click on the **New Master** button on the current bin toolbar. The New Master dialog box appears. (You can also drag clips to the empty edit timeline from the current bin.)
2. Enter the name of the new master in the New Master text box, or simply accept the default. The default name is always unique.
3. Click on the **OK** button. The name of the new, empty master appears above the edit timeline.



Adding media to a master

A newly created master is empty. You can assemble a master by inserting clips or even other masters into it:

1. Click in the edit timeline to make it active.
1. Select a clip or master in the current bin.
2. Choose **Insert** from the **Media** menu or from the shortcut menu with a right-click. You can also click the **Insert Media** button on the current bin toolbar.
3. The media is loaded onto the edit timeline.

You can also drag and drop a clip or master onto the edit timeline. To drag and drop media to the edit timeline:

1. Select a master or clip in the current bin by pressing the left mouse button while the mouse pointer is over the desired clip and hold the button down.
2. Drag the master to the edit timeline and release the mouse button.
3. Each is inserted into the new master at the closest cursor location. After insertion, the time cursor automatically moves to the last frame of the new material.

Playing a master

Now that you have created a new master, you can play it or any other master using the edit timeline:

1. Select the master you want to play in the current bin.
2. Choose **Load** from the **Media** menu or from the shortcut menu with a right-click. You can also click on the **Load** button on the current bin toolbar. The master is loaded onto the edit timeline and the timeline is made active.
3. Click on the **Play** button.

You can also drag and drop a master onto the empty edit timeline. To drag and drop a master:

1. Select a master by pressing the left mouse button while the mouse pointer is over the desired clip and hold the button down.
2. Drag the master to the edit timeline and release the left mouse button.

NOTE: *Masters cannot be loaded onto the capture timeline.*

Using the audio controls

The Tool Box Editor lets you gain access to up to 32 channels of audio. Each audio channel consists of an audio channel record selector button and an audio metering section. The audio metering section contains an input indicator, an overload indicator and, from left to right, tick marks to indicate decibel levels, an input gain level indicator, an audio level bar meter, and an output gain level indicator.

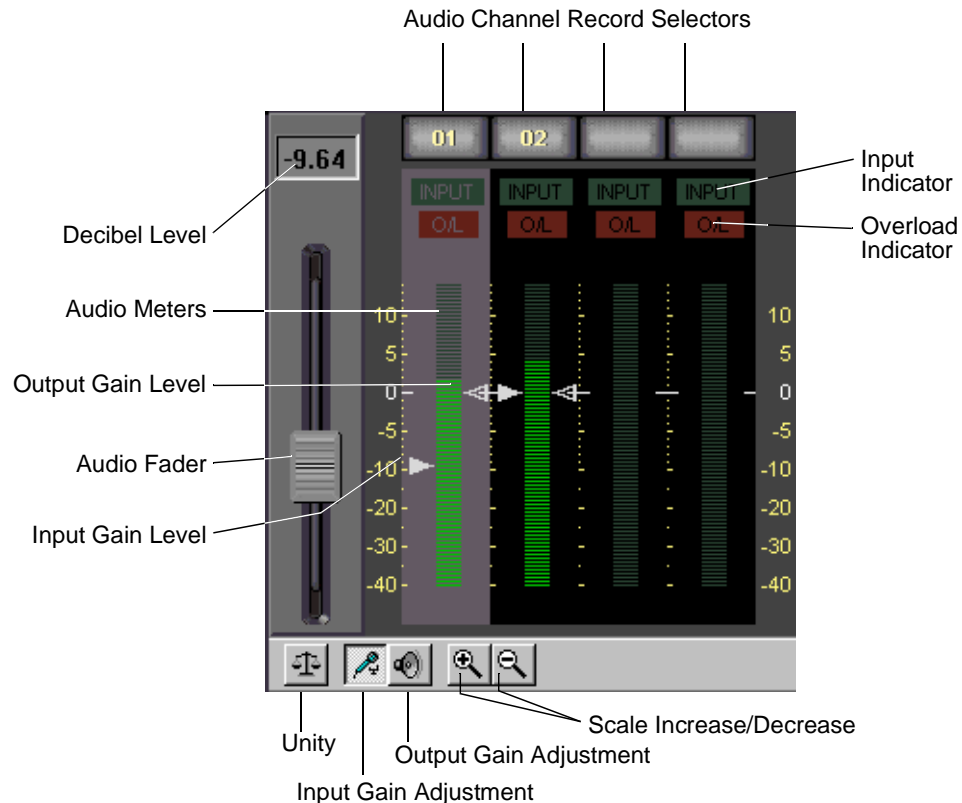


Figure 17. Audio controls

The overload indicator lights if the audio level is above the highest level of the meter. The input gain level, audio level, and output gain level use the same metering scale. The metering scale is a +4.0 dB meter scale (+0 corresponds to +4.0 dB) and ranges from +14 dB to -40 dB. (+18 dB to -56 dB full scale).

At the top of the four audio meters are the audio channel record selector buttons. Valid audio channels for the current channel will have record selector buttons containing a channel number. To enable a channel for recording, place the mouse pointer over the record selector button and click on it with the left mouse button.

The audio fader lets you adjust the audio input and output levels of the currently selected channel. If more than one audio channel is selected for gain adjustment, the fader level reflects the highest gain level of the selected audio channels. The decibel level window above the fader also displays the fader's current decibel level.



The input and output gain levels of each channel may be adjusted also. To select an audio channel for gain adjustment, place the mouse pointer over any part of the channel's meter section. Click the left button to select the channel. The meter section is highlighted.

Below the audio gain displays is the audio control toolbar which has the following buttons:

- **Unity:** Sets all audio levels to the unity level (0 dB[+4.0]). To set unity, the audio meter must be selected and the input or output gain adjustment button must be selected.
- **Input gain adjustment mode:** This button activates the input level arrow (left side) for fader adjustments.
- **Output gain adjustment mode:** This button activates the output level arrow (right side) for fader adjustments.
- **Scale adjustment increase/decrease:** These buttons zoom in or zoom out on the audio display scale in the range of +6 to -6 dB.

Tool Box Editor keyboard shortcuts

The Tool Box Editor automatically programs a number of keyboard shortcuts.

Shortcut Key	Command
F1	Activate Channel 1
F2	Activate Channel 2
F3	Activate Channel 3
F4	Activate Channel 4
F9	Select video
F11	Select audio
F12	EE toggle
j	Reverse Play
h	Rewind
;	Fast Forward
l	Play
n	Record
SPACE or k	Stop
i	Create Mark-In
o	Create Mark-Out
q	Modify Mark-In
w	Modify Mark-Out
u	User Mark
, (comma)	Previous Frame (left)
. (period)	Next Frame (right)
Left Arrow	Previous Frame (left)
Shift Left Arrow	Jump Back 10 Frames
Right Arrow	Next Frame (right)
Shift Right Arrow	Jump Forward 10 Frames
a	Previous Event
s	Next Event
Ctrl-H	Select trim handle head
Ctrl-T	Select trim handle tail
z	Trim left 1 frame



Shortcut Key	Command
x	Trim right 1 frame
Shift-z	Trim left 10 frames
Shift-x	Trim right 10 frames
1	Give focus to current position timecode
2	Give focus to Duration timecode
3	Give focus to Mark-in timecode
4	Give focus to Mark-out timecode
7	Give focus to Fader Level
8	Give focus to Shuttle Rate
9	Give focus to New Clip Name
0	Give focus to Bin Display
Ctrl-M	Media Manager
Ctrl-N	New Project File
Ctrl-O	Open Project File
Ctrl-S	Save Project File

Using the List Manager

The Profile List Manager lets you automate your use of the Profile video disk recorder. You'll probably want to use List Manager to schedule playback of JPEG, MPEG, or DVCPRO clips or masters created in the Tool Box Editor on designated outputs. List Manager also lets you record incoming video at predetermined times or send incoming video directly to an output. You can also set up times to switch a live connection, transfer media between Profile systems connected via Fibre Channel, or even archive a clip on a library unit. You can combine these functions to increase the automation level of your station operations. (See Figure 18.)

List Manager overview

The Profile List Manager works with events. Each event is a task or operation that List Manager performs on a clip or a master or on incoming video.

List Manager uses a software "engine," called the Event Scheduler Engine, to schedule your lists. It runs behind the scenes and does all the actual work of playing and recording clips at the appointed times. This low-level software starts automatically when you start the List Manager, and continues to run for the rest of that Windows NT session, even if List Manager isn't running.

If you need to stop the Event Scheduler for any reason, click the minimized Event Scheduler icon, then type *exit* on the command line and press Enter.

List Manager lets you schedule playback, record, switch, transfer, and archive events. A playback event lets you play a clip or master at a designated time, while a record event allows you to record material at a given time. A switch event schedules a live connection; input and output are connected directly in E to E mode at a predetermined time and remain in that mode until the next playback event. A transfer event schedules the copying of media from one Profile video disk recorder to another Profile unit on the network (requires Ethernet and Fibre Channel connections). An archive event copies media to or from a Profile library system, such as the PLS 200 or PLS 20.

All of these capabilities are available on all Profile channels. For example, if you have four video channels, you might choose to dedicate two channels to recording incoming material, one for on-air playback, and the other for preview.

Each event can be scheduled to occur at an exact time, on demand, or it can follow other events. You can override or stop a list at any time.



List Manager provides you with two ways of scheduling lists:

- **Monitor.** You can drag and drop events into the list in Monitor view to schedule them immediately. Monitor displays the On-air List, which is the name of the list that is controlling activities on your Profile. List Manager always reads the On-air List, and will perform the events you see in the Monitor view at their appointed times unless you delete events. The On-air List can't be saved for future use. There is one On-air List and it has a limit of 5000 events.
- **Edit Window.** You can build several lists in the Edit window to use at a later date or to store for repeated use. Lists you build in the Edit window are not scheduled immediately. When you choose the Schedule List command from the Edit menu, the list is integrated into the On-air List and its events are performed with other events which were already on the On-air List.

List Manager validates the On-air List to make sure that you haven't scheduled conflicting events using the same Profile resources. You can then schedule the list and let List Manager control your Profile. You can follow the operation of a list by using the Monitor view on any or all of your Profile's channels.

Starting List Manager

To start List Manager in Windows NT 4.0:

- Double-click the List Manager shortcut icon on the desktop.

Or:

- Choose **Start | Programs | PDR Applications | List Manager**.

When you start List Manager for the first time, your screen should look similar to the one shown in Figure 18.

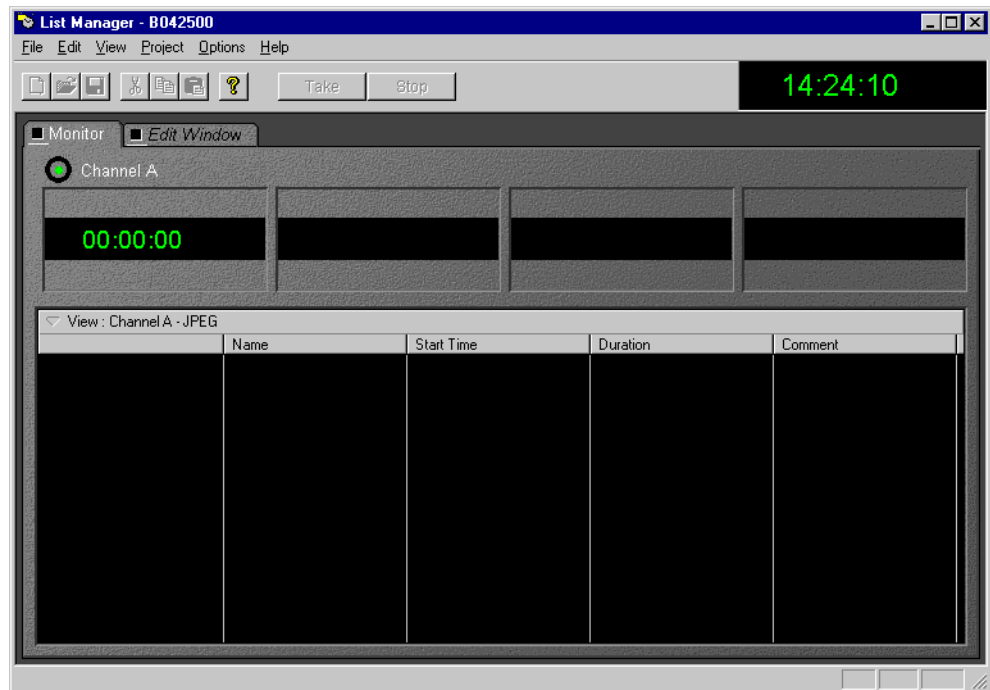


Figure 18. List Manager window



Whenever you start List Manager, a Hardware Communication Monitor is also started, if it is not already running. This program makes calls to the disk recorder, keeps track of the Profile host file (*profile.hst*) which lists Profile systems on the network, as well as remoting activities.

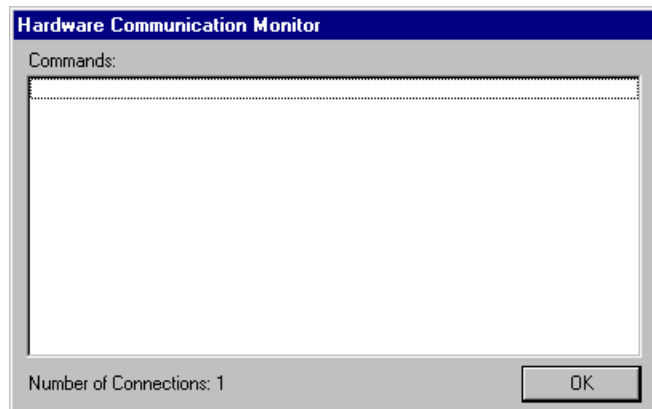


Figure 19. Hardware Communication Monitor message box

Viewing Help

To view Help topics:

- Choose **Help | Help Topics**.

Closing List Manager

To close List Manager:

- Choose **File | Exit**.

Connecting to a remote Profile machine

You can connect from your local machine to any remote Profile machine in your network. A local Profile machine refers to a Profile system to which you are directly attached. A remote Profile machine refers to a Profile system that is connected to your local system via an Ethernet local area network (LAN).

To connect to a remote Profile machine:

Choose **File | Remote Machine**. The Connect to Machine dialog box appears. The label *Local* appears after the name of the local Profile machine.

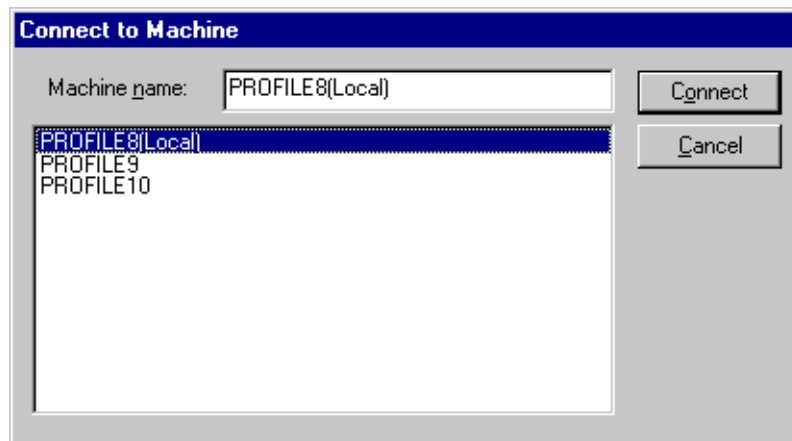


Figure 20. Remote Machine dialog box

To connect a Profile machine from the network host list:

1. Select the name of the machine in list box.
2. Click **Connect**.
3. The Connecting to Machine dialog box is displayed. If the connection is unsuccessful, you are given the opportunity to retry the connection or to cancel the operation.



Building a playback list

List Manager lets you use a simple graphical interface to build lists that automate your operations. You can drag media from the Media Manager into your list, then define things like when to play the material, and what channel and output to use.

Drag and drop of incompatible clips is not allowed. There are five types of channels: JPEG, MPEG Record, MPEG Play, MPEG Play/Record, and DVCPRO. JPEG channels allow only JPEG clips, MPEG channels allow only MPEG clips, and DVCPRO channels only allow DVCPRO clips.

- JPEG channels - allow any type of events (play/record etc.)
- MPEG Play - allow any type of events except record
- MPEG Record - allow any type of events except play
- MPEG Play/Record - allow any type of events (play/record etc.)
- DVCPRO - allow any type of events (play/record etc.)

Adding media for playback

Creating a playback list is the simplest of all List Manager operations. To build a playback-only list:

1. Click the **Monitor** tab to view the On-air List. The first time you use List Manager, this list should be empty.
2. Scroll through the Media Manager tree to locate the first clip or master that you wish to include in your list.
3. Drag the clip or master into the List Manager window and drop it at the desired location in the list.

You can add clips or masters between two existing events by dropping an event on the line separating the two events and selecting the top event. The item is inserted below the selected event.

4. Change the event settings to meet your needs. The settings are described in “Changing event settings” on page 38.
5. Continue adding clips or masters by dragging them onto the list. List Manager will perform the events at the scheduled time.

After adding a few events, your list should look similar to the one shown in Figure 21.

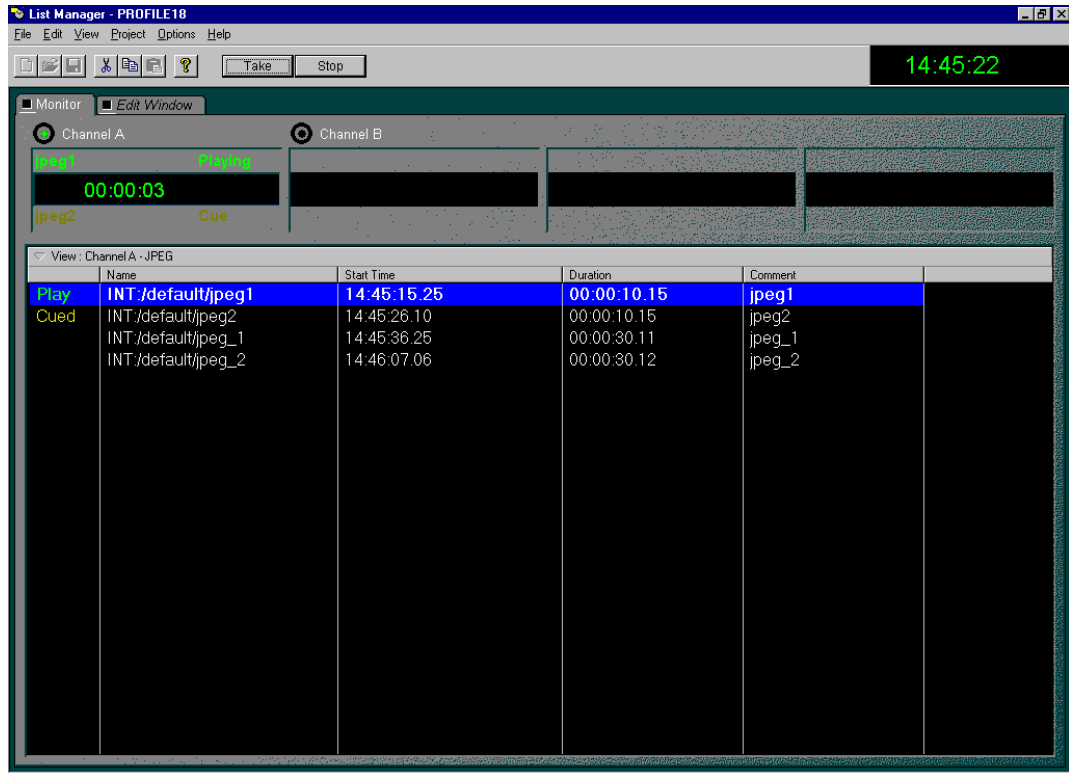


Figure 21. A basic playback list



Changing event settings

List Manager establishes default settings for each event as you drop material into the window. You can move from event to event in the list with the up and down arrow keys. You can customize the event by editing the property settings in the list. You can also edit property settings by double-clicking on the left end of the row, then changing settings in the edit boxes of the properties dialog box that appears. The dialog box for play event properties is shown in Figure 22.

The dialog box is titled "Play Event Properties" and contains the following fields and controls:

- Clip Name:
- Start Time: Duration:
- Type: Start Date:
- Comment:
- Repeat section:
 - None
 - Hourly
 - Daily
 - Weekly
 - Every: Hour(s): Minutes:
 - No End Date/Time
 - End Date:
 - End Time:
- Error:
- Buttons:

Figure 22. Play event properties dialog box

By default, the list displays five columns: Status, Name, Start Time, Duration, and Comment. A label at the top of each column (except Status) identifies the settings in that column. Choose **View | Columns** to change which columns are displayed. (See “Customizing your list display” on page 53.)

Status - This cell displays the current status of the event. The word *Status* does not appear in the header. The Status column is active only in the On-air List (in the Monitor view). If there is a conflict between an event and any other event in the current list or another event on the On-air List, the Status cell displays *Error*. You can identify the conflict by right-clicking on the cell and reading the error message in the Event Property dialog box. This table shows all the event status indicators.

Status	Color	Description
Play	Green	The event is currently being executed.
Record	Green	The audio and video from the specified input is currently being recorded as the Destination clip name.
Error	Red	The signal is in conflict with another event, or the material is not available.
Stop	White	The event is stopped.
Cued	Yellow	Approximately five seconds before Start Time, the required resources are prepared for playback or recording.
Take	White	Event is about to be executed.

Name - This cell identifies the clip or master name, whether it is being played or whether it is a new clip being recorded.

Start Time - You can enter the time at which you wish to play the specified material. Enter the time in standard timecode format (HH:MM:SS:FF). If the time entered consists of one or two digits not separated by colons, List Manager displays the entry as a number of seconds, not frames. For example, if the time entered is 25, List Manager displays 00:00:25:00. (Leading zeros are ignored—that is, 0025 is interpreted as 00:00:25:00.)

Duration - The duration of the playback event is set by the duration of the media. If you change the duration to one shorter than the media's duration, List Manager will play the material from the mark in point for the specified duration. If you enter a longer duration, List Manager plays the material from the mark in point to the last mark out point, then freezes on the last frame for the rest of the duration.

Comment - The Comment cell displays the name of the master or clip which you dragged into the window. You can change this to a title more meaningful to you. However, this will not change what clip or master is used, nor will it change its name.



Optional columns

These are the columns that you can add to the window to provide you with additional event information.

Action - When you drag material into the List Manager window, Action is set to Play. The possible actions are: Play, Record, Switch, Transfer, and Archive. These options are described in later in this chapter.

Event Number - Events are numbered as they are added to the current list. The event number can't be changed because it provides a unique identifier for this event in the current list. The event number does not determine the playback order.

Parent - This setting uses the number of the event that precedes it, the "parent" event, and is valid only for Follow events. Any event can be a parent event as long as it has a Follow event after it.

Type - The event types are:

- The Absolute event type plays the material at the time specified in the Start Time. An Absolute event is always displayed in bold face in the list.
- The Follow event type plays the event immediately after the preceding event in the list. A Follow event is always displayed in regular face in the list.
- The Approx event type is queued but will not play unless you select the event from the list and then issue a Take command. An Approx event is always displayed in bold face in the list.

Date - Enter the date on which you wish the event to take place. Dates must be in the format used in your current Windows NT session, usually MM/DD/YYYY. The current date is entered by default.

Settings unique to transfer events

Transfer events add these settings (refer to "Scheduling a transfer event" on page 46):

Source Media - The path name of the source media.

Source Profile - The name of the Profile unit where the media is stored.

Destination Media - The path name of the destination media.

Destination Profile - The name of the Profile unit to which the media is copied.

Settings unique to archive events

Archive events have these added settings (see “Scheduling an archive event” on page 47):

Media - The name of the media (clip) that is to be archived or restored.

Path - The name of the directory path for the media.

Action - Click either **Archive** or **Restore**.

Cartridge - Under **Advanced**. Enter the bar code number for the cartridge—00000015, for example. This is an optional setting.

Partition - Under **Advanced**. Enter the partition number where the media is archived. This also is an optional setting.

Monitoring a list as it runs

Events you enter in the Monitor view are performed at their appointed times. The current house time is displayed at the top of the window. You can monitor the progress of events on each channel in the channel panels. Each panel shows:

Air Time - The timecode of the current frame of material.

Duration - The duration of the current material.

Time Till Next Event - This clock counts down the time until the next scheduled event.

The current event is highlighted in green for easy identification; a cued event is highlighted in yellow.

Validating a list

The On-air List is validated automatically every few minutes. You should manually check any other list to make sure that you haven't scheduled conflicting events using the same Profile resources. To validate a list:

- Choose **Validate List** from the **Options** menu or from the shortcut menu with a right-click.

If a conflict arises, the word *Error* appears in the Status (left-most) column next to an invalid event. Three errors are at the root:

- The media does not exist. As a solution, bring in the correct media or verify that the name is correct.
- There is a conflict for a channel resource. For example, a channel resource would generate an error if it is scheduled for use at the same time by two or more events. To solve this problem, change the events so that they don't attempt to use the resource at the same time.
- The media is not long enough, that is, the media is shorter than the duration of the event. To fix this, shorten the duration of the event to match the media.



Scheduling a new play event

Another way to add events to a list is to open the New Play Event dialog box and enter the properties of the new event in the edit boxes.

1. Open the list to which you are adding the play event.
2. Choose **File | New Event | Play** to open the New Play Event dialog box as shown in Figure 23.
3. Fill in the edit boxes with the various event properties. If you select one of the repeat options, you'll need to enter time and date settings.
4. Click **OK** to close the dialog box and enter the new play event in the list.

The dialog box is titled "New Play Event" and contains the following fields and options:

- Clip Name: Clip1
- Start Time: 14:37:46:11
- Duration: 05:45:34:28
- Type: Absolute (dropdown menu)
- Start Date: 11/17/1998
- Comment: Event1
- Repeat section:
 - Radio buttons: None (selected), Hourly, Daily, Weekly
 - Every: Hour(s) 0, Minutes 0
 - Checkbox: No End Date/Time (unchecked)
 - End Date: (empty field)
 - End Time: (empty field)
- Buttons: OK, Cancel

Figure 23. Creating a play event

Scheduling recording operations

You can schedule recording operations to take place automatically at predetermined times. For example, you may want to record a satellite feed during off-hours. Scheduling a recording operation is just as simple as a playback.

1. Open the list to which you are adding the recording event.
2. Choose **File | New Event | Record** to open the New Record Event dialog box as shown in Figure 24.

The image shows a 'New Record Event' dialog box. It has a title bar with 'New Record Event' and a close button. The fields are: 'Clip Name' (Clip1), 'Start Time' (14:42:17:17), 'Duration' (05:45:34:28), 'Type' (Absolute), 'Start Date' (11/17/1998), and 'Comment' (Event1). There is a 'Repeat' section with radio buttons for 'None', 'Hourly', 'Daily', and 'Weekly'. The 'None' radio button is selected. To the right of the radio buttons are 'Every' (with 'Hour(s)' and 'Minutes' spinners), a 'No End Date/Time' checkbox, and 'End Date' and 'End Time' fields. At the bottom are 'OK' and 'Cancel' buttons.

Figure 24. Creating a record event

3. In the New Record Event dialog box, enter all the event information as described in “Changing event settings” on page 38. The clip is stored in the default bin with the name you enter in the Clip Name box.
4. Click **OK**.



Scheduling rules and constraints

Rule #1 - Absolute events always start at the scheduled time.

- Of multiple absolute events inserted at the same time, the last inserted absolute event is the one that is scheduled.
- If an event's end time overlaps an absolute event start time, that event is shortened so that the absolute event starts on time.

Rule #2 - An approximate event always cues if it is the next event in the time line.

- A cued approximate event is de-cued 150 frames prior to the start time of an absolute event (see rule #1).
- Approximate events remain in the list during their *aging* process. The aging process allows approximate events to stay cued past their start time.

Allow at least fifteen seconds for a channel to switch between record and playback. The 15-second gap is used in the following manner: 5 seconds for queuing, 5 seconds for de-queuing, and 5 seconds to account for transition gap.

Allow at least 10 seconds between starting a recording on one channel and playing that clip on another channel. The 10-second delay allows the material to exist at least 5 seconds prior to queue time.

In the situations described here, use absolute events rather than approximate events, because the rules for approximate events allow them to exceed the constraints.

Using a live feed

To further automate station operation, you can integrate live feeds into your lists. For example, you may want to broadcast a live event, inserting stored commercials at appropriate times.

1. Open the list that you want to add a live event to.
2. Choose **File| New Event | Switch** and the New Switch Event dialog box appears, as shown in Figure 25.

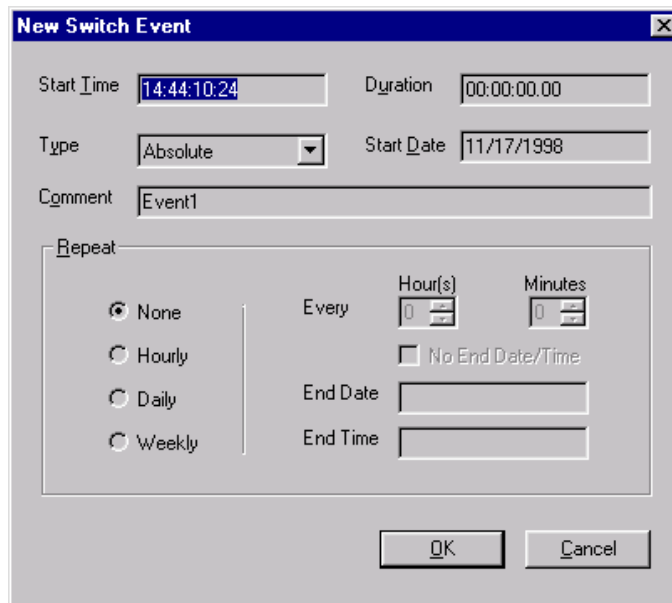


Figure 25. New Switch Event dialog box

3. In the New Switch Event dialog box, enter all the event information as described in “Changing event settings” on page 38. This will set the cross-point switch for the channel so that your video input is routed directly to the output. In a PDR 100, audio inputs are **not** routed to audio outputs for switch events; however, they are routed to audio outputs in the PDR 200, 300, and 400.
4. Click **OK**.



Scheduling a transfer event

You can schedule transfer events in your lists. A transfer event schedules the copying of media from one Profile video disk recorder to another Profile unit on the network (requires Ethernet and Fibre Channel connections). Only one Transfer event may be scheduled at one time.

1. Open the list to which you wish to add the live event.
2. Choose **File | New Event | Transfer** and the New Transfer Event dialog box appears, as shown in Figure 26.

The dialog box is titled "New MediaAcs Event". It contains the following fields and controls:

- Start Time: 14:44:55:23
- Duration: 00:01:00:00
- Type: Absolute (dropdown menu)
- Start Date: 11/17/1998
- Comment: Event1
- Source Media: (empty text box)
- Destination Media: (empty text box)
- Source Profile: (empty text box)
- Destination Profile: (empty text box)
- Repeat section:
 - Radio buttons: None, Hourly, Daily, Weekly
 - Every: Hour(s) 0, Minutes 0
 - No End Date/Time
 - End Date: (empty text box)
 - End Time: (empty text box)
- Buttons: OK, Cancel

Figure 26. New Transfer Event dialog box

3. In the New Transfer Event dialog box, enter all the event information as described in "Changing event settings" on page 38.
4. Click **OK**.

Scheduling an archive event

You can schedule archive events in your lists. An archive event copies media to or from a Profile library system, such as the PLS200. The PLS200 must be attached to a Profile system running the Event Scheduler engine.

1. Open the list to which you wish to add the live event.
2. Choose **File | New Event | Archive** and the New Archive Event dialog box appears, as shown in Figure 27.

The screenshot shows the 'New Archive Event' dialog box. The title bar is blue with the text 'New Archive Event' and a close button. The dialog is divided into several sections. At the top, there are two text boxes: 'Start Time' containing '14:48:11:00' and 'Duration' containing '00:00:00:00'. Below these is a 'Type' dropdown menu set to 'Absolute' and a 'Start Date' text box containing '11/17/1998'. A 'Comment' text box contains 'Event1'. Below that are 'Media' and 'Path' text boxes, both empty. The 'Action' section has two radio buttons: 'Archive' (selected) and 'Restore'. The 'Repeat' section has four radio buttons: 'None' (selected), 'Hourly', 'Daily', and 'Weekly'. To the right of the 'Repeat' section are 'Every' (0), 'Hour(s)' (0), and 'Minutes' (0) spinners, a 'No End Date/Time' checkbox, 'End Date', and 'End Time' text boxes. At the bottom are three buttons: 'Advanced >>', 'OK', and 'Cancel'.

Figure 27. New Transfer Event dialog box

3. In the New Archive Event dialog box, enter all the event information as described in “Changing event settings” on page 38.
4. Click **OK**.



Editing event lists

You can reorganize your event lists at any time. While you can change the settings for each event in a list, sometimes you'll want to change the order of events, or add, replace, or delete events from the list. The following sections describe how to organize your lists to meet your needs.

Changing the order of events

You may want to change the order of events in your list. There are two ways to do this:

- If an event's type is set to Absolute, you must:
 - Change the Start Time of the event so that it starts at the desired time.
- If an event's type is set to Follow, you can:
 - Select the event by clicking on the event in the left-most column of the window, then drag the event to its new position to the list. You can move several events by using the standard Windows operations to select a range of events (Shift-click to select a range or extend it), then drag the selection.

Inserting events

To insert an event in a list from a Media Manager window:

1. Select a clip or master in the Media Manager contents pane.
2. Drag the material to the List Manager window.
3. Drop the material in the list where you want to place the new event. The new material is dropped below the highlighted event.

To insert an event elsewhere in a list:

1. Select the event that you want to insert elsewhere.
2. Drag the desired event and drop it on the event. The event is placed below the selected event.

Removing events from a list

The On-air List grows as you add events. You may want to reduce the size of the On-air List by deleting events that have been performed and whose status is now Done. To remove unwanted events from a list:

1. Select the unwanted event. You can select several events by using the standard Windows operations to select more than one event (Ctrl-click to add an event to the selection, Shift-click to select a range of events).
2. Delete the event or events using **Ctrl-X**, or **Edit | Cut**, or the **Delete** key. You can also choose **Delete** from the shortcut menu with a right-click.
3. Click **Yes** to confirm that you want to delete the event.

Using the edit window

You can use the Edit window to build lists in exactly the same way as you did in the Monitor view. The lists you build in the Edit window will not be scheduled until you choose the **Edit | Schedule List** command from the Edit menu.

The Edit window allows you to create and store lists that you want to reuse. By saving your lists, you can use them on a daily or weekly basis without having to rebuild the list each time. For example, you may want to use this for inserting commercials in network feeds.

Creating a new list

To create a new list:

1. Choose **File | New** and the New List dialog box appears.

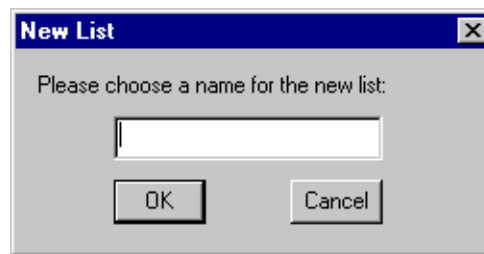


Figure 28. New List dialog box

2. Enter a name for the list. Click **OK** to save the new list.

Saving a list

You must save a list to your system's hard disk if you want to use it at a later date. To save the list:

1. Choose **File | Save As**.
2. Enter a different name for the list. Click **OK** to save the list.



Reusing a list

There are two ways to reuse a list that you created earlier:

1. In the Edit window, choose **File | Open** and select the desired list. When the list opens, choose **Edit | Schedule List** to integrate the list into the On-air List.
2. In the Monitor view, drag the list from a Media Manager window to the On-air List. The dragged events are added to the bottom of the On-air List. Make sure you select the appropriate channel before dragging in the list, then change the Channel settings to match.

In either case, List Manager checks for conflicts with events already in the On-air List. If it finds any conflicts, such as events using the same channel or output at the same time, it will report these errors so that you can take corrective action. The word *Error* will appear in the status cell of the event causing the conflict. Right-click on the event, choose Event Property (Alt-Enter), and read the error information in the Event Properties dialog box. You can also double-click the event to get properties.

Closing a list

To close a list:

- Choose **File | Close List**.

Exporting a list

To export a list into an ASCII text file (*.lst*):

1. Click the Edit window tab.
2. Choose **File | Export**. A dialog box appears.
3. Enter the a name of the file you want to save in the File Name box.
4. Click **OK**. The *.lst* extension is added to the file name automatically.

List file ASCII text format

The file format for an ASCII text list file follows these rules:

- A line beginning with pound sign (#) is treated as a comment.
- Each event is saved on a single line in the text file.
- Individual fields of an event are separated by a comma (,).
- White spaces are allowed before and after field delimiters.
- Fields are case insensitive.

The format for each event is: Action, Clip Name, Start Time, Duration, Type, Start Date, Comment, other required fields depending on the action.

There are several other rules for list files saved as text:

- The first event in the list file has to be an absolute event, otherwise it is an error.
- A follow event will be on the line following the parent event in the list file.
- Each event can have only one follow event.
- Empty lines will be ignored while parsing.
- An error occurs if all the fields for a particular type of event are not present.
- If an error is detected in any event while parsing the list file, the event list will not be created for that file.
- The date field will be of the format **mm/dd/yyyy**.
- Time field (both start time and the duration) will be in the format Hour:Min:Sec:Frames or Hour:Min:Sec.Frames.
- Allowed event actions are: Play, Record, Switch, Archive or Transfer.
- For play and record events, the Clip Name, Start Time, Start Date, Duration, Comment will be saved in the list text file.
- For a switch event, Start Time, Start Date, Duration, Comment will be stored in the list text file.
- For Transfer event source Profile (Machine Name or IP address), destination Profile (Machine Name or IP address), source media and the destination media will be stored in the text file.
- For Archive event Cart Label, Clip Name, Partition Number and the Option (Keep/Delete clip after archiving) will be saved.

Here is a sample list file in ASCII text format:

```
# Play event.
# The format is Action, Clip Name, Start Time, Duration, Type, # Start
Date, Comment
Play, INT:/Default/River Rafting, 05:10:20:00, 00:01:30:00, Absolute,
02/02/1997, River Rafting
# Record event.
# The format is Action, Clip Name, Start Time, Duration, Type, # Start
Date, Comment
Record, INT:/Default/Pepsi commercial, 05:10:20:00, 00:01:30:00,
Absolute, 02/02/1997, Commercial1
# Switch event.
# The format is Action, Start Time, Duration, Type, Start Date, # Comment
Switch, 05:10:20:00, 00:01:30:00 Absolute, 02/02/1997, Coke
# Archive event.
# The format is Action, Start Time, Duration, Type, Start Date, # Comment,
Clip, Name, Cart Label, Path, Partition Number
Archive, 05:10:20:00, 00:01:30:00, Absolute, 02/02/1997, Ad1, Surf Soap,
Label1, INT:/Default, 1
# Transfer event.
# The format is Action, Start Time, Duration, Type, Start Date, # Source
Profile, Destination Profile, Source Media,
# Destination Media, Comment
Transfer, 05:10:20:00, 00:01:30:00, Absolute, 02/02/1997, Profile1,
Profile2, Soap, Surf Soap Ad, New Surf Ad
```



Importing a list

You can import a list that has been previously exported to an ASCII text file (.lst). To import a file:

1. Click the Edit window tab.
2. Choose **File | Import**. An Open dialog box appears, displaying files of type .lst in the path *c:\profile*.
3. Select the name of the file you want to import. Double-click the file name or click **OK**.

Deleting an entire list

To remove an entire list:

- Choose **Edit | Delete List**.

Overriding events in a list

Not every operation in your environment can be predicted to the second. In some instances, you'll want to be able to interrupt an event as it's playing, or stop a list completely. List Manager provides you with the tools you need to meet these challenges.

Taking an event

As your list executes, you may want to manually choose a particular event and start playing it immediately. For example, you may have inserted a very long Switch event to use a live feed, but you now want to run a commercial. List Manager lets you immediately use any event in your list.

1. Schedule your list normally.
2. Monitor the list by clicking the **Monitor** tab. Make sure you can see the channel that will execute the event you wish to take.
3. Highlight the event that you want to use immediately.
4. Click the **Take** button. The event begins five seconds later.
5. The list will continue running all the events which would normally be performed after the Take event. It will not return to the event that was interrupted, unless you highlight that event and use the **Take** button again.

NOTE: *An Approx event type is not a scheduled event. You must take an event of type Approx to run it.*

Stopping an event

List Manager provides a way to stop a event at any time. You can use the Stop button to interrupt the event on the current channel. To stop an event:

1. Locate the event which is currently being executed (highlighted in green) and select the event.
2. Click the **Stop** button to stop the event.
3. After a few seconds, the event will stop and the video output will display black.

Customizing your list display

You may find that the default list display does not meet your needs. For example, you may have long input names that are not visible because the Name column is not wide enough. If you never use List Manager to schedule Record events, you might not want to see the Source column at all.

You can change fonts, text color, and highlight color in a list display. To change a font:

1. Choose **View | Font** and the Font dialog box appears (Figure 29).

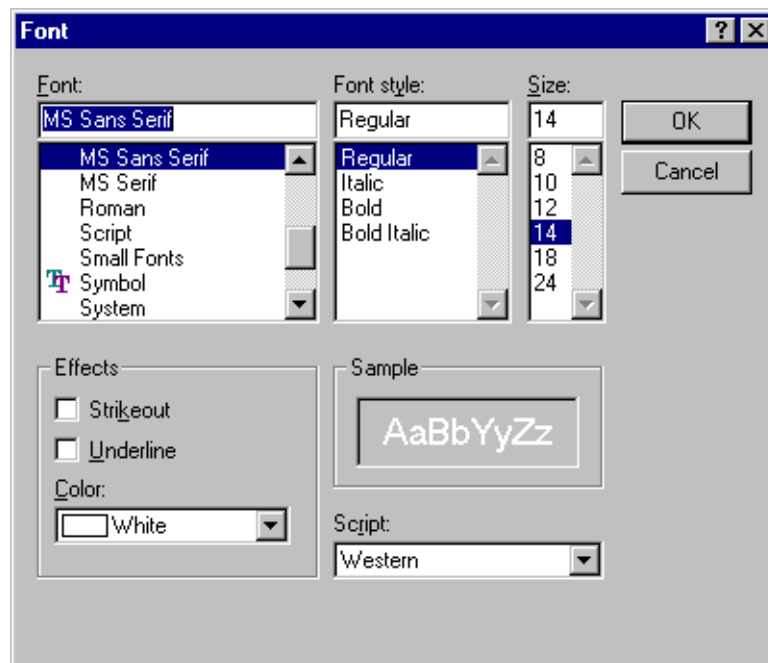


Figure 29. Font dialog box

2. Enter your changes. You can change the font, font style, font size, and color. You can also underline and strike out the text.
3. Click **OK**.

NOTE: *Absolute events are always shown in bold face and Follow events are displayed in regular face.*



You can change the text color another way besides the Font dialog box, as well as the text highlight (background) color. The Color dialog box allows you a much broader range of colors than the Font dialog box. The change the text's color or highlight color:

1. Choose **View | Color | Text** or **View | Color | Highlight** and the Color dialog box appears (Figure 30).

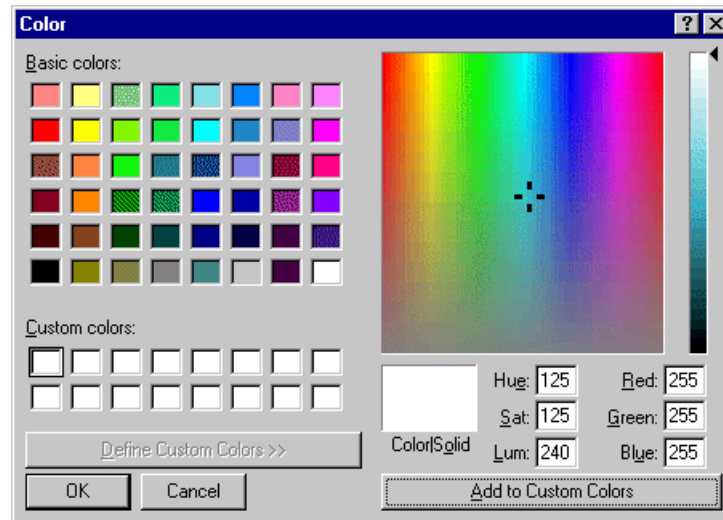


Figure 30. Color dialog box, with custom color controls shown

2. To select a preset color, click one of the basic 48 colors and then **OK**.
3. To create a custom color, move the cursor in the rainbow window until you find the color you want, then click **Add to Custom Colors**. The color is added to the array of custom color boxes.
4. To select a custom color, click on one of the custom color boxes that contains a custom color, then click **OK**.

You can change which columns to display, the size of the columns and order of the columns in the list display. You display up to 10 columns in a list. By default, the Name, Start Time, Duration, and Comment columns are displayed. You can add columns for Action, Event Number, Parent Event, Type, and Date. You can also make a column as wide or as narrow as you want, or make it disappear completely. You can move one or several columns to the left or right to arrange them in an order that you find more convenient.

To add a column to a list display:

1. Choose **View | Columns** and Columns dialog box (Figure 31).

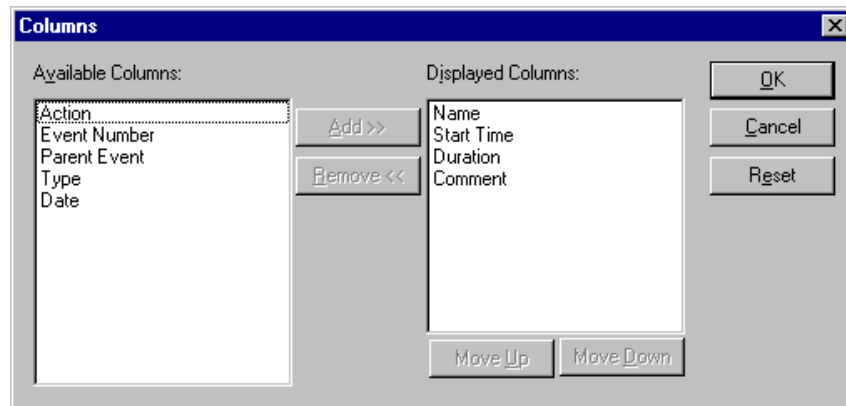


Figure 31. Columns dialog box

2. Click on a column label in the Available Columns box.
3. Click **Add**. The column label moves to the Displayed Columns box.
4. To change the order of the columns, click a column label in the Displayed Columns box, then click **Move Up** or **Move Down**.
5. To return the columns to their original settings, click **Reset**.
6. Click **OK** when done.

To adjust the size of a column:



1. Position the mouse pointer over the right border of the column title of the column you wish to adjust. The pointer changes to a sizing shape.
2. Drag the border to the right to widen the column, to the left to make the column narrower.
3. Drop the border at the desired column width.
4. Drag the right border completely to the left to reduce the column width to nothing, removing the column from the display. To make the column visible again, double-click on the border you dragged, then follow steps 1. and 2..



To change column order:

1. Select the column you wish to move by clicking on its title. You can select more than one column by clicking in one column title, then dragging the mouse pointer through the adjacent titles you wish to select.
2. Drag the selected column or columns to the desired destination.

Using the event log

As events are performed in the On-air List, a record of those operations is kept in a file called *c:\profile\evntsch.log*. You can extract information from this log file for record-keeping, billing, or any other purpose where accurate records are required.

The information in the log file is stored as ASCII text in tabular form, separated by commas. You can use a text editor to read the file, but be careful not to save any changes you may make. You can see an example of a section of a log file in Figure 32.

Channel	Event Type	Status	Type	Date	Start Time	Scheduled Duration	End Time	Reserved	User Name	List Name	Event Title
C0	Play	, Play	, Absolute	07/22/1996	08:41:23:11	00:00:07:00	08:41:30:11		, profile		, Clip
C0	Play	, Play	, Absolute	07/22/1996	08:42:04:06	00:00:07:00	08:42:11:06		, profile		, Clip

Figure 32. An example of a log file

The Scheduled Duration field shows the value entered in the On-air List. It does not show the actual duration of the event. The times shown in the Start Time and End Time fields are actual times which can be used to calculate the event duration.

The List Name field shows the name of the original list containing that event, which subsequently was Scheduled and became part of the On-air List

When the log file reaches about four megabytes in length, the information in the file is moved to a new file called *evntsch1.log* and kept as an archive. This ensures that *evntsch.log* always contains current information, but keeps its size manageable. Subsequent archived information will be stored in *evntsch2.log*, *evntsch3.log*, and so on.

Index

A

Absolute event type 40, 48
Actions in List Manager 40
Adjusting column width 55
Air time in Monitor view 41
Archive event 47

Audio

channels 27
controls 27
gain levels 27
meters 27

B

Bin

cleaning up 22

Building a list 36

C

Camera 5, 9

Capture timeline 18

Capturing clips 5, 9

CD player 5, 9

Channels, audio 27

Cleanup Media 22

Clip

capture 19

capturing 5, 9

drag and drop 21

play 21

record 19

subclip 22

trimming 22

Column width 55

Comment column 39

Controls, audio 27

Create Mark-In button 23

Create Mark-Out button 23

D

Date 40

dB 27

Decibels 27

Delete Media 15

Drop-frame timecode 18

Duration 39

Duration in Monitor view 41

E

E to E button 19

Edit

Delete 48

New Event 42, 43

Edit timeline 24

Edit view in List Manager 32

Edit Window 49

Editing lists 48

Emptying the Recycle Bin 17

Entry window, timecode 19

Event

Archive 47

date 40

duration 39

inserting 48

play 36

record 43

removing 48

settings 38

start time 39

switch 45

taking 52

transfer 46

Event Number column 40

Event order 48

Event Scheduler Engine

definition 31

stopping 31

F

Fast Forward 20

File

Open 50

Save 49



Follow 48

G

Gain levels 27

H

Hardware Communication Monitor 11, 34

House Time 41

I

Insert Media 15

Inserting events 48

L

List

- building 36

- editing 48

- event order 48

- inserting events 48

- opening 50

- saving 49

- validate 41

List Manager 31

- configuring resources 6

- Edit view 32

- engine, *See* Event Scheduler Engine 31

- live events 45

- Monitor 32

- monitoring a list 41

- recording 43

Live events 45

Load Media 15

Loop Play 20

M

Master

- adding media to 26

- creating 25

- playing 26

Master List 36

Media

- cleaning up trimmed clips 22

- sorting 14

Media files

- sorting 14

Media properties 16

Meters, audio 27

Microphone 5, 9

Modify Mark-In button 18

Modify Mark-Out button 18

Monitor

- selecting 36

Monitoring a list 41

N

Name column 39

New Bin 15

New Master 15

O

Open Bin 15

Opening a list 50

P

PAL 17

Parent Event column 40

Play 20

Properties 16

R

Record 43

Record Event 42, 43

Recycle Bin 17

Reverse 20

Rewind 20

S

Satellite feed 5, 9

Saving a list 49

Settings

- event 38

Sorting

- media files 14

Sorting media 14

Start Time 39

Status column 39

Subclip 22

Switch event 45

T

Take button 52

Time Till Next Event in Monitor view 41

Timecode

drop-frame 18

entry window 19

Timeline

capture 18

edit 24

Timeline Eject 15

Tool Box Editor 5, 9

configuring resources 6

exiting 10

launching 10

Transfer Event 46

Transport controls

cue 20

fast forward 20

loop play 20

mode 20

play 20

reverse 20

rewind 20

stop 20

Trigger

Follow 48

U

Unity, audio 28

User mark 22

V

Validating a list 41

Viewing columns 38

VTR 5, 9

Z

Zooming the edit timeline 24

