NewsEdit XT

DIGITAL NEWS EDITOR

User Guide

SOFTWARE VERSION 4.5

the most watched worldwide

grass valley

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the most watched worldwide

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Revision Status

Rev Date	Description
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Grass Valley Product Support

To get technical assistance, check on the status of problems, or report new problems, contact Grass Valley Support via e-mail, the Web, or by phone or fax.

Web Technical Support

To access support information on the Web, visit the product support Web page on the Thomson Grass Valley Web site. You can download software or find solutions to problems by searching our Frequently Asked Questions (FAQ) database.

World Wide Web: http://www.thomsongrassvalley.com/support/
Technical Support E-mail Address: gvgtechsupport@thomsongrassvalley.com.

Phone Support

Use the following information to contact product support by phone during business hours. After-hours phone support is available for warranty and contract customers.

USA and Americas (includes Latin America and Canada)

Telephone	(800) 547-8949 (Toll Free)
	(530) 478-4148 (Direct Dial Toll Call)
Fax	(530) 478-3181

Europe and UK

UK Regional Service Location	Tel +44 1753 218 777	Italy	Tel +39 72 901 428
	Fax +44 1753 218 757		Fax +39 72 905 371
France	Tel +33 145 297 300	Germany	Tel +49 221 1791 234
	Fax +33 145 297 302		Fax +49 221 1791 235

Asia Pacific

Australia	Tel (612) 8877 6800	India	Tel (91) 11 373 0544
	Fax (612) 8877 6825		Fax (91) 11 373 0543
China	Tel (86) 10 6235 1185	Japan	Tel (813) 5484 6869
	Fax (86)10 6235 1190		Fax (813) 5484 3775
Hong Kong	Tel (852)-2531-3000	Southeast Asia	Tel (65) 7328 729
	Fax (852)-2802-2996		Fax (65)7327 649

Authorized Support Representative

A local authorized support representative may be available in your country. To locate the support representative for your country, visit the product support Web page on the Thomson Grass Valley Web site.

Profile Users Group

You can connect with other Profile XP Media Platform users to ask questions or share advice, tips, and hints.

Send email to profile-users@thomsongrassvalley.com to join the community and benefit from the experience of others.

Safety Summaries

General Safety Summary

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it.

Only qualified personnel should perform service procedures.

While using this product, you may need to access other parts of the system. Read the *General Safety Summary* in other system manuals for warnings and cautions related to operating the system.

Review all system operator manuals, including manuals in electronic format on the system hard drive.

Injury Precautions

Use Proper Power Cord

To avoid fire hazard, use only the power cord specified for this product.

Ground the Product

This product is grounded through the grounding conductor of the power cord. To avoid electric shock, the grounding conductor must be connected to earth ground. Before making connections to the input or output terminals of the product, ensure that the product is properly grounded.

Do Not Operate Without Covers

To avoid electric shock or fire hazard, do not operate this product with covers or panels removed.

Do Not Operate in Wet/Damp Conditions

To avoid electric shock, do not operate this product in wet or damp conditions.

Do Not Operate in an Explosive Atmosphere

To avoid injury or fire hazard, do not operate this product in an explosive atmosphere.

Avoid Exposed Circuitry

To avoid injury, remove jewelry such as rings, watches, and other metallic objects. Do not touch exposed connections and components when power is present.

Product Damage Precautions

Use Proper Power Source
Do not operate this product from a power source that applies more than the voltage specified.

Provide Proper Ventilation
To prevent product overheating, provide proper ventilation.

Do Not Operate With Suspected Failures
If you suspect there is damage to this product, have it inspected by qualified service personnel.

Battery Replacement
To avoid damage, replace only with the same or equivalent type recommended by the circuit board manufacturer. Dispose of used battery according to the circuit board manufacturer's instructions.

Safety Terms and Symbols

Terms in This Manual
These terms may appear in this and other product manuals:

⚠ *WARNING*: Warning statements identify conditions or practices that can result in personal injury or loss of life.

⚠ *CAUTION*: Caution statements identify conditions or practices that can result in damage to the equipment or other property.

Terms on the Product
These terms may appear on the product:

DANGER indicates a personal injury hazard immediately accessible as one reads the marking.

WARNING indicates a personal injury hazard not immediately accessible as you read the marking.

CAUTION indicates a hazard to property including the product.

Symbols on the Product

The following symbols may appear on the product:

⚡ DANGER high voltage

⏚ Protective ground (earth) terminal

⚠ ATTENTION – refer to manual

Service Safety Summary

Do Not Service Alone

Do not perform internal service or adjustment of this product unless another person capable of rendering first aid and resuscitation is present.

No Power Switch

To avoid electric shock, disconnect the main power by means of the power cord. The power cord is the main power disconnect. Ensure that the power cord is easily accessible at the rear of the product or at the power receptacle.

Use Care When Servicing With Power On

Dangerous voltages or currents may exist in this product. Disconnect power and remove battery (if applicable) before removing protective panels, soldering, or replacing components.

To avoid electric shock, do not touch exposed connections.

Certifications and Compliances

Canadian Certified Power Cords

Canadian approval includes the products and power cords appropriate for use in the North America power network. All other power cords supplied are approved for the country of use.

FCC Emission Control

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by Grass Valley can affect emission compliance and could void the user's authority to operate this equipment.

Canadian EMC Notice of Compliance

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A préscrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Canadian Certified AC Adapter

Canadian approval includes the AC adapters appropriate for use in the North America power network. All other AC adapters supplied are approved for the country of use.

EN55022 Class A Warning

For products that comply with Class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Laser Compliance

Laser Safety Requirements

The device used in this product is a Class 1 certified laser product. Operating this product outside specifications or altering its original design may result in hazardous radiation exposure, and may be considered an act of modifying or new manufacturing of a laser product under U.S. regulations contained in 21CFR Chapter 1, subchapter J or CENELEC regulations in HD 482 S1. People performing such an act are required by law to recertify and reidentify this product in accordance with provisions of 21CFR subchapter J for distribution within the U.S.A., and in accordance with CENELEC HD 482 S1 for distribution within countries using the IEC 825 standard.

Laser Safety

Laser safety in the United States is regulated by the Center for Devices and Radiological Health (CDRH). The laser safety regulations are published in the "Laser Product Performance Standard," Code of Federal Regulation (CFR), Title 21, Subchapter J.

The International Electrotechnical Commission (IEC) Standard 825, "Radiation of Laser Products, Equipment Classification, Requirements and User's Guide," governs laser products outside the United States. Europe and member nations of the European Free Trade Association fall under the jurisdiction of the Comité Européen de Normalization Electrotechnique (CENELEC).

FCC Emission Limits

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesirable operation.

Certification

Category	Standard
Safety	*Designed/tested for compliance with:*
	ANSI/UL60950-2000 - Safety of Information Technology Equipment
	IEC 60950 - Safety of Information Technology Equipment (3rd edition, 1999)
	CAN/CSA C22.2, No. 60950-00 - Safety of Information Technology Equipment
	EN60950:2000 - Safety of Information Technology Equipment (3rd edition)

Environmental Criteria

The following table lists the environmental criteria for the NewsEdit XT system.

Characteristics	Description	
Operating Temperature	*Requirement:*	10° to 40°C
Storage Temperature	*Requirement:*	-40° to 65°C
Operating Altitude	*Requirement:*	To 10,000 feet
	Supplemental Data:	IEC 60950 compliant to 2000 meters
Storage Altitude	*Requirement:*	To 40,000 feet
Mechanical Shock	*Supplemental Data:*	Class 5 (30G) Grass Valley 001131500
Random Vibration	*Requirement:*	Operational: Class 6 Grass Valley 001131500
	Requirement:	Non-Operational: Class 5 Grass Valley 001131500
Transportation	*Requirement:*	Grass Valley 001131500
Equipment Type	*Supplemental Data:*	Information Technology
Equipment Class	*Supplemental Data:*	Class 1
Installation Category	*Requirement:*	Category II Local level mains, appliances, portable equipment, etc.
Pollution Degree	*Requirement:*	Level 2 operating environment, indoor use only.
Relative Humidity	*Requirement:*	Operating 80% from +30° to +40°C Non-Operating 90% from +30° to +60°C Do not operate with visible moisture on the circuit boards

Introducing NewsEdit XT

NewsEdit XT is a digital nonlinear editing system for news applications, combining all of the functionality and speed of deck-to-deck editing with the power and performance of a nonlinear system.

This manual shows you how to use NewsEdit XT effectively and efficiently to produce quality on-air news stories.

This chapter discusses:

• What NewsEdit XT is

• The NewsEdit XT editing process

• The NewsEdit XT window

• NewsEdit XT navigation

• The NewsEdit XT keyboard

What is NewsEdit XT ?

NewsEdit XT is a digital nonlinear editing solution designed specifically for editing news stories. It replaces your record deck and effects switcher by displaying your edits in real time so you can quickly move on to your next edit without going back to review a completed edit.

Nonlinear editing systems provide greater efficiency, accuracy, and flexibility than analog tape-based systems. For instance, you do not need to edit the first shot first and the last shot last — you can edit shots in any order without re-recording all of your edits after a change. You can also update breaking stories quickly, save them, and then create different versions.

Re-editing stories, fixing mistakes, and adding shots in a tape-to-tape environment can require valuable time in a business where time isn't always available. With nonlinear editing, however, you can make changes to cuts, transitions, and audio levels at any time during the editing process. NewsEdit XT trims precious minutes down to seconds with just a few keystrokes.

The NewsEdit XT interface is designed for ease of use. It consists of a bin, a record/playback viewing monitor, a four-track audio mixer, a trim tool, and an editing Timeline. NewsEdit XT's unique dynamic display updates automatically to provide you, the editor, with the tools you need for every edit.

Because the audio and video are stored digitally, you can repeatedly use and manipulate media without duplication or degradation.

Quick Overview of Editing with NewsEdit XT

You create a news story with NewsEdit XT in three stages:

1. Record your raw footage or feed directly to the NewsEdit XT Timeline or Bin.

   You can also to import clips and sequences from other third-party sources or other NewsEdit XT workstations.

2. Edit the story and fine-tune it.

   Use basic editing procedures to create simple cuts. Add dissolve, wipe, or slide transitions. Add video effects such as blurs, color effects, or Picture-in-Picture. Adjust the audio or add new audio. Add graphics or titles.

3. Save your final story to a network server, record it to tape for airing, or play it directly to air with your NewsEdit XT playlist.

Tour of the NewsEdit XT Window

The NewsEdit XT window consists of a main toolbar, a Bin to hold your files, a record/playback monitor, a four-track audio mixer, an editing Timeline, and a dynamic window that changes depending on the tool you are using.

Editing Timeline
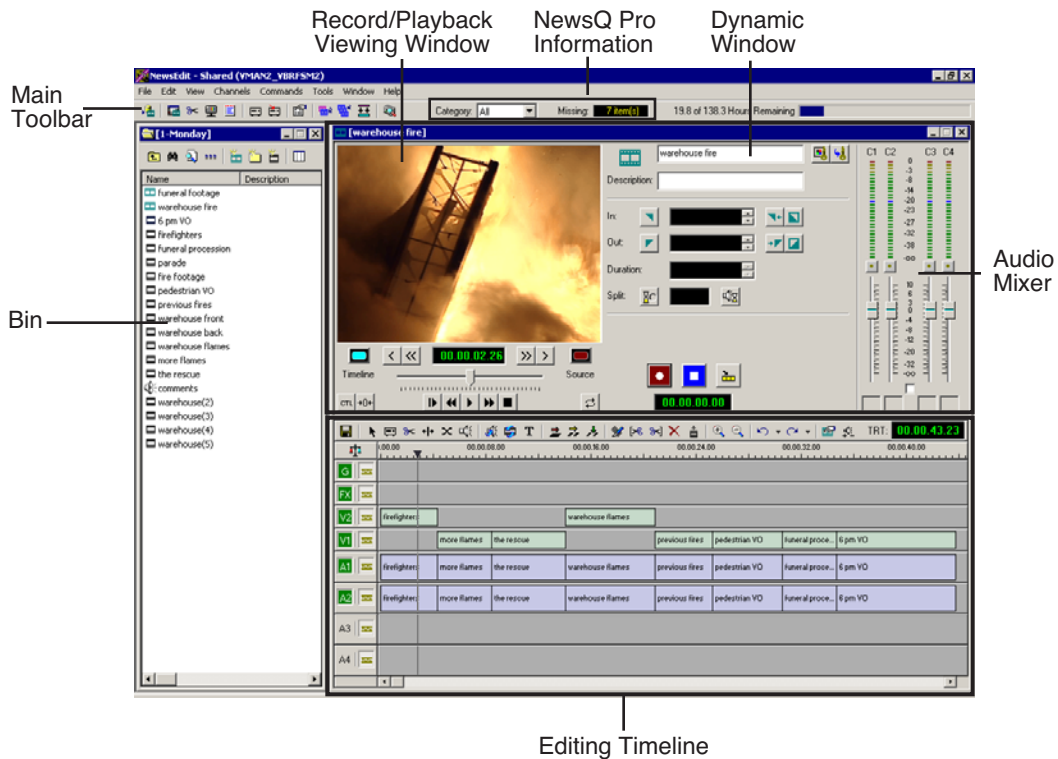
If you are using the NewsQ Pro Assignment List Manager with NewsEdit XT, you see the Category pull-down list and the number of missing stories for NewsQ Pro in your NewsEdit XT window. See the NewsQ Pro documentation for further information.

Main Toolbar

The Main Toolbar lets you access common NewsEdit XT functions:

Icon	Name	Function
	Send to File	Sends a clip or sequence to another destination.
	Timeline View	Displays the main view with the selected sequence on the Timeline.
	Trimmer View	Opens the selected clip in the Trimmer for editing.
	Player View	Displays the video in another player window.
	Story View	Displays the script for the selected sequence, if there is one.
	Record to Bin	Records clips directly into your Bin.
	Play to Tape	Records the selected clip or sequence to tape.
	Properties	Displays the properties for the currently selected clip or sequence, including the description, creation date, and location.
	Render Effects	Renders the currently selected transitions or other selected effects.
	Render All	Renders all unrendered transitions and effects in the current sequence.
	Mix Down	Collapses a video effect into the video clip below it, allowing you to apply another effect to the same clip.
	ContentShare Explorer	Opens the ContentShare Explorer program, which allows you to obtain and manage media files from your network.

Bin

The Bin is a database where clips and sequences are stored and organized. The top-level bin appears by default when you start NewsEdit XT.

You can create additional bins to organize your media. You can also customize the information about each clip and then search specific fields in the database.

See "Setting Up The Bin" on page 61 for details on using the Bin.

Timeline

The Timeline is an all-purpose editing window that replaces a record deck in the editing process. The Timeline provides a graphic representation of your sequence in a single window, displaying its tracks, the name of each clip, and the current frame's location.

The Timeline window has its own Toolbar:
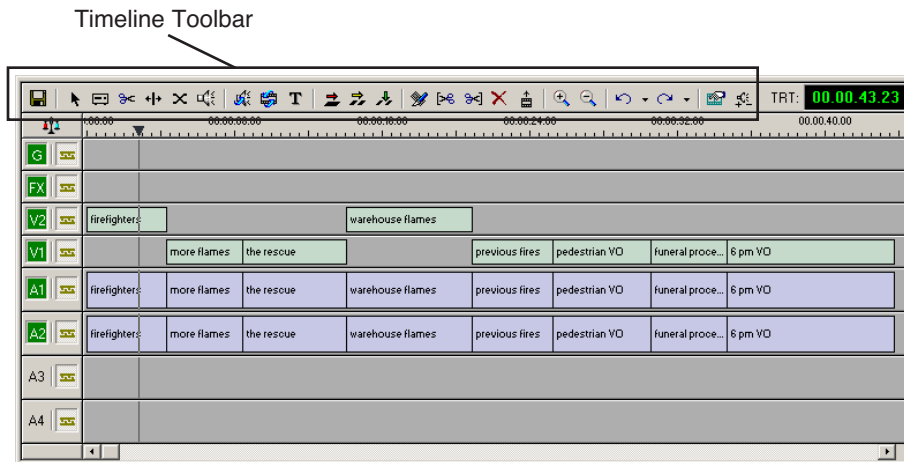
Timeline Toolbar

The Timeline Toolbar provides access to each of the NewsEdit XT tools and lets you select your editing mode:

Icon	Function
🖫	Saves your sequence in the Bin.
▶	Selects the Timeline Tool.
⊟	Selects the Source Tool.
✀	Selects the Trim Tool.
⊹⊦	Selects the Cut Point Edit Tool.
✕	Selects the Transition Tool.

Icon	Function
	Selects the Audio Mixer Tool.
	Selects the Audio Effects Tool.
	Selects the Video Effects Tool.
T	Selects the Title Tool.
	Selects Overwrite Edit Mode.
	Selects Splice Edit Mode.
	Activates Fit To Fill.
	Splits a clip at the cursor point.
	Trims the top of the selected clip on the Timeline.
	Trims the tail of the selected clip on the Timeline.
✗	Deletes selected clips.
	Lifts selected clips off the Timeline.
	Zooms in the view in the Timeline.
	Zooms out the view in the Timeline.
	Undo.
	Redo.
	Opens the Sequence Properties window.
	Shows All Audio Tracks in the Timeline.

Tools

Each of the nine NewsEdit XT tools displays in the dynamic window, leaving the Timeline unchanged. You select the tools from the Timeline toolbar.

Timeline Tool | Trim Tool | Transition Tool | Audio Effects Tool | Title Tool

Source Tool | Cut Point Edit Tool | Audio Mixer Tool | Video Effects Tool
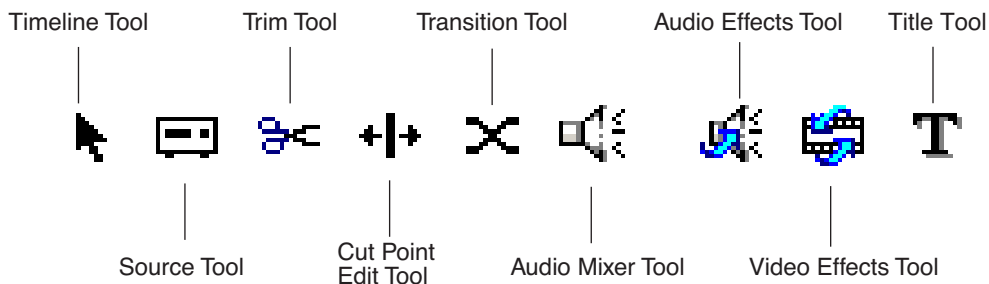
The Timeline Tool

The Timeline Tool opens by default when you first create a sequence. You can select and move clips or audio tracks, play sequences, mark in and out points, and adjust master output audio sliders.
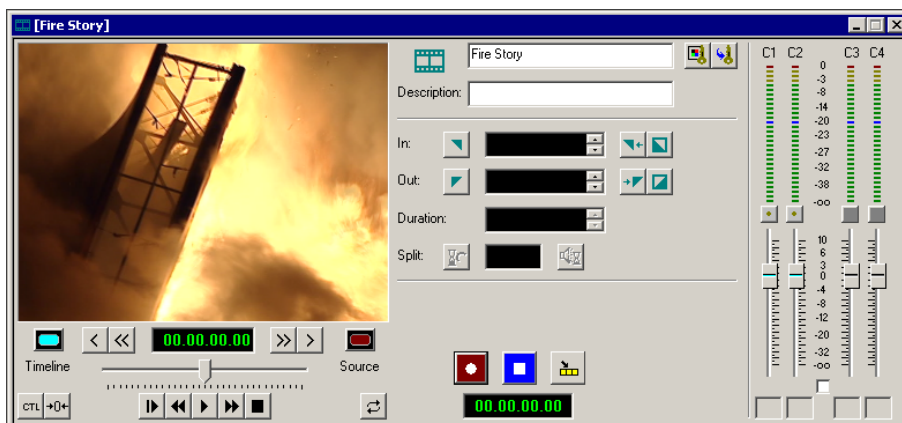
The Source Tool

The Source Tool digitizes raw material directly to the Timeline. This is the fastest and most efficient way to generate clips from a source tape. You can also use other sources for your footage, such as video feeds or microphones.
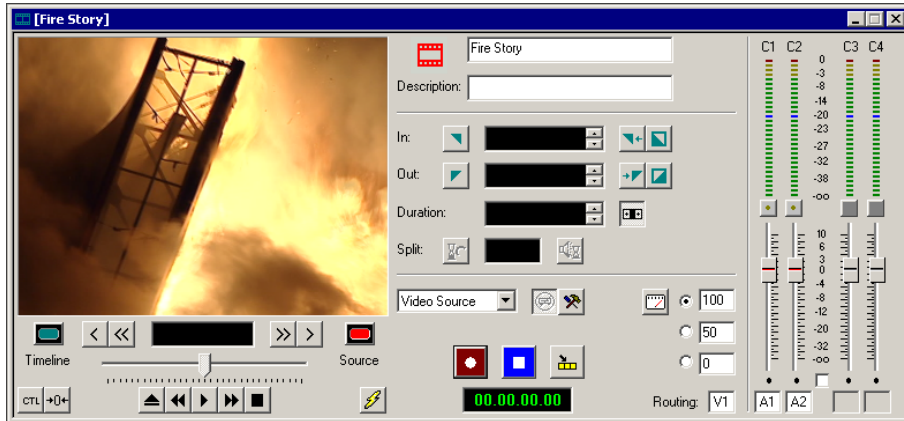
The Trim Tool

The Trim Tool changes the head or tail of a clip to change its duration.
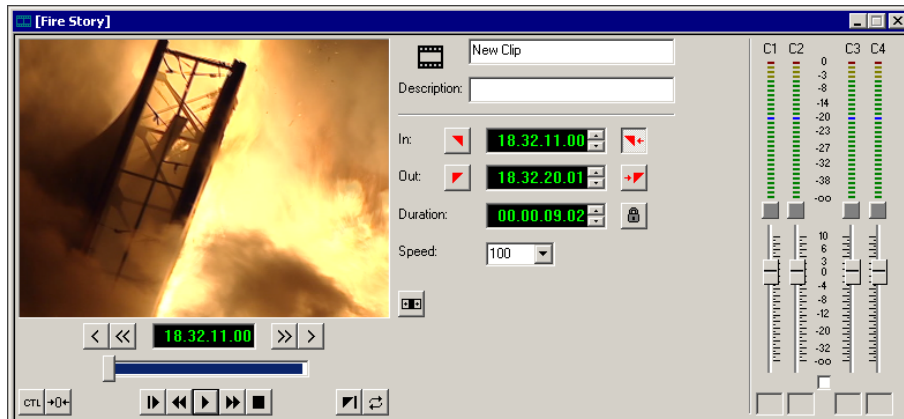
The Cut Point Edit Tool

The Cut Point Edit Tool changes the edit points between clips in the Timeline. You can easily create split edits by only selecting audio or video. If you have handles on your clips, you can access unused portions of a clip without returning to the source tape and redoing the edit.

The Transition Tool

The Transition Tool creates transition effects between clips in a sequence. You can create dissolves or wipes between any two edits by selecting the transition you want and clicking at the point you want the effect to appear.
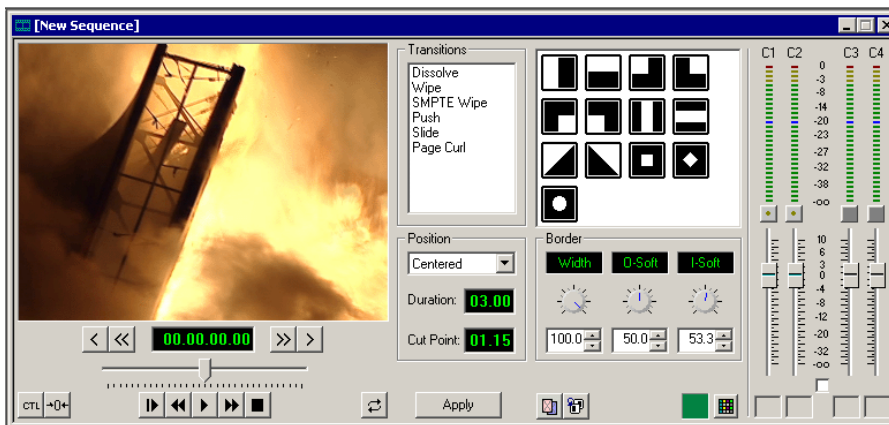
The Audio Mixer Tool

The Audio Mixer Tool adjusts the audio settings in a sequence, including the level, the pan, and output channel routing. You can raise or lower the audio on each audio track, or ride the audio on the fly using the Write Automation option.
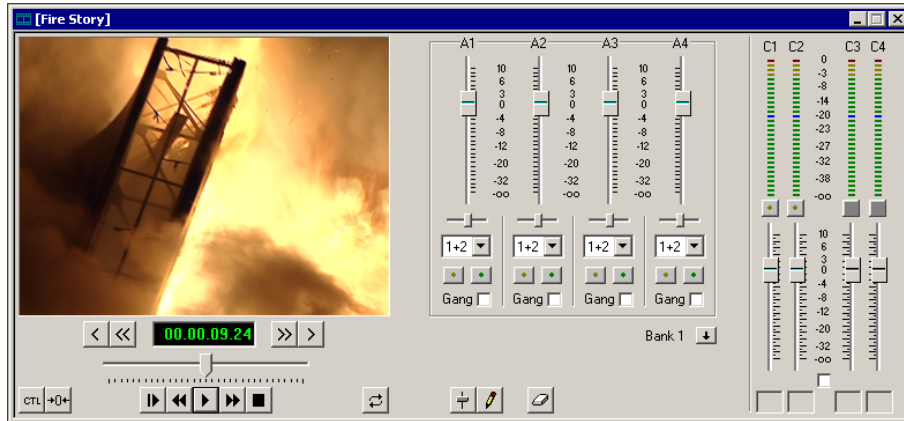
The Audio Effects Tool

The Audio Effects Tool adjusts the frequency and gain within a clip by adjusting the audio EQ. For instance, you could disguise a subject's face and voice by modifying the audio and using a mosaic or blur effect for video.
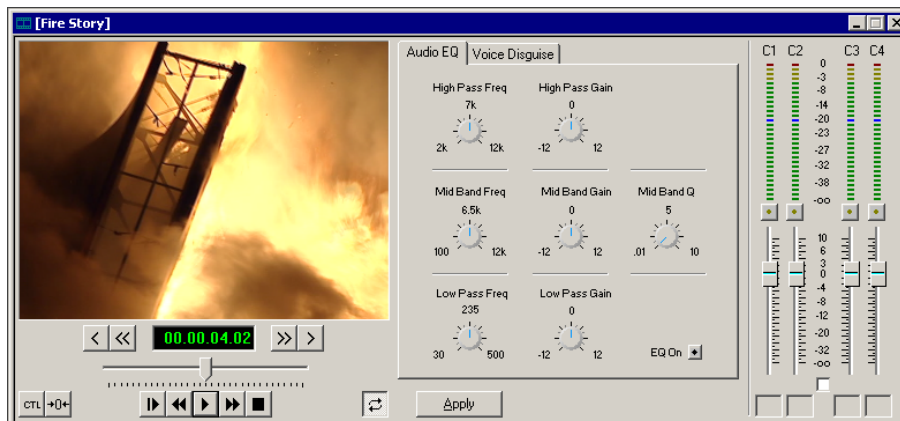
The Video Effects Tool

The Video Effects Tool creates effects for one or two video tracks, depending on the effect. An effects track on the Timeline lets you create the effect using keyframes and review the clip with the effect applied to it.
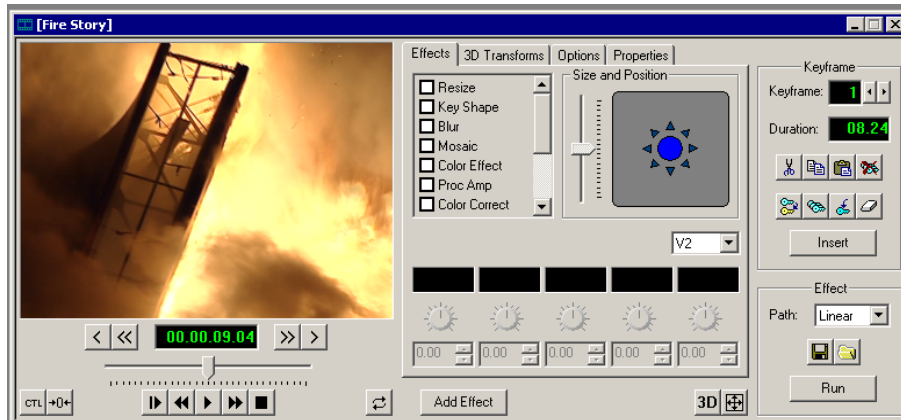
The Title Tool

The Title Tool adds text and graphics to your sequences. A graphics track on the Timeline lets you create the effect, modify its properties, and review the clip with the title applied to it.

Navigating in NewsEdit XT

NewsEdit XT supports any combination of mouse and keyboard navigation. This manual includes instructions for both mouse and keyboard commands.

Using the Mouse

To execute a mouse command, move the mouse pointer to a menu or button and click the left mouse button. This manual uses the term *click* when you press the mouse button once, *double-click* when you press the mouse button twice in quick succession, and *press* when you press and hold the mouse button.

You can also drag clips from the Bin directly into the Timeline. Place the mouse pointer on the title bar of the clip you want to move, press and hold the mouse button, drag the clip to the Timeline, and release the mouse button. This method of editing is track specific, so make sure you have the proper video and audio tracks enabled on the Timeline before performing the edit.

Using the Keyboard

The NewsEdit XT keyboard has color-coded keys that allow you to see editing commands at a glance. Keyboard commands can be single keystrokes or key combinations. You execute key combinations such as **Ctrl + TAB** by pressing and holding the first key in the combination, while simultaneously pressing the second key. See Appendix A for a complete list of keyboard keys and functions.

Using the Shortcut Menus

This application also makes use of right-click shortcut menus. Shortcut menus provide a quick way to access relevant commands without having to move the mouse pointer to the toolbar or menu bar. To access these menus, press the right-mouse button once and a menu appears. The commands that appear depend on the position of the mouse pointer when you right-click. For example, when you right-click in the Bin, the shortcut menu provides quick access to bin management commands.

If you are comfortable using a mouse, shortcut menus provide a valuable means of accessing commands quickly.

Tour of the NewsEdit XT Keyboard

NewsEdit XT's keyboard uses color-coded keys that correspond to NewsEdit XT functions. The different sections of the keyboard are introduced below. See *Appendix A* for a detailed key reference.

The Record Key

The red record key starts recording.

Main Tool Selection Keys

The first eight dark blue keys activate the corresponding NewsEdit XT tools. The last two dark blue keys move clips between cut points in the Timeline.

Track Selection Keys

The light blue keys zoom the view in the Timeline and select clip tracks.

Mark Point Keys

The dark purple keys set and control the mark In and Out points.

Deck Control Keys

The light purple keys act as deck controls for playing sequences.

Transport Command Keys

The avocado green keys control movement within a clip.

Edit Mode Keys

The gray keys select the different edit modes.

Clip and Track Selection Keys

The peach keys select clips and tracks on the Timeline.

Cut Point Edit Tool Keys

The yellow keys perform cut point edits.

Other NewsEdit XT Keys
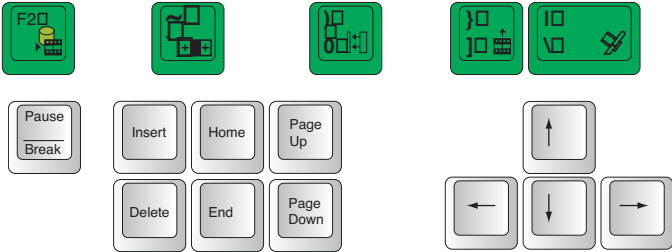
The green and black keys perform miscellaneous editing functions.

Chapter **2**

Configuring NewsEdit XT

You need to configure NewsEdit XT for your newsroom's equipment before you can create and edit news stories. This chapter describes how to configure NewsEdit XT.

This chapter discusses how to:

- Add video sources
- Set options for your newsroom
- Set up media files for sharing with other workstations

Adding Video Sources to NewsEdit XT

Before using footage from a particular source, you need to add the source to the NewsEdit XT source list. NewsEdit XT pre-installs two sources for you — a video source and a clip source:

- The video source, usually a tape deck, allows you to record footage directly into the Timeline or Bin.

- The clip source allows you to edit a clip as a Timeline source directly in the Bin, which is useful for large clips so you don't have to go back and forth from a tape deck. You only need one clip source; you don't have to create a new clip source for each clip you want to use.

To add other sources to NewsEdit XT:

1. Choose **View | Sources**.

   The Sources window appears, listing the currently configured sources:
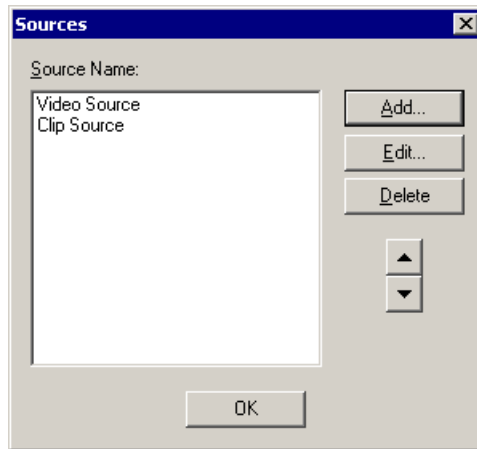
2. Click **Add**.

The Add Source window appears:
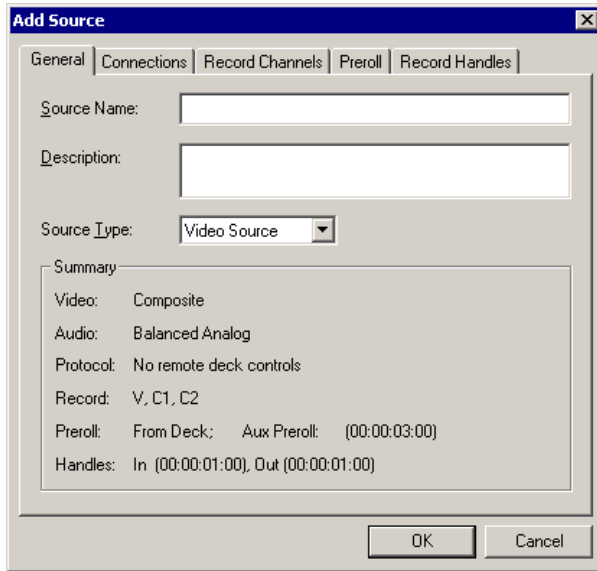
3. Go through each Add Source tab to configure the new source.

The following sections describe each tab in the Add Source window.

4. Click **OK** when you are done setting up the new source.

NOTE: You can edit a video source at any time by selecting
View | Sources, *highlighting the source name, and then selecting*
Edit. *Make your changes to the source properties, click* **OK**, *and click*
OK *again to close the source dialog window.*

Setting General Source Options
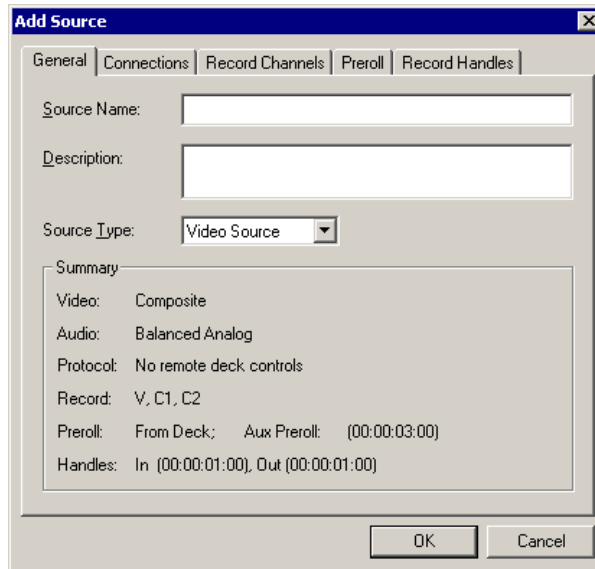
Setting	Options	Description
Source Name		Enter a name for the source, such as Tape Deck.
Description		Enter a description for the source.
Source Type	**Video Source**	Select **Video Source** for all incoming sources, including audio sources.
	Clip Source	Select **Clip Source** to use an existing clip in the bin as a source.

Setting Connections

Setting	Options	Description
Video Input	**Composite S-Video Component SerialD1**	Select the Video Input option that corresponds to the source's connection to NewsEdit XT. The Serial Digital interface (**SDI**) requires the Pro Analog/Digital Breakout Box.
Audio Input	**Balanced Analog Unbalanced Analog AES/EBU SDI/Embedded TDIFF**	Select the Audio Input option that corresponds to the source's connection to NewsEdit XT. The **AES/EBU** and **SDI/Embedded** options require the Pro Analog/Digital Breakout Box.
Deck Protocol	**No remote deck controls Sony 422 Protocol Sony DNW-A100**	Select the Deck Protocol that corresponds to the type of tape deck control you are using with NewsEdit XT. If you are adding a clip source, video router, or a non-video source, select **No remote deck controls**.
Comm Port	**None COM1 - COM10**	Select the Comm Port you are using to connect the source to NewsEdit XT.

Setting Record Channels
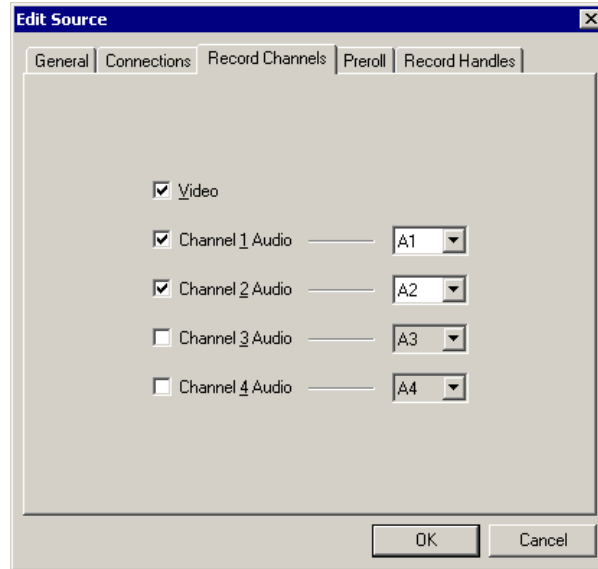
Setting	Options	Description
Video		Check **Video** if you want to record video with this source.
Channel 1 Audio	**A1** to **A8**	Check each audio channel that should record audio from this source and select the default audio track (A1–A8) on the Timeline to which you want the channel routed.
Channel 2 Audio	**A1** to **A8**	
Channel 3 Audio	**A1** to **A8**	
Channel 4 Audio	**A1** to **A8**	

NOTE: Setting up a microphone source that does not record video (audio-only record) greatly reduces the required disk space.

Setting Preroll
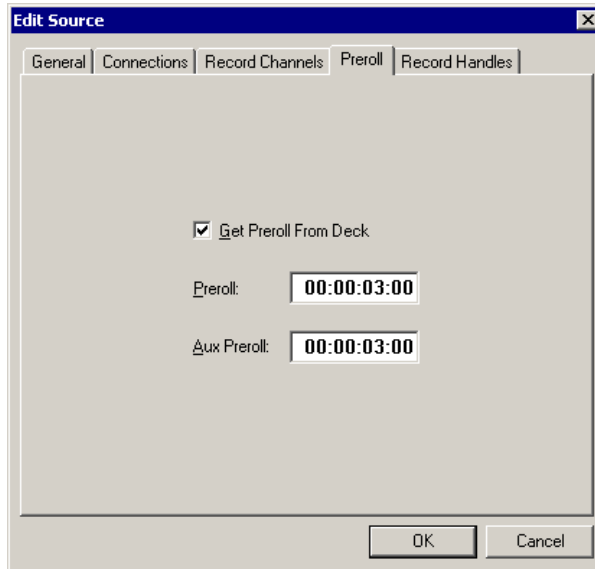
Setting	Description
Get Preroll From Deck	Check **Get Preroll From Deck** to use the preroll settings from your tape deck instead those configured in NewsEdit XT.
Preroll	Enter the number of seconds of preroll to use when recording from this source. This setting overrides the source's Preroll setting unless you check **Get Preroll From Deck**.
Aux Preroll	Enter the number of seconds of auxiliary preroll you want to use when using an auxiliary input or a non-remote source.

Setting Record Handles
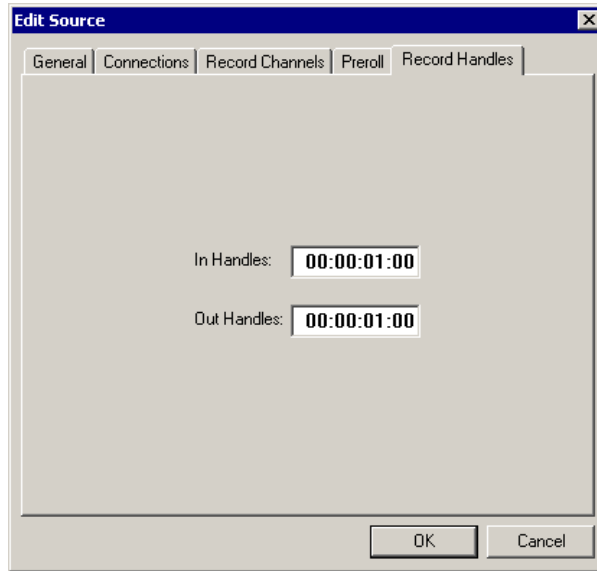
Setting	Description
In Handles	Enter the number of seconds for the In and Out Handle length.
Out Handles	Handles provide the extra frames necessary to trim or add transition effects at the head or tail of a clip. When you Mark In and Mark Out, NewsEdit XT begins recording the specified number of seconds before your Mark In and after your Mark Out. Only the material between your marks is edited to the Timeline.

NOTE: When you stop recording manually you must press the O *key to get an Out handle.*

Setting Options for Your Newsroom

You need to configure NewsEdit XT for your particular newsroom equipment.

To configure your NewsEdit XT system:

1. Choose **Tools | Options**.

   The Options window appears:
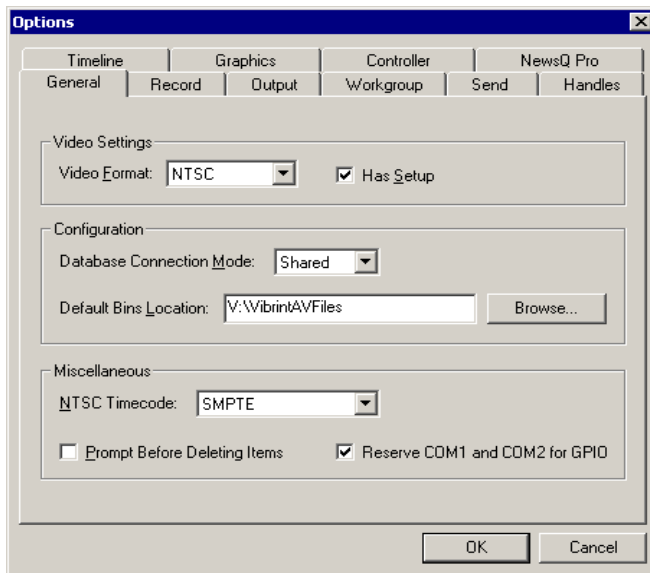
2. Go through each Options tab to configure NewsEdit XT.

   The following sections describe each tab in the Options window.

3. Click **OK** when you are done configuring your system.

Setting General Options

Setting	Options	Description
Video Format	**NTSC** **PAL**	Select the Video Format you are using. NTSC has a frame rate of 29.97 frames/second and is used primarily in the Americas and Japan. PAL has a frame rate of 25 frames/second and is used in Europe, most of Asia, and Australia.
Has Setup	**On** **Off**	Check Has Setup if the analog composite signal carries setup information.
Connection Mode	**Local** **Shared**	Select **Local** if you are using local disk storage and a local NewsEdit XT database. You have access to files on your local machine only. Select **Shared** if you are using shared disk storage and a shared database. You share the Bin with all NewsEdit XT workstations that are part of the NewsShare network, according to security settings.
Default Bins Location		Enter the default path to your media files.

Setting	Options	Description
NTSC Timecode	**SMPTE - Drop Frame**	Recommended setting to avoid the time slipping problems associated with non-drop frame.
	SMPTE	Standard format used to represent timecode.
Prompt Before Deleting Items	**On** **Off**	Check this option to receive a confirmation prompt before deleting files.
Reserve COM1 and COM2 for GPIO	**On** **Off**	Check this option to keep COM ports 1 and 2 available for an input device to control NewsEdit XT.

Setting Record Options
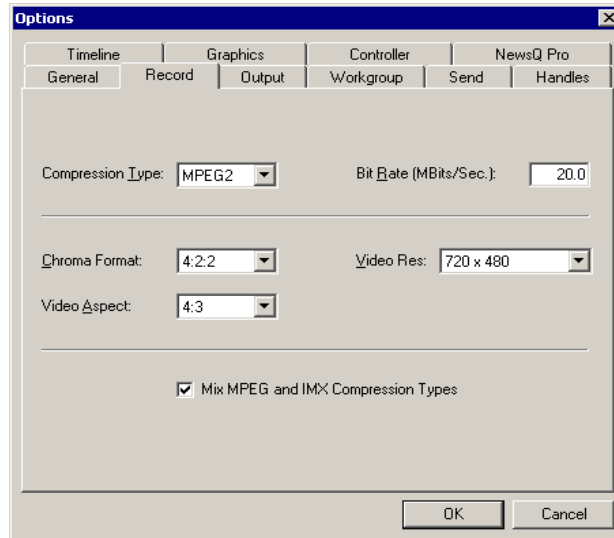
Setting	Options	Description
Compression Type	**MPEG2** **DV25** **DV50** **IMX30** **IMX40** **IMX50**	Select a Compression Type based on your newsroom preference. The **DV50** and **IMX** formats are optional and may not be available on all systems.
Bit Rate	**4-50 mbits**	Enter the Bit Rate specified by your newsroom engineer. More than 25 mbits is optional.
Chroma Format	**4:1:1**	Select the **4:1:1** Chroma Format if you use DV25 compression.
	4:2:0	Select the **4:2:0** Chroma Format if you use MPEG2 compression.
	4:2:2	Select the 4:2:0 Chroma Format if you use DV50 or MPEG2 compression. **4:2:2** offers more color resolution than **4:2:0** with MPEG2.
Video Aspect	**4:3**	Select **4:3** Video Aspect for regular television format.
	16:9	Select **16:9** Video Aspect for wide-screen television format.

Setting	Options	Description
Video Resolution	**704 x 480**	Select for NTSC systems using MPEG2 compression.
	720 x 512	Select for NTSC systems using MPEG2 compression.
	720 x 480	Select for NTSC systems using DV25, DV50, or MPEG2 compression. You must use **720 x 480** to transfer NTSC files to a Profile server.
	704 x 576	Select for PAL systems using MPEG2 compression.
	720 x 576	Select for PAL systems using DV25, DV50, or MPEG2 compression. You must use **720 x 576** to transfer PAL files to a Profile playout server.
	720 x 608	Select for PAL systems using MPEG2 compression.
Mix MPEG and IMX Compression Types		Check this option to allow video clips of both MPEG and IMX compression types to be used on this NewsEdit XT system. If you are using IMX compression and sending clips to a Profile for storage and playout, the Profile Server converts the clips to MPEG compression. Therefore, you want to check this option so you can use these clips from the Profile Server at a later time. If you are using IMX compression and are recording completed sequences back onto videotape, you want to leave this option unchecked.

Setting Output Options

Setting	Options	Description
Video Connections	**Composite** **S-Video** **Component** **Serial D1**	Select the Video Connection option that corresponds to the video source's connection to NewsEdit XT. If you are using the Pro D&A Break Out Box, the Component Y output defaults to a second composite output unless you select **Component** Video.
Audio Connections	**Balanced Analog** **Unbalanced Analog** **AES/EBU** **SDI Embedded** **TDIFF** **SPDIF**	Select the Audio Connection option that corresponds to the audio source's connection to NewsEdit XT.
Video Output to VGA	**Composite** **S-Video**	Select the Video Output type for your VGA card.

Setting Up Workgroups

Before a NewsEdit XT workstation can pull media from other NewsEdit XT workstations, you need to set up a workgroup.
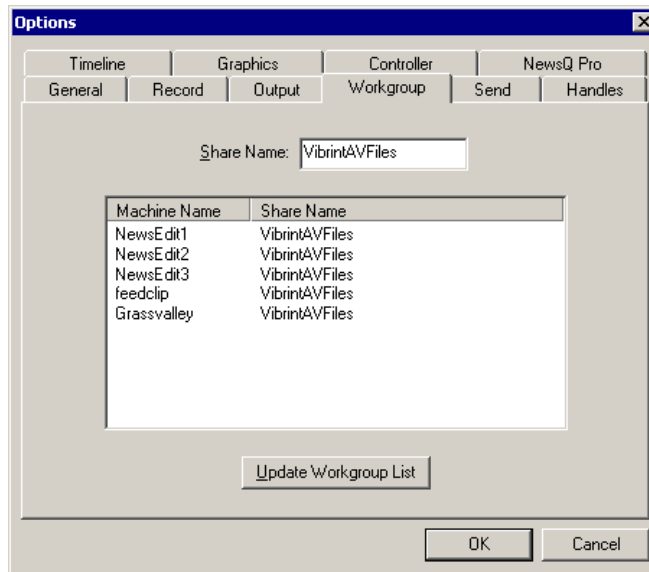
To set up a workgroup:

1. Verify that your Share Name matches the folder name you configured for Default Bins on the General Tab.

   If your Default Bins folder has a different name than **VibrintAVFiles**, change it by typing the name in the Share Name field.

2. Click **Update Workgroup List**.

   The system lists the available machines for file import or export.

3. Click **OK**.

In addition to setting up a workgroup, you also need to share your media folder to receive files from other NewsEdit XT workstations. See "Setting Up Media Files for Sharing" on page 60 for instructions.

Setting Up Send Locations

After completing a sequence you can send it to a playout machine or to a network video server. To send completed sequences or individual clips, you first need to configure NewsEdit XT with each of your send locations.

A send location can be another NewsEdit XT workstation, a Profile Media Server, or a Bin you specify. If you want to store completed sequences on your computer, you can also add a send location for your PC.
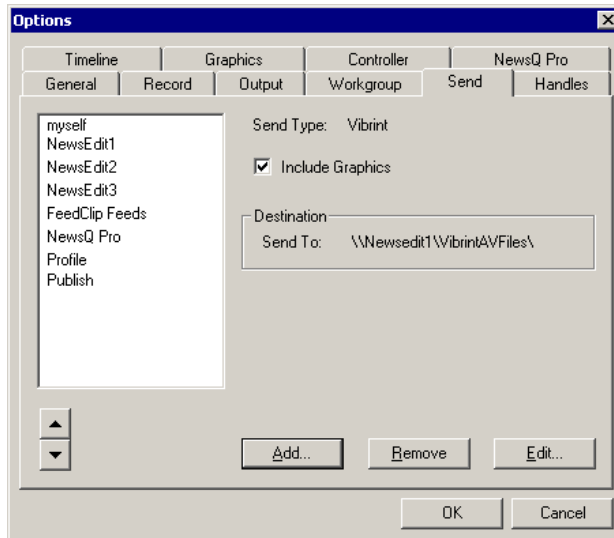
To set up a send location:

1. Click **Add**.

   The Add Named Destination to Send List window appears:
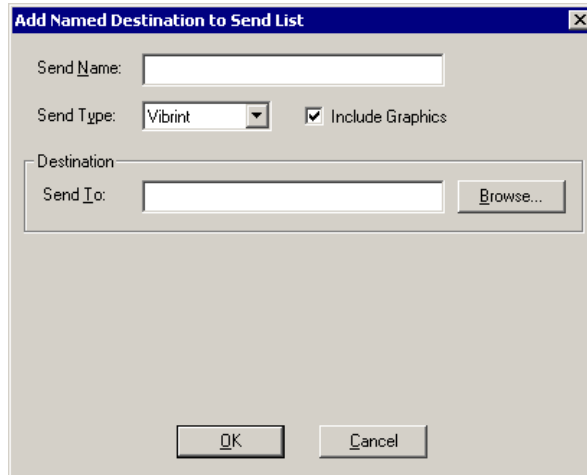
2. Enter the name of the send location.

3. Select the type of location from the drop-down list.

Send Type	Description
Vibrint	Select **Vibrint** when the send location is another NewsEdit, FeedClip, or NewsQ workstation, or a NewsQ Pro system.
Profile	Select **Profile** when the send location is a Profile Media Server.
Publish	Select **Publish** when you are using NewsQ Pro to control NewsQ in a shared environment.
SeaChange	Select **SeaChange** when the send location is a SeaChange server.
GXF ftp	Select **GXF ftp** to send the completed sequence as a GXF stream which can be used for a generic FTP site.

4. Check the **Include Graphics** box if you want all graphics to remain with the sequence.

5. Click **Browse** and select the file destination path.

   If you are setting up a Profile Media Server as a send location, open Media Manager, click on the desired destination directory, and drag the folder from Media Manager into this field.

6. If you are setting up a Profile, SeaChange, or GXF ftp send location, enter the following information:

   - **Host Name** — For Profile, automatically fills in with the computer name for the Profile Video Server; for the others, enter the name of the computer.

   - **User Name** — For Profile, automatically fills in as **movie**; leave as is; for the others, enter your user name.

   - **Password** — For Profile, leave this field blank; for the others, enter the password for the send location, if you have one.

7. If you are setting up a Publish-type send location, check the **Render All Effects** box if you want all transitions and effects rendered before sending.

8. Check the **NewsQ Pro Destination** box if this send location is a NewsQ Pro server.

9. Click **OK**.

Setting Handles
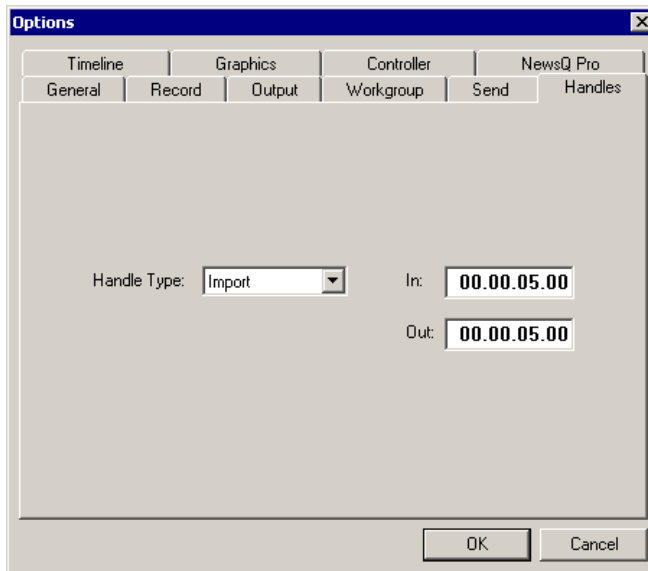
Setting		Description
Handle Type	**Import**	Select **Import** when you are importing a file from another workstation to your own.
	Export	Select **Export** when you are exporting files from your workstation to another workstation or server.
	Trimmer	Select **Trimmer** when you are trimming a clip with the Trim Tool and trim the set duration from either side of your clip.
	Consolidation	Select **Consolidation** when you are consolidating a clip or sequence, which reduces the file size by removing unused footage.
	Render	Select **Render** when you are using media with effects and transitions; provides handles to effects that are mixed down.

To change the handle durations, select the handle type from the drop-down menu and enter the new duration in the In or Out fields.

Setting Timeline Options
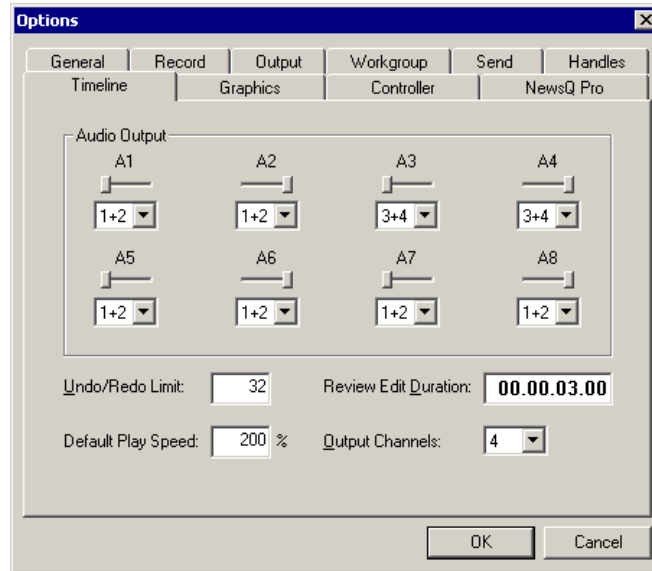
Setting	Options	Description
Audio Input	**1+2** **3+4** **All**	Select the output routing for each audio channel and set its pan direction.
Undo/Redo Limit	**1 - 1024**	Enter the number of undo levels you want NewsEdit XT to track. *NOTE: Increasing the number of undo levels increases NewsEdit XT's system memory usage.*
Default Play Speed		Enter the speed at which to play clips when reviewing them in the Timeline.
Review Edit Duration		Enter the amount of preroll to play on a clip prior to playing the edit you're reviewing.
Output Channels	**1-8**	Select the number of output channels you are using.

Setting Graphics Options
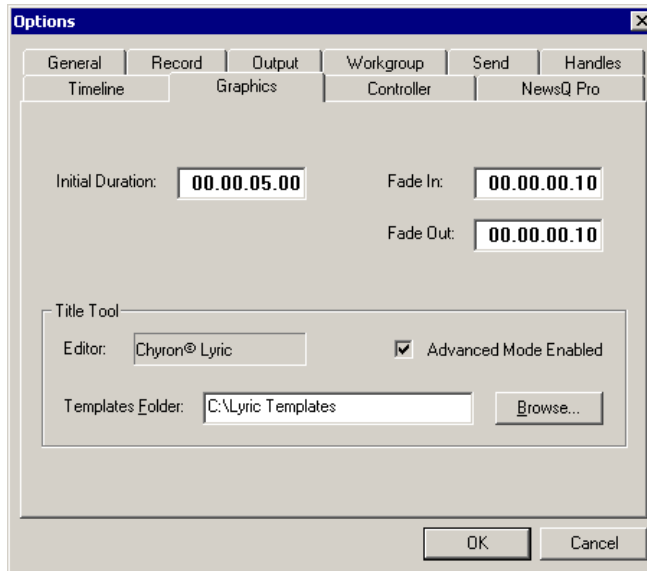
Setting	Description
Initial Duration	Enter the initial duration for a graphic placed on the Timeline.
Fade In	Enter the number of frames over which the graphic fades in to the clip.
Fade Out	Enter the number of frames over which the graphic fades out to the next clip.
Editor	Indicates whether the Chyron plug-in is installed with the NewsEdit XT system.
Advanced Mode Enabled	Check to use the Advanced Mode of the Title Tool; you need the Chyron plug-in installed to use this feature.
Templates Folder	Enter the path to the Graphics template directory.

Setting Controller Options
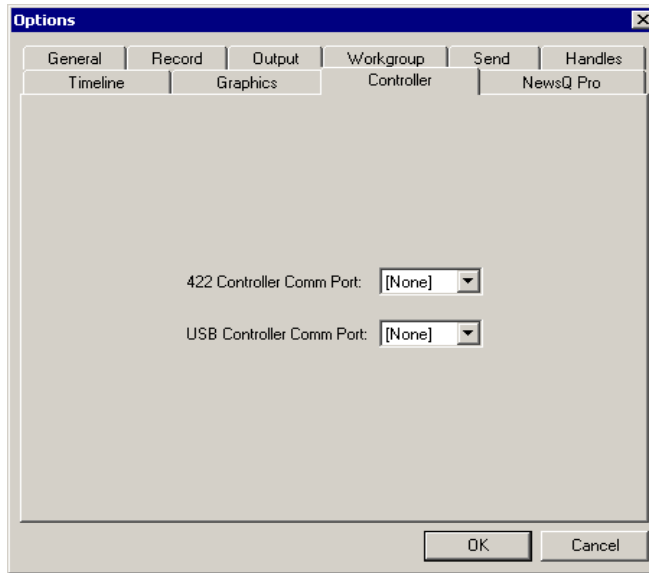
Setting	Options	Description
422 Controller Comm Port	**None** **COM1** through **COM10**	If you are using an external controller with NewsEdit XT, select the COM port to which it is connected. Otherwise, select None.
USB Controller Comm Port		

Setting NewsQ Pro Options
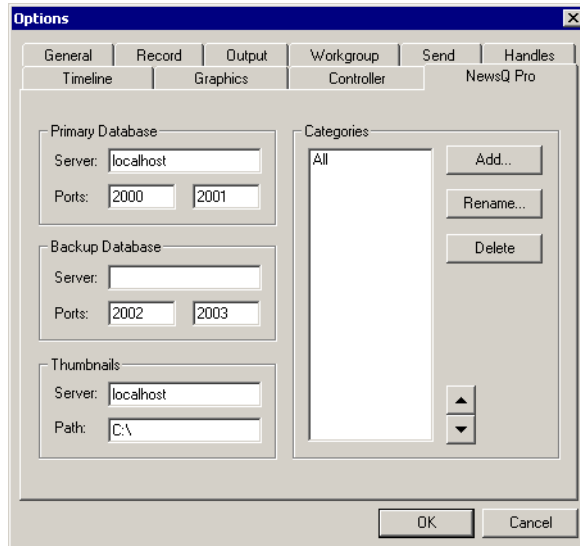
Setting		Description
Primary Database	Server	Enter the server name where the primary NewsQ Pro database resides.
	Ports	Enter the port numbers used to access the primary NewsQ Pro database.
Backup Database	Server	Enter the server name where the secondary NewsQ Pro database resides.
	Ports	Enter the port numbers used to access the secondary NewsQ Pro database.
Thumbnails	Server	Enter the server name where NewsQ Pro stores video clip thumbnails.
	Path	Enter the path to the thumbnail directory.
Categories		Lists the currently configured NewsQ Pro categories.

Adding NewsQ Pro Categories

NewsQ Pro lets you create playlists for airing news broadcasts. Categories let you better organize your clips and separate them for different news shows, for example.

If you want to add NewsQ Pro categories:

1. Click **Add**.

   The Add Category window appears:
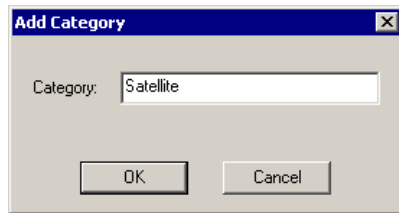
2. Enter a category name and click **OK**.

Setting Up Media Files for Sharing

Before you can transfer media files to another NewsEdit XT workstation, you need to set up your computer for sharing:

1. In Windows Explorer, open the drive where your media files will be stored, usually drive E:.

2. Right click on the VibrintAVFiles folder and choose **Sharing**.

3. Choose the **Shared As** option button and leave the default share name **VibrintAVFiles**.

4. Click **OK**.

The folder you shared appears with the standard Windows sharing icon.

Setting Up The Bin

NewsEdit XT uses Bins to hold all of your media clips, sequences, and raw footage. You can create as many bins as you need to organize your work.

This chapter discusses how to:

- Create a new bin

- Work in Shared or Local mode

- Set up your bins

- Set up a bin to monitor a Profile Media Server folder in a shared environment

- View your bins

- Use the context-sensitive Bin menu

The Bin Window

The Bin window consists of two main components — a toolbar and the area that holds your files. The toolbar lets you create new bins and sequences, search for specific files, and change the way you view bins.
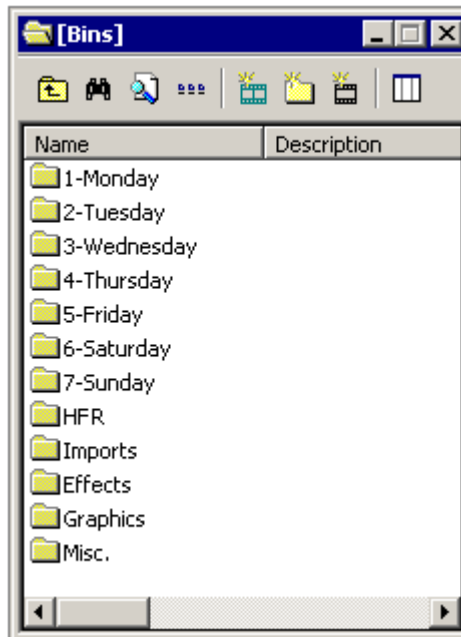
Understanding the Bin Toolbar

The Bin Toolbar lets you access common bin functions:

Button	Function
	View the bins at the next highest level.
	Search for a specific clip or sequence.
	Toggle between displaying bins and search results.
	Toggle between displaying your clips and sequences as text or as thumbnails.
	Create a new sequence in your bin.
	Create a new bin.
	Import clips from other workstations.
	Select the columns to view in your bin; available only when viewing bin contents as text, not as thumbnails.

Creating a New Bin

The Bin window is empty when you open NewsEdit XT for the first time. Before you can begin using NewsEdit XT, you need to create bins to store your work. You can create and organize your bins to suit your work style. For instance, you could create a bin for each day of the week and within those set up a bin for each individual story or for each editor.

To create a new bin:

1. Click the **New Bin** button on the Bin toolbar.

   The Bin Properties window appears:

2. Enter the bin Name.

3. Enter a bin Description.

4. Enter bin Keywords.

   You can use the keywords to search for a specific bin.

5. Click **OK**.

   NOTE: To change a bin's properties, highlight the bin folder and choose **Edit | Properties.**

Working in Shared or Local Mode

You can use NewsEdit XT either in shared or local mode:

- Shared mode uses a shared media database. All NewsEdit XT workstations access the same bins; the bins are locked so two editors can't make changes to the same file at the same time.

- Local mode uses your computer's local disk storage and a local media database. Each NewsEdit XT workstation has its own Bin on the NewsEdit XT machine, and cannot share the Bin. In order to use someone else's files, you need to import them into your Bin.

You can change modes from the General Options menu; see "Setting General Options" on page 46 for instructions.

NewsEdit XT indicates your current mode at the top of the window.

NewsEdit XT in shared mode

You create sequences in NewsEdit XT the same way regardless of what mode you are working in. The main difference is that your Bin is shared, and all editors using a NewsEdit XT workstation have access to the same media files you do, according to security settings.

Setting Up Your Bins

There are several ways to organize your bins, and the organization you choose depends mostly on your job function as well as your organizational style.

A typical setup for a newsroom might be:
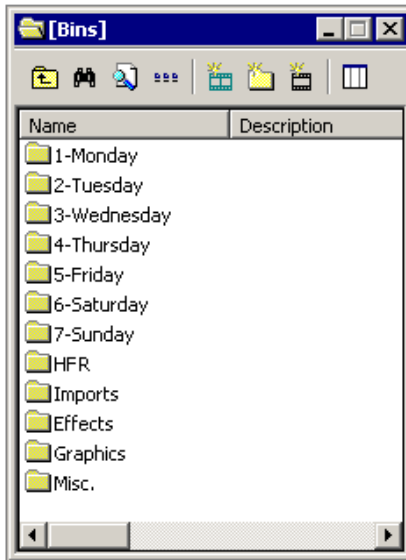
Bins **1-Monday through 7-Sunday** are used for everyday stories.

Bin **Imports** is set up as a single location where other NewsEdit XT workstations can send clips over the network to you.

Bin **Misc.** is a folder to hold any clips to be saved, such as Whiteflash, Black, Color Bars and Tone, Reporter Outcues, repeated effects, etc.

Bin **HFR** (Hold For Release) is used when you are editing a story on one day but airing it on another.

Bin **Effects** holds saved video effects.

It is also important that, within each day of the week, you create another bin with the title of the specific project you are working on. This helps to keep the bins organized, especially if you have more than one editor working on the same NewsEdit XT system.

NewsEdit XT automatically monitors your bins and refreshes the display if anyone places a file in one of your bins. For instance, as a breaking story develops, station staff can place the latest footage in a given directory. It then appears in your Bin where you can use it in your sequence.

To refresh your Bin manually, press **F5** or select **View | Refresh**.

Setting Up a Bin to Monitor a Profile Media Server Folder

If you are using NewsEdit XT in shared mode, you can have clips from a Profile Media Server appear in one of your bins automatically. NewsEdit XT monitors the Profile folder you specify and updates the Bin automatically when new feeds or updated feeds appear. You don't need to go into the Profile directory and copy the media into your NewsEdit XT bin in order to use it in a sequence.

To set a bin to monitor a Profile Media Server folder:

1. Click the **New Bin** button on the Bin toolbar.

   If you want to set up an existing bin, right-click on the bin folder and choose **Edit | Properties**.
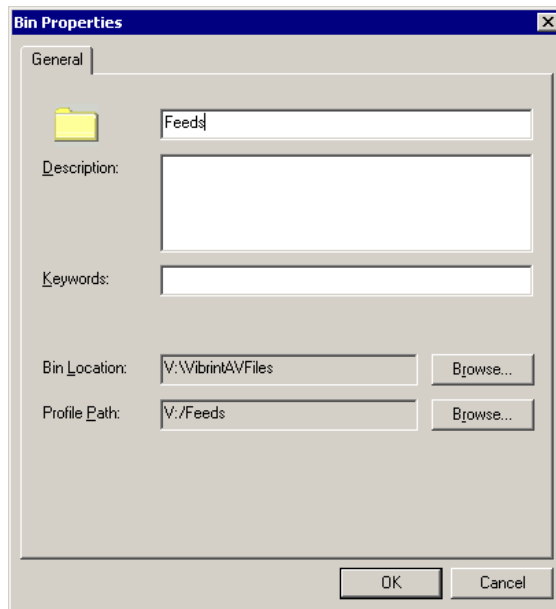
2. Enter a name, description, and any keywords for the Bin.

3. Click **Browse** and select the folder on the Profile Media Server to monitor.

4. Click **OK**.

NewsEdit XT now monitors the Profile folder and adds new media to this bin automatically.

Viewing the Material in Your Bins

There are two ways to view the contents of your Bin: Thumbnail view or Details view.

Thumbnail View

In this view, each clip or sequence is represented by a single frame, allowing you to see the content of the material. The Thumbnail view provides a visual representation of the type of media file in each bin.
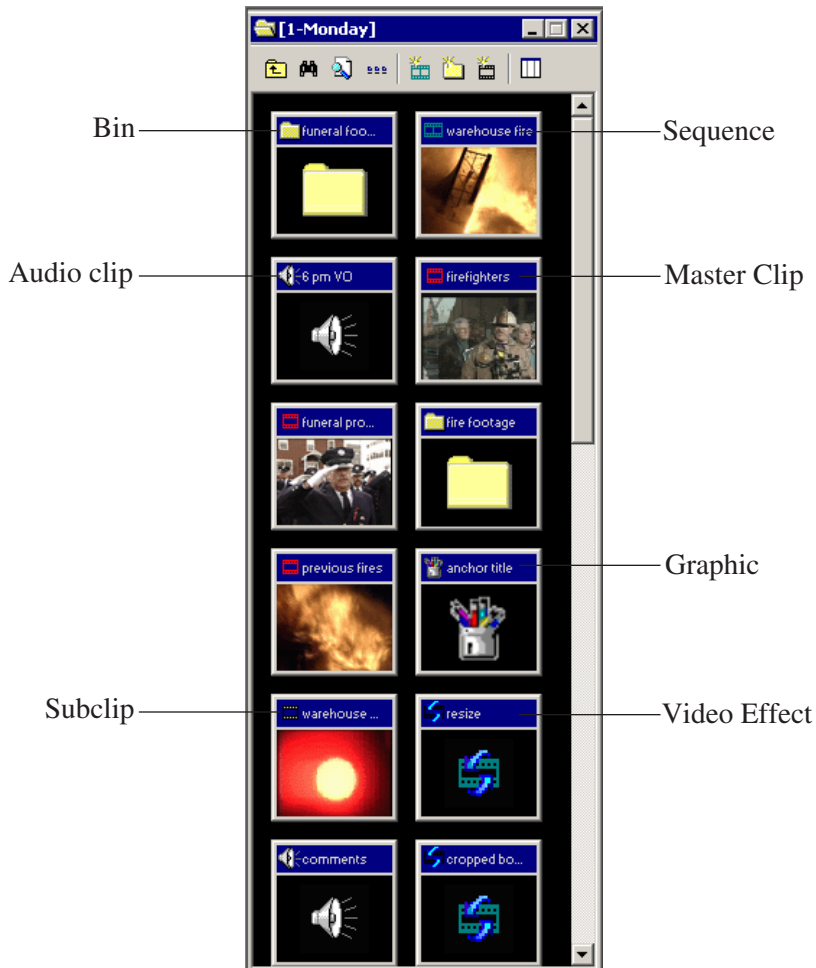
Changing Thumbnail Size

NewsEdit XT offers three different sizes of thumbnails in this view: small, medium, and large. The default size is small.

To change the size of the thumbnails:

1. Click the **View Thumbnails** button on the Bin Toolbar.

2. Choose the thumbnail size you want from the View menu.

Selecting the Head Frame

Each clip or sequence in Thumbnail view is represented by a single frame, called the head frame. By default, NewsEdit XT uses the first frame from the clip or sequence. However, you can choose any frame within the clip or sequence to represent the file in the view.

To select a different frame for the Thumbnail:

1. Double-click the clip or sequence to open it.

   Clips open in the Trimmer window; sequences open in the Timeline Tool.

2. Play through the clip until you find the frame you want to use.

3. Click **Set Head Frame From Current Frame**.

4. Click **OK**.

Details View
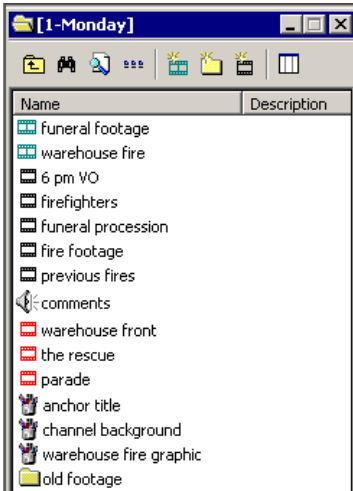
In this view, each clip or sequence is represented by an icon, the name of the file, and other information about the file, such as timecode, description, and keywords.

The information acts as a database that you can customize by entering information about your clips. You can also search the information for clips that match certain criteria.

Displaying Columns

You can hide or display multiple text columns in the Bin:

1. Click the **View Thumbnails** button in the Bin Toolbar.

2. Double-click on a bin to open it.

   If you are in the highest-level bin, you will not see all of the column choices.

3. Click the **Column Manager** button in the Bin Toolbar.

4. Select the columns you want to display or click the **Reset** button to display all of the columns. A checkmark appears next to the selected options:

   - **Name** — Displays the name of the clip or sequence.

   - **Description** — Displays the description of the clip or sequence.

   - **Keywords** — Displays any keywords you entered; these keywords help to identify and search for specific clips.

   - **Created** — Displays the date the clip or sequence was created.

   - **Folder** — Displays the directory where the clip files are stored.

   - **Duration** — Displays the length of the clip or sequence.

- **Mark In** — Displays the Mark In timecode.

- **Mark Out** — Displays the Mark Out timecode.

- **Video Format** — Displays the video format used for the clip or sequence, NTSC or PAL.

- **Video Aspect** — Displays the video aspect for the clip or sequence, 4:3 or 16:9.

- **Video Resolution** — Displays the video resolution for the clip or sequence.

- **Compression** — Displays the video compression type for the clip or sequence, DV25, DV50, or MPEG2.

- **Chroma Format** — Displays the chroma ratio for the clip or sequence, 4:1:1, 4:2:0 or 4:2:2.

- **Tracks** — Displays the tracks present in the clip.

- **Modified** — Displays the date of the last time the clip was modified.

5. Click **OK**.

   The Bin displays your new column choices.

Sorting Your Media Files

You can arrange clips in numeric or alphabetical order according to the columns you select. For example, you can sort the Bin by the Mark In column to display all of the clips in timecode order.

To sort the Bin:

1. Click the heading of the column by which you want to sort the Bin.

   The clips and sequences display in alphabetical or numerical order depending on the column you selected.

2. Click the column again to reverse the order of the sort.

3. Right-click in the Bin and select **Restore Default Sort** to return to the original sort order.

Using the Context-Sensitive Bin Menu

Many NewsEdit XT features are available by right-clicking in the Bin window. This menu displays available commands depending on where you click.

Menu Item	Description
Details	Changes the Bin view to Details View.
Thumbnails	Changes the Bin view to Thumbnails View.
Copy	Copies a clip or sequence from the Bin to the clipboard.
Paste	Pastes a clip or sequence from the clipboard to the Bin.
Delete	Deletes the selected clip from the Bin.
Rename	Changes the name of a bin, clip, or sequence.
Consolidate	Strips a clip or sequence of any unused data, reducing the file size.
Copy to Timeline	Copies the selected clips in the Bin to the Timeline.
Copy to Source Tool	Copies the selected clips into the Source Tool.
Send to File	Send a clip or sequence to another destination.
View Player	Previews the selected clip or sequence in a viewer window.
View Trimmer	Opens the bin trimmer.
View Timeline	Opens the Timeline window.
Import Clip	Opens the Import Clip dialog box so you can select a file to import.
Record to Bin	Records a clip directly into the Bin instead of the Timeline.
Play to Tape	Records sequences onto videotape.
Find	Opens the Find dialog box so you can search for a clip or sequence.
Find in Workgroup	Searches for clips or sequences on other workstations in your workgroup.
Restore Default Sort	Restores the default sort order in the Details View of the Bin window.
Column Manager	Opens the Column Manager so you can change the columns in the Bin.
Show References	Displays all places a clip is used (sequences, sub-clips, and master clips).

Menu Item	Description
Properties	Opens the Properties window so you change the properties of a file.

Chapter **4**

Editing In the Timeline

To edit a story with NewsEdit XT, you need to move the video and audio media from tapes or feeds to a digital format on your computer. The most efficient way to create stories is to edit directly to the Timeline.

This chapter discusses how to:

- Use the Timeline Tool and Source Tool for editing

- Create a new sequence

- Select and deselect tracks

- Mark In and Out points

- Set up a split edit

- Use variable speed recording

- Route audio input

- Select a source for input

- Use a clip as an input source

- Create your clips

- Play your sequence

- Save your sequences

Editing Overview

Editing directly to the Timeline is the fastest and most efficient way to use NewsEdit XT and produce sequences. Editing in the Timeline involves these basic steps:

1. Create a new sequence.

2. Select the tracks you want to record in the Timeline.

3. From the Timeline Tool, you may optionally:

    - Mark In and Out points

    - Set up a split edit

    - Route the audio output

4. Press **2** to select the Source Tool and optionally:

    - Mark In and Out points

    - Route the audio output

    - Change the speed of a clip

    - Set up a split edit

5. Select the source you are using to edit.

6. Play the source to find footage you want to use in your NewsEdit XT sequence.

7. Press **F12** to record.

8. Press the **spacebar** to stop recording when your clip is complete.

    If you've marked an Out point, the system will stop recording at that point.

9. Play your sequence if you want to.

10. Repeat steps 6-9 for each clip.

11. Save your sequence.

This chapter discusses each of these steps.

Understanding the Timeline and Source Tools

Editing in the Timeline involves using both the Timeline Tool and the Source Tool.

The Timeline Tool

The Timeline Tool opens when you create a new sequence. It is the tool you use to select clips, mark in and out points, and play sequences.

To use the Timeline Tool, press **1** on your keyboard or click the **Timeline Tool** button in the Timeline Toolbar.
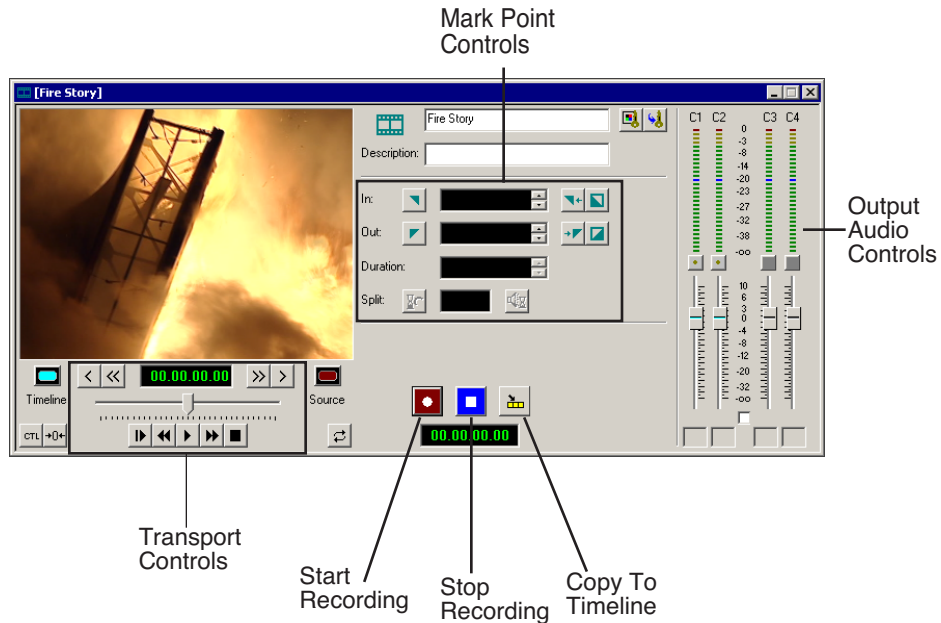
Changing the Timeline View

You can zoom in and out of the Timeline to see a specific area of the Timeline or to get an overall perspective of your sequence.

To change the Timeline view:

1. Click the **Scale** button in the Timeline.
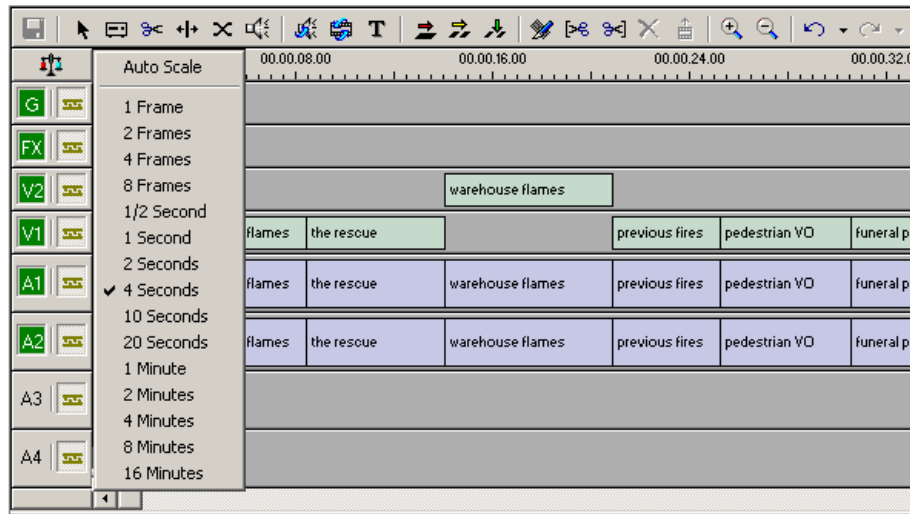
2. Choose an increment to display.

> *NOTE: If a sequence extends beyond the Timeline view, choose* **Auto Scale** *to compress and display the entire sequence in the Timeline.*

You can also press **+** on your keyboard or click the **Zoom In** button in the Timeline Toolbar to zoom in the Timeline view. Press **-** or click **Zoom Out** to zoom out the Timeline view.

The Source Tool

The Source Tool is the place where you view your footage, taking media from the input source into the Timeline for editing.

To select the Source Tool, press **2** on your keyboard or click the **Source Tool** button in the Timeline Toolbar.

Input Audio Controls

Variable Speed Controls

Input Tools

Control Track Controls

Quick Edit Mode

Available Sources

Use Aux Input
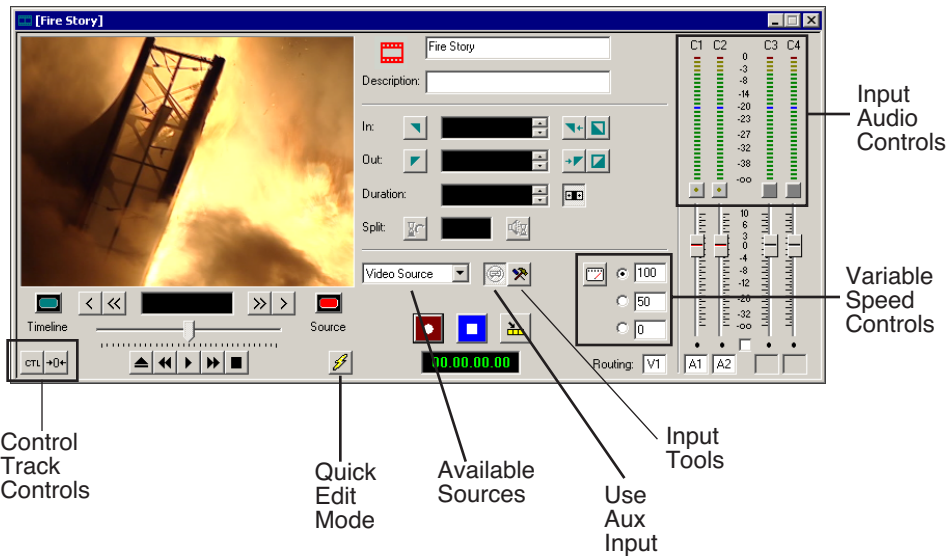
Controlling a Deck from NewsEdit XT

If you are using a tape deck, you can control it from the NewsEdit XT window or keyboard. NewsEdit XT provides transport control buttons like those on a tape deck, which control the Timeline, clip source, and Deck.

Use these controls to locate the material you want to record as a clip. Then use the marking controls to mark the clip or use the transport control buttons on your deck to locate your Mark In and Mark Out points. The deck controls are:

Button	Function
▲	Ejects the tape.
◀◀	Rewinds the tape.
▶	Plays the tape.
▶▶	Fast forwards the tape.
■	Stops the tape.
(shuttle slider)	Moves through the tape (drag the shuttle forward or backward).
‹	Jogs one frame back.
‹‹	Jogs 10 frames back.
›	Jogs one frame forward.
››	Jogs 10 frames forward.
←	Shuttles left in increments of -50%, -75%, -1x, -2x, -3x.
→	Shuttles right in increments of +50%, +75%, +1x, +2x, +3x.
↑	Resets shuttle speed to the default (50%); to change the default speed select **View I Options I Timeline I Default Play Speed** and enter the new speed.
↓	Selects previous shuttle speed.

Creating a New Sequence

The first thing you need to do is to create a new sequence. The new sequence must be inside a bin in order for you to use it.

To create a new sequence:

1. Click the **New Sequence** button on the Bin toolbar.

   The Sequence Properties window appears:

Sequence Properties	✕

   General

   | ▦ | New Sequence(3) | Link To Story... | > |

   Video ID: [_____]

   Description: [_____]

   Keywords: [_____]

   Start Time: `00.00.00.00`

   Tracks

   Video Tracks: 2 ▾   ☑ Graphics Track

   Audio Tracks: 4 ▾   ☑ Video Effects Track

   [OK]   [Cancel]
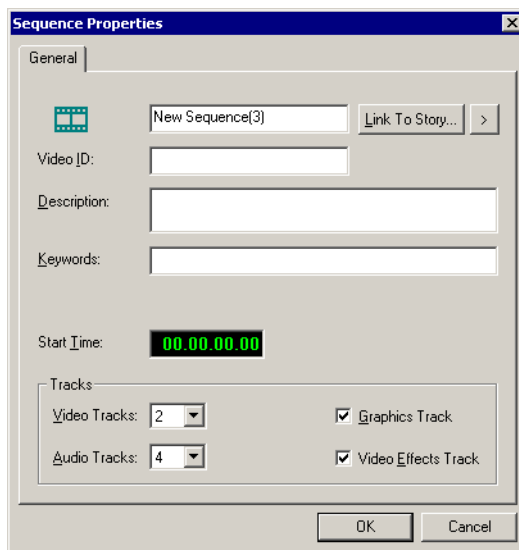
2. Enter a name for the sequence.

3. Enter a Description (optional).

4. Enter Keywords for the clip (optional).

   You can use keywords to search for a specific sequence in your bin.

5. To use a Start Time other than 00:00:00:00, enter another time.

6. Select the number of Video and Audio Tracks to use for this sequence.

   Audio Tracks refers to the number of tracks in the Timeline for mixing, not the number of output tracks.

7. Check the Video Effects Track checkbox if you are adding video effects to this sequence.

8. Check the Graphics Track checkbox if you are adding graphics or text to this sequence.

9. Click **OK**.

   The new sequence appears in your Bin and the Timeline opens. You are now ready to add footage to the Timeline.

Changing Sequence Properties

After creating a sequence, you can change any of the sequence properties as necessary.

To edit sequence properties:

1. If the sequence is open in the Timeline, click the **Properties** button in the Timeline toolbar. If you are in the Bin, right-click on a sequence and choose **Properties**.

   The Sequence Properties window appears:
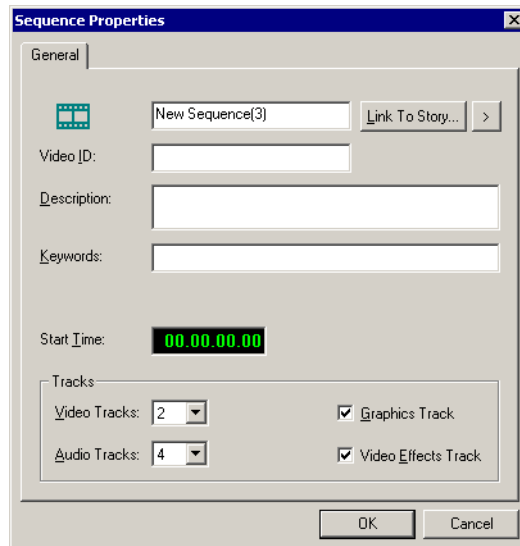
2. Make any necessary changes.

3. Click **OK** to save your changes.

Selecting and Deselecting Tracks

You can select which tracks you want to record to in the Timeline. NewsEdit XT lets you work with two video tracks and up to eight audio tracks. You can edit from any source audio track onto any record track in the Timeline.

To select or deselect tracks:

• Click once in the track indicator on the Timeline for each track you want to select or deselect.

Selected track buttons are green in the Timeline.

Graphics track selected ——
Video track selected ——
Audio track selected ——
Audio track deselected ——

Toggling tracks on the fly

While you are editing in the Timeline, you can select and deselect tracks at the same time you add clips.

Use the instructions above for selecting and deselecting tracks.

Showing Audio Tracks

By default, NewsEdit XT displays the first four audio tracks. If you are using more than four audio tracks in your sequence, you can view all eight tracks:

• Click the **Show All Audio Tracks** button on the Timeline Toolbar.

The Timeline expands to show the additional audio tracks.

Setting Up Your Edit in the Timeline Tool

Before you record clips in the Timeline, there are several features you can use:

• Mark In and Out points on the Timeline

• Set up a split edit

• Route the audio output

Marking In and Out Points

You can set the Mark Points using the Mark In and Mark Out buttons in either the Timeline Tool or the Source Tool. The steps to create a mark point are the same regardless of which tool you are using, but you will be setting different mark points in the two tools. In the Timeline Tool, you are setting mark points for your sequence; in the Source Tool, you are setting mark points for the input source.

When you make the first edit in a sequence, you can mark In and Out points if you want to. If you don't set a Mark In point, recording starts at the current position of the cursor. If you don't set a Mark Out, NewsEdit XT creates an Out when you stop recording and the clip is edited into the Timeline. The Timeline automatically moves the cursor to the end of each edit in preparation for the next edit.
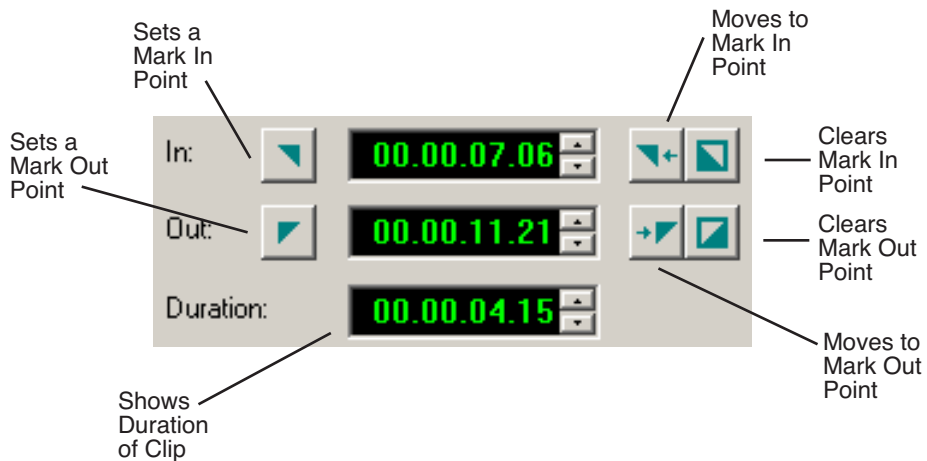
To Mark In and Out Points:

1. Move to the Mark In or Mark Out point in any of the following ways:

    - Click the point on the Timeline where you want to place the points.

    - Press the **A**, **S**, **D**, or **F** keys on the keyboard to jog through clips in 1-frame or 10-frame increments.

    - Press **G** to move back to the previous cutpoint.

    - Press **H** to move forward to the next cutpoint.

2. Press **I** on the keyboard to Mark In and press **O** to Mark Out.

Setting Up a Split Edit

NewsEdit XT lets you set In and Out points to create a pre-defined split edit from the Timeline Tool. To delay one of the tracks at the beginning of a clip, set different In points for the video and audio, with one starting after the other. You can also extend one track after the other at the end of a clip.

If your clips are already recorded to the Timeline, you can create a split edit using the Cut Point Edit Tool. See "Changing Cut Points Between Adjacent Clips" on page 117 for details.

To create a split edit:

1. Press **1** to select the Timeline Tool.

2. Press **I** on the keyboard to mark an In point for the video track.

3. Click the **Show Audio Marks** button.

    Blue icons indicate audio mark in and out points.

4. Select a Mark In Point for the audio track.

    The duration of the split appears in the Duration field.

5. Record your clip.

Setting Up Your Edit in the Source Tool

There are also several features in the Source Tool you can use before you begin recording:

- Mark In and Out points on the Timeline

- Use a variable speed for recording

- Set up a split edit

- Route the audio output

Marking In and Out Points

Marking In and Out Points in the Source Tool is identical to marking points in the Timeline Tool. See "Marking In and Out Points" on page 84.

Using Variable Speed Record

NewsEdit XT lets you take advantage of the Dynamic Motion Control on most tape decks and create a slow-motion or fast-motion record on the fly. In the Source Tool, you set the speed in percentages and click them when you want a change in speed. The default speeds are 75%, 50%, and 0, which you use to create a freeze frame. Variable speed record also works with clip sources.

To create a variable speed record:

1. Press **2** to select the Source Tool.

2. Click **Enable variable speed controls**.

   The percentage windows become active.

3. Choose one of the three default speeds or enter a new percentage.

   You can enter positive or negative numbers, as your deck allows.

4. Press **F12** to record your clip.

   The clip records to the Timeline with the speed you chose.

   NOTE: If you are using a deck source, you can change the speed while recording the clip by clicking one of the other percentage fields.

Setting Up a Split Edit

Setting up a split edit in the Source Tool is the same as setting up a split edit in the Timeline Tool. See "Setting Up a Split Edit" on page 85.

Routing Audio Tracks

You can edit audio from any source track onto any record track in the Timeline. You can work with up to eight audio tracks in the Timeline, though you can record only four tracks per clip. If you have two audio inputs you may need to assign a different track to your audio source.

To route an audio track:

1. Press **2** to select the Source Tool.

Audio Channels

C1 of input routed to A1 (track 1) of Timeline
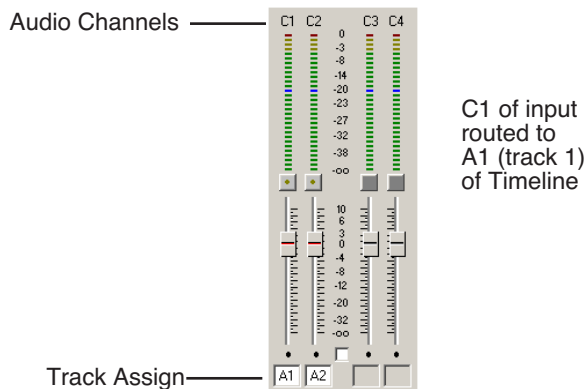
Track Assign

2. Click the **Track Assign** box for the Audio Input channel you need to reassign.

3. Select the new audio track location.

   NOTE: If your source only has one input audio channel, pathing to the Timeline is automatic. The channel from the source goes directly to the selected track regardless of the routing indication.

Selecting Your Source

You can select your input source from the equipment your newsroom has set up for you. Sources can include tape decks, feeds, or routers.

1. Press **2** to select the Source Tool.

2. Select a source from the drop-down menu.

   The image in the viewing monitor changes to reflect the new source.

Deck

Using a Clip Source

You can load any clip from your Bin into the Source Tool, which effectively treats the clip like a live source such as a tape deck.

To use a clip as a clip source, drag the clip into the viewer or press **Shift + C** to load the clip. After loading a clip as a clip source, you can edit to the Timeline as you would with a tape deck.

Patching Audio Tracks

If you select a clip for a clip source with more audio tracks than the Timeline, the Select Source Channel window appears and you can route the tracks.

Changing Sources

You can connect and configure a variety of video and audio sources as input devices to NewsEdit XT, which is normally done by your newsroom engineer. See "Adding Video Sources to NewsEdit XT" on page 38 if you need to add a source.

You can also configure a non-remote source, such as a microphone or a router, as an input source and specify the tracks to select when using that input source.

To change a source:

1. Press **2** to select the Source Tool.

2. Select a source from the drop-down menu.

   The image in the viewing monitor changes to reflect the new source.

Using Auxiliary Input

You can also connect an auxiliary source as an input for creating sequences, which is helpful if you are using an A-B switch for controlling your sources.

When you enable auxiliary input, NewsEdit XT disables deck control from the Timeline and your keyboard so you can use the device's external controls.

To use auxiliary input:

1. Press **2** to select the Source Tool.

2. Click the **Use Aux Input** button.

   The deck controls on NewsEdit XT gray out; you can use the external controls of the auxiliary device.

Creating Your Clips

To create a clip in your sequence, follow these steps. Repeat the steps for each additional clip in your sequence.

1. Play the source to find the media you want.

2. Press **F12** to start recording.

3. Press the **spacebar** to stop recording immediately, or press **O** on your keyboard to stop recording after adding Out handles.

4. Play the sequence, if you want to.

Playing a Sequence

As you create a sequence, you may want to review the progress. With NewsEdit XT, you can play the sequence as part of the editing process in the Timeline.

To play a sequence:

1. Press **1** on the keyboard to select the Timeline tool.

2. Select one of these commands to play or work through the sequence:

Command	Icon	Keyboard Key	Description
Move 1 Frame Left	<	**A**	Moves the position indicator one frame to the left.
Move 1 Frame Right	>	**S**	Moves the position indicator one frame to the right.
Move 10 Frames Left	<<	**D**	Moves the position indicator ten frames to the left.
Move 10 Frames Right	>>	**F**	Moves the position indicator ten frames to the right.
Play From Start	▮▶	**Q**	Starts playing from the beginning of the sequence.
Rewind	◀◀	**E**	Rewinds the sequence.
Play	▶	**W** or **Spacebar**	Starts playing from the position of the cursor.

Command	Icon	Keyboard Key	Description
Fast Forward	▶▶	**R**	Fast Forwards the sequence.
Stop	■	**Spacebar**	Stops playing the sequence.
Loop Playback	⇄	**--**	Plays the sequence in a continuous loop.
N/A	←	**Left arrow**	Shuttles left in increments of -50%, -75%, -1x, -2x, -3x.
N/A	→	**Right arrow**	Shuttles right in increments of +50%, +75%, +1x, +2x, +3x.
N/A	↑	**Up arrow**	Resets shuttle speed to default, which is 50%.
N/A	↓	**Down arrow**	Selects previous shuttle speed.

You can drag the shuttle slider with your mouse to scrub through the Timeline.

Saving a Sequence

You need to save your sequence periodically to your workstation Bin or to the shared database.

To save a sequence:

• Click **Save** in the Timeline toolbar or press **Ctrl + S** on the keyboard.

NewsEdit XT saves the sequence in the Bin where you created it.

Other Ways to Edit with NewsEdit XT

NewsEdit XT lets you access media clips from other computer systems. You can import clips into NewsEdit XT and use them just as you would clips from tape.

You can import clips from another NewsEdit XT workstation or other machines, and can also use a news script as a guide in creating your sequence.

This chapter discusses how to:

- Use clips already residing in the Bin

- Import files, including video, graphic, audio, EDL files, and video effects

- Pull media files from a Profile Server

- Search for clips in the Bin or your workgroup

- Link to an existing news story

- Record to the Bin

- Move, rename, and delete clips and sequences

Using Clips Stored in the Bin

If you created clips in the Bin before starting a sequence, you can copy them to the Timeline and use them in a new sequence.

To copy a clip from the bin to the Timeline:

1. Navigate through your Bin until you find the clip you want.

2. Click once on the clip to select it.

3. Copy the clip to the Timeline using one of the following methods:

   - Click the **Copy To Timeline** button.

   - Press **C** on the keyboard.

   - Drag the clip to the Timeline.

   - Right-click on the clip in the Bin and select **Copy To Timeline**.

Importing Files

NewsEdit XT can import various formats of media clips, graphic files, video effects, EDL files, audio files, and DiskCam files.

To import a file, choose your import type from the **File | Import** menu:
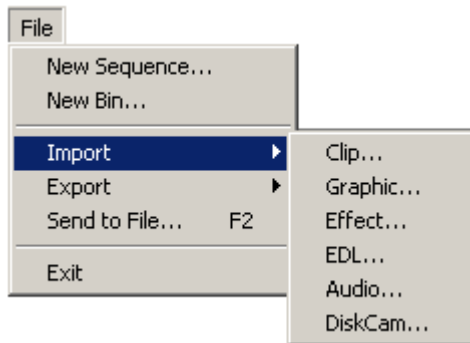
Importing Media Clips

You can import media clips from your computer network or other NewsEdit XT workstations. Imported clips appear in your Bin so you can use it in sequences.

To import a clip:

1. Choose **File | Import | Clip** or click the **Import Clip** button in the Bin toolbar.

   The Import Clips window appears:

Name	Duration	Created
Sports	00.00.09.29	6/27/2002 9:07:40 ...
Warehouse Fire	00.00.20.04	6/27/2002 9:06:23 ...
Weather	00.01.00.10	6/27/2002 9:08:29 ...
warehouse fire	00.00.14.25	6/27/2002 8:59:47 ...
cemetary	00.00.12.09	6/16/2002 8:00:00 ...
fire footage	00.00.12.09	6/16/2002 8:00:00 ...
funeral procession	00.00.12.09	6/16/2002 8:00:00 ...
reaction	00.00.23.06	6/27/2002 9:05:23 ...
Untitled 2	00.00.46.15	6/20/2002 8:00:00 ...
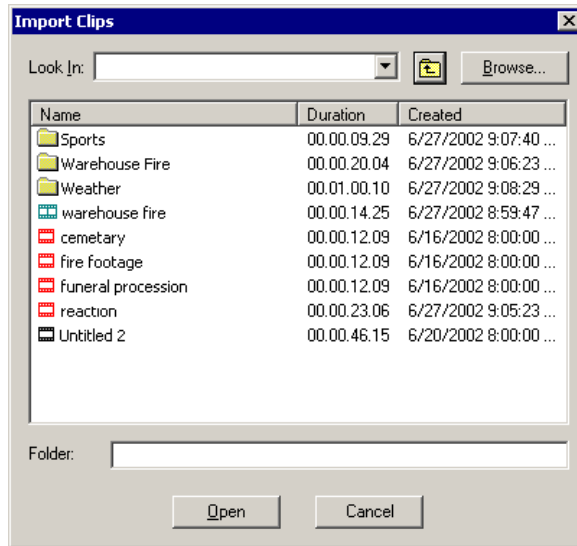
2. Use the **Look in** list or **Browse** button to find the clip you want to import.

3. Highlight the clip and click **Open**. Press the **Ctrl** key to select multiple clips.

   A progress bar indicates the import status.

The imported file appears in the Bin; you can use it just like any other clip.

Importing Graphic Files

NewsEdit XT can import bitmap (.bmp) or targa (.tga) graphics. Graphics must be 24 or 32 bit graphic files. You can use these imported graphics as a background for an entire sequence or a graphic of a specific story to introduce it. You can also superimpose a bitmap (with an alpha key) over the video in your clip. Imported graphics appear in your Bin.

To import a graphic:

1. Choose **File | Import | Graphic**.

   The Import Graphic Files window appears:
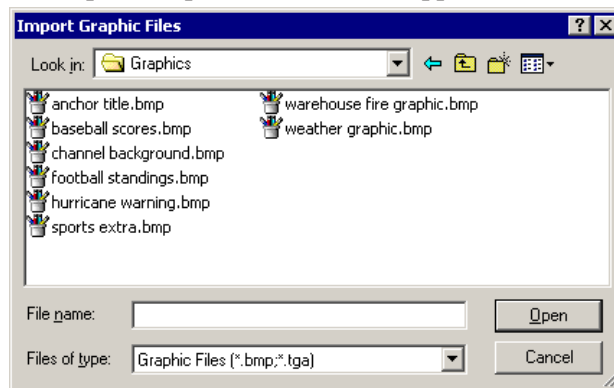
2. Navigate to the graphic you want to import and select it.

3. Click **Open**.

   A progress bar indicates the import status.

The imported graphic appears in the Bin; you can bring it onto the Timeline on the Graphics (G) track.
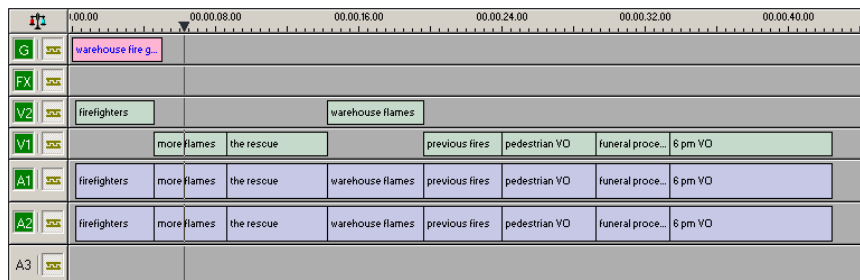
Importing Effects

You can import video effects from other workstations as well as saved effects you created for other sequences. See "Using Saved Effects in Your Sequence" on page 189 for more information.

To import an effect:

1. Choose **File | Import | Effect**.

    The Import Effect window appears:
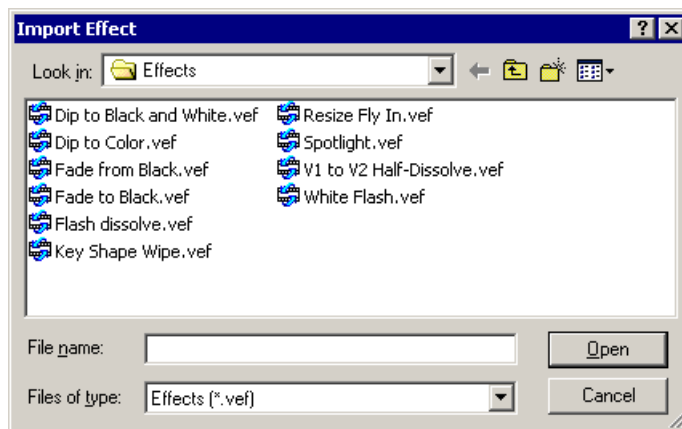
2. Navigate to effect you want to import and select it.

3. Click **Open**.

    A progress bar indicates the import status.

The effect appears in the Bin; you can bring it into the FX track on the Timeline.

Importing EDL Files

You can import common EDL formats (.OMF, .AAF, and .XML) from low-resolution editing systems. These files contain sequenced clips that you can use to create your own sequences.

To import an EDL file:

1. Choose **File | Import EDL**.

   The Import EDL window appears:
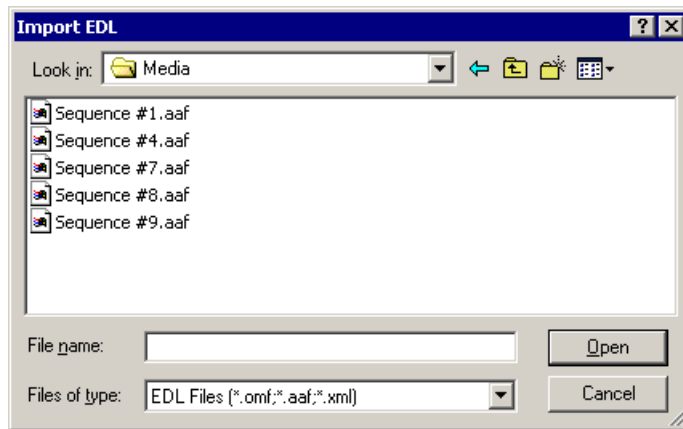
2. Navigate to the EDL file you want to import and select it.

3. Click **Open**.

   A progress bar indicates the import status.

NewsEdit XT creates a new bin with the name of the imported EDL for the sequence and its clips.

Importing Audio Files

You can import audio files in .wav, .mp3, or CD audio formats. NewsEdit XT converts the imported file to the standard NewsEdit XT format, .pcm.

To import an audio file:

1. Choose **File | Import | Audio**.

   The Import Audio window appears:
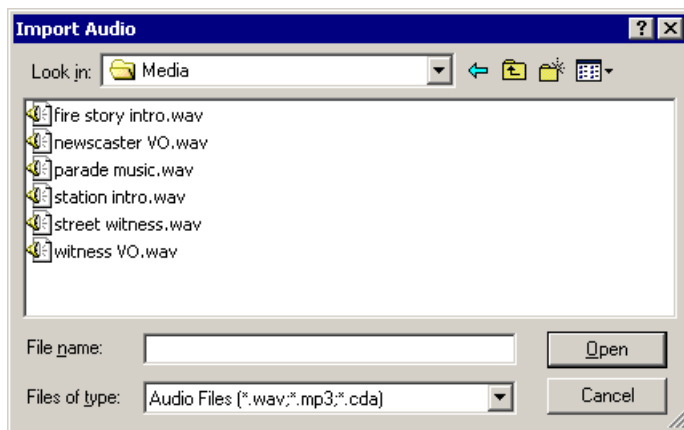
2. Navigate to the clip you want to import and select it.

3. Click **Open**.

   A progress bar indicates the import status.

The imported audio file appears in the Bin; you can use it to add audio to your sequence.

Importing DiskCam Media Files

NewsEdit XT can import DiskCam files from NLTEK digital cameras. See http://www.nltek.com for more information on NLTEK and DiskCam.

1. Choose **File | Import | DiskCam**.

   The Import DiskCam Media window appears:
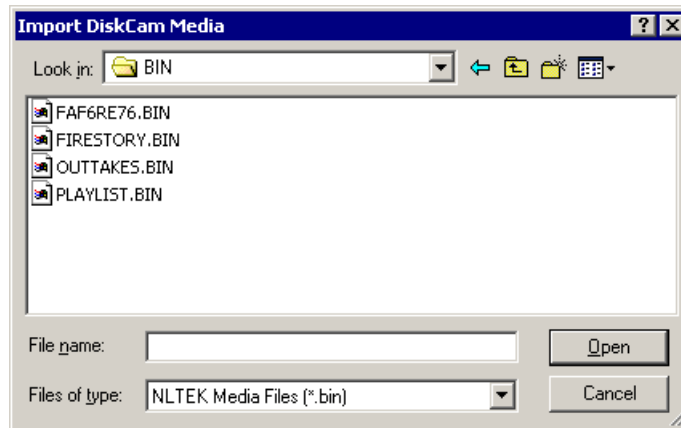
2. Navigate to the DiskCam file you want to import and select it.

3. Click **Open**.

   A progress bar indicates the import status.

   NewsEdit XT creates a new bin with the name of the imported DiskCam file for the sequence and its clips.

Pulling Media Files from a Profile Server

If you use a Profile Server as part of your news production system, you can obtain media files from Media Manager or ContentShare Explorer.

To pull files from Media Manager or ContentShare Explorer:

1. Verify that NewsEdit XT is configured to work with a Profile server.

   See "Setting Up Send Locations" on page 52 for instructions on connecting a NewsEdit XT workstation to a Profile server.

2. Open the Media Manager or ContentShare Explorer application.

3. Place the new window over the top of the NewsEdit XT application.

4. Select the clip you want in Media Manager or ContentShare Explorer.

5. Drag the clip into the desired NewsEdit XT bin.

   The clip appears in your Bin as a master clip, ready for you to use in a sequence.

Finding Clips in Your Workgroup

If your NewsEdit XT workstation is part of a network workgroup with other NewsEdit XT workstations, you can import clips from the NewsEdit XT VibrintAVFiles folder on those workstations to use in your sequences.

See "Setting Up Workgroups" on page 51 to configure a workgroup.

To find clips in your workgroup:

1. Choose **Tools | Find in Workgroup** or right-click in the Bin and select **Find in Workgroup**.

   The Find in Workgroup window appears:
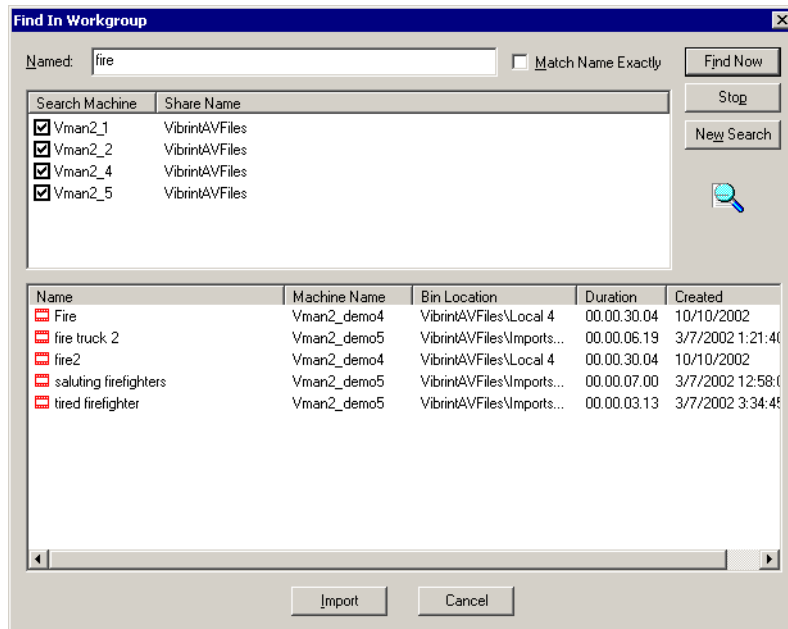
2. Check the boxes for the NewsEdit XT workstations you want to search.

3. Click **Find Now**.

   The found files appear in the box below the workstation listing.

4. Select the clip you want to import and click **Import**.

   NewsEdit XT copies the clip into the current Bin.

Linking to an Existing News Story

NewsEdit XT can link to scripts on iNews, NewStar, and AP/ENPS Newsroom computer systems, which you can use as an aid for creating your sequence.

You can link to a news story when you create a new sequence, as described below, or to an existing sequence by opening Sequence Properties and clicking **Link to Story**.

To link to a news story:

1. Click the **Create New Sequence** button in the Bin toolbar.

   The Sequence Properties window appears:
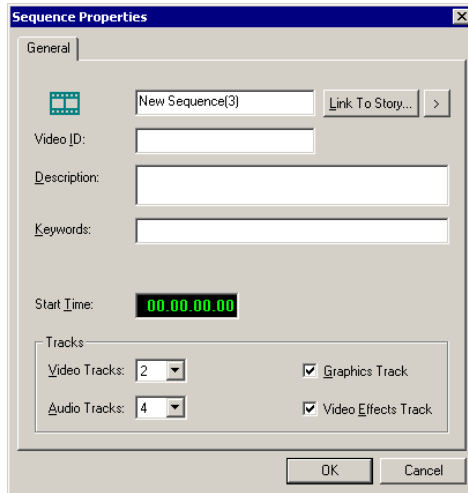
2. Click the arrow next to Link To Story and select your newsroom system.
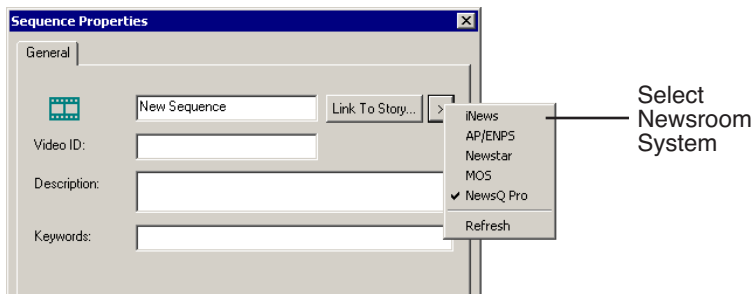
3. Click **Link to Story**.

A Browse window appears, displaying the available stories:
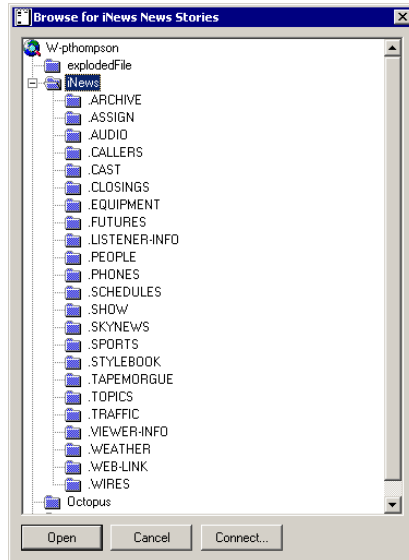
If you select NewsQ Pro as your newsroom system, the NewsQ Pro Items window appears:
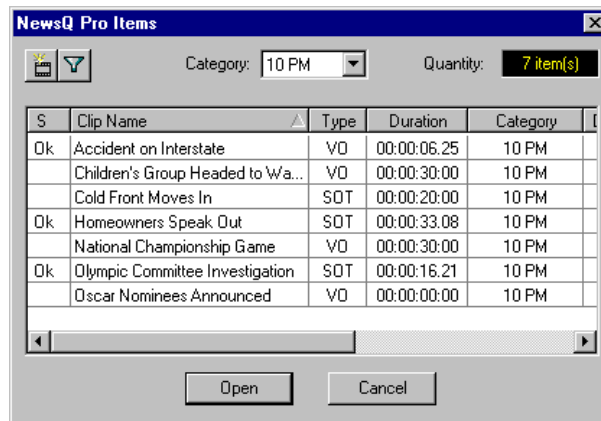
4. Select the file you need and click **Open**.

   The Sequence Properties window appears with the file title and Video ID filled in (if you are set up to use Video IDs with your NRCS):
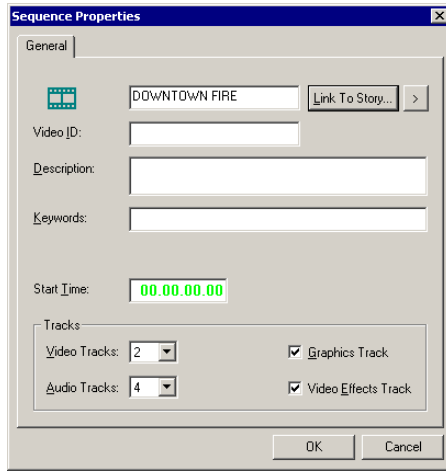
5. Click **OK**.

   The Timeline opens.

6. Click the **Story View** button in the Main Toolbar.

The script opens:
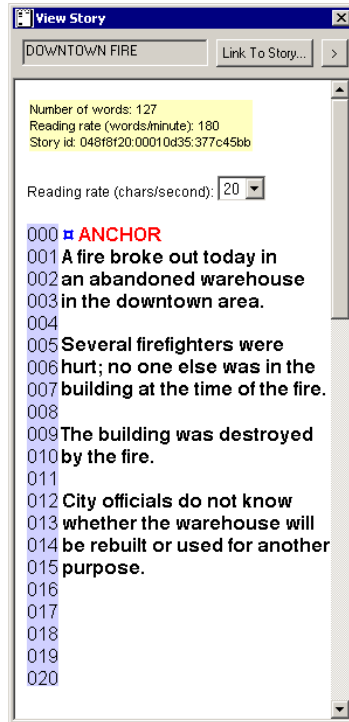
You can leave the script open and create a sequence to match the story.

Recording to the Bin

You can record media directly to the Bin to use later. Once you open a bin, you can record from your tape deck or any other source directly into that bin. You later edit that material in the Bin or bring it into the Timeline.

To record to the bin:

1. Open the bin where you want the media to reside.

2. Click the **Record to Bin** button in the menu bar.

   The Record to Bin window appears:

Type name of clip

Add clip description

Record Window

Choose your record source
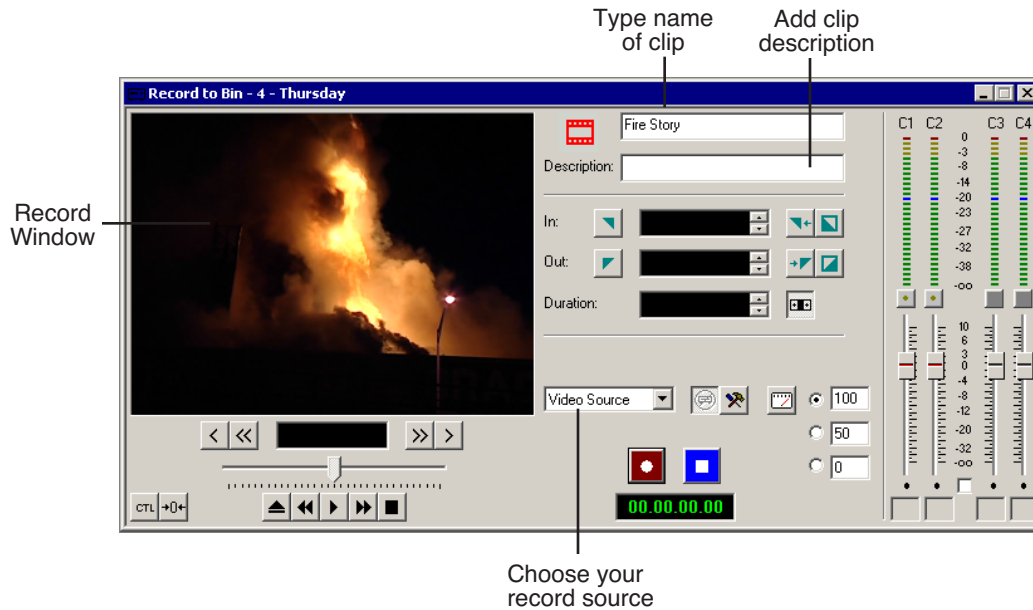
3. Enter the name of the clip and add a description, if you want to.

4. Choose the record source using the drop-down menu.

5. Play or cue the tape to the place where you want to start recording.

6. Mark an In point by pressing **I** on the keyboard.

   If you don't set a Mark In, NewsEdit XT uses the current position.

7. Press **F12** to start recording.

   The recording appears in the Record Window.

8. When you are done recording, press the **space bar** to stop, or press **O** on the keyboard to stop recording after adding Out handles.

   If you marked an Out point, recording stops at that point.

   NewsEdit XT automatically saves the clip into the selected bin.

9. Close this window by clicking the **X** in the upper right corner.

Moving Clips and Sequences

You can copy clips and sequences between bins or move clips or sequences from one bin to another.

Copying a Clip or Sequence

To copy an item:

1. Select the item you want to copy.

2. Right-click on the item and choose **Copy**.

3. Open the bin where you want to paste the item.

4. Right-click and choose **Paste**.

   NOTE: If you copy a master clip, NewsEdit XT pastes it as a subclip.

Moving a Clip or Sequence

To move a item into another bin:

1. Choose **View | Bins** to open a second Bin window.

2. In the second Bin window, navigate to the destination bin.

3. Drag the sequence or clip from the first Bin window to the second.

Renaming Bins and Media Files

If you want to change the name of any bin, clip or sequence:

1. Select the item you want to rename.

2. Choose **Edit | Rename**.

   You can also press **Shift + R** on the keyboard or right-click on the item and choose **Rename**.

3. Enter the new name of the item.

Deleting Clips and Sequences

You can delete unused clips or sequences you no longer need. However, you cannot delete files if they are being used in any existing sequences or subclips.

To delete a clip or sequence:

1. Select the clip or sequence you want to remove. Hold down the **Ctrl** key to select multiple items.

2. Press **Delete** on the keyboard.

   A dialog box prompts you to confirm the deletion.

3. Click **Yes** to delete the file.

Searching for a Clip or Sequence

You can search for clips and sequences in the Bin. You can search for all clips that meet specific criteria or for a specific clip.

To search for a clip or sequence:

1. Click the **Find** button in the Bin Toolbar.

   The Find In View window appears:
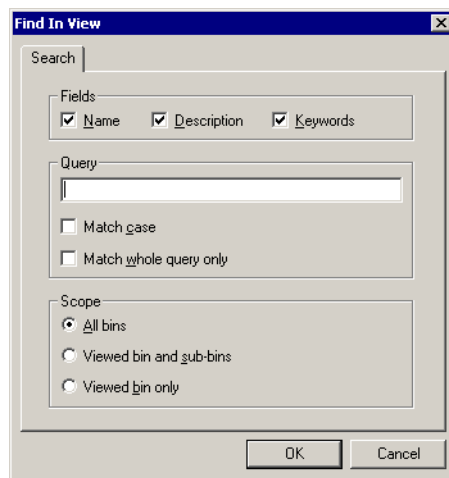
2. Choose the appropriate options:

   - **Fields** — Check the boxes for the field(s) on which you want to search.

   - **Query** — Enter the text you want to search for.

   - **Match case** — Check this checkbox to do a case-sensitive search.

   - **Match whole query only** — Check this checkbox to search only for clips with text matching the query text exactly.

   - **All bins** — Select this option to search all NewsEdit XT bins.

   - **Viewed bin and sub-bins** — Select this option if you want to search all of the bins within the bin you selected.

   - **Viewed bin only** — Select this option if you want to search the bin you are currently viewing.

3. Click **OK**.

   Clips and sequences matching your search result appear in the Bin window.

When you are done with your search, click the **Search Results** button off to restore the normal bin view and allow you to continue working in the Bin. To see your search results again, click the **Search Results** button on.

Chapter **6**

Trimming Your Clips

After you create clips in the Bin or directly in the Timeline, you may need to trim a clip to fit or edit out extra frames. NewsEdit XT provides several methods for trimming clips so you can create quality sequences.

This chapter discusses how to:

• Use the Trim Tool and the Cut Point Edit Tool for trimming clips

• Change the end points between clips

• Extend your edits

• Trim your clips in the Bin

Trimming Clips

You will often need to shorten your clips or change the starting or ending frame. In NewsEdit XT you trim clips by changing the Mark In and Mark Out points.

You can also trim clips in the Bin without bringing them into the Timeline. See "Trimming Your Media Clips in the Bin" on page 123 for instructions.

Using the Trim Tool

One way to trim your clips while in the Timeline is to use the Trim Tool.

To select the Trim Tool, press **3** on your keyboard or click the **Trim Tool** button in the Timeline Toolbar.

You can also double-click on the video track for the clip you want to trim.
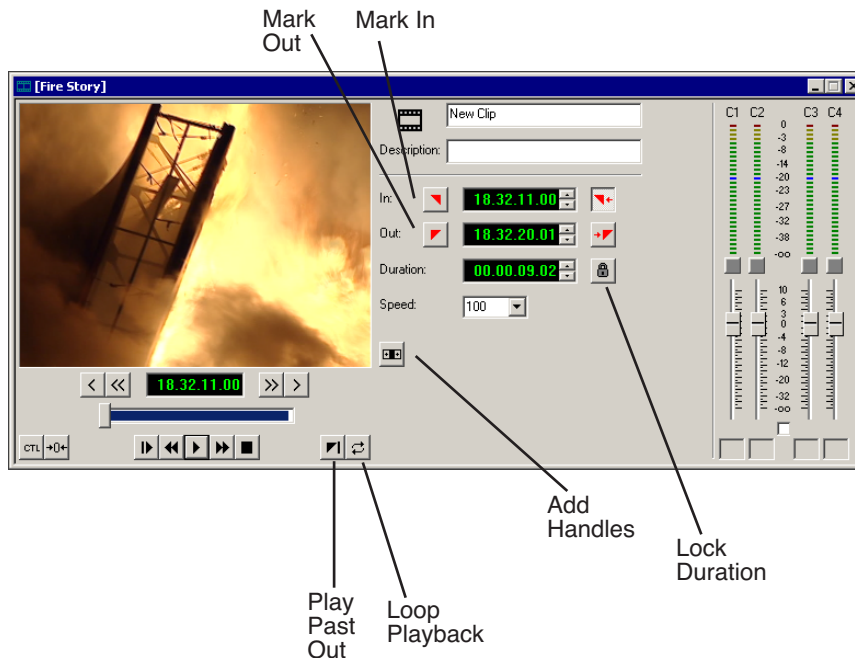
Trimming Your Clips

You trim your clips by marking new In and Out points for each clip.

To trim a clip:

1. Click once on the clip you want to trim to select it.

2. Press **3** on the keyboard or click the **Trim Tool** button in the Timeline toolbar. The Trim window appears:

3. To trim the beginning of a shot, press the **spacebar** to play the clip and press the **spacebar** again to stop at the frame where you want the clip to start.

   You can also use the slider to find the approximate In point and then use the **A**, **S**, **D**, and **F** keys on the keyboard to find the exact spot.

4. Press **I** on the keyboard to mark a new In point.

5. To trim the end of the same clip, play the clip again and stop at the frame where you want the clip to end.

6. Press **O** on the keyboard to mark a new Out point.

7. Continue trimming other clips in your sequence.

   NOTE: You can also trim an individual track in a clip by turning off the tracks you don't want, clicking on the desired track, and trimming the clip.

Using Handles to Add Frames to Your Clips

If you have recorded handles with your clips, you have additional frames to choose from when trimming your clips.

To use handles:

1. Click the **Add Handles** button in the Trim Tool.

   The handles appear as additional frames on the slider in the Viewing Monitor.

2. Mark new In and Out points for your clip using the additional material.

Locking the Duration of a Clip

Sometimes you need trim a clip while maintaining its duration. The Lock Duration feature allows you to keep the clip duration constant while trimming by using the extra frames in the handles and adjusting the clip. For instance, if you move the Mark In point 5 frames from the beginning of the clip, the Mark Out point moves automatically 5 frames to maintain the duration.

To lock the duration of a clip:

• Click the **Lock Duration** button in the Trim tool.

Playing Past Out

Playing Past Out lets you create an Out point on the fly while viewing media after the Mark Out point, which is useful when verifying the Out point.

To play past the Out point:

1. Click the **Play Past Out** button in the Trim Tool.

2. Play the clip.

   The clip continues playing past the Mark Out point, letting you see the rest of the footage in the clip.

Changing Cut Points Between Adjacent Clips

You may need to adjust the cut points between two clips in the Timeline. When you edit part of a clip into your sequence, NewsEdit XT recognizes that there is more material in the clip than is being used in the edit. The Cut Point Edit Tool lets you access the unused portion of the clip without returning to the source clip and repeating the edit.

Using the Cut Point Edit Tool

To select the Cut Point Edit Tool, press **4** on your keyboard or click the **Cut Point Edit Tool** button in the Timeline Toolbar.
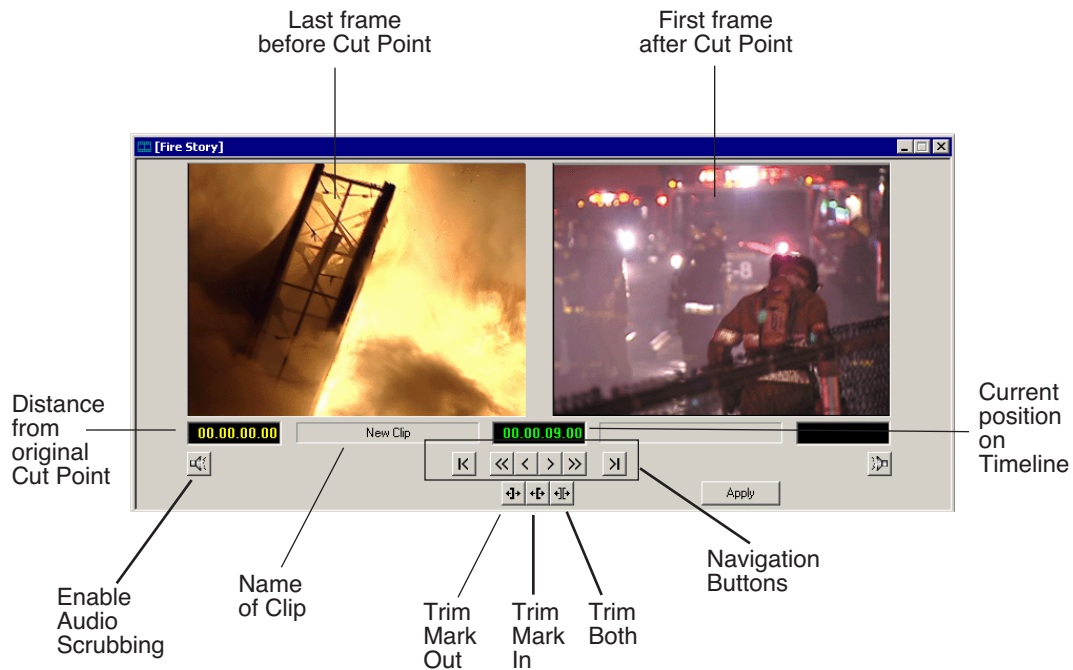
Changing Cut Points

Adjust the cut points between two adjacent clips by trimming the Out point of the first clip, the In point of the second clip, or both.

To change a cut point:

1. Select the tracks you want to edit in the Timeline.

2. Move to the appropriate cut point in the Timeline:

   - Move to the next cut point by pressing **H** on your keyboard.

   - Move to the previous cut point by pressing **G** on your keyboard.

3. Press **4** on your keyboard or click the **Cut Point Edit Tool** button in the Timeline toolbar.

   The Cut Point window appears showing the two clips you want to trim:

4. Choose one of the following ways to trim:

   - **Trim Mark Out** — Extends or retracts the Out point of the first clip; changes the duration of a sequence.

   - **Trim Mark In** — Extends or retracts the In point of the second clip; changes the duration of a sequence.

   - **Trim Both** — Simultaneously manipulates the Out point of the first clip and the In point of the second clip. This method extends L-cuts without changing the sequence duration.

5. Choose how much you want to trim the cut point(s) by:

   - Dragging the cut point in the Timeline to the new position.

   - Using the cut point navigation tools to select the new frame position. The next section, *Navigating to Cut Points* describes these buttons.

6. Click **Apply** or press **Enter** on the keyboard.

   The Timeline updates with the new cut point.

Navigating to Cut Points

NewsEdit XT provides some quick ways to navigate through your clips to find the frames you need for trimming.

You can either click the buttons in the Cut Point Edit Tool or press the corresponding keys on the keyboard.

Navigation
Buttons

Use these tools to navigate through your sequence:

Icon	Keyboard Key	Description
K	Z	Extends to the previous cut point.
«	D	Moves back 10 frames.
‹	A	Moves back 1 frame.
›	S	Moves forward 1 frame.
»	F	Moves forward 10 frames.
›|	X	Extends to the next cut point.
|←	G	Selects the previous cut point.
→|	H	Selects the next cut point.

Using Audio Scrubbing

Digital audio scrubbing allows you to jog through your material while monitoring the audio. Use audio scrubbing to locate your audio edit points.

To use audio scrubbing:

- Click **Enable Audio Scrubbing** in the Cut Point Edit Tool.

Extending Your Edits

You can use the Cut Point Edit Tool to extend an individual track (video or audio) over the track in the next clip.

To extend an individual track:

1. Press **4** on your keyboard to select the Cut Point Edit Tool.

2. Deselect any tracks you don't want to extend.

   For example, to extend an audio track only, deselect the video track.

   To deselect a track, click once in the track indicator on the Timeline for each track you want to deselect.

Graphics track selected

Video track selected

Audio track selected

Audio track deselected

3. Put the cursor at the beginning of the track you want to extend.

4. Move to the next or previous cut point using the buttons or the **Z** and **X** keys on the keyboard.

5. Press **Enter** to extend the edit over the clip.

Extending Your Edits

NewsEdit XT provides a quick way to extend an edit without having to re-record any footage. Use this feature to extend an individual track (video or audio) over the track in the next clip.
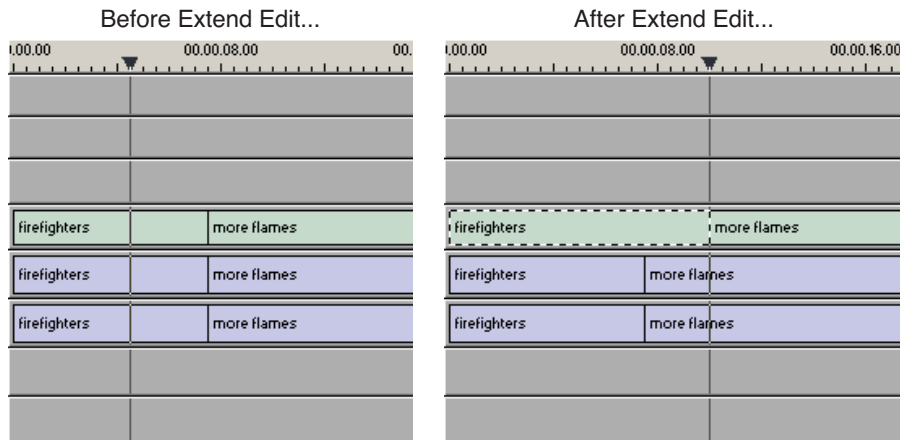
To extend an edit:

1. Deselect any tracks you don't want to extend.

   To deselect a track, click once in the track indicator on the Timeline for each track you want to deselect.

2. Highlight the clip you want to extend.

3. Move the cursor to the position you want to extend the clip to.

4. Press **V** on your keyboard.

   The clip extends into the next clip. If the clip doesn't have enough handle material to extend as far as you select, NewsEdit XT extends it as far as it can.

You can also shorten a clip using this method by marking an In point on a clip and pressing **V** on your keyboard.

Trimming Your Media Clips in the Bin

You can trim clips in the Bin without putting them into the Timeline. For example, you can record a long section of tape and then create shorter individual clips to edit into a sequence. This process is the same as editing clips in the Timeline, but you can also create subclips using this method. Subclips allow you to create shorter clips without changing the original recorded clip.

To trim media clips in the Bin:

1. Double-click the media clip you want to trim.

   The Trimmer window appears:

Add Handles

Create
Sub-clip

Copy to
Timeline
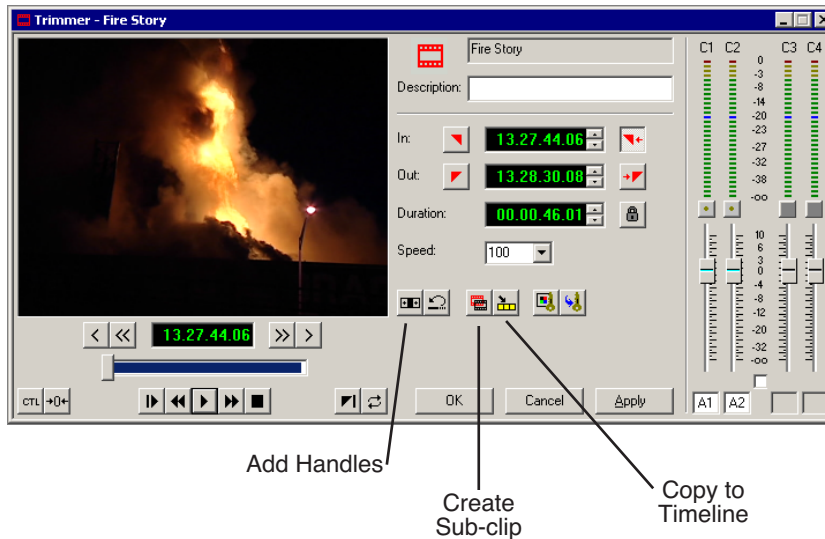
2. Press **W** on the keyboard to play the clip.

3. Press the **I** and **O** buttons on the keyboard to mark new edit points.

   To see the extra recorded material, click the **Add Handles** button.

4. Click **OK**.

   NOTE: You can also drag other clips into the Trimmer without having to close and reopen the Trimmer window.

Creating SubClips

If you want to create a shorter clip from a larger recorded clip:

1. Press the **I** and **O** buttons on the keyboard to mark new edit points.

2. Click **Create SubClip** on the Bin Trimmer window.

   The Create Subclip dialog appears.

3. Name the subclip and click **OK**.

When you close the Trimmer, click **No** to save changes. Otherwise, the master clip will be modified.

Copying a Clip to the Timeline

If you want to copy a portion of a larger recorded clip to the Timeline:

1. Open a sequence window if one is not open.

2. Press the **I** and **O** buttons on the keyboard to mark new edit points.

3. Press **C** on the keyboard or click **Copy to Timeline** on the Bin Trimmer window.

The smaller clip copies to the Timeline at the insert point and is ready for editing.

A Quick Way to Edit

To quickly edit a sequence:

1. Click **Play Past Out** on the Bin Trimmer window.

2. Play the clip.

3. Mark an In point.

4. Mark an Out point.

5. Copy to the Timeline by pressing **C** on the keyboard while the clip is playing.

6. Repeat steps 3-5 to continue your edits.

Fine Tuning and Advanced Editing

Once you have clips in the Timeline, NewsEdit XT has several features to help you fine-tune a sequence.

This chapter discusses how to:

- Rearrange clips within a sequence
- Change the editing mode or use Quick Edit mode
- Split clips
- Lift clips from the timeline
- Delete clips
- Insert filler between clips
- Create a Fit To Fill
- Add a freeze frame
- Vary the speed of a clip
- Create a split edit
- Use Control Track and Match Frame

Moving Clips in the Timeline

When you move clips in the Timeline, the result differs slightly based on the current edit mode. If you are in Overwrite Edit Mode, a moved clip covers other clips. If you are in Splice Edit Mode, a moved clip pushes other clips out.

To move a clip:

1. Press **1** on your keyboard to choose the Timeline Tool.

2. Click once on the clip in the Timeline you want to move.

   An outline appears around the clip you selected.
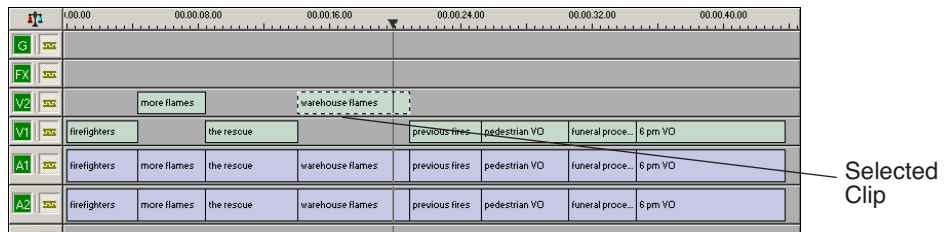
3. Drag the clip to its new location.

You can also use the following keyboard keys to move clips:

Keyboard Keys	Function
Numberpad **4**	Moves the selected clip one frame to the left on the Timeline.
Numberpad **6**	Moves the selected clip one frame to the right on the Timeline.
Ctrl + Numberpad **4**	Moves the selected clip 10 frames to the left on the Timeline.
Ctrl + Numberpad **6**	Moves the selected clip 10 frames to the left n the Timeline.
Z	Moves the selected clip to the previous cut point.
X	Moves the selected clip to the next cut point.

Moving Audio Clips

You can move an audio clip to any of the eight NewsEdit XT audio tracks.

To move an audio clip to a different track:

• Drag the audio clip to the desired track.

Changing the Editing Mode

The Timeline has three editing modes — Overwrite mode (the default), Splice mode, and Fit To Fill, a special mode for creating motion effect clips.

For the first edit and for adding one clip after another, you can use either Overwrite or Splice mode. The difference between these modes is important when you revise and fine tune your sequence, as described in the table below.

Once you use these modes to edit clips to the sequence in your Timeline, you can move clips forward or backward within the sequence or use the Trim tool to trim transitions or to produce split edits.

The NewsEdit XT editing modes are:

Tool	Icon	Keyboard Key	Description
Overwrite		**F9**	Replaces existing sections of a sequence with new material, leaving the sequence duration unchanged. Similar to an insert edit in a tape-based system.
Splice		**F10**	Splices a clip between two existing clips in the Timeline by moving the two clips apart and inserting the new clip in between them. All clips after the edit point move downstream and lengthen the sequence.
Fit To Fill		**F11**	Fits a clip into a duration you specify in the Timeline.

Using Quick Edit Mode

Quick Edit mode switches you to the Source Tool after an edit to the Timeline, which is good if you prefer to lay down all of your edits and then go back and review your sequence.

To use Quick Edit:

1. Press **2** to select the Source tool.

2. Click the **Quick Edit** button.

    You are now in Quick Edit mode.

To stop Quick Editing, click the Quick Edit button again.

Splitting Clips

You can split an existing clip into two clips. For example, you can insert new material between two split sections or split a clip and remove a piece of it to tighten the sequence.

Before Split...   After Split...
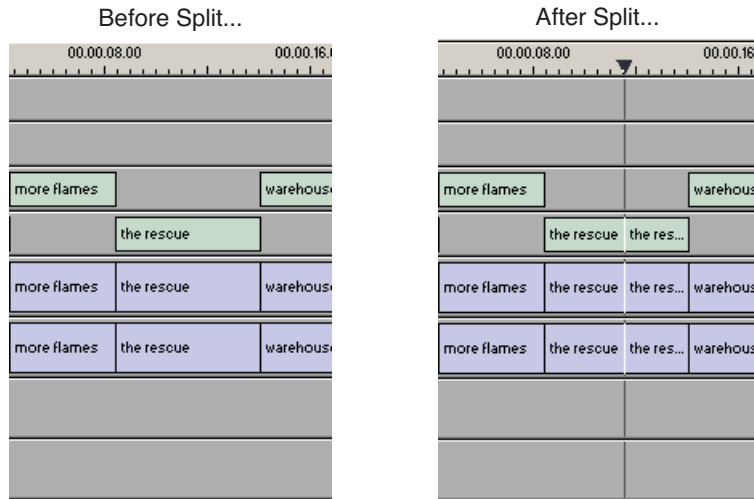
To split a clip:

1. Press **1** on the keyboard to choose the Timeline Tool.

2. Drag the cursor to the spot where you want to split the clip.

   You can also use the **A**, **S, D**, and **F** keys to find the split point.

3. Press **** on the keyboard or click the **Split Clip** button on the Timeline toolbar.

   The clip splits in two.

To split only one of the tracks (for example, split the Video track and leave A1 and A2 intact), deselect the track button at the left of the Timeline for tracks you want to be unaffected by the split.

Lifting Clips From the Timeline

You can lift a clip out of a sequence to replace it, or remove a piece of a clip from a sequence after splitting it. Black or silence replaces the lifted portion.

Before Lift...   After Lift...
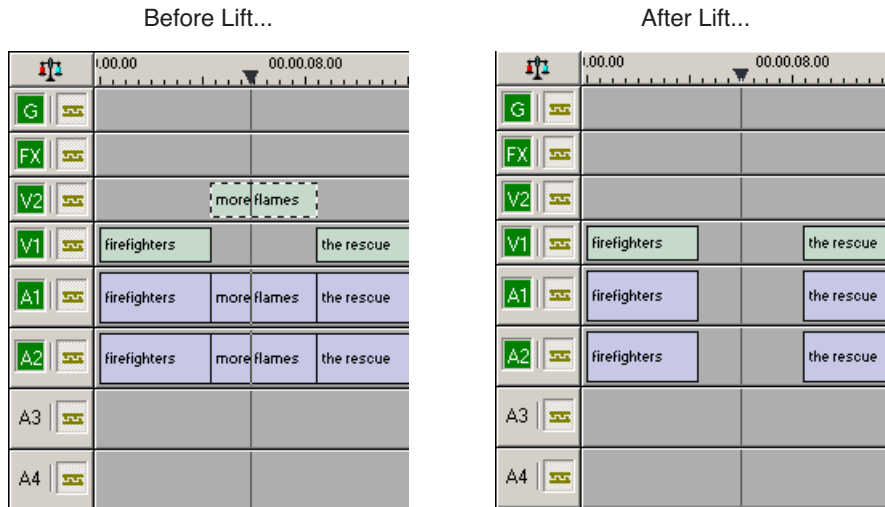
To lift a clip:

1. Press **1** on your keyboard to choose the Timeline Tool.

2. Click once on the clip you want to lift.

3. Press **]** on the keyboard or click the **Lift Clip** button on the Timeline toolbar.

   The clip disappears from the sequence.

To fill in the gap created by lifting a clip:

• Select the first clip after the gap and press **0** on the keyboard or select **Collapse Sequence** from the Command menu.

   The hole to the left of the selected clip closes. You can also use the **Delete** key to completely remove the clip and close the gap in a single step.

You can also lift an area of the sequence that includes parts of adjoining clips.

Before Lifting Area...   After Lifting Area...
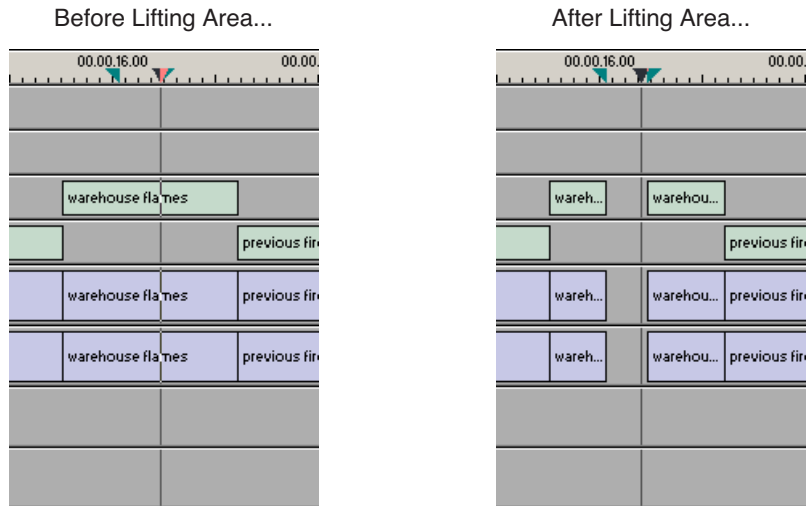
To lift an area:

1. Press **1** if you are not already in the Timeline Tool.

2. Select the area to lift by marking and In and an Out point.

3. Press **Ctrl +]** on the keyboard or hold down the **Ctrl** key while clicking the **Lift Clip** button.

   You can also right-mouse click in the Timeline and select **Lift Area**.

Deleting a Clip from Your Sequence

Instead of lifting a clip from the Timeline, which leaves black and silence, you can delete a clip and close the gap between the remaining clips in the sequence.

Before deleting an individual track on a clip, be sure to deselect the tracks you don't want to delete by clicking their track indicators on the Timeline.

Before Deleting...   After Deleting...
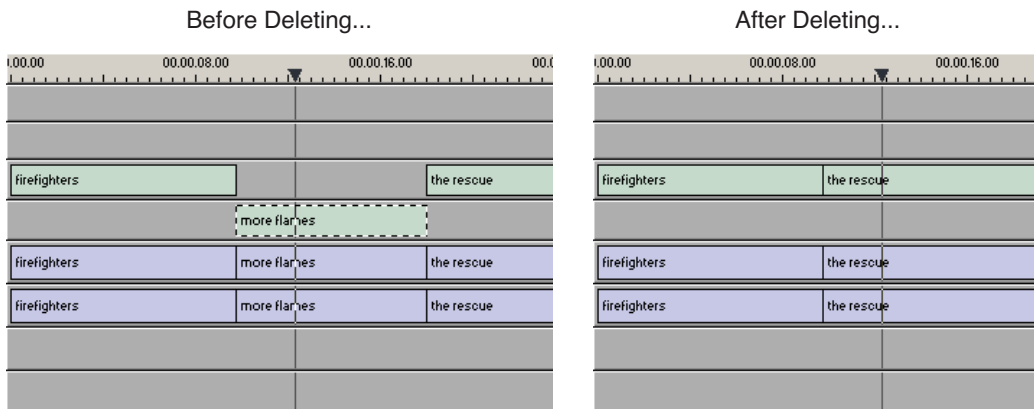
To delete a clip:

1. Press **1** on your keyboard to choose the Timeline Tool.

2. Select the clip in the Timeline that you want to delete. Press the **Ctrl** key to select multiple clips.

3. Press **Delete** on your keyboard.

   The clip disappears from the Timeline.

You can also delete an area of the sequence, which can include parts of adjoining clips.

Before Deleting an Area...   After Deleting an Area...
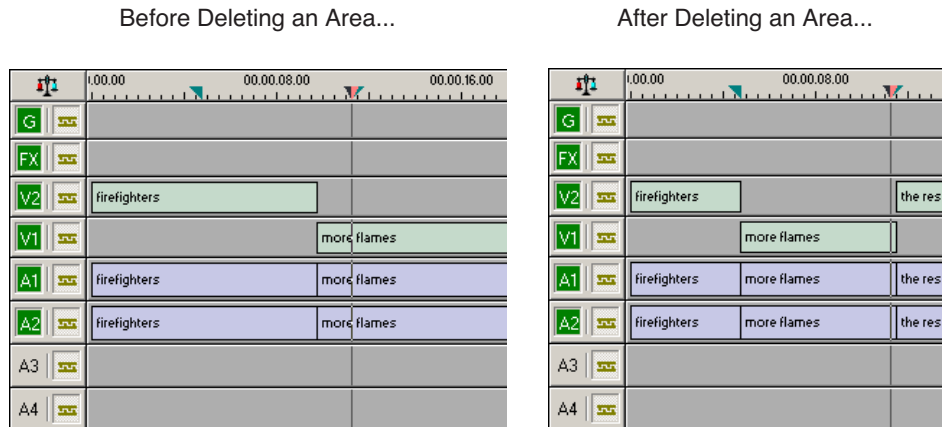
To delete an area:

1. Press **1** on your keyboard to choose the Timeline Tool.

2. Select the area to delete by marking an In and an Out point.

3. Press **Ctrl + Delete** on the keyboard or hold down the **Ctrl** key while clicking the **Delete** button.

   You can also right-click in the Timeline and choose **Delete Area**.

Inserting Filler Between Clips

With NewsEdit XT, you use filler to place a gap between two shots or to create a dip to silence in the sequence. You can also use filler to serve as a placeholder for late-arriving material. Inserting filler is both track and edit mode specific.

Before Filler...   After Filler...
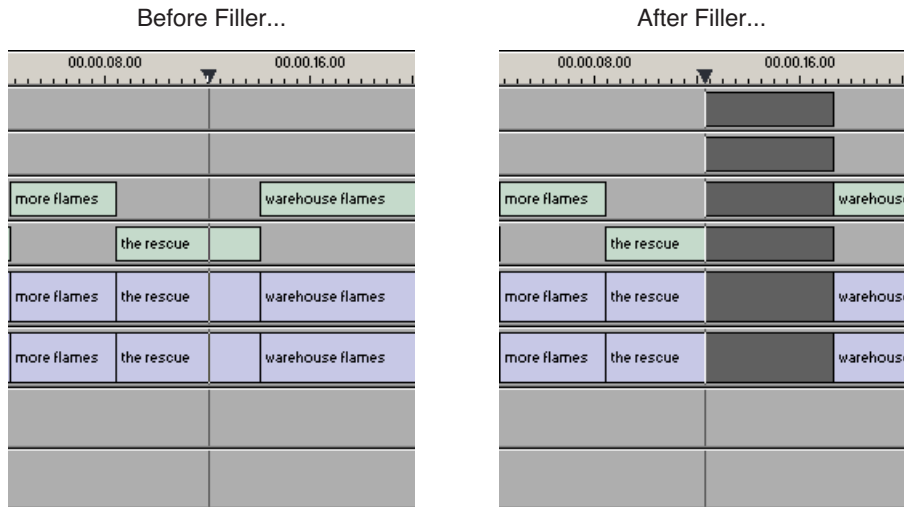
To insert filler:

1. Press **1** on your keyboard to choose the Timeline Tool.

2. Click once on the clip, at the point before you want to insert filler.

3. Right-click and select **Insert Filler**.

   The Filler Properties window appears:
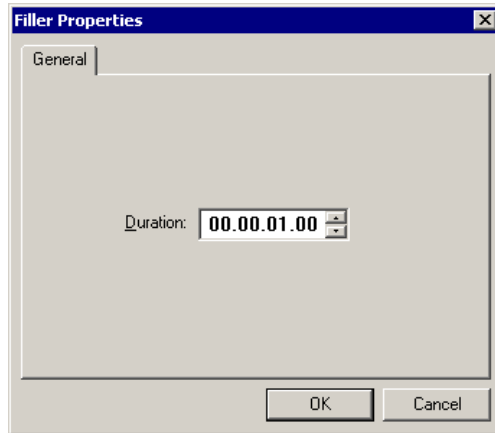
4. Enter a Duration for the filler and click **OK**.

   The Timeline updates with the filler inserted into the sequence.

   NOTE: You can also insert filler between Mark In and Mark Out points on all tracks that are active. You cannot add a transition effect between a clip and filler.

Creating a Fit To Fill

You can create a Fit To Fill between sequence clips. When you use Fit To Fill, NewsEdit XT compares the marked source clip's duration to the target duration you mark in the Timeline and adjusts the clip speed to match the target duration.

Fit To Fill only works with a clip that already exists in your Bin.

Before Fit To Fill...   After Fit To Fill...
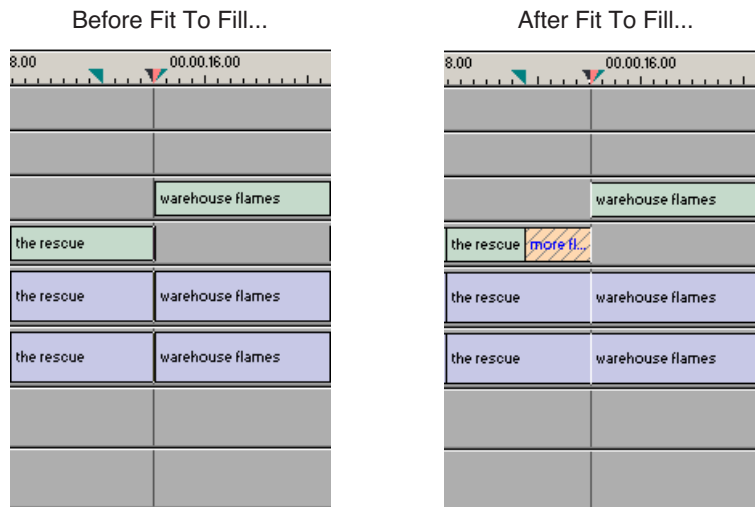
To create a Fit To Fill:

1. Press **9** on the keyboard or click the **Fit to Fill** button in the Timeline toolbar.

2. Mark In and Out points in the Timeline for the area to be filled.

   - To Mark In, move the cursor to the desired clip beginning and press **I** on the keyboard.

   - To Mark Out, move the cursor to the desired clip end and press **O** on the keyboard.

3. In the Bin, double-click on the clip you are using for the fill.

The Bin Trimmer window appears:

4. Mark the selection you want to use by marking an In and Out point.

5. Press **C** on the keyboard or click the **Copy to Timeline** button.

A new clip appears in the Timeline covering the space you indicated.

6. Click **Cancel** to close the Bin Trimmer window.

7. Clear the Mark In and Mark Out points for the new clip by pressing **P** and **[** on the keyboard.

8. Play the sequence to determine if the Fit to Fill works in your sequence.

9. Turn off Fit To Fill mode.

You can also create a Fit To Fill from the Bin Source.

NOTE: If you have a clip in the Bin that's trimmed the way you want it, you can drag it to the Timeline while in Fit To Fill mode to automatically fill the area between the Mark In and Mark Out points.

TIP—You can create a freeze frame by setting the In and Out points to the same position.

Adding a Freeze Frame To Your Sequence

You can create a freeze frame to use in a sequence; you might typically use a freeze frame at the end of a clip to hold the image.

To add a freeze frame to a sequence:

1. Select a clip.

2. Move the cursor to the frame you want to freeze.

3. Press **F3** on the keyboard or right-click and choose **Match Frame to Bin**.

   The viewing monitor displays the frame from the source. See "Using Match Frame" on page 140 for more information.

4. Mark an In point where you want the frame to occur.

5. Click **Enable variable speed controls** and select **0**.

6. Press **F12** to start recording.

7. Press the **spacebar** to stop recording when you have enough media.

   The freeze frame appears as a new clip with an unrendered image.

You can also create a freeze frame by setting the play speed of a clip already on the Timeline to zero. The system uses the Mark In point as the freeze frame.

Varying the Speed of a Clip

You can vary the clip speed to create slow or fast motion effects in a sequence.

To vary the speed of a clip:

1. Click once on the clip you want to change.

2. Right-click on the video track for the clip and choose **Play Speed**.

   The Change Playback Speed window appears:
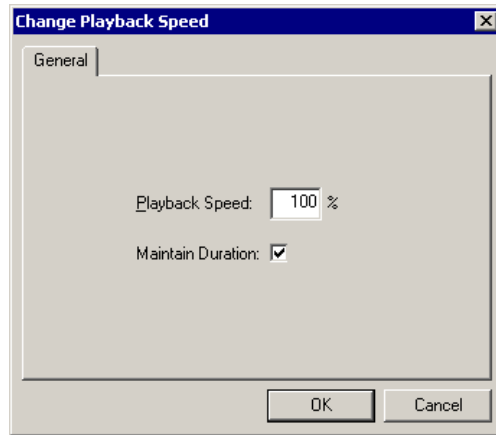
3. Enter a new speed percentage for the clip.

4. To keep the clip duration constant, check the **Maintain Duration** checkbox.

5. Click **OK**.

   The play speed of the clip changes.

To check a clip's play speed, right-click on the clip and choose **Play Speed**.

Creating Split Edits

The Cut Point Edit Tool provides a way to create split edits, which allow you to trim one track without affecting other tracks. Split edits are useful if you want to have the audio track start before the video track or extend past the video.

Before Split Edit...   After Split Edit...
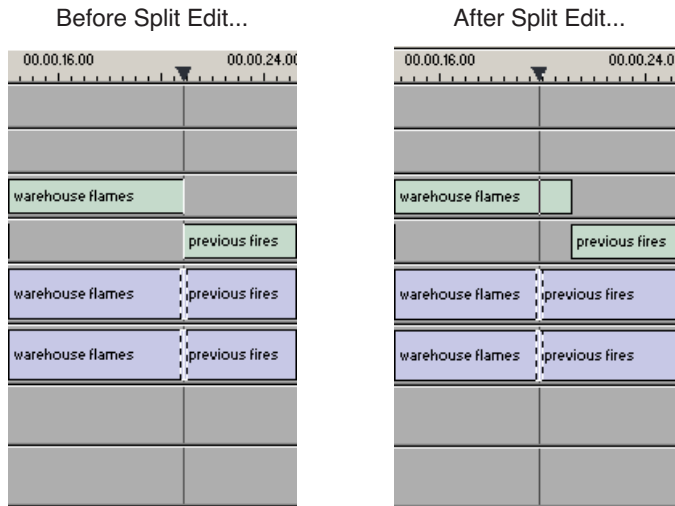
To create a split edit:

1. Press **4** to select the Cut Point Edit Tool.

2. Deselect any tracks you don't want to split off.

   For example, to split off the video track, deselect the audio tracks.

   To deselect a track, click once in the track indicator on the Timeline.

3. Click the **Trim Both** button.

4. Trim the cut points as described in "Changing Cut Points" on page 118.

   The Timeline updates to reflect the split.

Using Control Track

Control track lets you see the actual count of a clip or piece of tape instead of using timecode. Control track is available in the Timeline and Source Tools.

To use control track:

CTL

- Click the **Control Track** button.

  The timecode field changes and the text becomes yellow. To switch back to viewing the timecode, click the Control Track button again.

To reset the control track to zero:

→0←

- Click the **Reset Control Track** button while in Control Track mode.

Using Match Frame

NewsEdit XT can match frames on the Timeline with the input source. Use Match Frame if you need to add more material at the beginning or end of a clip.

You can Match Frame to either the Bin or Source.

Match Frame to Bin

Match Frame to Bin finds a frame you select from the Timeline and loads it in as a clip source.

To match frame to the Bin:

1. Select a clip on the Timeline.

2. Select the frame you want to match.

3. Press **F3** on the keyboard.

   NewsEdit XT finds the frame on the clip and loads it as a clip source.

Match Frame to Source

Match Frame to Source finds a frame you select from a Timeline import source and loads it into the Source Tool, using that frame as the Mark In point.

To match frame to the Source:

1. Select a clip on the Timeline.

2. Select the frame you want to match.

3. Press **F4** on the keyboard.

   NewsEdit XT finds the frame on the source and loads it into the Source Tool as a new Mark In point.

4. To view the frame source, press **F7.**

   To use this footage in a clip, press **F12** to record to the Timeline.

Adding Transitions to Your Sequences

NewsEdit XT lets you create a variety of transitions between clips in your sequence. Adding transitions to your sequences can add visual interest, avoid a bad edit between two shots, or slow a change between two shots for a pacing effect.

Video transition effects include dissolves, wipes, SMPTE wipes, pushes, slides, fades, and page curls. You can also create crossfades on the audio tracks in your sequence.

This chapter discusses how to:

• Use the Transition Tool

• Add transitions between edit points

• Work with different transition types

• Add audio crossfades to your clips

Using the Transition Tool

To create transitions or audio crossfades, you use the Transition Tool.

To select the Transition Tool, press **5** on your keyboard or click the **Transition Tool** button in the Timeline Toolbar.

Select type of transition   Choose the effect

Changes the parameters of a transition

Applies transition adjustments to a selected transition

Determines if an audio crossfade is added automatically to a transition

Reverses the direction of some transitions

Changes the color of a wipe border or a page curl highlight
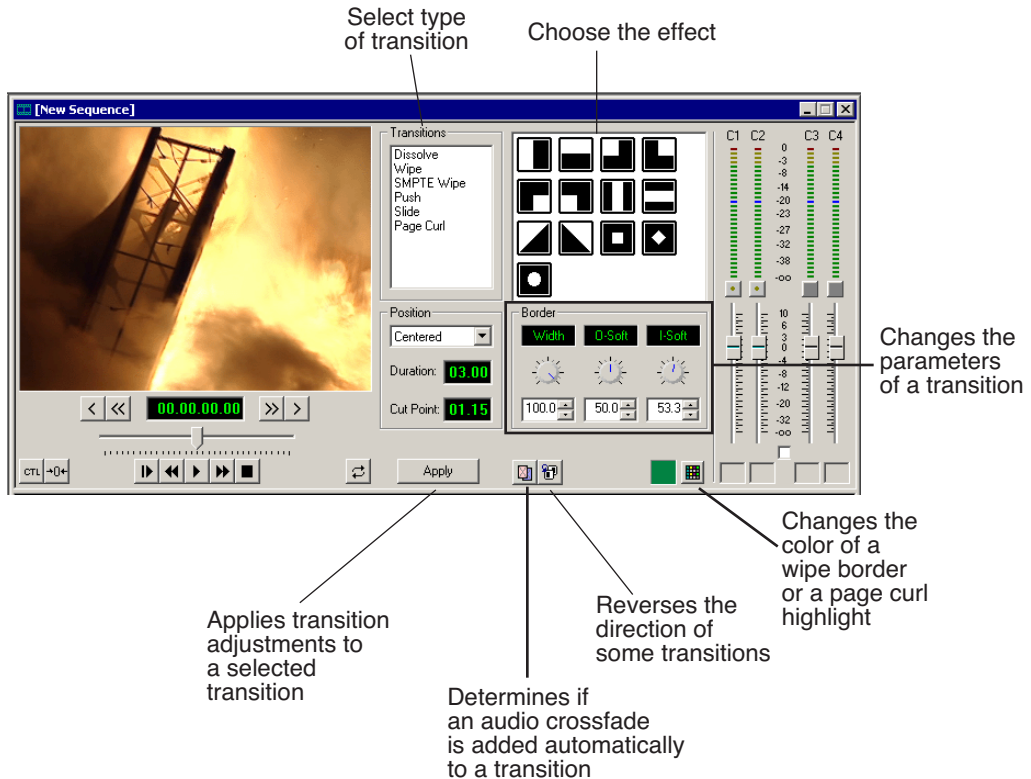
Adding Transitions to Your Sequences

You add transitions between clips in your sequence. You need to have handles on your clips in order to apply a transition.

When you create a transition, NewsEdit XT places it on the Timeline as an unrendered effect. Before you send the sequence to another video server, you need to render all effects.

Creating a Transition

You create each of the seven kinds of transitions in the same way.

To create a transition:

1. Press **5** on your keyboard to select the Transition Tool.

   The Transition window appears:
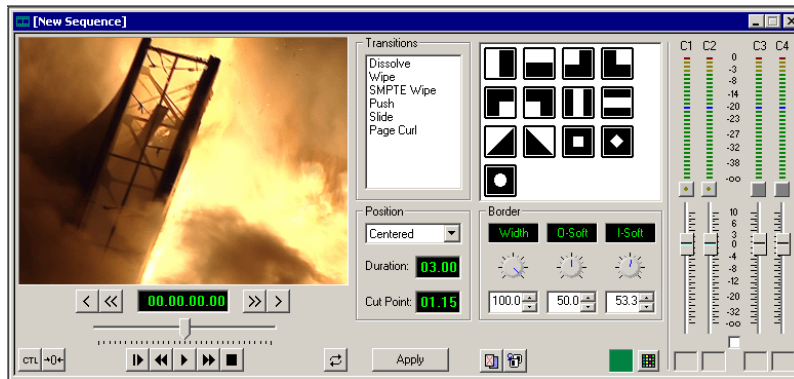
2. Click on the transition type and then on the icon for the effect you want.

3. In the Settings area, choose the **Position** of the transition from these choices:

   - **Centered** — Centers the transition across the cut point (default).

   - **End at Cut** — Ends the transition at the cut point between clips.

   - **Start at Cut** — Starts the transition at the cut point between clips.

   - **Custom** — Lets you set the position by typing it in the Cut Point field. If you don't have enough handle material to complete the custom position you set, NewsEdit XT completes as much of the positioning as it can.

4. Enter the **Duration** of the transition.

   The default duration is 15 frames.

5. Move the mouse over the cut point between the two clips.

   The cursor turns into a red X.

6. Click the mouse once to place the effect.

   The transition appears on the Timeline as a pink box with diagonal lines in it, indicating the transition is unrendered.
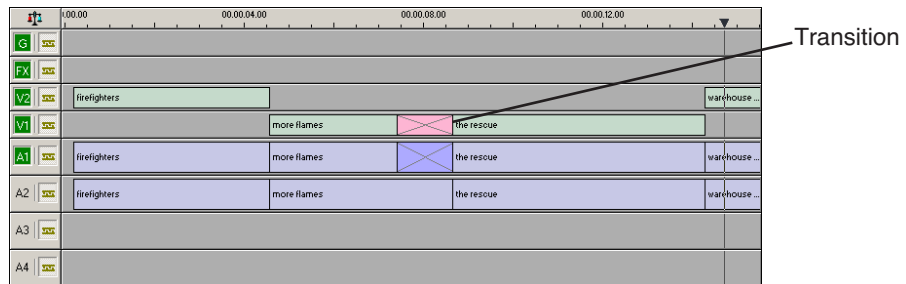
When you play the sequence in the Timeline, you see the transitions in the Video window.

NOTE: You need the Real-Time Preview Option to see transitions when you play a sequence before rendering it. If you don't have this option, you need to render all transitions before you can view them.

Changing Transitions

You can change a transition from one type to another or change the properties of the transition.

To change a transition:

1. Click once to select the transition on the Timeline.

   A red and green dotted border appears around the transition indicating its properties are displayed in the Transition Tool.

   You can select multiple transitions (by pressing **Ctrl +** clicking on each transition) and apply changes to all of the transitions at once. If you have more than one transition selected the red and green dotted border appears only around the transition for which the properties are displayed.

2. Make any changes—type of transition, type of effect, transition position, duration, or border.

3. Click **Apply**.

   The new transition replaces the old one on the Timeline.

   NOTE: Double-clicking on a transition in the Timeline from any tool selects the Transition Tool and shows the transition's properties.

Rendering Transitions

When you create a transition over two clips, NewsEdit XT places it on the Timeline as an unrendered object. Before you send the sequence to another video server, you need to render each of the transitions.

You can render a transition anytime after creating it, and you can render a selected transition or all transitions in your sequence.

To render a single transition:

1. Double-click once in the Timeline to select the transition.

2. Click **Render** on the Main Toolbar.

To render all transitions, click **Render All** on the Main Toolbar. A window appears, showing the rendering progress.

Deleting Transitions

Sometimes you need to delete a transition on the Timeline.

To delete a transition:

1. Click on the transition to select it.

   To delete several transitions at once, hold down the **Ctrl** key on the keyboard, then click on each transition you need to delete.

2. Press **Delete** on the keyboard.

   The transition disappears from the Timeline.

Understanding Transition Types

NewsEdit XT has six types of transitions—dissolves, wipes, SMPTE wipes, pushes, slides, and page curls.

To read a description of each transition, double-click its effect icon in the Transition Tool.

Type of transition

Description of effect:
Outgoing image slides top to bottom to reveal the incoming image
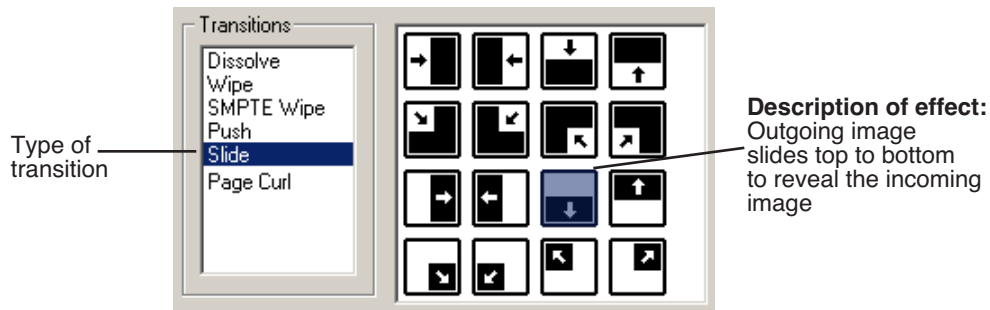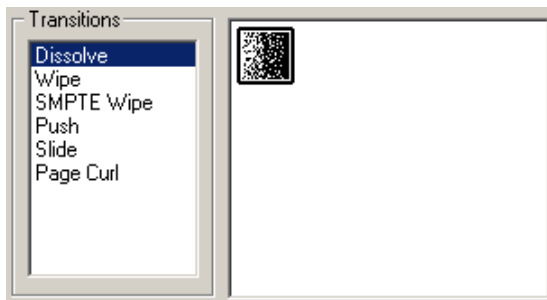
Dissolves

A dissolve fades the existing image as the new image becomes visible in its place. You cannot specify the direction or kind of dissolve.

You can create fades using the Dissolve transition. A fade is the gradual appearance a a new picture from black (fade-in) or the gradual disappearance of a picture to black (fade-out).

To gradually fade the video in, place a dissolve transition at the beginning of a sequence. To fade the video off the screen, place a dissolve transition at the end of the sequence.

Wipes
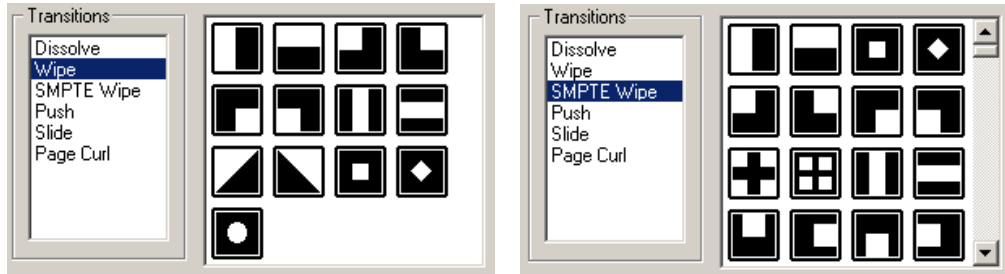
A wipe moves a new image over an old image. SMPTE wipes are industry standard wipe patterns, and include more complex directional wipes, shape wipes, clock wipes, and matrix wipes.

Reversing a Wipe

To reverse the direction of a wipe, click the **Reverse** button in the Transition Tool and create the transition as described in "Adding Transitions to Your Sequences" on page 145.

Adding a Border

With NewsEdit XT, you can add a border to any wipe or SMPTE wipe. You can use the default settings or change these settings to customize your border.

You can adjust these parameters:

Option	Definition	Range	Description
Width	Increases or decreases the size of the border.	0-100	0 is no border and 100 is the full border width available.
O-Soft	Softens the leading edge of the wipe.	0-100	0 is no softness and 100 is the full softness available for the outside region of the border.
I-Soft	Softens the trailing edge of the wipe.	0-100	0 is no softness and 100 is the full softness available for the inside region of the border.

You adjust the border width and softness using the dials on the Transition Tool.

The best way to adjust a dial is:

• Click on the dial you want to adjust and move it to the right to increase the value or to the left to decrease the value.

  You can see the size and softness change in the Viewing Window.

You can also adjust the parameters by typing a value in the box below the dial or clicking the up and down spinners beside the value box.

To reset a dial to 0, double-click the dial.

Changing the Border Color

You can also change the color of the wipe border to match a specific color scheme for your news station or to provide more visual contrast in a clip. The default color for a border is white.

To change the color of a border:

1. Click the **Change Color** button on the Transition Tool.

   The Color window appears.

2. Click on the new border color and click **OK**.

   The box beside the Change Color button displays the new border color.

   NOTE: Border color is only visible if the Border Width is set to a value greater than zero.

Pushes
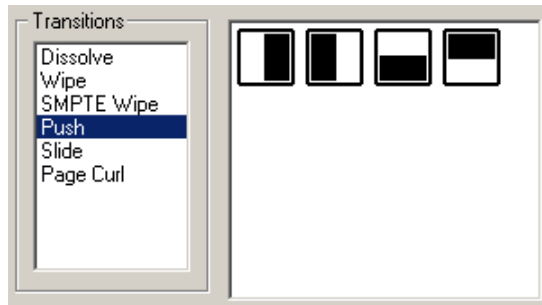
A push moves the second image in the direction chosen onto the screen, looking like the first image is "pushed" out of the way.

Slides
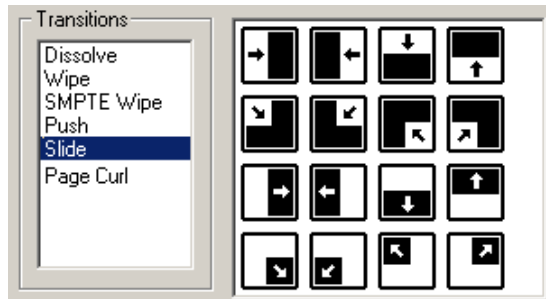
A slide moves either the old image or the new image. The old image moves to reveal the new image or the new image moves to conceal the old image.

A black arrow indicates the direction and path the second image takes moving into the frame. A white arrow indicates a reverse slide, where the first image slides to reveal the second image.

Page Curls

A page curl moves the old image out of the way in the direction chosen, revealing the new image. The old image moves off of the screen looking like it "curls" off, revealing the new image.

Adjusting the Characteristics of a Page Curl

With NewsEdit XT, you can use the default settings for a page curl or change these settings to customize your page curl.

You can adjust these parameters:

Option	Definition	Range	Description
Radius	Changes the thickness of the curl edge.	0-10	0 is a tight curl edge and 10 is the maximum thickness of the edge.
Intensity	Changes the brightness of the curl highlight.	0-100	0 is no brightness and 100 is the maximum brightness of the highlight.

You adjust the characteristics of a page curl using dials on the Transition Tool. See page 151 for instructions on adjusting the dials.
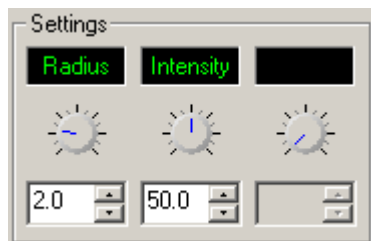
Changing the Highlight Color

You can also change the color of the page curl highlight to match a specific color scheme for your news station or to provide more visual contrast in a clip. The default color for a border is white.

To change the color:

1. Click the **Change Color** button on the Transition Tool.

   The Color window appears.

2. Click on the new color and click **OK**.

   The box beside the Change Color button displays the new color.

Adding Audio Crossfades

If you want to soften the transition between two audio clips, you can add an audio crossfade. NewsEdit XT lets you create audio crossfades between any two edit points in your sequence. Apply crossfades to only the audio tracks in a clip or with each video transition you create.

Applying Crossfades to the Audio Tracks Only

You can apply the audio crossfade to just the audio tracks in your clip.

To create an audio crossfade:

1. Press **5** on the keyboard to select the Transition Tool.

2. Move the mouse over the cut point between the two audio clips where you want to place the transition.

   The cursor turns into a red X.

3. Click the mouse once on the audio track to place the effect.

   The audio crossfade appears on the Timeline as a blue box with an X in it. Audio crossfades do not have to be rendered.

Applying Crossfades Automatically With Transitions

You can also have NewsEdit XT apply an audio crossfade each time you add a video transition effect between edit points.

To create an Audio Crossfade automatically:

1. Press **5** on the keyboard to select the Transition Tool.

2. Click the **Auto-Apply Crossfade** button.

Each time you apply a video transition, an audio crossfade occurs on the audio tracks at the same point. The audio crossfade uses the same settings you are using for the video transitions; position, duration, and cut point.

You can also adjust the settings for the audio crossfade separately from the video transition if desired. Click to highlight the transitions for crossfading, whether all or some of the audio tracks.

Adding and Adjusting Audio

NewsEdit XT allows you to adjust many aspects of the audio tracks in your sequence and add additional audio tracks to your sequence.

While NewsEdit XT can only record four audio tracks, you can edit up to eight tracks. The Audio Mixer Tool adjusts levels and pan for individual edits in a sequence, for entire clips, or for entire audio tracks. You can also connect an external mixer to NewsEdit XT; see your newsroom administrator for instructions.

This chapter discusses how to:

- Use the Audio Mixer Tool
- Change audio levels in a clip
- Monitor audio tracks
- Adjust audio gain
- Ride audio on the fly
- Crossfade audio

Using the Audio Mixer Tool

To edit audio, use the Audio Mixer Tool.

To select the Audio Mixer Tool, press **6** on your keyboard or click the **Audio Mixer Tool** button in the Timeline Toolbar.
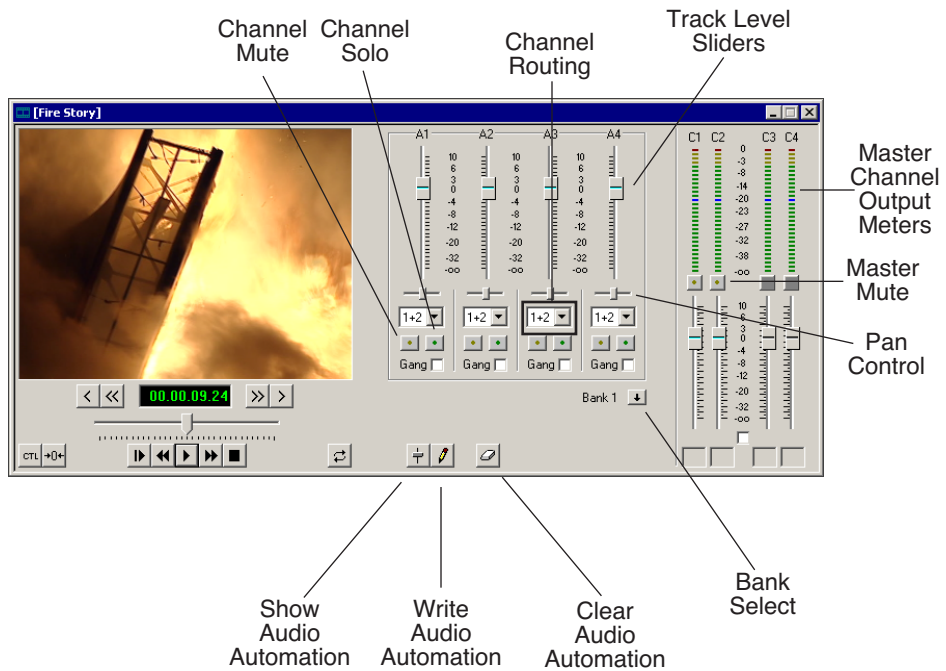
Changing Audio Levels in a Clip

You can adjust the audio levels within a clip by adding and manipulating fade control points in the Timeline, which is known as rubber banding.

To change the audio level in a clip:

1. Press **6** on the keyboard to select the Audio Mixer Tool.

   The Timeline shows a red fade control line through each audio track.

fade
control
line
                                        fade control point
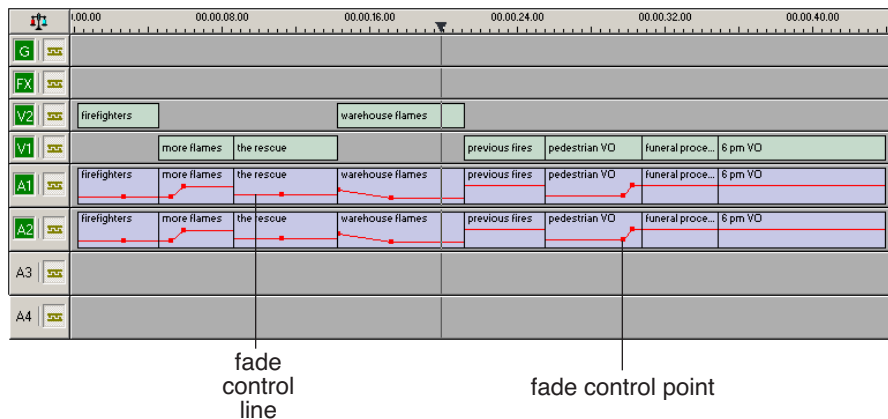
2. To adjust the audio level in a clip, do one of the following:

   - To adjust a specific point in a clip, click on the red line to create a fade control point. Using the fade control point as a pivot, click on another point in the audio track and drag the red line to raise or lower the level.

   - To raise the sound level for the entire track in a clip, click the fade control line and drag it up in the track. If fade control points exist, you need to click on a point before raising the level.

   - To lower the sound level, click the fade control line and drag it down.

If your audio levels are still too low or too high after adjusting the fade control line to its maximum or minimum value, you can make further adjustments by changing the audio gain. See "Adjusting Audio Gain" on page 166.

Removing Fade Control Points

To remove a fade control point, press **Ctrl + click** on the fade control point. Notice that the cursor changes to a red hand, allowing you to click and remove the control point.

To remove all of the fade control points, right-click within the audio clip and select **Clear Fade Control Points**.

Ganging and Adjusting Multiple Audio Tracks

Instead of adjusting multiple audio tracks individually, you can gang and adjust multiple tracks at the same time.

To adjust multiple audio tracks:

1. In the Audio Mixer Tool, check the **Gang** checkbox for each track you want to adjust.

2. Move the slider up or down to set the track volumes.

Sliders move together to adjust entire audio track

Check this checkbox to gang audio tracks
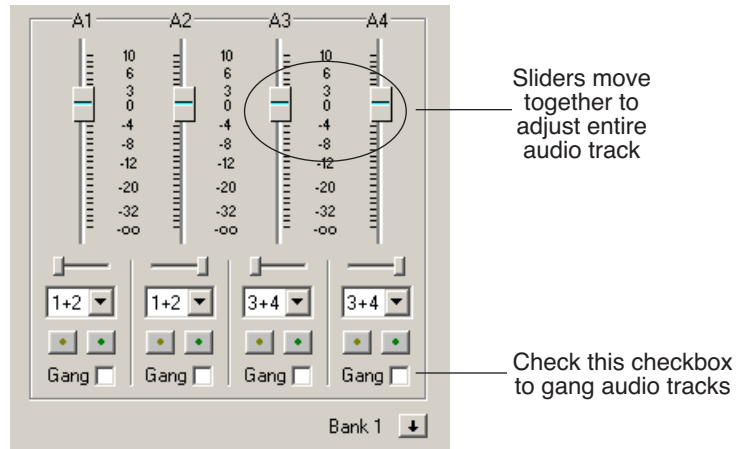
To turn off ganging, uncheck the checkboxes.

Setting the Pan Control

The pan control adjusts sound location. By default, odd-numbered channels pan to the left and even-numbered channels pan to the right.
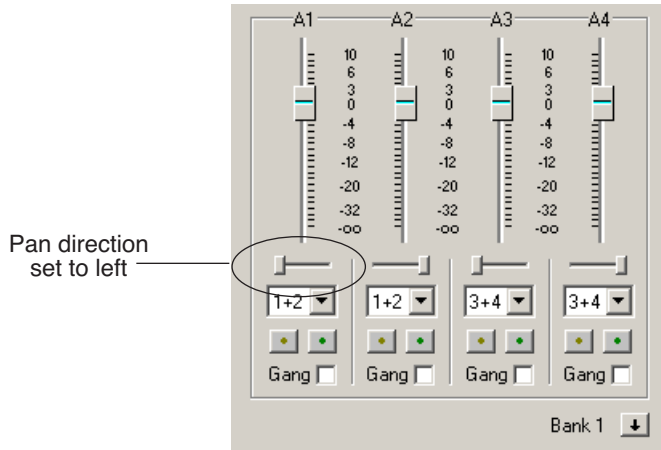
Changing the pan direction affects the entire track in a sequence.

To change the pan direction:

• Drag the pan slider for an audio channel to the right or left position.

To set the pan direction to center, press **Alt + click** on the pan slider.

Monitoring Audio Tracks

By default, NewsEdit XT monitors all audio tracks in a sequence. However, you can specify the tracks to monitor using the Solo and Mute buttons.

Soloing a Track

When you Solo a track, all other audio tracks mute until you turn off the Solo feature. You can also Solo multiple tracks if you wish.

To Solo one or more tracks:

• In the Audio Mixer Tool, click the **Channel Solo** button for each track you want to Solo.

Click the
Channel Solo
button to solo
a track
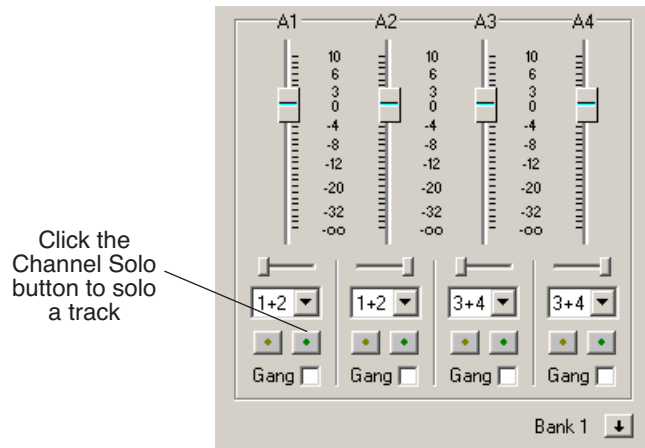
To turn off Solo, click each Channel Solo button again.

Muting a Track

Muting is the opposite of Soloing. When you Mute one or more tracks you hear only the unmuted tracks until you deactivate Muting. Muting is useful when recording voice-overs to the Timeline.

To Mute one or more tracks:

• In the Audio Mixer Tool, click the **Channel Mute** button for each track you want to mute.

Click the Channel Mute button to mute a track
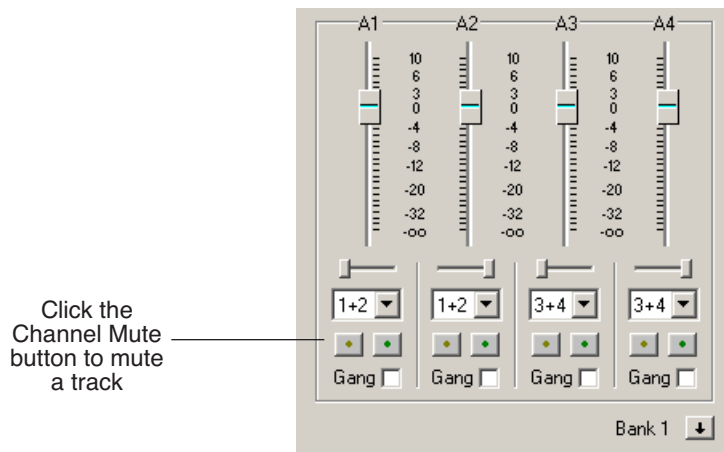
To turn off Muting, click each Channel Mute button again.

Using the Master Audio Sliders to Set Output Level

You can use the Master Audio Sliders to adjust the output level for your final sequence. When you output audio, the eight audio tracks are mixed down to four or fewer tracks. The pan direction determines how tracks are mixed.

By default, odd-numbered tracks mix to channel one and even-numbered tracks mix to channel two of your output sequence.
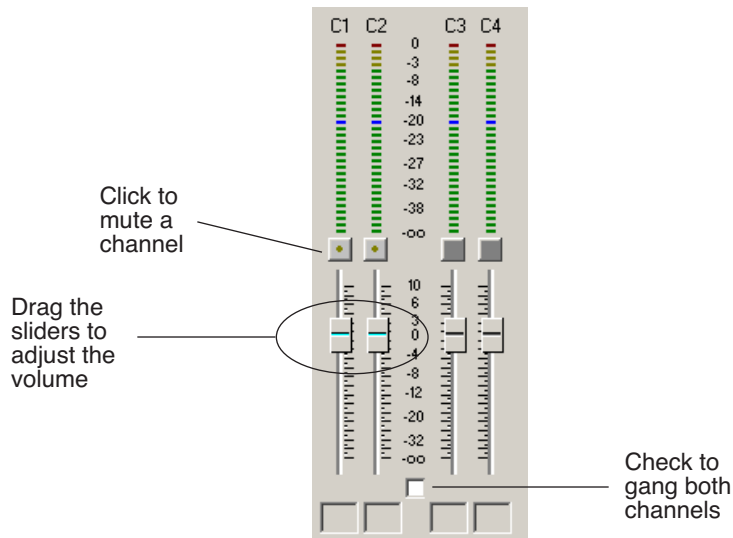
To use the Master Audio Sliders:

• Drag the level slider up or down for each channel to set the output volume.

Check the Master Gang box to adjust both channels simultaneously.

Channel Routing

You can select where the audio tracks of your sequence output by specifying the number of output channels and routing the channels.

The number of output channels is set in the Options Menu. To change this setting, see "Setting Output Options" on page 50.

For a two-channel system, the channels route by default as follows:

• If the pan control is in the left position, output routes to Channel 1.

• If the pan control is in the right position, output routes to Channel 2.

• If the pan control is in the center position, output routes to all channels.

Select the channels for output

Select the bank for your audio tracks
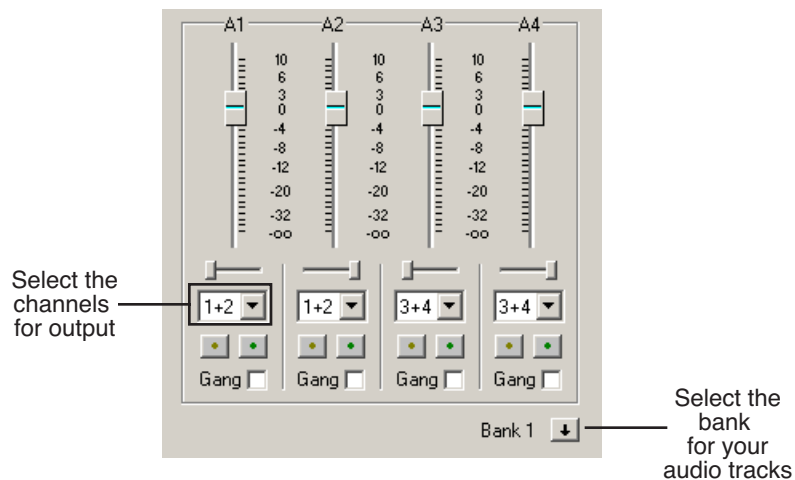
To change channel routing:

• Click the arrow next to the **Channel Routing** field for each audio track you want to change and select a new setting.

   You can select from **1+2**, **3+4,** or **ALL**. If you have more than four audio tracks in your sequence, click the **Bank Select** arrow to move to Bank 2 and then make your changes for tracks A5 through A8.

Adjusting Audio Gain

NewsEdit XT lets you adjust the audio levels within a clip in your sequence. Audio may record in at levels that are too low or too high. The Audio Gain feature lets you compensate by adjusting the clip. You can adjust the audio between -41 dB and +10 dB.

To adjust an audio clip, you can use the Timeline Tool, the Trim Tool, or the Audio Mixer Tool.

To adjust the audio gain in a clip:

1. Select the clip you need to adjust.

2. Right-click in the appropriate audio track.

3. Choose **Adjust Audio Gain**.

   The Adjust Audio Gain dialog box appears:
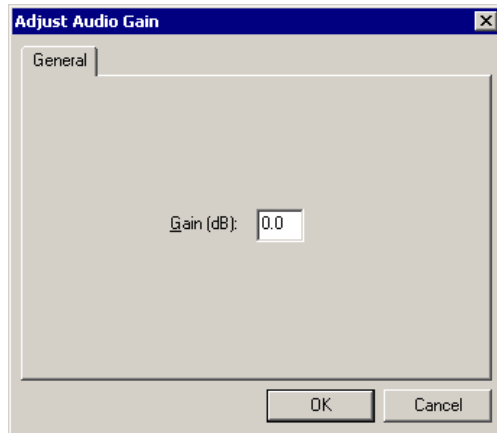
4. Enter a new value for the audio gain:

   - To lower the gain, enter a value preceeded by a minus sign, such as -5.

   - To raise the gain, enter a value, such as 5.

5. Click **OK**.

   The new value appears for the audio clip.

Using Audio Automation

You can use Audio Automation to adjust volume on the fly while a sequence is playing. You can then go back to adjust the fade control points for each level.

To use Audio Automation:

1. Press **6** on the keyboard to select the Audio Mixer Tool.

2. Click the **Write Audio Automation** button.

3. Click in the Timeline where you want the audio automation to start.

4. Press **F10** or click **Play** to play the sequence.

5. As the sequence is playing, click on the audio slider in the appropriate channel and raise or lower it.

6. When you reach the end of the sequence, press the **spacebar** to stop.

    The automation appears as fade control points in the audio tracks.

Showing Audio Automation

When you play a sequence with Audio Automation, you may want to see the audio sliders moving along with the video, which show you the audio changes you made while recording.

To show Audio Automation:

• Verify that the **Show Audio Automation** button is activated in the Audio Mixer Tool.

When you play the sequence, the sliders move along with it. If you need to do any fine-tuning, you can move any of the fade control points once the sequence has stopped playing.

If you play a sequence without Show Audio Automation on, you see the fade control points from the automation, but the sliders don't move during playback.

Removing Audio Automation

You can remove an individual fade control point or all points in a sequence.

To remove a single fade control point:

• Press **Ctrl + click** on a fade control point to remove it.

The cursor changes to a red hand, allowing you to click and remove the control point.

To remove all fade control points:

• Click **Clear Audio Automation**.

All of the audio fade control points disappear.

Crossfading Audio

NewsEdit XT lets you create audio crossfades between any two edit points in your sequence using the Transition Tool. See "Adding Audio Crossfades" on page 155 for instructions.

Creating Audio Effects

NewsEdit XT lets you create audio effects in your sequence by adjusting the audio EQ in a clip or disguising a voice.

You can adjust the Playback EQ of a clip that has already been recorded or the input EQ of a live source. You can also disguise a voice to go along with a blur or mosaic video effect, which disguises the face of an individual.

This chapter discusses how to:

- Use the Audio Effects tool
- Equalize the audio after a sequence is recorded
- Equalize the audio input while you record a sequence
- Disguise a voice in a clip

Using the Audio Effects Tool

To adjust the audio EQ or disguise a voice in a clip, use the Audio Effects Tool. You can also adjust the Input audio EQ of a live source.

To select the Audio Effects Tool, press **7** on your keyboard or click the **Audio Effects Tool** button in the Timeline Toolbar.

Adjusts the frequency and gain

Disguises a voice

Applies your changes to the clip

Equalizing Audio in a Recorded Sequence

Using the Audio EQ tab in the Audio Effects Tool, you can boost or cut the low-end audio, adjust the mid range audio, and modify the high-end shelf. You can adjust the Audio EQ on a single clip or multiple clips in a sequence.

The NewsEdit XT Audio EQ is a 3-band parametric EQ, consisting of a low-pass filter, a mid band pass with a variable Q, and a high-pass filter.

When disguising a voice, adjusting the Audio EQ on a clip in addition greatly enhances the effect.
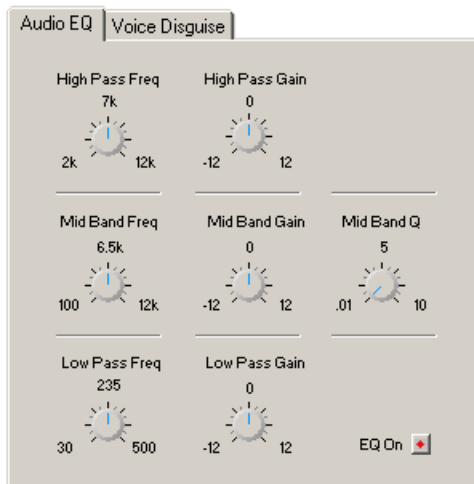
> *NOTE: Sequences with 5 or more audio tracks cannot play both playback and live EQ at the same time. During an edit, any unrendered EQ will not be heard to allow for input EQ.*

To adjust the audio EQ in a clip:

1. Press **7** on your keyboard or click the Audio Effects Tool button.

2. Select the clip you want to adjust. To select multiple clips, hold down the **Ctrl** key while clicking on clips.

The EQ turns on automatically and the button turns red.

Audio EQ turned on
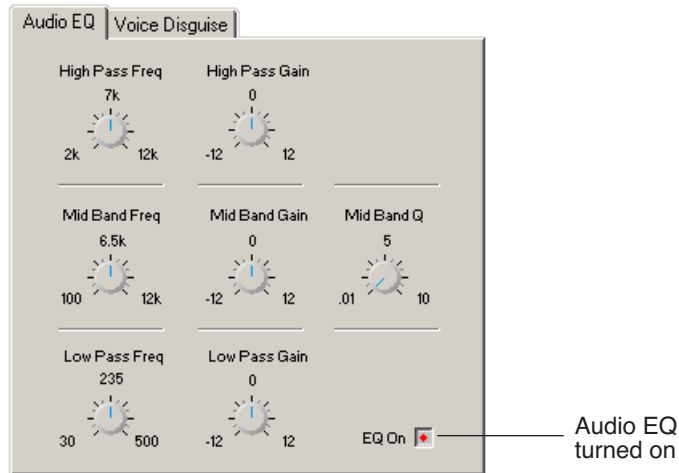
3. Adjust the High, Mid, and Low frequencies as needed.

   A description of each adjustment follows this procedure.

4. Play back the clip to hear your changes.

   NOTE: While you are playing a clip, you can toggle the EQ button on and off to compare the original and adjusted clips.

5. Make further adjustments as necessary.

6. Click **Apply** to apply your changes.

   While you can hear the changes when you play back the clip, you need to render the effect before you can send it to another workstation or editor. If you don't render the effect, NewsEdit XT automatically renders before sending.

You can also apply a previously applied Audio EQ effect to other clips in the same Timeline:

1. Select the unrendered clip.

2. **Ctrl + click** the audio clips you want to affect.

3. Select **Apply**.

Adjusting the Frequency

The Frequency dials let you adjust the frequency of the three shelves. The ranges for adjusting the frequency are:

Dial	Range	Default
High Pass Frequency	2k Hz to 12k Hz, +/- 12 dB	7k Hz
Mid Band Frequency	100 Hz to 12k Hz, +/- 12 dB	6.5k Hz
Low Pass Frequency	30 Hz to 500 Hz, +/- 12 dB	235 Hz

Adjusting the Gain

The Gain dials let you alter the gains of the three shelves. The ranges for adjusting the gain are (units are in dB):

Dial	Range	Default
High Pass Gain	-12 to +12	0
Mid Band Gain	-12 to +12	0
Low Pass Gain	-12 to +12	0

Adjusting the Mid Band Q

The Mid Band Q lets you alter the octave range for both the Mid Band Frequency and the Mid Band Gain.

The range for the Mid Band Q is .01 to 10, with 5 as the default.

NOTE: You can double-click any dial to reset the default value.

Equalizing the Audio Input

Using the Source Tool, you can monitor and control the audio EQ of live input audio while you are recording a clip. A pop-up dialog contains the same EQ functionality as the Audio Effects Tool; the difference is that you need to turn on the Input EQ for the channel you want to adjust while recording. Once on, adjustments you make occur in real time and cannot be undone once recorded.
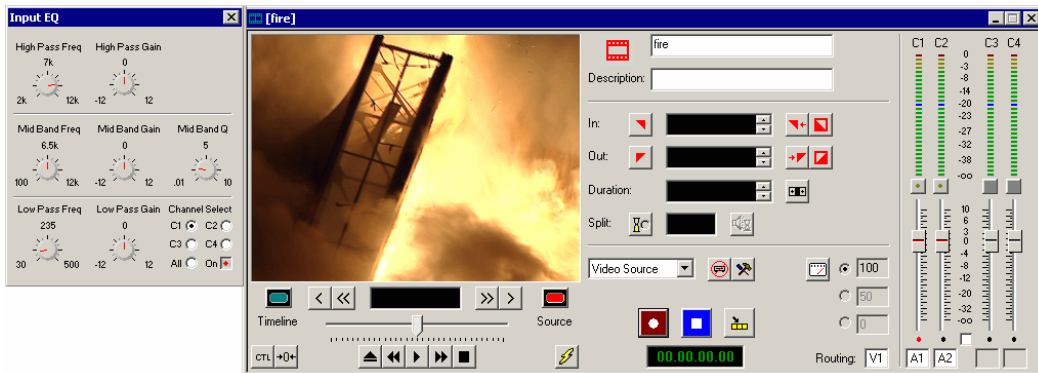
To adjust the audio EQ while recording a clip:

1. Press **2** on your keyboard or click the Source Tool button.

2. Press **9** on your keyboard or click the Input Tools button.

   The Input EQ window appears:
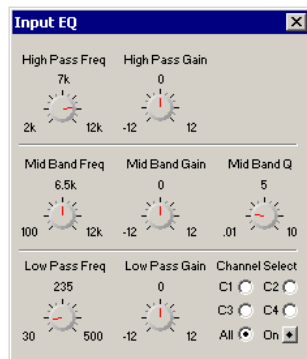
3. Select the channel you want to adjust (**C1**, **C2**, **C3**, **C4**, or **All**) and click the **On** button.

   The On and channel input buttons turn red.

Audio EQ
turned on

4. Start recording your clips.

5. While you are recording clips, adjust the frequency and gain as necessary by clicking the dial with your mouse and dragging it to a new setting.

   You can make adjustments at any time while you are recording, which are automatically added to your recorded clip.

6. When you stop recording, close the Input EQ window.

NOTE: You can also adjust the audio Input EQ using a clip source. Drag the clip from the Bin into the Viewing Window and follow the steps above. The clip on the Timeline displays the characteristics of an unrendered EQ clip.

Disguising a Voice in a Clip

Using the Voice Disguise tab on the Audio Effects Tool, you can distort a clip's audio for the using the Pitch Adjustment and Randomizer parameters.

Voice Disguise is not a real-time effect; NewsEdit XT automatically renders the voice disguise when you apply the effect to a clip.
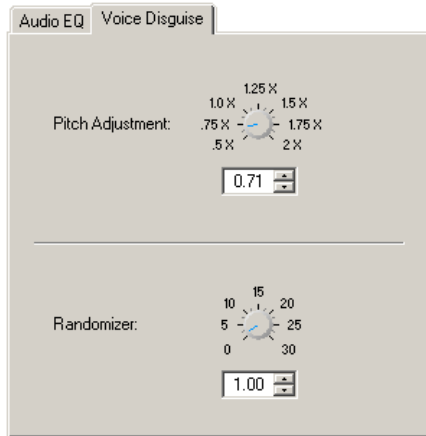
To disguise a voice in a clip:

1. Press **7** on your keyboard or click the Audio Effects Tool button.

2. Click the Voice Disguise tab to bring it to the front of the window.

3. Select the clip you want to disguise. To select multiple clips, hold down the **Ctrl** key while clicking on clips.

4. Adjust the pitch and use the randomizer as necessary.

   A description of each adjustment follows this procedure.

5. Click **Apply** to apply your changes.

   The voice disguise adds to your clip, and a new master clip is created and saved to the Rendered Clips bin.

Adjusting the Pitch and Randomizing the Voice

When you adjust pitch you also adjust the tone of a voice. Adjusting the pitch less than 1x makes the audio sound slower and lower. Adjusting the pitch greater than 1x makes the audio sound faster and higher. A lower pitch is typical for a blur or mosaic video disguise.

The Randomizer applies frequency changes and makes the audio effect irreversible.

You also can apply the Randomizer along with the Pitch Adjustment. The Randomizer periodically alters the Pitch Adjustment in order to further skew the audio, therefore better disguising the voice.

The ranges for these adjustments are:

Dial	Range	Default
Pitch Adjustment	.5x to 2x	1x
Randomizer	0 to 30	0

Creating Video Effects (Option)

NewsEdit XT lets you create a variety of video effects with clips in your sequence, including blurs, mosaics, color inverting, and mirroring. You can also resize video images and use key shapes to create Picture-in-Picture (PIP) effects.

This chapter discusses how to:

- Understand video effects
- Use the Video Effects Tool
- Add a new video effect to the Timeline, use a saved effect, or import an effect
- Define your video effect, including 3D Transformations
- Work with keyframes
- Set a path for your effect
- View video effects within your sequence
- Save a video effect to a bin
- Render a video effect
- Apply multiple effects to a clip
- Export a video effect

Video Effects Overview

Adding video effects to your sequences involves choosing the effect you want, determining the effect duration, and adding keyframes to the effect. NewsEdit XT also provides a number of preconfigured video effects that you can drag directly onto the Timeline.

Creating video effects involves these basic steps:

1. Place an effect on the Timeline.

   The effect can be new, blank, or a saved in your Bin.

2. Define the effect by selecting and modifying an effect and its options.

3. Insert a keyframe at the position where the effect starts.

4. Continue to insert keyframes to determine the course of the effect.

5. Select the path to use for the effect.

6. Press **Run** to review the effect.

7. Click **Render**, **Render All**, or **Mixdown** to complete the effect(s).

8. Save the effect to the Saved Effects Bin if you want to re-use again.

This chapter discusses each of these steps. For a complete description of each video effect, their options, and ranges, see *Appendix B*.

Understanding Video Effects

Before you can create video effects, you need to understand the ways you can manipulate the video image.

Moving the Foreground Image Within the Viewer Window

When you create a Resize or Key Shape effect, one of the video tracks becomes the foreground and the other becomes the background. With a Resize Effect, the foreground image defaults to 50% the size of the background image and is visible. When you apply a Key Shape effect to a single video track, you cannot see the initial key shape until you apply an effect to it. When you add another effect to the Key Shape effect, you can then see the shape and position it.

You can manipulate the foreground image in five different ways:
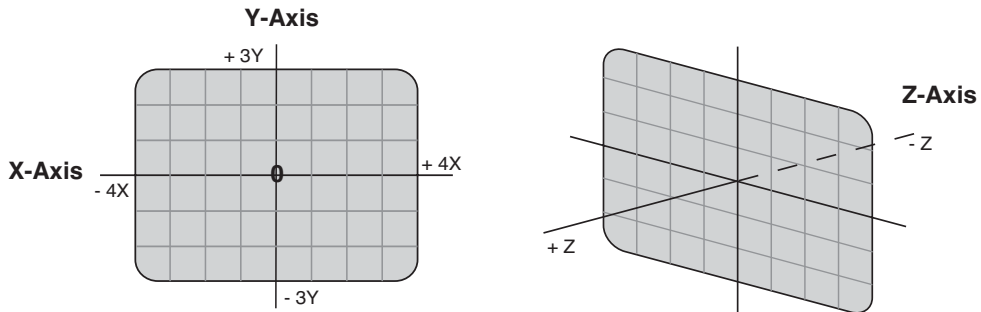
- X-Axis — The image moves left or right.
- Y-Axis — The image moves up or down.
- Z-Axis — The image moves either closer or farther away, giving the impression that the foreground is getting either larger or smaller, respectively.
- X-Aspect — The image stretches or shrinks along the X-Axis.
- Y-Aspect — The image stretches or shrinks along the Y-Axis.

There are several ways to alter the size and position of the foreground image:

Drag the image in the Viewer Window

Change the size with the resize slider

Change the position with the joystick

Adjust the dials
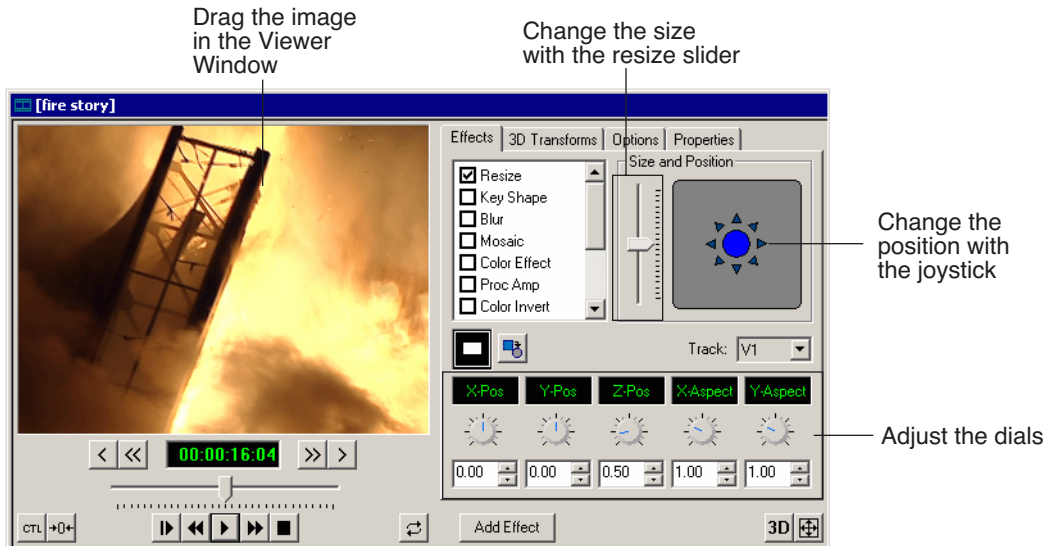
- Drag the image within the Viewer Window — When using Resize or Key Shape, the mouse cursor changes to a hand. Holding the left mouse button down grabs the image and allows you to move it left, right, up, or down. You can also change its position on the Z-Axis by holding down the **Ctrl** key while dragging up and down. Finally, holding down the **Alt** key locks the mouse movement to the X-Axis or the Y-Axis, depending on the direction you move the mouse was after pressing the Alt key.

- Use the joystick — From the Effects and Options tabs, you can move the foreground image along the X- and Y-Axes by clicking the joystick and moving it in any direction. The joystick's primary purpose is to position the foreground image outside the viewing area.

- Move the resize slider — You can change the image size (the Z-Axis) by moving the resize slider up to enlarge the image and down to make it smaller.

- Adjust the dials — You can use the resize and key shape parameter dials to change for X-, Y-, and Z-Axis positions, and X- and Y-Aspect changes.

   To adjust a dial, click the dial and drag right to increase the value or drag left to decrease the value. Double-click a dial to reset it to 0.

You can also make adjustments entering a value in the box below a dial or by clicking the up and down spin controls beside a value box.

- Use the keyboard — You can also use the arrow keys on the keyboard to move the foreground image:

    - The left and right arrows move the image along the X-Axis

    - The up and down arrows move the image along the Y-Axis

    - **Ctrl +** up and down arrows move the image along the Z-Axis

    - **Shift +** left and right arrows adjust the X-Aspect

    - **Shift +** the up and down arrows adjust the Y-Aspect

Defining 3D Source and Target Space

NewsEdit XT uses two frames of reference for its 3D transformation effects: source space and target space.

- The source space uses an object's (channel) coordinate system for reference.

- The target space uses the coordinate system of the next higher level for reference.

The combination of source and target space is useful in effects editing; one space can use a simple context for image transforms, while the other can use a more complex coordinate system. Manipulating the two spaces simultaneously can create complex effects.

The simplest way to visualize source vs. target space is to move a rotated picture across the screen using two coordinate systems:

- The rotated picture is the source space, or frame of reference. The source's coordinate system is transformed with the picture so that the x, y, and z axes are defined relative to the 'face' of the picture.

- The monitor screen is the target space, or frame of reference. The target's coordinate system is unchanged -- x is left to right, y is up and down, z is closer and farther. In this case the target space is also the global frame of reference, having the same coordinate system as the screen.
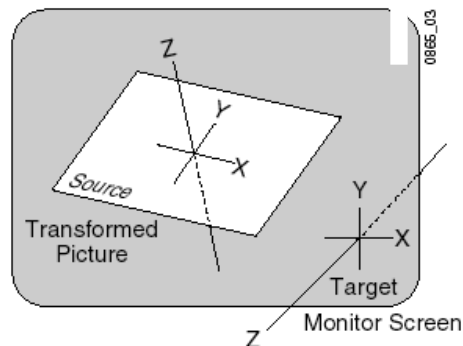
Moving the picture along the x-axis in the source space appears as a diagonal movement across the screen because the x-axis is no longer horizontal relative to the screen. Moving the picture along the x-axis in the target space moves it horizontally left to right across the screen.

**Source Translate
Along X-Axis**

**Target Translate
Along X-Axis**
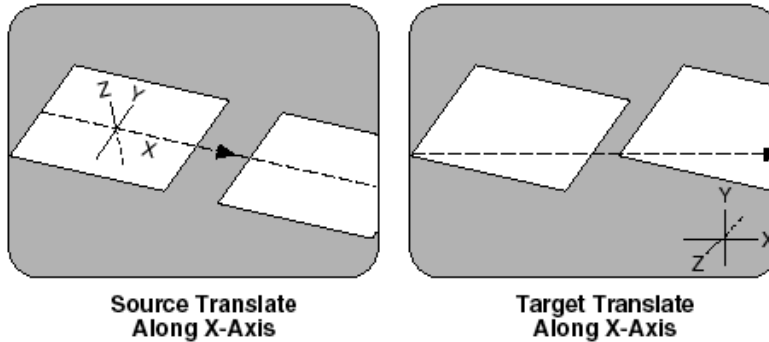
If the global frame of reference were rotated there would be three coordinate systems:

• The source space still has a coordinate system relative to itself, though because it is 'within' the target space it rotates with the target space.

• The target space is now the global channel and has its own coordinate system relative to how it was rotated. The source space, effectively 'within' the target space, is rotated accordingly.

• The monitor screen no longer shares a coordinate system with either the source or target space, which have both been rotated.
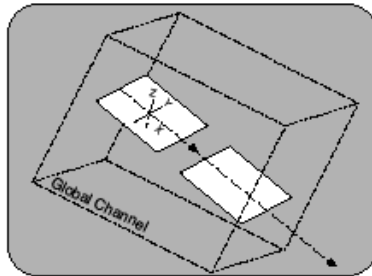
**Logical Channel Source Translate
Along X-Axis**
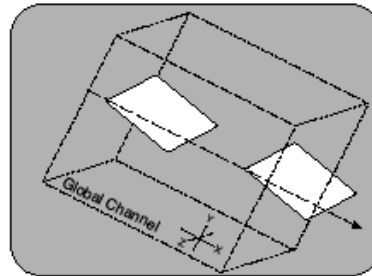
**Logical Channel Target Translate
Along X-Axis**
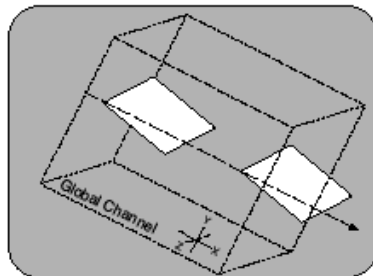
**Global Channel Source Translate
Along X-Axis**
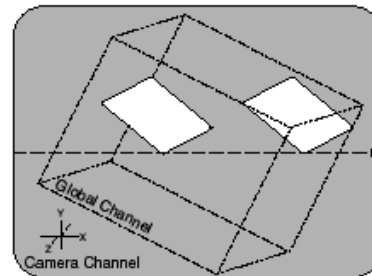
**Global Channel Target Translate
Along X-Axis**

Moving the picture along its x-axis within the source space makes it appear to move diagonally and 'out' relative to the screen because the rotated global channel creates z-axis movement relative to the screen.

Moving the picture along its x-axis within the target space makes it appear to move diagonally across the screen because there is no z-axis change. Because there are three coordinate systems in this scenario you can also move the target space along its x-axis to create the same diagonal movement with the picture.

Finally, moving the target space along its x-axis relative to the screen moves the picture horizonatally left to right across the screen.

Using the Video Effects Tool

To create video effects to use in your sequences, you use the Video Effects Tool.

To select the Video Effects Tool, press **8** on your keyboard or click the **Video Effects Tool** button in the Timeline Toolbar.

Viewer Window

Select your effect

Adjust the size and position of the effect

Insert and modify keyframes

Select a path for your effect

Save or open an effect

Play the effect

Show the safe video area

Enable 3D effects

Select the track(s) for the effect

Create an effect on the Timeline
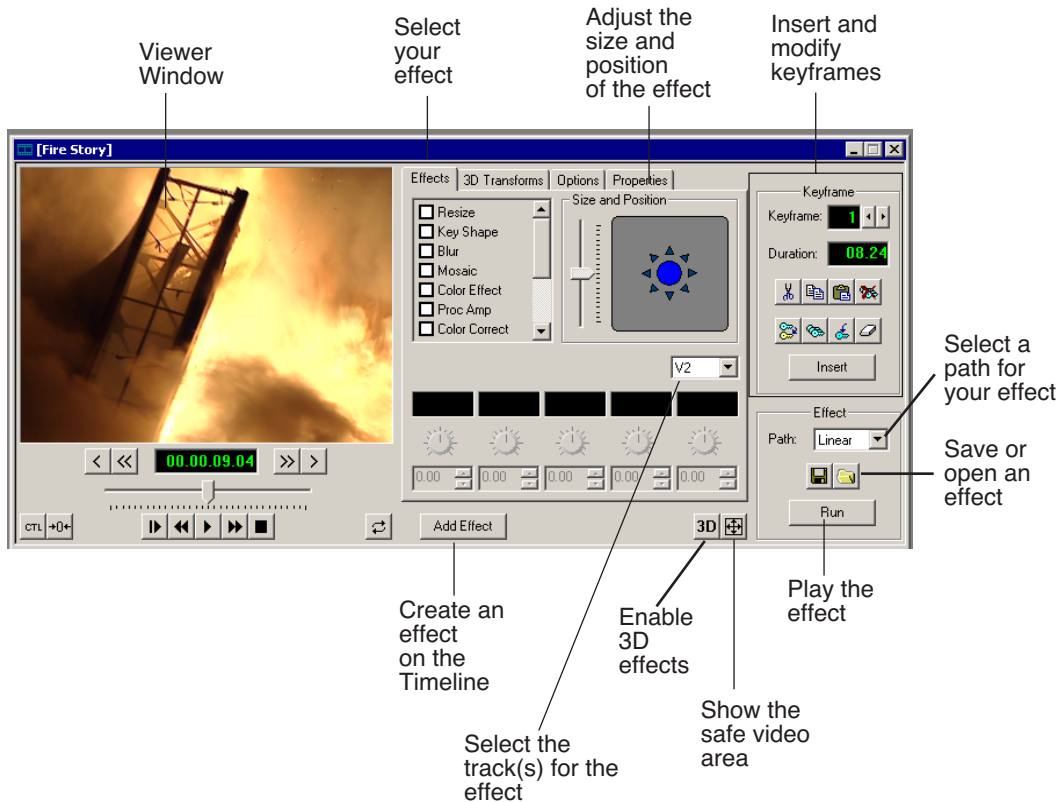
Adding an Effect to the Timeline

The first step in creating a new effect is to place a blank effect template on the Timeline that will contain the keyframes to comprise the effect.

To add a blank effect to the Timeline, there must be an effects (FX) track present. When you first create a sequence you can check the **Video Effects Track** checkbox to add an effects track to the Timeline.

If you are working with a sequence without an effects track, click the **Sequence Properties** button on the Timeline Toolbar and check the **Video Effects Track** checkbox to create the track.

There are several ways to add a blank effect to the Timeline:

- Highlight the clip(s) for the effect and click **Add Effect** or **Shift + 8**.

  NewsEdit XT places the effect on the effects track with the same duration as the selected clip(s) and sets the correct track for the effect. For example, if you select a clip on Video Track 1 and add an effect, V1 is automatically designated as the track that receives the effect.

  You can automatically create a Resize effect by selecting overlapping clips on the two video tracks and clicking **Add Effect**.

- Mark In and Out points on the Timeline to set the effect duration and click **Add Effect**.

  The effect appears on the Timeline at the location and with the duration set by the mark points. If you mark an In point or an Out point but not both, you must enter an effect duration in the pop-up window and click **OK**. The Mark Point you set marks either the beginning of the effect (if you marked an In point) or the end of the effect (if you marked an Out point).

- Click **Add Effect** within the Video Effects Tool, enter the duration of the effect (the default is 1 second) and click **OK**.

  The effect appears on the Timeline at the pointer location.

- Right-click on the Timeline, choose **Add Effect,** enter the effect duration (the default is 1 second) and click **OK**.

  The effect appears on the Timeline at the pointer location.

You can change the duration of the video effect using the Extend Edit feature. To lengthen or shorten an effect, place the pointer where you want the effect to end or begin and press **V** on the keyboard. The effect duration moves to the new pointer position, thereby lengthening or shortening the effect.

A video effect overlays the video tracks, allowing you to slide the video underneath it on tracks V1 and V2. The effect characteristics are applied to the clips that reside on the video tracks below it, which lets you swap one video effect for another or one video clip for another.

Using Saved Effects in Your Sequence

NewsEdit XT provides a number of preconfigured effects, stored in an Effects Bin. You can add these effects to your sequence and modify them to suit your needs.

If you don't have an Effects Bin, you can import each effect into your Bin. The effects are located at **C:\ProgramFiles\Vibrint40\Effects**. See "Importing Effects" on page 190 for instructions.
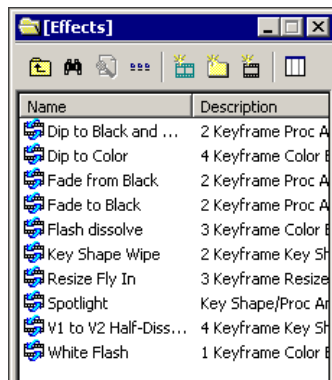
NOTE: You must have the complete NewsEdit XT Effects Package to use all of these effects. If you don't have the package you can still use the effects Dip to Black and White, Fade from Black, and Fade to Black.

Saving effects also saves their duration, but the duration of an effect you place on the Timeline is depends upon on the way you add the effect to your sequence. There are multiple ways to add a saved effect to your sequence:

• Drag and drop the saved effect onto the Timeline — the effect duration is exactly as it was when saved and the keyframes are in the same positions.

• Highlight the clip(s) for the effect and drag the saved effect onto the Timeline — the effect duration and keyframes adjust to match the duration of the selected clip(s).

• Mark In and Out points on the Timeline to define the effect duration and then drag a saved effect onto the Timeline — the effect duration and keyframes adjust to fit the duration between the mark points.

• Click **Open**, select the effect, and click **Open** — the duration follows the above guidelines based on whether you select mark points or a clip for the effect.

Once you have the effect on the Timeline, you can use the Video Effects Tool to modify the effect.

Importing Effects

You can also use effects that are located on another NewsEdit XT workstation, another computer, a network server, or a diskette. You can only import effects with a .vef suffix. For details on saving effects on other media, see "Exporting Video Effects" on page 204.

To import an effect into your sequence:

1. Choose **File | Import | Effect**.

   The Import Effect window appears.

2. Navigate to the effect you want to import and select it.

3. Click **Import**.

   A progress bar indicates the import status.

You can import effects to the Bin or directly to the Timeline, depending on which window has focus.

Defining Your Video Effect

Each video effect definition consists of the effect type, the effect size and position, options set for that effect, and any adjustments you make to the effect.

Choosing a Video Effect

After you add a blank effect to the Timeline, you choose the video effect to create in your sequence.

To choose a video effect:

1. Press **8** on your keyboard or click the **Video Effects Tool** button on the Timeline Toolbar.

2. Add a blank effect to the Timeline using the steps in the section "Adding an Effect to the Timeline" on page 188.

3. Check the checkbox next to the effect you want to use.
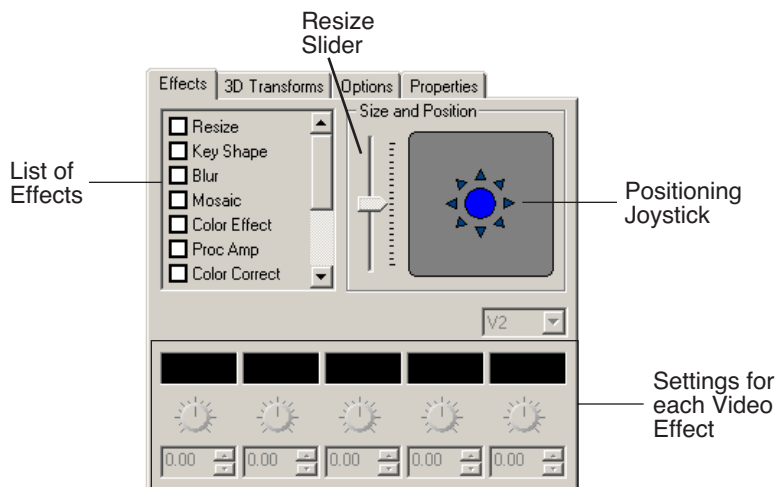
4. Adjust the effect settings as necessary.

NewsEdit XT provides a variety of video effects to choose from. For a complete description of each video effect and its properties, see *Appendix B*.

Name	Description
Resize	Enlarges the image using one video track or creates a Picture-in-Picture effect using two video tracks.
Key Shape	Gives a specific shape to a video image or applies an effect to a part of a video image. Used primarily in conjunction with other video effects, a key shape defines an area within an image that you can fill with other effects.
Blur	Distorts an image beyond recognition. Often used in conjunction with a Key Shape effect to disguise a person's identity.
Mosaic	Distorts an image beyond recognition. Often used on an entire image or in conjunction with a Key Shape effect to disguise a person's identity.
Color Effect	Overlays a selected color over the video with variable opacity. Used either for an entire image or in conjunction with the Key Shape effect. Used primarily for color flashes, dips or fades to color, color tints, etc.
Proc Amp	Adjusts an image's video levels. Provides options for altering the image gain, chroma, setup and hue; a Key Shape effect; or a Resize effect.
Color Correct	Adjusts the color levels in a video image; adjust the white and black balance, gamma balance, and white clip.
Mirror Vertical	Flips an image vertically.
Mirror Horizontal	Flips an image horizontally.
Luma Key	Keying inserts part of one picture into another to create a composite picture. Luma Key uses the color brightness of an incoming source to specify where to cut the hole in the background.
Chroma Key	Detects color (rather than luminance) in a video image and replaces it with a new background.
Warp	Twists and turns the image in the direction and shape selected.

Using 3D Transformations

In addition to using effects in your sequences, you can also use 3D Transformations. 3D Transformations create an additional dimension to a video effect. NewsEdit XT provides a variety of 3D Transformations to choose from. For a complete description of each transformation and its properties, see *Appendix B*.

Name	Description
Resize	Enlarges and reduces the image while remaining in the same plane in 3D space.
Locate	Moves the image along the X, Y, and Z axes.
Rotate	Rotates the picture around the reference axis in the X, Y, and Z dimensions.
Spin	Supports multiple rotations around the reference axis in the X, Y, and Z dimensions.
Skew	Slants the picture in the horizontal and vertical directions.
Scale	Changes the horizontal and vertical size of the image.
Axis Locate	Determines the center point of translations, spins, and rotations for that channel.
Perspective	Changes the viewer's apparent viewpoint of an image; tilts the image so part of it is farther from the viewer.

To use a 3D Transformation:

1. Press **8** on your keyboard or click the **Video Effects Tool** button on the Timeline Toolbar.

2. Add a blank effect to the Timeline using the steps in the section "Adding an Effect to the Timeline" on page 188.

3. Click the **Enable 3D Effects** button on the Video Effects Tool.

4. Check the **Resize** checkbox in the Effects tab.

   You cannot use any of the transformations unless the Resize effect is checked.

5. Click the 3D Transforms tab and select the 3D Transform you want to use.
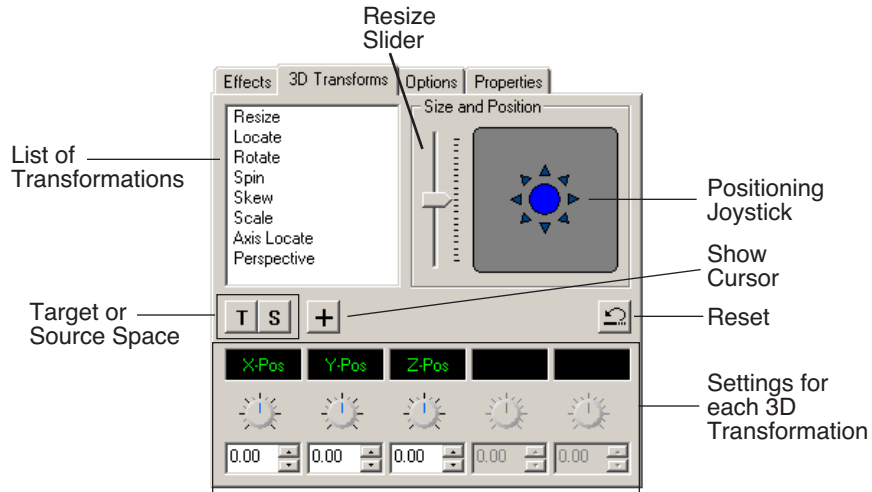
6. Click to select the Target (**T**) or Source (**S**) space for the transformation.

   See "Defining 3D Source and Target Space" on page 184 for a description of target and source spaces.

7. Adjust the settings as necessary.

Using Effect Options

Some video effects and 3D transformations have additional options. For a description of each option, see *Appendix B*.

Name of Option	Description
Blend	Lets you change the opacity or edge softness of a resize or key shape effect.
Border	Lets you apply a border to a resize or key shape effect, change the color and size of the border, and adjust border placement around the image.
Crop	Lets you trims the foreground image of a resize or key shape effect.
Hold Key	Lets you manipulate the video image while keeping the shape, path, etc. intact.
Drop Shadow	Lets you apply a drop shadow to the foreground image and change the shadow's color and opacity.
Path Control	Lets you apply different paths to a particular keyframe or part of an effect; overrides the chosen effect path.
Slab	Lets you add a 3-dimensional border, creating depth in your image.
Highlight	Lets you add colored highlighted areas to a warp effect.

To choose and adjust effect options:

1. Press **8** on your keyboard or click the **Video Effects Tool** button in the Timeline Toolbar.

2. Click the effect on the FX track you want to modify.

3. Click the **Options** tab in the Video Effects Tool.

4. Select the option you want to use.

List of Options

Settings for each Effect Option
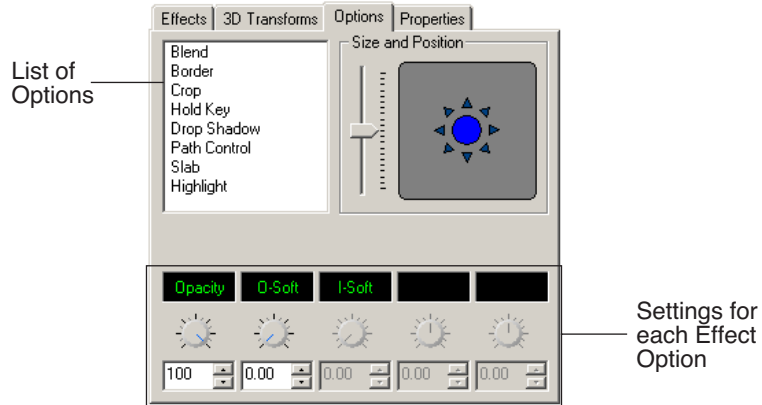
5. Adjust the effect settings.

6. To save your settings, click **Insert** for a new keyframe or click **Modify Keyframe** if the keyframe already exists.

Defining Effect Properties

You may want to add some descriptive information about the video effect you create. Effect properties help you remember the characteristics of the effect.

To add effect properties:

1. On the FX track, click the effect for which you want to add properties.

2. Click the **Properties** tab in the Video Effects Tool.

3. Enter the effect name and a description.
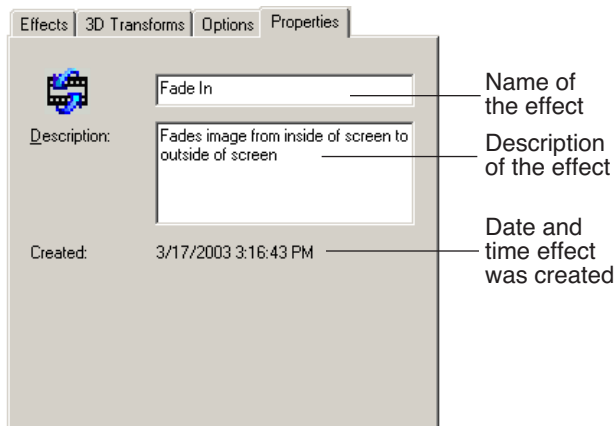
Working with Keyframes

NewsEdit XT uses keyframes to synchronize a clip's video effects with the video and audio. A keyframe is a set of characteristics defining the image at a specific instant in time. Characteristics include size, location, borders, drop shadow, and cropping but do not include the video image, which resides on the video track.

After creating an effect, insert a keyframe to mark the effect's location and characteristics on the Timeline. All effects need at least one keyframe.

If you want the effect to play consistently through the clip, you only need one keyframe. If you want the effect to change throughout the clip, continue to adjust characteristics and insert keyframes throughout the clip as necessary.
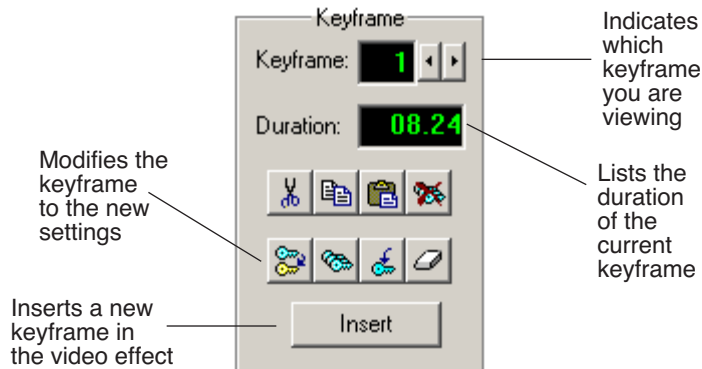
Within the Video Effects Tool, some parameters are keyframeable and some are not. That is, if a parameter is keyframeable, the parameter can change from one keyframe to the next. If a parameter is not keyframeable, that parameter is used for the entire effect and cannot change across keyframes.

The type of effect is not keyframeable. See *Appendix B* for a list of effect parameters and options, and whether each is keyframeable.

Inserting Keyframes

You can add keyframes to any point of a video effect. There are two general
approaches for inserting keyframes.

- Step through the video and insert a new keyframe at each point where you
  want the effect to move. This method is useful when creating a blur or
  mosaic effect or when you want to move an effect to cover or highlight a
  specific area.

- Set up the first keyframe and insert it into the effect. Then set up a second
  keyframe and insert it. NewsEdit XT automatically places the second and
  subsequent keyframes one second after the previous one. This method is
  useful with resizing effects such as Picture-in-Picture that are less dependent
  on exact frame positions than on the effect's path and speed.

Once inserted, you can adjust a keyframe's position by clicking it and then
dragging it left or right.

To insert a keyframe:

1. Place the pointer at the spot where you want the keyframe.

2. Configure the video effect characteristics.

3. Press **Insert** on your keyboard or click **Insert** on the Video Effects Tool.

   A keyframe appears on the FX track on the Timeline. This keyframe places
   all of the video effect characteristics on a single data point on the Timeline.

4. Continue defining the effect and inserting keyframes as necessary.

Modifying Keyframes

NewsEdit XT provides some standard tools for modifying keyframes:

- Cut — Removes a keyframe and places it on the clipboard for pasting into another position or effect.

- Copy — Copies a keyframe for pasting into another position or effect.

- Paste — Pastes the properties of a cut or copied keyframe in a new location.

- Delete All — Deletes all of an effect's keyframes.

- Modify — Changes the characteristics of an existing keyframe.

- Modify All — After modifying the characteristics of a single keyframe, allows you to apply those changes to all keyframes within the effect. When modifying all keyframes, you can choose the type of modification you want:

  - Relative: Alters each keyframe in relation to its current status.

  - Absolute: Alters all keyframes to the value set in the modifying keyframe, regardless of each keyframe's current status.
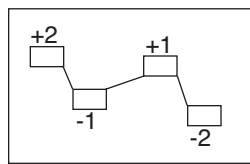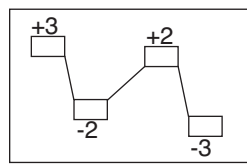
Original Effect	Relative Modification	Absolute Modification
with original values	Trim by +1	Set to +1
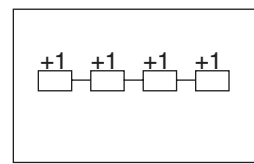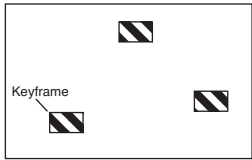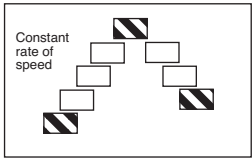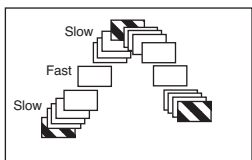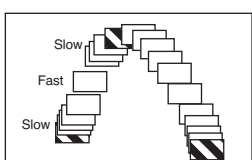
- Restore — Restores default settings to the current effect position.

- Clear — Allows you to return to an original keyframe if you have altered it and want to use the previous settings instead.

Setting a Path for the Effect

Each video effect you create has a path that determines how the effect behaves from keyframe to keyframe. You can apply paths only to an entire effect, not just a particular keyframe or part of an effect. If you want to apply a path to a specific keyframe, use the Path Control feature in the Options tab.

NewsEdit XT has four path types:

Path Type	Example	Description
Hold		The effect characteristics hold for the duration of the keyframe and then change instantaneously to the next keyframe. For example, the image jumps from its location in one keyframe to a new location in the next keyframe.
Linear		The effect plays in a constant direction and at a constant rate of speed from keyframe to keyframe. For example, the image moves from one location to the next in a straight line at the same speed.
S-Linear		The effect plays in a constant direction but at a variable rate of speed from keyframe to keyframe. For example, the image moves from one location to the next in a straight line; it begins slowly, speeds up, then slows down again as it approaches the next keyframe. Because of the changing speed, S-Linear changes appear less abrupt than linear changes.
Curve		The effect plays in a variable direction and at a variable rate of speed, causing a rounded path through the keyframe. For example, the image moves from one location to the next in a smoothly curved line. The Curve path is the least abrupt type of path control; both direction and rate of speed are kept smooth and steady in appearance.

To set a path for your effect, select a path from the Path drop-down list.

To see how the path affects your sequence, click **Run**.

Viewing Effects Within Your Sequence

Once you create an effect, you can view it within the clip to see if you need to make further adjustments.

To view the effect within a clip:

• Press **Ctrl + W** on your keyboard or click the **Run** button in the Effect area of the Video Effects Tool.

The current video effect plays on the clip.

Saves the effect to the Bin

Plays the clip and the effect
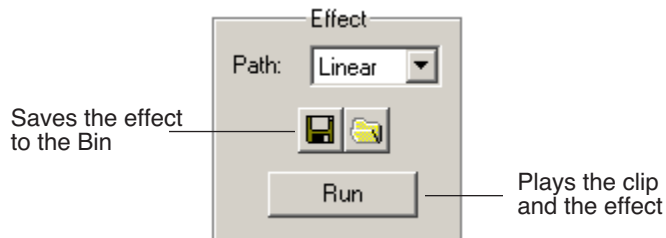
Saving Video Effects

After you create an effect, you can save it to use again in another sequence. You save effects the same way you save clips and sequences — in a bin. You can retrieve a saved effect and drag it onto a Timeline in another news sequence.

When you save a video effect, the effect characteristics such as its duration and keyframes are saved with it.

To save a video effect:

1. Click the **Save** button in the Effect box in the Video Effects Tool.

2. Select a bin for the effect and enter a name.

3. Click the **Save** button.

Rendering Video Effects

When you add a video effect to the Timeline, you need to render the effect before you can send it to another NewsEdit XT workstation or server. If you begin sending a sequence to another destination without rendering video effects, NewsEdit XT automatically renders the effects before sending.

To render an effect:

1. Select the effect to render.

2. Click the **Render Effects** button in the Main Toolbar.

You can also render all video effects at the same time by clicking the **Render Al**l button.

> *NOTE: All unrendered transitions that reside under real-time effects appear as straight cuts until the transition is rendered. Field interpolated slow-motion also becomes frame-based until rendered.*

Layering Effects

NewsEdit XT allows you to apply more than one effect to a clip. You can mix down an effect into the video clip below it and then add another effect on the FX track that affects the same clip.

Mix Down modifies the video clip (or clips) in which the effect occurs; for example, if the effect was on V2, the effect collapses into V2. If both video tracks are being affected, the effect collapses onto V1.

To mix down an effect:

1. Select the effect.

2. Click the **Mix Down** button on the main toolbar.

   You can also right-click on the effect and select **Mix Down Selected**.

   A progress bar indicates rendering status.

Once an effect is rendered, it is removed from the FX track and becomes part of the video clip below it. A new master clip is also created and saved in the Rendered Clips bin.

Exporting Video Effects

In addition to saving your video effects to the Bin, you can also export them to a location outside of NewsEdit XT. The effect exports as a .vef file, which you can export to any folder on your computer, to another computer on your network, or to a diskette.

To export an effect from the Bin or the Timeline:

1. Highlight the effect you want to export from the Bin or on the Timeline.

2. Choose **File | Export | Effect.**

   The Export Effect window appears.

3. Select a location for the effect and click **Save**.

The video effect exports as a .vef file.

Chapter **12**

Adding Titles (Option)

The NewsEdit XT Titling option lets you add titles to your sequences using built-in templates or those you create. Titles allow you to add your news station logo to all of your stories, add newscaster names, and other graphics or text you wish to superimpose on your video.

To use the Title Tool, you need to have the Chyron® Lyric plug-in installed on your NewsEdit workstation and have a Chyron license. See your system administrator if you want this option.

> *NOTE: This chapter highlights some of the Lyric features; see the Lyric online help for complete documentation.*

This chapter discusses how to:

- Use the Title Tool
- Use existing title templates
- Modify templates for your sequence
- Use advanced Lyric features
- Add fonts

Using the Title Tool

To add titles to your sequences, use the Title Tool.

T

To select the Title Tool, press **Ctrl + T** on your keyboard or click the **Title Tool** button in the Timeline Toolbar.

Uses template name for the title

Fades the title in and out

Changes features of the text, like font, size, justification, and color

Changes the characteristics of the edges of the text

Opens the title in Advanced Mode for further editing

Copies the current title to the Timeline

Applies your title changes to the selected title

Shows the Text Fields in the Viewing Window

Shows the Safe Area for adding titles

Shows the Background behind the title

Using Title Templates

NewsEdit XT includes several sample templates that you can modify, which you can find in the Templates drop-down list. By default, the templates list displays files located in the **C:\LyricDemo** directory.

If you create additional title templates (in .lyr format) that you wish to appear in the Templates list, place them in the samples directory or configure NewsEdit to use a different directory; see "Setting Graphics Options" on page 57 for instructions.

To add a title to your sequence:

1. Select a template from the Template drop-down list.

   The title template appears in the Viewing Window.

2. Make any changes to the title graphic.

   The next section, *Modifying a Template for Your Sequence*, describes changes you can make.

3. Add a title to your sequence using one of the following methods:

   - Add a Mark In and Mark Out Point on the Timeline and click the **Copy to Timeline** button—the title appears between the mark points; or

   - Press the **Copy to Timeline** button with no mark points; the title starts at the cursor position and uses the duration set in the Options menu.

   If you need to extend the duration of a title, highlight the title on the Timeline, move the cursor to the new duration point, and press **V** (Extend Edit) on the keyboard.

| 🏛	1.00.00	00.00.08.00	00.00.16.00	00.00.24.00	00.00.32.00	00.00.40.00
G ▦	New Title					
FX ▦						
V2 ▦	firefighters		warehouse flames			
V1 ▦		more flames	the rescue	previous fires	pedestrian VO	funeral proce... 6 pm VO
A1 ▦	firefighters	more flames	the rescue	warehouse flames previous fires	pedestrian VO	funeral proce... 6 pm VO
A2 ▦	firefighters	more flames	the rescue	warehouse flames previous fires	pedestrian VO	funeral proce... 6 pm VO
A3 ▦						
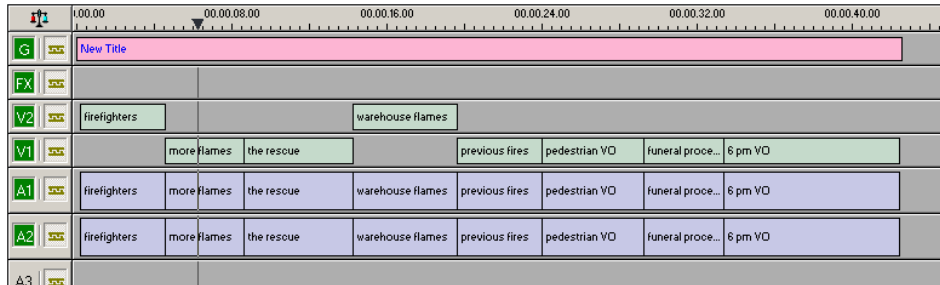
4. Play your sequence to view the title.

The new title appears on the Graphics track on the Timeline and is saved as a graphic file in the Bin. To use a saved title in other sequences, drag it onto the Timeline of the new sequence. NewsEdit XT copies the title into the new Bin so you can edit it independently from the original.

Modifying a Template for Your Sequence

The default templates contain placeholder text and graphics that you'll need to change for your sequence.

You can make changes to any existing text field. To add another field, see "Advanced Titling" on page 214.

Viewing Window

Active Text Field

Textbox
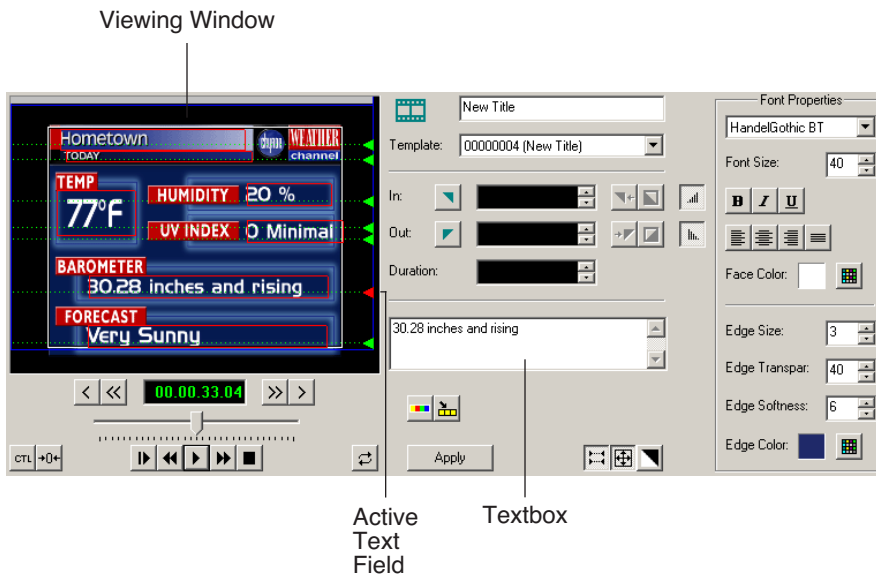
Selecting a Text Field

To change text in the template, you first need to select the text field. Any changes you make to a text field affect the entire field — you cannot change part of a field, such as bolding only one word.

To select a text field:

1. Verify that the **Show Text Fields** button is toggled on.

2. Double-click the green arrow at the end of the text field you want to modify.

   The arrow turns red and the text appears next to the Viewing Window.

Editing Text
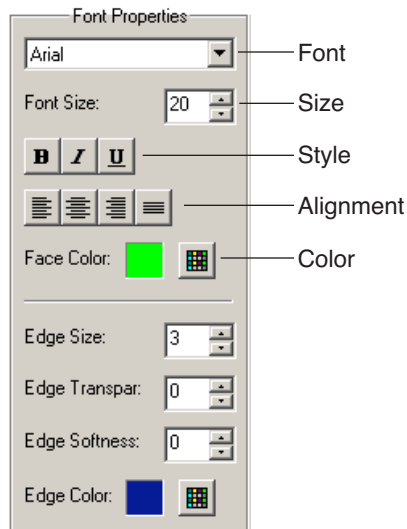
To change the text in any part of a title:

1. Select the text field.

   The selected text appears next to the Viewing Window.

2. Modify the text as necessary.

3. Click **Apply** to save changes to your title.

Changing Text Properties

You can change many text properties within a title. Changes affect the entire text field.


To change text properties:

1. Select the text you want to modify.

   The selected text appears next to the Viewing Window.

2. Change any of the following as necessary:

   - Font—Select a font from the drop-down menu.

   - Size—Enter a new font size or click the arrows to change the size.

   - Style—Click the buttons for Bold, Italic, or Underline.

   - Alignment—Select Align Text Left, Center, Right, or Justify Text.

   - Color—Click the color button, select the new color, and click **OK**.

3. Click **Apply** to save changes to your title.

Changing Edge Properties
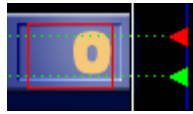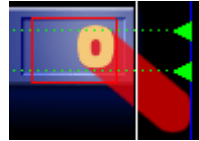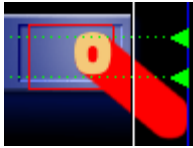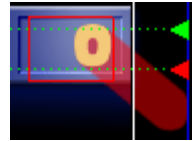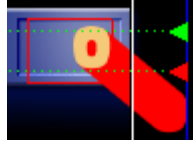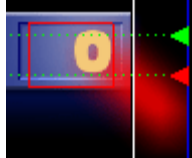
In addition to changing text properties, you can also modify its edge properties. The main use of this feature is to make a drop shadow on the text.
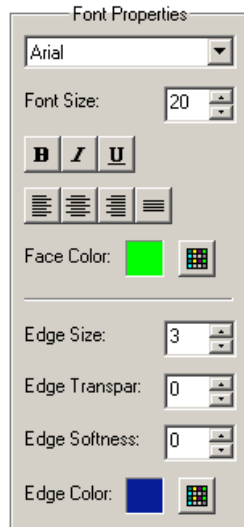
These options affect the right edge of each character in the selected text field.

Option	Range	Description
Size	0-100	0 is not visible at all and 100 is the full size of the edge.
Transparency	0-100	0 is fully opaque and 100 is fully transparent.
Softness	0-99	0 is no softness and 99 is the full softness available for the edge of the text.

The following table shows each of the edge characteristics using different values:

Edge Characteristic	Lowest Value = 0	Highest Value = 100
Size		
Transparency		
Softness		

To change the edge properties:

1. Select the text field.

   The selected text appears next to the Viewing Window.

2. Make any of the following changes:

   - Size, Transparency, and Softness—Enter new values or use the arrows to change the values.

   - Color—Click the color button to select a new color.

3. Click **Apply** to save these changes to your title.

Advanced Titling

To create a new template or extensively edit an existing one, you use the Title Tool's Advanced Mode, which launches the Chyron Lyric plug-in. If you need to configure the plug-in, see "Setting Graphics Options" on page 57.

To use Advanced Mode:

1. Click the **Advanced Mode** button in the Title Tool.

   The Chyron Lyric plug-in appears:
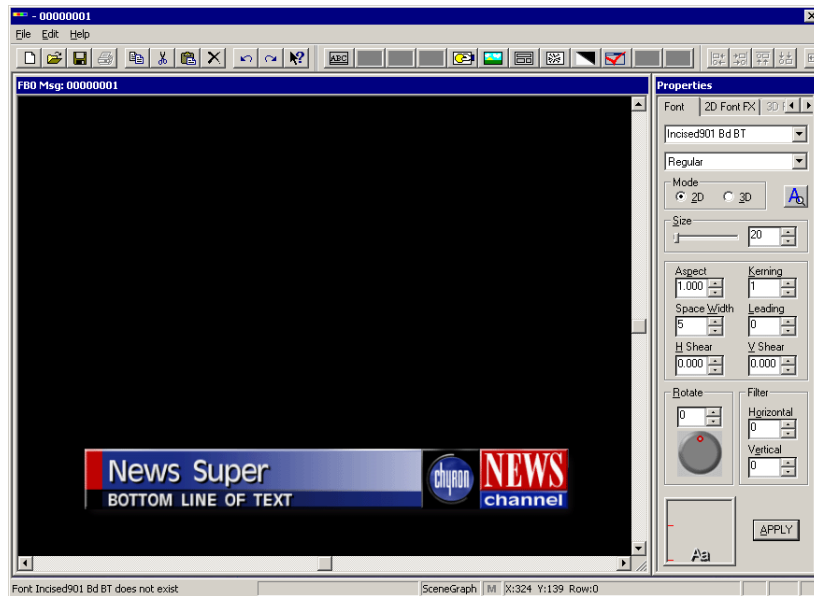
2. Make changes to the current title or create a new one.

   The rest of this section describes how to perform several tasks you may frequently use. For more detailed instructions, see the online help under **Help l Help Topics**, or see the Chyron documentation.

3. If you made changes to the Font or 2D Font FX tabs, click **Apply** in the Properties window. Changes made directly on the Lyric Canvas display in the Title Tool automatically.

4. Close the window.

5. Click **Apply** in the Title Tool to apply the title changes to the Timeline.

Understanding the Lyric Plug-in

The Lyric plug-in consists of a Canvas in which you create your title, a toolbar, and a Properties window:

Lyric Toolbar

Canvas

Properties Window
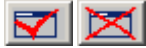
The Lyric Toolbar

The Lyric plug-in toolbar provides access to common functions:

Button	Function
ABC	Opens a two-dimensional text window so you can add text to your title; this text cannot be edited within the NewsEdit Title Tool.
	Imports a graphic from a saved file.
	Imports a background image or texture from a saved file.
	Opens a template field so you can add text to your title; this text can be edited within the NewsEdit Title Tool.

Button	Function
	Erases elements from the title canvas or erases the entire canvas.
	Toggles the default background on and off. The default background is a black or gray background that displays over the video to help with visibility while you are creating or modifying a title. The default background does not effect the video output.
	Toggles between displaying text window and template borders on the canvas.
	Aligns the left edges of two or more template fields.
	Aligns the right edges of two or more template fields.
	Aligns the top edges of two or more template fields.
	Aligns the bottom edges of two or more template fields.
	Resizes the selected template fields to be the same width.

Properties Window

The Properties Window has two active tabs:

- Fonts—Lets you select a font and adjust its characteristics.

- 2D Font FX—Lets you change character type face and edge properties, such as transparency, edge size, edge angle, and color/texture fill.

Changing the Title Background

You can select a solid color or an imported graphic as your background.

To change the background:

1. From within the Lyric plug-in, click **Change Background**.

2. Select **Solid/Ramp Color** or **Graphic File**:

   - If you selected Solid/Ramp Color:

      a. Select the mode for the background, **Ramp** or **Solid Color**.

      b. Select the new background color.

      c. Click **OK**.

   - If you selected Graphic File, select a file to import and click **Open**.

Importing Graphics

You can import a variety of graphic file formats into your title.

To import a graphic file:

1. Click **Import Graphics**.

   The Import Graphics window appears.

2. Select the graphic file you want to import.

3. Click **Open**.

   The graphic appears on the canvas.

To move the graphic on the canvas, drag it to a new position with the mouse.

Adding Text

You can add text to titles using one of two methods:

• Add 2D text to your template, which can only be edited in Advanced Mode

• Add text as a template field that can be edited in basic mode

Adding 2D Text

You can add text to your title canvas, such as the name of your news station or show segments, that doesn't usually change from sequence to sequence.

To add text to your canvas:

1. Click **2D Text**.

   A 2D text window opens.

2. Enter text at the cursor.

To move the text window around the canvas, click and drag the title bar.

To use other features of the Lyric plug-in to change the appearance of the text, see the Lyric online help.

Adding Template Fields

If you want to be able to edit text within a title, you need to add a text template field rather than a 2D text field. Any text you add using a template field can be edited within the NewsEdit Titling Tool.

To add a template field:

1. Click **Template**.

   An empty template field is added to your canvas.

2. Enter text in the field; it is a good idea to enter a description of what type of text should be in this field, i.e., Reporter Name.

3. Continue adding template fields as necessary.

Adding Fonts

The Chyron Lyric CD-ROM includes additional fonts you can use to provide greater text variety in your titles.

Adding many additional fonts may slow the application down, so add only the fonts you need.

To add fonts:

1. Insert the Chyron Bitstream Fonts CD into the CD-ROM drive,

2. From the Windows Start menu, select **Settings | Control Panel | Fonts**.

3. From the File menu, select **Install New Font**.

4. In Drives, select your CD-ROM drive.

5. In Folders, double-click the **FONTS** folder.

6. In List of fonts, click the font you want to add.

   To select more than one font, hold down the Ctrl key and click each font you want to add.

7. Click **OK**.

Sending & Storing Completed Sequences

Once your sequence is complete, you have several output options. The most efficient method is sending the sequence to a network video server.

If you are using NewsEdit XT in a shared environment, you don't need to send sequences — since the Bin is shared, all editors can access the same clips and sequences.

This chapter discusses how to:

• Send your sequences to another NewsEdit XT or a playback server

• Record your sequences to tape

• Store your sequences on NewsEdit XT

• Create a playback list

• Archive your sequences on tape

Sending Sequences to Another NewsEdit XT or a Playback Server

Sending your completed sequences to a playback server is the most common way to use NewsEdit XT. You can also send your sequences to another NewsEdit XT workstation or to a network server.

> *NOTE: When using NewsEdit XT in a shared environment, you won't need to send files often since the Bin is common among all editors.*

If you have a Profile Video Server, you can send your sequences to the server for almost instant playback to air. Once you establish a network between a Profile server and other NewsEdit XT workstations, you can send clips and sequences to other NewsEdit XT workstations as well as the Profile Video Server.

You follow the same steps to send a story to any NewsEdit XT workstation or compatible playback server.

To send a completed sequence:

1. Go to the Bin and highlight the sequence you wish to send by clicking on the sequence title.

   If the sequence is open on the Timeline, you don't need to go to the Bin.

2. Press **F2** on the keyboard.
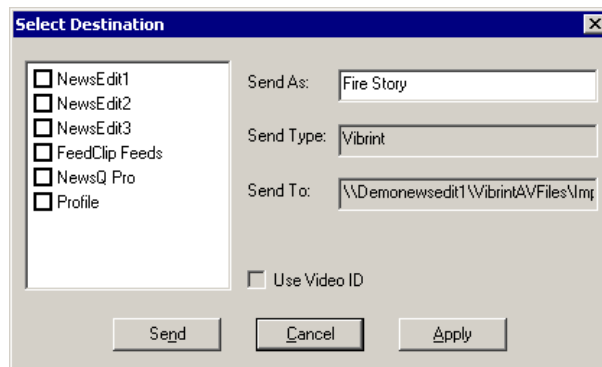
   The Select Destination window appears, showing all available locations:

3. Click on the box where you want to send the sequence.

4. If you want to change the name of the sequence, enter it in the **Send As:** field.

   You cannot change the **Send Type** or **Send To** fields.

5. Click **Send** or press **Enter** on the keyboard to send your sequence.

   A progress bar indicates sending progress.

You can use the Video ID of a sequence instead of the sequence name by selecting the **Use Video ID** box in the Select Destination window. If no Video ID appears with the sequence, that box is grayed out.

Recording Completed Sequences to Tape

You can also record your sequences to tape. Use this to archive stories or provide a copy of a story to others not using NewsEdit XT.

Before you begin:

- Make sure that you have rendered all effects before recording a sequence to tape; non-rendered effects don't record and won't be visible on the tape.

  See "Rendering Transitions" on page 147 and "Rendering Video Effects" on page 203 for instructions.

- Save your sequence and close it.

- Cue your record tape to an appropriate recording spot.

  Click the **Record To Bin** button and play the tape to determine an appropriate spot to start recording.
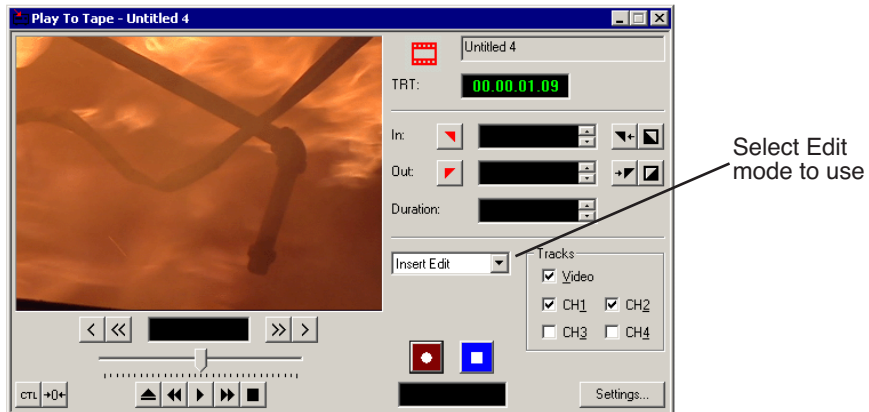
To record to tape:

1. Highlight the sequence you wish to record by clicking the sequence title in the Bin window.

2. Click the **Play to Tape** button in the main toolbar.

   The Play To Tape window appears:

3. Click the **Settings** button and verify the settings in the Play Settings window:
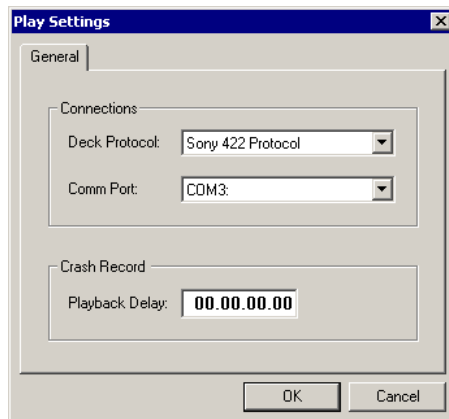
- **Deck Protocol** — Choose the protocol for the tape deck you are using. Choices include Sony 422 Protocol, Sony DNW-A100, and DV 1394. You only need to configure the protocol once.

- **Comm Port** — Choose the communication port you are using for the tape deck, from COM1 through COM10. The port should be set to the same port as the Comm Port you specify for deck controls in your Source setup.

- **Playback Delay** — Enter a playback delay if you want a delay between clicking **Record** in the Play to Tape dialog and when the playback actually begins. Playback Delay applies only to the Crash Record mode, providing time to press the Record button on the tape deck.

4. Select an edit mode for the record:

- **Insert Edit** — Records new material at an intermediate point of an existing recording, using the existing timecode. You can send individual tracks to the tape as well.

- **Assemble Edit** — Records new material at the end of a pre-recorded section of the tape, changing the timecode.

- **Crash Record** — Initiates a record without using the auto-edit function, eliminating the need for preroll; results in a record that doesn't have a frame-accurate start position.

NOTE: The Insert and Assemble Edit modes work only with decks that have Auto-Edit functions. Check your tape deck's user manual to determine if it supports this feature.

5. Mark an In point.

The timecode of the record tape shows up at the Mark In point.

6. Press **F12** on the keyboard, or click the **Record** button, to start recording.

After the sequence is done recording, the deck will stop.

7. Close the Play To Tape window.

8. Review your recorded story on tape by clicking the **Record To Bin** button in the main toolbar.

Storing Sequences on NewsEdit XT

Instead of sending your sequences to a playback server, you can save them on your NewsEdit XT workstation to use later. To save a completed sequence, you send it to a bin on the same computer you are using. You can then create master clips instead of saving the entire sequence and the clips it uses.

To set up a send location for your system, see "Setting Up Send Locations" on page 52. It is a good idea to create a bin specifically for holding stored sequences, such as HFR (Hold For Release).

To send a sequence to your system:

1. Click once on the sequence title that you want to send.

2. Press **F2** on the keyboard.

   The Select Destination window appears, showing all available locations:
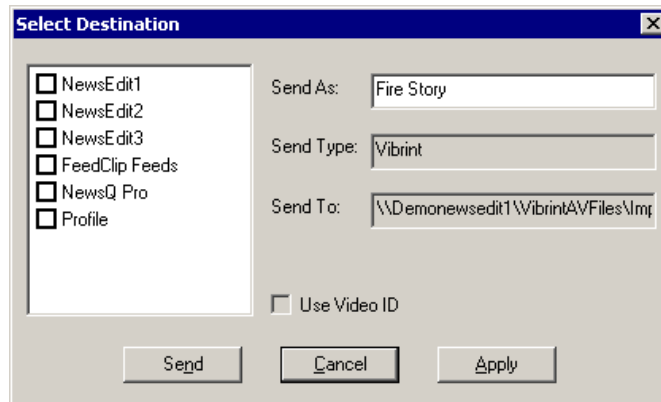
3. Click on the box for your system.

4. Click **Send** to send your sequence.

   Your sequence archives as a single clip.

To archive a sequence so it can be edited later, you must export it in .AAF format:

• Select **File | Export | AAF**, select a location for the file, and click **Save**.

Creating a Playback List

You can use NewsEdit XT's playback list feature to back up your primary playback server. With this feature, stories can be played to air from any edit bay.

If you want to send sequences directly to air from NewsEdit XT, use the Playback Channel feature. Opening a Playback Channel lets you add completed sequences in order and save the compiled list of sequences as a Playback List.

To create a playback list:

1. Choose **Channels | Open Playback Channel**.

   The Playback Channel window appears:
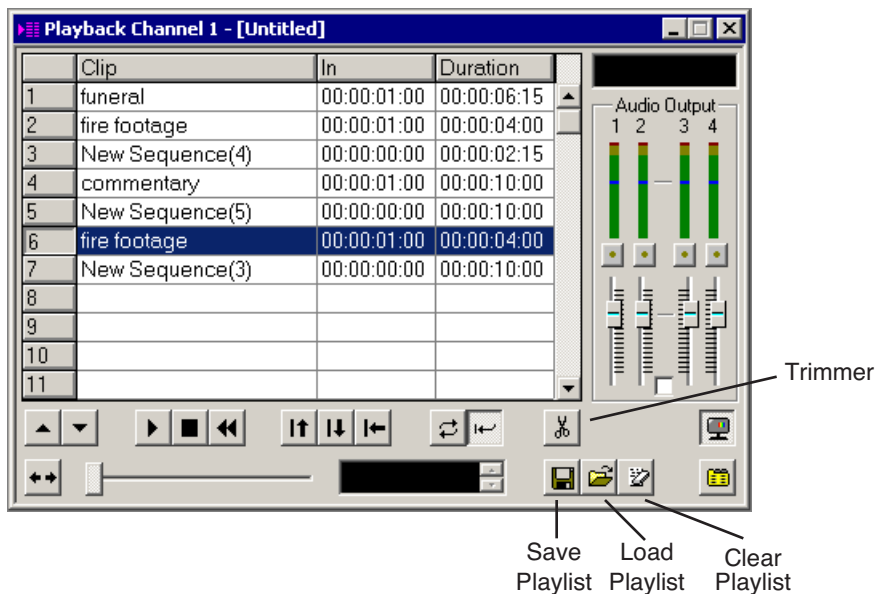
2. Open the bin (or bins) where the sequences reside.

3. Highlight each sequence and drag it into the numbered slots in the window.

4. When you are done adding sequences, click the **Save** button.

   The Save Playlist window appears:

Enter name of playlist ⎯⎯⎯

Save Playlist

11 PM show

11 PM show
5 PM show
6 PM show
fire profile story

Click to save playlist ⎯⎯⎯ | Save | Delete | Cancel
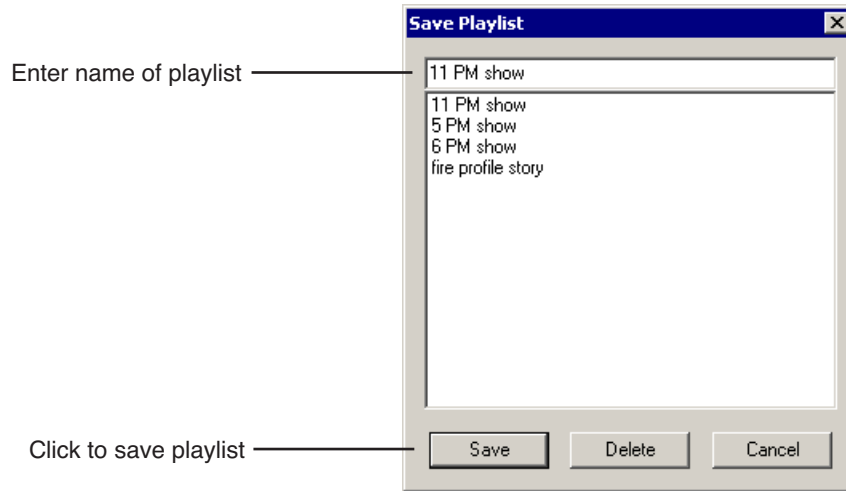
5. Enter the name of the playlist and click **Save**.

6. When you are ready to air the playlist, click the **Load** button.

   The Load Playlist window appears:

Select name of playlist⎯

Load Playlist

11 PM show

11 PM show
5 PM show
6 PM show
fire profile story

Click to load playlist ⎯⎯⎯ | Load | Delete | Cancel
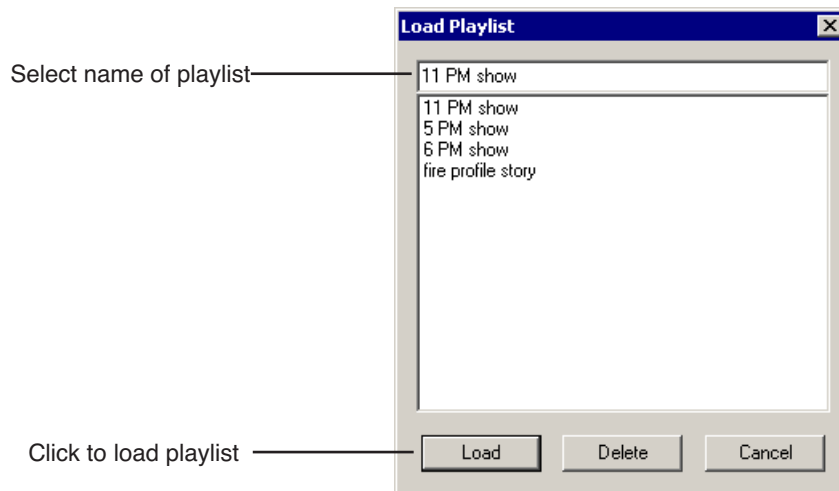
7. Select the name of the playlist you want and click **Load**.

The playlist loads into the Playback Channel window.

You can now play or review the playlist.

Playing Sequences in the Playback List

There are several ways to view a playlist. Use the buttons below to move through the list.
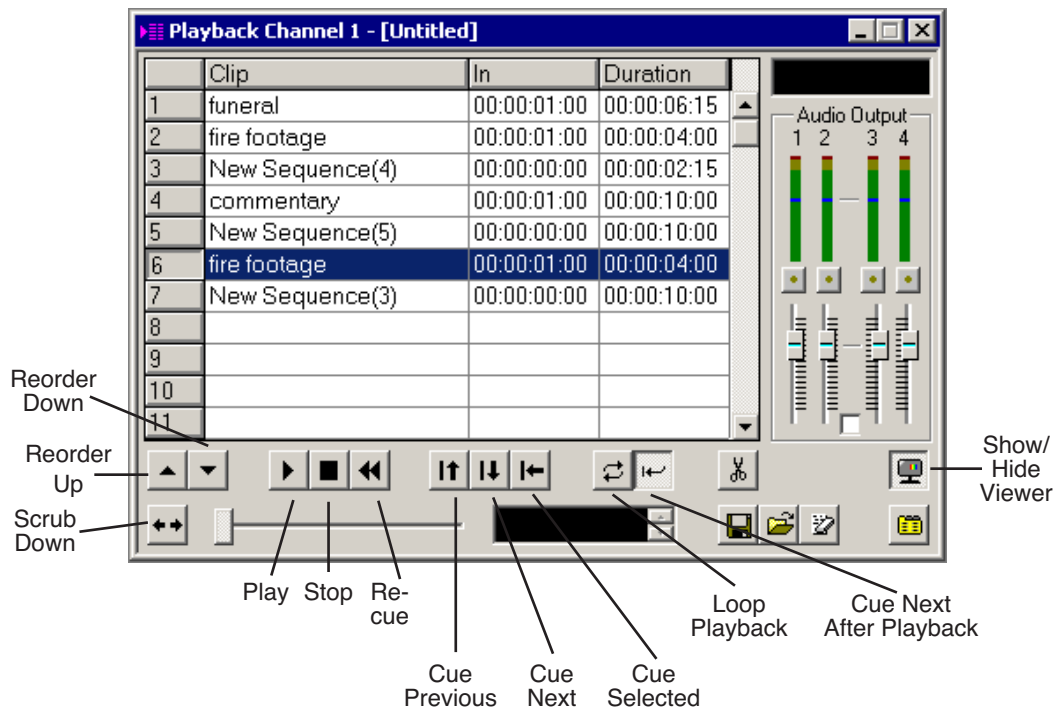
TIP—You can play through all sequences by pressing **Ctrl + Shift** *on the keyboard and simultaneously clicking the* **Play** *button on the screen, which continuously loops the entire playlist. Turn* **Loop Playback** *off and* **Cue Next After Playback** *on to use this feature.*

You have the option of viewing footage while playing a sequence. To view your sequences, click the **Show/Hide Viewer** button.

The Playback Channel View window appears:
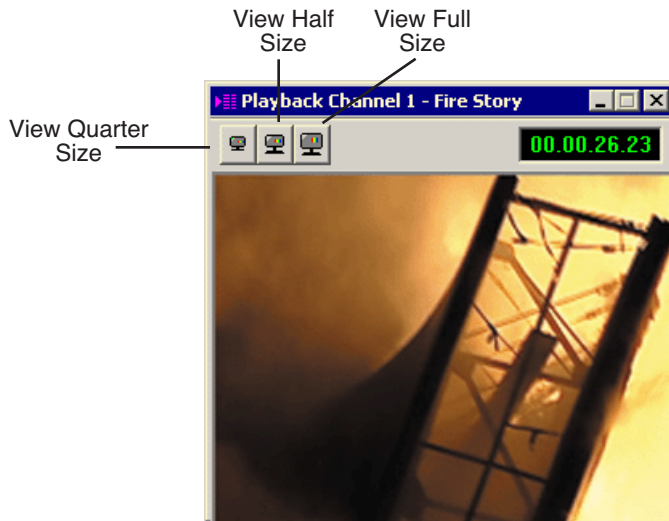
Trimming Sequences in the Playlist

You can trim sequences in the playlist without going back to the original sequence in the bin.

To trim a sequence in the playlist:

1. Highlight the sequence you want to trim.

2. Click the **Trimmer** button in the Playback Channel window.

   The Trimmer window appears:
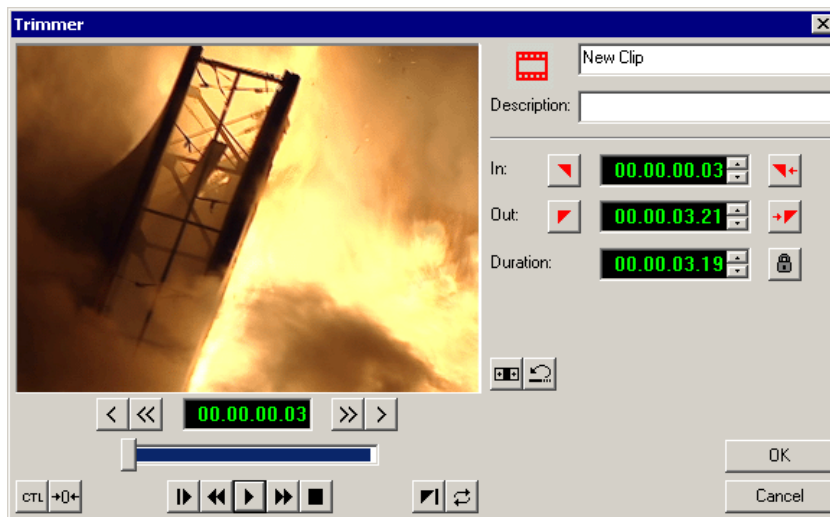
3. Change the Mark In and Mark Out points for the clip.

4. Click **OK**.

Changing Playback Colors

In the playback list, different colors indicate the playback status of sequences.

To change the playback colors:

1. Choose **Channels | Playlist Colors**.

   The Playlist Colors window appears:
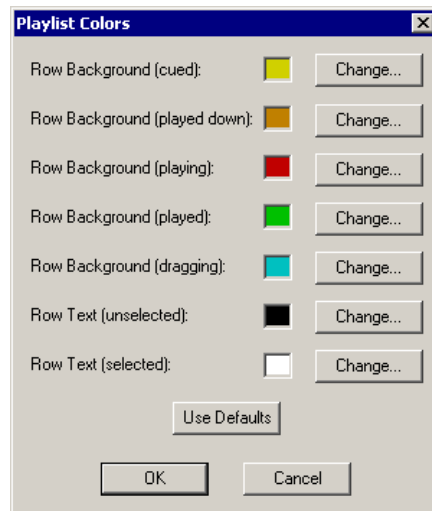
2. Click **Change** for the row color you wish to change.

3. Pick a new color and click **OK**.

4. Change other colors as necessary.

5. Click **OK**.

Archiving Sequences on Tape

The Play to Tape feature records one story at a time, though you can also record stories in groups.

To archive a group of stories, create a playlist with the selected sequences and then record the playlist to tape. It is a good idea to load a clip of black (or a countdown) for approximately 5 seconds in between each sequence. You can record a clip of black and keep it in your MISC folder in your Bin.

To archive your sequences to tape:

1. Create a playlist using the sequences you want to archive.

   See "Creating a Playback List" on page 227 for instructions.

2. Press Record on your tape deck.

3. Press the **Play** button in the Playback Channel window.

   TIP—You can play through all sequences by pressing Ctrl + Shift *on the keyboard and simultaneously clicking the* Play *button on the screen, which continuously loops the entire playlist. Turn* Loop Playback *off and* Cue Next After Playback *on to use this feature.*

The NewsEdit XT Keyboard

This appendix lists all of the keyboard functions that control NewsEdit XT, including key combinations using the Control and Shift keys.

Icon	Key	Name	Function
	Esc	Unused	
	F1	Unused	
	F2	Send	Lets you send a clip or sequence to another destination.
	F3	Match to Bin	Matches the selected frame in the Timeline to the exact frame in the Bin and becomes the Clip Source.
	F4	Match to Source	Matches the exact frame of the clip and loads the timecode into the Mark In of the first remote source.
	F5	Cut Mark In; Refresh	Cuts the beginning of the clip, the top, off of the selected clips on the Timeline; In the Bin, refreshes bin folders and displays any newly imported files.
	F6	Cut Mark Out	Cuts the end of the clip, the tail, off of the selected clips on the timeline.
	F7	Go to Mark In	Moves to the Mark In point.
	F8	Go to Mark Out	Moves to the Mark Out point.
	F9	Overwrite edit mode	Allows you to overwrite clips to the Timeline.
	F10	Splice edit mode	Allows you to splice clips to the Timeline.
	F11	Fit To Fill	Lets you create fit to fill clips.
	F12	Record	Starts recording from source or source bin.
	~	Play	Plays the Timeline, source or clip.
	Shift + ~	Add Handles	In the Source Tool, toggles clip handles on and off. When on, handles appear as additional frames on the slider in the Viewing Monitor.

Icon	Key	Name	Function
↖	1	Timeline Tool	Selects and moves items on the Timeline.
⊟•]	2	Source Tool	Views the source.
	Ctrl + 2	Quick Edit	In the Source Tool, toggles Quick Edit mode on and off. When on, NewsEdit XT automatically switches you to the Source Tool after an edit to the Timeline.
✂	3	Trim Tool	Trims Mark In and Mark Out points in your clips.
←|→	4	Cut Point Edit Tool	Trims the cut points between adjacent clips.
✕	5	Transition Tool	Adds transition effects to your clips.
🔊	6	Audio Mixer Tool	Adjusts the audio tracks in your clips.
	Ctrl + 6	Show All Tracks	Display all of the audio tracks on the Timeline.
🔊	7	Audio Effects Tool	Adjusts the Audio EQ in your clips and disguise voices.
🎥	8	Video Effects Tool	Creates video effects to use on your clips, such as blurs and Picture-in-Picture.
	Ctrl + 8	Effects (FX)	Toggles the Effects Track (FX) on and off.
	Shift + 8	Add Effect	Adds a blank effect to the Timeline.
🛠	9	Input Tools	Lets you adjust the Audio EQ in a clip while it is recording.
⫤	0	Collapse	Collapses a clip in a sequence to close a gap between media.
⊖	(-)	Zoom out	Zooms the view in the Timeline out.
⊕	(+)	Zoom in	Zooms the view in the Timeline in.
▷|	Q	Play From Start	Plays sequence or clip starting at the beginning.
	Ctrl + Q	Eject	Ejects tape from tape deck.

Icon	Key	Name	Function
▶	**W**	Play	Plays the Timeline, source or clip.
	Ctrl + W	Run Effect	Plays the video effect from the beginning.
	Shift + W	Reverse Play	Plays sequence in the Timeline in reverse.
◀◀	**E**	Rewind	Rewinds for both Timeline and Source.
▶▶	**R**	Fast Forward	Fast Forwards for both Timeline and Source.
	Ctrl + R	Record	Starts recording from source or source bin.
	Shift + R	Rename	In the Bin, lets you change the name of a selected clip or sequence.
	Ctrl + Shift + R	Render Selected	Renders the selected effect.
◄]►	**T**	Trim Mark Out	Trims the Out point in the Cut Point Edit Tool; changes the duration of the sequence.
	Ctrl + T	Title Tool	Adds titles and graphics to your sequences.
◄[►	**Y**	Trim Mark In	Trims the In point in the Cut Point Edit Tool; changes the duration of the sequence.
	Ctrl + Y	Redo	Re-applies the last edit for which you used the Undo command.
◄][►	**U**	Trim Both	Trims both the In and Out points in the Cut Point Edit Tool; doesn't change the duration of the sequence.
◣	**I**	Mark In	Marks an In point.
	Ctrl + I	Go to Mark In	Moves to the Mark In point.
	Shift + I	Mark Audio In	Creates an Audio Mark In point for either the Timeline or the source.
◢	**O**	Mark Out	Marks an Out point.
	Ctrl + O	Go to Mark Out	Moves to the Mark Out point.
	Shift + O	Mark Audio Out	Creates an Audio Mark Out point for either the Timeline or the source.

Icon	Key	Name	Function
◣	**P**	Clear Mark In	Clears the In point.
	Ctrl + P	Sequence Properties	Displays the Sequence Properties for the current sequence in the Timeline.
	Shift + P	Clear Audio In	Clears the Audio In point.
	Alt + P	Clear All Mark Points	Clears all points in the Timeline and Source Tools.
◿	**[**	Clear Out	Clears the Out point.
	Shift + [	Clear Audio Out	Clears the Audio Out point.
⬒	**]**	Lift Clip	Lifts selected clip out of the sequence, leaving black and silence.
	Ctrl +]	Lift Area	Lifts the area between the Mark In and Mark Out points.
✧	****	Split Clip	Splits the selected clip at the cursor point.
‹	**A**	Move 1 frame back	Moves cursor one frame back on the Timeline.
	Ctrl + A	Aux Input	Switches to the auxiliary input source.
	Shift + A	Show Audio Marks	Toggles the video and audio Mark In and Out points.
›	**S**	Move 1 frame forward	Moves cursor one frame forward on the Timeline.
	Ctrl + S	Save	Saves your sequence.
	Shift + S	Select All	Selects all clips, effects, graphics, and audio clips on the Timeline.
«	**D**	Move 10 frames back	Moves cursor 10 frames back on the Timeline.
	Ctrl + D	Move one second back	Moves cursor 1 second back on the Timeline.
	Shift + D	Deselect All	Removes the highlight on all items on the Timeline.

Icon	Key	Name	Function
≫	**F**	Move 10 frames forward	Moves cursor 10 frames forward on the Timeline.
	Ctrl + F	Move one second forward	Moves cursor 1 second forward on the Timeline.
	Ctrl + Shift + F	Insert Filler	Places a gap between the clip at the cursor location.
⊢	**G**	Move to previous cut point	Moves cursor to the previous cut point.
	Ctrl + G	Graphic	Toggles the Graphics Track (G) on and off.
⊣	**H**	Move to next cut point	Moves cursor to the next cut point.
V	**J**	Video 1	Toggles video track V1 on and off.
	Ctrl + J	Video 2	Toggles video track V2 on and off.
	Ctrl + Shift + J	Video sync lock	Toggles the video sync lock on and off for V1.
A1	**K**	Audio 1	Toggles audio track A1 on and off.
	Ctrl + K	Audio 5	Toggles audio track A5 on and off.
	Shift + K	Sync lock	Toggles the sync lock on and off for A1.
	Ctrl + Shift + K	Sync lock	Toggles the sync lock on and off for A5.
A2	**L**	Audio 2	Toggles audio track A2 on and off.
	Ctrl + L	Audio 6	Toggles audio track A6 on and off.
	Shift + L	Sync lock	Toggles the sync lock on and off for audio track A2.
	Ctrl + Shift + L	Sync lock	Toggles the sync lock on and off for A6.
A3	**;**	Audio 3	Toggles audio track A3 on and off.
	Ctrl + ;	Audio 7	Toggles audio track A7 on and off.
	Shift + ;	Sync lock	Toggles the sync lock on and off for audio track A3.
	Ctrl + Shift + ;	Sync lock	Toggles the sync lock on and off for A7.

Icon	Key	Name	Function
A4	'	Audio 4	Toggles audio track A4 on and off.
	Ctrl + '	Audio 8	Toggles audio track A8 on and off.
	Shift + '	Sync lock	Toggles the sync lock on and off for A4.
	Ctrl + Shift + '	Sync lock	Toggles the sync lock on and off for A8.
⎸⟨	**Z**	Extend left	Moves the selected clip to the previous cut point.
	Ctrl + Z	Undo	Removes the last edit you did.
⟩⎸	**X**	Extend right	Moves the selected clip to the next cut point.
	Ctrl + X	Cut	Removes the selected clip from the Timeline.
	C	Copy To Timeline	Copies selected clips from Bin as well as Timeline clip sources to the Timeline.
	Ctrl + C	Copy	Copies selected clip or sequence in the Bin.
	Shift + C	Load Clip to Source	Takes a clip from the Bin and loads it as a source.
◀⬚▶	**V**	Extend Edit	Extends an edit past the end of the clip using handles.
	Ctrl + V	Paste	Pastes the clip or sequence in the Bin.
	Shift + V	Render All	Renders all unrendered transitions or other effects.
CTL	**B**	Control Track	Toggles between Timecode and Control Track.
→0←	**N**	Reset Control Track	Resets the Control Track to 00:00:00:00.
◀⬚	**M**	Select previous clip	Selects the previous clip in the sequence.
	Ctrl + M	Move to Mark In point	Moves the selected clip to the Mark In point.
	Shift + M	Mixdown Selected	Layers the selected effect into the video track immediately below it.
⬚▶	,	Select next clip	Selects the next clip in the sequence.
⬆⬚	.	Select previous track	Selects a clip on the previous track in the sequence.

Icon	Key	Name	Function
	/	Select next track	Selects a clip on the next track in the sequence.
Space Bar		Stop/Record	Toggles between recording and stopping recording.
Pause☐ ☐ _____ Break	**Pause**	Enable Vary Speed	Enables variable speed controls in the Source Tool.
Insert	**Insert**	Insert Keyframe	In the Video Effects Tool, adds a keyframe to the currently selected effect.
	Ctrl + Insert	Modify Keyframe	In the Video Effects Tool, applies your changes to the current keyframe.
	Shift + Insert	Modify All Keyframes	In the Video Effects Tool, allows you to apply changes to one keyframe to all keyframes within an effect.
Home	**Home**	Go to Start	Moves the position to the beginning of a clip or sequence.
Page☐ Up	**Page Up**	Previous Vary Speed	In the Source Tool or Trimmer, selects the previous variable speed.
		Previous Keyframe	In the Video Effects Tool, goes to the previous keyframe for the effect.
Delete	**Delete**	Delete	Deletes the selected clip from the Bin or the Timeline.
	Ctrl + Delete	Delete area	Deletes the selected area from the Bin or the Timeline.
End	**End**	Go to End	Moves the position to the end of a clip or sequence.
Page☐ Down	**Page Down**	Next Vary Speed	In the Source Tool or Trimmer, selects the next variable speed.
		Next Keyframe	In the Video Effects Tool, goes to the next keyframe for the effect.
←	**Left arrow**	Shuttle Rewind	Shuttles left in increments of -50%, -75%, -1x, -2x, -3x.
→	**Right arrow**	Shuttle Fast Forward	Shuttles right in increments of +50%, +75%, -1x, -2x, -3x.

Icon	Key	Name	Function
↑	**Up arrow**	Shuttle Default Speed	Resets shuttle speed to its default speed.
↓	**Down arrow**	Shuttle Previous Speed	Selects previous shuttle speed.
←	**Numberpad 4**	Back 1 frame	Moves the selected clip on the Timeline backwards one frame.
	Ctrl + Numberpad 4	Back 10 frames	Moves the selected clip on the Timeline backwards 10 frames.
→	**Numberpad 6**	Forward 1 frame	Moves the selected clip on the Timeline forward one frame.
	Ctrl + Numberpad 6	Forward 10 frames	Moves the selected clip on the Timeline forward 10 frames.

Video Effects

This appendix lists all of the video effects and 3D transformations you can create within your sequences, a description of each, and the options available for each effect.

To learn about creating video effects, see Chapter 11.

How Video Effects Work Together

Most video effects can be used alone or in conjunction with other effects to create a different, more complex effect. The Blur effect is the only effect that cannot be used alone; you must combine it with the Key Shape effect.

Effects

This table shows which video effects can be combined with NewsEdit XT.

Effects	Resize	Key Shape	Blur	Mosaic	Color Effect	Proc Amp	Color Correct	Color Invert	Mirror Vertical	Mirrow Horizontal	Luma Key	Chroma Key	Warp
Resize	✔					✔		✔	✔	✔			
Key Shape		✔	✔	✔	✔	✔		✔	✔	✔			
Blur		✔	✔										
Mosaic		✔		✔									
Color Effect		✔			✔								
Proc Amp	✔	✔				✔		✔	✔	✔			
Color Correct							✔						
Mirror Vertical	✔	✔				✔		✔	✔	✔			
Mirror Horizontal	✔	✔				✔		✔	✔	✔			
Luma Key	✔					✔					✔		✔
Chroma Key	✔					✔						✔	✔
Warp	✔					✔					✔	✔	✔

✔ You can only use the Blur effect in conjunction with the Key Shape effect.

3D Transformations

All of the 3D Transformations can be used with each other.

Keyframes

Within the Video Effects Tool, some parameters are keyframeable and some are not. That is, if a parameter is keyframeable, the parameter can change from one keyframe to the next. If a parameter is not keyframeable, that parameter is used for the entire effect and cannot change across keyframes.

The type of effect or 3D transformation is not keyframeable. The following tables list the type of effect, its parameters and options, and whether each is keyframeable.

Effects

Effect	Parameter	Keyframeable	
		Yes	**No**
	Track Selection		✔
	Path	✔	
Resize and Key Shape Effects	X-Position	✔	
	Y-Position	✔	
	Z-Position	✔	
	X-Aspect	✔	
	Y-Aspect	✔	
	Shape		✔
Blur	Defocus	✔	
	O-Soft		✔
Mosaic	Size	✔	
	O-Soft		✔

Effect	Parameter	Keyframeable	
		Yes	**No**
Color Effect	Opacity	✔	
	Color	✔	
Proc Amp	Gain	✔	
	Chroma	✔	
	Setup	✔	
	Hue	✔	
	Background	✔	
Color Correct	White Balance	✔	
	White Clip	✔	
	Black Balance	✔	
	Gamma Balance	✔	
Mirror Vertical			✔
Mirror Horizontal			✔
Luma Key	Clip	✔	
	Gain	✔	
Chroma Key	Hue	✔	
	Range	✔	
	Threshold	✔	
	Softness	✔	
	Suppress	✔	
	Luma Suppress	✔	
	Chroma Suppress	✔	

Effect	Parameter	Keyframeable	
		Yes	**No**
Warp	Type		✔
	Amplitude	✔	
	Aspect	✔	
	Axis Angle	✔	
	Curl Angle	✔	
	Curve	✔	
	Edge Softness	✔	
	Frequency	✔	
	Offset	✔	
	Radius	✔	
	Skew	✔	
	Skew Amplitude	✔	
	Skew Angle	✔	
	Split Softness	✔	
	Transparency	✔	
	X-Position	✔	
	X-Size	✔	
	Y-Position	✔	
	Y-Size	✔	

3D Transformations

All of the parameters for each of the 3D transformations is keyframeable.

Options

Option	Parameter	Keyframeable	
		Yes	No
Blend	Opacity	✔	
	O-Soft		✔
	I-Soft		✔
Border	Left	✔	
	Right	✔	
	Top	✔	
	Bottom	✔	
	All	✔	
	Color	✔	
	Type		✔
Crop	Left	✔	
	Right	✔	
	Top	✔	
	Bottom	✔	
	All	✔	
Hold Key	Left	✔	
	Right	✔	
	Top	✔	
	Bottom	✔	
	Size	✔	

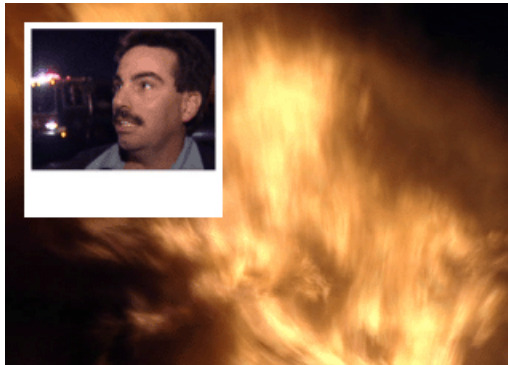| Option	Parameter	Keyframeable	
		Yes	**No**
Drop Shadow	Opacity		✔
	X-Offset	✔	
	Y-Offset	✔	
	All	✔	
	Softness		
	Color	✔	
Path Control	Tension	✔	
	Continuity	✔	
	Bias	✔	
	Path	✔	
Slab	Width	✔	
	Color	✔	
Highlight	Intensity	✔	
	Color	✔	

Effects and What They Do

Each video effect has a different function and different adjustment controls.

Resize

You can use the Resize effect with a single video track or with both video tracks (V1 and V2). You can also use a Resize effect in conjunction with the Proc Amp, Color Invert, Mirror Vertical, and Mirror Horizontal effects. When you use resize with one video track, you are generally enlarging the image. Enlarging lets you zoom in on a still image, remove a logo, or highlight newspaper print. When you use resize with two video tracks, you create a Picture-in-Picture (PIP) with V2 in the foreground and V1 in the background.

To resize an image, use the slide control or adjust the dials.

Option	Range	Description
X-Position	-32 to +32 (4:3) -128 to +128 (16:9)	Moves the image left or right.
Y-Position	-24 to +24 (4:3) -72 to +72 (16:9)	Moves the image up or down.
Size	0 to 4	Moves the image closer or farther away.
X-Aspect	0 to 4	Adjusts the image width left to right.
Y-Aspect	0 to 4	Adjusts the image width top to bottom.
Shape		Change the shape of the Key Shape effect by clicking the **Change** button on the Effects tab, selecting a new shape, and clicking **OK**.

Key Shape

You can use the Key Shape effect with a single video track or with both video tracks (V1 and V2). You can also use a key shape effect in conjunction with these effects: Blur, Mosaic, Color Effect, Proc Amp, Color Invert, Mirror Vertical and Mirror Horizontal.

When you use a Key Shape effect with one video track, you can create a variety of effects. You can apply a Blur or Mosaic effect in conjunction with the key shape to block out a face. You can also use this effect for other purposes, including creating a highlight with Proc Amp and bringing up the gain of the video image through a small hole, adding a gray blotch if the Blur and Mosaic effects aren't sufficient, or creating a spotlight effect.

You use two video tracks with the Key Shape effect in much the same way as you use a PIP. However, a Key Shape effect only provides the shape instead of resizing the image. In order to see the key shape image, you need to choose V2 to be over V1 in the Video Effects Tool (Select **V2/V1** from the Track drop-down box in the Effects tab). The key shape appears to "punch a hole" through V1 with the V2 image displaying in the key.

To position a Key Shape effect, drag the image in the Video Window or use the Left and Right arrow keys on the keyboard.

Option	Range	Description
X-Position	-32 to +32 (4:3) -128 to +128 (16:9)	Moves the key shape left or right.
Y-Position	-24 to +24 (4:3) -72 to +72 (16:9)	Moves the key shape up or down.
Size	0 to 4	Moves the key shape closer or farther away.
X-Aspect	0 to 4	Stretches or shrinks the key shape from the left and right.
Y-Aspect	0 to 4	Sretches or shrinks the key shape from the top and bottom.
Shape		Change the shape of the Key Shape effect by clicking the **Change** button on the Effects tab, selecting a new shape, and clicking **OK**.

Blur

You use the Blur effect to cover up an image that needs to be protected or disguised. When you select the Blur effect, the Key Shape effect automatically turns on. This is because you need the Key Shape effect to select the size, shape, and position of the blur. You cannot create a Blur effect without using the Key Shape effect as well.

When covering up an image throughout a clip, you probably have to move the blur effect several times in order to cover the image as the clip plays. You can do this quickly using the keyboard keys.

Option	Range	Description
Defocus	0 to 5	0 is no blur and 5 is the heaviest blur.
O-Soft	0 to 100	0 is no softness and 100 is full softness for the outside region of the shape.

To create a blur effect using the keyboard:

1. Add a blank effect to the Timeline and select it.

2. Check the Blur checkbox to choose the effect.

3. Find a size and shape for the blur that you like.

   Move the slider up or down to change the size of the blur; check the Key Shape box on the Effects tab and click **Change** to change the shape.

4. Move the blur pattern over the image at the beginning of the effect.

5. Hit **Insert** on the keyboard.

   This places a keyframe in the effect on the Timeline.

6. Using the **A**, **S**, **D**, and **F** keys, step through the clip to determine if you need to move the blur pattern in order to cover the image.

7. If you need to move the blur, use the left, right, up, and down arrow keys to place the blur pattern over the image.

8. Hit **Insert** on the keyboard.

9. Continue until the end of the clip.

If you need to resize the blur, press the Ctrl + Up and Down keys.

Mosaic

You can also use the Mosaic effect to cover up an image that needs to be
protected or disguised. When you select the Mosaic effect, the Key Shape effect
automatically turns on. This is because you need the Key Shape effect to select
the size, shape, and position of the mosaic. Unlike the Blur effect, however, you
can turn off the Key Shape effect, giving the entire image a mosaic effect.

When covering up an image throughout a clip, you probably have to move the
mosaic effect several times in order to cover the image as the clip plays. You
can do this quickly using the keyboard keys.

Option	Range	Description
Size	0 to 5	0 is no mosaic at all and 5 is the largest block size.
O-Soft	0 to 100	0 is no softness and 100 is full softness for the outside region of the shape.

To create a Mosaic effect using the keyboard:

1. Check the Mosaic checkbox to choose the effect.

2. Find a size and shape for the mosaic that you like.

   Move the size slider up or down to change the size of the mosaic; check the Key Shape box on the Effects tab, then click **Change** to change the shape.

3. Move the mosaic pattern over the image at the beginning of the effect.

4. Hit **Insert** on the keyboard.

   This places a keyframe in the effect on the Timeline.

5. Using the **A**, **S**, **D**, and **F** keys, step through the clip to determine if you need to move the mosaic pattern in order to cover the image.

6. If you need to move the mosaic, use the left, right, up, and down arrow keys to place the mosaic pattern over the image.

7. Hit **Insert** on the keyboard.

8. Continue until the end of the clip.

If you need to resize the mosaic, press the Ctrl + Up and Down keys.

Color Effect

You use the Color Effect either as a standalone effect or in conjunction with the Resize or Key Shape effects to create an area of color.

You can change the color and the opacity to create the effect you want.

Option	Range	Description
Opacity	0 to 100	0 is not visible at all and 100 is opaque.
Color	Standard Windows color picker	Change the color by clicking the **Change** button on the Effects tab and selecting a new color.

Proc Amp

You adjust video levels using the Proc Amp effect. You use this effect either as a standalone effect or in conjunction with the Resize or Key Shape effects.

You use four controls — Gain, Chroma, Setup, and Hue — to alter the entire image or part of the video image.

One way to use the Proc Amp effect is to spotlight an image. You create a key shape within a single track of video, check the Background checkbox, and increase the Gain in order to bring out the spotlight within the video image.

Option	Range	Description
Gain	-100 to +100	-100 appears black and +100 washes out with brightness. 0 is the default.
Chroma	-100 to +100	-100 appears black and white while +100 boosts the color scheme. 0 is the default.
Setup	-100 to +100	-100 crushes the black levels while +100 increases the brightness. 0 is the default.
Hue	-180 to +180	The sweep from -180 to 180 cycles through the entire spectrum of colors altering the image.
Invert	On or Off	Gives a film negative look to the image by inverting all of the colors within the video image.
Background	On or Off	Within a Resize or Key Shape effect, lets you adjust the background video layer.

Color Correction

You can adjust the colors in a video image using the Color Correct effect.

For a quick color correction, just use the White Balance parameter. For a complete color correction, use the parameters in this order for best results:

• Black Balance

• White Balance

• White Clip

• Gamma Balance

You can adjust colors individually using the dials or automatically. To adjust a dial, click the dial and drag right to increase the value or drag left to decrease the value. Double-click a dial to reset it to 0.

You can also make adjustments entering a value in the box below a dial or by clicking the up and down spin controls beside a value box.

To use automatic color correction:

1. Click a parameter button for the parameter you want to adjust.

   Select from White Balance, White Clip, Black Balance, or Gamma Balance.

2. Using the eyedropper on the video image, drag a box around an area that represents the best color for the parameter you're adjusting.

   For example, select the "whitest" area if you are adjusting White Balance.

Automatic Color Correction Eyedropper

3. Let go of the mouse.

   NewsEdit adjusts the color in the video image automatically.

4. Repeat steps 1-3 for the other parameters.

Parameter	Option	Range	Description
White Balance	Red	-100 to +100	Increases or decreases the component's overall level (gain) relative to the other colors; used to achieve "true white" in a specific part of the image. You can adjust each color individually or use the automatic adjustment (select a white area of the image you want to adjust to using the eyedropper).
	Green		
	Blue		
	All		
White Clip	Red	0 to 108	Limits the values of the red, green, and blue components of an image. You can adjust each color individually or use the automatic adjustment (select a white area of the image you want to adjust to using the eyedropper).
	Green		
	Blue		
	All		
Black Balance	Red	-20 to +20	Changes the pedestal of the red, green, and blue components of an image; provides a black or null offset for each color component. You can adjust each color individually or use the automatic adjustment (select a white area of the image you want to adjust to using the eyedropper).
	Green		
	Blue		
	All		
Gamma Balance	Red	1.00 to 4.40	Lets you bring out more detail in a color component; applies different values of gamma to the red, green, and blue components of an image. You adjust each color individually.
	Green		
	Blue		
	All		

Mirror Vertical

You use the Mirror Vertical effect either as a standalone effect or within the Resize or Key Shape effects. This effect flips the image vertically providing an upside-down view of the image.

The Mirror Vertical effect is either On or Off.

Mirror Horizontal

You use the Mirror Horizontal effect either as a standalone effect or within the Resize or Key Shape effects. This effect flips the image horizontally providing a reverse view of the image.

One way to use the Mirror Horizontal effect is to reverse an interview subject either within a PIP or to change story interviews from one side to the other.

The Mirror Horizontal effect is either On or Off.

Luma Key

Keying inserts part of one picture into another to create a composite picture. The Luma Key effect uses the color brightness of an incoming source to specify where to cut the hole in the background.

Option	Range	Description
Clip	0 to 100	Adjusts the luminance (brightness) level in the key signal above which the foreground or key fill video becomes visible over the background video.
Gain	0 to 100	Adjusts the sharpness of the key edge.
Invert	On or Off	Lets you see the video below the clip level; used for keying from dark graphics on a light background.

Chroma Key

The Chroma Key effect detects color (rather than luminance) in a video image and replaces it with a new background. You can use this effect to put a reporter sitting in front of a green screen into a background of a mountain scene, making it appear that the reporter is sitting in front of the mountain.

Option	Range	Description
Hue	0 to 359	Sets the color (tint) of the shadow.
Range	0 to 359	Sets the angle of discrimination applied to the chroma when generating a chroma key; the larger this angle is, the wider the range of colors will be which result in an opaque key being generated.
Threshold	0 to 125	Specifies the minimum threshold required to generate a chroma key.
Softness	0 to 100	Controls the gain of the chroma key; the larger the value, the greater the softness.
Suppress	0 to 100	Specifies the angle of chroma suppression used to generate a chroma key.
Luma Suppress	0 to 100	Indicates the amount of suppression applied to the luma when generating a chroma key.
Chroma Suppress	0 to 100	Indicates the amount of suppression applied to the chroma when generating a chroma key.
Invert	On or Off	Causes a hole to be cut in the background where a normal key retains the background, and vice versa; makes the white areas of the key signal produce transparency, and the black areas produce opacity, the opposite of a standard key.

Warp

You use a Warp effect to transform a video image in a nonlinear fashion. A linear transformation is a two dimensional image attached to a flat plane that moves in a three dimensional space; therefore, a nonlinear transformation bends or curves the plane that image is on. It can also slice the plane into small segments and move those segments individually in different directions or at different rates.

Option	Range	Description
Amplitude	-64 to +64	Sets the gain for the selected shape; affects the sharpness of the warp edge.
Aspect	-1.00 to +1.00	Changes the ratio of the image's width to its height, making it taller or wider than the original image; used with circular warp effects, it stretches the image into an oval shape.
Axis Angle	-180 to +180	Sets the direction the effect moves across the screen.
Curl Angle	-180 to +180	Sets the position from which the curl starts.
Curve	0 to 2	Used with circular warp effects, sets the amount of "roll" on the curved shape.
Edge Softness	0 to 100	Sets the amount of softness applied to the underneath edge of a warp effect edge.
Frequency	0 to 25	Changes the wavelength of the warp effect; it affects how many repetitions of the warp effect appear in the image.
Offset	-8.20 to +8.20	Sets the position of the warp effect on the background video.
Radius	0 to 100	Sets the distance from the center to the outer edge of circular warp shapes.
Skew	-1.0 to +1.0	Slants the image in the X (horizontal) and Y (vertical) directions.
Skew Amplitude	-4 to +4	Sets the gain for the slanted image.
Skew Angle	-180 to +180	Sets the angle for the slanted image.
Split Softness	0 to 100	Sets the amount of softness of the full-frame edge of a warp effect.
Transparency	0 to 100	Sets how much of the background image you can see through the effect.
X-Position	-12 to +12	Moves the image left or right.

Option	Range	Description
X-Size	0 to 1.00	Used with a Mosaic warp effect, adjusts the size of the box width.
Y-Position	-9 to +9	Moves the image up or down.
Y-Size	0 - 1.00	Used with a Mosaic warp effect, adjusts the size of the box height.

The following table illustrates which warp parameters are available for each warp type.

Warp Effects and Parameters	Amplitude	Aspect	Axis Angle	Curl Angle	Curve	Edge Softness	Frequency	Offset	Radius	Skew	Skew Amplitude	Skew Angle	Split Softness	Transparency	X-Position	X-Size	Y-Position	Y-Size
Arrow	✔		✔				✔	✔			✔	✔						
Ball					✔				✔						✔		✔	
Bow Tie	✔						✔	✔		✔								
Bumps	✔						✔	✔		✔								
Bursts One Burst Center Burst	✔		✔				✔	✔			✔	✔						
Circle	✔						✔	✔		✔								
Ellipse	✔						✔	✔		✔								
Goblet	✔						✔	✔		✔								
Hexagons Regular Medium Wide	✔						✔	✔		✔								
Hour Glass Regular Thin	✔						✔	✔		✔								

Warp Effects and Parameters	Amplitude	Aspect	Axis Angle	Curl Angle	Curve	Edge Softness	Frequency	Offset	Radius	Skew	Skew Amplitude	Skew Angle	Split Softness	Transparency	X-Position	X-Size	Y-Position	Y-Size
Magnifying Glass — Glass 1 and 2	✔	✔					✔		✔						✔		✔	
Melt Horizontal — Horizontal 1 - Horizontal 9	✔						✔								✔		✔	
Melt Vertical — Vertical 1 - Vertical 9	✔						✔								✔		✔	
Mosaic																✔		✔
Octagon	✔						✔	✔		✔								
Page Fold, Page Curl 1, and Page Curl 2 — No Split / Horizontal / Reverse Horizontal / Vertical / Reverse Vertical / Quad Split				✔	✔			✔	✔				✔	✔				
Rain Drop	✔						✔	✔		✔								
Sawtooth	✔		✔				✔	✔			✔	✔						
Sine Wave	✔		✔				✔	✔			✔	✔						
Slats	✔		✔				✔	✔			✔	✔						
Splash — Hole / Burst / 5 Ring / Ring 1 and 2	✔	✔					✔		✔						✔		✔	

Warp Effects and Parameters	Amplitude	Aspect	Axis Angle	Curl Angle	Curve	Edge Softness	Frequency	Offset	Radius	Skew	Skew Amplitude	Skew Angle	Split Softness	Transparency	X-Position	X-Size	Y-Position	Y-Size
Vortex	✔	✔					✔		✔						✔		✔	
Worm Hole Vortex 3 and 5																		
Waves	✔	✔					✔		✔						✔		✔	
Single Wave Multi-wave																		

3D Transformations and What They Do

Each 3D transformation has a different function and different adjustment controls.

Resize

Enlargement and reduction of the image area while it remains in the same plane in 3D space.

Option	Range	Description
X-Position	-32 to +32	Moves the image left or right .
Y-Position	-24 to +24	Moves the image up or down.
Size	0 to 4	Moves the image closer or farther away.
X-Aspect	0 to 4	Adjusts the image width left to right.
Y-Aspect	0 to 4	Adjusts the image width top to bottom.

Locate

You use the Locate transformation to move the image anywhere on the screen. or to a position partially or completely off-screen.

Option	Range	Description
X-Position	-32 to +32	Moves the image left or right.
Y-Position	-32 to +32	Moves the image up or down.
Z-Position	-32 to +32	Moves the image closer or farther away; the image appears larger or smaller but does not actually change in size.

Rotate

You use the Rotate transformation to rotate the image around the reference axis in the X, Y, and Z dimensions. Rotate is limited to +/- one half revolution, and always takes the shortest path to the new position. Multiple rotations can be done using the Spin transformation.

X Axis Rotate   Y Axis Rotate   Z Axis Rotate
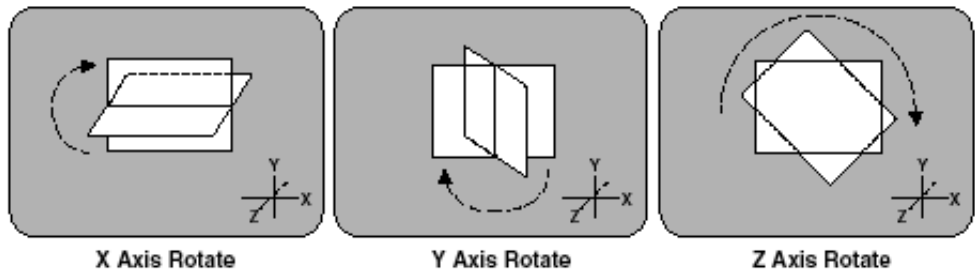
Option	Range	Description
X-Axis	-50 to +50	Moves the image left or right along the horizontal axis.
Y-Axis	-50 to +50	Moves the image left or right along the vertical axis.
Z-Axis	-50 to +50	Moves the image relative to the viewing point; positive values move the image away, making it appear smaller, negative values move the image closer, making it appear larger.

Spin

You use the Spin transformation to do multiple rotations about the reference axis in the X, Y, and Z directions. Spin supports fractional values, and is similar to Rotate when the move is less than +/- one half revolution. Spin applies transformation values in Z, X, Y order, so editing effects in this axis order provides the best control of the effect.

Option	Range	Description
X-Axis	-999 to +999	Moves the image left or right along the horizontal axis.
Y-Axis	-999 to +999	Moves the image left or right along the vertical axis.
Z-Axis	-999 to +999	Moves the image relative to the viewing point; positive values move the image away, making it appear smaller, negative values move the image closer, making it appear larger.

It is possible to use both Spin and Rotate at the same time in an effect. When both are used, the transformations are nested to that the values of one are applied after the previous transformation values are calculated. This nesting provides increased control of the effect dynamics. Source and Target space also affects the transform nesting order.
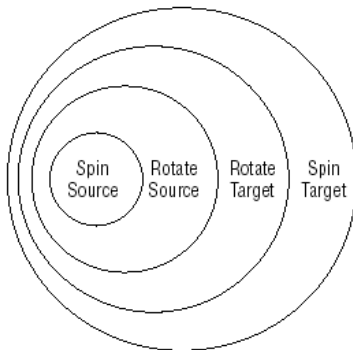
Skew

You use the Skew transformation to slant the image in the X (horizontal) and Y (vertical) directions.
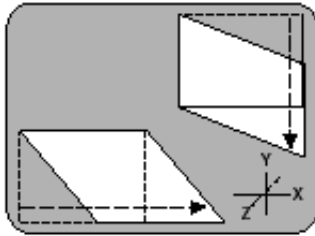
Option	Range	Description
X-Axis	-32 to +32	Moves the image left or right along the horizontal axis.
Y-Axis	-24 to +24	Moves the image left or right along the vertical axis.

Scale

You use the Scale transformation to adjust the size of the image.
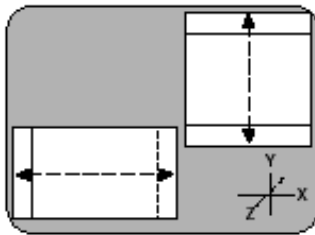
Option	Range	Description
X-Aspect	0 to 4	Adjusts the image width left to right.
Y-Aspect	0 to 4	Adjusts the image width top to bottom.

Axis Locate

You use the Axis Locate transformation to determine the center point of
translations, spins, and rotations for that channel. You can move the axis to a
new location to change the behavior of that channel. The axis location can be
within or outside of the screen area.
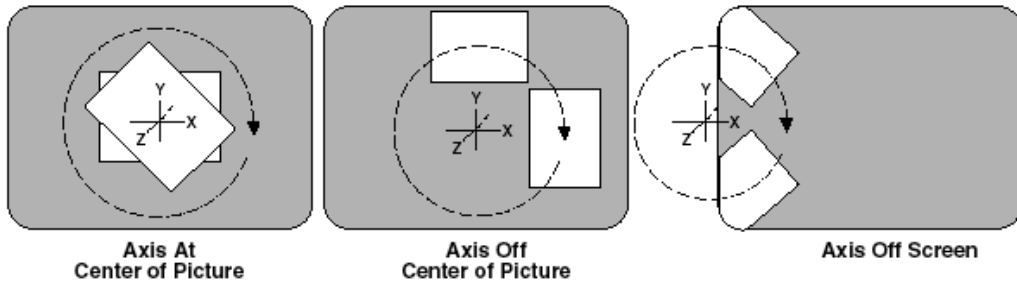
Axis At
Center of Picture

Axis Off
Center of Picture

Axis Off Screen

Option	Range	Description
X-Position	-32 to +32	Moves the image left or right.
Y-Position	-24 to +24	Moves the image up or down.
Z-Position	-32 to +32	Moves the image closer or farther away.

Perspective

You use the Perspective transformation to change the viewer's apparent viewpoint of an image. This only applies when an image is tilted so part of it is farther from the viewer. The farther portion appears smaller than the closer portion, and the amount of perspective controls how much smaller the distant part is.

Option	Range	Description
X-Axis	-32 to +32	Moves the image left or right along the horizontal axis.
Y-Axis	-24 to +24	Moves the image left or right along the vertical axis.
Z-Axis	-32 to +32	Moves the image relative to the viewing point; positive values move the image away, making it appear smaller, negative values move the image closer, making it appear larger.

Options For Resize or Key Shape Effects

Effect options can be applied to both Resize and Key Shape effects. Options include the ability to add borders, crop images, apply drop shadows, .

> *NOTE: When using the default resize rectangle, you can round the corners of the shape by checking the Rounded Corners checkbox. When you use rounded corners and apply a border or a softness to the rectangle image, the image's edges appear rounded, not square.*

Blend Options

Blend options affect the characteristics of the resize or key shape.

Option	Range	Description
Opacity	0-100	Opacity affects the entire foreground image. The default is 100%, which shows the foreground image and hides the background image. As you change the opacity percentage, the foreground image blends into the background image. Use the opacity option to create fade-ins and fade-outs with Picture-in-Picture (PIP) and to create half-dissolves without fully exposing the background image. 0 is not visible at all and 100 is fully visible.
O-Soft	0-100	The O-Soft option softens the hard line that surrounds the outside of the foreground image. You use O-Soft to blend the outside border of the foreground into the background. 0 is no softness and 100 is the full softness available for the outside region of the shape.
I-Soft	0-100	The I-Soft option softens hard images that are found on the inside border of an image. One way to use I-Soft is to soften a white border for the inside of a PIP. 0 is no softness and 100 is the full softness available for the inside region of the shape.

Borders

You can apply a border to any Resize or Key Shape effect. You can also change the color and size of a border and add the border from different directions.

Using any of the key shapes, you can alter the border from the left, right, top, bottom, or on all sides. This may mean your image can have an uneven border. To ensure your borders apply evenly, use the dial **All**.

Option	Range	Description
Left	0-8	The 4:3 image is divided into 8 equal sections, making the border larger as the number increases.
Right	0-8	
Top	0-6	
Bottom	0-6	
All	0-4	
Color	Standard Windows color picker	Change the color of the border by clicking the **Color** icon on the Options tab and selecting a new color.
Type	11 choices	Select the type from the drop-down list: Flat, Tubular, Mitre, Peak, Ramp, Low Ramp, Single Bevel, 2-Sided Bevel, 2-Sided Bevel II, 3-Sided Bevel, Bevel Ramp

Cropping

You can crop a Resize effect. Cropping an image trims the foreground image from whatever side you select, either left, right, top, bottom, or from all sides. You can also use cropping to center an image or cut out any unwanted video.

Option	Range	Description
Left	0 to 8	The 4:3 image is divided into 8 equal sections, making the crop larger as the number increases.
Right	0 to 8	
Top	0 to 6	
Bottom	0 to 6	
All	0 to 4	
Lock Crop	On or Off	Locks the size of the image box so you can move the video within it without changing the size of the image box.

Hold Key

Using the Hold Key effect, you can position video within a resized image—without altering the shape or position of the image.

Option	Range	Description
Left	0 to 8	The 4:3 image is divided into 8 equal sections, making the image larger as the number increases.
Right	0 to 8	
Top	0 to 6	
Bottom	0 to 6	
Size	0 to 4	

Drop Shadows

You can apply a drop shadow to the foreground image in your effect. In addition to adding the drop shadow, you can change its color, opacity, and amount of offset.

To position the drop shadow, use the X-Offset and Y-Offset parameters.

Option	Range	Description
Opacity	0 to 100	0 is not visible at all and 100 is opaque.
X-Offset	-4 to +4	-4 is the far left of the foreground and +4 is the far right.
Y-Offset	-3 to +3	-3 is the upper most limit and +3 is lowest limit from the foreground.
All	-4 to +4	-4 places the X-Offset at the left and the Y-Offset at the upper most limit while +4 places the X-Offset at the right and the Y-Offset at the lowest limit from the foreground.
Softness	0 to 100	
Color	Standard Windows color picker	Change the color of the drop shadow by clicking the **Color** icon on the Options tab and selecting a new color.

Path Control

You can apply different path types to specific keyframes in your sequence with the Path Control option.

Option	Range	Description
Tension	-10 to +10	Controls the length of the tension vector.
Continuity	-10 to +10	Determines the angle of the path into and out of the keyframe.
Bias	-10 to +10	Determines whether the path is pulled towards the previous or the following keyframe.
Path	None	See "Effect Paths" on page 279 for a description of each path type.
	Hold	
	Linear	
	S-Linear	
	Curve	

Slab

You can add a 3-dimensional border, known as a slab, to your video image. The Slab border appears on all sides of the image shape.

Option	Range	Description
Width	0 to 8	The 4:3 image is divided into 8 equal sections, making the border larger as the number increases.
Color	Standard Windows color picker	Change the color of the border by clicking the **Color** icon on the Options tab and selecting a new color.

Highlight

The Highlight option adds an accent to Warp effects. Two highlights allow you to use different colors to accent the effect.

Option	Range	Description
Intensity		
Color	Standard Windows color picker	Change the color of the highlight by clicking the **Color** icon on the Options tab and selecting a new color.

Effect Paths

Each video effect you create has a path applied to it. The path determines how the effect behaves from keyframe to keyframe. You can choose which path you prefer for each effect; the path can only be applied to an entire effect, not a specific keyframe or part of an effect. If you want to apply different paths to specific keyframes, use the Path Control option.

The paths available in NewsEdit XT are:
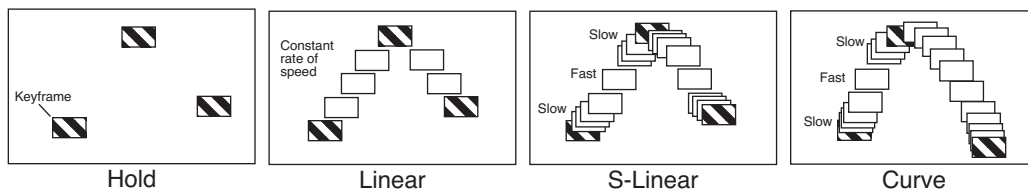
Hold   Linear   S-Linear   Curve

- Hold — The effect characteristics hold for the duration of the keyframe and then change instantaneously to the next keyframe. For example, the image jumps from its current location in one keyframe to its new location in the next keyframe instantly.

- Linear — The effect plays in a constant direction and at a constant rate of speed from keyframe to keyframe. For example, the image moves from one location to the next in a straight line at the same speed. This is the default path.

- S-Linear — The effect plays in a constant direction but at a variable rate of speed from keyframe to keyframe. For example, the image moves from one location to the next in a straight line; it begins slowly, speeds up, then slows down again as it approaches the next keyframe. Because of the changing rate of speed, S-Linear changes appear less abrupt than linear changes.

- Curve — The effect plays in a variable direction and at a variable rate of speed, causing a rounded path through the keyframe. For example, the image moves from one location to the next in a smoothly curved line. The Curve path is the least abrupt type of path control; both direction and rate of speed are kept smooth and steady in appearance.

Digital News Production: Site Preparation

This Appendix provides site information for installing Digital News Production (DNP) systems, and electrical and physical specifications for those system components.

This Appendix also provides connector information and pin assignments in case you require custom cabling.

DNP System Layouts

This section provides a typical system layout and diagrams of the Vibrint system components showing the rear interface connections. The exact orientation of the equipment depends on:

- Available space in the work area — This document provides the dimensions of the equipment; however, Grass Valley Group recommends additional space for access and ventilation.

- Cable length — Excessive length clutters the area and impedes signal strength.

- User preference — Whether the monitor, video deck, and system are on the left or the right side is up to the user. The order from top to bottom in the rack can also differ due to connector and viewing indicator accessibility.

Digital News Production (DNP) Workgroup Layout
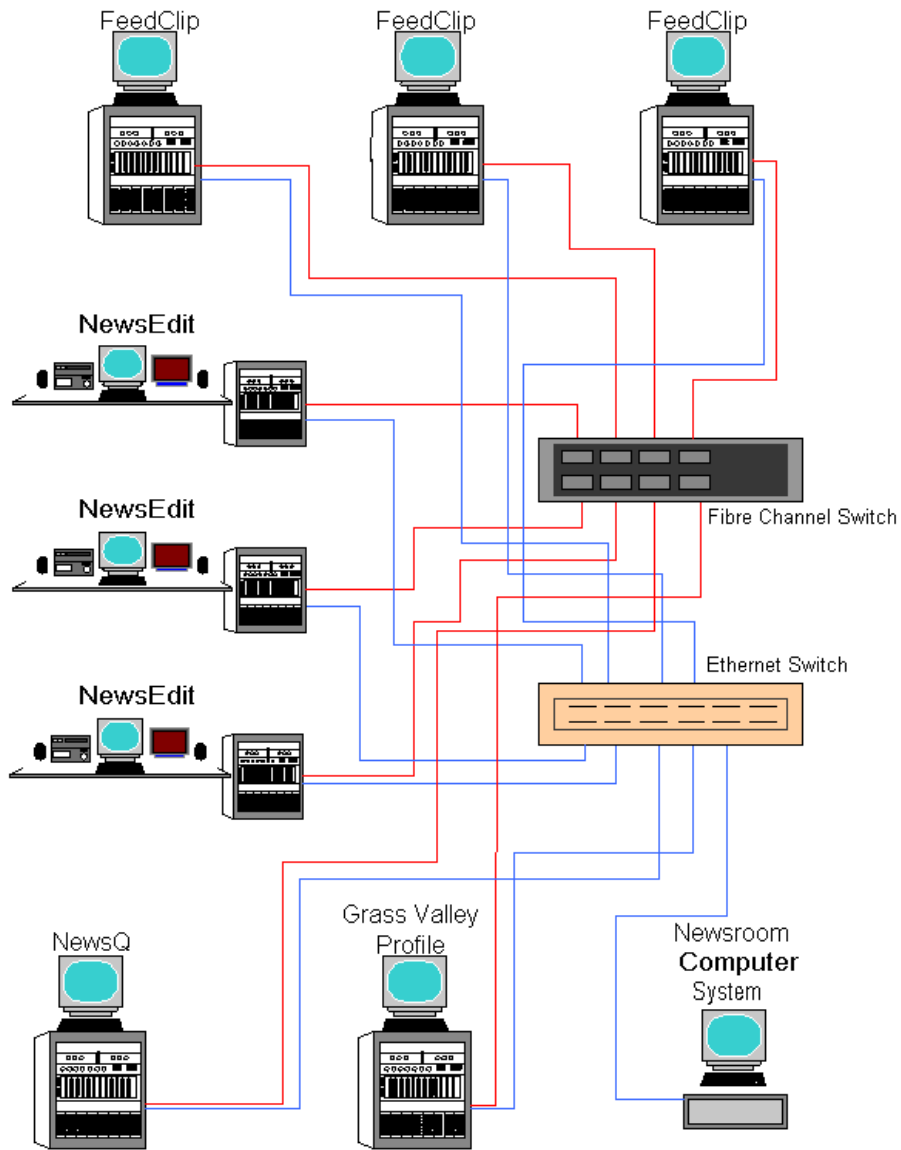
DNP Components

The DNP Server system includes the following features:

- 20 gigabyte IDE hard drive with NTFS format
- 3.5 inch floppy drive; reads and writes to 1.44 MB diskettes
- CD-ROM drive; required for installing software
- TCP/IP-compatible Ethernet LAN connection
- Microsoft Windows 2000 operating system
- Breakout I/O panel (either Pro Analog or Pro D&A)
- Standard keyboard and PS/2 mouse
- Two serial ports
- DNP software

The DNP Server system may have the following optional features:

- 17-inch VGA monitor
- Fibre Channel network adapter card
- Gigabit Ethernet adapter card
- Time-code Reader adapter card (FeedClip systems only)
- 9, 18, 36, 72, or 180 gigabyte removable SCSI media drives
- Additional DNP software
- RAID3 Fibre Channel protection

DNP Server Connectors

The DNP Server is a computer with specific peripheral hardware for converting incoming video and audio (analog or digital) signals into digital format for storage. The Windows 2000 operating system and DNP application come pre-installed on the DNP Server.

The following illustrations identify the connectors and parts on the rack mount version. The tables describe each connector.
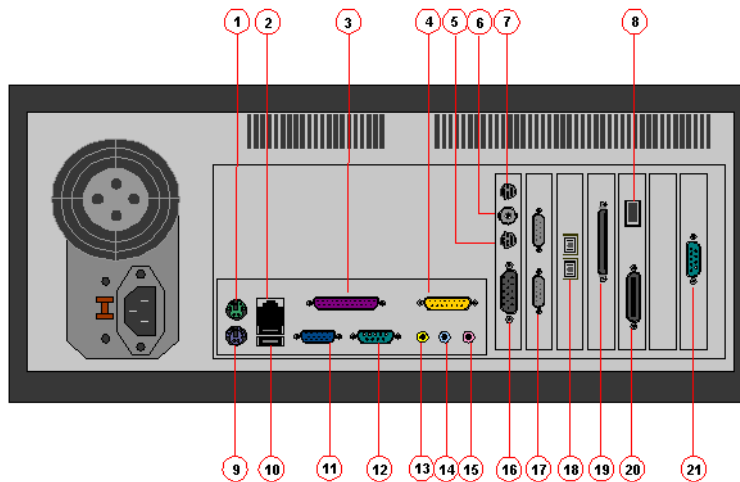
The following table identifies the DNP Server connectors:

Number	Connector	Function
1	PS/2 style	PS/2 style connector for Mouse
2	RJ-45	Ethernet Port Connector
3	DB-25	Not used
4	DB-15	Not used
5	S-Video In	Video Input for VGA video
6	RCA	Not used
7	S-Video Out	Not used
8	1394 Firewire	Not used
9	PS/2 style	PS/2 style connector for Keyboard
10	USB	Disabled
11	DB-15 HD	VGA port (only used for troubleshooting)
12	DB-9 Male	COM1 port used for external GPI
13	RCA Mini	Computer audio line in (not used)
14	RCA Mini	Computer audio line out (not used)
15	RCA Mini	Computer Mic (not used)
16	DB-15 HD	VGA port used for external UI monitor
17	DB-9 Male	RS-422 Remote Control
18	Dual SC type	Fibre Channel connectors
19	50 pin SCSI	SCSI connector for external storage devices
20	Digital Tether	Connection to I/O Breakout panel
21	DB-9 Male	COM2 port used for external GPI
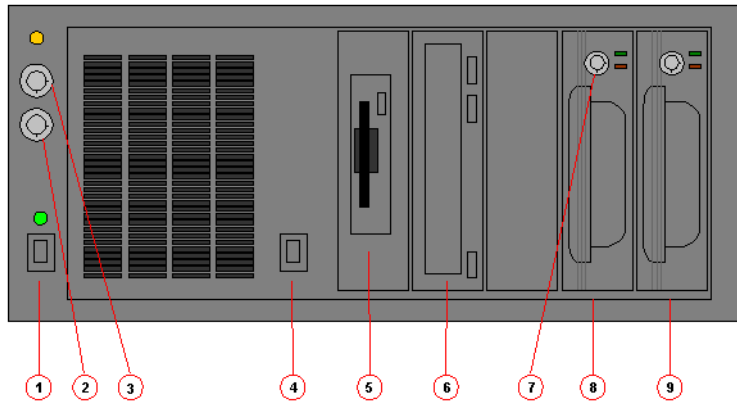
The following table identifies the DNP Server connections:

Number	Function
1	Main power switch
2	Panel door lock
3	Keyboard lock
4	Reset power switch
5	1.4 meg Floppy disk drive
6	CD-ROM drive
7	Media drive lock
8	Media drive carriage #1
9	Media drive carriage #2

Server Backplane

ATI Adapter

Keyboard/Mouse

Pro Analog Breakout I/O

Pro Digital/Analog Breakout I/O

Fibre Channel switch

VTR

Ethernet Hub
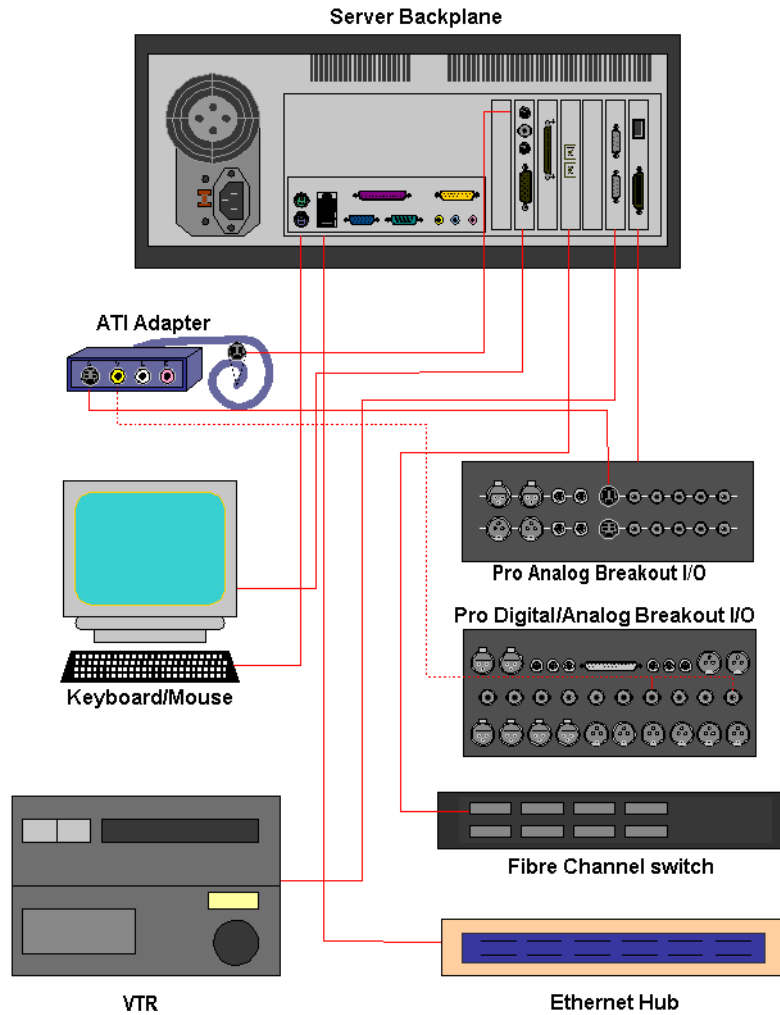
External I/O Connections

The DNP Server comes with an I/O Breakout Box (BOB) to provide video and audio input and output. Currently there are 2 different types of I/O panel configurations. The following illustrations identify the connections for the Pro Analog and the connections for the Pro Digital/Analog combination panel.
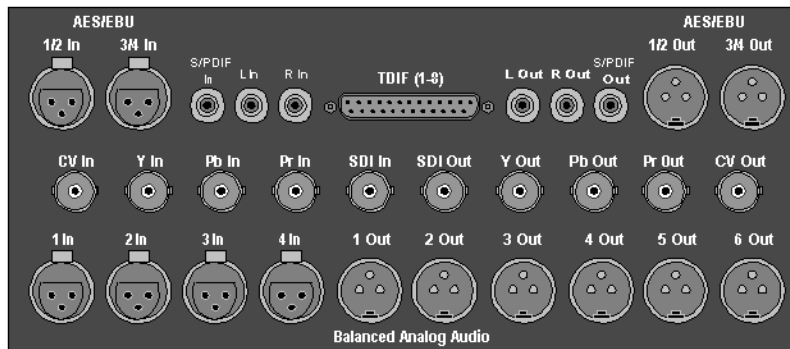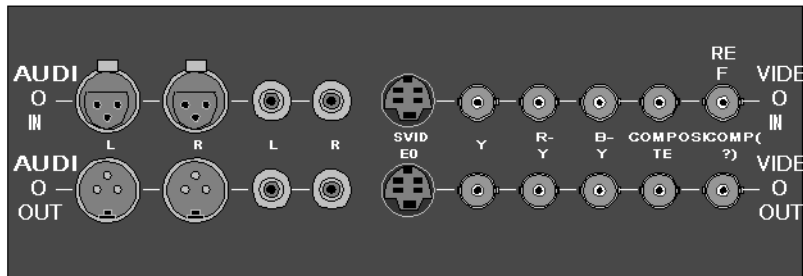
NOTE: The Pro Digital/Analog breakout panel has a reference input for genlocking the DNP system.

ATI All-In-Wonder Breakout Module

The DNP contains an ATI All-In-Wonder Video Graphics Adapter and a small purple breakout module for viewing low-resolution video display on the user interface. The module has S-Video, RCA video, and RCA audio inputs.

When using the Pro Analog I/O, you need to connect the S-Video output from the I/O panel to the S-Video input on the ATI module. When using the Pro Analog/Digital I/O, you need to connect the composite video output of the I/O panel to the RCA video input on the ATI module.

Alternately, you can connect the video input of the ATI module to the Component Y output of the I/O panel to see video. In any case, when you open the DNP program, you need to set the VGA input selection in order to properly see a video connection on the user interface.

Cabling Guidelines

Creating a floor plan of your facility with user and equipment locations marked will help you determine necessary cable lengths. The following list describes all cables typically needed, as well as length limitations and recommendations.

• Use all GVG-supplied cables delivered with the DNP system. All supplied cables are tested and qualified for GVG broadcast system configurations.

• The monitors should be within 6 feet of the DNP server. You may use VGA cable extensions, though video images degrade with increased length.

• The keyboard and mouse should be within 6 feet of the DNP server. Use keyboard and mouse extensions only if necessary.

• The audio/video breakout panel should be within 10 feet of the DNP server.

• The VTR should be within 15 feet of the DNP server for a standard RS-422 length cable. An extension cable can be added for greater distances.

• The length of a fibre-optic cable between a DNP server and a fibre-channel switch should be 1650 feet (500 meters) when using a Multimode cable.

Cable Description	Length	Connects
Standard power cords	Up to 6 ft. (1.8m)	All physical hardware with designated power supply
Keyboard cable	Up to 6 ft. (1.8m) (Quality PS/2 extender cables can be used)	Keyboard to Server
Mouse cable	Up to 6 ft. (1.8m) (Quality PS/2 extender cables can be used)	Mouse to Server
Digital tether data cable	15 ft. (1.8m)	I/O Breakout box to video board on Server
Purple ATI I/O cable	8 ft. (1.8) standard	ATI I/O to mini din connection on graphics card
S-Video cable	6 ft. (1.8m)	S-Video on Analog I/O box to ATI I/O

Cable Description	Length	Connects
Fibre optic	50- or 62.5-micron, SC Multimode type, up to 1650 ft. (500m)	Fibre channel switch to server fibre port
RJ-45 Cat5 Ethernet	Customer desired	Ethernet hub or switch to Server ethernet port
Remote serial	Up to 15 ft. (4.6m) (Quality RS422 extension module can be used)	Remote control from VTR to RS-422 card on server
BNC video	8 ft.	Digital I/O composite or component Y to ATI I/O
BNC video reference	Customer desired	Reference on I/O Panel
BNC video	Customer desired	Customer equipment to I/O panel
BNC timecode	Customer desired	House timecode clock to TCR card
XLR Audio	Customer desired	Customer supplied equipment to I/O panel

Audio Mixer for NewsEdit XT

Optionally, you can add an audio mixer to enhance NewsEdit XT's audio capabilities by feeding multiple inputs into the editor. The following table is a suggested configuration on the setup of a mixer and NewsEdit XT, based on the Mackie 1402VLZPro.

The following table describes a possible mixer setup.

Input	From	To	Cable type
Analog Audio with a Mixer	VTR Channel 1 output	Mixer channel 1 line IN	XLR-female to 1/4"-male
	VTR Channel 2 output	Mixer channel 2 line IN	XLR-female to 1/4"-male
	Main mixer out left channel	Breakout panel balanced IN left channel	XLR-female to XLR-male
	Main mixer out right channel	Breakout panel balanced IN right channel	XLR-female to XLR-male
	Breakout panel Balanced Left Out	VTR Channel 1 input	XLR-male to XLR-male
	Breakout panel Balanced Right Out	VTR Channel 2 input	XLR-male to XLR-male
	Breakout panel Unbalanced Left Out	Left desktop speaker	RCA-male to XLR-male or 1/4" male
	Breakout panel Unbalanced Right Out	Right desktop speaker	RCA-male to XLR-male or 1/4" male

Input	From	To	Cable type
Analog Audio without a Mixer	VTR Channel 1 output	Breakout panel balanced IN left channel	XLR-female to XLR-male
	VTR Channel 2 output	Breakout panel balanced IN right channel	XLR-female to XLR-male
	Breakout panel Balanced Left Out	VTR Channel 1 input	XLR-male to XLR-female
	Breakout panel Balanced Right Out	VTR Channel 2 input	XLR-male to XLR-female
	Breakout panel Unbalanced Left Out	Left desktop speaker	RCA-male to XLR-male or 1/4" male
	Breakout panel Unbalanced Right Out	Right desktop speaker	RCA-male to XLR-male or 1/4" male
Digital Audio	VTR AES/EBU Channels 1&2 Output	Breakout panel AES/EBU Channels 1&2 Input	XLR-male to XLR-male
	Breakout panel AES/EBU Channels 1&2 Output	VTR AES/EBU Channels 1&2 Input	XLR-male to XLR-female
	Breakout panel Unbalanced Left Out	Left desktop speaker	RCA-male to XLR-male or 1/4" male
	Breakout panel Unbalanced Right Out	Right desktop speaker	RCA-male to XLR-male or 1/4" male
Video	VTR-SDI Output	Breakout panel SDI Input	Single BNC-BNC
	Breakout panel SDI Output	VTR SDI Input	Single BNC-BNC
	VTR Composite Output	Breakout panel Composite Input	Single BNC-BNC
	Breakout panel Composite Output	VTR Composite Input	Single BNC-BNC
	VTR Component Output	Breakout panel Component Input	Tri BNC-BNC harness
	Breakout panel Component Output	VTR Component Output	Tri BNC-BNC harness
Ethernet & Fibre	Server Chassis	Ethernet Hub/Switch	RJ45-RJ45
	Server Chassis	Fibre Channel Switch	Dual SC-Dual SC

Component Weights and Dimensions

The following table describes DNP physical specifications.

Component	Rack Mount	Rack Units	Height x Width x Depth	Weight
DNP Server	Yes	4	5.87 x 17 x 20 in	40 lbs
Analog Breakout Box	Yes	2	3.5 x 12 x 3.8 in	2.5 lbs
D&A Breakout Box	Yes	3	3.7 x 13.68 x 4.25 in	3.5 lbs
17" Monitor (optional)	No	N/A	16 x 16 x 17 in	38 lbs
Mackie 1402VLZ Pro (optional)	Yes	8	2.9 x 14 x 12.9 in	9.5 lbs
Speakers (optional)	No	N/A	7.25 x 4.67 x 6.58 in	3.7 lbs
Brocade Silkworm 2400 (optional 8 port)	Yes	1	1.71 x 16.87 x 17.72 in	17 lbs (dual power supply)
Brocade Silkworm 2800 (optional 16 port)	Yes	2	3.5 x 16.87 x 17.72 in	28.5 lbs (dual power supply)
Netgear FS516 Ethernet Switch (optional 16 port)	Yes	1	1.7 x 13 x 8 in	4.7 lbs

Site Requirements

This section describes the various site requirements for installing the Digital News Production System.

Power Requirements

Grass Valley Group highly recommends using a surge protector and an uninterruptible power supply (UPS) with your system. There must be a 20 A, 110 to 120 V alternating current, 60 Hz or 10 A, 220 to 224 V alternating current, 50 Hz circuit breaker and an isolated ground.

Storage upgrades may require additional electrical service. Consider the equipment nameplate ratings and consult your GVG representative.

GVG systems are designed to work with a single-phase (three-wire) power cord with a grounded neutral conductor. To reduce the risk of electric shock, always plug the cord into a powered off grounded power outlet.

For best performance, keep all system power connections on the same power feed distribution panel. Do not connect any other equipment to the same outlet that is powering the DNP equipment.

The following table lists the power requirements for the system components.

Component	Voltage	Frequency	Power
DNP Server	120/240 VAC	50/60	300 Watts
Analog Breakout Box	N/A	N/A	N/A
D&A Breakout Box	120/240 VAC		1.5 Amps
17" Monitor (optional; spec based on Viewsonic A70)	100/240 VAC	50/60	2 Amps
Mackie 1402VLZ Pro (optional)	120/240 VAC	50/60	25 W
Fostex Speakers (optional)	120 VAC		5 W
Brocade Silkworm 2400 (optional 8 port)	100/240 VAC	50/60	1.5 Amps
Brocade Silkworm 2800 (optional 16 port)	100/240 VAC	50/60	1.5 Amps
Netgear FS516 Ethernet Switch (optional 16 port)	100/240 VAC	50/60	29 W

Synchronization Requirements

You must have a stable video reference source to synchronize the system if you are playing directly to air. The system needs no reference as a stand-alone workstation or on a fibre channel network environment. The Pro Analog and Pro Digital/Analog breakout boxes each have reference in connections.

Environmental Requirements

The following table lists the environmental specifications for a standard broadcast environment.

Condition	Range
Operating temperature	50 to 75 degrees Fahrenheit
Storage temperature	0 to 140 degrees Fahrenheit
Relative humidity	20% to 80%
Altitude	0 to 6000 ft. (0 to 1829 m)

Networking Requirements

Grass Valley Group products are designed to work over industry-standard local area networks (LANs) and wide area networks (WANs), using standard TCP/IP networking protocols. Install all possible network cabling before the equipment arrives and note of all the network IP addresses that reside within the network.

Fibre Channel

The DNP system transfers files to the playback server through a Fibre Channel switch connection. GVG recommends the Brocade Silkworm 2800 switch. Typically, fibre-optic cable is run along or inside facilities ductwork using a Multimode dual SC type termination connectors. GVG can recommend sources for custom or off-the-shelf length cables.

Ethernet Switch

The Ethernet switch routes data between all DNP systems, the playout server, and newsroom systems. A 100-BaseT Ethernet switch with RJ-45 connectors is required to connect network devices within GVG newsroom production workgroups. Status LEDs on the hub show network activity.

Pin Assignments

The following section provides pin assignments for various connections to the DNP server.

VGA Monitor Port

The monitor port is a standard DB-15 pin female VGA connector for the 17" graphics monitor. The following illustration and table shows the pin-out configuration for the connector.
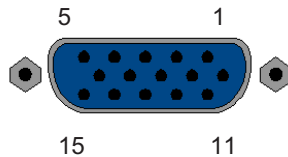
Pin	Signal
1	Red video
2	Green video
3	Blue video
4	GND
5	Display Data Channel GND
6	Red GND
7	Green GND
8	Blue GND
9	Not used
10	SYNC GND
11	GND
12	Serial Data
13	Horizontal SYNC
14	Vertical SYNC
15	Serial Clock

Keyboard and Mouse Connectors

The DNP system provides two standard PS/2 style connectors. These connectors are used for the keyboard and mouse. The following illustration and table shows the pin-out for these 6-pin female connectors.
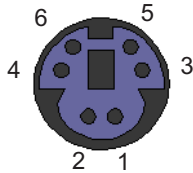
Keyboard/Mouse Pin	Signal
1	Data
2	NC
3	Ground
4	Plus 5 volts
5	Clock
6	Not used

RJ-45 Connectors

Category 5 unshielded twisted pair (UTP) cable supports up to 100 megabits per second. The cable contains four twisted pairs of wires, for a total of eight wires.

The four pairs of wires in UTP cable are color-coded so that they can be identified at each end of the cable. Typically, the pairs are made up of a solid color and the same color striped with white. The following illustration and table shows the standard pin configuration for an 8-pin RJ-45 connector.

1   8
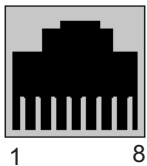
Pin	Color Code
1	Orange/white stripe
2	Orange
3	Green/white stripe
4	Blue
5	Blue/white stripe
6	Green
7	Brown/white stripe
8	Brown

GPI Pin Assignments

There are 2 COM port connectors on the backplane of the DNP server. COM1 is located alongside the other motherboard connectors. COM2 is located in a slot position next to the video capture card(s). Both COM ports are generally used for the NewsQ application but can also be used with NewsEdit XT. See the User Manual for setting up the GPI Commands in relationship to the pins shown in the illustration and table below.
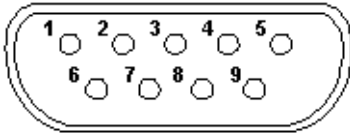
Pin	COM1 Function	COM2 Function
1	-	-
2	-	-
3	-	-
4	-	-
5	Chassis Ground	Chassis Ground
6	IN 2	IN 5
7	+12V	+12V
8	IN 1	IN 4
9	IN 3	IN 6

Provide +5 to +24 volts to an input to trigger.

For more information on third party products, see these vendor websites:

www.brocade.com
www.netgear.com
www.mackie.com
www.ati.com
www.fostex.com
www.microsoft.com
www.intel.com

Troubleshooting

This appendix describes the symptoms of various problems you might encounter when using NewsEdit XT and offers suggestions for solving each problem.

Symptom	Description or Action Required
When trying to move an audio clip from the A2 track to the A3 track, you see a *No* symbol.	• You must activate the track by clicking **A3** to the left of the track before you can move the clip.
In your sequence, you turned off tracks A1 and A2 and turned on A3, but when you record, the audio doesn't record to A3.	1. In the Source tool, click in the Track Assign field under the Audio Input slider for the desired channel. 2. Select **A3**. Audio for the channel is re-routed to A3. To set a track as the default: 1. Choose **View I Sources** and select a Source Name. 2. Choose **Edit I Record Channels**. 3. Choose a default record track for each audio channel.
You see the message *Unable to perform edit. Check video 'Mark Ins' and video 'Mark Outs' to make sure you have set a valid editing mode, then try again.* when trying to record a split edit.	There is a conflict between the Mark Ins/Outs set on the Timeline and those set in the Source tool. Try removing one or more of your marks in the Timeline or Source tool to reach a valid configuration for recording.
You want to import a clip or EDL, but the menu item is missing from the File menu.	• Click on the Bin window to make these items available in the File menu.
You want to Record to Bin, but the menu item is grayed out.	• Click on the Bin window to make Record to Bin available.
You want to Play to Tape, but the menu item is grayed out.	• In the Bin window, click on the sequence or clip that you wish to Play to Tape.
You're trying to send a clip or sequence, but the Send to File menu item is grayed out.	Try one of these solutions: • Verify that you selected only one clip or sequence in the Bin window. You cannot send multiple items. • If you are sending an open sequence, click on the Sequence window to give it focus before sending. • If you are sending an item in the Bin, click to select it.
Someone at another NewsEdit XT workstation sent you a clip, but you don't see it in your Bin.	• Click in the Bin and press **F5** on your keyboard or choose **Refresh** from the View Menu.
You minimized your sequence window and now you can't find it.	• Choose the sequence from the Window menu to switch back to it.
When you choose Send to File, the Rendering Effects progress dialog comes up.	You can view variable speed and transition effects in the sequence window without rendering them, but you must render them before sending them to another location. After rendering, the Select Destination dialog appears.

Symptom	Description or Action Required
When sending clips or sequences to another location, the transfer rate seems slow.	File transfers may be occurring over your Ethernet connection instead of the faster fibre channel connection.
	To force transfers to use fibre channel:
	1. From the Windows desktop, right-click on My Network Places and choose **Properties**.
	2. In the Network and Dial-up Connections window, right-click on the Ethernet LAN connection and choose **Properties**.
	3. Deselect **Client for Microsoft Networks** and click **OK**.
When you choose Update Workgroup under Options, not all other Vibrint systems on the network show up.	Try one of these solutions:
	• Make sure that each system has a shared *VibrintAVFiles* folder.
	• Make sure that each system is using the same login password, which is *vibrint* by default.
You receive the message *No material exists beyond one or both clip boundaries to apply transition.* when attempting to apply a transition between two clips on the timeline,	To apply a transition, there must be overlapping material between the two clips for the transition to use.
	• Overlap the clips slightly and then apply a transition.
	To avoid this problem, enable the **Add Handles** button in the sequence window or Record to Bin dialog when recording clips.
You want to adjust the edge softness of a transition, but the Softness slider is grayed out.	You can only apply the Softness setting to Wipe transitions. Select the Wipe category and the slider will be available.
You receive a message that the clip is the wrong frame size, compression, or format when adding a clip to your sequence.	Clips must match the Compression Type, Chroma Format, and Resolution that was set when the sequence was created.
	To change these settings:
	1. Choose **Tools I Options I Record**.
	2. Make any changes to the settings.
	The settings will take effect for any future sequences or clips that are created.
You receive the message *Cannot delete items while windows, other than bins and playback channels, are opened. close all other windows before deleting.* when trying to delete a clip from the Bin.	This feature is a safeguard against accidentally deleting clips that are currently in use in an open window.
	• Save and close any open sequences or other open windows, and then delete the clip.

Symptom	Description or Action Required
You receive the message *Not all selected items could be deleted. You must first delete all references to each selected item and make sure the item is not opened for playback or editing*. when trying to delete a clip from the bin.	• Right-click on the clip and choose **Show References**. A list appears showing any sequences or sub-clips that are currently referencing the clip. If you still need to delete the clip, you must delete it from any sequence that is using it or delete the sequence itself.
You changed a clip to slow-motion on your Timeline but can no longer view the entire clip.	1. Right-click on a clip's video track on the timeline and choose **Play Speed**. 2. Deselect the **Maintain Duration** setting to increase the overall clip length and show the entire clip.
You are unable to send clips or sequences between your NewsEdit XT system and a Grass Valley Profile Server.	1. In Media Manager on the NewsEdit XT system, verify that you have added the Profile system by choosing **File	Add/Remove Machine**. 2. In NewsEdit XT, verify that you have set up a send destination to the Profile system by choosing **Tools |Options	Send**. 3. Using Notepad, open the **Hosts** file on the NewsEdit XT system to verify that the your workstation name is listed and that the IP addresses match and are correct. The path is C:\WINNT\system32\drivers\etc\Hosts. You may need your IT engineer check this file. 4. Verify that your fibre switch is showing good connections for both the NewsEdit XT system and the Profile (usually indicated by a solid green light). 5. Check the disk space available on the Profile. 6. Verify that checksums are enabled in the Profile Configuration Manager. 7. If you've tried all of the above and still can't connect, try rebooting the NewsEdit XT system, Profile, and fibre switch, if possible. Check with your IT engineer before you reboot. For more information on establishing connectivity between a NewsEdit XT system and a Profile, see the *NewsEdit XT Setup Guide*.

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