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User Reference Guide

SOFTWARE VERSION 5.1

April 11, 2009

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Grass Valley, Inc.

400 Providence Mine Road
Nevada City, CA 95945
United States

15655 SW Greystone Ct.
Beaverton, OR 97006
United States

10 Presidential Way
3rd Floor, Suite 300
Woburn, MA 01801
United States

Nederland B.V.
4800 RP BREDA
The Netherlands

Weiterstadt, Germany
Brunnenweg 9
D-64331 Weiterstadt
Germany

Rennes, France
Rue du Clos Courtel
Cesson-Sevigne, Cedex
France

Technopole Brest Iroise
CS 73808
29238 Brest Cedex 3
France

17 rue du Petit Albi-BP 8244
95801 Cergy Pontoise
Cergy, France

2300 South Decker Lake Blvd.
Salt Lake City, UT 84119
United States

7140 Baymeadows Way
Suite 101
Jacksonville, FL 32256
United States

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KEMA-Registered Quality, Inc.
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Ph: (215)997-4519
Fax: (215)997-3809

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Contacting Grass Valley

International Support Centers	**France 24 x 7**	+800 8080 2020 or +33 1 48 25 20 20 +800 8080 2020 or +33 1 48 25 20 20	**United States/Canada 24 x 7**	+1 800 547 8949 or +1 530 478 4148
Local Support Centers (available during normal business hours)	**Asia**	**Hong Kong, Taiwan, Korea, Macau:** +852 2531 3058 **Indian Subcontinent:** +91 22 24933476 **Southeast Asia/Malaysia:** +603 7805 3884 **Southeast Asia/Singapore:** +65 6379 1313 **China:** +861 0660 159 450 **Japan:** +81 3 5484 6868		
	Australia and New Zealand: +61 1300 721 495		**Central/South America:** +55 11 5509 3443	
	Middle East: +971 4 299 64 40 **Near East and Africa:** +800 8080 2020 or +33 1 48 25 20 20			
	Europe	**Belarus, Russia, Tadzikistan, Ukraine, Uzbekistan:** +7 095 2580924 225 **Switzerland:** +41 1 487 80 02 **S. Europe/Italy-Roma:** +39 06 87 20 35 28 **-Milan:** +39 02 48 41 46 58 **S. Europe/Spain:** +34 91 512 03 50 **Benelux/Belgium:** +32 (0) 2 334 90 30 **Benelux/Netherlands:** +31 (0) 35 62 38 42 1 **N. Europe:** +45 45 96 88 70 **Germany, Austria, Eastern Europe:** +49 6150 104 444 **UK, Ireland, Israel:** +44 118 923 0499		

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Grass Valley Web Site

The www.thomsongrassvalley.com web site offers the following:

Online User Documentation — Current versions of product catalogs, brochures, data sheets, ordering guides, planning guides, manuals, and release notes in .pdf format can be downloaded.

FAQ Database — Solutions to problems and troubleshooting efforts can be found by searching our Frequently Asked Questions (FAQ) database.

Software Downloads — Download software updates, drivers, and patches.

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Grass Valley's innovation and excellence in product design also extends to the programs we've established to manage the recycling of our products. Grass Valley has developed a comprehensive end-of-life product take back program for recycle or disposal of end-of-life products. Our program meets the requirements of the European Union's WEEE Directive, the United States Environmental Protection Agency, and U.S. state and local agencies.

Grass Valley's end-of-life product take back program assures proper disposal by use of Best Available Technology. This program accepts any Grass Valley branded equipment. Upon request, a Certificate of Recycling or a Certificate of Destruction, depending on the ultimate disposition of the product, can be sent to the requester.

Grass Valley will be responsible for all costs associated with recycling and disposal, including freight. However, you are responsible for the removal of the equipment from your facility and packing the equipment to make it ready for pickup.

For further information on the Grass Valley product take back system please contact Grass Valley at + 800 80 80 20 20 or +33 1 48 25 20 20 from most other countries. In the U.S. and Canada please call 800-547-8949 or 530-478-4148, and ask to be connected to the EH&S Department. Additional information concerning the program can be found at: www.thomsongrassvalley.com/environment

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Preface

About This Manual

This User Reference Guide contains detailed information concerning EDIUS tools, features and functions used in creating and managing project workflows.

For information about the installation of EDIUS and importing custom data from prior versions of EDIUS, see the Quick Start Guide.

Minimum System Requirements

- Intel® or AMD® CPU 3.0 GHz or faster (multiple CPUs or multi-core CPUs are recommended; SSE2 and SSE3 instruction sets supported).
- 1 GB RAM (2 GB or more recommended)
- 800MB or more free disk space for the software installation.
- DVD-ROM Drive for software installation.
- DVD-R/RW or DVD+R/RW drive required when creating DVD video with Burn to Disc
- Blu-Ray BD-R/BD-RE drive required when creating Blu-Ray disc with Burn to Disc
- DirectX 9.0 or later
- Graphics card supporting Direct3D 9.0c or later and support for Pixel-Shader Model 3.0 is required.
  - For SD editing: 128 MB RAM or larger required; 256 MB or larger recommended.
  - For HD editing: 256 MB RAM or larger required; 512 MB or larger recommended.
- ATA 100/7200 rpm or faster hard drive is necessary for video storage.
  - Available hard drive space should be twice the size of file to be edited.
  - RAID 0 recommended for HD editing.
- One free USB port (1.1 or higher) for software protection key.
- Soundcard with WDM driver support is required.
- Supported operating systems:
  - Windows® XP Home or Windows XP Professional (Service Pack 2 or later, 32-bit)
  - Windows® Vista (SP1 or later, 32-bit or 64-bit) including the following:
  - Windows® Vista Home Basic
  - Windows® Vista Home Premium
  - Windows® Vista Business
  - Windows® Vista Ultimate

Note External video decks/camera may require either a free IEEE 1394 FireWire port or USB 2.0 port for connectivity.

DVD Contents

- EDIUS software
- User Reference Guide (PDF)
- Bonus Applications and Tools
- Plug-ins
- Bundled Software:
  - NewBlue video filters: Art Effects, Film Effects and Motion Effects
  - ProDAD video effects and image stabilization: VitaScene and Mercalli Expert
  - iZotope VST audio plug-ins: Audio Effects Suite, Audio Restore, AGC and Mastering Effects Suite
  - SmartSound Sonic Fire Pro 5 Trial
  - MyMusic for EDIUS Plugin
  - Corel Blu-Ray authoring: DVD Movie Factory
  - Artbeats HD stock footage and graphics

Section 1

Getting Started

This section contains the basic information needed for working with EDIUS such as numeric data input, EDIUS license issues, starting EDIUS, creating user profiles and projects presets, and, screen layout and customization.

Topics dealing with the use of EDIUS tools, features and functions (e.g. application settings, capturing clips, Timeline editing, titles and effects, audio operation and exporting projects) used in creating projects are covered in other sections of this manual.

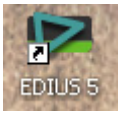
Note All keyboard shortcut keys referenced in any part of this manual are the default shortcuts. Keyboard shortcuts may be customized. In this case, some or all of the shortcuts referenced in this manual may not reflect the shortcuts defined on your system. For a comprehensive listing of default keyboard shortcuts, see *Appendix C-Input/Output Formats*.

Starting EDIUS

To start the EDIUS application, do one of the following:

1. Double-click the EDIUS icon (illustrated in Figure 1) on the desktop.

Figure 1. EDIUS Application Icon



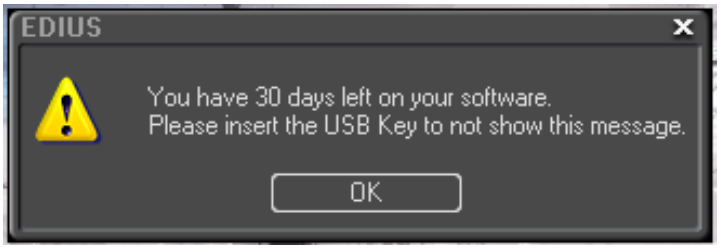
2. Select Start>All Programs>Canopus>EDIUS 5 from the Windows desktop.

When EDIUS is started the first time after installation, some startup screens may appear. These startup screens vary depending upon the installation status. If EDIUS was installed for the first time (i.e. the installation was not an upgrade of a prior EDIUS version), more information is gathered. For an upgrade installation, most settings from the prior version are retained and fewer startup screens will appear.

Startup Without USB Key License

The license for EDIUS is contained on the USB key that came in the box with the product DVD. If EDIUS is started without the USB key inserted in a USB port on the host computer, the message shown in Figure 2 appears.

Figure 2. No USB Key Startup Message



Insert the USB key and click **OK** to detect the license and use EDIUS.

Note If **OK** is clicked without the USB key present, the 30-day trial countdown period begins. If you wish to transfer the license from the USB key to the PC or to another USB key, see *License Transfer* section below.

To avoid the message above, the USB key should be inserted before starting EDIUS.

License Transfer

When EDIUS is installed on a laptop or, if you prefer not to use the USB key, it may be desirable to transfer the license from the USB key to the laptop or PC on which EDIUS is installed. It is also possible to transfer the license from the USB key provided with EDIUS to another USB key. Before proceeding with any license transfer, please thoroughly read the notes and warnings which follow.

- The license transfer tool must be initiated on the system on which EDIUS is already installed.
- License transfer is available between USB key and PC or USB key and USB key only. It is not possible to transfer a license from PC to PC.
- Several licenses of the same product cannot be combined on the same USB key.

WARNING A lost USB key cannot be replaced for any reason. Keep the USB key secure and do not lose it.

WARNING Close the license transfer tool only after the transfer is complete. If the transfer tool is closed prior to completing the transfer, the license is irretrievably lost.

WARNING If the license is transferred to a PC and the hard drive on which the license is stored becomes corrupted or fails with no backup, the license may be irretrievably lost.

WARNING When a license is transferred to a PC, changing major PC components such as CPU, memory, motherboard, hard drive, NIC, etc. may invalidate the license.

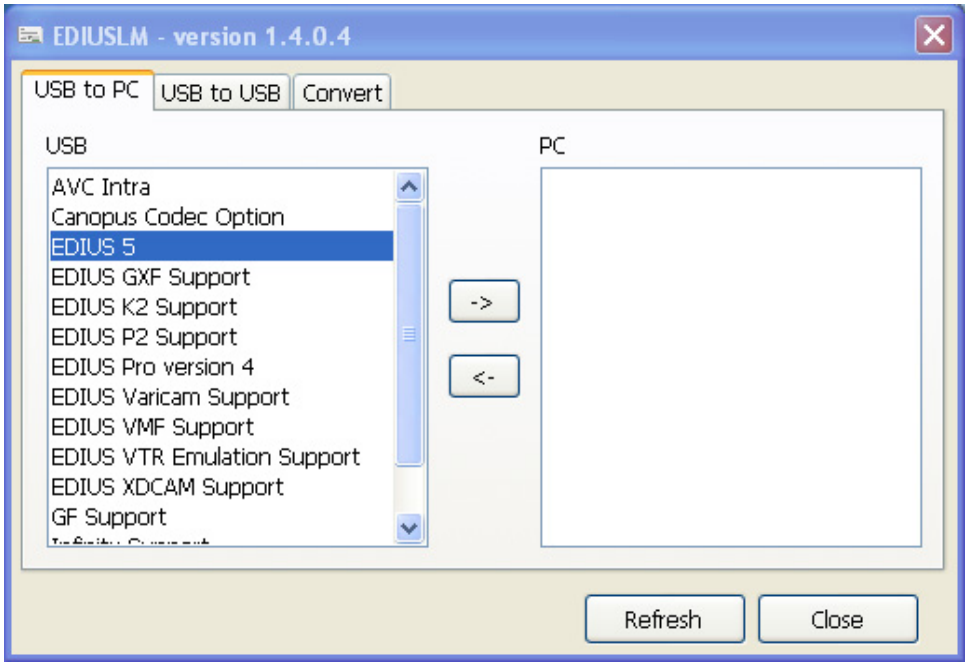
A transfer of the license to a PC is not recommended without a compelling reason for doing so.

Starting the License Transfer Tool

1. Attach the USB key to a USB port on the PC on which EDIUS is installed.
2. Insert the installation DVD for the installed version of EDIUS into the DVD drive.
3. Click on **Browse DVD** when the splash screen appears.
4. Navigate to the Tools>EdiusLM folder and double click the file EdiusLM.exe.

The screen shown in Figure 3 appears.

Figure 3. EDIUS License Manager Dialog Box



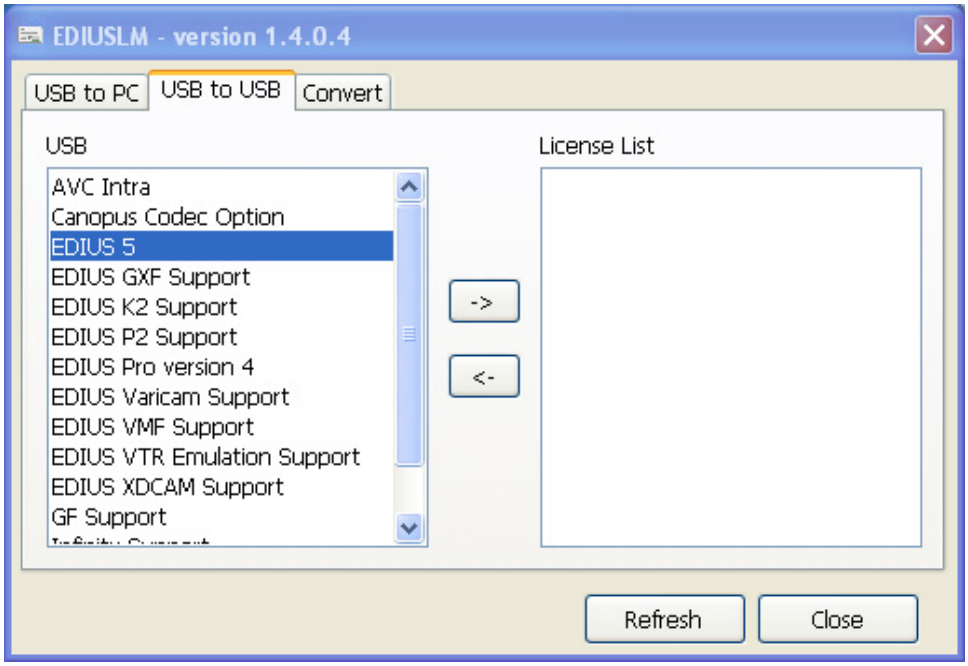
Transfer License to PC Local Disk

1. Select the USB to PC tab in the dialog box.
2. Select the license to transfer from the list that appears in the USB to PC tab.
3. Click the **->** button to execute the license transfer.
4. Repeat for additional licenses to be transferred.
5. Click the **Close** button when all license transfers are complete.

Transfer License to Another USB Key

1. Select the USB to USB tab in the dialog box. See Figure 4.

Figure 4. USB to USB License Manager Dialog Box



2. Select the license to transfer from the list that appears in the USB to USB tab.
3. Click the **->** button to move the license to the list on the right side of the dialog box.
4. Replace the EDIUS USB key with the one to which the license should be transferred.
5. Click the **Refresh** button.

6. After the license transfer is complete, replace the destination USB key with the original USB license key if you wish to transfer more licenses.

Note After every USB key swap, click the **Refresh** button.

7. Repeat the steps above to transfer additional licenses.

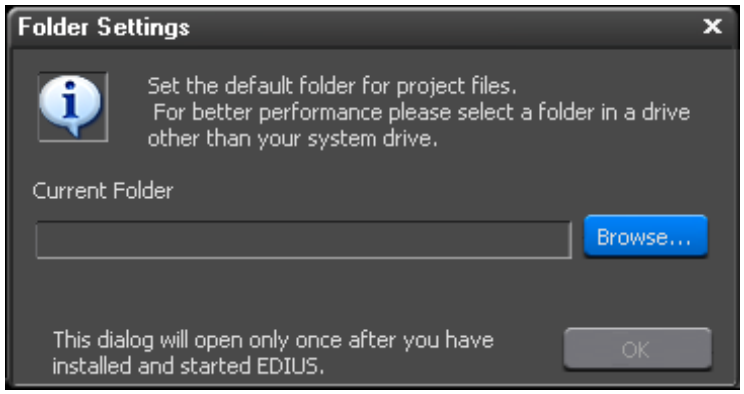
WARNING Do not replace USB keys while the license is transferring or the license may be irretrievably lost.

8. Click the **Close** button when all license transfers are complete.

Select Project Folder Location

When EDIUS is started for the first time after a new installation (not an upgrade from a prior version), the dialog box in Figure 5 will appear.

Figure 5. EDIUS Project Folder Location Dialog



To select a folder in which to store EDIUS projects, do the following:

1. Click the **Browse** button.
2. Navigate to the drive on which the desired folder is located or will be created (see Figure 6).

Figure 6. Browse to Project Folder Location

3. If the desired folder already exists on the selected drive, select the desired folder and click the **OK** button (see Figure 7).

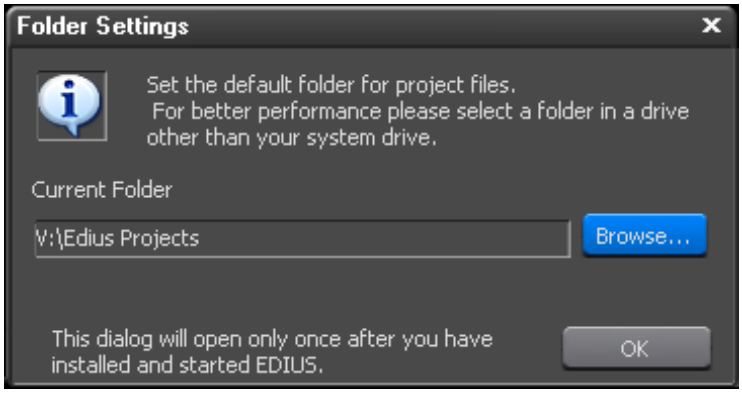
Figure 7. Select Project Folder

4. If the desired folder does not exist on the selected drive, Click the **Make New Folder** button, enter the desired folder name and click on the **OK** button (see Figure 8).

Figure 8. Make New Project Folder

The dialog box in Figure 9 appears indicating the selected project folder.

Figure 9. Project Folder Default Location



5. Click **OK** to set the current folder as the default folder for EDIUS project files.

Note As indicated in the dialog box, once the default folder selection is made, this dialog box will not appear again when EDIUS is launched.

Entering Numeric Data

Numeric data entry is possible or required in many application screens and data input windows throughout EDIUS, including some startup screens. This section explains the various methods of entering numeric data

There are four methods for entering numeric data into an input field (examples of such data fields in Project Presets are the TC preset, Total length, Over Scan Size, Audio Reference Level, Track(default), Duration, etc. The four entry methods are:

- Direct Input
- Offset Input
- Arrow Key Input
- Mouse Wheel Input

Some input fields are time codes or duration which may be comprised of multiple number segments. The format of these fields is HH:MM:SS;FF (H=hour, M=Minutes, S=Seconds and F=Frames). Other numeric input field are single-segment numbers such as the number of video and audio tracks. Except where noted below, these numeric input methods apply to all numeric fields.

Direct Input

The direct input method requires entering the numeric values from the keyboard. To enter a numeric value with the direct input method do the following:

1. Select the desired input field.
2. To enter, for example, the value 25 minutes, 16 seconds and 15 frames use one of the following methods:
   a. enter 25M16S15F
   b. enter 251615
3. Press the [Enter] key.

Note When entering a number such as 1 hour and 15 minutes with no seconds and frames, enter either 1H10M or 01150000. 10 minutes is entered as either 10M or 100000. 2 hours is entered as either 2H or 02000000.

Offset Input

The offset input method is used to quickly increment or decrement an existing timecode by a particular value.

Note Offset input is only available with timecode (multi-segment) values.

To enter a timecode offset, follow these steps:

1. Select the desired input field.

2. Enter the desired offset value.

   A "+" before the value increments the timecode by the specified value.

   A "-" before the value decrements the timecode by the specified value.

Note If the timecode value in a particular field is 00:05:35;20 (5 minutes, 35 seconds, 20 frames), entering an offset value of +2510 will increment the timecode value to 00:06:01;00 (assuming a 30 frame per second video standard). Entering an offset value of -2510 will decrement the timecode to 00:05:10;10.

3. Press the [Enter] key.

Arrow Key Input

With the arrow key input method, the arrow keys (↑,↓,←,→) are used to enter or change numeric values.

To enter numbers using the arrow key input method, do the following:

1. Select the desired input field.
2. Use the [↑] key to increment the numeric value; use the [↓] key to decrement the numeric value; use the [←] key to move one number segment to the left; use the [→] key to move one number segment to the right.
3. Press the [Enter] key when input is finished.

Mouse Wheel Input

The mouse wheel input method uses the mouse wheel or buttons to input numeric data.

To enter numbers using the mouse, follow these steps:

1. Move the mouse cursor near the input field. The mouse cursor shape changes to indicate that mouse wheel input mode is active.
2. Click the numeric value you wish to change whether it is part of a multi-segment number or a single-segment value.
3. Rotate the mouse wheel up or down to increment or decrement the selected value.
4. Press the [Enter] key when input is finished.

An alternate mouse input method uses the mouse buttons as follows:

- Hold down the right mouse button and drag the mouse upwards from the initial mouse position until the number begins to increase. Once the number begins to increase, it will continue to increase until the mouse button is released.
- Hold down the right mouse button and drag the mouse downward to decrease the data value. Once the number begins to decrease, it will continue to decrease until the mouse button is released.

Note The number will not decrement below a value of zero (0).

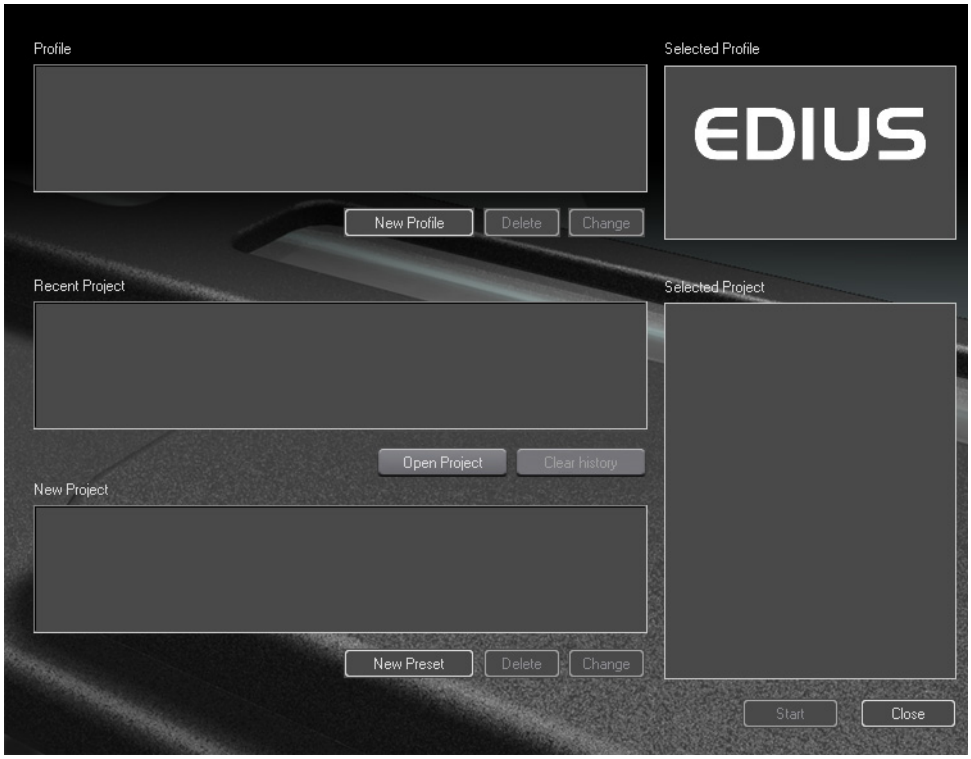
- Hold down the left mouse button and drag the mouse upward to increase the value. Only continued upward movement of the mouse will increase the data value.
- Hold down the left mouse button and drag the mouse downward to decrease the value. Only continued downward movement of the mouse will decrease the data value.

Note The number will not decrement below a value of zero (0).

Start-Up Window

Each time EDIUS is launched, the window shown in Figure 10 will appear. When EDIUS is started for the first time after a new installation (not an upgrade from a prior version), this window will be blank.

Figure 10. EDIUS Start-up Window



The EDIUS start-up window is composed of three main areas; Profiles, Recent Projects list and New Project presets.

Profiles

Screen layouts, application settings, custom settings and plug-in settings are associated with profiles. Each time a profile is selected for an EDIUS session, the settings associated with that profile are automatically used. Multiple profiles may be created.

Note Hardware settings, changes to the Effects palette and preset exporters are not stored with profiles.

Create a Profile

To create a profile, do the following:

1. Click on the **New Profile** button.
2. Enter a name for the profile.
3. If you wish to change the icon for this profile, click on the ... button.
4. Select the desired profile icon from the list (see Figure 11) and click the **Open** button.

Note There is no icon preview from the icon “Open” dialog box. See Table 1 below for a list of default profile icons.

Figure 11. User Profile Creation

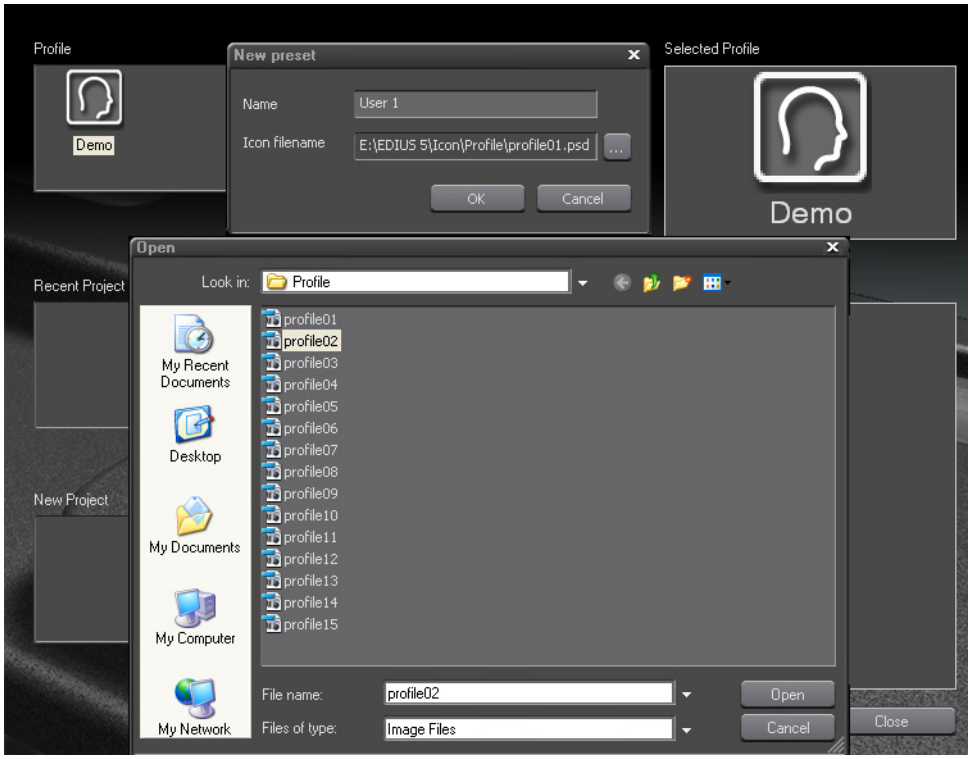


Table 1. User Profile Icons

Icon Name	Icon Graphic
profile01	
profile02	
profile03	
profile04	
profile05	
profile06	
profile07	
profile08	

Table 1. User Profile Icons

Icon Name	Icon Graphic
profile09	
profile10	
profile11	
profile12	
profile13	
profile14	
profile15	

Note If the table above is not viewed or printed in color, many icons will appear the same. The difference between icons of the same design is the background color.

5. Click the **OK** button to create the profile.

The EDIUS start-up screen re-appears

6. Create additional profiles as needed by repeating the steps above.

Change a Profile Name or Icon

To change the name or icon associated with a profile do one of the following:

- Select the profile and click the **Change** button. Change the name or icon as desired.
- Right-click on the profile icon select **Rename** or **Change Icon** from the menu.

Delete a Profile

To delete a profile do one of the following:

- Select the profile and click the **Delete** button.
- Select the profile and press the [Delete] key on the keyboard.
- Right-click the profile and select **Delete** from the menu.

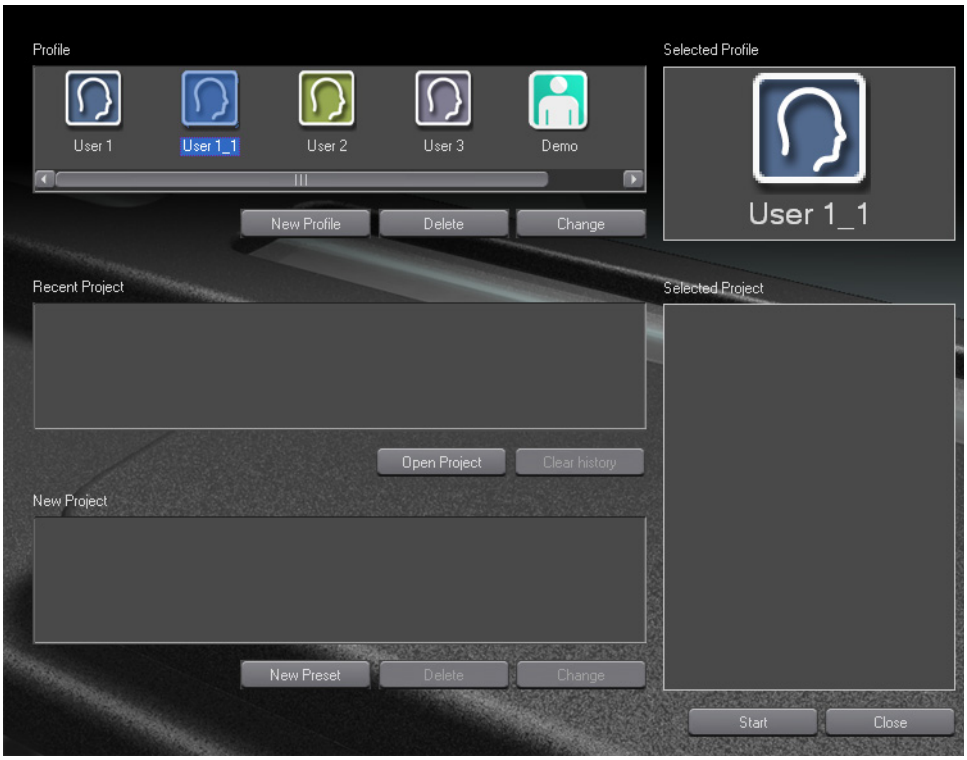
Copy a Profile

To copy a profile do the following:

1. Right-click on the profile to be copied
2. Select **Copy** from the menu.

A new profile icon appears in the Profile list (see Figure 12 for an example).

Figure 12. Copied Profile



See *Change a Profile Name or Icon* above for information on changing the profile name and icon.

Export Profiles

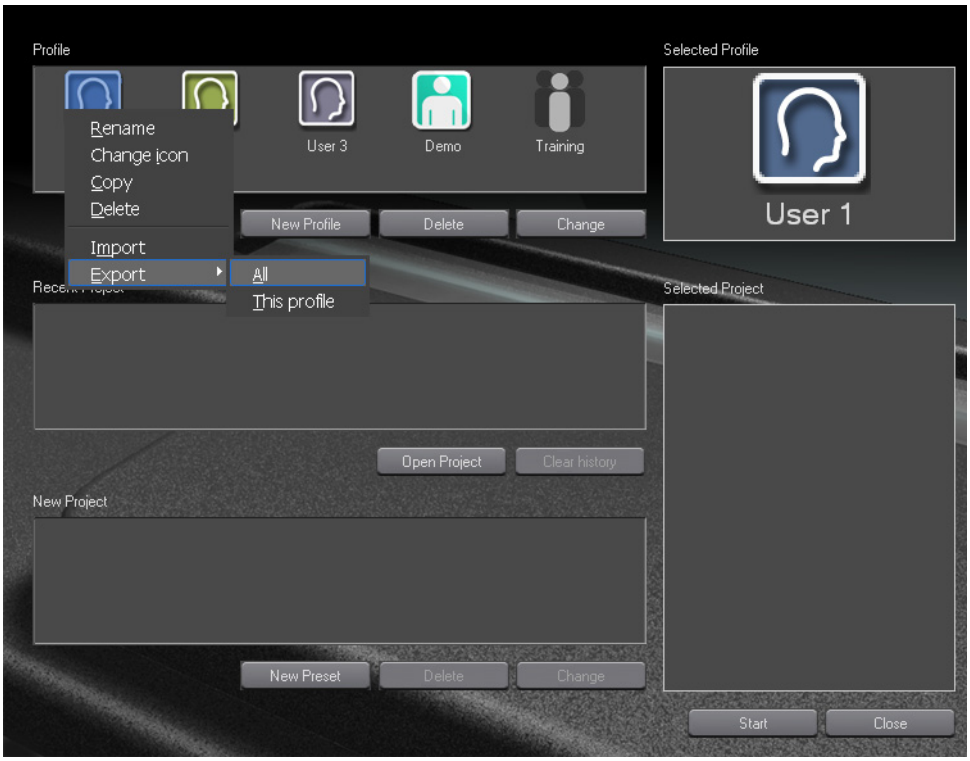
Profiles created in EDIUS on one computer can be exported and used in an EDIUS system on a different computer. Profiles can be exported to network drives, external drives, USB drives, etc. and then imported into the EDIUS environment in which they are to be used.

To export one or all EDIUS profiles follow these steps:

1. Right-click on a profile icon.
2. Select **Export** from the menu.

3. Select **All** or **This profile** from the export menu (see Figure 13).

Figure 13. Profile Export Menu

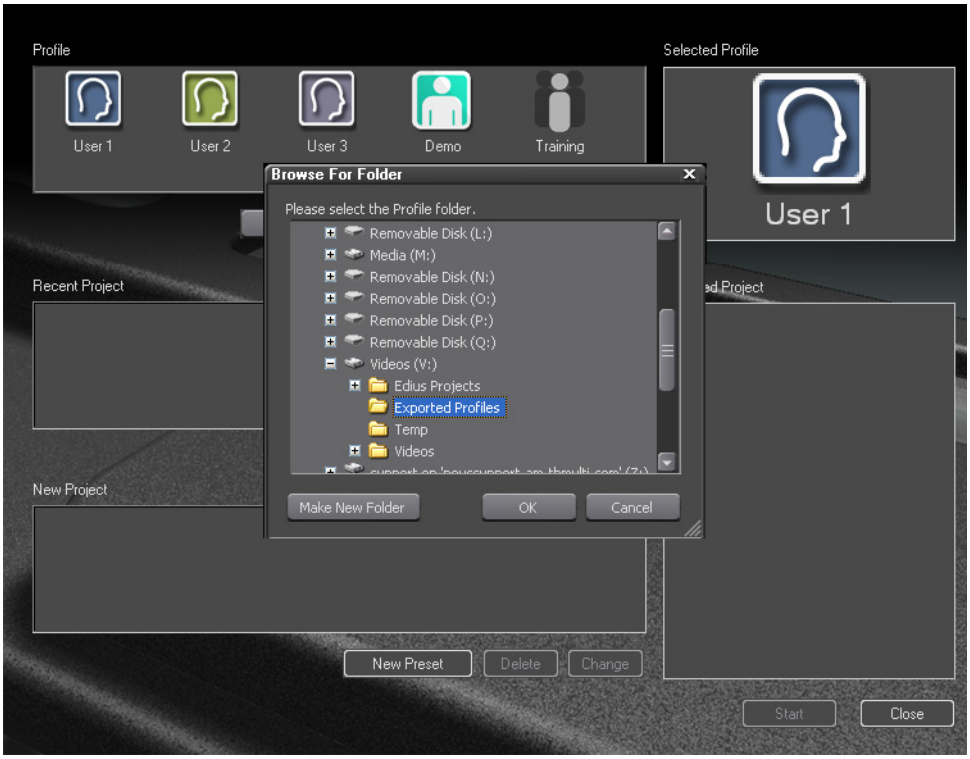


Note Just the right-clicked profile or all profiles may be exported. **This profile** refers to the profile right-clicked in Step 1.

4. Navigate to the location in which the exported profile(s) will be stored as shown in Figure 14.

Note A new folder may be created on the destination drive by clicking on the **Make New Folder** button in the Browse For Folder dialog.

Figure 14. Profile Export Location



5. Click the **OK** button the export the profile(s) to the selected location.

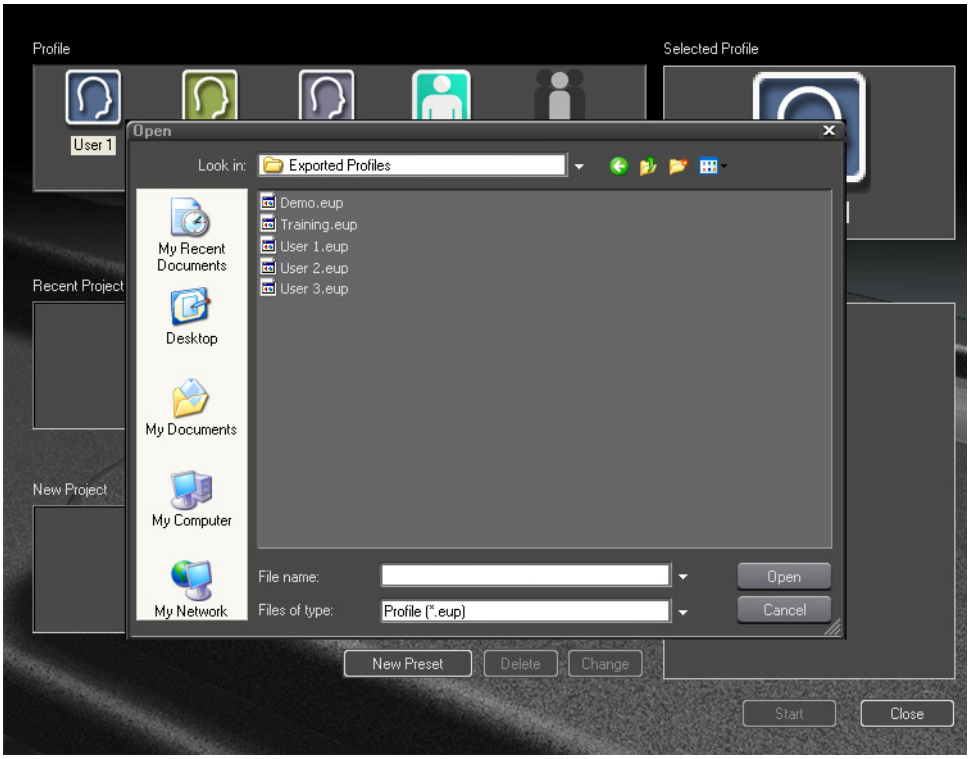
Import Profiles

Profiles that have been exported from an EDIUS system may be imported into the same or another EDIUS system.

To import profiles, perform the following actions:

1. Right click on any profile icon.
2. Select **Import** from the menu.
3. Navigate to the location in which exported EDIUS profiles are stored (an example is shown in Figure 15).

Figure 15. Exported Profiles



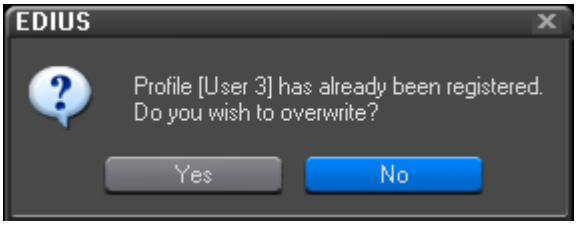
4. Select the profile(s) to be imported.

Note To select multiple profiles, hold down the [CTRL] key while clicking on the desired profiles. To select all profiles, click on the first profile in the list and hold down the [SHIFT] key while clicking on the last profile in the list.

5. Click the Open button to import the selected profile(s).

If a profile with the same name as a profile to be imported already exists, the dialog shown in Figure 16 appears.

Figure 16. Profile Overwrite Dialog



6. Select the appropriate response to continue importing profiles.

Profile Management

Profile management provides the ability to switch the active profile from within EDIUS, change profile properties and configure access by EDIUS workstations to shared profiles.

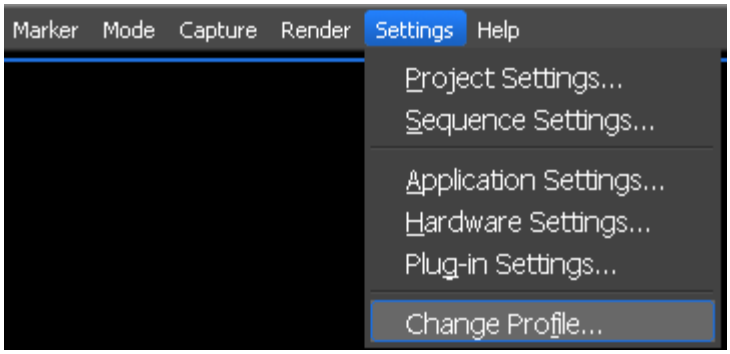
Note A dedicated profile management tool is installed on the server(s) on which shared EDIUS profiles will be managed. The actions described in this section pertain to EDIUS workstation settings and options and not the server-based profile management operations.

Manage Profile Access

To manage profile access do the following:

1. Select Settings>Change Profile from the Preview window menu bar as illustrated in Figure 17.

Figure 17. Settings Change Profile Menu



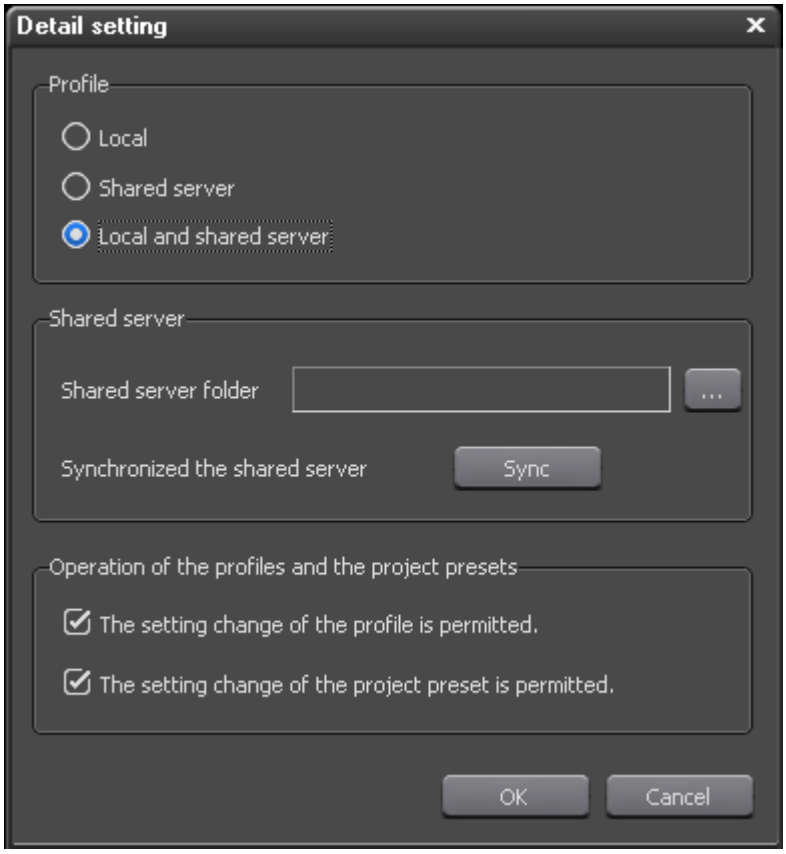
The Change Profile dialog shown in Figure 18 appears.

Figure 18. Change Profile Dialog

2. Click the **Detail setting** button.

The Detail Setting dialog illustrated in Figure 19 appears.

Figure 19. Profile Management Detail Setting Dialog



3. Select the profile location to be used from this EDIUS workstation by selecting one of the following options:

Local

Only profiles stored on the local EDIUS workstation will be used.

Shared server

Only profiles stored in the shared server folder specified in the next step will be used.

Local and shared server

Profiles stored in both the local EDIUS workstation and the shared server location will be used.

4. To use profiles stored in shared server, specify the folder containing shared profiles by clicking the ... button and browsing to and selecting the desired shared server folder.

Note If Local is the selected profile location, the Shared server options are not available.

Note The Documents and Settings\{UserName\Application Data folder is not a valid shared profile location on any computer.

5. If a Shared server location is specified, click the **Sync** button to synchronize profiles stored on the local workstation with those stored in the shared server location.

6. Select the desired profile and project preset change actions as described below:

The Setting Change of the Profile is Permitted

If this option is selected, creating new profiles, changing profile settings (name and icon) and profile deletion are permitted. If this option is not selected, these actions are not allowed.

The Setting Change of the Project Preset is Permitted

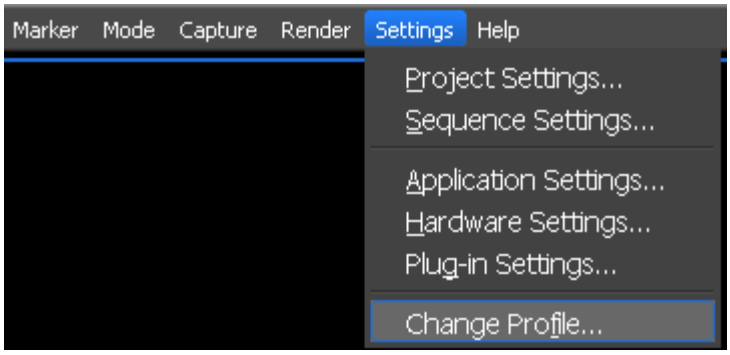
If this option is selected, creating new project presets, changing project preset settings (name and icon) and project preset deletion are permitted. If this option is not selected, these actions are not allowed.

Switch Active Profile

To switch the active profile from with EDIUS, do the following:

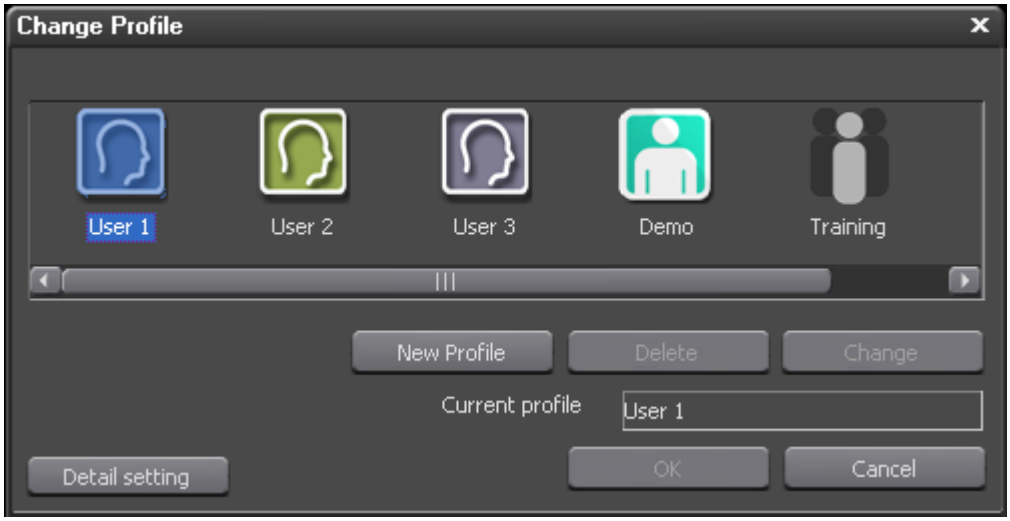
1. Select Settings>Change Profile from the Preview window menu bar as illustrated in Figure 20.

Figure 20. Settings Change Profile Menu



The Change Profile dialog shown in Figure 21 appears.

Figure 21. Change Profile Dialog

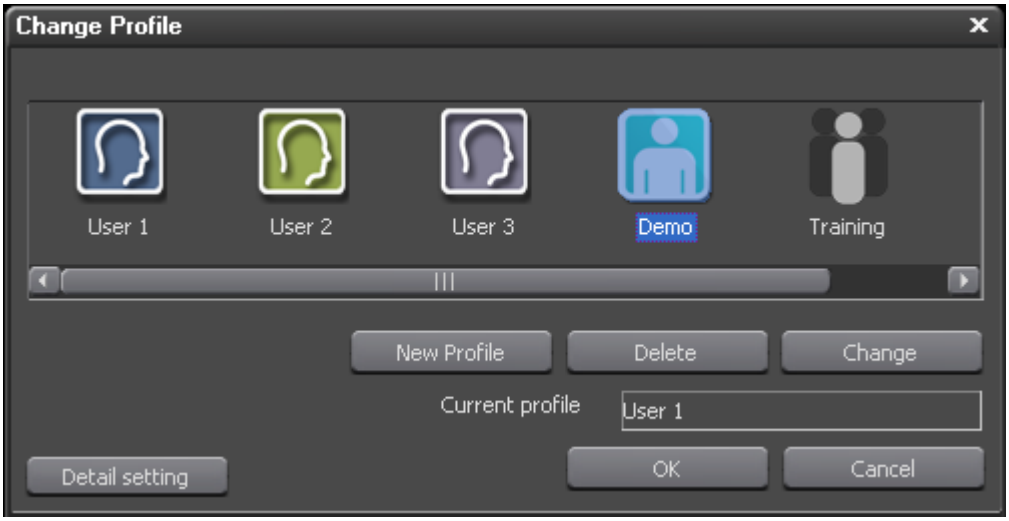


The current profile is selected and listed in the Current profile field.

2. Select the profile you wish to activate.

The **Change**, **Delete** and **OK** buttons will become active as illustrated in Figure 22.

Figure 22. New Profile Selected



3. Click the **OK** button to activate the selected profile.

Change Profile Properties

To change a profile name or the icon associated with a profile, follow these steps:

Note This action is available only if the "Setting change of the profile is permitted" option is selected. See *Manage Profile Access* *on page 40* for more information.

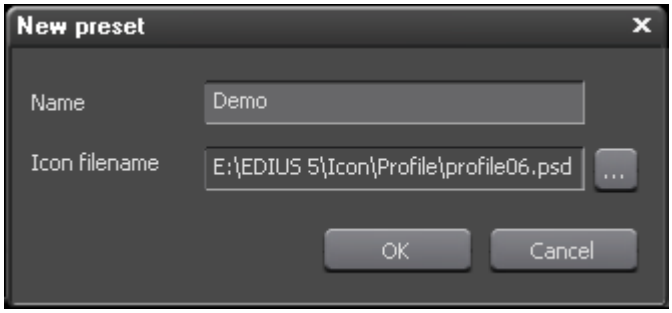
1. Select Settings>Change Profile from the Preview window menu bar.

The Change Profile dialog appears.

2. From the Change Profile dialog, select the desired profile
3. Click the **Change** button.

The new preset dialog shown in Figure 23 appears.

Figure 23. New Preset Dialog



4. Enter a new profile name, if desired.
5. Click the ... button and browse to the icon file you wish to assign to the selected profile.
6. Click the **OK** button to close the New Preset dialog.

Project Presets

Project presets make it possible to start a new project with predetermined default settings. Settings which can be defined in project presets include the following:

- Output Device
- Output Format
- Rendering Format
- Time Code Preset and Mode
- Total Length
- Overscan Size
- Audio Reference Level
- Panning Mode
- Color Space Conversion
- Number of Video and Audio Tracks
- Audio Channel Map

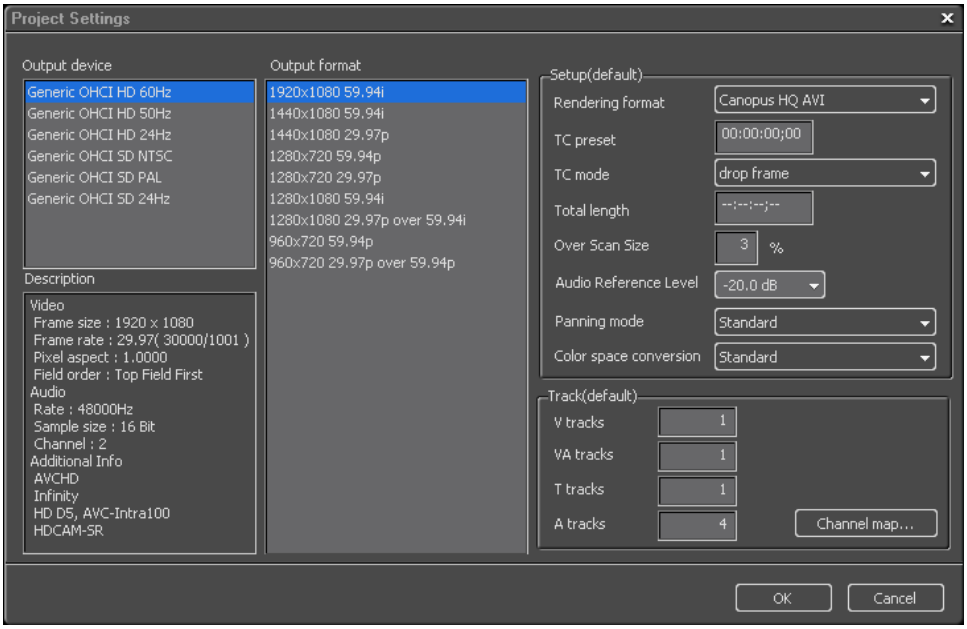
Multiple project presets may be created from which the appropriate selection is made when a new project is started.

Create a Project Preset

To create a project preset, do the following:

1. From the start-up window, click the **New Preset** button. The dialog box in Figure 24 appears.

Figure 24. Project Preset Settings



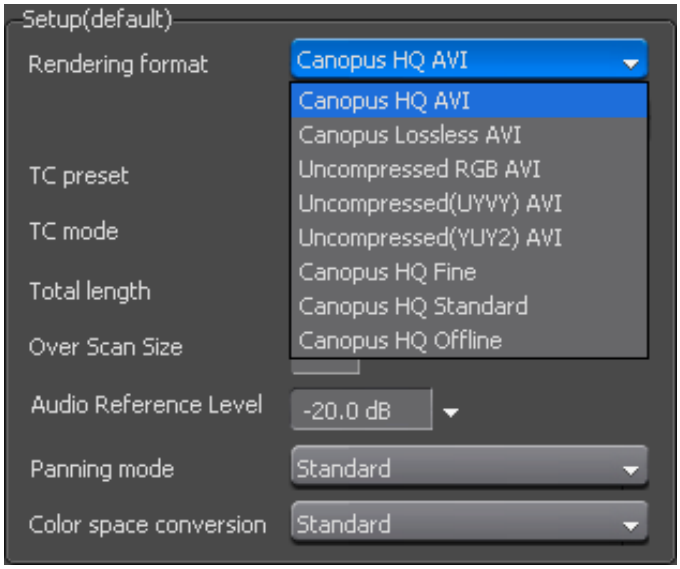
2. From the list of available output devices, select the output device for the project preset.

3. From the list of output formats, select the default output format for the project preset

Note The Description section of the Project Settings dialog will contain details such as frame size, frame rate, audio rate, sample size, channels, etc. based on the output device an output format selections.

4. In the Setup(default) section of the dialog box, click on the list button [▽] of the **Rendering format** button. A drop-down list similar to the one shown in Figure 25 appears. Select the desired rendering format.

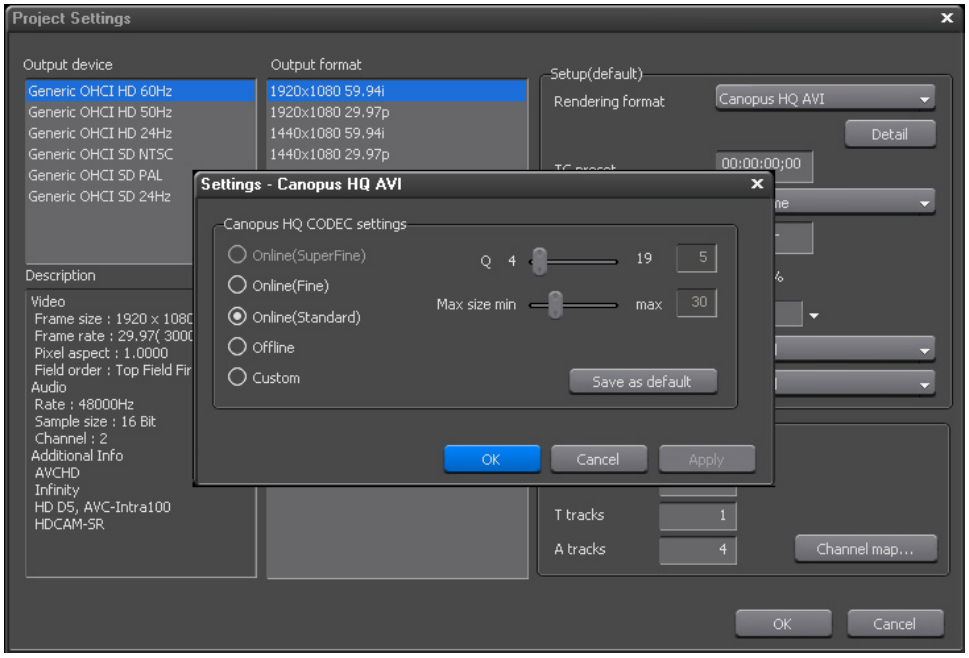
Figure 25. Rendering Format Drop-Down List



Note The list of available rendering formats may change depending upon the selected output device and output format. See *Appendix A-Hardware Settings* for more information on output device and rendering codecs.

5. Click the **Detail** button to see rendering codec details. See Figure 26.

Figure 26. Rendering Codec Settings



Change settings as desired.

6. Set the TC preset as desired. The TC preset will be the starting timecode on the Timeline for any project using this project preset. See *Starting EDIUS* *on page 23* for the various methods of entering numeric data and timecodes.

7. Select the TC mode by clicking on the list button [▽] on the **TC mode** button. If an NTSC device was selected in Step 2 above, you may select "drop frame" or "non drop frame" for the timecode display.

8. If desired, you can set the desired length of the Timeline by entering a value in this field. If a value is entered, the Timeline length is fixed to this time. When the project exceeds this length, the color of the Timeline section that exceeds this length is changed.

9. If over scanning is desired, enter the desired overscan ratio in the Over Scan Size field. The value can be set from 0% to 20%. Setting the value to 0 results in no overscan.

10. Enter the desired audio reference level. Clicking on the list button [▽] of the **Audio Reference Level** button displays a drop-down list of common reference levels (-20 dB, -18dB and -12dB); however, any reference level may be entered.

Note In any field with a drop-down selection list (indicated by the ▽symbol next to the field), the [↑] and [↓] keys may be used to scroll through the list choices without opening the drop-down list.

11. Select the desired Panning mode. The choices are 'Standard" and "EDIUS Pro3 Compatible." This setting affects the appearance of the audio rubber band for audio channels defined as "Monaural channel." Use "EDIUS Pro3 Compatible" only if you have been using this version for past projects.

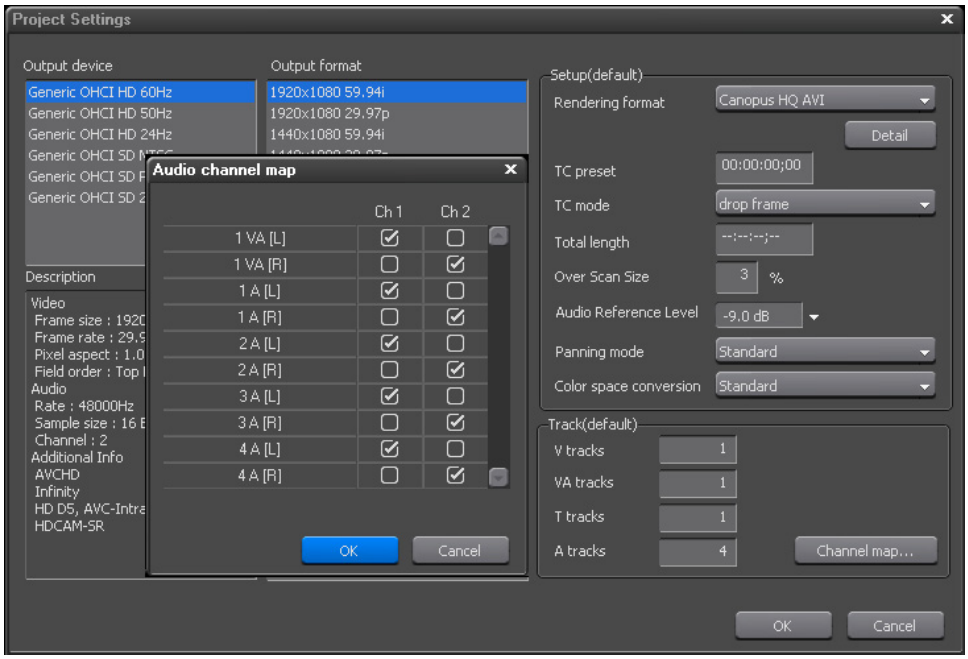
12. Set Color Space Conversion as desired. "Standard" detects the appropriate color space in different formats automatically and converts to the appropriate color space. Set to "EDIUS Pro3 Compatible" to use the original color space of each source even when multiple formats are used in the project.

13. In the Track(default) section of the Preset Settings dialog specify the desired number of default video, audio and title tracks.

- V = video tracks
- VA = video/audio tracks (video with separate but connected audio)
- T = Title tracks
- A = Audio tracks

14. Click on the **Channel Map** button to display the Audio channel map dialog as shown in Figure 27.

Figure 27. Audio Channel Map



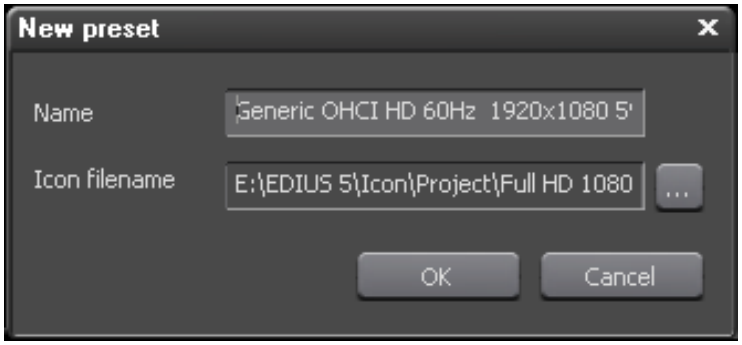
15. Select the desired output channels for each track. Click the **OK** button when finished.

Note Two (2) channels maximum can be output from one track. The number and types of tracks displayed may vary depending on the Track settings specified in Step 13.

16. Click the **OK** button to close the Project Settings dialog box.

The project preset name dialog shown in Figure 28 appears.

Figure 28. Project Preset Name

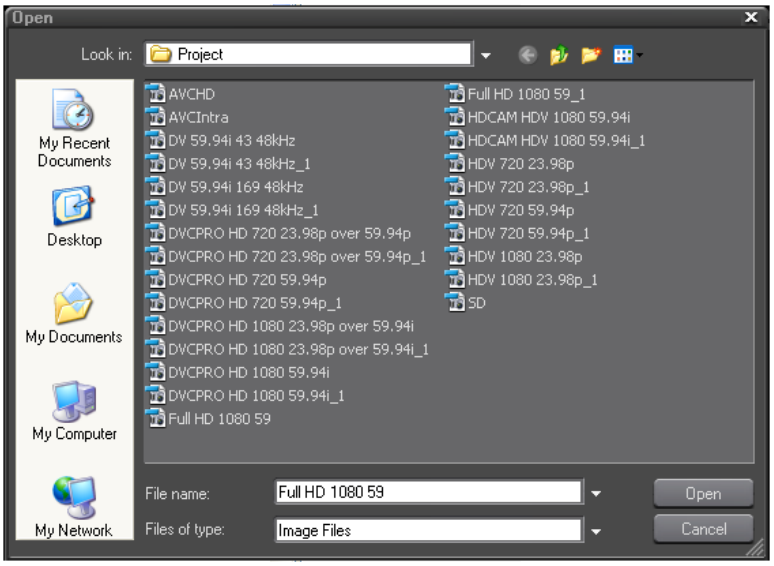


17. If you wish to accept the default project preset name and icon, proceed to Step 21.

18. If you wish to change the name, enter a new name.

19. If you wish to select an icon other than the default icon, click the ... button. The icon list shown in Figure 29 appears.

Figure 29. Project Preset Icon List

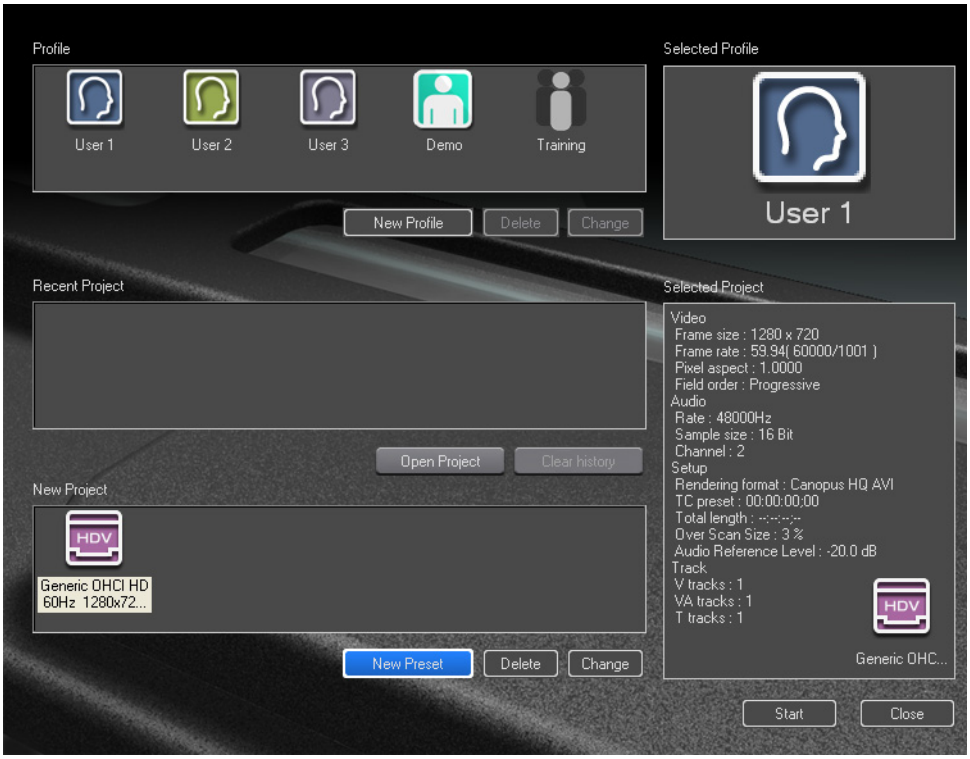


20. Select the desired icon from the list and click the **Open** button.

21. Click the **OK** button to accept the project preset name and icon.

The EDIUS start-up screen re-appears (see Figure 30) with the new preset definition in the New Project window.

Figure 30. EDIUS Start-up Screen with New Project Definition



22. Create additional project presets as needed by repeating the steps above.

Create a New Project

EDIUS projects can be created from project presets or from the current project.

Create a New Project from a Project Preset on Startup

Before selecting the project preset, make sure you have clicked on the desired profile in the Profile area of the start-up screen. The selected profile icon and name appear in the Selected Profile area in the upper right corner of the start-up screen (see Figure 30). This selected profile will be used when a new project is initiated.

To create a new project using a project preset, do the following:

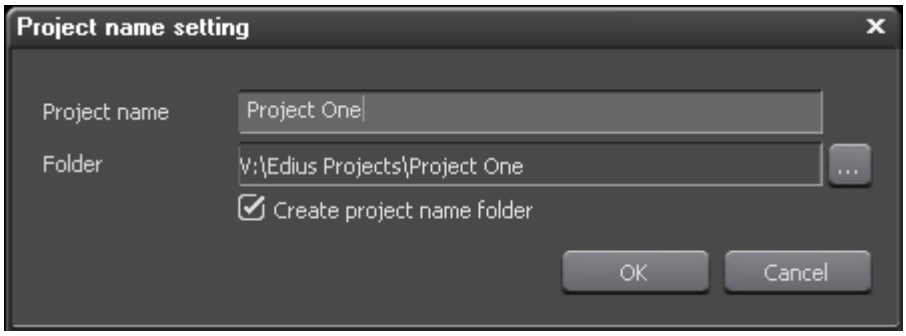
1. Double-click the desired project preset icon in the New Project area of the EDIUS start-up screen.

Note You may also single-click to select the desired preset icon and then click the **Start** button in the lower right corner of the start-up screen.

The Project name setting dialog shown in Figure 31 appears.

2. Enter the project name in the Project name field.

Figure 31. New Project Preset Name



Note The default project folder is the folder specified in *Select Project Folder Location* *on page 27*.

3. Select the "Create project name folder" to create a folder with the same name as the project in the selected project folder. The project file(s) will be stored in this folder.

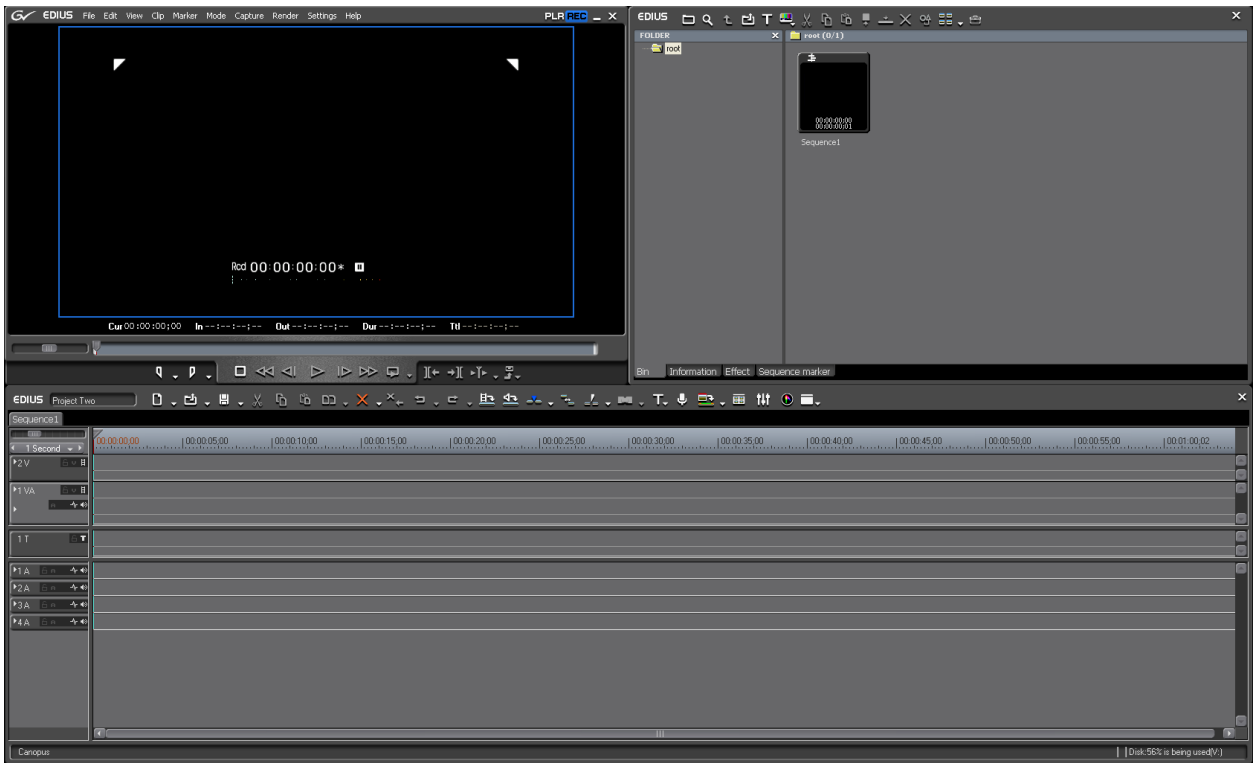
Note If the "Create project name folder" option is not selected, the project file(s) will be stored in the selected folder location without creating a new folder with the project name.

If you wish to specify a location for this project other than the default, click the **...** button and browse to the desired location. Click to **OK** button to select the new folder.

4. Click **OK** to create the new project and open EDIUS.

A blank project (no data in the Timeline, Recorder/Player, or Asset Bin widows) appears as illustrated in Figure 32.

Figure 32. EDIUS New Project



Create a New Project From the Current Project

A new project can be created from the current project in one of three ways.

- Select File>New>Project from the Preview Window
- Click the list button [▽]on the **New Sequence** Icon and select **New Project** from the menu. See Figure 33.

Figure 33. Create New Project from New Sequence List Button

Note Clicking the **New Sequence** button, will result in the creation of a new sequence in the current project. To create a new project, click on the list button [▽] symbol. See *Sequences on page 58* for more information on sequences.

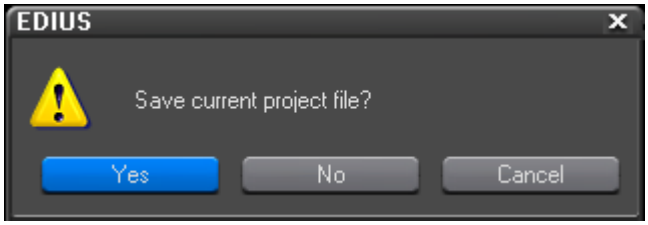
- Press [CTRL]+[N] on the keyboard

To create a new project from the current project, do the following:

1. Perform any of the three actions listed above to initiate the creation of a new project.

After performing any of these actions, a dialog prompting to save the current project file appears. See Figure 34.

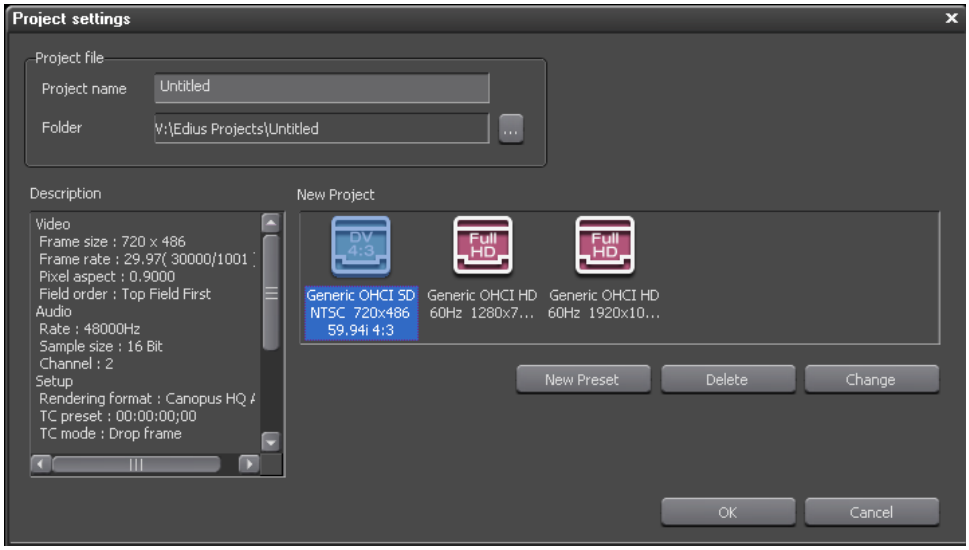
Figure 34. Save Current Project Dialog



2. Click **Yes** to save the current project.

The Project settings (simple settings) dialog box shown in Figure 35 appears.

Figure 35. Project Settings (Simple Settings) Dialog



3. Enter a name for the project in the Project name field.

4. Select the desired project preset and click the **OK** button.

Note If you wish to create a new project preset, click the **New Preset** button and follow the instructions to *Create a Project Preset* *on page 45*.

Change Current Project Settings

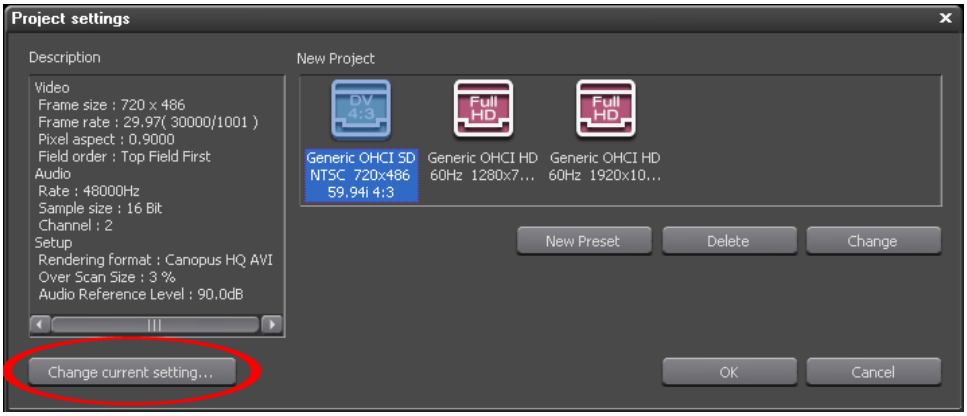
Although a project is started with a project preset and its associated settings, it is possible to change the settings for a particular project at any time before project output.

To change project settings, do the following:

1. Select Settings>Project Settings from the Preview window

The Project Settings window shown in Figure 36 appears.

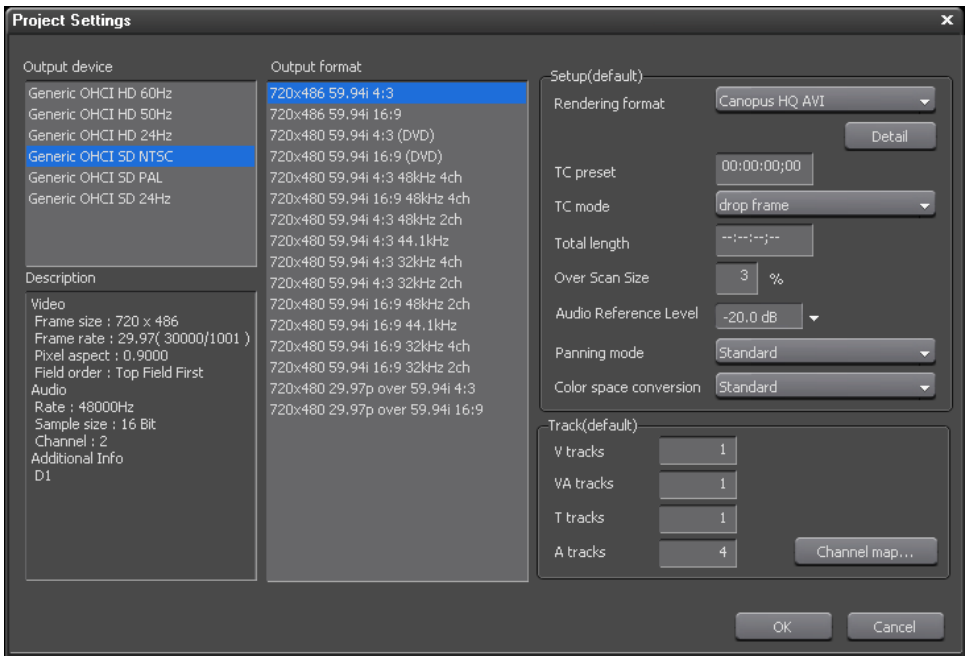
Figure 36. Project Settings - Change Current Settings



2. Click the **Change current setting…** button.

The Project Settings detail window appears. See Figure 37

Figure 37. Project Settings Detail



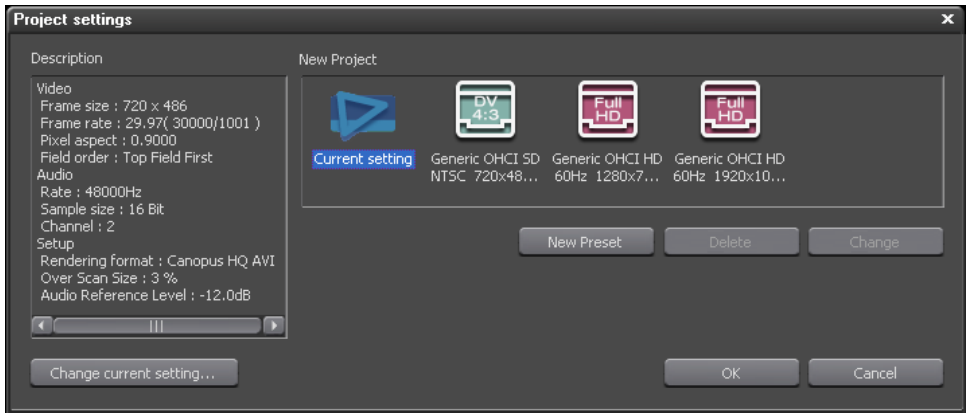
3. Change the desired project settings. See *Create a Project Preset* *on page 45* for details concerning project settings.

4. Click the **OK** button to save the changes to the current project settings.

If you back into Settings>Project Settings you will notice the addition of the Current Setting icon (see Figure 38). The current project settings are associated with this project preset.

Note Changing the current project settings does not change the settings associated with the original preset from which the project was initiated.

Figure 38. Project Settings - Current Settings



Save the Current Settings as a New Project Preset

If you wish to create a new preset from the current settings, perform the following actions:

1. Click on the Current setting icon.
2. Click the **New Preset** button.

Note The Current setting preset cannot be deleted or changed (buttons are greyed out). If you wish to change the current settings use the **Change current setting…** button.

3. Click the **OK** button to save the current settings.

Note Do not make any setting changes if you wish to save the current settings as a new project preset.

4. (Optional) Enter a name and select an icon for the new project preset.
5. Click the **OK** button to save the project preset.

Change the Settings of an Existing Project Preset

If you wish to make changes to the settings of an existing project preset, do one of the following:

- Click on the project preset icon from either the EDIUS start-up window or the Project Settings dialog shown in Figure 36 and click the **Change** button.
- Right-click the preset icon for which you wish to change the settings and select **Change preset** from the menu.

Other Actions in the Simple Settings Dialog

The following actions can be performed from the Project Settings (Simple Settings) dialog box shown above in Figure 35:

- Specify a folder other than the default for a project location. Click the … button to navigate to another folder.
- Delete existing project presets. Click on the project preset icon; click the **Delete** button to delete the project preset.

Note An alternative method of deleting project presets is to right-click on the project preset icon and select the **Delete** option from the menu.

Sequences

A sequence is a collection of clips, images, effects, etc. placed on the Timeline. A project may be comprised of one or more sequences.

The sequence tab is located in the upper left corner of the Timeline window just above the Timeline and just below the project name (see Figure 39).

Figure 39. Sequence Tab

Create a New Sequence

To create a new sequence in the current project, do one of the following:

- Click the **New Sequence** button in the Timeline window (see Figure 40 - the **New Sequence** button is highlighted in blue).

Figure 40. New Sequence Button

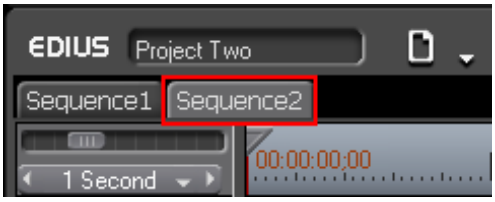
- Select File>New>Sequence from the Preview window menu bar.
- Right-click on a blank area of the clip view in the Asset Bin and select "New Sequence" from the menu.

Note In this case a blank Timeline sequence clip is created in the Asset bin but a sequence tab is not displayed in the Timeline window.

- Press **[SHIFT]**+**[CTRL]**+**[N]** on the keyboard.

Any of these methods will result in a new sequence tab appearing in the Timeline window as shown in Figure 41 as well as the creation of a sequence clip in the Asset bin as illustrated in Figure 42.

Figure 41. New Sequence Tab



Note Double right-click a sequence tab to change the sequence name.

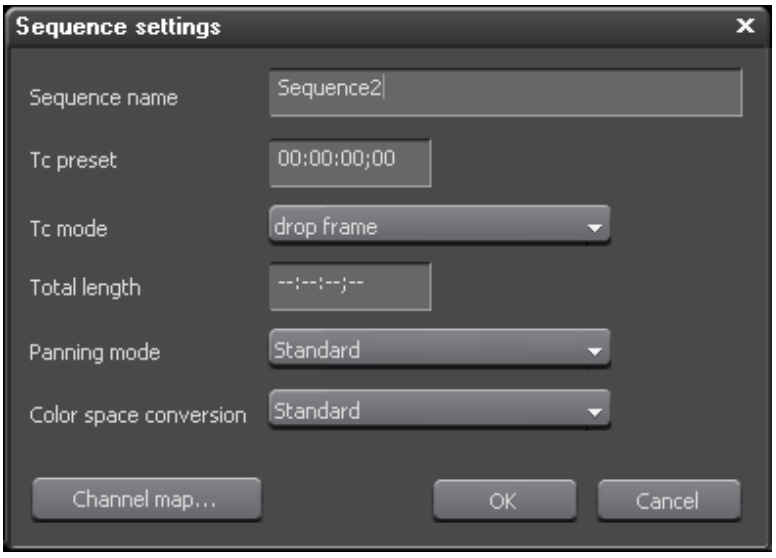
Figure 42. New Sequence Clip In Asset Bin

Note The sequence tabs can be dragged and dropped to change their order.

Sequence Settings

Some sequence settings may have been defined when creating project presets. The Sequence Settings dialog is illustrated in Figure 43.

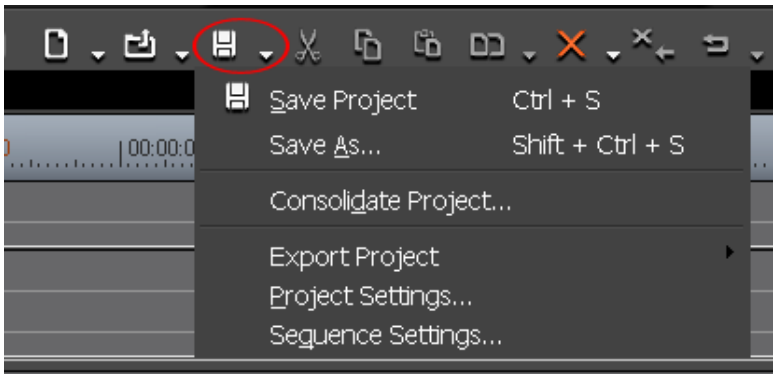
Figure 43. Sequence Settings Dialog



To change sequence settings, access the Sequence Settings dialog in one of the following ways:

- Click on the list button [▽] of the Save Project icon (see Figure 44) in the Timeline window and select **Sequence Settings…** from the menu.

Figure 44. Save Project Menu



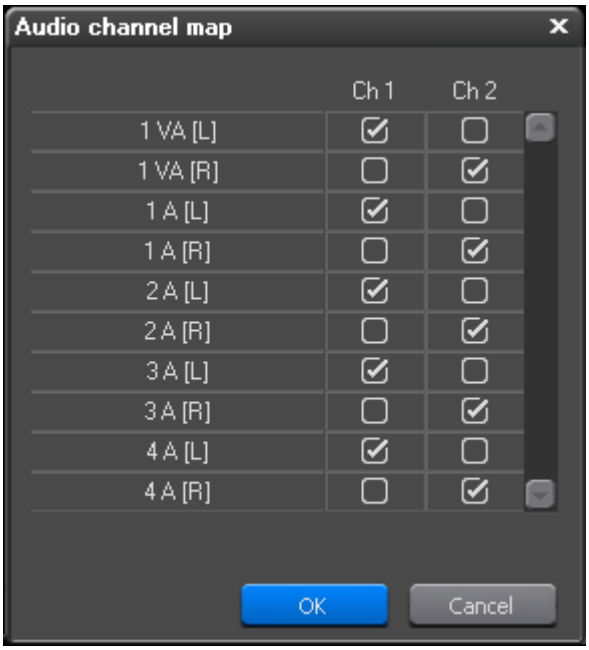
- Select Settings>Sequence Settings from the Preview window.
- Right-click on a sequence tab in the Timeline window and select **Sequence Settings…** from the menu.
- Right-click a sequence clip in the Asset Bin and select **Sequence Settings…** from the menu.

The settings that can be changed in the Sequence Settings dialog are:

- Tc Preset — The TC preset will be the starting timecode on the Timeline for any project using this project preset. See *Starting EDIUS on page 23* for the various methods of entering numeric data and timecodes.
- Tc Mode — Select the TC mode by clicking on the ▽ symbol on the TC mode button. If an NTSC device was selected in Step 2 above, you may select “drop frame” or “non drop frame” for the timecode display.
- Total length — If desired, you can set the desired length of the Timeline by entering a value in this field. If a value is entered, the Timeline length is fixed to this time. When the project exceeds this length, the color of the Timeline section that exceeds this length is changed.
- Panning mode — The choices are ‘Standard” and “EDIUS Pro3 Compatible.” This setting affects the appearance of the audio rubber band for audio channels defined as “Monaural channel.” Use “EDIUS Pro3 Compatible” only if you have been using this version for past projects.

- Color Space Conversion — "Standard" detects the appropriate color space in different formats automatically and converts to the appropriate color space. Set to "EDIUS Pro3 Compatible" to use the original color space of each source even when multiple formats are used in the project.
- Channel Map — Click on the **Channel Map** button to display the Audio channel map dialog as shown in Figure 27.

Figure 45. Audio Channel Map



Select the desired output channels for each track. Click the **OK** button when finished.

Note Two (2) channels maximum can be output from one track. The number and types of tracks displayed may vary depending on track settings.

In the Sequence Settings dialog, make the desired changes to the sequence settings and click the **OK** button to save the changes and close the dialog.

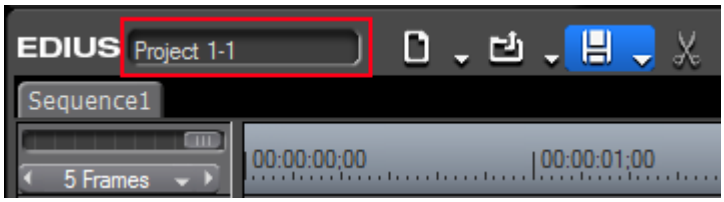
Saving Projects

EDIUS projects are saved as .ezp files in the folder specified as the projects folder. See *Select Project Folder Location on page 27* for more information.

To save a project with the name entered (or the default name) at project creation, do one of the following:

- Click the **Save project** button (highlighted in blue in Figure 46) in the Timeline window.

Figure 46. Timeline Save Project Button



- Click on the list button [▽] of the **Save project** button and select "Save Project" from the menu.
- Select File>Save Project from the preview window menu bar.
- Press the [**CTRL**]+[**S**] keys on the keyboard.

Note As illustrated in Figure 46, the current project name which will be used for saving the file with the methods listed above is shown in the Timeline window.

To save a project with a name other than the current name, do one of the following:

- Click on the list button [▽] of the **Save project** button and select "Save As" from the menu.
- While holding down the [**SHIFT**] key, click the **Save project** button (highlighted in blue in Figure 46) in the Timeline window.
- Select File> Save As from the preview window menu bar.
- Press the {**SHIFT**]+[**CTRL**]+[**S**] keys on the keyboard.

Note Using any of the methods described above will display a Save As dialog in which you can choose a location and file name in which to save the project.

Auto Save/Backup

Backup files are only used in unusual circumstances such as project files becoming corrupted or EDIUS crashing while editing. They are not used in normal operations.

Backup files are created automatically in the following manner:

Location

{Project Name}/{Project}/Backup

File Name

{Project name}-year, month, day - hour, minute, second.ezp

If the auto save is enabled, project files are automatically saved at the specified interval. For information on enabling auto save see *Enable Auto Save/ Auto Save Interval* *on page 153*.

When auto save is enabled, auto save files are created in the following manner:

Location

{Project Name}/{Project}/AutoSave

File Name

{Project name}-year, month, day - hour, minute, second.ezp

To recover a project from an auto save or backup file, copy the file to the original project folder and import the file.

Note Auto save and backup files are read only and cannot be overwritten.

Exiting EDIUS

To exit EDIUS, do any of the following:

- Select File>Exit from the Preview window menu bar (see *Preview Window* *on page 109* for more information) and click on the **Yes** button if you wish to exit EDIUS or the **No** button if you wish to cancel the exit operation.
- Press the **[ALT]**+**[F4]** keys on the keyboard.
- Click on the "X" in the upper right corner of the preview window.

Project Operations

This section covers project operations such as opening, importing and exporting project information.

Opening Project Files

Projects may be opened on EDIUS startup or within EDIUS from the current project.

Open Project on Startup

To open a project on startup, do one of the following when the startup screen illustrated in Figure 47 appears:

- Double-click the desired project icon in the Recent Project list.
- Click the desired project icon in the Recent Project list and click the **Open Project** button.
- Click the desired project icon in the Recent Project list and click the **Start** button.

Note Projects may be removed from the Recent Project list by selecting the project to be removed and clicking the **Clear History** button.

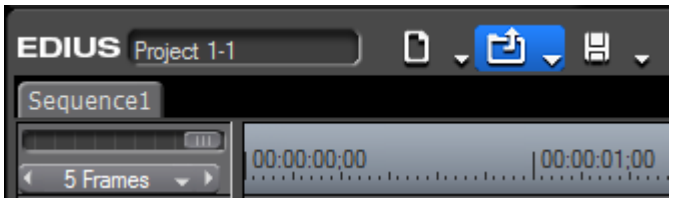
Figure 47. EDIUS Startup Screen Project Icons

Open a Project from the Current Project

To open a different project from within the current project, do any of the following:

- Click the **Open Project** button (highlighted in blue in Figure 48) in the Timeline window and select the project to open from the Open dialog.

Figure 48. Timeline Open Project Button



- Click the list button [▽] of the **Open Project** button and select the desired project from the history of recently opened projects at bottom of the menu.
- Select File>Recent Project>{project name} from the preview window menu bar.
- Select File>Open Project from the preview window menu bar and select the desired project from the Open dialog.
- Press the **[CTRL]**+**[O]** keys on the keyboard.

Importing Sequences

A collection of clips, images, effects, etc. placed on the Timeline is known as a "sequence."

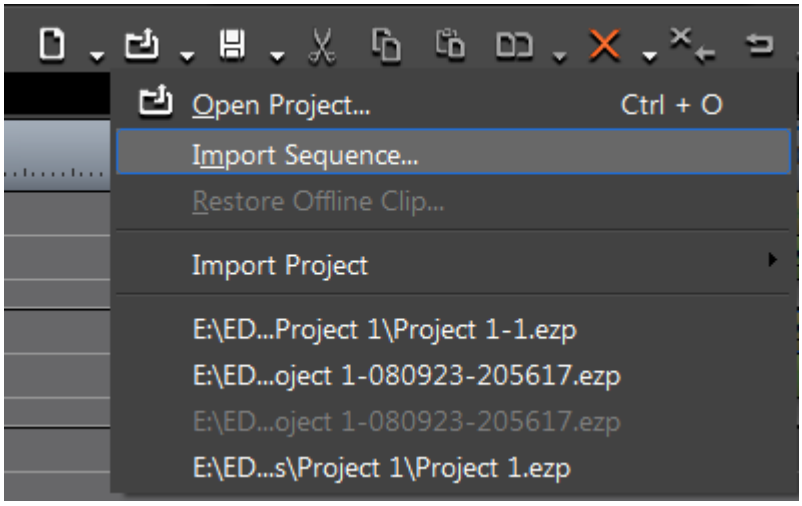
Sequences created in another project may be imported into the current project. The imported project will appear as a new sequence in the current project.

To import a sequence, do the following:

1. Click the list button [▽] of the **Open Project** button and select "Import Sequence" from the menu as illustrated in Figure 49.

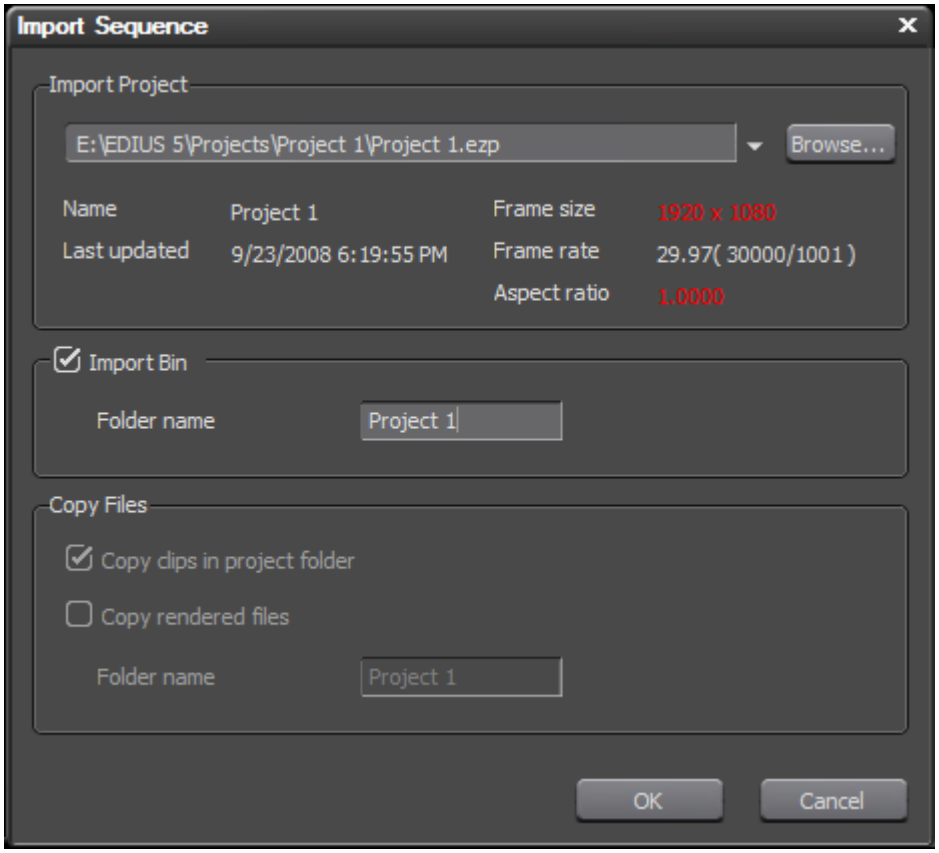
Note An alternative method is to select File>Import Sequence from the preview window menu bar.

Figure 49. Open Project Button Menu - Import Sequence



The Import Sequence dialog shown in Figure 50 appears.

Figure 50. Import Sequence Dialog



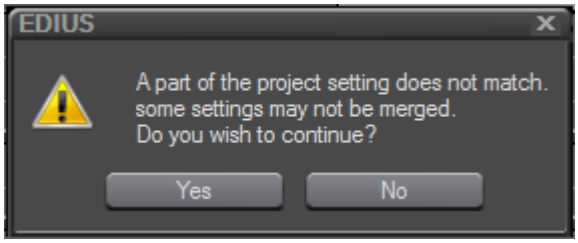
2. Select the desired import settings as explained below:

Import Project

Use the list button [▽] to select a project from the history of recently opened projects or the **Browse** button to select the project from an Open dialog. When a project is selected, project details are displayed (see Figure 50 above).

If the frame size or aspect ratio of the selected project is different than current project, these are displayed in red as shown in Figure 50. Attempting to import the project when these settings do not match will result in the warning illustrated in Figure 51.

Figure 51. Sequence Import Settings Mismatch Warning

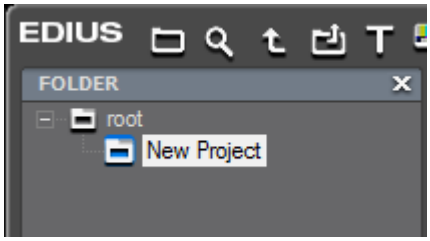


Note If the frame rates are different, the projects cannot be combined.

Import Bin

The contents of the merged projects can be placed in a designated folder in the Asset Bin. Select the "Import Bin" option and enter the name of the folder you want to create as the import location. This folder will be created under the "root" folder as illustrated in Figure 52

Figure 52. Asset Bin Import/Merge Folder Created



Copy Files

Select the "Copy clips in project folder" option to copy the files used in a merged project.

Note Copy files is not available when the project folder is the same as the folder for the project to be merged.

Select the "copy rendered files" option if you wish to copy the rendered files as well.

Note Rendered files cannot be copied if the project to be imported has a frame size, aspect ratio or overscan size that differs from the current project.

Enter the desired folder name to which the files should be copied. This folder will be created under the current project folder.

3. Click the **OK** button, to import the project/sequence using the designated import settings.

Consolidate Project

Project consolidation removes unused clips or portions of clips from the project folder. Consolidation is also useful in creating a smaller copy of the project file to, for example, transfer the project to removable media for archival.

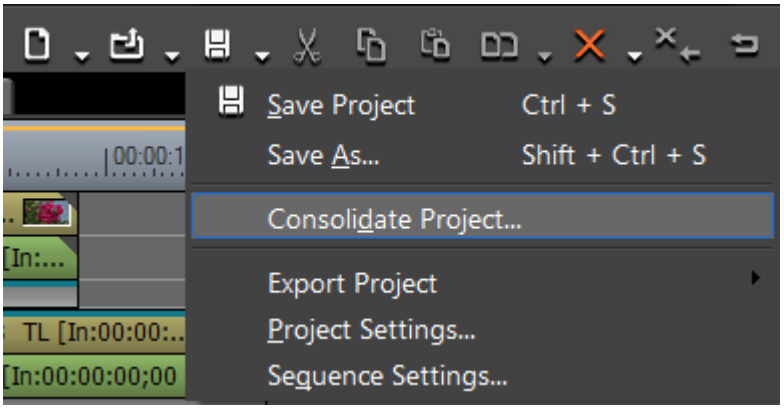
Note See *File Formats Supported In Trimming Operations* *on page 770* of *Appendix C-Input/Output Formats* for more information on file format support in trimming and consolidation operations.

To consolidate a project, do the following:

1. Click the list button [▽] of the **Save Project** button and select "Consolidate Project" from the menu as illustrated in Figure 53.

Note An alternative method is to select File>Consolidate Project from the preview window menu bar.

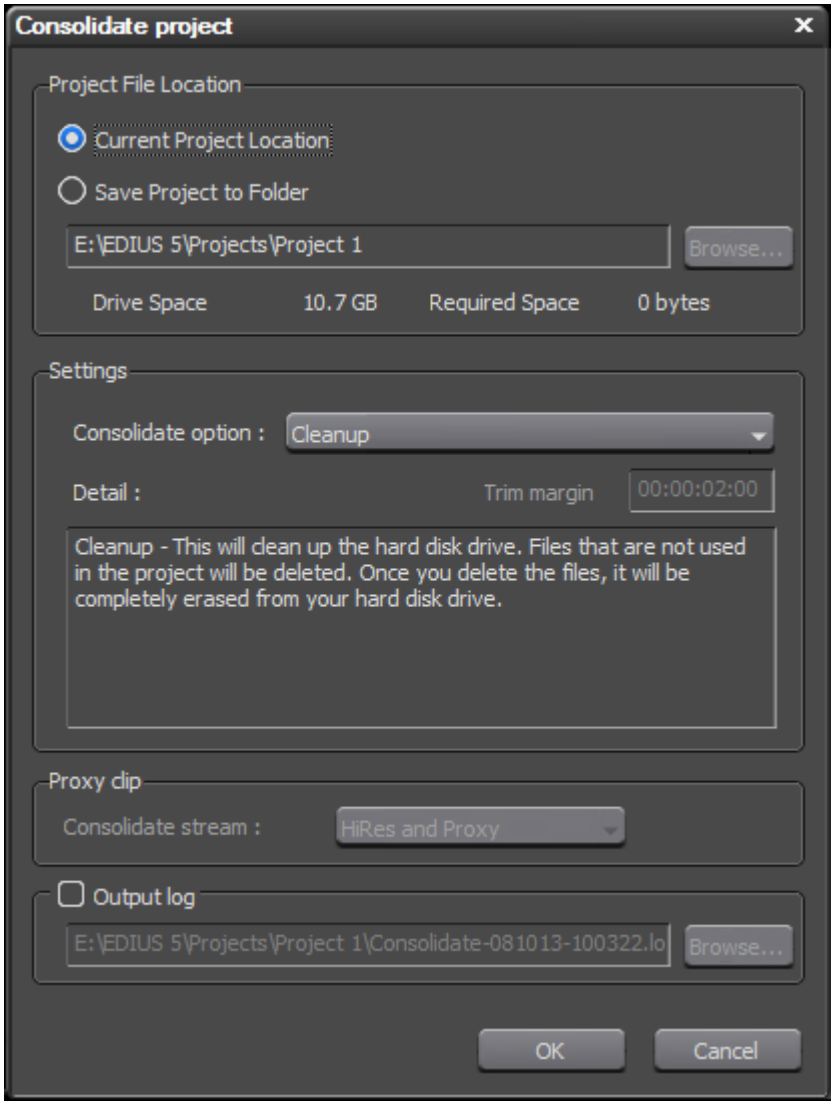
Figure 53. Timeline Save Project Menu - Consolidate Project



Note If the message "Not enough disk space for consolidating" appears, change the project saving destination to a drive with more available space.

The Consolidate Project dialog appears as shown in Figure 54

Figure 54. Consolidate Project Dialog



2. Select the desired consolidation settings according to the following explanations:

Project File Location

Select the location to which to save the consolidated project.

Current Project Location

If this location is selected, the current project files are overwritten with the consolidated project files

Save Project to Folder

Designate a new folder location to which to save the consolidated project files. If this option is selected, enter or browse to the folder location to which to save the files.

Note When a project folder is selected, the available drive space and required drive space for the consolidated files is displayed. If the required space exceeds the available space, the required space is displayed in red.

Settings

From the "Consolidate option" drop-down list, select the desired consolidation method. Consolidation method details are displayed in the "Detail" window as each option is selected.

Cleanup

This will clean up the hard disk drive. Files that are not used in the project will be deleted. Once you delete the files, they will be permanently erased from the hard disk drive.

Backup

This will backup the project together with all files in the Asset bin. All files in the Asset bin will be copied. Files in the Timeline but not in the Asset bin will be trimmed (only the used area of the files are copied) and copied to the project folder.

A trim margin can be set for this option. The allowable trim margin range is from 00:00:00;00 to 00:01:00;00. The trim margin is the area between clips that can be used for adding transitions and audio cross fades or for "fine-tuning" the clip trimming.

Backup (no trimming)

This will backup the entire project. All the files that are used in the project will be copied in to the project folder (files that are already in the project folder will not be copied again).

Backup and Cleanup

This will backup the project with trimming and also clean up the hard disk drive. Files that are used in the project will be trimmed (only the used area of the files are copied) and copied to the project folder. Files that are not used in the project will be deleted. This operation will allow you to save disk space, but the deleted files can not be recovered.

A trim margin can be set for this option. The allowable trim margin range is from 00:00:00;00 to 00:01:00;00. The trim margin is the area between clips that can be used for adding transitions and audio cross fades or for "fine-tuning" the clip trimming.

Backup and Cleanup (no trimming)

This will backup the project and clean up the hard disk drive. Files that are used in the project will be copied in their entirety without trimming. Files that are not used in the project will be deleted.

Custom

If "Custom" is selected, the following options are available:

- Remove unused clips in Timeline - removes clips from the Asset Bin that are not used in the Timeline.
- Leave only areas used in the Timeline - saves as another file the clip areas in the Timeline that are used in the project. These new file(s) then replace(s) the file(s) currently on the Timeline.

Note This option is available for AVI files only. The new file(s) are saved in a folder created in the project folder.

- Copy used files to Project Folder - copies all the clips used in the project to the designated project folder.
- Delete unused files in Project - Delete all unused clips from the project folder.

Note This option is available only when one of the other custom options is selected. Even if the delete unused files option is selected, files may not be deleted if user access rights to the project folder do not allow delete operations.

Proxy Clip

If a proxy clip is used, select the proxy data type from the drop-down list.

Output Log

Select the this option and enter or browse to the location in which to save a log file containing the details of the consolidation operation.

3. Click the **OK** button to consolidate the project according to the selected settings.

Note If the "Delete unused files in Project" option was selected, a confirmation message is displayed. Click the **Yes** button to continue.

Import AAF Files

Advanced Authoring Format (AAF) is a multimedia file format that allows the exchange of digital media and metadata between platforms, systems, and applications. Authoring applications that support AAF (such as EDIUS, Avid Xpress and others) read and write data in AAF files to the extent that they support the format. AAF is a widely-recognized file exchange standard for video editing.

AAF files imported into EDIUS have the following limitations:

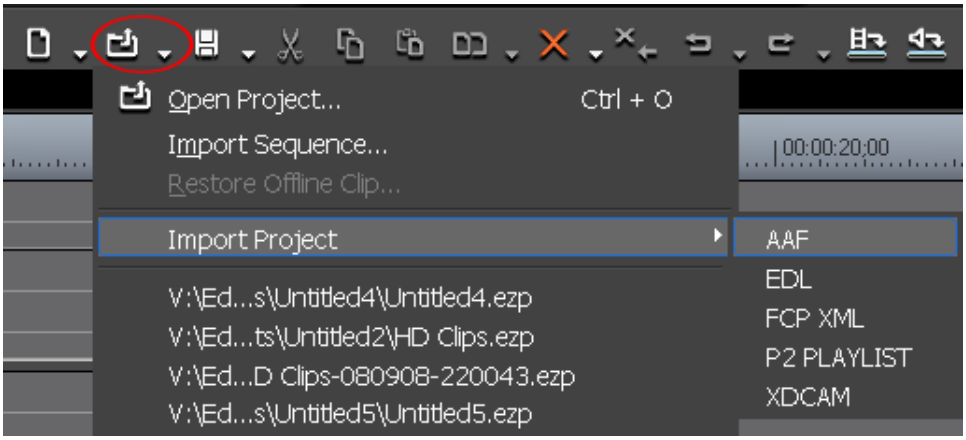
- The output in the AAF file must be frame based
- Embedded AAF files are not supported - the AAF file must reference the source files directly.

To import an AAF file, do the following:

1. Click the list button [▽] of the **Open Project** button and select "Import Project>AAF" from the menu as illustrated in Figure 55.

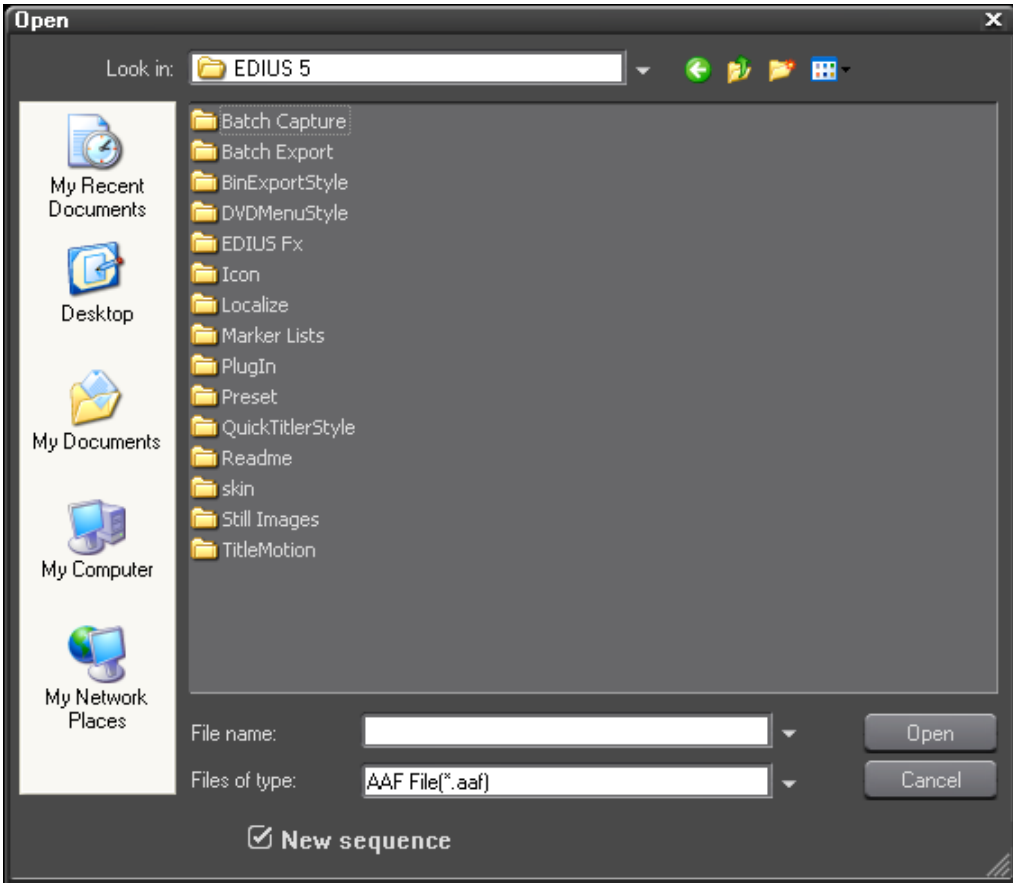
Note An alternative method is to select File>Import Project>AAF from the preview window menu bar.

Figure 55. Timeline Open Project Menu - Import Project AAF



The Open dialog illustrated in Figure 56 appears.

Figure 56. AAF File Open Dialog



2. Select the AAF file to import from the Open dialog

3. Click the **Open** button to import the AAF file.

Note When importing an AAF file, if the "New sequence" option is selected in the Open dialog, a new sequence in the current project is created to which the AAF file is imported. If this option is not selected, a new track in the current sequence is created to which the AAF file is imported.

Import EDL Files

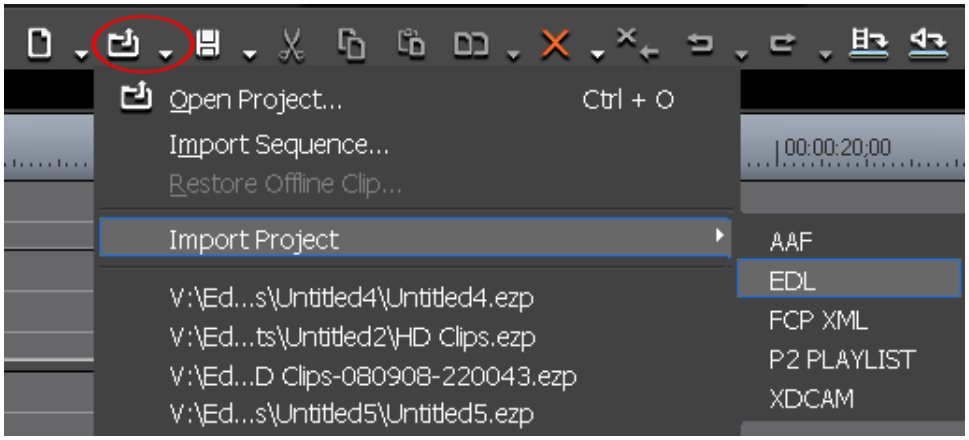
An Edit Decision List (EDL) is a way of representing sequences of clips or reels stored on disk. It contains an ordered list of file and timecode data which represents the final edit.

To import an EDL file, follow these steps:

1. Click the list button [▽] of the **Open Project** button and select "Import Project>EDL" from the menu as illustrated in Figure 57.

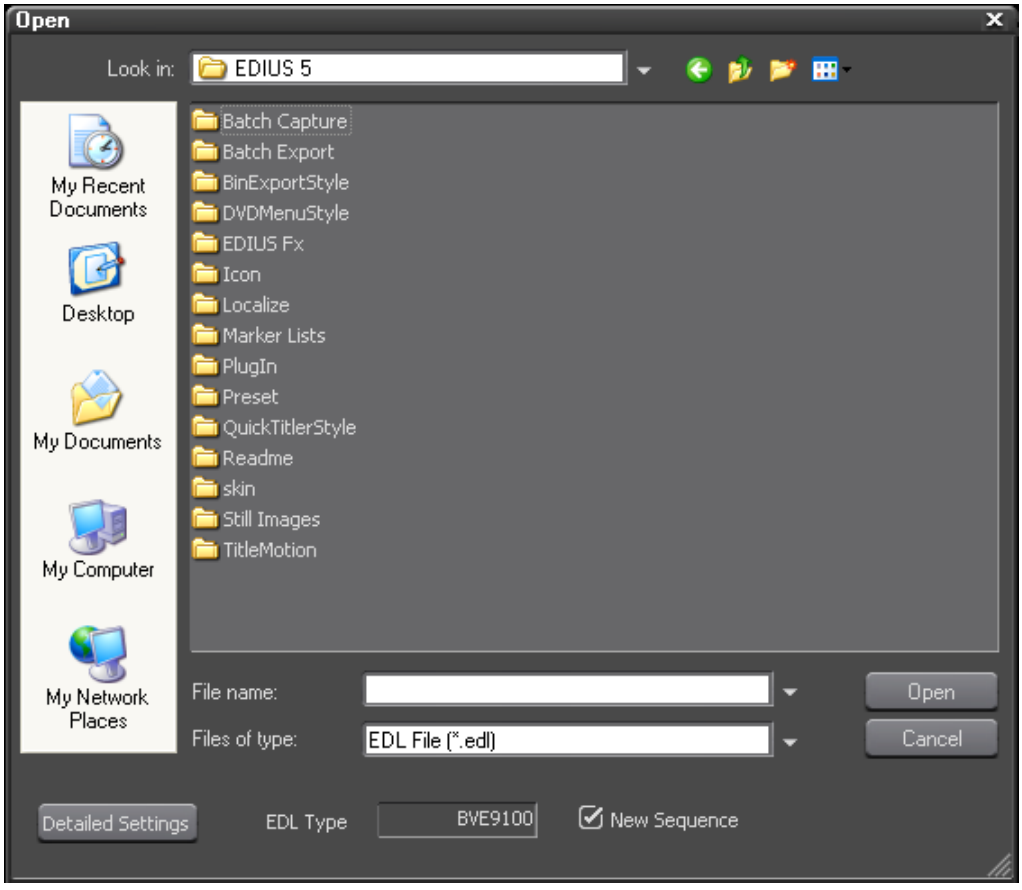
Note An alternative method is to select File>Import Project>EDL from the preview window menu bar.

Figure 57. Timeline Open Project Menu - Import Project EDL



The Open dialog illustrated in Figure 58 appears.

Figure 58. EDL File Open Dialog

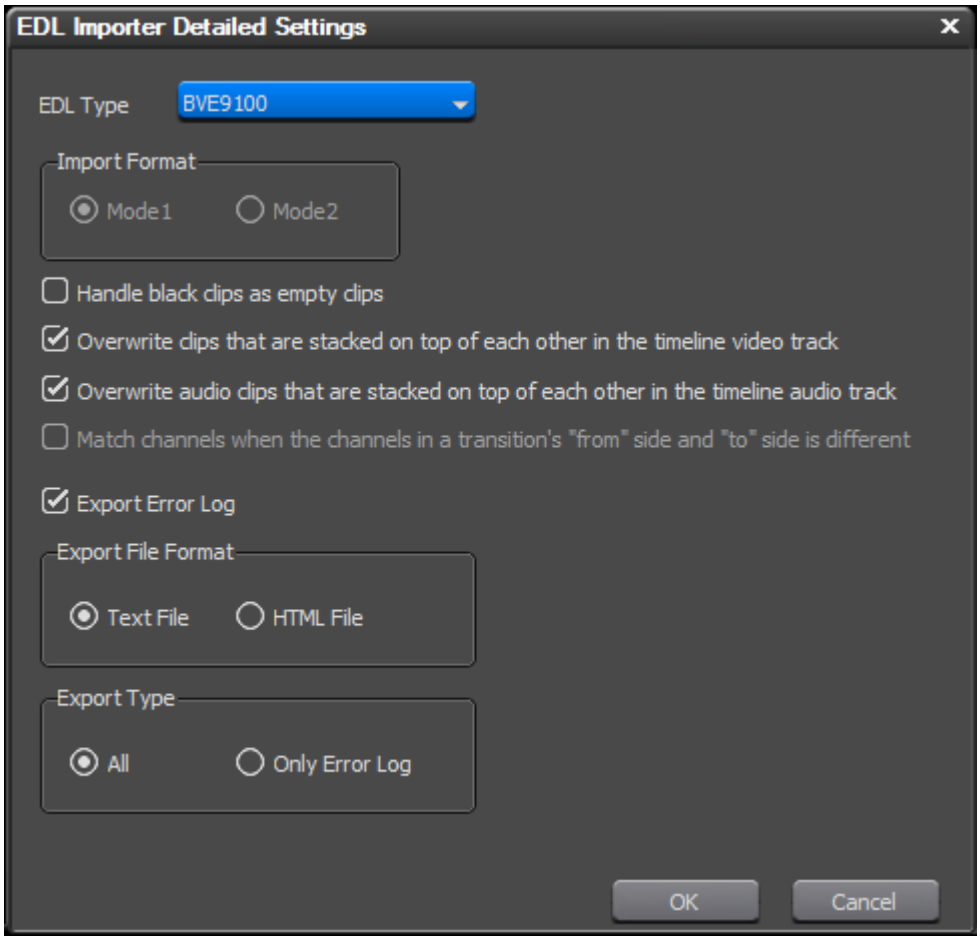


Note When importing an EDL file, if the “New sequence” option is selected in the Open dialog, a new sequence in the current project is created to which the EDL file is imported. If this option is not selected, a new track in the current sequence is created to which the EDL file is imported.

2. Click the **Detailed Settings** button in the lower left corner of the Open dialog.

The EDL Importer Settings Dialog shown in Figure 59 appears.

Figure 59. EDL Importer Settings Dialog



3. Select the desired EDL import settings as explained below:

EDL Type

Select the EDL file type of the file to be imported from the drop-down list. Choices are:

- BVE5000
- BVE9100
- CMX340
- CMX3600

If a CMX type is selected, the mode for calculating the Out point of a file with a specified playback speed is available for selection.

Mode 1

Calculates the Out point timecode by adding the source duration multiplied by playback speed (also know as Dynamic Motion Control or DMC) to the Player In timecode.

Note If the speed is a negative value, source duration multiplied by playback speed is subtracted from the Player In timecode.

Mode 2

Use the Player Out timecode. Do not calculate an Out timecode. The Player In an Out timecodes become the source In and Out points.

Handle Black Clips as Empty Clips

If this option is selected, reel names of BL, BLK or BLACK designate black clips which will be handled as empty clips.

Overwrite Clips that are Stacked on Top of Each Other in the Timeline Video Track

If this option is selected and "New Sequence" is not selected in the Open dialog, the current clips that are on stacked the 1VA (or 1V) track on the Timeline will be overwritten.

If this option is not selected and "New Sequence" is not selected in the Open dialog, stacked clips will be placed on the 2VA, 3VA, etc. (or 2V, 3V, etc.) tracks. If the tracks do not exist, they will be created.

Overwrite Audio Clips that are Stacked on Top of Each Other in the Timeline Audio Track

If this option is selected and "New Sequence" is not selected in the Open dialog, the current clips that are on stacked the 1VA (or 1A) track on the Timeline will be overwritten.

If this option is not selected and "New Sequence" is not selected in the Open dialog, stacked clips will be placed on the 2VA, 3VA, etc. (or 2A, 3A, etc.) tracks. If the tracks do not exist, they will be created.

Match Channels When the Channels in a Transition's "From" Side and "To" Side Are Different

This setting is available if a CMX file type is selected.

Export Error Log

If selected, this setting will export the log to a file when import errors occurs. Select the desired Export Format and Export type. If the Export Type is set to "All" the imported contents as well as the errors are specified in the log.

4. Click to **OK** button to set the selected import settings.

The EDL Importer Detailed Settings dialog closes and control is returned to the Open dialog.

5. Click the **Open** button to import the EDL file using the selected import settings.

The EDL file is imported and the Find Offline Clip dialog appears. Restore the offline clip(s) using the methods explained in *Restore Offline Clips* *on page 96*.

Important Considerations

The following limitations exist when importing the indicted EDL file types:

BVE5000/BVE9100

- Edit Modes ASMBL and ASSY1 are not supported
- Edit Types C, W and D are the only types supported
- GPI Data Line is not supported
- Learn Data Line is not supported

CMX340/CMX3600

- Edit Types C, W and D are the only types supported

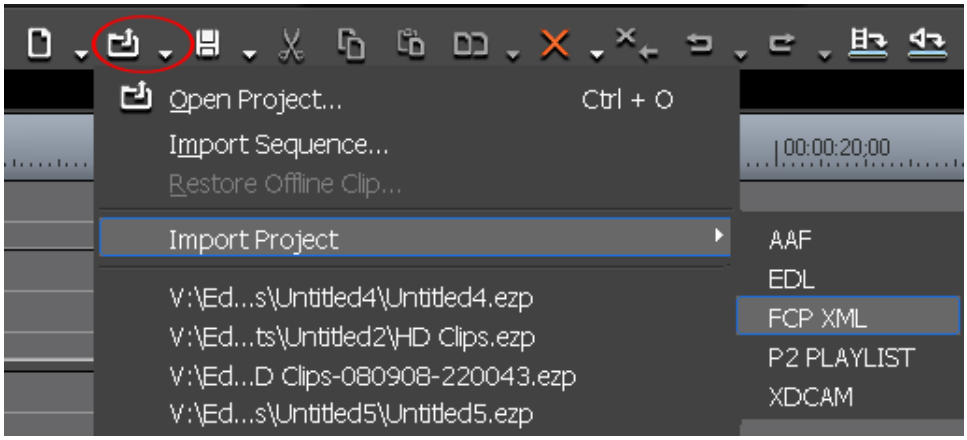
Import Final Cut Pro (FCP) XML Files

To import a Final Cut Pro XML file do the following:

1. Click the list button [▽] of the **Open Project** button and select "Import Project>FCP XML" from the menu as illustrated in Figure 60.

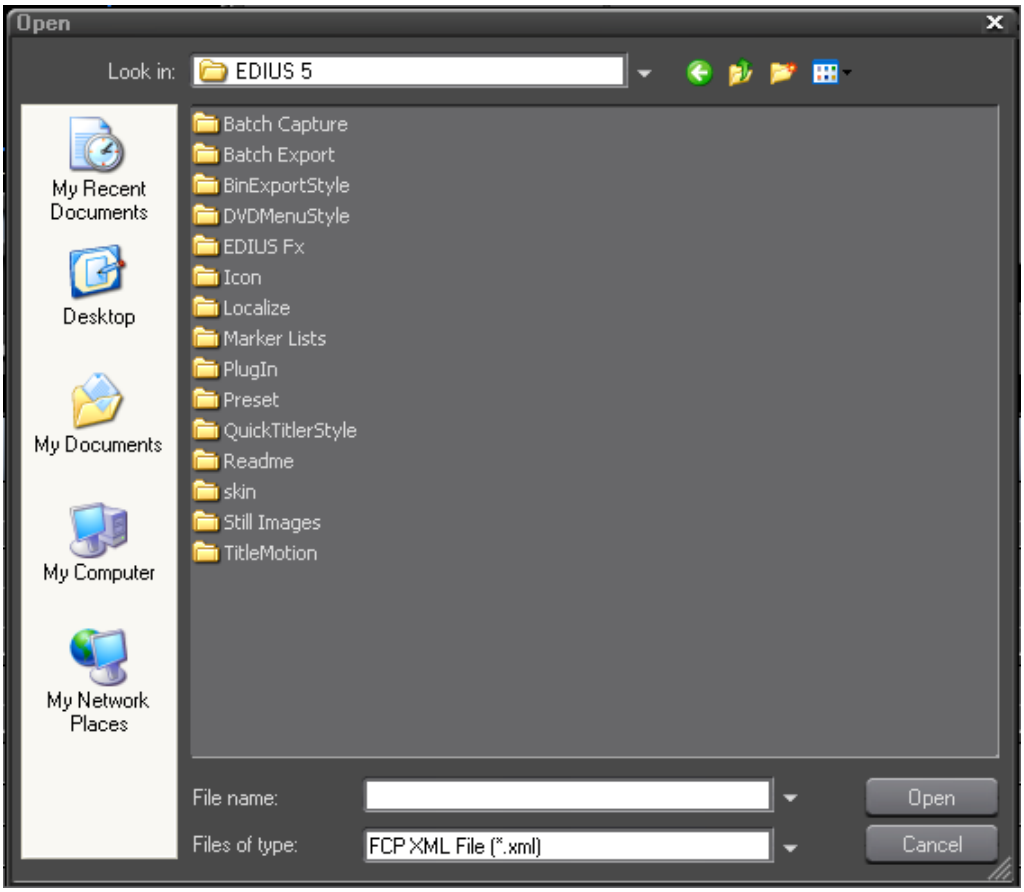
Note An alternative method is to select File>Import Project>FCP XML from the preview window menu bar.

Figure 60. Timeline Open Project Menu - Import Project FCP XML



The Open dialog illustrated in Figure 61 appears.

Figure 61. Final Cut Pro XML Open Dialog



2. Select the Final Cut Pro XML file to import from the Open dialog
3. Click the **Open** button to open the selected Final Cut Pro XML file.

The project described in the Final Cut Pro XML file will be imported as a new EDIUS sequence.

Note If any errors occur during the import process, an error log with the name "{XML file name}+ErrorLog.csv will be created in the same location as the FCP XML file. An error dialog will appear with this information.

Special Considerations

- The following items are supported when importing a Final Cut Pro XML file:
  - Video, audio and still clips
  - Transitions

Note All Final Cut Pro transitions will be replaced by EDIUS dissolve transitions

  - Sequence clip

Note When a sequence clip is used in several places on the Timeline each instance will be recognized as separate clips. This is the same behavior as Final Cut Pro.

  - Freeze frame
  - Multiclip
  - Clips generates wit Bars and Tone and Color Matte in the Video Generator folder.
- A clip generated in the formats listed below using the Bars and Tone video generator in Final Cut Pro will be imported as a color bar clip in the EDIUS Timeline:
  - Bars and Tone (HD 1080i60)
  - Bars and Tone (HD 25p/50i Full Frame)
  - Bars and Tone (HD 25p/50i)
  - Bars and Tone (HD 720p60)
  - Bars and Tone (NTSC
  - Bars and Tone (PAL Full Frame)
  - Bars and Tone (PAL)
  - More bars and Signals
- A clip generated using Final Cut Pro Color or Slug will be imported as a black color matte clip in the EDIUS Timeline
- When importing a Final Cut Pro multiclip, all clips included in the multiclip will be placed on the EDIUS Timeline

- The following item types are not supported when importing a Final Cut Pro XML file:
  - Clips which cannot be handled as offline clips
  - Title (text) clips
  - Key frames
  - Video filters

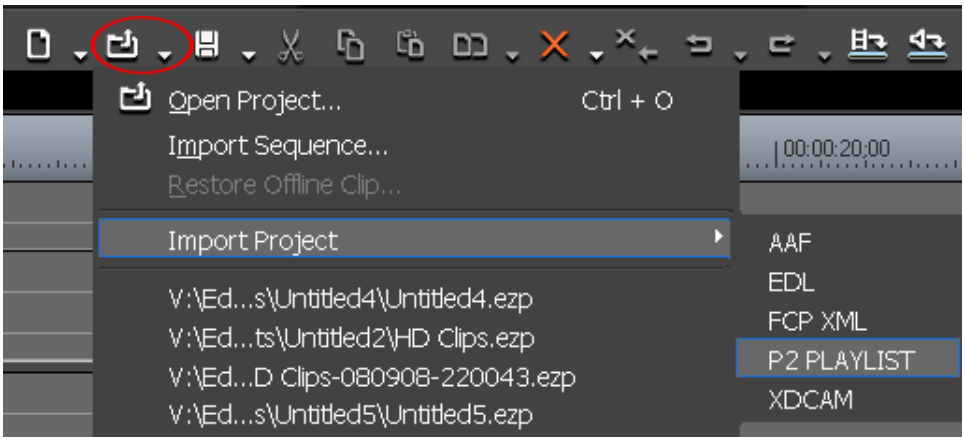
Import P2 Playlists

To import a P2 Playlist file, follow these steps:

1. Click the list button [▽] of the **Open Project** button and select "Import Project>P2 Playlist" from the menu as illustrated in Figure 62.

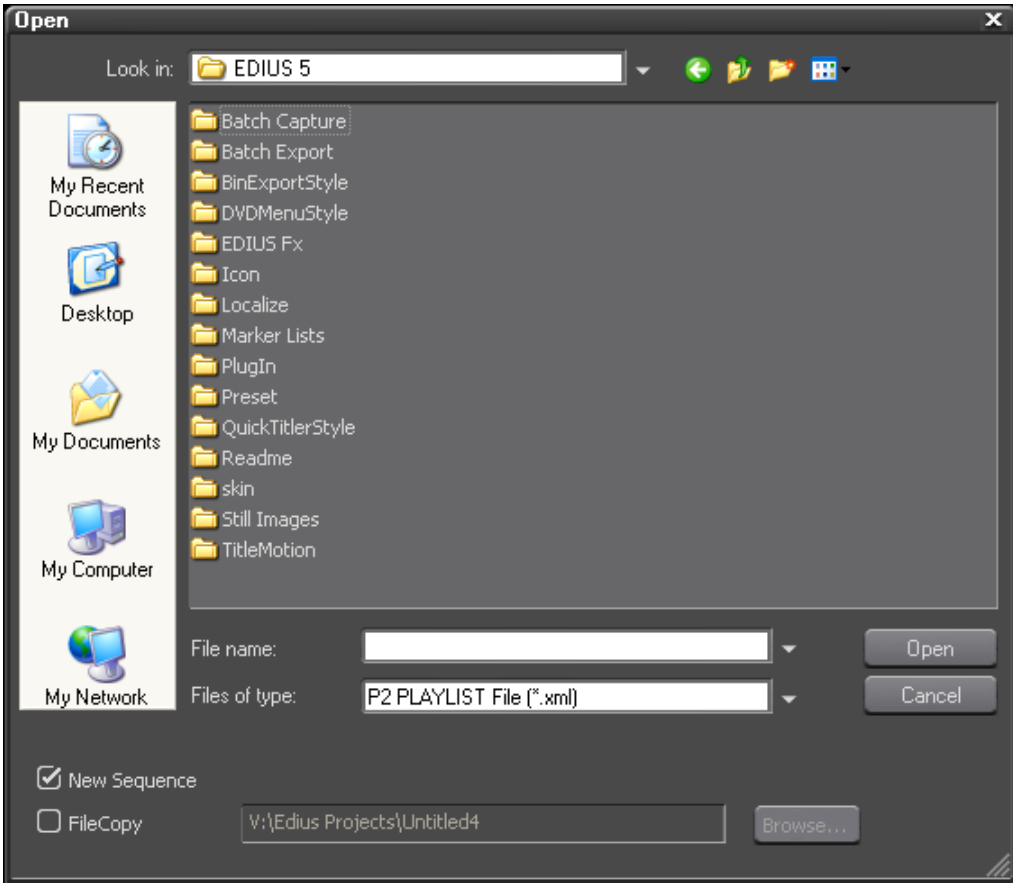
Note An alternative method is to select File>Import Project>P2 Playlist from the preview window menu bar.

Figure 62. Timeline Open Project Menu - Import Project P2 Playlist



The Open dialog illustrated in Figure 63 appears.

Figure 63. P2 Playlist Open Dialog



2. Select the P2 Playlist to import from the Open dialog

3. Click the **Open** button to import the P2 Playlist.

Note When importing a P2 Playlist, if the "New sequence" option is selected in the Open dialog, a new sequence in the current project is created to which the P2 Playlist is imported. If this option is not selected, a new track in the current sequence is created to which the P2 Playlist is imported.

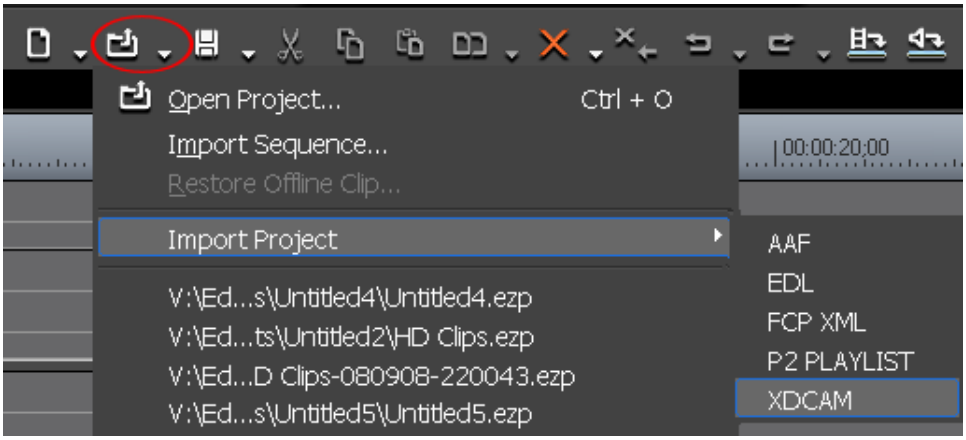
Import XDCAM Files

To import a XDCAM file, follow these steps:

1. Click the list button [▽] of the **Open Project** button and select "Import Project>XDCAM" from the menu as illustrated in Figure 64.

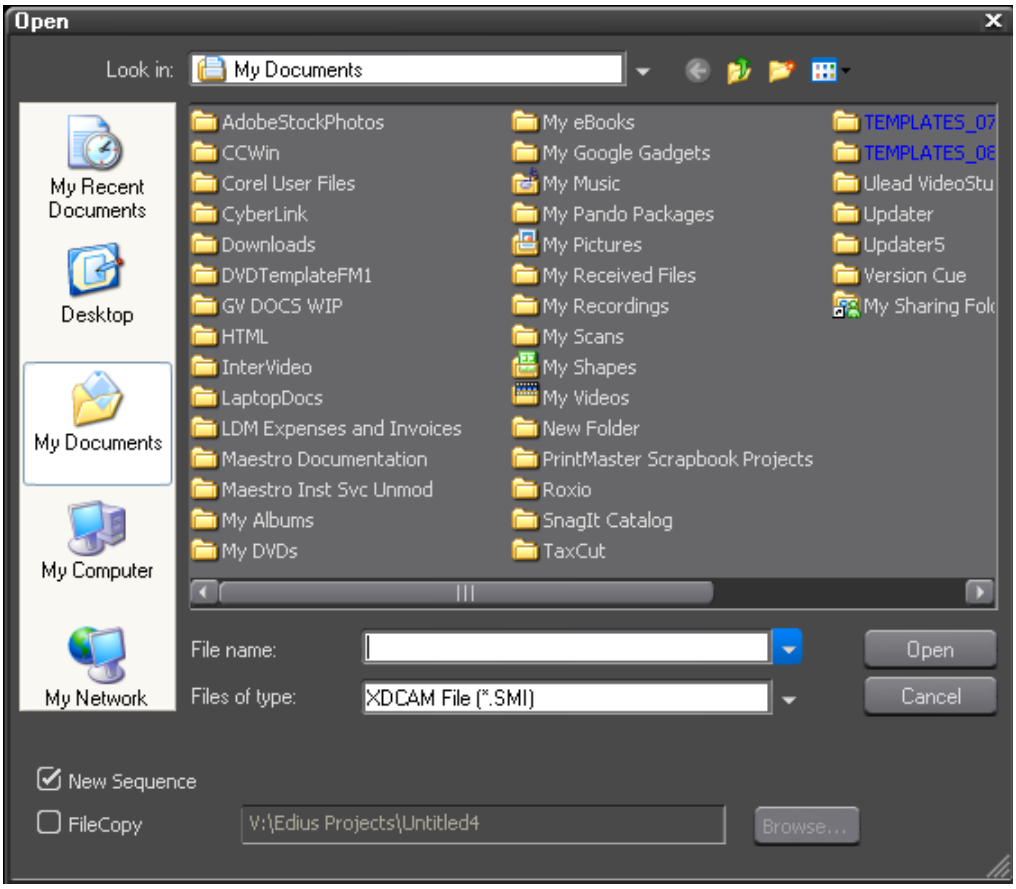
Note An alternative method is to select File>Import Project>XDCAM from the preview window menu bar.

Figure 64. Timeline Open Project Menu - Import Project XDCAM



The Open dialog illustrated in Figure 65 appears.

Figure 65. XDCAM File Open Dialog



2. Select the XDCAM file to import from the Open dialog
3. Click the **Open** button to import the XDCAM file.

Note When importing an XDCAM file, if the “New sequence” option is selected in the Open dialog, a new sequence in the current project is created to which the XDCAM file is imported. If this option is not selected, a new track in the current sequence is created to which the XDCAM file is imported.

Export AAF Files

Advanced Authoring Format (AAF) is a multimedia file format that allows the exchange of digital media and metadata between platforms, systems, and applications. Authoring applications that support AAF (such as EDIUS, Avid Xpress and others) read and write data in AAF files to the extent that they support the format. AAF is a widely-recognized file exchange standard for video editing.

Important Considerations

When exporting an AAF file from EDIUS, the following limitations should be considered:

- Only active sequences will be exported
- The following will not be exported:
  - Tracks with no clip
  - Audio tracks with no channel map setting
  - Title track
  - Tracks with video or audio mute set
  - All effects

Note Source files with pan and volume settings will be exported with those settings

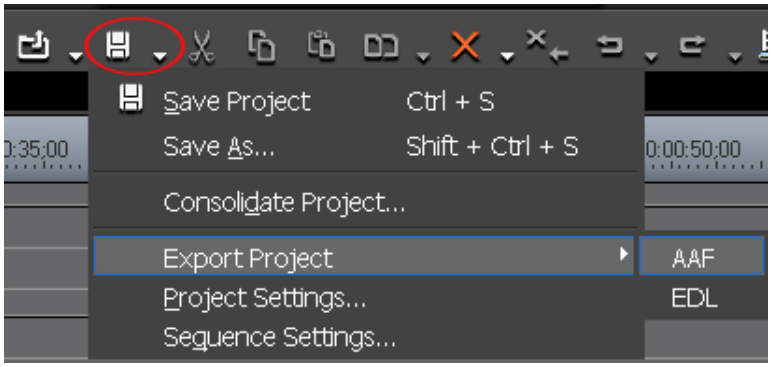
- Sections of clips with transitions or cross fades applied will be exported as separate clips
- In point margin cannot be added to a clip on the top track of the Timeline
- Network drives cannot be designated as an export destination; however, mounted network drives are valid export destinations
- If the selected exporter does not support the timecode, the file is not properly exported.

To export an AAF file from EDIUS, do the following:

1. Click the list button [▽] of the **Save Project** button and select “Export Project>AAF” from the menu as illustrated inFigure 66

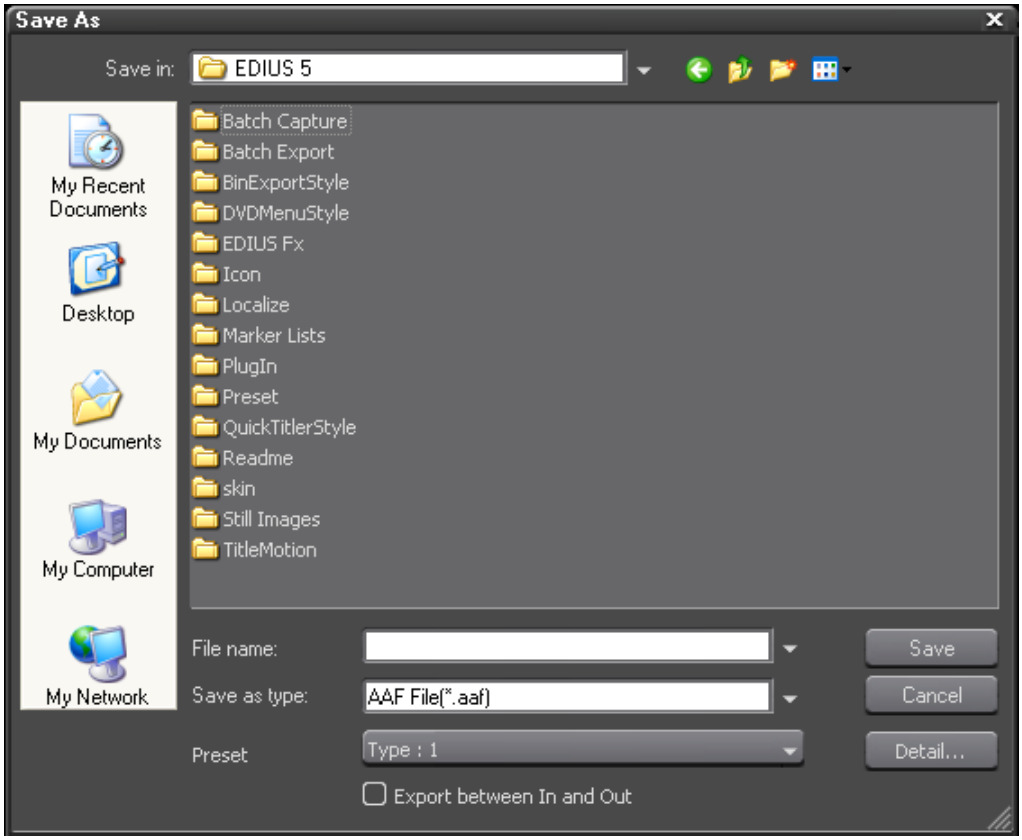
Note An alternative method is to select File>Export Project>AAF from the preview window menu bar.

Figure 66. Timeline Save Project Menu - Export Project AAF File



The Save As dialog illustrated in Figure 67 appears.

Figure 67. AAF Save As Dialog



2. Select the desired export settings as explained below:

Preset

Select the desired preset export type from the drop-down list.

Type: 1

If the exported AAF file will be imported with audio editing software, use the Type: 1 preset.

This preset causes audio clips to be written to the AAF file by sample unit. The audio source file is exported as an AIFF file.

No video information is written to the AAF file; however, the source video is exported in MPEG-1 format. The video file must be imported manually in the target application as it is not referenced in the AAF file.

Type: 2

If the exported AAF file will be imported with video/audio composition software, use the Type: 2 preset.

The preset causes frame-based video clip information to be written to the AAF file. The video source to which the AAF file refers is not copied or exported.

Frame-based audio information corresponding to the exported video information range is exported as a single-clip AIFF file.

Type: 3

This preset writes frame-based video and audio clip information to the AAF file. The video and audio sources to which the AAF file refers is not copied or exported.

Detail Button

Displays the AAF Detail Settings dialog box. See *AAF Detail Setting Dialog on page 86* for information on using this dialog to select detailed AAF export settings.

Export Between In and Out

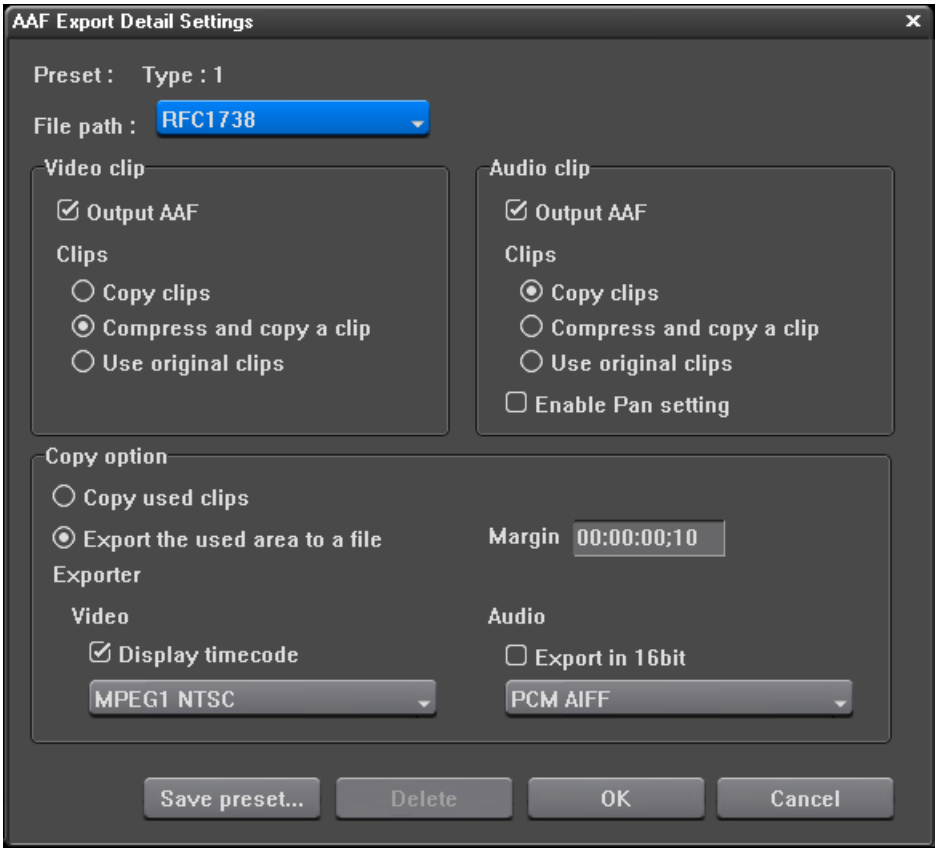
Select this option to export only the portions of the sequence between the Timeline In and Out points of In/Out points are set.

3. Designate a file name and folder destination in the Save As dialog.
4. Select the desired preset and click the **Save** button.

The project is exported as an AAF file with the selected settings.

AAF Detail Setting Dialog

Figure 68. AAF Export Detail Settings Dialog



Set the desired detailed AAF export settings as explained below:

Video Clip

These settings specify how video clips will be handled.

Output AAF

If selected, this option add video clip information to the AAF file.

Copy Clips

Copy (export) the video source file(s) that are referenced in the AAF file.

Compress and Copy a Clip

All video clips on the Timeline will be exported as a single clip. The file name of the first clip on the smallest numbered track will be used as the name for the exported file containing all video clips on the Timeline.

Use Original Clips

The AAF files will reference the original source files without copying/exporting them.

Audio Clip

These settings specify how audio clips will be handled.

Output AAF

If selected, this option add audio clip information to the AAF file.

Copy Clips

Copy (export) the audio source file(s) that are referenced in the AAF file.

Compress and Copy a Clip

All audio clips on the Timeline will be exported as a single clip. The file name of the first clip on the smallest numbered track will be used as the name for the exported file containing all audio clips on the Timeline.

Use Original Clips

The AAF files will reference the original source files without copying/exporting them.

Output Audio Track by Samples

Select this option to export audio tracks as sample units. Deselect this option for a frame-based export of audio tracks.

Enable Pan Setting

Select this option to export stereo tracks as individual monaural tracks.

The clip names will be “clip name +.L” for channel 1 (Left) and “clip name + .R” for channel 2 (Right).

If this option is deselected, stereo tracks will be downmixed and exported as a single monaural clip.

If the track number is an odd number, channel 1 (Left) will be used for the channel map. If the track number is an even number, channel 2 (Right) will be used as the channel map.

The clip names will be “clip name +.L” for odd numbered tracks and “clip name + .R” for even numbered tracks.

Copy Option

The selected copy option specifies how the source will be copied (exported) when you select “Copy Clips” for video and audio clips.

Copy Used Clips

Source files referenced by clips on the Timeline will be copied (exported).

Export the Used Area to a File

Only the portions of the clips on the Timeline that are used in the project will be exported. In this case, the "Margin" setting is enabled and adds the specified clip margin as the In/Out points of exported clips.

Exporter

From the drop-down lists, select the desired video and audio exporters.

For video files, you may also elect to display the timecode in the video. Audio files may be exported as 16-bit audio in either AIFF or WAV formats

Save Preset Button

Click this button if you wish to save the current AAF export settings as a new preset. Enter the desired name and click the **OK** button.

Delete Button

Click this button to delete the currently-selected preset.

Note Only presets created by using the **Save Preset** button may be deleted. The system installed presets Type: 1, Type: 2 and Type: 3 may not be deleted.

OK Button

If the **OK** button is clicked, instead of the **Save Preset** button, the detailed export setting are used temporarily for the current AAF file export. Use the **Save Preset** button if you wish to save and register the current settings as a preset that can be selected for future export operations.

Cancel Button

Click this button to cancel the export settings and return to the Save As dialog.

Export EDL Files

An Edit Decision List (EDL) is a way of representing sequences of clips or reels stored on disk. It contains an ordered list of file and timecode data which represents the final edit.

The following EDIUS tracks can be exported to EDL files (tracks not listed are not supported):

- 1VA, 2VA, 1V and 2V video tracks
- 1A, 2A, 3A and 4A audio tracks
- All T tracks

Audio tracks have the following limitations:

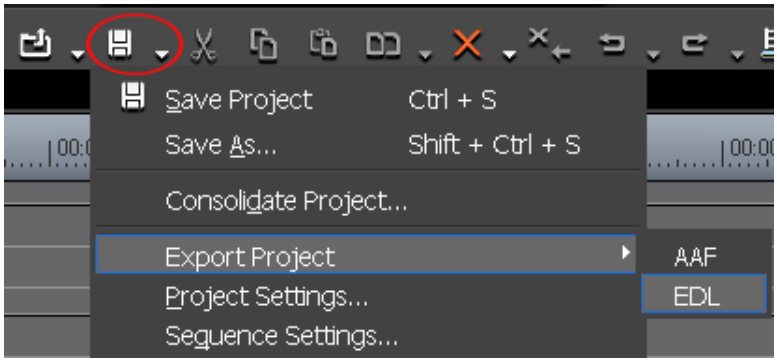
- Audio clips in the 1VA and 2VA tracks are not exported
- 1A to 4A audio track export is dependent upon the EDL file type as follows:
  - BVE5000 - 1A and 2A only
  - BVE9100 - 1A, 2A, 3A and 4A
  - CMX340 - 1A and 2A only
  - CMX3600 - 1A, 2A, 3A and 4A

To export an EDL file from EDIUS, do the following:

1. Click the list button [▽] of the **Save Project** button and select "Export Project>EDL" from the menu as illustrated in Figure 69.

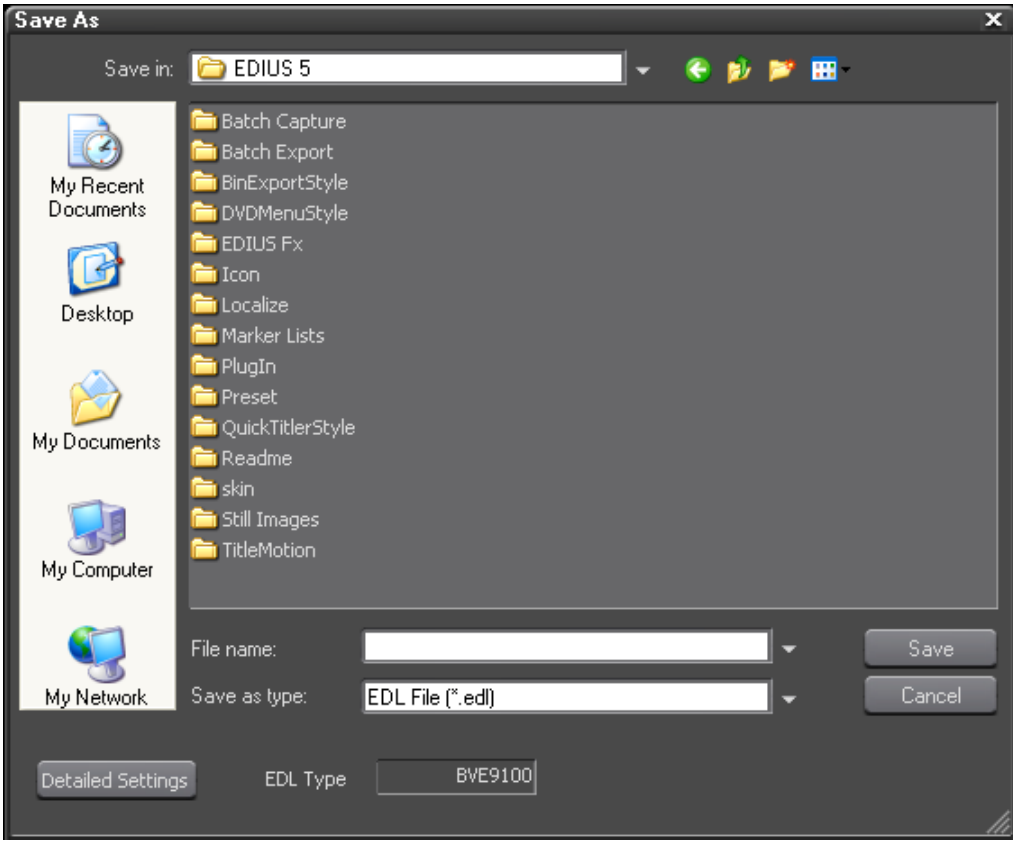
Note An alternative method is to select File>Export Project>EDL from the preview window menu bar.

Figure 69. Timeline Save Project Menu - Export Project EDL File



The Save As dialog illustrated in Figure 70 appears.

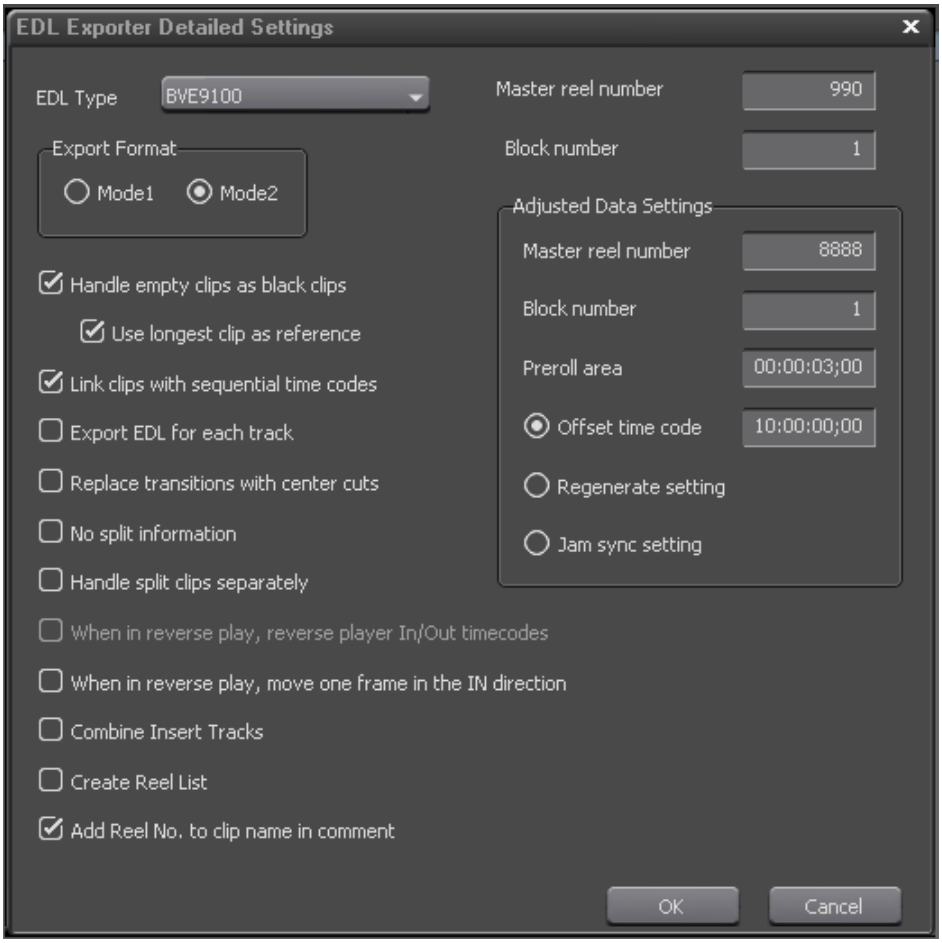
Figure 70. EDL Save As Dialog



2. Designate a file name and folder destination in the Save As dialog.
3. Click the **Detailed Settings** button in the lower left corner of the Save As dialog.

The EDL Exporter Detailed Settings dialog shown in Figure 71 appears.

Figure 71. EDL Exporter Detailed Settings Dialog



4. Configure the desired detailed settings as explained below.

EDL Type

From the drop-down list, select the desired EDL export type

Export Format

Select the desired export format (mode).

Mode 1

Comment lines are not added to the EDL file.

Mode 2

Comment lines are added to the EDL file.

Note If EDL files from other applications are not correctly imported into EDIUS, use this mode for exporting EDL files from EDIUS as it may improve the ability of these files to be imported in other applications as well as EDIUS.

Handle Empty Clips as Black Clips

If this option is selected, empty space on the Timeline is treated as a black clip. If "Use longest clip as reference" is also selected, the Out point is set to the end of the longest clip on the Timeline and track space between clips is treated as black clips.

Link Clips with Sequential Timecodes

If this option is selected, a series of multiple clips with sequential timecodes (no gaps) are treated as one clip. If a transition is set between sequential clips, these clips are not linked.

Export EDL for Each Track

If selected, this option creates and EDL file for each Timeline track. Identifying characters are added to the end of each file name as follows:

- 1VA (or 1V) track: _V
- A track: _A
- 2VA (or 2V) track: _INSERT
- T track: _T

If a 2VA or 2V track has a transition, it is replaced with a center cut.

Replace Transitions with Center Cuts

If selected, this option replaces all transitions and audio cross fades with center cuts.

No Split Information

If selected, audio and video that is grouped together across multiple tracks is split and handled as separate clips.

If EDL files are not properly imported in EDIUS, this option may improve the compatibility of exported EDL files with EDIUS and other applications.

Note This option cannot be set if "Handle split clips separately" is selected.

See *Handling Split Clips on page 94* for more information.

Handle Split Clips Separately

If selected, this option separates the gap between tracks to eliminate the split. When clip speed is changed, clips are not handled separately.

Note This option cannot be set if "No split information" is selected.

See *Handling Split Clips on page 94* for more information.

When Reverse Play, Reverse Player In/Out Timecode

The reverse speed is normally displayed from the Player In point to the Player Out point. If this option is selected, the reverse speed is displayed from the Player Out point to the Player In point.

Note The setting is available only when the selected EDL file type is a CMX file.

When Reverse Play, Move One Frame to IN Direction

Normally, one (1) frame is added to the Player Out timecode when playing in reverse. If this option is selected, one (1) frame is added to the Player In timecode to prevent the original timecode from slipping one frame forward.

Note Select this option when EDL files cannot be correctly imported into EDIUS. This option may improve the compatibility of exported EDL files with EDIUS and other applications.

Combine Insert Tracks

Select this option to overwrite the 1VA or 1V track with the files from the 2VA or 2V track and export both tracks together as a 1VA or 1V track.

Create Reel List

Select this option to create a list of reel number associated with the files/clips to be exported.

Add Reel No. to Clip Name in Comment

If this option is selected both clip name and reel number will be added to the comments. If this option is deselected, only clip name is added to comments.

Note When the export format is set to Mode1, this option is greyed out.

Master Reel Number

For BVE9100 file types, the master reel number can be set. The allowable range is 0 - 999.

Block Number

For BVE5000 and BVE9100 file types, the block number may be set. The allowable range is 0 - 999.

Adjusted Data Settings

These settings can be used to adjust the indicated parameters.

Master Reel Number

When an A/A roll (transition between clips with the same reel number) exists, the entered master reel number is used to replace the file in the same location.

When the original clips have the same reel number, decrease the master reel number incrementally to avoid number duplication.

Block Number

For BVE5000 and BVE9100 file types, the block number may be set. The allowable range is 0 - 999.

Preroll Area

Set the margin added to the In and Out point of source clips.

Offset Timecode

Select this option in order to enter an optional start timecode.

Regenerate Setting

Set the start timecode to the In point of the first source clip.

Jam Sync Setting

Set the In and Out point of the source clip to the In and Out points of the Timeline.

5. Click the **OK** button to save settings and return to the Save As dialog
6. Click the **Save** button.

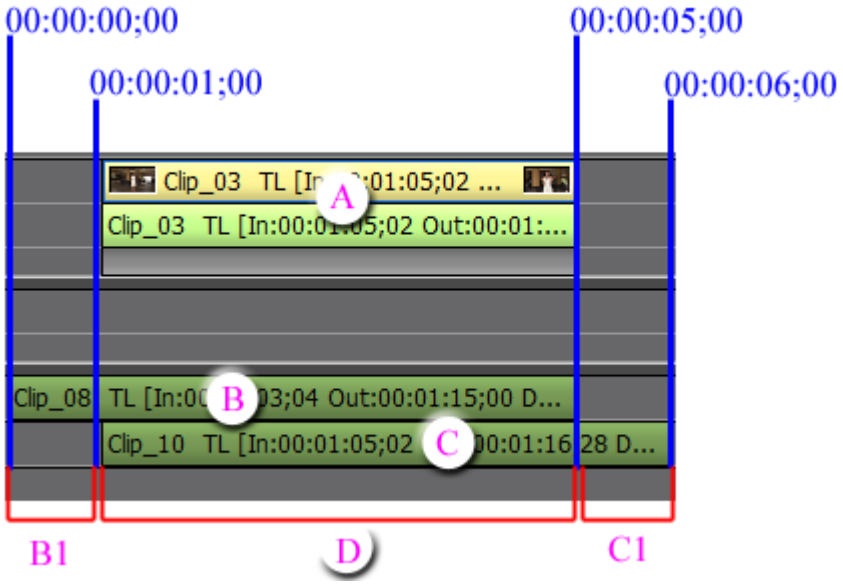
Handling Split Clips

When clips placed on different tracks are grouped and they have a gap of less than three (3) seconds between them, they are split into separate files when exporting the EDL file.

When the clips have split information, the exported EDL file differs depending upon the settings in the EDL Exporter Settings dialog. See *No Split Information* *on page 92* and *Handle Split Clips Separately* *on page 92* for more information.

The example in Figure 72 shows grouped clips in three (3) different tracks.

Figure 72. Grouped Clips in Three Tracks



When exporting these clips in an EDL file, the result for each setting is as follows:

"No Split Information" is Selected

The clip grouping is released and each clip is treated separately. The clips are separated into three time periods (labelled A, B and C in Figure 72).

- A - 00:00:01;00 to 00:00:05;00
- B - 00:00:00;00 to 00:00:05;00
- C - 00:00:01;00 to 00:00:06;00

"No Split Information" is Not Selected

Gaps between the clips are split. The B1 and C1 areas (see Figure 72) are split and the information is separated into one (1) time period represented by area D.

- D - 00:00:01;00 to 00:00:06;00 including the split information for B1 and C1

Handle Split Clips Separately is Selected

Separates the gaps between tracks and eliminates the split. The clips are separated into three time periods (labelled B1, C1 and D in Figure 72).

- B1 - 00:00:00;00 to 00:00:01;00
- C1 - 00:00:05;00 t0 00:00:06;00
- D - 00:00:01;00 to 00:00:05;00

Note Clips with speed changes are not split or handled separately as their group is released.

Restore Offline Clips

Clips saved in the Asset Bin are linked with their source files. If a source file is moved, renamed or deleted after the project file is saved, clips linked to the source file become "offline clips."

Figure 73 shows an offline clip on the Timeline.

Figure 73. Offline Clip on the Timeline

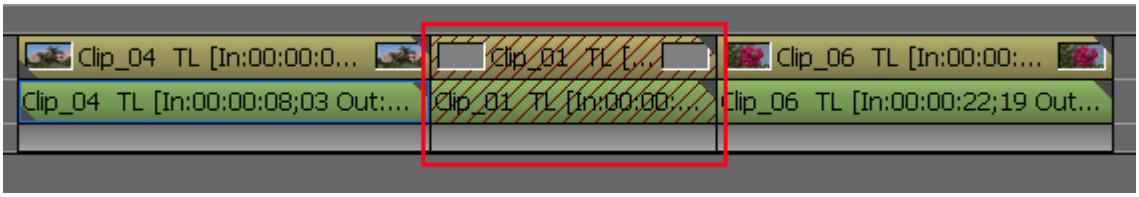
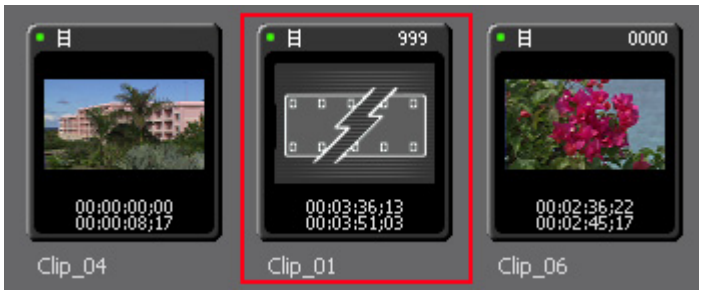


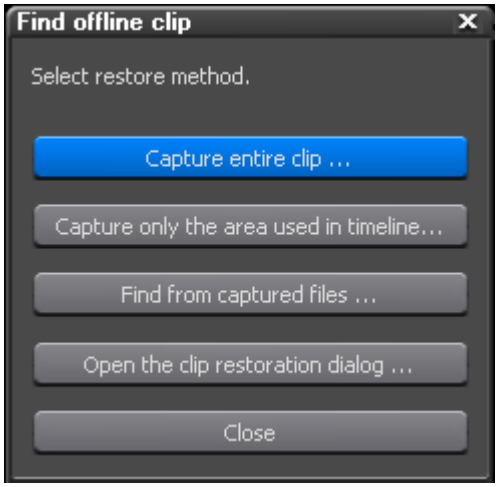
Figure 74 shows the same offline clip represented in the Asset Bin.

Figure 74. Offline Clip in the Asset Bin



The Find Offline Clip dialog illustrated in Figure 75 appears when a project file is opened or imported which contains offline clips.

Figure 75. Find Offline Clip Dialog



The following restoration methods are available:

Capture Entire Clip

If this method is selected, the Batch Capture dialog appears and the entire clip may be re-captured.

For more information on the batch capture procedure see *Importing Existing Clips or Stills into the Asset Bin* *on page 234*.

Capture Only the Areas Used in the Timeline

If this method is selected, the Batch Capture dialog appears and only the portions of the clip used on the Timeline may be re-captured. If there are multiple offline clips, replace each offline clip with the recaptured file.

For more information on the batch capture procedure see *Batch Capturing* *on page 228*.

Find From Captured Files

If this method is selected, already captured files are searched by reel number and timecode. If no matching file is found, click the **Select Folder** button in the Restore Offline Clip dialog to change the search location. To restore all matching files, click **Restore All** in the Restore Offline Clip dialog. To restore file individually, select the clip name from the list and click the **Restore** button.

For more information on the Restore Offline Clip dialog, see *Relink and Restore* *on page 99*.

Open the Clip Restoration Dialog

Select this option to open the Restore Offline Clip dialog. Relink the offline clip to a file on disk.

For more information on the Restore Offline Clip dialog, see *Relink and Restore* *on page 99*.

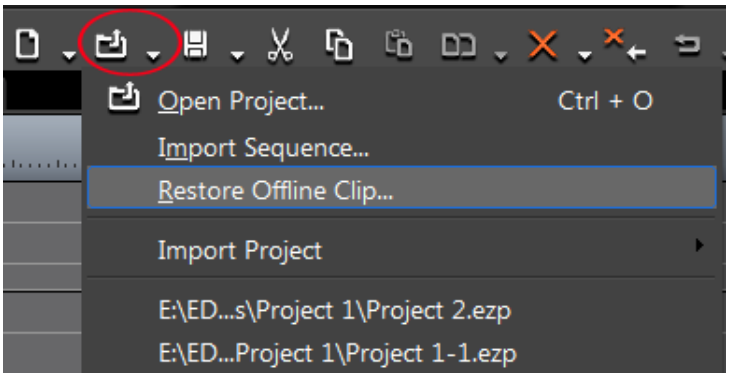
Close Button

Click the **Close** button and then the **Yes** button on the confirmation dialog to close the Find Offline Clip dialog without attempting to restore the offline clip(s). Offline clips will appear on the Timeline and in the Asset Bin as illustrated in Figure 73 and Figure 74. Video and audio for the offline clip are muted.

If the Restore Offline Clip dialog appears upon opening or importing a project file and is closed before restoring the offline clips, it can be opened at any time by one of the following methods:

- Click the list button [▽] of the **Open Project** button and select "Restore Offline Clip" from the menu as illustrated in Figure 76.

Figure 76. Timeline Open Project Button Menu - Restore Offline Clip



- Select File>Restore Offline Clip from the preview window menu bar.

Important Considerations

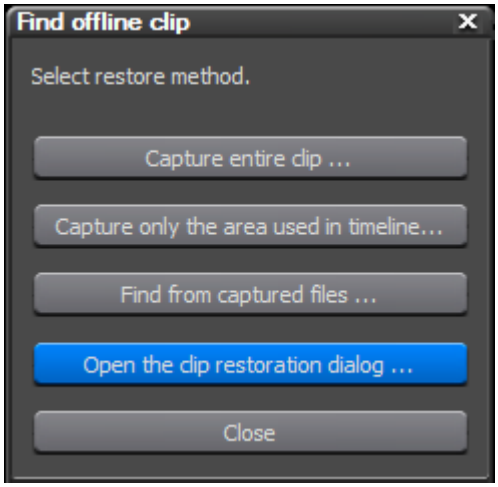
- When storing reference AVI files as clips, clips linked to the reference file become offline if the source AVI file is moved. In this case, the offline clips cannot be restored.
- Files can be captured or restored only if they meet the following criteria:
  - Video information for the file exits
  - A reel name is assigned to the file
  - The file extension is .avi, .m2t or .mov

Relink and Restore

To relink and restore an offline clip, do the following:

1. In the Find Offline Clip dialog, click the **Open the clip restoration dialog** button (highlighted in blue in Figure 77).

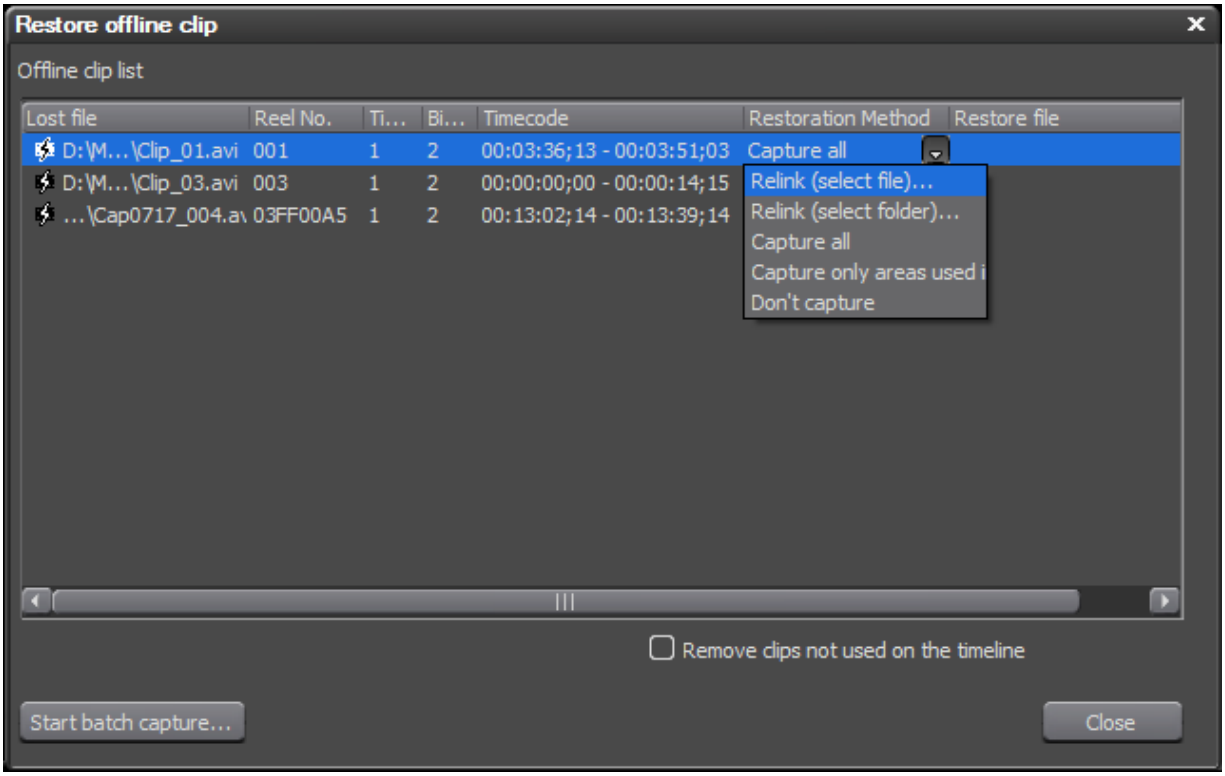
Figure 77. Restore Offline Clip Dialog - Open the Clip Restoration Dialog



The Restore Offline Clip dialog is displayed as illustrated in Figure 78.

2. Select the clip(s) to be restored from the Offline Clip List and select “Relink (select file)” or “Relink (select folder)” from the Restoration Method column. See below for an explanation of the restoration methods.

Figure 78. Restore Offline Clip Dialog



Note Select the "Remove clips not used on the Timeline" option on the Restore Offline Clip dialog to display only the clips used on the Timeline in the Offline Clip List.

With a clip selected for restoration, the restoration method is selected by clicking the drop-down list button [▽] in the Restoration Method column and select the desired method from the list. Options are:

Relink (select file)

Displays an Open dialog from which the source file to relink to the offline clip may be selected.

Relink (select folder)

Displays a Browse for Folder dialog. Search for the source file of the same name as the offline clip in the specified folder and select the file to relink.

Capture All

Click the **Start batch capture** button in the lower left corner of the Restore Offline Clip dialog to display the Batch Capture dialog. Use the batch capture dialog to recapture the entire clip.

For more information on the batch capture procedure see *Batch Capturing on page 228*.

Capture Only Areas Used in Timeline

Click the **Start batch capture** button in the lower left corner of the Restore Offline Clip dialog to display the Batch Capture dialog. Use the batch capture dialog to recapture the portions of the offline clip(s) used on the Timeline.

For more information on the batch capture procedure see *Batch Capturing on page 228*.

Don't Capture

If this method is selected, offline clips are not relinked or recaptured.

3. Select the source from the Open or Browse for Folder dialog and click the **Open** (Open dialog) or **OK** (Browse for Folder dialog) button to relink the source to the offline clip.

4. Click the **Close** button in the Restore Offline Clip dialog.

Note When the Restore Offline Clip **Close** button is clicked, a message will display if restoration failed on any offline clips.

5. Click the **Close** button in the Find Offline Clip dialog.

Alternative Method:

Double-click the offline clip on the Timeline or in the Asset Bin and browse for the file to link to the clip from the Open dialog box.

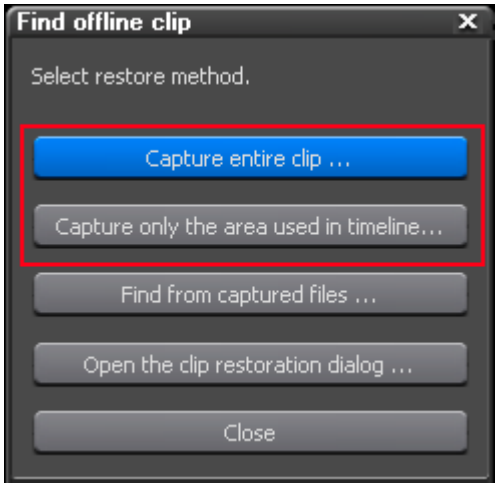
Capture and Restore

When the source file(s) of offline clip(s) do not exist on the hard drive, you can recapture them to restore the offline clips.

To capture and restore offline clips, follow these steps:

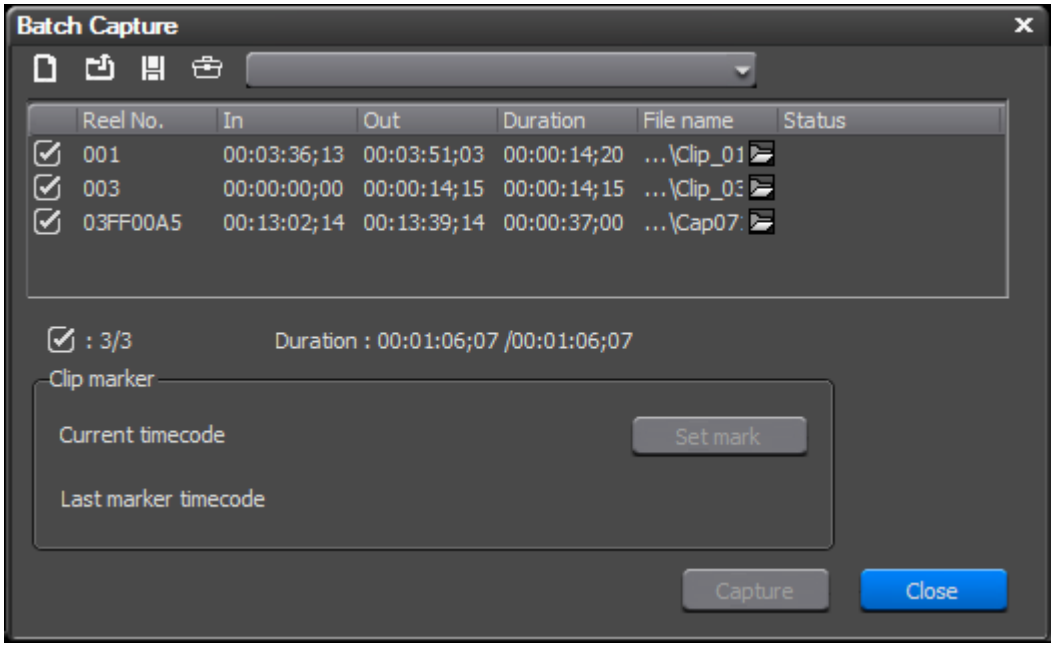
1. Click the **Capture entire clip** or **Capture only the area used in the Timeline** button in the Find Offline Clip dialog as illustrated in Figure 79.

Figure 79. Restore Offline Clip - Capture Entire Clip



The Batch Capture dialog shown in Figure 80 appears.

Figure 80. Batch Capture Dialog



2. Execute the batch capture following the instructions found in *Batch Capturing* *on page 228*.

Alternative Method:

Select “Capture all” or “Capture only the areas used in timeline” from the Restoration Method column in the Restore Offline Clip dialog. For more information on the Restore Offline Clip dialog, see *Relink and Restore* *on page 99*.

Window Configuration

EDIUS software can be used in multi- or single-monitor configurations. Some layouts will likely be desirable in a single monitor configuration in order to eliminate overlapping windows.

Note All EDIUS screen shots throughout this manual were taken on a single monitor setup with a 1680x1050 resolution wide screen monitor. Other monitor resolutions or configurations will result in displays that are similar, but, not identical, to those depicted in this manual.

Multi-Monitor Layout

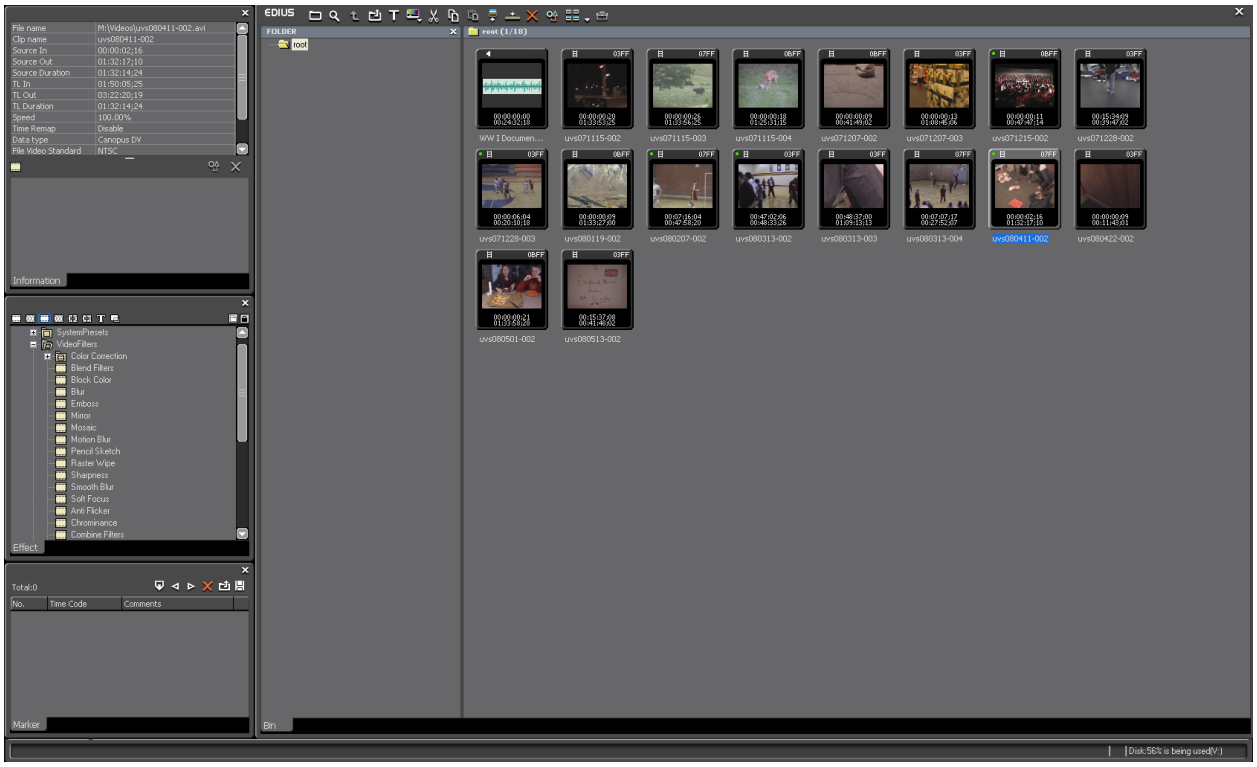
In a multi-monitor configuration using, for example, two monitors, the Preview and Timeline windows will be displayed on one monitor and the Asset Bin and Palette windows will be displayed on the second monitor. Sample layouts are shown below in Figure 81 and Figure 82.

Figure 81. Dual-Monitor Sample Layout - Monitor One

The Preview window (upper portion of Figure 81) is comprised of the Player and Recorder and their associated controls. For more information concerning the operation of the player and recorder, see *Player Operation Buttons* *on page 112* and *Recorder Operation Buttons* *on page 115*.

The Timeline window (lower portion of Figure 81) is the workspace where video and audio clips are placed for editing. Titles, transitions and effects are added to clips on the Timeline. For more information on Timeline functions, see *Section 5-Timeline Operations*.

Figure 82. Dual-Monitor Sample Layout - Monitor Two



The large window on the right side of the screen is the Asset Bin window. Video and audio clips are placed here for easy access in EDIUS. Clips in the asset bin can be organized and managed according to user needs.

The three smaller windows on the left of the screen are (from top to bottom) the Information Palette, the Effects Palette and the Marker Palette.

Single-Monitor Layout

In a single monitor layout, all of the above windows are displayed on a single monitor. The default layout presents these windows as illustrated in Figure 83. The Asset Bin, Effects Palette and Sequence Marker Palette widows are tabbed on the upper right. The Information Palette occupies the bottom right. It is possible to customize the screen layout and position the various windows according to your editing needs and preferences. See *Customizing Screen Layout* for more information.

Figure 83. Default Single-Monitor Screen Layout

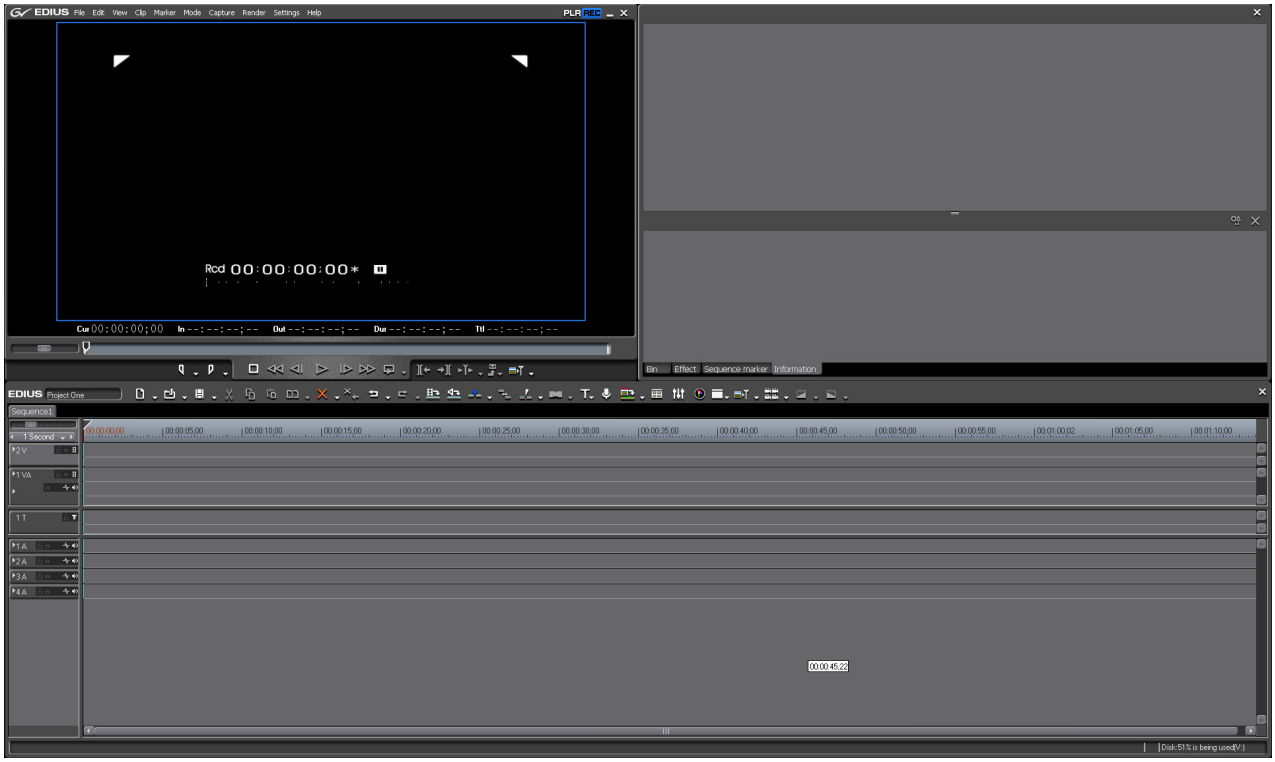
Notice in the lower right corner that the Information Palette occupies screen space that you may wish to utilize for the Timeline. The process of customized screen layouts is explained in the next section.

Customizing Screen Layout

If you wish to use the entire lower section of the monitor display for the Timeline, the Information Palette can be moved to the upper tabbed section with the Asset Bin and other palettes as illustrated in Figure 84. In the custom layout in Figure 84, all of the major elements of EDIUS are still readily available with a single mouse click.

Note Other custom layouts may be created according to user preferences. The example in Figure 84 is intended to show one way in which all major elements remain easily accessible although not simultaneously visible on the screen.

Figure 84. Single-Monitor Customized Layout



To create the custom layout depicted in Figure 84, do the following:

1. Click **View** on the menu bar and then select **Single Mode.**

Note Both the Player and Recorder previews are still available. In single mode they are not simultaneously displayed. See *Preview Window on page 109* for more information.

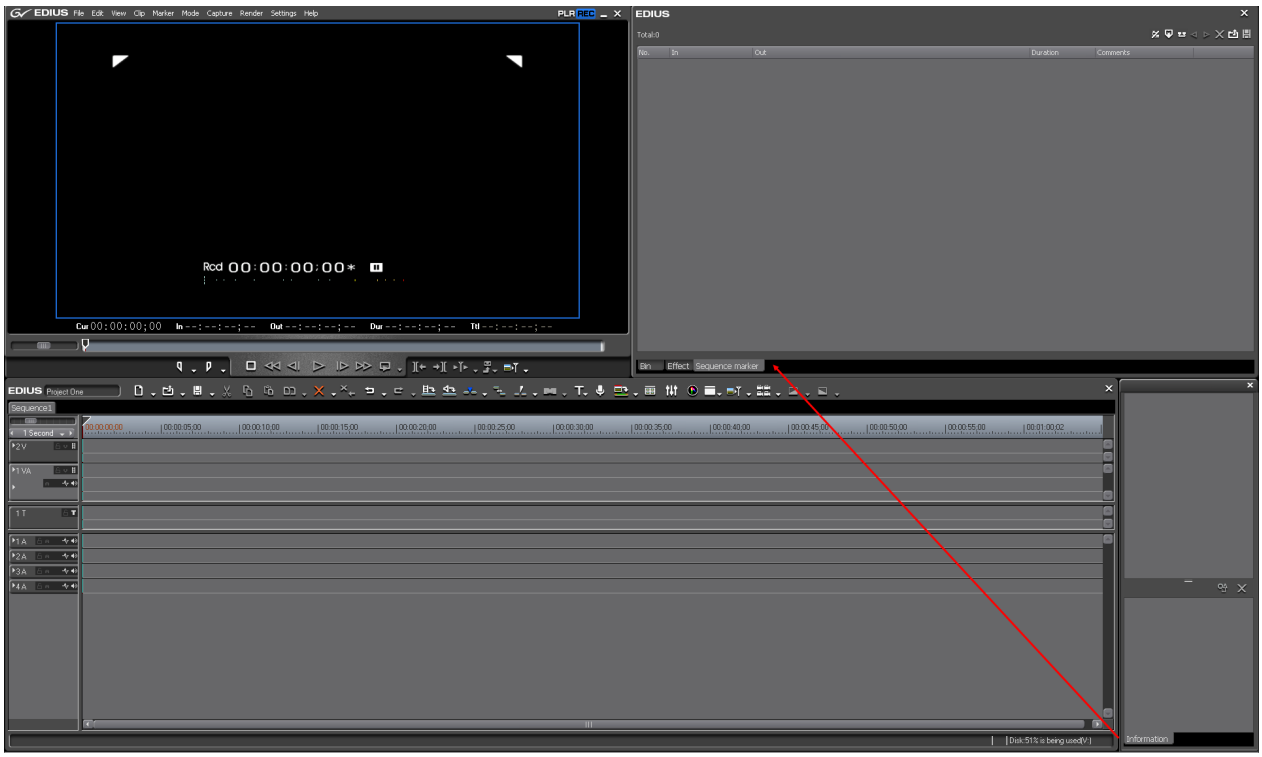
2. Drag the Information tab and drop it next to the Bin, Effect and Sequence Marker tabs in the upper right section of the display as illustrated in Figure 85.

3. Drag the right edge of the Timeline window to the right edge of the screen.

The result is the custom layout in Figure 84.

Note The Bin, Effect, Sequence marker and Information Palettes are now accessible as tabs. Selecting the desired tab will display the associated window in the upper right area of the screen.

Figure 85. Single Monitor Drag Information Palette Window



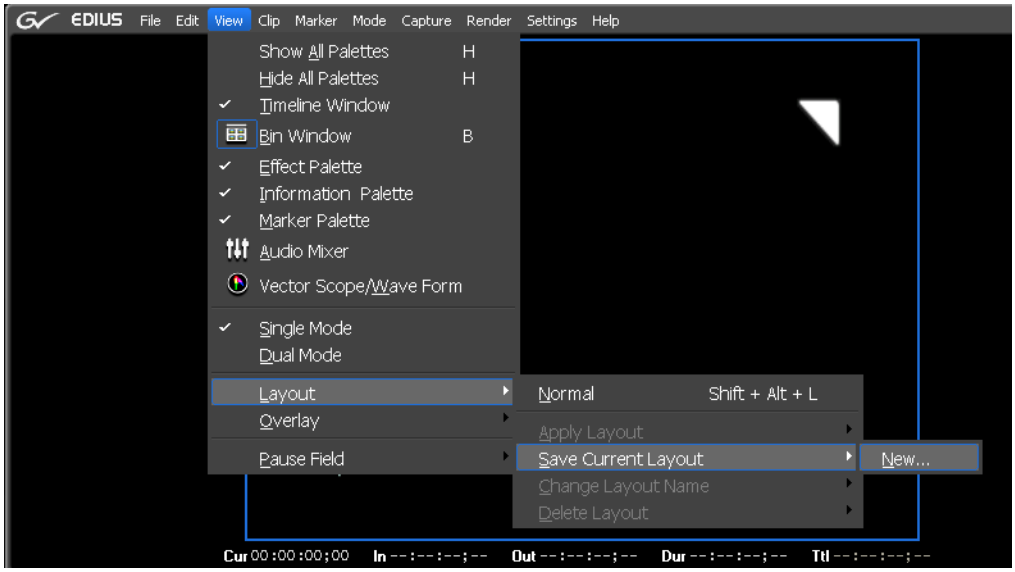
Other custom layouts may be created by resizing windows, reordering tabs, moving palettes to other locations, etc.

Saving Custom Layouts

Custom screen layouts, such as the layout created in the steps above, may be saved so they can be applied during future EDIUS sessions. To save a custom layout, do the following:

1. Click **View** on the menu bar.
2. Select **Layout** then **Save Current Layout** then **New** (See Figure 86).

Figure 86. Save Current Layout Menu



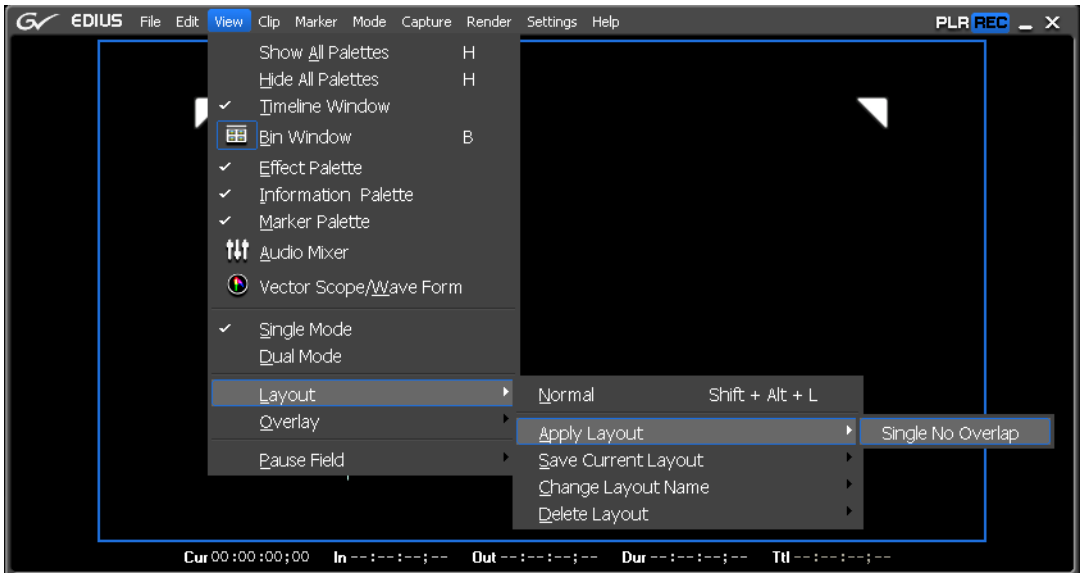
3. Enter the desired name for the custom layout and click **OK**.

Apply a Saved Layout

To apply a saved layout:

Click **View** on the menu bar, select **Layout**, then **Apply Layout**, then the name of the saved layout you wish to apply (See Figure 87).

Figure 87. Apply Layout Menu

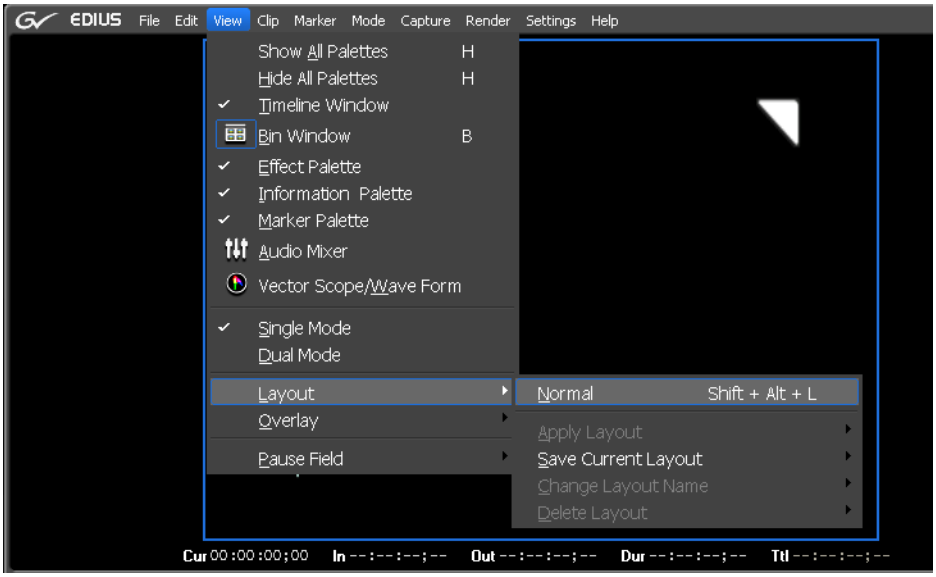


Restoring Default Layout

To return to the default layout:

Click **View** on the menu bar, select **Layout** then **Normal** (See Figure 88)

Figure 88. Normal Layout Menu



Preview Window

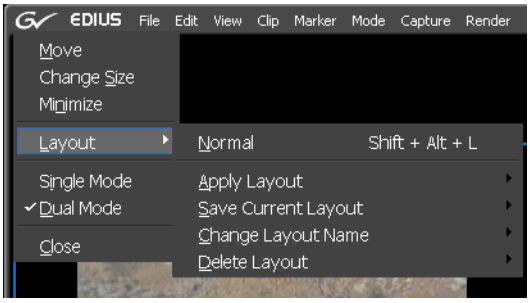
The preview window can be presented in two modes: Dual Mode and Single Mode. The manner in which the preview window is displayed and the area it occupies on the screen is also dependent upon the active screen layout as described in the sections which follow.

Dual Mode

To select Dual Mode, click on **View** in the menu bar and select **Dual Mode**.

Note All layout and preview mode functions are also available by clicking on the GV logo in the upper left corner of the screen. Figure 89 shows the menu that appears when the GV logo is clicked.

Figure 89. GV Logo Menu



In dual mode, both the Player preview window and the Recorder preview window are visible at the same time. Figure 90 depicts dual mode preview for a dual-monitor configuration or for a single-monitor configuration with the default (normal) layout. In these layouts, the Player and Recorder preview windows occupy the entire upper portion of the screen.

Figure 90. Dual Mode Preview - Dual Monitor or Single Monitor Default Layout

Player

The Player window (on the left) is used to preview material before importing it into EDIUS and placing it on the Timeline for editing. Already captured clips can also be placed on and edited to the Timeline through the player window. The Player can control external devices or play a clip from the Asset Bin.

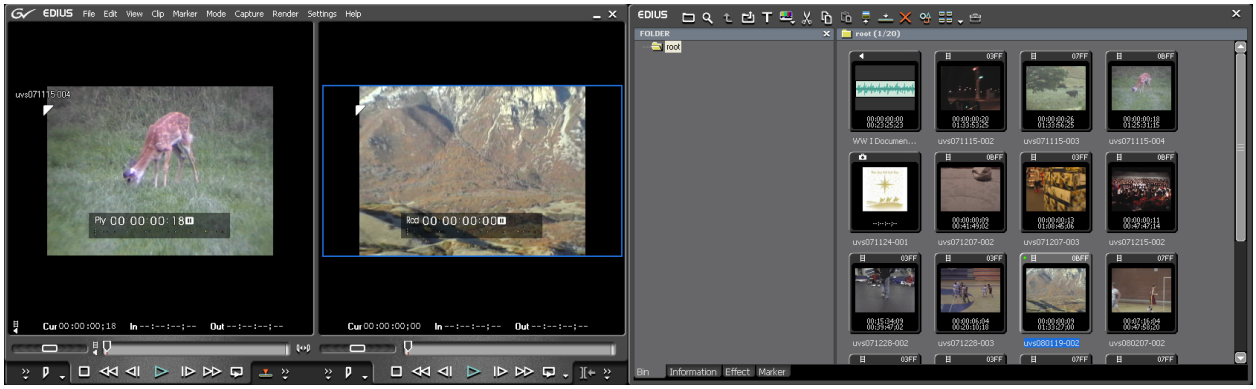
Recorder

The Recorder window (on the right) is used to preview edits and effects applied to clips on the EDIUS Timeline.

Figure 91 shows a dual-mode display using the single-monitor custom layout with non-overlapping windows. In this example, only the left half of the upper portion of the screen is used for the Player and Recorder preview windows and they are automatically resized.

The right half of the screen is occupied by the Asset Bin, Information Palette, Effects Palette and Marker Palette window.

Figure 91. Dual Mode Preview - Single Monitor Custom Layout



Single Mode

To select Single Mode, click on **View** in the menu bar and select **Single Mode**.

Note All layout and preview mode functions are also available by clicking on the GV logo in the upper left corner of the screen. Figure 89 shows the menu that appears when the GV logo is clicked.

In single mode, only one preview window is visible. The preview display is switched between the Player and the Recorder as necessary to manage the EDIUS workflow. When in single mode, preview toggle buttons appear in the upper right corner of the Preview window as shown in Figure 92.

Figure 92. Single Mode Preview Toggle Buttons

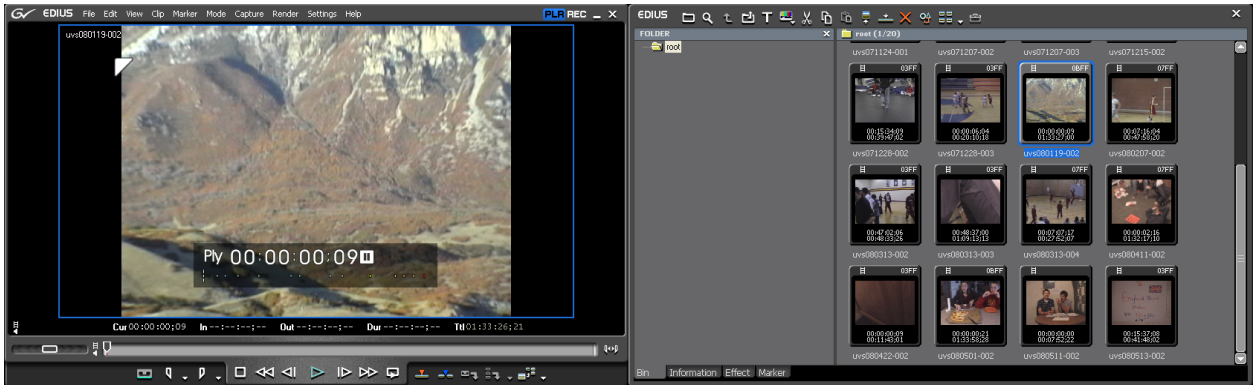
The active preview window is highlighted in blue. Click **PLR** to activate the Player preview window. Click **REC** to activate the Recorder preview window.

Figure 93 shows the single mode display for a dual-monitor or single monitor configuration with the default layout.

Figure 93. Single Preview Mode Dual Monitor or Single Monitor Default Layout

Figure 94 shows the single-mode display for a single-monitor custom layout with non-overlapping windows.

Figure 94. Single Mode Preview - Single Monitor Custom Layout



Player Operation Buttons

Figure 95 shows the Player operation buttons. The function of each of these buttons is explained in Table 2.

Note All keyboard shortcuts are the default shortcuts. Keyboard shortcuts may be customized through the Application Settings dialogs (see *Section 2-Application and Plug-In Settings* for more information).

Figure 95. Player Operation Buttons

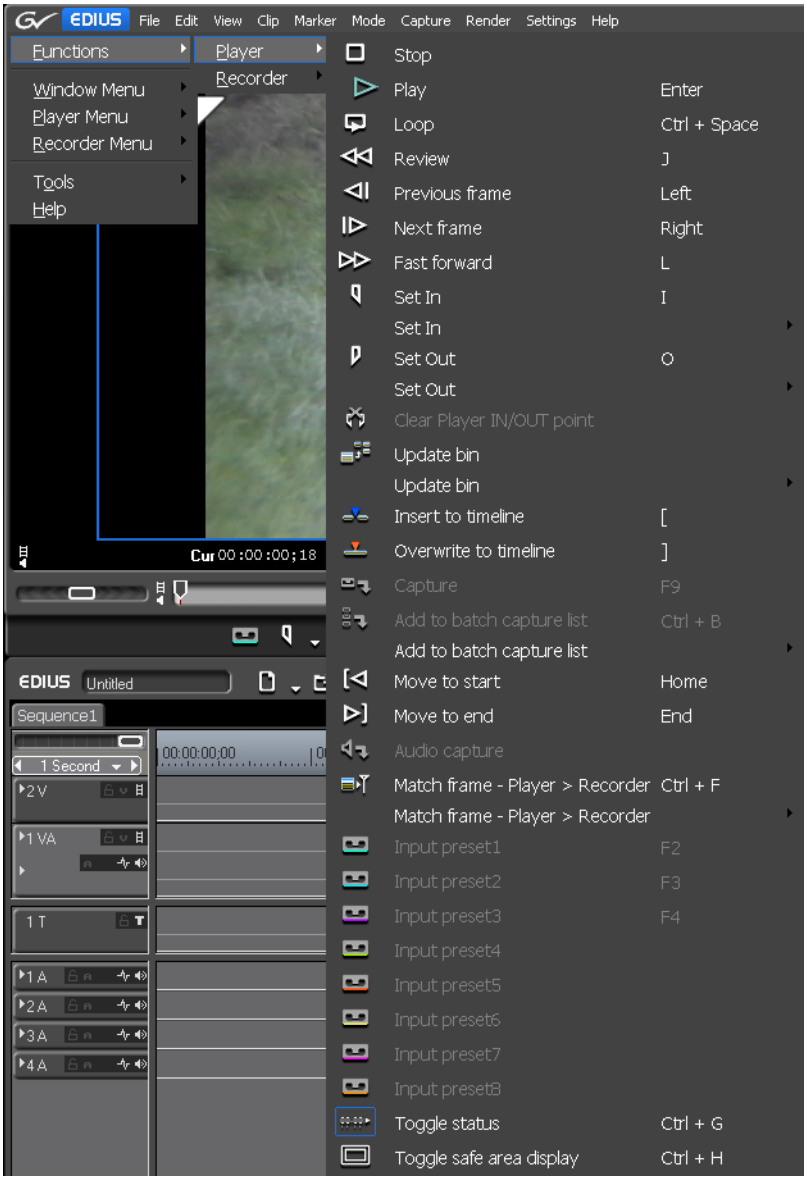
Table 2. Player Operation Button Details

Button	Function	Description	Keyboard Shortcut
	Input Preset	Input settings that are preset and saved as buttons can be activated by clicking on the appropriate Input Preset button.	
	Set In	Specifies the beginning point of a section of a clip that should be included in the project	[I]
	Set Out	Specifies the end point of a section of a clip that should be included in the project	[O]
	Stop	Stops playback in the Player window	[K]
	Review	Reviews (rewinds) the clip in the Player	[J]
	Previous Frame	Goes to the previous frame in a clip. Each click of the button moves to the previous frame. Holding down the [<--] key moves frame-by-frame in a faster step rewind	[<--]
	Play	Plays the clip in Player	[ENTER]
	Next Frame	Goes to the next frame in a clip. Each click of the button moves to the next frame. Holding down the [-->] key moves frame-by-frame in a faster step forward.	[-->]
	Fast Forward	Fast forwards through the clip in the Player	[L]
	Loop	Repeatedly plays back the clip in the Player until playback is stopped	[CTRL]+[SPACE]
	Overwrite to Timeline	Overwrites clip(s) on the Timeline at the cursor position with the clip in the Player. Clip(s) at the cursor position are replaced by the clip in the Player.	[]
	Insert to Timeline	Inserts the clip in the Player at the cursor position on the Timeline. Other clips on the Timeline after the cursor position will be adjusted b backward by the length of the inserted clip.	[[]
	Capture	The image displayed in the Player is captured as a still to the Asset Bin	[F9]
	Add to Batch Capture List	The segments in the clip marked with In and Out points are added to the batch capture list for future processing.	[CTRL]+[8]
	Add Clip to Bin	The clip in the Player is added to the Asset Bin.	[SHIFT]+[CTRL]+[B]

Clicking on the EDIUS logo in the upper left corner also allows access to the Player functions with their descriptions and keyboard shortcuts. To access the menu as shown in Figure 96, click on the **EDIUS** logo, select **Functions** and then **Player**.

Note Additional functions not available in the Player preview window are available from this menu.

Figure 96. EDIUS Logo Player Function Menu



Recorder Operation Buttons

Figure 97 shows the Recorder operation buttons. The function of each of these buttons is explained in Table 3.

Note All keyboard shortcuts are the default shortcuts. Keyboard shortcuts may be customized through the Application Settings dialogs (see *Section 2-Application and Plug-In Settings* for more information).

Figure 97. Recorder Operation Buttons

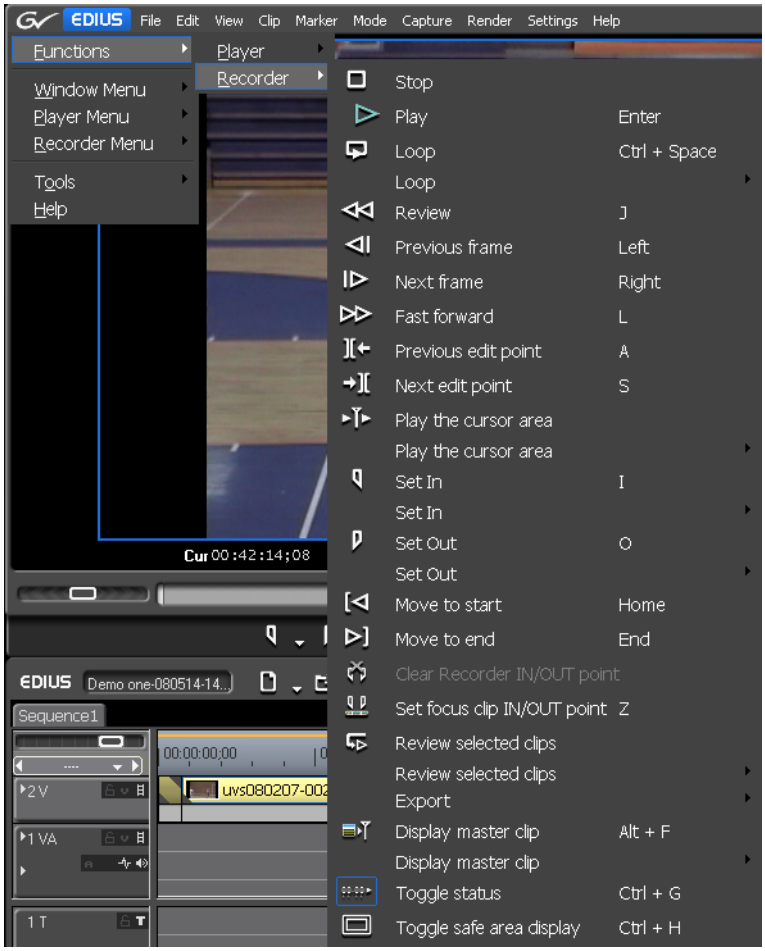
Table 3. Recorder Operation Button Details

Button	Function	Description	Keyboard Shortcut
	Set In	Specifies the beginning point of a section on the Timeline content hat should be included in the project output.	[I]
	Set Out	Specifies the end point of a section of the Timeline content that should be included in the project output.	[O]
	Stop	Stops playback in the Recorder window	[K]
	Review	Reviews (rewinds) the clip in the Recorder	[J]
	Previous Frame	Goes to the previous frame in a clip. Each click of the button moves to the previous frame. Holding down the [<--] key moves frame-by-frame in a faster step rewind	[<--]
	Play	Plays the content in the Recorder	[ENTER]
	Next Frame	Goes to the next frame in a clip. Each click of the button moves to the next frame. Holding down the [-->] key moves frame-by-frame in a faster step forward.	[-->]
	Fast Forward	Fast forwards through the content in the Recorder	[L]
	Loop	Repeatedly plays back the Timeline contents until playback is stopped. If In and Out points have been set, the segment between these points is played repeatedly.	[CTRL]+[SPACE]
	Previous Edit Point	Moves the cursor to the edit point preceding the current Timeline cursor position.	[A}
	Next Edit Point	Moves the cursor to the edit point following the current Timeline cursor position.	[S]
	Play Cursor Area	Repeatedly plays the content (~3 seconds on each side) in front of and behind the Timeline cursor.	
	Export	Exports content to a tape or file.	

Clicking on the EDIUS logo in the upper left corner also allows access to the Recorder functions with their descriptions and keyboard shortcuts. To access the menu as shown in Figure 96, click on the **EDIUS** logo, select **Functions** and then **Recorder.**

Note Additional functions not available in the Recorder preview window are available from this menu.

Figure 98. EDIUS Logo Recorder Function Menu



Timeline Window

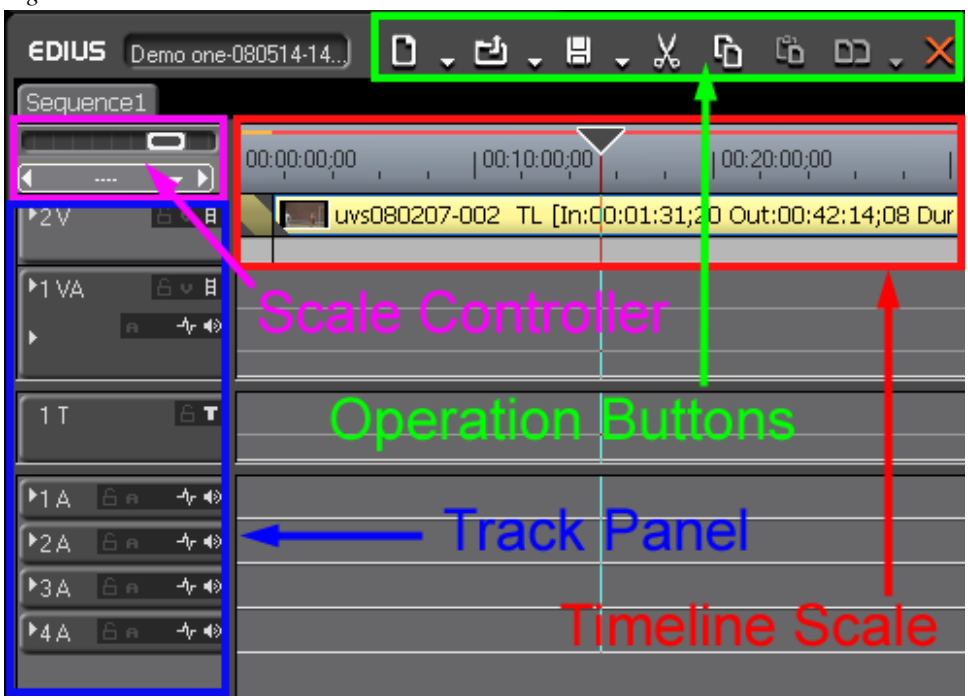
The Timeline shows a chronological progression from beginning to end of all the elements that comprise a project.

Major editing operations are performed with content on the Timeline. Video clips, audio clips, still images, titles, transitions, and effects are all managed on the Timeline. The Timeline is where the finished project takes shape.

A collection of clips, images, effects, etc. placed on the Timeline is known as a "sequence."

Figure 99 depicts the major components of the Timeline window.

Figure 99. EDIUS Timeline



The Timeline window is comprised of:

- the Timeline Operation Buttons
- the Timeline Scale
- the Timeline Scale Controller
- the Track Panel

Timeline Operation Buttons

The Timeline operation buttons shown in Figure 100 are discussed in detail in *Section 5-Timeline Operations*.

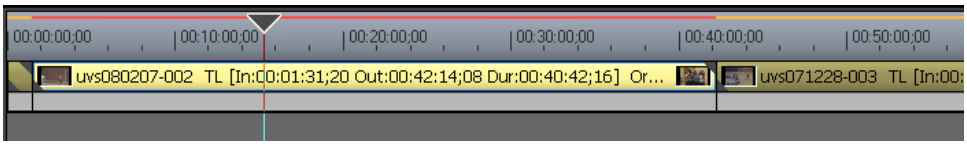
Figure 100. Timeline Operation Buttons

Timeline Scale

The Timeline scale provides a very accurate indication of the overall length of a sequence and allows for frame-accurate editing and clip placement.

Figure 101 shows a portion of the Timeline scale.

Figure 101. Timeline Scale



The numbers at the top of the scale indicate the Timeline position in hours:minutes:seconds;frames (hh:mm:ss;ff).

The Timeline cursor marks the current preview or editing point.

Timeline Scale Controller

The Timeline scale controller is used to adjust the Timeline scale unit in order to see more or less material on screen simultaneously. With a larger scale unit, more material will be visible on a single screen. With a smaller scale unit, less material will be visible on a single screen. Or course, regardless of the scale unit setting, all material placed on the Timeline is accessible using the scroll bar at the bottom of the Timeline window.

The Timeline scale is adjusted using the Timeline scale controller depicted in Figure 102. Timeline scale units range from one frame to 60 minutes.

Figure 102. Timeline Scale Controller

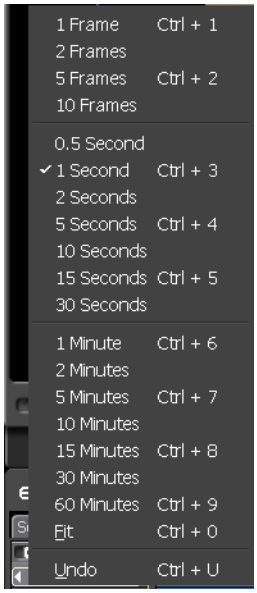
Adjusting the scale changes the value of the second-degree (mid-sized) tick mark. The value of the first-degree (smallest) tick mark is 1/5 of the value of the second-degree tick mark. The value of the third-degree (largest) tick mark is five times the value of the second-degree tick mark. Third-degree tick marks are labeled with the time code.

In the example in Figure 102, the value of the second-degree tick mark is one (1) second. This makes the value of the first-degree tick mark .20 seconds and the value of the third-degree tick marks five (5) seconds.

The Timeline scale can be adjusted in one of three ways:

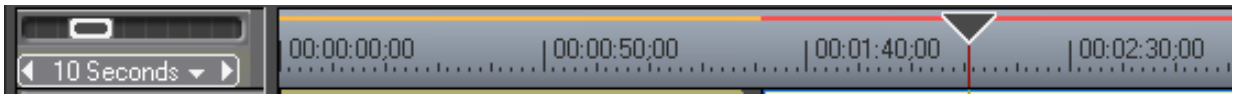
- Drag the slider to increase or decrease the Timeline scale unit.
- Click on the ◀(decrement scale unit) or ▶(increment scale unit) symbols on the scale control button. The scale unit is indicated by the text on the button (1 Second in the example above).
- Click on the ▼symbol on the scale control button to display the scale unit menu (shown in Figure 103) and select the desired scale unit.

Figure 103. Timeline Scale Control Menu



If the scale unit is changed to 10 seconds, the Timeline scale adjusts accordingly with each first-degree tick mark representing two (2) seconds and each third-degree tick mark 50 seconds. See Figure 104.

Figure 104. Timeline Scale Unit at 10 Seconds



Viewing Entire Sequence on the Timeline

If clips have been added to the Timeline that individually or collectively exceed the Timeline scale and it is desirable to view the entire sequence on a single screen, select **Fit** on the Timeline scale menu. This will adjust the Timeline scale unit automatically so that the entire sequence is visible on screen without scrolling.

Figure 105 shows a sequence with a two (2) minute Timeline scale unit that causes the sequence to exceed the width of a single screen.

Figure 105. Timeline Sequence Two-Minute Scale Unit

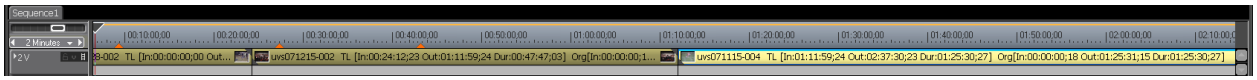


Figure 106 depicts the same sequence with the Timeline scale unit set to "Fit" which adjusts the Timeline scale to accommodate the entire sequence on a single screen.

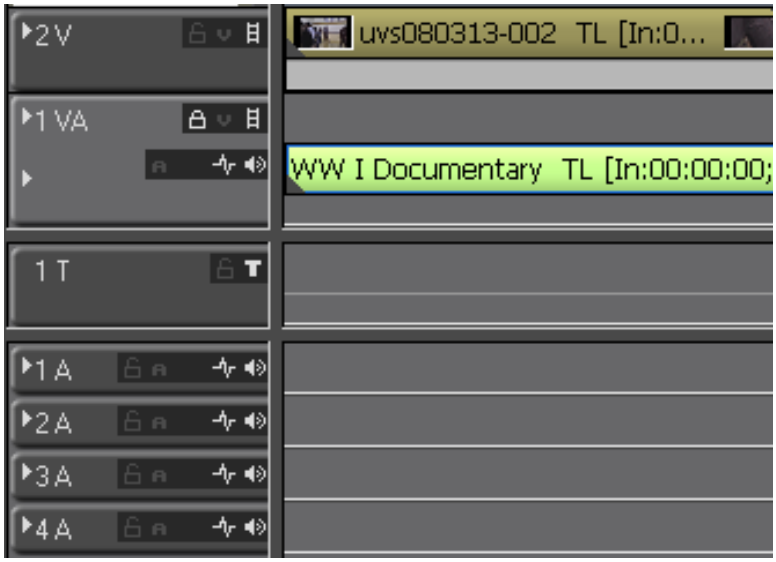
Figure 106. Timeline Sequence "Fit" Scale Unit

Track Panel

The track panel is used for managing video clips and audio clips, generating audio wave forms, managing titles, etc. More details regarding the track panel are found in *Section 5-Timeline Operations*.

Click the icon to lock a track and prevent it from being edited.

Figure 107. Timeline Window Track Panel



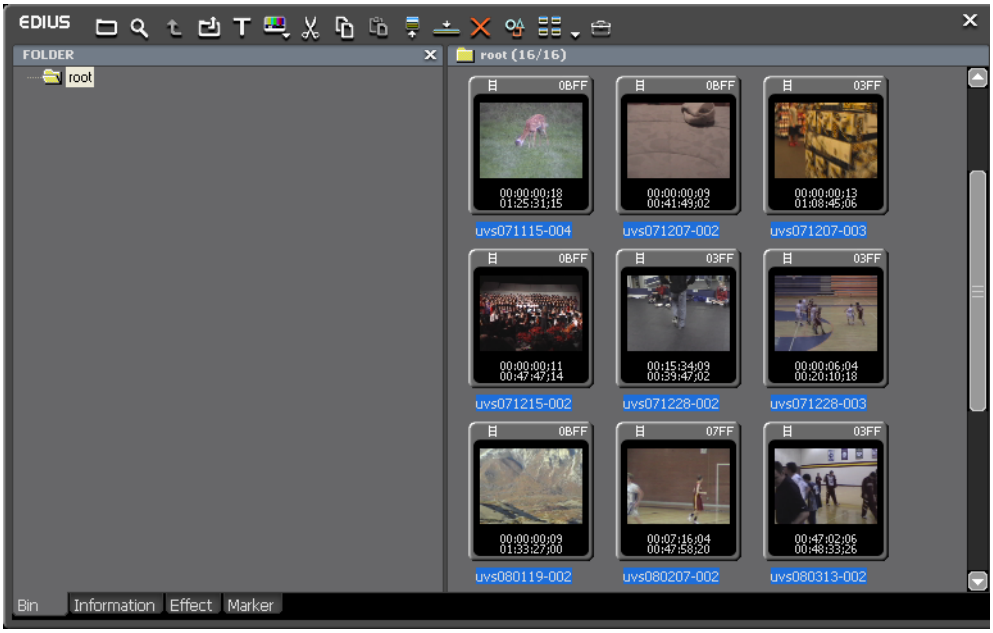
Asset Bin Window

The asset bin is where video and audio clips are stored and organized. The Asset Bin has three main components:

- the Operation Buttons
- the Folder View
- the Clip View.

The Asset Bin is shown in Figure 108.

Figure 108. Asset Bin



The folder view on the left side of the window displays a tree view of asset folders into which clips can be grouped and organized.

The clip view on the right side of the window shows thumbnails (default view) of the clips stored in the selected folder.

Palette Windows

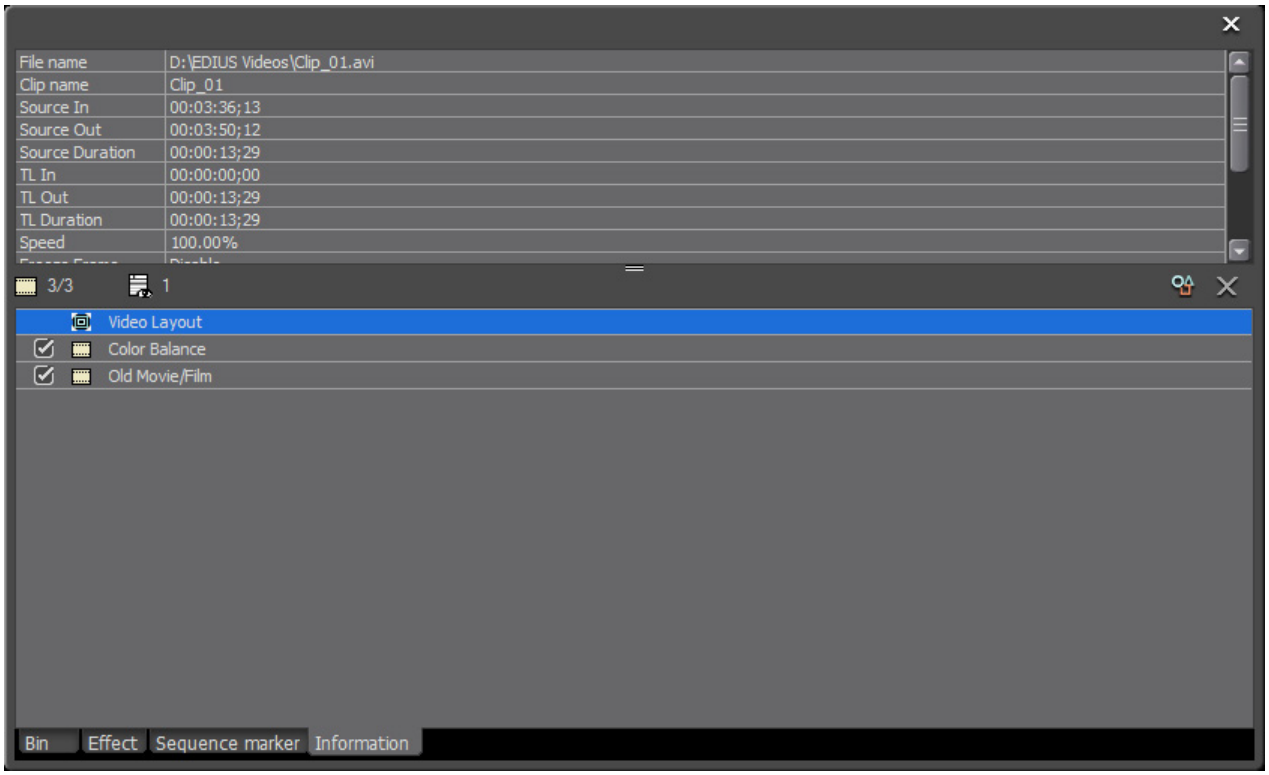
The Palette Windows are:

- the Information Palette
- the Effect Palette
- the Sequence/Clip Marker Palette

Information Palette

Information regarding the clip selected on the Timeline is displayed in the Information Palette window. Any effects that have been applied to the clip are also displayed in the Information Palette window. For more information concerning the Information Palette see *Section 4-Clip Operations and Management*.

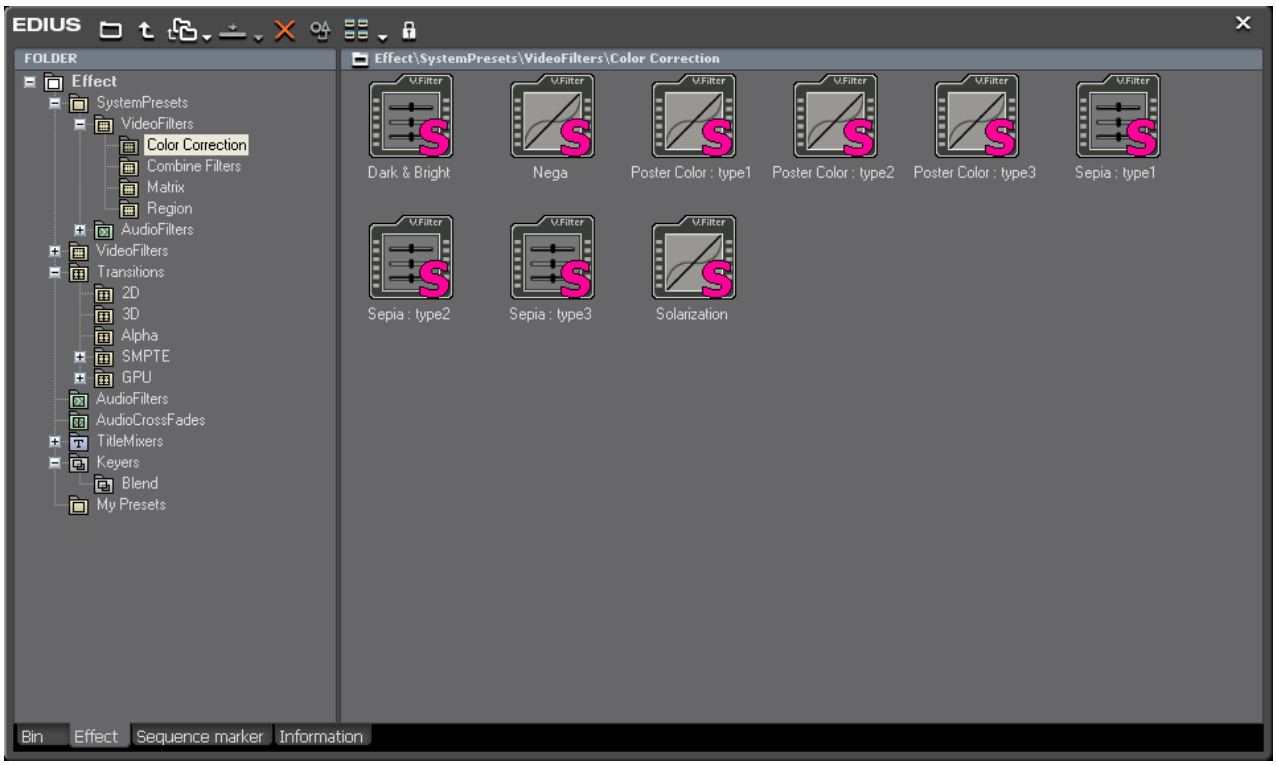
Figure 109. Information Palette



Effect Palette

The Effect Palette window displays the various color correction, video and audio filter, transition, title mixer and other effects that may be applied to clips on the Timeline. Figure 110 shows the Effect Palette window. For more information on the Effect Palette, see *Effects* *on page 369*.

Figure 110. Effect Palette



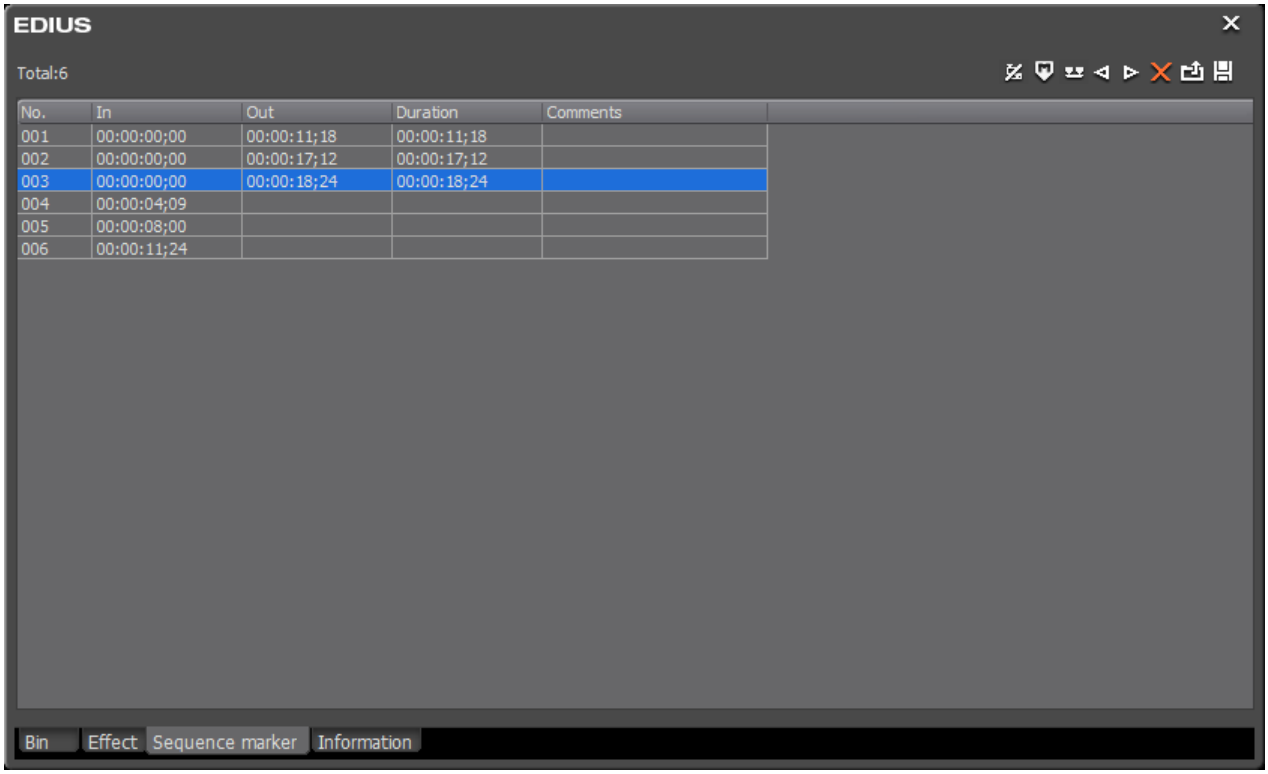
Sequence/Clip Marker Palette

The Sequence/Clip Marker Palette window displays the time code position of all markers applied to assets on the Timeline. Markers are used to quickly jump to marked positions on the Timeline. The markers become chapter points in the project output for the Burn to Disc application (see *Export to DVD or Blu Ray* *on page 536* for more information on Burn to Disc).

Note Outputs other than Burn to Disc do not receive marker information and markers do not function as chapter points in these outputs.

See Figure 111 for a depiction of the Sequence Marker Palette. For more information regarding the Sequence/Clip Marker Palette, see *Sequence and Clip Markers* *on page 316*.

Figure 111. Sequence Marker Palette



Section 2

Application and Plug-In Settings

This section covers application and plug-in settings that are used to customized EDIUS and which determine the behavior of certain EDIUS features. Settings related to specific hardware that may be used with EDIUS are discussed in *Appendix A-Hardware Settings*.

Application Settings

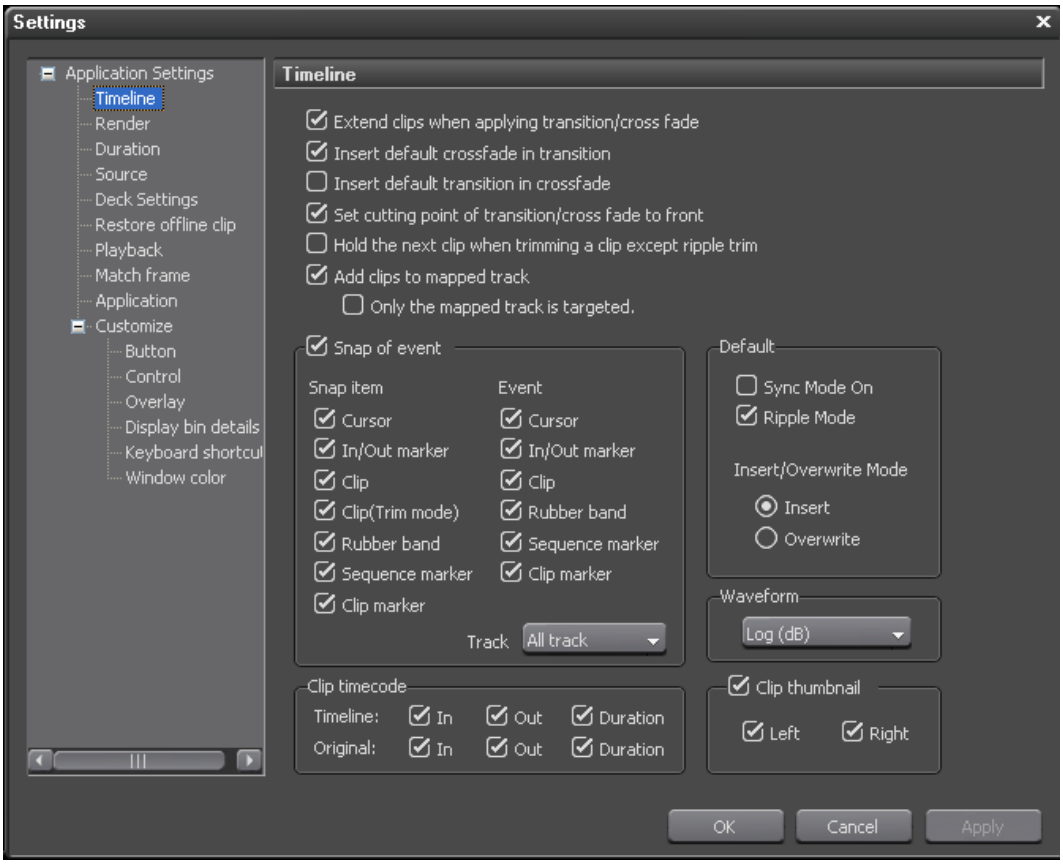
Application settings are organized in the following settings categories:

- Timeline
- Render
- Duration
- Source
- Deck Settings
- Restore Offline Clip
- Playback
- Match Frame
- Application
- Customize
  - Button
  - Control
  - Overlay
  - Display Bin Details
  - Keyboard Shortcuts
  - Window Color

Any or all of these settings can be adjusted according to your preferences or to meet the specific requirements for a particular project.

Application settings are accessed by selecting Settings>Application Settings from the Preview window. The Application Settings dialog is shown in Figure 112 with both Application Settings and Customize trees expanded.

Figure 112. Application Settings Dialog



Timeline Settings

From the Settings dialog shown above, select Timeline from the Application Settings tree (click the "+" to expand the tree if it is collapsed).

The following settings affect clips and effects on the Timeline (see Figure 112):

Note After making changes to any of the items in the Timeline Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Extend Clips When Applying Transition/Cross Fade

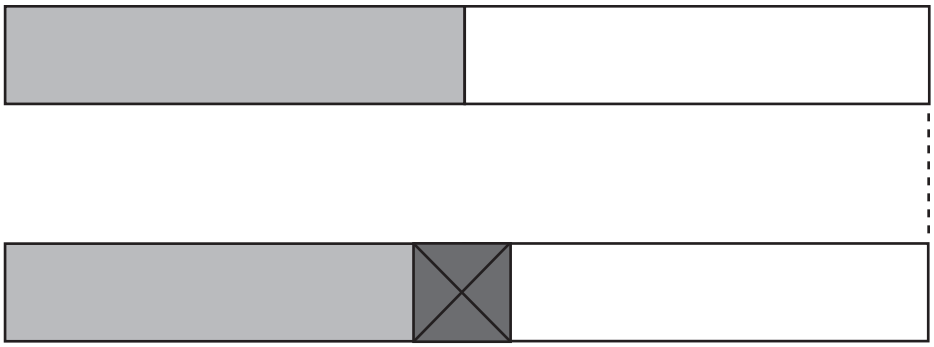
The status of this setting determines whether extend mode is enabled or fix mode is enabled as explained below.

Extend Mode

- Extend clips when applying transition/cross fade — If this setting is checked, adding or deleting a transition or audio cross fade between clips will not change the overall sequence length on the Timeline as illustrated in Figure 113. Default = Checked (extend mode enabled).

For more information on Extend Mode, see *Extend Mode* *on page 308*.

Figure 113. Extend Mode Example

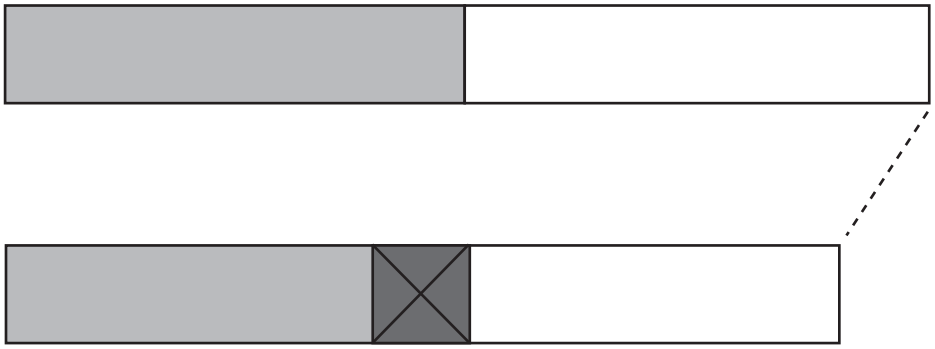


Fix Mode

- Extend clips when applying transition/cross fade — If this setting is not checked (disabled), adding a transition or an audio cross fade between clips shortens the overall length of the sequence on the Timeline as illustrated in Figure 114. Deleting a transition or cross fade lengthens the sequence on the Timeline. Default = Checked (extend mode enabled).

For more information on Fix Mode, see *Fix Mode* *on page 309*.

Figure 114. Fix Mode Example



Insert Default Cross Fade in Transition

If this item is checked, adding a transition to a video clip on the VA track will automatically add an audio cross fade of the same length as the transition to the audio clip at the same position. Default = Checked.

Insert Default Transition in Cross Fade

If this item is checked, adding a cross fade to an audio clip on the VA track will automatically add a transition of the same length as the audio cross fade to the video clip at the same position. Default = Not Checked.

Set the Cutting Point of Transition/Cross Fade to Front

If this item is checked, the cut point of a transition or audio cross fade is set forward. For example, on a seven-frame transition (no even division point on either side of the cut line), the transition is set between the 3rd and 4th frame. This is the first full-frame point forward of the 3.5 frame midpoint of the transition. Default = Checked.

Hold the Next Clip When Trimming a Clip Except Ripple Trim

If this item is checked, clips after the clip that is trimmed will hold their position on the Timeline unless ripple trim is enabled. Default = Not Checked.

Add Clips to Mapped Track

With this option enabled, when a clip is added to the Timeline, parts of the clip that have corresponding mappings in the Timeline are also added.

For example, if a video track is mapped, adding a clip to the audio track will also add the video portion of the clip to the video track. Insert/Overwrite settings are in effect and govern the manner in which the clip is added.

If "Add clips to mapped track" is disabled, adding a clip to the audio track will only add the audio portion of that clip to the selected track. The video portion will not be added.

Default = Checked.

Only the Mapped Track is Targeted

Note This option has no effect if "Add Clips to Mapped Track" is disabled.

When this option is enabled, only the portions of a clip that have mapped tracks will appear on the Timeline. Adding clips to an unmapped track is not allowed.

For example, with this option enabled, if no video track is mapped, but audio tracks are mapped, dragging a clip with both video and audio onto the Timeline will result in only the audio portion appearing on the mapped audio track(s).

When this option is disabled, the portion of the clip that does not have corresponding track mapping will be placed on the Timeline where the user drops it, if possible, and the mapped portions will appear on the mapped track(s).

As an example, if a video track is mapped, dragging a clip with both video and audio to an audio track will result in the audio of the clip appearing in the selected audio track and the video of the clip appearing in the mapped video track.

Default = Not Checked.

Snap of Event

Selection in this section determine which items will snap to which destination and the range to which this applies.

Snap Item

Check the items from the following list which should snap to the designated event destinations (Default = all items checked).

- Cursor
- In/Out Marker
- Clip
- Clip (trim mode)
- Rubber Band
- Sequence Marker
- Clip Marker

Event

Check the events from the following list which will be displayed as snap destinations (Default = all items checked):

- Cursor
- In/Out Marker
- Clip
- Rubber Band
- Sequence Marker
- Clip Marker

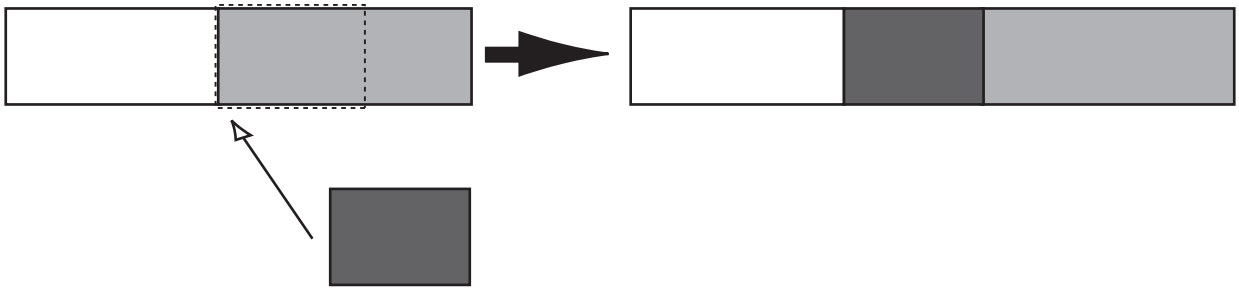
Track

Select from the drop-down list the track range for even snapping. The choices are: All Tracks or Same Track.

Insert Mode

With insert mode enabled, adding a new clip moves any existing clips at the insertion point forward in time to accommodate the new clip. The length of the sequence is increased by the length of the inserted clip (see Figure 115). Default = On.

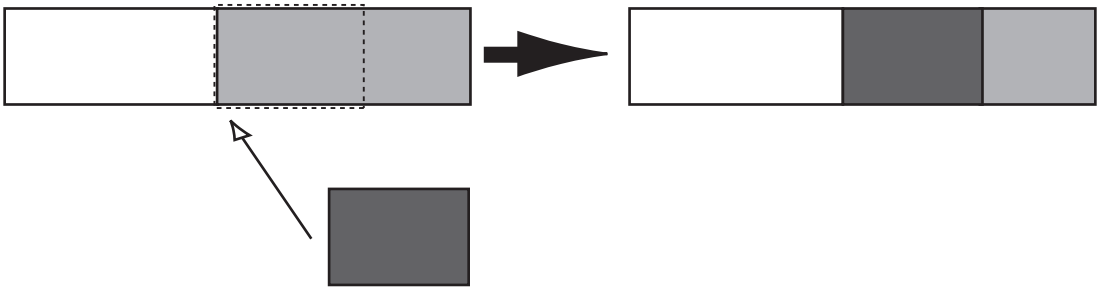
Figure 115. Insert Mode Example



Overwrite Mode

With overwrite mode enabled, adding a new clip overwrites the existing clip at the insertion point by the amount of overlap between the two clips. The length of the sequence does not increase (see Figure 116). Default = Off.

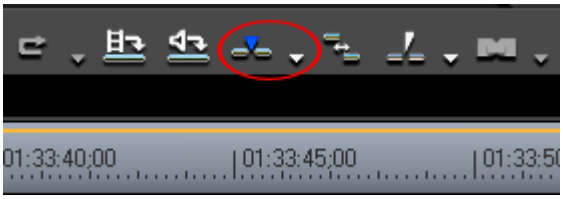
Figure 116. Overwrite Mode Example



Note Insert Mode and Overwrite Mode are mutually exclusive. Only one or the other is active. Enabling one mode automatically disables the other.

Insert and Overwrite mode may also be toggled from the tool bar in the Timeline window. See Figure 117.

Figure 117. Insert/Overwrite Toggle Button



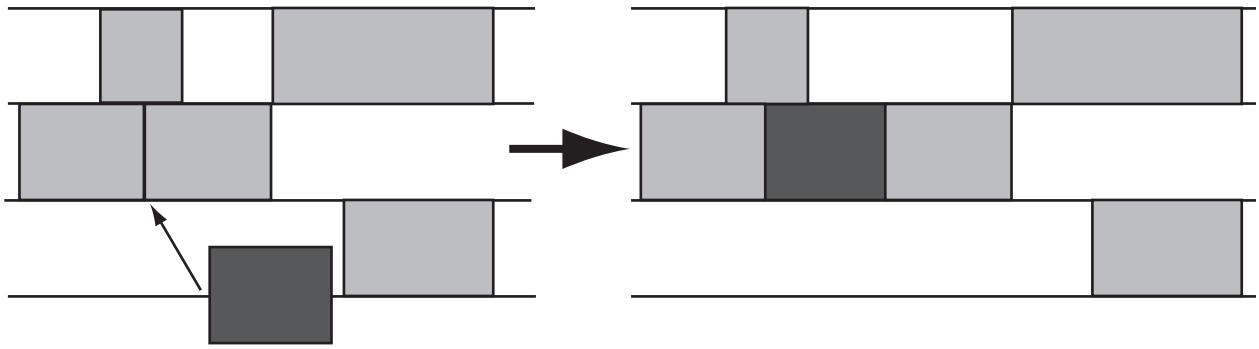
Each click of the button switches modes.

= Insert Mode = Overwrite Mode

Sync Mode

If sync mode is enabled, editing a track (inserting or moving clips, for example) affects other tracks if insert mode is also enabled. All tracks are kept in sync (maintain their prior positions relative to one another) from the insertion point on. See Figure 118 for an example. Default = Not Checked.

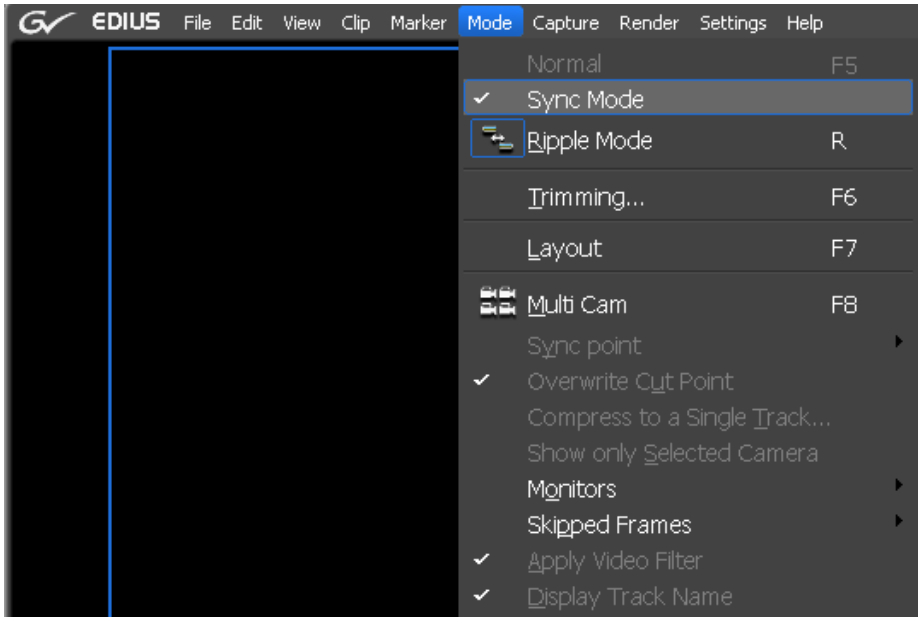
Figure 118. Sync Mode With Insert Enabled



Sync Mode may also be toggled on and off by either of the following methods:

- Click the list button [▽]on the **Insert Mode** or **Overwrite Mode** icon and select Sync Mode. A check mark by Sync Mode indicates that Sync Mode is on. Sync Mode is off when the check mark is not present.
- Select Mode>Sync Mode from the Preview window (see Figure 119). A check mark by Sync Mode indicates that Sync Mode is on. Sync Mode is off when the check mark is not present.

Figure 119. Sync Mode Menu Toggle



Note If you do not want Sync Mode to affect a particular track when Sync Mode is on, click the lock icon on the track panel next to the track you wish to lock (see Figure 120). When the lock icon is highlighted and locked, the track is locked. When the icon is dim and unlocked, the track is unlocked. Clicking the lock icon toggles the lock on and off.

Figure 120. Track Lock Toggle

Ripple Mode

With ripple mode enabled, when a clip is deleted or trimmed, the clips which follow in the Timeline move to fill in the space formerly occupied by the trimmed or deleted clip. Default = Checked (On).

Note With ripple mode on, the behavior of clips on all tracks is also affected by the status of the Sync Mode setting. The examples below illustrate the effect of the Sync Mode setting on Ripple Mode editing.

Figure 121 represents the movement of clips in various tracks on the Timeline when ripple mode is on, sync mode is off and insert mode is enabled.

Figure 121. Ripple Mode On/Sync Mode Off/Insert Mode Enabled

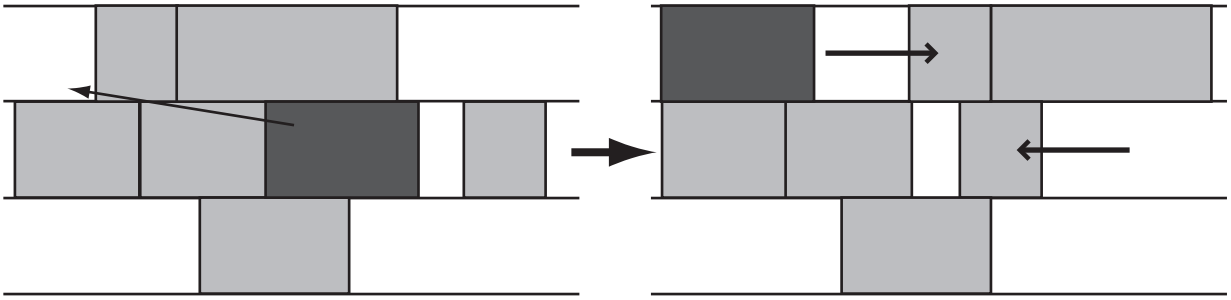
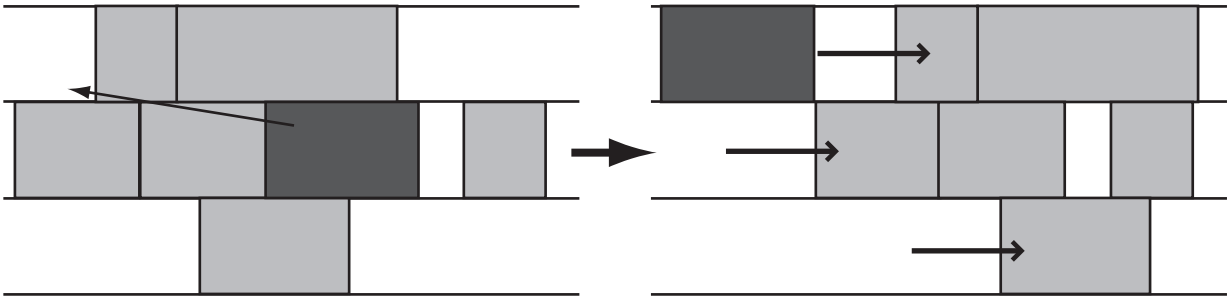


Figure 122 represents the movement of clips in various tracks on the Timeline when both ripple mode and sync mode are turned on with insert mode also enabled.

Figure 122. Ripple Mode On/Sync Mode On/Insert Mode Enabled



Ripple Mode may also be toggled on and off by one of the following procedures:

- Click the **Ripple Mode** button on the Timeline window tool bar. Each click toggles ripple mode on or off. When ripple mode is off there is a slash through the ripple mode icon. When ripple mode is on, the slash is removed. See Figure 123 for details.

Figure 123. Ripple Mode Toggle Button

- Select Mode>Ripple Mode in the Preview window. As in the example above, the icon next to the Ripple Mode menu selection has a slash through it when ripple mode is disabled. The slash is not present when ripple mode is enabled.

Waveform

The Waveform selection sets the display of the waveform on the Timeline. Choices are Log(dB) or Linear (%). Select the desired waveform display from the drop-down list by clicking on the ▽ symbol and making the desired selection. Default = Log (dB).

Clip Timecode

Displays checked timecodes.

In/Out points and duration timecodes on both the Timeline and the original clip may be selected for display.

Clip Thumbnail

If Clip Thumbnail is checked, thumbnails of the In/Out points are displayed at the clip edge of the Timeline. Thumbnails may be displayed on the left edge, the right edge or both locations. Default = All Checked.

Render Settings

These options control the behavior of the blue/aqua/green/orange/red lines under the time scale ticks on the Timeline. These colored lines control what is rendered by forced temporary rendering (the Render In/Out>Render Overload Area on the Preview window menu bar).

Blue

The area should play back in real-time (no rendering required).

Aqua Blue

Clip will playback in real-time with no rendering (rendering may be required in certain circumstances).

Green

The area has been rendered to a temporary file.

Orange

The area may not play back in real-time (this area is considered a "loaded" area).

Red

Real-time playback was attempted for this area but failed (this area is considered an "overload" area).

The checkboxes determine what factors are considered when labeling an area as "loaded" (orange).

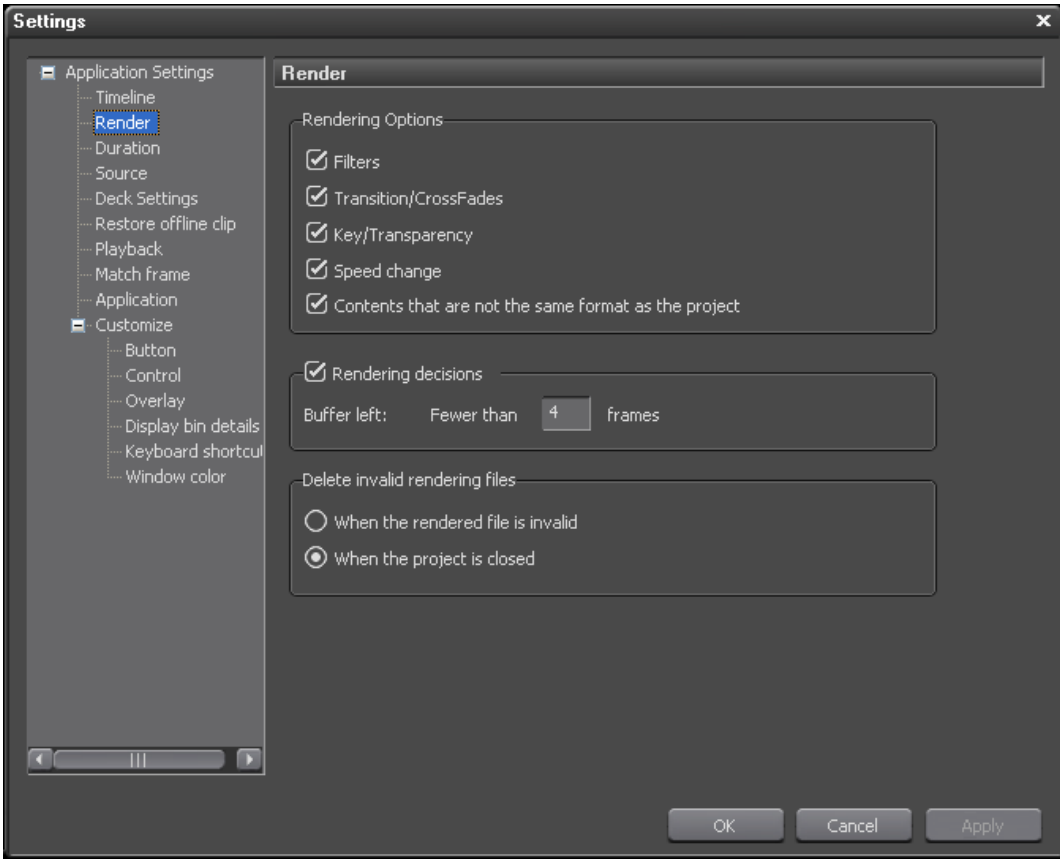
Regardless of the settings, a Render overload area command will still render all of the effects to the temporary file.

The render settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Render from the Application Settings tree in the Settings dialog. See Figure 124.

For more information on rendering, see *Rendering Operations* *on page 441*.

Note After making changes to any of the items in the Render Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 124. Render Settings



Select or de-select the following to be included in the rendering target: Default = All Checked (included in rendering target).

Filters

Select to include video filters in the rendering process.

Transition/Cross Fades

Select to include transitions and title mixers in the rendering process.

Key/Transparency

Select to include key effects and transparency (when changed from the default) in the rendering process.

Speed Change

Select to include any clips that feature speed adjustments from the default of 100% in the rendering process.

Contents That Are Not the Same Format as the Project

Select to include in the rendering target any clips with formats that differ from project settings. Clips with the following format differences are included in the rendering process if this parameter is checked:

- Frame size different than project settings
- Aspect ratio different than project settings
- Frame rate different than project settings
- Field order different than project settings
- CODEC compression format different than project settings
- Alpha channel information included in clip

Rendering Decisions

If this parameter is checked, EDIUS will mark areas as requiring rendering if, during playback, the buffer drops below the number of frames specified in the Buffer Left setting. Default = Checked.

Buffer Left

Specify a number of frames in the buffer which is the threshold for the rendering decision. If the number of frames in the buffer drops below this threshold during playback, the area will be marked as requiring rendering. Maximum = 10 frames.

Delete Invalid Rendering Files

This selection determines when invalid rendering files are deleted. The choices are:

- When the rendered file is invalid
- When the project is closed (default)

These choices are mutually exclusive. Selecting one automatically deselects the other.

Duration Settings

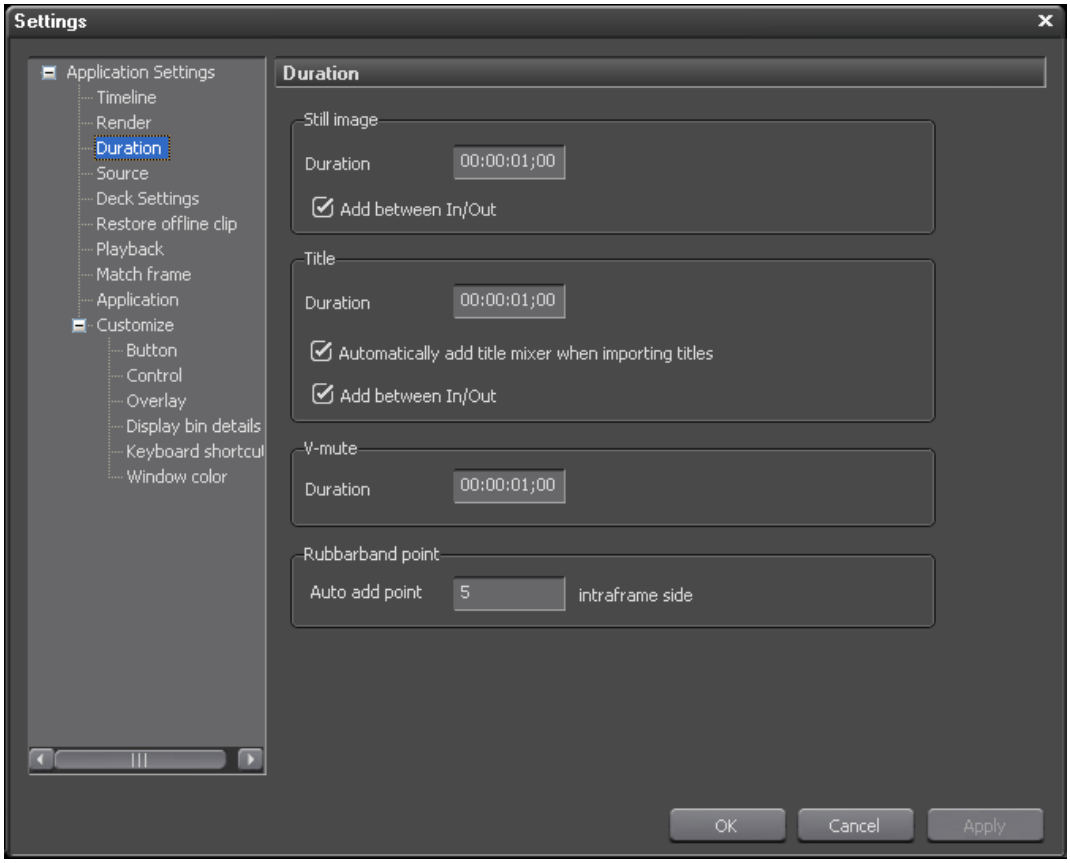
Duration settings determine the default duration on the Timeline of still images, titles and V-mutes. These settings are defaults and my be changed on a source-by-source basis on the Timeline.

The format of these duration fields is HH:MM:SS;FF (H=hour, M=Minutes, S=Seconds; F=Frames). See *Entering Numeric Data* *on page 29* for more information on the various methods for entering numeric data.

The Duration settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Duration from the Application Settings tree in the Settings dialog. See Figure 125.

Note After making changes to any of the items in the Duration Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 125. Duration Settings



Still Image

When a still image is placed on the Timeline, its default duration will be the duration specified in this setting. Default = 00:00:01;00 (1 second).

Add Between In/Out

Check this box if you want to allow still images to be placed between In/Out points on the Timeline. Default = Checked.

Title

When a title is placed on a title track, its default duration will be the duration specified in this setting. Default = 00:00:01;00 (1 second).

Automatically Add Title Mixer When Importing Titles

If this setting is checked, placing a title on the track automatically applies the default title mixer as well. Default = Checked.

Add Between In/Out Points

Check this box if you want to allow titles to be placed between In/Out points on the Timeline. Default = Checked.

V-Mute

The V-mute function eliminates audio by frame units. This is useful for eliminating small amounts of unwanted audio noise.

Set the desired default duration for V-mute. Default = 00:00:01;00 (1 second).

Rubberband Point

Set the desired auto add point for rubberband points.

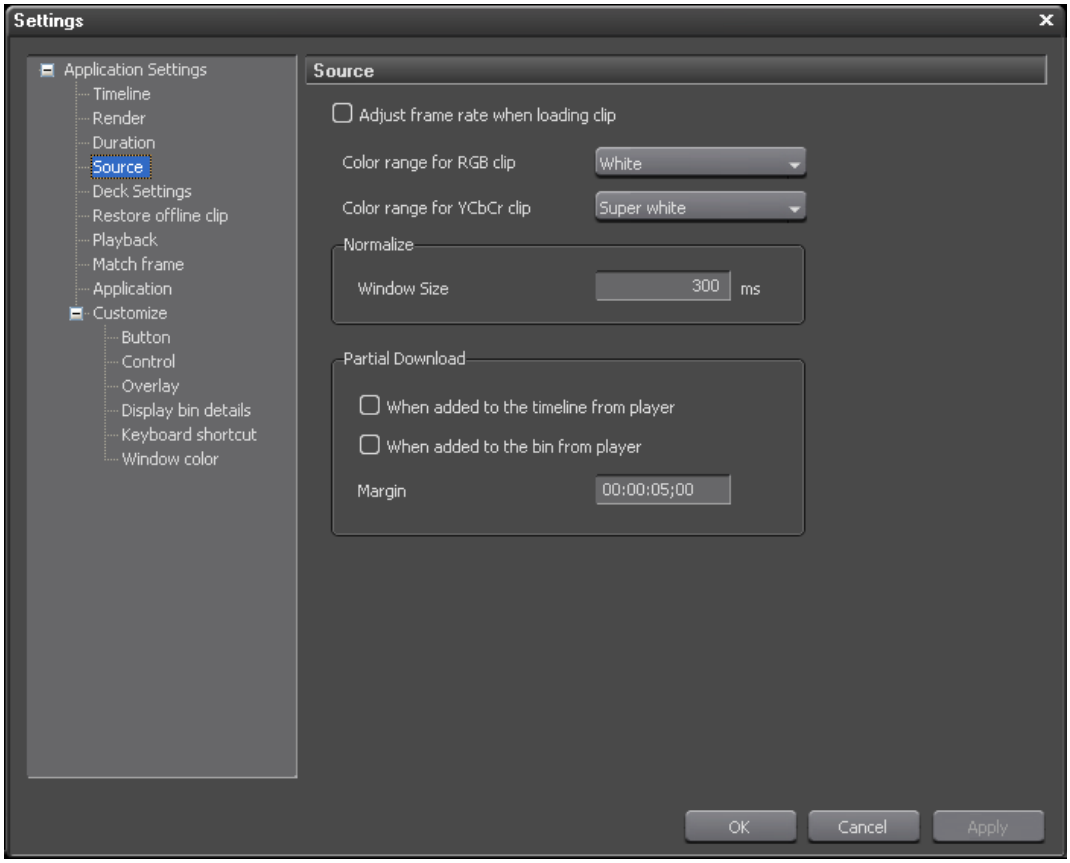
Source Settings

Source settings determine how sources imported into EDIUS are treated.

The Source settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Source from the Application Settings tree in the Settings dialog. See Figure 126.

Note After making changes to any of the items in the Source Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 126. Source Settings



Adjust Frame Rate When Loading Clip

Check this box if you want the frame rate of imported clips to be automatically adjusted to match the project settings frame rate. (Default = Not Checked).

Color Range for RGB Clip

This setting determines the default way EDIUS should treat RGB color-space clips.

Note The color range setting can be changed for individual clips in the Bin in the Clip Properties.

Because there are two different methods for converting RGB color space to YCbCr color space for broadcast, you may find that RGB clips may have blown-out whites and crushed blacks or have dull whites and grayish blacks.

Select the desired color range for RGB clips. Choices are:

- White (default)
- Super White

White

Maps RGB 0,0,0 to YCbCr 16,128,128 (broadcast-safe black) and RGB 255,255,255 to YCbCr 235,128,128 (broadcast-safe white). All values in-between are interpolated through the range.

Use this setting if your RGB clip is showing crushed blacks and blown-out whites.

Super White

Maps RGB 0,0,0 to YCbCr 0,128,128 (super-black) and RGB 255,255,255 to YCbCr 255,128,128 (super-white). All values in-between are interpolated through the range.

If your RGB clip is showing grayish blacks and dull whites, set the clip's color range to Super White.

Color Range for YCbCr Clip

This setting determines the default way EDIUS should treat YCbCr color-space clips.

Note This option does not have any affect on Canopus DV, Canopus HQ or Canopus Lossless clips. These formats are always treated as Super White.

Select the color range for YCbCr Clips. Choices are:

- White
- Super White (default)

White

Maps YCbCr 0,128,128 to YCbCr 16,128,128 (broadcast-safe black) and YCbCr 255,128,128 to YCbCr 235,128,128 (broadcast-safe white). All values in-between are interpolated through the range.

Use this setting if your YCbCr clip is showing crushed blacks and blown-out whites.

Super White

Maps YCbCr 0,128,128 to YCbCr 0,128,128 (super-black) and YCbCr 255,128,128 to YCbCr 255,128,128 (super-white).

If your YCbCr clip is showing grayish blacks and dull whites, set the clip's color range to Super White.

Normalize Window Size

When audio is normalized, the value entered for the window size (in milliseconds) is used in the Root Mean Square (RMS) calculation.

Partial Download

Partial download is the ability to download partial clips from external media as a background operation. See *Partial Download* *on page 228* for more information. There are two methods for partial downloads; adding partial clips to the Timeline and adding partial clips to the Asset Bin.

When Added to the Timeline from Player

If this option is selected, partial download is available when adding clips to the Timeline from the Player

When Added to the Bin from Player

If this option is selected, partial download is available when adding clips to the Asset Bin from the Player.

Margin

The margin on both sides of the clip is specified by the Margin setting. Any margin from 0 seconds to 1 hour may be specified. Default = 5 seconds.

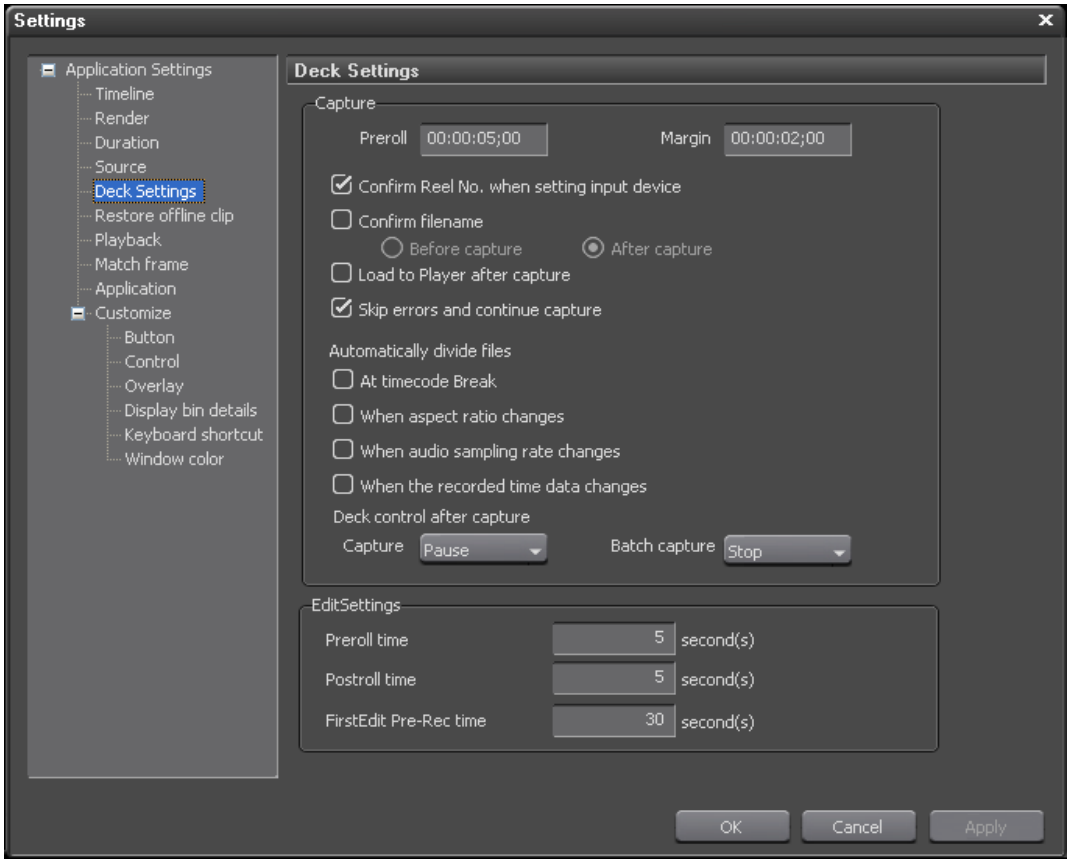
Deck Settings

Deck settings determine how EDIUS interacts with an external source deck when capturing clips.

The Deck settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Deck Settings frames Application Settings tree in the Settings dialog. See Figure 127.

Note After making changes to any of the items in the Deck Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 127. Deck Settings



The format of the Preroll and Margin fields is HH:MM:SS;FF (H=hour, M=Minutes, S=Seconds; F=Frames). See *Entering Numeric Data* *on page 29* for more information on the various methods for entering numeric data.

Preroll

Enter the desired time to preroll the device before capturing begins.

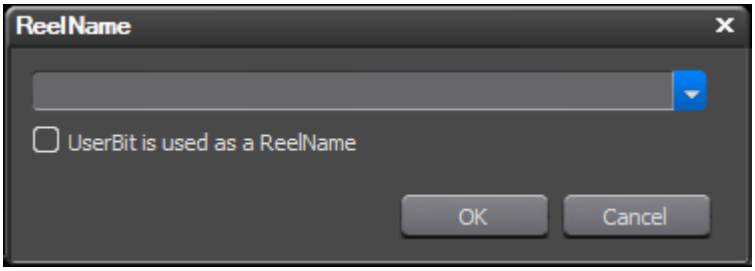
Margin

Enter the desired clip margin added at In and Out points during capture operations. The margin is the “dead space” before and after clips that can by used to insert transitions and other effects.

Confirm Reel No. When Setting Input Device

If the option is selected, when an input device is selected for capture operations, the ReelName dialog illustrated in Figure 128 will automatically appear. See *Section 3-Capturing and Importing Clips and Stills* for more information. Default = Not Checked.

Figure 128. ReelName Dialog



Confirm Filename

A file name for AVI file(s) generated during capture operations is automatically created. This setting determines when the user is prompted to confirm/change the filename and location. Choices are:

- Before Capture
- After Capture (default)

Select the desired filename confirmation setting.

Load to Player After Capture

If this setting is checked, the AVI file created during a capture operation will be automatically loaded into the Player when the capture is complete. Default = Not Checked.

Skip Errors and Continue Capture

If this setting is checked, errors encountered during batch capture operations will be ignored and capturing will continue. Default = Checked.

Automatically Divide Files

Select the conditions which will cause captured data to be automatically divided into multiple AVI files during capture operations. Choices are:

- At timecode break
- When aspect ratio changes
- When audio sampling rate changes
- When the recording time data changes

Default = All Checked.

Deck Control After Capture

Select the desired deck state after a manual capture and a batch capture.

Capture

- Nothing
- Pause (default)
- Stop

Batch Capture

- Nothing
- Pause
- Stop (default)

EditSettings - Preroll Time

Sets the preroll time in editing operations.

EditSettings - Postroll Time

Sets the post operation roll time in editing operations.

EditSettings - FirstEdit Pre-Rec Time

Sets the draft (margin) length at FirstEdit - recording the control signal automatically at the top of the tape.

Note To set the preroll for voice overs, see *Playback Settings* *on page 147*. The voice over margin uses the Margin setting on page 143.

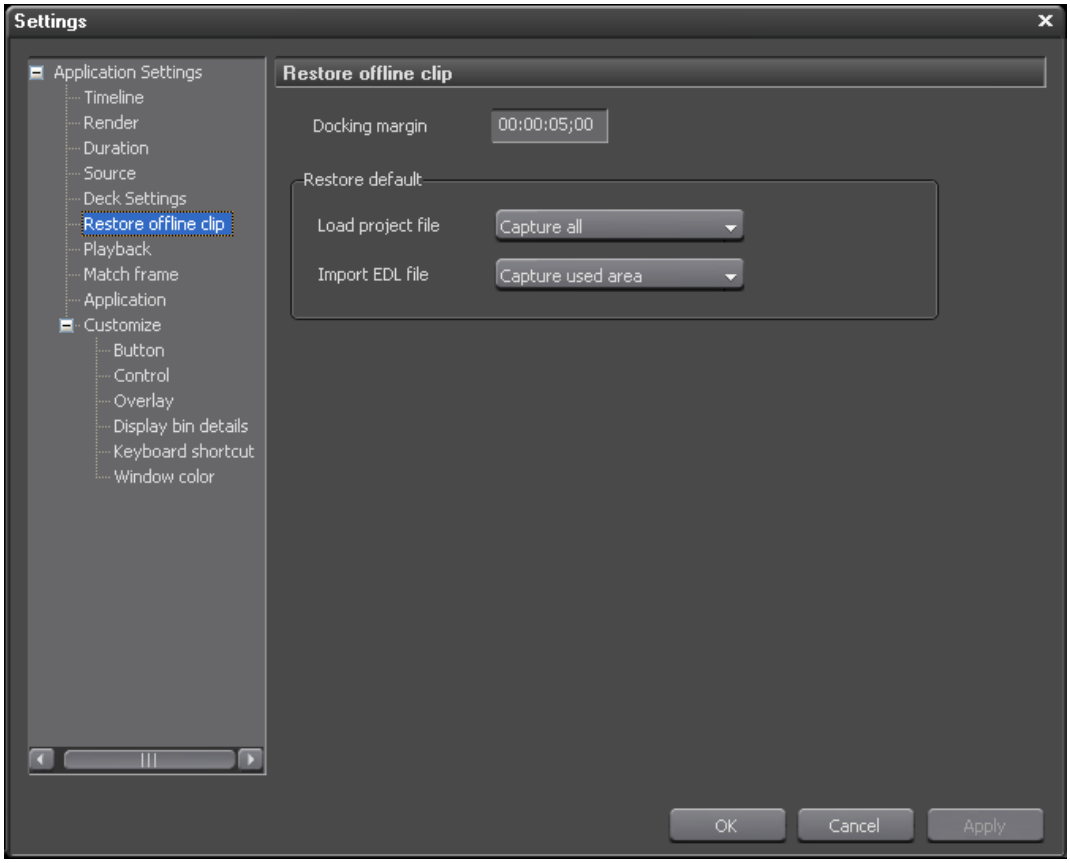
Restore Offline Clip Settings

Clips that have been used in projects may go "offline" if they are accidentally moved or deleted. If offline clips need to be recaptured, the settings in this section determine the restoration parameters.

The Restore Offline Clip settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Restore Offline Clip from the Application Settings tree in the Settings dialog. See Figure 129.

Note After making changes to any of the items in the Restore Offline Clip Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 129. Restore Offline Clip Settings



Docking Margin

When re-capturing the necessary areas of an offline source, set the margin between recaptured areas. When multiple offline clips are placed on the Timeline in closer proximity than the docking margin, they are combined into a single clip.

Set the desired docking margin in a HH:MM:SS;FF (H=hour, M=Minutes, S=Seconds; F=Frames) format. See *Entering Numeric Data* *on page 29* for more information on the various methods for entering numeric data.

Restore Default - Load Project File

When restoring clips using a project file select the preferred restoration method. Choices are:

- Capture all (default)
- Capture used area
- Don’t capture

Restore Default - Import EDL File

An Edit Decision List (EDL) file may be imported for use in restoring offline clips. Select the preferred restoration method when using imported EDL files. Choices are:

- Capture all
- Capture used area
- Don't capture

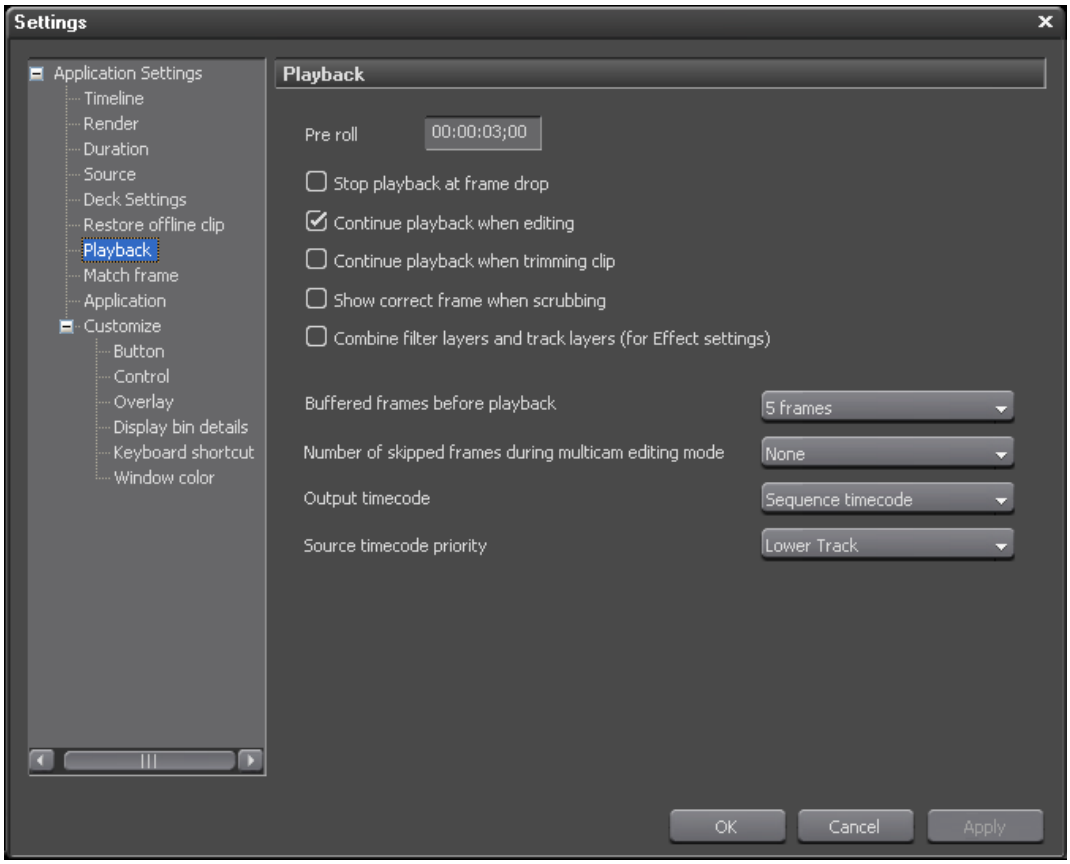
Playback Settings

Playback settings determine behavior during project playback operations.

The Playback settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Playback from the Application Settings tree in the Settings dialog. See Figure 130.

Note After making changes to any of the items in the Playback Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 130. Playback Settings



Preroll

Set the preroll time for playback with the Play Cursor Area function. Default = 00:00:03;00 (3 seconds).

Stop Playback at Frame Drop

If this selection is checked, playback stops when processing cannot keep up with the playback speed which results in dropped frames. Default = Not Checked.

Continue Playback When Editing

If this option is checked, playback continues even as editing operations are executed during playback. Default = Checked.

Continue Playback When Trimming Clip

If this option is checked, playback continues even as clip trimming operations are executed during playback. Default = Checked.

Show Correct Frame When Scrubbing

When checked, the correct frame is always displayed while scrubbing (dragging the Timeline cursor with the mouse). If this option is not checked, some frames may be skipped while scrubbing. When scrubbing on MPEG or Windows Media files, it is best to leave this option disabled. Default = Not Checked.

Combine Filter Layers and Track Layers (for Effect Settings)

When checked, this option displays a composite image when previewing clips in the effect settings dialog box. For example the composite image of V1 and V2 track images is displayed when opening the settings dialog for a video filter applied to the V1 track. If this option is not checked, only the image on the V1 track is displayed. Default = Not Checked.

Buffered Frames Before Playback

This setting designates the number of frames to be buffered when playback is initiated. Increasing the number of buffered frames increases the likelihood that processing can keep up with the playback speed. Choices are 5, 10 and 15. Default = 5.

Number of Skipped Frames During Multicam Editing Mode

Set the number of frames to skip during playback while in multicam editing mode. CPU loads are reduced by increasing the skipped frame setting. Choices are 0-5. Default = None (0).

Output Timecode

Select the timecode to be exported when exporting to file or tape. Choices are:

- Sequence timecode (default)
- Source timecode

Source Timecode Priority

When exporting or displaying the source timecode, set the track priority to either lower track (default) or upper track.

Note Even with Lower Track selected, if the upper track transparency is not set to 100%, the lower track timecode is not displayed.

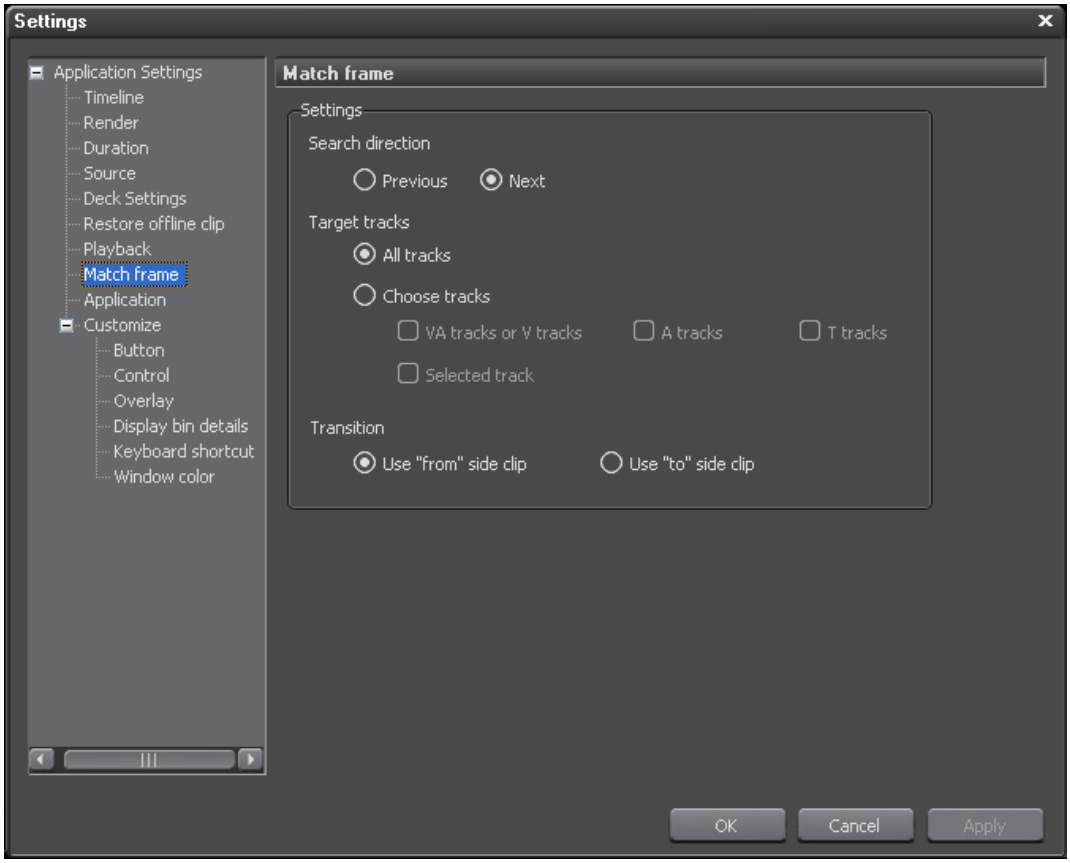
Match Frame Settings

Match Frame settings determine search order and targets.

The Match Frame settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Match Frame from the Application Settings tree in the Settings dialog. See Figure 131.

Note After making changes to any of the items in the Match Frame Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 131. Match Frame Settings



Search Direction

Select the desired search direction; Previous or Next (default). Previous searches from right to left across the Timeline. Next searches from left to right across the Timeline.

Target Tracks

The target tracks selection determines which tracks are searched. All tracks is the default. If you want to limit the tracks that are searches, select Choose Tracks and then check the tracks to be included in searches. Choices are:

- VA tracks or V tracks (Video/Audio or Video only)
- A tracks (Audio)
- T tracks (Title)
- Selected track (track currently selected in the Timeline window)

Transition

When searching for transitions, this setting determines if the search should find the frame before the transition (“from” side clip) or the frame after the transition (“to” side clip). Default = “from” side clip.

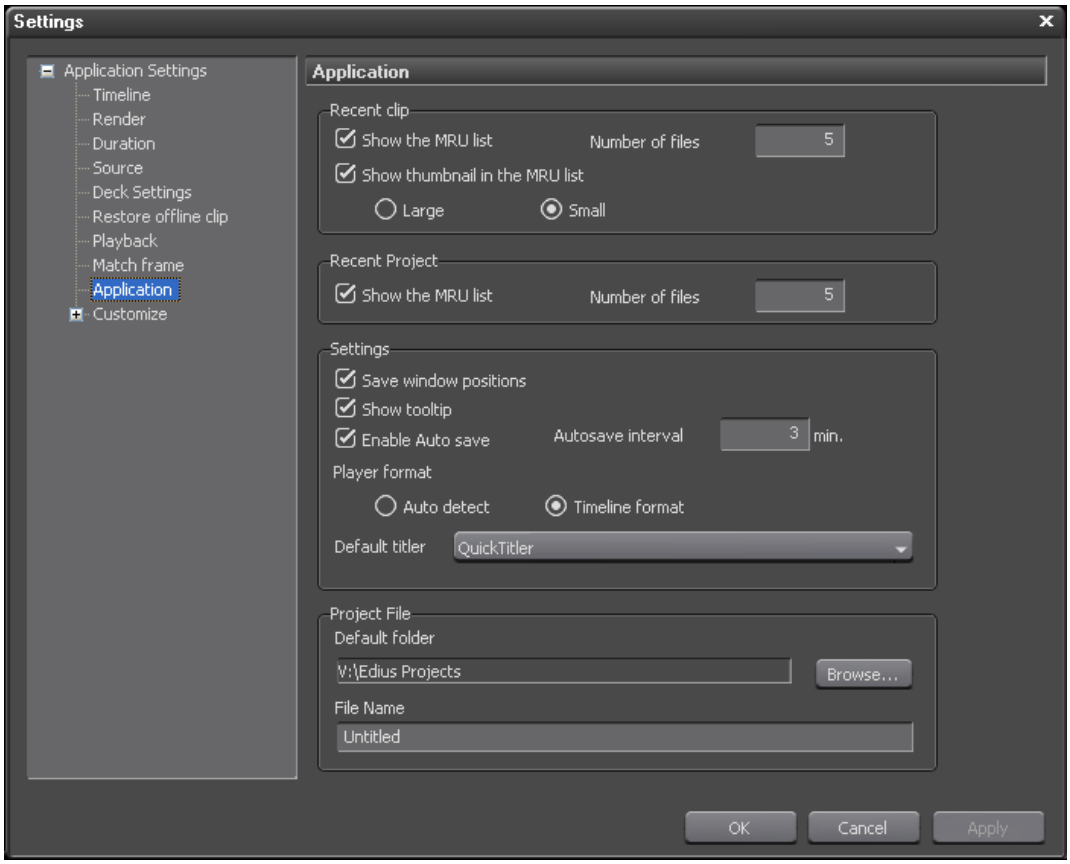
Application Settings

Application settings determine how EDIUS saves files, records window positions, creates titles and other application-specific operations.

The Application settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Application from the Application Settings tree in the Settings dialog. See Figure 132.

Note After making changes to any of the items in the Application Settings dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

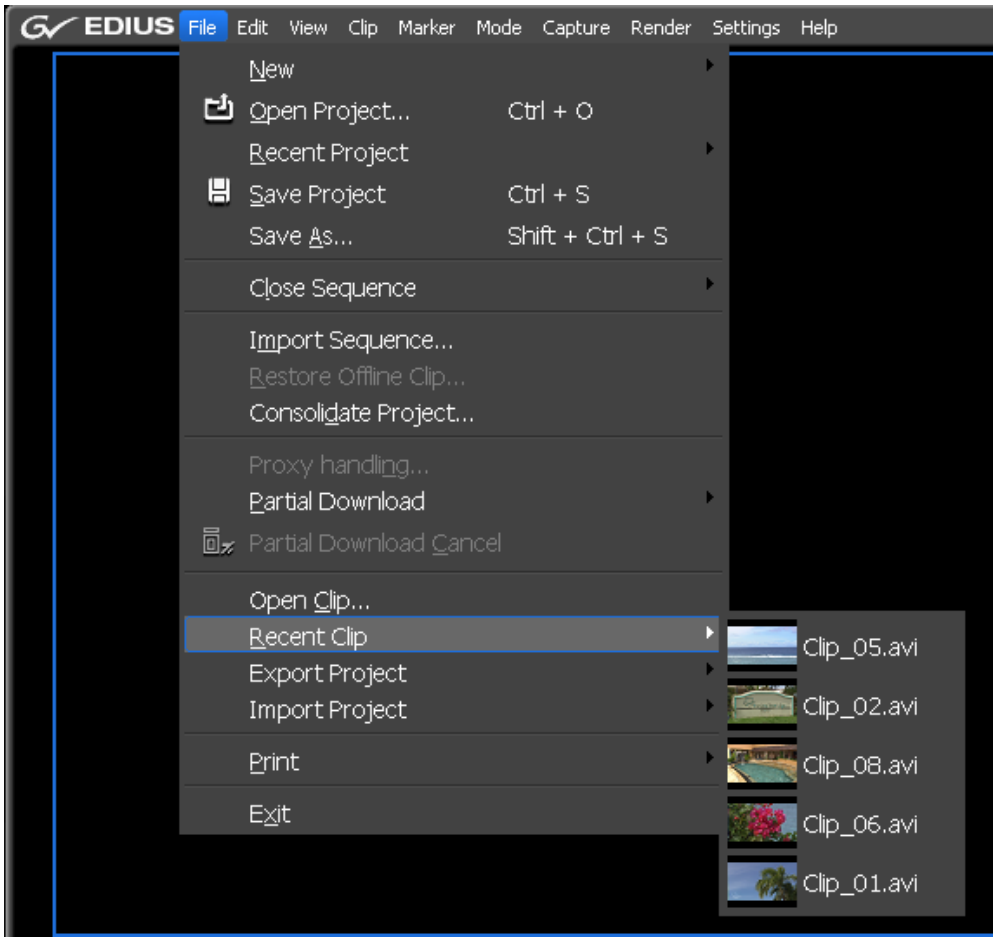
Figure 132. Application Settings



Recent Clip - Show the MRU List

If this option is selected, the names of recently used clips will appear in the Recent Clip list which is accessed by selecting File>Recent Clip from the preview window menu bar. See Figure 133 for an example.

Figure 133. Recent Clip Menu



Recent Clip - Number of Files

The number entered in this field designates how many recently used clips will be displayed in the Recent Clip list. Default = 5.

Recent Clip - Show Thumbnail in the MRU List

If selected, this setting displays clip thumbnails in the Recent Clip list. Large or Small (default) clip thumbnails may be selected. The Recent Clip list is accessed by selecting File>Recent Clip from the Preview window.

Recent Project - Show the MRU List

If this option is selected, a list of recently opened projects appears in the Recent Project area of the EDIUS start up screen.

Recent Project - Number of Files

The number entered in this field designates how many recently opened projects will be displayed in the recent Project window. Default = 5.

Save Window Positions

If this setting is checked, window and palette positions at the time EDIUS is closed are saved and used the next time EDIUS is started.

Show Tooltip

If this option is enabled, tooltips are displayed when the mouse cursor is positioned on effect names. Default = Checked.

Enable Auto Save/Auto Save Interval

If this setting is checked, open project files are automatically saved at the interval specified in Auto save interval. The Auto save interval is specified in minutes. Default = Checked with a 3-minute auto save interval.

Player Format

Select the desired player format for file playback; Auto detect or Timeline format (default).

Default Titler

Select the default application to be used for creating titles. QuickTitler is the default application included with EDIUS. If other EDIUS-compatible titling applications (such as TitleMotion Pro) have been installed, they will be available in the selection list.

Project File - Default Folder

A default project folder may created when EDIUS is first started. The default location for all projects may be changed here. Regardless of the default project folder location setting, a different location may be specified for each project, if desired, as it is created or saved.

Project File - File Name

Enter the default filename when a new project is created. The default name can be changed when a new project is created or saved.

Customize Settings

Many aspects of the EDIUS interface may be customized including buttons, keyboard shortcuts, window colors and more.

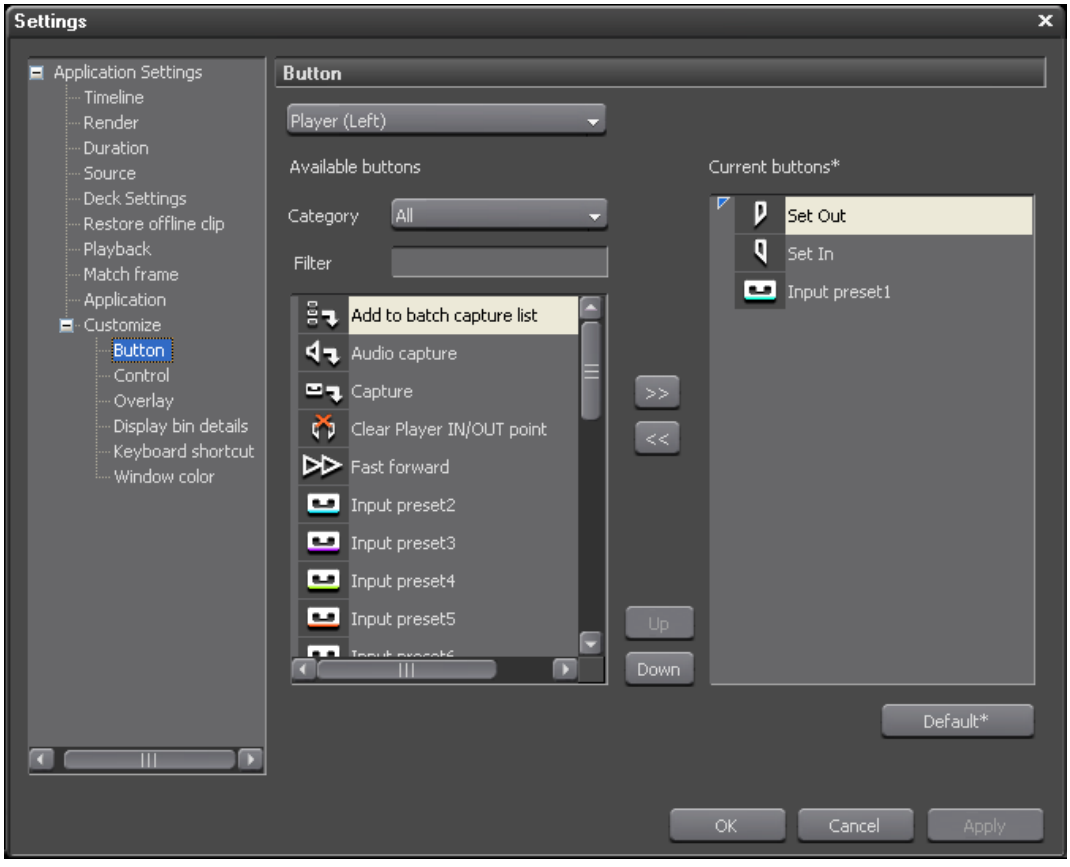
Button Settings

The Button settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Button from the Customize tree in the Settings dialog. See Figure 134.

If the Customize tree is collapsed, click the "+" to expand the tree.

Note After making changes to any of the items in the Button dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 134. Button Settings



Buttons for the Player, Recorder, Asset Bin, Timeline and Effects windows may be customized according to needs and usage patterns. The Player and

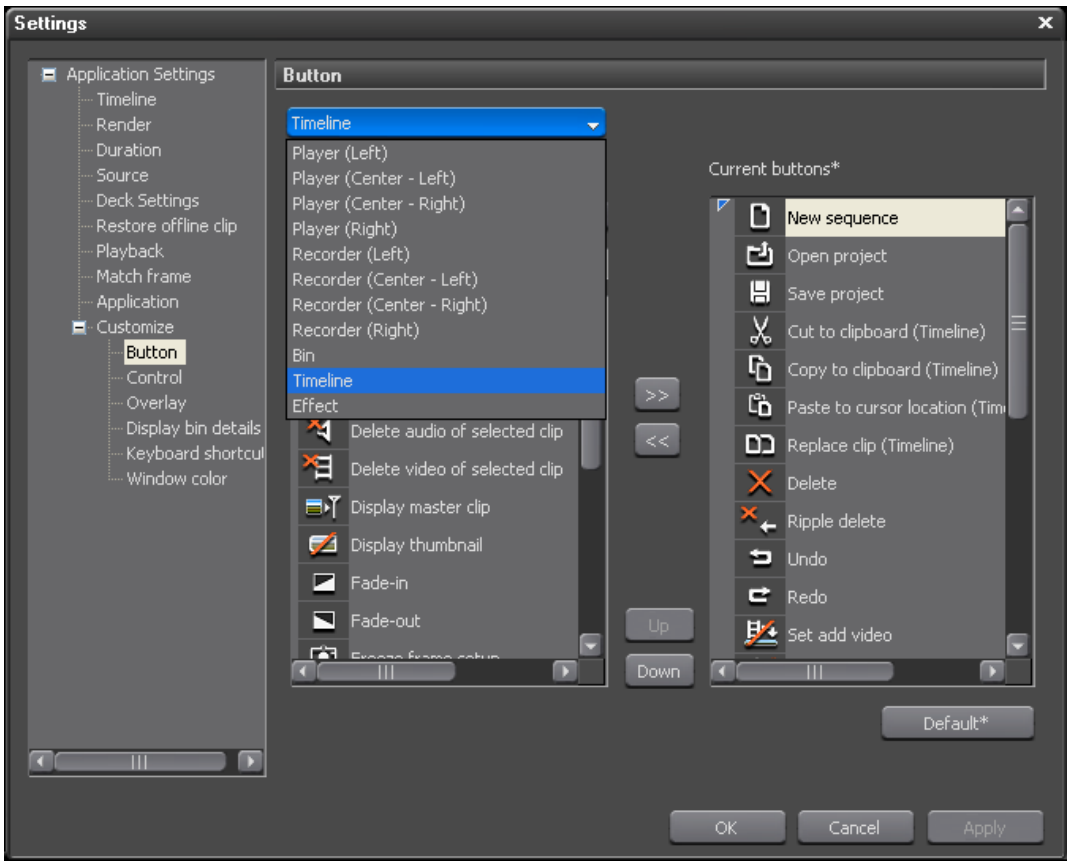
Recorder buttons are divided into the following button groups (see Figure 135):

- Left
- Center - Left
- Center - Right
- Right

Figure 135. Player Operation Button Groups

The drop-down list at the top of the Button dialog (see Figure 136) displays the button groups that may be customized.

Figure 136. Select Button Group

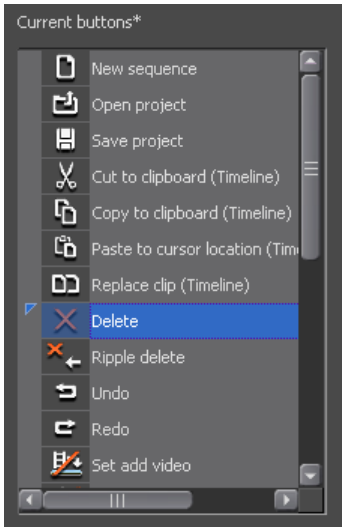


To customize operation buttons, do the following:

1. Select the button group to be customized from the drop-down list box shown in Figure 136.

2. From the Current Buttons list, select the button before which you want the new button placed. The insertion marker marks the position at which the button will be inserted. See Figure 137 for an example.

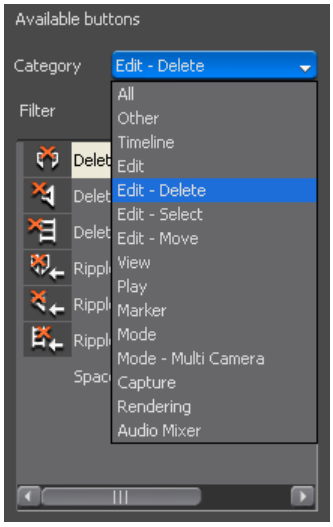
Figure 137. Select New Button Position



3. Select a button to add from the Available Buttons list and click the **Add** button.

Note The Available Buttons list can be filtered to narrow down the possible selections. From the Category drop-down list, a specific button category may be selected (see Figure 138). Alternatively, a key word may be entered in the Filter field to narrow down the list of available buttons.

Figure 138. Button Category Selection



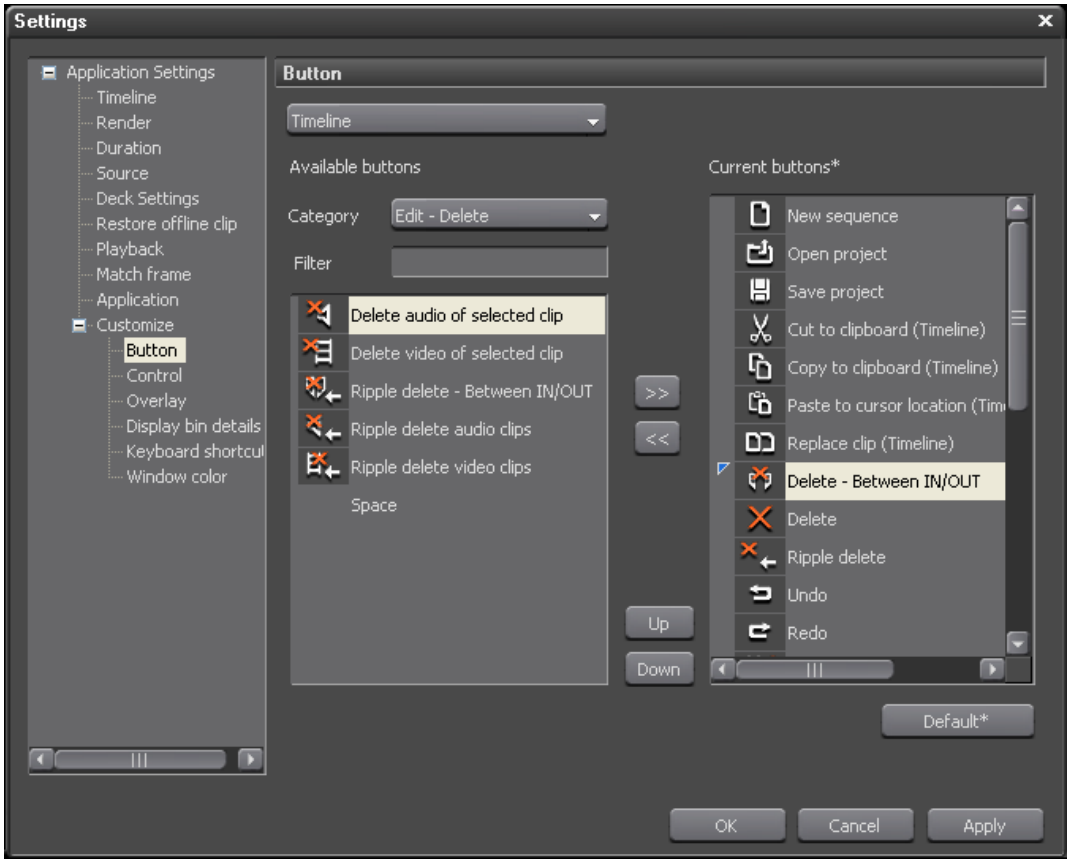
The selected button is added to the Current Button list at the position of the insertion marker. See Figure 139.

4. Add other buttons as needed following the steps above.

Alternative Methods:

- Double-click the button to be added from the Available buttons list. The button is inserted in the Current Buttons list above the insertion point.
- Drag and drop the button from the Available Buttons list to the Current Buttons list. The button may be dropped at any point in the Current Buttons list and the selected insertion point is ignored.

Figure 139. New Button Added to Current Buttons List



5. Make additional changes to button groups as needed (see page 158 for additional button actions).

6. Click the **Apply** button to apply the changes made to button groups and close the Button Settings dialog.

Note If too many buttons are added to the Player (Center - Left), Player (Center - Right), Recorder (Center - Left) or Recorder (Center - Right) button groups, only the buttons that can be displayed within the available area will be shown.

Other button actions may be performed in the Button Setting dialogs as explained below.

Add a Space Between Buttons

"**Space**" is an available button on all available button lists. Add "**Space**" as you would any other button to create a space between buttons.

Delete Buttons

Select a button to delete (including "Space", if appropriate) from the Current Buttons list and click the **Remove** button

.

Alternative Methods:

- Double-click the button to be deleted in the Current Buttons list.
- Drag and drop the button to be deleted from the Current Buttons list to the Available Buttons list.

Change Button Position

Select the button to be moved in the Current Buttons list and click the **[Up]** or **[Down]** buttons to move the button in the desired direction. Each click moves the selected button up or down one position.

Alternatively, you may drag and drop buttons in the Current Buttons list to new positions within the list.

Reset Current Button List to Defaults

Click the **Default*** button to reset the button list in the Current Buttons list to the defaults for that list.

Control Settings

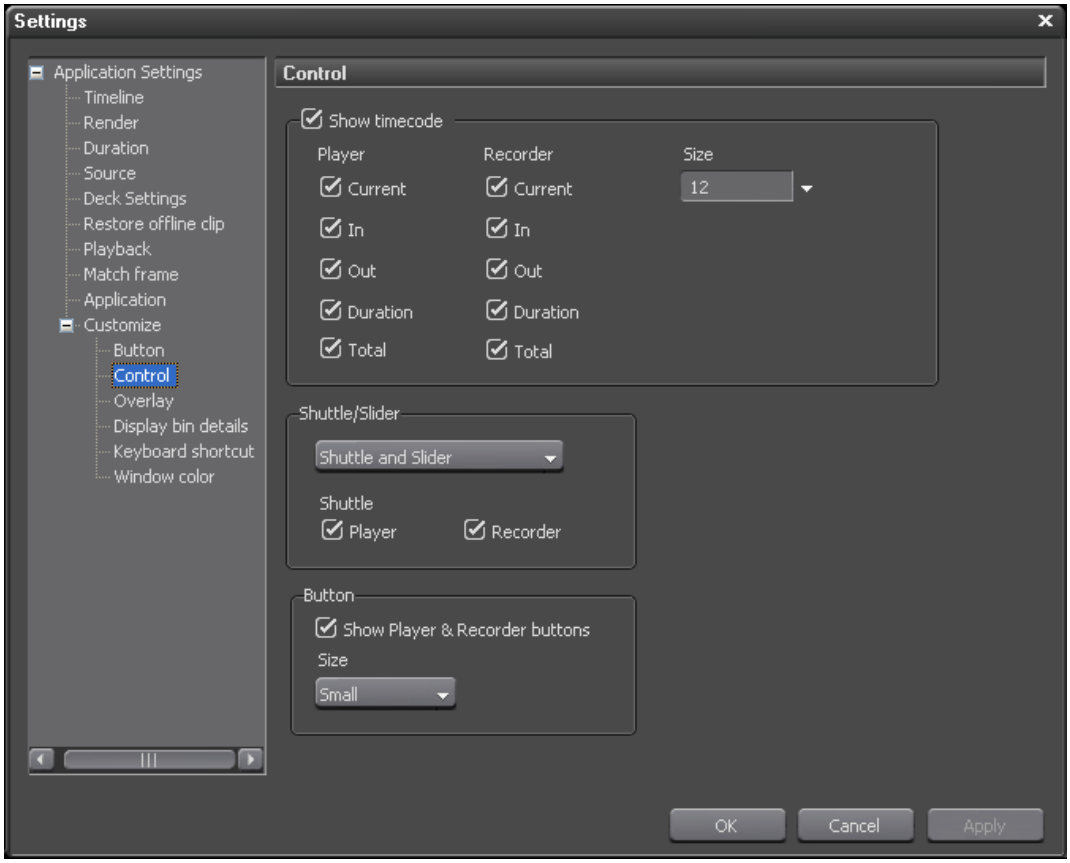
Control settings determine the display properties of timecodes, shuttles and sliders and operation buttons in the Preview window.

The Control settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Control from the Customize tree in the Settings dialog. See Figure 140.

If the Customize tree is collapsed, click the "+" to expand the tree.

Note After making changes to any of the items in the Control dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 140. Control Settings



Show Timecode

The Show Timecode settings determine which timecode displays will be shown in the Player and Recorder windows. For both the Player and Recorder, the following timecodes may be displayed:

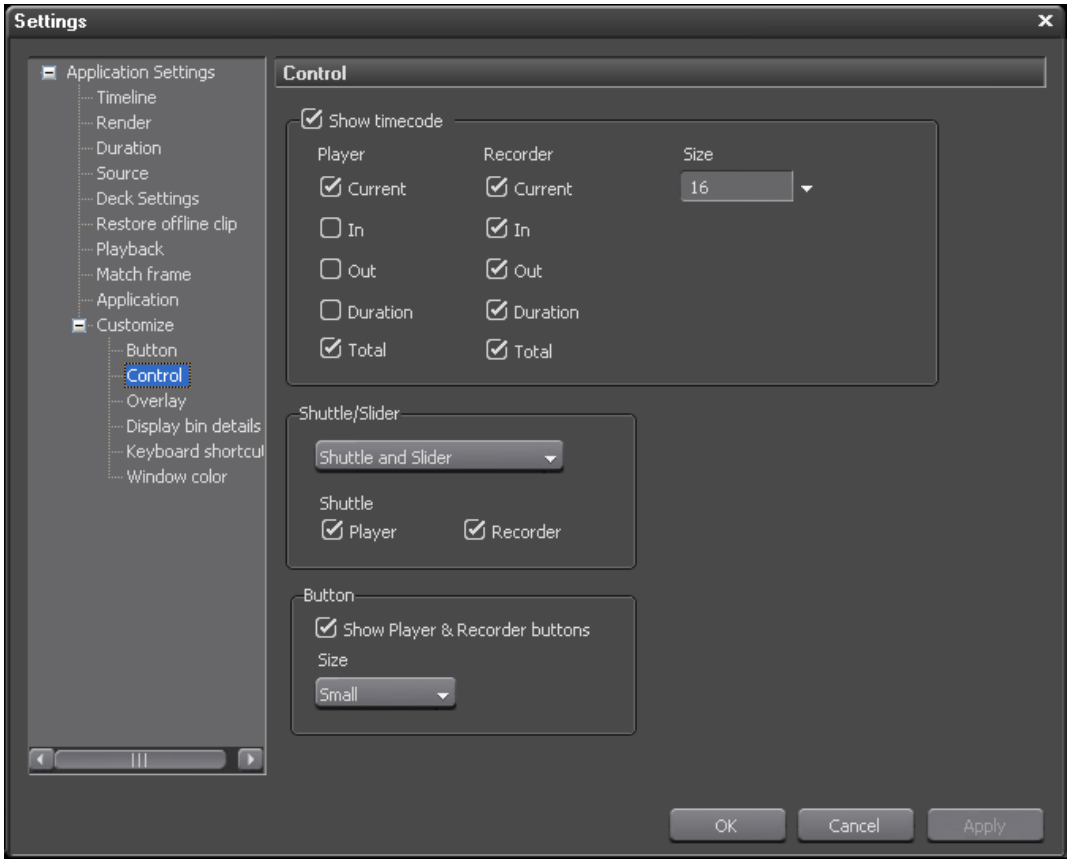
- Current
- In
- Out
- Duration
- Total

The default selections is all timecodes checked for both the Player and Recorder.

The timecode font size may be selected from either the drop-down list or be entering the desired font size in the Size field.

The Show Timecode settings shown in Figure 141 result in the timecode displays for the Player and Recorder shown in Figure 142 and Figure 143 respectively.

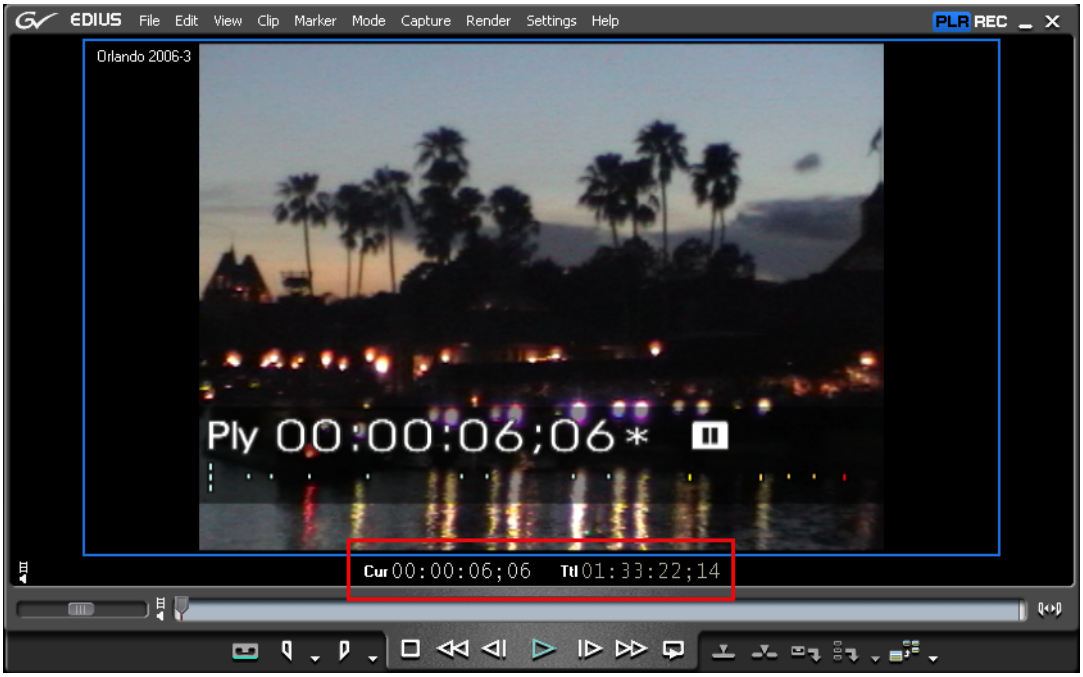
Figure 141. Show Timecode Settings



The In Out and Duration timecodes have been de-selected for the Player. All timecodes are selected for the Recorder. Display font size for timecodes is set at 16 point.

Note If the Show Timecode box is not checked, no timecodes will be displayed in the Player and Recorder windows.

Figure 142. Player Timecodes



Only the Current and Total timecodes are displayed in the Player window.

Figure 143. Recorder Timecodes

All timecodes are displayed in the Recorder Window.

Shuttle/Slider

This setting determines shuttle and slider display attributes for both the Player and Recorder windows. The drop-down list displays the following choices:

- Shuttle and Slider
- Slider Only
- No Display

If Shuttle and Slider is selected, the check boxes for Player and Recorder allow the Shuttle display to be removed from the Player or Recorder windows or both. Default = Shuttle and Slider with Shuttle selected for both Player and Recorder.

Figure 144 shows the Recorder window with both shuttle and slider displayed.

Figure 144. Recorder Shuttle and Slider

Show Player and Recorder Buttons

If selected, the operation buttons are displayed for both the Player and Recorder windows. If button display is enabled, the button size may also be selected. Choices are small, medium and large. Default = Checked with small buttons.

Overlay Settings

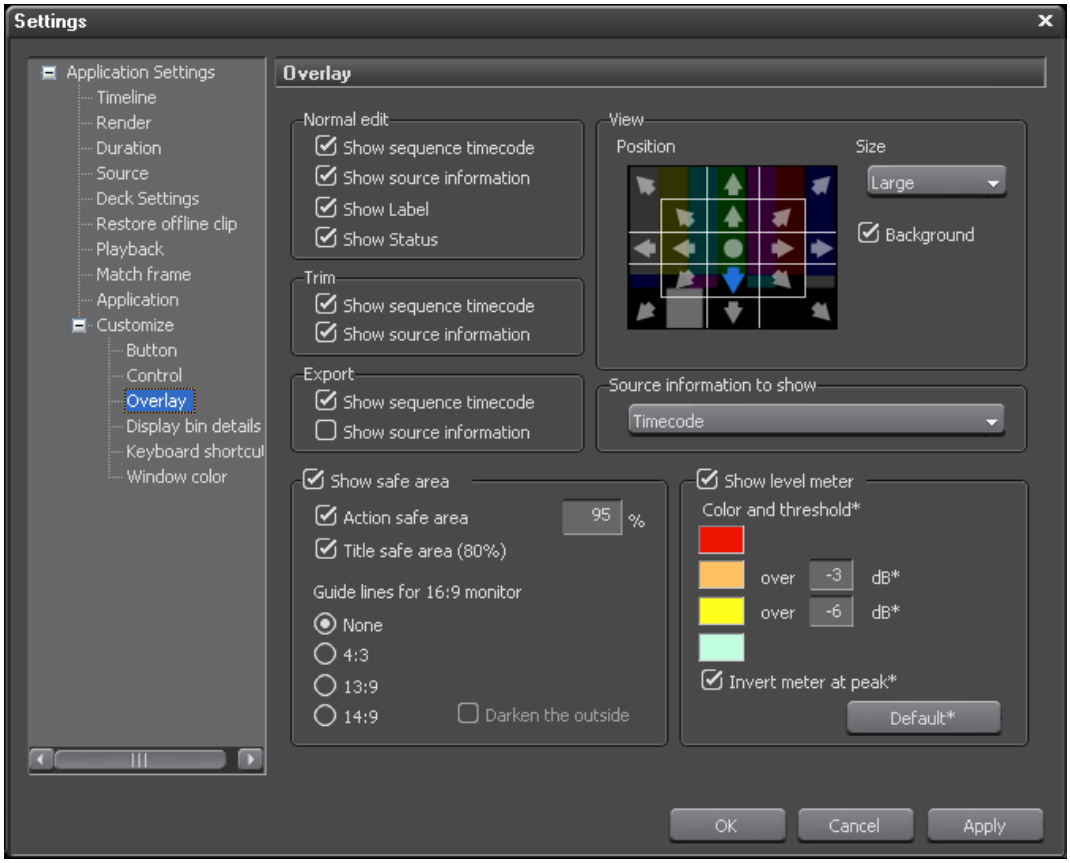
Overlay settings determine the display properties of information overlays on the Preview window such as timecodes, safe area displays and audio meters.

The Overlay settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Overlay from the Customize tree in the Settings dialog. See Figure 145.

If the Customize tree is collapsed, click the "+" to expand the tree.

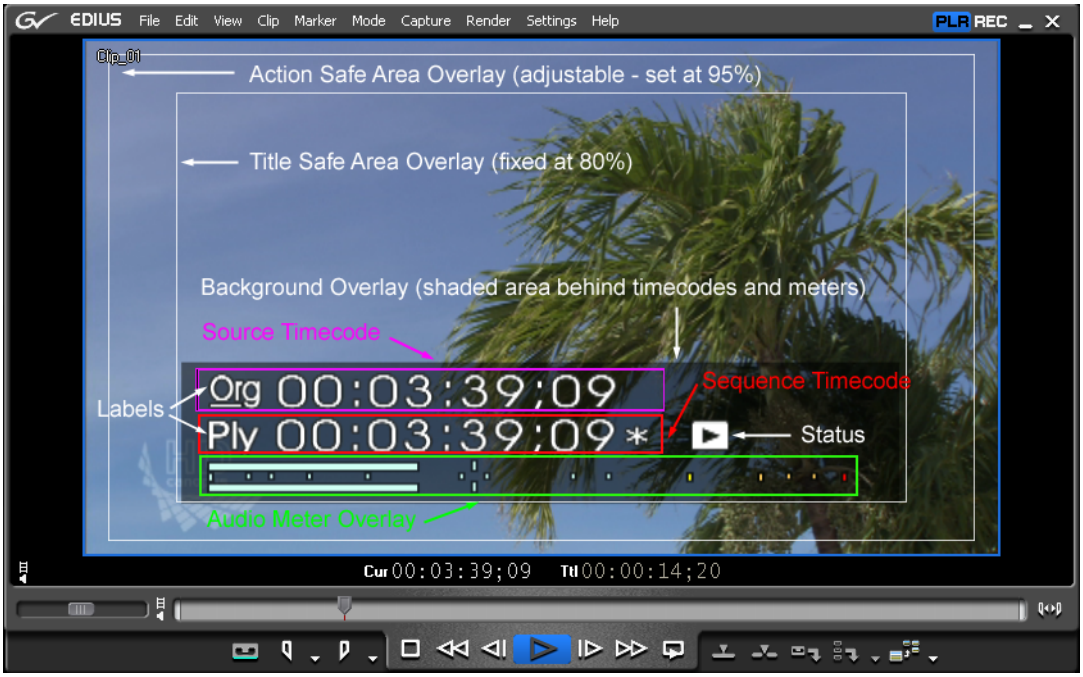
Note After making changes to any of the items in the Overlay dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 145. Overlay Settings



The settings above display the overlays shown in Figure 146.

Figure 146. Player Recorder Window Overlays



Normal Edit Overlays

Activate the overlay elements to be displayed during normal edit operations by checking the items to be displayed. The choices are:

- Sequence Timecode
- Source Information (information shown is determined by the “Source information to show” setting).
- Label
- Status

Default = All Checked

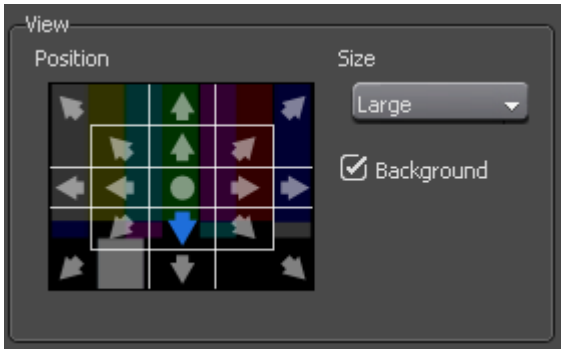
Trim Edit Overlays

Select the overlay elements to be displayed during trim edit operations. By default, Sequence timecode is selected; Source information is not selected.

Overlay View Attributes

The View settings determine the position of the overlay elements that are visible in the Preview window. The default position is just below center vertically and centered horizontally. Figure 147 shows the Overlay View controls.

Figure 147. Overlay View Controls



Position

The blue arrow indicates the current position of the overlays. To change the display position, click on the arrow which represents the desired position. The circle in the center can be clicked to center the overlays vertically and horizontally.

Size

From the size drop-down list the overlay size can be set to small, medium or large. Default = Large.

Background

With Background checked, the shaded background area is displayed behind the overlays. If the shaded background is not desired, de-select the background. Default = Checked.

Export Overlays

Select which overlay information to include in Export displays. By default, Sequence timecode is selected; Source information is not selected.

Source Information to Show

If Source Information is a selected overlay for Normal Edit, Trim or Export operations, this setting determines what source information is displayed. Choices are as follows:

- Timecode (default)
- Recording day
- Recording time
- Recording date
- Recording date (2 lines)

Show Safe Area Overlay Attributes

Safe area overlays show an outline over the video content which indicates the “safe” areas for action and titles. On some screens, the edges of content may be lost due to various degrees of overscanning. To make certain that titles and other important information will always be visible, they should be inside the safe areas.

If “Show Safe Area” is selected, the Action Safe Area may be set as desired (default = 100% of the screen). In Figure 146, the action safe area was set to 95% to better see the overlay.

The title safe area is fixed at 80% of the screen area and cannot be changed. Select “Title safe area (80%)” to display the title safe area overlay.

Guide Lines for 16:9 Monitor

If the project settings and content have a 16:9 aspect ratio, enabling guides for another aspect ratio is helpful in order to see what content may be lost if displayed on a monitor of that aspect ratio.

Selecting “Darken the outside” causes the content outside the guides to be shaded.

Figure 148 shows the 4:3 guidelines and Darken the outside selected. Safe area overlays are disabled for a cleaner view.

Figure 148. 4:3 Guides with Dark Sides

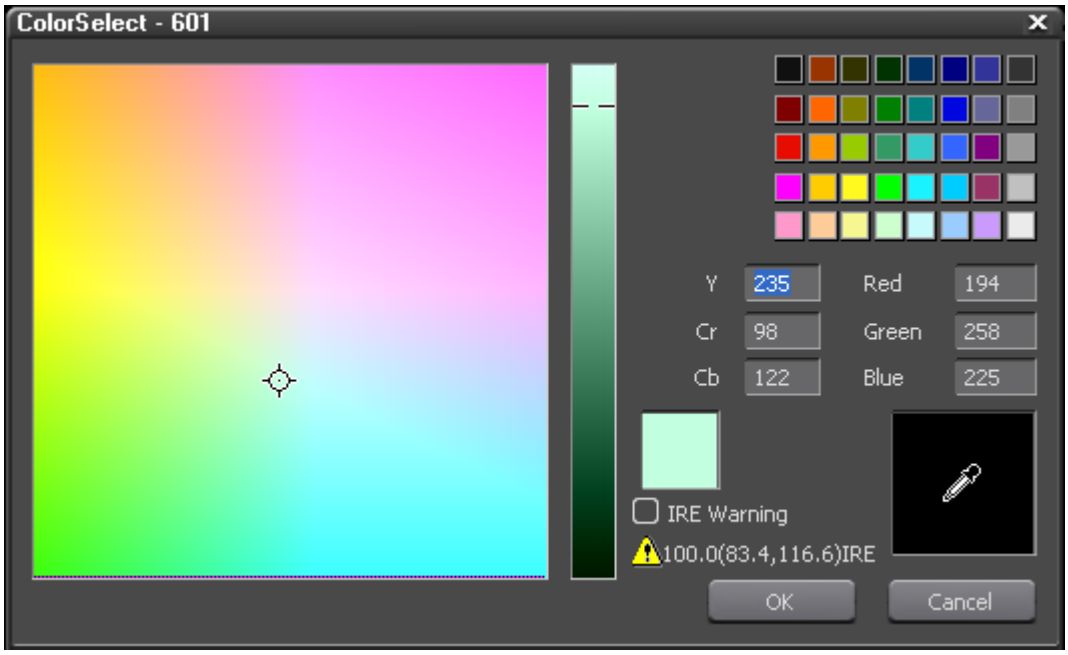
Audio Level Meter Overlays

Selecting “Show Level Meter” will display audio meter level overlays as shown above in Figure 146. Default = Checked.

Color and Threshold

Meter bar colors and thresholds at which colors change may be customized. To change colors, click on the color you wish to change. The color selector shown in Figure 149 appears.

Figure 149. Meter Bar Color Selector



Select the desired color for the meter bar segment.

Note Check the IRE warning box to limit color selection to pre-determined “safe” IRE levels.

To change the thresholds, enter the desired dB level for segments two an three at which meter bar colors will change.

Click the **Default*** button to return meter colors and thresholds to the default settings.

Display Bin Details Settings

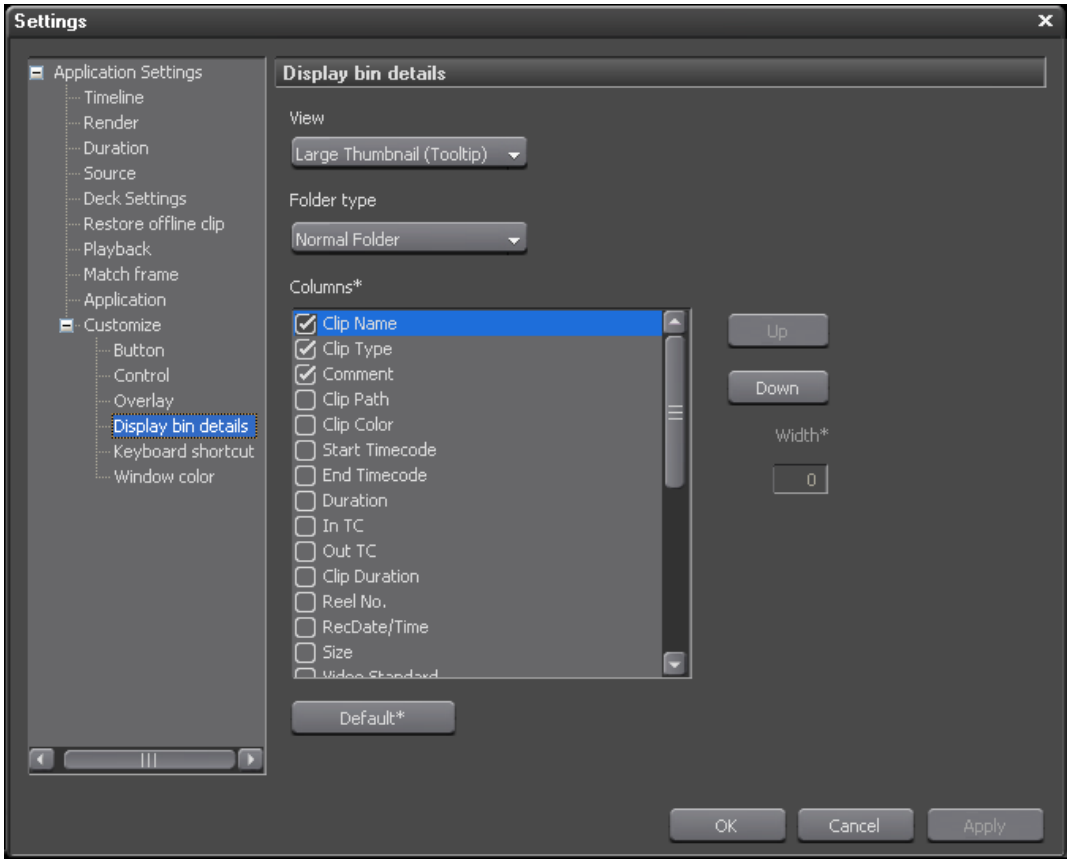
Display bin details determines what information is shown in specific asset bin views and mouse overs.

The Display Bin Details settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Display Bin Details from the Customize tree in the Settings dialog. See Figure 150.

If the Customize tree is collapsed, click the "+" to expand the tree.

Note After making changes to any of the items in the Display Bin Details dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

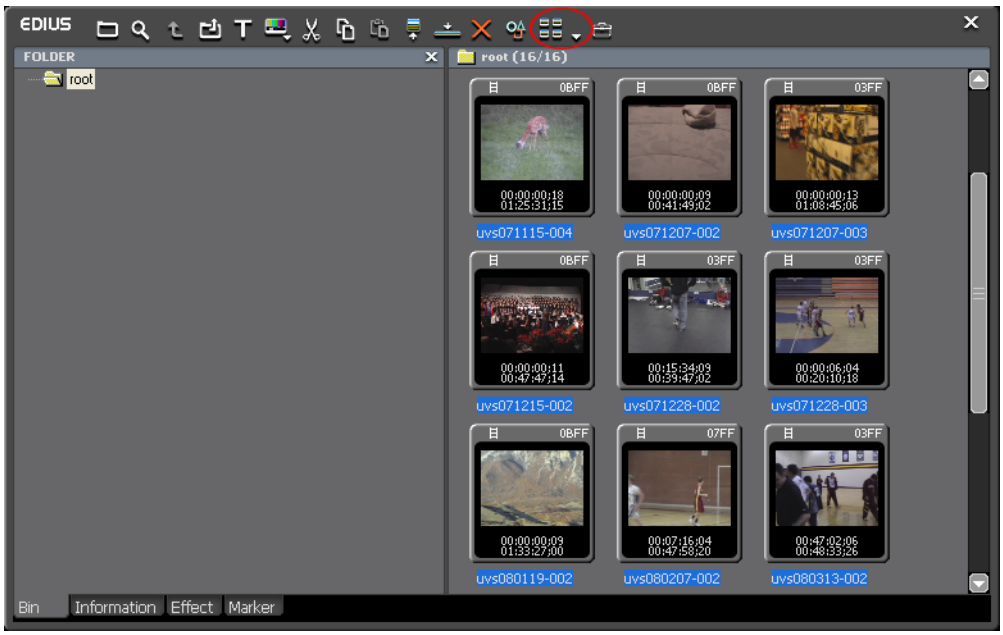
Figure 150. Display Bin Details Settings



View

In the Asset Bin window (contains imported video and audio clips for use in EDIUS projects), different content views may be selected by clicking the **View** button. See Figure 151.

Figure 151. Asset Bin View Button



Different "columns" of information may be selected for display in the following Asset Bin views:

- Large Thumbnail (Tooltip)
- Small Thumbnail (Tooltip)
- Detail

When one of the Thumbnail (Tooltip) views is selected, the selected "column" information designates what will be shown when the mouse cursor is placed over a clip in the bin.

When "Detail" is selected, the selected column information will display in the Asset Bin when the bin view is set to any of the following:

- Detail Text (Large)
- Detail Text (Small)
- Detail Icon

Folder Type

Views for two different folder type may be defined. A "Normal Folder" is a view of all the contents of the Asset Bin. A "Find Folder" displays a subset of the Asset Bin contents based on specific search criteria.

Columns

The Columns section displays the various pieces of clip-related information that may be selected for display in a mouse over or detail view of the Asset Bin contents.

Column Width

Set the width in ??? for the selected column. A width of 0 (default) causes EDIUS to automatically adjust column width based on the information that needs to be displayed.

Column Operations

The order of columns in the view may be changed by selecting a column and clicking the **[Up]** or **[Down]** buttons to change its position in the column list.

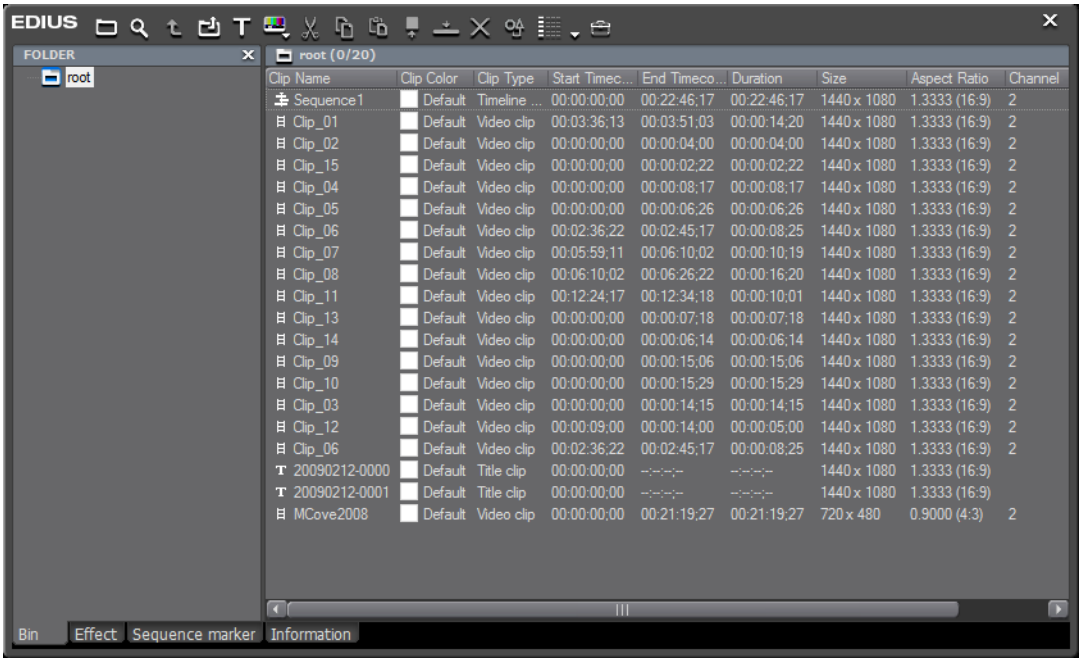
Clicking the **Default*** button sets all columns back to the defaults for the selected view and folder type.

To set the display information for Asset Bin views do the following:

1. Select the view from the View drop-down list for which you wish to define the display details.
2. Designate if the column selections will apply to a Normal Folder or a Find Folder by making the appropriate selection from the Folder Type drop-down list
3. Place a check mark next to the columns of information you wish to include in the view.
4. Set the desired column width and order.
5. Click **Apply** button to apply the changes. Or click the **OK** button the apply changes and close the Display Bin Details dialog.

Figure 152 shows the "Detail Text (Small)" Asset Bin view with default column and width settings.

Figure 152. Detail Bin View With Default Settings



Keyboard Shortcut Settings

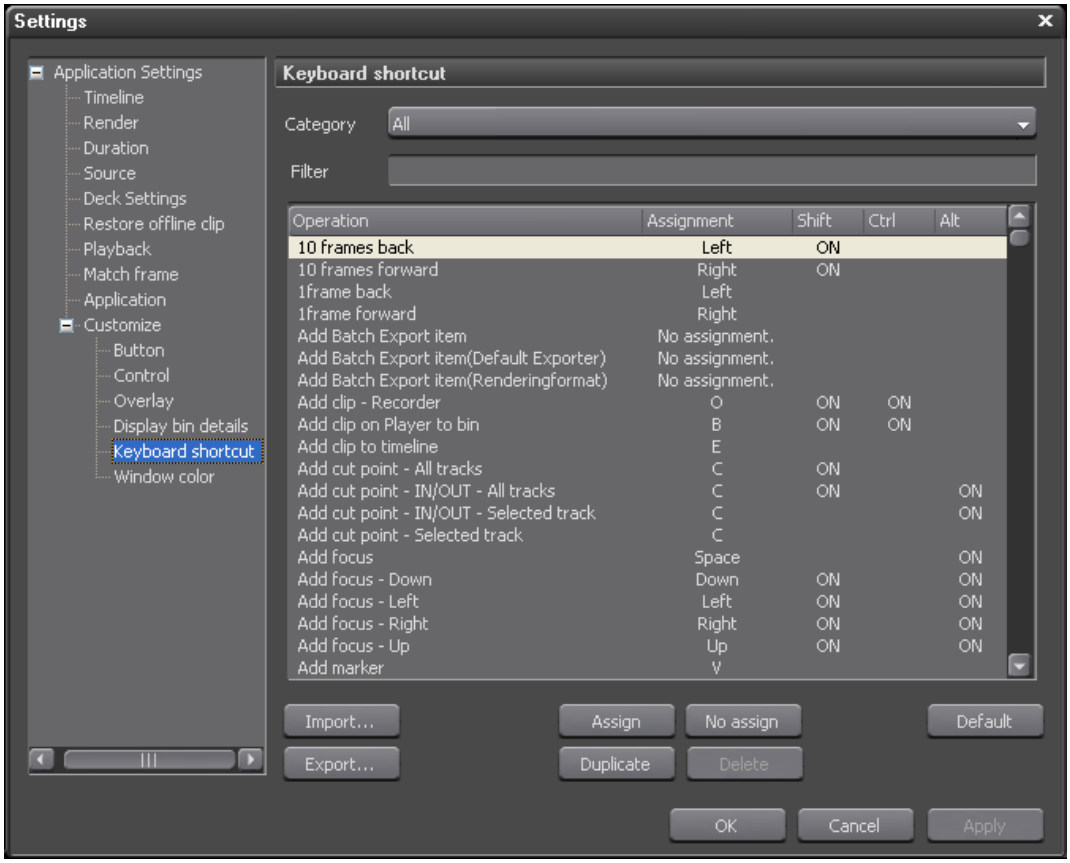
Keyboard shortcuts, in conjunction with the mouse, often provide a faster and more efficient way of using EDIUS for many users. Keyboard Shortcut settings allow custom keyboard shortcuts to be assigned to many EDIUS functions. Many default keyboard shortcuts are provided; however they may be customized to meet user needs and usage patterns.

The Keyboard Shortcut settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Keyboard Shortcut from the Customize tree in the Settings dialog. See Figure 153.

If the Customize tree is collapsed, click the "+" to expand the tree.

Note After making changes to any of the items in the Keyboard Shortcuts dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 153. Keyboard Shortcut Settings



Category

Keyboard shortcut categories may be selected in order to narrow the shortcut list down to just those that pertain to the selected category. Shortcut categories are:

- All
- Other
- Timeline
- Edit
- Edit - Delete
- Edit - Select
- Edit - Move
- View
- Play
- Marker
- Mode
- Mode - Multicam
- Capture
- Rendering
- Audio Mixer

Filter

A filter keyword (e.g. “Delete”) may also be entered to narrow down the shortcut list to only those shortcuts that fit the keyword.

Shortcut Assignment Buttons

The buttons explained in this section are used in making keyboard shortcut assignments.

Assign

When the **Assign** button is clicked, the keyboard map shown in Figure 154 appears.

Figure 154. Keyboard Shortcut Key Assign

Light grey keys (**[SHIFT]**, **[CTRL]** and **[ALT]** are "special keys" frequently used in combination with other keys in keyboard shortcuts. If one or more of these keys is used in the selected keyboard shortcut, it will be black.

A yellow-colored key indicates that key is currently used in one or more keyboard shortcut assignments, in conjunction with any black special key(s). Placing the mouse cursor over a yellow key shows hover text containing the current assignment(s) for that key.

A white-colored key, is a key for which no keyboard shortcut assignments currently exist in combination with the black-colored "special key(s)." These keys may be used in shortcut assignments.

Dark grey keys (e.g. numbers keys on numeric keypad) are keys which cannot be used in keyboard shortcuts.

Blue key(s) are keys currently used in the selected assignment - alone or in conjunction with any black special keys.

In the example in Figure 154, the black special key (**[Shift]**) is currently assigned with the blue (←) key as the keyboard shortcut for the selected operation - 10 frames back.

No Assign

Clicking the **No assign** button changes the assignment for the selected operation to "No assignment" which indicates that no keyboard shortcut currently exists for that operation.

Duplicate

Clicking the **Duplicate** button, creates a duplicate of the selected keyboard operation name and keyboard assignment. The original operation is set to "No assignment."

Delete

When a shortcut is duplicated with the **Duplicate** button, the **Delete** button can be used to delete one of the duplicates. The **Delete** button is greyed out (inactive) unless the selected operation is a duplicate.

Default

Clicking the **Default** button resets the keyboard shortcut to the default for the selected operation.

Import

The **Import** button is used to import a keyboard shortcut file (.eap extension) into EDIUS. Keyboards shortcut files with .dat extensions - from older versions of EDIUS - may also be imported.

Export

The **Export** button is used to export the current keyboard shortcut assignments to a file which can then be imported into another EDIUS system.

Export is also useful when upgrading from one version of EDIUS to another. Custom keyboard shortcuts are not always retained during an upgrade. The existing keyboard shortcuts should be exported before the upgrade and then imported after the upgrade to the new version.

Exported shortcuts are saved in a file with an .eap extension.

Making a Keyboard Shortcut Assignment

To make new keyboard shortcut assignment or modify existing assignments, perform the following actions:

1. Use the Category drop-down list or filter to narrow down the keyboard shortcut operations.
2. Select from the operation list, the EDIUS operation for which you want to create a new assignment.
3. Click the **Assign** button and select the keys which you want to assign the the selected operation.

Note If you select shortcut keys used in another operation, a confirmation dialog will appear asking for confirmation to remove the shortcut assignment from the current operation and assign it to the selected operation. See Figure 155.

Figure 155. Shortcut Reassignment Confirmation

4. Click the **Apply** button to save the shortcut assignment.
5. Make any additional desired assignments following the steps above.
6. Click the **OK** button to save any un-applied assignments and close the Keyboard Shortcut dialog.

Window Color Settings

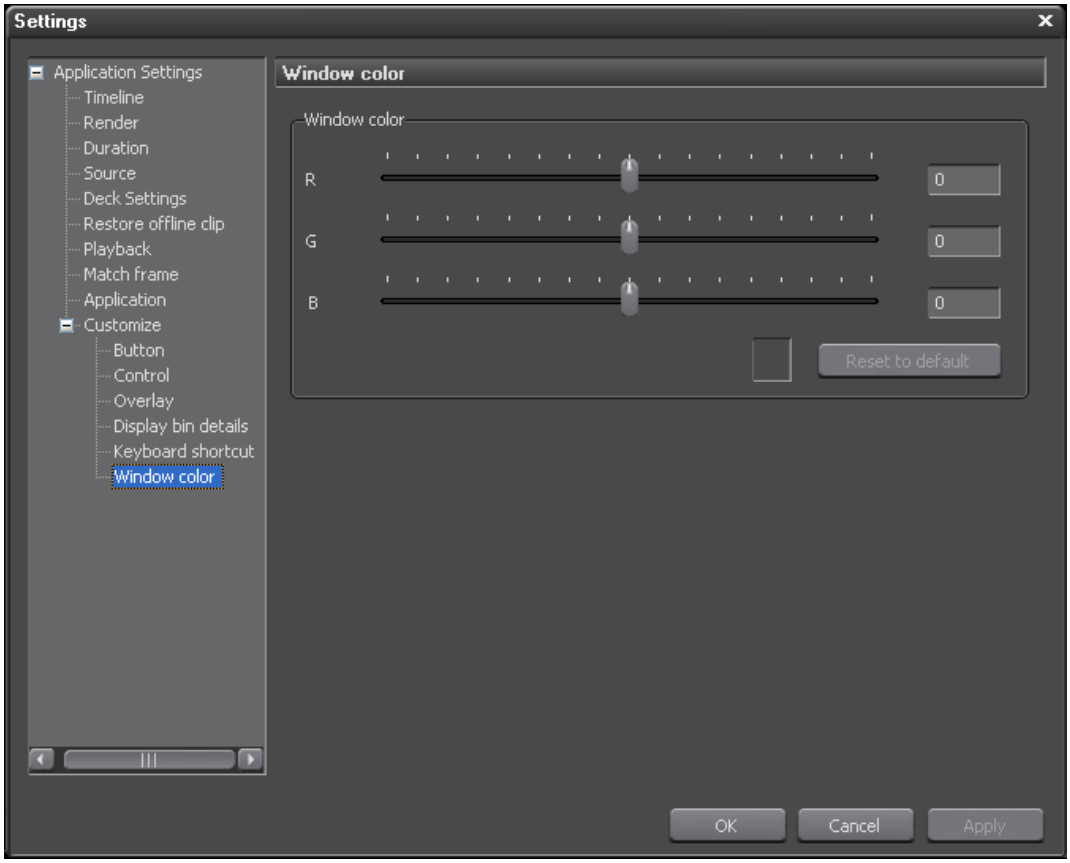
Window Color settings allow you to change the primary interface color according to preference.

The Window Color settings are accessed by selecting Settings>Application Settings from the Preview window and then selecting Window Color from the Customize tree in the Settings dialog. See Figure 156.

If the Customize tree is collapsed, click the "+" to expand the tree.

Note After making changes to any of the items in the Window Color dialog, click the **Apply** button to apply the changes and make them active. Several changes may be made before clicking the **Apply** button.

Figure 156. Window Color Settings



To change the screen color,

1. Move the R, G and B sliders to select the desired color.

As the sliders are moved, the current color selection appears in the small sample box next to the **Reset to Default** button.

2. Click the **Apply** button to apply selected color and leave the Window Color dialog open or, click the **OK** button to apply the color setting and close the Window Color dialog.

The settings shown in Figure 157 change the interface color as illustrated in Figure 158.

Figure 157. Window Color Slider Operation

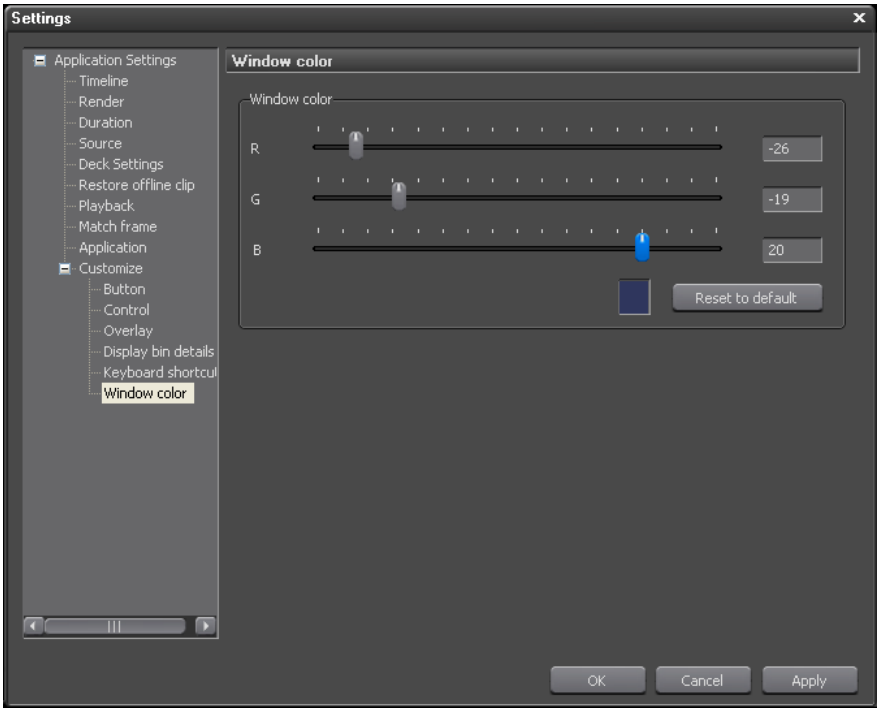
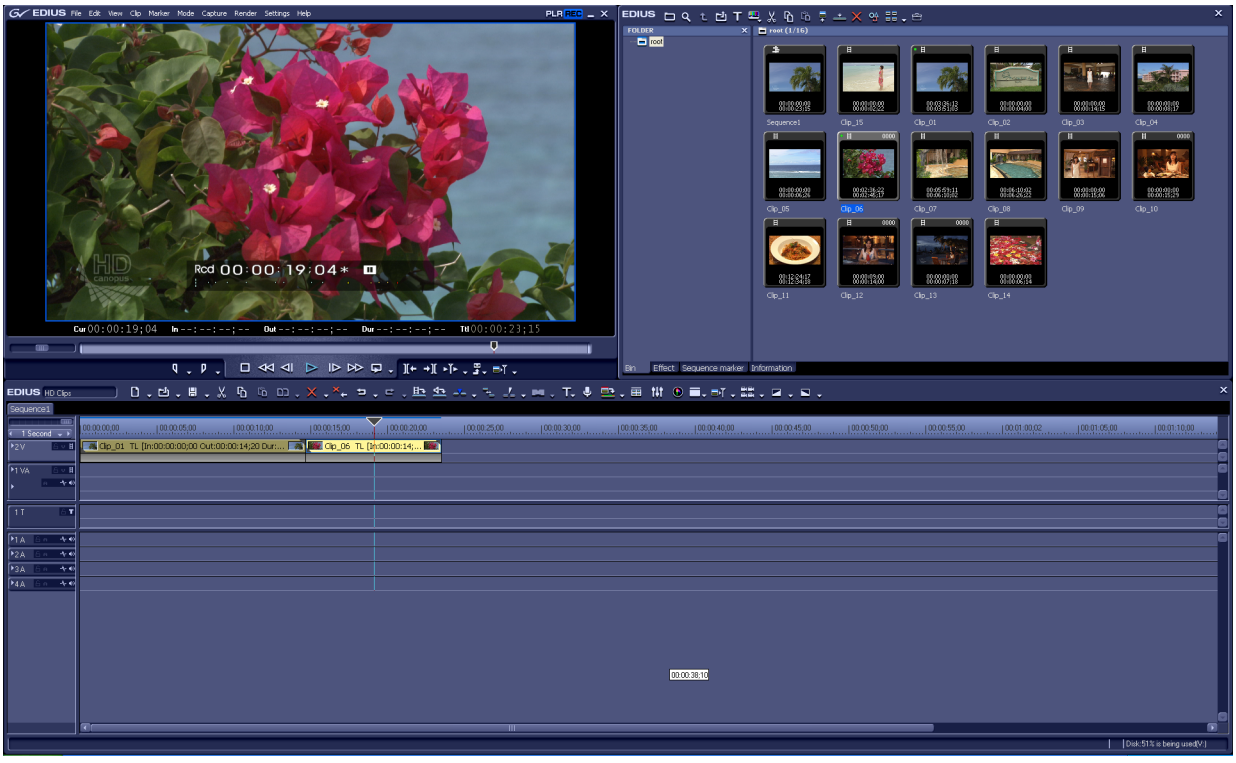


Figure 158. New Window Color Applied



To return to the default window color, open the Window Color dialog and click the **Reset to Default** button, then click the **OK** button.

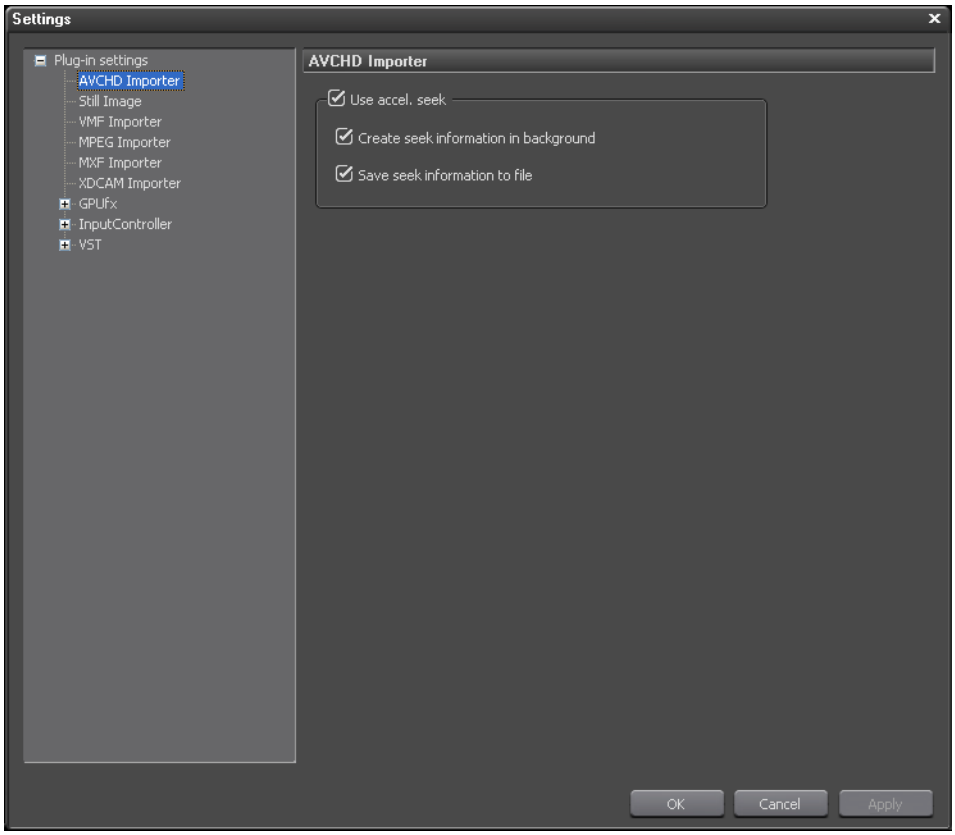
Plug-In Settings

AVCHD Importer

AVCHD Importer settings determine the accel and seek parameters for AVCHD file importing.

The AVCHD Importer settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting AVCHD Importer from the Plug-In Settings tree in the Settings dialog. See Figure 159.

Figure 159. AVCHD Importer Settings



Select the settings to be used when importing Advanced Video Codec High Definition (AVCHD) content for use in EDIUS. Default = All Checked.

Use Accel.Seek

Selecting this option speeds up the seek times on AVCHD files. If this item is selected, the “create seek” and “save seek” parameters may also be selected. Default = Checked

Note Many AVCHD files include seek information in a Clip Information File (.cpi) which is saved in a CLIPINF folder. EDIUS can use this file and perform seek operations faster than with the seek files generated by EDIUS. If a .cpi file is found, EDIUS will use this seek file. If it is not found, EDIUS will create a seek file in the .ese format and use this seek file. The ability to copy and use a .cpi file is dependent upon the folder structure and camera manufacturer that produces the AVCHD (.mts) files.

Create Seek Information in Background

Selecting this option causes the time stamp information of AVCHD files to be collected in the background (during CPU idle times). The collected seek information speeds up AVCHD seek times. Default = Checked

Save Seek Information to File

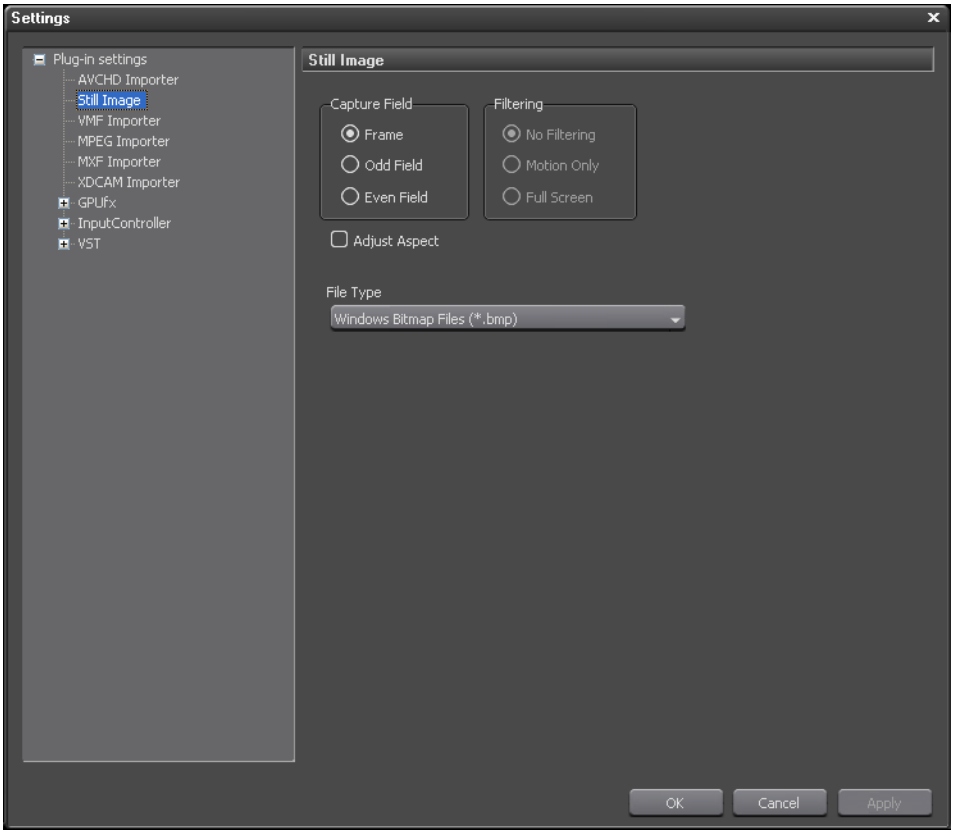
Selecting this option, causes the collected seek information to be saved in a reusable file (.ese extension). Default = Checked.

Still Image

Still image settings determine how EDIUS captures still images from video clips.

The Still Image settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting Still Image from the Plug-In Settings tree in the Settings dialog. See Figure 160.

Figure 160. Still Image Settings



Capture Field

Select the desired still image capture field. “Frame” usually provides the highest quality; however, frame captures from large files or motion shots may be blurred. If “Frame” does not provide good still captures, try the “Odd Field’ or Even Field” selections. Default = Frame

Filtering

Select the desired image filtering setting. “No Filtering” may result in lower image quality if “Odd Field” or “Even “Field” is the selected capture field. Set filtering to “Motion Only” if blurring occurs only in motion scenes. Set filtering to “Full Screen” if blurring appears in all parts of the image capture. Default = No Filtering.

Adjust Aspect

Aspect ratios differ in video and still images for the PC. Select “Aspect Adjust” to adjust captured images to the proper aspect ratio for viewing on the PC monitor. Default = Not Checked.

File Type

From the File Type drop-down list box, select the preferred file type for captured still images. Choices are:

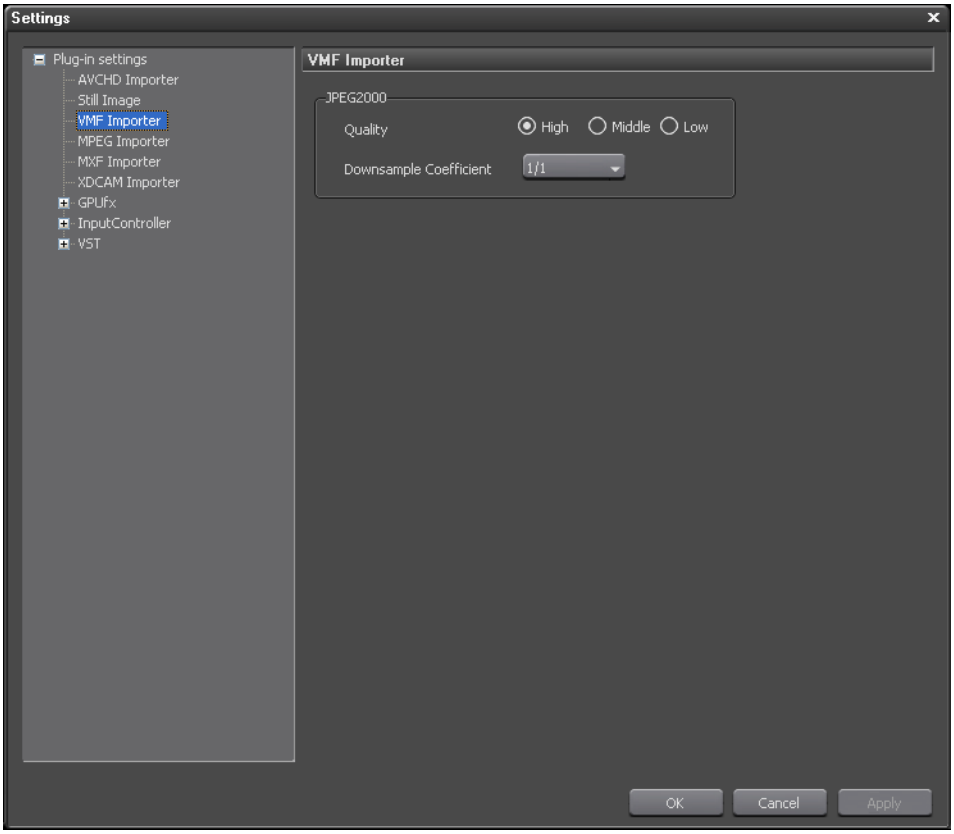
- Targa Files (.tga)
- Windows Bitmap Files (.bmp) - default
- JPEG Files (.jpg)
- TIFF Files (.tif)
- Photoshop Files (.psd)
- JPEF File Interchange Format Files (.jfif)
- Portable Network Graphic Files (.png)
- Mac Pict Files (.pic)
- QuickTime Image Files (.qtif)
- SGI Files (.sgi)

VMF Importer

These setting determine how Grass Valley Aurora Edit VMF files are imported.

VMF files are imported as JPEG2000 files. Set the desired quality and the downsampling coefficient (compression ratio) from the drop-down list.

Figure 161. VMF Importer Settings

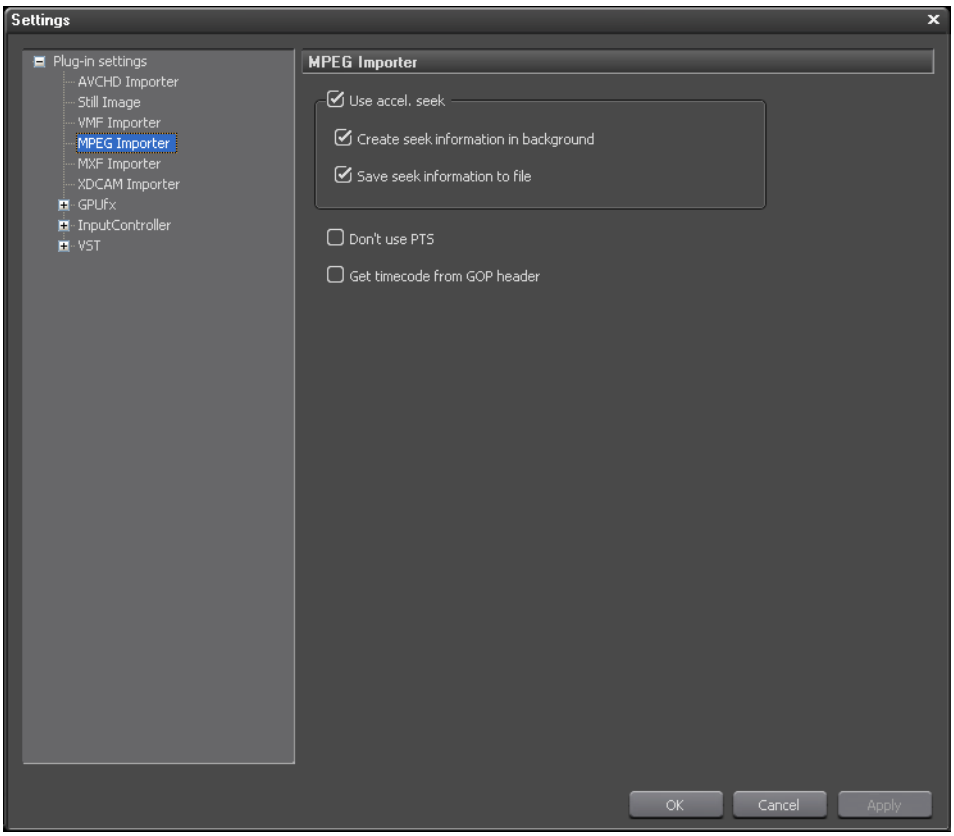


MPEG Importer

MPEG Importer settings determine the parameters for importing MPEG files for use in EDIUS.

The MPEG Importer settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting MPEG Importer from the Plug-In Settings tree in the Settings dialog. See Figure 162.

Figure 162. MPEG Importer Settings



Use Accel.Seek

Selecting this option speeds up the seek times on MPEG files. If this item is selected, the "create seek" and "save seek" parameters may also be selected. Default = Checked

Create Seek Information in Background

Selecting this option causes the time stamp information of MPEG files to be collected in the background (during CPU idle times). The collected seek information speeds up MPEG seek times. Default = Checked

Save Seek Information to File

Selecting this option, causes the collected seek information to be saved in a reusable file. Default = Checked.

Don't Use PTS

Some MPEG files may not have valid time stamp (PTS) information. If this option is selected, PTS information will not be used during MPEG decoding. Default = Not Checked.

Note If you notice flashes of colored frames when playing for scrubbing MPEG clips, try enabling this option as a possible resolution.

Get Timecode from GOP Header

Some MPEG files contain timecode information in the GOP header. Select this option to use GOP header timecode information. Default = Not Checked.

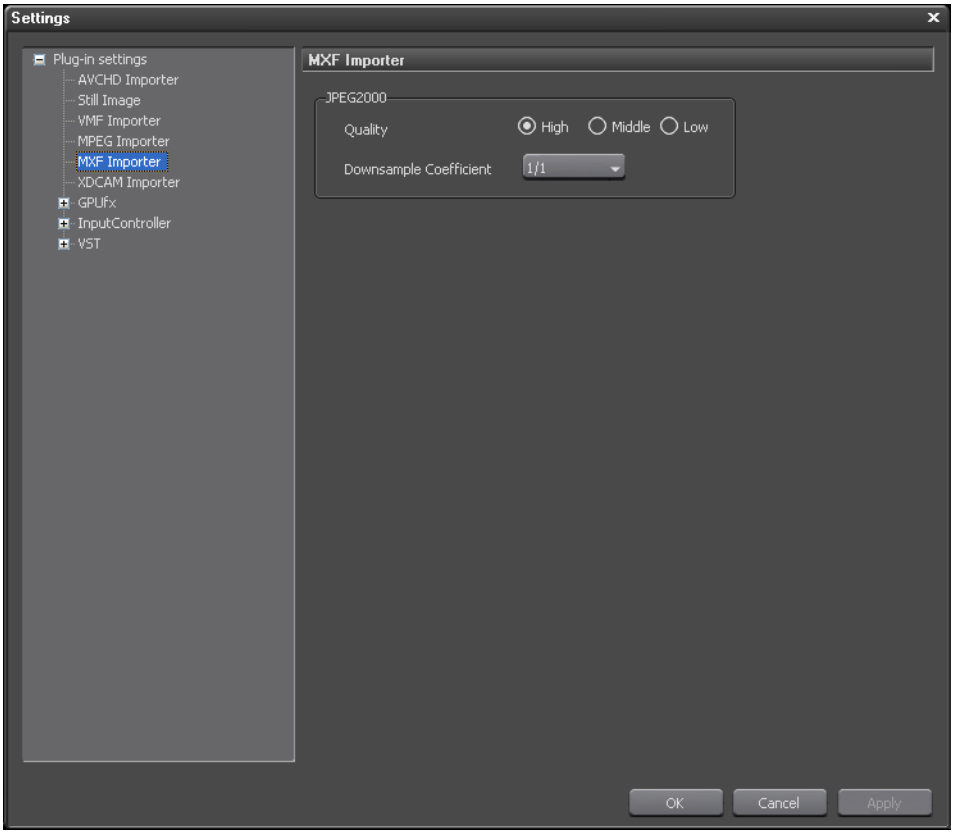
Note If you notice flashes of colored frames when playing for scrubbing MPEG clips, try enabling this option as a possible resolution.

MXF Importer

MXF Importer settings determine the parameters for importing MXF files for editing in EDIUS.

The MXF Importer settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting MXF Importer from the Plug-In Settings tree in the Settings dialog. See Figure 163.

Figure 163. MXF Importer Settings



JPEG2000 Settings

Material Exchange Format (MXF) files are imported using the JPEG 2000 standard. Set the desired quality (High, Medium, Low). Default = High

Choose the desired downsampling coefficient. Choices are:

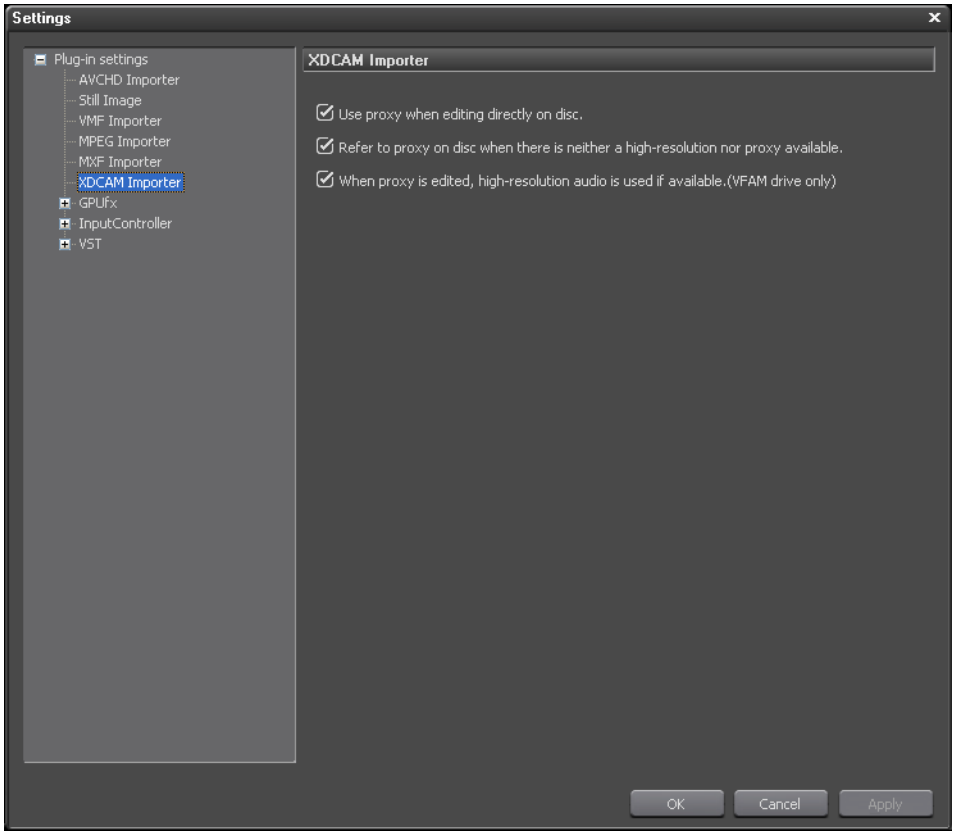
- 1/1 (highest quality) - default
- 1/2
- 1/4
- 1/8
- 1/16 (lowest quality)

XDCAM Importer

The XDCAM Importing settings determine proxy editing parameters.

The XDCAM Importer settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting XDCAM Importer from the Plug-In Settings tree in the Settings dialog. See Figure 164.

Figure 164. XDCAM Importer Settings



Proxy Editing Options

Select which of the following proxy editing options you wish to enable (default = All Checked):

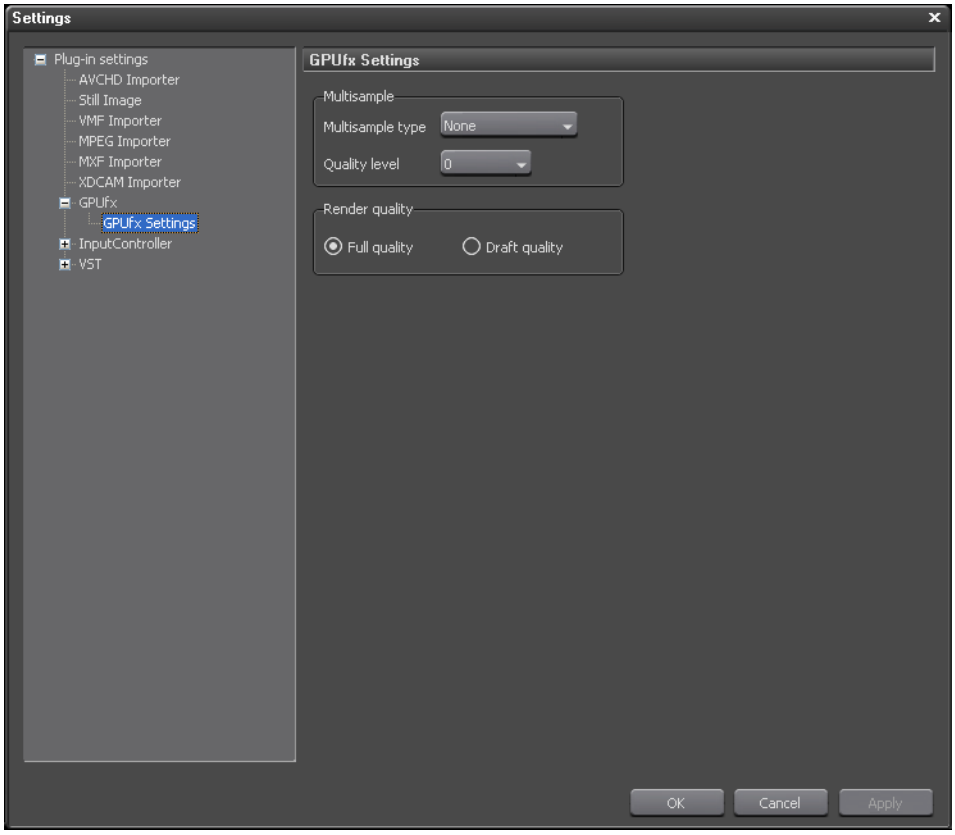
- Use proxy when editing directly on disk
- Refer to proxy on disk when there is neither a high-resolution nor proxy available.
- When proxy is edited, high resolution audio is used if available (VFAM drive only).

GPUfx Settings

If have a video card that is supported by GPUfx, these settings determine how the GPUfx are used in EDIUS.

The GPUfx Settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting GPUfx Settings from the GPUfx tree in the Settings dialog. See Figure 165.

Figure 165. GPUfx Settings



Multisample Settings

Select a multisample type from the drop-down list box. Choices are:

- None (default)
- NoMaskable
- 2 Samples
- 4 Samples
- 6 Samples

Select a quality level (applies only if the Multisample type is set to "NoMaskable"). Choices are 0, 1, 2. Default = 0 for all multisample types.

Quality Level

The quality level is set to a default of 0.

Rendering Quality

Select the desired rendering quality.

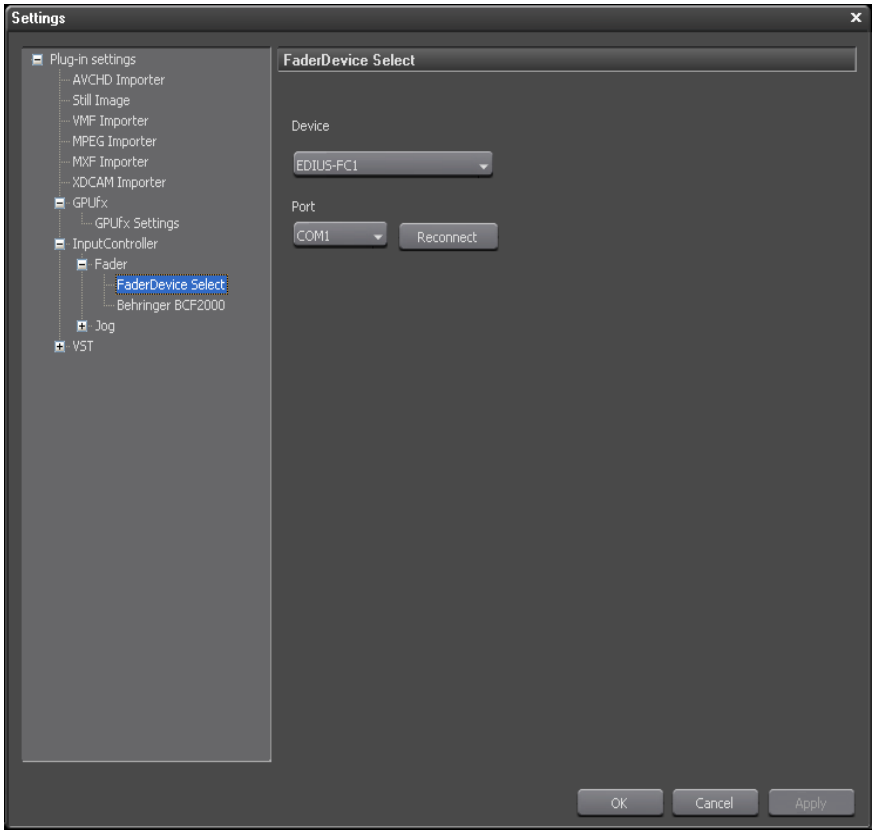
- Full quality
- Draft quality

Fader Device Select

The Fader Device Select dialog allows selection of a fader connected to the computer on which EDIUS is installed.

Fader Devices Select is accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting Fader Device Select from the InputController>Fader tree in the Settings dialog. See Figure 166.

Figure 166. Fader Device Select



To specify a fader device for use with EDIUS, do the following:

1. Select the device from the Device drop-down list. Choices are Behringer BCF2000 and EDIUS FC-1. If Behringer BCF2000 is selected see *Behringer BCF2000* below.
2. Select the port on which the device is connected to the EDIUS computer.
3. Click the **Reconnect** button to detect and connect to the device.

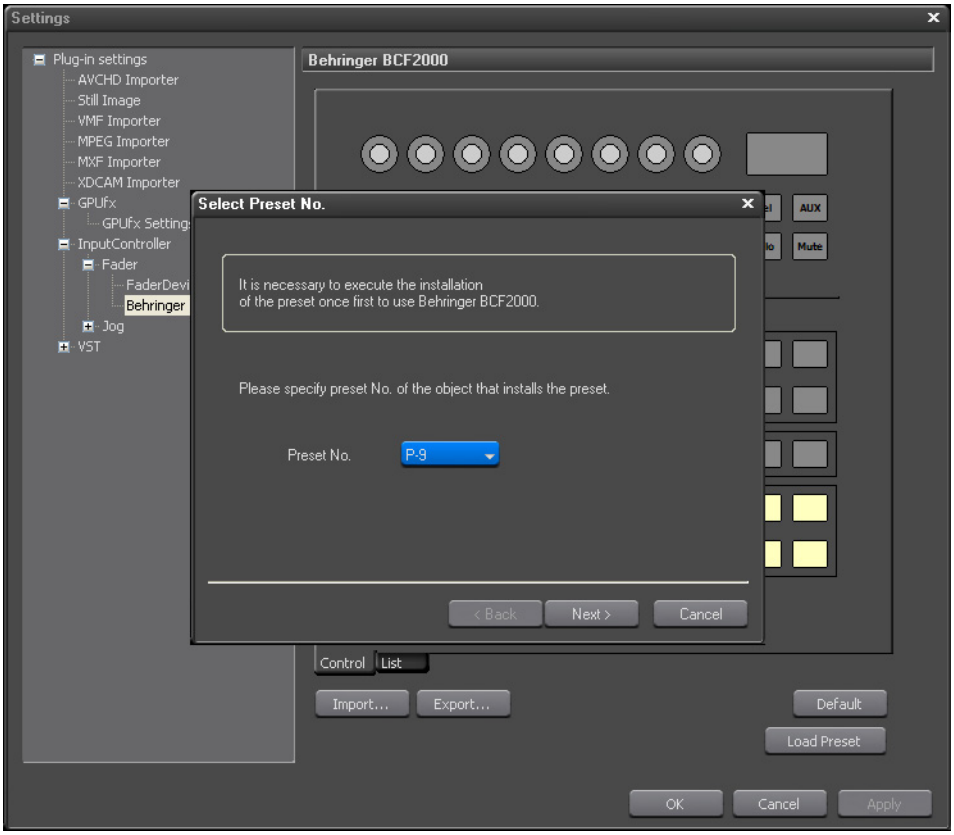
Note If the device is not found, the error dialog in Figure 167 appears. Check the device and the port connection to make sure it is correct.

Figure 167. Jog/Fader Reconnect Failed

Behringer BCF2000

The Behringer BCF2000 settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting Behringer BCF2000 from the InputController>Fader tree in the Settings dialog. See Figure 168.

Figure 168. Behringer BCF2000 Preset

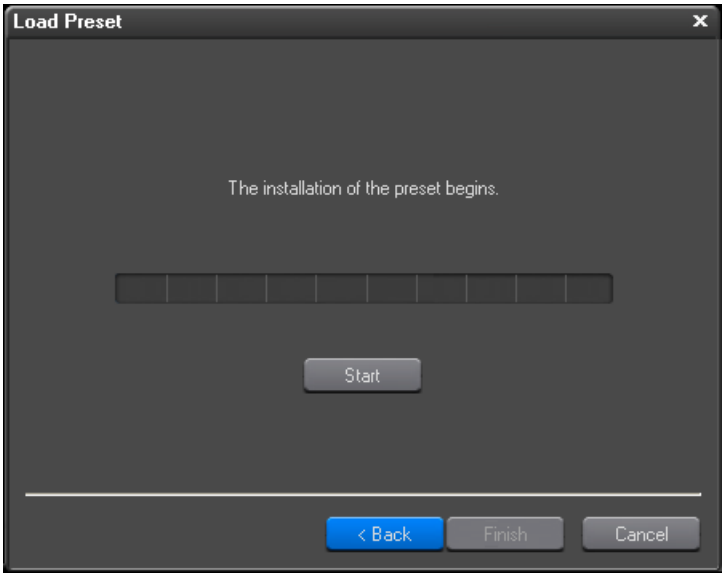


When the Behringer BCF2000 is selected the first time, the Select Preset No. dialog shown above appears. To install a preset, do the following:

1. From the Preset No. drop-down list, select the preset number to be installed for the Behringer BCF2000 and click the **Next** button.

The Load Preset dialog in Figure 169 appears.

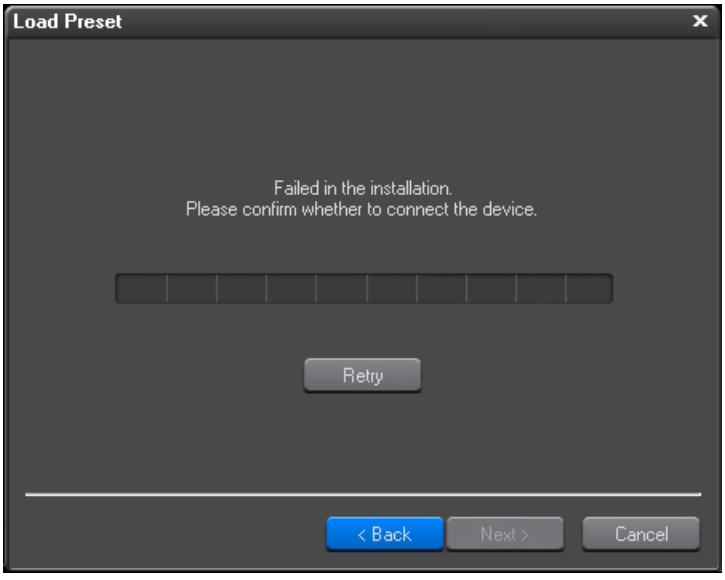
Figure 169. Load Preset



2. Click the **Start** button to begin the preset installation.

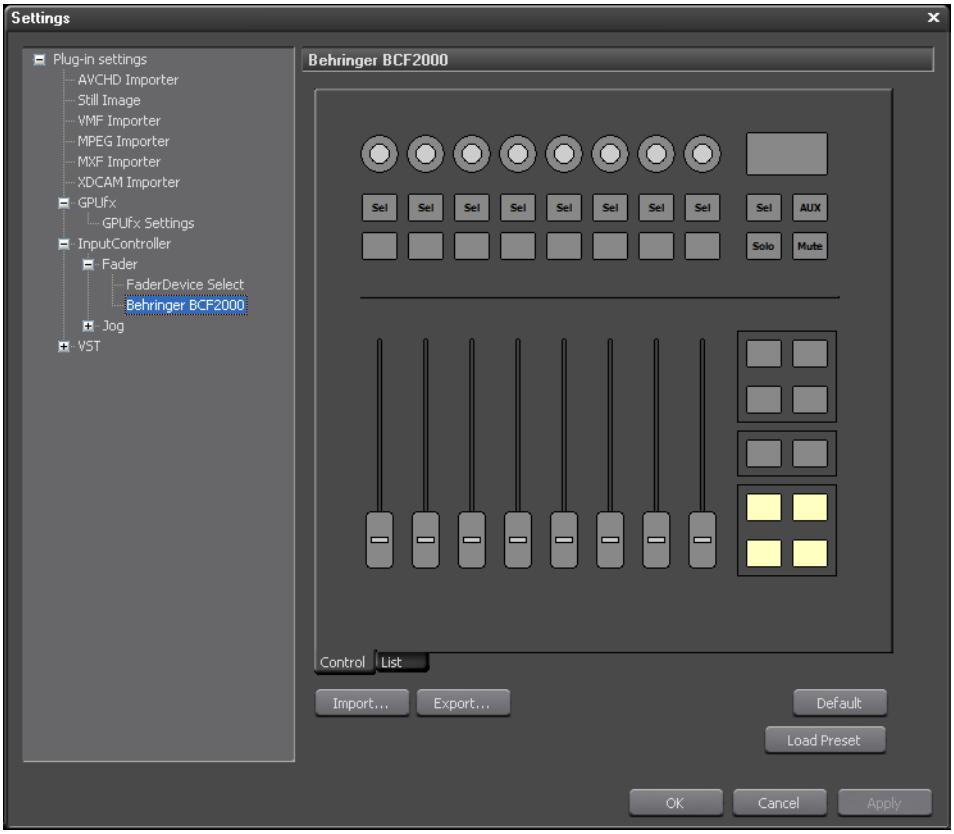
If the preset installation fails because the device is not detected, the dialog in Figure 170 appears. Check that the device is properly connected and click the **Retry** button.

Figure 170. Preset Installation Failed



If the installation is successful the Behringer BCF2000 dialog illustrated in Figure 171 appears.

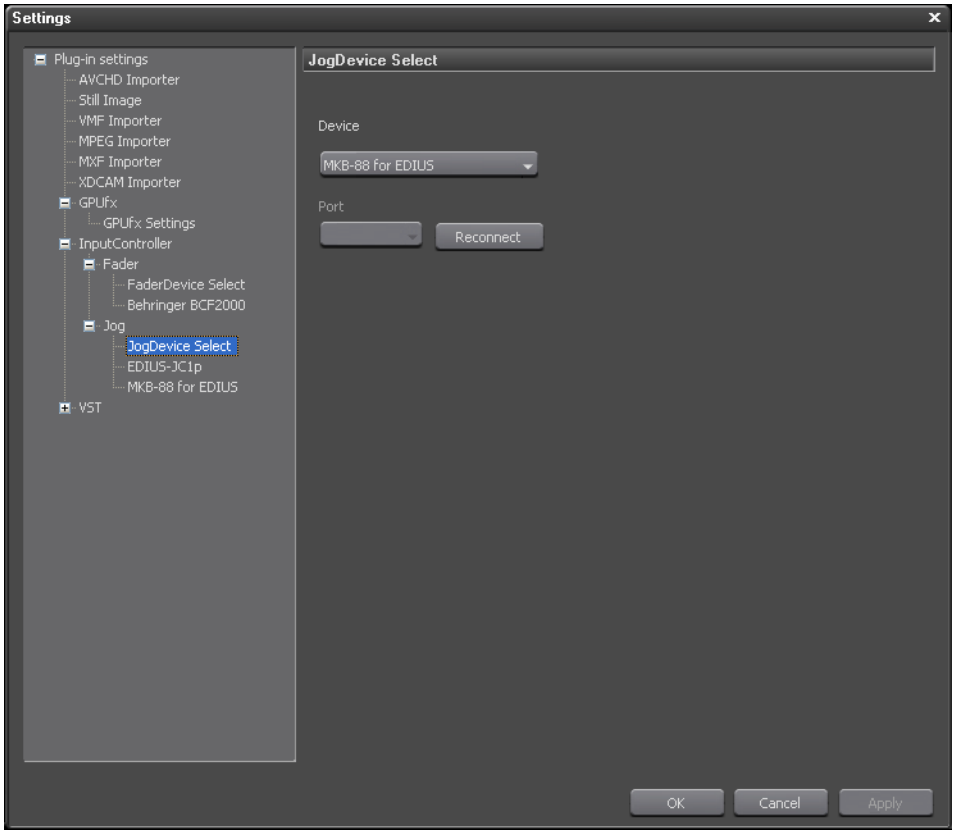
Figure 171. Behringer BCF2000 Settings



Jog Device Select

Jog Device Select is accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting JogDevice Select from the Input-Controller>Jog tree in the Settings dialog. See Figure 172.

Figure 172. Jog Device Select



To specify a jog device for use with EDIUS, do the following:

1. Select the device from the Device drop-down list. Choices are EDIUS-JC1p and MKB-88. S
2. Select the port on which the device is connected to the EDIUS computer.
3. Click the **Reconnect** button to detect and connect to the device.

Note If the device is not found, the error dialog in Figure 167 appears. Check the device and the port connection to make sure it is correct.

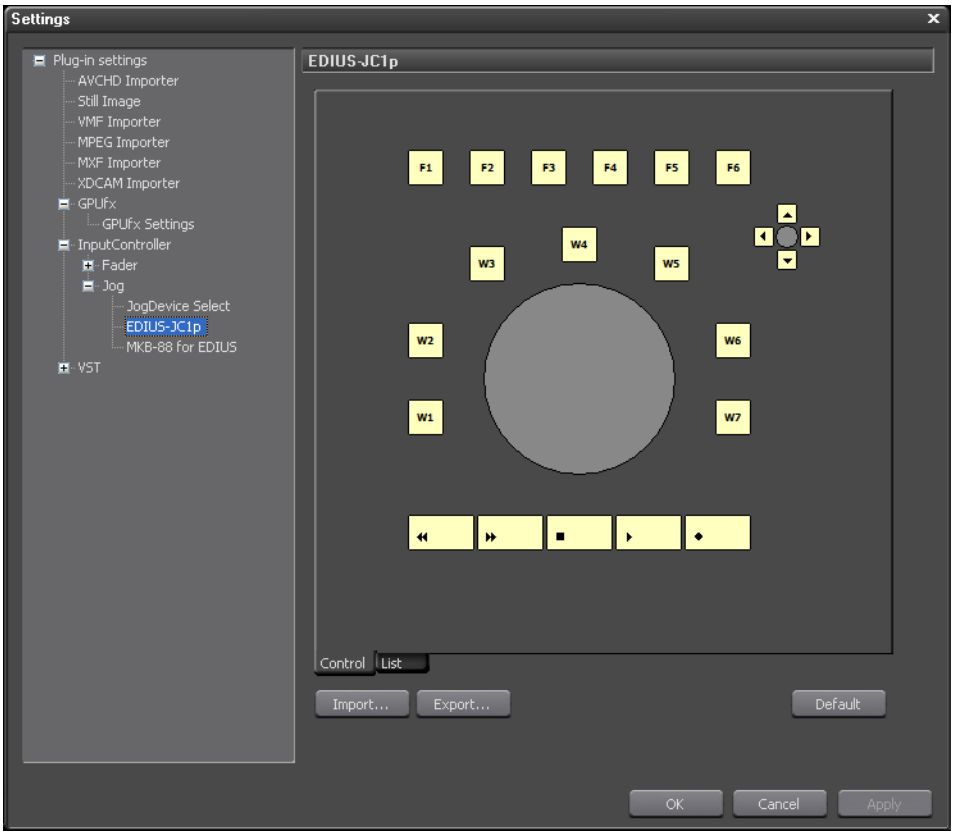
Figure 173. Jog/Fader Reconnect Failed

EDIUS-JC1p

Operation assignments for the EDIUS JC1p keys are made in the EDIUS JC1p settings dialog. The EDIUS JC1p allows operations performed with the keyboard and mouse in the EDIUS software to be assigned to the EDIUS-JC1p hardware controller.

The EDIUS-JC1p Settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting EDIUS-JC1p from the InputController>Jog tree in the Settings dialog. See Figure 174.

Figure 174. EDIUS-JC1p Settings



An overview of the EDIUS-JC1p controller is displayed.

A yellow-colored key indicates that key currently has an assigned operation. Placing the mouse cursor over a yellow key shows hover text containing the current operation assignment for that key. By default, all EDIUS-JC1p keys have an operation assignment.

A white-colored key (if any), is a key for which no operation assignment currently exists.

Operation Assignment Buttons

The buttons explained in this section are used in making operation assignment to device keys.

Assign

When the **Assign** button is clicked, the keyboard map shown in Figure 154 appears.

No Assign

Clicking the **No assign** button changes the operation assignment for the selected key to "---" which indicates that no operation assignment currently exists for that key.

Find Short Cut

Click the **Find Short Cut** button and press the key(s) for a keyboard shortcut. The operation currently assigned to that keyboard shortcut is highlighted in the list.

Note This is useful if you want to make a jog device key assignment that is equivalent to a particular keyboard shortcut.

Default

Clicking the **Default** button resets the operation assignment to the default for the selected key.

Import

The **Import** button is used to import a jog device key assignment file (.jljog extension) into EDIUS.

Export

The **Export** button is used to export the current jog device key assignments to a file which can then be imported into another EDIUS system.

Export is also useful when upgrading from one version of EDIUS to another. Custom device key operation assignments are not retained during an upgrade. The existing device key operation assignments should be exported before the upgrade and then imported after the upgrade to the new version.

Exported device key operation assignments are saved in a file with a .jljog extension.

Making an Operation Assignment to a Key

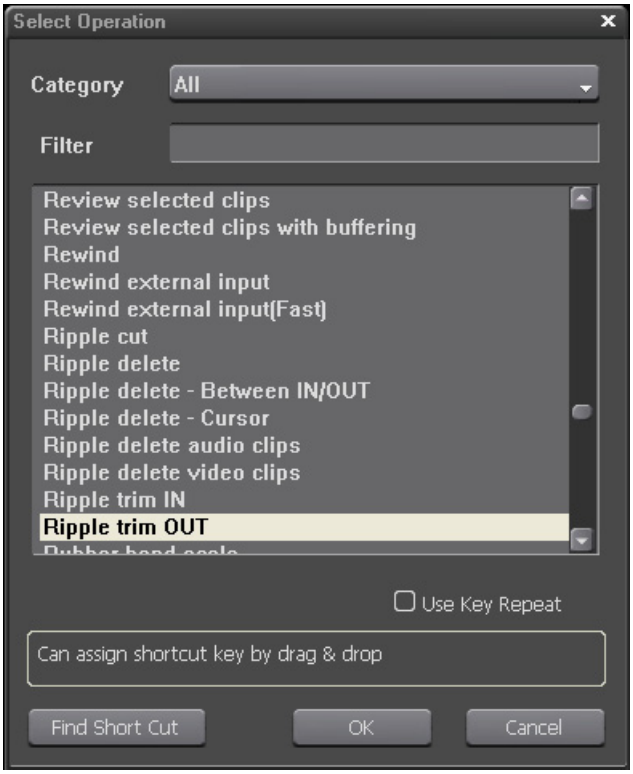
To make an operation assignment to a controller key, perform the following actions:

1. Double-click the key for which you wish to make an assignment.

Note Alternatively, you may click on the "List" tab and click the **Assign** button. The list tab displays all buttons, assigned operations and repeat On/Off status in a list.

The dialog shown in Figure 175 appears.

Figure 175. EDIUS-JC1p Select Operation



2. Use the Category drop-down list or the "Filter" field to narrow down the list of operations to just those that pertain to the selected category or filter keyword (e.g. "delete"). Operation categories are:
   - All (default)
   - Other
   - Timeline
   - Edit
   - Edit - Delete

- Edit - Select
- Edit - Move
- View
- Play
- Marker
- Mode
- Mode - Multicam
- Capture
- Rendering
- Audio Mixer

3. Select from the list the operation you wish to assign to the key selected in Step 1.

Note Use the **Find Short Cut** button to find the operation currently assigned to a keyboard shortcut. Click the **Find Short Cut** button and press the key(s) for a keyboard shortcut. The operation currently assigned to that keyboard shortcut is highlighted in the list.

4. Check "Use Key Repeat" if the key should perform the operation repeatedly while the key is held down.

5. Click the **OK** button to make the operation assignment to the selected key.

In the "List" tab, the **No assign** button can be used to delete the operation assignment for the selected controller key. That key will then be white in the controller overview screen ("Control" tab).

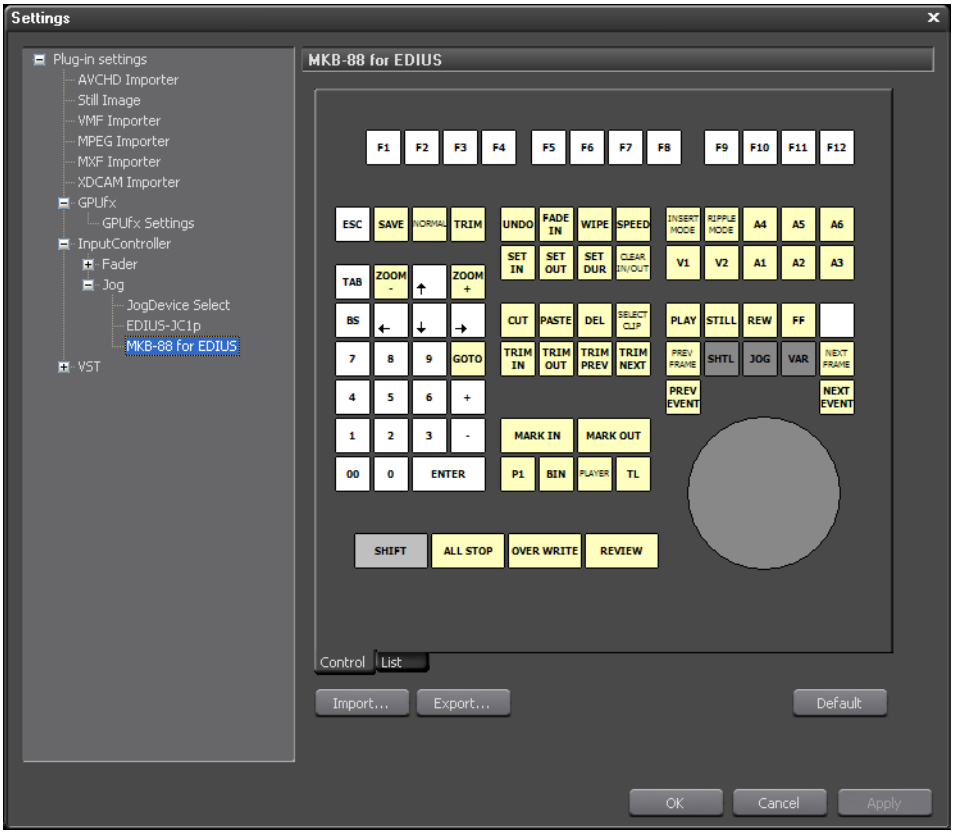
Click the **OK** button on the EDIUS-JC1p dialog to save all operation assignments and close the dialog.

MKB-88 Settings

Operation assignments for MKB-88 keys are made in the MKB-88 for EDIUS dialog. The MKB-88 allows operations performed with the keyboard and mouse in the EDIUS software to be assigned to the MKB-88 for EDIUS hardware controller.

MKB-88 Settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting MKB-88 for EDIUS from the Input-Controller>Jog tree in the Settings dialog. See Figure 176.

Figure 176. MKB-88 Settings



An overview of the MKB-88 for EDIUS controller is displayed.

A yellow-colored key indicates that key currently has an assigned operation. Placing the mouse cursor over a yellow key shows hover text containing the current operation assignment for that key.

A white-colored key, is a key for which no operation assignment currently exists.

Operation Assignment Buttons

The buttons explained in this section are used in making operation assignment to device keys.

Assign

When the **Assign** button is clicked, the keyboard map shown in Figure 154 appears.

No Assign

Clicking the **No assign** button changes the operation assignment for the selected key to "---" which indicates that no operation assignment currently exists for that key.

Find Short Cut

Click the **Find Short Cut** button and press the key(s) for a keyboard shortcut. The operation currently assigned to that keyboard shortcut is highlighted in the list.

Note This is useful if you want to make a jog device key assignment that is equivalent to a particular keyboard shortcut.

Default

Clicking the **Default** button resets the operation assignment to the default for the selected key.

Import

The **Import** button is used to import a jog device key assignment file (.jljog extension) into EDIUS.

Export

The **Export** button is used to export the current jog device key assignments to a file which can then be imported into another EDIUS system.

Export is also useful when upgrading from one version of EDIUS to another. Custom device key operation assignments are not retained during an upgrade. The existing device key operation assignments should be exported before the upgrade and then imported after the upgrade to the new version.

Exported device key operation assignments are saved in a file with a .jljog extension.

Making an Operation Assignment to a Key

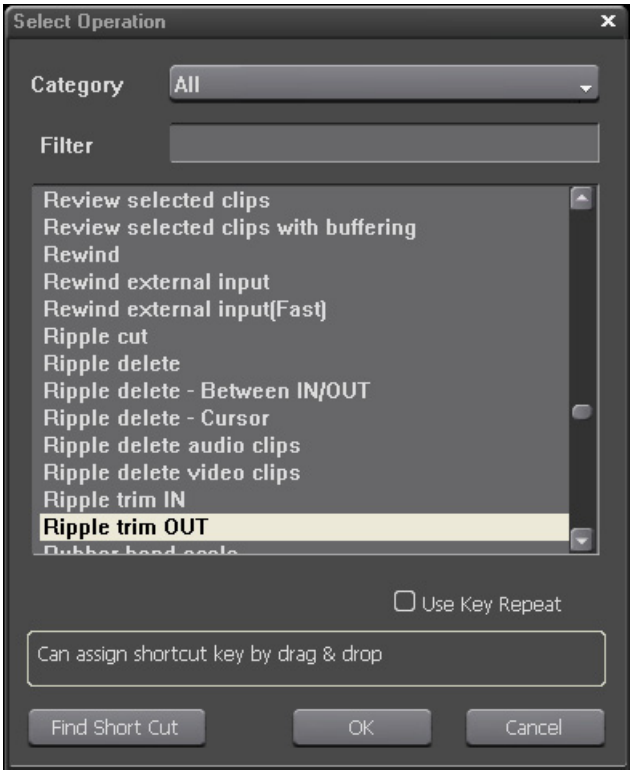
To make an operation assignment to a controller key, perform the following actions:

1. Double-click the key for which you wish to make an assignment.

Note Alternatively, you may click on the “List” tab and click the **Assign** button. The list tab displays all buttons, assigned operations and repeat On/Off status in a list.

The dialog shown in Figure 175 appears.

Figure 177. EDIUS-JC1p Select Operation



2. Use the Category drop-down list or the “Filter” field to narrow down the list of operations to just those that pertain to the selected category or filter keyword (e.g. “delete”). Operation categories are:
   - All (default)
   - Other
   - Timeline
   - Edit
   - Edit - Delete
   - Edit - Select
   - Edit - Move
   - View
   - Play
   - Marker
   - Mode
   - Mode - Multicam

- Capture
- Rendering
- Audio Mixer

3. Select from the list the operation you wish to assign to the key selected in Step 1.

Note Use the **Find Short Cut** button to find the operation currently assigned to a keyboard shortcut. Click the **Find Short Cut** button and press the key(s) for a keyboard shortcut. The operation currently assigned to that keyboard shortcut is highlighted in the list.

4. Check "Use Key Repeat" if the key should perform the operation repeatedly while the key is held down.

5. Click the **OK** button to make the operation assignment to the selected key.

In the "List" tab, the **No assign** button can be used to delete the operation assignment for the selected controller key. That key will then be white in the controller overview screen ("Control" tab).

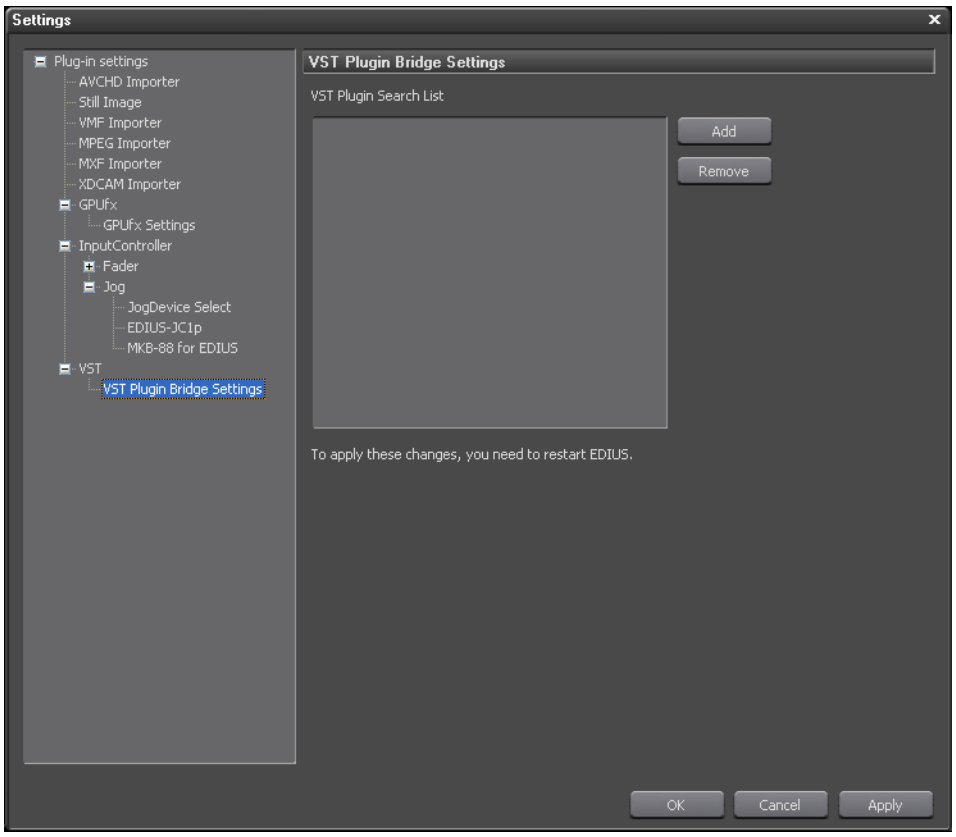
Click the **OK** button on the MKB-88 for EDIUS p dialog to save all operation assignments and close the dialog.

VST Plugin Bridge Settings

VST Plugin Bridge Settings allow you to specify the locations where VST plugins are located.

The VST Plugin Bridge Settings are accessed by selecting Settings>Plug-In Settings from the Preview window and then selecting VST Plugin Bridge Settings from the VST tree in the Settings dialog. See Figure 178.

Figure 178. VST Plugin Bridge Settings



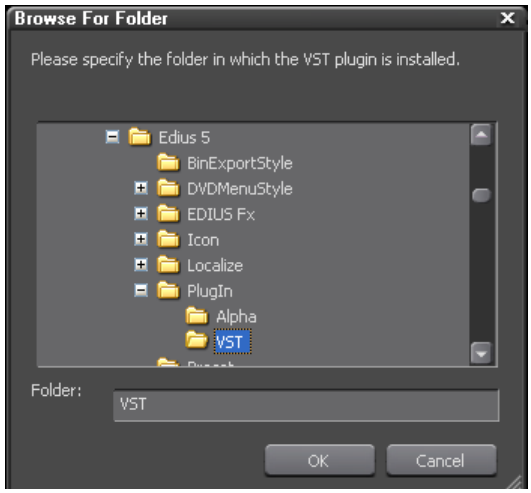
Adding a Location to the VST Plugin Search List

To add a VST Plugin location to the search list, do the following:

1. click the **Add** button

The Browse For Folder dialog in Figure 179 appears.

Figure 179. VST Plugin Browse Folder

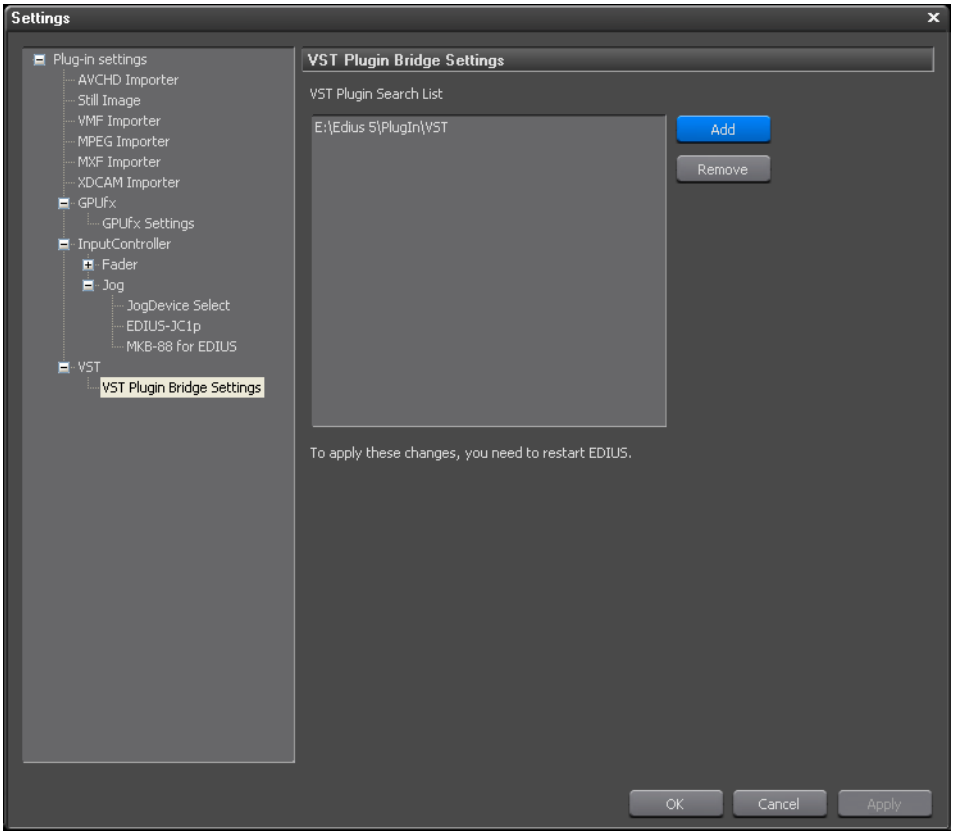


2. Navigate to a folder containing VST plugin DLLs and click the **OK** button.

3. Repeat steps above for any additional folders you wish to add to the search list.

Added folders appear in the VST Plugin Search List as illustrated in Figure 180.

Figure 180. VST Plugin Search List



To remove a folder from the search list, select the folder path and click the **Remove** button.

Note EDIUS must be restarted before the search list changes are recognized.

Click the **OK** button on the VST Plugin Bridge Settings dialog to save all changes and close the dialog.

VST folder(s) will be registered in the AudioFilters tree in the Effect Palette.

Section 3

Capturing and Importing Clips and Stills

Capturing is the process of acquiring external material from tapes, memory cards, web cameras, DVDs, CDs, etc. and digitizing the material, if necessary, for use in EDIUS projects.

When capturing material for use in EDIUS, you may capture the entire source or just portions of the source that are defined in a batch capture list. These captured clips are stored in the Asset Bin. Material may also be captured directly to the Timeline for immediate use.

Importing is the process of making existing clips and stills stored on the EDIUS computer local disk, or other attached storage, available in the Asset Bin for use in EDIUS projects.

Supported File Types

The Asset Bin can contain clips of any of the following file types and extensions:

- AVCHD (.m2ts, mts)

Note Using the AVCHD Converter (available in the Tools folder of the EDIUS installation DVD) to convert AVCHD files to AVI using the Canopus HQ Codec can improve editing response time.

- DivX (.divx, .div)
- GF Clip File (.xml)
- AVI (.avi)
- DIF stream (.dif, .dv)
- Sony HVR-DR60/HVR-MRC1 Meta File (.idx)
- Inscriber (.icg, .ips)
- Ogg Vorbis File (.ogg)
- AIFF File (.aif, .aiff)

- Wave File (.wav)
- QuickTime Movie (.mov)
- MPEG4 Files (.mp4)
- 3GPP Files (.3gp, .3g2, .amc)
- AAC Files (.aac, .m4a)
- Targa Files (.tga, .targa, .vda, .icb, .vst)
- Windows Bitmap Files (.bmp,. dib, .rle)
- JPEG Files (.jpg, .jpeg)
- Flash Pix Files (.fpx)
- TIFF Files (.tif, .tiff)
- Photoshop Files (.psd)
- JPEG FIle Interchange Format Files (.jfif)
- Portable Network Graphics Files (.png)
- Mac Pict Files (.pic, .pct, .pict)
- QuickTime Image Files (.qtif, . qti, .qif)
- Silicon Graphics Image Files (.sgi, .rgb)
- Compuserve GIF Files (.gif)
- Windows Meta File (.wmf, .emf)
- Maya IFF File (.iff)
- DPX (SMPTE 268M-2003) File (.dpf)
- QuickTitler (.etl)
- Infinity Clip File (.xml)
- MPEG Program Stream (.mpg, mpeg, .m2p, .mp2, .vob, .vro)

Note If a .vob file cannot be imported, capture the source with DISCcapture (see *Capturing from DVD/CD on page 221* for more information on DISCcapture).

- MPEG Transport Stream (.m2t)
- MPEG HDD Movie (.mod, .tod)
- MPEG Video Stream (.mpv, .m2v)
- MPEG Audio Stream (.mpa, .m2a)
- Dolby Digital (.ac3)
- MPEG Audio Layer-3 (.mp3)
- MXF File (.mxf)

- Windows Media Audio (.wma)
- Windows Media Video (.wmv, .asf)
- XDCAM EX (.mp4, .smi, .xml)

Note AIFF/AIFC files are only supported in PCM format.

Note EDIUS does not support Electronic Arts IFF (.iff) files.

Note Grass Valley Imaginate project files can be imported.

Capturing Basics

Before beginning the capture process, make sure the source playback device is turned on, is functioning properly and is connected to the EDIUS computer.

With the playback device connected to the EDIUS computer, you can capture analog, DV or HDV sources and encode them using the award-winning Canopus HQ codec. DVCPRO HD and DVCPRO 50 formats may also be captured.

Source Connections

Playback sources may be connected to any of the following:

- Generic OHCI IEEE 1394 port
- Main board DV terminal of optional SHX-E1, SHX-E2, NHX-E1 and NHX-E2 EDIUS boards

Note These optional boards cannot be used for HDV capture

- DV terminal of Grass Valley editing systems

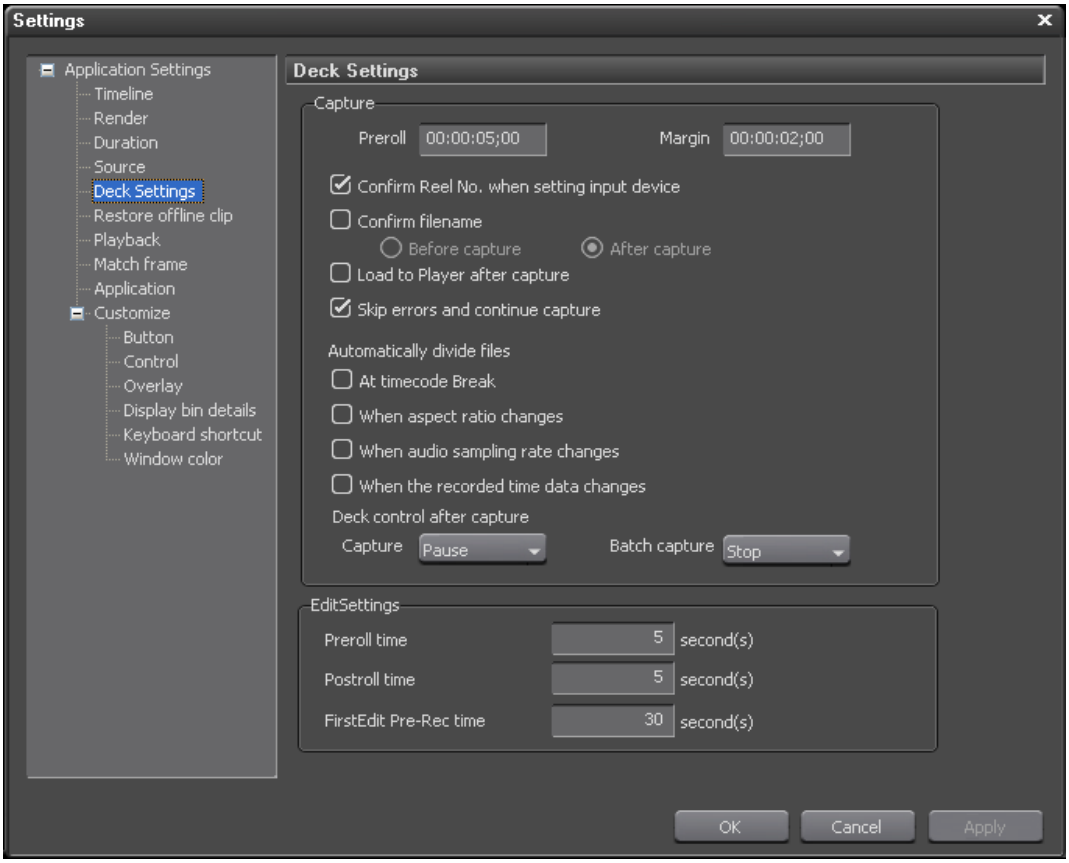
If your playback device supports HDV, set the device to HDV mode following the instructions of your device.

Capture Settings

When performing a batch capture, verify the “Automatically divide files” settings. By default, EDIUS is configured to automatically divide captured files into new clips on date, timecode, audio sampling rate and aspect ratio changes. This is usually not desirable when batch capturing; therefore these options should be disabled.

These settings are accessed by selecting Settings>Application Settings from the Preview window and selecting Deck Settings. The dialog shown in Figure 181 appears.

Figure 181. Deck Settings Dialog



Disable the "Automatically divide files" settings by clicking them to remove the check mark.

The desired preroll and margin times are also set in this dialog. Verify that the current settings are appropriate for the playback device and source to be captured. See *Preroll* *on page 143* and *Margin* *on page 143* for more information about these settings.

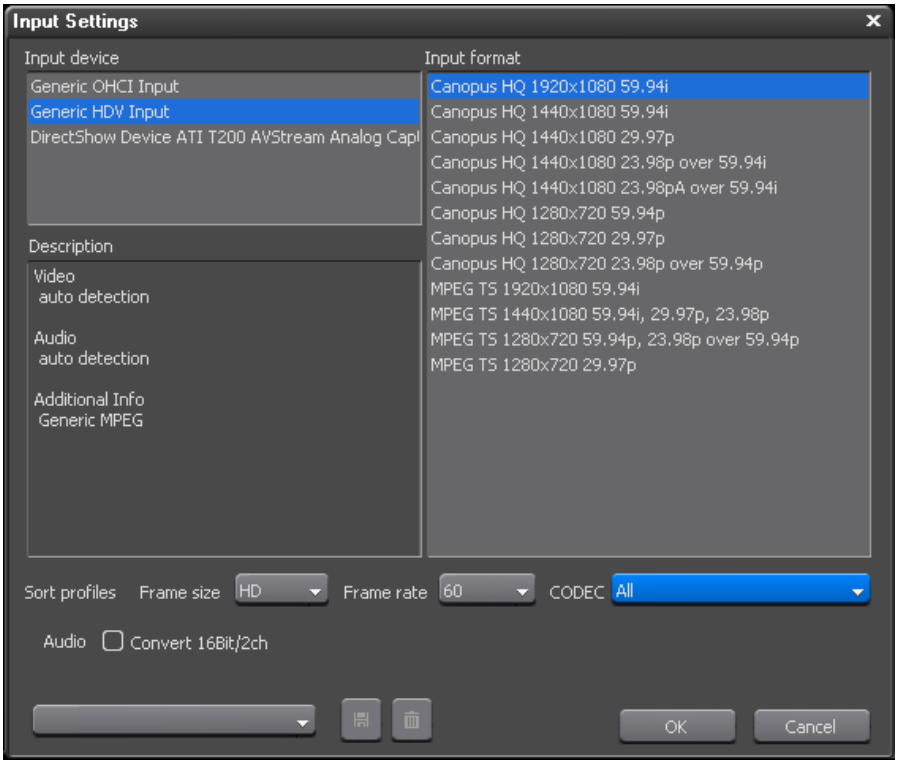
Capturing from a DV or HDV Device

To capture a source from a DV or HDV device, do the following:

1. Select Capture>Input Settings from the Preview window.

The Input Settings dialog in Figure 182 appears

Figure 182. Input Settings Dialog



Any attached devices which EDIUS supports are listed in the "Input Device" section of the dialog.

2. Select Generic OHCI or Generic HDV Input from the list of Input Devices.

3. Select the desired input format from the list in the "Input Format" section of the dialog.

Note The list of input formats varies depending on the selected codec and the "sort profiles" settings. In Figure 182, all available HD/60 Hz input formats are listed because the CODEC selection has been set to "All", Frame size to "HD" and Frame rate to "60." See *Sorting Input Formats* *on page 216* for more information on how to use these settings.

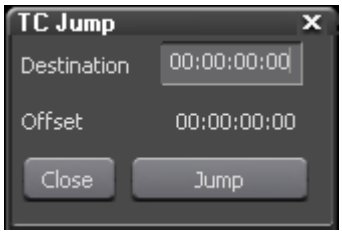
4. Select the "Convert 16Bit/2ch" option if you wish to convert the source audio to 16-bit, 2-channel audio as it is captured. Default = Not Checked.

5. Click the **OK** button to save the current settings and close the dialog.

Note Depending on the settings in the Capture Settings dialog, the ReelName or Input Capture File dialogs may appear when the **OK** button is clicked. See *Setting Reel Name* *on page 211* and *Confirming File Capture Settings* *on page 213* for more information.

6. If desired, you may jump to a specific timecode location in the source by clicking on the "Cur"" timecode in the Player window. The TC Jump dialog appears. See Figure 183. Enter the destination timecode and click the **Jump** button.

Figure 183. TC Jump Dialog



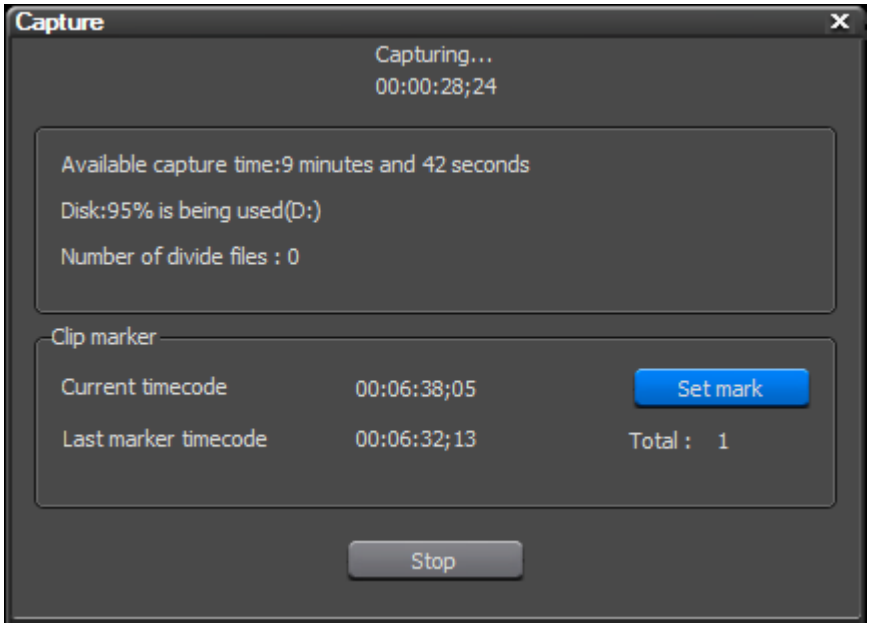
7. Playback the source using the Player operation buttons. Set In and Out points as desired. Setting no In and Out points allows you to capture the entire source. For more information on In and Out points see *Setting In and Out Points* *on page 214*.

Note See *Player Operation Buttons* *on page 112* for information about the Player buttons and their functions.

8. Click the **Capture** (see Figure 184) button to begin source capture. The Capture dialog in Figure 185 appears.

Figure 184. Player Capture Button

Figure 185. Capture Dialog



If In and Out points were set, capturing begins at the In point and ends automatically at the Out point. Click the **Stop** button to stop capturing before reaching the Out point.

9. While capturing a clip, clicking the **Set Mark** button will place a Clip marker at the current timecode location and the message "marker set to 00:00:00;00" (00:00:00;00 is replaced by the actual clip timecode) is displayed for five seconds. See *Sequence and Clip Markers* *on page 316* for more information on Clip markers.

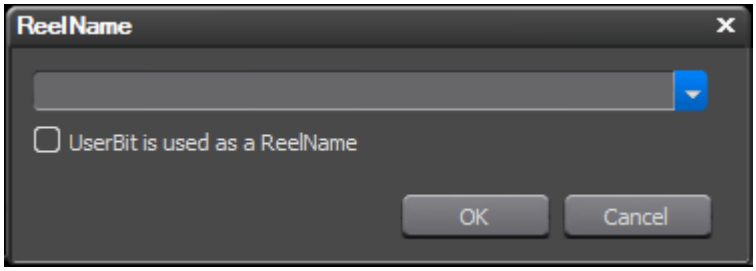
Note The total number of Clip markers set during a capture operation is also displayed in the Capture dialog.

Captured clips are placed in the Asset bin at the conclusion of the capture process. These clips are now available for use in EDIUS Neo projects.

Setting Reel Name

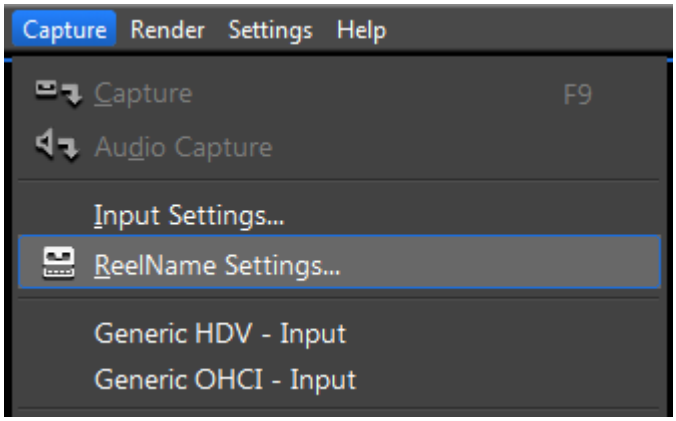
If the "Confirm reel name when setting input device" option is selected in the Capture Settings (see Figure 181), the ReelName dialog illustrated in Figure 186 will automatically appear when the **OK** button is clicked in the Input Settings dialog.

Figure 186. ReelName Dialog



If the ReelName dialog does not appear automatically and you wish to set a reel name for the captured clip(s), select Capture>ReelName Settings from the Preview window menu bar as shown in Figure 187. This opens the ReelName dialog shown in Figure 186.

Figure 187. Capture Menu - ReelName Settings



If the "UserBit is used as ReelName" option is selected, the reel name will be automatically set and manual reel name entry is disabled. If this option is not selected, the reel name may be manually entered or selected from the drop-down list of previously used reel names.

Note When capturing an audio file, UserBit as reel name option is disabled and cannot be selected.

Enter or select the desired reel name for captured clip(s) and click the **OK** button.

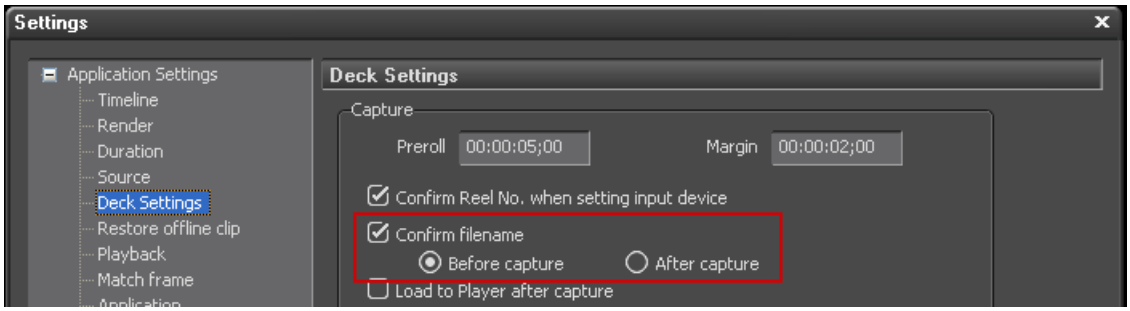
If a reel name is set, the reel name is displayed in the Player window during capture as illustrated in Figure 188.

Figure 188. Clip with Reel Name Displayed in Player Window

Confirming File Capture Settings

In the Capture Settings dialog, the method of confirming the file name for captured clip(s) is specified as illustrated in Figure 189.

Figure 189. Capture Settings - Confirm Filename

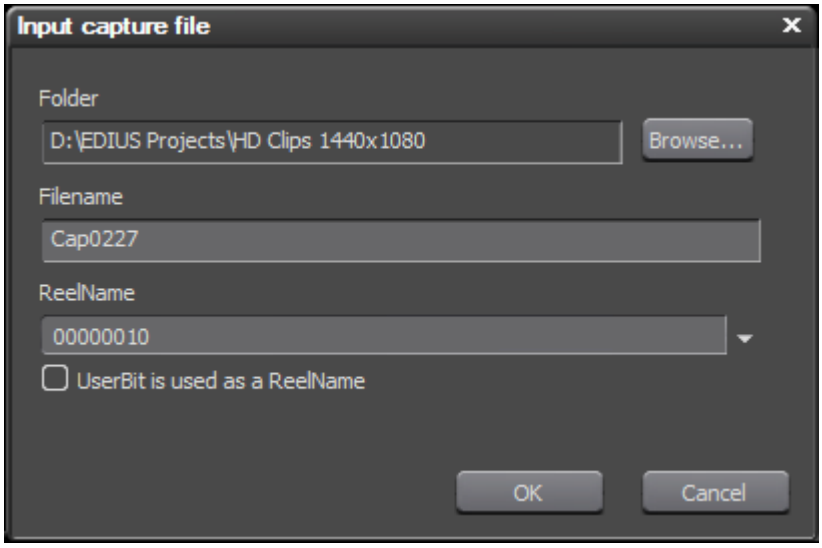


Confirm Filename

If the 'Confirm filename" option is not selected, the file will be named automatically with no confirmation.

If the "Confirm filename" option is selected, you may choose to confirm the filename before or after capturing a clip and the dialog shown in Figure 190 appears either before or after clip capture.

Figure 190. Capture File Dialog



Set the following filename parameters as desired:

- The folder location for the captured clip is specified by entering a folder path or browsing to the desired folder using the **Browse...** button.
- Enter the desired filename for the captured file.
- Set the reel name, if desired as explained in *Setting Reel Name on page 211*.

Captured clips are placed in the Asset bin at the conclusion of the capture process. These clips are now available for use in EDIUS projects.

Setting In and Out Points

Setting In an Out points allows you to choose just a portion of the source material for capture instead of capturing the entire source and then trimming as needed. Setting In an Out points is done in the following ways:

- While playing a clip, click the **Set In** and **Set Out** buttons at on the Player button bar. See Figure 191. Play the clip until the desired beginning frame is reached; press the **Set In** button. Continue playing the clip until the desired end frame is reached; click the **Set Out** button.

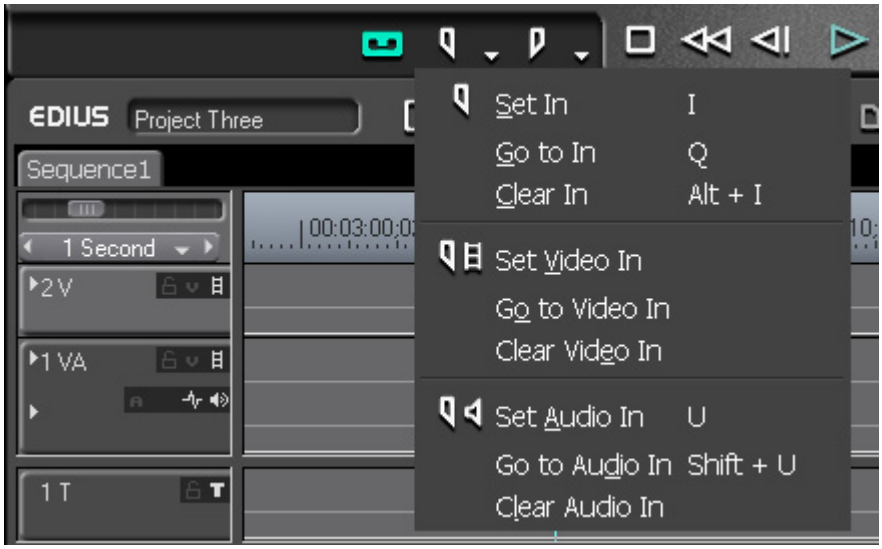
Figure 191. Player In and Out Buttons

- Press the **[I]** key on the keyboard to mark an In point. Press the **[O]** key to mark the Out point.

In and out points may be set separately for video and audio. To set an In point for video or audio only, do the following:

1. Click the list button (▽) on the **In** button. The menu in Figure 192 appears.

Figure 192. Mark In Menu



2. Select "Set Video In" or "Set Audio In" to mark an In point for video or audio only.

The procedure is the same for marking an Out point for video or audio only except the list button (▽) on the **Out** button is clicked.

You may also set the **In** and **Out** buttons to one of three modes such that clicking on the button sets the In or Out point according to the selected mode:

- Video Only
- Audio Only
- Video and Audio

To change the **In/Out** button mode, click the In/Out toggle button in the bottom left corner of the Player window (see Figure 193).

Figure 193. In/Out Mark Toggle Button

The **In** and **Out** buttons in Figure 193 mark the In and Out point for both audio and video as there is no video or audio symbol on the buttons.

Each click of the toggle button selects a different mode and changes the **In** and **Out** button icon in the Player as follows:

Set Video In Set Video Out

Set Audio In Set Audio Out

Sorting Input Formats

In the Input Settings dialog, available input formats may be sorted by:

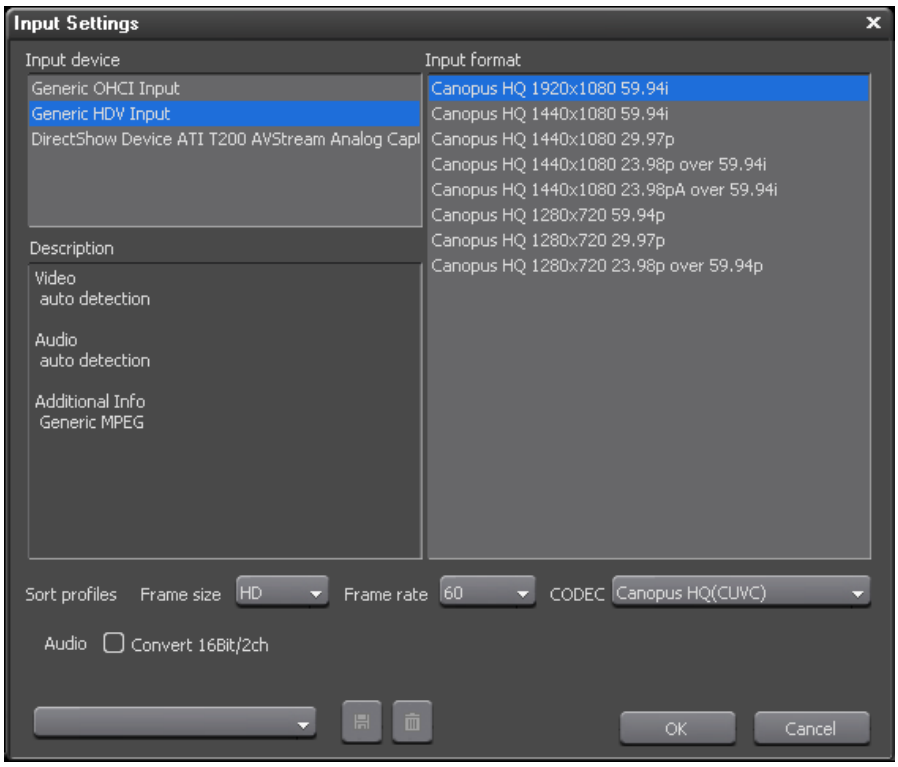
- Frame Size
- Frame Rate
- Codec

To use the criteria above to sort the formats do the following:

1. Select the desired input device.
2. From the Frame Size drop-down list, select the desired frame size (All, SD, or HD).
3. From the Frame Rate drop-down list box, select the desired frame size (All, 60, 50, 24 or other).
4. From the CODEC drop-down list box, select the desired input codec (All, others as listed).

The Input Format list displays all formats that meet the selected criteria. shows an example of formats sorted by HD frames size, 60 Hz frame rate and the Canopus HQ codec.

Figure 194. Sorted Input Formats



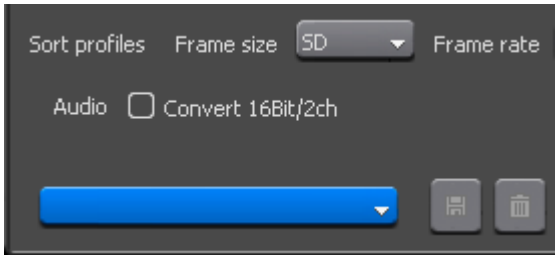
Registering Input Presets

The input settings selected for capture operation may be saved as an input preset which may be recalled at the click of a button. To save input settings as an input preset, do the following while in the Input Settings dialog.

1. Click the Input Preset drop-down list button (highlighted in blue in Figure 195) if you wish to register the current settings as an input preset. From the list, select the preset (1-8) to which to register the current input settings.

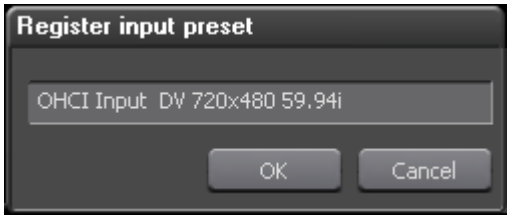
Note The button will have no text (as shown in Figure 195) if the current settings have not been assigned to an input preset.

Figure 195. Register Input Preset



2. Click the save button to assign the current settings to the selected input preset number. The Register Input Preset dialog shown in Figure 196 appears.

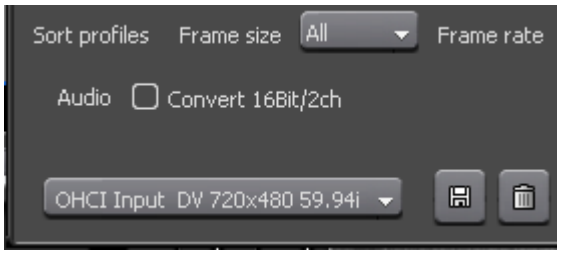
Figure 196. Input Preset Name



3. Enter the desired Input Preset name and click the **OK** button.

The Input Preset button now shows the registered preset name as illustrated in Figure 197.

Figure 197. Input Preset Name



Click the delete button to delete an input preset assignment (unregister the input preset button 1-8).

When an input preset button is registered, it appears on the Player buttons as illustrated in Figure 198. Placing the mouse cursor over the preset button shows the registered name as hover text.

Figure 198. Registered Input Preset

Capturing from DirectShow Devices (Web Cameras, etc.)

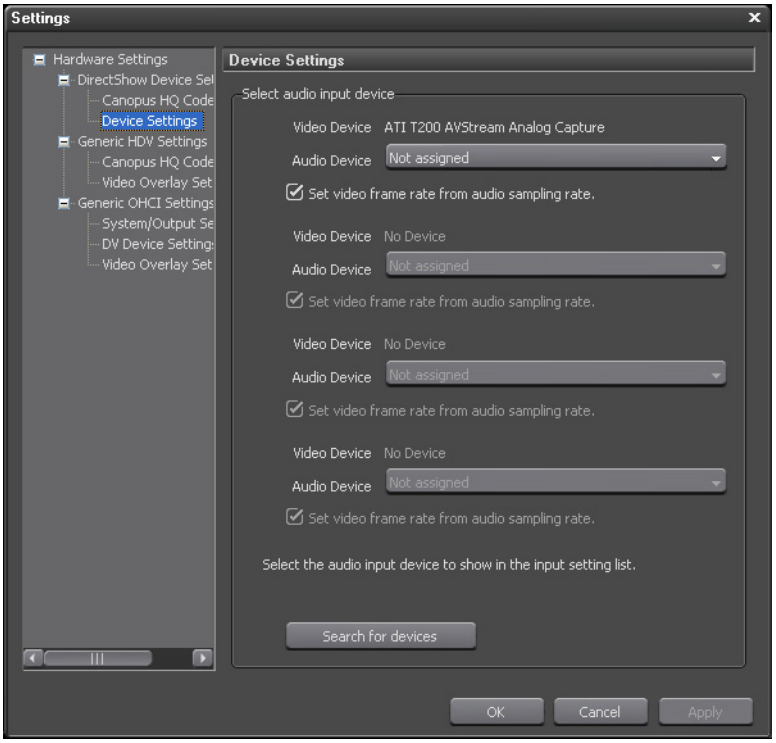
Source material can be captured from DirectShow-based video and audio capture devices such as web cameras.

To capture sources from a DirectShow device, do the following:

1. Select Settings>Hardware Settings from the Preview window menu bar.
2. From the Hardware Settings dialog, click the "+" if necessary to expand the "DirectShow Device Settings" tree.
3. Select "Device Settings" from the DirectShow Device Settings tree.

The dialog shown in Figure 199 appears.

Figure 199. DirectShow Device Settings Dialog



All DirectShow video devices connected to the EDIUS computer are displayed.

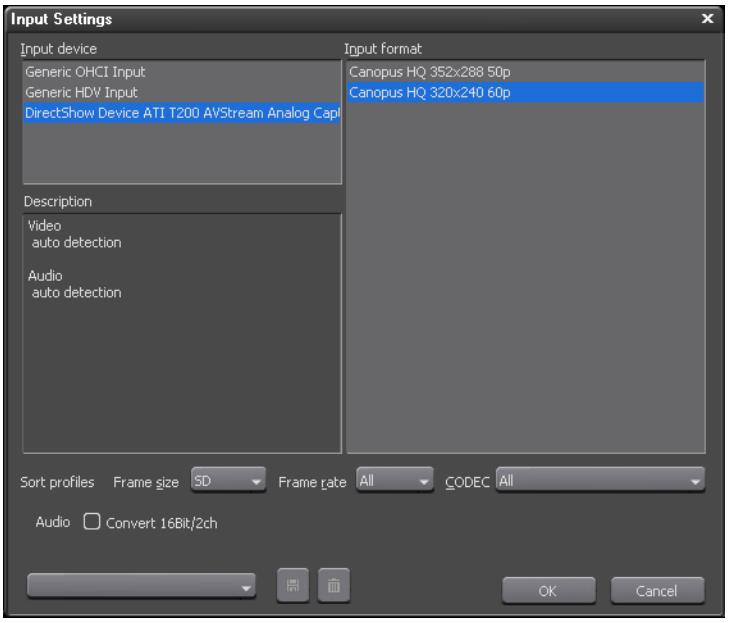
4. From the drop-down list associated with the desired video device, select the desired audio capture device to be associated with that video device.
5. Click the **OK** button.

Note Once the audio device had been selected for a particular video device, that association remains in place unless it is changed. It is not necessary to set the audio device before each capture operation unless a change is desired.

6. Select Capture>Input Settings from the Preview window.

The Input Settings dialog appears as illustrated in Figure 200

Figure 200. Input Settings Dialog



7. Select the desired DirectShow device name in the "Input Device" list and the desired capture format from the "Input Format" list.

Note Source settings such as bitrate, aspect ratio, etc. will vary depending upon the selected device.

8. Click the **OK** button.

9. Click the Capture button in the Player. See Figure 201.

Note Capturing can also be initiated by pressing the [F9] key on the keyboard.

Figure 201. Player Capture Button

The Capture dialog appears and capturing begins.

10. Click the **Stop** button in the Capture dialog to stop capturing.

The captured clip is placed in the Asset Bin.

To see the current settings for any DirectShow device, select Capture>[input device name] from the Preview window.

Capturing from DVD/CD

Video and audio can be captured from DVDs or CDs in the following formats:

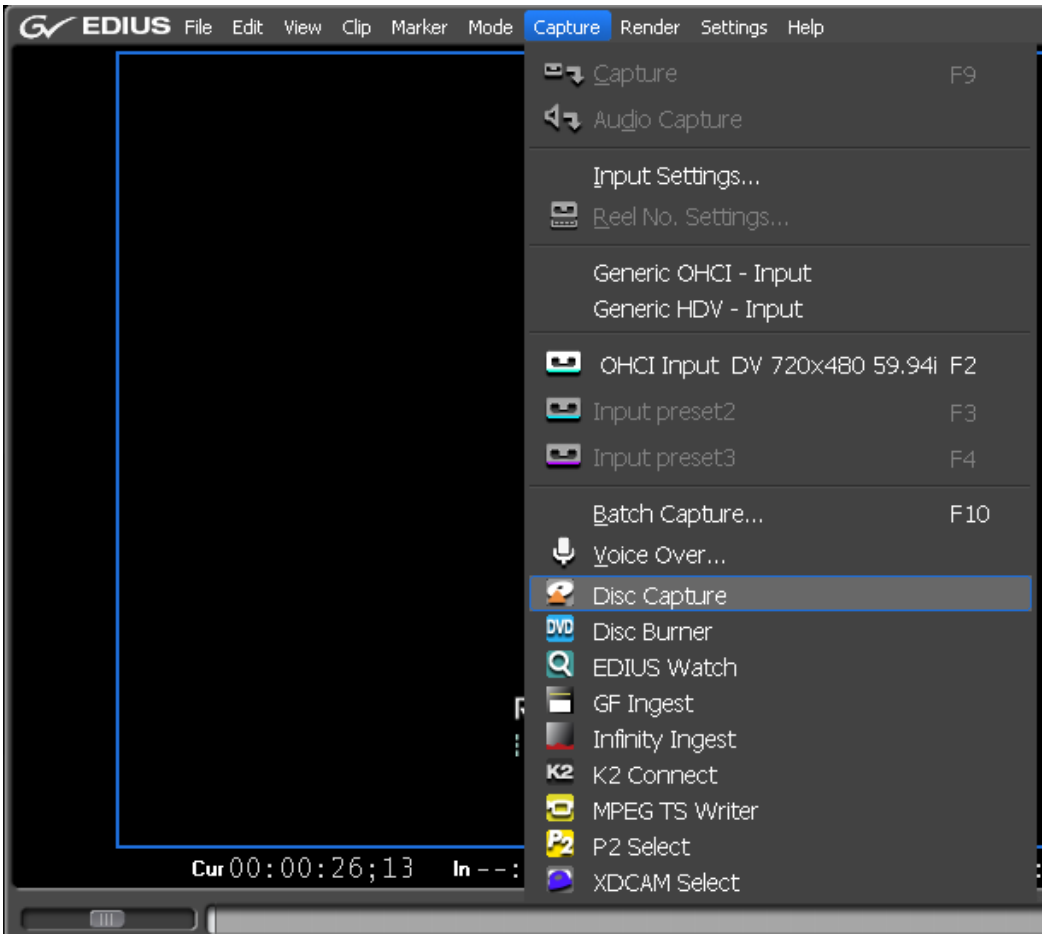
- .WAV - Audio CDs files
- .MPEG-2 - DVD-Video and DVD-VR files

Note Copy protected content cannot be captured.

To capture source material from a CD or DVD, perform the following actions:

1. Select Capture>DISCcapture from the Preview window menu bar. See Figure 202.

Figure 202. DISCcapture



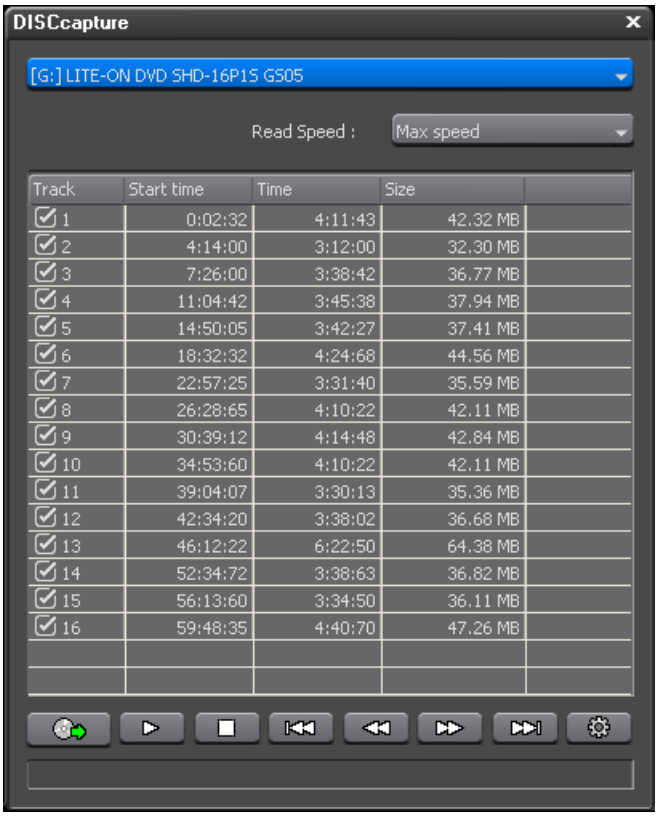
The DISCcapture application starts up.

If the desired source disc was already in the disc drive when DISCcapture was initiated, its contents will be displayed in the DISCcapture dialog (See Figure 203).

2. If the desired source disc is not in the drive, and there is more than one CD/DVD disc drive in the EDIUS computer, select the appropriate disc drive from the drop-down list in the DISCcapture dialog and insert the source disc in the drive.

The track list appears in the DISCcapture dialog as illustrated in Figure 203.

Figure 203. DISCcapture Track List



Note Track contents vary according to the source disc.

With Audio CDs, the track control buttons (see Figure 204) allow you to Play/Pause, Stop, Go to Previous Track, Rewind, Fast Forward, and Go to Next Track.

Figure 204. DISCcapture Track Control Buttons

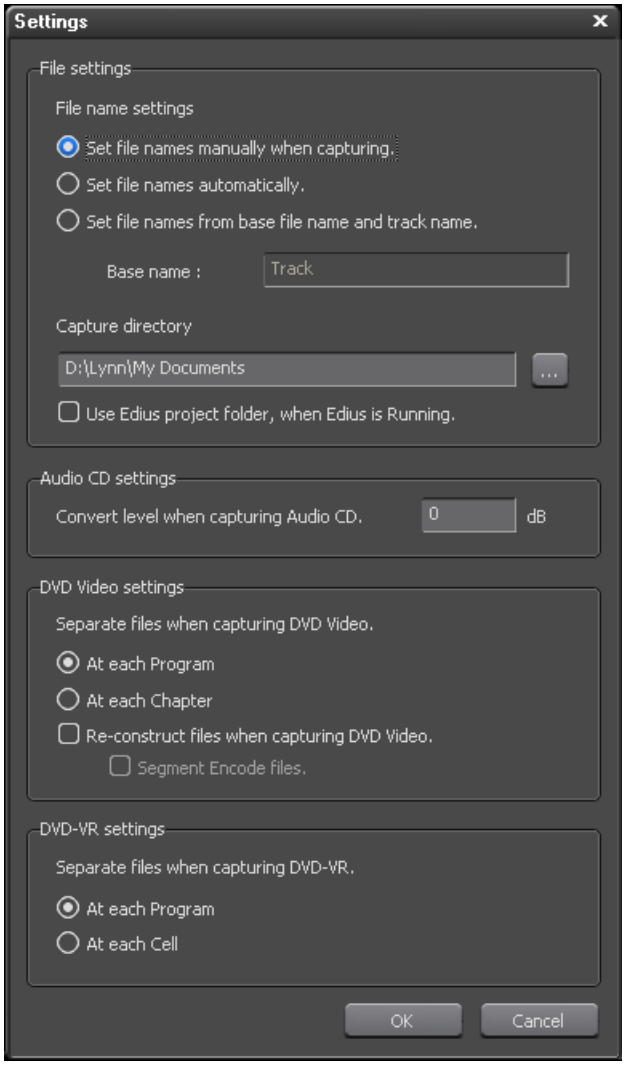
3. Select the track(s) you wish to capture.

Note By default, all tracks are selected for capture. To clear track selections, right click anywhere on the track list and select “Clear All Selections.” To select all tracks, right click on the track list and select “Select All Tracks.”

4. Click the settings button.

The Settings dialog shown in Figure 205 appears.

Figure 205. DISCcapture Settings Dialog



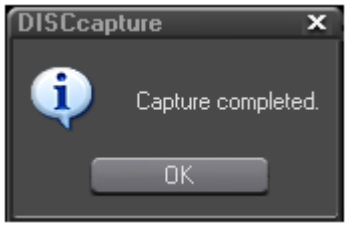
5. Specify the desired file naming, capture location and file division settings (see *DISCcapture Capture Settings* *on page 225* for more information) and click the **OK** button.

6. Click the capture button to begin capturing the selected tracks with the specified settings.

Note If you selected "Set file names manually when capturing" in the Settings dialog, the Save As dialog will appear in which you can specify the desired file name and location for the captured track. Click the **Save** button to begin track capture.

7. When the DISCcapture "Capture completed" message appears (see Figure 206), click the **OK** button.

Figure 206. DISCcapture Capture Completed Dialog



8. Click the '**X**" in the upper right corner of the DISCcapture dialog to close DISCcapture when all capture operations are complete.

Alternative Methods:

- To capture a single track, right click the desired track and select 'Capture This Track" from the menu.
- To capture all selected tracks, right click on the track list and select "Start Capture" from the menu.

DISCcapture Capture Settings

In the DISCcapture Settings dialog, the following capture parameters may be set:

- File Name Settings (select one)
  - Set file names manually when capturing - Displays a Save As dialog for each file in which the file name and location are specified before capturing.
  - Set file names automatically - Automatically names the captured files by combining the current date, time and track number. Files are stored in the specified capture directory.
  - Set file names from base file name and track name - Automatically create the file name by combining the base file name and track number. The base name is designated on the "Base name" field if this option is selected. Files are stored in the specified capture directory.
- Capture Directory
  - Specify the default directory location for storing captured files.
  - Select the "Use EDIUS project folder when EDIUS is Running" option if you wish to store captured tracks in the default EDIUS project folder.
- Audio CD Settings - To reduce the audio level of captured tracks, enter the dB value by which you want the level reduced. A level of "0" does not reduce the audio level.
- DVD Video Settings
  - Separate files when capturing DVD Video (select one)
    - At each Program - creates a separate capture file for each separate DVD file.
    - At each Chapter - creates a separate capture file for each chapter in the DVD file(s).
  - Re-construct files when capturing DVD video - If some captured files cannot be played, selecting this option may make it possible to playback captured files that were recorded by a DVD recorder.
  - Segment Encode files - If the "re-construct ..." option above is selected, this setting re-encodes only the necessary parts of the file.
- DVD-VR Settings
  - Separate files when capturing DVD Video (select one)
    - At each Program - creates a separate capture file for each separate DVD-VR file.
    - At each Cell - creates a separate capture file for each cell in the DVD-VR files.

Note "At each Cell" divides the files into small units which may result in MPEG files that are incompatible with the MPEG standard and cannot be played back when imported into the stream.

Capturing from Devices Not Controlled by Deck Settings

Some external playback devices cannot be controlled (started, stopped, etc) from EDIUS. Deck Settings (see *Deck Settings* *on page 142* for more information) do not apply to these devices and all source control operations must be performed manually on the device.

To capture clips from a device not controlled by deck settings, do the following:

1. On the external device, go to the point in the source at which you wish to begin capturing and stop or pause the device.
2. Select Capture>Input Settings in the Preview window.

The Input Settings dialog appears (see Figure 182 on page 209.)

3. Select the external input device name and input format.
4. Click the **OK** button.
5. Click the **Capture** button in the Player. See Figure 207.

Note Pressing [F9] on the keyboard will also initiate the capture process.

Figure 207. Player Capture Button

The Capture dialog appears and capturing begins.

6. Start or resume playback on the external playback device containing the source.
7. When the source has been played back to the point at which you wish to stop capturing, click the **Stop** button in the Capture dialog.

The captured clip is places in the Asset Bin

8. Stop playback on the external playback device.

Capturing Directly to the Timeline

Normally, captured clips are placed only in the Asset bin at the conclusion of the capture process; however, you can capture clips directly to the Timeline for immediate editing. To capture directly to the Timeline, do the following:

1. Select the VA track on which you wish to place the captured clip.

Figure 208. Capture to Timeline

2. Move the Timeline cursor to the point at which you wish to insert the captured clip. In Figure 208, the cursor is at the 00:03:05;00 mark.
3. Playback the source and set the desired In and Out points.

Note Setting no In and Out points causes the entire source to be captured.

4. Click the **Insert to Timeline** or **Overwrite to Timeline** button. See Figure 209.

Figure 209. Capture to Timeline Buttons

After capturing, the clip is placed on the track with the clip beginning at the cursor position. It is also saved to the Asset Bin.

See also *Three-Point Editing on page 338* (placing a clip between In and Out points on the Timeline) and *Four-Point Editing on page 339* (Placing In and Out points of a clip between the In and Out points on the Timeline).

Partial Download

Partial download is the ability to download partial clips from external media as a background operation. This function is available with P2, XDCAM, Infinity and GF hardware only.

Note If partial download is in progress, it will be halted during Timeline playback in order to ensure smooth playback.

To begin a partial download operation, Select File>Partial Download from the Preview window menu bar. The following options are available from this menu:

Current Sequence

Downloads clips used in the current sequence.

All Sequences

Downloads clips used in any Timeline sequence.

All Sequences and Bin

Downloads clips used in all sequences and in the Asset Bin even if they are not used on the Timeline.

Batch Capturing

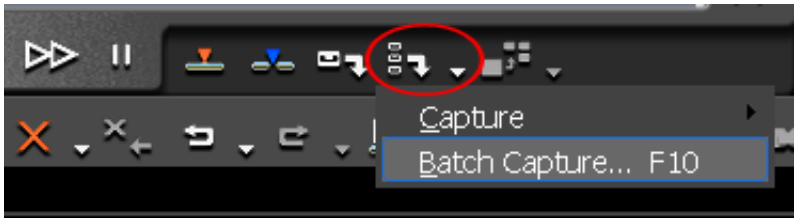
Batch capturing is the process of capturing multiple clips in one operation. These can be selected clips from different sources or multiple clips from the same source. Batch capturing works from a batch capture list that contains the source name and the desired In and Out points of the clips to be captures.

To create a batch capture list, perform the following actions:

1. Click the list button (▽) of the **Add to Batch Capture List** button and select "Batch Capture" from the menu. See Figure 210.

Note Pressing [F10] on the keyboard also starts batch capture.

Figure 210. Batch Capture Menu



2. Playback the source to be captured and set the In and Out point(s) as desired.

Note If an Out point is set at a timecode before the In point, the In, Out and Duration timecodes in the Player window are colored in red text. The range in red text will not be captured. See Figure 211 for an example.

Figure 211. Out Point Set Before In Point on Timeline

3. Click the **Add to Batch Capture List** button (click the button icon not the list button) to add the selected clip to the batch capture list.

Note Pressing [CTRL]+[B] on the keyboard also adds clips to the batch capture list.

4. Repeat steps 2 and 3 for all clips you wish to capture.

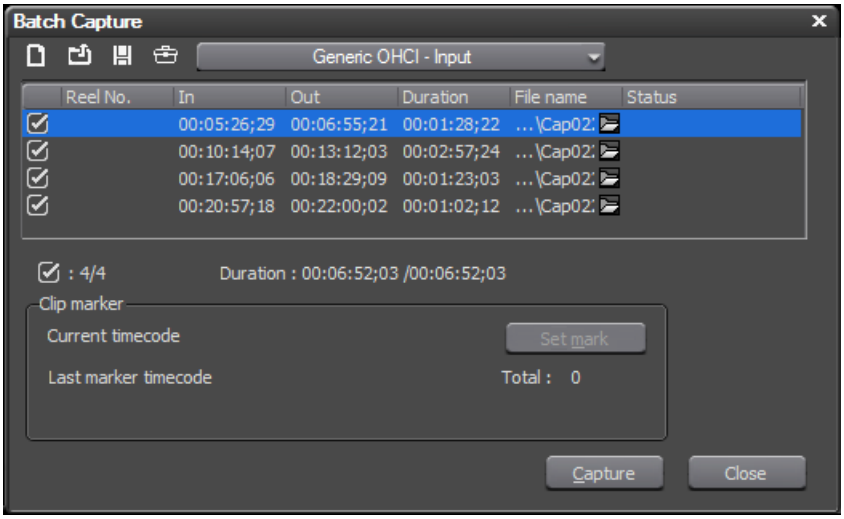
Note To capture additional clips from the same source, clear the previous In and Out points after adding the clip to the batch capture list.

5. After adding all desired clips to the batch capture list, click the list button (▽) of the **Add to Batch Capture List** button and select "Batch Capture" from the menu. See Figure 210.

Note You may also select Capture>Batch Capture on the Preview window to open the batch capture list.

The batch capture dialog in Figure 212 appears.

Figure 212. Batch Capture Dialog



Note If a reel name was set while defining Input Settings, it will be displayed in the Batch Capture dialog. See *Setting Reel Name* *on page 211* for more information.

6. De-select (remove the check mark) any clips you may want to exclude from the batch capture.

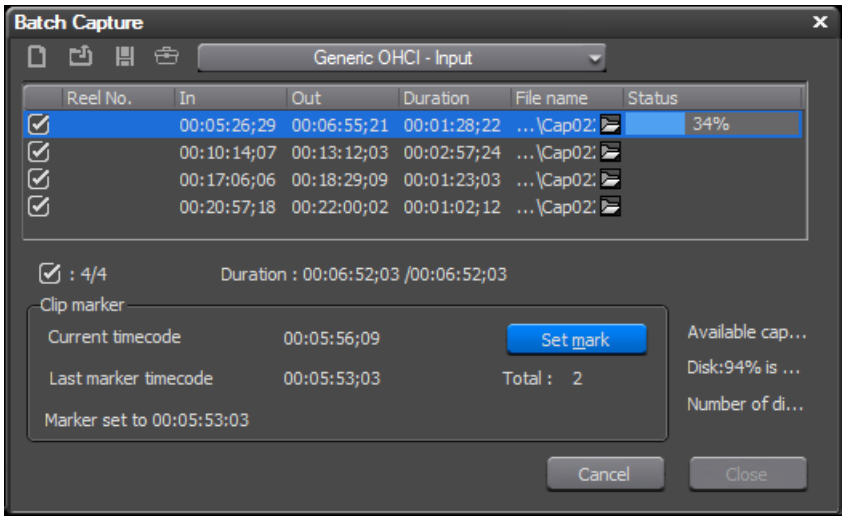
Note As clips are added to the batch capture list, they are automatically selected for inclusion in the batch capture.

7. Click the **Show Setup Dialog** button to verify the capture settings. Refer to *Capture Settings* *on page 207* for a discussion of appropriate batch capture settings.

8. Click the **Capture** button to begin capturing the clips in the batch capture list.

The Batch Capture dialog (see Figure 213 for an example) shows the batch capture operation in progress.

Figure 213. Batch Capture in Progress



9. While capturing a clip, clicking the **Set Mark** button will place a Clip marker at the current timecode location and the message "marker set to 00:00:00;00" (00:00:00;00 is replaced by the actual clip timecode) is displayed for five seconds. See *Sequence and Clip Markers* *on page 316* for more information on Clip markers.

Note The total number of Clip markers set during a batch capture operation is also displayed in the Batch Capture dialog.

10. When the batch capture is complete, click the **Close** button to exit the Batch Capture dialog.

The captured clips are placed in the Asset Bin and may be used in EDIUS projects.

Batch Capture Functions

Batch capture lists may be created, saved for future use and loaded from a previously saved file.

Creating a New Batch Capture List

With the Batch Capture dialog open, the existing batch capture list may be cleared and a new list created.

To create a new batch capture list, click the Create New Capture List button. Create a new list following the steps above.

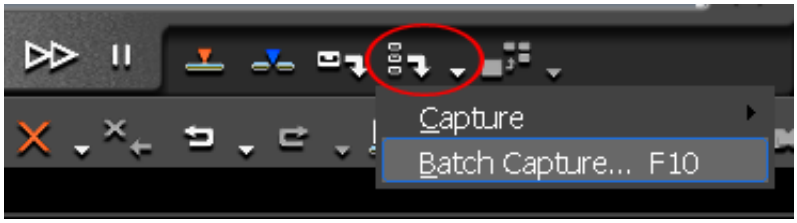
Saving Batch Capture Lists

To create a batch capture list, perform the following actions:

1. Click the list button (▽) of the **Add to Batch Capture List** button and select "Batch Capture" from the menu. See Figure 210.

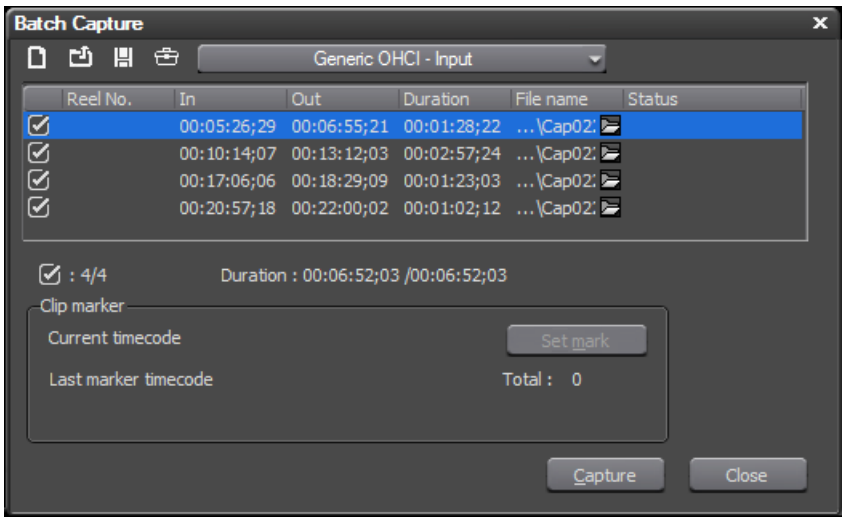
Note Pressing [F10] on the keyboard also starts batch capture.

Figure 214. Batch Capture Menu



The Batch Capture dialog appears with the current capture list. See Figure 215

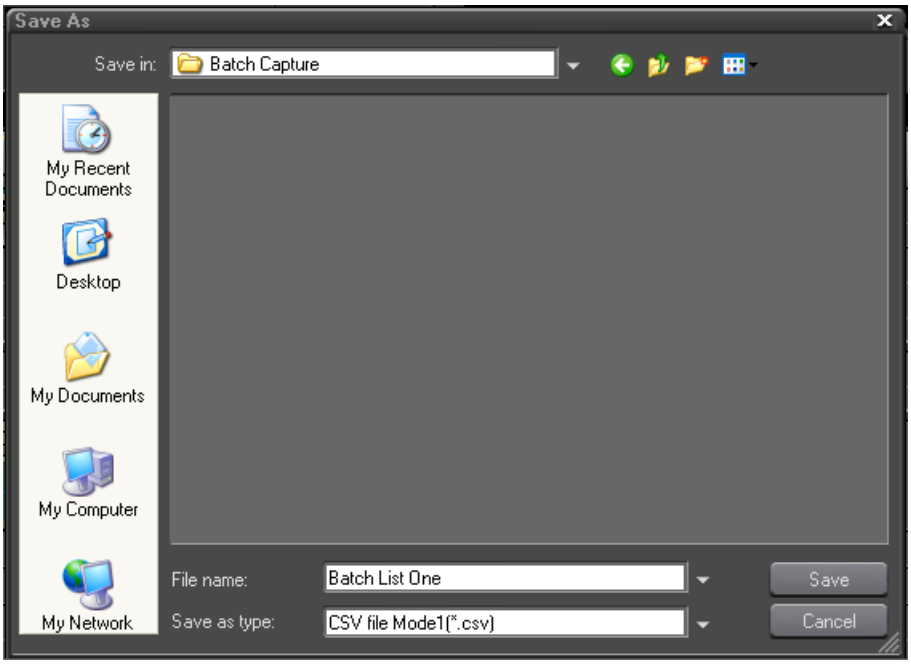
Figure 215. Batch Capt.ure List



2. Click the **Save Capture List** button.

The Save As dialog shown in Figure 216 appears.

Figure 216. Batch Capture List Save As Dialog



3. Specify the location, file name and file type in which to save the batch capture list and click the **Save** button.

Note Files may be saved in CSV Mode1 or CSV Mode2 formats.

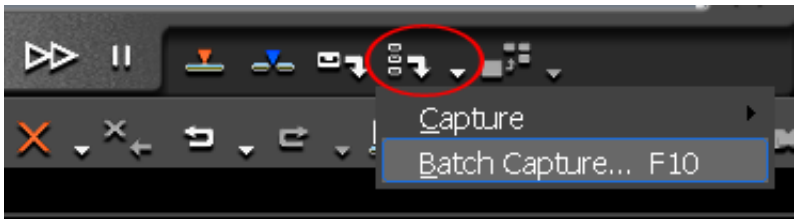
Loading Batch Capture Lists

To load an existing batch capture list, do the following:

1. Click the list button (▽) of the **Add to Batch Capture List** button and select "Batch Capture" from the menu. See Figure 210.

Note Pressing [F10] on the keyboard also starts batch capture.

Figure 217. Batch Capture Menu

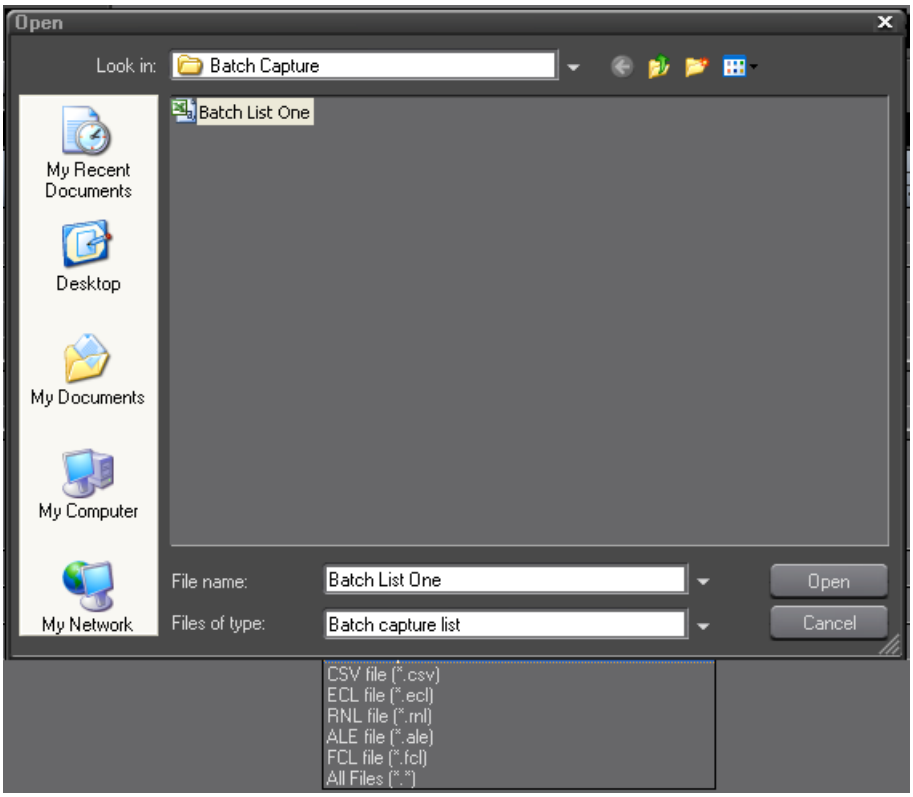


The Batch Capture dialog appears.

2. Click the **Load Capture List** button.

The Capture List Open dialog inFigure 218 appears.

Figure 218. Batch Capture List Open Dialog



3. Select the batch capture list to be opened and click the **Open** button.

Note As noted in Figure 218, batch capture lists in several formats may be opened in EDIUS.

The following batch capture list formats are supported:

- .CSV - comma delimited text file
- .ECL - batch capture list in binary format
- .RNL - files created by Grass Valley products such as StormNavi, Rex-Navi, RaptorNavi and EzNavi.
- .ALE - Avid batch capture list
- .FCL - Final Cut batch capture list

Importing Existing Clips or Stills into the Asset Bin

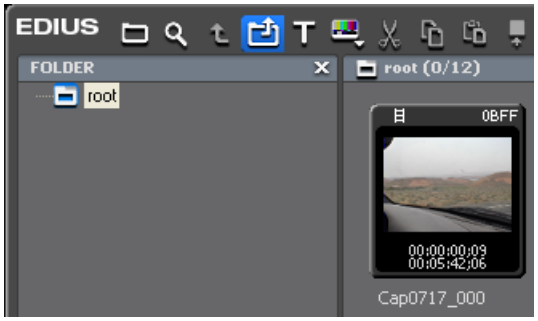
Capturing clips from external sources is one way of placing clips in the Asset Bin. However, there might also be existing clips or still files stored on the EDIUS computer local disk or attached storage that may be imported into the Asset Bin for use in EDIUS.

To import existing clips or stills into the Asset Bin, do the following:

1. Click the **Add Files** button in the Asset Bin window. See Figure 219. The **Add Files** button is highlighted in blue.

Note Pressing [CTRL]+[O] on the keyboard is another way in which files can be added to the Asset Bin.

Figure 219. Add Files to Asset Bin



A file Open dialog appears.

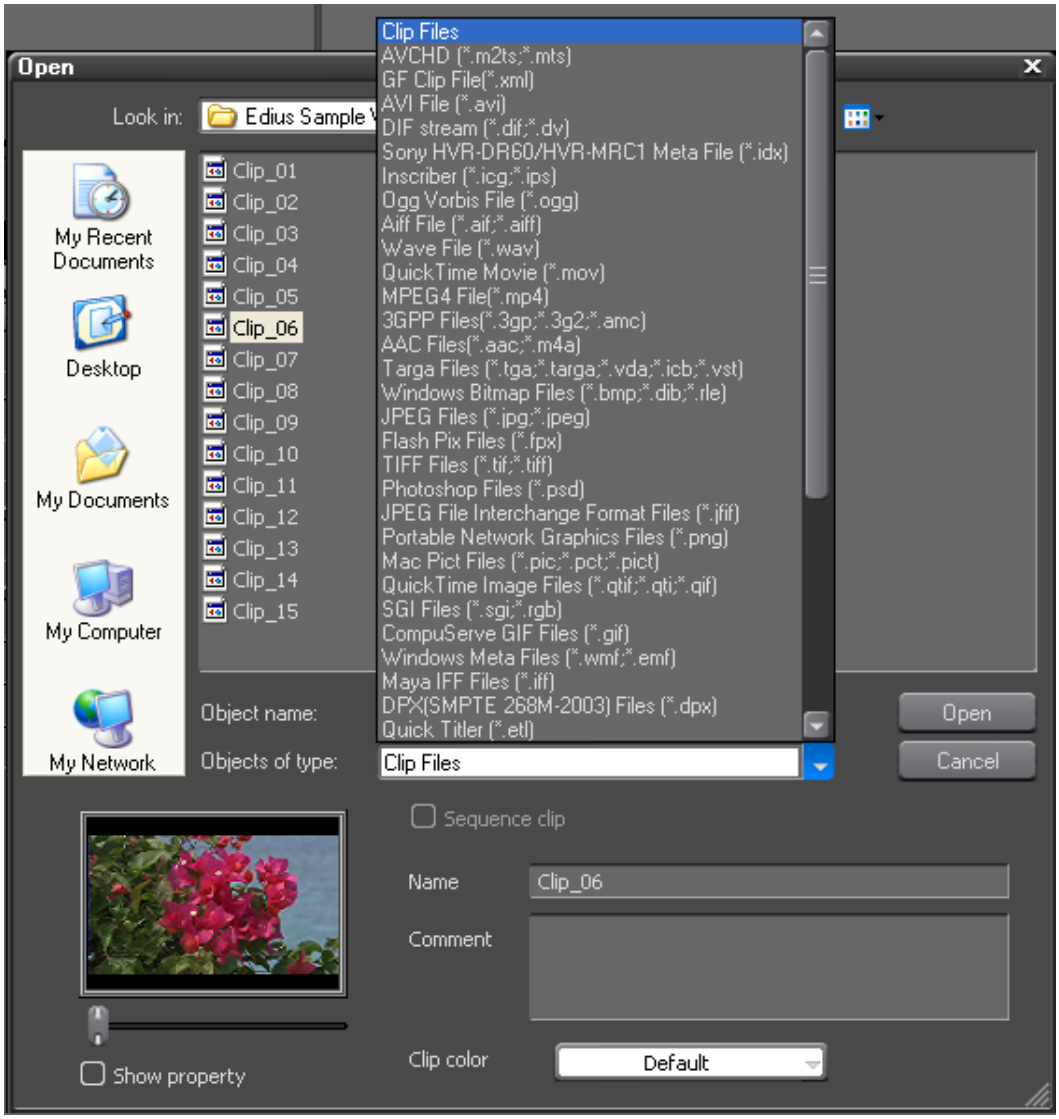
2. Navigate to the drive and directory in which clips or stills to be imported are stored.

3. Select the file(s) to be imported.

Note Multiple files may be selected by holding down the [CTRL] key while clicking on the desired files.

As illustrated in Figure 220, files of many different types may be imported into the EDIUS asset bin. You can use the file type list to browse for files of a particular type or display all files in the directory.

Figure 220. File Type List



4. When all the files you wish to import have been selected, click the **Open** button.

The selected files are placed in the Asset Bin and are available for use in EDIUS project.

Importing Still Sequences

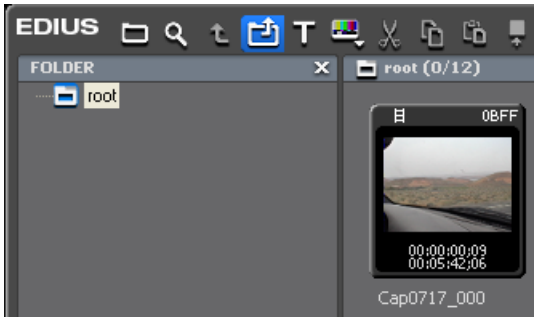
Still sequences are consecutively numbers still image that may be treated as a single clip. In order to be imported into EDIUS as a still sequence, the files must be consecutively numbered (e.g JPG_100, JPG_101, JPG_102, etc.) and stored in the same directory.

To import a series of still images into the Asset Bin as a sequence, do the following:

1. Click the **Add Files** button in the Asset Bin window. See Figure 221. The **Add Files** button is highlighted in blue.

Note Pressing [CTRL]+[O] on the keyboard is another way in which files can be added to the Asset Bin.

Figure 221. Add Files to Asset Bin

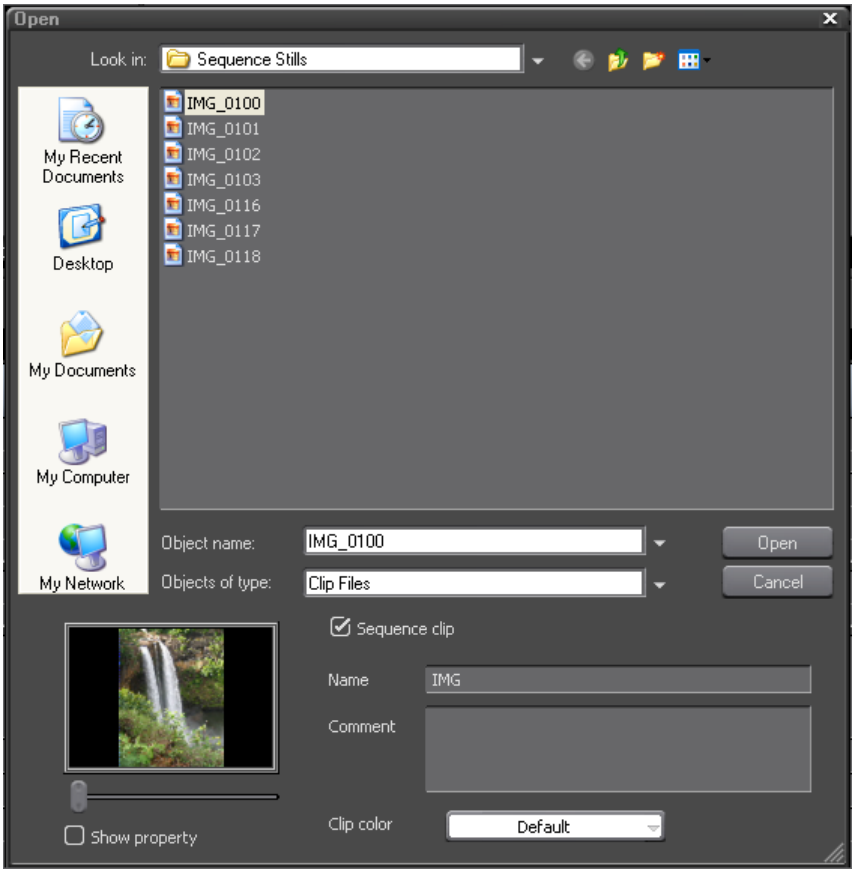


A file Open dialog appears.

2. Navigate to the drive and directory in which the stills to be imported as a sequence are stored.

3. Select the first file in the sequence and select the “Sequence clip” option. See Figure 222.

Figure 222. Import Stills as Sequence



4. Click the **Open** button to import all the consecutively numbered still images in the same folder as a sequence.

Note In Figure 222, there are seven still images in the folder; however, only the first four will be imported as a sequence as they are consecutively numbered (JPG_100 through JPG_103). The next still after JPG_103 is named JPG_116 and, thus, breaks the consecutive numbering rule. JPG_116 to JPG_118 may be imported as a separate sequence.

Once stored in the Asset Bin, sequence clips may be used as sequence or divided into separate still images.

For more information on the Asset Bin and the various file types that can be stored and managed in the Asset Bin, see *Section 4-Clip Operations and Management*.

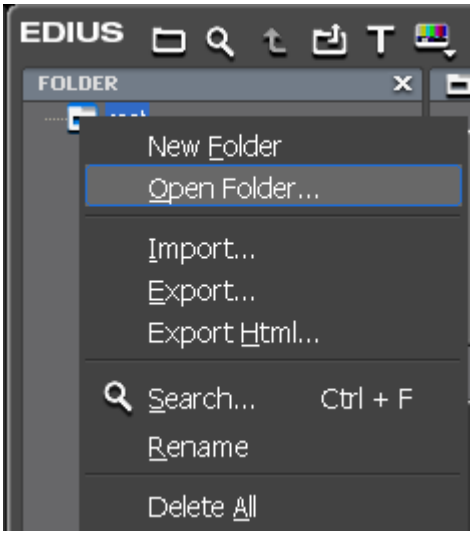
Importing Folders

Folders and their contents can be imported into the Asset Bin. These folders may contain video and audio clips or stills. To import a folder into the Asset Bin, do the following:

1. Right-click a folder icon in the Asset Bin folder view and select "Open Folder" from the menu. See Figure 223.

Note The folder icon on which you right click will be the parent folder under which the imported folder and its contents will be stored.

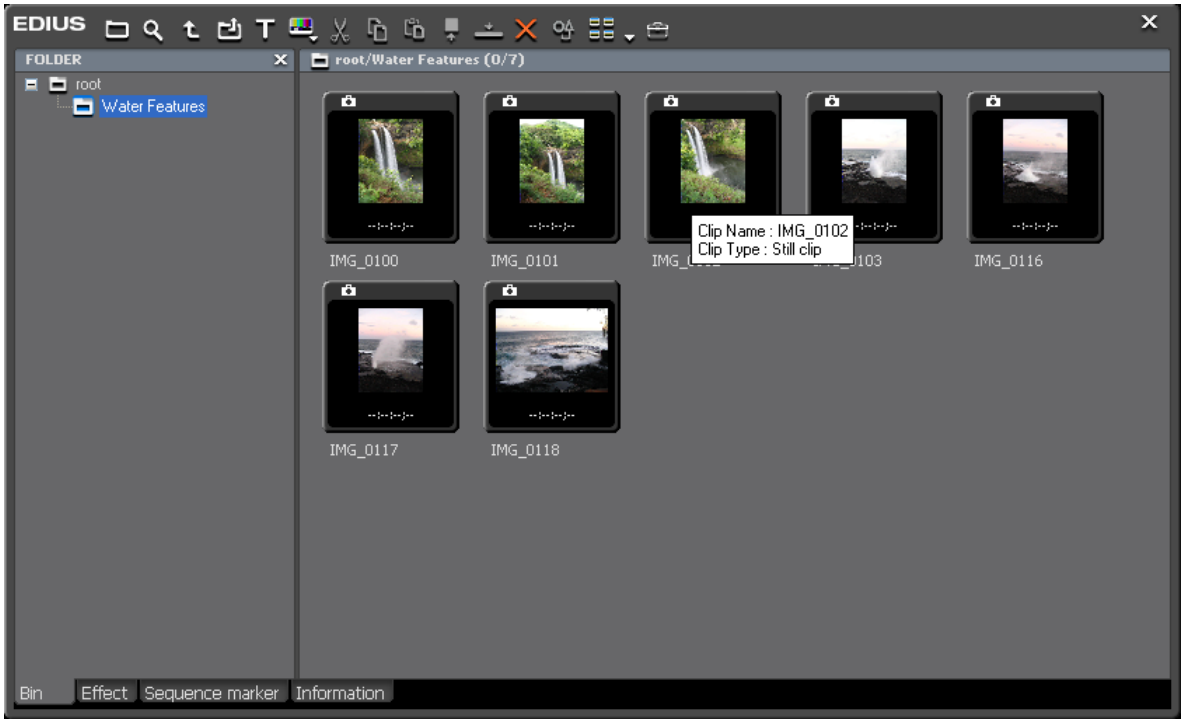
Figure 223. Asset Bin Open Folder



2. Navigate to the folder you wish to import and click the **OK** button.

The Folder and its contents are imported one level beneath the folder on which you right-clicked in Step 1. See Figure 224 for an example.

Figure 224. Imported Folder and Contents



Alternative Method:

Navigate to the desired folder in Windows Explorer and drag and drop the folder into the clip view or a folder in the Asset Bin folder view.

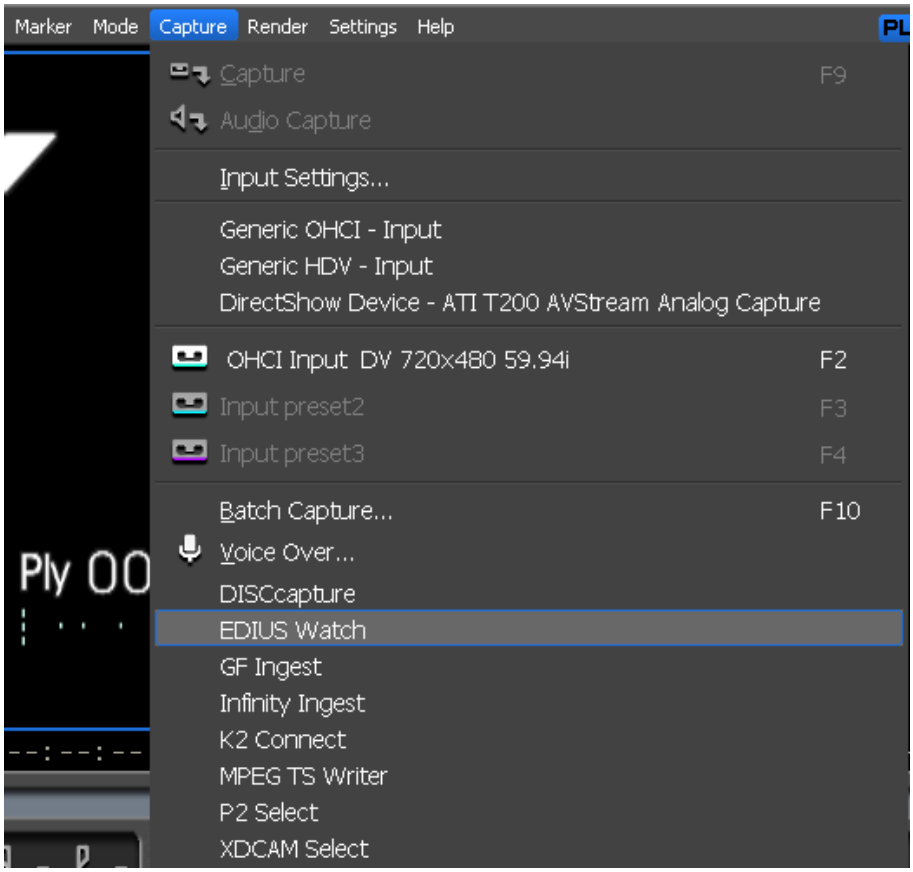
Automatic (Watch Folder) Import

Watch folders are folders that are watched by EDIUS. When new content is added to these folders, that content is imported automatically into the Asset Bin.

To specify and configure a watch folder, do the following:

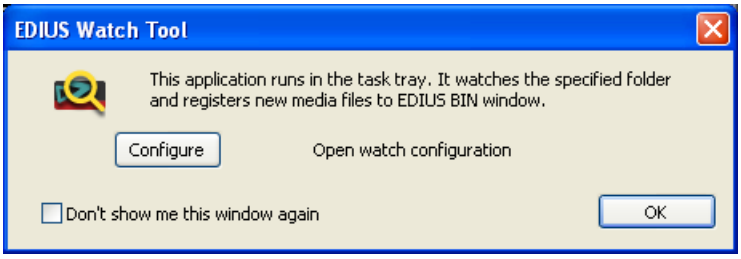
1. Select Capture>EDIUS Watch in the Preview window menu bar as shown in Figure 225.

Figure 225. Capture Menu - EDIUS Watch



The EDIUS Watch application starts and the dialog shown in Figure 225 appears.

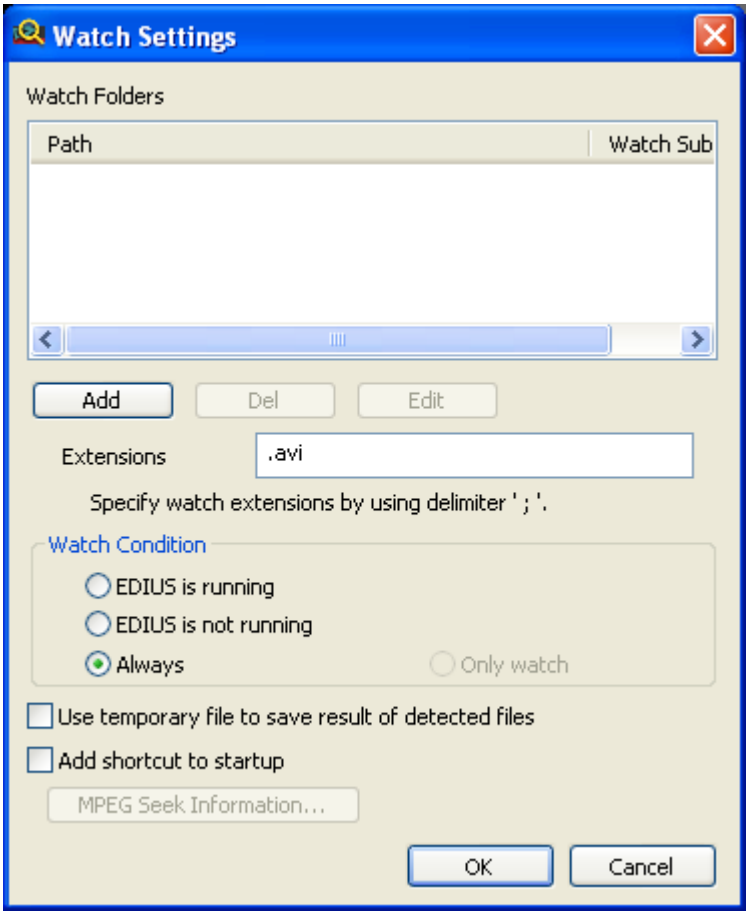
Figure 226. EDIUS Watch Tool Dialog



2. Click the **Configure** button to configure the Watch Tool.

The Watch Settings dialog illustrated in Figure 227 appears.

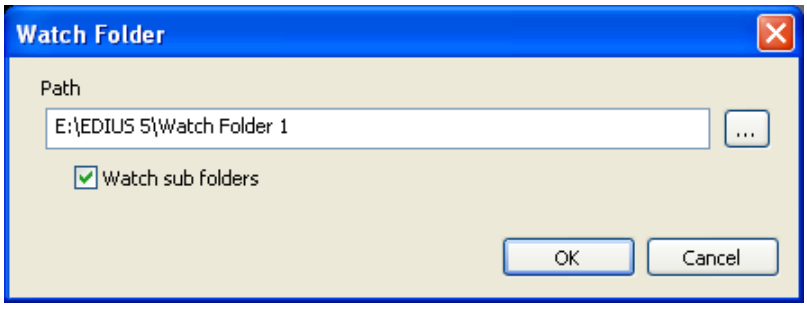
Figure 227. Watch Tool Settings



3. Click the **Add** button to add a watch folder.

The Watch Folder Path dialog shown in Figure 228 appears.

Figure 228. Watch Folder Path Dialog



4. Click the ... button and navigate to the desired watch folder.

5. Select the "Watch sub folders" option if you wish to have sub-folders of the selected folder watched.

6. Click the **OK** button.

7. Repeat Step 3 through Step 6 for any additional watch folders you wish to add.

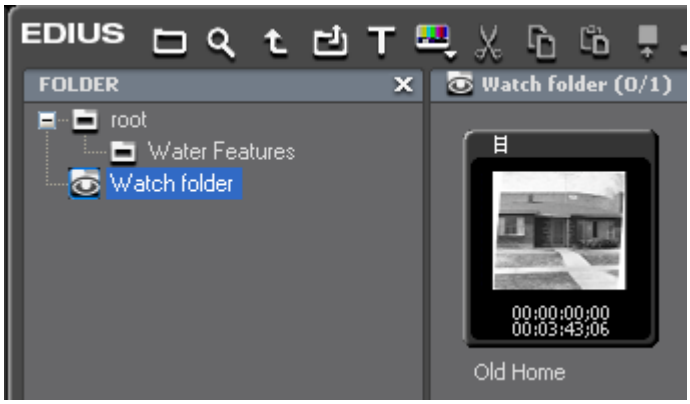
8. Click the **OK** button in the Watch Settings dialog to begin watching the selected folders.

Note For information on configuring watch folder settings, see *Watch Folder Settings* *on page 243*.

The EDIUS Watch icon ( ) appears in the task tray to indicate that folder watching is active.

When content is added to a watched folder, a Watch Folder is created in the Asset Bin folder view and the new content is added to that folder. See Figure 229 for an example.

Figure 229. Asset Bin Watch Folder



Watch Tool rules:

- If a file added to a watch folder has the same name as a file already in the Asset Bin Watch Folder, the new file will not be added. If the file name is changed in a watched folder, the file is added to the Asset Bin.
- If a watched folder is moved, the files from that folder in the Asset Bin Watch Folder will be considered offline clips. See Figure 230.

Figure 230. Watch Folder Offline Clip

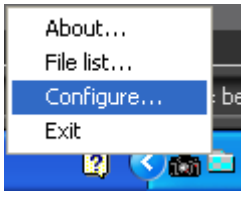
- Files are watched only when the EDIUS Watch Tool application is running. If must be started manually from within EDIUS or configured to start automatically when Windows starts. See *Watch Folder Settings* *on page 243* for more information.

Watch Folder Settings

To configure the Watch Tool in the task tray, do the following:

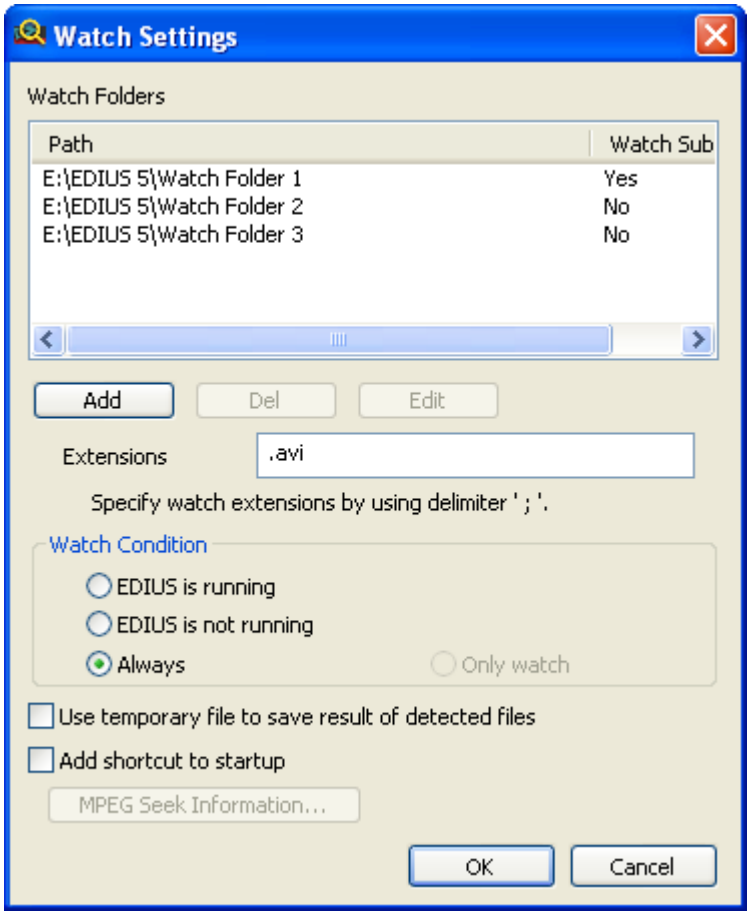
1. Right-click the EDIUS Watch Tool icon in the task tray and select "Configure" from the menu. See Figure 231.

Figure 231. EDIUS Watch Tool Configure



The Watch Settings dialog illustrated in Figure 232 appears.

Figure 232. Watch Folder Configuration



2. Add any additional folders you wish to watch by clicking the **Add** button.

3. Delete or edit watch folders by selecting the desired folder and clicking the **Del** or **Edit** buttons.

4. Modify the extensions list by entering the file extensions the Watch Tool should watch for. Any files with these extension will be added to the Asset Bin Watch Folder.

Note Separate file extensions with a ";". Wildcard characters such as "*" and "?" are not allowed. An extension list may be similar to the following: .avi; .mpg; .jpg; .mov

5. Specify the desired Watch Condition by selecting one of the following:

Note Watch Condition options apply only if the Watch Tool is running. The Watch Tool must be manually started from within EDIUS (it remains running when EDIUS is shutdown) or set to start automatically when Windows starts (see Step 7.

- EDIUS is running - When a file is added to a watch folder while EDIUS is running, the file is automatically added to the Asset Bin. If EDIUS is not running, no files are added to the Asset Bin.
- EDIUS is not running - Files added to watch folders are added to the Asset Bin only when EDIUS is not running. If EDIUS is running, no files are added to the Asset Bin.
- Always - Files added to watched folders are added to the Asset Bin whether or not EDIUS is running.

6. Only Watch - Select the "Use temporary file to save results of detected files" to save the detected file results in a temporary file which will be used on the next EDIUS startup.

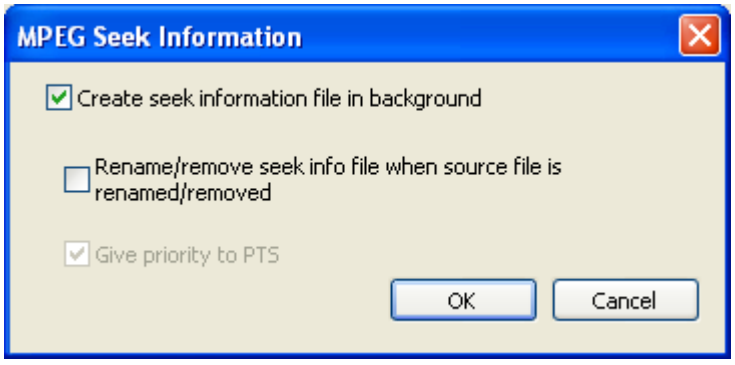
Note Selecting this option restores the last watch folder status on startup. This option should not be selected if the environment changes significantly between EDIUS sessions.

7. Select the "Add shortcut to startup" option to start the EDIUS Watch Tool automatically when Windows starts.

8. Click the **MPEG Seek Information** button, configure this setting as desired (See Figure 233) and click the **OK** button.

Note This button is available only if the .mpg file extension is specified in the Extensions list. Creating a seek information file can improve MPEG file performance.

Figure 233. Watch Tool MPEG Seek Information Dialog



9. Click the **OK** button in the Watch Settings dialog.

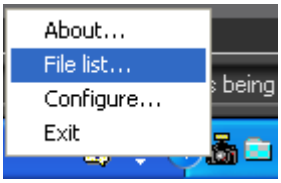
Note When watching network folders, user name/password protection on these folders must be removed.

Managing the Watched Folders File List

To view and manage the watched folders file list, do the following:

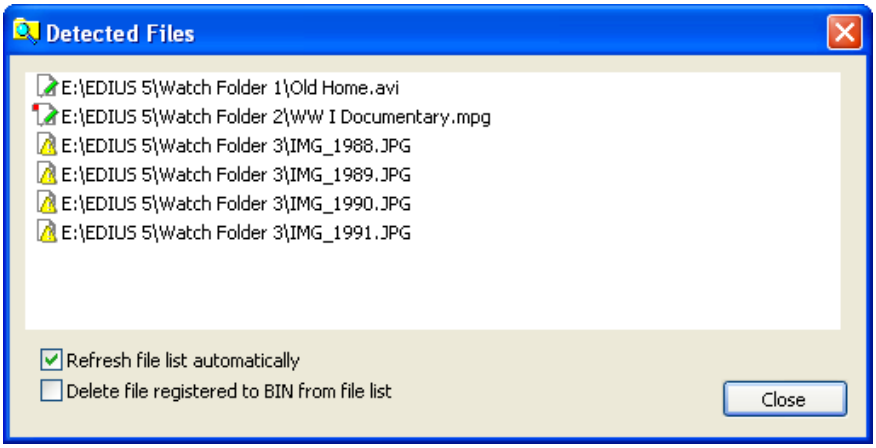
1. Right-click the Watch Tool icon in the task tray and select "File list" from the menu. See Figure 234.

Figure 234. EDIUS Watch Tool File List



The Detected Files dialog in Figure 235 appears.

Figure 235. EDIUS Watch Tool Detected Files Dialog



The icons that may appear in the list and their meaning is as follows:

- - File saved in the Asset Bin
- - File saved in the Asset Bin and MPEG seek info created
- - File not yet saved to Asset Bin
- - Deletion of file detected
- - File name change detected
- - File does not exist

2. Select the "Refresh file list automatically" option if desired.

Note If this option is enabled, the list refreshed automatically when a new file is added to the list.

3. Select the "Delete file registered to BIN from file list" option if desired.

Note If this option is enabled, the file in the file is deleted after is it saved to the Asset Bin. A change in this option is only in effect after the EDIUS Watch Tool is restarted.

4. Select any file(s) in the list you do not want stored in the Asset Bin. Right-click and select "Delete from List" to remove them from the file list.

Note You may also press the [DEL] key on the keyboard to remove selected files from the file list. These files are removed from the list only. They remain in the watch folder(s).

To see how many files are in the watched folder file list that have not yet been saved to the Asset Bin, position the mouse cursor over the Watch Tool icon in the task tray. Hover text appears showing the number of files yet to be saved to the Asset Bin.

Section 4

Clip Operations and Management

This section explains the operations associated with creating and managing clips in the Asset Bin and the Timeline.

For more information on capturing and importing clips to the Asset Bin, see *Section 3-Capturing and Importing Clips and Stills*.

Clip Storage

The following clip types can be saved in the Asset Bin:

- Video clips
- Still image clips
- Audio clips
- Color bars
- Color matte
- Title clips
- Timeline sequence clip
- Sequence clip

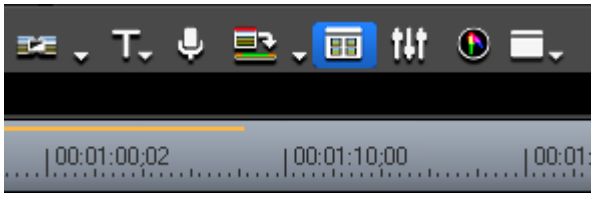
Video, audio, still and sequence clips are captured or imported for use in projects. Color bars, color matte and title clips are created from within EDIUS or external applications. Timeline Sequence clips are created by EDIUS as the result of building projects with the other clip types.

Clip Display Properties

If the Asset Bin window is not displayed, click the **Toggle bin window display** button (highlighted in blue in Figure 236) on the Timeline to show the Asset Bin.

Note Pressing [B] on the keyboard also toggles the Asset Bin window display.

Figure 236. Toggle Asset Bin Display Button

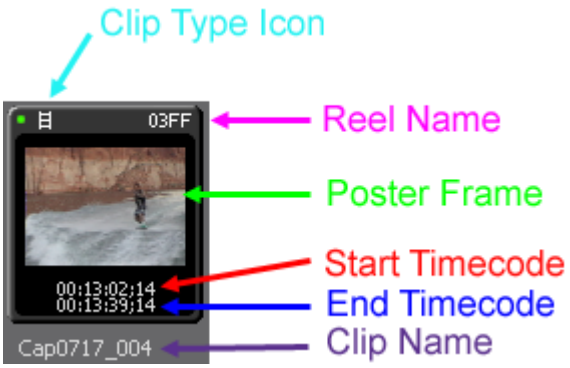


Clips stored in the Asset Bin have the display properties by type as explained below.

Note The descriptions below are with the Asset Bin View set to "Clip Width (Large)." For more information on changing the Asset Bin view, see

Video Clip

Figure 237. Video Clip Display Properties

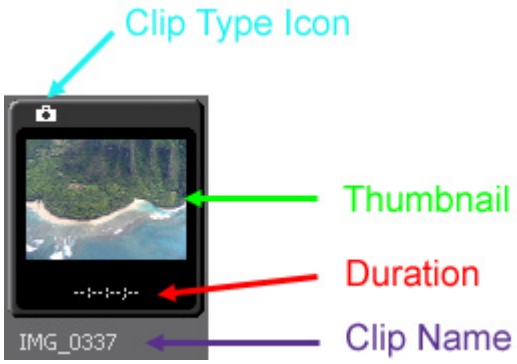


- Clip Type Icon - a unique icon that identifies the clip type.
- Reel Name - the name of the source reel as set by user or automatically generated during capture and import operations.
- Poster Frame - the clip frame that serves as the clip thumbnail.
- Start Timecode - the beginning timecode of the clip.
- End Timecode - the end timecode of the clip.
- Clip Name - the name of the clip as automatically generated during capture or import or entered by the user.

Note The green dot in the upper left corner indicates the clip is used in a sequence in the current project. Clips of any type will have this indicator when they are used in a sequence.

Still Image Clip

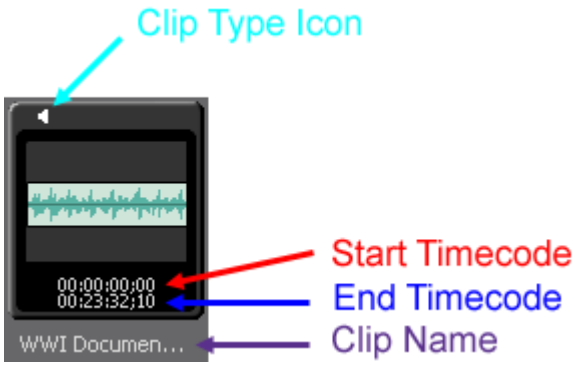
Figure 238. Still Image Clip Display Properties



- Clip Type Icon - a unique icon that identifies the clip type.
- Thumbnail - a small version of the still image for easy identification.
- Duration - not set at time of clip creation. Duration is created if the clip is placed on a Timeline track and then stored again in the Asset Bin.
- Clip Name - the name of the clip as automatically generated during capture or import or entered by the user.

Audio Clip

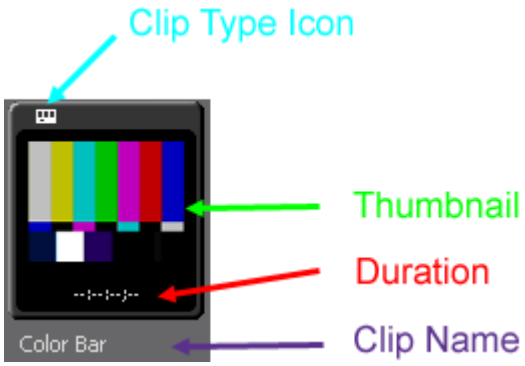
Figure 239. Audio Clip Display Properties



- Clip Type Icon - a unique icon that identifies the clip type.
- Start Timecode - the beginning timecode of the clip.
- End Timecode - the end timecode of the clip.
- Clip Name - the name of the clip as automatically generated during capture or import or entered by the user.

Color Bar Clip

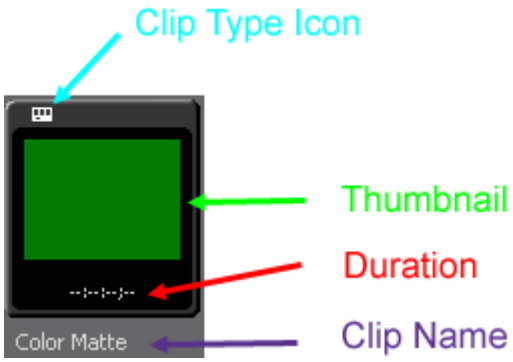
Figure 240. Color Bar Clip Display Properties



- Clip Type Icon - an icon that identifies the clip type.
- Thumbnail - a small version of the image for easy identification.
- Duration - not set at time of clip creation. Duration is created if the clip is placed in a Timeline track and then stored again in the Asset Bin.
- Clip Name - the name of the clip as automatically generated during creation or entered by the user. “Color Bar” is the default clip name.

Color Matte Clip

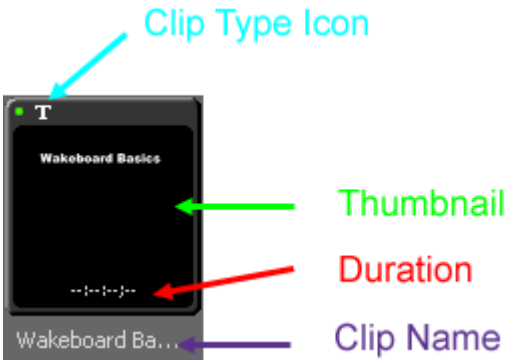
Figure 241. Color Matte Clip Display Properties



- Clip Type Icon - a icon that identifies the clip type.
- Thumbnail - a small version of the still image for easy identification.
- Duration - not set at time of clip creation. Duration is created if the clip is placed in a Timeline track and then stored again in the Asset Bin.
- Clip Name - the name of the clip as automatically generated during creation or entered by the user. “Color Matte” is the default clip name.

Title Clip

Figure 242. Title Clip Display Properties



- Clip Type Icon - a unique icon that identifies the clip type.
- Thumbnail - a small version of the still image for easy identification.
- Duration - not set at time of clip creation. Duration is created if the clip is placed in a Timeline track and then stored again in the Asset Bin.

Note When animated titles are created, their duration is specified at clip creation.

- Clip Name - the name of the title clip as specified in the title creation application.

Timeline Sequence Clip

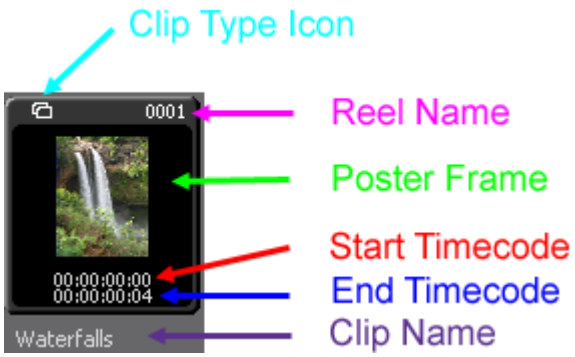
Figure 243. Timeline Sequence Clip Display Properties

- Clip Type Icon - a unique icon that identifies the clip type.
- Reel Name - the name of reel as set by user
- Poster Frame - the clip frame that serves as the clip thumbnail.
- Start Timecode - the beginning timecode of the clip.

- End Timecode - the end timecode of the clip.
- Clip Name - the name of the sequence clip as automatically created by EDIUS or entered by the user.

Sequence Clip

Figure 244. Sequence Clip Display Properties



- Clip Type Icon - a unique icon that identifies the clip type.
- Reel Name - the name of reel as set by the user.
- Poster Frame - the clip frame that serves as the clip thumbnail
- Start Timecode - the beginning timecode of the clip.
- End Timecode - the end timecode of the clip.
- Clip Name - the name of the clip as automatically generated during capture or import or entered by the user.

Renaming Clips

To rename any clip, do one of the following:

- Select a clip and click on the clip name
- Right-click the clip and select “Rename Clip” from the menu.
- Select a clip and press the [F2] key on the keyboard.

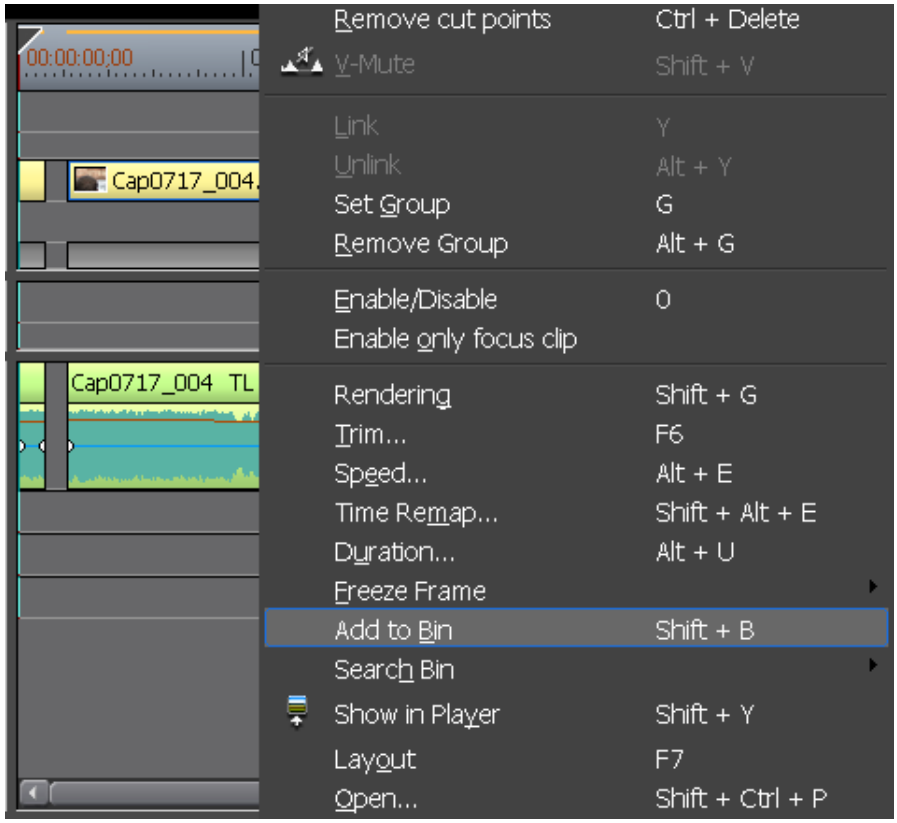
Saving Clips from the Timeline

After clips have been edited on the Timeline, you may wish to save them in the Asset Bin in their edited form. Editing clips on the Timeline does not modify the original clip in the Asset Bin.

To store a Timeline clip to the Asset Bin, do one of the following:

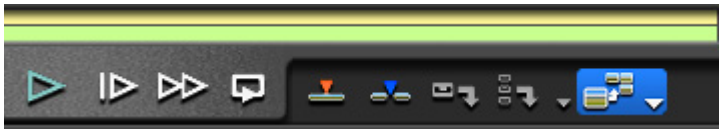
- Right-click on the clip on the Timeline and select "Add to Bin" from the menu as shown in Figure 245.

Figure 245. Add Timeline Clip to Asset Bin



- Select the clip and press [SHIFT]+[B] on the keyboard.
- Drag and drop the clip from the Timeline to the Asset Bin.
- Select Clip>Add to Bin from the Preview window.
- Double-click a clip to display it in the Player and click the list button [▽]on the **Update Bin** button (highlighted in blue in Figure 246) in the Player. Select "Add Clip to Bin" from the menu.

Figure 246. Player Update Bin Button



- Double-click a clip to display it in the Player and drag and drop it from the Player to the Asset Bin.

Note If you change In and Out points on a clip and you double-click the clip to display it in the Player; clicking the **Update Bin** button (highlighted in blue in Figure 246) updates the original clip in the bin with the new information.

Creating Clips

Video, audio, still and sequence clips are created by the capturing and importing processes as explained in *Section 3-Capturing and Importing Clips and Stills*.

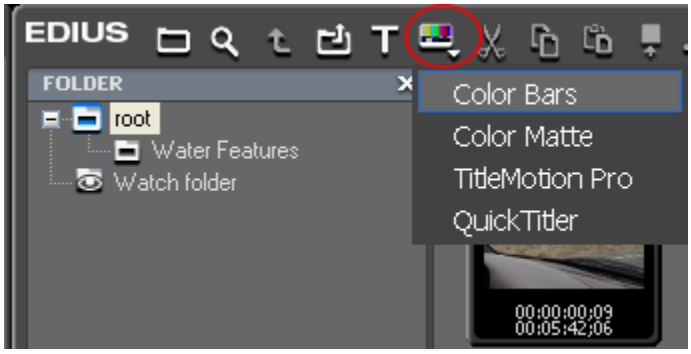
Color Bar, Color Matte and Title clips are created from within EDIUS or an external application. Sequences may also be created by conjoining multiple clips. Sequences may be created by storing individual clips in a sequence of stills or video clips.

Create a Color Bar Clip

To create a Color Bar clip, follow these steps:

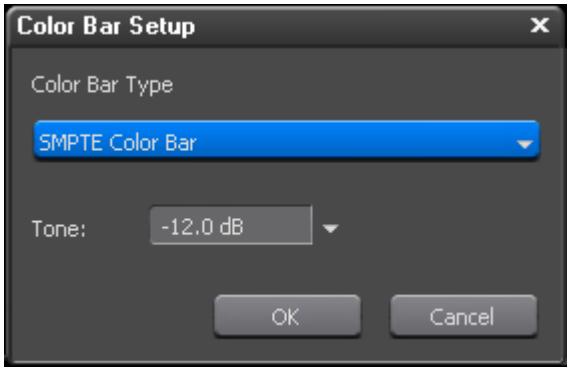
1. Click the **New Clip** button in the Asset Bin and select "Color Bars" from the menu. See Figure 247.

Figure 247. Asset Bin New Clip Menu - Color Bars



The Color Bar Setup dialog shown in Figure 248 appears.

Figure 248. Color Bar Setup Dialog



2. From the Color Bar Type drop-down list, select the desired color bar type from the following options:

- SMPTE Color Bar
- ARIB Multiformat Color Bar
- 75/x/75/x Color Bar
- 100/x/75/x Color Bar
- 100 x/100x/Color Bar
- ITU-R BT.801 100/x/75/x Color Bar
- ITU-R BT.801 100/x/100/x Color Bar
- SPECIAL Bar

3. Set the desired Tone level by select the form one of the following Tone levels in the Tone drop-down list:

- -12 dB
- -18 dB
- -20 dB
- Mute

4. Click the **OK** button.

Alternative Methods:

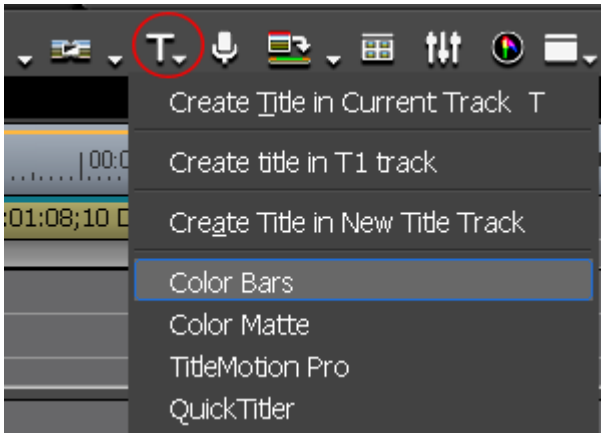
- Select File>New>Color Bars from the Preview window menu bar. The Color Bar clip is placed at the Timeline cursor position on the active track as the In point.

Note If In and Out points are set on the Timeline, the clip is placed between the In and Out point with the appropriate duration.

- Right-click on a blank space in the Asset Bin clip view area and select New Clip>Color Bars from the menu.
- Click the list button [▽]on the **Create Title** button on the Timeline and select "Color Bars" from the menu (see Figure 249). The Color Bar clip is placed at the Timeline cursor position on the active track as the In point.

Note If In and Out points are set on the Timeline, the clip is placed between the In and Out point with the appropriate duration.

Figure 249. Create Title Button Menu - Color Bars



- Set In and Out points on the Timeline. Right-click on the track in which you wish to place a clip and select New Clip>Color Bars from the menu. A Color Bar clip with a duration between the In and Out points is created.

Modify Color Bar Properties

To modify the properties associated with a Color Bar clip, do any of the following:

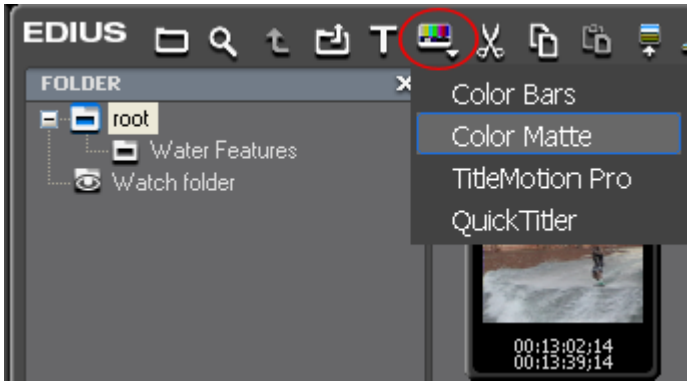
- Right-click on the Color Bar clip in the Asset Bin and select "Edit."
- Double-click the Color Bar clip in the Asset Bin.
- Right-click on the Color Bar clip in the Timeline and select "Edit."
- Double-click on the Color Bar clip on the Timeline.

Create a Color Matte Clip

To create a Color Matte clip, do the following:

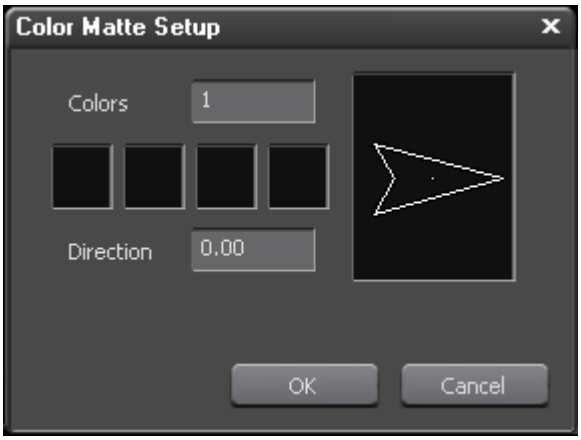
1. Click the **New Clip** button in the Asset Bin and select "Color Matte" from the menu. See Figure 250.

Figure 250. Asset Bin New Clip Menu - Color Matte



The Color Matte Setup dialog in Figure 251 appears.

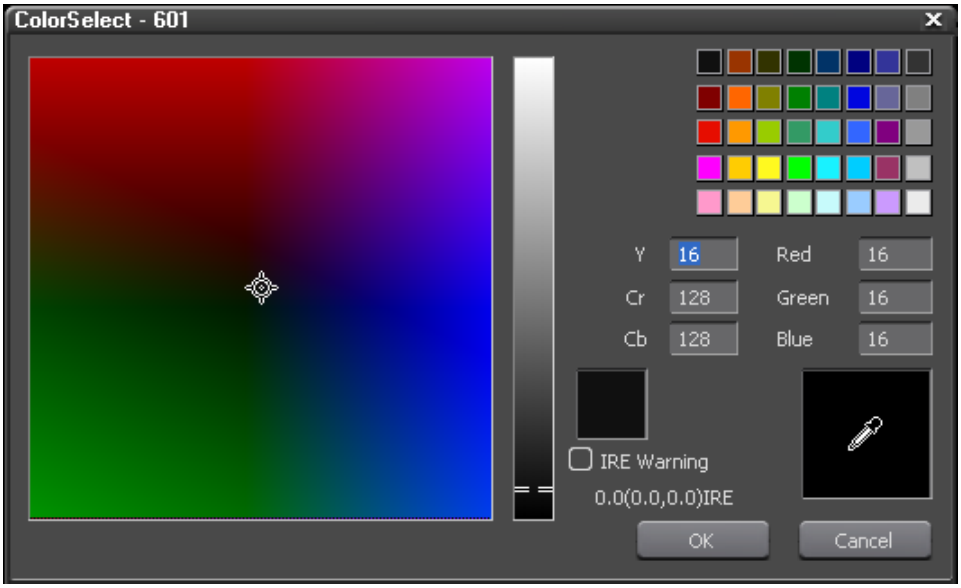
Figure 251. Color Matte Setup Dialog



2. Click a blank color box (begin with the one on the left) of the four-box color palette.

The ColorSelect dialog shown in Figure 252 appears.

Figure 252. Color Matte Color Select Dialog



3. Select the IRE Warning option if desired.

Note If the IRE Warning option is selected, colors selected with the color chart and color bar are limited to a luminance safe color range.

4. Select the color for the first color box using any of the following methods:

- Drag and click the cursor in the color chart on the left to set the color.
- Drag the cursor up and down the color bar to select the color.
- Select a color from the color box in the upper right.
- Enter the color number values in YCrCb or RGB fields.
- Click the color picker (eyedropper in the lower right) and click on a color in the Player/Recorder.

The selected color is displayed in the color preview box.

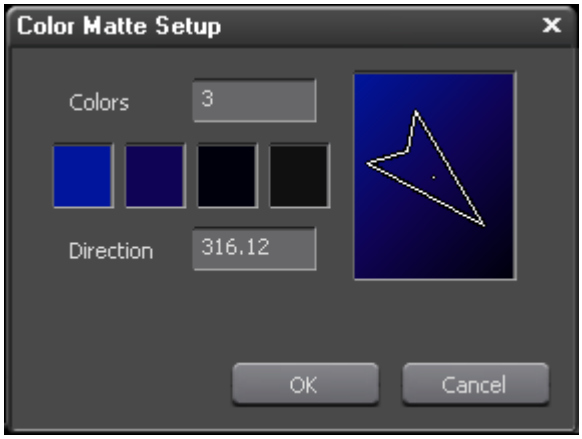
5. Click the **OK** button.

The ColorSelect dialog is closed and focus returns to the Color Matte Setup dialog.

6. If color gradation is desired, set the value in the "Colors" field to "2", "3" or "4" and repeat Step 2 through Step 5 for any additional colors you wish to specify in a gradation progression.

7. If a color gradation scale was specified in Step 6, set the direction of the gradation by dragging the arrow or entering the direction in degrees with either the keyboard or the mouse wheel. See Figure 253 for an example.

Figure 253. Color Matte Gradation Setup



8. Click the OK button on the Color Matte Setup dialog.

Alternative Methods:

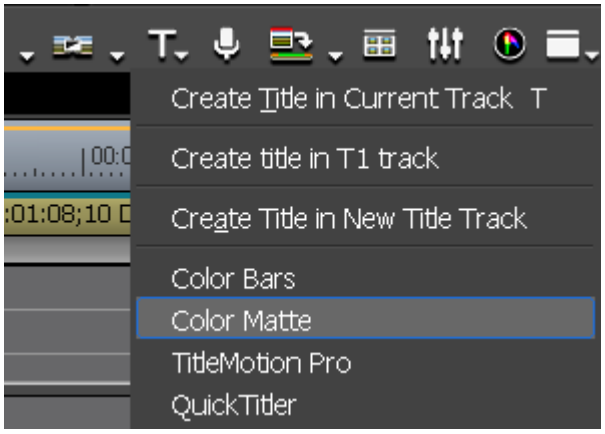
- Select File>New>Color Matte from the Preview window menu bar. The Color Matte clip is placed at the Timeline cursor position on the active track as the In point.

Note If In and Out points are set on the Timeline, the clip is placed between the In and Out point with the appropriate duration.

- Right-click on a blank space in the Asset Bin clip view area and select New Clip>Color Matte from the menu.
- Click the list button [▽]on the **Create Title** button on the Timeline and select "Color Matte" from the menu (see Figure 249). The Color Matte clip is placed at the Timeline cursor position on the active track as the In point.

Note If In and Out points are set on the time, the clip is placed between the In and Out point with the appropriate duration.

Figure 254. Create Title Button Menu - Color Matte



- Set In and Out points on the Timeline. Right-click on the track in which you wish to place a clip and select New Clip>Color Matte from the menu. A Color Matte clip with a duration between the In and Out points is created.

Modify Color Matte Properties

To modify the properties associated with a Color Matte clip, do any of the following:

- Right-click on the Color Matte clip in the Asset Bin and select "Edit."
- Double-click the Color Matte clip in the Asset Bin.
- Right-click on the Color Matte clip in the Timeline and select "Edit."
- Double-click on the Color Matte clip on the Timeline.

Create a Title Clip

See *Titles on page 591* for more information on creating Title clips.

Creating a Sequence (Conjoining Multiple Clips)

In order to create a sequence from multiple clips, the following conditions apply:

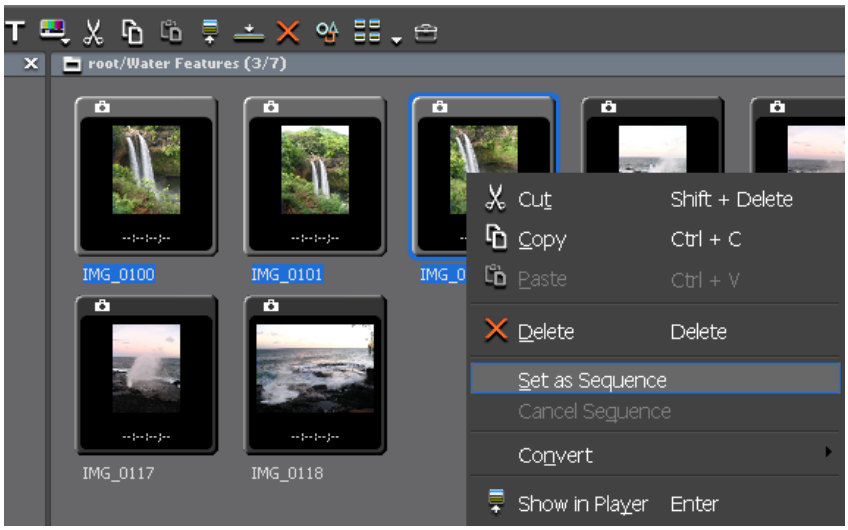
- The clip type, image size and aspect ratio of all clips must be the same.
- For video clips, the field order and frame rate of all clips must be the same.

To create a sequence from multiple clips in the Asset Bin, follow these steps:

1. Select multiple clips in the Asset Bin (hold down the [**CTRL**] or [**SHIFT**] keys while selecting clips) and right-click on a selected clip.

2. Select "Set as Sequence" from the menu. See Figure 255 for an example.

Figure 255. Asset Bin - Set as Sequence



A new sequence clip is created and saved in the Asset Bin as shown in Figure 256.

Note The icon in the upper left corner identifies the clip as a sequence clip.

Figure 256. Asset Bin - New Sequence Clip

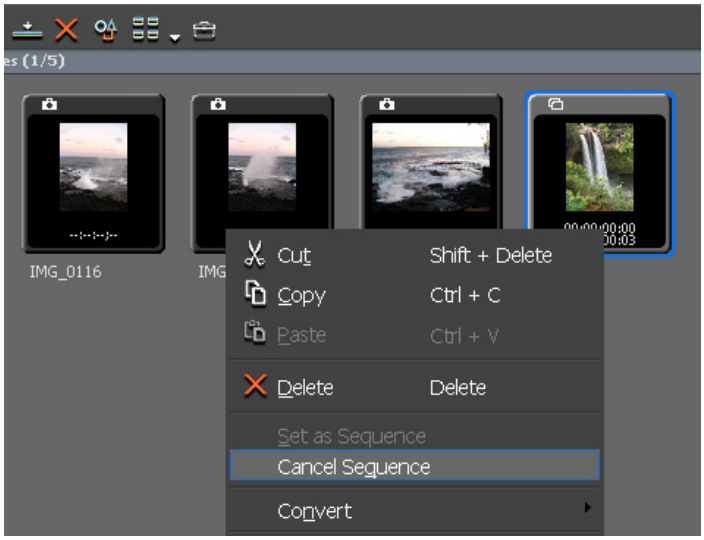
Note Clips are conjoined in the sorting order of the Asset Bin and any In and Out points for the original clips are disabled in the new sequence clip.

Creating Individual Clips from a Sequence (Cancelling a Sequence)

To create individual clips from a sequence clip, do the following:

- Right-click the sequence clip and select "Cancel Sequence" from the menu. See Figure 257.

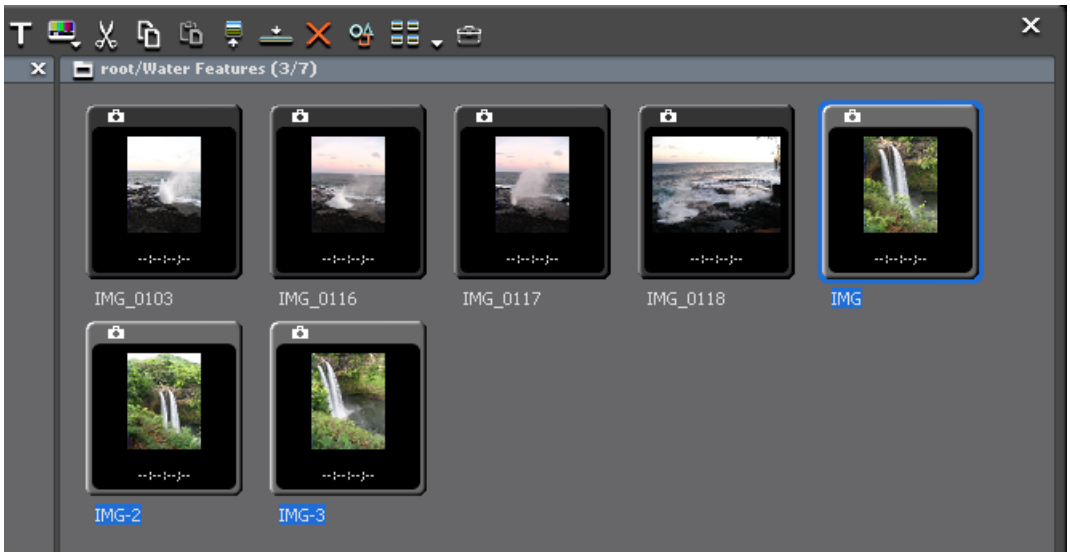
Figure 257. Asset Bin - Cancel Sequence



The new individual clips are named in a sequential manner based on the name of the first clip in the sequence. See Figure 258 for an example.

Note The icon in the upper left corner of each new clip identifies them as individual still clips.

Figure 258. New Individual Clips in the Asset Bin



- The original sequence clip was named “IMG”
- The new individual clips are named “IMG”, “IMG-2” and “IMG-3”

Clip Operations

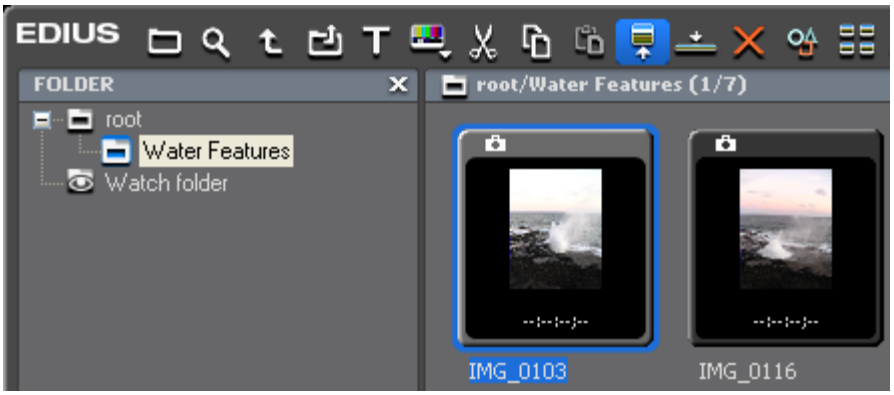
This section covers clip operations such as clip playback, using In and Out points with clips, and viewing or changing clip properties.

Displaying Clips in the Player

To display a clip from the Asset Bin in the Player, do any of the following:

- Select a clip in the Asset Bin clip view and click the **Show in Player** button (highlighted in blue in Figure 259).

Figure 259. Asset Bin Show In Player Button

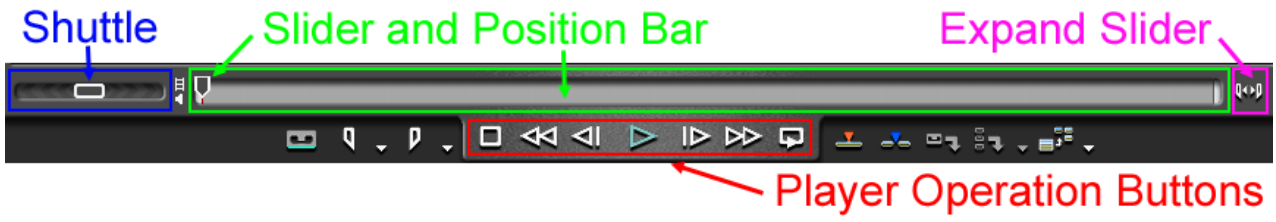


- Drag a clip from the Asset Bin and drop it on the Player window.
- Right-click on a clip and select “Show In Player” from the menu.
- Double-click the clip.
- Select a clip and press the [**ENTER**] key on the keyboard.

Clip Playback

Clip playback in the Player is controlled with the Player operation buttons and the shuttle/slider controls illustrated in Figure 260, or, with the mouse.

Figure 260. Player Operation Buttons, Shuttle and Slider



Playback with Player Operation Buttons

The Player operation buttons control clip playback as explained in Table 4.

Table 4. Player Operation Button Functions

Icon	Function	Description	Keyboard Shortcut
	Stop	Stops playback in the Player window.	[K] or [SHIFT]+[↓]
	Review	Reviews (rewinds) the clip in the Player. Each click changes the reverse speed to four (4) times or twelve (12) times.	[J] (see note 1 below)
	Previous Frame	Goes to the previous frame in a clip. Each click of the button moves to the previous frame. Holding down the [<--] key moves frame-by-frame in a faster step rewind	[<--]
	Play	Plays the clip in Player. While a clip is playing, clicking the Play button pauses playback. When playback is paused, clicking the button resumes playback.	[ENTER] or [SPACE]
	Next Frame	Goes to the next frame in a clip. Each click of the button moves to the next frame. Holding down the [-->] key moves frame-by-frame in a faster step forward.	[-->]
	Fast Forward	Fast forwards through the clip in the Player. Each click changes the fast forward speed to four (4) times or twelve (12) times.	[L] (see note 2 below)
	Loop	Repeatedly plays back the clip in the Player until playback is stopped.If In and Out points are defined, only the portion of the clip between those points is looped. If no In point is defined, the source is repeated from the beginning to the Out point. If no Out point is defined, the source is repeated from the In point to the end. If separate In and Out points for audio have been set, they are played from the first In point to the last Out point including the In and Out points for video.	[CTRL]+[SPACE]

Note (1) - Each press of the [**J**] key switches rewind speed in six levels from 2x to 32x. Press the [**L**] key to slow the rewind speed.Pressing [**J**] while playback is paused will playback the source in the reverse direction at the normal speed.

Note (2) - Each press of the [**L**] key switches the fast forward speed in six levels between 2x and 32x. Press the [**J**] key to slow down the fast forward speed. Pressing [**L**] while playback is paused will playback the source in the normal direction at the normal speed.

Note Fast forward and rewind operations may be limited if controlling an external deck. When playing the source from an external deck, the Loop control functions as a Pause.

Playback with Shuttle/Slider Controls

The shuttle and slider controls function as follows:

Shuttle

- There are 21 speed levels from 1/20x to 16x in the forward and reverse directions.

- Drag the shuttle to the right to play the clip in the normal (forward) direction. The further to the right the shuttle is dragged, the faster the playback speed.

Note Pressing [**CTRL**]+[**L**] on the keyboard will also fast forward the shuttle. Each press of these keys will move to the next speed step.

- Drag the shuttle to the left to play the clip in the reverse direction. The further to the left the shuttle is dragged, the faster the playback speed.

Note Pressing [**CTRL**]+[**J**] on the keyboard will also rewind the shuttle. Each press of these keys will move to the next speed step.

- Release the drag to return the shuttle to the center (pause) position.

Slider/Position Bar

- Click a position on the position bar to display the frame at that position.
- Drag the slider along the position bar in either direction. The Player shows the clip at the position of the slider.

Expand Slider

If a clip with In and Out points is displayed in the Player, clicking the **Expand Slider** button will cause only the portion of the clip between the In and Out points to occupy the entire position bar. Portions of the clip outside these points are not accessible with the slider/position bar.

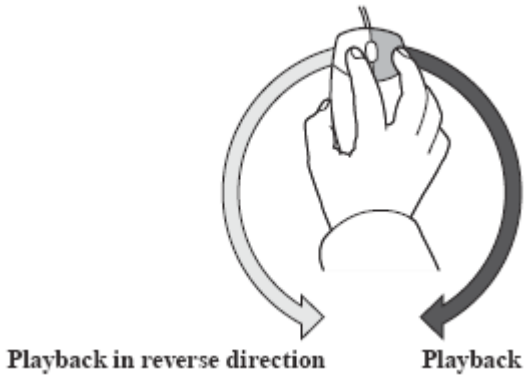
Note Playback operations with the slider are not available with non-digitized data.

Playback with the Mouse

To use the mouse to playback clips in the Player do the following:

1. Position the mouse cursor in the Player window and hold down the right mouse button.
2. Draw with the mouse in a clockwise direction for normal (forward) playback, or, draw with the mouse in a counter-clockwise direction for reverse playback as illustrated in Figure 261.

Figure 261. Playback with the Mouse



Note The faster you draw with the mouse, the faster the playback speed.

Alternative Method:

- Position the mouse cursor in the Player window,
- Scroll the mouse wheel towards you for playback in the normal (forward) direction. Scroll the mouse wheel away from you for reverse playback.

Note The faster you scroll the mouse wheel, the faster the playback speed.

Note Playback operations with the mouse are not available for non-digitized data.

Setting In and Out Points

Setting In and Out points on the allows you to restrict the range in which certain operations will take place, or to display only a portion of a clip in the Player.

To set In and Out points in the Player, follow these steps:

1. Play a clip in the Player until you reach the desired In point or position the slider on the frame at which you wish to set the In point.
2. Click the **Set In** button in the Player controls. See Figure 262.

Figure 262. Player Set In and Set Out Buttons

3. Continue playing the clip or position the slider on the frame at which you wish to set the Out point.
4. Click the **Set Out** button in the Player controls. See Figure 262.

Alternative Method:

- Place a clip on the Timeline and set In and Out points by trimming.
- Drag the In slider or Out slider to change the position of the In or Out point. See Figure 263.

Note When the cursor is positioned at the In point the cursor changes to "IN" as illustrated in Figure 263. Drag the cursor position to change the In point. When the cursor is positioned at the Out point, it changes to "OUT" and can also be dragged to change the Out position.

Figure 263. Set In and Out Points by Trimming

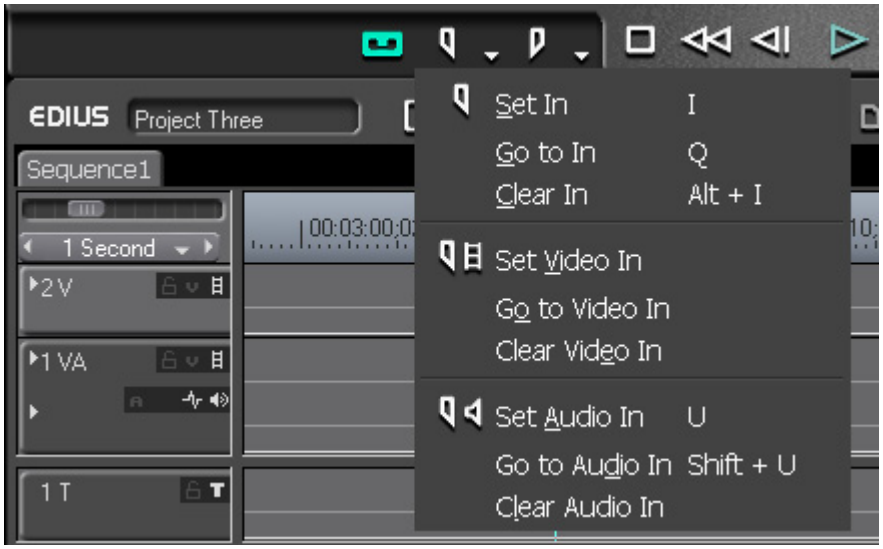
Note If the Out point is placed before the In point, the position bar between the points is displayed in red and part of the timecode is also displayed in red to indicate an invalid In/Out condition.

Setting Separate In/Out Points for Video and Audio

In and out points may be set separately for video and audio. To set an In point for video or audio only, do the following:

1. Click the list button (▽) on the **Set In** button. The menu in Figure 264 appears.

Figure 264. Mark In Menu



2. Select "Set Video In" or "Set Audio In" to mark an In point for video or audio only.

3. Set the desired video or audio Out point.

Note The procedure is the same for marking an Out point for video or audio only except the list button (▽) on the **Out** button is clicked.

You may also set the **In** and **Out** buttons to one of three modes such that clicking on the button sets the In or Out point according to the selected mode:

- Video Only
- Audio Only
- Video and Audio

To change the **In/Out** button mode, click the In/Out toggle button in the bottom left corner of the Player window (see Figure 265).

Figure 265. In/Out Mark Toggle Button

The **In** and **Out** buttons in Figure 265 mark the In and Out point for both audio and video as there is no video or audio symbol on the buttons.

Each click of the toggle button selects a different mode and changes the **In** and **Out** button icon in the Player as follows:

Set Video In Set Video Out

Set Audio In Set Audio Out

With In and Out points set separately for video and audio the position bar in the player is divided horizontally into two sections. The upper (yellow) section represents the video and the lower (green) section the audio. See Figure 266 for an example.

Note If the position bar is not divided, place the mouse cursor at the far right or far left edge of the position bar. Click the left mouse button while holding down the [CTRL] key and the position bar is divided.

Figure 266. Split Position Bar for Video and Audio

Alternative Methods:

- Select Marker>Set Audio In or Marker>Set Audio Out from the Preview window menu bar.
- Press **[U]** or **[P]** on the keyboard to set In or Out points respectively.

Note When setting In and Out points for either video or audio only, only that portion of the clip can be placed on the Timeline. If In and Out points are set for both parts of the clip, both may be placed on the Timeline as a single clip with separate video and audio In and Out points.

Adjusting Video and Audio In/Out Points

To adjust the In and Out points for video and audio, position the cursor at the current In or Out point on the video or audio position bar. The cursor changes to indicate which point will be adjusted as follows:

- - Video In
- - Video Out
- - Audio In
- - Audio Out

Hold down the left mouse button and drag the cursor on the position bar in the direction in which you wish to adjust the In or Out point.

Note When adjusting In or Out points for video or audio parts of the clip, the other part is not affected.

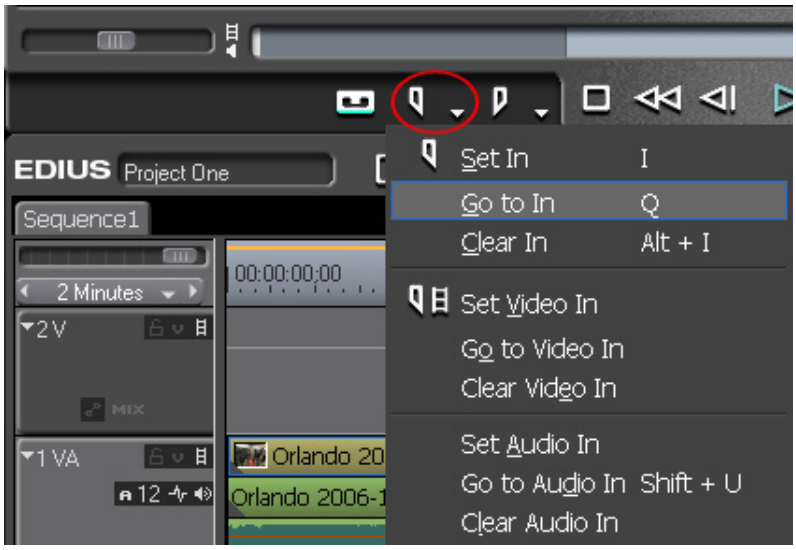
Move to the In or Out Point

To move to the In or Out point in the Player do any of the following:

In Point

- Click the list button (▽) on the **Set In** button and select "Go to In" from the menu as illustrated in Figure 267.

Figure 267. Set In Button Menu - Go to In



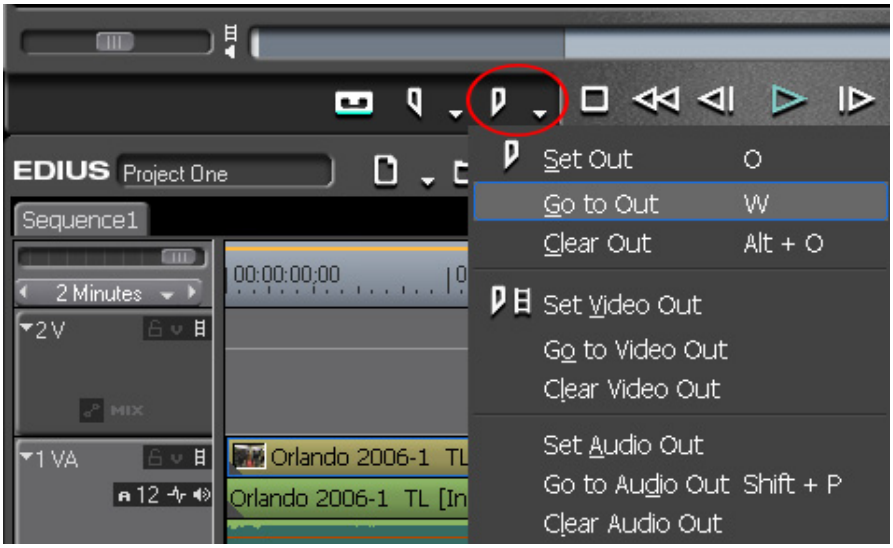
Note To move to the In point for either the video portion of the clip or the audio portion, select "Go to Video In" or Go to "Audio In" from the menu.

- Hold down the [**SHIFT**] key while clicking the **Set In** button.
- Press [**SHIFT**]+[**I**] on the keyboard.
- Press [**SHIFT**]+[**U**] to move the Audio In point.

Out Point

- Click the list button (▽) on the **Set Out** button and select "Go to Out" from the menu as illustrated in Figure 268.

Figure 268. Set Out Button Menu - Go to Out



Note To move to the Out point for either the video portion of the clip or the audio portion, select “Go to Video Out” or Go to “Audio Out” from the menu.

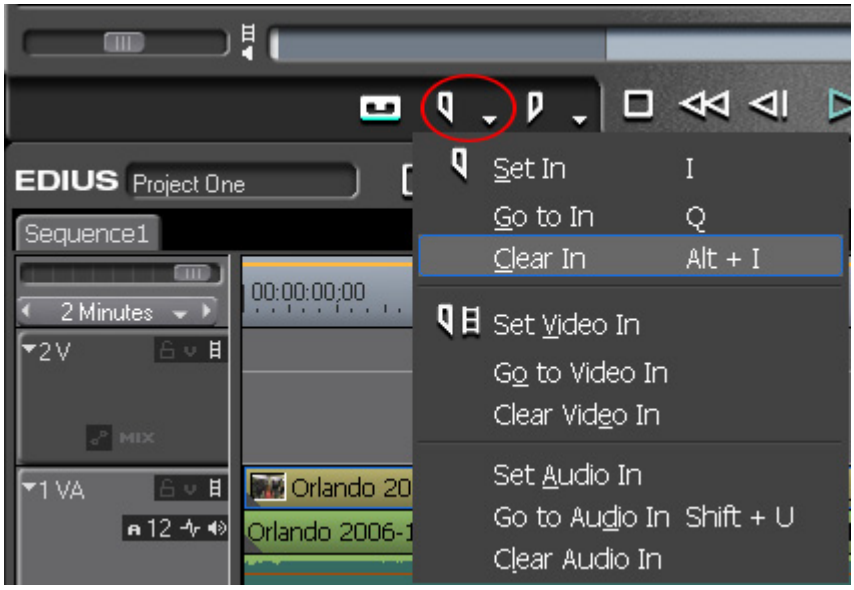
- Hold down the [**SHIFT**] key while clicking the **Set Out** button.
- Press [**SHIFT**]+[**O**] on the keyboard.
- Press [**SHIFT**]+[**P**] to move the Audio Out point.

Removing In and Out Points

To remove In and Out points in the Player, do the following:

- Click the list button (▽) on the **Set In/Set Out** button in the Player and select “Clear In” or ‘Clear Out “ from the menu. See Figure 269.

Figure 269. Set In Button Menu - Clear In



Note To clear the In or Out point for either the video portion of the clip or the audio portion, select "Clear Video In/Clear Video Out" or "Clear Audio In/Clear Audio Out" from the menu.

- Move the slider to the In or Out point and click the **Set In** or **Set Out** buttons while holding down the [**SHIFT**] key.

Note If the **Set In** button is in Video In or Audio In mode, holding down the [**SHIFT**] key while clicking the **Set In** button on a In point, will clear only the respective video or audio In point. The same is true with the **Set Out** button.

Editing Clip Properties

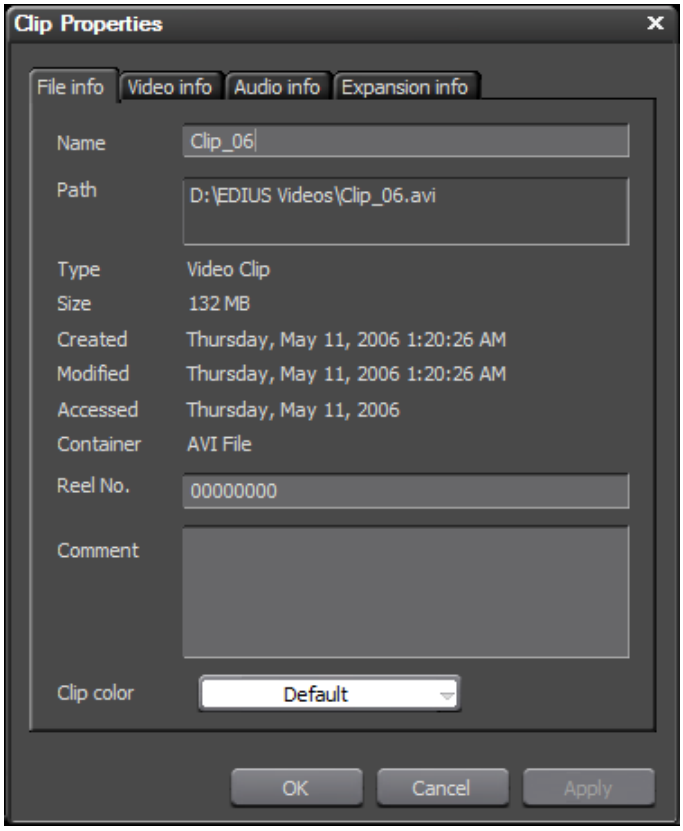
To edit the properties associated with a clip, perform the following actions:

1. Select a clip in the clip view of the Asset Bin and click the Properties button (highlighted in blue in Figure 270).

Figure 270. Asset Bin Properties Button

The Clip Properties dialog shown in Figure 271 appears.

Figure 271. Asset Bin Clip Properties Dialog



Note the four properties tabs: File Info, Video Info, Audio Info and Expansion Info. Each tab displays information that applies to that category. Some of the properties may be edited.

Note If the clip is a still image, color bar or color matte clip, the tabs are File Info and Still Image Info. If the clip is an audio clip, no Video Info tab appears.

2. If desired, edit the clip name and enter comments in the File Info tab.
3. A reel number may have been created during source capture. If you wish to change the reel no., enter the new number in this field.
4. Set a new clip color if desired, by selecting from the Clip Color drop-down list. See *Setting Clip Color* *on page 287* for more information.
5. If the Video Info tab is displayed, make any desired modifications to the following properties:

Start TC

The starting timecode of the clip.

Poster Frame

The poster frame is the frame in the clip that will be the thumbnail icon displayed to identify this clip. Enter the poster frame timecode or move

the slider under the poster frame image to select the frame you wish to designate as the poster frame.

Aspect Ratio

Use the Aspect Ratio drop-down list to select a new aspect ratio for the clip.

Color Range

From the Color Range drop-down list, select the desired color range setting for the clip.

Note Depending on the clip file type, this option may not be available.

Field Order

From the Field Order drop-down list, Select the desired field order for interlaced or progressive clips.

Frame Rate

Change the frame rate using the Frame Rate drop-down list, if desired.

Back to Default Settings

Click this button to reset video info properties to the defaults. A menu appears from which you can reset all properties or selected properties to their default values.

6. If the Still Image Info tab is displayed, make any desired modifications to the following properties:

Duration

This is the amount of time a still image will be displayed when placed on the Timeline.

Aspect Ratio

From the Aspect Ratio drop-down list, choose an aspect ratio for the still image.

Color Range

Select the desired color range.

White - Use this setting if the clip is showing crushed blacks and blown-out whites.

Super White - Use this setting if the clip is showing grayish blacks and dull whites

7. In the Audio Info tab, make any desired changes to the following properties:

Refresh Wave Data

Click the **Refresh wave data** button to regenerate the audio waveform cache for the clip.

Channel Settings

Select the desired audio channel setting from the available choices for the clip.

8. Click the **OK** button to close the Clip Properties dialog and save any property changes you have made.

Alternative Methods:

- Right-click the clip and select "Properties" from the menu.
- Select a clip on a Timeline track and check the properties in the Information Palette.

Note The Information Palette is display only and the properties cannot be changed in this view.

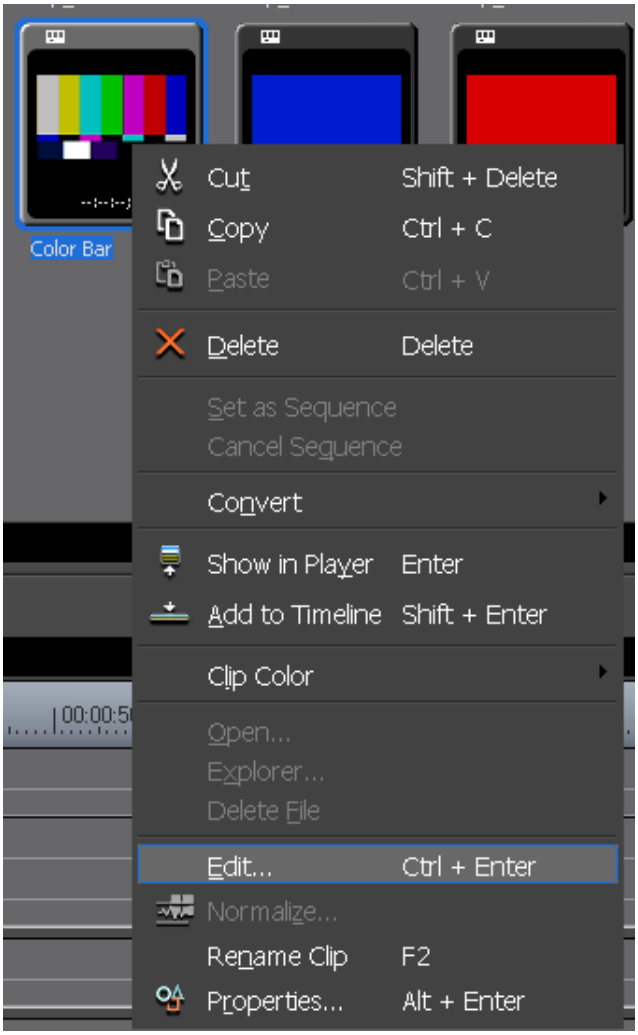
Editing Clip Settings

Color Bar, Color Matte and Title Clips

Color Bar, Color Matte and Title clips have additional settings that may be edited. To edit the settings for these clip types, do the following:

1. Right-click the clip and select "Edit" from the menu as illustrated in Figure 272.

Figure 272. Clip Menu



The setup dialog for the selected clip type appears. Make setting changes as explained in the sections noted below:

For Color Bar clips, see *Create a Color Bar Clip* *on page 256*.

For Color Matte clips, see *Create a Color Matte Clip* *on page 259*.

For Title clips, see *Titles* *on page 591*.

Alternative Methods:

- Double-click the clip in the Asset Bin.
- Right-click a clip on the Timeline and select “Edit” from the menu.
- Double-click a clip on the Timeline.

Select a clip on the Timeline and press the **[SHIFT]**+**[CTRL]**+**[E]** keys on the keyboard.

Editing Clip Settings for Multiple Clips

Settings associated with clips in the Asset Bin may be changed simultaneously for multiple selected clips. The settings that may be changed for multiple clips and the methods by which they are changed are dependent upon the selected Asset Bin view.

Clip Width View

If the clip view is set to Clip Width (Large) or clip Width (Small), the following clip properties may be changed:

- Clip Name
- Reel No.
- Comments

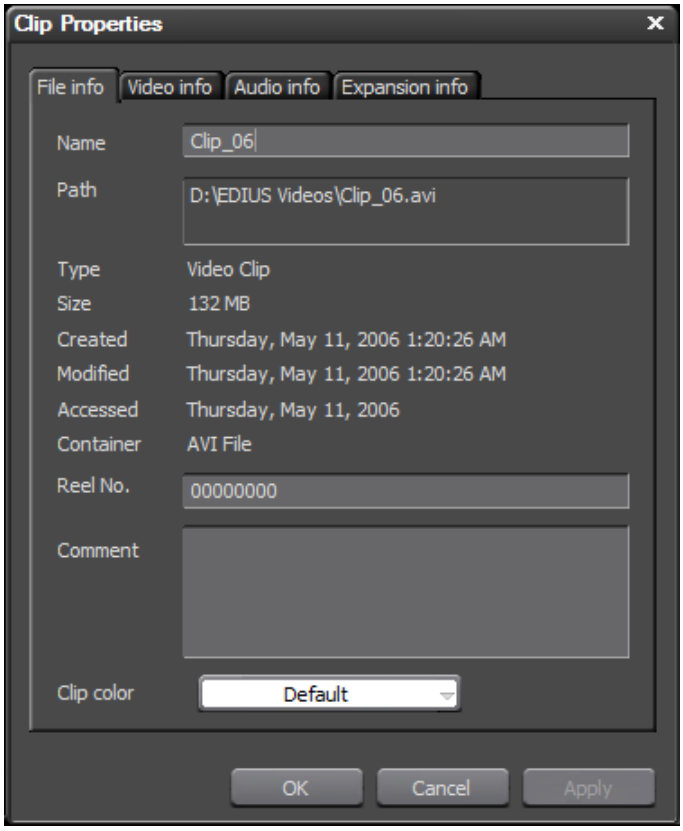
Note If the Clip name is changed for more than one clip, each clip name will have a unique number added to the name automatically.

To change clip properties in a clip width view, do the following:

1. Select one or more clips in the Asset Bin clip view.
2. Do one of the following to display the Clip Properties dialog:
   - Click the **Properties** button in the Asset Bin
   - Press the **[ALT]**+**[ENTER]** keys on the keyboard
   - Right click on a selected clip and select “Properties” from the menu

The Clip Properties dialog shown in Figure 273 appears.

Figure 273. Clip Properties Dialog



3. In the Clip Properties dialog, make the desired changes to clip name, reel no. and comments.

4. Click the **OK** button to save the changes and close the dialog.

Detail View

If the clip view is set to one of the detail displays; Detail text (Large), Detail Text (Small) or Detail Icon, the following settings may be changed from the Asset Bin Detail view:

- Clip color
- Frame rate
- Aspect ratio
- Field order
- Color range

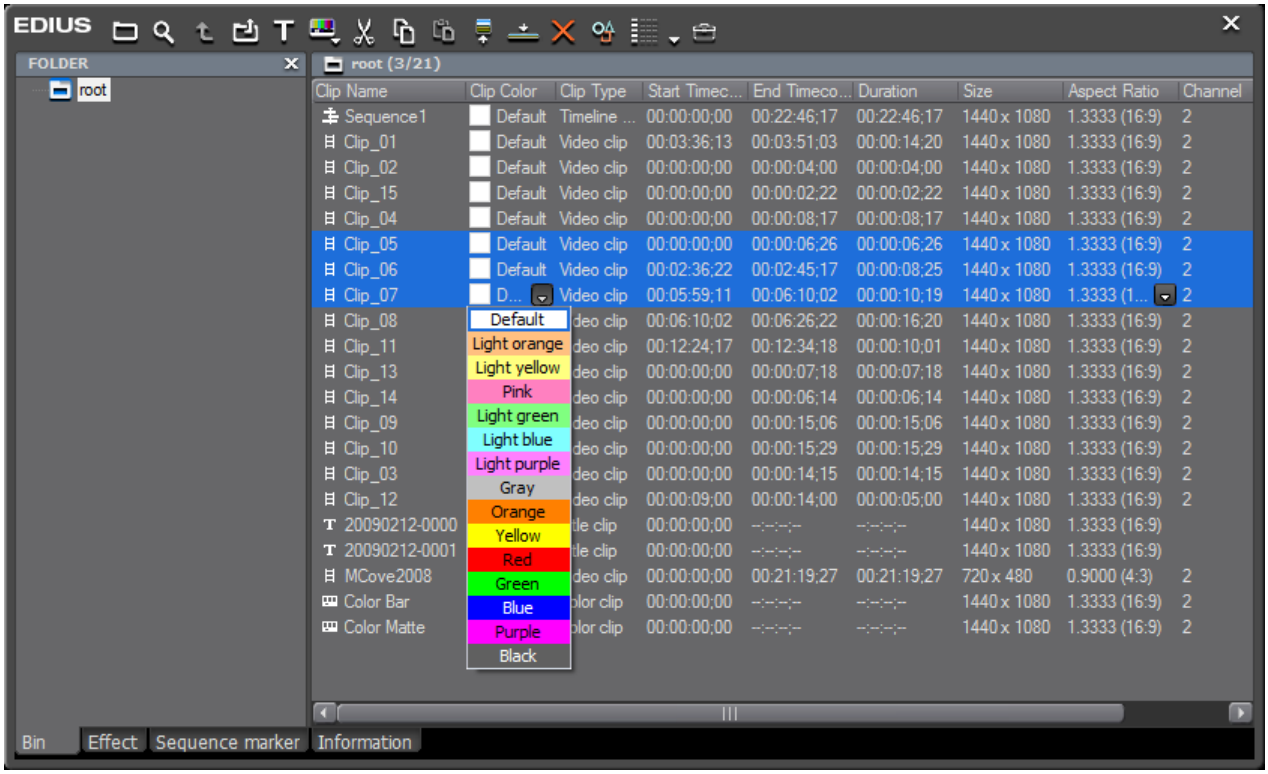
Note The clip attributes above must appear in the bin detail list in order to be edited in the manner described below. See *Display Bin Details Settings* *on page 168* for more information on defining Asset Bin list details.

To change the clip settings listed above, follow these steps:

1. Select one or more clips in the Asset Bin detail view.

As illustrated in Figure 274, settings which can be changed have a drop-down list button in the setting column. In this example, Clip Color and Aspect Ratio are included in the Asset Bin details view and have drop-down list buttons to allow changing these settings for all selected clips.

Figure 274. Asset Bin Detail View



2. Click the drop-down list button for any setting you wish to change.

Note an * denotes the default setting.

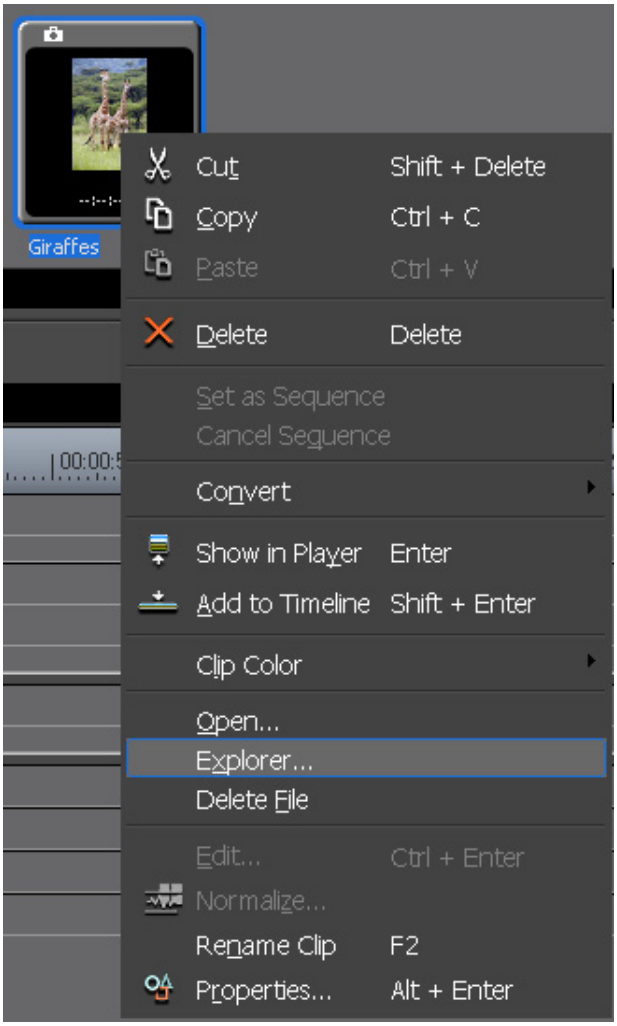
3. Select the desired setting from the drop-down list.

Note If a setting cannot be changed for a selected clip, a warning dialog will appear asking if you wish to continue. If you continue, the setting will be changed for the other selected clips only.

Checking Clip Storage Location

To see where a clip is stored, right-click on the clip and select “Explorer: from the menu as shown in Figure 275

Figure 275. Clip Menu - Explorer



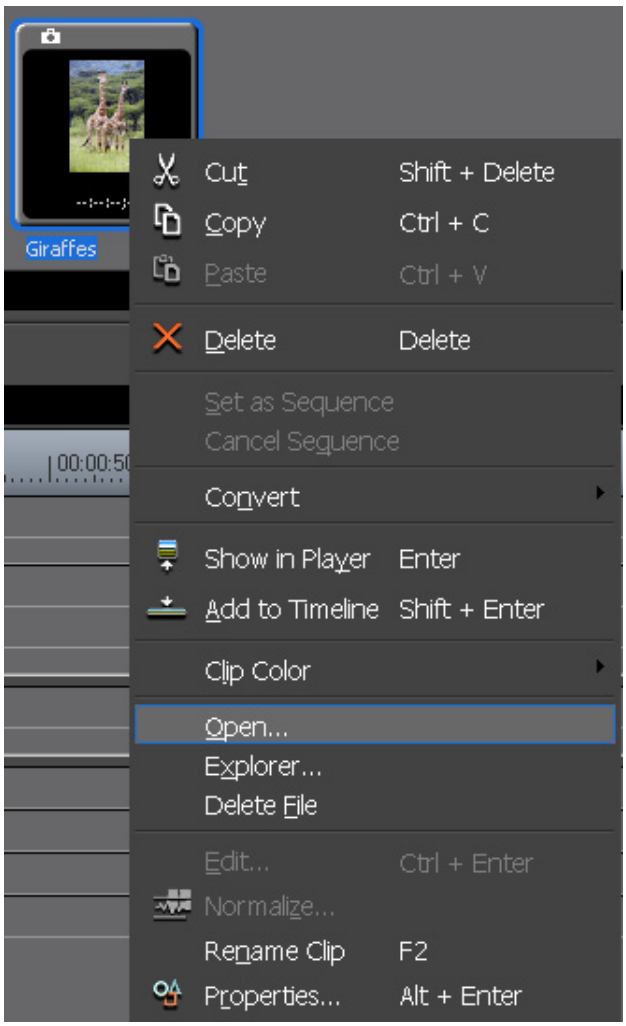
A Windows Explorer window opens displaying the clip file in its storage location.

Opening a Clip with an External Application

To open a clip with the application associated in Windows with the clip file extension, do any of the following:

- Right-click the clip in the Asset Bin and select “Open” from the menu as illustrated in Figure 276

Figure 276. Clip Menu - Open



- Right-click a clip on the Timeline and select “Open” from the menu.
- Select a clip on the Timeline and press the **[SHIFT]**+**[CTRL]**+**[P]** keys on the keyboard.

Clip Management

Selecting Clips

- To select a single clip, click on it in the Asset Bin or the Timeline.
- To select multiple clips, do one of the following:
  - Frame (draw a box around) the clips you wish to select with the mouse cursor.
  - While holding down the [**CTRL**] key, click on the clips you wish to select.
  - While holding down the [**SHIFT**] key, select the first clip in a range and the last clip in a range. All clips from the first to the last will be selected.

Copying Clips

To copy a clip, do any of the following:

- Select a clip in the Asset Bin and click on the **Copy** button (highlighted in blue in Figure 277).

Figure 277. Asset Bin Copy Button

- Right-click a clip in either the Asset Bin or Timeline and select “Copy” from the menu.
- Select a clip and press [**CTRL**]+[**C**] on the keyboard.

Cutting Clips

To cut a clip from the current location, do any of the following:

- Select a clip in the Asset Bin and click on the **Cut** button (highlighted in blue in Figure 278).

Figure 278. Asset Bin Cut Button

- Right-click a clip in either the Asset Bin or Timeline and select “Cut” from the menu.
- Select a clip and press [**CTRL**]+[**X**] on the keyboard.

Pasting Clips

Pasting a clip to a new location is available after a clip has been copied or cut using one of the procedures above.

To paste a clip, select the Asset bin folder in which you wish to paste the clip and do one of the following:

- Click on the **Paste** button (highlighted in blue in Figure 279).

Figure 279. Asset Bin Copy Button

- Right-click on a blank area in the Asset Bin clip view and select “Paste” from the menu.
- Right-click on a clip and select “paste” from the menu.
- Press [**CTRL**]+[**V**] on the keyboard.

To paste a clip in the Timeline do one of the following:

- Position the Timeline cursor at the point where you want to past the clip and press [**CTRL**]+[**V**] on the keyboard.
- Right click on a clip on the Timeline and select one of the following from the menu depending on the desired paste location:
  - Paste>Cursor - paste the clip at the cursor location.
  - Paste>Clip In - paste the clip at the In point.
  - Paste>Clip Out - paste the clip at the Out point.

Deleting (Releasing) Clips

To delete (release) a clip from the Asset Bin do one of the following:

- Select the clip and click the Delete Button (highlighted in blue in Figure 280.

Figure 280. Asset Bin Delete Button

- Right click a clip and select “Delete” from the menu
- Select a clip and press the [**DELETE**] key on the keyboard.

Note Releasing a clip from the Asset Bin does not delete the clip source. Only its information in the Asset Bin is deleted. Clips released from the bin cannot be restored.

To delete a clip from the Timeline, do one of the following:

- Right click a clip a select “Delete” from the menu
- Select a clip and press the [**DELETE**] key on the keyboard.

Note A clip deleted from the Timeline may be restored by selecting Edit>Undo from the Preview window menu bar.

Sorting Clips

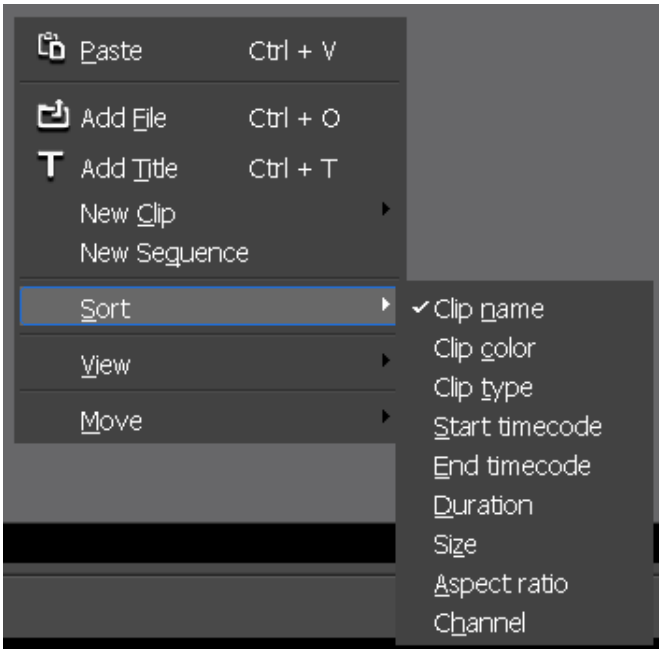
Clips may be sorted in the Asset Bin by doing one of the following:

- Right-click on a blank space in the Asset Bin clip view and select Sort>{sort criterion} from the menu. As example is shown in Figure 281.

Sort Criterion is any of the following:

- Clip name
- Clip color
- Clip Type
- Start timecode
- End timecode
- Duration
- Size
- Aspect Ratio
- Channel

Figure 281. Asset Bin Menu - Sort



- If a detailed clip view is the active Asset Bin view, clicking the column headers (same as the sort criteria above) changes the sorting order on the clicked header from ascending to descending or vice versa as indicated by the symbol on the header. Ascending = [△]; Descending = [▽]

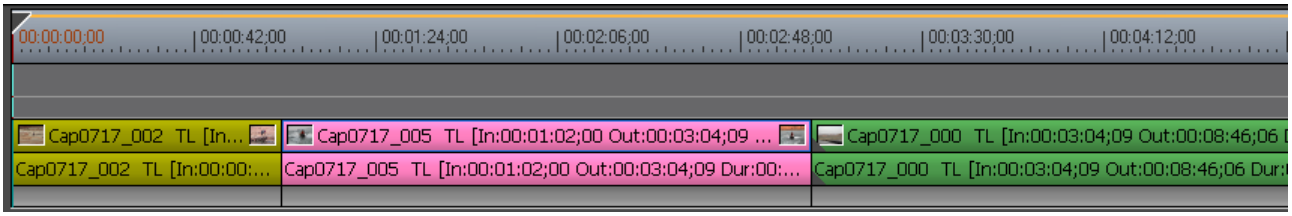
Setting Clip Color

The clip color is the highlight color for a clip display as illustrated in Figure 282.

Figure 282. Clip Color - Clip Width(Large) View

When a clip is placed on the Timeline, it will also be represented by the assigned clip color as shown in Figure 283.

Figure 283. Clip Colors on the Timeline

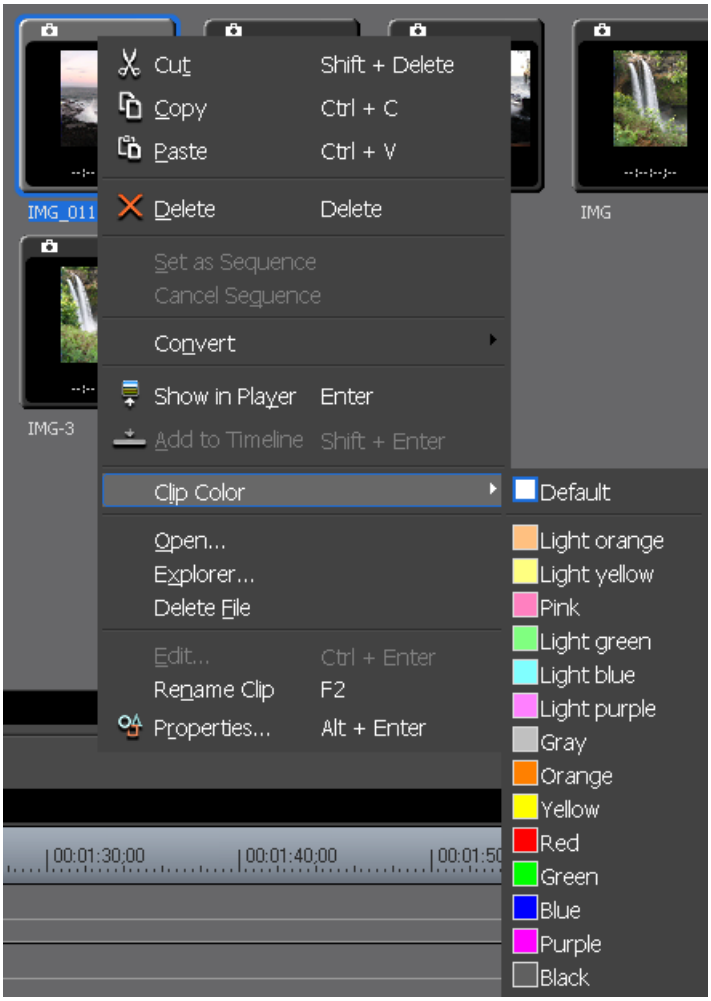


Each clip may have a different clip color as illustrated in Figure 282.

To set the clip color, follow these steps:

1. Right-click on the clip and select “Clip Color” from the menu. See Figure 284 for an example.

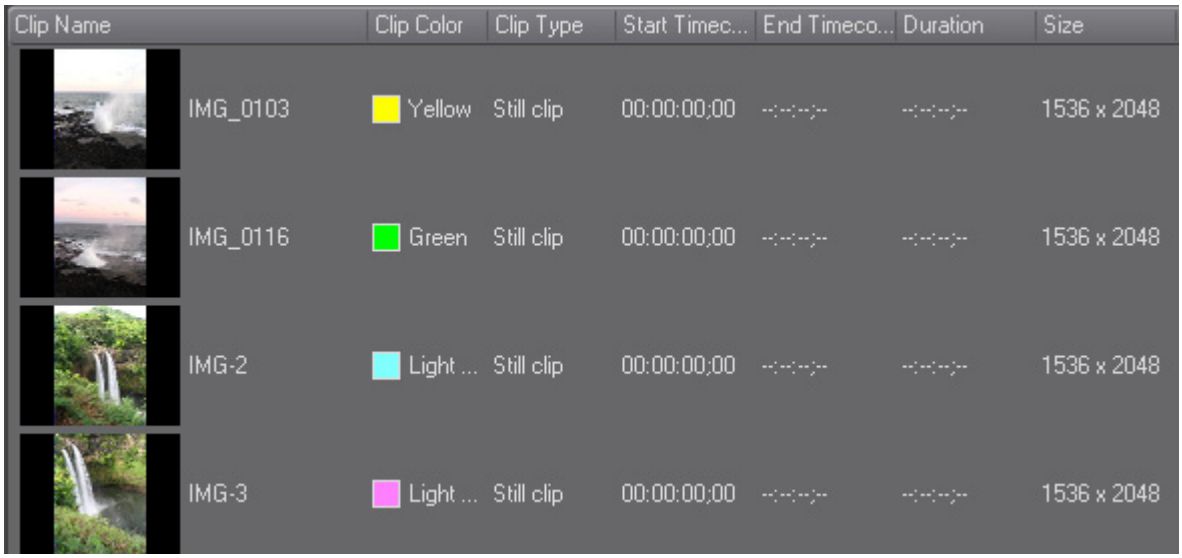
Figure 284. Clip Color Menu



2. Select the desired clip color from the menu.

Figure 282 shows the effect of setting a clip color when the selected clip view is “Clip Width(Large).” shows the same clip color settings for the same clips in the Detail Text(Large) view.

Figure 285. Clip Color - Detail Text(Large) View



Alternative Method:

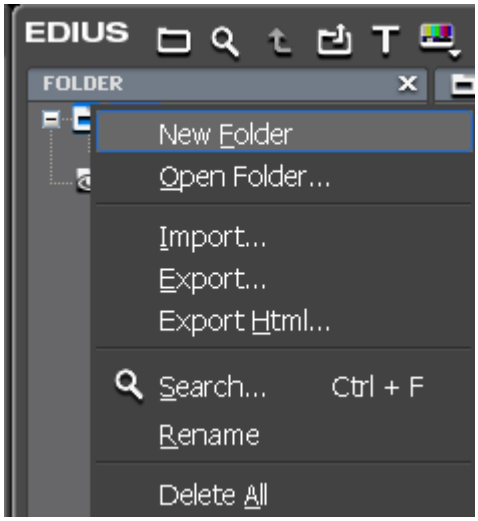
Select the “File Info” tab in the Clip Properties dialog (see *Editing Clip Properties on page 274* for more information) and select the desired clip color from the Clip Color drop-down list.

Creating Folders

To create a new folder in the Asset Bin, do the following:

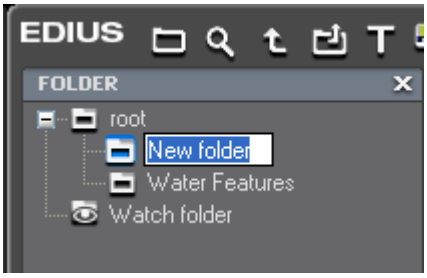
1. Right click on the folder under which you wish to create the new folder.
2. Select “New Folder” from the menu (see Figure 286).

Figure 286. Asset Bin Folder Menu - New Folder



A new folder named "New folder" is created under the folder on which you clicked in Step 1. See Figure 287 for an example.

Figure 287. New Folder Created

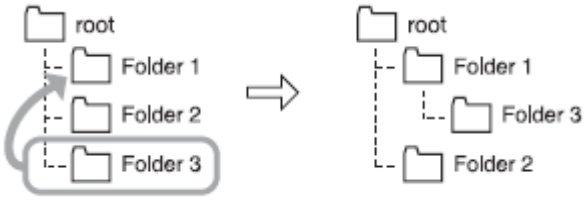


3. Enter the desired name for the new folder.

Moving Folders

To move a folder in the Asset Bin, drag and drop it on a new destination folder. See Figure 288 for an example.

Figure 288. Moving Folders Diagram



Note The “root” (top level) folder cannot be moved; however, it can be renamed.

Duplicating Folders

To duplicate a folder in the Asset Bin and the folder contents, hold down the [**CTRL**] key while dragging the folder to be copied to a new destination parent folder.

Note The “root” (top level) folder cannot be copied.

Deleting Folders

To delete a folder from the Asset Bin, do the following:

Note If you delete a folder, all the clips and sub-folders of that folder are deleted. If you delete the “root” (top level) folder, all clips (including clips in the “root” folder) and sub-folders are deleted; however, the “root” folder is not deleted.

1. Select the folder to be deleted and click the Delete button (highlighted in blue in Figure 289).

Figure 289. Asset Bin Delete Button

A dialog box appears asking you to confirm the folder deletion.

2. Click the **OK** button to delete the folder and its contents.

Note Once a folder is deleted, it cannot be restored.

Selecting the Folder to Display

From the folder tree view in the Asset Bin, click on the folder to display.

If the folder tree view is not visible, click the Folder button in the Asset Bin. The folder button is highlighted in blue in Figure 290.

Figure 290. Asset Bin Folder Button

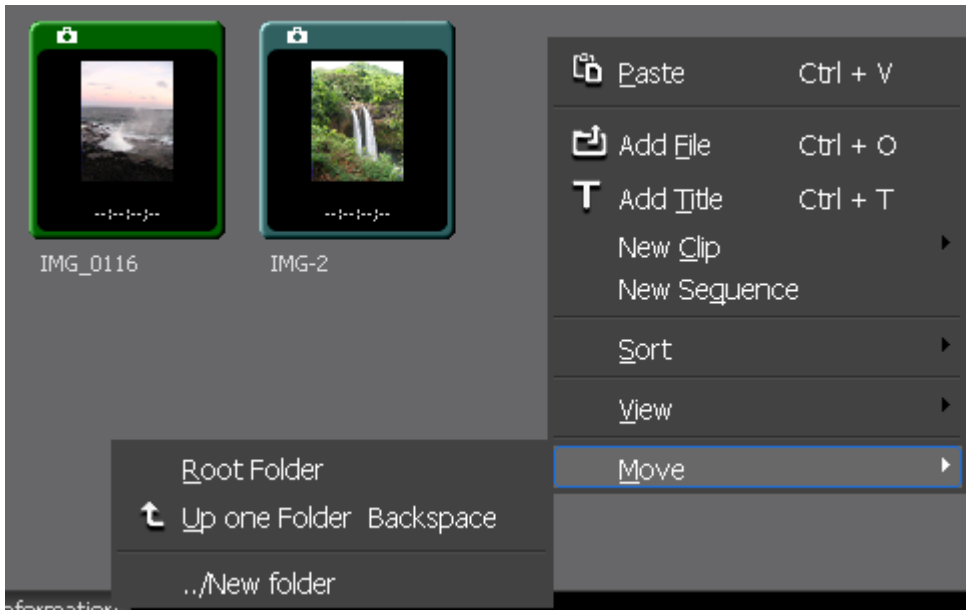
Alternative Methods:

- Press the [**BACKSPACE**] key on the keyboard to move up one folder level from the current folder.
- Click the **Move Up** button (highlighted in blue in Figure 292) to move up one folder level.

Figure 291. Asset Bin Move Up Button

1. Click on a blank area in the clip view and select "Move" from the menu (see Figure 292).
2. Select the desired folder move operation; to the "Root Folder" or "Up One Folder" level from the current folder.

Figure 292. Asset Bin Folder Move Menu



Exporting Bin Information

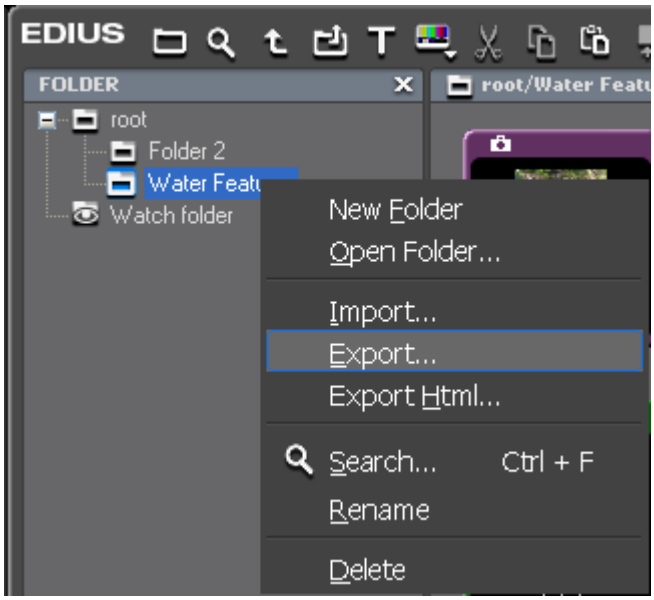
Asset Bin folder information can be exported as an .ebd file with the folder structure maintained.

Note Timeline sequence clips are not exported.

To export folder information, including all clips in the folder and any sub-folders, do the following:

1. Right-click on the folder to be exported and select “Export” from the menu as shown in Figure 293.

Figure 293. Asset Bin Folder Menu - Export



A Save As dialog appears.

2. Navigate to the folder location in which you wish to save the .ebd (Bin Information File) file and enter the desired file name.

Note If the entered file name is the same as an existing .ebd file in the same location, the older file is overwritten.

3. Click the **Save** button to save the folder information file.

Note Exporting does not save the actual contents of the folder. It saves only an information file that can be used to reconstruct a folder and its contents by importing the information file. The original clip files must still exist in the original location.

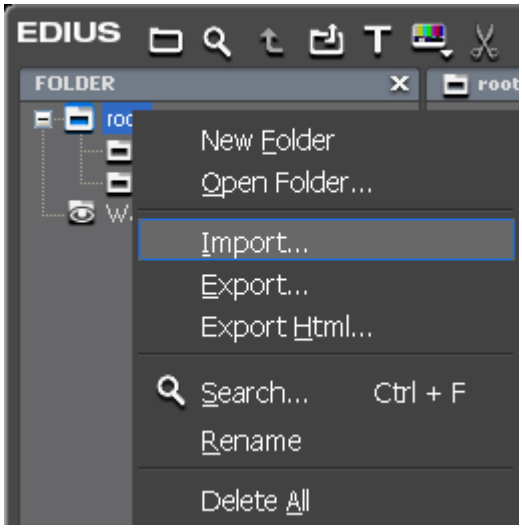
Importing Bin Information

Folder information that has been exported, may be imported into the Asset Bin to reconstruct a folder and its contents.

To import a folder information file (.ebd extension), do the following:

1. Right-click on the folder under which you wish to import a folder information file and select “Import” from the menu. See Figure 294.

Figure 294. Asset Bin Folder Menu - Import



A File Open dialog appears.

2. Navigate to the folder that contains the desired .ebd files and select the file.

3. Click the **Open** button to import the folder structure.

Note The exported folder and its contents are created under the folder on which you right-clicked in Step 1. The clips stored in the folder at the time it was exported must still exist in their original location or they cannot be imported.

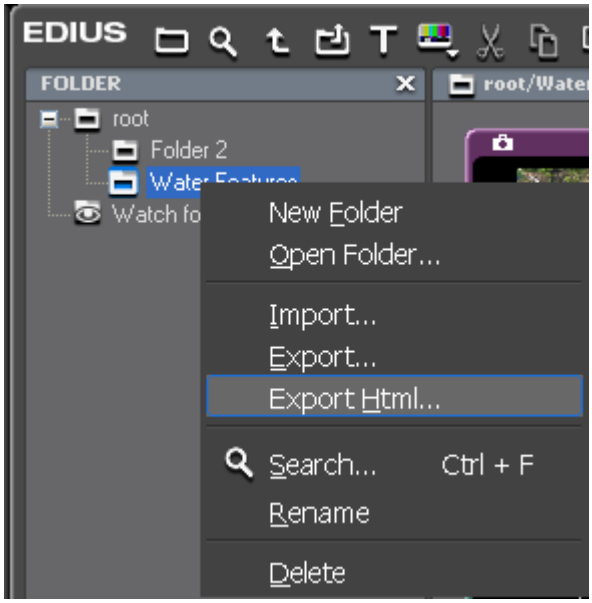
Exporting Stored Information

Folder information may be exported as an .html file with or without using cascading style sheets as a template.

To export a folder structure as an .html file, do the following:

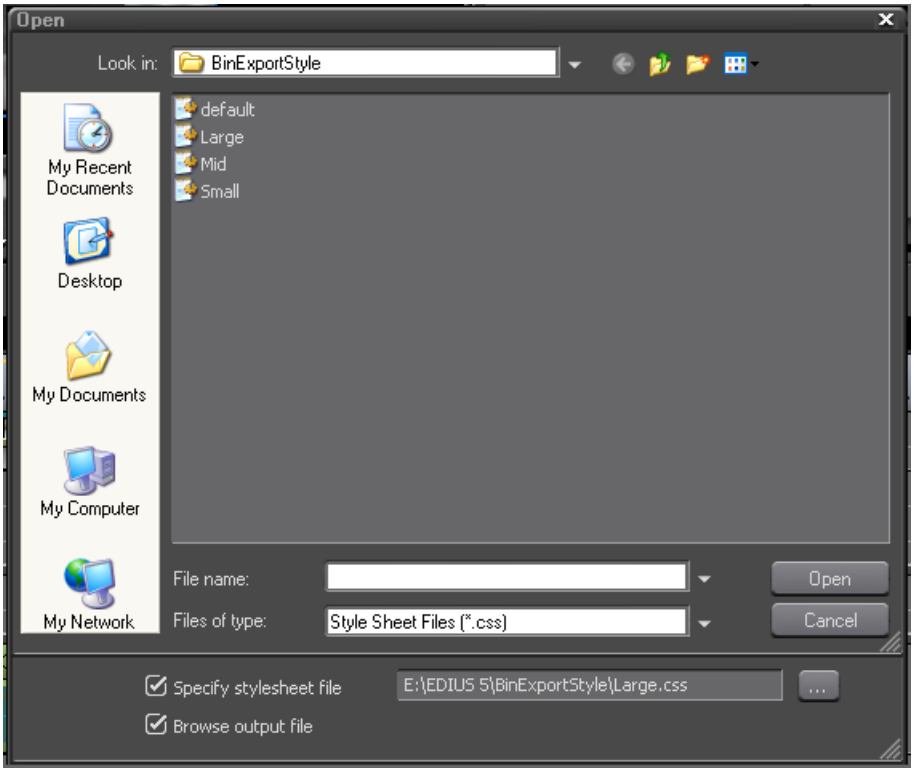
1. Right-click on the folder to be exported and select "Export Html" from the menu as shown in Figure 295.

Figure 295. Asset Bin Folder Menu - Export Html



A Save As dialog appears as illustrated in Figure 296.

Figure 296. Save As Dialog - Cascading Style Sheet Selection



2. Select the “Specify stylesheet file” option if you wish to select a cascading style sheet (.css file) for the .html file. Use the ... button to navigate to the folder location which contains the .css files. If you do not wish to apply a stylesheet go to Step 4.

3. Select the desired stylesheet file and click the **Open** button.

4. Navigate to the location in which you wish to save the .html file and specify the desired file name.

5. Click the **Save** button to export the folder information as an .html file.

Figure 297 shows an example of a Folder and its contents exported as an .html file with the “small” cascading style sheet applied.

Figure 297. Folder Exported as HTML with Cascading Style Sheet

Searching for Clips in the Asset Bin

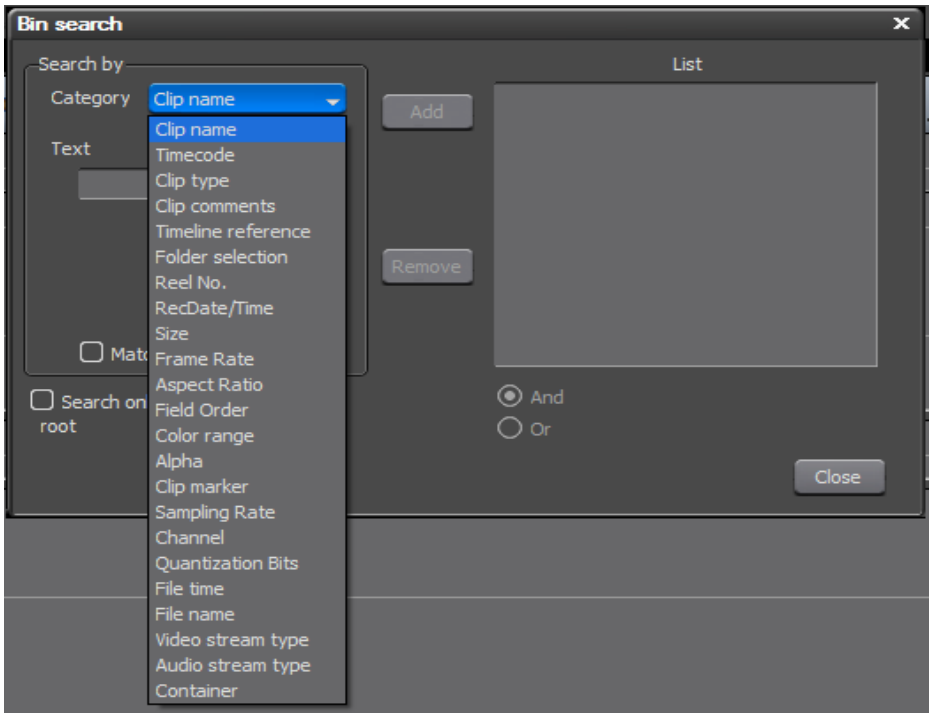
To search for a clip in the Asset Bin. do the following:

1. Click the Search button (highlighted in blue in Figure 298) in the Asset Bin.

Figure 298. Asset Bin Search Button

The Bin Search dialog shown in Figure 299 appears

Figure 299. Asset Bin Search Dialog

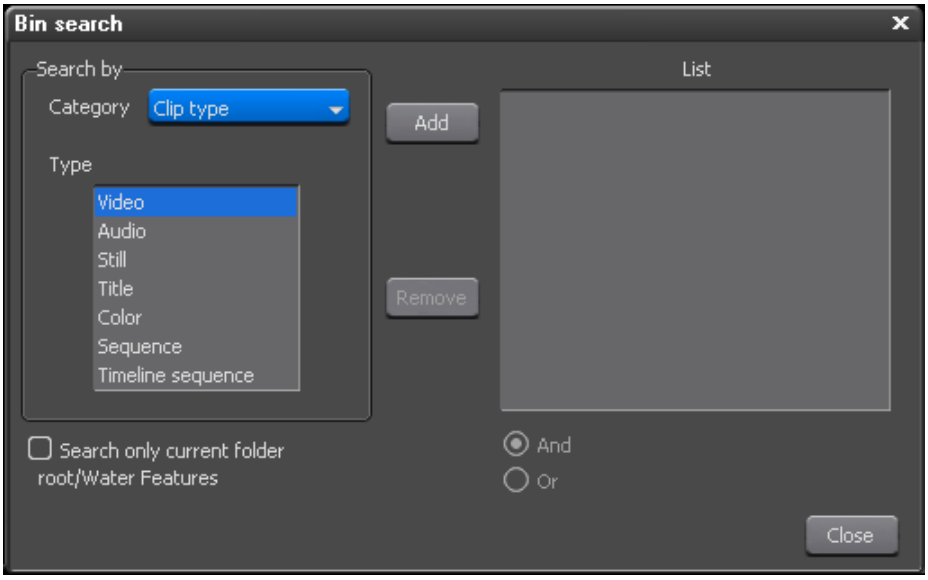


2. Select a search criterion from the Category drop-down list box as shown above.

The Bin Search dialog changes to a category-specific dialog based on the criterion selected in Step 2. See for an example based on the Clip Type.

Note The category-specific dialog will be different for different search categories. The remaining steps are presented as an example that applies to a Clip Type search only.

Figure 300. Category-Specific Bin Search Dialog

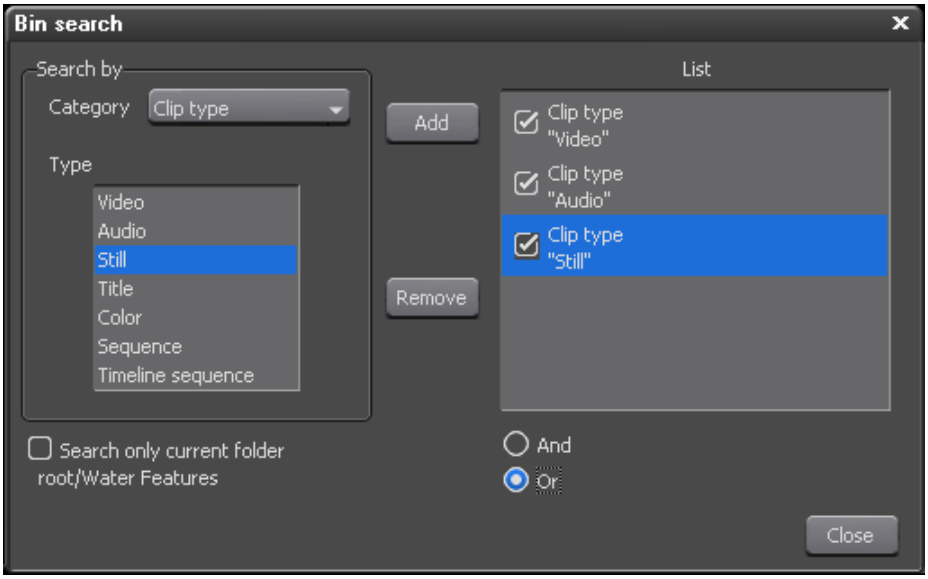


3. Select the clip type for which you wish to search and click the **Add** button.

4. Repeat Step 3 for any additional search types you wish to add.

All added search types appear in the "List" section as illustrated in Figure 301.

Figure 301. Asset Bin Search List



5. Select additional search parameters such as an "And" or and "Or" search logic and "search only current folder."

Note With the Clip Type search in the above example, “Or” should be selected as the search logic operation as no clips will match the “And” logic of a video clip and an audio clip and a still clip.

Clips found by the search appear in the Search Results folder in the folder view.

6. To close the Bin Search dialog, click the **Close** button.

Alternative Method:

Right-click the folder view in the Asset Bin and select “Search” from the menu.

Additional Searching Information and Considerations:

- You may refine the results in the search results folder, selecting “Search In” from the menu and entering search criteria as explained in the steps above.
- To delete a search criterion, select it in the “List” and click the **Remove** button.
- Right-click the “Search Results” folder and select “Change Search Settings” from the menu to change the search criteria.
- Select the “Search only current folder” to search only in the currently selected folder. Sub-folders are excluded from the search.
- Still image, color bar, color matte and title clips have no In and Out points. When searching by In and Out points, these clips types will not be found.
- The “Clip Duration” type in a “Timecode” category search will not find still image, color bar, color matte and title clips as the clip duration is the length between In and Out points and these clip types have no In and Out points.

Note The “Search Results” folder cannot be moved.

Searching for Unused Clips

To locate clips in the Asset Bin that are unused on the Timeline, do the following:

1. Click the Search button (highlighted in blue in Figure 302) in the Asset Bin.

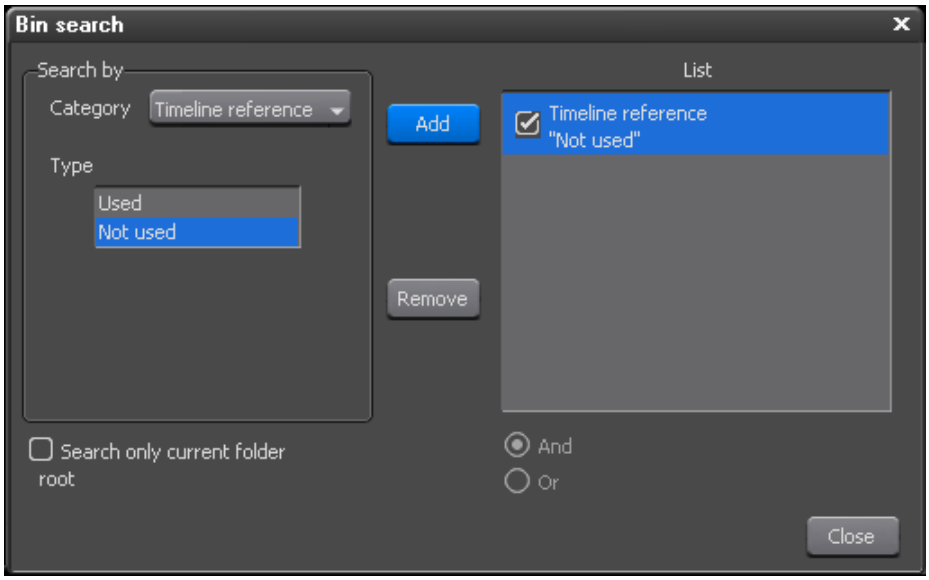
Figure 302. Asset Bin Search Button

The Bin Search dialog appears.

2. Select "Timeline Reference" in the Category drop-down list

3. Select "Not Used" and click the **Add** button. See Figure 303.

Figure 303. Search for Unused Clips Bin Search Dialog



4. Click the **Close** button to close the Bin Search dialog.

To delete the source files of unused clips, right-click the clip in the Search Results folder and select "Delete File" from the menu.

Note Clips used on the Timeline have a green dot in the upper left corner of the clip display (See Figure 304). The green dot is not present for clips not used on the Timeline.

Figure 304. Clip Used on the Timeline

To release unused clips in the Asset Bin, right-click the clip in the Search Results folder and select "Delete" from the menu. Releasing clips deletes the clips in the Asset Bin, but, does not delete the source file.

Note When a clip is released from the Search Results folder, the linked clip in "Root" is also released. These clips cannot be restored (release cancelled).

Deleting Search Results

To remove the Search Results folder do the following:

1. Select the Search Results folder and click the Delete button (highlighted in blue in Figure 289).

Figure 305. Asset Bin Delete Button

A dialog appears asking to confirm the deletion.

2. Click the **OK** button to delete the Search Results folder and its contents.

Alternative Methods:

- Right-click the Search Results folder, select "Clear" from the menu and click the **OK** button in the confirmation dialog.
- Select the Search Results folder, press the [**Delete**] key and click the **OK** button in the confirmation dialog.

Note Once deleted, the Search Results folder cannot be restored without recreating the search.

Section 5

Timeline Operations

The majority of the work done an any EDIUS project is accomplished on the Timeline. Clips are placed on the Timeline for editing and adding transitions effects and titles. When the project is finished, it is exported to the final format for viewing.

The sections which precede this section focused on understanding the various interface elements of EDIUS, adjusting settings which affect the way you work, managing clips and capturing source material for use in EDIUS. With an understanding of these concepts, you are now ready to begin using EDIUS tools to create your video projects.

Editing is the process of positioning, moving, deleting, copying, modifying, trimming and marking clips on the Timeline in order to produce the final project. After editing is complete, transitions, effects and titles are added before the final project is exported as a completed work. This section focuses on the tasks associated with the editing process.

Timeline Settings

When performing operations on the Timeline, Timeline settings determine the behavior of many of those operations. With some settings, there are interdependencies; in other words, the behavior of setting B may be dependent upon the configuration of setting A. The explanations below cover the various Timeline settings and any interdependencies which may exist between these settings.

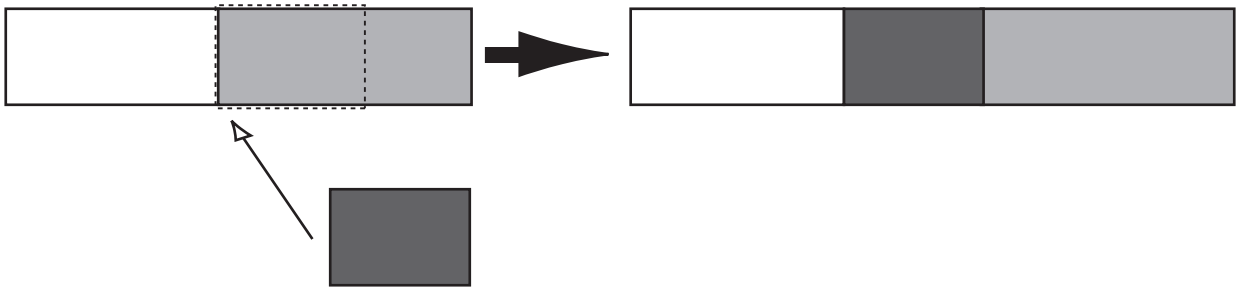
Edit Settings

These settings affect the behavior of editing operations on the Timeline.

Insert Mode

With insert mode enabled, adding a new clip moves any existing clips at the insertion point forward in time to accommodate the new clip. The length of the sequence is increased by the length of the inserted clip (see Figure 306). Default = On.

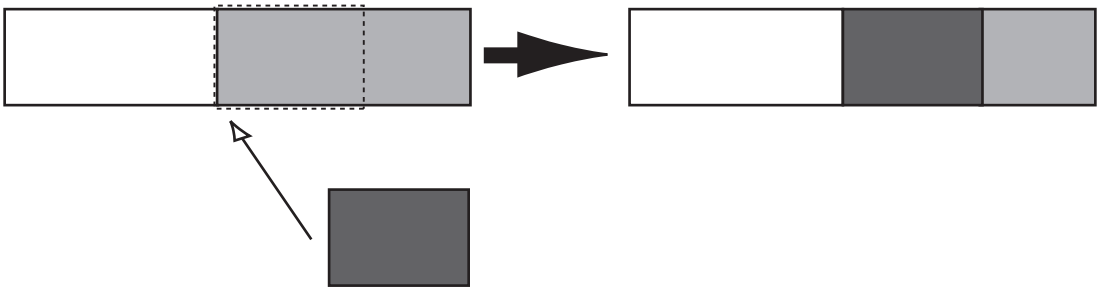
Figure 306. Insert Mode Example



Overwrite Mode

With overwrite mode enabled, adding a new clip overwrites the existing clip at the insertion point by the amount of overlap between the two clips. The length of the sequence does not increase if the inserted clip is shorter than or equal in length to the clip it overwrites (see Figure 307). Default = Off.

Figure 307. Overwrite Mode Example



Note Insert Mode and Overwrite Mode are mutually exclusive. Only one or the other is active. Enabling one mode automatically disables the other.

Insert and Overwrite mode are toggled from the tool bar in the Timeline window. See Figure 308.

Figure 308. Insert/Overwrite Toggle Button

Each click of the button switches modes.

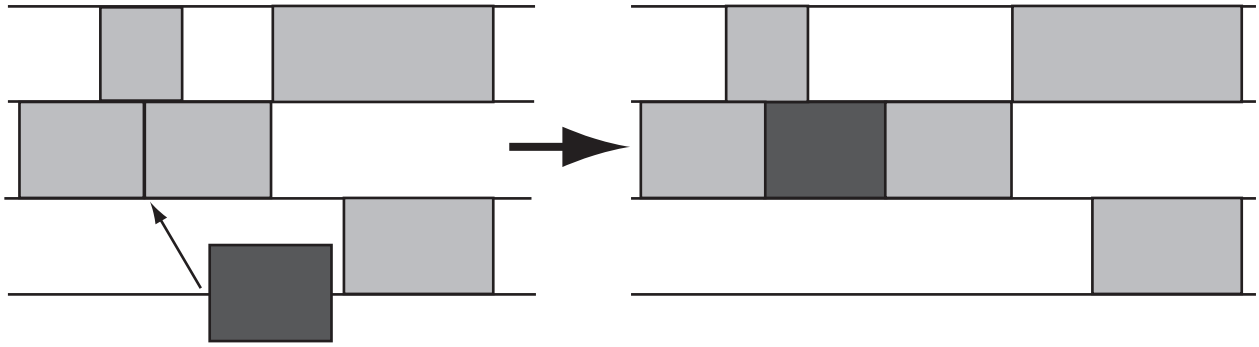
= Insert Mode = Overwrite Mode

Pressing the [**INSERT**] key on the keyboard also toggles Insert/Overwrite mode.

Sync Mode

If sync mode is enabled, editing a track (inserting, deleting or moving clips, for example) affects other tracks if insert mode is also enabled. All tracks are kept in sync (maintain their prior positions relative to one another) from the insertion point on. See Figure 309 for an example. Default = Not Checked.

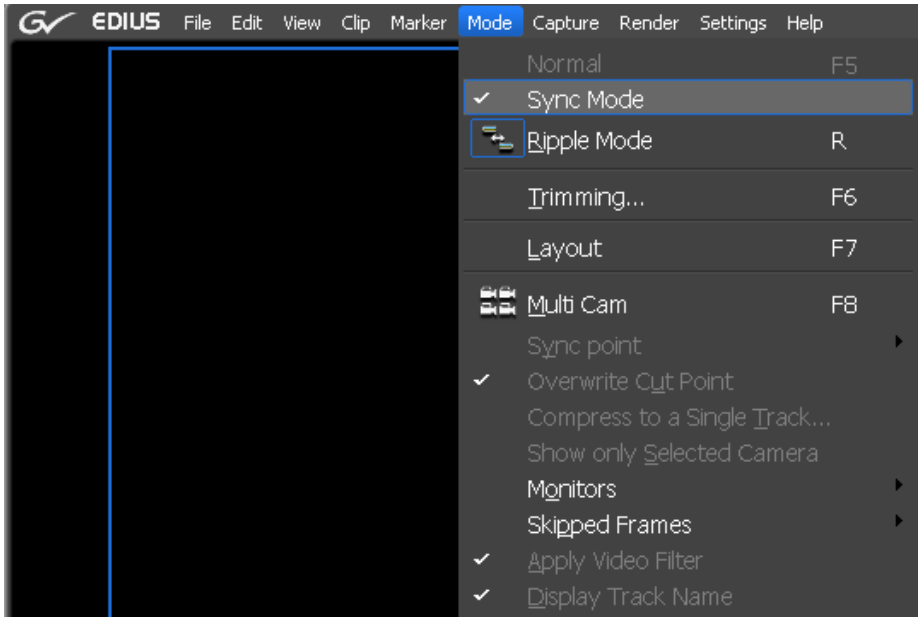
Figure 309. Sync Mode With Insert Enabled



Sync Mode is toggled on and off by either of the following methods:

- Click the list button [▽] on the **Insert Mode** or **Overwrite Mode** icon and select Sync Mode. A check mark by Sync Mode indicates that Sync Mode is on. Sync Mode is off when the check mark is not present.
- Select Mode>Sync Mode from the Preview window (see Figure 310). A check mark by Sync Mode indicates that Sync Mode is on. Sync Mode is off when the check mark is not present.

Figure 310. Sync Mode Menu Toggle



Note If you do not want Sync Mode to affect a particular track when Sync Mode is on, click the lock icon on the track panel next to the track you wish to lock (see Figure 311). When the lock icon is highlighted and locked, the track is locked. When the icon is dim and unlocked, the track is unlocked. Clicking the lock icon toggles the lock on and off.

Figure 311. Track Lock Toggle

Ripple Mode

With ripple mode enabled, deleting or trimming a clip causes all the clips which follow in the Timeline to move to fill in the space formerly occupied by the trimmed or deleted clip. Default = Checked (On).

Note With ripple mode on, the behavior of clips on all tracks is also affected by the status of the Sync Mode setting. The examples below illustrate the effect of the Sync Mode setting on Ripple Mode editing.

Figure 312 represents the movement of clips in various tracks on the Timeline when ripple mode is on, sync mode is off and insert mode is enabled.

Figure 312. Ripple Mode On/Sync Mode Off/Insert Mode Enabled

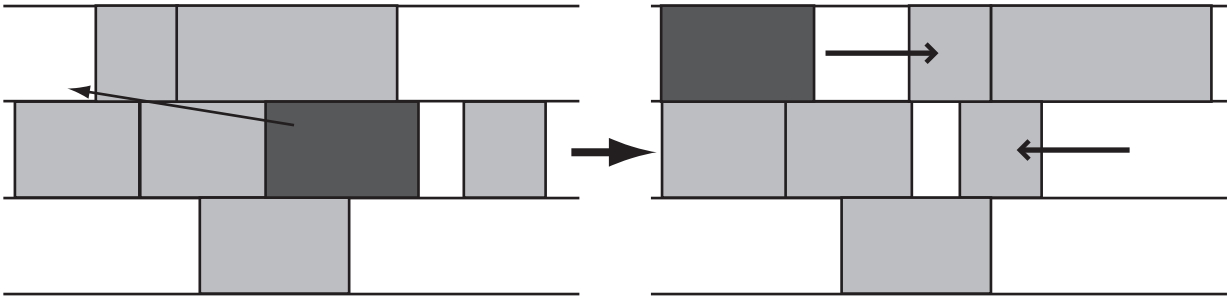
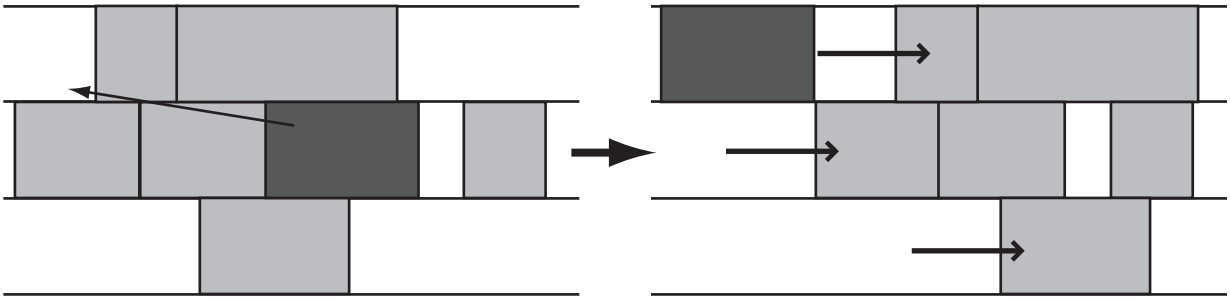


Figure 313 represents the movement of clips in various tracks on the Timeline when both ripple mode and sync mode are turned on with insert mode also enabled.

Figure 313. Ripple Mode On/Sync Mode On/Insert Mode Enabled



Ripple Mode is toggled on and off by one of the following procedures:

- Click the **Ripple Mode** button on the Timeline window tool bar. Each click toggles ripple mode on or off. When ripple mode is off there is a slash through the ripple mode icon. When ripple mode is on, the slash is removed. See Figure 314 for details.

Figure 314. Ripple Mode Toggle Button

- Select Mode>Ripple Mode in the Preview window. As in the example above, the icon next to the Ripple Mode menu selection has a slash through it when ripple mode is disabled. The slash is not present when ripple mode is enabled.
- Press the **[R]** key on the keyboard to toggle Ripple mode on and off.

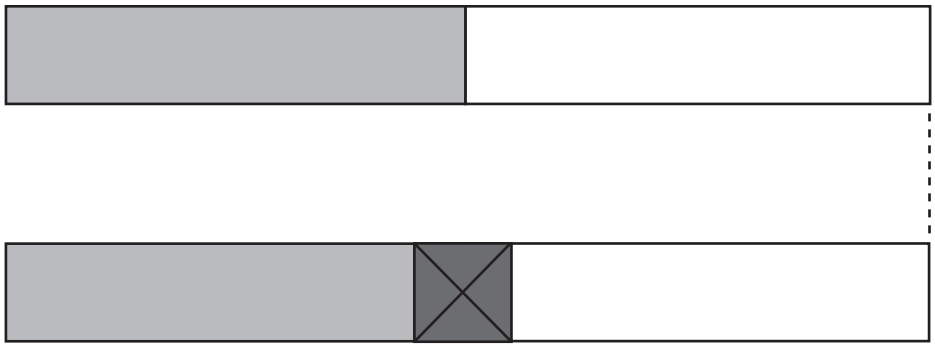
Extend Mode

Extend mode and fix mode are controlled by the "Extend clips when applying transition/cross fade" setting in the Timeline Settings dialog. When this setting is enabled (checked), extend mode is enabled. When the setting is disabled (not checked), fix mode is enabled.

To change the setting, select Settings>Application Settings>Timeline from the Preview window menu bar. Enable or disable the "Extend clips when applying transition/cross fade" setting depending upon the mode you desire.

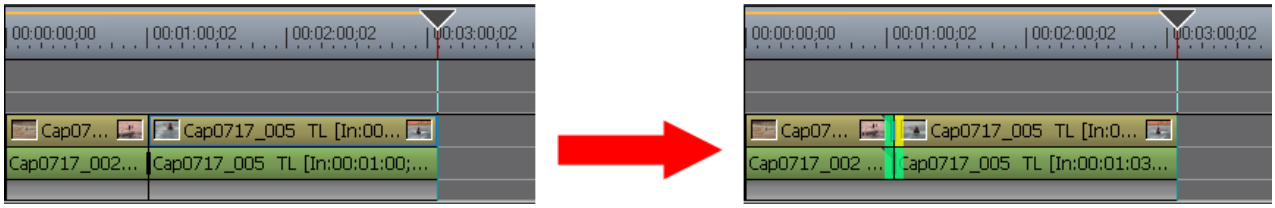
- In Extend Mode, adding or deleting a transition or audio cross fade between clips will not change the overall sequence length on the Timeline as illustrated in Figure 315.

Figure 315. Extend Mode Example



When adding a transition or audio cross fade, the In/Out points of the clips before and after the transition extend with the length of the transition. The net result is that the overall sequence length does not change. See Figure 316.

Figure 316. Transition Added - Extend Mode



Note If a clip does not have a margin, transition/audio cross fade cannot be set (except in the Mixer area). A transition/cross fade length can only be extended by the amount of margin in a clip.

When a transition or audio cross fade between clips is deleted, the In/Out-points of the clips before and after the transition contract by an amount

equal to the length of the transition and the overall sequence length remains unchanged. See Figure 317.

Figure 317. Transition Deleted - Extend Mode

Note When one of the clips with the transition is deleted, the transition is deleted as well. The length of the remaining clip changes and extends to the mid-point location of the deleted transition.

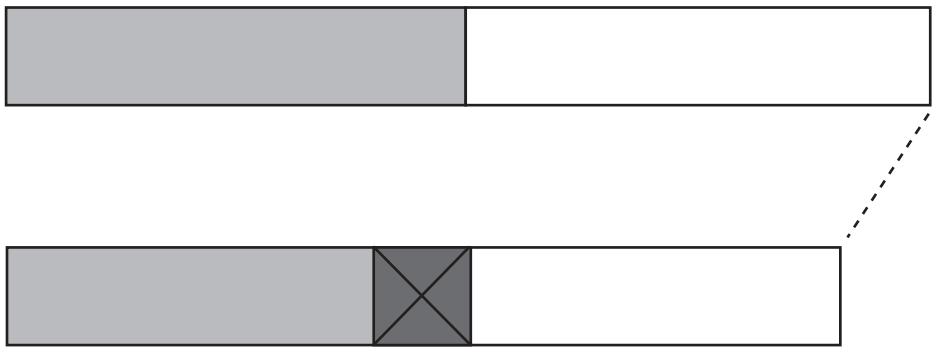
Fix Mode

Extend mode and fix mode are controlled by the "Extend clips when applying transition/cross fade" setting in the Timeline Settings dialog. When this setting is enabled (checked), extend mode is enabled. When the setting is disabled (not checked), fix mode is enabled.

To change the setting, select Settings>Application Settings>Timeline from the Preview window menu bar. Enable or disable the "Extend clips when applying transition/cross fade" setting depending upon the mode you desire.

- In Fix Mode, adding a transition or an audio cross fade between clips shortens the overall length of the sequence on the Timeline (as illustrated in Figure 318). Deleting a transition or cross fade lengthens the sequence on the Timeline.

Figure 318. Fix Mode Example



When adding a transition or audio cross fade, the clips before and after the transition overlap each other by the length of the transition. The net result is that the overall sequence length shortens by the length of the transition as illustrated in Figure 319.

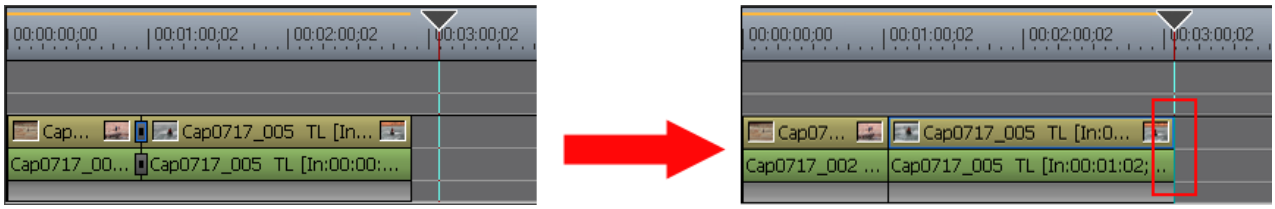
Figure 319. Transition Added - Fix Mode

When the length of a transition is increased, clips move to the left and the total sequence length changes according to the transition length as illustrated in Figure 320.

Figure 320. Transition Length Increased - Fix Mode

When a transition or audio cross fade is deleted, the total length of the sequence increases by the length of the transition as illustrated in Figure 321.

Figure 321. Transition Deleted - Fix Mode



Note Overall length of the Timeline sequence when adding, modifying or deleting transition may also be affected by Sync Mode and Insert/Overwrite settings.

Track Settings

The settings listed below can be changed in the Project Settings (Detail) dialog box. For information on accessing and changing these settings, see *Change Current Project Settings* *on page 55*.

- TC Preset
- TC Mode
- Total Length
- Number of tracks of each track type
- Audio Channel Map

Some of the settings above, as well as additional settings, may be changed in the Sequence Settings dialog. For more information on accessing and changing sequence settings see *Sequence Settings* *on page 59*. The following is a list of the settings that can be changed in the Sequence Settings dialog:

- Sequence Name
- TC Preset
- TC Mode
- Total Length
- Panning Mode
- Color Space Conversion
- Audio Channel Map

Track Panel

The items shown in Figure 322 can be set in the Track Panel:

Note The icon for each item is illuminated (white) when the setting is on. The icon is dimmed (grey) when the setting is off.

Figure 322. Timeline Track Panel Detail

Track Lock -

This button toggles the track lock/unlock status. When a track is locked, editing the track is disabled.

Pressing **[ALT]**+**[L]** on the keyboard also toggles the track lock on and off.

Video Channel -

This button toggles the video channel on and off and controls video channel locking. When video channel is on and Obey Mapped Tracks is enabled, the video portion of video clips with audio, color bar clips, color matte clips and title clips may be placed on the track. With video channel off, no video clips may be placed on the track.

Video Mute -

This button toggles the video mute/video play status. With video mute on, video on the track will not be played.

Pressing **[SHIFT]**+**[W]** on the keyboard also toggles the video mute on and off.

Audio Channel -

This button toggles the audio channel on and off and controls audio channel locking. When audio channel is enabled for a track that supports audio, the audio channels for that track may be selected from the menu as shown in Figure 323.

Figure 323. Track Panel - Audio Channel Menu

Note The audio channel selection affects only newly-added audio. For example, if you have tracks 1,2 of clip A on the audio track, changing it to Monaural Channel 3 doesn't change the existing audio on the track, it just forces any new audio added to the track to add only monaural channel 3.

For more information, see page 4 of the audio manipulation how-to document located at

http://desktop.thomsongrassvalley.com/support/supportdocs/docs/edius_v45/How_To_Manipulate_Audio_KH022608C.pdf

Wave -

This button toggles the display of the audio waveform on and off. Figure 324 shows the audio waveform enabled on an audio track.

Pressing **[CTRL]**+**[W]** on the keyboard also toggles the waveform display on and off.

Note If the clip has on monaural audio, only a single waveform is displayed as shown in Figure 324. If the clip has tow or more audio channels, two waveforms are generated (if necessary) and displayed as illustrated in Figure 325.

Figure 324. Track Panel - Audio Waveform Enabled - Mono Audio

Figure 325. Track Panel - Audio Waveform Enabled - Stereo Audio

Audio Mute -

This button toggle audio mute on and off. When audio mute is on, no audio is heard when the track is played.

Pressing **[SHIFT]**+**[S]** on the keyboard also toggles the audio mute on and off.

Expand 1

This button [▷/▽]toggles the display of the **VOL/PAN** button on and off.

Pressing **[ALT]**+**[S]** on the keyboard also toggles the **VOL/PAN** button on and off.

VOL/PAN - VOL

This button toggles between volume (VOL) adjustment mode and pan (PAN) adjustment mode.

Expand 2

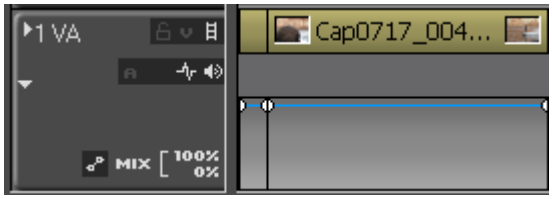
This button [▷/▽] toggles the display of the **MIX** button on and off.

Pressing **[ALT]**+**[W]** on the keyboard also toggles the **MIX** button on and off.

MIX - MIX

This button toggles transparency adjustment mode on and off. Figure 326 shows the track with transparency adjustment mode on as indicated by the large grey panel at the bottom of the track. For more information, see *Transparency Adjustments* *on page 556*.

Figure 326. Track Panel - Transparency On



Title - T

This button toggles the display of titles on an off. This button appears only in a T (title) track.

Note Enable both Video Channel and Audio Channel in a VA track in order to place video and audio in the track.

Adjust Track Panel Width

To change the width of the track panel, position the cursor at the right edge of the track panel (the cursor shape changes as indicated in Figure 327). Drag the edge of the track panel in the desired direction.

Figure 327. Adjust Track Panel Width

Note All track panels have the same width. It does not matter on which track panel the cursor is positioned. Dragging the edge adjusts the width of all track panels.

Adjust Track Panel Height

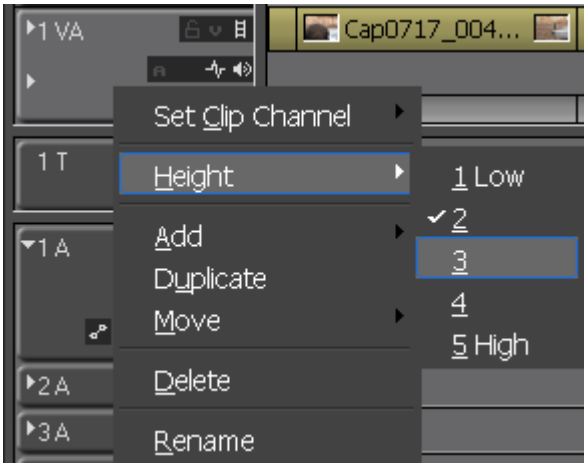
Track panel height may be adjusted for individual panels or for all panels simultaneously.

To adjust individual track panel height, follow these steps:

1. Right-click on the track panel to be adjusted.
2. Select Height>{height unit} from the menu as illustrated in Figure 328.

Note Track height may be adjusted from 1 height unit to 5 height units which may vary by track. The currently selected track height is indicated by the check mark.

Figure 328. Adjust Track Panel Height

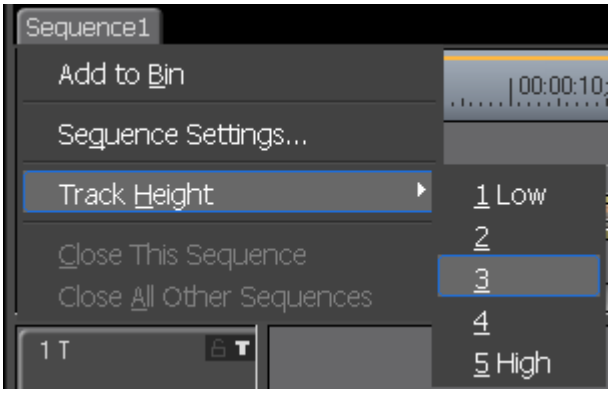


The track height is changed according to your selection.

To adjust the height of all tracks simultaneously, do the following:

1. Right-click on the sequence tab.
2. Select Track Height>[height unit] from the menu as illustrated in Figure 329.

Figure 329. Adjust Height of All Tracks

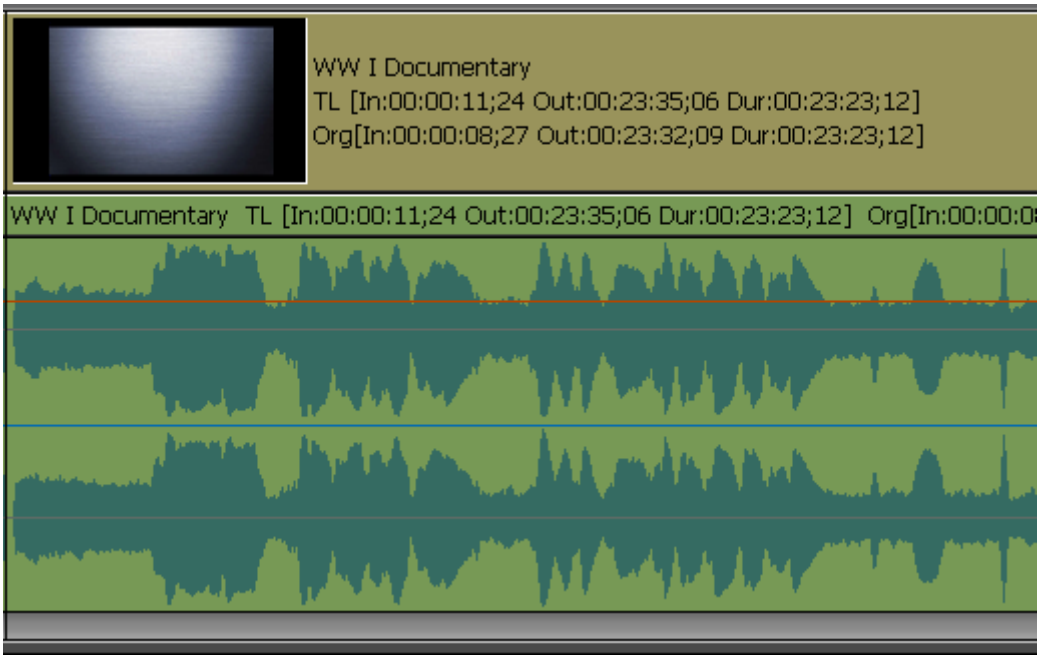


The height of all tracks is adjusted according to your selection.

Note Tracks height will be adjusted according to current expand settings.

When viewing waveforms, it is often desirable to increase track height in order to better view the peaks and valleys in audio waveforms as illustrated in Figure 330.

Figure 330. Track Height of 5 with Waveform



Change Track Name

The default track names are:

- V - Video Track
- VA - Video/Audio Track
- A - Audio Track
- T - Title Track

These track names may be changed, if desired. Track names may be up to 30 characters in length. Multiple tracks may have the same name.

To change a track name, do the following:

1. On the track panel, click the current track name which you wish to change.

The current track name appears in an edit box as shown in Figure 331.

Figure 331. Change Track Name

2. Enter the new track name and press the [**ENTER**] key.

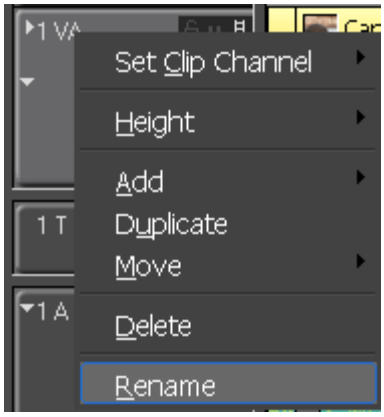
The track name is changed as shown in Figure 332.

Figure 332. New Track Name

Alternative Method:

Right-click the track panel to change and select "Rename" from the menu (see Figure 333).

Figure 333. Track Menu - Rename



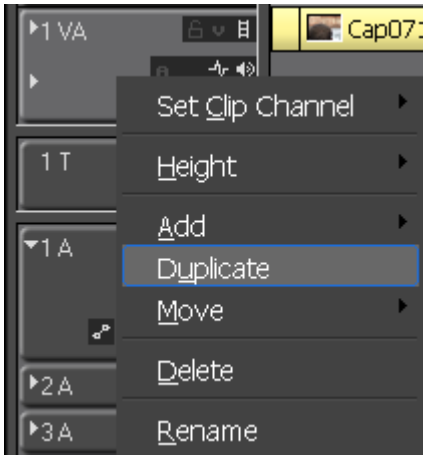
Note When a track is duplicated, the track name is also duplicated.

Copy Tracks

To copy a track, follow these steps:

1. Right-click on the track panel of the track you wish to copy.
2. Select "Duplicate" from the menu (see Figure 334)

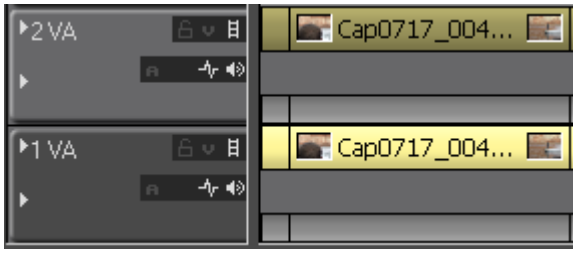
Figure 334. Track Menu - Duplicate



The selected track is copied in the right-clicked panel (see Figure 335).

Note The track number increments on the copied track.

Figure 335. Copied Track



Move Tracks

To move a track, follow these steps:

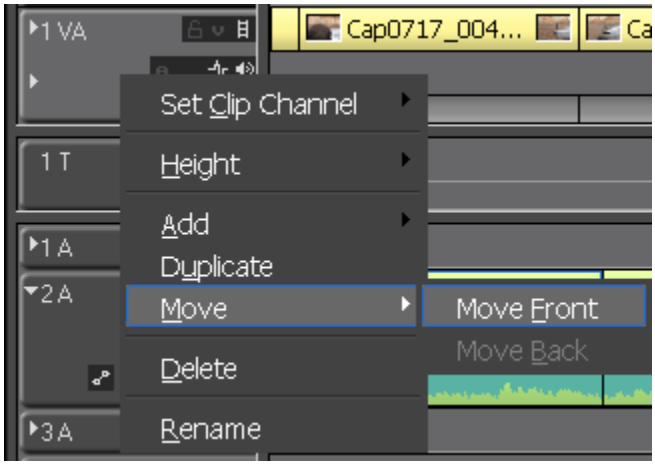
Note The relative order of track types is maintained when moving tracks. V and VA tracks are at the top; T tracks come next and, A tracks are at the bottom of the track panel. You may switch the order of V and VA tracks, multiple T tracks or multiple A tracks; however, you cannot move a T track before a V or VA track nor an A track before a T, V or VA track.

1. Right-click the track panel to be moved.

2. Select Move>Move Front or Move>Move Back from the menu as illustrated in Figure 336.

- Move Front - moves the selected track up (V and VA tracks) or down (T and A tracks) in the track panel order relative to other tracks of the same type.
- Move Back - moves the selected track down (V and VA tracks) or up (T and A tracks) in the track panel order relative to other tracks of the same type.

Figure 336. Track Panel - Move Tracks



Note A track that is moved is assigned a new track number to indicate its position with respect to other tracks of the same type.

Alternative Method:

Drag and drop the track in the desired position in the track panel.

Note Tracks moved in this manner may be reordered only with respect to tracks of the same type as explained above.

Add Tracks

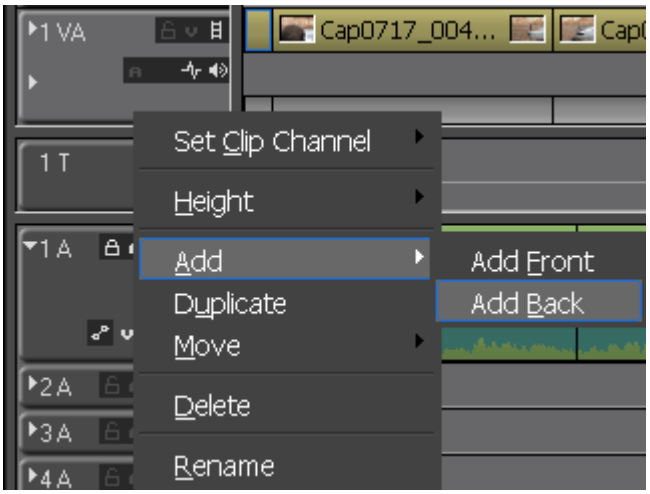
To add tracks to the Track Panel, do the following:

1. Right-click on an existing track of the type (V, VA, T or A) you wish to add.

2. Select Add>Add Front or Add>Add Back from the menu as shown in Figure 337.

- Add Front - Adds the new track before other tracks of the same type in the Track Panel.
- Add Back - Adds the new track after other tracks of the same type in the Track Panel.

Figure 337. Track Panel Menu - Add Track



The Add Track dialog shown in Figure 338 appears.

Figure 338. Add Track Dialog

3. Enter the number of tracks of the selected type to be added and click the **OK** button.

Note If you right-clicked on a V or VA track in Step 1, a dialog appears (see Figure 339) from which to select the track type to be added in addition to the number of tracks to be added. Make the selections and click the **OK** button.

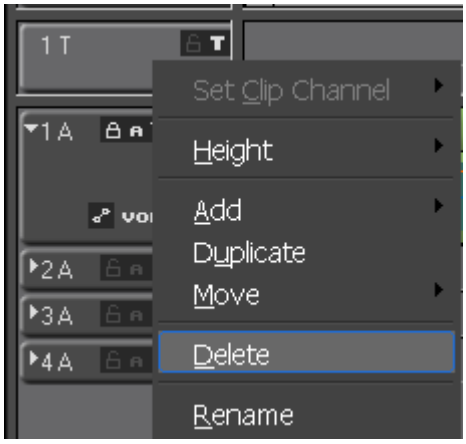
Figure 339. Track Panel Add V/VA Track Dialog

Delete Tracks

To delete a track from the Track Panel, do the following:

1. Right-click on the track to be deleted.
2. Select "Delete" from the menu as shown in Figure 340.

Figure 340. Track Panel Menu - Delete

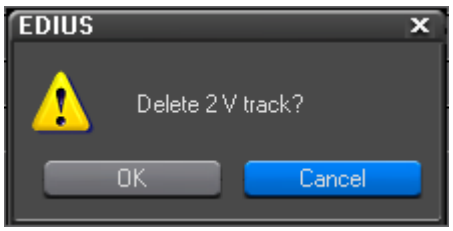


If the track has no clips on it, it is deleted immediately.

If the track has clips on it, the dialog in Figure 341 appears.

3. Click the **OK** button to delete the track.

Figure 341. Track Delete Confirmation Dialog

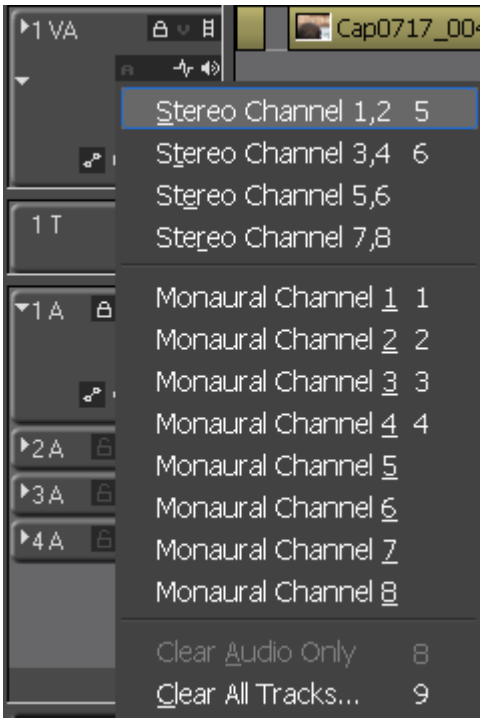


Audio Channel Settings

To set audio channels on tracks that support audio, follow these steps:

1. Click the **Audio Channel** button on a VA or A track on the Track Panel.
2. Select the channel(s) to assign to the track from the menu that appears (see Figure 342).

Figure 342. Track Panel - Audio Channel Menu



Alternative Methods:

- Press the **[5]** key on the keyboard to assign stereo channels 1,2 to a track.
- Press the **[6]** key on the keyboard to assign stereo channels 3,4 to a track.
- Press the **[1]** key on the keyboard to assign mono channel 1 to a track.
- Press the **[2]** key on the keyboard to assign mono channel 2 to a track.
- Press the **[3]** key on the keyboard to assign mono channel 3 to a track.
- Press the **[4]** key on the keyboard to assign mono channel 4 to a track.
- Press the **[8]** key on the keyboard to clear audio channel assignments on all tracks.
- Press the **[9]** key on the keyboard to clear video and audio channel assignments on all tracks.

Audio channel information and considerations:

- Stereo channel choices assign two audio channels to the track.
- Monaural channel choices assign one audio channel to the track.
- The same channel(s) may not be assigned to multiple tracks.
- In the default settings, the first audio channel in the track is assigned to the first audio channel in the output. To change audio channel mappings see *Sequence Settings* *on page 59*.
- "Clear Audio Only" clears the audio channel assignments in all tracks.

Note Audio clips assigned to these tracks are not cleared. Only the audio track assignment that appears in the track panel is cleared.

- "Clear All Tracks" clears the video and audio channel assignments in all tracks.

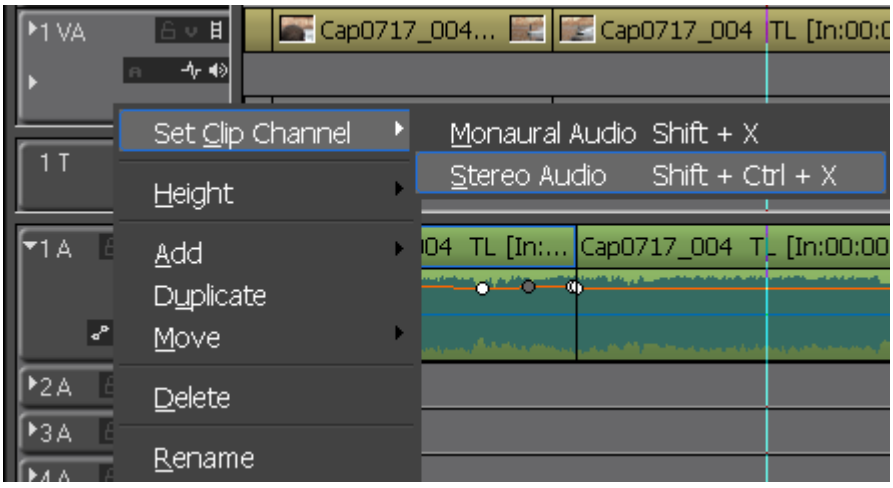
Note Video and audio clips assigned to the tracks are not cleared. Only the video and audio channel assignments and status that appears in the track panel are cleared.

To set the audio type on all audio tracks to the same type , do the following:

1. Right-click on an audio track in the Track Panel.
2. Select Set Clip Channel>{audio type} from the menu as shown in Figure 343.

Note Changing the audio type will affect audio channels already assigned to an audio track.

Figure 343. Track Panel Menu - Set Clip Channel



Alternative Methods:

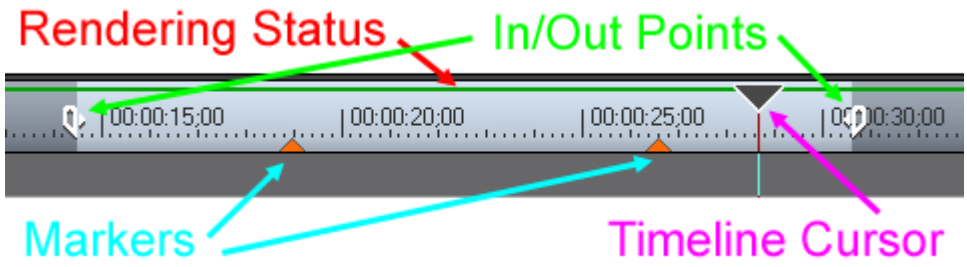
- To set all audio tracks to monaural audio, press [SHIFT]+[X] on the keyboard.
- To set all audio tracks to stereo audio, press [SHIFT]+[CTRL]+[X] on the keyboard.

Timeline Scale Settings

Timeline Scale Markings

The marking on the Timeline are illustrated in Figure 344.

Figure 344. Timeline Markings



Rendering Status

The rendering status line indicates the rendering requirements or status for a clip on the Timeline. The line color indicates the status as follows:

Blue

The area should play back in real-time (no rendering required).

Aqua Blue

Clip will playback in real-time with no rendering (rendering may be required in certain circumstances).

Green

The area has been rendered to a temporary file.

Orange

The area may not play back in real-time (this area is considered a "loaded" area).

Red

Real-time playback was attempted for this area but failed (this area is considered an "overload" area).

See *Rendering Operations on page 441* for more information on rendering.

In/Out Points

These points mark the In and Out points of the content that should be included in the project output. They also limit the range over which certain operations are executed.

Markers

Markers serve as chapter points when the project is output using Burn to Disc. Markers are also used to designate points on the Timeline for quick navigation.

Timeline Cursor

The Timeline cursor marks the position on the Timeline of the frame displayed in the Recorder. The cursor may be freely dragged to the left or the right to change its position.

Timeline Scale Settings

The time scale on the Timeline can be displayed in units ranging from 1 Frame to 60 minutes. The entire project may also be displayed without scrolling by automatically adjusting the Timeline scale to "Fit" the project.

For information on adjusting the Timeline scale, see *Timeline Scale on page 118*.

Clip Placement

In and Out Points

When working with clips on the Timeline, it is often desirable to set In and Out points in order to use only a portion of the clip or to limit the range over which certain operations are executed.

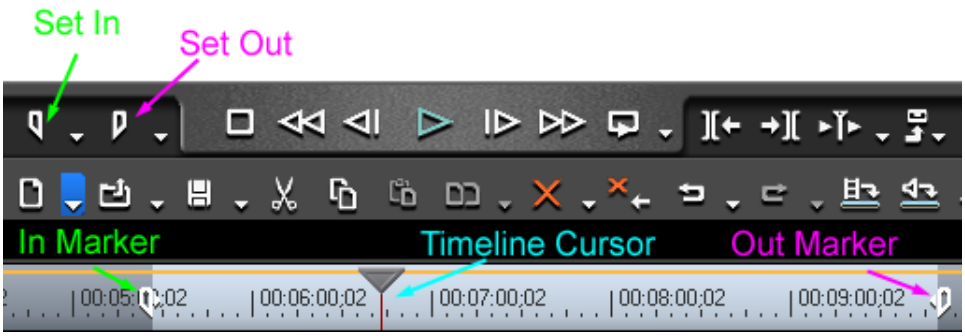
Setting In and Out Points on Timeline

Setting In and Out points on the Timeline allows you to restrict the range in which certain operations will take place, or to position a clip in the Timeline based on the In and Out points.

To set In and Out points on the Timeline, do the following:

1. Move the Timeline cursor to the position at which you wish to set the In point. Refer to Figure 345.

Figure 345. Set In and Out on Timeline



2. Click the **Set In** button in the Recorder.

You may also do one of the following to set the In point.

- Right-click on the time scale, select “Set In” from the menu
- Select Marker from the Preview window menu bar and select “Set In” from the menu.
- Press **[I]** on the keyboard.

3. Move the Timeline cursor to the position at which you wish to set the Out point.

4. Click **Set Out** in the Recorder.

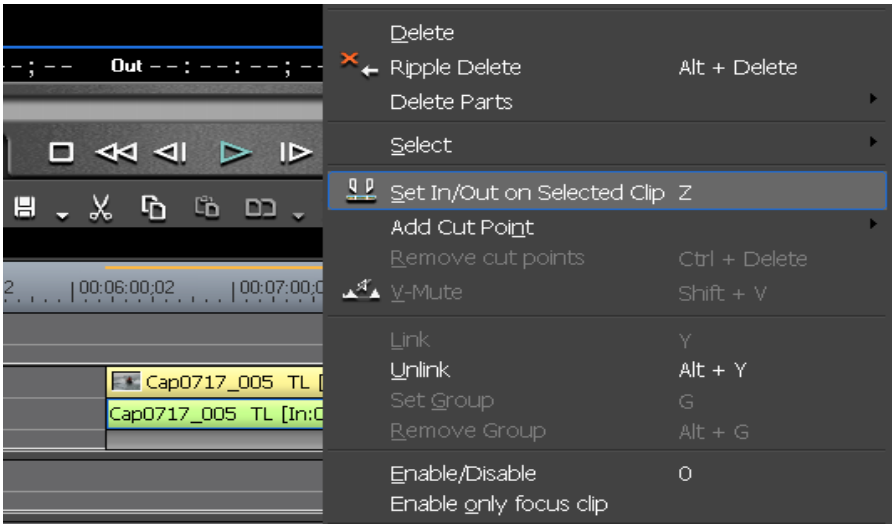
You may also do one of the following to set the Out point.

- Right-click on the time scale, select “Set Out” from the menu
- Select Marker from the Preview window menu bar and select “Set Out” from the menu.
- Press **[O]** on the keyboard.

Setting In and Out Points on Ends of Clips

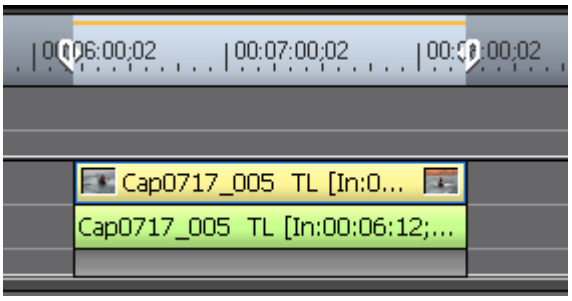
To set In and Out points at the end of a clip, right click on the clip. The menu in Figure 346 appears.

Figure 346. Clip Menu



In and Out points are set at each end of the clip. See Figure 347.

Figure 347. In and Out at End of Clip



Alternative Methods:

- Select a clip and select Marker from the Preview window menu bar. Select "Set In/Out on Selected Clip."
- Select a clip and double click the time scale above the clip.

Adjusting In and Out Points

Once In and Out points have been set on the Timeline, they may be adjusted by dragging the In or Out slider to a new location.

Note If the Out point is set or moved to a position before the In point, the Timeline scale between the points is displayed in red as well as part of the timecode in the recorder.

Deleting In and Out Points on the Timeline

To delete In and Out points on the Timeline, do the following:

1. Click the list button (▽) of the **Set In** or **Set Out** button in the Recorder.
2. Select "Clear In" or "Clear Out" on the menu.

Alternative Methods:

- Right-click on the time scale and select "Clear In" or "Clear Out."
- Select Marker on the menu bar and select "Delete In" or "Delete Out."

You can delete both In and Out points simultaneously by any of the following methods:

- Right-click on the time scale and select "Clear In/Out."

Note If you select "Delete In/Out from the menu, both the In and Out points and the clip between these points is deleted.

- Select Marker on the menu bar and select "Delete In/Out."
- Press **[X]** on the keyboard.

Placing Clips on the Timeline

An EDIUS project is comprised of one or more sequences and a sequence is comprised of one or more clips. A sequence is built by placing related clips on the Timeline. There are several ways to place and position clips on the Timeline.

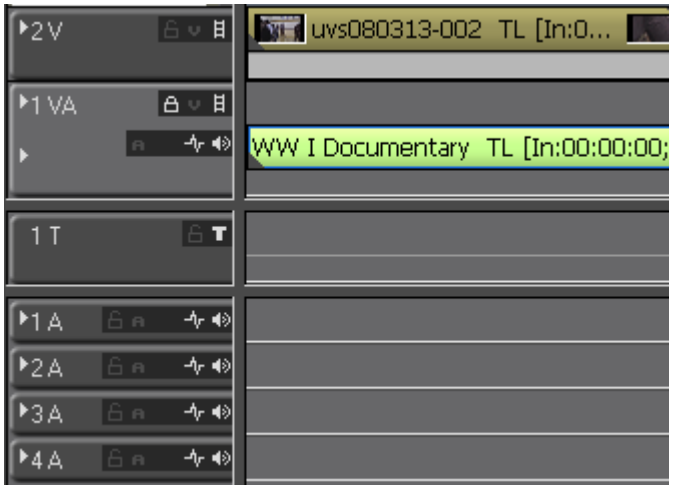
Using Clips in the Asset Bin

Captured or imported clips in the Asset Bin are placed on the Timeline to build EDIUS projects.

To place a clip in the Asset Bin on the Timeline, do the following:

1. Click the track on which you wish to place the clip. See Figure 348.

Figure 348. Track Panel



There are four track types in EDIUS. They are:

- V Track - Video, still images, titles, color bar clips and matte color clips are placed on this track

Note If video clips with audio are placed on this track, the audio is disabled.

- VA Track - Video, audio, still images, titles, color bar clips and matte color clips are placed on this track
- T Track - Video, still images, titles, color bar clips and matte color clips are placed on this track. Title positions can be adjusted on this track.

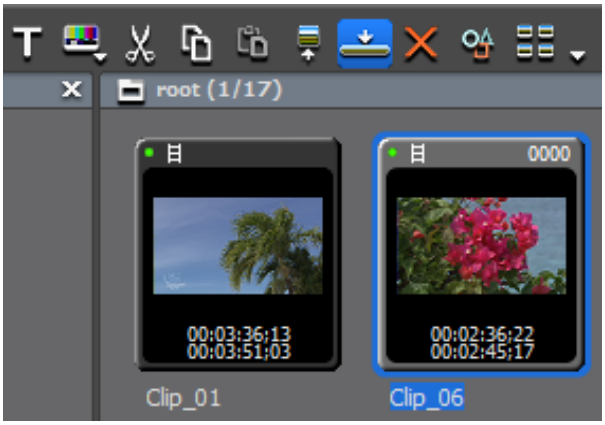
Note If video clips with audio are placed on this track, the audio is disabled.

- A Track - Audio clips are placed on this track

Note If video clips with audio are placed on this track, the video is disabled and only the audio is used.

2. Move the Timeline cursor to the position where the track is to be placed.
3. Select a clip in the Asset Bin and click the **Add to Timeline** button in the Asset Bin. See Figure 349.

Figure 349. Asset Bin - Add Clip to Timeline



The clip is added to the Timeline at the cursor position.

Alternative Methods:

- Press **[SHIFT]**+**[ENTER]** on the keyboard.
- Drag and drop the clip from the Asset bin to the Timeline.
- Right-click on a clip in the Asset Bin and select "Add to Timeline."
- Play the clip in the Player and drag and drop it to the Timeline.
- Play the clip in the Player and click the **Insert to Timeline** or **Overwrite to Timeline** button.
- Add the video displayed in the Player to the Timeline by pressing **[E]** on the keyboard.
- Select a track and move the Timeline cursor to the desired clip insertion point. Drag and drop a clip to the Recorder - the clip will also be placed in the Timeline at the cursor position with the cursor position as the In point.
- Move the Timeline cursor to the desired clip insertion point. Right-click a track (not the Track Panel) and select "Add Clip."An "Open" dialog appears; navigate to the source location and click the **Open** button. The clip is placed in the Timeline at the cursor position with the cursor position as the In point.

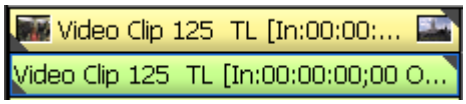
Clip Status Indicators

Clips placed on the Timeline may have the status indicators explained below depending upon editing actions and other operations performed with these clips.

End of Clip Indicator

The triangular marks in the corners at the beginning and ending of the clip (see Figure 350) indicate the entire source clip is used on the Timeline. These marks disappear when the clip is trimmed.

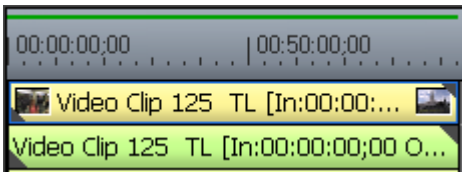
Figure 350. End of Clip Indicator



Rendering Status

The green line above the Timeline scale in Figure 351 indicates the clip has been rendered. For other rendering status indicators, see*Timeline Scale Markings* *on page 325*.

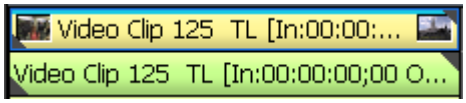
Figure 351. Rendered Clip Indicator



Filter Set

The aqua blue line above the on the clip in Figure 352 indicates that a video filter has been set for this clip.

Figure 352. Filter Set Indicator



Between-Clip Transition Indicator

When a transition has been added between clips in the Timeline, the between clip indictor shown in Figure 353 appears between the clips.

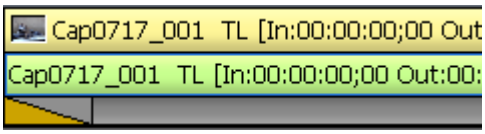
Note It is possible to set different transition rates for video and audio transitions.

Figure 353. Between-Clip Transition Indicator

Start of Clip Transition Indicator

The yellow triangle shown in Figure 354 in the lower left corner in the mixer area indicates that a transition has been set at the beginning of the clip.

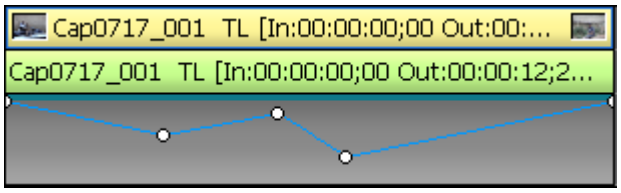
Figure 354. Beginning of Clip Transition Indicator



Transparency Rubber Band

Click the **Expand 2** button to display the Transparency adjustment area. Click the **Mix** button to display the Transparency rubber band as shown in Figure 355. See *Clips with Keyer effects applied display an aqua blue line at the top of the mixer area.* *on page 526* for more information.

Figure 355. Transparency Adjustment



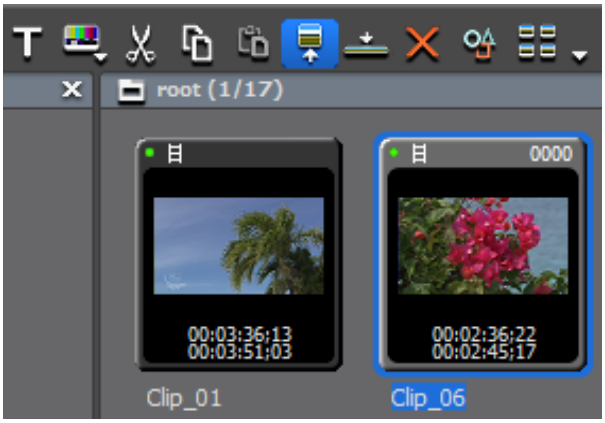
Setting In/Out Points and Placing a Clip

To set In/Out point on a clip and place it on the Timeline at the Timeline In point, do the following:

1. Select the desired clip in the Asset Bin and click the **Show in Player** button (highlighted in blue in Figure 356).

Note You may also drag and drop an clip from the Asset Bin to the Player

Figure 356. Asset Bin Show in Player Button



2. In the Player, set the desired In and Out point for the clip. See *Setting In and Out Points* *on page 214* for more information.
3. Select the track on which to place the clip.
4. Move the Timeline cursor to the position at which you wish to place the clip.
5. Depending on the mode in which you wish to insert the clip, click the **Insert to Timeline** or **Overwrite to Timeline** button in the Player.

The clip is placed on the Timeline with the position of the Timeline cursor as the In point.

Alternative Methods:

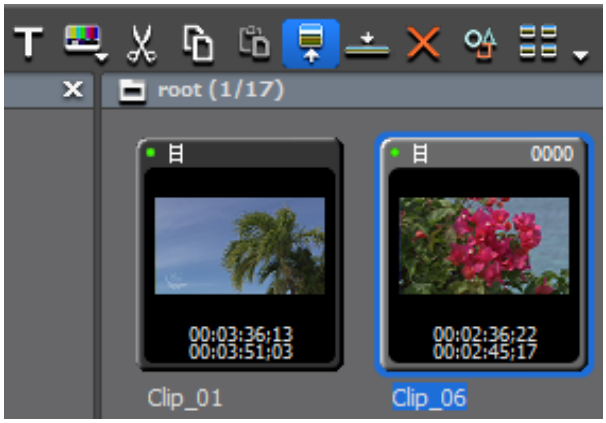
- After setting clip In and Out points in the Player, drag and drop the clip on the Timeline
- After setting clip In and Out points in the Player, press the **[E]** key to place the clip on the Timeline.

Place Video or Audio Only on Timeline

If a clip has both video and audio and you wish to place only one of these elements on the Timeline, perform the following actions:

1. Select a clip in the Asset Bin and click the **Show in Player** button. See Figure 357.

Figure 357. Asset Bin - Show in Player



Review the clip in the Player. If necessary, set In and Out points using the procedures documented in *In and Out Points* *on page 326*.

2. Click the **Set Add Video** or **Set Add Audio** button to enable or disable the video or audio elements as desired.

Note If the Set Add Video or Set Add Audio buttons have a diagonal red line through them (clicking the button toggles between the enabled and disabled states), the corresponding clip element will not be placed on the Timeline.

Note **[SHIFT]+[J]** also toggles the **Set Add Video** button and **[SHIFT]+[K]** also toggles the **Set Add Audio** button.

3. Select the track on which to place the clip.
4. Position the Timeline cursor at the desired insertion point.
5. Click the **Insert to Timeline** or **Overwrite to Timeline** button.

Only the video or audio of the clip is placed on the Timeline at the Timeline cursor position.

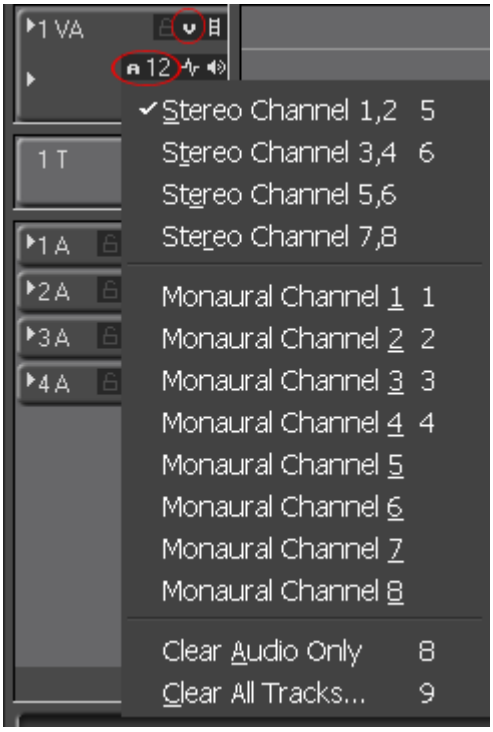
Alternative Methods:

- After Step 2, drag and drop the clip in the Player to the Timeline
- Set In and Out points for the video or audio element only. Click **Insert to Timeline** or **Overwrite to Timeline**. In this case, regardless of the state of the **Set Add Video** or **Set Add Audio** buttons, only the element with In and Out points is placed on the Timeline.

Placing Clips by Channel

Placing clips by channel operates with the Video Channel and Audio Channel settings for the track in the Track Panel. Figure 358 illustrates the buttons in the Track Panel which enable channel filtering.

Figure 358. Video and Audio Channel Buttons in Track Panel



Note The VA Track is the only track which has both **Video Channel** and **Audio Channel** buttons. The V Track has **Video Channe**l only. The Audio tracks have **Audio Channel** only. The T track has neither.

When **Video Channel** (small "v" symbol) is enabled, the video portion of a clip can be placed on that track. Clicking the button toggles the button between an enabled and disabled (dim) state.

When **Audio Channel** is enabled (small "A' symbol), the designated audio channel(s) of the audio portion of a clip can be placed on that track. Clicking the button toggles the button between an enabled and disabled (dim) state.

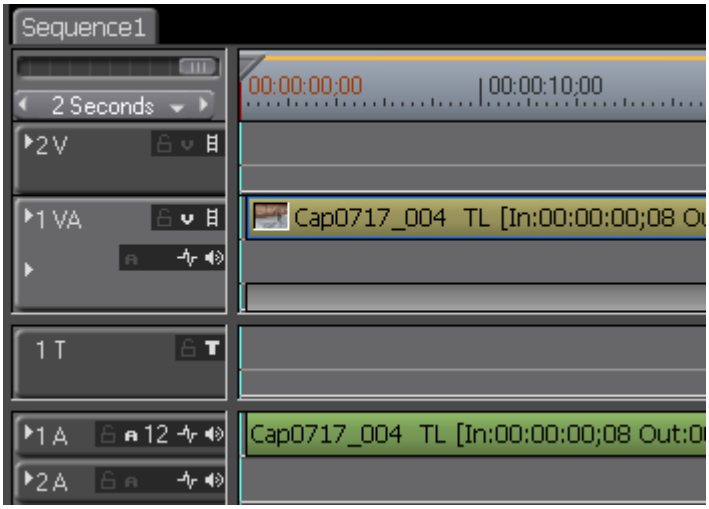
Note When enabling the Audio Channel, the desired audio channels are selected from the menu. In the example above, channels 1 and 2 have been selected.

If a clip has video and audio, a track split can be defined by enabling Video Channel in the VA Track and Audio Channels 1 and 2 on the 1A track as per the example in Figure 359.

Figure 359. Split Video and Audio Channel Settings

With these channel settings, a clip with both video and audio would be split between the 1VA track and the 1A track as illustrated in Figure 360.

Figure 360. Split Video and Audio Channel on Timeline



To place clips by video or audio channel, do the following:

1. Set the desired channels by clicking on the **Video Channel** and **Audio Channel** buttons on the desired tracks. Select the desired audio channels from the menu.

Note Audio channels are limited to those selected from the **Audio Channel** button menu.

2. Move the Timeline cursor to the position at which the clip will be inserted.

3. Select a clip in the Asset Bin and click the **Add to Timeline** button.

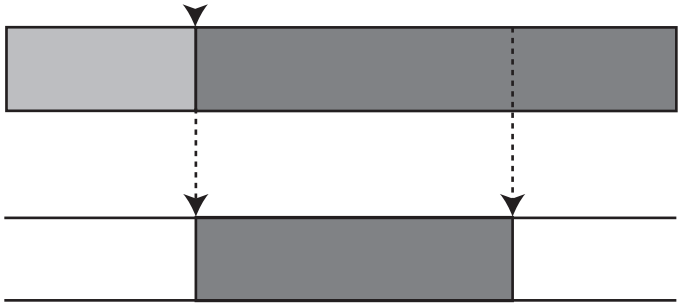
Note Video and Audio channels that are split, as in the example above, are categorized in groups.

Three-Point Editing

Three-point editing is the placing of a clip between the In and Out points of the Timeline as illustrated in Figure 361 or the placing of a clip with In and Out points at the Timeline In or Timeline Out point.

As long as three of the four possible In and Out points (Clip In/Out and Timeline In/Out) are defined, the fourth is automatically determined as clip speed is constant.

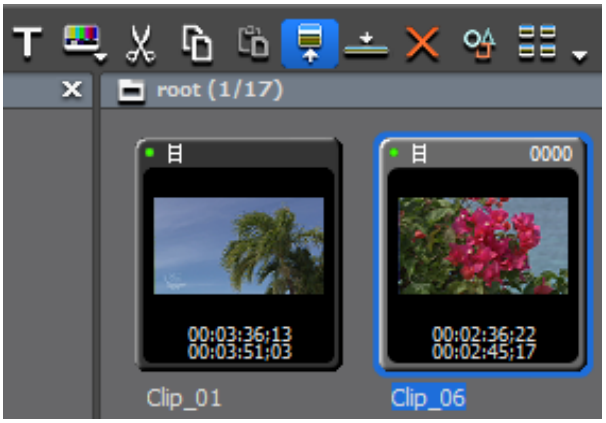
Figure 361. Three-Point Editing



To perform three-point editing, do the following:

1. Select a clip in the Asset Bin and click the **Show in Player** button (see Figure 362).

Figure 362. Asset Bin - Show in Player



Check the video in the Player and set In and Out points if necessary.

2. Select the track on which to place the clip.
3. Set the In and/or Out points on the Timeline (see *Setting In and Out Points on Timeline on page 326*).
4. Click the **Insert to Timeline** button.

Note Click the **Overwrite to Timeline** button to replace the clip at the Timeline In/Out position.

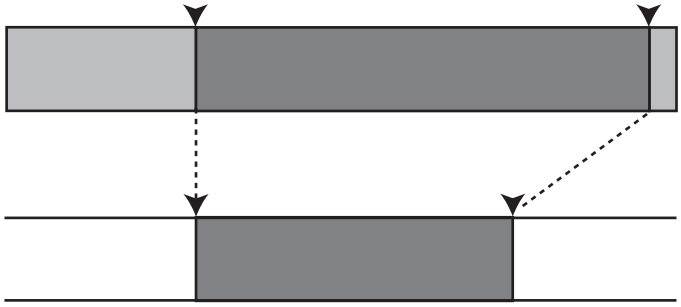
The clip is positioned between the In and Out points of the Timeline and trimmed in length (if necessary). If only the one of the Timeline points was defined, the other is automatically determined based on clip length.

The playback speed of the positioned clip is unchanged.

Four-Point Editing

Four-point editing is placing the In and Out points of a clip between the In and Out points of the Timeline Figure 363.

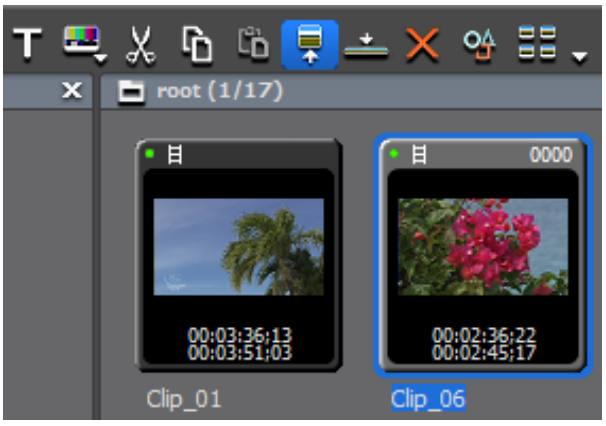
Figure 363. Four-Point Editing



To perform four-point editing, do the following:

1. Select a clip in the Asset Bin and click the **Show in Player** button (see Figure 364).

Figure 364. Asset Bin - Show in Player



Check the video in the Player and set In and Out points.

2. Select the track on which to place the clip

3. Set the In and Out points on the Timeline (see *Setting In and Out Points on Timeline* *on page 326*).

4. Click the **Insert to Timeline** button.

Note Click the **Overwrite to Timeline** button to replace the clip at the Timeline In/Out position.

The In and Out points of the clip are placed between the In and Out points of the Timeline.

Note The playback speed between In and Out points of the clip is adjusted automatically in order to stay between the In and Out points of the Timeline. The range between In and Out points is maintained.

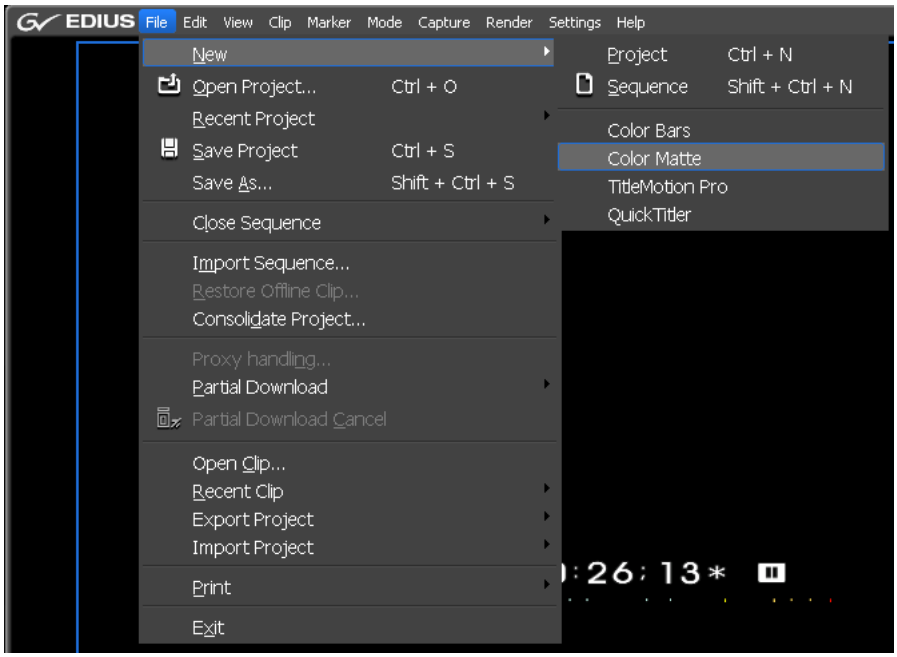
Placing Special Clips Between In and Out Points of the Timeline

Special clips are clips that can be created as needed and are not already found in the Asset Bin. To create and place a special clip between the Timeline In and Out points, so the following:

1. Set the desired In and Out points on the Timeline (see *Setting In and Out Points on Timeline* *on page 326*).

2. Select File>New from the Preview window menu bar. The menu in Figure 365 appears.

Figure 365. Special Clip Menu



3. From the menu, select the special clip type you wish to create.

- Color Bar Clip
- Color Matte Clip
- TitleMotion Pro
- QuickTitler

Note TitleMotion Pro is only available if this application has been installed.

4. Create the special clip and click **Save**, **OK** or **Close** as appropriate in the special clip creation dialog.

The special clip is placed on the Timeline between the In and Out points.

Alternative Method:

1. Right-click on the area between the In and Out points on the desired track.
2. Select New Clip>[Special Clip Type] from the right-click menu to create a new special clip.
3. Create the special clip and click **Save**, **OK** or **Close** as appropriate in the special clip creation dialog.

Moving Clips on the Timeline

Clips on the Timeline may be moved to a new location on the current track or another track. Functions and behaviors related to the movement of clips on the Timeline are explained in this section.

To move clips, they must first be selected. You can select a single clip by clicking on that clip on the Timeline, or you may select multiple clips by following the procedures explained below.

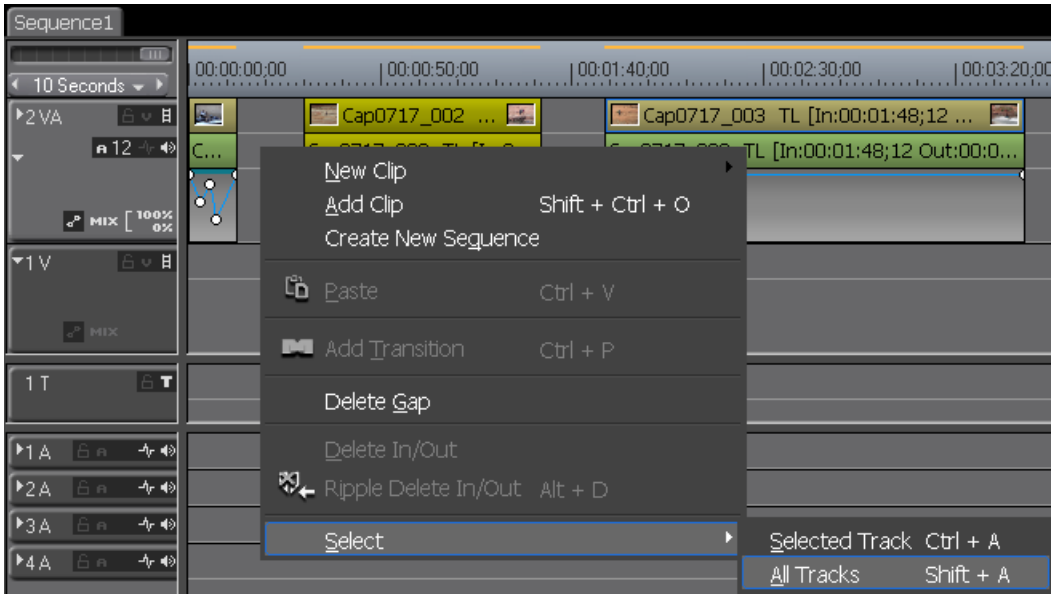
Selecting Multiple Clips

To select multiple clips on the Timeline do any of the following:

- Right-click on a track and choose Select>Selected Track or Select>All Tracks from the menu (see Figure 366) depending which clips you wish to select.

Note "Selected Track" selects all clips on the track on which you right clicked to display the menu. "All Tracks" selects all clips on all tracks.

Figure 366. Timeline Track Menu - Select All Tracks



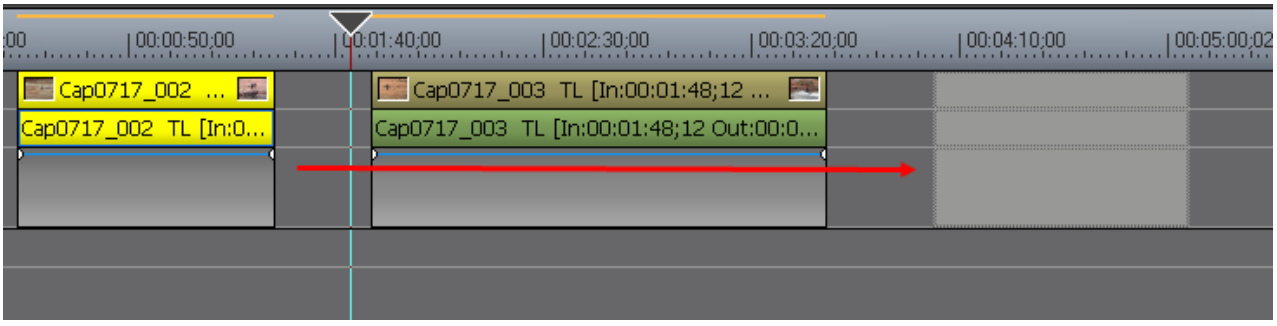
- Select Edit>Select>Select Track or Edit>Select>All Tracks from the Preview window menu bar.
- Hold down the [**CTRL**] key while clicking on clips. They are selected/deselected one by one as you click on the clips.
- Drag the mouse cursor around clip(s) on the Timeline .
- Press [**CTRL**]+[**A**] on the keyboard to select all clips on the selected track.
- Press [**SHIFT**]+[**A**] on the keyboard to select all clips on the Timeline.

Moving Selected Clip(s)

One or more selected clips may be moved by dragging and dropping the clip(s) to the desired location as illustrated in Figure 367.

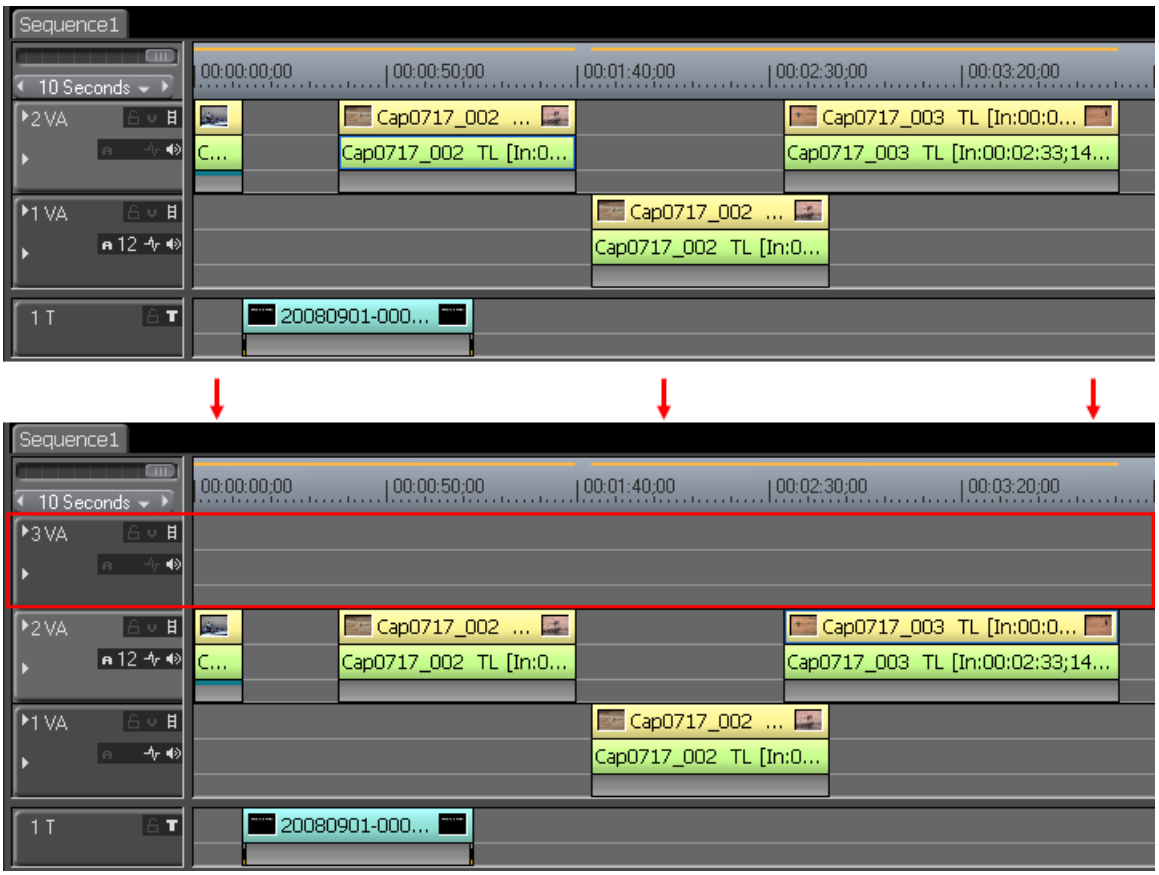
Note When sync mode is set, clips in different tracks also move in order to maintain their position relative to the selected clip(s) for more information on sync mode see, *Sync Mode* *on page 305*.

Figure 367. Move Selected Clip(s)



As illustrated in Figure 368, if you select clips on multiple tracks and move them to a Timeline area when a particular track type in the selection does not exist, the needed track(s) are automatically created.

Figure 368. Automatic Track Creation in Move



Note If you move only one of two clips that have a transition or audio cross fade defined between them, the selected clip is moved and the transition is released (deleted) from both clips.

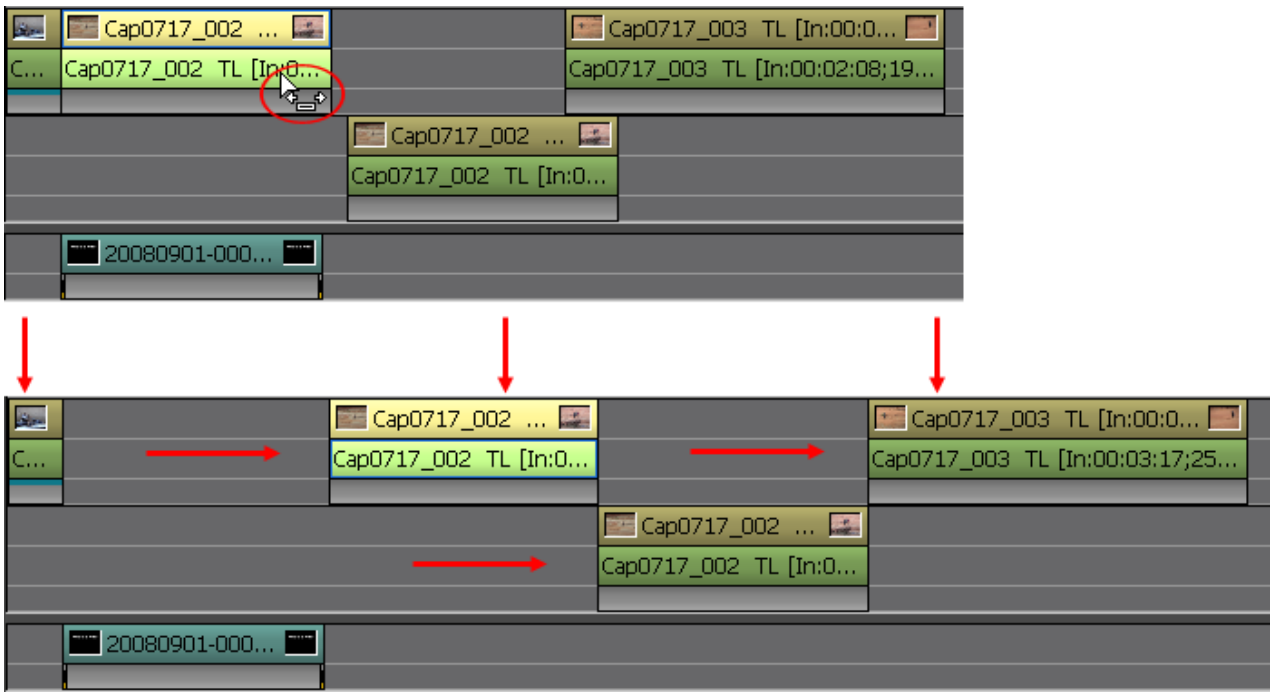
Moving Selected Clip(s) and Subsequent Clips

To move a clip and any clips that follow on the same track, do the following:

1. Select the first clip of the clips to be moved.
2. Press and hold the [**SHIFT**] and [**ALT**] keys on the keyboard and drag the clip in the track area.

The shape of the mouse cursor changes and all subsequent clips move together with the selected clip as illustrated in Figure 369

Figure 369. Move Selected and Subsequent Clips



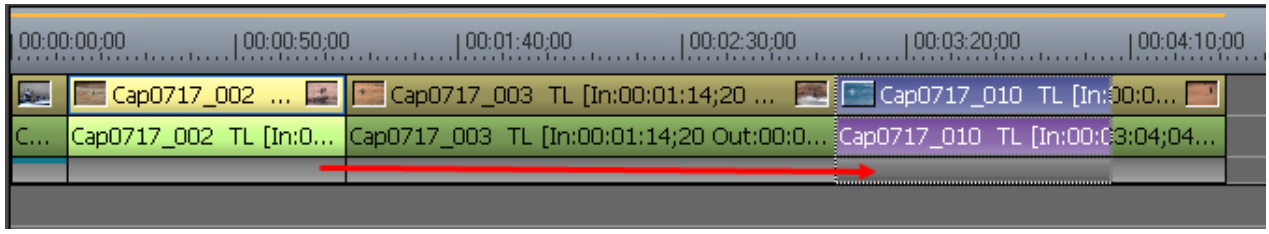
Note As shown in Figure 369, if sync mode is enabled, subsequent clips in tracks other than the track in which the selected clip is placed will also move in order to maintain their position relative to the selected track.

3. Drop the selected clip in the desired position on the track.

Changing Clip Order

To change the order of clips, drag and drop the desired clip(s) to the new location on the track as illustrated in Figure 370.

Figure 370. Change Clip Order

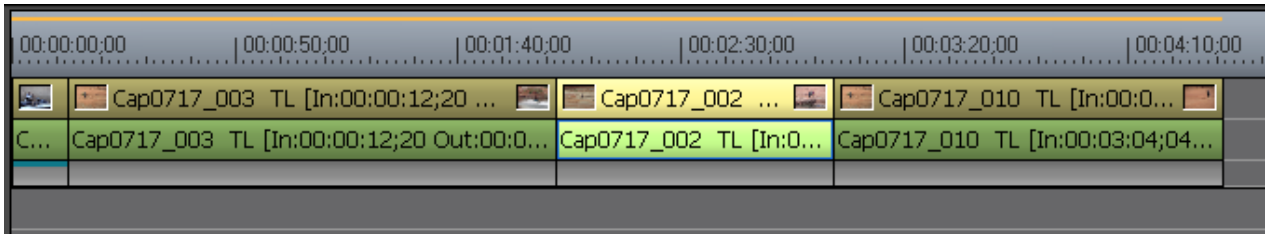


Note If sync mode is enabled, clips in other tracks will move as well to maintain their position relative to the moved track.

The clip order changed as shown in Figure 371.

Note Insert mode is enabled in this example. See *Insert Mode* *on page 303* and *Overwrite Mode* *on page 304* for more information.

Figure 371. Clip Order Changed with Insert Mode Enabled

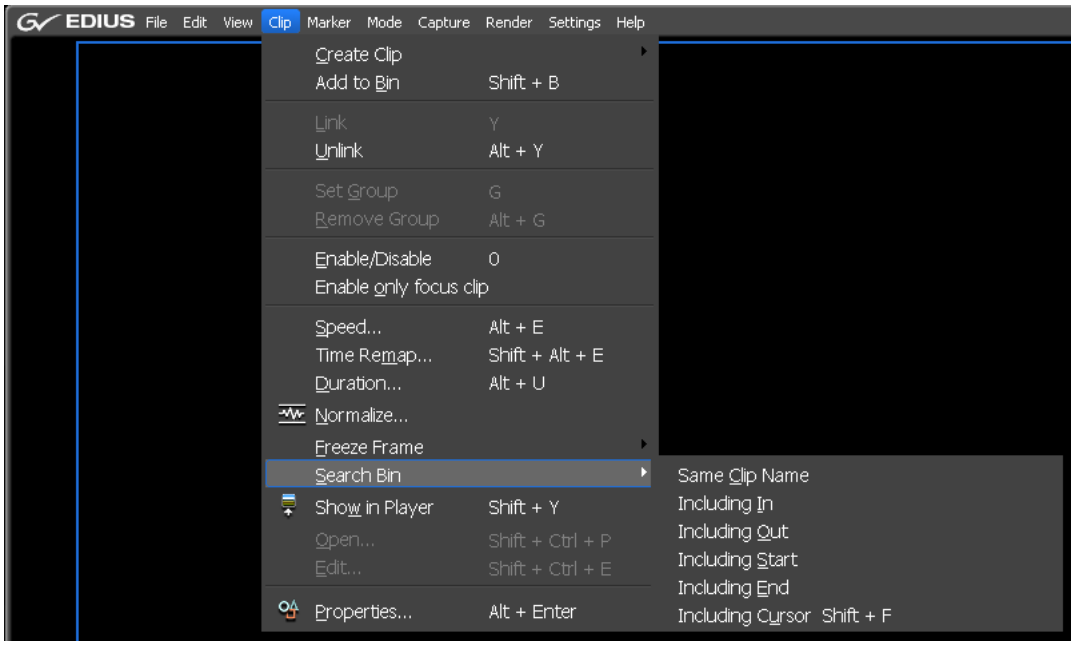


Searching Timeline Clips in the Asset Bin

To search for clips in the Asset Bin that match criteria of clips on the Timeline, do the following:

1. Select a clip in the Timeline to search
2. Select Clip>Search Bin from the Preview window menu bar as shown in Figure 372.

Figure 372. Timeline Clip Search Menu



3. Select a criterion from the menu on which to search clips in the Asset Bin. Available criteria are:

- Same Clip Name
- Including In
- Including Out
- Including Start
- Including End
- Including Cursor

Note Clips newly registered in the Asset Bin are also included in the search target.

All clips in the Asset Bin matching the selected search criterion are displayed in the Search Results folder in the Asset Bin folder view.

Note Search settings can be changed to refine the search results in the search folder. For more information on searching clips in the Asset Bin see *Searching for Clips in the Asset Bin* *on page 296*.

Alternative Method:

Right-click a clip and select Search Bin>{clip criterion} from the menu.

Timeline Clip Operations

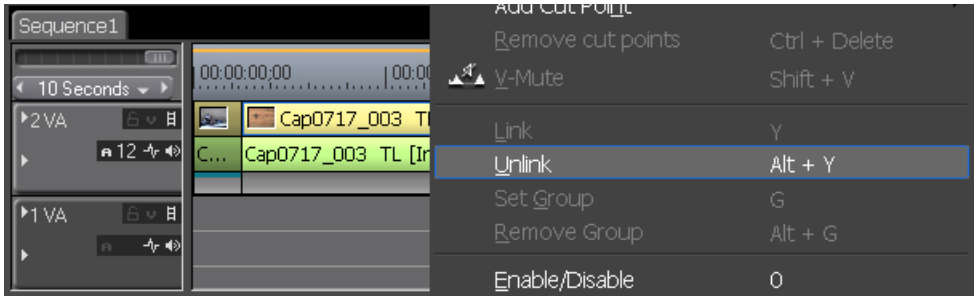
Unlink

The video and audio portions of a video clip on a VA track can be separated (unlinked) and treated as independent clips when moving, deleting, etc.

To unlink a clip, do any of the following after selecting a clip:

- Right-click on the clip to be unlinked and select “Unlink’ from the menu (see Figure 373).

Figure 373. Clip Menu - Unlink



- Select Clip>Unlink from the Preview window menu bar.
- Press **[ALT]**+**[Y]** on the keyboard.

Link

Video and audio clips that have been unlinked may be relinked. In order to link separate video and audio clips, they must meet the following criteria:

- Clips must be placed on the same track
- Clips must overlap on the track
- Clips must refer to the same source

To link separate audio and video clips, do the following:

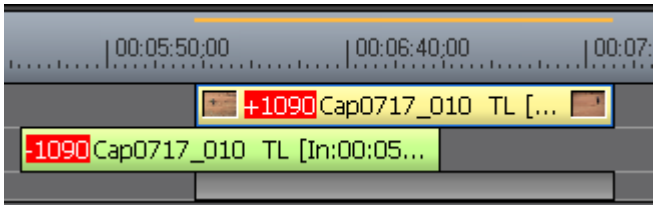
1. Select the video and audio tracks to be linked.
2. Right-click either the audio or video clip and select “Link” from the menu.

Note You may also select Clip>Link from the Preview window menu bar or press **[Y]** on the keyboard to relink selected clips.

The clips are relinked and can be treated as a single clip.

If there is a gap between the starting points of video and audio when they are relinked, a red square appears at the beginning of each clip indicating the length of the gap expressed in frames. See Figure 374 for an example.

Figure 374. Linked Clips with Video/Audio Start Gap

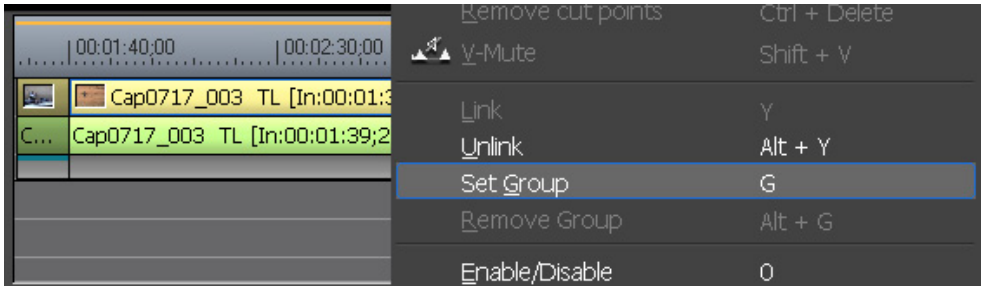


Group

Multiple clips may be grouped together and treated as a single clip. Clips on multiple tracks may be grouped. To create a clip group, follow these steps:

1. Select the clips to be grouped.
2. Right-click on a selected clip and select “Set Group” from the menu as illustrated in Figure 375.

Figure 375. Clip Menu - Set Group



Alternative Methods:

- Select Clip>Set Group from the Preview window menu bar.
- Press [G] on the keyboard.

Ungroup (Remove Group)

To remove a clip grouping, do any of the following after selecting a clip in the group:

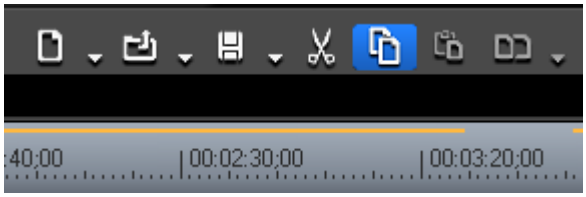
- Right-click on a grouped clip and select “Remove Group” from the menu.
- Select Clip>Remove Group from the Preview Window menu bar.
- Press [**ALT**]+[**G**] on the keyboard.

Copy

To copy a clip on the Timeline, do any of the following after selecting the clip:

- Select a clip and click the **Copy to Clipboard** button (highlighted in blue in Figure 376) on the Timeline.

Figure 376. Timeline Copy to Clipboard Button



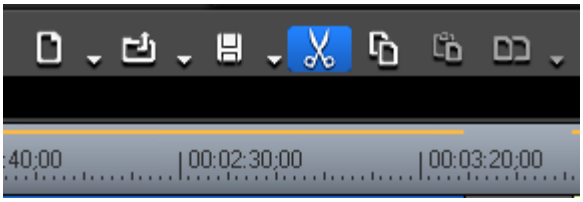
- Right-click a clip and select “Copy” from the menu.
- Select Edit>Copy on the Preview window menu bar.
- Press [**CTRL**]+[**C**] on the keyboard.

Cut

To cut a clip from the Timeline, do any of the following after selecting the clip:

- Select a clip and click the **Cut to Clipboard** button (highlighted in blue in Figure 377) on the Timeline.

Figure 377. Timeline Cut to Clipboard Button



- Right-click a clip and select “Cut” from the menu.
- Select Edit>Cut on the Preview window menu bar.
- Press [**CTRL**]+[**X**] on the keyboard.
- Press [**SHIFT**]+[**DELETE**] on the keyboard.

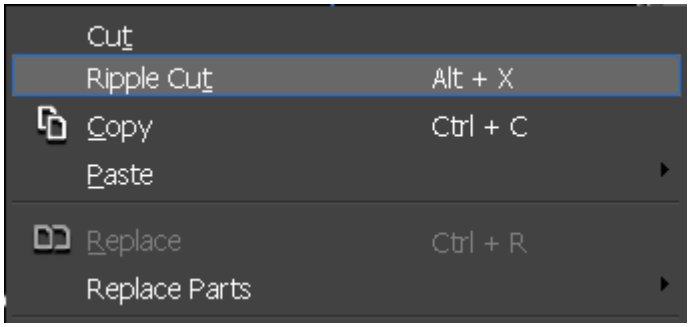
Ripple Cut

To ripple cut a clip from the Timeline, do any of the following after selecting the clip:

- Right-click on a clip and select “Ripple Cut” from the menu as shown in Figure 378.

Note An alternative is to select Edit>Ripple Cut from the Preview window menu

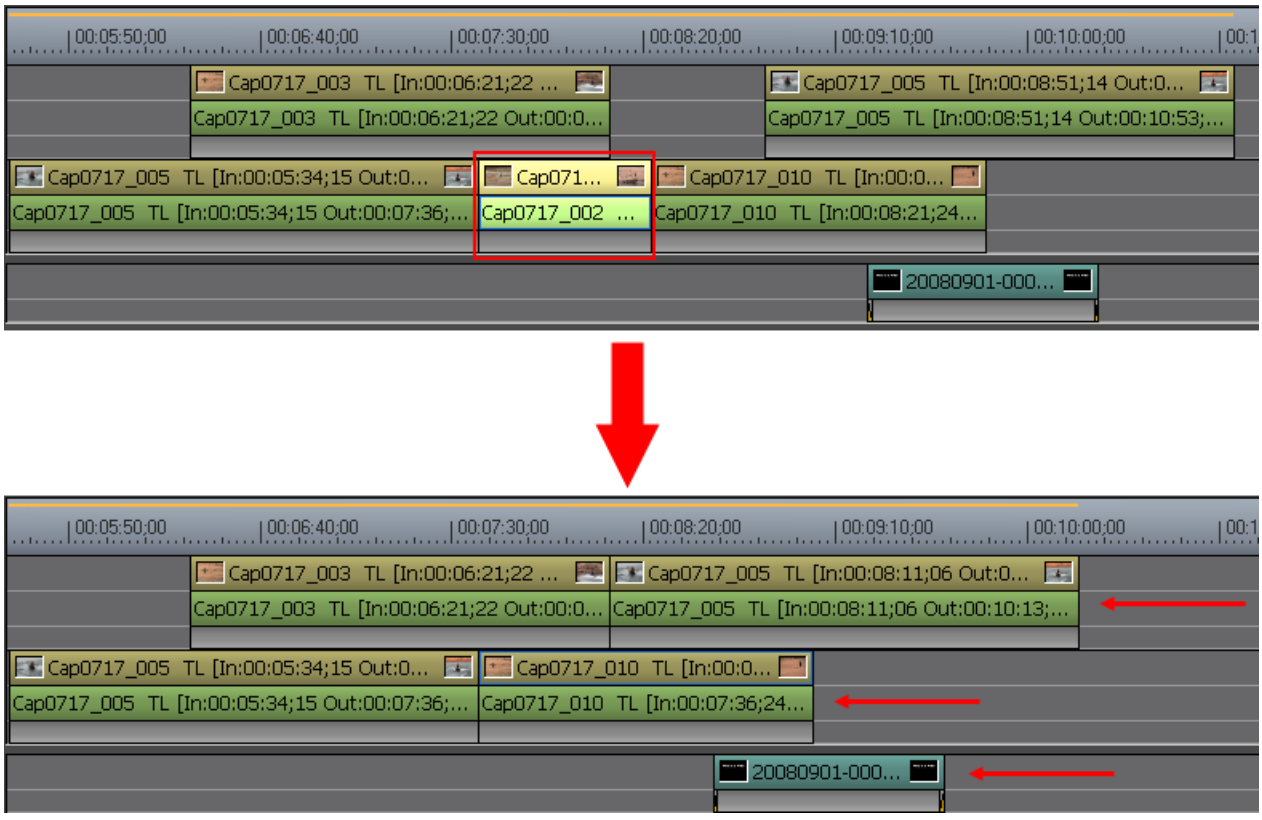
Figure 378. Clip Menu - Ripple Cut



The selected clip is deleted and the next clip on the same track moves forward to fill in the gap created by the deleted clip.

Note If sync mode is enabled, clips on other tracks may also move in order to maintain their positions relative to the clip which moves to fill in the gap created by the ripple cut. An example is illustrated in Figure 379.

Figure 379. Ripple Cut with Sync Mode Enabled



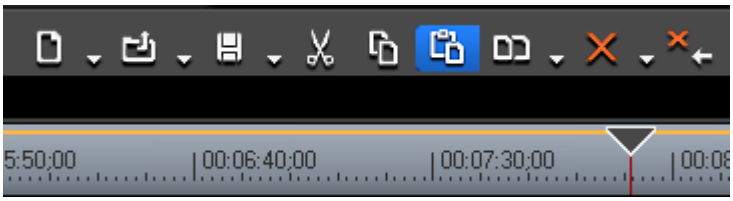
Paste

A paste operation is performed after a clip has been copied or cut to the clipboard using the copy, cut or ripple cut procedures explained on the preceding pages.

To paste a clip on the Timeline, do the following:

1. Select a clip and copy, cut or ripple cut it to the clipboard.
2. Select the track on which you wish to paste the clip
3. Move the Timeline cursor to the position at which you wish to paste the clip.
4. Click the Paste to Cursor Location button (highlighted in blue in Figure 380) on the Timeline.

Figure 380. Timeline Paste to Cursor Location Button



The clip is pasted to the Timeline with the position of the Timeline cursor set as the In point.

Alternative Methods:

- Right click on the track on which you wish to paste the clip and select "Paste" from the menu.
- Select Edit>Paste>Cursor from the Preview window menu bar.
- Right-click on any clip on the track on which you wish to paste the clip and select Paste>Cursor from the menu.
- Press the **[CTRL]**+**[V]** keys on the keyboard.

Note If a clip already exists at the destination location, it is divided at the point of the Timeline cursor and the pasted clip overwrites the existing clip at the cut point or is inserted between the divided clips depending upon the Insert/Overwrite setting.

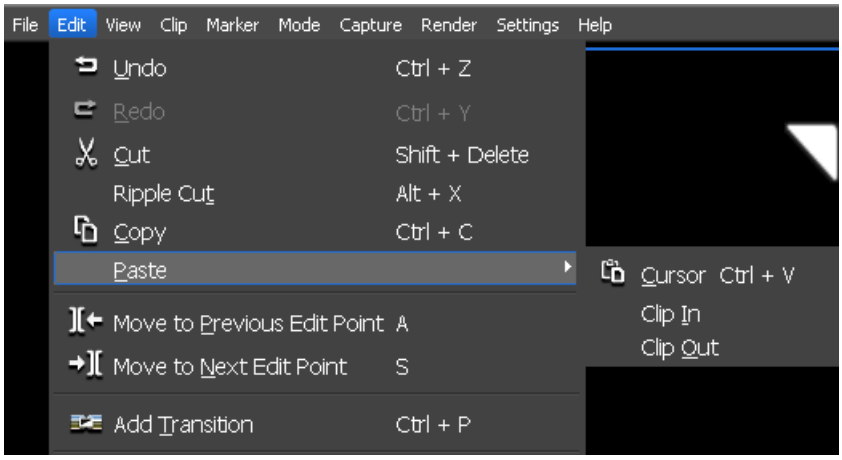
Paste at In/Out Points of Existing Clip

To paste a clip at the In or Out point of an existing clip in the Timeline, follow these steps:

1. Select a clip and copy, cut or ripple cut it to the clipboard
2. Select the clip to be the base point of the paste operation.
3. Select Edit>Paste>Clip In or Edit>Paste>Clip Out from the Preview window menu bar based on the desired paste location. See Figure 381.

- Clip In - Insert the clip before the In point of the selected base clip.
- Clip Out - Insert the clip after the Out point of the selected base clip.

Figure 381. Paste In/Paste Out Menu



Alternative Method:

Right-click on the clip you desire to be the base point for the paste operation and select Paste>Clip In or Paste>Clip out from the menu.

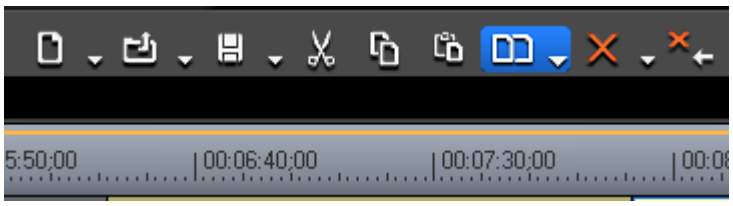
Replace

You can replace a clip on the Timeline with a clip that has been copied, cut or ripple cut to the clipboard.

To replace a clip, do the following:

1. Select a clip that will be the replacement source and copy, cut or ripple cut it to the clipboard.
2. Select the clip to be replaced and click the **Replace Clip** button (highlighted in blue in Figure 382) on the Timeline.

Figure 382. Timeline Replace Clip Button



Note All of the mixers and filters attached to the replaced clip are also replaced.

Alternative Methods:

- Click the list button [▽] on the **Replace Clip** button and select "All" from the menu.
- Right-click the clip to be replaced and select "Replace" from the menu.
- Select Edit>Replace from the Preview window menu bar.
- Press the [**CTRL**]+[**R**] keys on the keyboard.

Note The length of the replacement clip is automatically adjusted based on the In point of replaced clip. The playback speed does not change.

Replace Clip Elements

Certain elements of the clip may be replaced without replacing the entire clip an all clip elements. The elements that can be replaced are:

- Filter
- Mixer
- Clip
- Clip and Filter

To select the elements of a clip to be replaced, follow these steps:

1. Select a clip that will be the replacement source and copy, cut or ripple cut it to the clipboard.
2. Select the clip for which you wish to replace clip elements.
3. Click the list button [▽] on the **Replace Clip** button and select the element(s) to be replaces as illustrated in Figure 383.

Figure 383. Timeline Replace Clip Menu

Alternative Methods:

- Select Edit>Replace Parts>{element to replace] from the Preview window menu bar.
- Right-click the clip on which you wish to replace element and select Replace Part>{element to replace} from the menu.
- Replace the Filter: Press the [**ALT**]+[**R**] keys on the keyboard.
- Replace the Mixer: Press the [**SHIFT**]+[**CTRL**]+[**R**] keys on the keyboard.
- Replace the Clip: Press the [**SHIFT**]+[**R**] keys on the keyboard.
- Replace the Clip and the Filter: Press the [**SHIFT**]+[**ALT**]+[**R**] keys on the keyboard.

Set Clip Color on Timeline

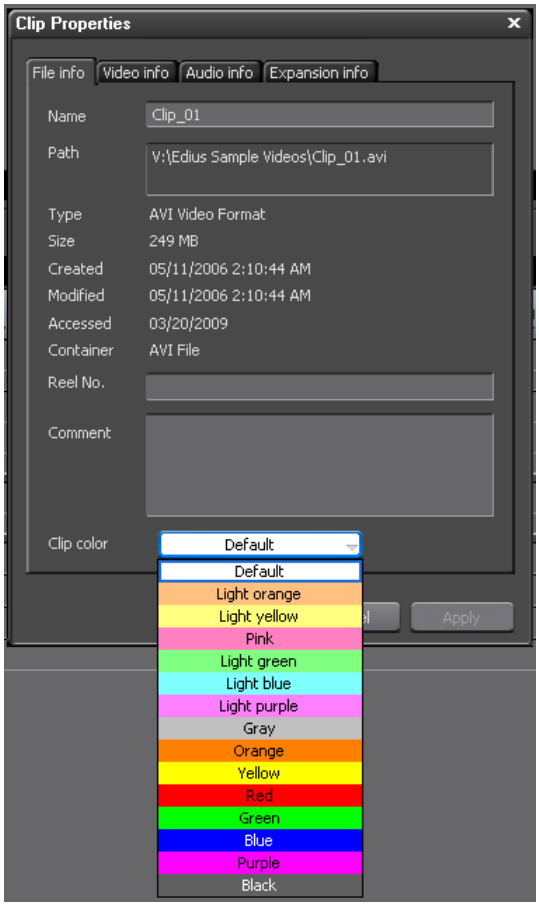
To set the display color of a clip on the Timeline do the following:

1. Right-click on a clip and select “Properties” from the menu.

The Clip Properties dialog appears.

2. Select the “File Info” tab and click on the “Clip Color” drop-down list as illustrated in Figure 384.

Figure 384. Clip Properties - Clip Color



3. Select the color for the clip from the drop-down list.

Alternative Methods:

- Select Clip>Properties on the Preview window menu bar.
- Press the [**ALT**]+[**ENTER**] keys on the keyboard.

Dividing Clips at Cursor Position

Clips may be divided at the Timeline cursor position. This will create separate clips that may be treated separately on the Timeline.

To divide clips at the Timeline cursor position, execute the following steps:

1. Select the track where the clip to be divided is placed.
2. Position the Timeline cursor at the point in the clip at which it will be divided.

3. Click the **Add Cut Point** button (highlighted in blue in Figure 385) on the Timeline.

Figure 385. Timeline Add Cut Point Button

The clip is divided at the Timeline cursor position as illustrated in Figure 386.

Figure 386. Clip Divided at Cursor Position

Alternative Methods:

- Click the list button [▽] on the **Add Cut Point** button and select "Selected Track" from the menu.
- Right-click on the clip to be divided and select Add Cut Point>Selected Track from the menu.
- Select Edit>Add Cut Point>Selected Track from the Preview window menu bar.
- Press the [**C**] key on the keyboard.

To divide all clips on all tracks at the Timeline cursor position, do any of the following:

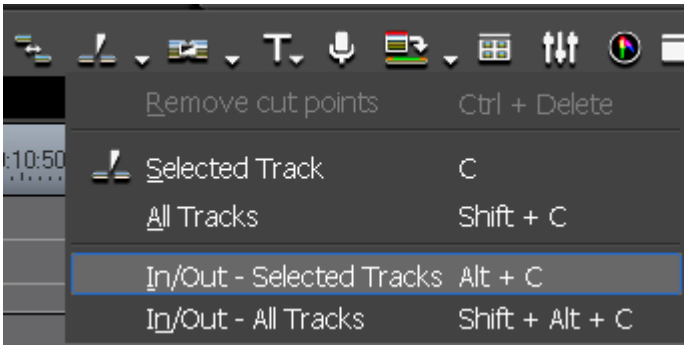
- Click the list button [▽] on the **Add Cut Point** button and select "All Tracks" from the menu.
- Right-click on any clip and select Add Cut Point>All Tracks from the menu.
- Select Edit>Add Cut Point>All Tracks from the Preview window menu bar.
- Press the [**SHIFT**]+ [**C**] key on the keyboard.

Dividing Clips at In/Out Points

To divide a clip at the In/Out points on the Timeline, do the following:

1. Select the track where the clip to be divided is placed.
2. If In/Out points on the Timeline are not already defined, define them now. See *Setting In and Out Points on Timeline* *on page 326*.
3. Click the list button [▽] on the **Add Cut Point** button and select "In/Out - Selected Tracks" from the menu as shown in Figure 387.

Figure 387. Add Cut Point Menu - In/Out -Selected Tracks



Alternative Methods:

- Right-click on a clip and select Add Cut Point>In/Out - Selected Tracks from the menu.
- Press the [**ALT**]+[**C**] keys on the keyboard.

To divide all clips on all tracks at the Timeline In/Out points, do any of the following:

- Click the list button [▽] on the **Add Cut Point** button and select "In/Out - All Tracks" from the menu.
- Right-click on any clip and select Add Cut Point>In/Out - All Tracks from the menu.
- Select Edit>Add Cut Point>In/Out - All Tracks from the Preview window menu bar.
- Press the [**SHIFT**]+ [**ALT**]+[**C**] key on the keyboard.

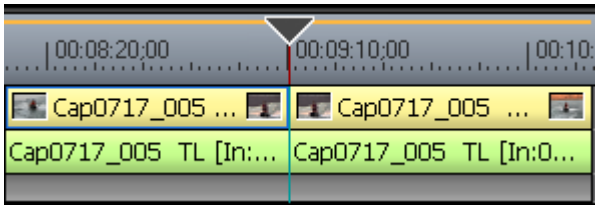
Combining a Divided Clip

To combine divided parts of a clip that refer to the same source, follow these steps:

1. Select the clips to be combined (see Figure 388).

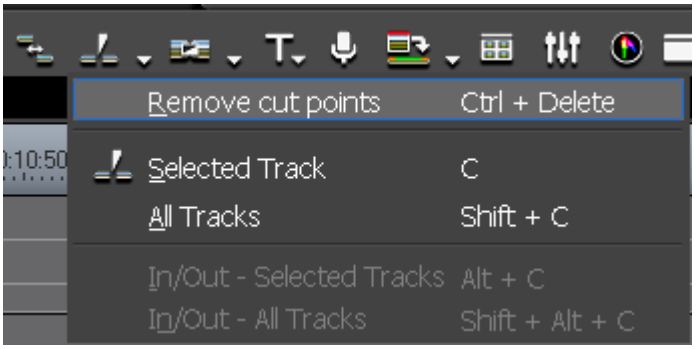
Note Two or more clips can be combined with the same operation as long as they refer to the same source and are neighboring clips on the same track. The timecode across the clips to be joined must also be continuous with no time-code gaps or timecode overlaps at the cut point(s).

Figure 388. Clips Selected to be Combined



2. Click the list button [▽] on the **Add Cut Point** button and select "Remove Cut Points" from the menu as illustrated in Figure 389.

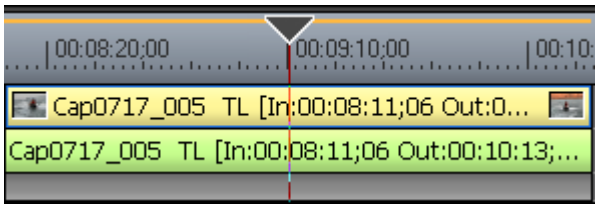
Figure 389. Add Cut Point Menu - Remove Cut Points



The clips are combined and can be treated as a single clip as shown in Figure 390.

Note When clips are combined, all effects and rubber band settings return to their pre-division status.

Figure 390. Divided Clips Combined as One



Alternative Methods:

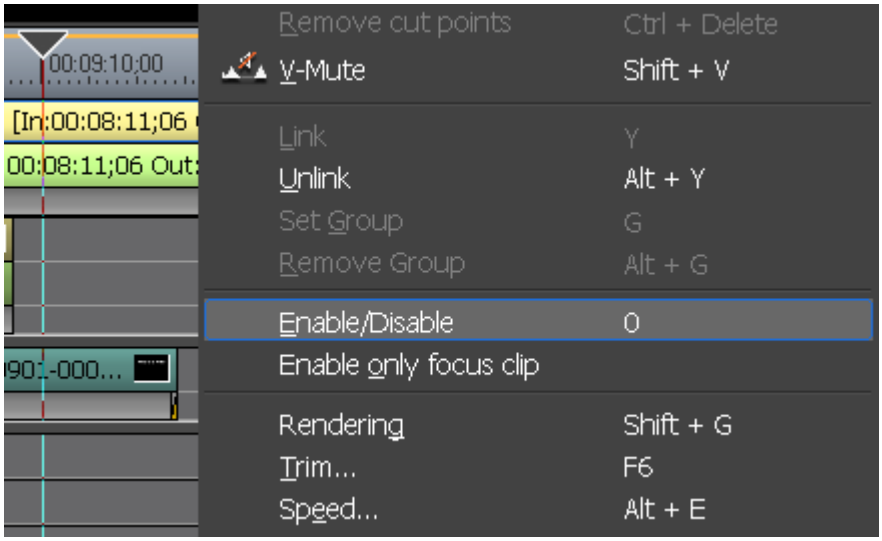
- Right-click on a clip and select “Remove Cut Points” from the menu.
- Select Edit>Remove Cut Points form the Preview window menu bar.
- Press the **[CTRL]**+**[DELETE]** keys on the keyboard.

Enable/Disable Clips

Disabling clips on the Timeline prevents them from being played. Enabling or disabling a clip is a toggle operation performed in the same manner. If the clip is currently enabled, it will be disabled. If it is currently disabled, it will be enabled.

To disable (or enable) a clip on the Timeline, right-click on the clip and select “Enable/Disable” from the menu as illustrated in Figure 391.

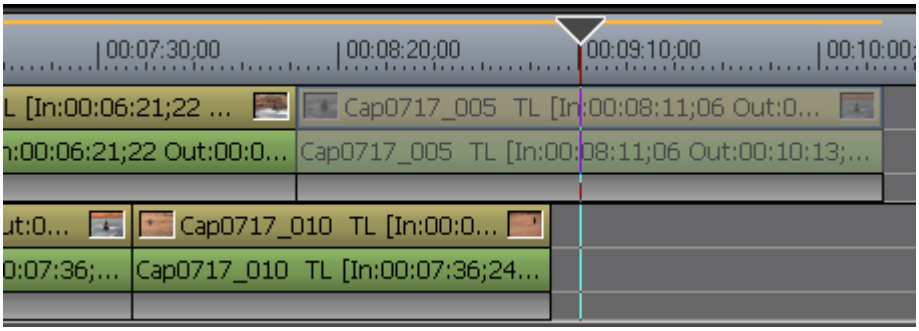
Figure 391. Clip Menu - Enable/Disable



Note Pressing the **[0]** (Zero) key on the keyboard will also toggle the enable/disable status of the selected clip.

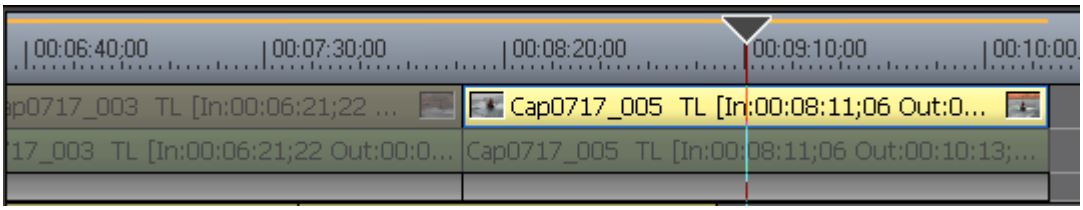
The clip is disabled (or enabled) and will not play (see Figure 392).

Figure 392. Disabled Clip on the Timeline



Note If a clip is linked or grouped with other clips, you may choose to enable only the selected clip or to enable only the video or audio portion of a clip with both video and audio. To enable only a single clip or a portion of a clip, right-click on the clip (or portion) and select “Enable only focus clip” from the menu. All other clips or portions of the clip are disabled. Figure 393 shows an example of only the video portion of one clip in a group enabled.

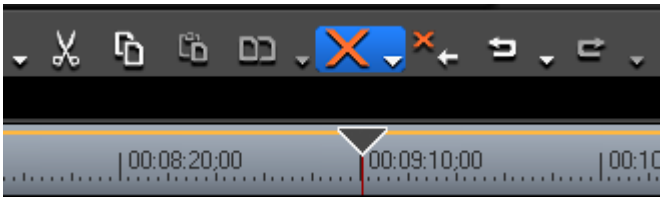
Figure 393. Video Only Enabled in a Clip Group



Deleting a Clip

To delete a clip from the Timeline, select the clip and click the **Delete** button (highlighted in blue in Figure 394) on the Timeline.

Figure 394. Timeline Delete Button



Note The result of the delete operation by any method differs depending upon the editing mode. For more information see *Sync Mode* *on page 305*.

Alternative Methods:

- Click the list button [▽] on the **Delete** button and select "Delete" from the menu.
- Right-click a clip to delete and select "Delete" from the menu.
- Select Edit>Delete from the Preview window menu bar.
- Press the [**Delete**] key in the keyboard.

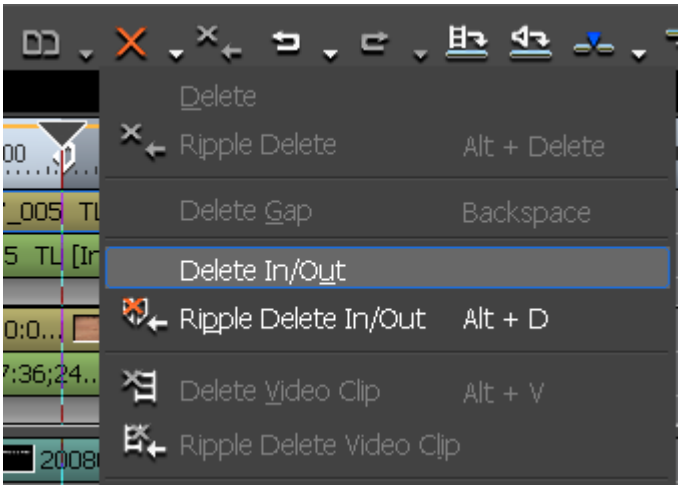
Deleting Between In/Out Points on Timeline

The portion of a sequence that exists between the In and Out points on the Timeline may be deleted. This includes any portion of one or more clips that are between the In and Out points.

To delete clips between the In and Out points on the Timeline, do the following:

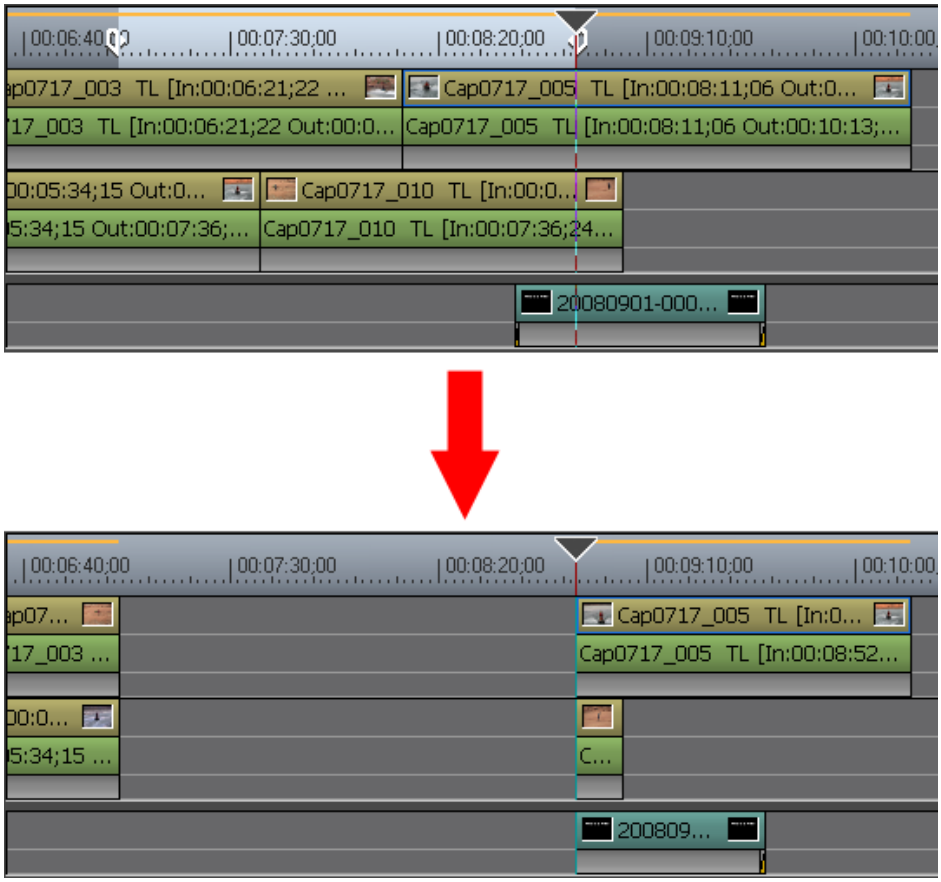
1. If not already defined, set In and Out points on the Timeline. See *Setting In and Out Points on Timeline* *on page 326* for more information.
2. Click the list button [▽] on the **Delete** button and select "Delete In/Out" from the menu as shown in Figure 395.

Figure 395. Timeline Delete Button Menu - Delete In/Out



All clips or portions thereof between the In and Out points are deleted as illustrated in Figure 396.

Figure 396. Clips Between In and Out Points Deleted



Alternative Methods:

- Right-click the time scale and select “Delete In/Out” from the menu.
- Select Edit>Delete In/Out from the Preview window menu bar.
- Right-click the track and select “Delete In/Out” from the menu.

Note If only and In point is set, the clip(s) - or portions of clips - after the In point are deleted. When only an Out point is set, the clip(s) - or portions of clips from the beginning of the Timeline to the Out point are deleted.

Deleting Only the Video or Audio Portion of a Clip

It is possible to delete only the video or the audio portion of clips with both video and audio. See Figure 397 for an example.

To delete only the video or audio portion of a clip, do any of the following after selecting a clip:

- Click the list button [▽] on the **Delete** button and select "Delete Video Clip" or "Delete Audio Clip" from the menu.
- Right-click a clip and select Delete Parts>Delete Video Clip or Delete Parts>Delete Audio Clip from the menu.
- Select Edit>Delete Parts>Delete Video Clip or Edit>Delete Parts>Delete Audio Clip from the menu.
- Unlink the clip, select only the video portion or the audio portion and click the Timeline **Delete** button. See *Unlink* *on page 346* for more information.
- Drag a clip and place it on either a V (video only) track or an A (audio only) track. The other portion is deleted.
- Press the **[ALT]**+**[V]** keys on the keyboard to delete the video portion.
- Press the **[ALT]**+**[A]** keys on the keyboard to delete the audio portion.

Figure 397. Delete the Video Portion of a Clip

Ripple Deleting Clips

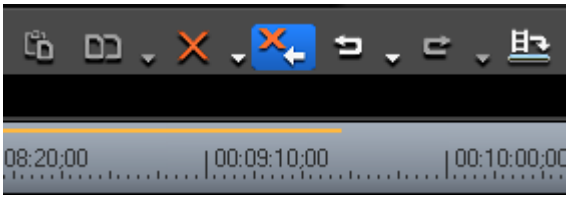
Ripple deleting a clip and causes subsequent clips to move to fill in the space formerly occupied by the deleted clip. See Figure 399.

Note All "ripple delete" functions are available regardless of the ripple mode setting. See *Ripple Mode* *on page 306* for more information.

To ripple delete a clip, do any of the following after selecting the clip to delete:

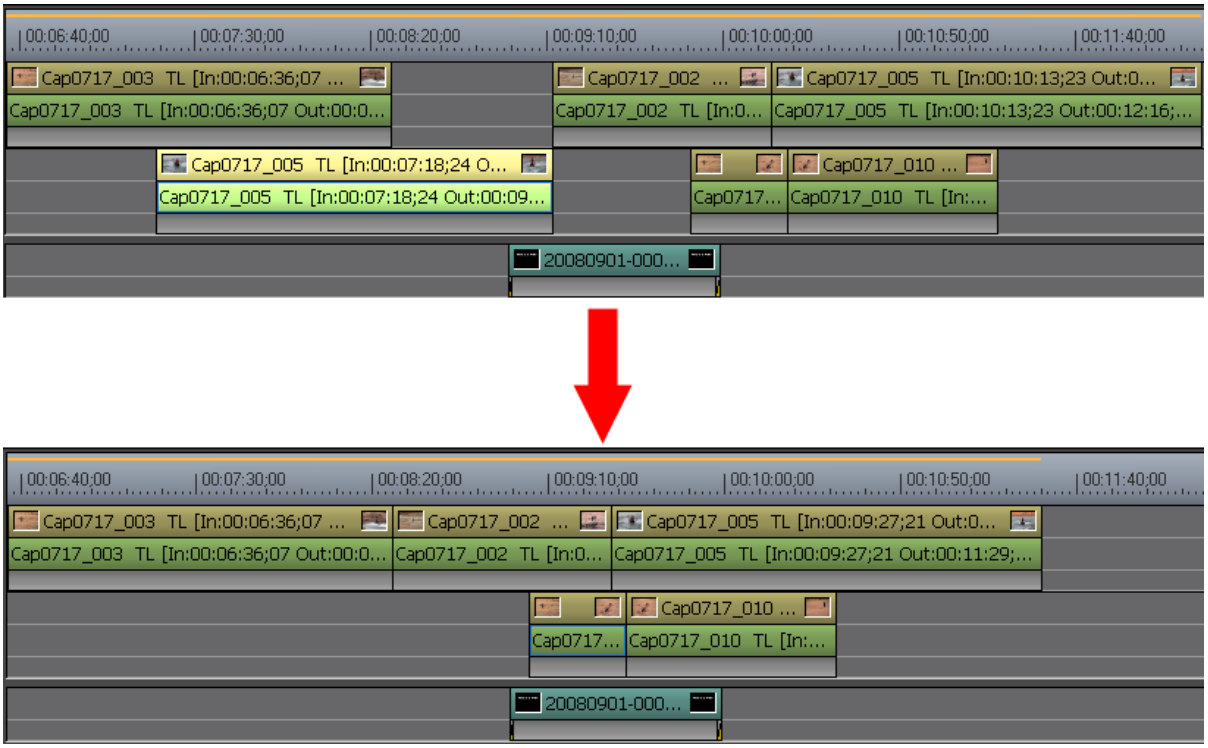
- Click the **Ripple Delete** button (highlighted in blue in Figure 398) on the Timeline.

Figure 398. Timeline Ripple Delete Button



- Click the list button [▽] on the **Delete** button and select "Ripple Delete" from the menu.
- Right-click a clip and select "Ripple Delete" from the menu.
- Select Edit>Ripple Delete from the Preview window menu bar.
- Press the [**ALT**]+[**DELETE**] keys on the keyboard.

Figure 399. Ripple Delete a Clip



Note When sync mode is enabled (as it is in the example above), clips on other tracks also move. See *Sync Mode* *on page 305* for more information on sync mode.

Ripple Deleting Between In/Out Points on Timeline

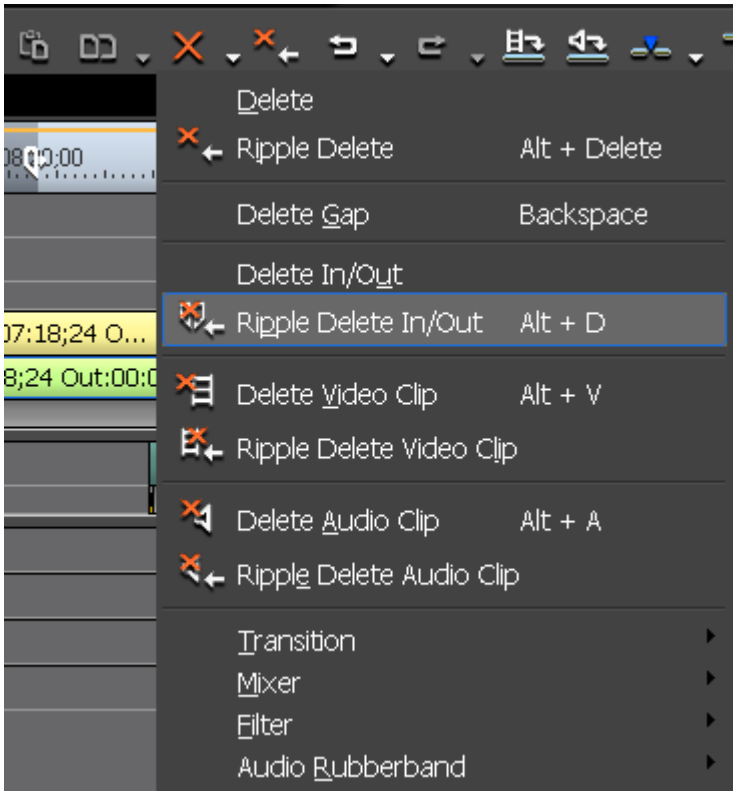
The portion of a sequence that exists between the In and Out points on the Timeline may be ripple deleted. This includes any portion of one or more clips that are between the In and Out points.

To ripple delete clips between the In and Out points on the Timeline, do the following:

1. If not already defined, set In and Out points on the Timeline. See *Setting In and Out Points on Timeline* *on page 326* for more information.

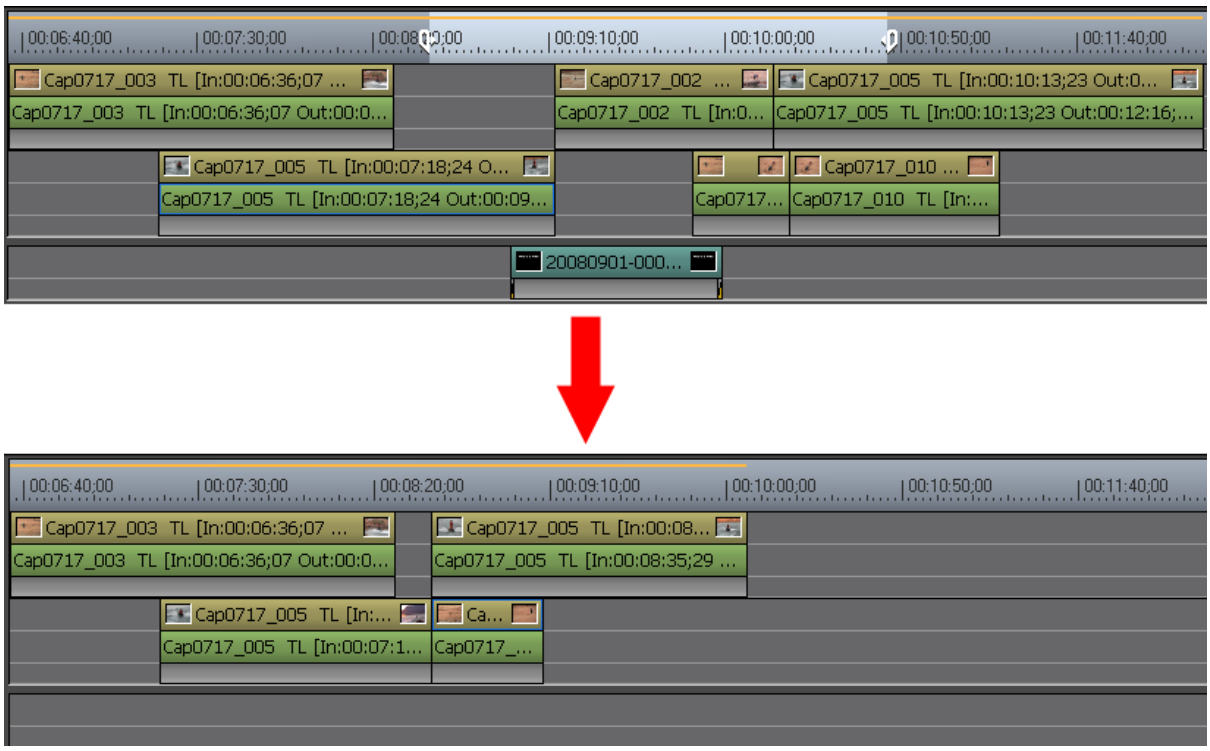
2. Click the list button [▽] on the **Delete** button and select "Ripple Delete In/Out" from the menu as shown in Figure 400.

Figure 400. Timeline Delete Button Menu - Ripple Delete In/Out



All clips or portions thereof between the In and Out points are ripple deleted as illustrated in Figure 401.

Figure 401. Clips Between In and Out Points Ripple Deleted



Alternative Methods:

- Right-click the time scale and select “Ripple Delete In/Out” from the menu.
- Select Edit>Ripple Delete In/Out from the Preview window menu bar.
- Right-click the track and select “Ripple Delete In/Out” from the menu.

Note If only and In point is set, the clip(s) - or portions of clips - after the In point are deleted. When only an Out point is set, the clip(s) - or portions of clips from the beginning of the Timeline to the Out point are deleted.

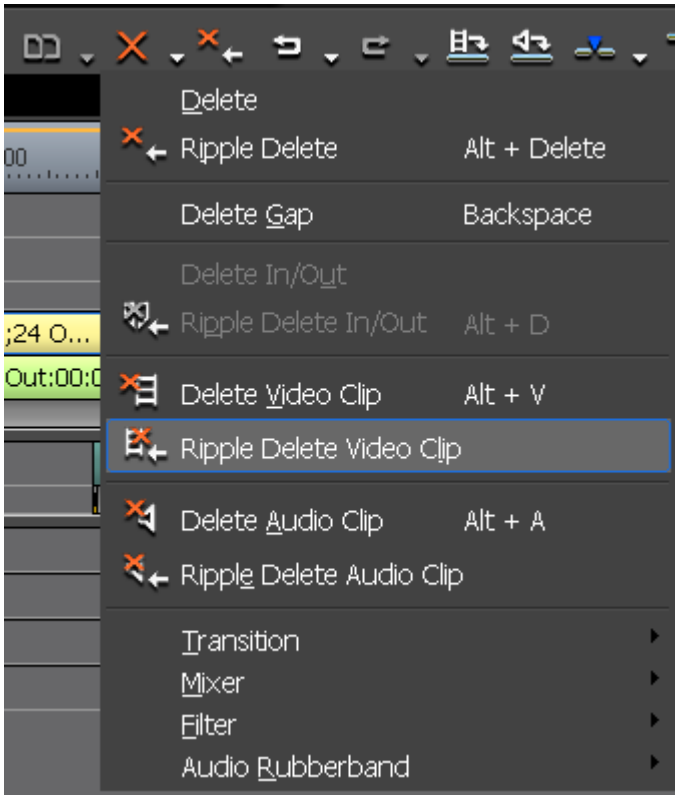
Ripple Deleting Only the Video or Audio Portion of a Clip

It is possible to ripple delete only the video or the audio portion of clips with both video and audio.

To ripple delete only the video or audio portion of a clip, do any of the following after selecting a clip:

- Click the list button [▽] on the **Delete** button and select “Ripple Delete Video Clip” or “Ripple Delete Audio Clip” from the menu. See Figure 402.

Figure 402. Delete Button Menu - Ripple Delete Video Clip



- Right-click a clip and select Delete Parts>Ripple Delete Video Clip or Delete Parts>Ripple Delete Audio Clip from the menu.
- Select Edit>Delete Parts>Delete Video Clip or Edit>Delete Parts>Delete Audio Clip from the menu.

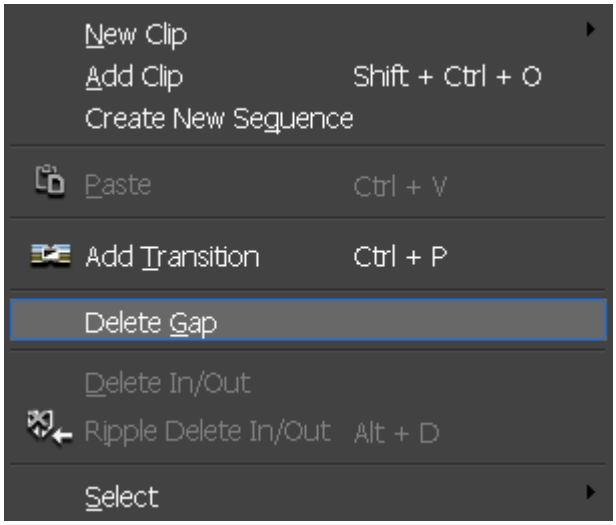
Note When sync mode is enabled, clips on other tracks also move. See *Sync Mode* *on page 305* for more information on sync mode.

Delete Timeline Gaps

To delete the gap between clips in a Timeline track, do any of the following after selecting the clip after the gap to be deleted:

- Right-click a blank space on the Timeline and select “Delete Gap” from the menu as illustrated in Figure 403.

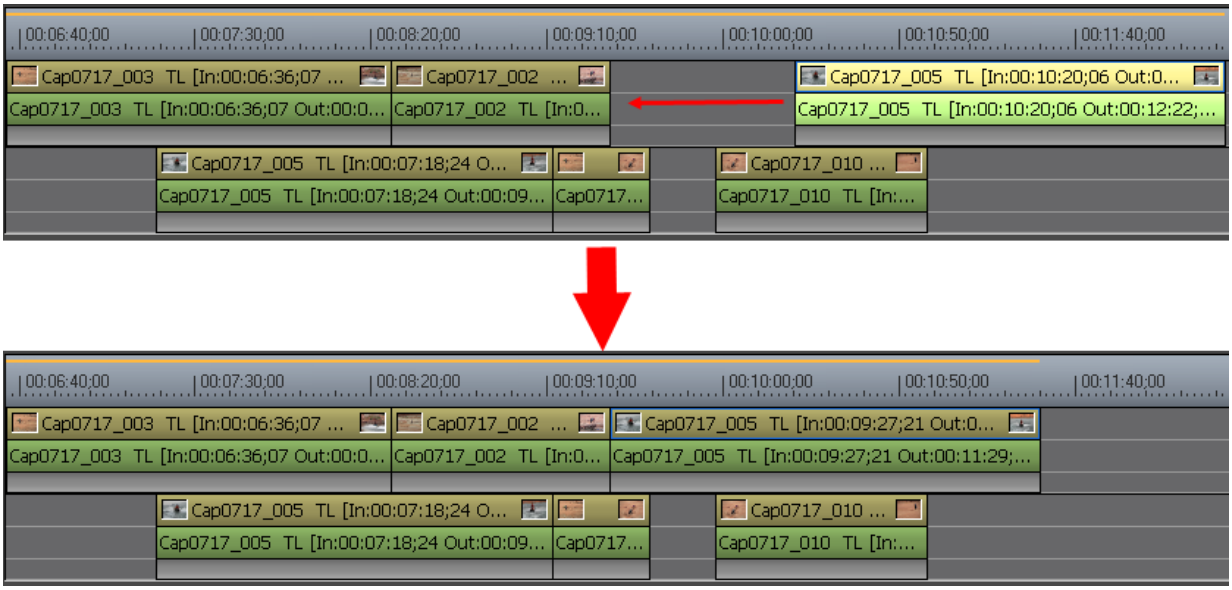
Figure 403. Timeline Menu - Delete Gap



- Click the list button [▽] on the **Delete** button and select "Delete Gap"
- Press the **[SHIFT]**+**[ALT]**+**[S]** or the **[Backspace]** keys on the keyboard.

The gap is deleted as shown in Figure 404.

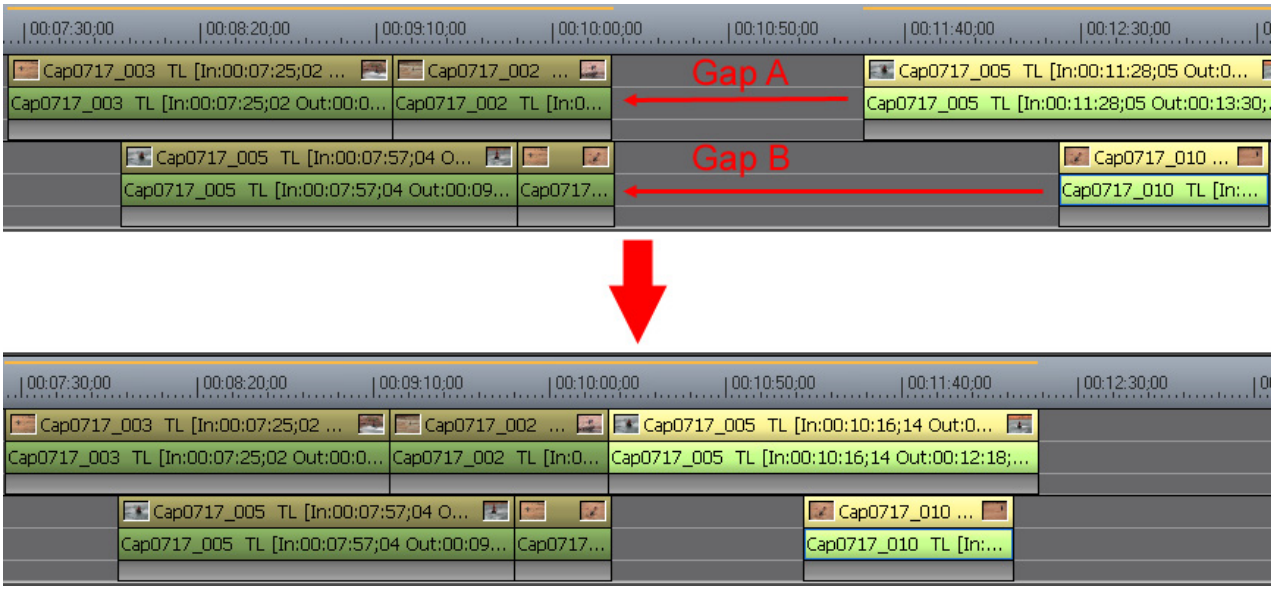
Figure 404. Gap Delete



To delete multiple gaps simultaneously, select the clips after all the gaps to be deleted before performing one of the operations above. See Figure 405 for an example.

Note When sync mode is on, all gaps will close by the length of the shortest gap in order to maintain the relative position of moved clips with respect to each other. This is shown in Figure 405 in which gap A is closed completely and gap B is closed only by an amount equal to the length of gap A.

Figure 405. Delete Multiple Gaps Simultaneously



Changing Clip Playback Speed

The playback speed of a clip may be changed to accommodate a particular time requirement or to slow down or speed up a clip.

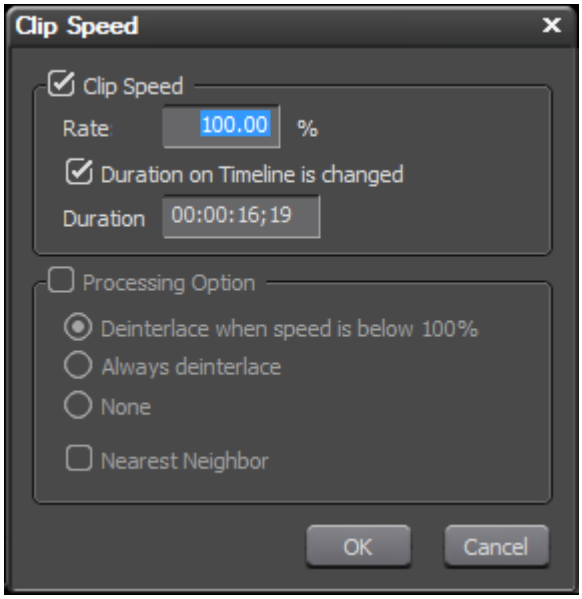
To change the playback speed of a clip, do the following:

1. Right-click a clip and select “Speed” from the menu.

Note An alternative method is to select Clip>Speed from the Preview window menu bar.

The Clip Speed dialog box illustrated in Figure 406 appears.

Figure 406. Clip Speed Dialog Box



2. Set the desired playback speed by Rate or Duration.

Rate

Enter a ratio (expressed a percentage) of the original speed. For example, 90% plays back the clip at 90% of the original speed which results in a longer playback time for the clip.

Entering a negative value (e.g. -50) plays back the clip at 50% of the original playback speed but in the reverse direction.

Duration on Timeline is Changed

If the "Duration on Timeline is changed" option is selected, the duration adjusts automatically to reflect the specified rate.

If the "Duration on Timeline is changed" option is not selected, the clip duration is unchanged regardless of the selected rate.

Note When the playback rate is changed and the duration is unchanged, only the portion of the source is used which corresponds to the current duration at the selected playback rate. If the clip is not long enough to accommodate the current duration at the selected playback speed, the ""Duration of Timeline is changed" option will greyed out and cannot be changed.

Duration

Enter the desired clip duration. The rate adjusts automatically to reflect the specified duration.

3. Select one of the Processing Options for reducing video flicker in slow motion scenes.
   - Deinterlace when speed is below 100%
   - Always Deinterlace
   - None
4. Select the Nearest Neighbor option, if desired, to interpolate the length of a slow motion clip by displaying the same frame as needed.
5. Click the **OK** button.

Note Playback speed cannot be changed for clips in the VA track that have been split trimmed. See *Ripple Trim* *on page 399* for more information.

Changing Speed of Multiple Clips

The playback speed can be changed simultaneously for multiple selected clips if the following conditions apply to all selected clips:

- Clips have the same start point
- Clips have the same length
- Clips have the same playback speed
- Clips have no transitions or audio cross fades applied
- The 'Duration on Timeline is changed" option is deselected (Off)

If an attempt is made to change the playback speed of multiple selected clips with the "Duration of Timeline is changed" option selected (On), an error dialog appears indicating which conditions above do not match the requirements.

Time Remap

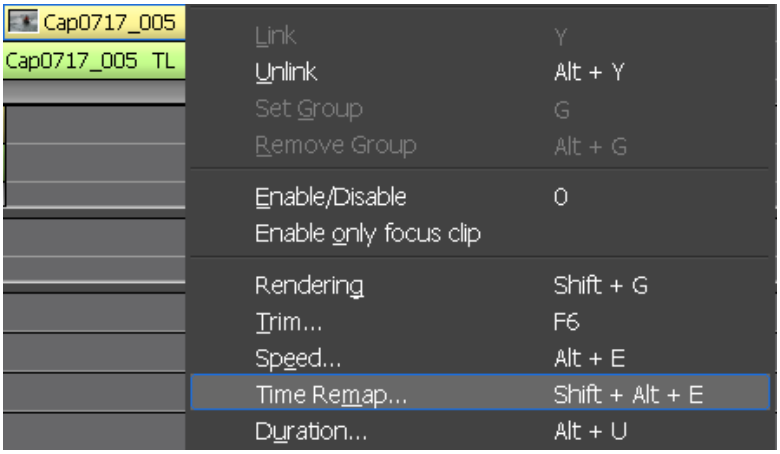
Time remapping is the process of changing the playback speed of clips by specifying the desired Timeline position of one or more keys which correspond to frames in the clip. The positions of the remaining frames in the clip are automatically interpolated and the speed adjusted in order to match the Timeline position of the key frames.

Note The In and Out points and the total length of the clip remain unchanged.

To time remap a clip, execute the following steps:

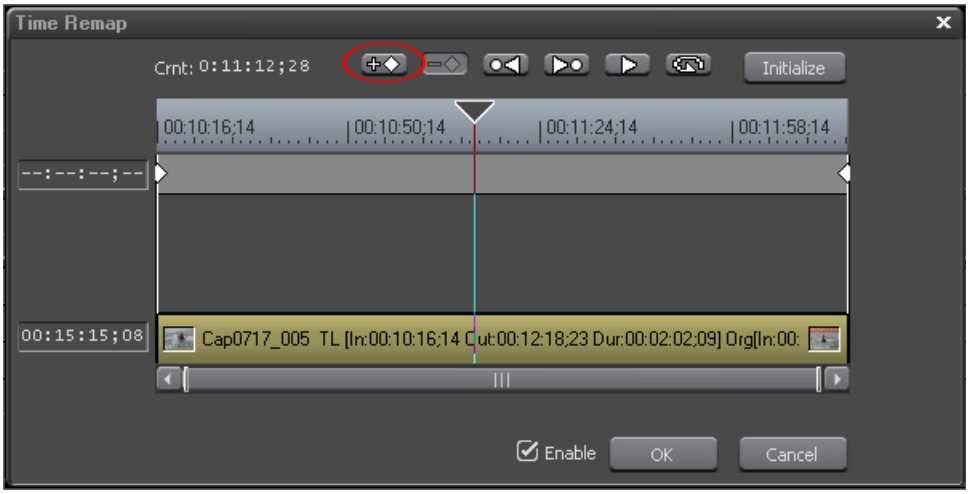
1. Right-click the clip to be remapped and select "Time Remap" from the menu as illustrated in Figure 407.

Figure 407. Clip Menu - Time Remap



The Time Remap dialog appears as shown in Figure 408.

Figure 408. Time Remap Dialog



2. Drag the Timeline cursor to the position at which you want to set a frame key

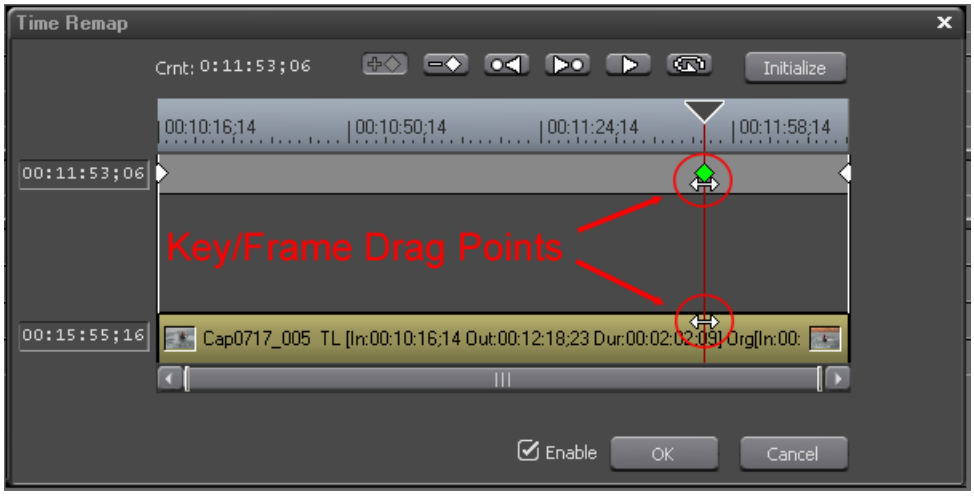
3. Click the **Add Key** button (circled in Figure 408) to add a key at the cursor position. See Figure 409.

Figure 409. Remapping Keys

Note More than one remapping key may be added.

4. Position the mouse cursor on the key drag point or the frame drag point and drag it to the left or the right to reposition the frame at the key location. See Figure 410 for drag points.

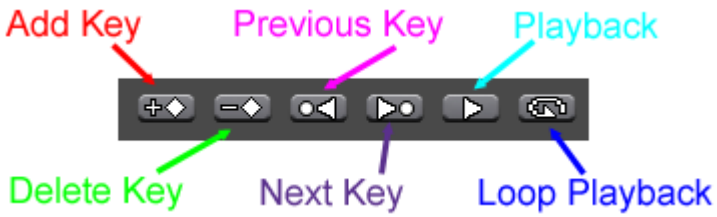
Figure 410. Reposition Key Frame



Other frames in the clip are automatically interpolated to match the new positions of the key frames and maintain the original clip length.

5. Click the **Playback** button or **Loop Playback** button (see Figure 411) to review the remapped clip. The clip is displayed in the Recorder.

Figure 411. Time Remap Buttons



6. After reviewing the clip, make any necessary adjustments.

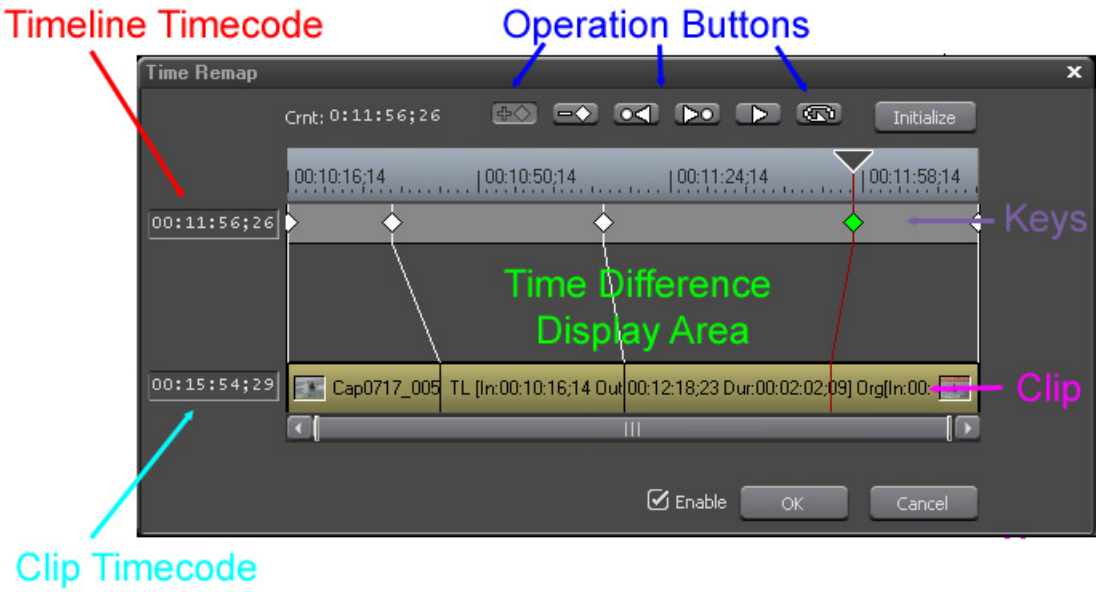
Note To disable the remapping, de-select the “Enable” option.

7. Click the **OK** button to close the Time Remap dialog.

Time Remap Dialog Details

Time Remap dialog details are illustrated in Figure 412.

Figure 412. Time Remap Dialog Detail



Operation Buttons

Add Key

Adds a remapping key at the position of the Timeline cursor. Shortcuts: **[INSERT]** or **[V]**.

Note A clip with no keys added has keys at the beginning and end of the clip.

Delete Key

Deletes the remapping key at the position of the Timeline cursor. Shortcut: **[DELETE]**

Previous Key

Moves the Timeline cursor to the previous key. Shortcuts: [**PAGE UP**], [**A**], [**CTRL**]+[←]

Next Key

Moves the Timeline cursor to the next key. Shortcuts: [**PAGE DOWN**], [**S**], [**CTRL**]+[→]

Play/Pause

Plays the video from the position of the Timeline cursor. If clicked while playing, playback pauses.

Loop Playback/Pause

Repeatedly plays the clip. If clicked while playing, playback pauses.

Initialize Button

To delete all keys and restore the clip to the defaults, click the **Initialize** button and click **Yes** at the prompt.

Timeline Timecode

The Timeline timecode is displayed when the cursor is on a remapping key. Entering a timecode creates a key at that timecode location.

Clip Timecode

Displays the clip timecode at the cursor location. Entering a timecode creates a key at that timecode location.

Keys

The area in which defined key markers appear.

Time Difference Display Area

This area displays lines connecting the timecode value of the keys and the timecode value of the key frame in the clip. This is a visual representation of the time difference (offset) between the keys and the clip frames with which the keys are associated.

Clip

Displays the clip being remapped. Also displays a line that connects the clip frame to its remapped key Timeline position.

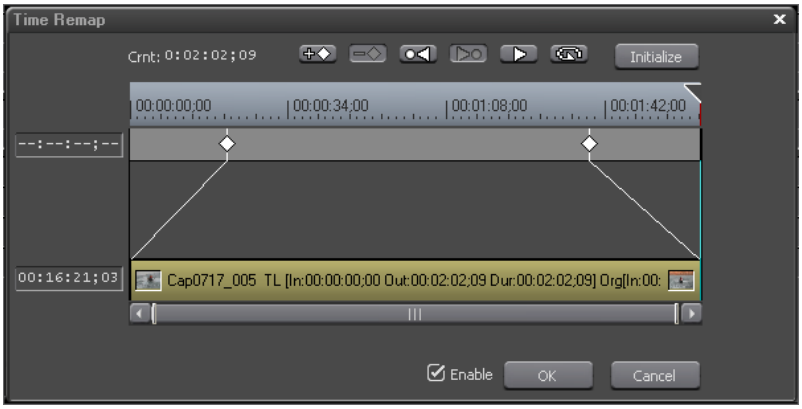
Enable

When selected, this option enables the defined time remap. When disabled, time remap settings are not active for the specified clip.

Other Time Remap Dialog Functions

- Right-click on the Time Remap dialog and select “Timeline Time” from the menu to reset the first frame timecode to 00:00:00;00 (the check mark on the ‘Timeline Time” option is removed).
- Right-click on the Time Remap dialog and select “Information” to hide the thumbnail displayed at the beginning and ending of the clip, the clip name and the clip timecode information in the Clip Area (the check mark on the ‘Information” option is removed).
- Right-click on the Time Remap dialog and select “Original Source Time” from the menu to reset the clip In point timecode to 00:00:00;00 (the check mark on the ‘Original Source Time” option is removed).
- To set a range in the clip in which the normal playback speed should be retained, save the range as a separate clip by using the **Add Cut Point** button on the Timeline to split the clip. Apply the time remap to the clip in which you wish to alter the playback speed. See *Dividing Clips at Cursor Position* *on page 355* for more information.
- To apply a fixed duration to the first or last frame in a clip, drag the preset key (always present) at the beginning or end of the clip to the timecode position that sets its duration (see Figure 413). The playback speed of the remaining frames between the first and last frame is faster.

Figure 413. First or Last Frame Fixed Duration



Alternative Methods:

- Press [**SHIFT**]+[**ALT**]+[**E**] to display the Time Remap dialog.
- Right-click the Time Remap dialog and select "Add Key" to add a key at the position of the Timeline cursor.
- Right-click the Time Remap dialog and select "Delete Key" to delete the key at the position of the Timeline cursor.
- Press the [**Home**] key to move the cursor to the first frame of the clip.
- Press the [**End**] key to move the cursor to the last frame of the clip.
- Press the [←] key to move to the previous frame.
- Press the [→] key to move to next frame.
- Press the [↑] key to move the focus to the Keys area.
- Press the [↓] key to move the focus to the Clip area.
- Press the [,] key to move the key/frame forward one frame.

Note This action is available only when the Timeline cursor is on a key/frame or when the focus is in the Keys or Clips area

- Press the [.] key to move the key/frame backward one frame.

Note This action is available only when the Timeline cursor is on a key/frame or when the focus is in the Keys or Clips area.

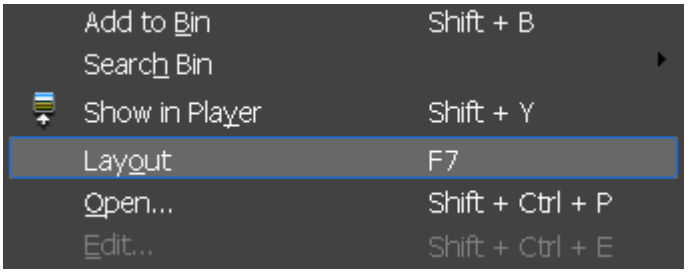
Video Display Layout/Crop

The display range or aspect ratio of the display may be changed.

To change the video display range, do the following:

1. Right-click the video portion of a clip on a V or VA track on the Timeline.
2. Select "Layout" from the menu as shown in Figure 414.

Figure 414. Clip Menu - Layout

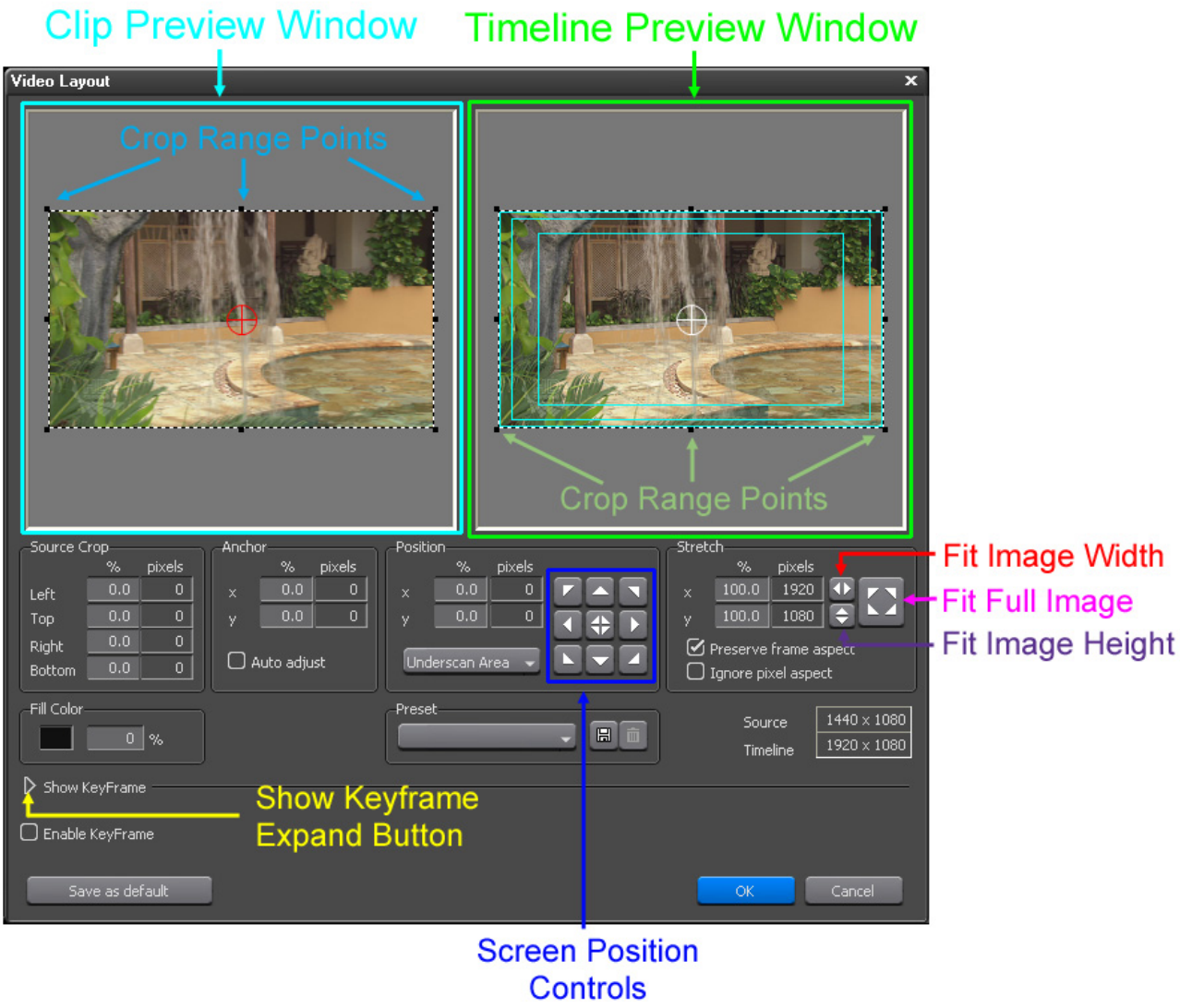


The Video Layout dialog illustrated in Figure 415 appears.

3. Adjust the video layout as desired by referring to the descriptions below of the Video Layout dialog functions.

4. Click the **OK** button on the Video Layout Dialog.

Figure 415. Video Layout Dialog



Many of the controls and functions in the Video Layout dialog accomplish the same tasks, but, in a different manner. Some work in conjunction with others and not all need to be used in order to modify the video layout.

Clip Preview Window

Displays the clip video. Drag one of the eight (8) crop range points on the perimeter to change the display range.

Timeline Preview Window

Shows the Timeline display. Drag one of the eight (8) crop range points on the perimeter to change the display position or the aspect ratio. These actions are also reflected in the Recorder.

Source Crop

Using the source crop settings, the area to be cropped is defined based on the original clip parameters.

Left

Based on the original clip width, designate the percentage of the area on the left of the clip to be cropped and not displayed.

Top

Based on the original clip height, designate the percentage of the area on the top of the clip to be cropped and not displayed.

Right

Based on the original clip width, designate the percentage of the area on the right of the clip to be cropped and not displayed.

Bottom

Based on the original clip height, designate the percentage of the area on the bottom of the clip to be cropped and not displayed.

Note After entering crop percentages, the number of pixels to be cropped from each side of the clip is calculated and displayed.

Anchor

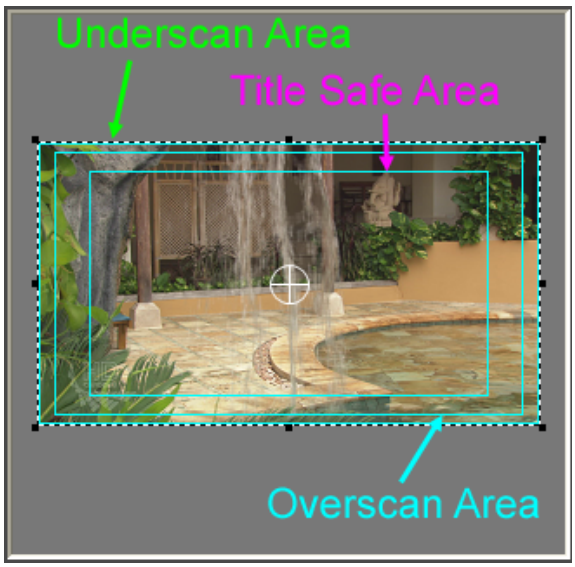
Designates the X,Y position of the display in the Timeline Preview window. The "Anchor Position" is the starting point for Source Crop operations explained above.

Position - Area Selection

From the drop-down list select the desired display area as indicated in Figure 416:

- Underscan Area
- Overscan Area
- Title Safe Area

Figure 416. Display Area Selection



Position - Control Button

The nine (9) position control buttons specify fixed anchor positions within the specified area selection. The button positions are Upper Left, Upper Center, Upper Right, Center Left, Center, Center Right, Lower Left, Lower Center and Lower Right.

Note Only one position is active. Selecting another position changes the active position to the new selection.

If the "Center" position is selected, display remains centered even when the Source Crop or Stretch settings are modified. If a different position control is selected, the position may also be modified with X and Y percentage values based on clip width and height.

Stretch

Stretch controls allow for quick adjustment of aspect ratio.

Preserve Frame Aspect

If this option is selected, when one dimension is changed, the other is automatically adjusted to preserve the current aspect ratio. If this option is not selected, both dimensions may be changed independently.

Ignore Pixel Aspect

If this option is selected, pixel magnification mapping is allowed without regard for the native pixel aspect ratio.

Fit Full Image

Clicking this button sets the maximum image size so that the full image fill both the width and height of the screen. Shortcut key: **[F]**

Fit Image Width

Clicking this button sets the image size to fill the full width of the screen. Shortcut key: [**W**]

Fit Image Height

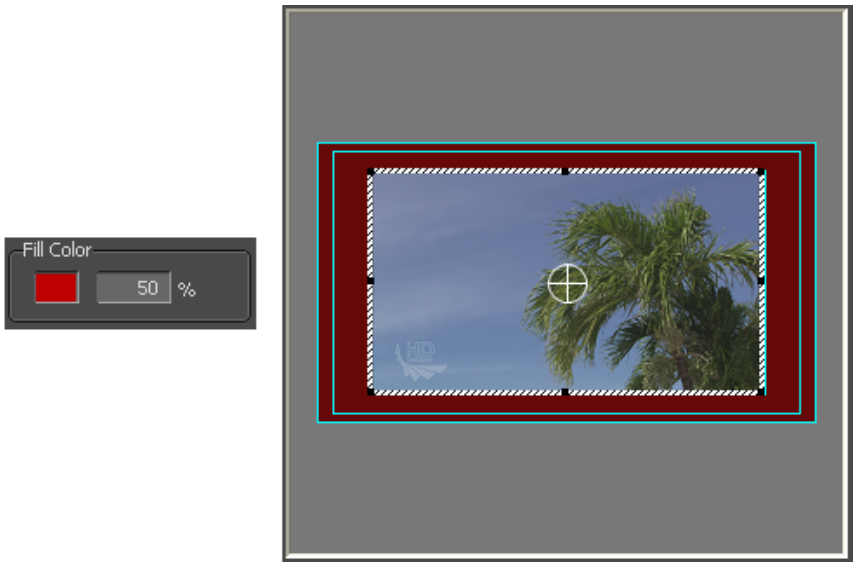
Clicking this button sets the image size to fill the full height of the screen. Shortcut key: [**H**]

Fill Color

Sets the color and transparency ratio of the area of the screen that is not filled with the video. Figure 417 shows an example of a red fill color set to 50% transparency.

To change the fill color, click the color sample box.

Figure 417. Layout Fill Color and Transparency



Preset

Click the **Preset** button to select a saved preset from the drop-down list. In addition to user-created presets, standard presets are:

- Default
- Fit Height
- Fit Width
- Original Size

Save -

Click the **Save** button to save the current settings as a preset. Once saved, it will appear in the drop-down list of the **Preset** button.

Delete -

Presets may be deleted from the Preset list by selecting the preset and then clicking the **Delete** button.

Note Standard presets may not be deleted.

Save as Default

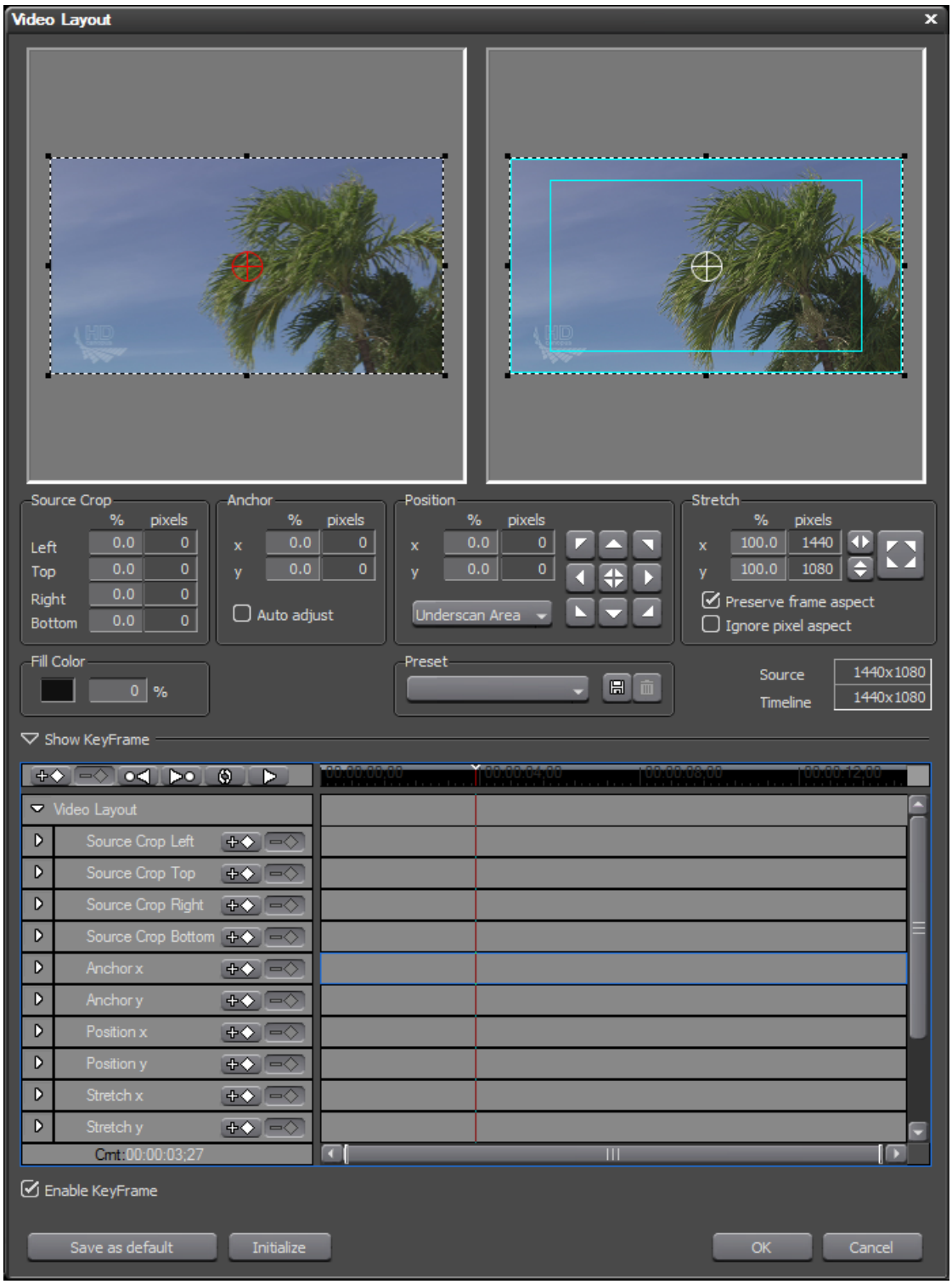
The current settings may be saved as the new default settings by clicking the **Save as Default** button. The current settings will be saved to the Default preset.

Note The original Default preset saves the entire image at maximum size and the aspect ration of the original preserved.

Show KeyFrame Expand

Click the [▷] button next to the Show KeyFrame Expand label to expand the Video Layout dialog and show the KeyFrame Area illustrated in Figure 418.

Figure 418. Video Layout KeyFrame Expand



Keyframe Settings

Key frames can be designated on the Keyframe Timeline for any of the parameters listed in the Video Layout column at the left of the Keyframe area. These parameters are:

- Source Crop Left
- Source Crop Top
- Source Crop Right
- Source Crop Bottom
- Anchor x
- Anchor y
- Position x
- Position y
- Stretch x
- Stretch y
- Fill color Y
- Fill color U
- Fill color V
- Fill color alpha

Enable KeyFrame

To define key frames, click the "Enable KeyFrame" checkbox to enable the KeyFrame operation buttons illustrated in Figure 419.

Figure 419. KeyFrame Operation Buttons

Note The **Add Key Frame** and **Delete Key Frame** buttons in the Keyframe button bar add and delete key frames at the Keyframe Timeline cursor position for all video layout parameters. Use the **Add** and **Delete** buttons for each video layout parameter to affect that parameter only.

- Add Key Frame

Adds a key frame at the position of the Timeline cursor in the Key Frame window.

Note A key frame can also be added by right-clicking on the KeyFrame window Timeline at the position at which to add the key and selecting 'Add" from the menu.

Once a key frame has been added to the KeyFrame window Timeline, the key frame may be selected and adjustments made for that key frame.

Note The interpolation method for frames between key frames is selected by right-clicking on a key frame and selecting “Hold”, “Linear” or “Bezier” from the menu.

- Delete Key Frame

Deletes the key frame at the position of the Timeline cursor in the Key Frame window.

Note A key can also be deleted by right-clicking on the key and selecting ‘Delete” from the menu.

/ - Move to Previous/Next Key Frame

Moves the cursor to the previous or next key frame in the Key Frame window.

- Default Settings

Return the selected key frame to default settings.

/ - Play/Pause Clips

Play or pause clips to which key frames and filters have been applied.

The **Initialize** button deletes all key frames and disables keyframe controls.

The **Save as default** button sets a user video layout default with the defined key frames for all projects which have the same project settings, source clip size (e.g. 1280x720), pixel aspect and aspect ratio.

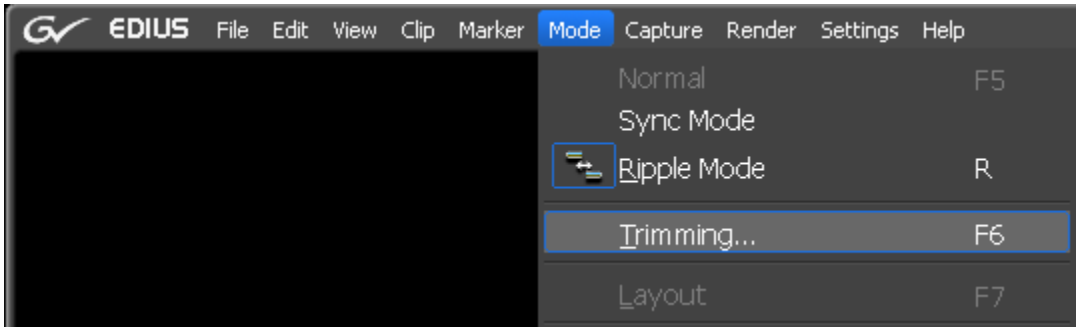
Trimming Clips

Trimming is the process of changing the clip length in order to fit a particular Timeline length or to remove unwanted portions of the clip.

Trimming Mode

To enter trimming mode, select Mode>Trimming on the Preview window menu bar as illustrated in Figure 420.

Figure 420. Trimming Mode Selection



The Preview window switches from the normal mode to the Trim window mode as shown in Figure 421 (Dual-Mode display) and Figure 422 (Single-Mode display).

Figure 421. Dual-Mode Trim Window

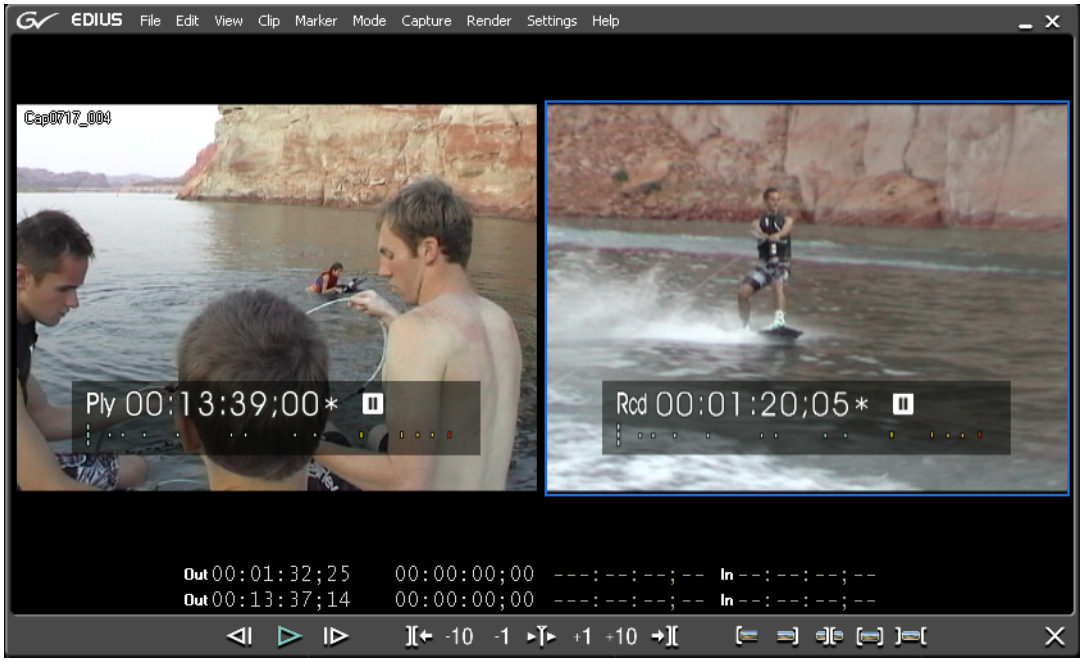
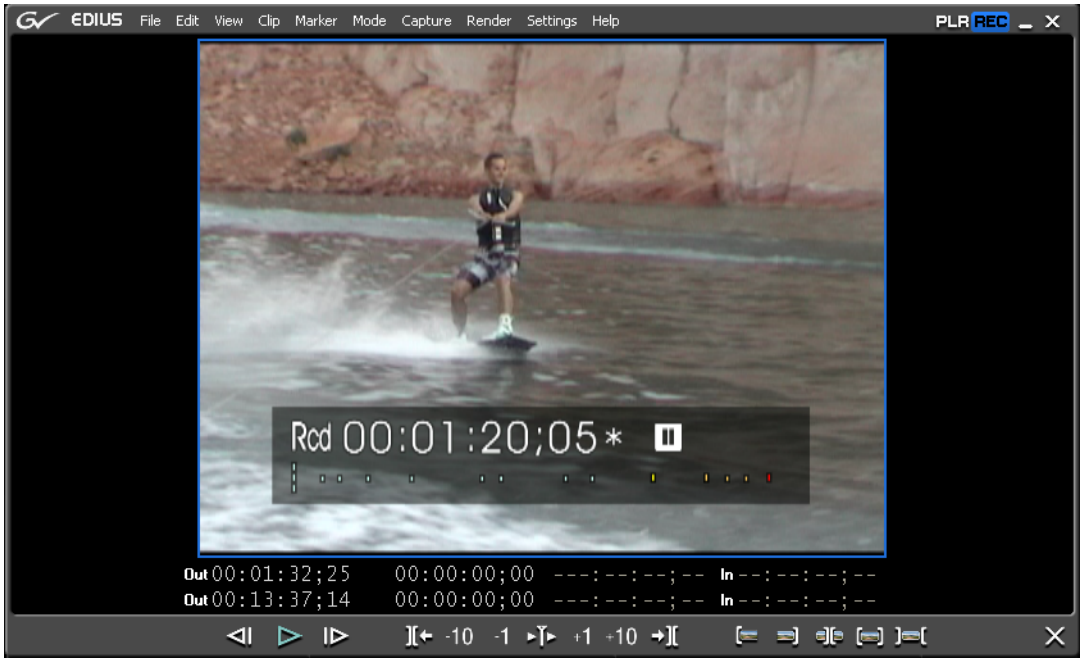


Figure 422. Single-Mode Trim Window



Note Depending upon the screen layout, display mode, project aspect ratio and other factors, your Trim Mode display may not appear exactly as represented here.

Alternative Methods:

- Double-click the In or Out point of a clip
- Right-click on a clip and select “Trim” from the right-click menu.

Any of the following will switch the display from Trim Mode to Normal Mode:

- Select Mode>Normal or Mode>Trimming from the Preview window menu bar.
- Click the **[X]** in the lower right corner of the Trim Mode window
- Press the **[F6]** key on the keyboard

Note **[F6]** toggles Trim Mode on and off.

- Press the **[F5]** key to switch to Normal Mode.

Figure 423 shows the Trim Mode operation buttons. This tool bar is available only while in trim mode.

Figure 423. Trim Mode Operation Buttons

Trim Mode operation button details are provided in Table 5

Table 5. Trim Mode Operation Buttons

Button	Function	Description	Keyboard Shortcut
	Previous Frame	Move to the previous frame	[<--]
	Profile (Play/Pause)	Play the Timeline in the normal direction. When clicked during playback, playback is paused.	[ENTER]
	Next Frame	Move to the next frame.	[-->]
	Move to Previous Edit Point - Trim	The focus and the Timeline cursor move to the edit point (cut point) to the left of the current cut point.When no cut point is selected, the focus and the Timeline cursor move to the edit point to the left of the current position.	[Page Up]
	Trim -10 Frames	Adjust the trim position by -10 frames from the current position.	[SHIFT]+[,]
	Trim -1 Frame	Adjust the trim position by -1 frame from the current position.	[,]
	Play the Event Area	Repeatedly play the video around the selected cut point. Click again to stop.	[/]
	Trim 1 Frame	Adjust the trim position by +1 frame from the current position	[.]
	Trim 10 Frames	Adjust the trim position by +10 frames from the current position	[SHIFT]+[.]
	Move to Next Edit Point - Trim	The focus and the Timeline cursor move to the edit point (cut point) to the right of the current cut point.When no cut point is selected, the focus and the Timeline cursor move to the edit point to the right of the current position.	[Page Down]
	Trim - Select IN Point	Select the IN point of the clip nearest to the Timeline cursor on the selected track.	
	Trim - Select OUT Point	Select the OUTpoint of the clip nearest to the Timeline cursor on the selected track.	
	Trim - Select Slide	When slide trim is enabled, select the cut point of the clip nearest to the Timeline cursor on the selected track	
	Trim - Select Slip	When slip trim is enabled, select the cut point of the clip nearest to the Timeline cursor on the selected track.	
	Trim - Select Roll	When rolling trim is enabled, select the cut point of the clip nearest to the Timeline cursor on the selected track.	
	Normal Mode	Switches the display from Trim Mode to Normal Mode	[F5}

Note Some of the functions above may be disabled when a cut point is selected while trimming is disabled, or, when no cut point exists to which to move on the selected track.

Trimming Operations

Trimming at Ends of Clips

These trimming action s are described with ripple mode disabled. By default, ripple mode is enabled. See *Ripple Mode* *on page 306*. See also *Sync Mode* *on page 305*.

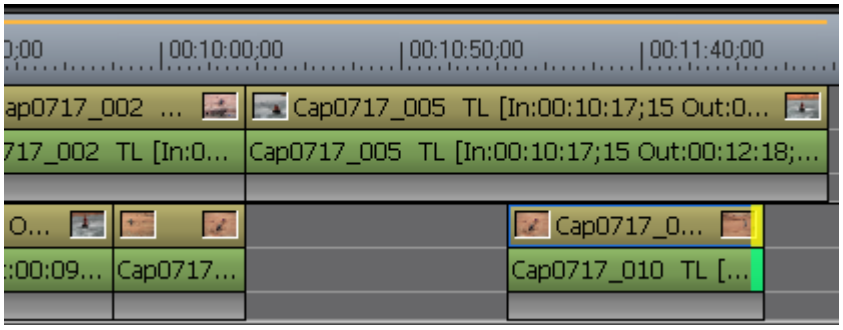
All trimming actions can be monitored in the Preview window.

To trim clips at their end points, do the following:

1. Click at the beginning (In point) or the end (Out point) of a clip.

The color of the cut point changes to green or yellow as illustrated in Figure 424 and trimming is enabled. The yellow cut point is the currently selected cut point.

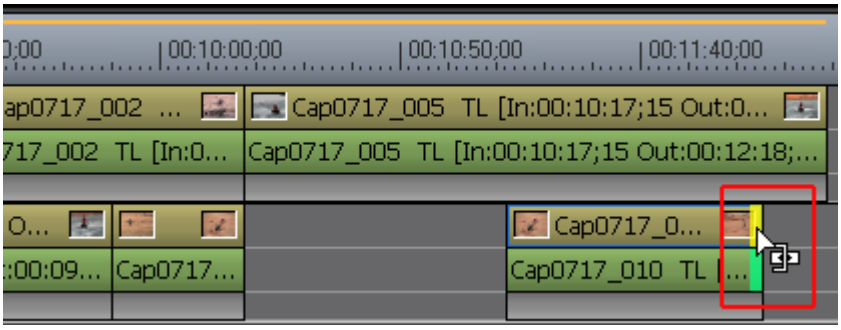
Figure 424. Trimming at Ends of Clips



2. Move the cursor to the cut point.

The cursor changes shape as shown in Figure 425.

Figure 425. End Point Trim Cursor

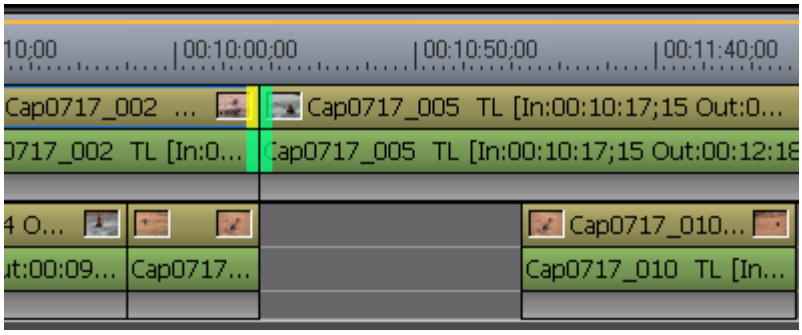


3. Drag the cursor to the left or right to trim the clip at the end point.

Note You can fine tune trimming by 1-frame or 10-frame units by using the trim buttons in the trim window or the corresponding keyboard shortcuts. See *Trim Mode Operation Buttons* *on page 388* for more details.

When selecting a trim point that is at the end of one clip and the beginning of another, two sets of cut points appear as illustrated in Figure 426. Click the cut point to be active for trimming. The active cut point is yellow.

Figure 426. Cut Points Between Clips

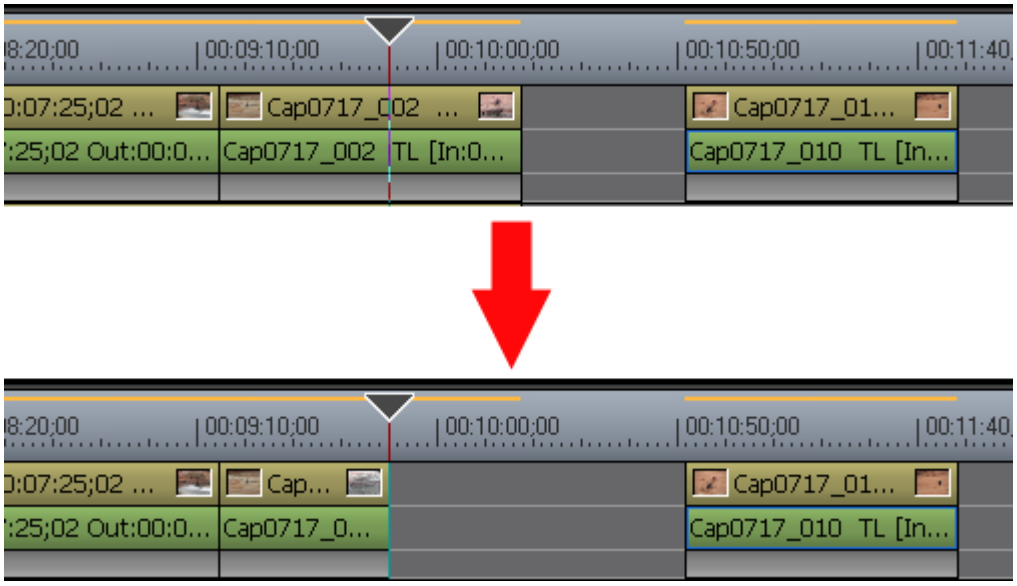


Alternative Method:

1. Click the track where the clip to be trimmed is placed.
2. Move the Timeline Cursor to the point to which the clip should be trimmed.
3. Press the appropriate shortcut key to trim from the beginning of the clip to the cursor position or from the end of the clip to the cursor position:

- **[N]** - trim from the beginning of the clip to the cursor position.
- **[M]** - trim from the end of the clip to the cursor position. See Figure 427 for an example of this action.

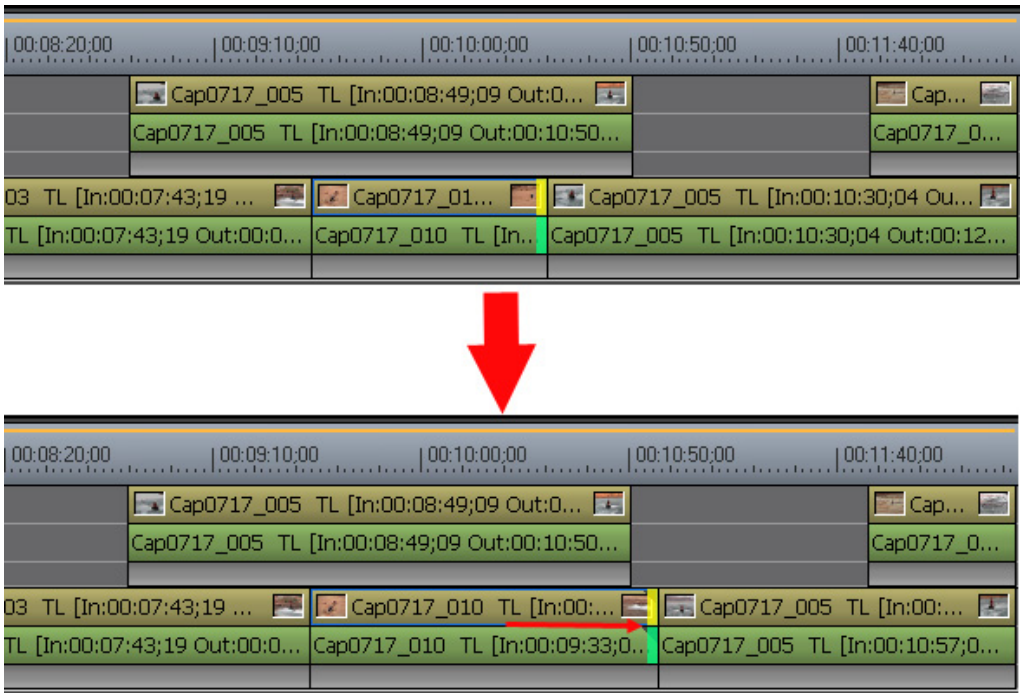
Figure 427. Trim from Clip End to Cursor



When trimming clips, the result will be different as clips are extended based on the Overwrite/Insert mode setting. Examples appear below in Figure 428 and Figure 429.

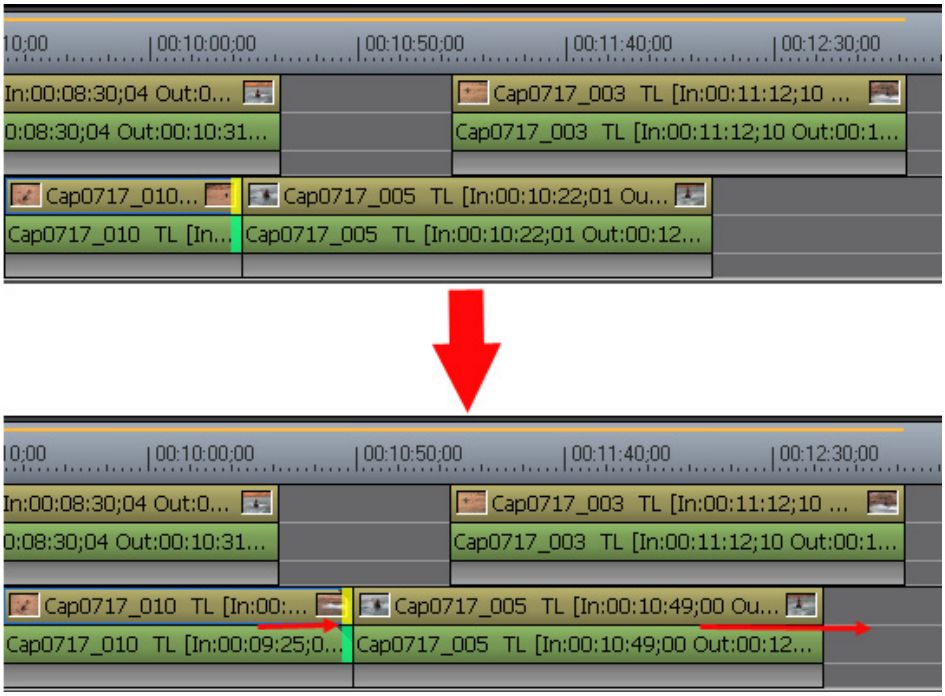
Overwrite Mode Trimming

Figure 428. Overwrite Mode Trimming



Insert Mode Trimming

Figure 429. Insert Mode Trimming



Trimming Notes:

- Transitions can be trimmed in the same way described above with clips
- Set the Timeline cursor on the trim to point in advance to trim more precisely.
- While trimming, the image of the In (beginning) frame is displayed in the Recorder and the image of the Out (end) frame is displayed in the Player.

Note In some trimming operations, there may be four displays; two for the Recorder and two for the Player.

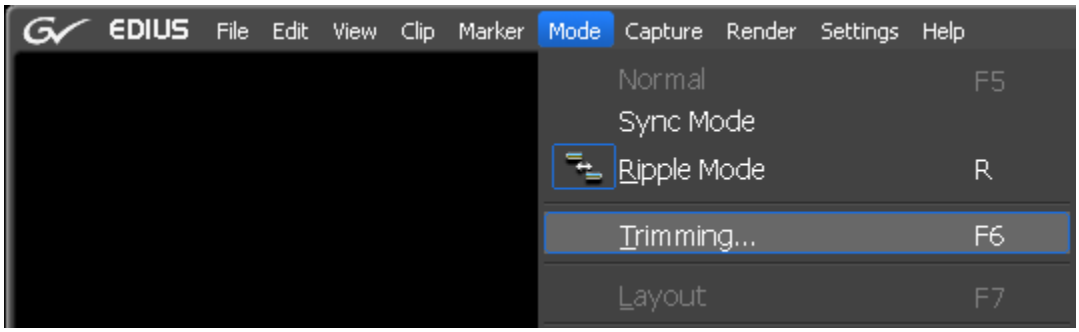
- In Single Mode, the Recorder shows the images at the cut point on two displays.
- Select a clip and press the [ALT]+[U] keys to display the Duration dialog box; enter the desired duration - the playback speed will be maintained. The In (beginning) does not change, but the Out (end)point will be trimmed.

Trimming from the Preview Window

Trimming by dragging mouse in the Preview window is another available trimming method. To trim in the Preview window, do the following:

1. Select Mode>Trimming from the Preview window menu bar as shown in Figure 430.

Figure 430. Trimming Mode Selection



The Preview window switches from normal mode to trim mode.

2. Click in the In (beginning) or Out (end) point of a clip to trim.

The color of the cut point changes to green or yellow and trimming is enabled. The yellow cut point is the active cut point.

3. Select the appropriate trim mode button in the Trim window according to the desired trimming type. See Table 5 on page 388 for more information on Trim mode buttons.

The trimming mode changes according to the selected In and Out points. For more information on trimming modes, see the following references:

- *Ripple Trim on page 399*
- *Split Trim on page 401*
- *Slide Trim on page 403*
- *Slip Trim on page 405*
- *Rolling Trim on page 406*

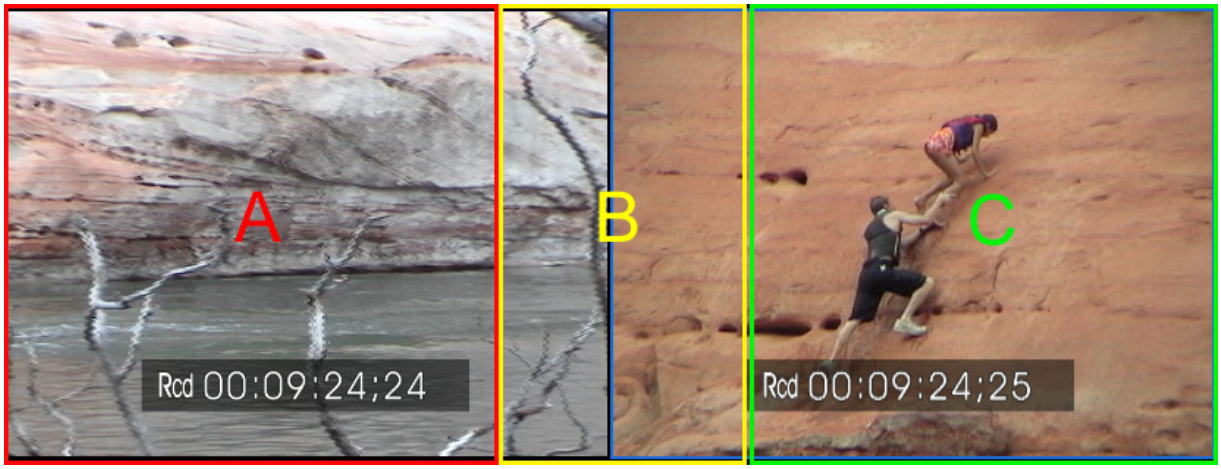
4. Position the mouse cursor on the Preview window and drag to the right or to the left when the mouse cursor changes to the appropriate trimming cursor as explained below in the section titled *In Point, Out Point or Slide Point Trim* and *Slip Trim or Rolling Trim*.

5. Trim the clip as desired while monitoring and verifying the trim operations in the Preview window.

In Point, Out Point or Slide Point Trim

Figure 431 shows the frames and trimming areas around a cut point.

Figure 431. Cut Point Trimming Areas



The trimming mode changes based upon the area in which the cursor is positioned when a trimming drag begins.

A: Out Point Trim

B: Slide Trim

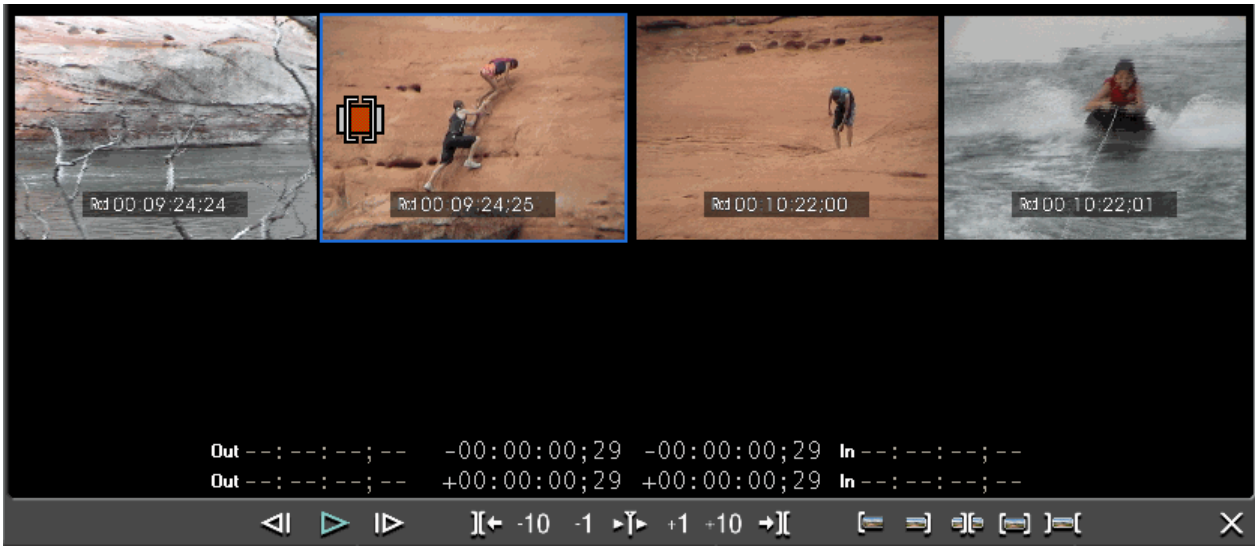
C: In Point Trim

Note Click the Preview window after Step 1 to select the cut point placed nearest to the Timeline cursor on the selected track. The mode is determined by the area (A,B, or C) which is clicked in the Preview window.

Slip Trim or Rolling Trim

For slip or rolling trim, each frame of the cut point is displayed in the Preview window as illustrated in Figure 432.

Figure 432. Cut Point Frames - Slip Trim



The Out point frame of the previous cut point, the In point frame of the previous cut point, the Out point frame of the next cut point and the In point frame of the next cut point are all displayed from left to right.

Note The four frames mentioned above are displayed only if the Preview window is set to dual mode. If the Preview window is set to single mode, only two frames are displayed; the Out point of the first clip at the cut point and the In point of the second clip.

Slip Trim

Rolling Trim

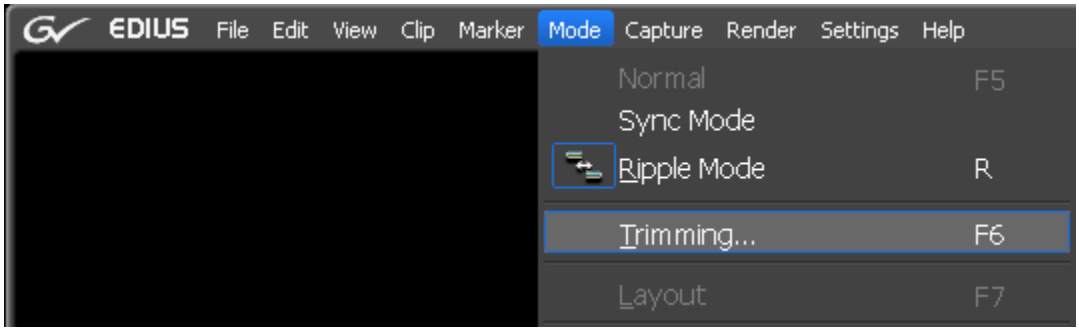
Trimming by Value

In Trim mode, the sequence timecode is displayed in the Preview window and you can trim by entering anew timecode value.

To trim a clip by value, do the following:

1. Select Mode>Trimming from the Preview window menu bar as shown in Figure 433.

Figure 433. Trimming Mode Selection



The Preview window switches from normal mode to trim mode.

2. Click in the In (beginning) or Out (end) point of a clip to trim.

The color of the cut point changes to green or yellow and trimming is enabled. The yellow cut point is the active cut point.

Select the appropriate trim mode button in the Trim window according to the desired trimming type. See Table 5 on page 388 for more information on Trim mode buttons.

The trimming mode changes according to the selected In and Out points. For more information on trimming modes, see the following references:

- *Ripple Trim* *on page 399*
- *Split Trim* *on page 401*
- *Slide Trim* *on page 403*
- *Slip Trim* *on page 405*
- *Rolling Trim* *on page 406*

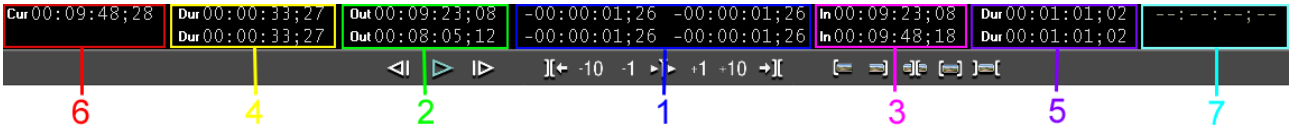
3. Enter the desired timecode to trim and press the **[ENTER]** key.

Move the mouse cursor to the timecodes at the bottom of the Preview window. The mouse cursor shape changes. Click on the timecode to change and a blue line appears under the timecode allowing entry of values. See Figure 434 or an example.

Figure 434. Timecode Trim Entry

The Trim window may contain any of the timecodes shown in Figure 435.

Figure 435. Trim Window Timecodes



The upper level timecodes are the sequence timecodes and the lower level contains the clip timecodes. Trimming can be performed by entering timecodes in either level.

1 - Frame timecode with focused cut point moved

2 - Timeline timecode of the focused cut point - Out point side of the clip.

3 - Timeline timecode of the focused cut point - In point side of the clip.

4 - The length of the clip to be trimmed - Out point side of the clip.

5 - The length of the clip to be trimmed - In point side of the clip.

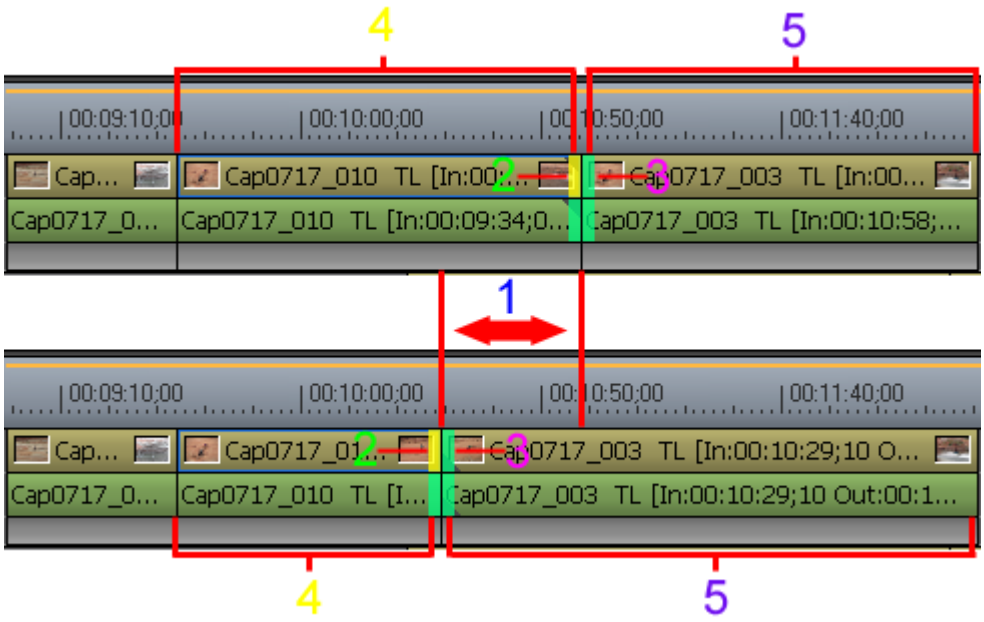
6 - Timeline code of the Timeline cursor.

7 - The length of the Transition/audio cross fade to be trimmed.

Note The timecodes displayed may differ from the above depending upon the Preview window view mode and size of the Preview window.

The example in Figure 436 shows the timecodes as explained in Figure 435.

Figure 436. Slide Trimming Timecodes

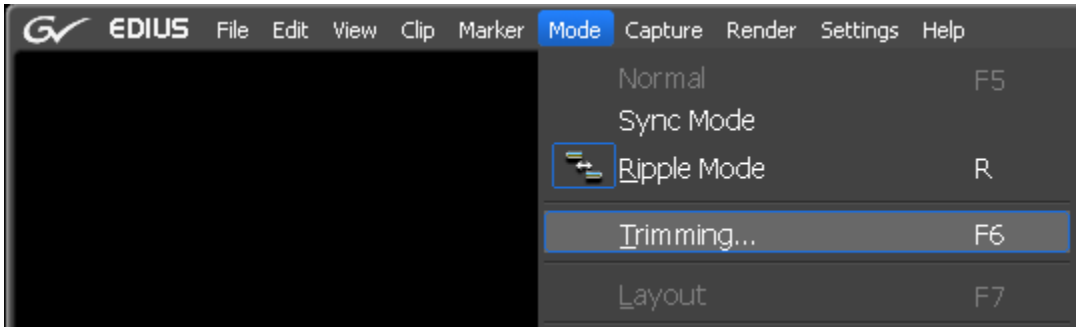


Trimming with Shortcuts

To use keyboard shortcuts in trimming operations, do the following:

1. Select Mode>Trimming from the Preview window menu bar as shown in Figure 437.

Figure 437. Trimming Mode Selection



The Preview window switches from normal mode to trim mode.

2. Click in the In (beginning) or Out (end) point of a clip to trim.

The color of the cut point changes to green or yellow and trimming is enabled. The yellow cut point is the active cut point.

Select the appropriate trim mode button in the Trim window according to the desired trimming type. See Table 5 on page 388 for more information on Trim mode buttons.

The trimming mode changes according to the selected In and Out points. For more information on trimming modes, see the following references:

- *Ripple Trim on page 399*
- *Split Trim on page 401*
- *Slide Trim on page 403*
- *Slip Trim on page 405*
- *Rolling Trim on page 406*

3. Use theses shortcuts to trim the clip:

- [.] - Trim +1 frame (one frame after the current frame).
- **[SHIFT]**+[.] - Trim +10 frames (10 frames after the current frame).
- [,] - Trim -1 frame (one frame before the current frame).
- **[SHIFT]**+[,] - Trim -10 frames (ten frames before the current frame).

Ripple Trim

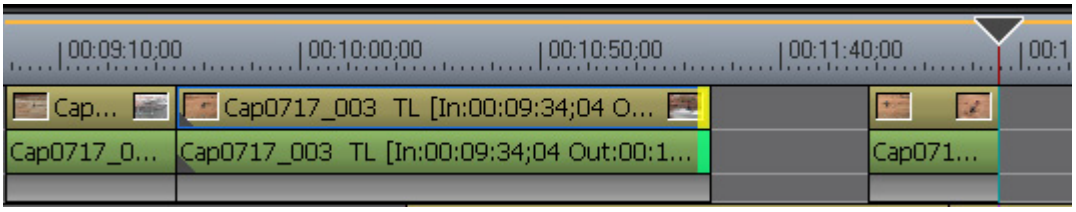
When Ripple mode is On, trimming clips produces the results shown in this section. For more information on ripple mode, see *Ripple Mode* *on page 306*.

1. Click at the beginning (In point) or the end (Out point) of a clip.

The color of the cut point changes to green or yellow as illustrated in Figure 438 and trimming is enabled. The yellow cut point is the currently selected cut point.

Note A cut point may also be selected by clicking the **Trim - Select IN point** or **Trim - Select OUT point** buttons in the Trim Window.

Figure 438. Ripple Mode Trimming at Ends of Clips



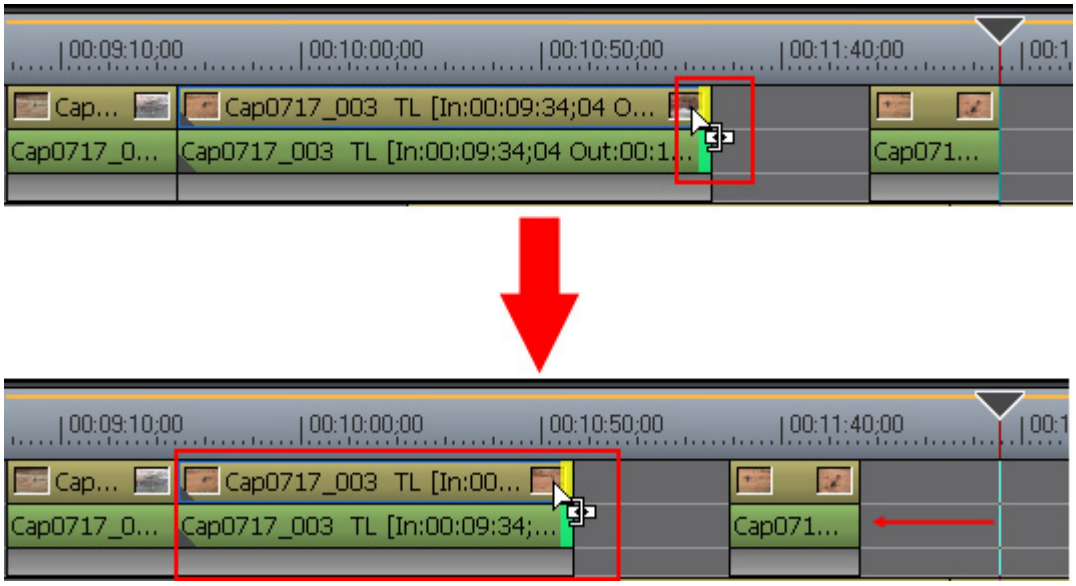
2. Move the cursor to the cut point.

The cursor changes shape as shown in Figure 439.

3. Drag the cursor to the left or right to trim the clip at the end point.

Note You can fine tune trimming by 1-frame or 10-frame units by using the trim buttons in the trim window or the corresponding keyboard shortcuts. See *Trim Mode Operation Buttons* *on page 388* for more details.

Figure 439. Ripple Mode Trim



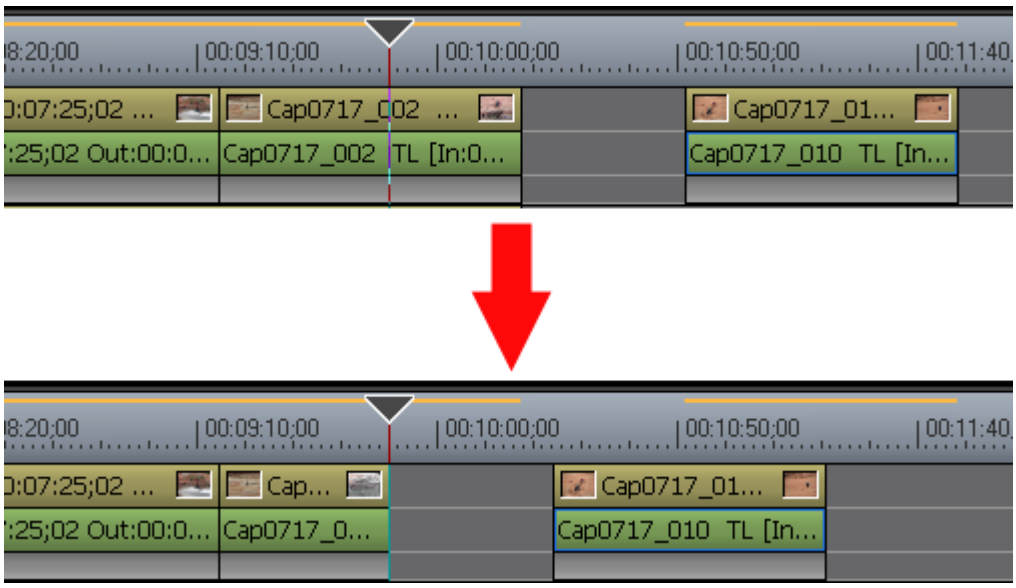
Note Clips in the same track are linked with Ripple mode on and they move when clips before them are trimmed. Clips in all tracks move when a clip is trimmed if Sync mode is also on. See *Sync Mode* *on page 305* for more information.

Alternative Method:

1. Click the track where the clip to be trimmed is placed.
2. Move the Timeline Cursor to the point to which the clip should be trimmed.
3. Press the appropriate shortcut key to ripple trim from the beginning of the clip to the cursor position or from the end of the clip to the cursor position:

- **[ALT]+[N]** - ripple trim from the beginning of the clip to the cursor position.
- **[ALT]+[M]** - ripple trim from the end of the clip to the cursor position. See Figure 440 for an example of this action.

Figure 440. Ripple Trim from Clip End to Cursor



Split Trim

Split trim allows you to trim only the video portion or the audio portion of a video with audio.

When Ripple mode is On, split trimming is not allowed if there is no margin between the clip to be trimmed and adjacent clips. When trimming clips with a margin, trimming can only be done up to the length of the margin.

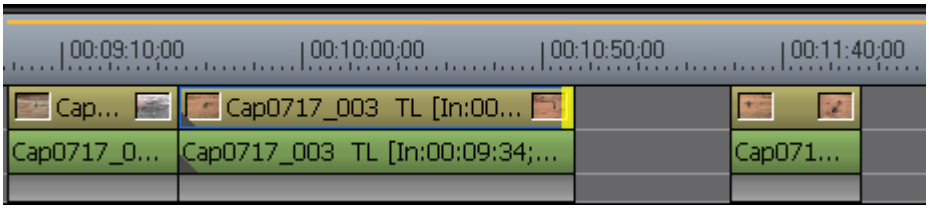
To perform a split trim, execute the following steps:

1. While holding down the [**ALT**] key, click the beginning (In point) or end (Out point) of the video or audio portion of a clip.

The color of the cut point changes to yellow and trimming is enabled. See Figure 441.

Note Click the In and Out points for each clip while holding down the [**ALT**] key to select the border of clips next to each other on the Timeline.

Figure 441. Split Trim at End of Clip



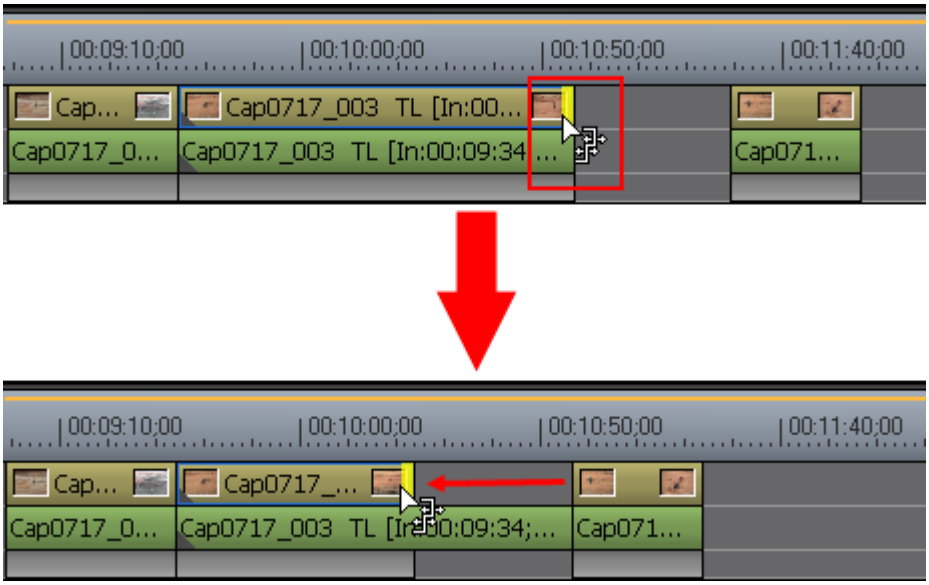
2. Move the cursor to the cut point.

The cursor changes shape as shown in Figure 439.

3. Drag the cursor to the left or right to trim the clip at the end point.

Note You can fine tune trimming by 1-frame or 10-frame units by using the trim buttons in the trim window or the corresponding keyboard shortcuts. See *Trim Mode Operation Buttons* *on page 388* for more details.

Figure 442. Split Trim

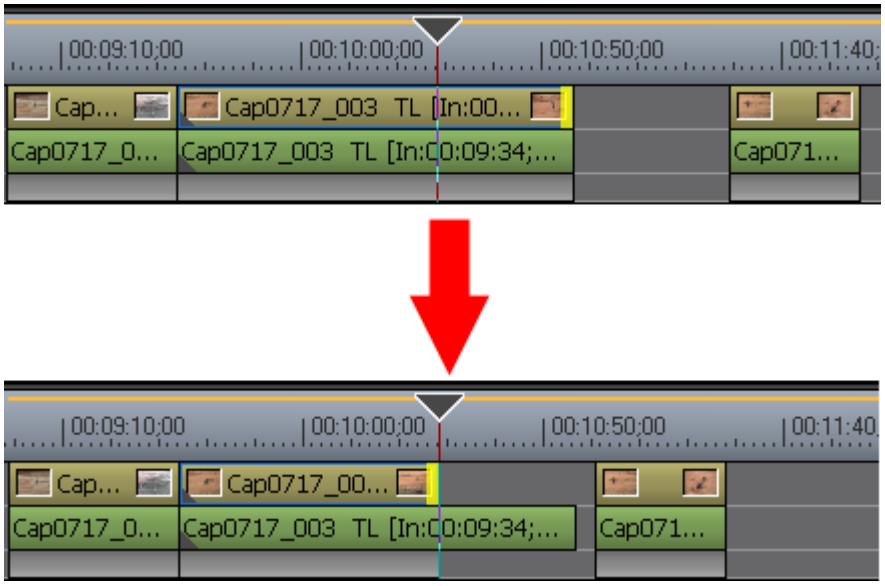


Alternative Method:

1. While holding down the **[ALT]** key, click the beginning (In point) or end (Out point) of the video or audio portion of a clip.
2. Move the Timeline Cursor to the point to which the clip should be trimmed.
3. Press the appropriate shortcut key to split trim from the beginning of the clip to the cursor position or from the end of the clip to the cursor position:

- **[SHIFT]+[N]** - Split trim from the In point side of the clip.
- **[SHIFT]+[M]** - Split trim from the Out point side of the clip. See Figure 443 for an example.
- **[SHIFT]+[ALT]+[N]** - Split ripple trim from the In point side of the clip.
- **[SHIFT]+[ALT]+[M]** - Split ripple trim from the In point side of the clip
- **[SHIFT]+[CTRL]+[ALT]+[N]** - Split slide trim from the In point side of the clip.
- **[SHIFT]+[CTRL]+[ALT]+[M]** - Split slide trim from the Out point side of the clip to the cursor position.

Figure 443. Split Trim to Cursor Position from Clip End



Slide Trim

As a clip is trimmed, slide trimming shifts forward or backward the start and end points of the neighboring clip. The total length of the clips does not change.

When Ripple mode is On, slide trimming is not allowed if there is no margin between the clip to be trimmed and adjacent clips. When trimming clips with a margin, trimming can only be done up to the length of the margin.

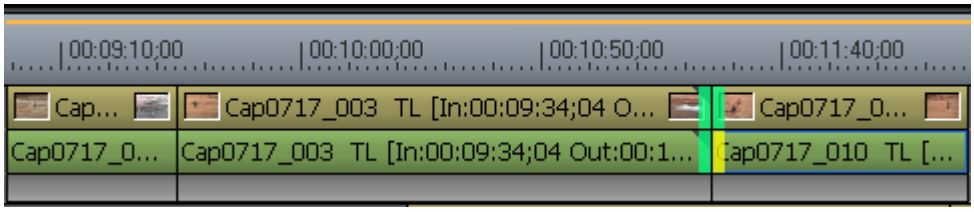
To slide trim a clip do the following:

1. Click the border between two clips.

The color of the cut point change to green or yellow and trimming is enabled. See Figure 444.

Note You may also select the slide trim cut point nearest to the Timeline cursor on the selected track by clicking the **Trim - Select Slide** button in the Trim window.

Figure 444. Slide Trim Clip Select



2. Move the cursor to the cut point.

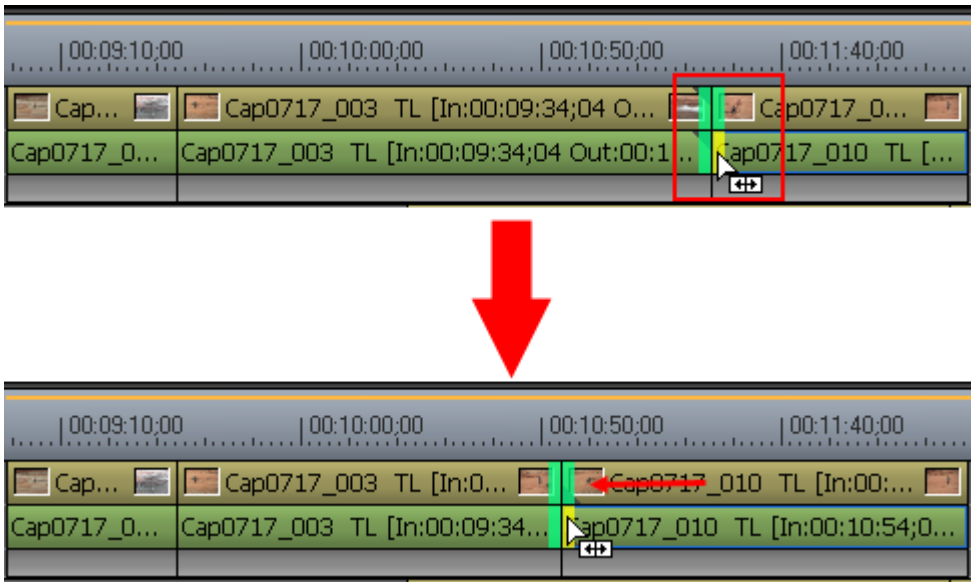
The cursor changes shape as shown in Figure 445.

3. Drag the cursor to the left or right to trim the clip at the end point.

The length and position of the clips before and after the two clips at the slide trim cut point are not affected.

Note You can fine tune trimming by 1-frame or 10-frame units by using the trim buttons in the trim window or the corresponding keyboard shortcuts. See *Trim Mode Operation Buttons* *on page 388* for more details.

Figure 445. Slide Trim

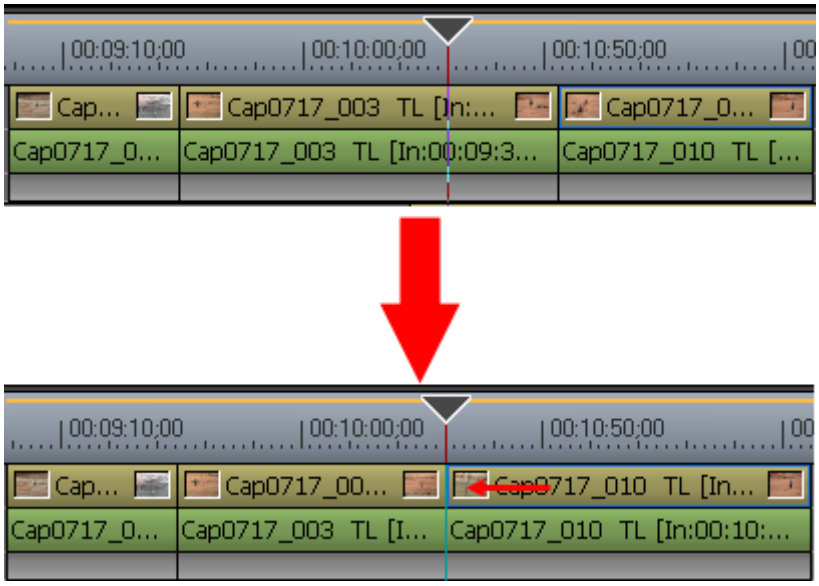


Alternative Method:

1. Select the track where the clip to be slide trimmed is placed.
2. Move the Timeline Cursor to the point to which the clip should be trimmed.
3. Press the appropriate shortcut key to slide trim from the beginning of the clip to the cursor position or from the end of the clip to the cursor position:

- **[CTRL]+[ALT]+[N]** - Slide trim from the In point side of the clip.
- **[CTRL]+[ALT]+[M]** - Slide trim from the Out point side of the clip

Figure 446. Slide Trim to Cursor Position from Clip End



Slip Trim

Slip trimming changes the section of the clip to be used without changing the length or position of the clip. The length and position of neighboring clips do not change.

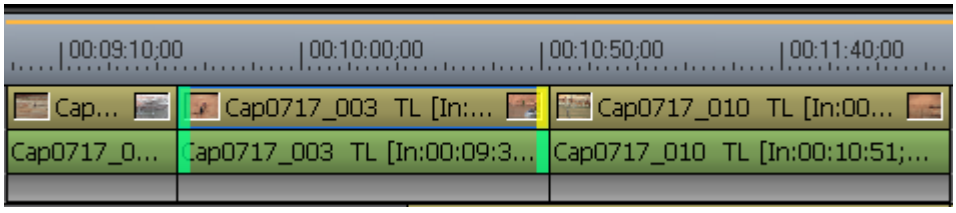
When Ripple mode is On, slip trimming is not allowed if there is no margin between the clip to be trimmed and adjacent clips. When trimming clips with a margin, trimming can only be done up to the length of the margin.

1. While holding down the [**CTRL**] key, click on the beginning (In point) and end (Out point) of the clip to be trimmed.

The color of the cut point changes to green or yellow and trimming is enabled. See Figure 447.

Note You may also select the cut points of the clip nearest to the Timeline cursor on the selected track by clicking the **Trim - Select Slip** button in the Trim window.

Figure 447. Slip Trim Clip Select



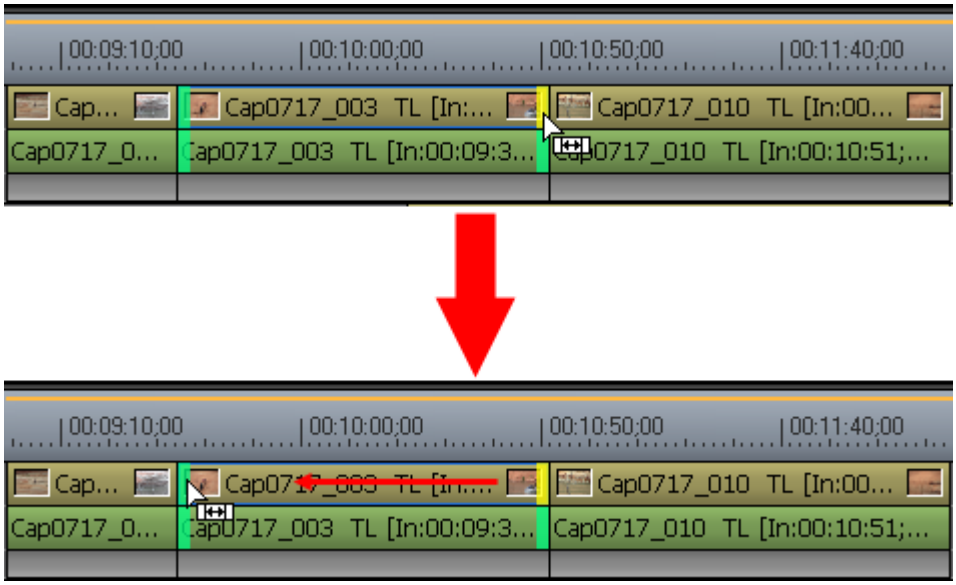
2. Move the cursor to the cut point.

The cursor changes shape as shown in Figure 445.

3. Drag the cursor to the left or right to change the section of the clip that is used.

Note You can fine tune trimming by 1-frame or 10-frame units by using the trim buttons in the trim window or the corresponding keyboard shortcuts. See *Trim Mode Operation Buttons* *on page 388* for more details.

Figure 448. Slip Trim



Rolling Trim

Rolling trim shifts the start and end points of clips before and after the selected clip. The length of the selected clip is not changed nor is the overall length of all the clips.

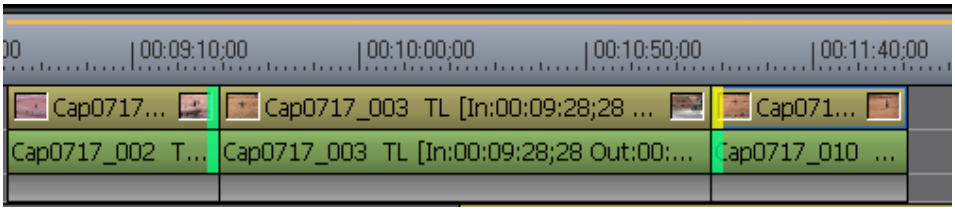
When Ripple mode is On, rolling trim is not allowed if there is no margin between the clip to be trimmed and adjacent clips. When trimming clips with a margin, trimming can only be done up to the length of the margin.

1. While holding down the **[CTRL]** key, click the end (Out point) of the clip before the clip to be trimmed and the beginning (In point) of the clip after the clip to be trimmed.

The color of the cut point changes to green or yellow and trimming is enabled. See Figure 449.

Note You may also select the cut points at the ends of the clip nearest to the Timeline cursor on the selected track by clicking the **Trim - Select Roll** button in the Trim window.

Figure 449. Rolling Trim Clip Select



2. Move the cursor to the In or out point of the clip to roll trim.

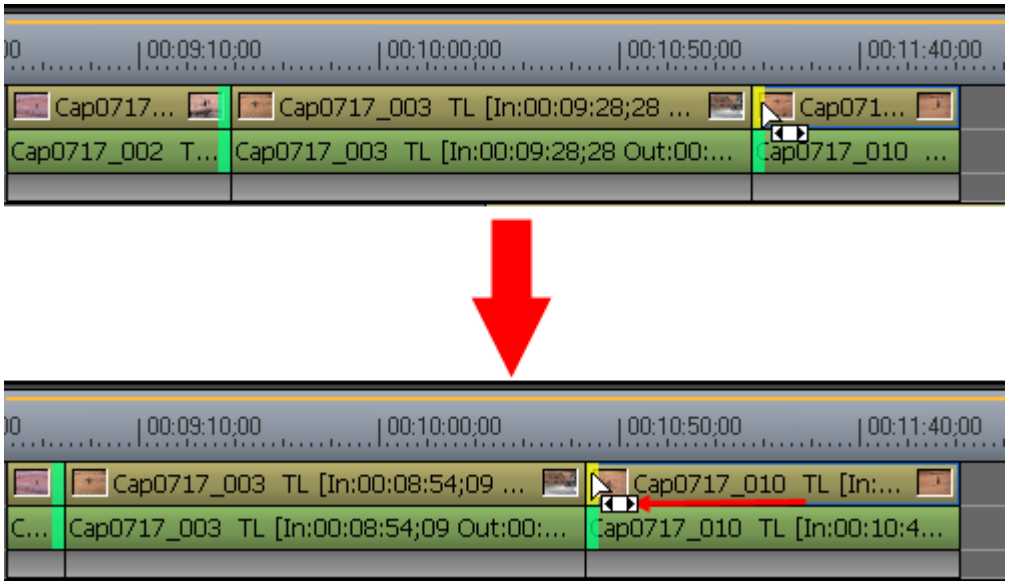
The cursor changes shape as shown in Figure 450.

3. Drag the cursor to the left or right to change the position of the clip

As the clip is dragged, the neighboring clips are shortened or lengthened but the overall length of all the clips remains unchanged.

Note You can fine tune trimming by 1-frame or 10-frame units by using the trim buttons in the trim window or the corresponding keyboard shortcuts. See *Trim Mode Operation Buttons* *on page 388* for more details.

Figure 450. Rolling Trim



Sequence and Clip Markers

Markers are set primarily for the following purposes;

- To designate chapter points when exporting the project with Burn to Disc.
- To enable quickly moving to a marked location on the Timeline or in a particular clip.
- To mark particular points or sections of a clip for use in Timeline or clip operations.

There are two different Marker Palettes; the Sequence Marker Palette and the Clip Marker Palette. A toggle button is used to switch between the two when the market Palette is displayed.

Sequence Markers

Sequence markers are markers that are placed on the Sequence Timeline. They have no association with a particular clip. If a clip is moved on the Timeline, Sequence markers may or may not refer to a point in the clip depending upon the position of the clip on the Timeline relative to any Sequence markers. Any clips placed on the Timeline are marked by Sequence markers.

Clip Markers

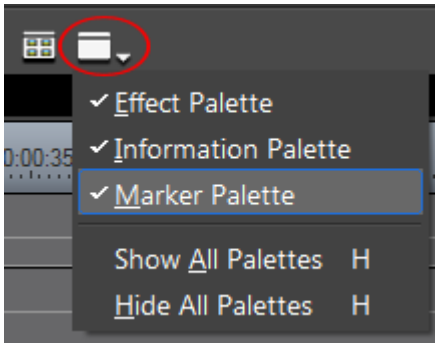
Clip markers are markers that exist in a particular clip only. When the clip is moved on the Timeline, the clip markers maintain their position within the clip. Clip markers have no association with Sequence or Timeline time-codes.

Show/Hide the Marker Palette

To toggle the Marker Palette display on and off, click the **Toggle palette display** button on the Timeline and select "Marker Palette" from the menu as illustrated in Figure 451.

If the check mark is present, the Marker Palette is displayed. If the check mark is not present, the Marker Palette is not displayed.

Figure 451. Toggle Palette Display Menu - Sequence Marker Palette



A sample Sequence Marker Palette is shown in Figure 452.

Note The size and dimensions of the Marker Palettes may differ from the examples depending upon your screen layout.

Alternative Methods:

- Select View>Marker Palette from the Preview window menu bar.
- Select View>Show All Palettes or View>Hide All Palettes from the Preview window menu bar.

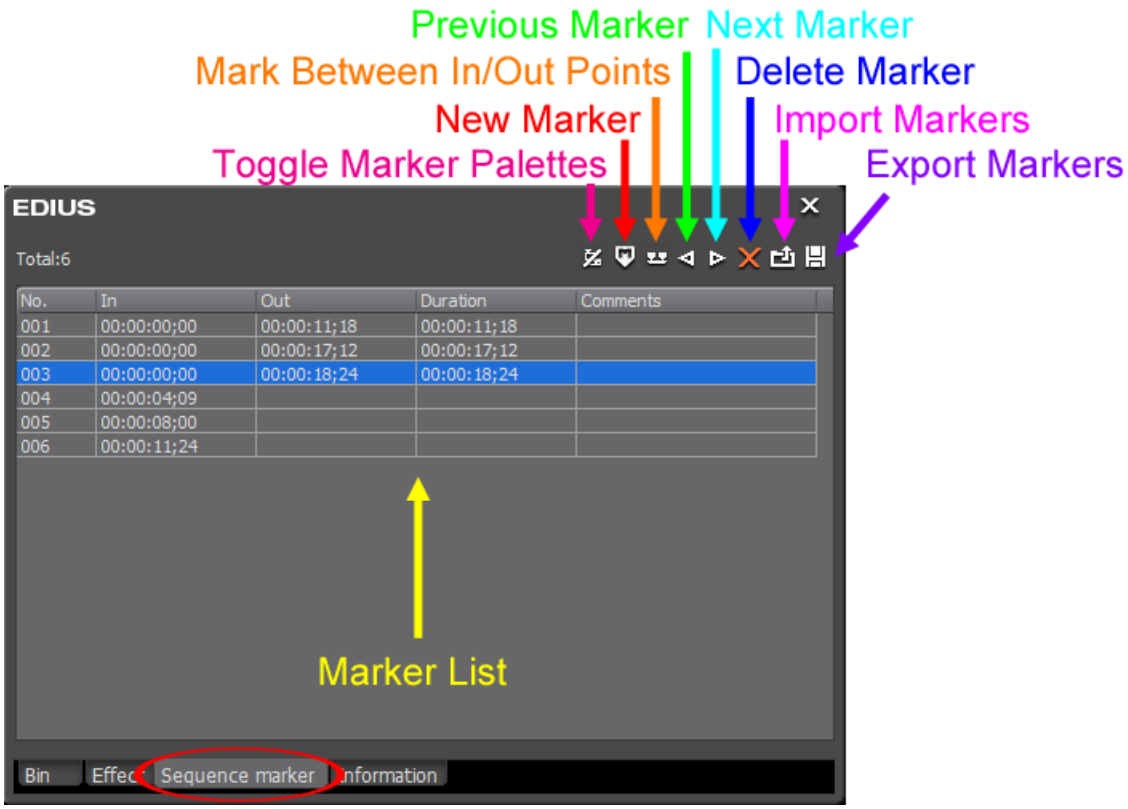
Note The “Show All Palettes” selection displays the Information Effect and Marker Palettes. The “Hide All Palettes” selection hides all of these palettes.

- Press the **[H]** key on the keyboard to toggle the Marker Palette display on and off.

Sequence Marker Palette

The Sequence and Clip Marker Palettes are viewed in the Marker Palette window; however, only one or the other is visible. The toggle button (see Figure 452) is used to switch between the two marker palettes.

Figure 452. Sequence Marker Palette



When the Recorder window is active and the Sequence Marker Palette is displayed, the function buttons operate in the manner described below.

Toggle Marker Palettes

Toggles the Marker Palette view between the Sequence Marker Palette and the Clip Marker Palette.

Set Mark

Adds a new marker at the position of the Timeline cursor.

Set Mark In/Out

Adds the clip segment between the current In/Out points to the marker list.

Previous Marker

Moves the Timeline cursor to the previous marker.

Next Marker

Moves the Timeline cursor to the next marker.

Delete Marker

Deletes the marker(s) selected in the Marker List

Import Marker List

Imports a list of marker positions from a file.

Export Marker List

Exports the current marker list to a .CSV file.

Marker List

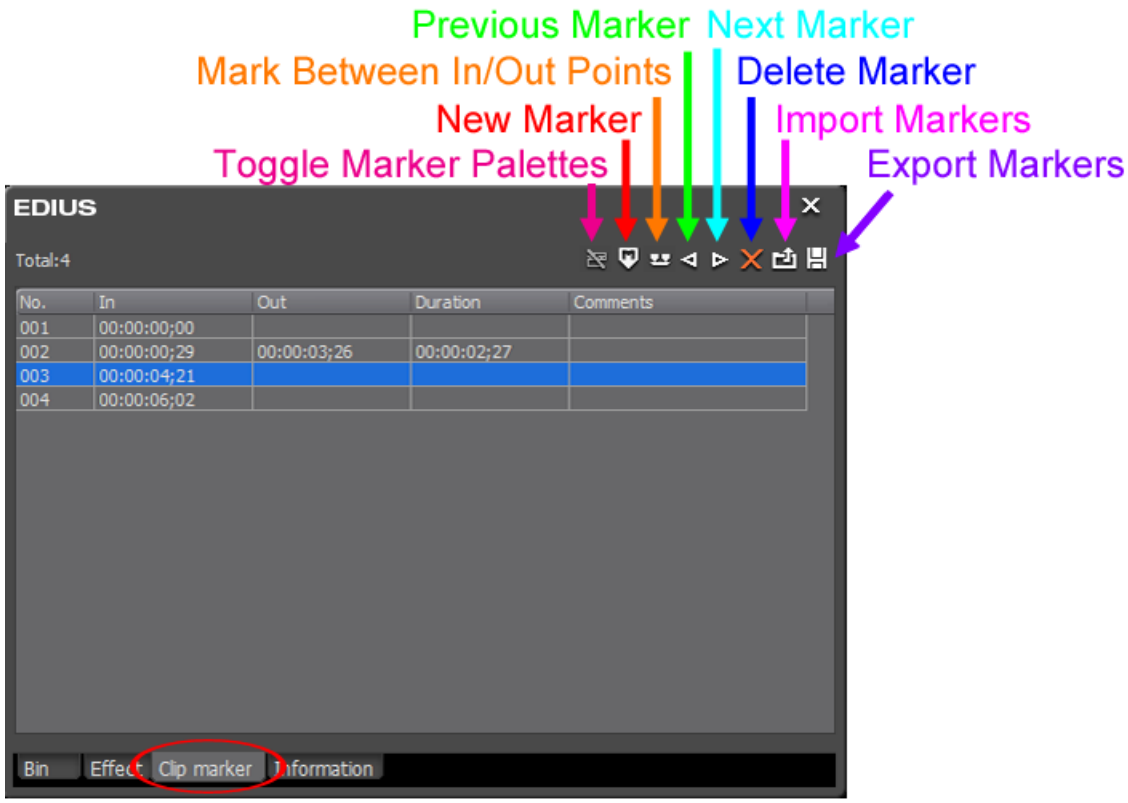
Displays the marker number; In, Out and duration timecode; and comments for all markers.

Clip Marker Palette

The Sequence and Clip Marker Palettes are viewed in the Marker Palette window; however, only one or the other is visible. The toggle button (see Figure 453) is used to switch between the two marker palettes.

Note When the Player window is active, it is not possible to switch to the Sequence Marker Palette and the **Toggle** button is greyed out as illustrated in Figure 453.

Figure 453. Clip Marker Palette



When a clip is loaded into the Player window, the Palette view switches automatically to the Clip Marker Palette.

As shown in Figure 454, clip markers appear in the slider and position bar area under the Player window.

Note If the Clip Marker Palette is active, the **Set Mark**, **Set Mark In/Out**, **Delete Marker**, **Import Marker List** and **Export Marker List** buttons are not available with the Recorder selected. These operations are available only when the Player is selected.

Figure 454. Player with Clip Markers

When the Player window is active and the Clip Marker Palette is displayed, the function buttons operate in the manner described below.

Toggle Marker Palettes

Toggle button is not active.

Set Mark

Adds a new marker at the position of the cursor in the Player position bar.

Set Mark In/Out

Adds the clip segment between the current In/Out points to the marker list.

Previous Marker

Moves the Player position bar cursor to the previous marker.

Next Marker

Moves the Player position bar cursor to the next marker.

Delete Marker

Deletes the marker(s) selected in the Marker List

Import Marker List

Imports a list of marker positions from a file.

Export Marker List

Exports the current marker list to a .CSV file.

Marker List

Displays the marker number; In, Out and duration timecode; and comments for all markers.

Setting Markers

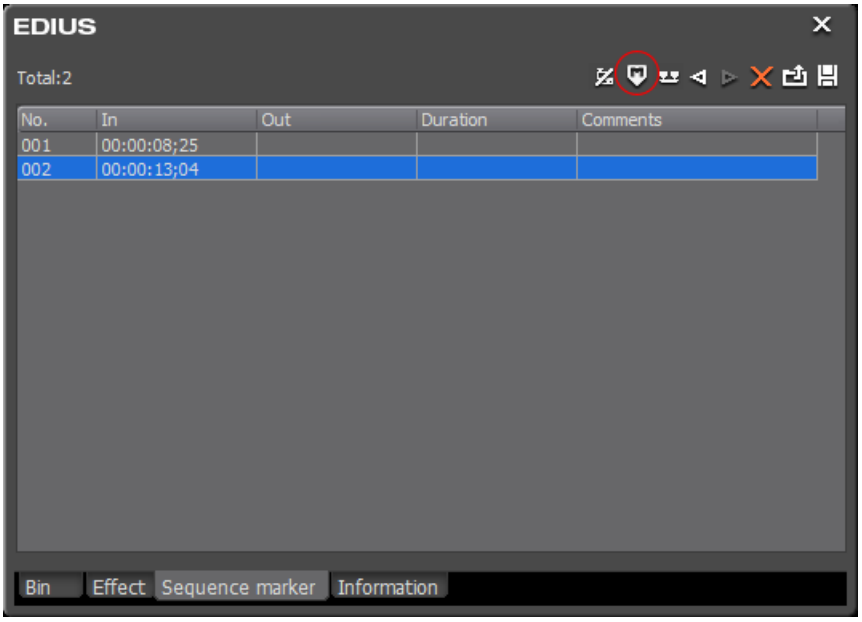
Set Marker at Specific Location

To set a marker at a specific location on a Sequence Timeline or in a clip, do the following:

1. Move the Timeline cursor (Sequence Marker) or the Player window position bar slider (Clip Marker) to the position at which you wish to place a marker.
2. Click the **Set Mark** button on the Marker Palette. See Figure 455.

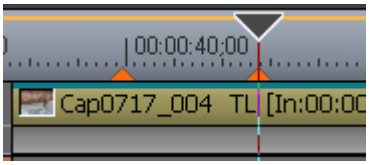
Note A Clip marker cannot be set in the same frame as a Sequence marker. The Sequence marker has priority over the Clip marker in the same frame.

Figure 455. Marker Palette Set Marker Button.



A Sequence marker is set on the Timeline at the position of the Timeline cursor (see Figure 456).

Figure 456. Timeline Sequence Marker



A Clip marker is set on the Player position bar at the position of the slider (see Figure 457).

Figure 457. Player Clip Marker

The marker number and In timecode are added to the Marker Palette as illustrated in Figure 455.

Note Mark Out and Duration will be blank as these apply only to markers set between In and Out points.

Alternative Methods:

- Select Marker>Set Mark on the Preview window menu bar.
- Select Marker> Set Mark In/Out on the Preview window menu bar to mark the segment of the clip between the current In and Out points.
- Right-click the marker list and select "Set Mark."
- If the **Add Marker** button has been added to the Timeline buttons, click this button. See *Button Settings* *on page 154* for more information.
- Press the **[V]** key on the keyboard.

Sequence Markers

- Right-click on the time scale and select "Set Sequence marker/Clear Sequence marker (Toggle)" from the menu.

Clip Markers

- Right-click on the Player position bar and select "Set clip marker/Clear clip marker (Toggle)" from the menu.

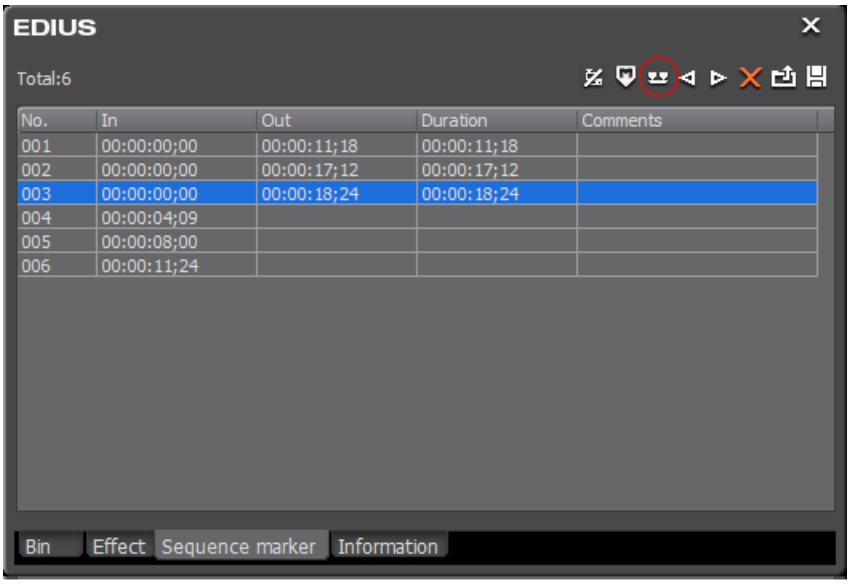
Set Marker Between In and Out Points

To set a marker for a Sequence Timeline or clip segment between the current In and Out points click the **Set Mark In/Out** button on the Marker Palette. See Figure 455.

If an In point does not exist, the beginning of the clip is specified as the In point. If an Out point does not exist, the end of the clip is specified as the Out point.

Note A Clip marker cannot be set in the same frame as a Sequence marker. The Sequence marker has priority over the Clip marker in the same frame.

Figure 458. Marker Palette Set Marker Between In and Out Points Button



Markers set between the current In and Out points display in the marker list with an In timecode, an Out timecode and a Duration. The Duration is the time covered by the clip segment between the In and Out points.

Alternative Methods:

- Select Marker> Set Mark In/Out on the Preview window menu bar to mark the segment of the clip between the current In and Out points.
- Right-click the marker list and select “Set Mark In/Out” from the menu.
- Press the **[V]** key on the keyboard.

Sequence Markers

- Right click on the time scale and select “Set Sequence marker/Clear Sequence marker (Toggle)” from the menu.

Clip Markers

- Right-click on the Player position bar and select “Set clip marker In/Out” from the menu.

Limitations

Markers cannot be set between In and Out points in the circumstances illustrated in the following examples:

Video and Audio Have Different In Points and Out Points

As shown in Figure 459 and Figure 460, if the video and audio portions of a clip have different In points and different Out points, the Mark Between In and Out Points operation is not available.

Figure 459. Different Video and Audio In and Out Points

Figure 460. Different Video and Audio In and Out Points Example 2

Video and Audio Have Same In (or Out) Point and Different Out (or In) Point

As shown in Figure 461 and Figure 462, if the video and audio portions of a clip have the same In (or Out) points and different Out (or In) points, the Mark Between In and Out Points operation is not available.

Figure 461. Same Video and Audio In Point and Different Out Points

Figure 462. Different Video and Audio In Points and Same Out Points

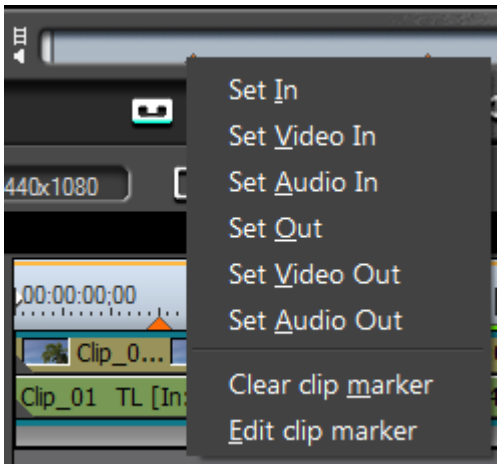
Note If the video and audio portions of a clip have the same In and Out points as illustrated in Figure 463, the Mark Between In and Out points operation is available.

Figure 463. Video and Audio Have Same In and Out Points

Clip Marker and Slider Shortcut Menus

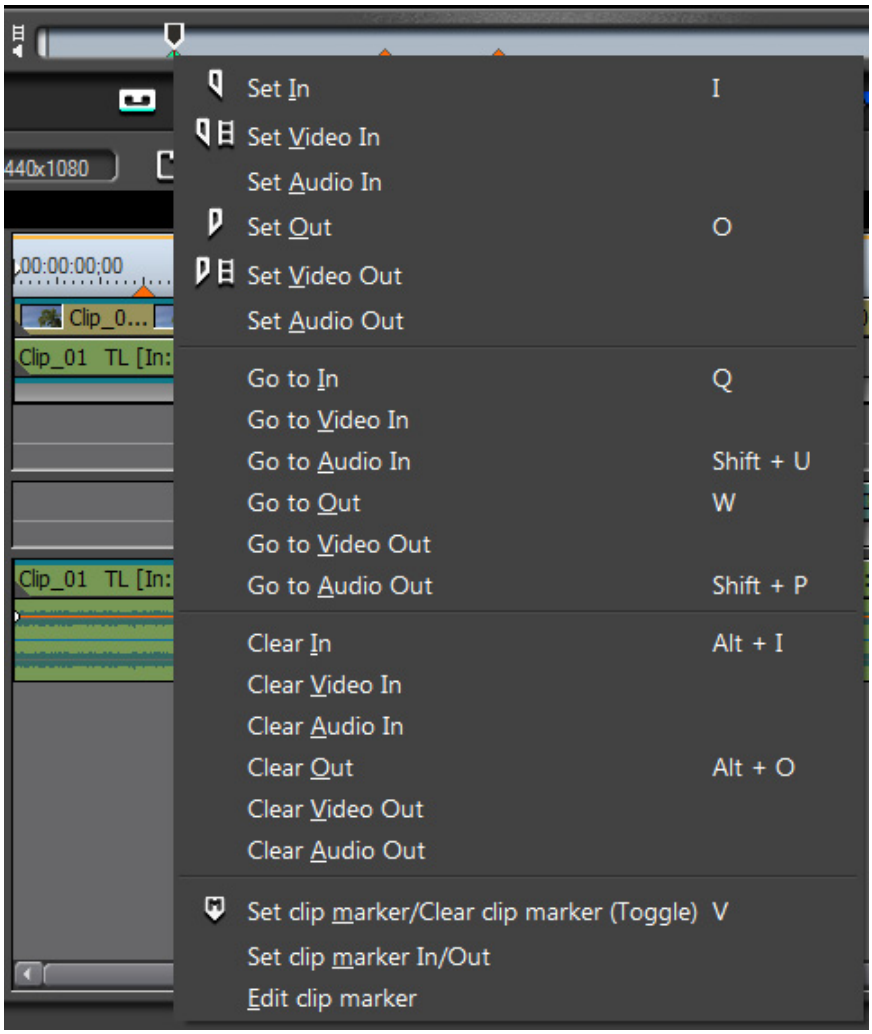
Right clicking on any Clip marker in the Player window displays the shortcut menu shown in Figure 464. Select the desired operation from the menu.

Figure 464. Clip Marker Shortcut Menu



Right click on the Player windows Slider display the menu illustrated in Figure 465.

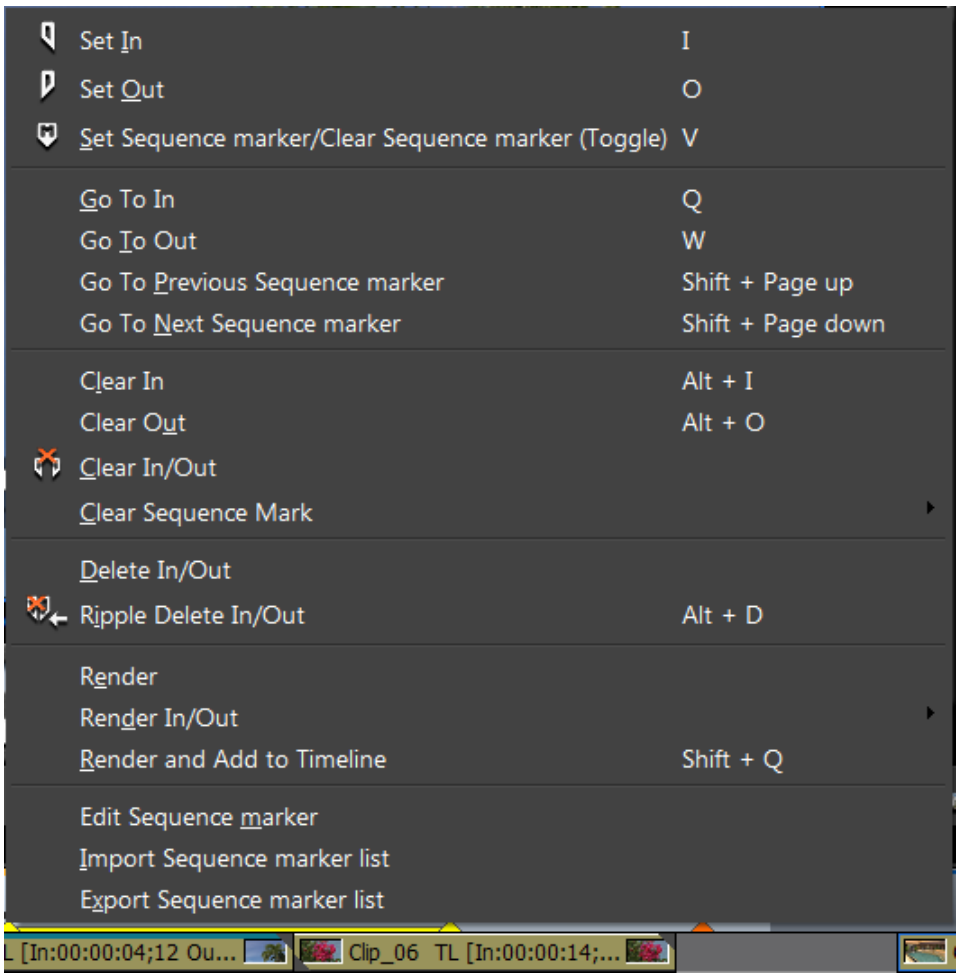
Figure 465. Player Slider Shortcut Menu



Sequence Marker and Timeline Cursor Shortcut Menu

Right clicking on a Sequence marker or Timeline cursor display the menu illustrated in Figure 466. Select the desired operation from the menu.

Figure 466. Sequence Marker or Timeline Cursor shortcut Menu



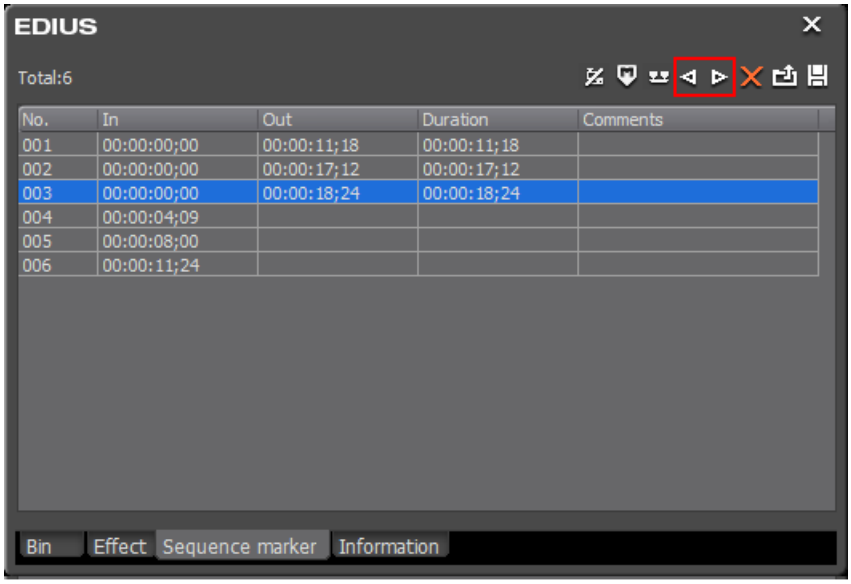
Selecting a Marker Position

To select a marker on the Timeline (Sequence Markers) or Player window position bar (Clip Markers), do any of the following:

- Use the Previous Marker and Next Marker buttons in the Marker Palette. See Figure 467

Note When moving to the Previous or Next marker in the Timeline, the cursor is positioned on the In point of and In/Out marker. With the In/Out marker selected, the Out point may be selected ny clicking on it; however, the Previous and Next buttons do not select the Out point of an In/Out marker.

Figure 467. Previous Marker and Next Marker Buttons



- Double-click the desired marker in the marker list.

Sequence Markers

- Right-click the time scale and select “Go to Previous Sequence marker” or “Go to Next Sequence marker” from the menu.
- Select Marker>“Go to Previous Sequence marker” or “Go to Next Sequence marker” from the Preview window menu bar.
- Double-click the desired marker on the time scale.
- Press the **[SHIFT]**+**[PAGE UP]** keys on the keyboard to go to the previous marker.
- Press the **[SHIFT]**+**[PAGE DOWN]** keys on the keyboard to go to the next marker.

When a marker is selected the Timeline cursor (Sequence Marker) or Player slider (Clip Marker) moves to the selected marker as illustrated in Figure 468 and Figure 469.

Figure 468. Selected Sequence Marker

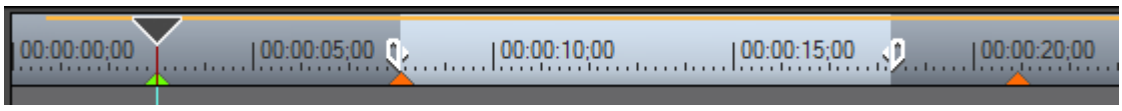
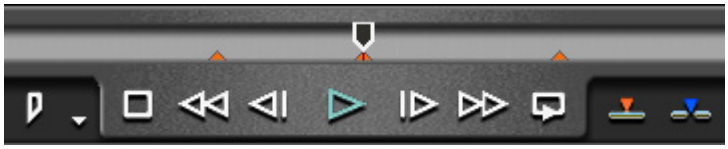


Figure 469. Selected Clip Marker



When and In/Out marker is selected, the In/Out marker range is highlighted as illustrated in Figure 470 and Figure 471.

Figure 470. Selected In/Out Sequence Marker

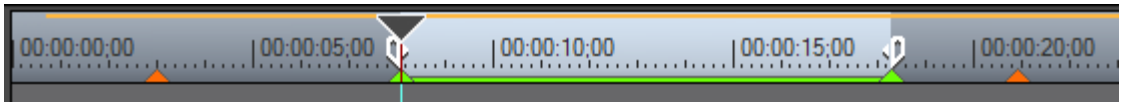


Figure 471. Selected In/Out Clip Marker

Moving Markers

Markers may be moved on the Timeline or in the Player window position bar by dragging them to a new location.

Delete Markers

To delete a marker from the marker list, do the following:

1. Select the marker(s) to be deleted in the marker list.
2. Click the **Delete** button.

Alternative Methods:

- Drag the marker to be deleted from the marker list and drop it outside the Marker Palette.
- Drag the marker to be deleted from the marker list and drop it on the **Delete Marker** button.
- Right-click the marker to be deleted from the marker list and select “Clear marker” from the menu.
- Select the marker from the marker list and press the **[DELETE]** key on the keyboard.

Sequence Markers

- Right-click on a marker on the time scale and select "Set Sequence marker/Clear Sequence marker (Toggle)" from the menu.
- Right-click on a marker on the time scale and select "Clear Sequence Mark>Current Sequence Marker" from the menu.

Note To delete all markers simultaneously, right-click on a marker on the time scale and select Clear Sequence Mark>All from the menu. Pressing [**SHIFT**]+[**ALT**]+[**V**] also clears all sequence markers.

Clip Markers

- Right click on a marker in Player window position bar and select "Clear clip marker" from the menu.

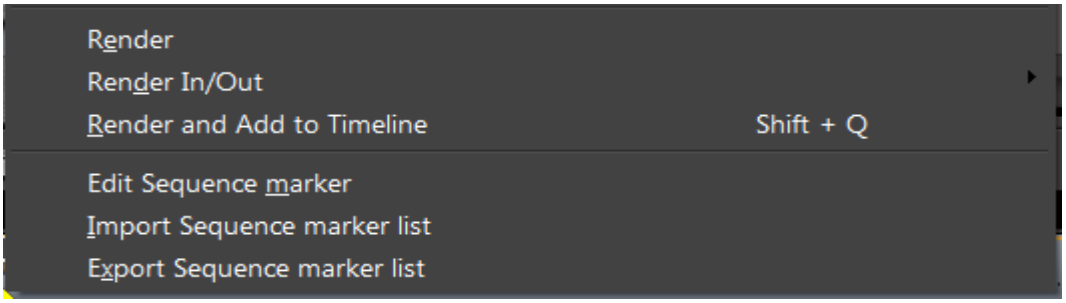
Entering Marker Comments

Sequence Marker Palette

To add comments to a marker. follow these steps:

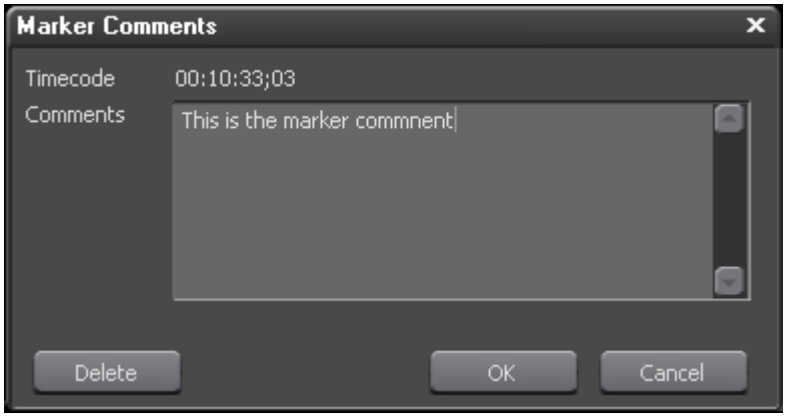
1. Right-click a marker on the Timeline and select "Edit Sequence marker" from the menu as illustrated in Figure 458

Figure 472. Marker Menu - Edit Sequence Marker



The Marker Comments dialog shown in Figure 473 appears.

Figure 473. Marker Comments Dialog



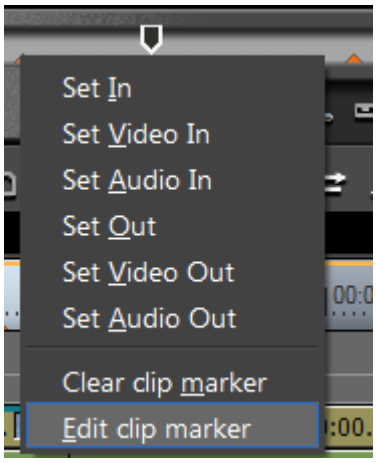
2. Enter the desired comments and click the **OK** button.

Clip Marker Palette

To add comments to a marker. follow these steps:

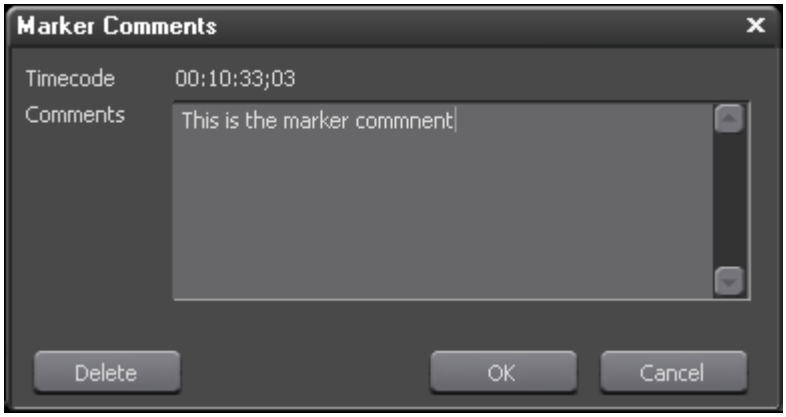
1. Right-click a marker on the Player window position bar and select "Edit clip marker" from the menu as illustrated in Figure 474

Figure 474. Marker Menu - Edit Clip Marker



The Marker Comments dialog shown in Figure 475 appears.

Figure 475. Marker Comments Dialog



2. Enter the desired comments and click the **OK** button.

Alternative Methods:

- Right-click the desired marker in the marker list and select "Edit marker" from the menu.
- Click the Comments field of the desired marker in the marker list and enter the comment.
- To enter a comment for the first marker (after beginning comment entry), press the **[CTRL]**+**[HOME]**, **[PAGE UP]** keys on the keyboard.
- To enter a comment for the last marker (after beginning comment entry), press the **[CTRL]**+**[HOME]**, **[PAGE DOWN]** keys on the keyboard.
- To enter a comment for the previous marker (after beginning comment entry), press the **[CTRL]**+[↑] keys on the keyboard.
- To enter a comment for the next marker (after beginning comment entry), press the **[CTRL]**+[↓] keys on the keyboard.

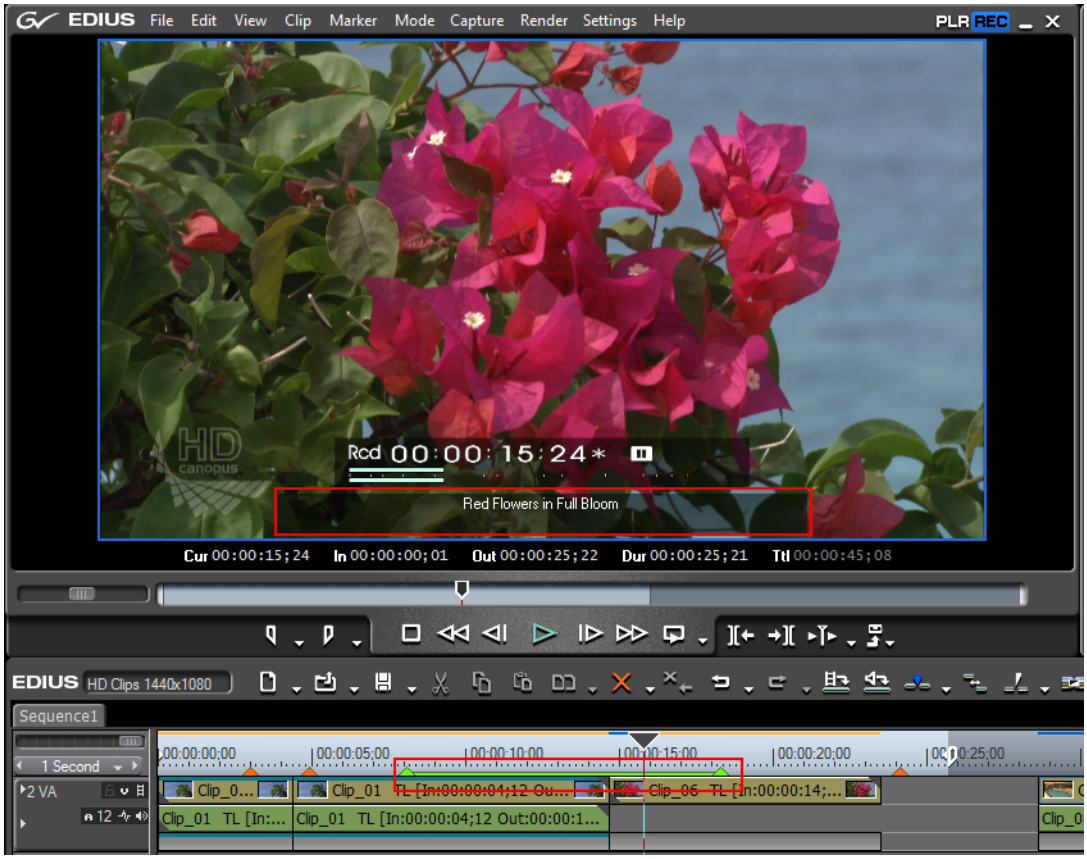
Note Comments already entered are edited in the same manner

Display of Marker Comments

Recorder Window

When the Timeline cursor is placed between the In and Out points of a In/Out Sequence or Clip marker, the marker comments will be displayed in the Recorder window as illustrated in Figure 476.

Figure 476. Sequence Marker Comments Displayed In Recorder



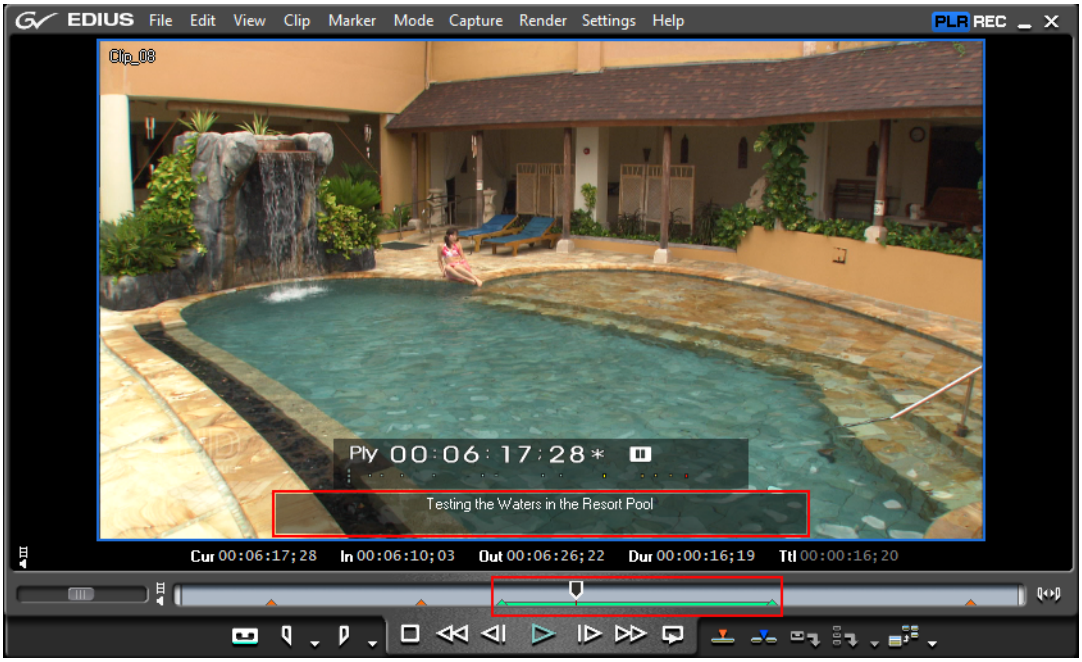
Comment Display Considerations

- If the In/Out range of a Sequence marker and a Clip marker overlap, the Sequence marker has priority and the comments associated with the Sequence marker will be displayed.
- If the In points of two or more In/Out markers overlap, the shorter rang marker has priority and the comments associated with this In/Out marker will be displayed.
- If an In/Out marker range exists within another In/Out marker, the inside marker has priority and the comments for this marker will be displayed.
- If In/Out marker ranges for clips on multiple tracks overlap, the upper track marker comments have priority and will be displayed. If the upper track is muted, no clip comments will be displayed.

Player Window

When the position bar slider is placed between the In and Out points of a In/Out Clip marker, the marker comments are displayed in the Player window as shown in Figure 477.

Figure 477. Clip Marker Comments Displayed in Player



Comment Display Considerations

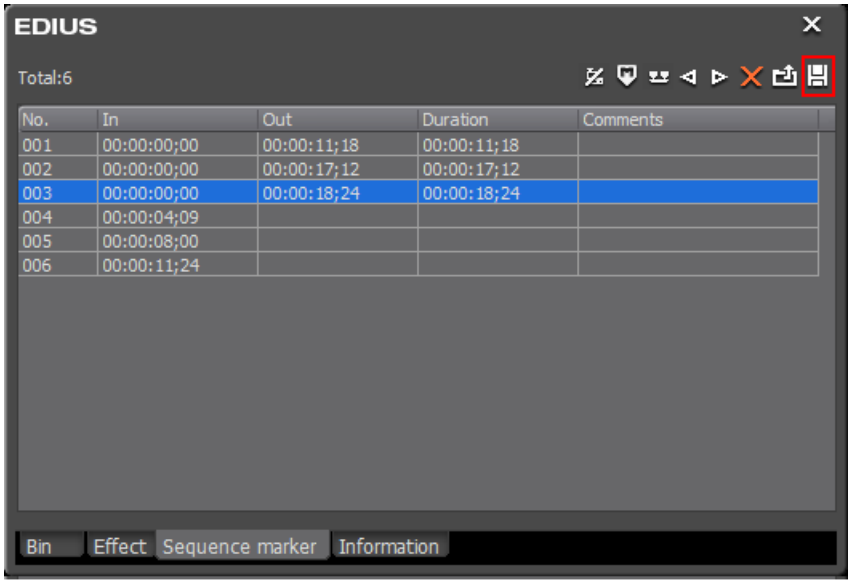
- If the In points of two or more In/Out markers overlap, the shorter rang marker has priority and the comments associated with this In/Out marker will be displayed.
- If an In/Out marker range exists within another In/Out marker, the inside marker has priority and the comments for this marker will be displayed.

Export Marker List

To export the current marker list to a .CSV file, do the following:

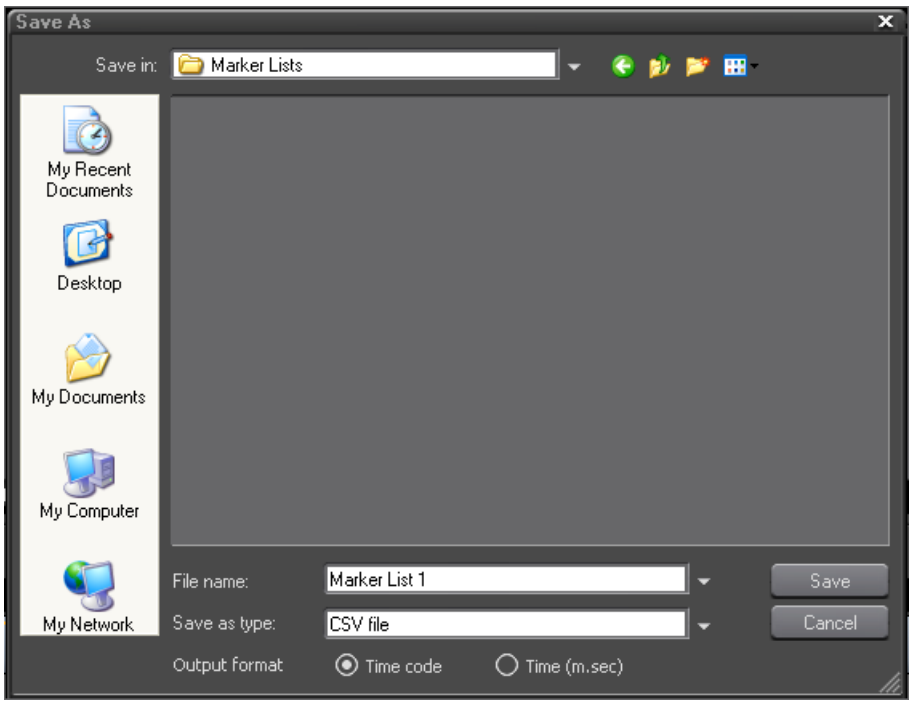
1. Click the **Export** button on the Marker Palette. See Figure 478.

Figure 478. Marker Palette Export Button



The Save As dialog shown in Figure 479 appears.

Figure 479. Export List Save As Dialog



2. Navigate to the desired destination folder and enter a file name for the exported marker list.

3. Select the desired timecode format:

- Time code = time in HH:MM:SS;FF
- Time (m.sec) = time in HH:MM:SS;milliseconds

4. Click the **Save** button to save the marker list as a .CSV file.

Alternative Methods:

- Right-click a marker in the marker list and select “Export marker list” from the menu.

Sequence Markers

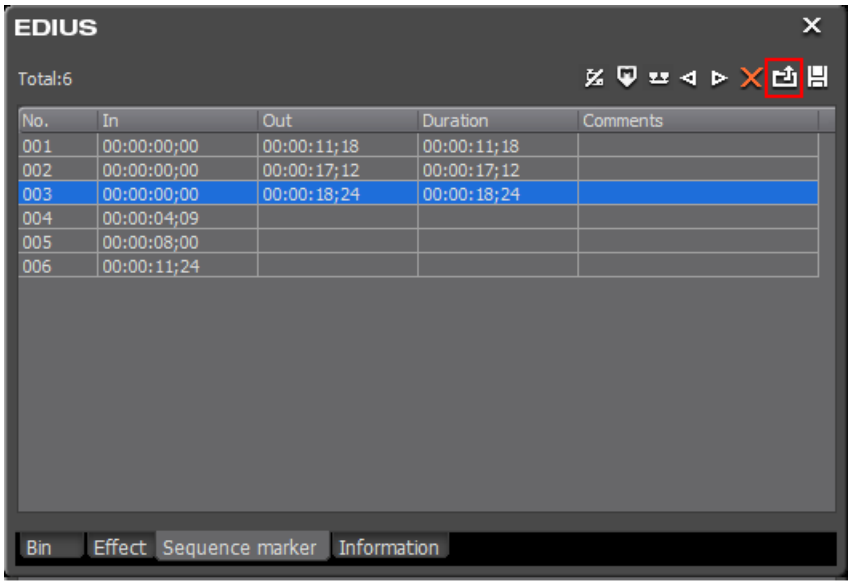
- Right-click a marker on the time scale and select “Export Sequence marker list” from the menu.

Import Marker List

To import a marker list from a saved .CSV file, do the following:

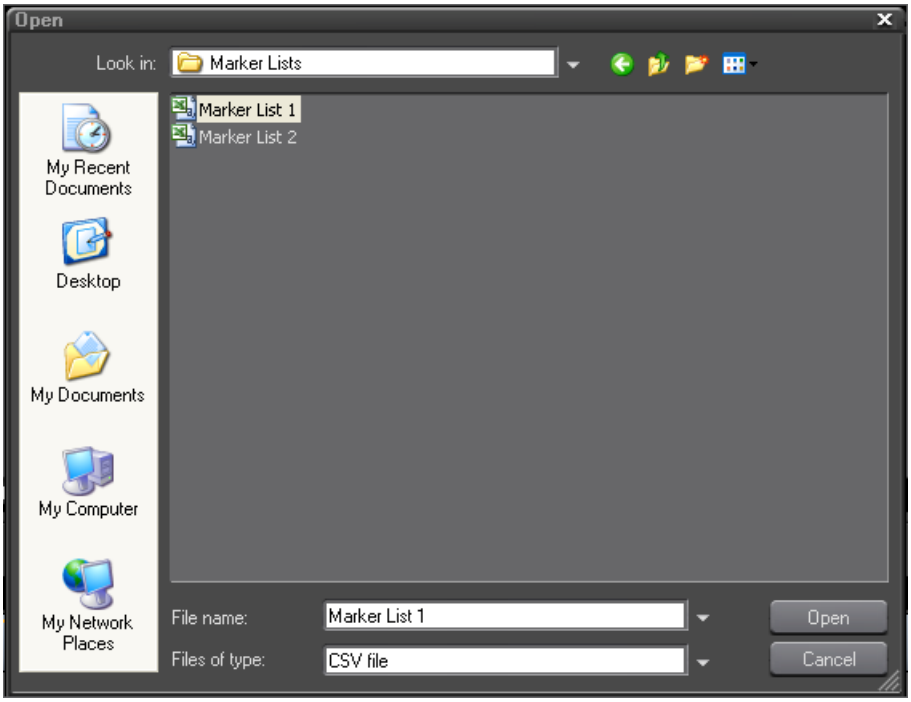
1. Click the **Import** button on the Marker Palette. See Figure 480.

Figure 480. Marker Palette Import Button



A File Open dialog as illustrated in Figure 481 appears.

Figure 481. Marker List Import Open Dialog



2. Navigate to the directory that contains the desired market list to be imported.

3. Select the marker list .CSV file and click the **Open** button.

Note If a marker is imported which does not contain Out and Duration information, these values will be set to "0."

Alternative Methods:

- Right-click a marker in the marker list and select "Import marker list" from the menu.

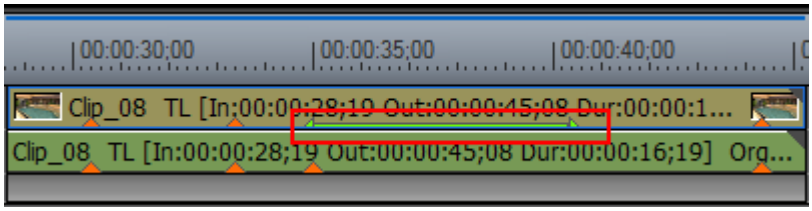
Sequence Markers

- Right-click a marker on the time scale and select "Export Sequence marker list" from the menu.

Clip Markers on the Timeline

Clip markers are set in the Player window. When a clip in which Clip markers have been set is moved to the Timeline, the Clip markers appear in the clip as illustrated in Figure 482. The In/Out Marker is currently selected and is highlighted in this example.

Figure 482. Clip with Clip Markers on the Timeline



Timeline Playback

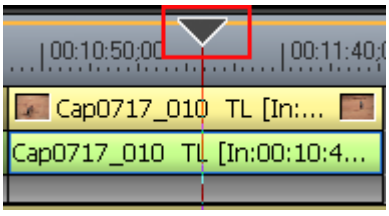
There are various methods for playing back Timeline sequences. Each of those methods is explained in this section.

Playback by Scrubbing

"Scrubbing" is the process of dragging the Timeline cursor back and forth over the Timeline to display the sequence in the Recorder.

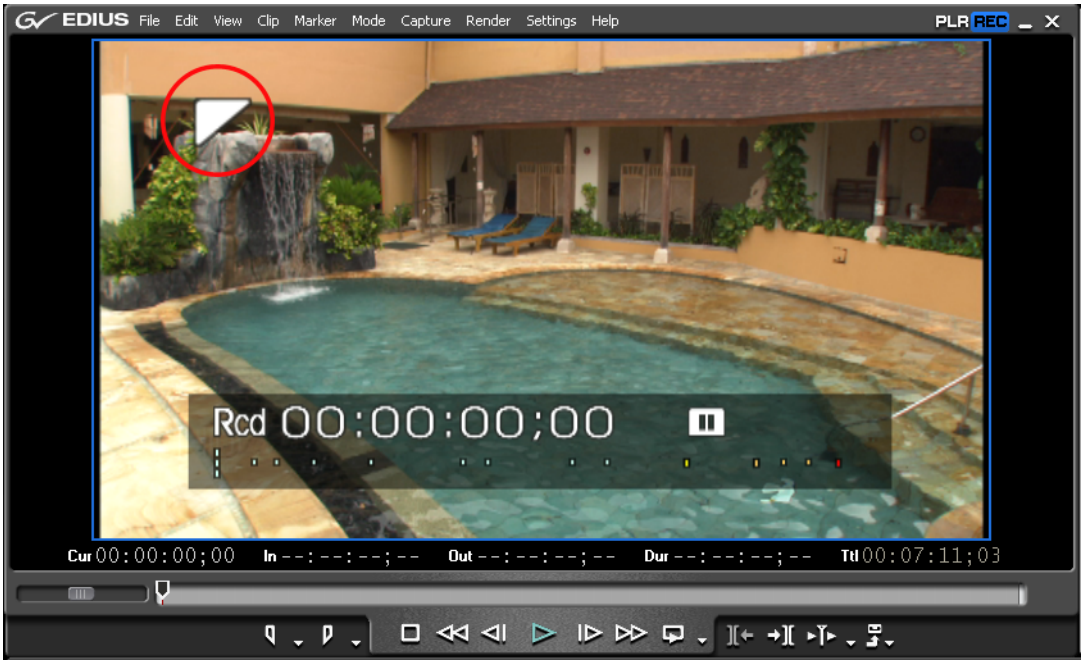
To playback by scrubbing, click and hold the mouse button on the Timeline cursor (see Figure 483) and drag it over the clips on the Timeline. The clips displayed in the Recorder are the clips on the currently selected track.

Figure 483. Timeline Cursor



Note When the cursor is located at the beginning frame of a Timeline sequence, a white triangle is displayed in the upper left corner of the Recorder as shown in Figure 484.

Figure 484. Recorder Window at First Frame



Note When the Recorder is active, it has a blue frame around it. In dual-mode display this is helpful to know whether the Player or Recorder is active.

Playback with Recorder Operation Buttons

To playback a sequence using the Recorder operation buttons use the buttons and shortcuts as explained in Table 6.

Figure 485. Recorder Operation Buttons

Table 6. Recorder Operation Button Details

Button	Function	Description	Keyboard Shortcut
	Set In	Specifies the beginning point of a section on the Timeline content hat should be included in the project output.	[I]
	Set Out	Specifies the end point of a section of the Timeline content that should be included in the project output.	[O]
	Stop	Stops playback in the Recorder window	[K] or [SHIFT]+[↓]
	Review	Reviews (rewinds) the clip in the Recorder	[J] (see note 1 below)

Table 6. Recorder Operation Button Details

Button	Function	Description	Keyboard Shortcut
	Previous Frame	Goes to the previous frame in a clip. Each click of the button moves to the previous frame. Holding down the [<--] key moves frame-by-frame in a faster step rewind	[<--]
	Play	Plays the content in the Recorder	[ENTER] or [SPACE]
	Next Frame	Goes to the next frame in a clip. Each click of the button moves to the next frame. Holding down the [-->] key moves frame-by-frame in a faster step forward.	[-->]
	Fast Forward	Fast forwards through the content in the Recorder	[L] (see note 2 below)
	Loop	Repeatedly plays back the Timeline contents until playback is stopped. If In and Out points have been set, the segment between these points is played repeatedly.	[CTRL]+[SPACE]
	Previous Edit Point	Moves the cursor to the edit point preceding the current Timeline cursor position.	[A] or [CTRL]+[←]
	Next Edit Point	Moves the cursor to the edit point following the current Timeline cursor position.	[S] or [CTRL]+[→]
	Play Cursor Area	Repeatedly plays the content (~3 seconds on each side) in front of and behind the Timeline cursor.	
	Export	Exports content to a tape or file.	

Note (1) - Each press of the [**J**] key switches rewind speed in six levels from 2x to 32x. Press the [**L**] key to slow the rewind speed.Pressing [**J**] while playback is paused will playback the source in the reverse direction at the normal speed.

Note (2) - Each press of the [**L**] key switches the fast forward speed in six levels between 2x and 32x. Press the [**J**] key to slow down the fast forward speed. Pressing [**L**] while playback is paused will playback the source in the normal direction at the normal speed.

Operation Notes:

- When playback is slow, try the following to speed up playback
  - Click the Play button while holding down the [**SHIFT**] key.

Note This creates a temporary playback buffer after which playback restarts. The playback buffer is managed by the RT Buffer setting in the System Settings for the appropriate hardware device. See *Appendix A-Hardware Settings* for more information.

- Render selected clips or all of the Timeline. See *Rendering Operations on page 441*.

- Press the **[HOME]** key to move the Timeline cursor to the beginning of the Timeline.
- Press the **[END]** key to move the Timeline cursor to the end of the Timeline.
- Press **[SHIFT]**+[←] to move backward 10 frames.
- Press **[SHIFT]**+[→] to move forward 10 frames.

Playback with Shuttle/Slider Controls

The Recorder shuttle and slider are illustrated in Figure 486. Use these playback controls as explained below.

Figure 486. Recorder Shuttle and Slider

Shuttle

- There are 21 speed levels from 1/20x to 16x in the forward and reverse directions.
- Drag the shuttle to the right to play the clip in the normal (forward) direction. The further to the right the shuttle is dragged, the faster the playback speed.

Note Pressing **[CTRL]**+**[L]** on the keyboard will also fast forward the shuttle. Each press of these keys will move to the next speed step.

- Drag the shuttle to the left to play the clip in the reverse direction. The further to the left the shuttle is dragged, the faster the playback speed.

Note Pressing **[CTRL]**+**[J]** on the keyboard will also rewind the shuttle. Each press of these keys will move to the next speed step.

- Release the drag to return the shuttle to the center (pause) position.

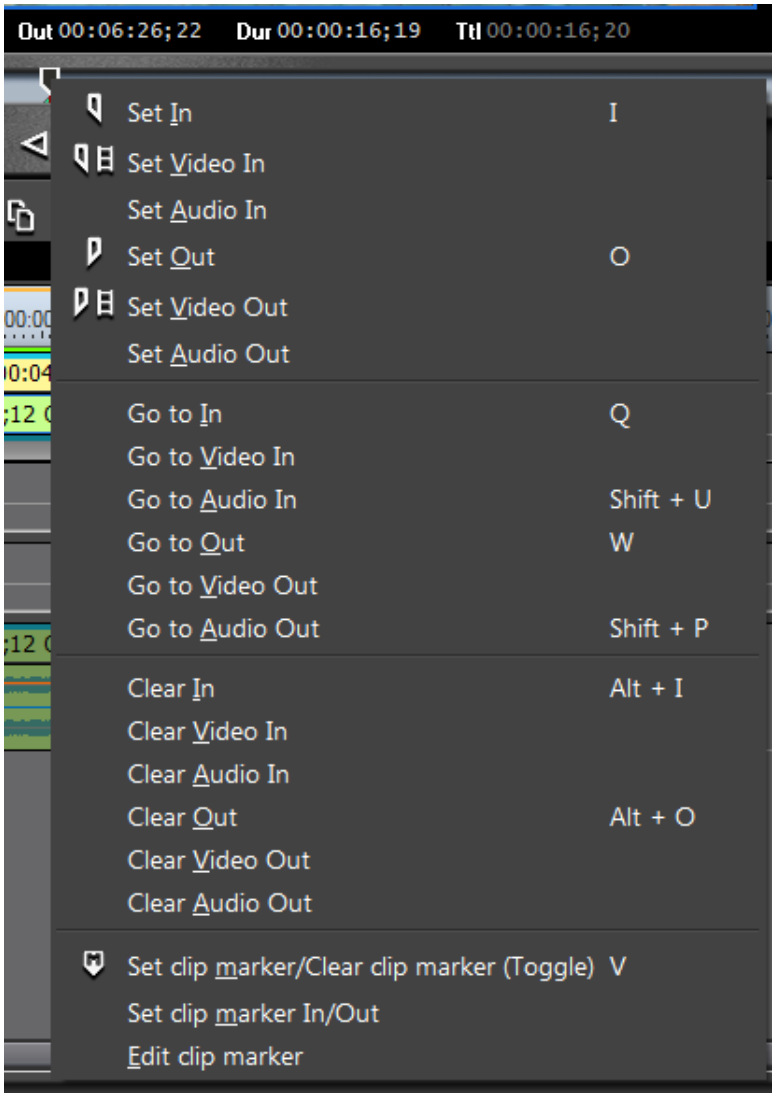
Slider/Position Bar

- Click a position on the position bar to display the frame at that position.
- Drag the slider along the position bar in either direction. The Player shows the frame at the position of the slider.

Position Slider Shortcut Menu

Right clicking on the Slider in the Player window will display the shortcut menu illustrated in Figure 487. Select the desired operation from the menu.

Figure 487. Player Slider Shortcut Menu



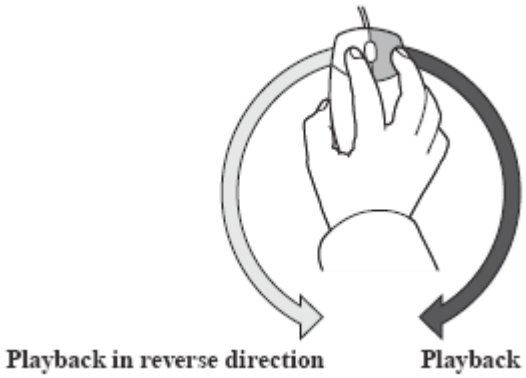
-

Playback with the Mouse

To use the mouse to playback clips in the Recorder do the following:

1. Position the mouse cursor in the Recorder window and hold down the right mouse button.
2. Draw with the mouse in a clockwise direction for normal (forward) playback, or, draw with the mouse in a counter-clockwise direction for reverse playback as illustrated in Figure 488.

Figure 488. Playback with the Mouse



Note The faster you draw with the mouse, the faster the playback speed.

Alternative Method:

- Position the mouse cursor in the Recorder window,
- Scroll the mouse wheel towards you for playback in the normal (forward) direction. Scroll the mouse wheel away from you for reverse playback.

Note The faster you scroll the mouse wheel, the faster the playback speed.

Note Playback operations with the mouse are not available for non-digitized data.

Playback Between Timeline In/Out Points

To playback the portion of the sequence between the In and Out points on the Timeline, follow these steps:

1. If necessary, set the desired In and Out points on the Timeline. See *Setting In and Out Points on Timeline on page 326* for more information.
2. Click the **Loop** button (highlighted in blue in Figure 489) in the Recorder.

Figure 489. Recorder Loop Button

Playback begins at the position of the Timeline cursor. The section of the sequence between the In and Out points is then played repeatedly until stopped.

3. Click the **Stop** button when you wish to stop the loop playback.

Playback Around Timeline Cursor

1. Position the Timeline cursor at the point at which you wish to begin playback.
2. Click the **Play the cursor area** button (highlighted in blue in).

Figure 490. Recorder Play the Cursor Area Button

The area approximately three (3) seconds before and three (3) seconds after the cursor position is played repeatedly until stopped.

3. Click the **Stop** button when you wish to stop playback.

Playback Around Nearest Cut Point

You can also play the area around the cut point nearest to the Timeline cursor position.

Click the list button [▽] on the **Play around cursor area** button and select one of the following from the menu:

- Play around Cut Point - 1 Sec
- Play around Cut Point - 2 Sec
- Play around Cut Point - 3 Sec

This operation will repeatedly plays the area around the cut point nearest to the Timeline cursor for the specified number of seconds before and after the cut point.

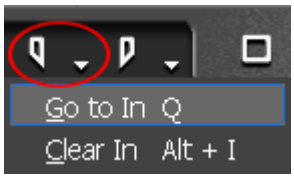
Click the **Stop** button when you wish to stop playback.

Move to Timeline In/Out Points

To move the Timeline cursor to the In or Out point on the Timeline, do one of the following:

- Click the list button [▽] on the **Set In** or **Set Out** button (see Figure 491) and select "Go to In" or 'Go to Out" respectively from the menu.

Figure 491. Set In Menu - Go to In



- Select Marker>Go to In or Marker>Go to Out from the Preview window menu bar.

Note If there is no In or Out point set, the respective option is greyed out on the menu.

- Press the [**Q**] key on the keyboard to move to the In point.
- Press the [**W**] key on the keyboard to move to the Out point.

Move by Timecode

To position the Timeline cursor by timecode entry, follow these steps:

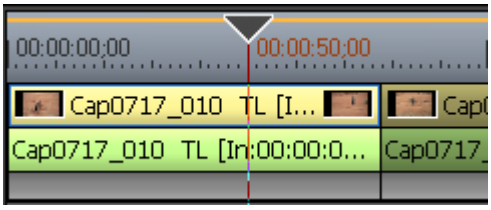
1. Click the "Cur" timecode in the Recorder.
2. Using the numeric keypad, enter the desired timecode to which to move the cursor in HH:MM:SS;FF (Hours:Minutes:Seconds;Frames) format. See Figure 492 for an example (5000 is the entered value).

Note Entering a "+" or a "-" before the timecode entry cause the cursor to move forward or backward from the current position by the entered value. See *Entering Numeric Data on page 29* for more information about entering time-codes.

Figure 492. Recorder Timecode Entry

3. Press the [**ENTER**] key and the cursor moves to the entered timecode position as illustrated in Figure 493.

Figure 493. Cursor Positioned at Entered Timecode



Match Frame Positioning

Match frame positioning acquires the timecode of the frame displayed in the Player or Recorder and jumps to that same timecode position on the Timeline (Recorder) or Player.

An example of the use of this feature would be switching, without any interruption in video or audio, from a frame in the video of an interview to the same frame in another video of the interview that may have been recorded from a different angle.

Note Match frame functions are available even when the source is on an external video deck.

In order to use this function, the **Match frame - Player > Recorder** button must be added to the Player, or the **Display Master Clip** button must be added to the Timeline or Recorder as it does not appear by default. See *Button Settings* *on page 154* for more information on adding buttons.

Once the button(s) have been added, the feature may be used as explained below.

Match Frame from Player to Timeline

To move to the same frame in the Timeline (Recorder) as the current frame in the Player, do the following:

1. Play a clip in the Player and locate the frame to which you wish to jump on the Timeline.
2. Click the **Match frame - Player > Recorder** button (highlighted in blue in Figure 494) on the Player.

Note Pressing the [**CTRL**]+[**F**] keys on the keyboard will also invoke this function.

Figure 494. Player Match Frame - Player > Recorder Button

The Timeline cursor timecode and the matched frame appear in the Recorder.

Note The **Match frame - Player > Recorder** button is not on the Player in the default settings. See *Button Settings* *on page 154* for more information on adding buttons.

Related Function:

To search clips in the Asset Bin which match the frame in the Player, do one of the following:

- Click the list button [▽] on the **Match frame - Player > Recorder** button and select "Bin Search" from the menu.
- Press the [**SHIFT**]+[**CTRL**]+[**F**] keys on the keyboard.

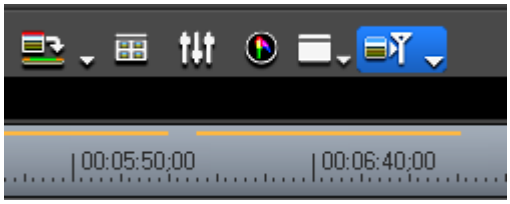
Match Frame from Timeline to Player

To move to the same frame in the Player (whether the source is an external deck or a file) as the current frame in the Recorder (Timeline), do the following:

1. Move the Timeline cursor to the frame to which to move in the Player.
2. Click the **Display Master Clip** button (highlighted in blue in Figure 495) on the Timeline or Recorder.

Note Pressing the [**ALT**]+[**F**] keys on the keyboard will also invoke this function.

Figure 495. Timeline Display Master Clip Button



The matched frame appears in the Player.

Note If the frame/timecode you are matching is part of a transition of two overlapping clips in the Timeline, *Match Frame Settings* *on page 149* determine whether the matched frame/timecode will be from the clip before or after the transition

Note The **Display Master Clip** button is not on the Recorder or Timeline in the default settings. See *Button Settings* *on page 154* for more information on adding buttons.

Alternative Method:

After Step 1 above, display the source in the Player, click the list button [▽] on the **Display master clip** button and select "Match frame - Recorder > Player" from the menu.

Related Functions:

To search clips in the Asset Bin which match the frame in the Player, do one of the following:

- Click the list button [▽] on the **Display master frame** button and select "Bin Search" from the menu.
- Press the **[SHIFT]**+**[F]** keys on the keyboard.

To display in the Player the clip currently at the Timeline cursor position, do one of the following:

- Select Clip>Show in Player from the Preview window menu bar.
- Press the **[SHIFT]**+**[Y]** keys on the keyboard.

Rendering Operations

Sometimes the format of source material makes real-time playback and editing difficult because of high bandwidth requirements. Rendering is the process of converting the source material to a format that is easier to accommodate in CPU and memory-intensive tasks such as playback and editing. In the rendering process, all effects specified for the rendered area are also applied. This section discusses the various rendering operations that are available in EDIUS to improve overall performance.

Time Scale Color Code

While editing on the Timeline, a colored line is displayed above the time scale wherever clips are placed (see Figure 496 - note the orange line). This colored line indicates the rendering status for the clip(s) in that range of the Timeline. The line may be a different color in different sections of the Timeline.

Figure 496. Timeline Rendering Status Indicator

The rendering status line color code is as follows:

No Line

No clips exist on the Timeline for that time scale range.

Blue

The area should play back in real-time (no rendering required).

Aqua Blue

Clip will playback in real-time with no rendering (rendering may be required in certain circumstances).

Green

The area has been rendered to a temporary file.

Orange

The area may not play back in real-time (this area is considered a "loaded" area).

Red

Real-time playback was attempted for this area but failed (this area is considered an "overload" area).

Note The need for rendering is detected based on the “Rendering decisions” setting as defined in the Application Settings>Render dialog. See *Render Settings* *on page 134* for more information. The red line is displayed when the remaining buffer is less than the preset value for “Rendering decisions.”

Important Rendering Considerations:

- When CG animation data is placed as consecutive still images on the Timeline, rendering the area does not affect the playback speed. In this case, use the "Render and Add to Timeline" function as explained in *Exporting Video Clips from the Timeline* *on page 449*.
- Once rendered, if a clip is repositioned in any way (including a ripple delete), the rendering for that clip is still valid.
- Tracks with video muted cannot be rendered.
- If a rendered clip needs to be utilized in project output, it should be saved with the Exporter.
- A temporary rendering file is created in the "rendered" folder. This folder is a sub-folder of the project folder. Make sure there is enough disk space (approximately twice the size of the file(s) to be rendered) for rendering before starting the rendering process. See *Deleting Temporary Files Manually* *on page 450* for more information on creating more disk space.

Rendering Sequence Overload Areas

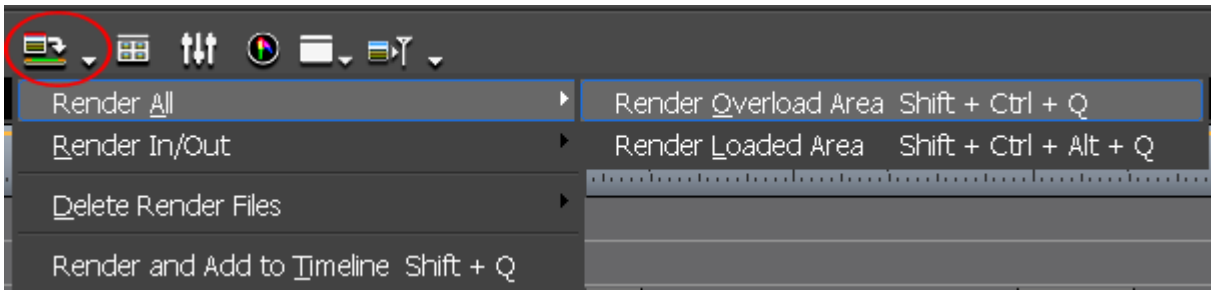
To render all of the overload and loaded areas in the entire sequence, do any of the following:

- Click the list button [▽] on the **Render In/Out - Render overload area** button and select "Render All>Render Overload Area" from the menu as illustrated in Figure 497.
- Select Render>Render Sequence>Render Overload Area from the Preview window menu bar.
- Press the **[SHIFT]**+**[CTRL]**+**[Q]** keys on the keyboard.

A Rendering dialog appears and rendering begins.

Note Click the **Abort** button in the Rendering dialog to stop rendering in progress.

Figure 497. Timeline Render In/Out Menu - Render Overload Area



When rendering is complete, a green line appears on the time scale in all areas that were rendered.

Other Rendering Options:

It is possible to simultaneously render the overloaded (red line) and loaded (orange line) areas in the entire sequence. To render both areas do one of the following:

- Click the list button [▽] on the **Render In/Out - Render overload area** button (highlighted in blue in Figure 497) and select "Render All>Render Loaded Areas" from the menu.
- Select Render>Render Sequence>Render Loaded Area from the Preview window menu bar.
- Press the [**SHIFT**]+[**CTRL**]+[**ALT**]+[**Q**] keys on the keyboard.
- When In and Out point are set on the Timeline, you can render only the area between these points. See *Rendering Between In an Out Points on page 446* for more information.

Rendering Overload Area in Entire Project

Projects may contain one or more sequences. To render overload areas, including loaded areas, in all sequences in a project, do the following:

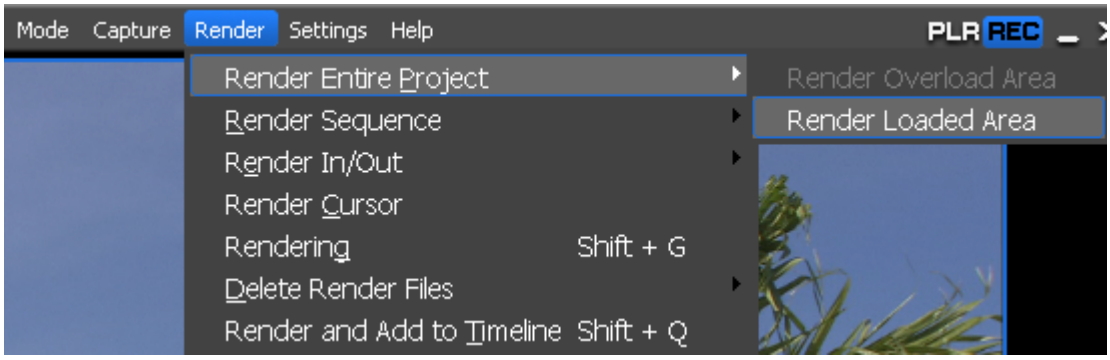
Select Render>Render Entire Project>Render Overload Area from the Preview window menu bar.

Note Click the **Abort** button in the Rendering dialog to stop rendering in progress.

When rendering is complete, a green line appears on the time scale in all areas that were rendered.

Note Just the loaded (orange line) areas in an entire project may be rendered at the same time as well. To render just the loaded areas, select Render>Render Entire Project>Render Loaded Area from the Preview window menu bar as illustrated in Figure 498. This will also render any unrendered overload (red) areas.

Figure 498. Render Project Menu - Loaded Area

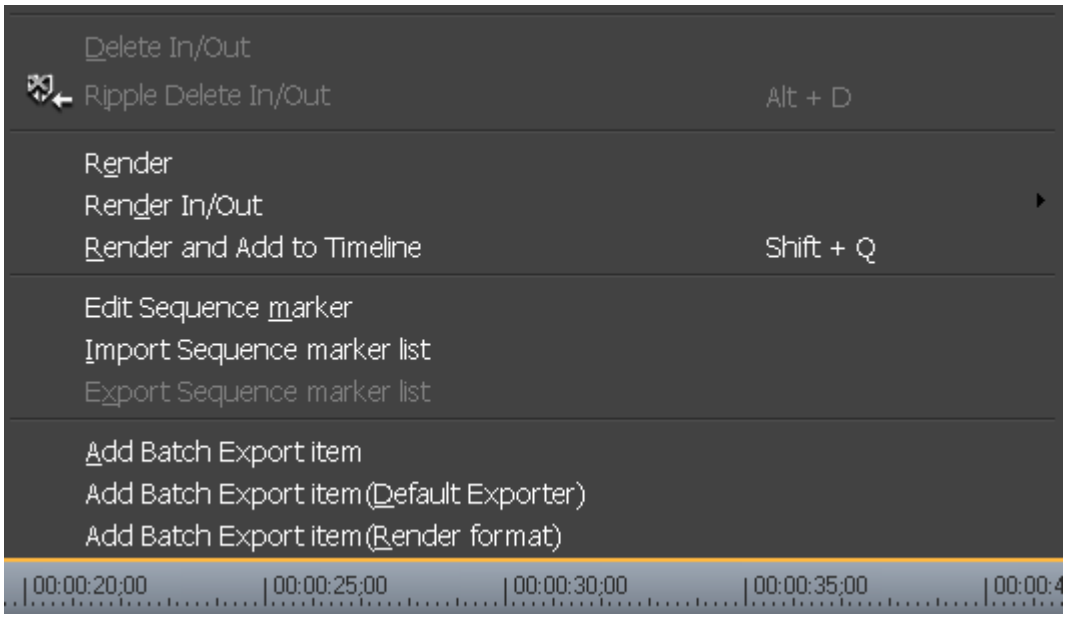


Rendering Only a Selected Overload/Loaded Area

To render only the overload (red line) or loaded (areas) in a sequence, do the following:

On the time scale, right-click the overload or loaded area you wish to render and select 'Render" from the menu as illustrated in Figure 499.

Figure 499. Time Scale Menu - Rendering



Note Click the **Abort** button in the Rendering dialog to stop rendering in progress.

When rendering is complete, a green line appears on the time scale above the rendered area.

Rendering Between In an Out Points

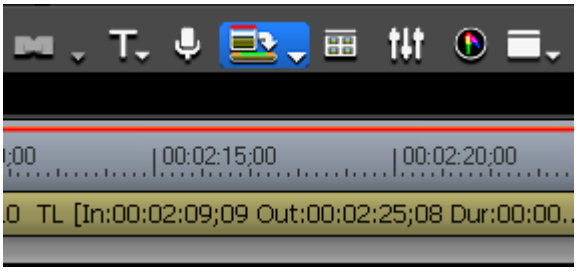
Various areas needing rendering between In and Out point may be rendered using the procedures explained in this section.

Rendering Overload Areas

To render overload areas between the In and Out points, do the following:

1. If necessary, set the desired In and Out points on the Timeline.
2. Click the **Render In/Out - Render overload** area button highlighted in blue in Figure 500.

Figure 500. Timeline Render In/Out - Render Overload Button



Note Click the **Abort** button in the Rendering dialog to stop rendering in progress.

When rendering is complete, a green line appears on the time scale above the rendered area.

Alternative Methods:

- Select Render>Render In/Out> Render Overload Area from the Preview window menu bar.
- Click the list button [▽] on the **Render In/Out - Render overload area** button and select “Render In/Out>Render Overload Area” from the menu.
- Right-click the time scale and select “Render In/Out>Render Overload Area” from the menu.
- Press the [**CTRL**]+[**Q**] keys on the keyboard.

Render All Areas Needing Rendering

To render all areas between the In and Out points needing rendering - overload (red line), loaded (orange line) and might need rendering (aqua blue line) areas - at the same time, do any of the following:

- Select Render>Render In/Out> All from the Preview window menu bar.
- Click the list button [▽] on the **Render In/Out - Render overload area** button and select "Render In/Out>All" from the menu.
- Right-click the time scale and select "Render In/Out>All" from the menu.
- Press the **[SHIFT]**+**[ALT]**+**[Q]** keys on the keyboard.

Rendering Overload and Loaded Areas

To render the overload (red line) and loaded (orange line) areas between the In and Out points on the Timeline, do any of the following:

- Select Render>Render In/Out> Render Loaded Area from the Preview window menu bar.
- Click the list button [▽] on the **Render In/Out - Render overload area** button and select "Render In/Out>Render Loaded Area" from the menu.
- Right-click the time scale and select "Render In/Out>Render Loaded Area" from the menu.
- Press the **[CTRL]**+**[ALT]**+**[Q]** keys on the keyboard.

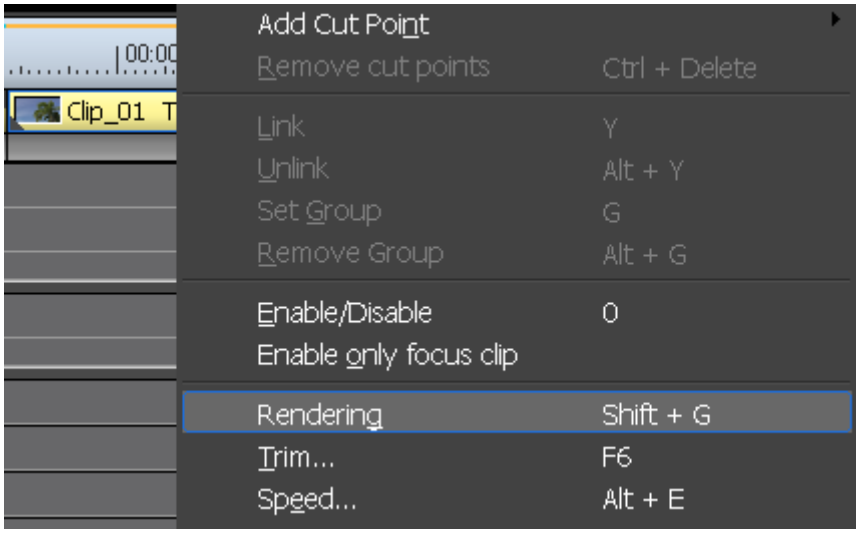
Note If the In and Out points cover only a portion of a loaded or overload area, rendering for that area is not available. Reposition the In and Out point to cover the entire loaded or overload area in order to render these areas.

Rendering a Clip or Transition

To render just a selected clip or transition, do the following:

Right-click a clip or transition and select "Rendering" from the menu as shown in Figure 501.

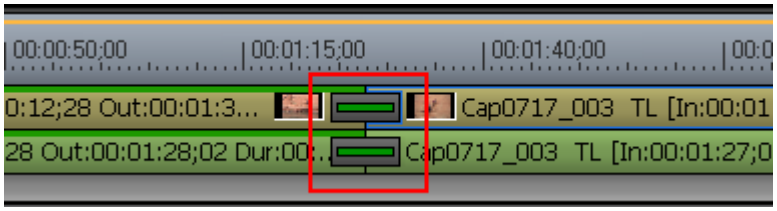
Figure 501. Clip Menu - Rendering



Note Click the **Abort** button in the Rendering dialog to stop rendering in progress.

When rendering is complete, a green line appears above the video and audio portions of the rendered clip and the line in the center of the transition indicator turns green as shown in Figure 502.

Figure 502. Rendered Transition Indicator



Note that in the example above, the clip before the transition has been rendered as indicated by the green line above the video and audio portion. The transition has also been rendered as indicated by the green line in the center of the transition indicator. The clip after the transition has not yet been rendered.

Alternative Methods:

- Select Render>Rendering from the menu bar after selecting a clip to render.
- Press the **[SHIFT]**+**[G]** keys on the keyboard.

Note If you render a clip with an alpha effect, alpha information will not be applied.

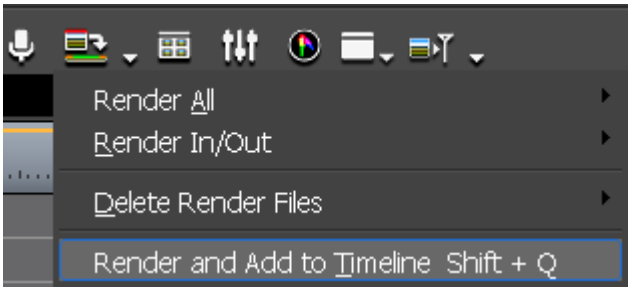
Note Keyer, transparency and between track transitions (effects set in the Mixer area) cannot be rendered in the manner described above. The alternative is to render part of the Timeline which includes these effects.

Exporting Video Clips from the Timeline

To export a rendered clip from the Timeline, do the following:

1. Set In and Out points to define the area to be rendered and exported.
2. Click the list button [▽] on the **Render In/Out - Render overload area** button and select "Render and Add to Timeline" from the menu (see Figure 503).

Figure 503. Render In/Out Menu - Render and Add to Timeline

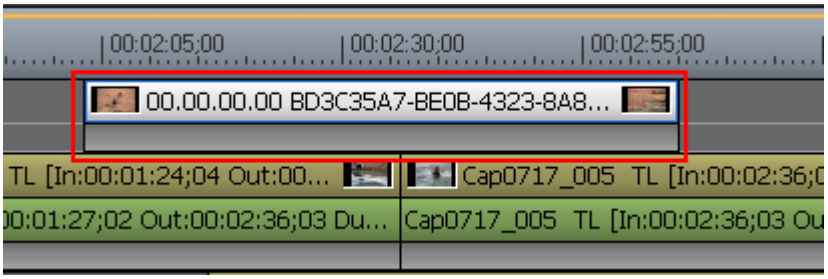


Note Click the **Abort** button in the Rendering dialog to stop rendering in progress.

When rendering is complete, the video clip is placed on a V or VA track on the Timeline.

If there is no space in the current track on the Timeline to add the clip, a new V tracks is added and the rendered clip is placed there as shown in Figure 504.

Figure 504. New V Track with Rendered Clip



The clip color is and name denote this clip as a clip "rendered and added to the Timeline."

Note Rendered/exported clips are saved in the "rendered" sub-folder in the project folder.

Alternative Methods:

- Select Render>Render and Add to Timeline from the Preview window menu bar.
- Right-click the time scale and select "Render and Add to Timeline" from the menu.
- Press the [**SHIFT**]+[**Q**] keys on the keyboard.

Important Notes Regarding Exported Clips

- Clips on the title track and the muted part of a video clip are exported as black clips.
- The exported clip is automatically deleted when the project is closed. If you need to save the clip for future use, save the project with the clip placed on the Timeline or stored in the Asset Bin.
- Copy the clip to a different folder to be able to use it in other projects.

Exporting Still Image Clips from the Timeline

Any frame in any clip may be exported as a still image. To export a frame as a still image, do the following:

1. In the Recorder or Player, display the frame to export as a still image.
2. Press the [**CTRL**]+[**T**] keys on the keyboard.

The frame is saved as a still image clip in the Asset Bin.

Note Images from an external deck can be exported as still images.

Alternative Methods:

- Use the Still Image Exporter. For more information, see *Export Still Images* *on page 700*.
- If the **Create a still image** button has been added to the Timeline, click on this button.

Note Still image export setting are modified in the Plug-In Settings>Still Image dialog. See *Still Image* *on page 181*.

Deleting Temporary Files Manually

Temporary files created during rendering processes are stored in the "rendered" sub-folder of the project folder. Temporary files without a link to a

clip or project are automatically deleted according to the settings in the Application Settings>Render dialog. See *Render Settings* *on page 134* for more information.

Temporary files are created by the following processes:

- Exporting a clip from the Timeline
- Rendering a part of the Timeline
- Rendering a clip

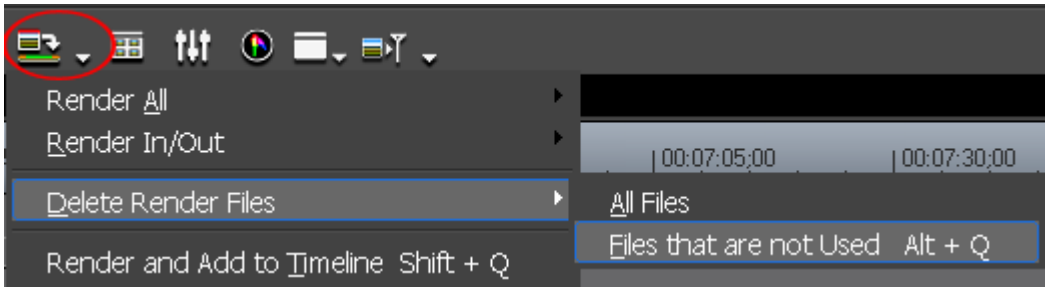
If the folder contents become too large, it may be necessary to delete some of these files manually to free up sufficient disk space for additional rendering operations.

Note In the descriptions below, "All Files" will delete all temporary files in the "rendered" directory; even those with valid links to existing clips. The "Files that are not Used" option only deletes temporary files that no longer have valid links.

To delete temporary files manually, follow these steps:

1. Click the list button [▽] on the **Render In/Out - Render overload area** button.
2. Select "Delete Render Files>All Files" or "Delete Render Files>Files that are not Used" from the menu. See Figure 505.

Figure 505. Render In/Out Menu - Delete Render Files



Alternative Methods:

- Select Render>Delete Render Files>All Files or Render>Delete Render Files>Files that are not Used from the Preview window menu bar.
- Press the **[ALT]**+**[Q]** keys on the keyboard to delete unused files.

Note Some temporary files in the "rendered" folder may be edited (renamed, deleted, copied, etc.). However, temporary files used in projects - such as files created with the Render In/Out options - cannot be edited, Temporary files created for clips placed on the Timeline with the 'Render and Add to Timeline" function can be edited to make the file an "Offline Clip."

Timeline Sequence Operations

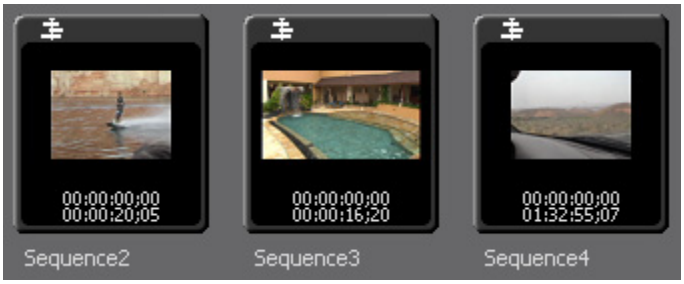
A sequence is a collection of clips, images, effects, etc. placed on the Timeline. A project may be comprised of one or more sequences as illustrated in Figure 506

Figure 506. Timeline Sequence Tabs

To select the sequence to edit, click on the desired sequence tab.

Sequences are also stored as Timeline Sequence clips in the Asset Bin as shown in Figure 507.

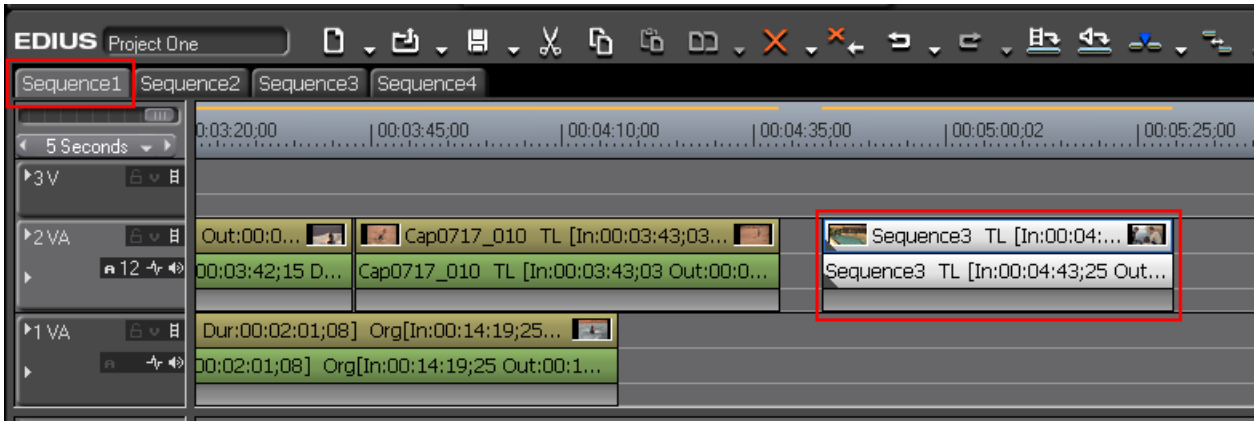
Figure 507. Asset Bin Timeline Sequence Clips



Timeline sequences may also be "nested." A nested sequence is a sequence placed within another sequence for editing. Figure 508 shows the Sequence3 Timeline clip placed on the 2VA track of Sequence1 as a clip for editing.

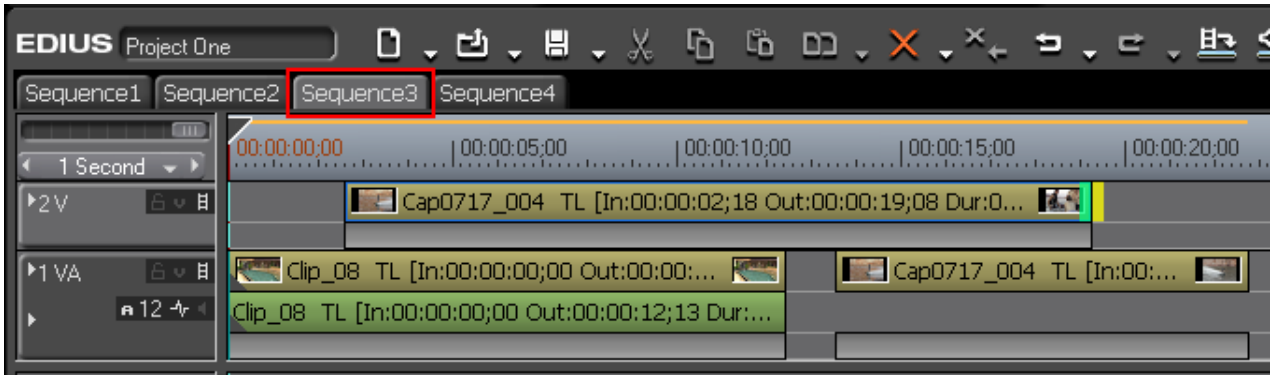
Note EDIUS prevents sequences from being nested if the result will be a circular reference. For example, if Sequence 1 is nested in Sequence 2, Sequence 2 may not be nested in Sequence 1 as this would result in an unresolved reference loop.

Figure 508. Timeline Nested Sequence



When the Sequence3 clip in Sequence1 is double clicked, Sequence3 is opened for editing as illustrated in Figure 509.

Figure 509. Open Nested Sequence



Right-click a sequence tab to display a menu allowing the following sequence options:

- Add to Bin - add the Sequence as a clip in the Asset Bin.
- Sequence Setting - open the Sequence Settings dialog.
- Change Track Height - change the height of a track in the Track Panel
- Close this Sequence - close the current sequence tab.
- Close All Other Sequences - close all sequence tabs except the current sequence.

Creating a New Sequence

To create a new sequence in the current project, do one of the following:

- Click the **New Sequence** button in the Timeline window (see Figure 510 - the **New Sequence** button is highlighted in blue).

Figure 510. New Sequence Button

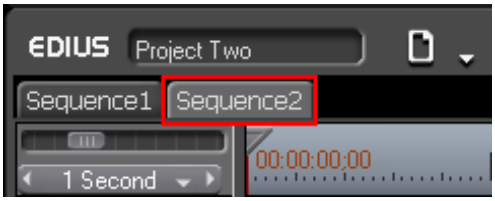
- Select File>New>Sequence from the Preview window menu bar.
- Right-click on a blank area of the clip view in the Asset Bin and select "New Sequence" from the menu.

Note In this case a blank Timeline sequence clip is created in the Asset bin but a sequence tab is not displayed in the Timeline window.

- Press [**SHIFT**]+[**CTRL**]+[**N**] on the keyboard.

Any of these methods will result in a new sequence tab appearing in the Timeline window as shown in Figure 511 as well as the creation of a sequence clip in the Asset bin as illustrated in Figure 512.

Figure 511. New Sequence Tab



Note Double right-click a sequence tab to change the sequence name.

Figure 512. New Sequence Clip In Asset Bin

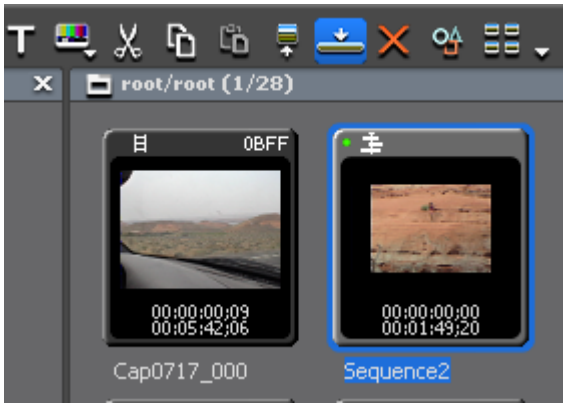
Note The sequence tabs can be dragged and dropped to change their order.

Creating a Nested Sequence

To create a nested sequence (a sequence represented as a clip within another sequence), do the following:

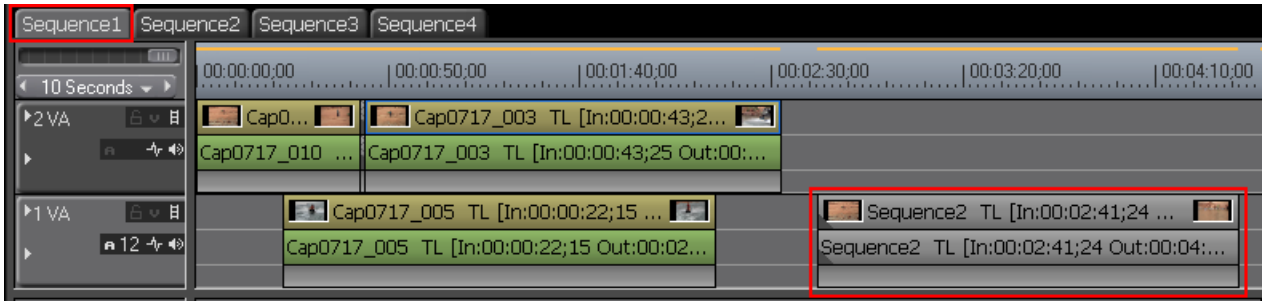
1. Select the track on which to place a sequence clip.
2. Move the Timeline cursor to the position at which to place the nested sequence clip.
3. Select a Timeline sequence clip in the Asset Bin and click the **Add to Timeline** button (highlighted in blue in Figure 513).

Figure 513. Asset Bin - Add to Timeline Button



The selected sequence clip is added to the Timeline at the location of the cursor as a nested sequence clip (gray clip shown in Figure 514).

Figure 514. Sequence Clip Added as a Nested Clip



Alternative Methods:

- Drag and drop a sequence clip from the Asset Bin to the Timeline.
- Right-click a sequence clip in the Asset Bin and select "Add to Timeline" from the menu.

- Play a Timeline sequence clip in the Player and click the **Insert to Timeline** or **Overwrite to Timeline** buttons.
- Add the clip displayed in the Player by pressing the **[E]** key on the keyboard.

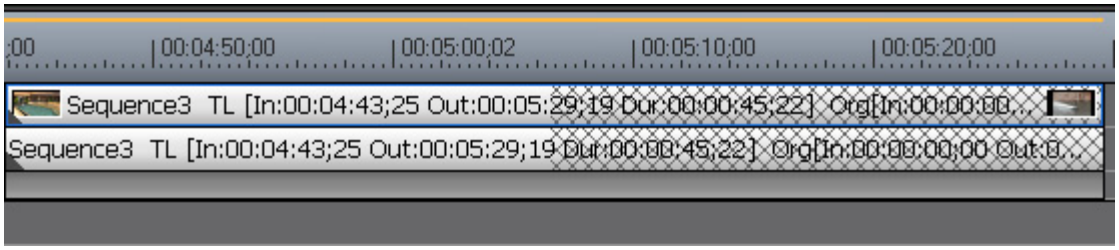
Open a Nested Sequence

To open a nested sequence for editing, do any of the following:

- Double-click a Timeline Sequence clip in the Asset Bin
- Double-click a nested sequence clip on the Timeline.
- Right-click a Timeline Sequence clip in the Asset Bin and select "Open Sequence" from the menu.

Note When a nested sequence is opened, the nested sequence clip in the host sequence is also updated. If the clips in a nested sequence are trimmed, the nested sequence clip length in the host sequence does not change; however, its display is updated as illustrated in Figure 515 to indicate the total area of the clip that has been trimmed.

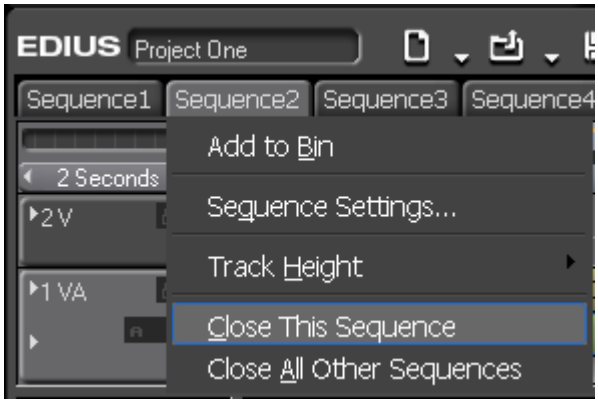
Figure 515. Nested Clip Trimmed



Closing a Sequence

To close a sequence, right-click on the sequence tab of the sequence to be closed and select "Close This Sequence" from the menu. See Figure 516.

Figure 516. Sequence Menu - Close This Sequence



Note Select "Close All Other Sequences" to close all sequences except the currently displayed sequence. At least one sequence must remain displayed. It is not possible to close all sequences in the Timeline.

Saving Timeline Clips as Asset Bin Sequence

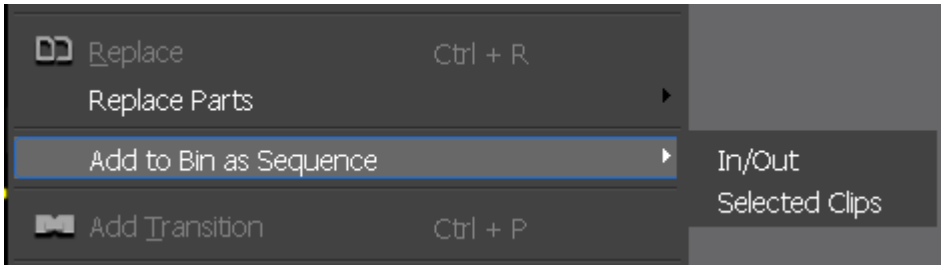
A single clip, multiple selected clips, or, the area of the Timeline between the In and Out points may be saved to the Asset Bin as a sequence.

After setting the desired In and Out points or selecting the desired clips, do one of the following:

- Right-click a clip and select "Add to Bin as Sequence>In/Out" or "Add to Bin as Sequence>Selected Clips" from the menu as illustrated in Figure 517.

Note Select the menu option that saves the desired portion of the Timeline as a sequence clip in the Asset Bin.

Figure 517. Clip Menu - Add to Bin as Sequence

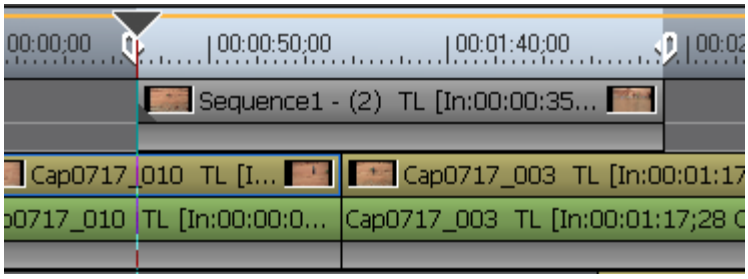


- Select Edit>Add to Bin as Sequence>In/Out or Edit>Add to Bin as Sequence>Selected Clips from the Preview window menu bar.

Related Operations:

- A video clip on the Timeline between the In and Out points may also be saved as a sequence on a Timeline track. To perform this function, select Edit>Sequence In/Out from the Preview window menu bar. The clip between the In and Out point is saved to the Asset Bin as a sequence clip and is also added to the current sequence as a nested sequence as shown in Figure 518.

Figure 518. Area between In/Out Points Added as Nested Sequence



Note If there is no space on the Timeline on which to add the nested sequence, a new V track is created for the nested sequence.

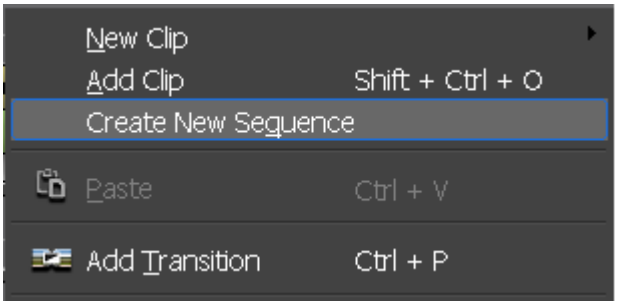
- The currently opened sequence may be saved to the Asset Bin as a sequence clip by right-clciking on the opened sequence tab and selecting “Add to Bin” from the menu.

Creating A Blank Sequence Clip on the Timeline

To create a blank nested sequence on the Timeline and create a blank sequence clip in the Asset Bin, do the following:

1. Position the Timeline Cursor at the point on the Timeline at which you wish to create the blank sequence.
2. Right-click on the track in which to create the sequence and select “Create New Sequence” from the menu as illustrated in Figure 519.

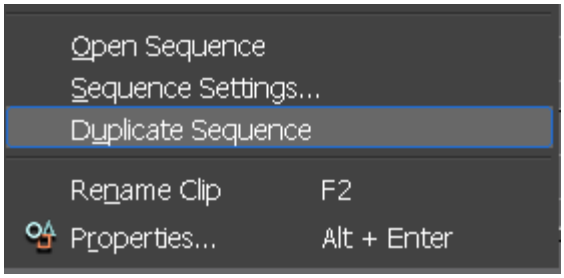
Figure 519. Track Menu - Create New Sequence



Duplicating a Sequence

To duplicate a Timeline sequence clip in the Asset Bin, right-click the desired sequence clip in the Asset bin and select “Duplicate Sequence” from the menu. See Figure 520.

Figure 520. Asset Bin Clip Menu - Duplicate Sequence



Note Duplicated sequence clips have the original sequence clip name with a sequential number appended to the end. For example, If Sequence6 is duplicated, the duplicate’s name will be “Sequence6-(X)” where (X) is the next available sequential number.

Multi Cam Mode

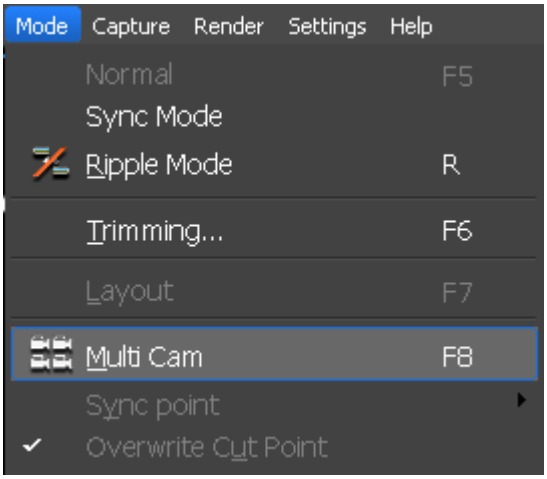
Multi-cam mode makes it possible to display and edit up to eight (8) clips at the same time. Each “camera” displays a separate clip.

Switching to Multi Cam Mode

To switch to multi cam mode, do any of the following:

- Select Mode>Multi Cam on the Preview Window menu bar. See Figure 521.

Figure 521. Edit Menu - Multi Cam



- Press the [F8] key on the keyboard.
- If the **Multi Cam** button has been added to the Timeline (see *Button Settings on page 154* for more information), click the **Multi Cam** button.

The Preview window is switched to multi cam mode and a Camera Mapping indicator appears on the Track Panel as illustrated in Figure 522.

Figure 522. Camera Mapping in Timeline Track Panel

To switch from multi cam mode back to normal mode, do any of the following:

- Select Mode>Normal or Mode>Multi Cam from the Preview window menu bar.
- Press the [**F8**] key on the keyboard (multi cam toggle).
- Press the [**F5**] key o the keyboard (switch to normal mode).

Note Clip and track operations are the same in multi cam mode as they are in normal more; however; keyboard shortcut keys differ.

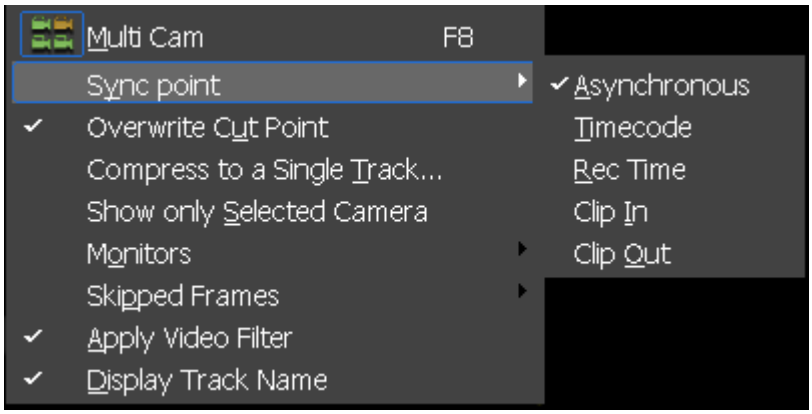
Defining Multi Cam Sync Point for Placing Clips

The selected sync point determines how clips are placed on the Timeline when in multi cam mode.

To define a multi cam sync point, and place clips follow these steps:

1. Select Mode>Sync point>{desired sync point} from the Preview window menu bar. Sync point selections shown in the menu in Figure 523 are explained below.

Figure 523. Preview Window Mode Menu - Sync Point



Asynchronous

Place clips based on the Timeline cursor position on the selected track. Clips are placed based on the Asset Bin sorting order.

Timecode

Place clips on each track based on the clip start timecode. If no timecode is set for a particular clip, 00:00:00;00 is used to place the clip.

Note Even if clips have different starting timecodes, EDIUS will try to align clips in the camera tracks so that matching timecode sections appear in sync.

Rec Time

Place clips on tracks based on the recorded time (timecode) of each clip. If no start timecode is set for a clip, 00:00:00 is used as the recorded time.

Note Recorded time is not affected by the recorded date. For example, a clip recorded at 02:30:00 PM on September 10 2008 has an earlier Rec Time than a clip recorded at 04:45:00 PM on August 10 2008.

Clip In

Place clips on tracks based on the In point timecode of each clip. If no In point is set for the clip, the beginning of the clip is used.

Clip Out

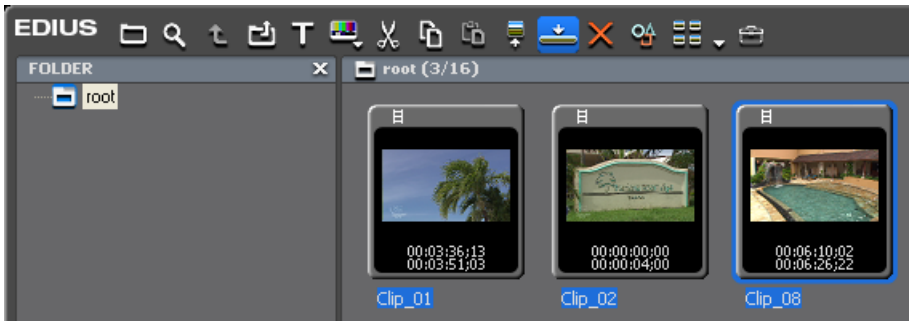
Place clips on tracks based on the Out point timecode of each clip. If no Out-point is set for the clip, the end of the clip is used.

2. Select a V/VA track on which to place clips.

3. Select multiple clips in the Asset Bin and click the Add to Timeline button as illustrated in Figure 524.

Note Selected clips may also be dragged and dropped on the Timeline.

Figure 524. Add Multiple Clips to Timeline



Clips are placed on tracks according to the selected sync point.

Note If “Asynchronous” was selected as the sync point in Step 1 above, all clips are placed on the selected track. If a different sync point is selected, the clips are placed on the selected track and the tracks above the selected track. If there are no tracks above the selected track, new track(s) are added.

The camera switch point is automatically set to the In/Out points of each clip. See *Setting Camera Switch Point During Playback on page 469* for information in changing the camera switch point.

Placing multiple clips on the Timeline in multi cam mode results in a Recorder window display similar to that shown in Figure 525.

Figure 525. Preview Window Mode Menu - Multi Cam Mode

Since three clips were selected to add to the Timeline, three multi cam windows are created.

The “Master” display monitor shows the image of the currently selected camera.

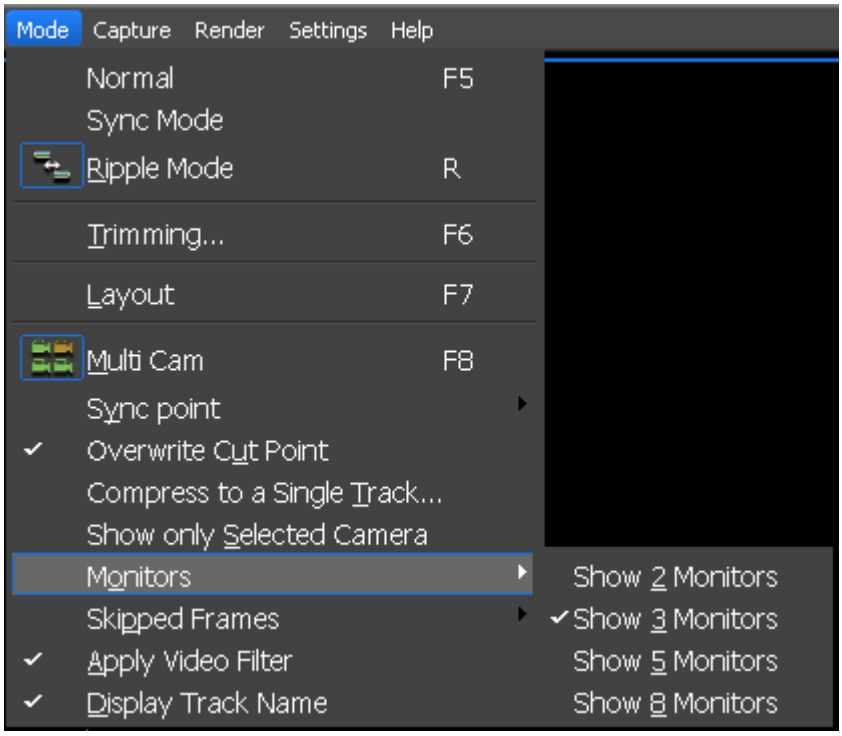
The other display monitors show the clips assigned to each camera.

Changing the Number of Monitors

To change the number of monitors in which to display clips in multi cam mode, do one of the following:

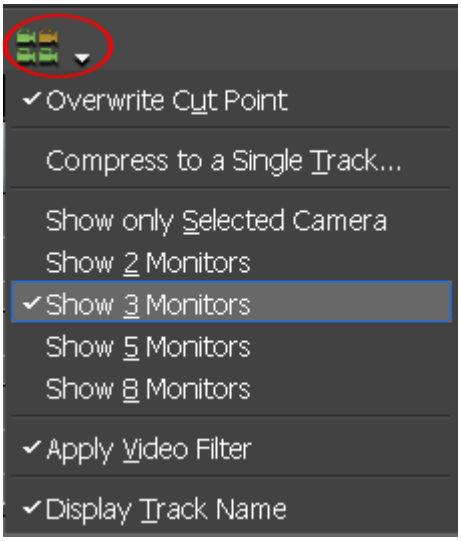
- Select Mode>Monitors>{number of monitors} from the Preview window menu bar. See Figure 526.

Figure 526. Mode Menu - Monitors



- If the Multi Cam button has been added to the Timeline, click the list button [▽] on the **Multi cam** button and select the desired number of monitors as illustrated in Figure 527.

Figure 527. List Button Menu - Monitors



Note Regardless of the selected number of monitors, there is only one “Master” monitor.

To display only the selected camera in a single monitor, do one of the following:

- Select Mode>Show only selected camera from the Preview window menu bar.
- Click the list button [▽] on the **Multi cam** button and select "Show only Selected Camera" from the menu.

Changing the Assigned Camera

When a clip is placed on the Timeline in multi cam mode, it is automatically assigned a camera number based on the V or VA track in which the clip is placed. These Camera mappings may be changed while editing.

Note A track is not displayed in multi cam mode when no camera is assigned to that track.

To change the camera mapping assignment for a particular track, do the following:

1. Click the **Camera mapping** indicator on the track panel of the V or VA track for which you wish to change the camera assignment. See Figure 528.

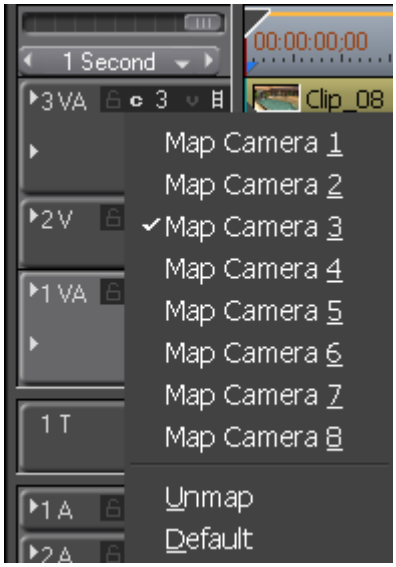
Note The **Camera mapping** indicator is only displayed when in multi cam mode.

Figure 528. Track Panel Camera Mapping Indicator

2. From the menu, select the camera to be assigned to the selected track as illustrated in Figure 529.

Note If a camera number is selected which does not exist in the multicam display, the **Camera mapping** indicator is greyed out. This can occur if the number of selected multi cam monitors is, for example, 3, and you try to assign camera number 5 to a track.

Figure 529. Track Panel Camera Mapping Menu



Other Menu Options:

- Select "Unmap" to release the camera assignment for the selected track.
- Select "Default" to remap all camera assignments to the default order based on the number of the V or VA track.

Related Operations:

The track name in the upper left corner of each camera monitor display in the multi cam window can be hidden by doing on of the following:

- Select Mode>Display Track Name from the Preview window menu bar.

Note This is a toggle function. If the check mark appears by the option, the track name display is on. If the check mark does not appear by the option, the track name is not displayed.

- Click the list button [▽] on the **Multi cam** button and select "Display Track Name" from the menu.

Note This is a toggle function. If the check mark appears by the option, the track name display is on. If the check mark does not appear by the option, the track name is not displayed.

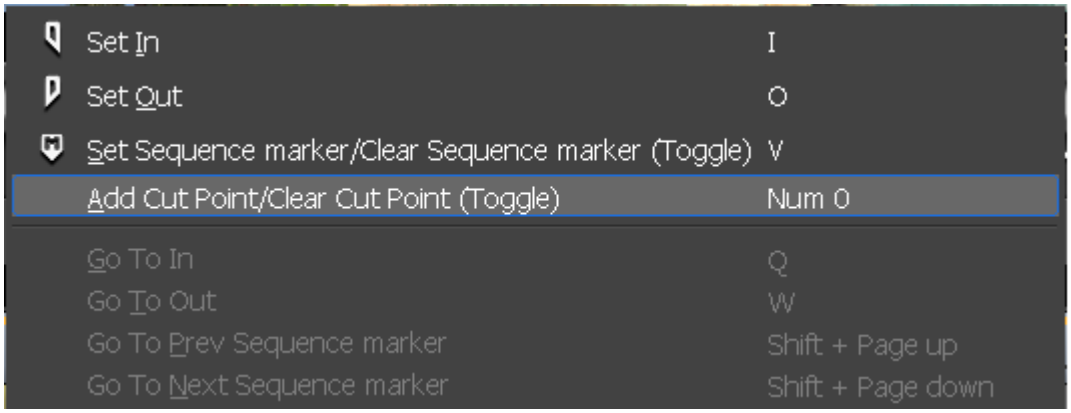
Setting Camera Switch Point

A camera switch point is a trigger which causes a switch in the multi cam camera display.

To set a camera switch point, do the following:

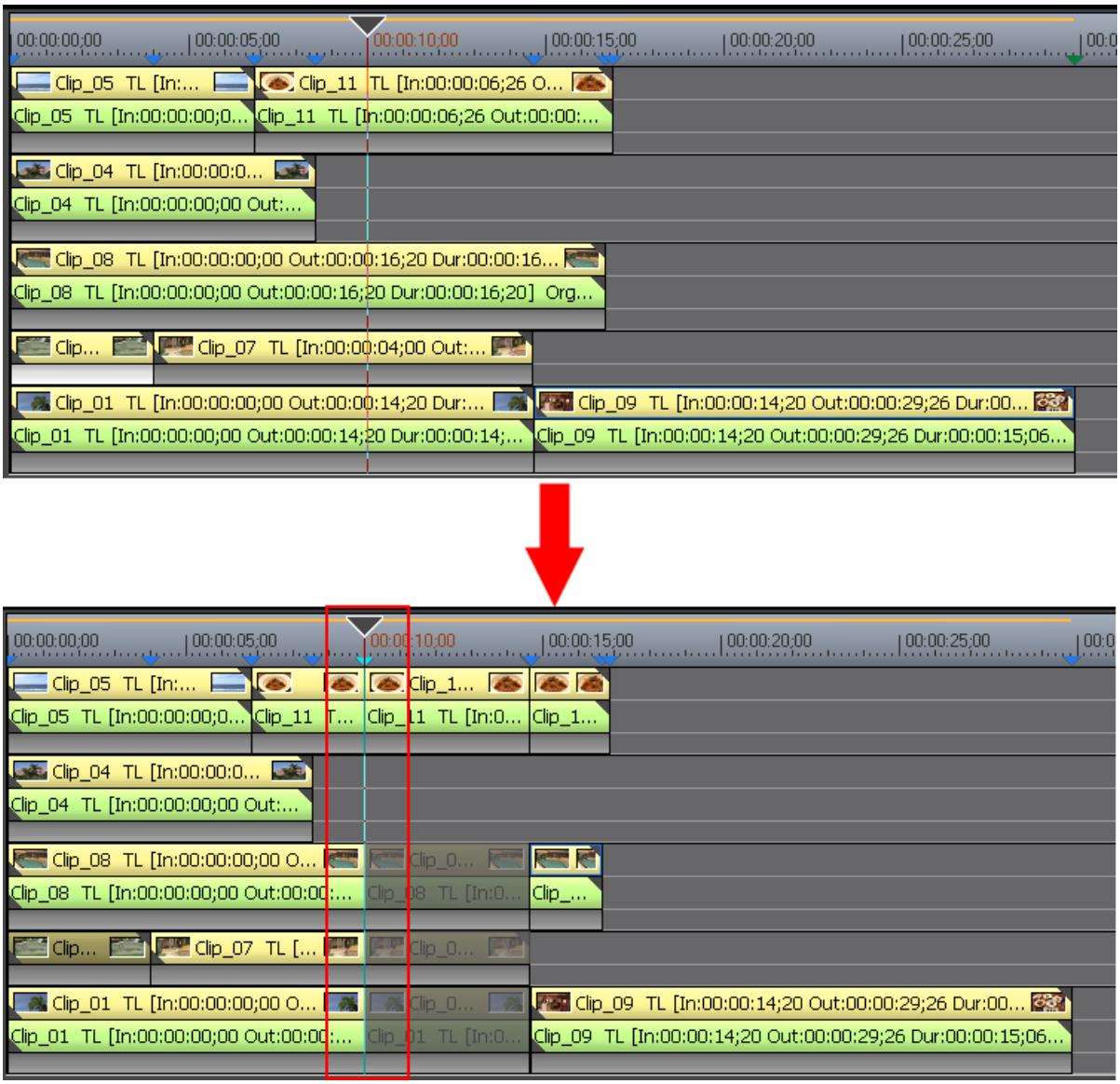
1. Position the Timeline cursor at the point at which you wish to set a switch point.
2. Right-click the time scale and select "Add Cut Point/Clear Cut Point (Toggle)" from the menu as shown in Figure 530.

Figure 530. Time Scale Menu - Add Cut Point/Clear Cut Point



A camera switch point is set at the cursor location and a cut point is added to the clips on the switch point as illustrated in Figure 531

Figure 531. Cut/Switch Point Added to Tracks



Alternative Methods:

- Double-click on the time scale to set a camera switch point.
- Double-click a video from the camera monitor of track in the Recorder multi cam display.

Note These operations are also available during clip playback.

Important Points:

- Clips after the camera switch point that are disabled are displayed as dimmed clips. The disabled clips are not displayed in the Master monitor at the camera switch point.
- A clip is enabled by switching to the selected camera for the track on which the clip is displayed.
- Enabling or disabling of a clip when a cut/switch point is added is dependent upon the status of the clips before it on the same track.
- If there are multiple enabled clips (as is the case in the example above with clips before the added cut point), the clip on the top track has the priority and will be displayed in the Master monitor.

Setting Camera Switch Point During Playback

Camera points can be set during clip playback. To set a switch point during playback, execute the following steps:

1. Move the Timeline cursor to the position at which you wish to begin playback.
2. Click the **Play** button in the Recorder.

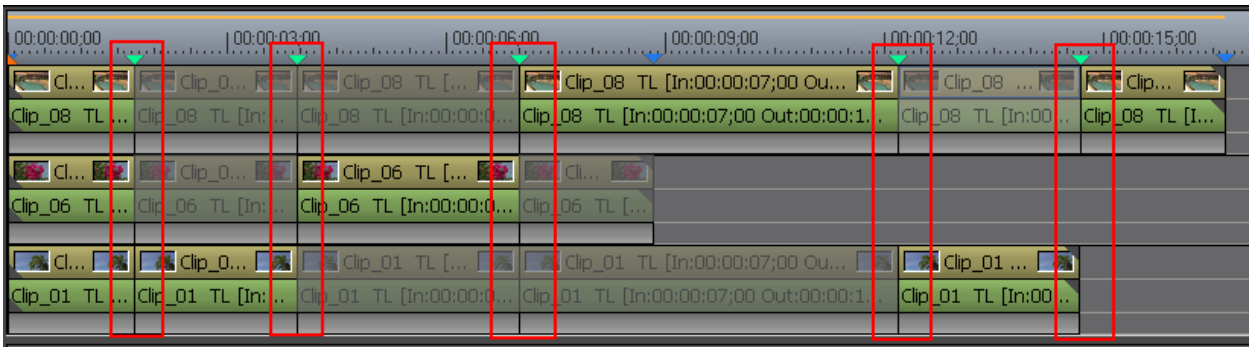
Figure 532. Multi Cam Display with Three Cameras

3. Click a video from the camera of each track in the multi cam display in the Recorder at the point at which you wish to switch the selected camera.

The camera switch point is set at the Timeline cursor position at the time the track camera was clicked. When playback stops, a cut point is added to the clip at each camera switch point. See Figure 533 for an example.

Note The number keys on the numeric keypad may also be used to switch cameras during playback. Press the numeric key corresponding to the camera to which you wish to switch.

Figure 533. Switch Points Added During Playback



In the example above, playback of this sequence from beginning to end would result in the following track cameras displayed in the Master monitor as defined by the switch points (3 is the top track and 1 is the bottom track): 3,1,2,3,1,3

Related Operations:

- By default, any existing camera switch points between the first added switch point and the end of playback are overwritten and deleted. Only the switch points added during playback remain
- To prevent overwriting existing switch points, do one of the following before beginning playback and setting new switch points:
  - Select Mode>Overwrite Cut Point from the Preview window menu bar.

Note This is a toggle function. If the check mark appears by the option, Overwrite Cut Point is on. If the check mark does not appear by the option, Overwriting of existing cut points is off

  - Click the list button [▽] on the **Multi cam** button and select "Overwrite Cut Point" from the menu.

Note This is a toggle function. If the check mark appears by the option, Overwrite Cut Point is on. If the check mark does not appear by the option, Overwriting of existing cut points is off,

- Any video filters which are usually applied to clips may be disabled by one of the following methods:
  - Select Mode>Apply Video Filter from the Preview window menu bar.

Note This is a toggle function. If the check mark appears by the option, Apply Video Filter is on. If the check mark does not appear by the option, Apply Video Filter is off'

  - Click the list button [▽] on the **Multi cam** button and select "Apply Video Filter" from the menu.

Note This is a toggle function. If the check mark appears by the option, Apply Video Filter is on. If the check mark does not appear by the option, Apply Video Filter is off.

Moving Camera Switch Points

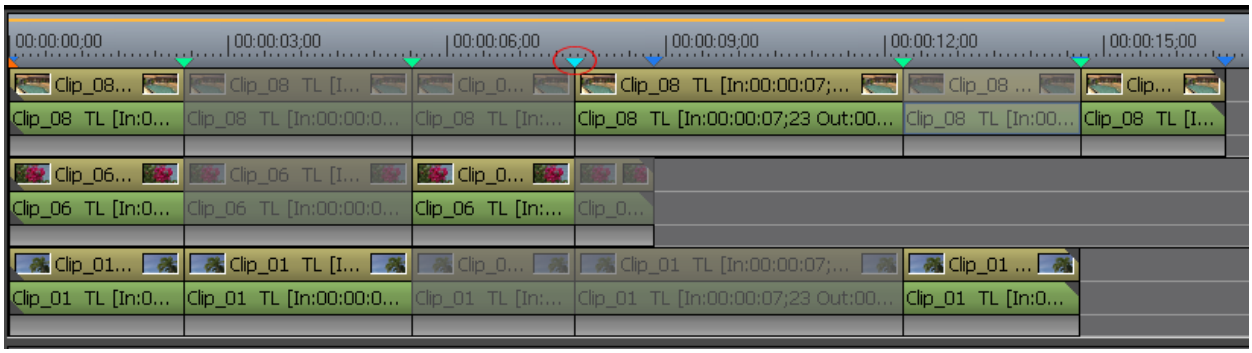
Once set, camera switch points may be moved to a new Timeline location.

To move a camera switch point, click and drag the desired switch point to a new location on the Timeline.

As illustrated in Figure 534, a selected switch point turns aqua blue. While dragging the switch point indicator, the images in the camera monitor display change to show the effect of moving the switch point and to facilitate precise positioning.

Note If you move a switch point to a new location that is before or after an existing switch point, that skipped switch point is deleted.

Figure 534. Select and Move a Camera Switch Point



Alternative Method:

1. Click on the switch point you wish to change.
2. Place the mouse cursor in the recorder and rotate the mouse wheel while holding down the [**SHIFT**] key.
3. Release the [**SHIFT**] key when the switch point is at the desired location.

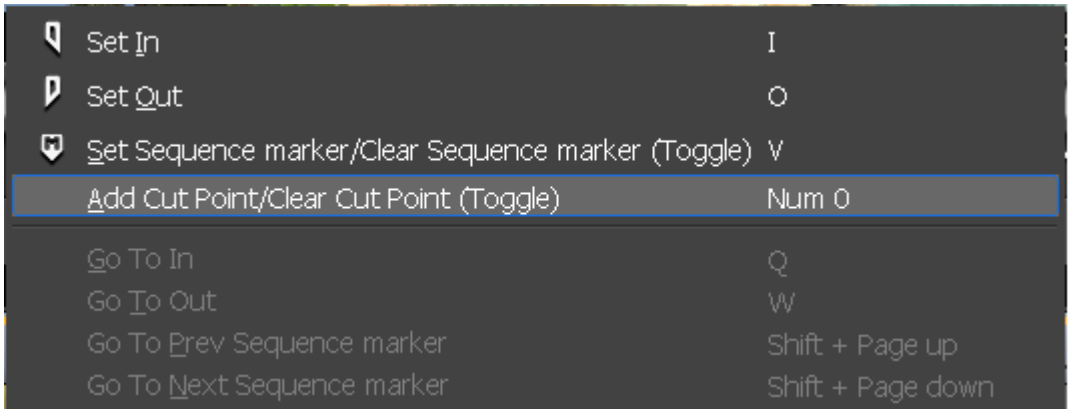
Note Moving a switch point that is set at the Out point (end) of a clip trims the clip.

Deleting Camera Switch Points

To delete a camera switch point, follow these steps:

1. Position the Timeline cursor at the switch point to be deleted.
2. Right-click the time scale and select "Add Cut Point/Clear Cut Point (Toggle)" from the menu as shown in Figure 535.

Figure 535. Time Scale Menu - Add Cut Point/Clear Cut Point



The camera switch point is deleted. Any clips that were cut at that switch point location are merged.

Note If a clip was divided by a cut point that is removed and part of the clip was disabled, the enable/disable setting of the merged clip will be same as the setting for the first portion of the previously divided clip.

Alternative Methods:

- Right-click the camera switch point to be deleted and select "Delete Cut Point" from the menu.
- Double-click the camera switch point to be deleted.
- Press the [**0**] (Zero) key on the numeric keypad (the number line zero is not supported).

Note A camera switch point that is set as the In (beginning) or Out (end) point of a clip with no margin cannot be deleted.

Related Operations:

- Right-click the time scale and select "Delete All Cut Point" to delete all camera switch points.
- Right-click the time scale and select "Delete Cut Points between In/Out" to delete all camera switch points between the Timeline In and Out points.

Switching the Selected Camera

To switch the camera displayed in the Master view at a particular switch point, do the following:

1. With playback stopped, move the Timeline cursor to the clip to which you wish to switch at a particular switch point.

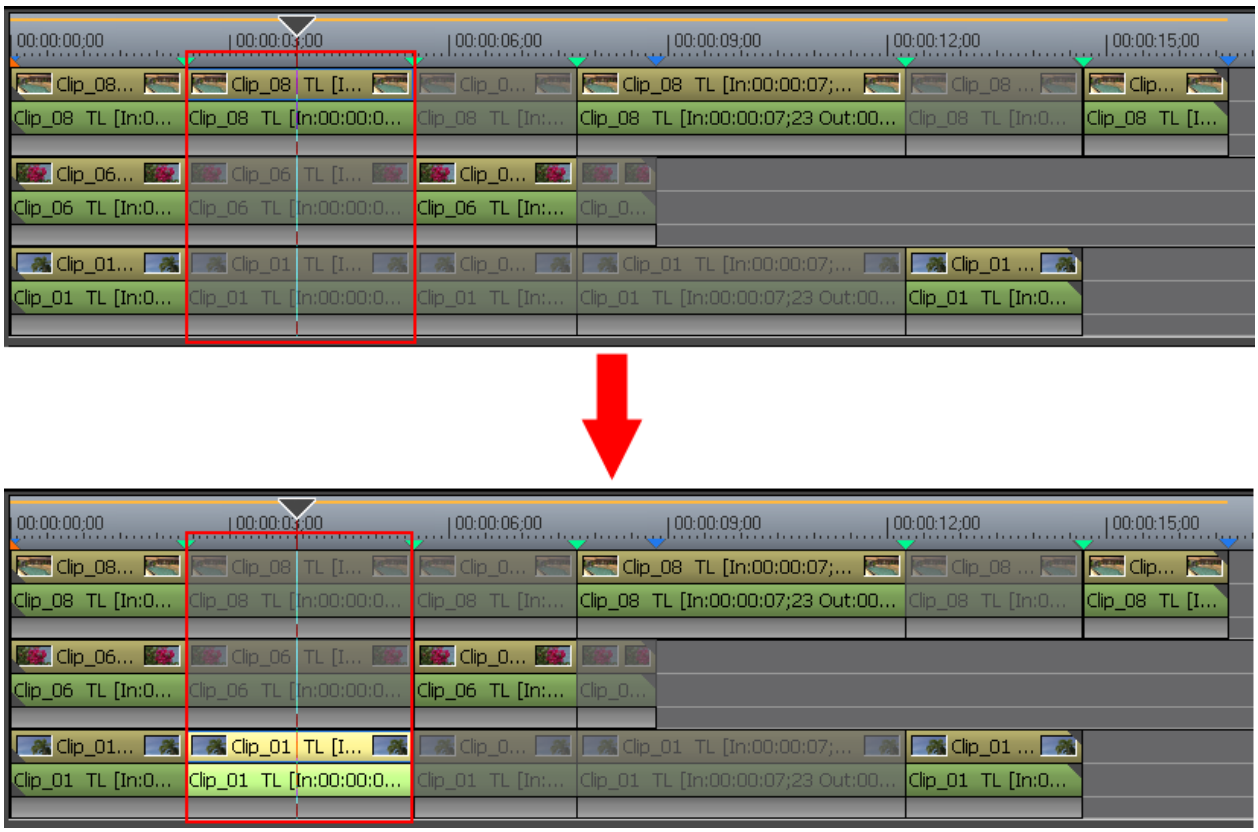
Note The Timeline cursor can be at any position in the clip and does need to be positioned as the switch point.

2. Click the track camera in the multi cam display of the clip to which you wish to switch as illustrated in Figure 536.

Figure 536. Select a Camera for a Switch Point

The clip from the selected camera is activated and the clips from the other cameras are disabled as illustrated in Figure 537. In this example, the camera is switched from Camera 3 to Camera 1 at the first switch point.

Figure 537. Switch from Camera Three to Camera 1



Alternative Method:

- With playback stopped, move the Timeline cursor to the clip to which you wish to switch at a particular switch point and press the number [**1**] to [**8**] on the numeric keypad of the camera to which you wish to switch.

Related Operations:

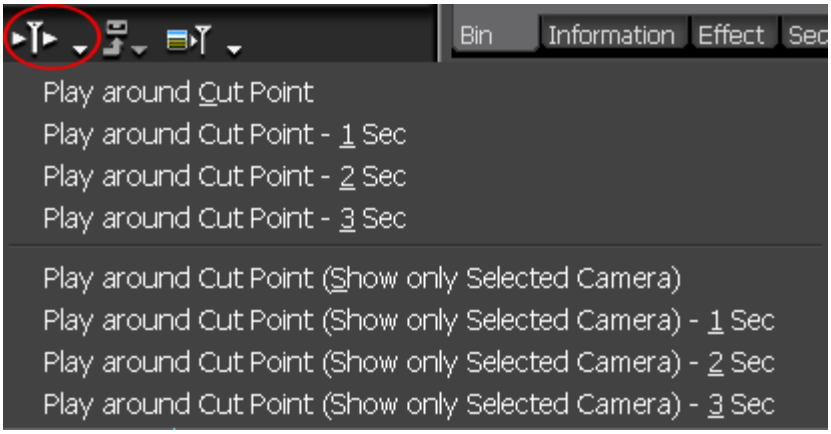
- To set a camera switch point and switch the camera simultaneously, do one of the following:
  - Move the Timeline cursor to the point at which you wish to set a switch point and switch to the selected camera and press the camera number key [**1**] to [**8**] on the numeric keypad while holding down the [**CTRL**] key.
  - Move the Timeline cursor to the point at which you wish to set a switch point and switch to the selected camera and double-click the desired track camera in the multi cam display.

Playback Around the Camera Switch Point

To confirm a camera switch point, you may play the area around the switch point using various methods.

To playback the Timeline area around the switch point, Click the list button [▽] on the **Play the cursor area** button and select the desired playback method from the menu as shown in Figure 538 and explained below.

Figure 538. Play the Cursor Area Menu



Play Around Cut Point

Play the area around (approximately three seconds before and three seconds after) the camera switch point which is before and nearest to the current Timeline cursor position.

Play Around Cut Point - 1 Sec

Play the clip for 1 second before and 1 second after the cut point before and neared to the current Timeline cursor position.

Play Around Cut Point - 2 Sec

Play the clip for 2 seconds before and 2 seconds after the cut point before and neared to the current Timeline cursor position.

Play Around Cut Point - 3 Sec

Play the clip for 3 seconds before and 3 seconds after the cut point before and neared to the current Timeline cursor position.

Play Around Cut Point (Show Only Selected Camera)

Displays only the video from the selected camera while playing the area around (approximately three seconds before and three seconds after) the camera switch point which is before and nearest to the current Timeline cursor position.

Play Around Cut Point (Show Only Selected Camera) - 1 Sec

Displays only the video from the selected camera while playing the area 1 second before and 1 second after the camera switch point which is before and nearest to the current Timeline cursor position.

Play Around Cut Point (Show Only Selected Camera) - 2 Sec

Displays only the video from the selected camera while playing the area 2 seconds before and 2 seconds after the camera switch point which is before and nearest to the current Timeline cursor position.

Play Around Cut Point (Show Only Selected Camera) - 3 Sec

Displays only the video from the selected camera while playing the area 3 seconds before and 3 seconds after the camera switch point which is before and nearest to the current Timeline cursor position.

The area around the camera switch points play repeatedly until stopped.

Note If playback is unable to keep up with the display in multi cam mode, you can set a number of frames to be skipped, if needed, by selecting Mode>Skipped Frames>{number of frames to skip} on the Preview window menu bar. This setting may also be defined in *Playback Settings* *on page 147*.

3. Click the **Stop** button in the Recorder to stop playback of the area around the switch point.

Note Camera switch points must already be set before using these playback options. Switch points cannot be defined during playback in this manner. To define switch points during playback, see *Setting Camera Switch Point During Playback* *on page 469*.

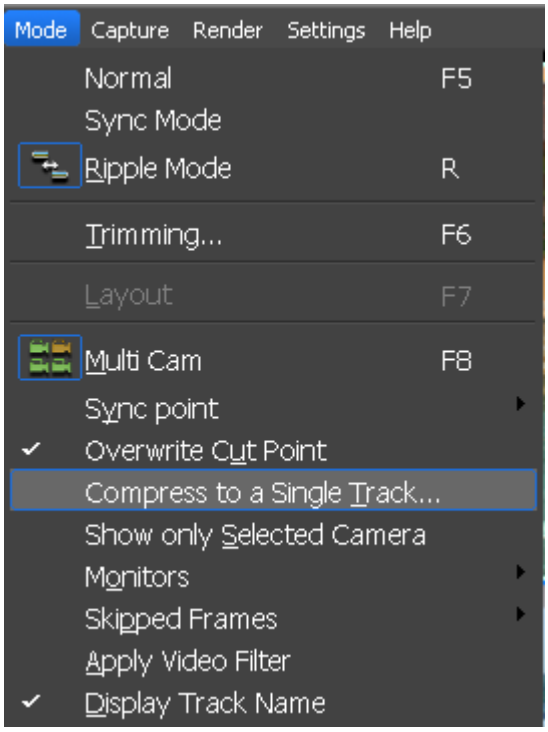
Copy Selected Clips to Track

Enabled clips may be extracted from multiple tracks and copied to one specific track. To copy enabled clips to a single track, do the following:

1. Select Mode>Compress to a Single Track from the Preview window menu bar. See Figure 539.

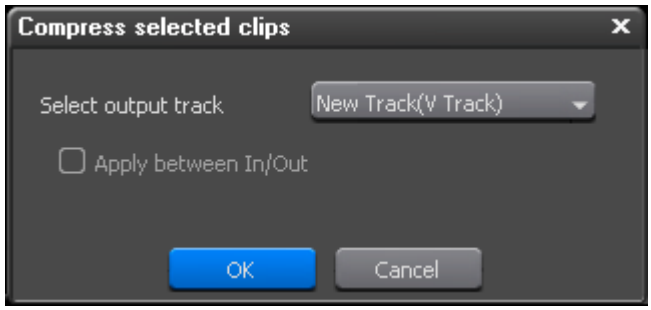
Note An alternative method is to Click the list button [▽] on the **Multi Cam** button (if it exists on the Timeline) and select “Compress to a Single Track” from the menu.

Figure 539. Mode Menu - Compress to a Single Track



The Compress Selected Clips dialog shown in Figure 540 appears.

Figure 540. Compress Selected Clips Dialog



2. From the Select Output Track drop-down list, select the track to which to copy the enabled clips.

Note You can select an existing V or VA track without an assigned camera or a new V or VA track.

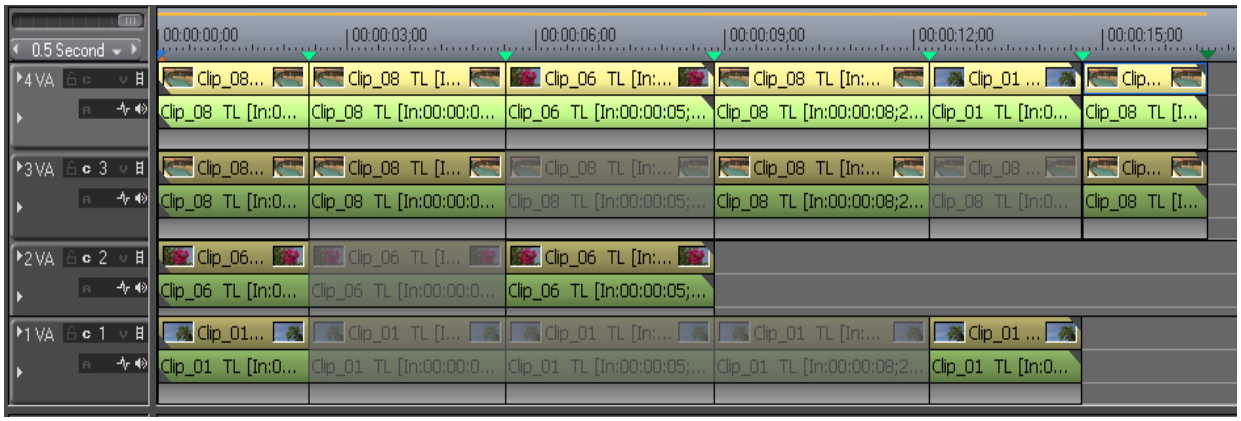
3. Select the "Apply between In/Out" option if you only want clips between the Timeline In and Out points to be copied to the specified track.

4. Click the **OK** button.

Selected clips are copied to the specified track as illustrated in Figure 541.

Note If other clips have already been placed on the destination track, an alert message appears. Click to **OK** button to continue copying enabled clips to the specified track.

Figure 541. Enabled Clips Copied to a Single Track



Note If multiple valid clips are placed between camera switch points, the priority is given to the clip on the highest numbered track. In the example above, there are valid (enabled) clips on the 3VA, 2VA and 1VA tracks before the first switch point. When the clips are copied to the new 4VA track, the clip in the 3VA track before the first switch point is copied.

Undo/Redo Operations

Undo an Operation

To undo a previously-performed operation and return to the prior state, do any of the following:

- Click the **Undo** button (highlighted in blue in Figure 542) on the Timeline.

Figure 542. Timeline Undo Button

- Click the list button [▽] on the **Undo** button and select a specific operation to undo from the menu.

Note The number of undo operations is not limited. However, if memory is low, undo histories may be deleted beginning with the oldest.

- Select Edit>Undo from the Preview window menu bar.
- Press the [**CTRL**]+[**Z**] keys on the keyboard.

Redo a Cancelled Operation

To redo a previously-cancelled operation and return to the prior state, do any of the following:

- Click the **Redo** button (highlighted in blue in Figure 542) on the Timeline.

Figure 543. Timeline Redo Button

- Click the list button [▽] on the **Redo** button and select a specific cancelled operation to redo from the menu.
- Select Edit>Redo from the Preview window menu bar.
- Press the [**CTRL**]+[**Y**] or [**SHIFT**]+[**CTRL**]+[**Z**] keys on the keyboard.

Section 6

Effects and Titles

Effects are project elements such as transitions, audio cross fades and video and audio filters.

Titles are text that appears on the video.

Effects and titles are usually applied to a sequence after all editing is done on the Timeline. Once effects and titles have been applied to clips on the Timeline, additional editing can cause timing issues.

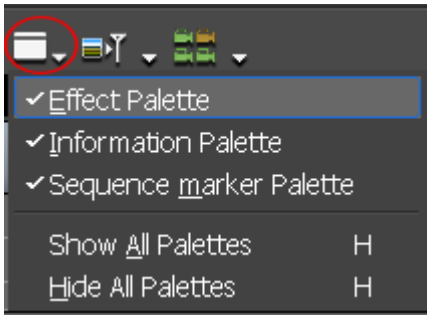
Effects

Show/Hide the Effect Palette

To show or hide (toggle functions) the Effect Palette, do one of the following:

- Click the **Toggle palette display** button on the Timeline (see Figure 544) and select "Effect Palette" from the menu.

Figure 544. Toggle Palette Display Button Menu - Effect Palette



- Select View>Effect Palette on the Preview window menu bar.
- Select View>Show All Palettes on the Preview window menu bar.

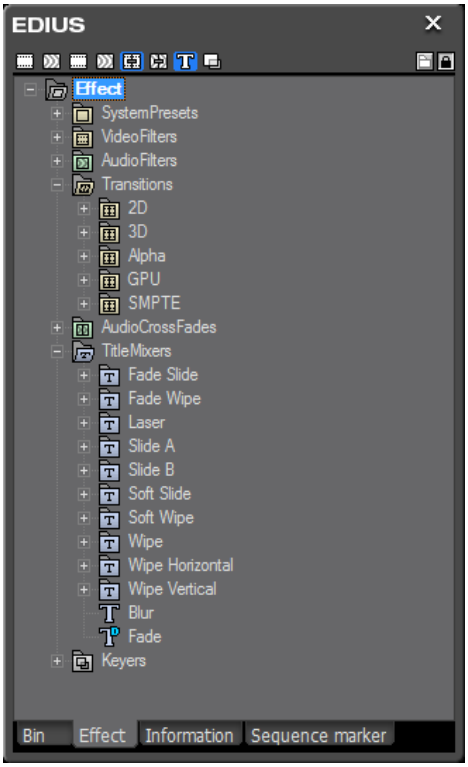
Note This function simultaneously shows or hides the Effect, Information and Sequence Marker palettes. For more information on the Information Palette, see *Information Palette* *on page 566*. For more information on the Marker Palette, see *Sequence Marker Palette* *on page 409*.

- Press the [**H**] key on the keyboard to show or hide all palettes.
- Select View>Hide All Palettes from the Preview window menu bar to hide the Information, Effect and Sequence Marker palettes.

Effect Palette

Effects are applied through the Effect Palette. Figure 545 shows the Effect Palette with some of the effect folders expanded.

Figure 545. Effect Palette



Expand Folder View

To expand or collapse an effect folder, click on the "+" to expand the folder or the "-" to collapse the folder.

The folder shortcut buttons (see Figure 546) may also be used to expand and collapse specific folders.

Figure 546. Effect Palette Folder Shortcuts

The Effect folders and their folder shortcut buttons are:

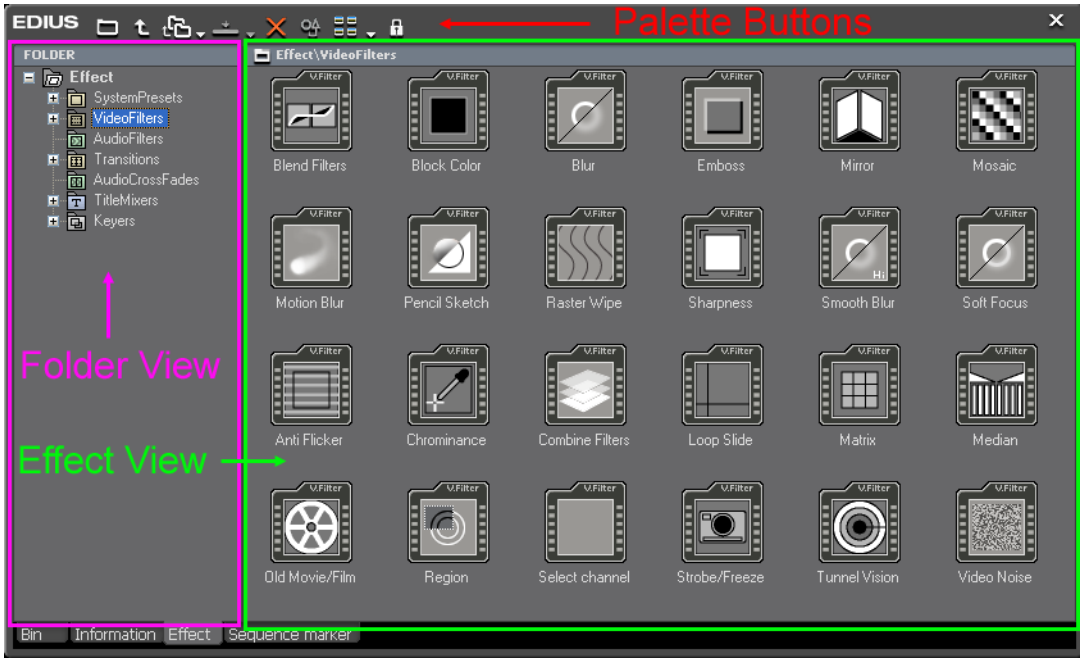
- System Presets
  - Video Filters
  - Audio Filters
- Video Filters
- Audio Filters
- Transitions
- Audio Cross Fades
- Title Mixers
- Keyers

To lock the folder view so the folder structure cannot be modified, click the **Lock/Unlock** / button.

Effect View Show/Hide

To Show/Hide effects details in a particular category click the **Show Effect View** button (upper right) on the Effect Palette window. When Show Effect View is active the Effect Palette shows the contents of the selected effect folder as shown in Figure 547.

Figure 547. Effect Palette - Show Effect View



In the Effect View, the function buttons in Table 7 are available.

Table 7. Effect View Function Buttons

Icon	Function	Description
	Show Effect View	While in the Effect View, clicking this button hides the Effect View.
	Move up One Folder	Display and select one folder level above the currently selected folder.
	Folder Link	Add a folder link for quickly opening frequently used folders.
	Add to Timeline	Adds the selected effect to a clip on the Timeline. Clicking the list button on the Add to Timeline button allows selection of the position (IN point, OUT point or Both).
	Delete	Delete the selected User Preset Effect.
	Property	Displays the properties of the selected effect. See *Effect Properties* *on page 486* for more information.
	View	Change the view style. Each click of the button cycles to the next view style. Views styles in order of selection are Icon (Large), Detail Text (Large) and Detail Text (Small).
	Lock	Locks/Unlocks effect folders disabling/enabling folder structure modifications.

Effect Types

All EDIUS effects fit one of the following effect type definitions:

Plug-In Base Effects

These are effects that are installed with EDIUS. They cannot be deleted from the Effect Palette. Plug-In Base Effects include the following:

- VideoFilters
- AudioFilters
- Transitions
- AudioCrossFades
- TitleMixers
- Keyers

System Preset Effects

These are effects that are installed with EDIUS and customized plug-in base effects. They cannot be deleted from the Effect Palette. These effects have an “S” displayed on their icons. See Figure 548.

Figure 548. System Preset Effect

User Preset Effects

These are effects created and saved by users. These effects can be customized base effects in which parameters are changed and multiple effects are combined. These effects have a “U” displayed on their icon. See Figure 549.

Figure 549. User Preset Effect

Default Effects

Effects used in default settings. Only transition, audio cross fade and title mixer effects can be defined as default settings. These effects have a “D’ displayed on their icons. Figure 550.

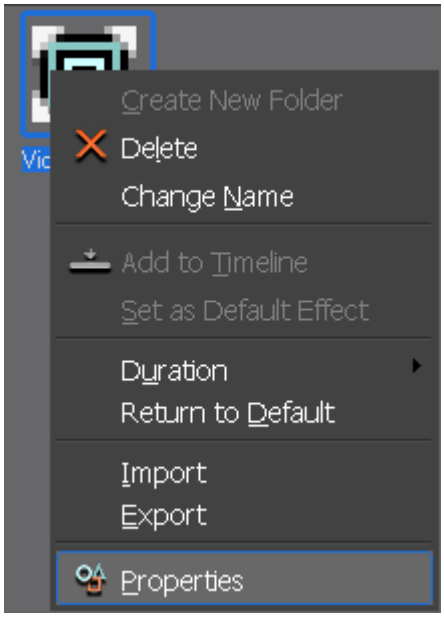
Figure 550. Default Effect

Effect Properties

To display and edit effect properties, do the following:

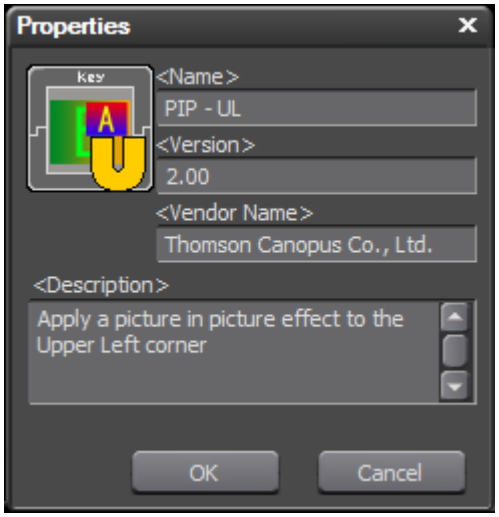
1. Select the desired effect in the Effect Palette window.
2. Right-click on the effect and select “Properties” from the menu as shown in Figure 551.

Figure 551. Effect Menu - Properties



The Properties dialog illustrated in Figure 552 appears.

Figure 552. Effect Properties Dialog



3. Edit the properties as desired and click the **OK** button.

Note Only the properties of User Preset Effects can be edited.

Alternative Method:

1. If not in the Effect View, click the **Show Effect View** button.
2. Click on the desired effect to select.
3. Click the **Property** button to display the effect properties.
4. Edit the properties as desired and click the **OK** button.

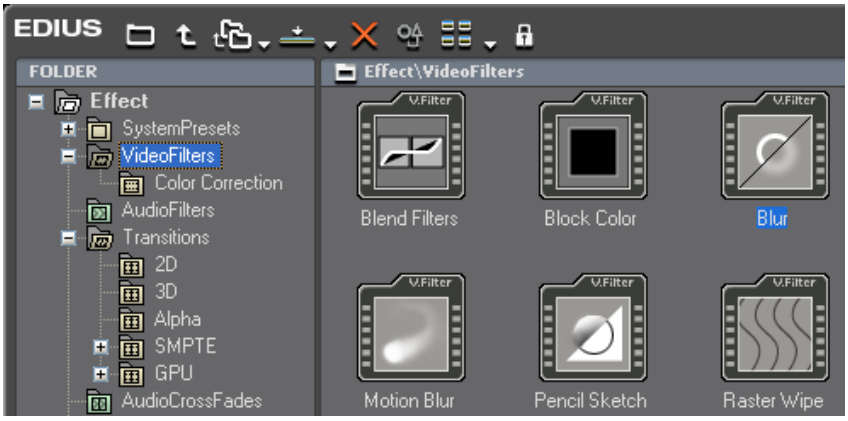
Applying Effects

Effects are applied to clips using the following methods:

Drag and Drop

1. From either the Effect Tree or the Effect View, click to select the folder and desired effect. See Figure 553.

Figure 553. Select Effect to Apply



2. Drag and drop the effect to the desired clip on the Timeline.

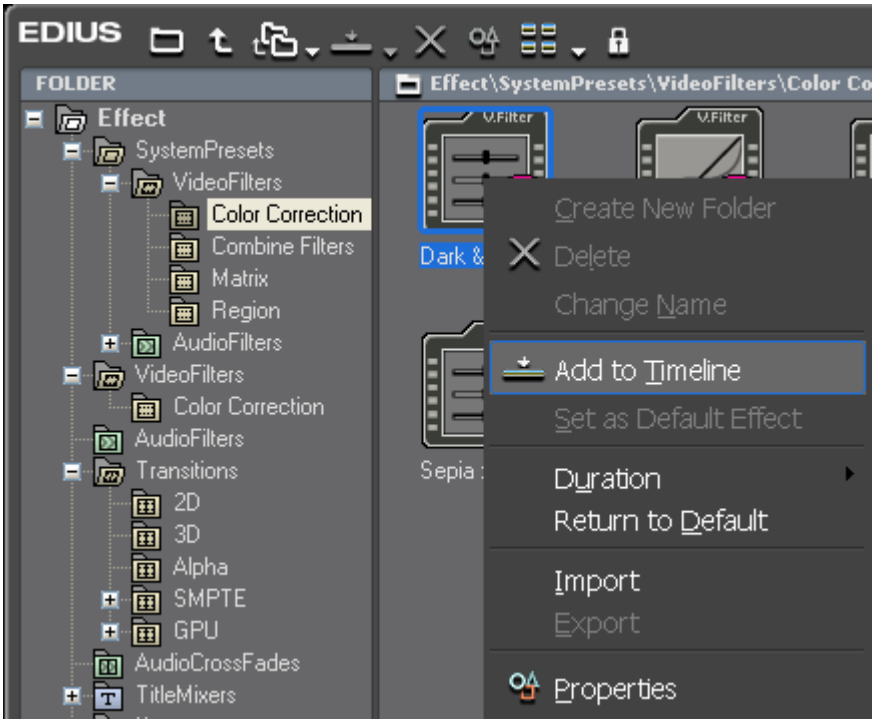
Alternative Method:

Select a clip or the mixer area of a clip and drag and drop the desired effect in the Effect Palette to the effect list of the Information Palette. See *Information Palette* *on page 566* for more information.

Right-Click Menu

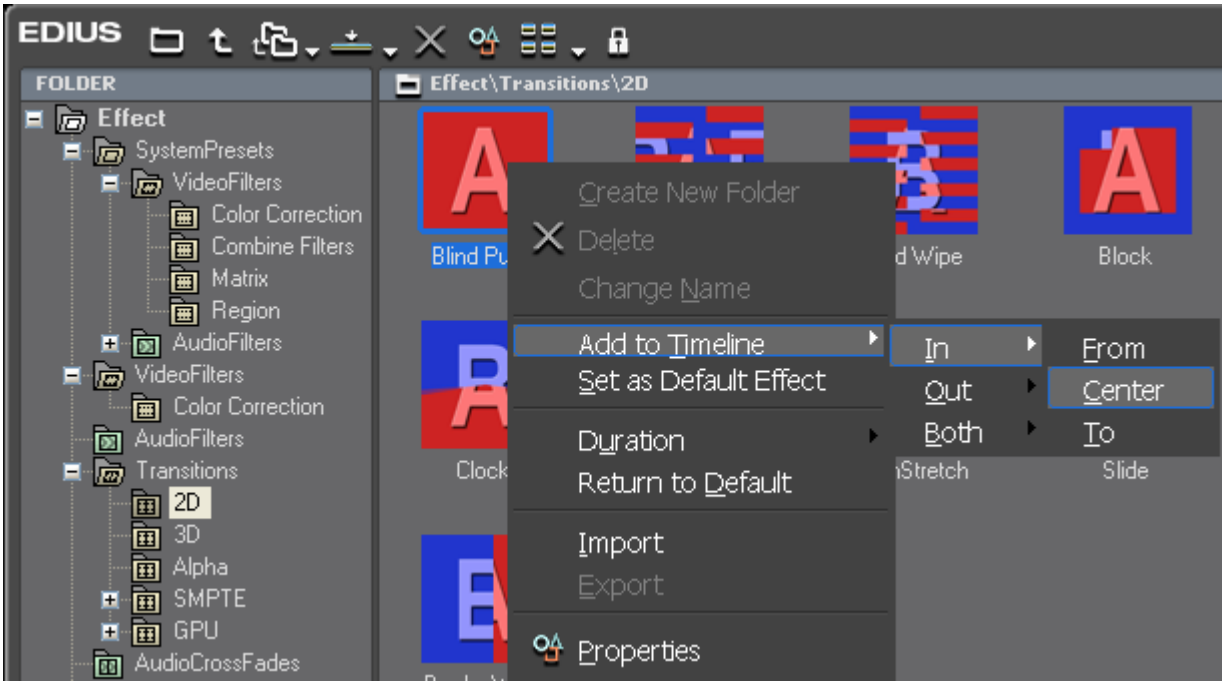
1. Select a clip on the Timeline.
2. From either the Effect Tree or the Effect View, click to select the folder and desired effect. See Figure 553.
3. Right-click on the effect to be applied and select “Add to Timeline” from the menu as illustrated in Figure 554.

Figure 554. Effect Palette - Add to Timeline



Note When applying transitions or audio cross fades, you may specify “In”, “Out” or “Both” with either “From”, “Center” or “To” as the location to which to add the effect. See Figure 555.

Figure 555. Effect Palette - Add to Timeline Options

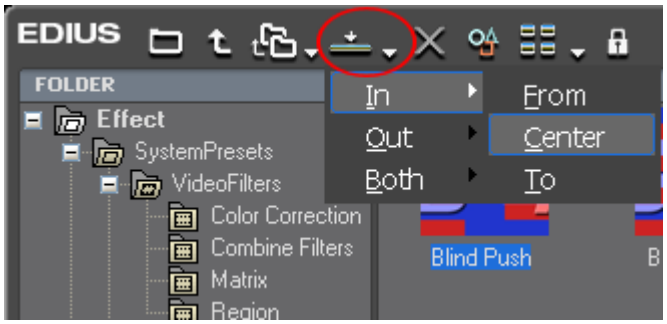


Alternative Method:

1. Select a clip on the Timeline
2. Select an effect in the Effect View of the Effect Palette.
3. Click the **Add to Timeline** button.

Note If a transition or audio cross fade is selected, click the **Add to Timeline** list button (▽) and select from the menu “In”, “Out” or “Both” with either “From”, “Center” or “To” as the location to which to add the effect. See Figure 556.

Figure 556. Apply Effect Add to Timeline List Selections



Applying Filters to Clips

Various video and audio filters may be applied to clips. Some examples are documented in this section.

Color Correction Filters

The color correction filters adjust color tone to match the previous or next clip, adjust brightness and correct color cast, and improve highlight detail loss and shadow detail loss.

The following color correction filters are available:

YUV Curve

Allows adjustment of the luminance (Y), blue color difference (U), and red color difference (V). Fine adjustments to shadows and highlights are also available in this filter.

Note The YUV Curve filter can be applied to keys, but, not the animation (if any) between keys.

See *Applying Color Correction Filters on page 491* for more information.

Color Balance

Provides adjustments to chroma, contrast and color tone values.

See *Adjusting Color Balance on page 498* for more information.

Color Wheel

Adjust the color density and color tone with the color wheel.

See *Color Wheel Adjustments on page 500* for more information.

White Balance

Corrections for shadows (black balance), intermediate (grey balance) and highlights (white balance) are provided with the White Balance controls.

See *White Balance Adjustments on page 502* for more information.

Monotone

Video may be given a monotone look with this filter.

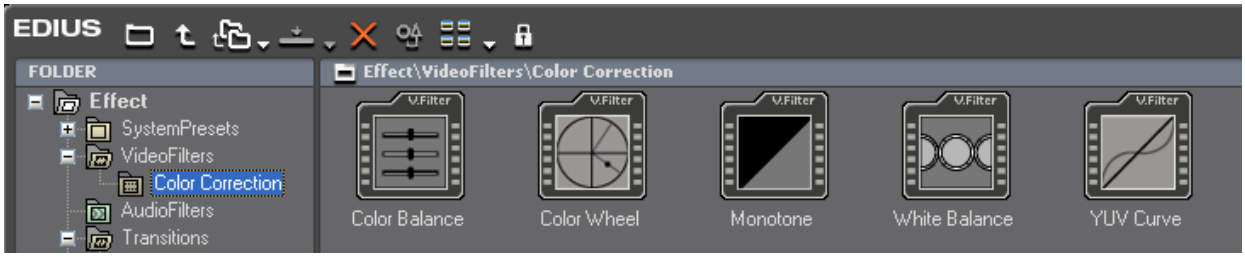
See *In the Information Palette, double-click the White Balance filter. on page 507* for more information.

Applying Color Correction Filters

To apply any color correction filter and make video adjustments with the filter, do the following:

1. Select the VideoFilters tree in the Effect Palette.
2. Select the Color Correction tree to display all color correction filters as illustrated in Figure 557.

Figure 557. Effect Palette VideoFilters - Color Correction



3. Drag and drop the desired filter to the desired clip on the Timeline.

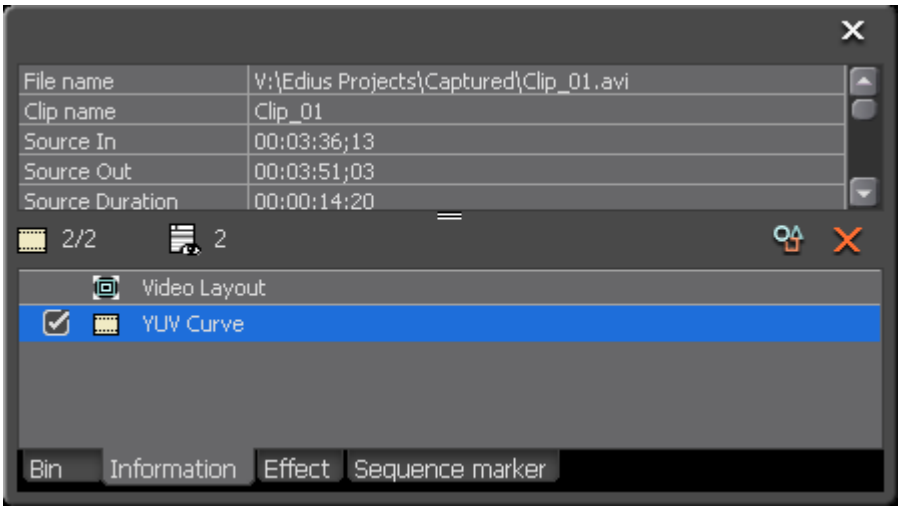
Note An alternative method of applying the filter is to select the clip on the Timeline to which to apply the filter, right-click the filter in the Effect Palette and select “Add to Timeline” from the menu.

Adjusting YUV Curve

Once the YUV Curve filter has been applied to a clip, you can adjust the YUV Curve filter settings by following these steps:

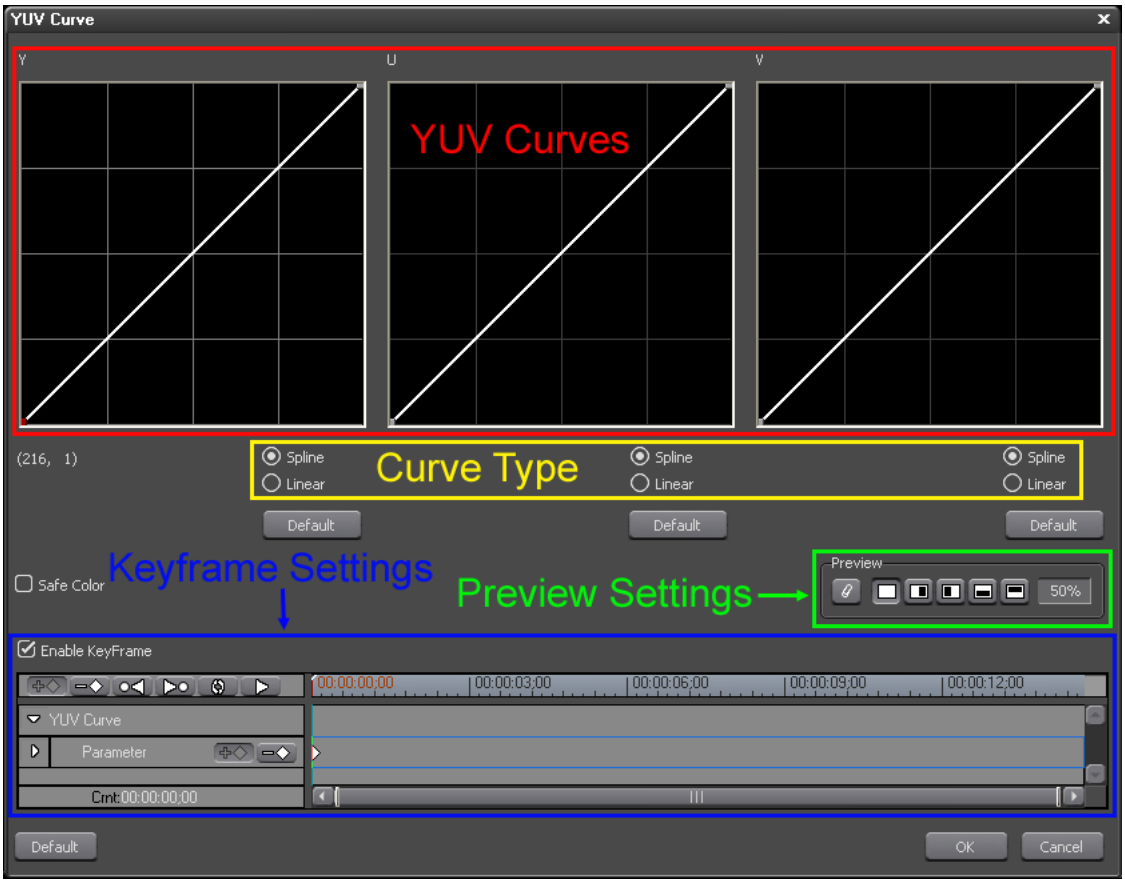
1. Select the clip to which the YUV Curve filter has been applied.
2. Display the Information Palette. For more information concerning the Information Palette, see *Information Palette* *on page 566*.
3. In the Information Palette, double-click the YUV filter as illustrated in Figure 558.

Figure 558. Clip Information Palette - YUV Curve Filter



The YUV Curve dialog shown in Figure 559 appears.

Figure 559. YUV Curve Dialog



4. Adjust the YUV filter settings as explained below.

5. Click the **OK** button to apply the settings and close the dialog.

YUV Curves

Drag the line on each chart to adjust the YUV values according to the Curve Type setting. The numerical value on the left below the Y curve indicates the input value and the output value of the selected curve.

Curve Type

Select the Spline or Linear curve type for each YUV curve.

Linear

A straight line from the end of the curve line to the adjustment point or from adjustment point to adjustment point.

Spline

A curved line from the end of the curve line to the adjustment point or from adjustment point to adjustment point.

Note Click the **Default** button for each YUV Curve to reset the curve to the default settings.

Safe Color Checkbox

Select this option to keep video signal adjustments within the YUV safe color space.

Preview Settings

The filter preview mode and settings can be adjusted to provide the preferred filter effect verification method. Preview Settings are common to many of the color correction filters. See *Preview Settings* *on page 494*, for more information.

Keyframe Settings

The YUV Curve chart can be adjusted at each key frame to provide the preferred filter effect. Keyframe settings are common to many of the color correction filters. See *Keyframe Settings* *on page 497*, for more information.

Master Default Button

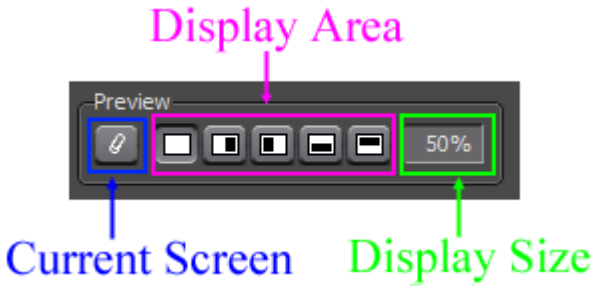
When clicked, the **Default** button in the lower left of the YUV Curve dialog deletes all key frames and returns all settings to the defaults.

Preview Settings

Preview settings determine how the effects of applying a color correction filter are previewed and verified before they are applied.

The configuration dialog for each color correction filter which uses preview settings will contain the Preview tools illustrated in Figure 560.

Figure 560. Color Correction Filters Preview Settings



Current Screen

Click this button to fix the display screen on the frame at the Timeline cursor location. This lets you freeze a point in the Timeline for preview purposes. If, for example, you want to correct to another shot on the Timeline, you can position the Timeline cursor over the frame you want, then click

the **Current Screen** button. When the Display Size is set at less than 100%, the "frozen" Timeline point is visible while also previewing adjustments to the current clip.

Display Area

Select the area of the Recorder video display that will be used to show the effects of the color correction filter.

From left to right, the display area buttons segment the video display as follows:

- Full Screen - show the effects of the filter on the entire display area.
- Left Half - show the effects of the filter on the left half of the display and leave the right half unfiltered.
- Right Half - show the effects of the filter on the right half of the display ane leave the left half unfiltered.
- Top Half - show the effects of the filter on the top half of the display and leave the bottom half unfiltered.
- Bottom Half - show the effects of the filter on the bottom half of the display and leave the top half unfiltered.

Note The filter is applied to the entire video. Preview settings are for verification of filter effects and do not represent the manner in which the filter is applied to the video.

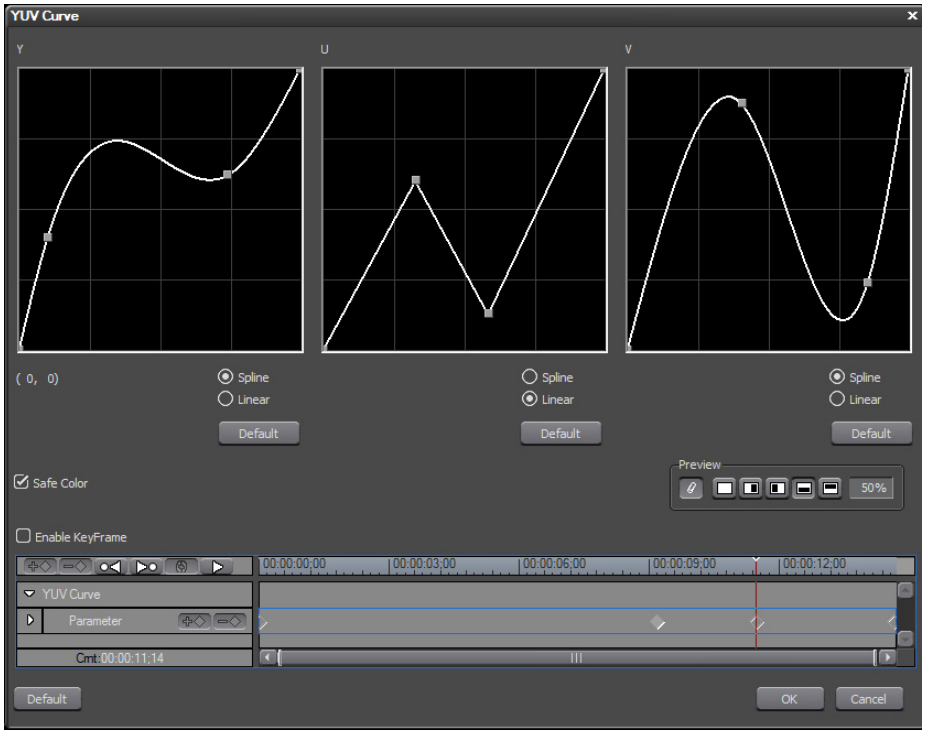
Display Size

The display size determines the amount of the video frame used to show the filter's effect when the Display Area is not set to Full Screen.

To preview the filter effects from the position of the Timeline cursor to the end of the clip, click the **Play** button in the KeyFrame operation buttons.

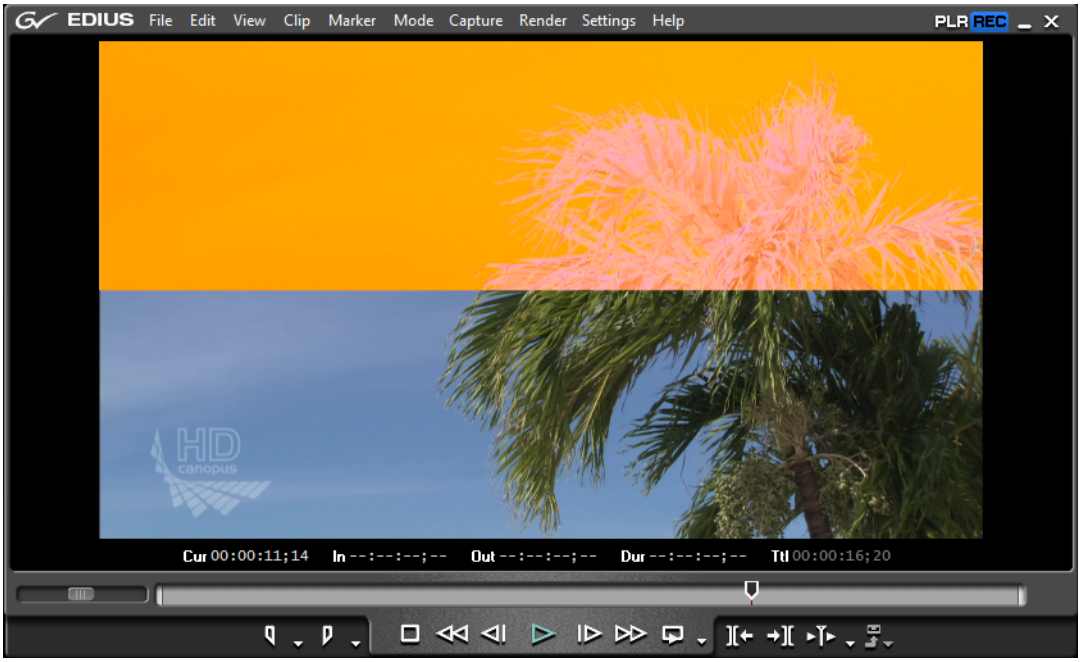
Figure 561 illustrates some sample YUV Curve settings and Preview settings. The affect of these settings on the video in the Recorder video display is shown in Figure 562.

Figure 561. YUV Curve Filter and Preview Settings



The settings in the YUV Curve dialog above result in the preview display shown below.

Figure 562. YUV Filter Preview



Keyframe Settings

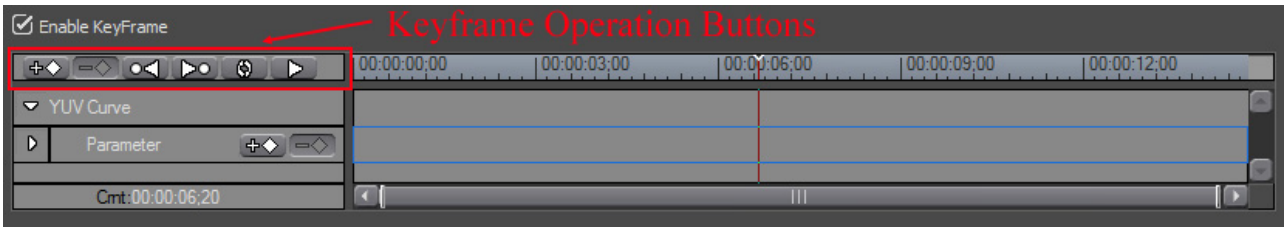
Key frames can be designated on the Timeline to which color correction filters are applied. Filter settings for other frames between keys frames are interpolated based on the key frame settings.

Note The YUV Curve filter uses linear keyframing only. No interpolation is applied.

Enable KeyFrame

To define key frames, click the "Enable KeyFrame" checkbox to enable the Key frame operation buttons illustrated in Figure 705.

Figure 563. KeyFrame Operation Buttons



KeyFrame Parameters

If the KeyFrame parameter panel is not displayed, click the expand button (▷) of the {filter name} panel to open the panel in which parameters can be set for key frames. Click the (▽) button on the {filter name} panel to hide the parameter panel.

In the parameter panel for some color correction filters, key frames can be added or deleted for specific adjustable parameters. For example, in the Color Balance KeyFrames parameter panel, key frames can be added for Chroma, Brightness, Contrast and color ranges.

- Add Key Frame

Adds a key frame at the position of the Timeline cursor in the Key Frame window.

Note A key frame can also be added by right-clicking on the KeyFrame window Timeline at the position at which to add the key and selecting 'Add" from the menu.

Once a key frame has been added to the KeyFrame window Timeline, the key frame may be selected and adjustments made for that key frame.

Note The interpolation method for frames between key frames is selected by right-clicking on a key frame and selecting "Hold", "Linear" or "Bezier" from the menu.

- Delete Key Frame

Deletes the key frame at the position of the Timeline cursor in the Key Frame window.

Note A key can also be deleted by right-clicking on the key and selecting ‘Delete” from the menu.

/ - Move to Previous/Next Key Frame

Moves the cursor to the previous or next key frame in the Key Frame window.

- Default Settings

Return the selected key frame to default settings.

/ - Play/Pause Clips

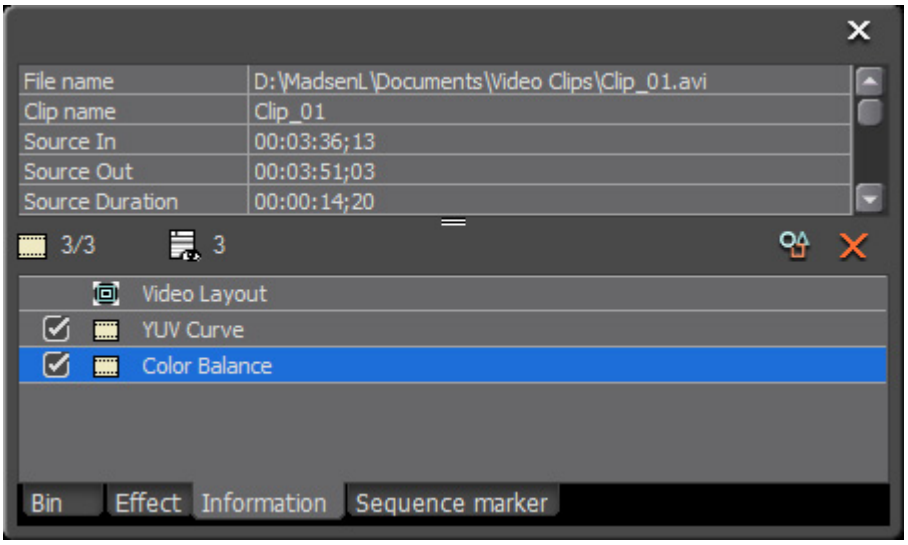
Play or pause clips to which key frames and filters have been applied.

Adjusting Color Balance

Once the Color Balance filter has been applied to a clip, you can adjust the Color Balance filter settings by following these steps:

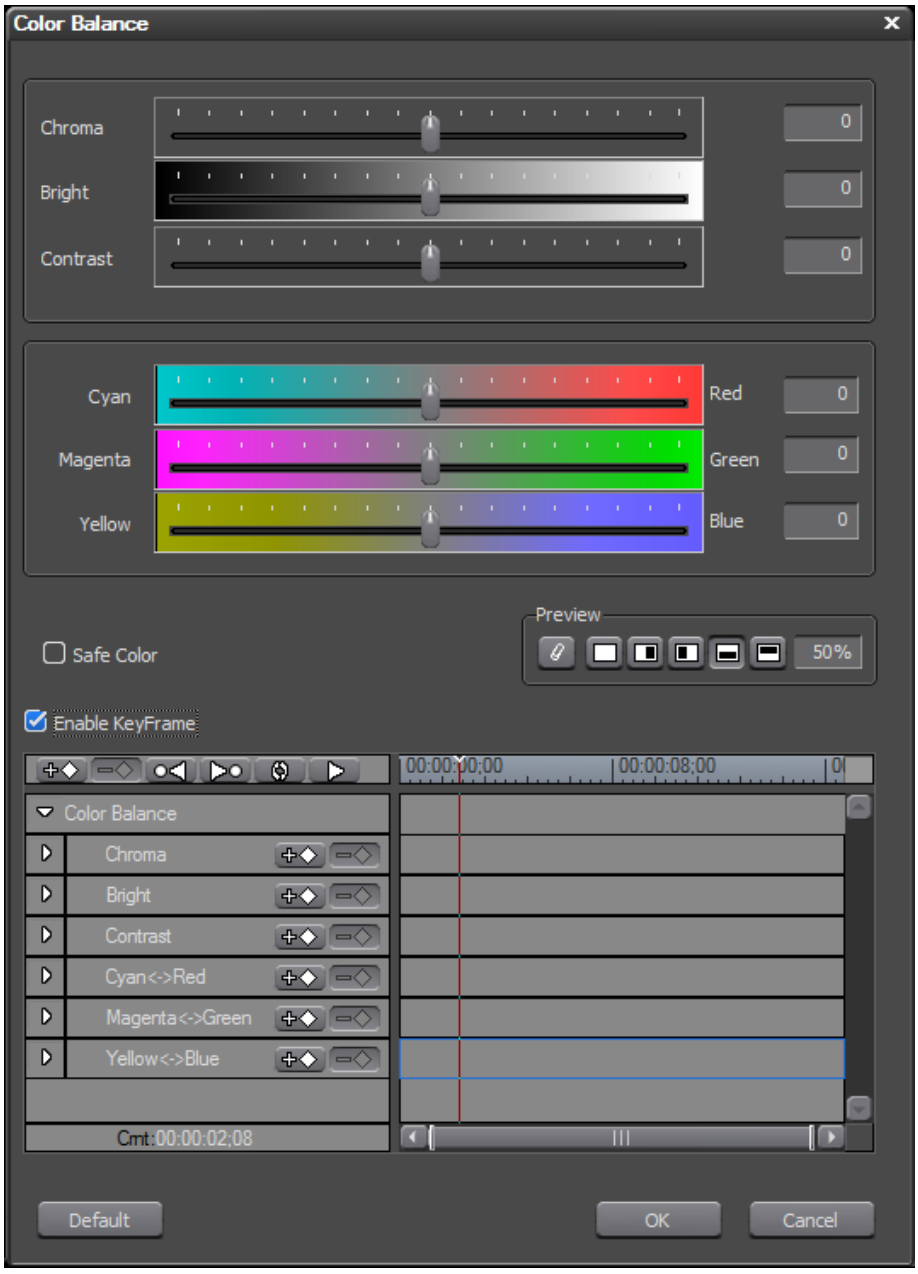
1. Select the clip to which the Color Balance filter has been applied.
2. Display the Information Palette. For more information concerning the Information Palette, see *Information Palette* *on page 566*.
3. In the Information Palette, double-click the Color Balance filter as illustrated in Figure 564.

Figure 564. Clip Information Palette - Color Balance Filter



The Color Balance dialog shown in Figure 565 appears.

Figure 565. Color Balance Dialog



4. Adjust the Color Balance filter settings as explained below.

5. Click the **OK** button to apply the settings and close the dialog.

Sliders

Move the slider for, Chroma, Brightness, Contrast or the color range you wish to adjust. The results are previewed according to preview settings.

Safe Color Checkbox

Select this option to keep video signal adjustments within the YUV safe color space.

Preview Settings

The filter preview mode and settings can be adjusted to provide the preferred filter effect verification method. Preview Settings are common to many of the color correction filters. See *Preview Settings* *on page 494*, for more information.

KeyFrame Settings

The Color Balance can be adjusted at each key frame to provide the preferred filter effect. Keyframe settings are common to many of the color correction filters. See *Keyframe Settings* *on page 497*, for more information.

Default Button

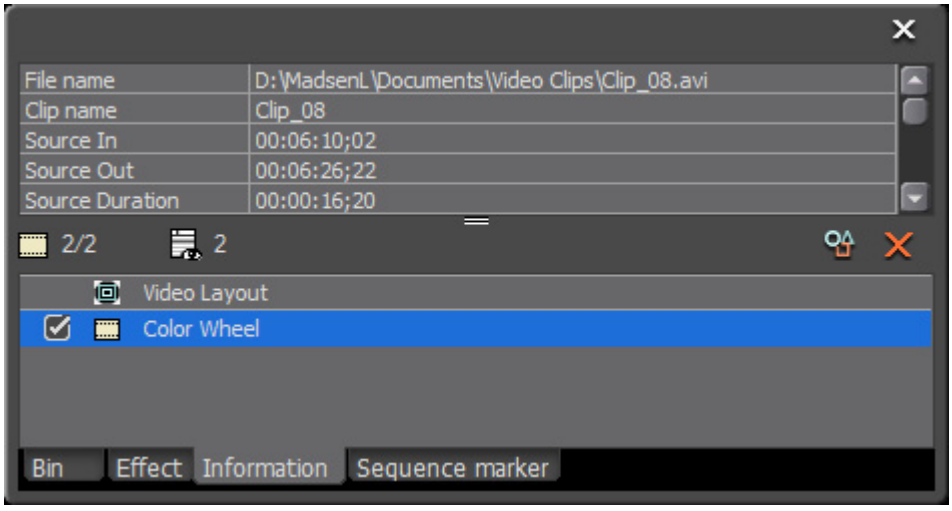
When clicked, the **Default** button in the lower left of the Color Balance dialog deletes all key frames and returns all settings to the defaults.

Color Wheel Adjustments

Once the Color Wheel filter has been applied to a clip, you can adjust the Color Wheel filter settings by following these steps:

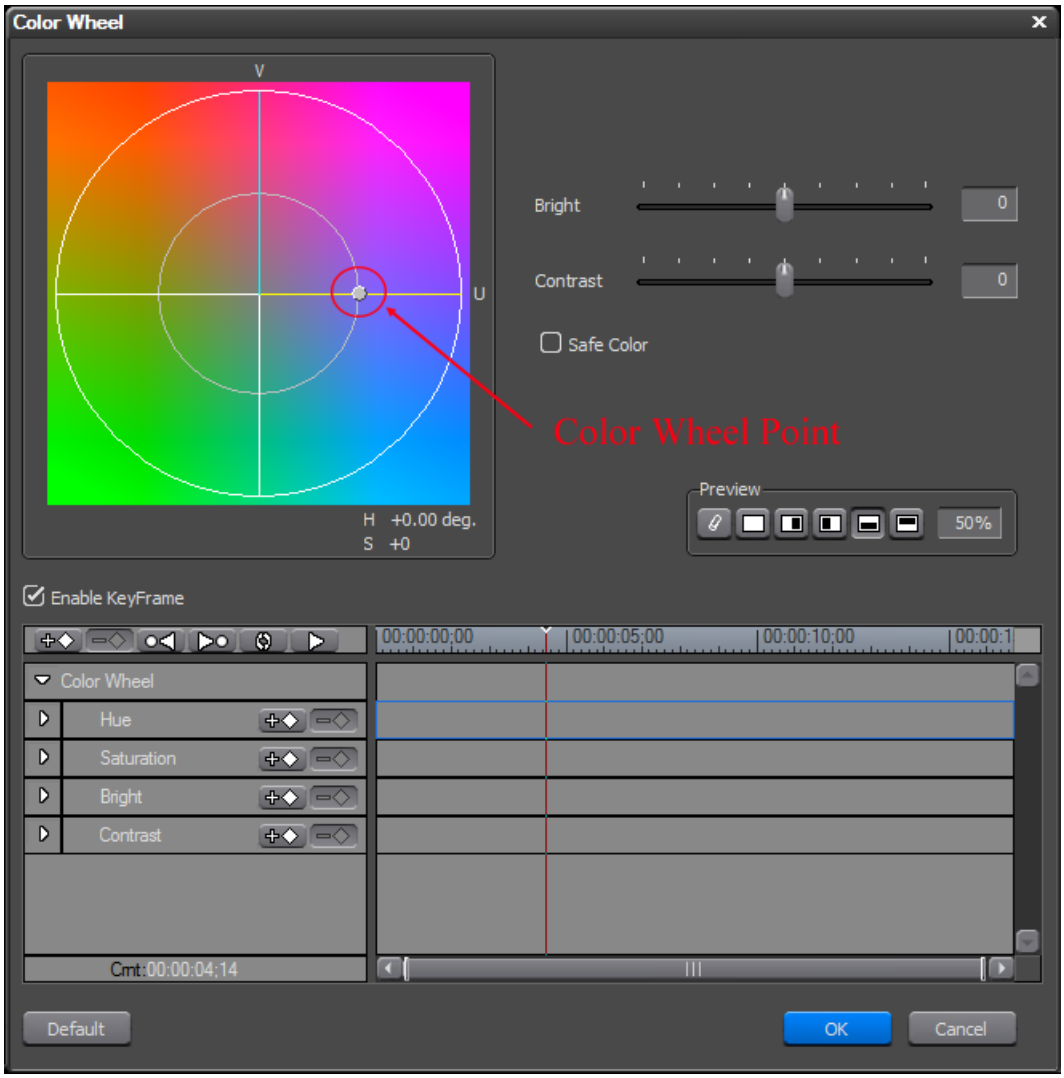
1. Select the clip to which the Color Wheel filter has been applied.
2. Display the Information Palette. For more information concerning the Information Palette, see *Information Palette* *on page 566*.
3. In the Information Palette, double-click the Color Wheel filter as illustrated in Figure 566.

Figure 566. Clip Information Palette - Color Wheel Filter



The Color Wheel dialog shown in Figure 567 appears.

Figure 567. Color Wheel Dialog



4. Adjust the Color Wheel filter settings as explained below.

5. Click the **OK** button to apply the settings and close the dialog.

Color Wheel Point

Drag the color wheel point from the center of the circle to the outer right edge to adjust the saturation (chroma). The chroma increases as the color point approaches the outer edge and decreases when moved toward the center point.

Wheel

Rotate the wheel by dragging toward the desired color tone.

Brightness/Contrast Sliders

Adjust the brightness (luminance) and contrast by moving the sliders. The results are previewed according to preview settings.

Preview Settings

The filter preview mode and settings can be adjusted to provide the preferred filter effect verification method. Preview Settings are common to many of the color correction filters. See *Preview Settings* *on page 494*, for more information.

KeyFrame Settings

The Color Wheel can be adjusted at each key frame to provide the preferred filter effect. Keyframe settings are common to many of the color correction filters. See *Keyframe Settings* *on page 497*, for more information.

Default Button

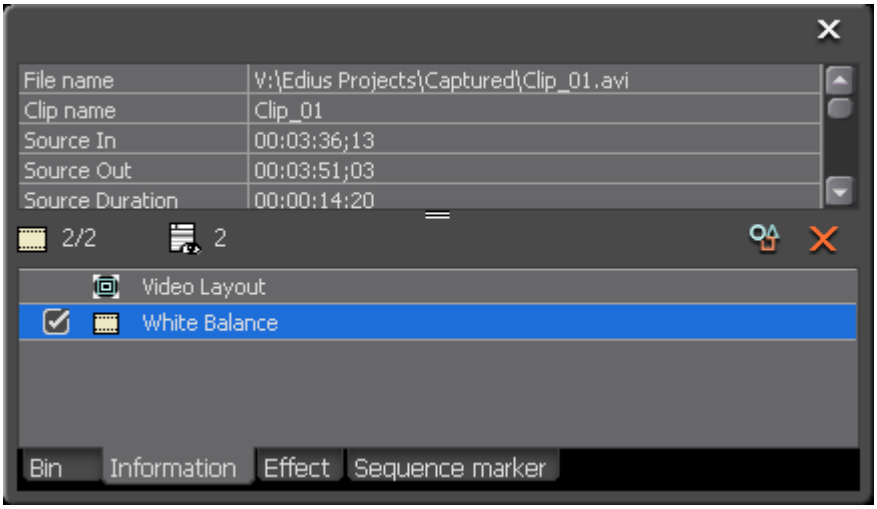
When clicked, the **Default** button in the lower left of the Color Wheel dialog deletes all key frames and returns all settings to the defaults.

White Balance Adjustments

Once the White Balance filter has been applied to a clip, you can adjust the White Balance filter settings by following these steps:

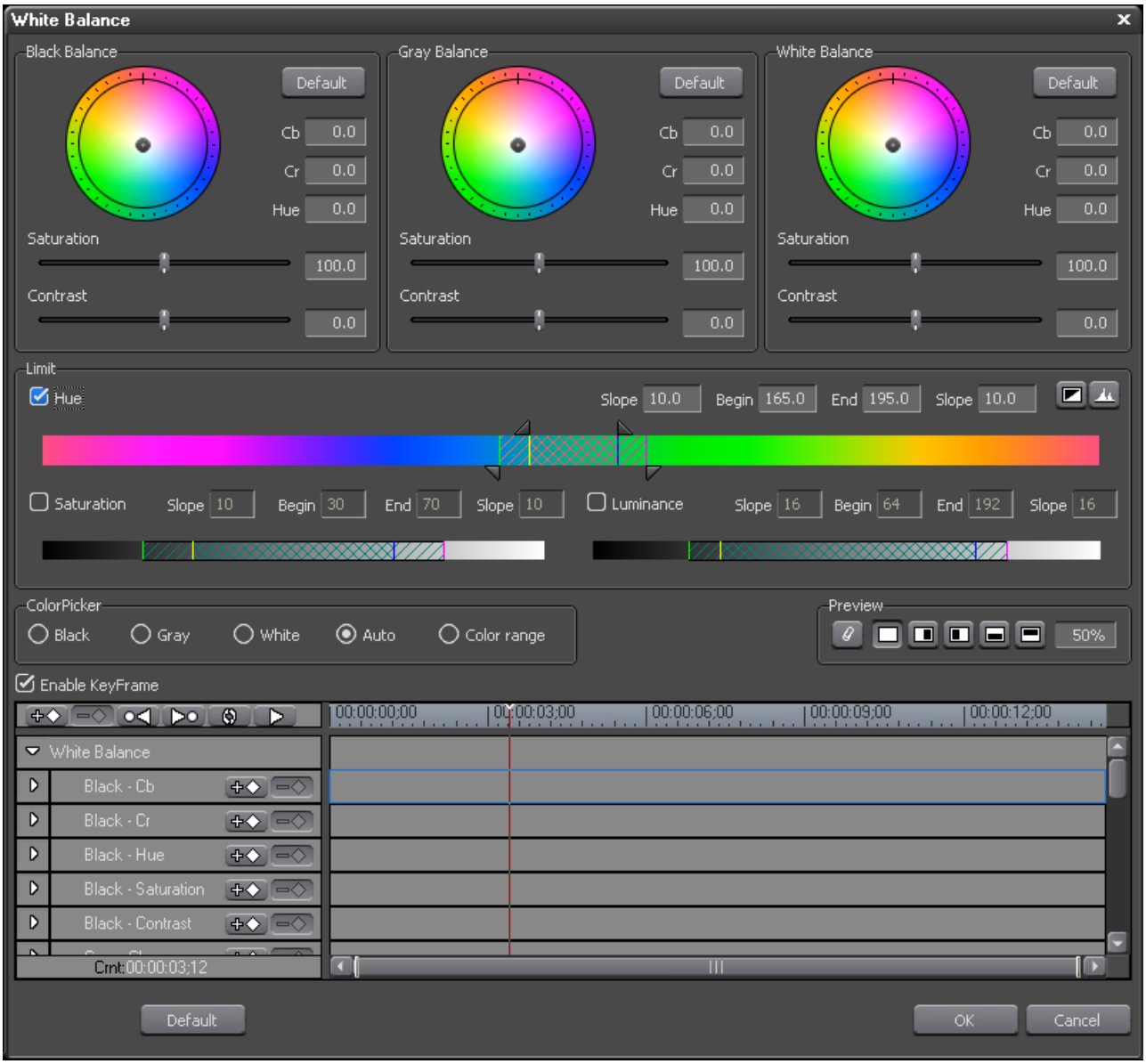
1. Select the clip to which the White Balance filter has been applied.
2. Display the Information Palette. For more information concerning the Information Palette, see *Information Palette* *on page 566*.
3. In the Information Palette, double-click the White Balance filter as illustrated in Figure 568.

Figure 568. Clip Information Palette - White Balance Filter



The White Balance dialog shown in Figure 569 appears.

Figure 569. White Balance Dialog



4. Adjust the White Balance settings as explained below.

5. Click the **OK** button to apply the settings and close the dialog.

Balance Color Wheels and Sliders

Drag the point in the center of each wheel to correct white balance (highlights), black balance (shadows) and grey balance (intermediate). The color wheel point adjusts the hue. The sliders adjust saturation (chroma) and contrast.

Limits

The limit tools provide color correction within a specified range. Check boxes for “Hue”, “Saturation” and “Luminance” activate the correction tools and numeric entry fields for that video element.

When the limit tools are activated, the triangle sliders are active to allow limit adjustments. The numeric entry fields (slope, begin, end, slope) for that setting are also activated. Either method sets the limit parameters. See Figure 570.

Figure 570. Hue Limit Tools

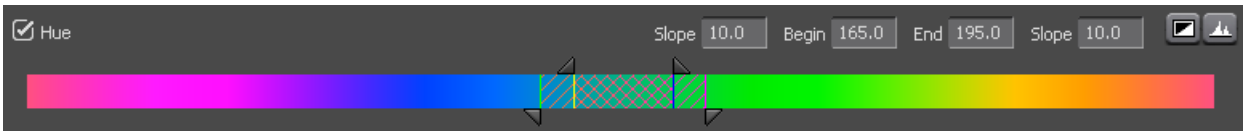
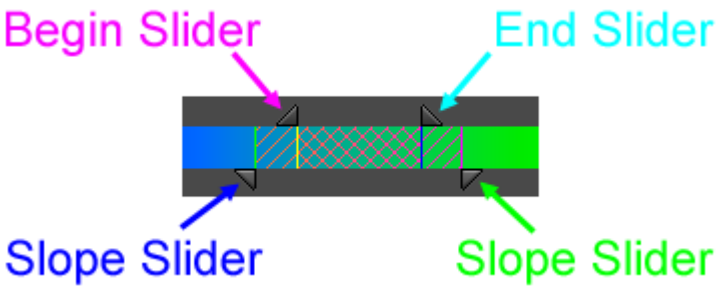


Figure 571 illustrates the sliders and the text fields to which they correspond.

Figure 571. Color Balance Limit Sliders



Note Although the sliders shown in Figure 571 are for setting hue limits, the sliders on the Saturation and Luminance limit bars function in the same manner.

Scale Range

The Hue scale has a range of 0 to 359

The Saturation scale has a range of 0 to 100

The Luminance scale has a range of 0 to 255

Gradual Increase

The range between the first Slope slider and the Begin slider is range over which adjustments will be gradually increased from 0 to 100%.

Hold at 100%

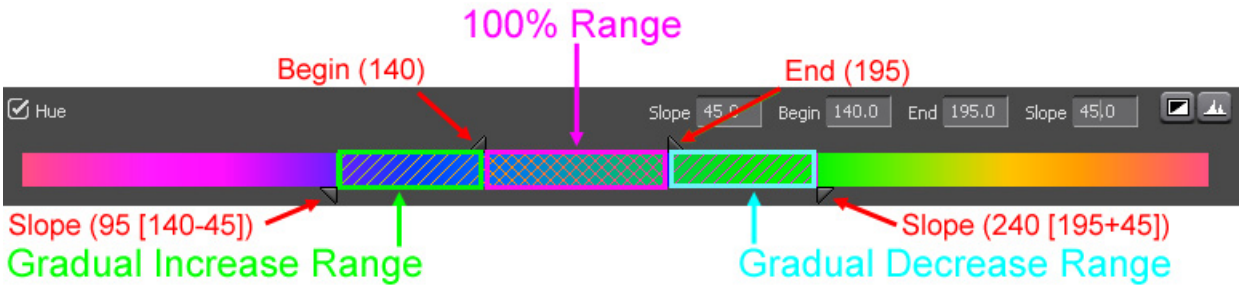
The range between the Begin slider and the End slider is the range over which the adjustments will be maintained at 100%.

Gradual Decrease

The range between the End slider and the second Slope slider is the range over which adjustments will be gradually decreased from 100% to 0.

Details are presented in Figure 572.

Figure 572. Color Balance Hue Limit Sliders Detail



- Key Display

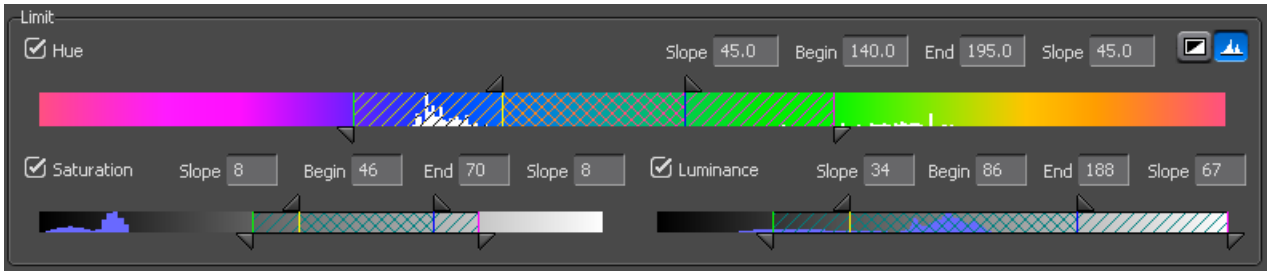
Click the **Key Display** button to display the applied limit effects. The area with effects applied at 100% is white. The area with no effects applied (0) is black. See Figure 573 for an example.

Figure 573. Color Balance Key Display

- Histogram Display

Click the Histogram Display button to display a histogram for Hue, Saturation and Luminance (all that are active) on the respective limit bars as illustrated in Figure 574.

Figure 574. Color Balance Histogram Display



Color Picker

The color picker allows a selected color from the image in the Player or Recorder to be set to “Black”, “Gray” or “White.

For more information on using the Color Picker, see *Correcting Colors with the Color Picker* *on page 506*.

Preview Settings

The filter preview mode and settings can be adjusted to provide the preferred filter effect verification method. Preview Settings are common to many of the color correction filters. See *Preview Settings* *on page 494*, for more information.

KeyFrame Settings

The White Balance can be adjusted at each key frame to provide the preferred filter effect. Keyframe settings are common to many of the color correction filters. See *Keyframe Settings* *on page 497*, for more information.

Default Buttons

When clicked, the **Default** button in each balance frame returns those balance settings to the defaults. The **Default** button in the lower left of the White Balance dialog deletes all key frames and returns all settings to the defaults.

Correcting Colors with the Color Picker

The Color Picker can be used to correct an entire image or just a selected range of colors.

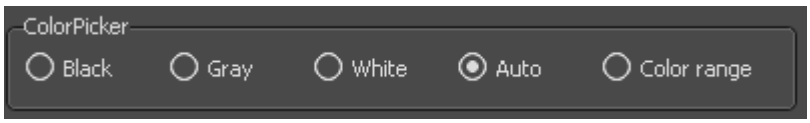
To correct colors in an entire image, do the following:

1. Select the clip to which the White Balance filter has been applied.
2. Display the Information Palette. For more information concerning the Information Palette, see *Information Palette* *on page 566*.
3. In the Information Palette, double-click the White Balance filter.

The White Balance dialog appears (see Figure 569).

4. From the Color Picker, select the color to which you wish to adjust a selected color. See Figure 575.

Figure 575. White Balance Color Picker



Note If 'Auto" is selected, the brightness of the selected color is automatically determined. Bright colors are adjusted to white and darker colors are adjusted to black.

5. In the Recorder, select the color which you wish to correct to the color selected in the color picker.

The color is corrected.

Note Colors may also be adjusted by using the Black, Gray or White balance color circles and the Saturation and Contrast sliders. For example, select 'White" from the color picker and then click a color point in the color wheel that you want to adjust to white.

To correct colors in a specific range, do the following:

1. Select the clip to which the White Balance filter has been applied.
2. Display the Information Palette. For more information concerning the Information Palette, see *Information Palette* *on page 566*.
3. In the Information Palette, double-click the White Balance filter.

The White Balance dialog appears (see Figure 569).

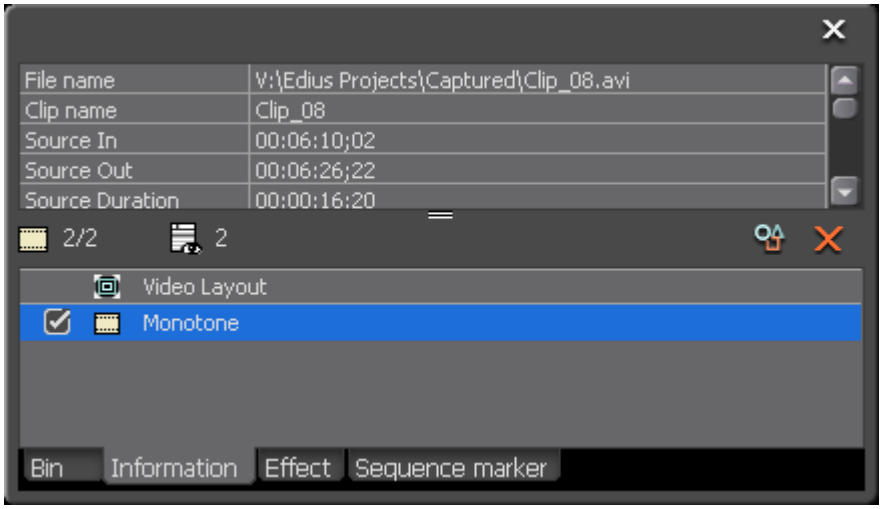
4. Select "Color range" from the Color Picker.
5. Select the color range in the Recorder by clicking on a color and holding down the **[SHIFT]** key while clicking on color points to be included in the range.

Monotone Filter Adjustments

Once the Monotone filter has been applied to a clip, you can adjust the Monotone filter settings by following these steps:

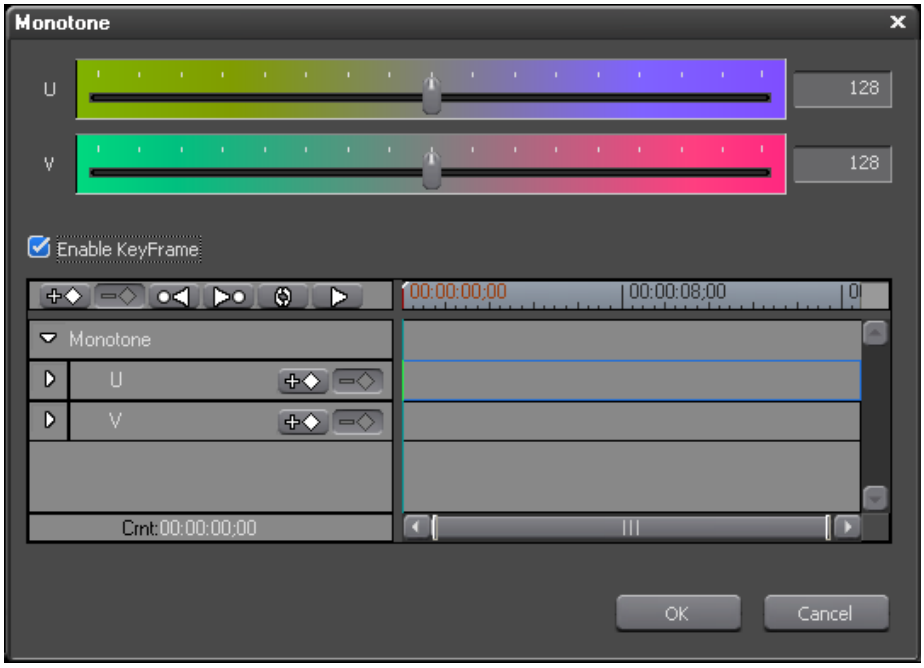
1. Select the clip to which the Monotone filter has been applied.
2. Display the Information Palette. For more information concerning the Information Palette, see *Information Palette* *on page 566*.
3. In the Information Palette, double-click the Monotone filter as illustrated in Figure 568.

Figure 576. Clip Information Palette - Monotone Filter



The Monotone dialog shown in Figure 569 appears.

Figure 577. Monotone Dialog



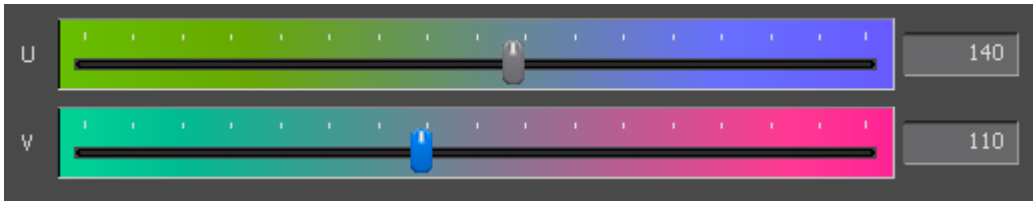
4. Adjust the Monotone settings as explained below.

5. Click the **OK** button to apply the settings and close the dialog.

Sliders

The color tone can be adjusted by moving the "U" and "V" sliders to get the desired color tone effect as illustrated in Figure 578 and Figure 579.

Figure 578. Monotone Sliders



These slider settings result in the color tone effect shown in Figure 579.

Figure 579. Monotone Color Tone Preview

KeyFrame Settings

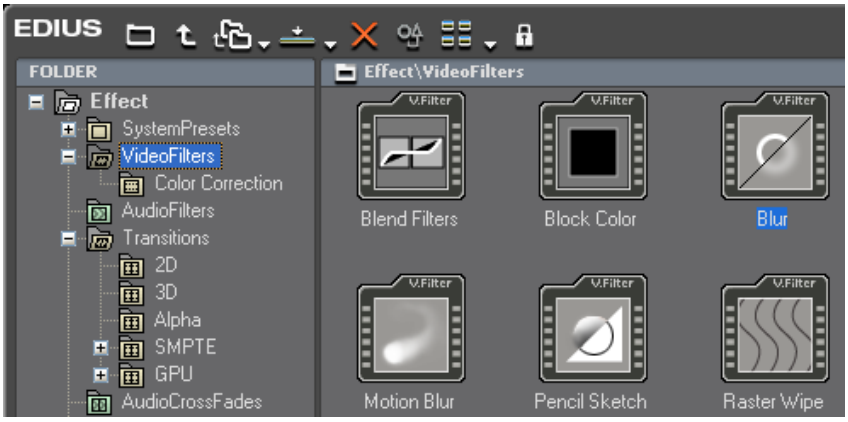
The Monotone settings can be adjusted at each key frame to provide the preferred filter effect. Keyframe settings are common to many of the color correction filters. See *Keyframe Settings* *on page 497*, for more information.

Apply Video Filters

To apply an video filter to a clip, follow these steps:

1. Select the VideoFilters tree in the Effect Palette to display all video filters as illustrated in Figure 580.

Figure 580. Select Video Filter



2. Drag and drop the selected filter on the desired clip on the Timeline.

Alternative Method:

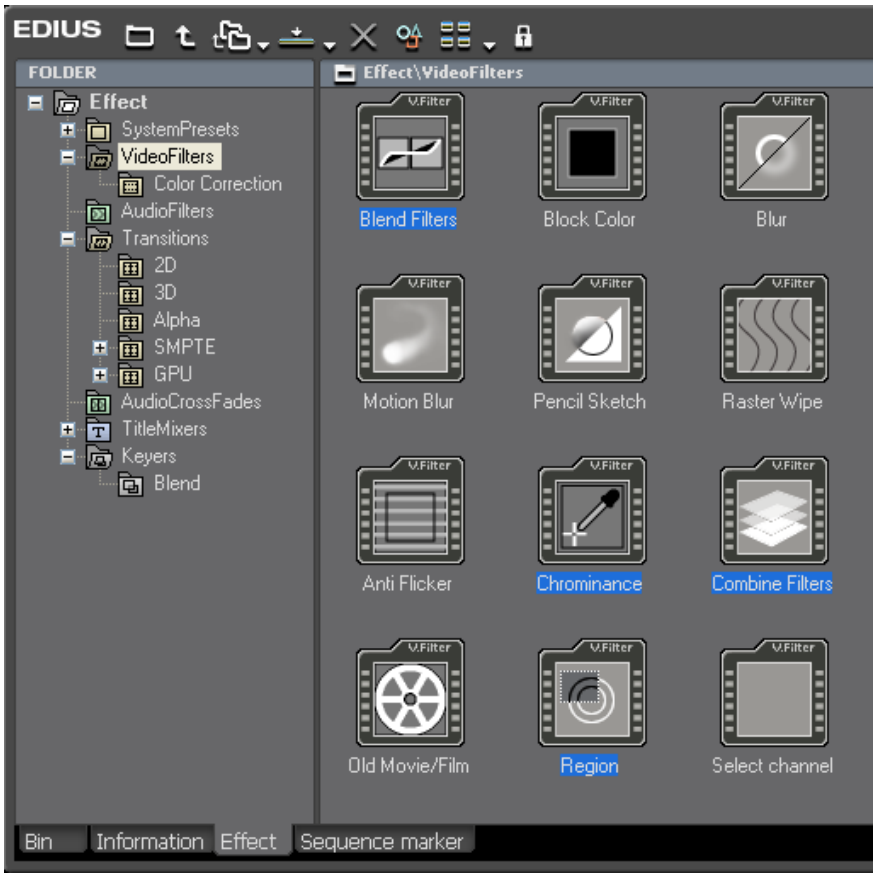
Use the right-click method explained in *Right-Click Menu* *on page 488*.

Combining Multiple Filters

Some video filters allow a combination of two or more filters to be applied and configured from a single filter dialog. These filters (highlighted in Figure 581) are:

- Region
- Chrominance
- Combine Filters
- Blend Filters

Figure 581. Combination Filters



If any of these filters are applied to a clip, other filter(s) may be selected from a drop-down in the filter configuration dialog as illustrated in Figure 582 with Blend Filters.

Note User preset effects and system preset effects are available to be used in these filters; however, the Region filter does not allow selection of the “Old Movie/Film” and “Tunnel Vision” filters or any user preset or combined presets that use these filters.

Figure 582. Blend Filter Select Filter List

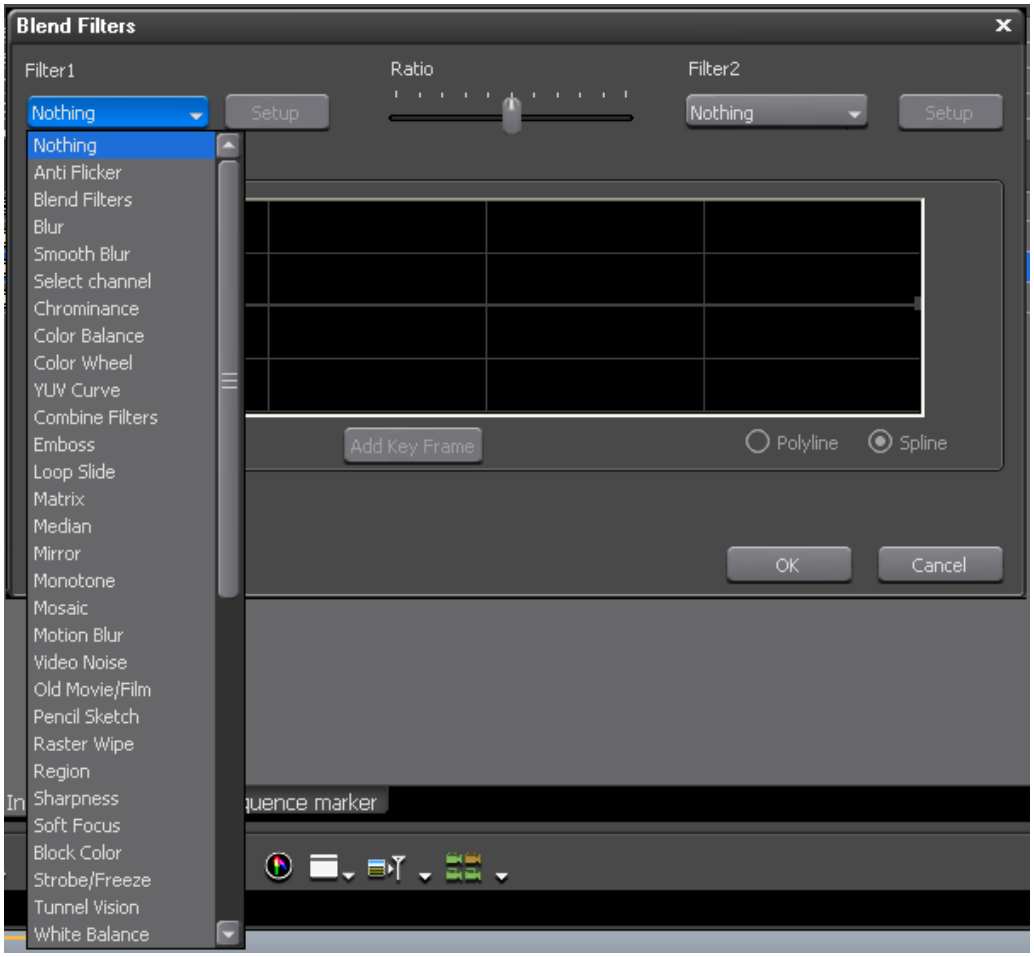
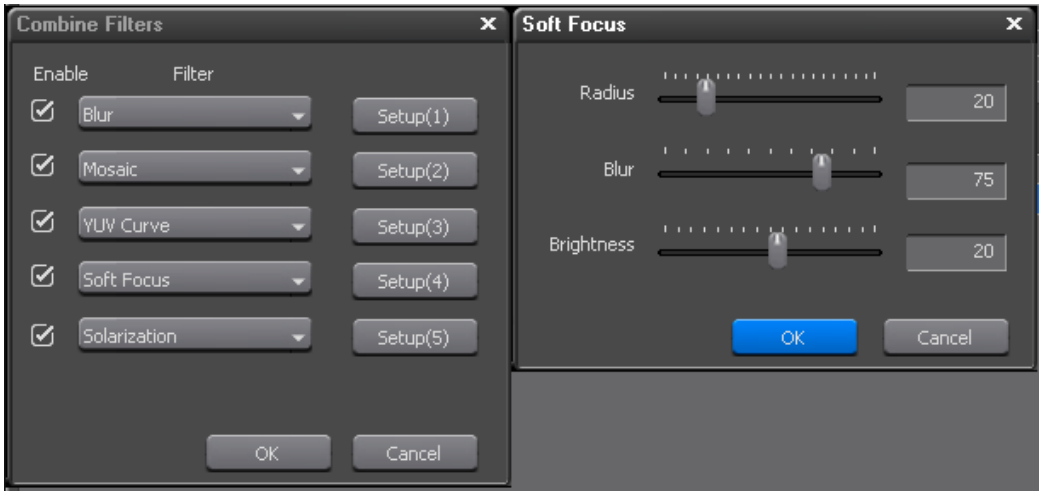


Figure 583 shows an example of the Combine Filters filter applied and the selection of five filters to apply to the clip. In this example, the “Soft Focus” filter has been assigned as the fourth filter and the **Setup(4)** button clicked to bring up the configuration dialog for the “Soft Focus” filter.

Figure 583. Combine Filters - Setup

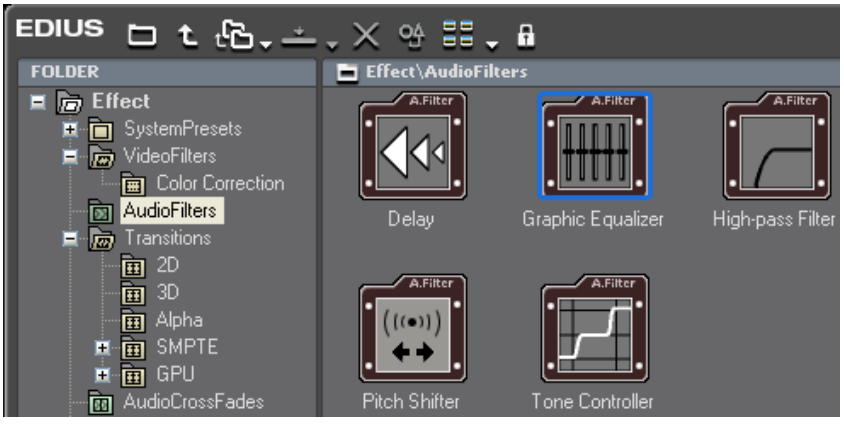


Apply Audio Filters

Audio filters are applied in the same was as video filters. To apply an audio filter to a clip, follow these steps:

1. Select the VideoFilters tree in the Effect Palette to display all video filters as illustrated in Figure 584.

Figure 584. Select Audio Filter



2. Drag and drop the selected filter on the desired audio clip on the Timeline.

Note When applying an audio filter to an audio clip, the waveform may be displayed to check the results of the effect. See *Adjusting Volume and Pan* *on page 643* for more information on displaying the waveform.

Alternative Method:

Use the right-click method explained in *Right-Click Menu* *on page 488*.

Adding Effects Between Clips

Effects such as transitions and audio cross fades may be added between clips.

Clip Margin

In Extend mode (see *Extend Mode* *on page 308* for more information), adding transitions or audio cross fades between clips requires that both clips have a margin. The margin is the portion of the video clip that is outside the range between the In and Out points.

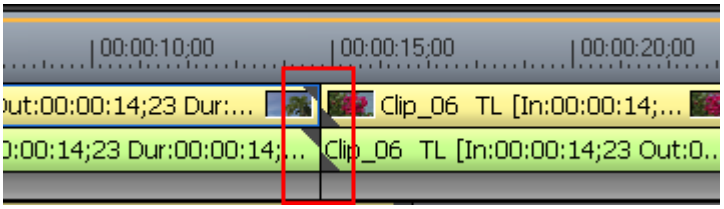
In Fix mode (see *Fix Mode* *on page 309* for more information), no margin is required between clips.

Note When adding transitions and cross fades, the length of the clips and the sequence changes depending upon the current editing mode (Extend or Fix).

No margin is present if the Out point of the first clip is set at the end of the clip and the In point of the second clip is at the beginning of the clip.

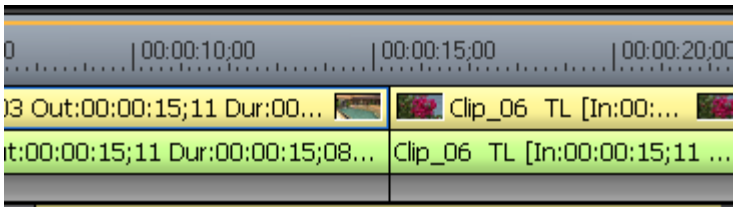
If there is no margin between clips, the black triangles illustrated in Figure 585 are present on the clips. The triangles indicate that the Out point of first clip is at the end of the clip and the In point of the second clip is at the beginning of the clip.

Figure 585. Clips with No Margin



If there is a margin between clips, the black triangles do not appear as shown in Figure 586.

Figure 586. Clips with Margin



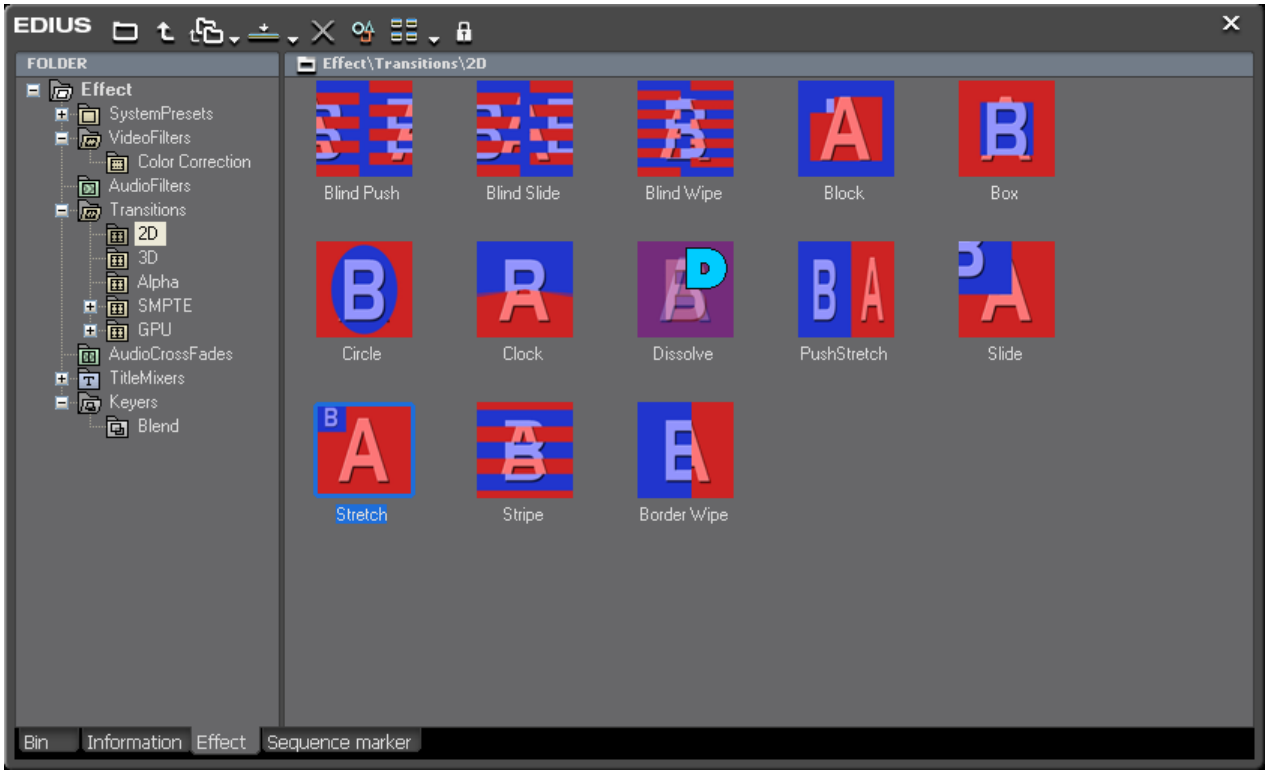
Clip Transitions

Transitions are effects that occur between clips as one clip is ending and the next clip is beginning.

To add a transition between clips, do the following:

1. Select "Transitions" in the Effect Tree of the Effect Palette.
2. Select the desired transition type from the effect view (see Figure 587) or the Effect>Transitions tree if the effect view is hidden.

Figure 587. Effect Palette - Transitions Effect View

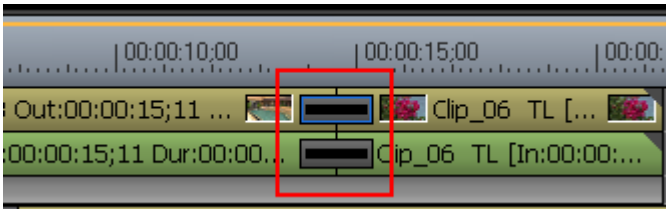


3. Drag and drop the selected transition effect at the point where the clips touch each other on the Timeline.

The transition indicator is added between the clips as illustrated in Figure 588.

Note The default audio cross fade is also added when a video transition is added. If you wish to disable the automatic addition of the audio cross fade, see *Insert Default Cross Fade in Transition* *on page 128* in *Timeline Settings*.

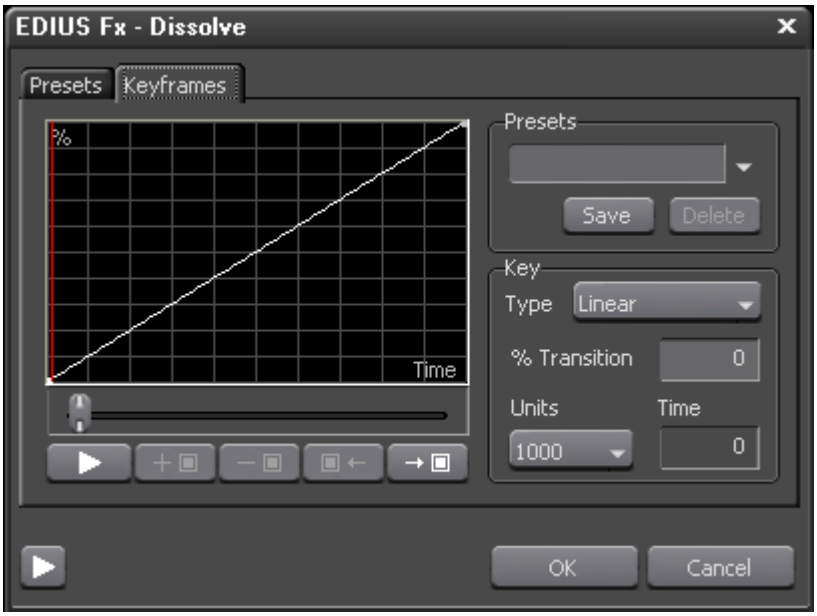
Figure 588. Transition Indicator Between Clips



4. Double-click the transition indicator (on an area other than the In/Out points or cut points) to display the transition settings dialog. The transition configuration dialog for the Dissolve transition effect is illustrated in Figure 589. The Settings dialog differs for each transition effect.

Note If the transition indicator is small and there is no area to double-click to open the settings dialog, right-click the transition indicator and select "Settings" from the menu or double-click the transition effect in the Information Palette.

Figure 589. Dissolve Transition Settings Dialog



5. Make any desired changes to the transition effect settings and click the **OK** button to close the dialog.

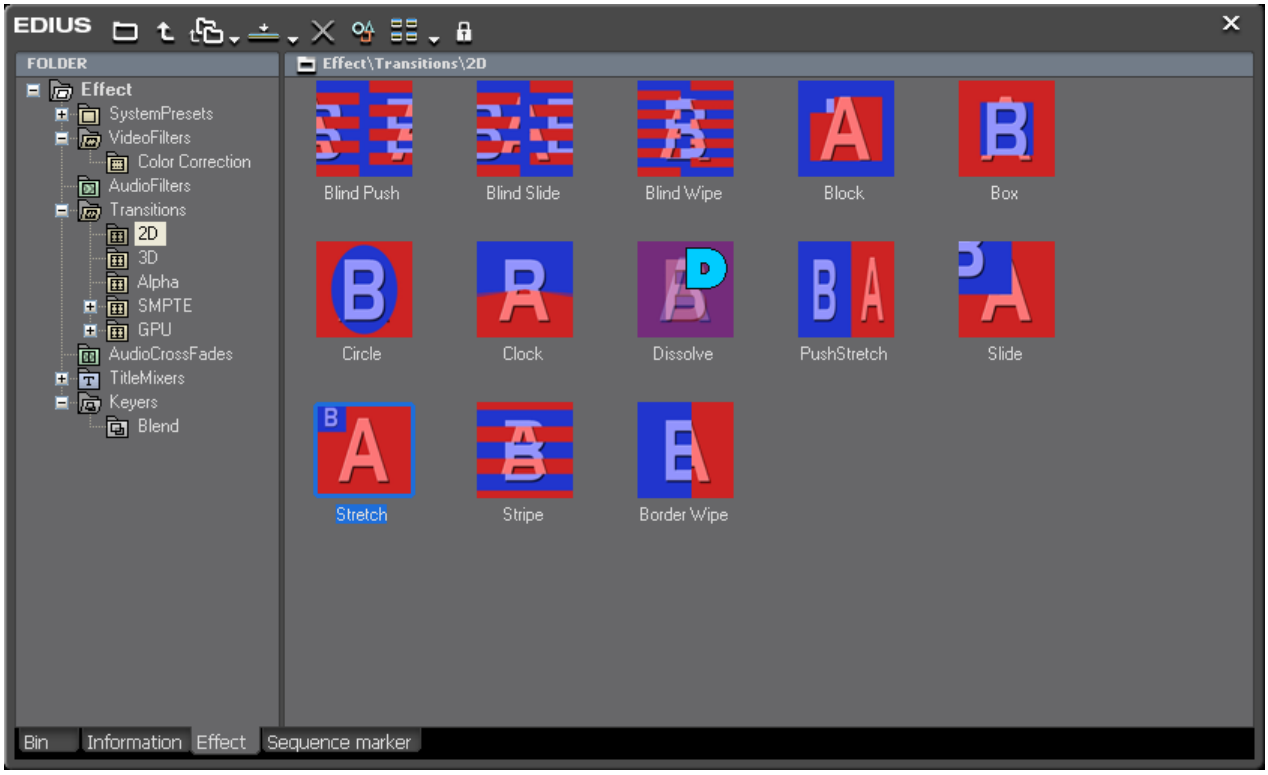
Track Transitions

Transitions may be applied in the mixer area at the point where clips transition on a track. To add a track transition, do the following:

1. Select "Transitions" in the Effect Tree of the Effect Palette.

2. Select the desired transition type from the effect view (see Figure 587) or the Effect>Transitions tree if the effect view is hidden.

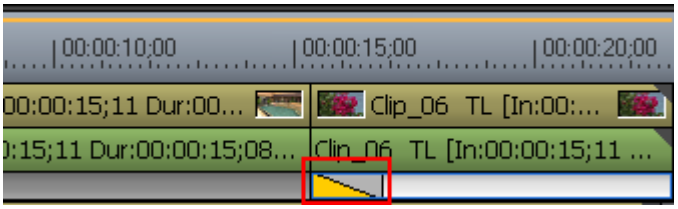
Figure 590. Effect Palette - Transitions Effect View



3. Drag and drop the selected transition effect to the mixer area at the point where the clips touch each other on the Timeline.

The transition indicator is added to the mixer area as illustrated in Figure 591.

Figure 591. Track Transition Indictor in Mixer Area

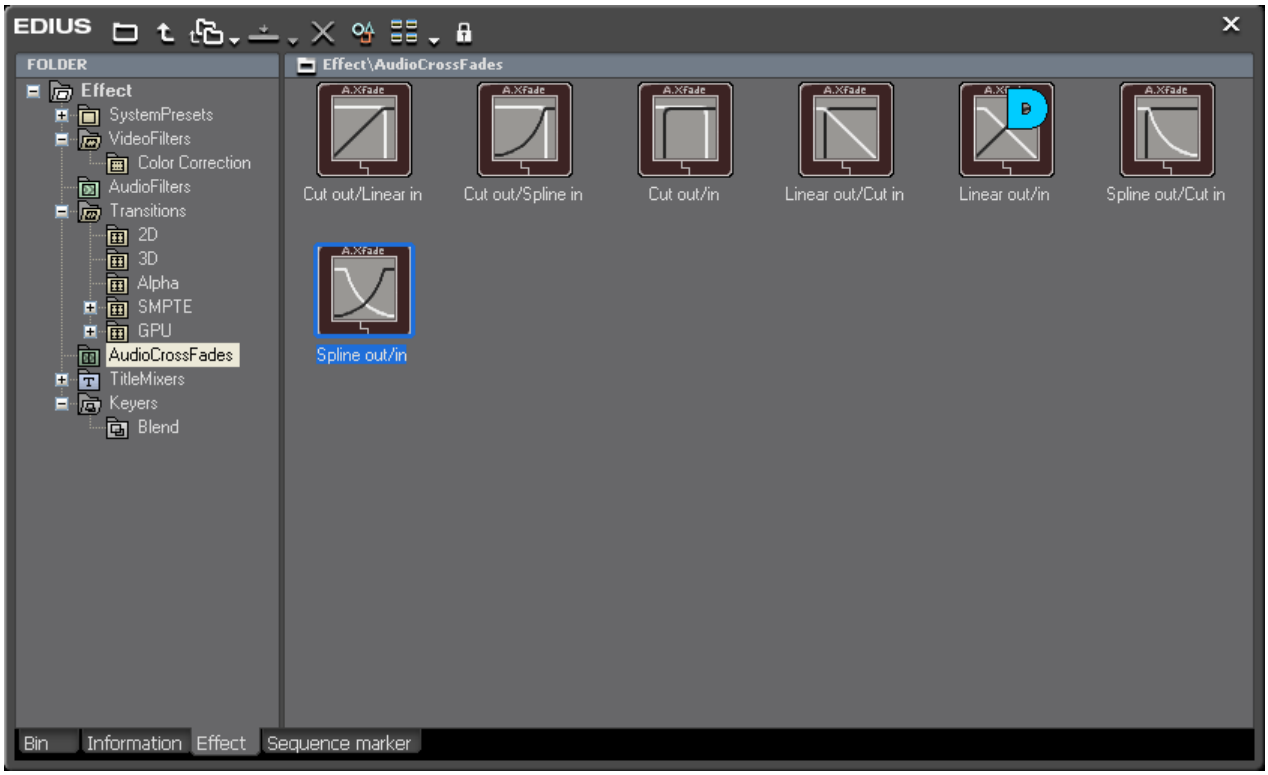


Audio Cross Fades

Audio cross fades may be applied at the point at which the audio is transitioning from one clip to another.

1. Select "AudioCrossFades" in the Effect Tree of the Effect Palette.
2. Select the desired cross fade type from the effect view (see Figure 587) or the Effect>AudioCrossFades tree if the effect view is hidden.

Figure 592. Effect Palette - Transitions Effect View

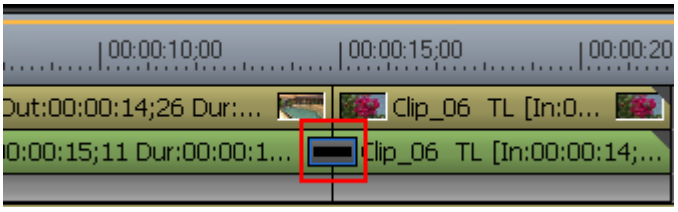


3. Drag and drop the selected cross fade effect at the point where the audio clips touch each other on the Timeline.

Note By default, the default video transition is not added automatically when an audio cross fade is added between clips. If you wish to enable the automatic addition of the video transition when a cross fade is added, see *Insert Default Transition in Cross Fade* *on page 128* in *Timeline Settings*.

The cross fade indicator is added between the clips as illustrated in Figure 593.

Figure 593. Audio Cross Fade Indicator Between Clips



Apply Default Effects

Default effects may be quickly applied to clips on the Timeline.

The defaults effects are as follows:

- Video Transitions - Dissolve
- Audio Cross Fades - Linear Out/In
- Title Mixers - Fade

Note When in the Effect View of the Effect Palette, default effects are indicated by a blue "D" on the effect icon. See *Default Effects* *on page 485* for more information.

To apply a default effect, follow these steps:

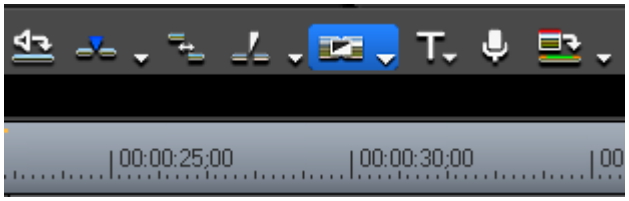
1. Select a clip to which to apply a default effect.

Note The clip on either side of the desired transition point may be selected

2. Click the **Set default transition** button (highlighted in blue in Figure 594) on the Timeline.

Note An alternative method is to press the [**CTRL**]+[**P**] keys on the keyboard.

Figure 594. Timeline Set Default Transition Button



The default transition(s) is added at the transition point nearest to the Timeline cursor position.

To select the point at which to add the transition, click the list button (▽) of the **Set default transition** button and select one of the following from the menu:

- Create Cursor ([**CTRL**]+[**P**]) - Add default transition(s) at the transition point neared to the current cursor position.
- Create Clip In ([**SHIFT**]+[**ALT**]+[**P**]) - Add default transition(s) at the In point of the currently selected clip.
- Create Clip Out ([**ALT**]+[**P**]) - Add default transition(s) at the Out point of the currently selected clip.

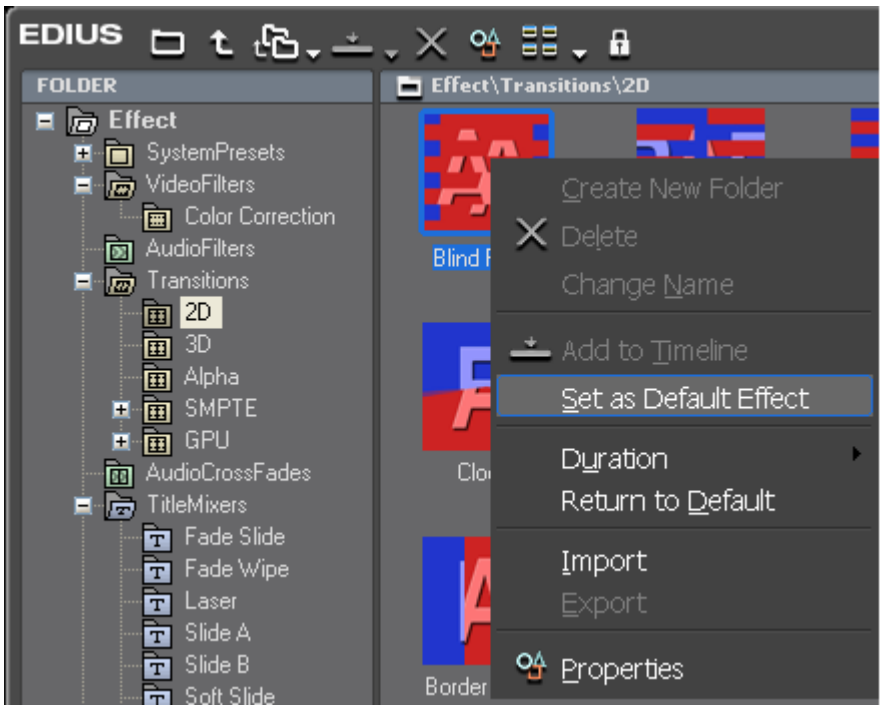
Changing Default Effects

The video transition, audio cross fade and title mixer effects assigned as the defaults may be changed.

To change the defaults, do the following:

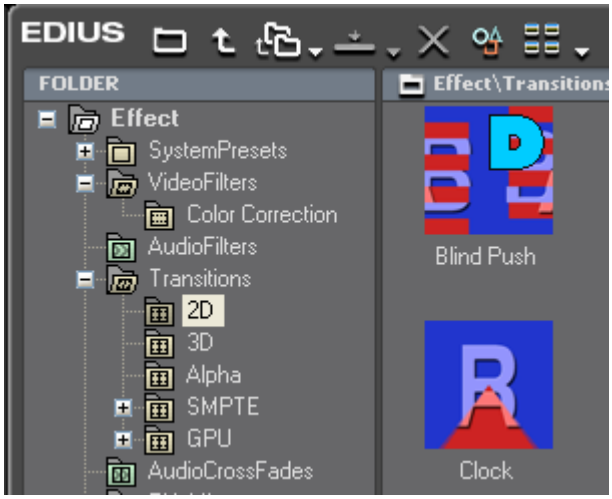
In the Transitions, AudioCrossFades or TitleMixers tree in the Effect Palette, or in the Effect View, right click the effect to be set as the default and select “Set as Default Effect” from the menu as shown in Figure 595.

Figure 595. Effect Right-Click Menu - Set as Default Effect



The effect set as the default has a blue “D” displayed on its icon as illustrated in Figure 596.

Figure 596. Default Effect Icon



Note If the effect view is hidden, the “D” appears on the effect name in the Effect tree.

Changing the Length of a Transition or Cross Fade

To change the length of a transition or audio cross fade between two clips, do the following:

1. Move the cursor to the end of the transition or audio cross fade.

The cursor changes shape as shown in Figure 597 for a clip transition or audio cross fade and as shown in Figure 598 for a track transition.

Figure 597. Change Transition Length Cursor - Clip Transition/Audio Cross Fade

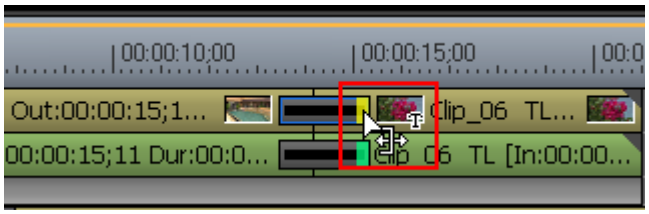
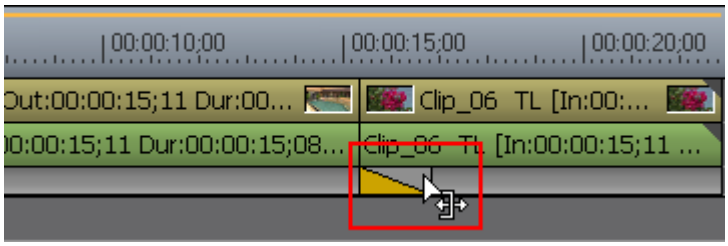


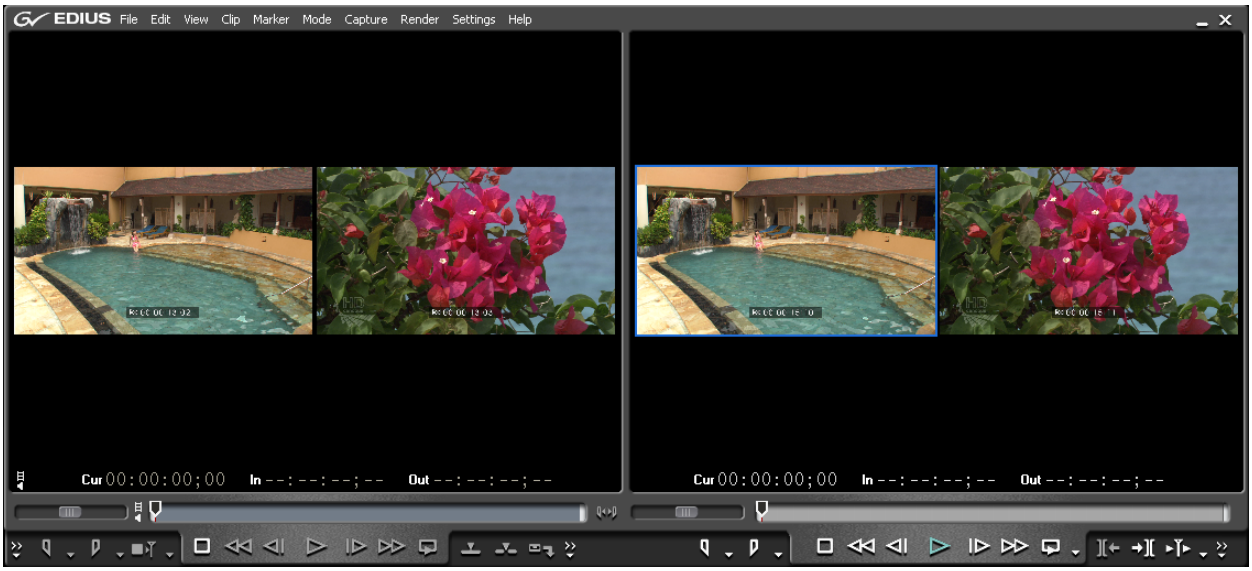
Figure 598. Change Transition Length Cursor - Track Transition



2. Click and drag the cursor to shorten or lengthen the transition.

Two images are displayed in both the Player and the Recorder as illustrated in Figure 599. The images in the Player represent the transition start frame. The images in the Recorder display the transition end frame. As the transition length is adjusted, you can see the results in the Player and Recorder.

Figure 599. Change Transition Length Preview



Note In Extend mode, the transition length may be shortened or lengthened by only the clip margin.

Title Mixer transition lengths are changed in the same manner as described above and as illustrated in Figure 600.

Figure 600. Change Transition Length Cursor - Title Mixer

Related Operations:

In the Mixer area, the length of track transitions and title mixers may also be changed by the following methods:

- Mixer Area In Point: **[SHIFT]**+**[ALT]**+**[U]**
- Mixer Area Out Point: **[CTRL]**+**[ALT]**+**[U]**

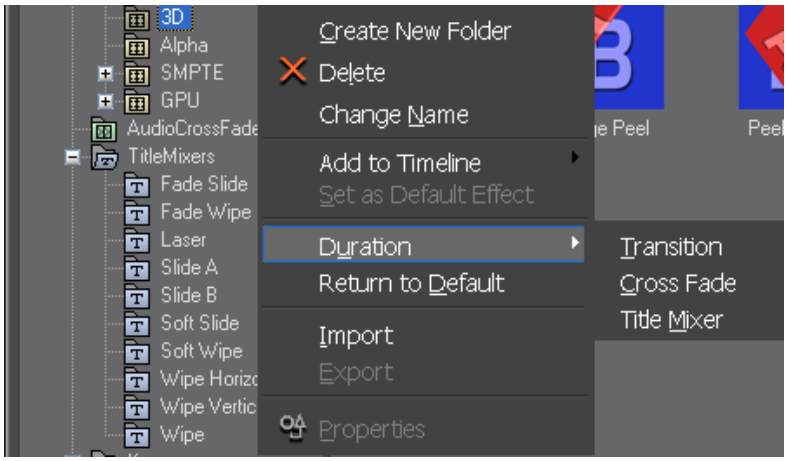
Changing Default Effect Duration

The default duration for video transitions, audio cross fades and title mixer effects can be changed.

To change the default duration, execute the following steps:

1. Right-click on the Effect Palette and select "Duration" from the menu as illustrated in Figure 601.

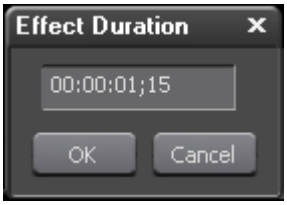
Figure 601. Effect Palette Right-Click Menu - Duration



2. Select the effect type (Transition, Cross Fade or Title Mixer) for which you wish to change the default duration.

A Duration dialog appears as shown in Figure 602.

Figure 602. Effect Duration Dialog



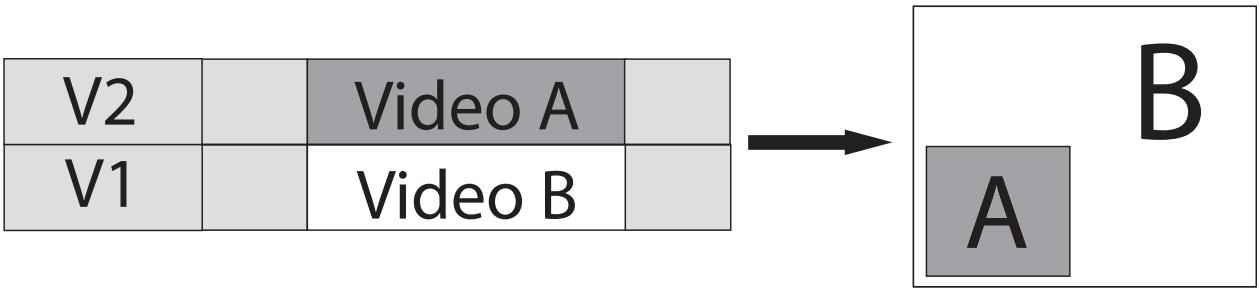
3. Enter the desired duration and click the **OK** button.

Creating Video Composites

Video composites are created by overlaying one video element over another in various ways as explained in this section.

When overlaying one video clip on another, the layering order is determined by the track order. For example, if video “B” is on the V1 track and video “A” is on the V2 track, when video ‘A” is composited with video “B” in a picture-in-picture overlay, video “B” is the background and video “A” occupies the picture-in-picture window as illustrated in Figure 603.

Figure 603. Video Overlay Priority



Composition

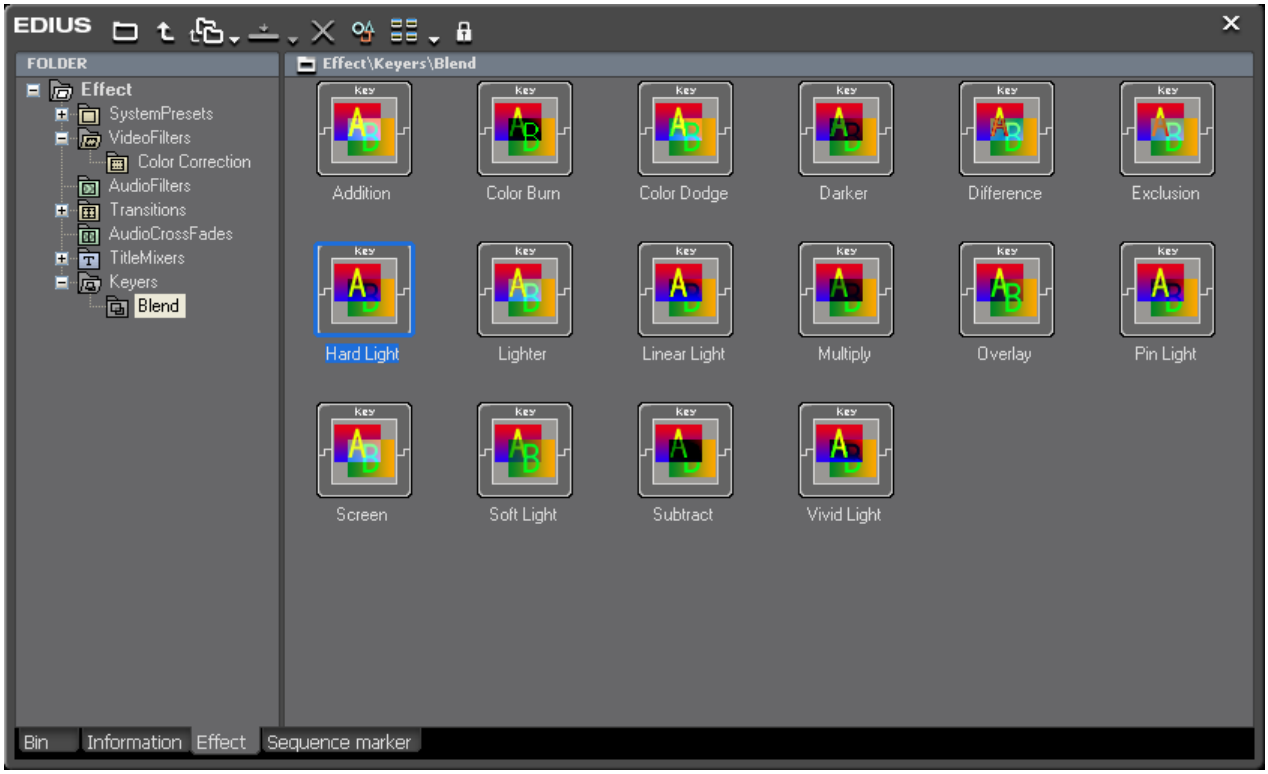
A composition video is created by layering two video sources in a blend effect.

To create a composition video, do the following:

1. Select the “Keyers” tree from the Effect Palette as shown in Figure 604.
2. Select the “Blend” tree and drag and drop the desired blend effect to the Mixer area of a clip.

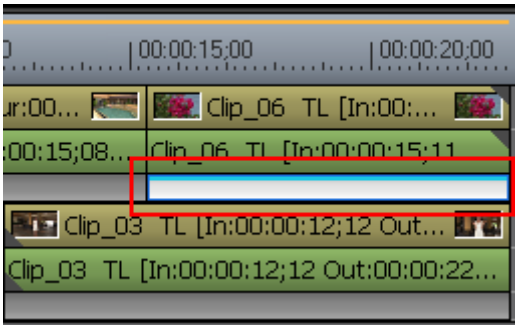
Note If the Effect view is hidden, the blend effects will be listed under the Blend tree in the Effect Palette.

Figure 604. Blend Composition Effects



Clips with Keyer effects applied display an aqua blue line at the top of the mixer area as illustrated in Figure 605.

Figure 605. Keyer Effects In Mixer Area



Picture in Picture

A picture in picture effect is where one video is overlaid over another with one serving as the background video while the other is confined to a certain area of the screen over the background as shown in Figure 603 on page 524.

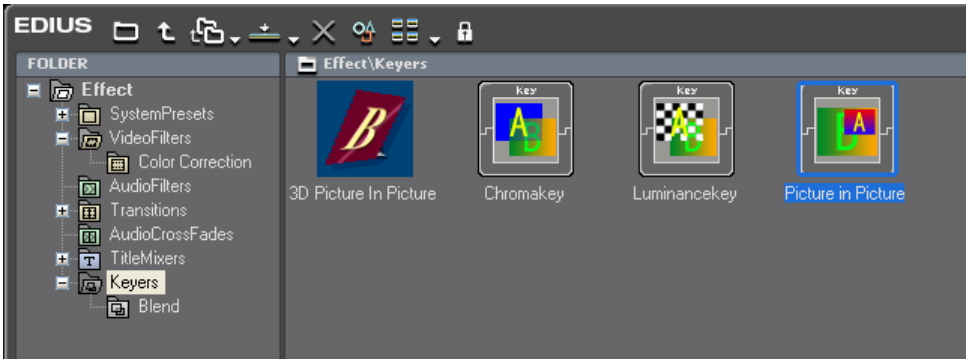
To create picture in picture effect, follow these steps:

1. Select the “Keyers” tree from the Effect Palette as shown in Figure 606.

2. Drag and drop the Picture in Picture effect to the Mixer area of the clip that will be in the overlay window.

Note If the Effect view is hidden, the keyer effects will be listed under the Keyers tree in the Effect Palette.

Figure 606. Picture In Picture Effect



Clips with Keyer effects applied display an aqua blue line at the top of the mixer area.

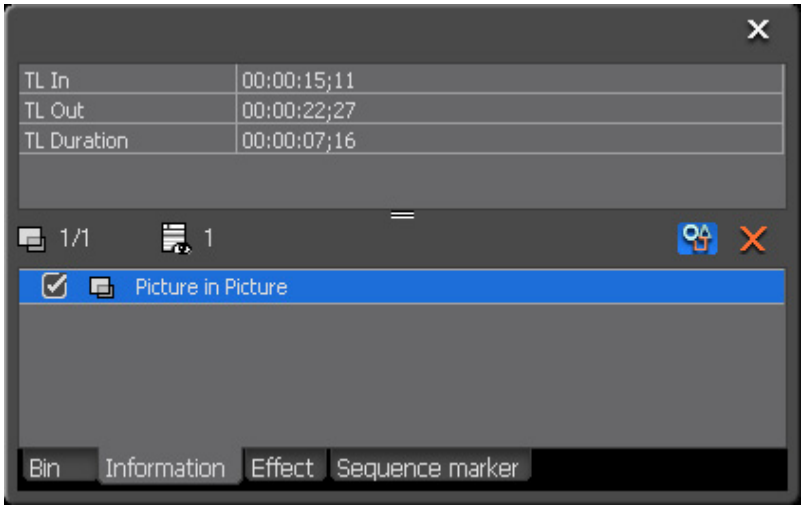
Configuring Picture in Picture Effects

To configure a Picture in Picture effect that has been applied to a clip, do the following:

1. Click the Mixer area of the clip to which the Picture in Picture effect has been applied

2. Display the Information Palette (see *Show/Hide the Information Palette on page 566* for more information) as shown in Figure 607.

Figure 607. Information Palette - Picture in Picture Effect

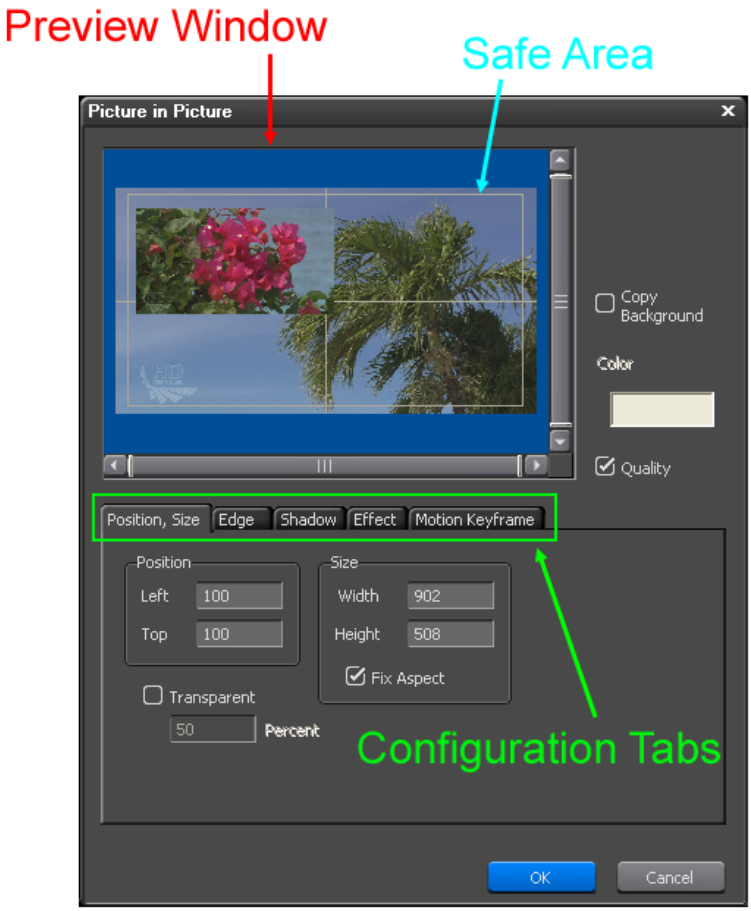


3. Double-click the Picture in Picture effect in the Information Palette.

Note You may also select the Picture in Picture effect and click the **Settings** button (highlighted in blue in Figure 607) in the Information Palette.

The Picture in Picture dialog shown in Figure 608 appears

Figure 608. Picture in Picture Configuration Dialog



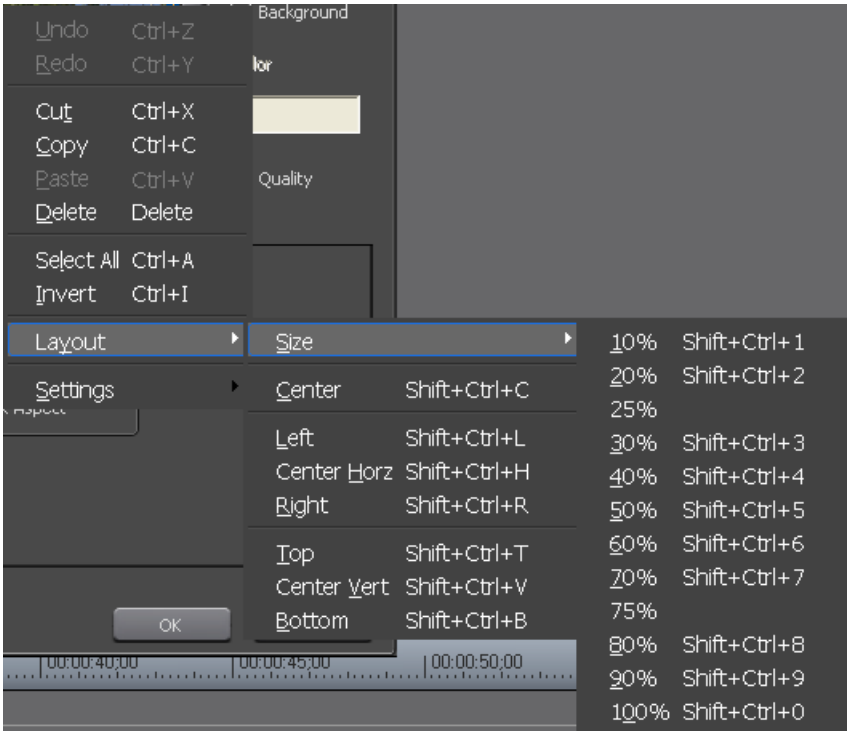
4. Configure the effect settings per the explanations below and click the **OK** button to close the dialog.

Preview Window

The preview window shows the effects of configuration settings such as position, size and motion in the overlay window.

Note Right-click the preview window and select Layout menu options (shown in Figure 609) to set the size and position of the overlay window as an alternative to doing so with the “Position, Size” tab.

Figure 609. Preview Window Right-Click Menu - Layout Options



Safe Area

The safe area is the boundary close to the edges of the screen that marks the area that should always be displayed regardless of the monitor used to display the video. The overlay window should be kept within the safe area

Position, Size Tab

The settings in this tab determine the position and size of the overlay window for the second video.

The position settings specify a number of pixels from the top left corner of the screen at which to anchor the top left corner of the overlay window.

The size settings specify the width and height in pixels of the overlay window beginning at the position defined in the positions settings as the top left corner of the overlay window.

For example, if the Position and Size settings are as follows: Left - 100, Top - 100, Width - 902, Height - 508, the top left corner of the overlay window will be positioned 100 pixels from the top of the screen and 100 pixels from the left edge of the screen. Beginning at that point, the width of the overlay window will be 902 pixels and its height will be 508 pixels.

Edge Tab

Select the "Enable" option to activate a frame around the overlay window. The "Width" setting specified the width in pixels of the frame and the frame color is selected by clicking on the color sample box and choosing the desired frame color.

Figure 610 shows the example of a 5 pixel red border.

Figure 610. Picture In Picture Edge Settings and Display

Shadow Tab

Select the "Enable" option to define a shadow for the overlay window. When enabled, the position, color and transparency of the shadow may be defined.

To top and Left numbers represent the offset of the shadow from the top left corner of the overlay window.

Figure 611 shows the example of a black shadow with 60% transparency offset 50 pixels from the top of the overlay window and 50 pixels from the left edge. The result is that the shadow extends 50 pixels below the bottom edge and 50 pixels beyond the right edge of the overlay window.

Figure 611. Picture In Picture Shadow Settings and Display

Effect Tab

Select the "Enable" option to activate effects at the overlay video In and Out points. The type of effect is selected from the drop-down lists. The effect duration is specified as a number of frames.

Click the **End In Effect** button to set the frame at the Timeline cursor position as the ending frame of the In effect.

the **Start Out Effect** button to set the frame at the Timeline cursor position as the beginning frame of the Out effect.

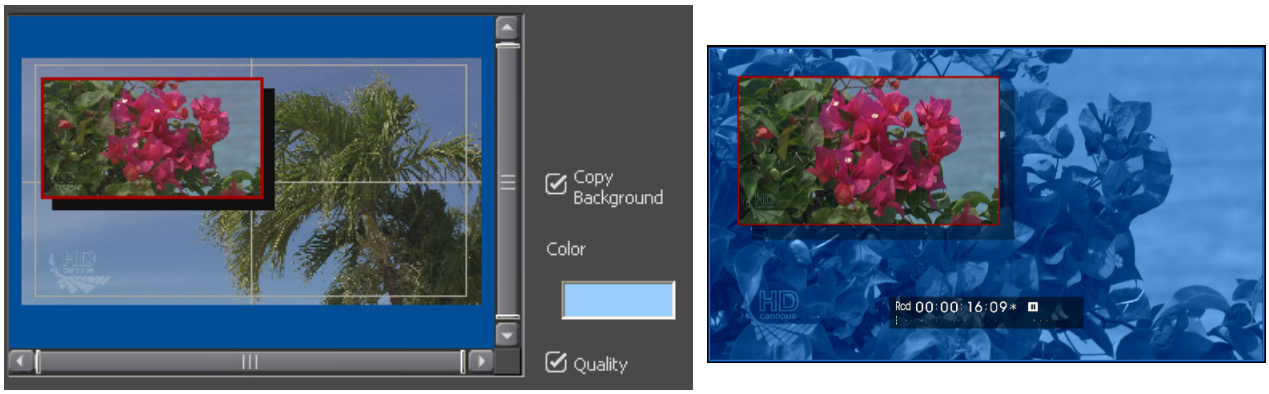
Motion Keyframe Tab

Set the motion speed and add motion to the overlay window. See *Adding Motion to the Overlay Window* *on page 530* for more information.

Copy Background

Select this option to copy the overlay window image to the background with the specified color. See Figure 612 for an example of the overlay window image copied to the background with a light blue tint.

Figure 612. Picture In Picture Copy Background with Color



Quality

Enable this option to set the overlay window image to high quality.

Adding Motion to the Overlay Window

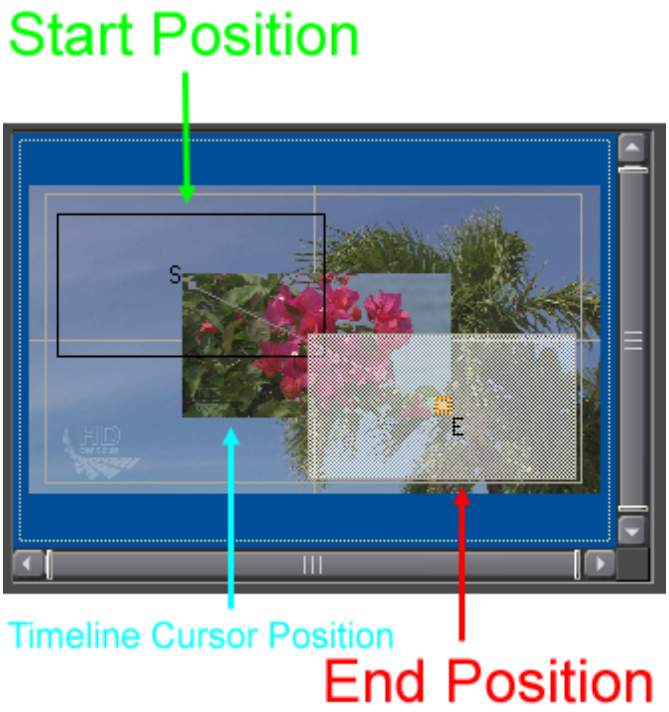
To add motion to the overlay video window, do the following:

1. Click the Preview window at the position at which you wish to start (S) the overlay window motion. This clicked point sets a keyframe. You may drag the start position keyframe to position it more precisely.

2. Click a second location in the Preview window to set the end (E) position keyframe for the overlay window motion. You may drag this end position keyframe to position it more precisely.

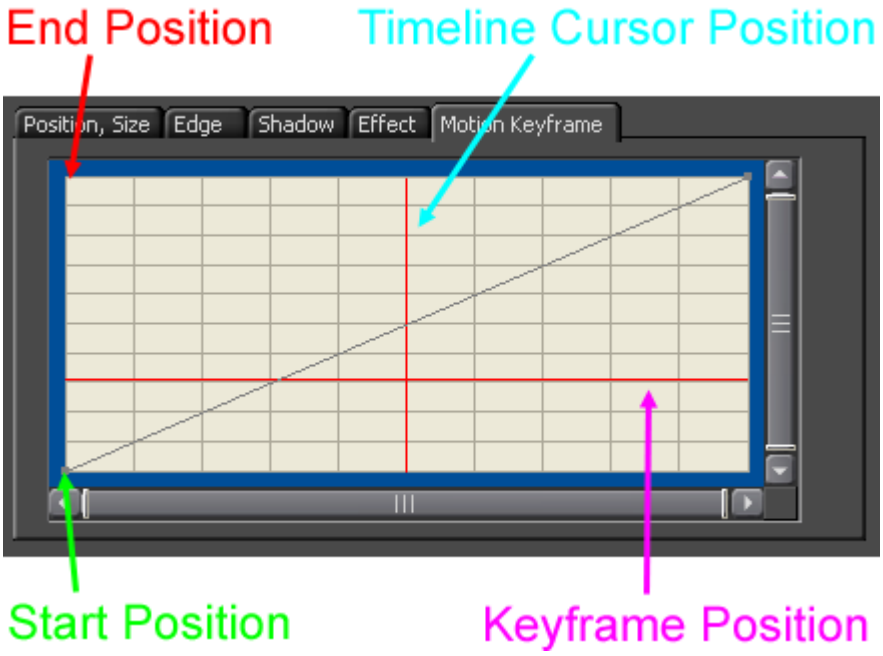
See Figure 613 for an example.

Figure 613. Picture in Picture Motion Keyframe Detail



3. Select the "Motion Keyframe" tab. The motion plot chart shown in Figure 614 appears.

Figure 614. Picture in Picture Motion Keyframe Chart Detail

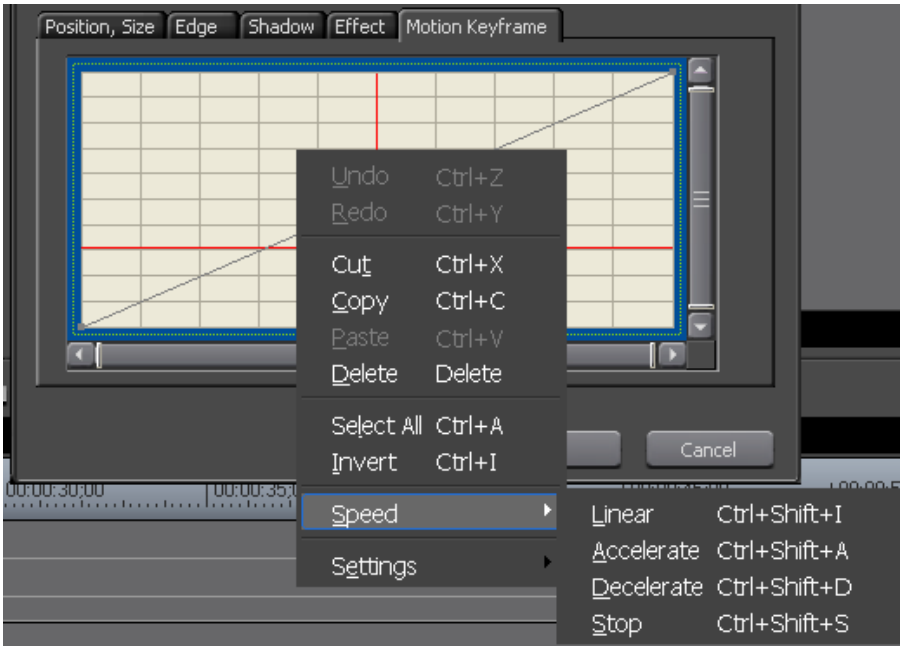


The vertical axis represents the position and the horizontal axis represents time.

4. Click an area on the chart to set a keyframe position point

5. Right-click the position point and select "Speed" from the menu as illustrated in Figure 615.

Figure 615. Picture in Picture Motion Keyframe Menu - Speed

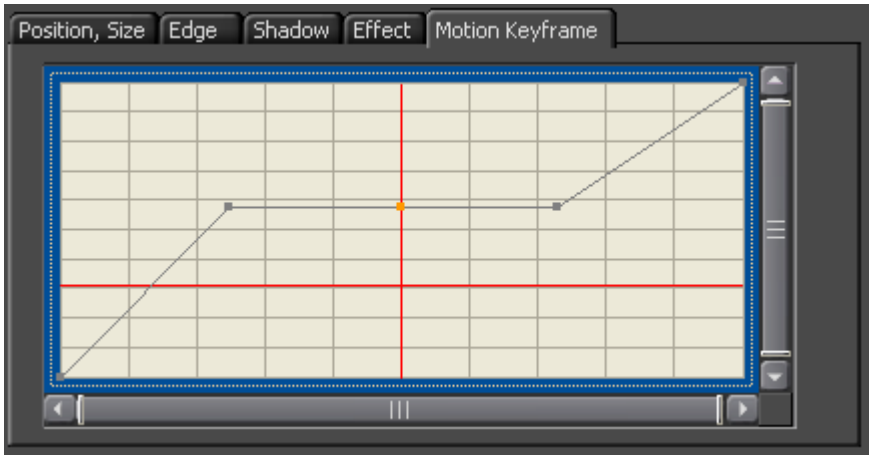


6. Select the desired speed setting from the menu for the selected position/time point on the chart.

Note A sharper angle on the black line increases the motion speed. Once a point has been set on the chart, its position and angle can be changed by dragging it to a new location on the position/time axes.

Figure 616 shows a sample motion keyframe chart for the overlay window. In this example, the window motion accelerates to the first keyframe then remains constant through the second and third keyframes after which it again accelerates to the end point.

Figure 616. Picture in Picture Motion Keyframe Chart



For a more detailed discussion of 2D Picture in Picture effects and a procedure for configuring a keyframeable 2D Picture in Picture effect, see *Appendix B-Special Procedures*.

3D Picture in Picture

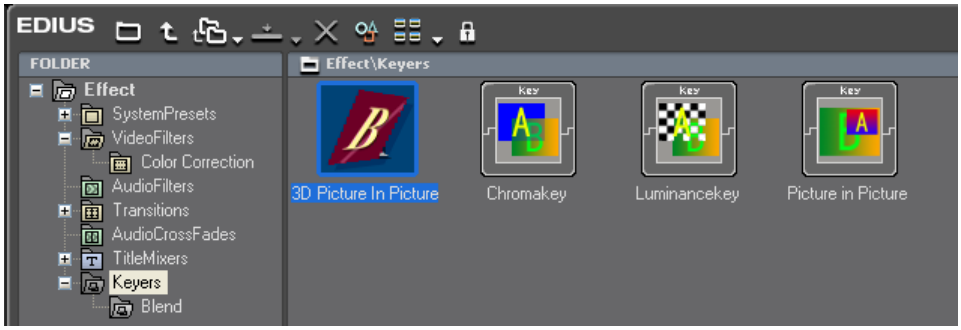
A picture in picture effect is where one video is overlaid over another with one serving as the background video while the other is confined to a certain area of the screen over the background as shown in Figure 603 on page 524.

To create picture in picture effect, follow these steps:

1. Select the "Keyers" tree from the Effect Palette as shown in Figure 617.
2. Drag and drop the 3D Picture in Picture effect to the Mixer area of the clip that will be in the overlay window.

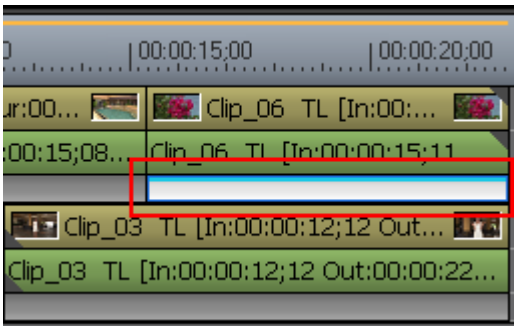
Note If the Effect view is hidden, the keyer effects will be listed under the Keyers tree in the Effect Palette.

Figure 617. 3D Picture In Picture Effect



Clips with Keyer effects applied display an aqua blue line at the top of the mixer area as illustrated in Figure 618.

Figure 618. Keyer Effects In Mixer Area

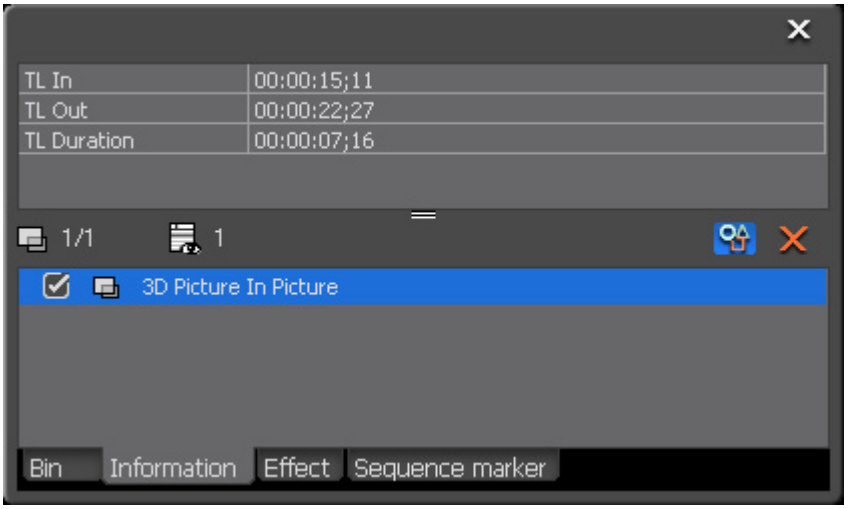


Configuring 3D Picture in Picture Effects

To configure a 3D Picture in Picture effect that has been applied to a clip, do the following:

1. Click the Mixer area of the clip to which the 3D Picture in Picture effect has been applied
2. Display the Information Palette (see *Show/Hide the Information Palette on page 566* for more information) as shown in Figure 619.

Figure 619. Information Palette - 3D Picture in Picture Effect

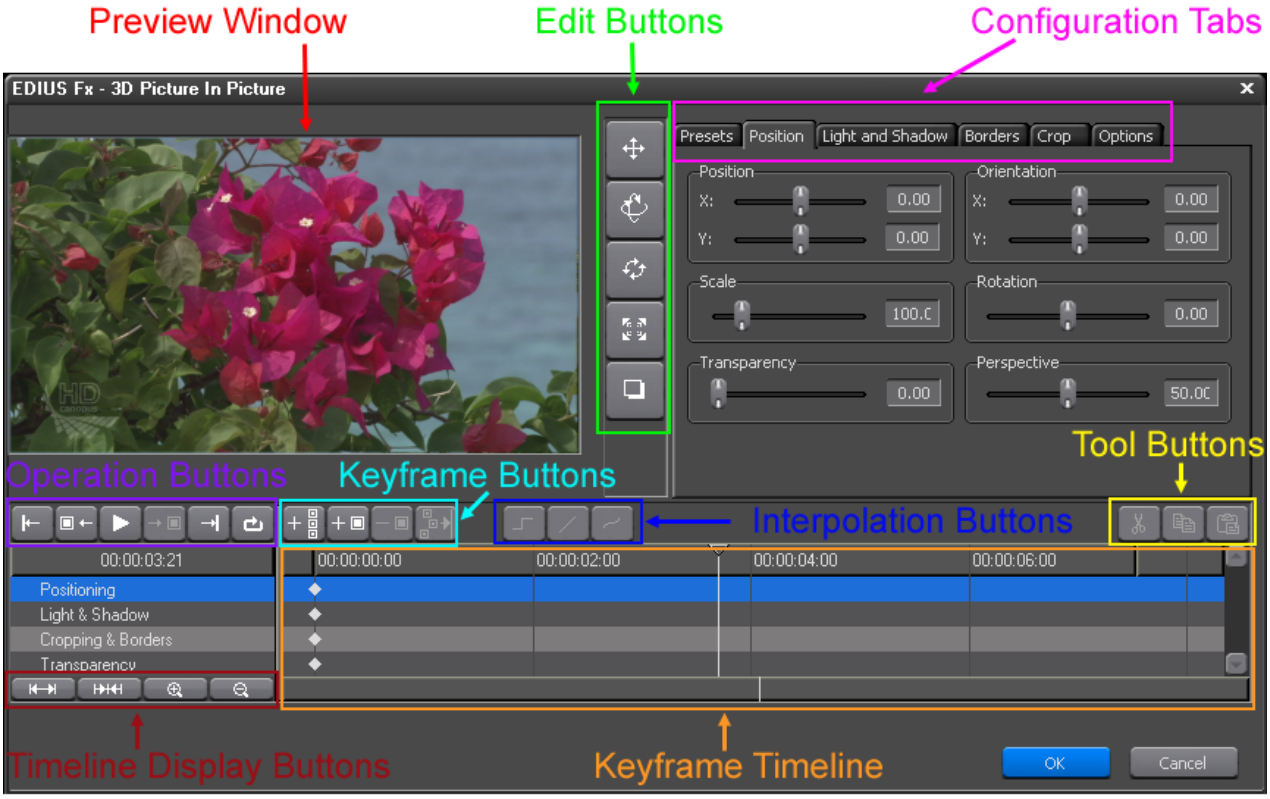


3. Double-click the 3D Picture in Picture effect in the Information Palette.

Note You may also select the 3D Picture in Picture effect and click the **Settings** button (highlighted in blue in Figure 619) in the Information Palette.

The Picture in Picture dialog shown in Figure 620 appears.

Figure 620. 3D Picture in Picture Configuration Dialog



4. Configure the effect settings per the explanations below and click the **OK** button to close the dialog.

Preview Window

The preview window shows the effects of configuration settings such as position, size and motion in the overlay window.

Edit Buttons

Edit buttons change the overlay window parameters. Click on the desired edit button and drag the overlay window to perform the button function.

- Change overlay window position

- Rotate horizontally and vertically

- Rotate around the Z axis

- Change overlay window size

- Change shadow position

To use this function, Drop Shadow must be enabled in the Light and Shadow Tab.

Keyframe Timeline

Timeline on which keyframes are added to specify the location and timing of motion and other effects. The Keyframe Timeline has four lines on which keyframe may be added individually or simultaneously. These lines are:

- Positioning
- Light and Shadows
- Cropping and Borders
- Transparency

Keyframe Buttons

Keyframe buttons are used to manage keyframes on the Keyframe Timeline.

- Add a Keyframe on All Lines

Adds a keyframe on all lines at the Timeline cursor position in the Keyframe Timeline.

- Add a Keyframe on Selected Line

Adds a keyframe on the currently-selected line at the Timeline cursor position on the Keyframe Timeline.

- Delete Keyframe

Deletes the keyframe at the Timeline cursor position on the selected line.

- Adjust All Keyframes

Adjusts all keyframe positions so that the last keyframe is at the end of the Keyframe Timeline.

Operation Buttons

Operation buttons allow you to play and review the effect in order to fine-tune effect settings.

- Move to the Beginning

Places the Timeline cursor at the beginning of he Keyframe Timeline.

- Move to Previous Keyframe

Positions the Timeline cursor at the previous keyframe in the Keyframe Timeline.

- Play/Pause

Plays the Keyframe Timeline at the beginning at the Timeline cursor position. When playing is in progress, the **Pause** button is available and pauses playback when clicked.

Note Playback is slower than real-time speed.

- Move to Next Keyframe

Positions the Timeline cursor at the next keyframe in the Keyframe Timeline.

- Move to the End

Positions the Timeline cursor at the end of the Keyframe Timeline.

- Repeat

When clicked, the repeat button will cause Timeline playback to repeat continuously until stopped.

Timeline Display Buttons

Timeline display buttons expand or contract the Keyframe Timeline display area.

- Fit to Window

Fit the effect Timeline and all keyframes into the Keyframe Timeline window.

- Focus on Cursor

Focus the Keyframe Timeline display on the area around the Timeline cursor position with the Timeline cursor in the center of the display.

- Zoom In

Expand the Keyframe Timeline to show a smaller segment of the Timeline. As this button is clicked repeatedly, the Timeline segment in the Timeline display represents a smaller time slice.

- Zoom Out

Contract the Keyframe Timeline to show a larger segment of the Timeline. As this button is clicked repeatedly, the Timeline segment in the Timeline display represents a larger time slice.

Interpolation Buttons

After selecting a keyframe in the Keyframe Timeline window, the desired interpolation method is selected by clicking the appropriate interpolation button. The selected interpolation method applies to the selected keyframe only and each keyframe may employ a different interpolation method if desired.

- No Interpolation

No interpolation of keyframe motion.

- Linear Interpolation

Interpolates keyframe motion in a linear manner.

- Sine Wave Interpolation

Interpolates keyframe motion with a sine wave algorithm.

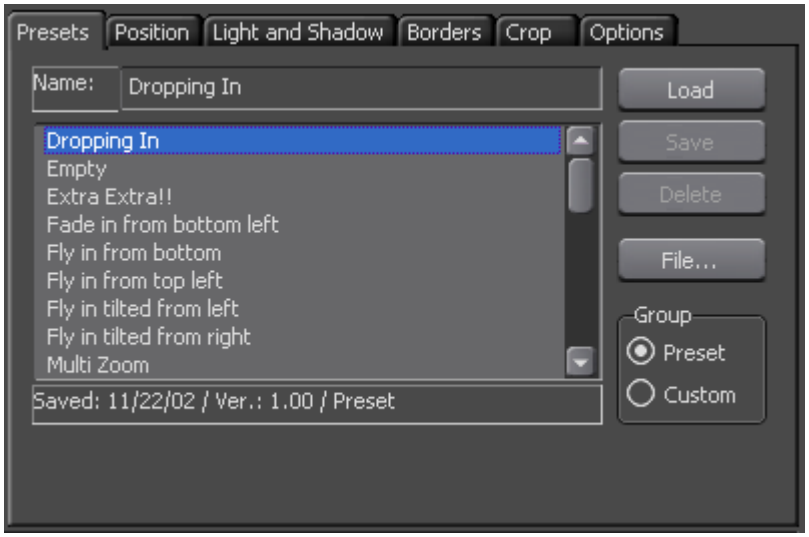
Tool Buttons

The tool buttons provide cut, copy and paste functions for the selected keyframe point on the Keyframe Timeline

Presets Tab

Motion presets included with EDIUS are accessible through the Presets as illustrated in Figure 621.

Figure 621. 3D Picture in Picture Presets Tab



Choose the desired motion preset for the overlay window and click the **Load** button to activate the selected motion preset. Click the **Play** button in the Operation Buttons group to preview the effect.

To create a custom motion effect group from the presets do the following:

1. Select the desired preset motion effect from the preset list.
2. Click the **Custom** button.
3. Click the **Save** button to add the preset to the custom group.
4. Click the **Preset** button to return to the preset list and select additional preset effects.
5. Repeat the above steps until all desired preset effects are saved in the custom group.

Click the **Delete** button to delete a motion effect from the Custom group.

Note The **Save** and **Delete** buttons are not available in the Preset group.

Click the **File** button if you wish to open an exported preset effects (*.FIX) file.

Position Tab

Configure the overlay window size, position and transparency parameters using sliders or direct numeric value entries.

Figure Figure 622 shows some sample position settings and results in the Preview window.

Figure 622. 3D Picture in Picture Position Tab

Note Size and Position parameters may also be set using the edit buttons. See *Edit Buttons* *on page 536* for more information.

Light and Shadow Tab

Select the "Enable Light" option to add a light reflection effect during overlay window rotation motions.

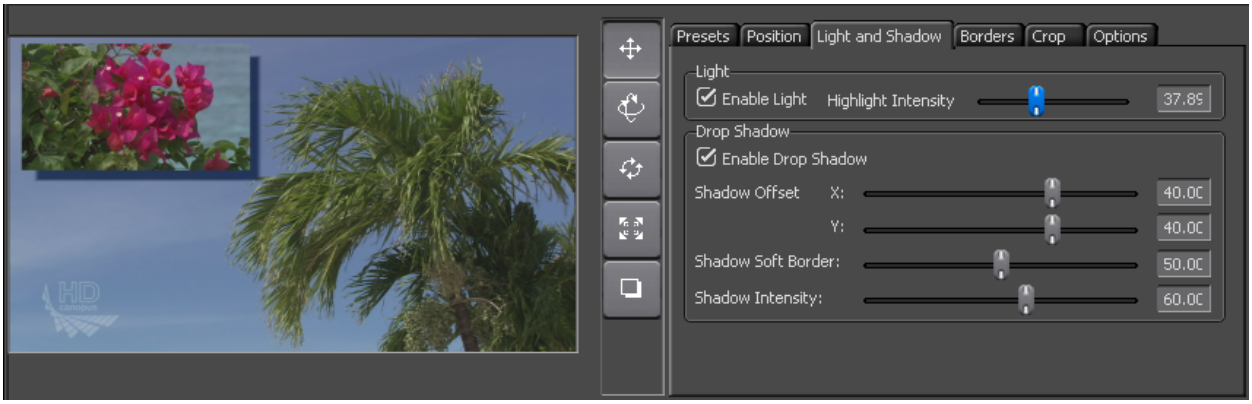
If the light effect is enabled, set the light intensity with the slider or by direct numeric input

Select the "Enable Drop Shadow" option to add a shadow to the overlay window.

If drop shadow is enabled, use the sliders or direct numeric entry to set the shadow offset and intensity parameters.

Figure Figure 623 shows some sample light and shadow settings and results in the Preview window.

Figure 623. 3D Picture in Picture Light and Shadows Tab



Borders Tab

Select the "Use Colored Border" option to add a colored frame around the overlay window.

If the colored border is enabled, user the sliders or direct numeric entry to set the border width and height.

Click the … button to select the border color.

Select the "Use Soft Border" option to blend the edges of the overlay window into the background video.

If the soft border is enabled, user the sliders or direct numeric entry to set the border width and height and select the rounding and smoothing options if desired.

Figure Figure 624 shows some sample borders settings and results in the Preview window.

Figure 624. 3D Picture in Picture Borders Tab

Crop Tab

Crop the left, right, top and bottom edges of the video in the overlay window.

Use the sliders or direct numeric entry to set the crop parameters in pixels.

Select the "Resize for Cropping" option of you want the overlay window adjusted to the cropped video size. If this option is deselected, the cropped video is extended to fill the original overlay window size.

Figure Figure 625 shows some sample crop settings and results in the Preview window.

Figure 625. 3D Picture in Picture Crop Tab

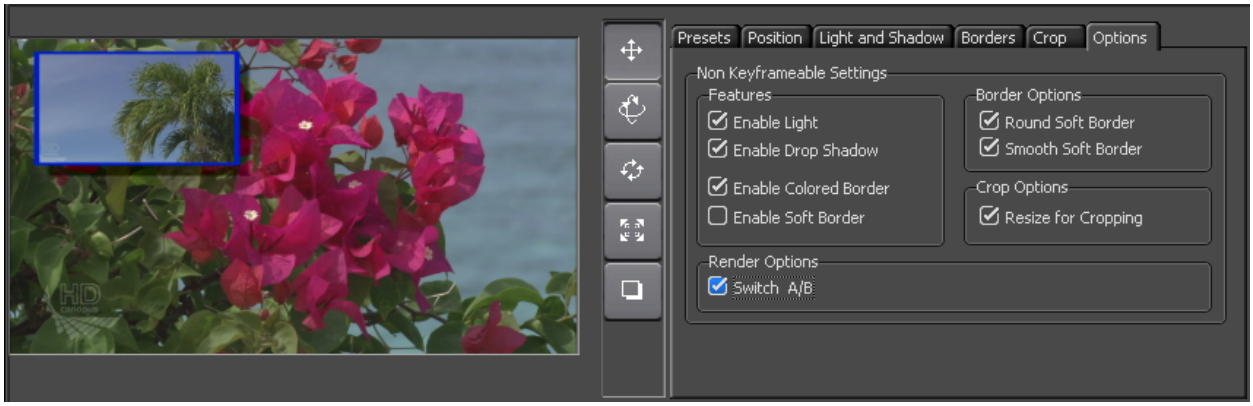
Options Tab

From the Options tab, you can enable or disable features configured in the other configuration tabs.

Select the "Switch A/B" option if you wish to swap the background video and overlay window video.

Figure Figure 626 shows some sample option settings and results in the Preview window.

Figure 626. 3D Picture in Picture Options Tab



Keyers

The two keyer effects available in EDIUS are the Chroma Key and the Luminance Key.

Chroma Key

Chroma key provides the ability to eliminate parts of a video based on color selection and have those parts replaced by another video source. Often

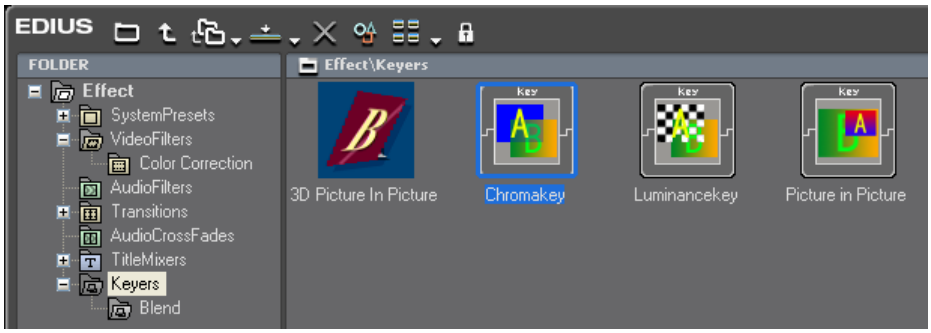
chroma key video is shot in front of a blue or green screen and the screen color is then eliminated and replaced with a background video.

To create a chroma key effect, do the following:

1. Select the "Keyers" tree from the Effect Palette as shown in Figure 617.
2. Drag and drop the Chromakey effect to the Mixer area of the clip that will be in the overlay window.

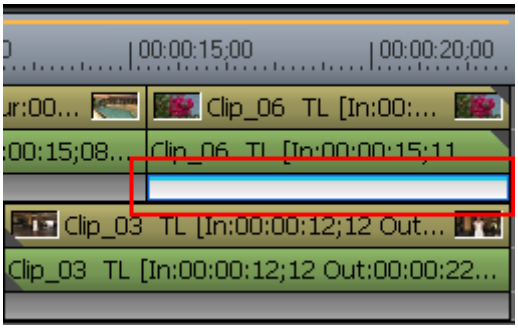
Note If the Effect view is hidden, the keyer effects will be listed under the Keyers tree in the Effect Palette.

Figure 627. Chroma Key Effect



Clips with Keyer effects applied display an aqua blue line at the top of the mixer area as illustrated in Figure 628.

Figure 628. Keyer Effects In Mixer Area

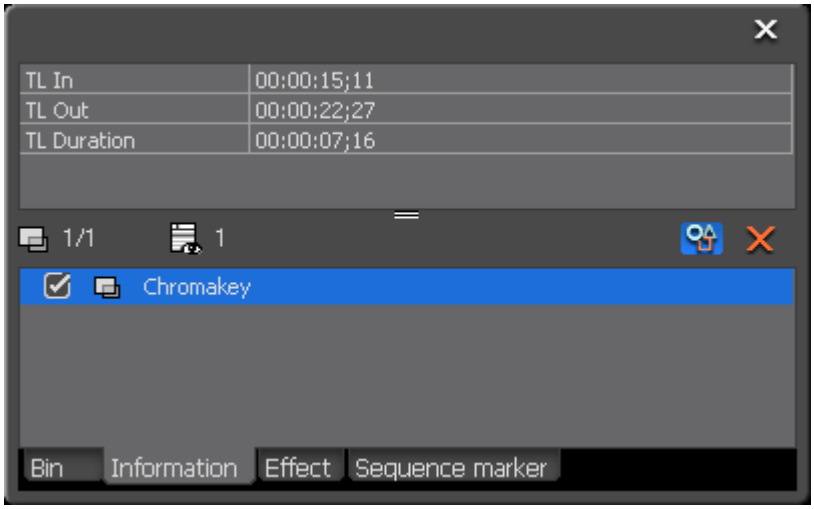


Configuring Chroma Key Effects

To configure a Chroma Key effect that has been applied to a clip, do the following:

1. Click the Mixer area of the clip to which the Chroma Key effect has been applied
2. Display the Information Palette (see *Show/Hide the Information Palette on page 566* for more information) as shown in Figure 629.

Figure 629. Information Palette - Chromakey Effect

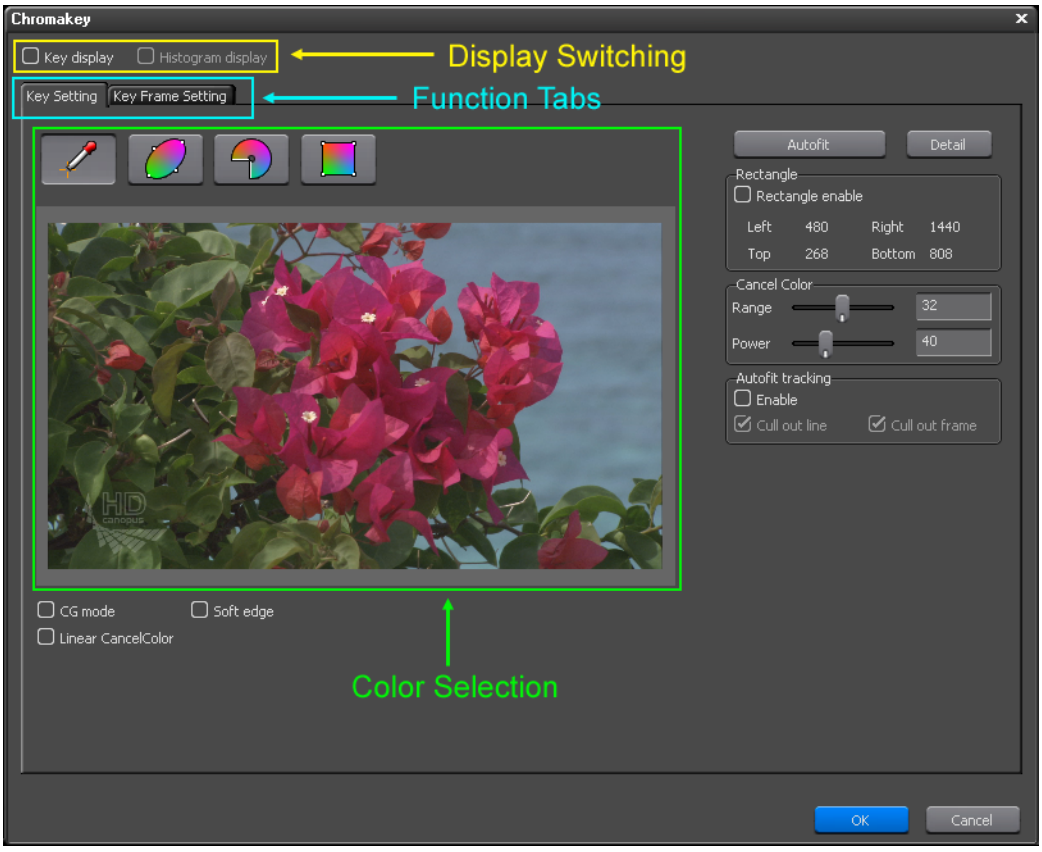


3. Double-click the Chromakey effect in the Information Palette.

Note You may also select the Chromakey effect and click the **Settings** button (highlighted in blue in Figure 629) in the Information Palette.

The Chromakey dialog shown in Figure 630 appears.

Figure 630. Chromakey Configuration Dialog

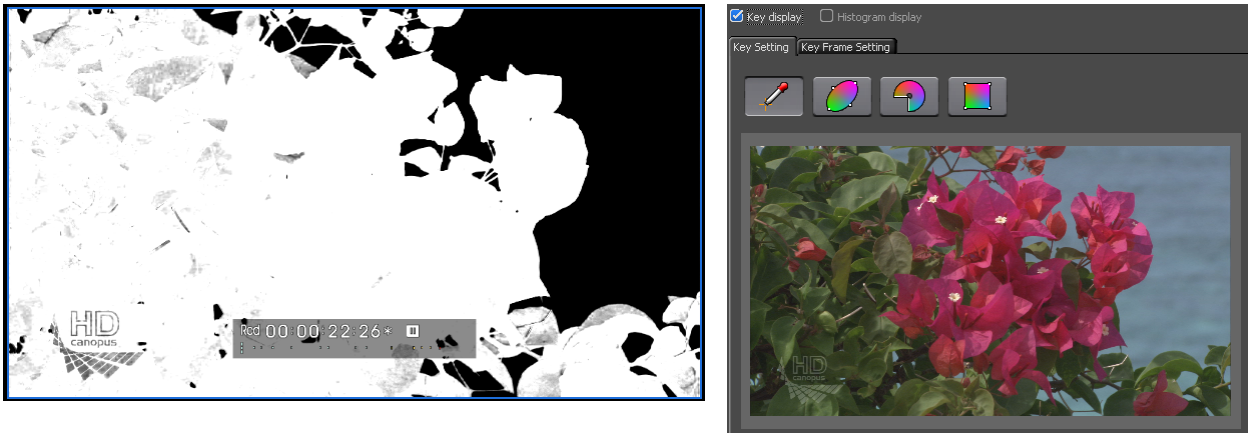


4. Configure the effect settings per the explanations below and click the **OK** button to close the dialog.

Display Switching

Select “Key Display” to display in black in the Recorder the parts of the video that will be cut out based on the current color selection. See Figure 631 for an example based on the eye dropper color selection of the blue water in the background.

Figure 631. Chromakey Key Display

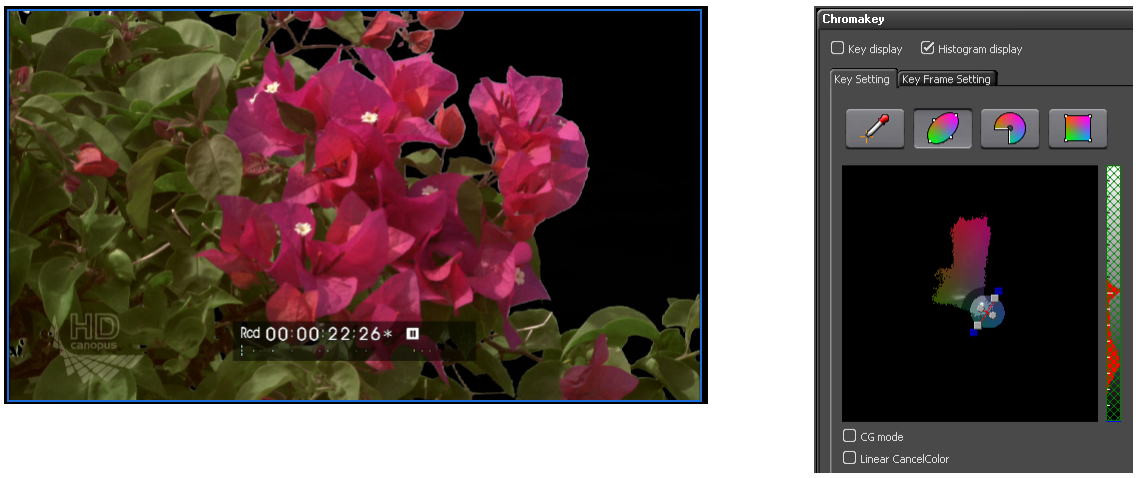


Select the ‘Histogram Display” option to display a histogram of the colors that can be selected for elimination.

Note The Histogram Display option is not available with the eye dropper color selector.

See Figure 632 for an example of a histogram display and color selection with the color circle.

Figure 632. Chromakey Histogram Display and Color Selection



Color Selection

Color selection tools allow the selection of the color (key color) to be eliminated and replaced by the background video.

There are four color selection methods. Each of the examples below shows the selection of the water as the key color using the four selection methods (highlighted in blue in each example) and the results in the Recorder.

Figure 633. Chromakey Eye Dropper Color Selector

Figure 634. Chromakey Color Wheel Color Selector

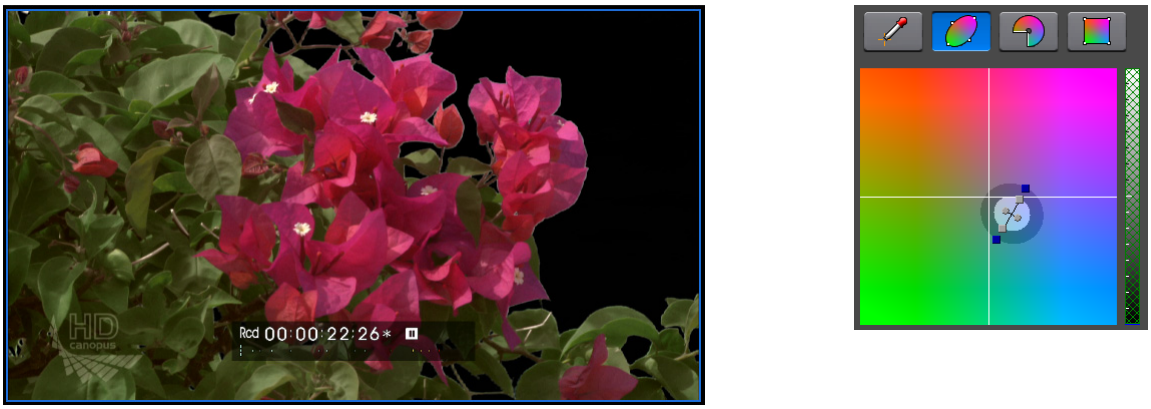


Figure 635. Chromakey Color Segment Color Selector

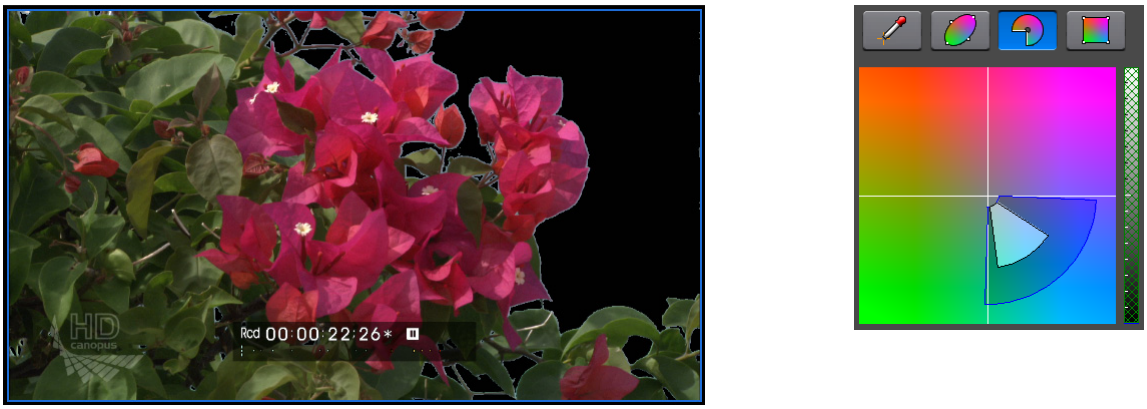
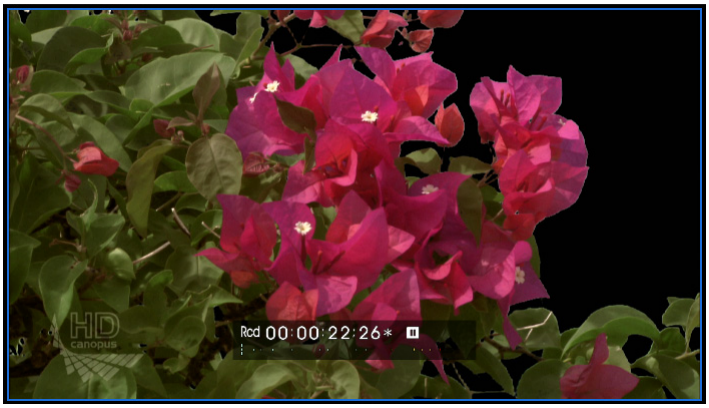
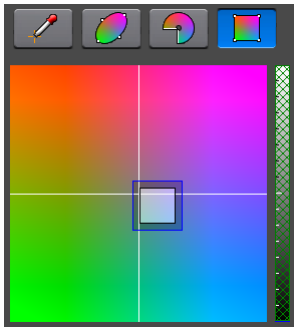


Figure 636. Chromakey Color Block Color Selector





Autofit Button

Click the **Autofit** button to automatically define keyer settings appropriate for the selected key color.

Detail Button

The Detail button shows detailed keyer settings which can be modified to fine tune the key color parameters. These settings vary based on the color selector method.

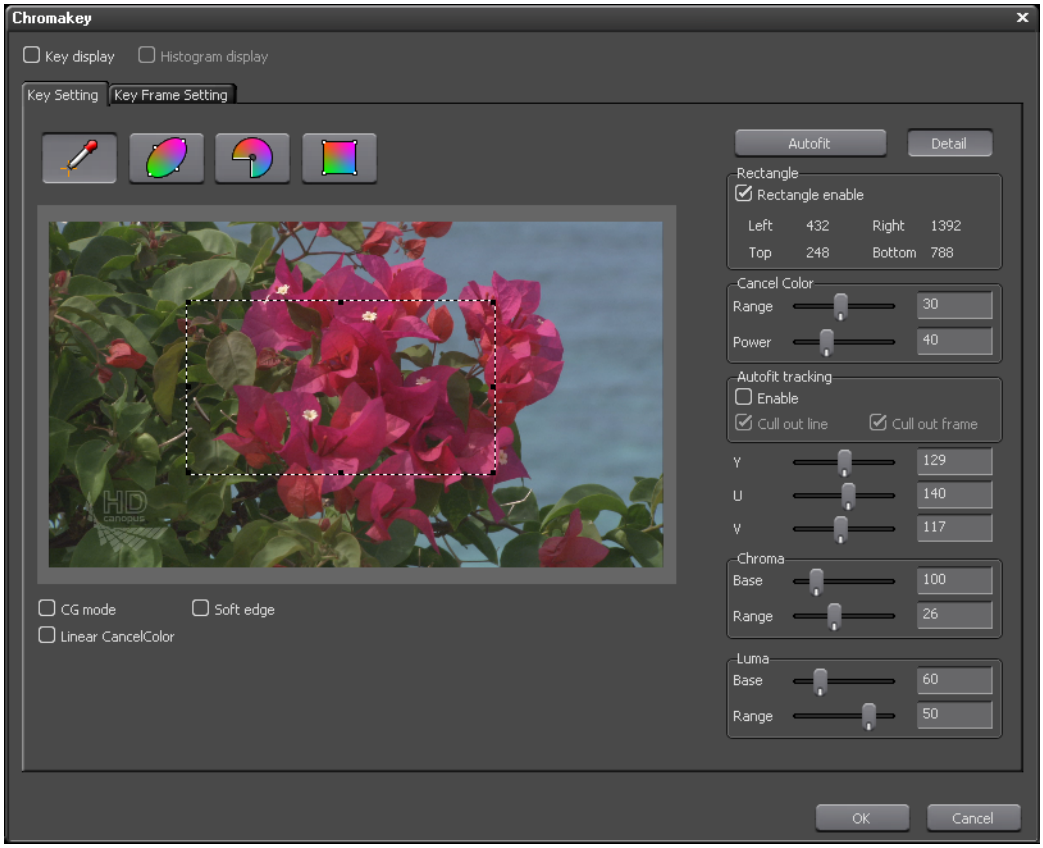
Figure 637 Shows the Detail Settings for the Color Wheel Selector.

Figure 637. Chromakey Color Wheel Selector Detail

Rectangle

Selecting the “Rectangle enable” option allows chromakey settings to be applied to a selected rectangular area of the video instead of the entire video as illustrated in Figure 638.

Figure 638. Chromakey Rectangle Enabled



Cancel Color

Cancel Color is used to fix shadows tinted by the background. For example, when shooting in front of a blue screen, the shadows may be tinted blue. Cancel Color can be used to adjust the tint back to a more neutral (gray) range.

Use the sliders or direct numeric entry to adjust the cancellation range and power of the selected key color and its opposite in the areas where the selected key color is bounded by other colors.

Autofit Tracking

Enable autofit tracking to adjust key color variation automatically.

CG Mode

Select this option to set the parameters for CG-generated images. This option should not be enabled for natural images.

Soft Edge

Select this option to blur the border between the background image and the overlaid image.

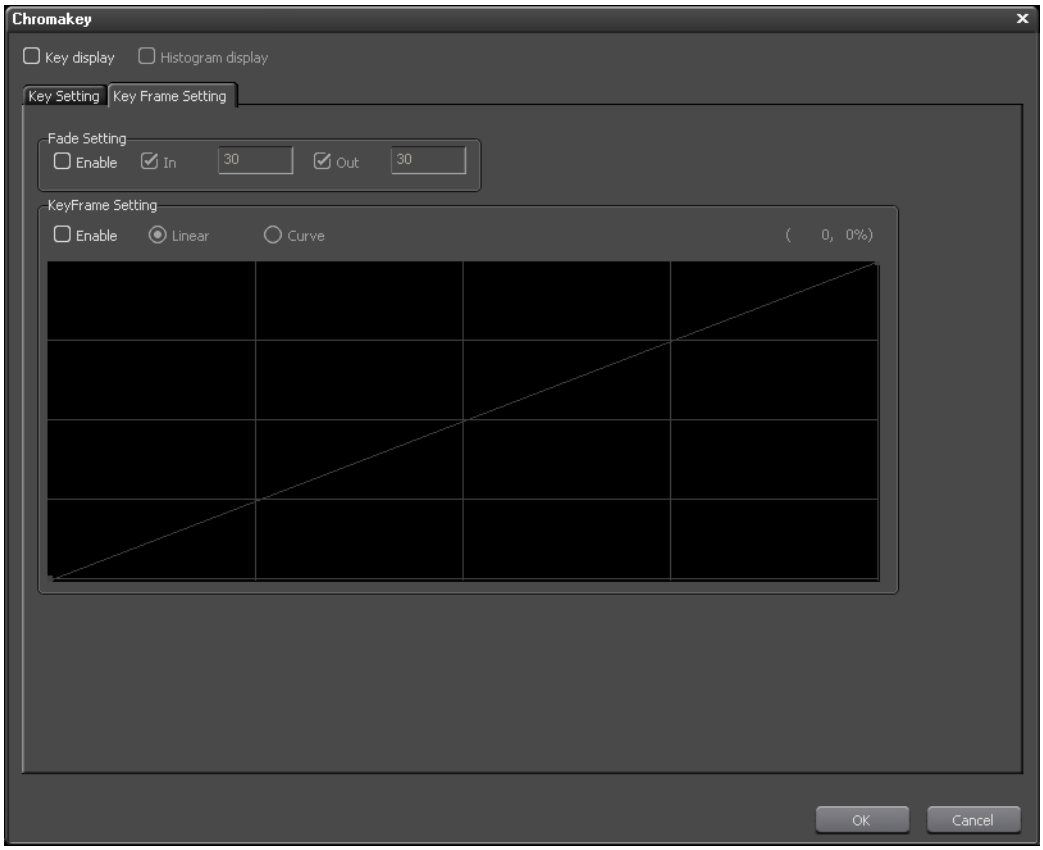
Linear CancelColor

Select this option if there is noticeable bleeding of the blue screen or green screen or discoloration by reflection. Linear CancelColor can often eliminate or reduce these effects.

Key Frame Setting Tab

When this tab is selected, the settings shown in Figure 639 appear.

Figure 639. Key Frame Setting Tab



Fade Settings

Enable the fade setting to add fade in and fade out effects to the key color area. The fade In and Fade Out durations are designated by entering a number of frames for the effect.

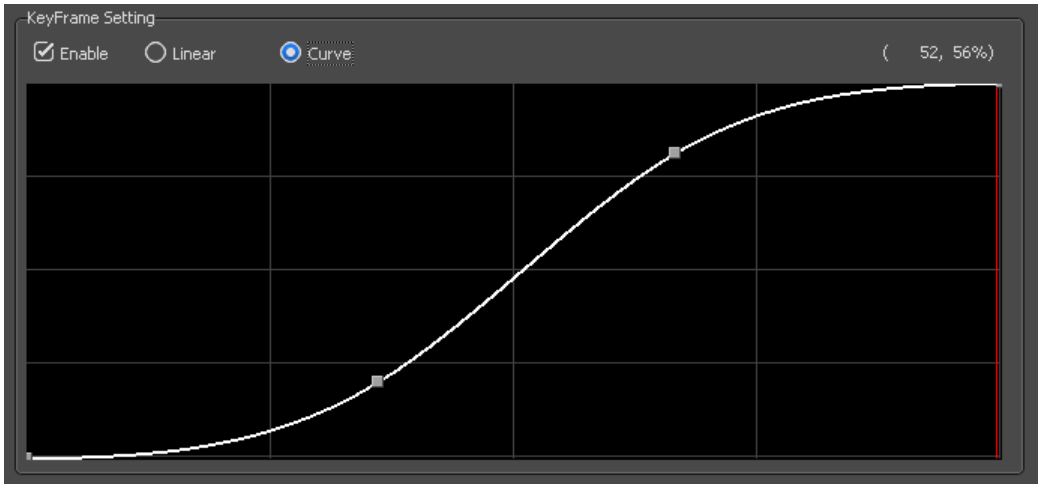
KeyFrame Settings

Enable this option in order to increase or decrease the chromakey effect.

Click on the line at the points to add key frames and drag the points to change the effect setting.

Select “Linear” or “Curve” as the manner in which to apply the effect adjustments. See Figure 640 for an example.

Figure 640. Chromakey KeyFrame Curve



Luminance Key

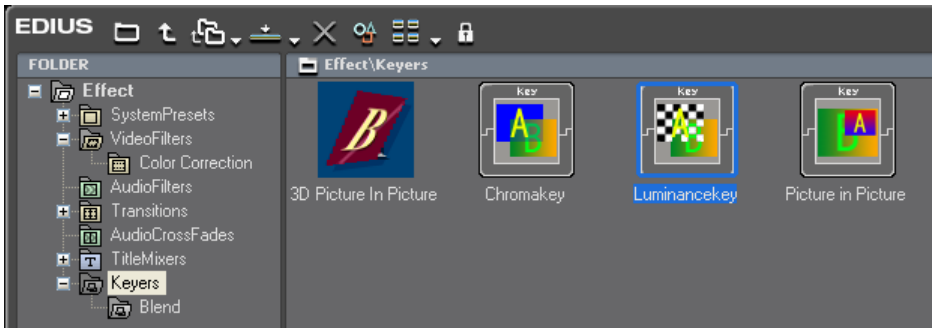
Luminance keying is similar to chroma keying except that keying is based on a particular luminance (brightness) level rather than a specific color.

To create a luminance key effect, do the following:

1. Select the “Keyers” tree from the Effect Palette as shown in Figure 641.
2. Drag and drop the Luminancekey effect to the Mixer area of the clip that will be in the overlay window.

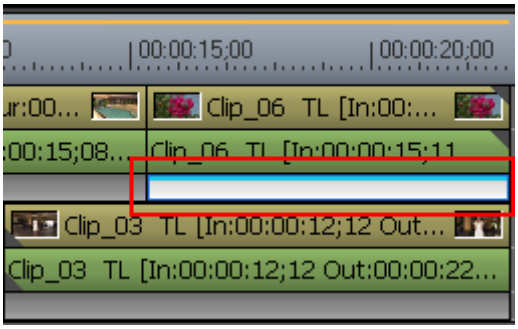
Note If the Effect view is hidden, the keyer effects will be listed under the Keyers tree in the Effect Palette.

Figure 641. Luminance Key Effect



Clips with Keyer effects applied display an aqua blue line at the top of the mixer area as illustrated in Figure 642.

Figure 642. Keyer Effects In Mixer Area

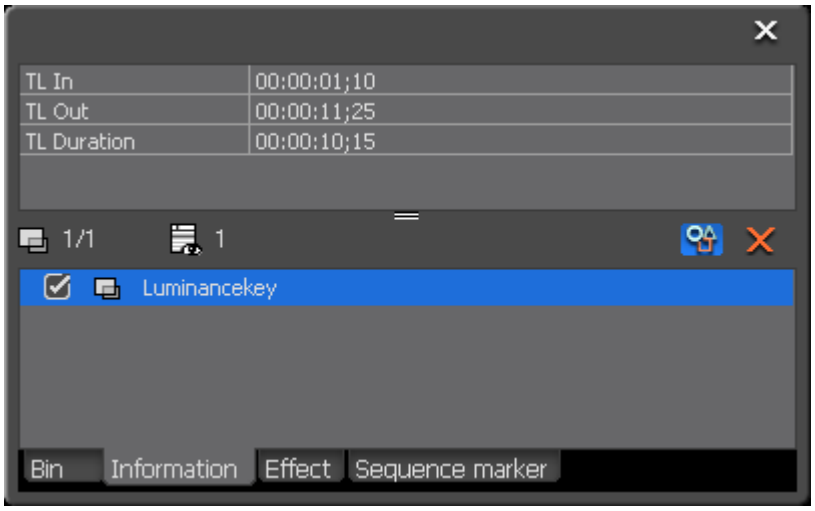


Configuring Luminance Key Effects

To configure a Luminance Key effect that has been applied to a clip, do the following:

1. Click the Mixer area of the clip to which the Luminance Key effect has been applied
2. Display the Information Palette (see *Show/Hide the Information Palette on page 566* for more information) as shown in Figure 643.

Figure 643. Information Palette - Luminancekey Effect

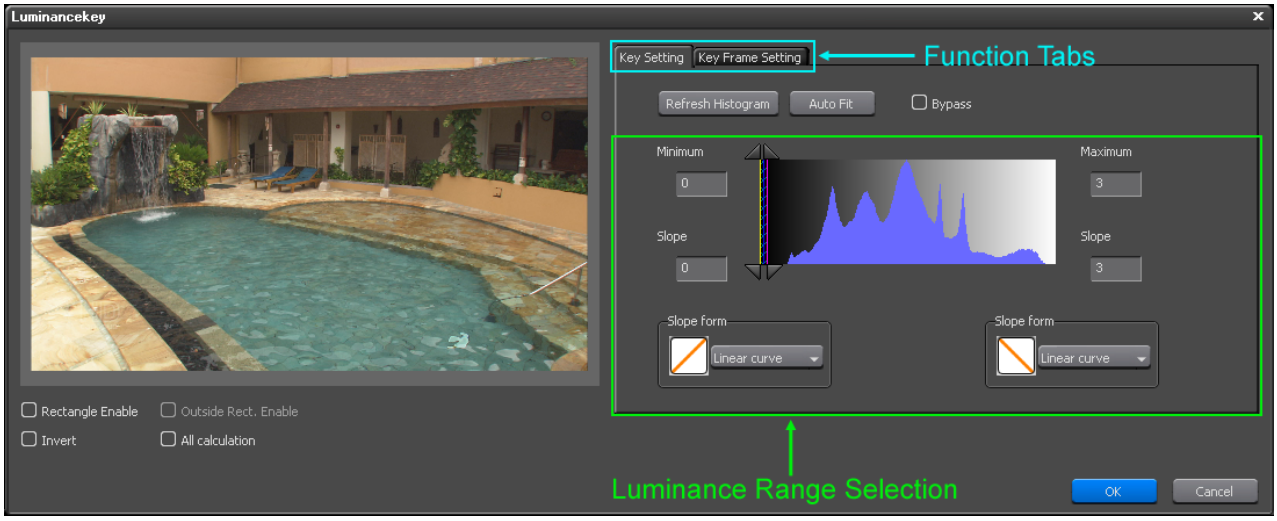


3. Double-click the Luminancekey effect in the Information Palette.

Note You may also select the Luminance effect and click the **Settings** button (highlighted in blue in Figure 629) in the Information Palette.

The Luminancekey dialog shown in Figure 630 appears.

Figure 644. Luminancekey Configuration Dialog

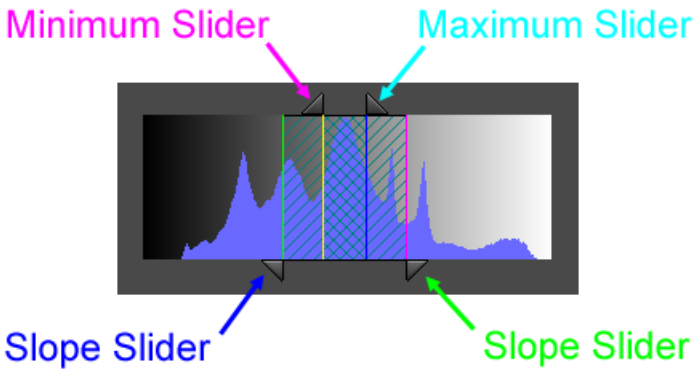


4. Configure the effect settings per the explanations below and click the **OK** button to close the dialog.

Luminance Range Selection

To specify the range over which luminance key settings apply, move the slope, minimum and maximum sliders or enter the desired numeric values directly into the corresponding entry fields.

Figure 645. Luminance Key Range Selection



Luminance settings are applied to the selected area of the video as follows:

Gradual Increase

The range between the first Slope slider and the Minimum slider is range over which luminance effects will be gradually increased from 0 to 100%.

Hold at 100%

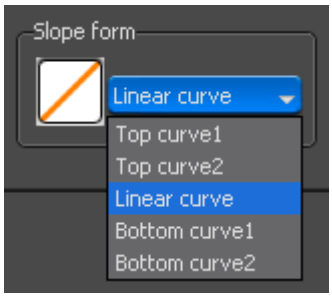
The range between the Minimum slider and the Maximum slider is the range over which the luminance effects will be maintained at 100%.

Gradual Decrease

The range between the Maximum slider and the second Slope slider is the range over which luminance effects will be gradually decreased from 100% to 0.

The shape of the slope between the first "slope" line and the "minimum" line and "maximum" line and the second "slope" line is defined by selecting the desired entry from the Slope drop-down lists as illustrated in Figure 646.

Figure 646. Luminance Slope Shape



Refresh Histogram Button

Click the button to refresh the video histogram in the Luminance Range Settings window.

Auto Fit Button

Click this button to automatically apply luminance keyer settings. Make manual adjustments with the slider or numeric entry fields to change the auto fit settings.

Bypass

Enable this setting to return the image to the original settings and bypass the luminance settings.

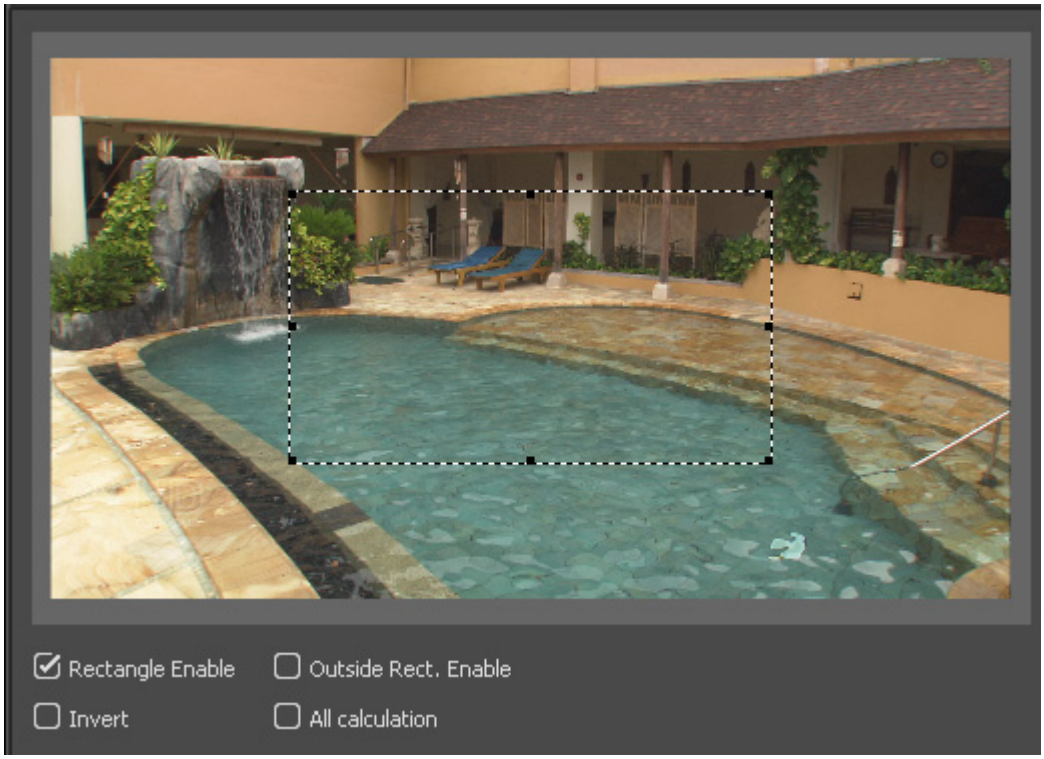
Rectangle Enable

Selecting the "Rectangle enable" option allows luminancekey settings to be applied to a selected rectangular area of the video instead of the entire video as illustrated in Figure 647.

The area outside the rectangle becomes completely transparent and the background image on the lower numbered track is revealed.

If “Outside Rect. Enable” is selected, luminancekey settings are applied within the rectangular area only and the area outside the rectangle show the original video.

Figure 647. Luminancekey Rectangle Enabled



Invert

Selecting this option inverts the range to which luminancekey settings are applied. The histogram will show that the settings are applied to the areas outside the slope lines.

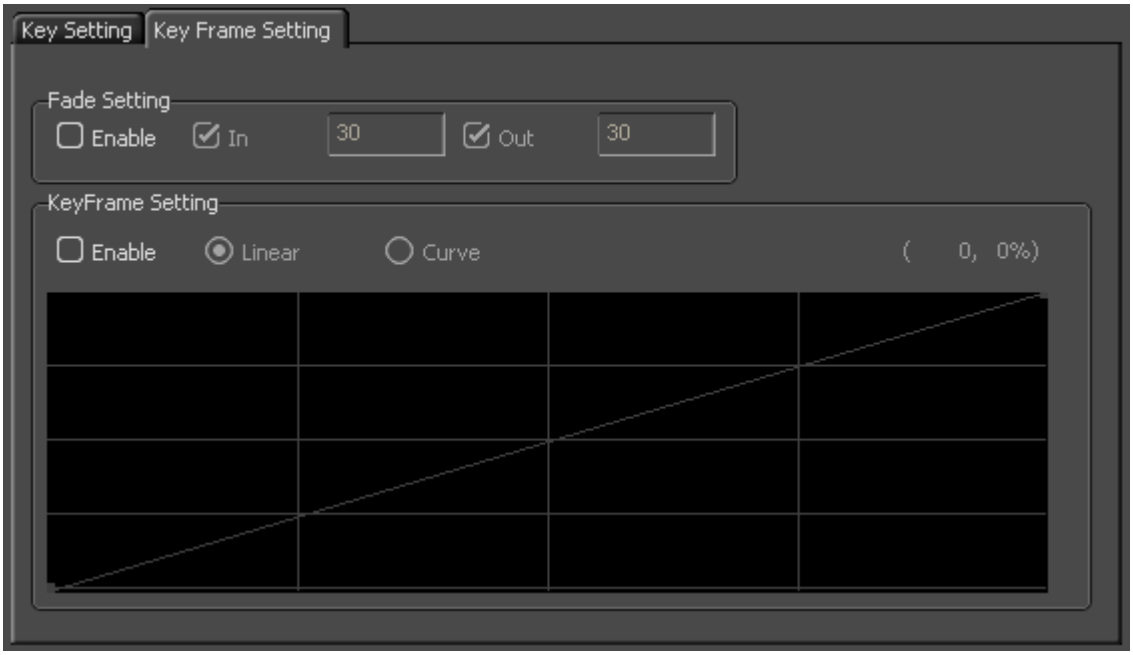
All Calculation

Select this option to calculate the area outside the range specified by “Outside Rect. Enable.”

KeyFrame Setting Tab

When this tab is selected, the settings shown in Figure 648 appear.

Figure 648. Key Frame Setting Tab



Fade Settings

Enable the fade setting to add fade in and fade out effects to the luminance key area. The fade In and Fade Out durations are designated by entering a number of frames for the effect.

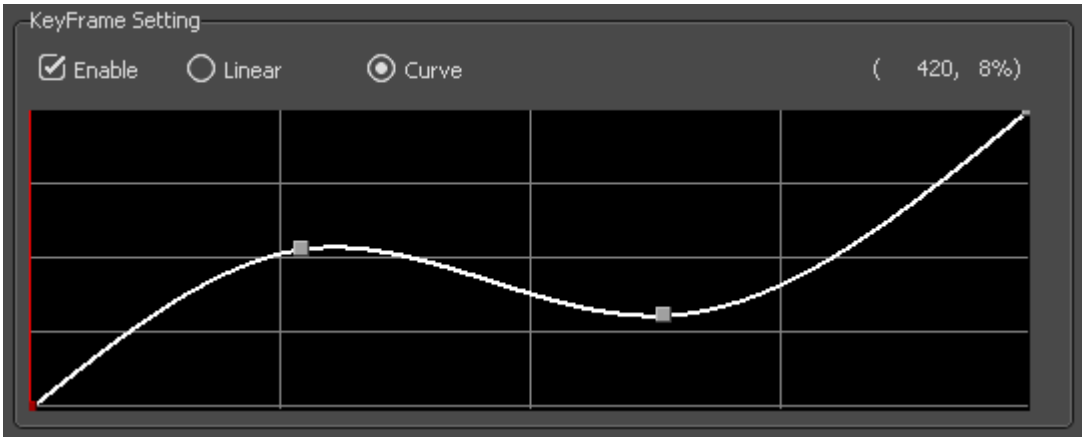
KeyFrame Settings

Enable this option in order to increase or decrease the luminancekey effect.

Click on the line at the points to add key frames and drag the points to change the effect setting.

Select “Linear” or “Curve” as the manner in which to apply the effect adjustments. See Figure 649 for an example.

Figure 649. Luminance KeyFrame Curve



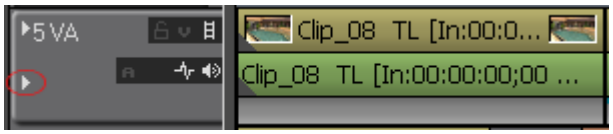
Transparency Adjustments

Transparency adjustments make it possible to change the transparency of the video in the upper track so that the video in the lower track becomes visible as well.

To adjust the transparency of a video, do the following:

1. In the Track Panel, click the **Expand2** button on the track containing the video for which you wish to adjust the transparency. See Figure 650.

Figure 650. Expand2 Button in Track Panel



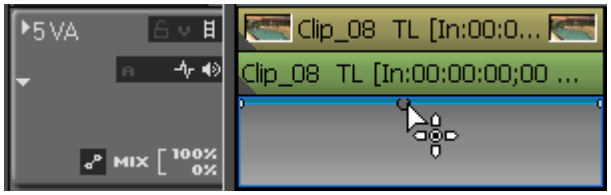
2. Click the **Mixer** button to activate the Mixer area. See Figure 651.

Figure 651. Mixer Button in Track Panel

3. Click a point on the rubber band at which you wish to set a key frame. See Figure 652.

Note To adjust the transparency of the entire clip, drag the line while pressing the **[ALT]** key on the keyboard.

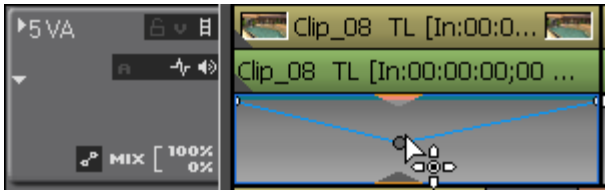
Figure 652. Set Key Frame on Rubber Band



4. Drag the key frame point to adjust the transparency. See Figure 653.

Note To make fine adjustments to the rubber band, hold down the [**CTRL**] key while dragging the key frame point.

Figure 653. Adjust Key Frame Transparency



While dragging the key frame point, the transparency setting is displayed in the lower left corner of the Timeline window as illustrated in Figure 654. The video is completely transparent when the setting reaches 0%.

Note Adjusting, deleting, and initializing rubber band points for transparency key frames is done utilizing the same procedures as the audio rubber band. See *Entering Value Adjustments* *on page 645* and *Deleting or Initializing Rubber Band Points* *on page 647* for more information.

Figure 654. Timeline Transparency Display

Fade-In/Fade-Out Effects

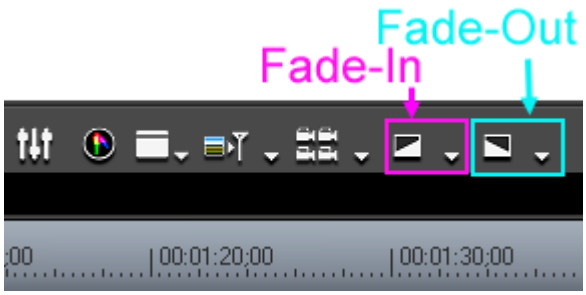
Fade-in effects cause a video to appear gradually and fade-out effects cause it to disappear gradually.

To define fade-in and fade-out effects, follow these steps:

1. Select a clip on the Timeline to which you wish to apply fade-in or fade-out effects.
2. Position the Timeline cursor at the end frame for a fade-in effect or at the beginning frame for a fade-out effect.
3. Click the **Fade-in** or **Fade-out** button on the Timeline. See Figure 655.

Note An aqua blue line appears at the top of the mixer area the clip with a fade-in and/or a fade-out effect applied.

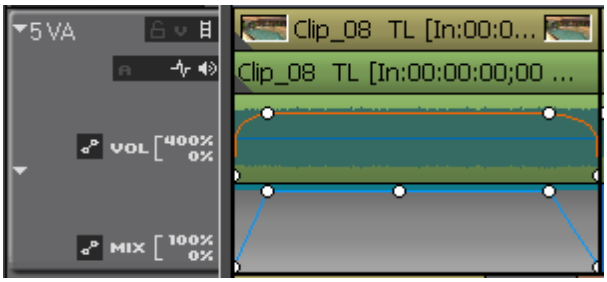
Figure 655. Timeline Fade-In and Fade-Out Buttons



Note By default, these buttons are not on the Timeline. To add them, see *Button Settings* *on page 154*.

Fade-In and Fade-Out settings are visible in the audio waveform and mixer areas of the track. Click the Expand1 and Expand2 buttons to expand the track if these elements are not already visible. A key frame point is added where a fade-in ends and a fade out begins as illustrated in

Figure 656. Timeline Fade-In and Fade-Out Key Frames



Related Operations:

To delete a fade-in or fade-out effect, delete the audio and video parts separately by doing the following:

- To delete the audio fade-in/fade-out, Right-click the clip and select "Delete Parts>Audio RubberBand>Volume" from the menu.

Note An alternative method is to press the [**SHIFT**]+[**ALT**]+[**H**] keys on the keyboard.

- To delete the video fade-in/fade-out, Right-click the clip and select "Delete Parts>Mixer>Transparency" from the menu.

Note An alternative method is to press the [**SHIFT**]+[**CTRL**]+[**ALT**]+[**G**] keys on the keyboard.

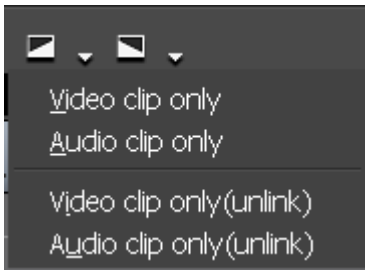
Apply Fade-In/Fade-out to Audio or Video Only

To apply a fade-in or fade-out effect to just the audio or video portion of a clip, do the following:

1. Select a clip on the Timeline to which you wish to apply fade-in or fade-out effects.
2. Position the Timeline cursor at the end frame for a fade-in effect or at the beginning frame for a fade-out effect.
3. Click the list button (▽) of the **Fade-in** or **Fade-out** button and select one of the following from the menu (see Figure 657):

- Video clip only - applies the fade-in or fade-out to the video only.
- Audio clip only - applies the fade-in or fade-out to the audio only.
- Video clip only(unlink) - applies the fade-in or fade-out to the video portion of only the selected clip if the clip is linked or part of a group.
- Audio clip only(unlink) - applies the fade-in or fade-out to the audio portion of only the selected clip if the clip is linked or part of a group.

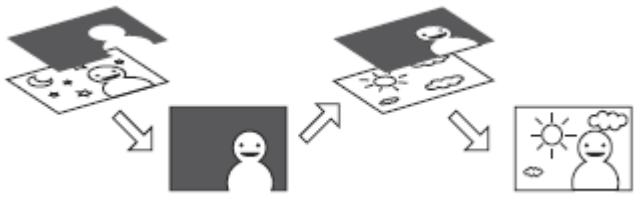
Figure 657. Timeline Fade-In Menu



Alpha Channel

A clip with transparency settings that mask out the unwanted portions of the clip may be overlaid as an alpha channel on a second background clip. The result is a composite of both clips as shown in Figure 658.

Figure 658. Alpha Channel Example



The clip from which the desired portions are extracted is called the "Fill." The transparency mask that extracts images from the fill is called the "Key" as illustrated in Figure 659.

Figure 659. Alpha Channel Key and Fill

The Alpha Channel functions are not supported when the following parameters are different for the Key and Fill images:

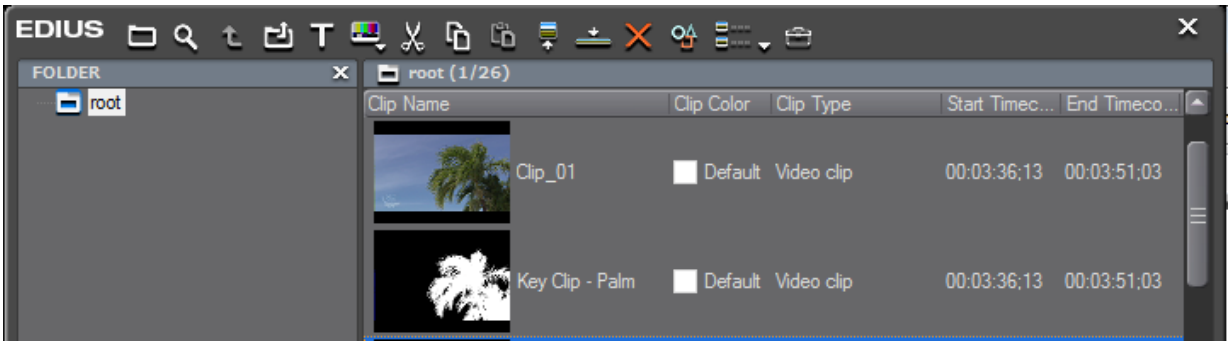
- Image size
- Frame rate
- Aspect ratio
- Field order (Top or Bottom Field First and Progressive are supported - No combination of Top Field First and Bottom Field First is supported)
- One or both clips has no defined duration.

Note The aspect ratio and field order of a clip is visible in the Information Palette.

To create an Alpha Channel composite clip, follow these steps:

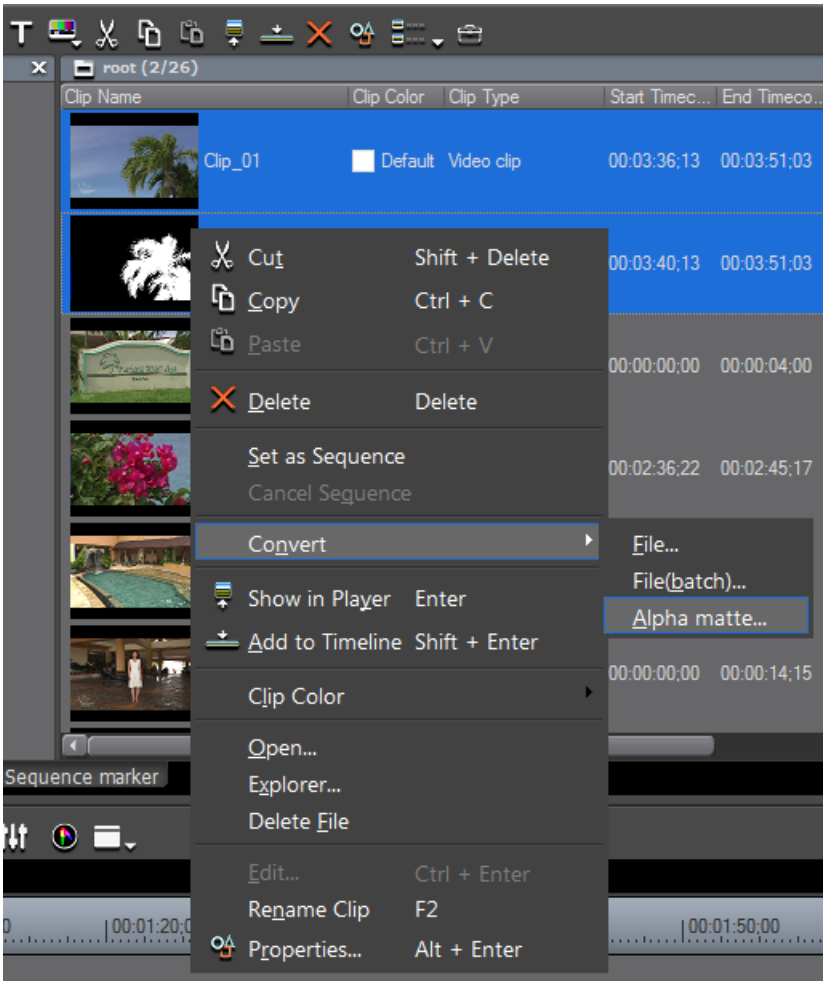
1. Save the clips that will be the Fill and Key clips in the Asset Bin as shown in Figure 660.

Figure 660. Fill and Key Clips in the Asset Bin



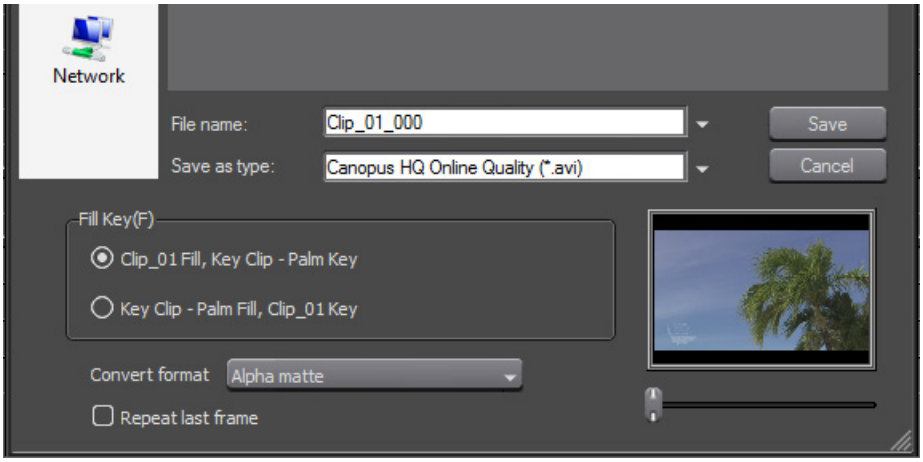
2. Select the two clips to use as the Fill and Key
3. Right click on the clips and select Convert>Alpha matte from the menu. See Figure 661.

Figure 661. Clip Menu - Alpha Matte as



A Save As dialog appears as illustrated in Figure 662.

Figure 662. Alpha Matte Save As Dialog



4. Set the save parameters per the explanations which follow.

Save As Type

From the drop-down list, specify the .avi file format for the saved file. Choices may include Canopus HQ, Canopus Lossless and Uncompressed RGB and are dependent upon the format of the original Key and Fill clips.

Fill/Key Selection

Select which clip is the Fill clip and which is the Key clip by clicking the appropriate radio button.

Convert Format

From the convert format drop-down list, select the element from the Key clip which is to be used for the alpha channel.

Alpha Matte

Select this format when the Key clip includes an alpha channel that will be applied to the Fill clip.

Alpha Matte (Invert)

Select this format when the Key clip includes an alpha channel, but the channel should be inverted when applied to the Fill clip.

Luminance Matte

Select this format when applying the luminance (0% to 100%) level of the Key clip as the alpha channel for the Fill clip where a luminance level of 100% signifies 100% transparency.

Luminance Matte (Invert)

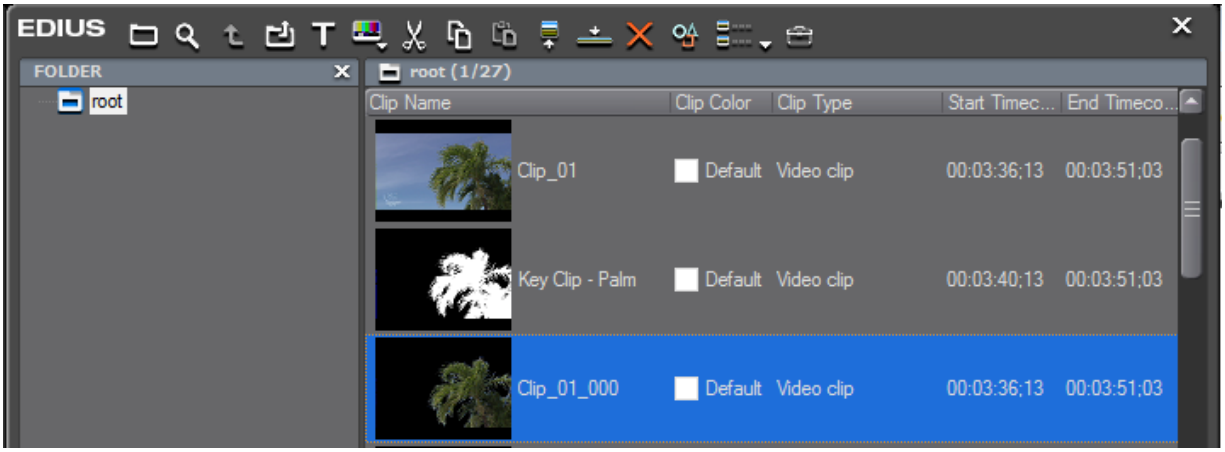
Select this format when applying the luminance (0% to 100%) level of the Key clip as the alpha channel for the Fill clip where a luminance level of 0% signifies 100% transparency.

Repeat Last Frame

Select this option to repeat the last frame of the Key clip to match the duration of the Fill clip when the Key clip is shorter.

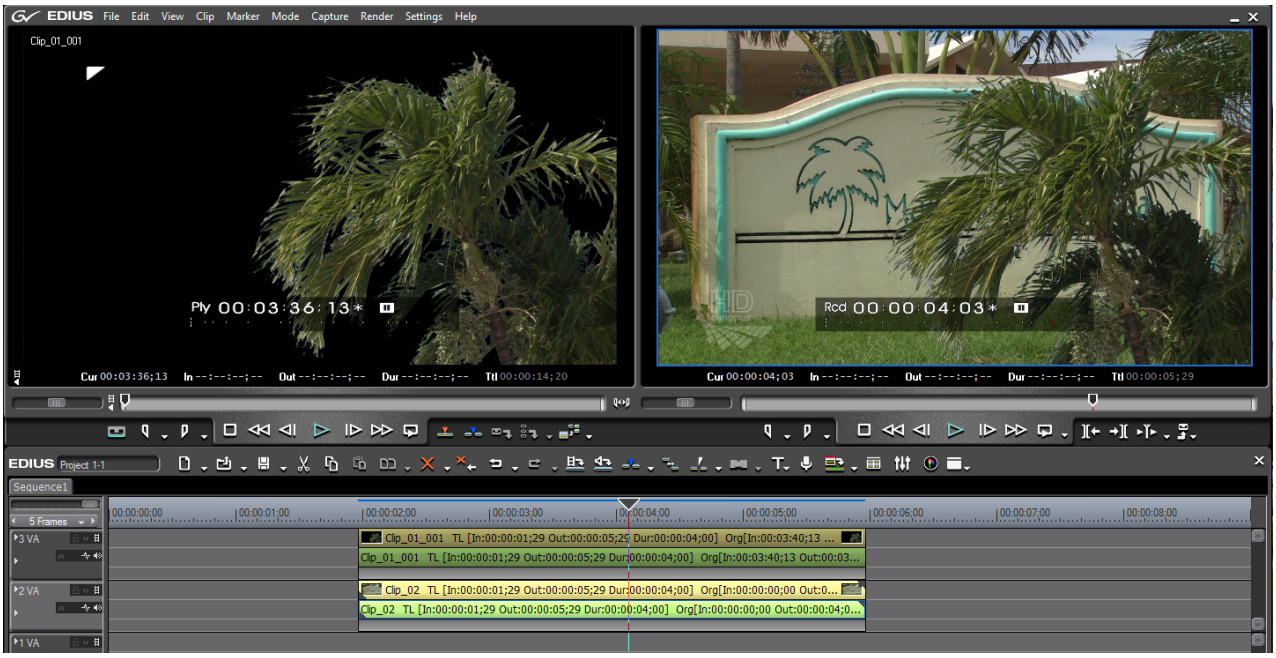
5. Click the **Save** button to create the alpha channel clip which is automatically saved in the Asset Bin. See Figure 663.

Figure 663. Alpha Channel Clip Saved to Asset Bin



6. Place the Alpha Channel clip and background clip on the Timeline to create the video composite as illustrated in Figure 664.

Figure 664. Background and Alpha Channel Clip Composite

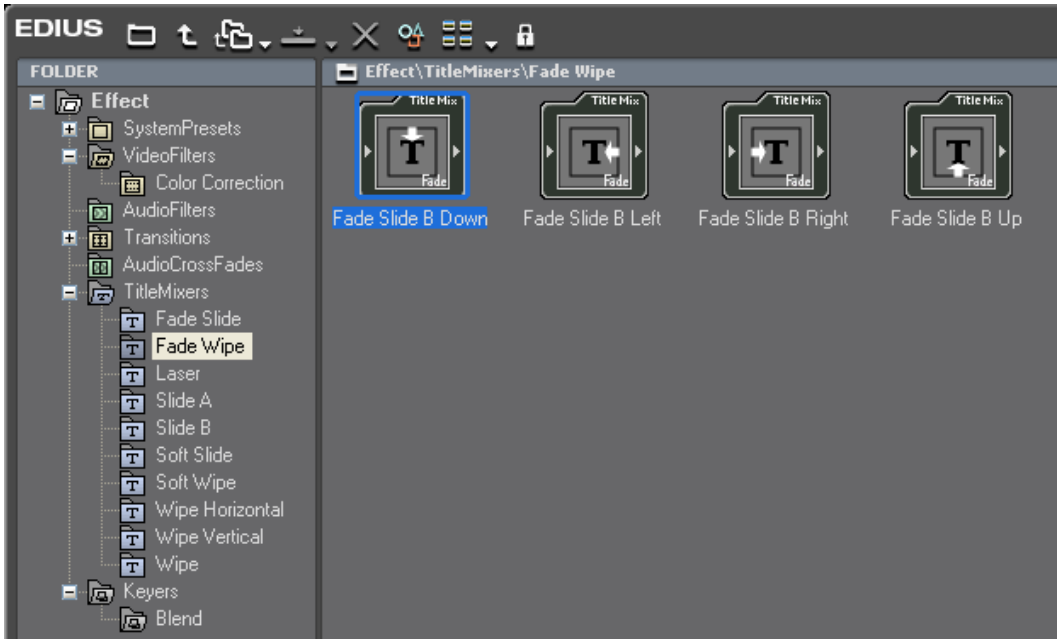


Title Mixer Effects

To add effects to a title clip, do the following:

1. Select the "TitleMixers" tree from the Effect Palette.
2. Select the desired TitleMixer effect group and title mixer effect as illustrated in Figure 665.

Figure 665. Effect Palette - Title Mixers

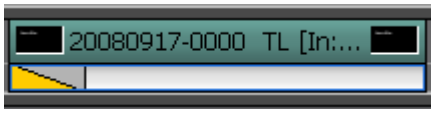


3. Drag and drop the desired title mixer to the mixer area of the title clip.

Note Separate title mixers can be added to the In and Out points of a title clip.

The yellow triangle on the title clip indicates a title mixer has been added. See Figure 666.

Figure 666. Title Mixer added to a Title Clip



Note The length of a title mixer effect can be changed after placing it on the title clip. See *Changing the Length of a Transition or Cross Fade* *on page 521* for more information.

Effect Operations

This section discusses operations related to the management of effects and effect folders.

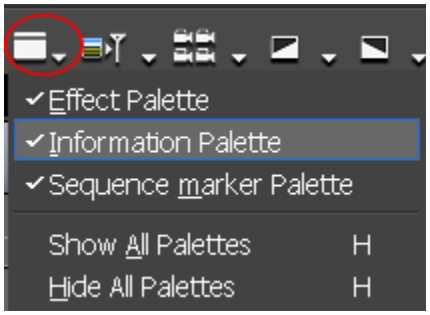
Show/Hide the Information Palette

The Information Palette shows details related to the selected clip. Among those details are any effects that have been placed on a clip.

To show or hide (toggle functions) the Information Palette, do one of the following:

- Click the **Toggle palette display** button on the Timeline (see Figure 667) and select "Information Palette" from the menu.

Figure 667. Toggle Palette Display Button Menu - Information Palette



- Select View>Information Palette on the Preview window menu bar.
- Select View>Show All Palettes on the Preview window menu bar.

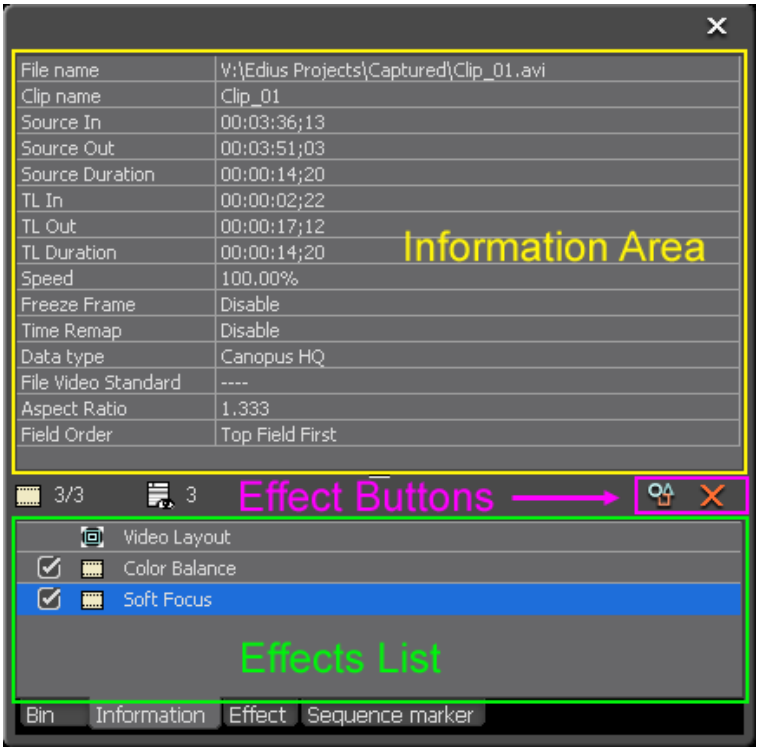
Note This function simultaneously shows or hides the Effect, Information and Sequence Marker palettes. For more information on the Effect Palette, see *Effect Palette* *on page 482*. For more information on the Marker Palette, see *Sequence Marker Palette* *on page 409*.

- Press the [**H**] key on the keyboard to show or hide all palettes.
- Select View>Hide All Palettes from the Preview window menu bar to hide the Information, Effect and Sequence Marker palettes.

Information Palette

Figure 668 shows the Information Palette and the functions and information available in this palette.

Figure 668. Information Palette



Information Area

The information area displays information about the selected clip such as; filename, duration, aspect ratio, etc. The information varies by clip type.

Effects List

Any effects applied to the selected clip are displayed in the effects list. The numbers above the list indicate the number of enabled effect and the total number of applied effects (e.g. 3/3 in the example above) and the number of the currently selected effect (e.g. 3 in the example above).

- Settings Button

Click the **Settings** button to display the configuration dialog for the currently-selected effect in the effects list.

- Delete Button

Click the **Delete** button to delete the currently-selected effect in the effects list.

Effect Enable/Disable

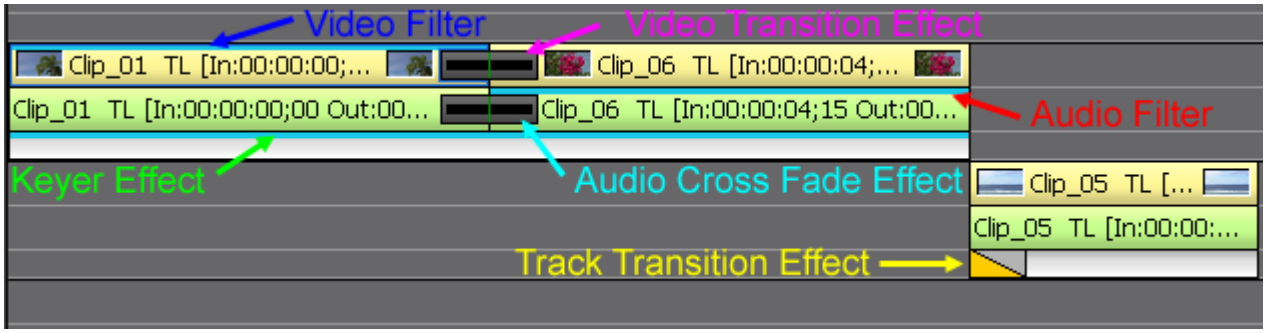
To temporarily disable a filter effect or key effect, click the checkbox next to the effect name. If the check mark is present, the effect is enabled. If there is no check mark, the effect is disabled.

Verifying and Adjusting Effects

The indicators noted in each example below show which effect types have been applied to clips on the various tracks.

VA Track

Figure 669. VA Track Effects Indicators

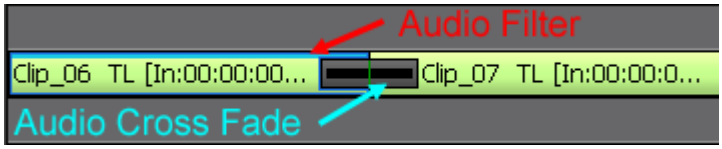


V Track

Figure 670. V Track Effects Indicators

A Track

Figure 671. A Track Effect Indicators



T Track

Figure 672. T Track Effects Indicators

The Information Palette displays a list of applied effects for the selected clip. For more information see *Information Palette* *on page 566*.

To adjust an effect, do any of the following:

- Select the effect name in the effects list of the Information Palette and click the **Settings** button.

The configuration dialog for the effect appears.

- Double-click the effect name in the effects list of the Information Palette.
- Drag and drop the effect name in the effects list to the **Settings** button of the Information Palette.
- Right-click the effect name in the effects list of the Information Palette and select "Open Setup Dialog" from the menu.

Adjust the effect as desired. For more information, see the section on applying each effect type.

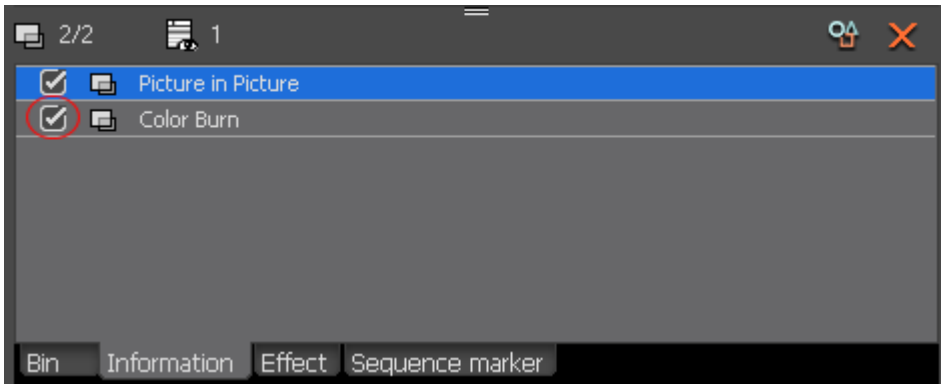
Note Effects can be modified and saved under a different name as user preset effects. See *Customizing the Effect Palette* *on page 577* for more information.

Enabling/Disabling Effects

To enable or disable effects that have been applied to clips, do one of the following after selecting the desired clip on the Timeline:

- Click the checkbox of the desired effect in the effects list of the Information Palette (see Figure 673). If the check mark is present, the effect is enabled. If there is no check mark, the effect is disabled.

Figure 673. Information Palette Effect Enable/Disable



- Right-click the effect name in the effect list of the Information Palette and select "Enable/Disable" from the menu.
- Select an effect name in the effect list of the Information Palette and press the [**CTRL**]+[**F**] keys on the keyboard.

Deleting Effects

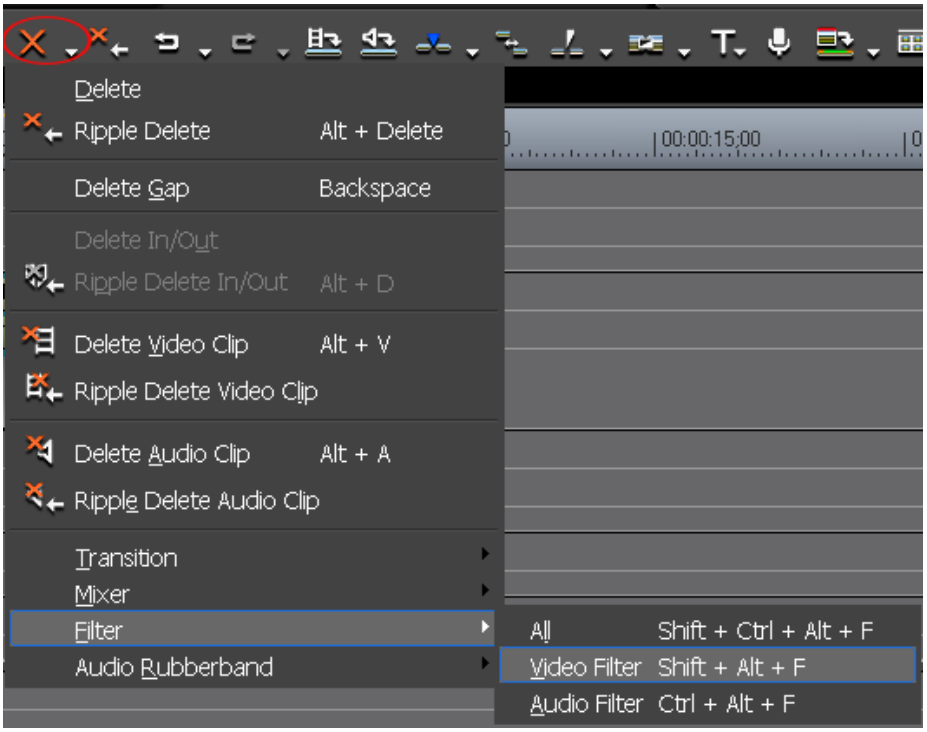
Effects may be deleted from the Timeline or from the Information Palette.

Deleting Effects from the Timeline

Do the following to delete an effect from the Timeline:

1. On the Timeline, select the clip with the effect you wish to delete.
2. Click the list button (▽) of the **Delete** button and select {effect type}>{item to delete} from the menu as illustrated in Figure 674.

Figure 674. Timeline Delete Button Menu - Filter



Note The effect you wish to delete may be under the Transition, Mixer, Filter or Audio Rubber Band menu.

Alternative Methods:

- Right-click a clip and select "Delete Parts>{effect type}>{item to delete}" from the menu.
- Select Edit>Delete Parts>{effect type}>{item to delete} from the Preview window menu bar.
- Right-click on the Mixer area with an effect applied and select "Delete" from the menu.
- Clip Transition - Press the **[SHIFT]**+**[ALT]**+**[T]** keys on the keyboard.

- Audio Cross Fade - Press the [**CTRL**]+[**ALT**]+[**T**] keys on the keyboard.
- Keyer - Press the [**CTRL**]+[**ALT**]+[**G**] keys on the keyboard.
- Transparency - Press the [**SHIFT**]+[**CTRL**]+[**ALT**]+[**G** keys on the keyboard.
- Video Filter - Press the [**SHIFT**]+[**ALT**]+[**F**] keys on the keyboard.
- Audio Filter - Press the [**CTRL**]+[**ALT**]+[**F**] keys on the keyboard.
- All Transitions - Press the [**ALT**]+[**T**] keys on the keyboard.
- All Filters - Press the [**SHIFT**]+[**CTRL**]+[**ALT**]+[**F**] keys on the keyboard.

Deleting Effects from the Information Palette

To delete an effect from the Information Palette, follow these steps:

1. Click the area of the clip (e.g. video/audio track or mixer area) to which the effect is applied that you wish to delete. See *Verifying and Adjusting Effects on page 568* for more information.
2. From the effects list in the Information Palette, select the effect name you wish to delete and click the Delete button (highlighted in blue in Figure 675).

Figure 675. Information Palette Delete Button

Alternative Methods:

- Drag the effect name out of the Information Palette.
- Drag and drop the effect name on the **Delete** button in the Information Palette.
- Right-click the effect name and select “Delete” from the menu.
- Select an effect to delete and press the [**Delete**] key on the keyboard.

Note In Extend mode, (see *Extend Mode on page 308* for more information) when a clip transition or audio cross fade is applied between clips, a green line (cut point) is displayed on the transition indicator. Deleting the transition between clips moves the Out point of the first clip and the In point of the second clip to the cut point as illustrated in Figure 676.

Figure 676. Delete Transition Detail

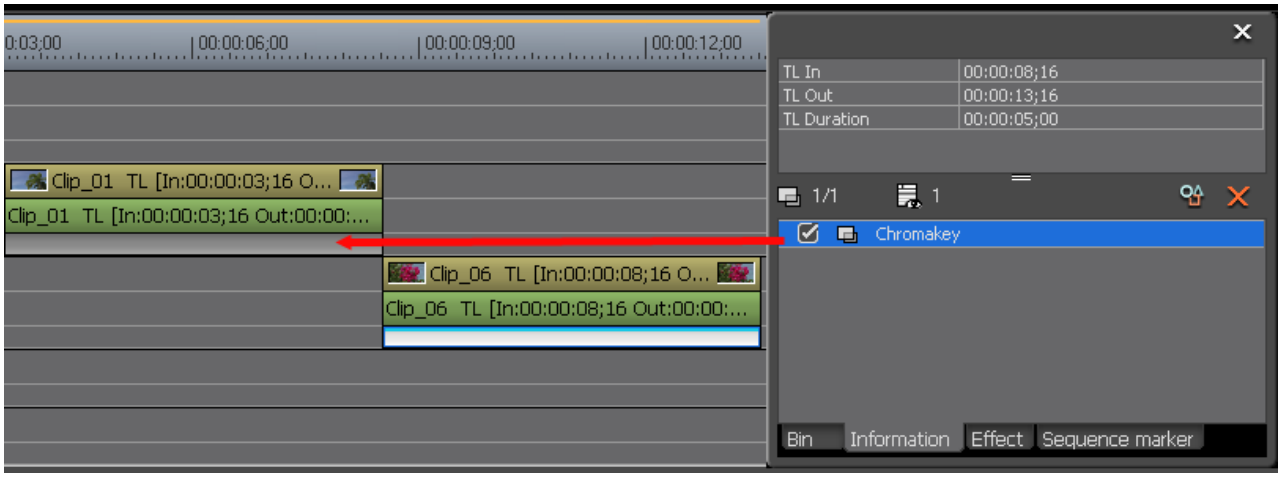
Copy Effects

Effects may be copied from one clip to another. If the effect settings were adjusted after being applied to the first clip, the adjusted settings are also applied to the clip to which the effect is copied.

To copy an effect and its settings from one clip to another, do the following:

1. Click the area of the clip (e.g. video/audio track or mixer area) to which the effect is applied that you wish to copy. See *Verifying and Adjusting Effects* *on page 568* for more information.
2. From the effects list in the Information Palette, select the effect name you wish to copy and drag and drop it directly to the target clip on the Timeline as shown in Figure 677.

Figure 677. Drag and Drop Effect from Information Palette to Another Clip



Note Clip transitions, track transitions, audio cross fades and keyers can be copied by dragging and dropping from one clip directly to another. These effect types do not require dragging and dropping from the Information Palette.

Copy Transitions

Transitions may also be copied from one clip to another in the following manner:

1. Select the transition you wish to copy by clicking on it (see Figure 678).

Figure 678. Transition Selected on Timeline

2. Click the **Copy to clipboard (Timeline)** button (highlighted in blue in Figure 679) to copy the selected transition.

Figure 679. Timeline Copy to Clipboard (Timeline) Button

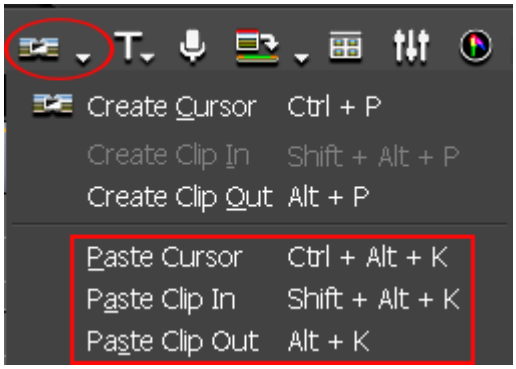
3. Select the clip to which to paste the transition.

If you want to paste the transition to a particular location on the clip, move the Timeline cursor to that position.

4. Click the list button (▽) of the **Set default transition** button and select the paste method from the following options:

- Paste Cursor - pastes the transition on the clip on the In side of the transition, the clip on the Out side of the transition, or, on both clips depending upon the cursor location.
- Paste Clip In - pastes the transition on the clip on the In side of the transition or on both clips depending on the cursor location and selected clip.
- Paste Clip Out - pastes the transition on the clip on the Out side of the transition or on both clips depending on the cursor location and selected clip.

Figure 680. Timeline - Set Default Transition Button Menu



Alternative Paste Methods:

- Paste Cursor - [**CTRL**]+[**ALT**]+[**K**]
- Paste Clip In - [**SHIFT**]+[**ALT**]+[**K**]
- Paste Clip Out - [**ALT**]+[**K**]

Replacing Effects

To replace a filter or mixer effect with the filter or mixer effect from another clip, do the following:

1. Select the clip with the applied filter or mixer effect you wish to copy and click the Copy to clipboard (Timeline) button. See Figure 681.

Figure 681. Timeline Copy to Clipboard (Timeline) Button

2. Select the clip on which you wish to paste the copied effect.
3. Click the list button (▽) of the **Replace clip (Timeline)** button and select "Filter" or "Mixer" from the menu depending upon the type of effect that was copied. See Figure 682.

Figure 682. Timeline Replace Clip (Timeline) Button Menu

Alternative Method:

Right-click the target clip and select "Replace Parts>Filter" or "Replace Parts>Mixer" from the menu.

Saving Effects

Effects can be customized and saved as user preset effects in the Effects Palette.

Multiple effects may also be saved as a single effect.

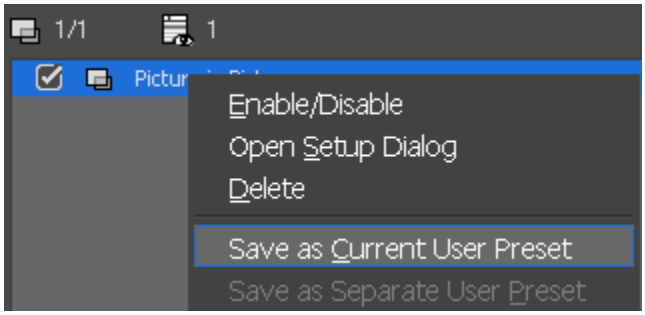
To save an effect as a user preset effect, execute these steps:

1. Select the clip area (video/audio track or mixer area) that has the effect applied that you wish to save.
2. Select the folder in the Effect Palette to which to save the effect.

Note Folders can be created in the Effects Palette. For more information on create Effect Palette folders, see *Creating Folders in the Effects Palette* *on page 577*.

3. From the Information Palette, right-click on the effect name to be saved and select "Save as Current User Preset" from the menu as illustrated in Figure 683.

Figure 683. Information Palette Effect Menu - Save as Current User Preset



The effect is saved in the currently selected folder in the Effects Palette. As shown in Figure 684, user preset effect have a yellow "U" displayed on their icon. See *User Preset Effects* *on page 485* for more information.

Figure 684. User Preset Effect

If you want to rename the saved user preset effect, click once on the effect name and enter a new name.

Alternative Method:

Drag and drop the effect name from the effects list in the Information Palette to the desired folder in the Effect Palette.

Related Operations:

Save Multiple Effects as a Single Effect

Multiple effects are saved as a single effect by selecting multiple effects before right-clicking on an effect. If 'Save as Current User Preset' is selected from the menu, the selected effects are saved as a single effect in the selected folder in the Effect Palette. The default effect name is the same as one of the selected effects.

The icon shown in Figure 685 indicates this effect contains multiple effects

Figure 685. Multiple Effects Saved as a Single Effect

Save Multiple Effects as Separate Effects

Multiple effects are saved as separate effects by selecting multiple effects before right-clicking on an effect. If 'Save as Separate User Preset' is selected from the menu, the selected effects are saved as separate effects in the selected folder in the Effect Palette.

Deleting Effects from the Effect Palette

To delete an Effect from the Effect Palette, do one of the following:

- In the Effect Palette effect view or tree view, right-click on the user preset effect to delete and select "Delete" from the menu.

Note Only user preset effects can be deleted. System preset effects and plug-in base effects cannot be deleted.

- Select the user preset effect to delete in the tree view or the effect view and press the **[DELETE]** key on the keyboard. See *Effect View Show/Hide on page 483* for more information on the effect view.

Related Operation:

Folders and their contents may also be deleted from the Effect Palette.

To delete folders, right-click on the folder and select 'Delete" from the menu.

Note If the folder contains effects other than user preset effects, only the user preset effects are deleted. If the folder contains saved folder shortcuts, a confirmation dialog appears. Click the **OK** button to delete the folder.

Customizing the Effect Palette

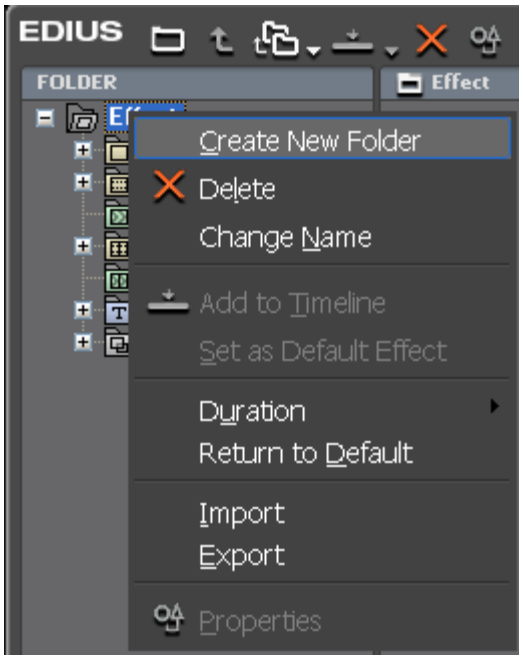
The Effect Palette and its contents may be customized in several ways as explained in this section.

Creating Folders in the Effects Palette

To create a new folder in the Effect Palette, do the following:

1. Right-click on the existing folder in which you wish to create the new folder and select "Create New Folder" from the menu as illustrated in Figure 686.

Figure 686. Effect Palette Menu - Create New Folder



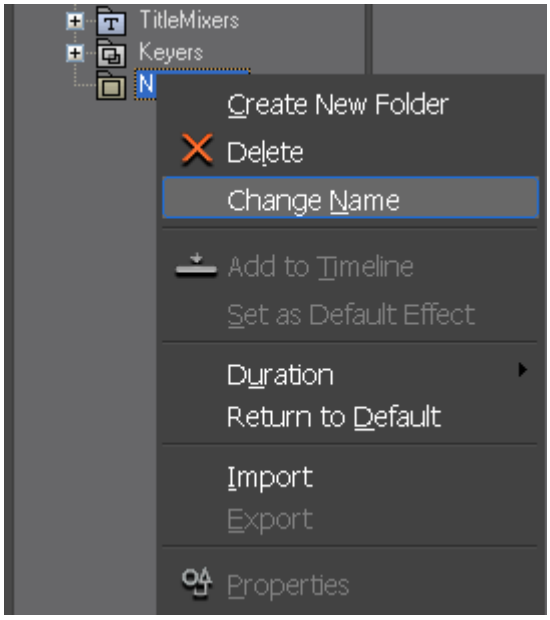
2. Enter the desired name for the "New folder" that appears in the Effect Palette tree.

Renaming Effects and Folders

To rename an effect or folder, do one of the following:

- Right-click the effect or folder name and select "Change Name" from the menu. See Figure 687.

Figure 687. Effect Palette Menu - Change Name



- Click once on the effect name or folder name
- Effect only - right click on the effect and click the **Properties** button. Change the name in the Properties dialog and click the **OK** button.

Note Plug-in base effects and system preset effects cannot be renamed.

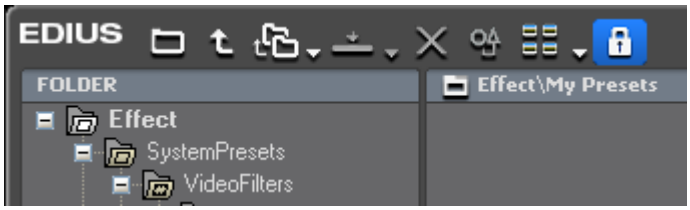
Lock/Unlock the Folder Structure

The Effect Palette folder structure can be locked so that changes to the folder structure are not allowed. When the Effect tree is unlocked, folders may be moved.

To lock or unlock the folder structure, check the status of the lock indicator on the Effect Palette. In Figure 688, the lock indicator is highlighted in blue.

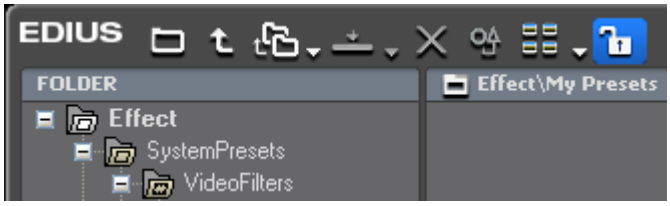
Note Figure 688 shows the location of the lock indicator if the effect view is active. If the effect view is disabled, the lock indicator is in the upper right corner of the Effect Palette under the close window (X) icon.

Figure 688. Effect Palette Lock Indicator



If the indicator is locked (as it is in Figure 688), the folder structure cannot be changed. To change the folder structure, click the lock indicator and it changes to an unlocked state as shown in Figure 689.

Figure 689. Effect Palette - Unlocked



Note If you execute the "Return to Default" function, the defaults are re-established even if the folder structure is locked. See *Resetting Effect Palette to Defaults on page 582* for more information.

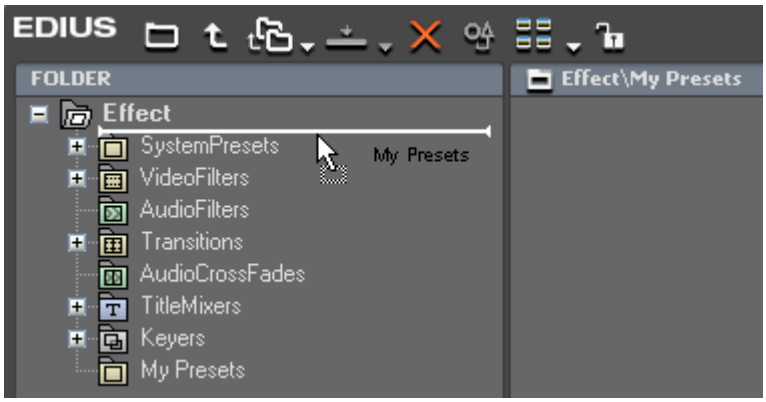
Changing the Folder Structure

The folder structure of the Effect Palette can be reorganized.

Note Before changing the folder structure check the folder lock indicator to verify that the folder structure is unlocked.

To change the location of a folder, drag and drop it to a new location in the folder tree as illustrated in Figure 690.

Figure 690. Effect Palette Folder Drag and Drop

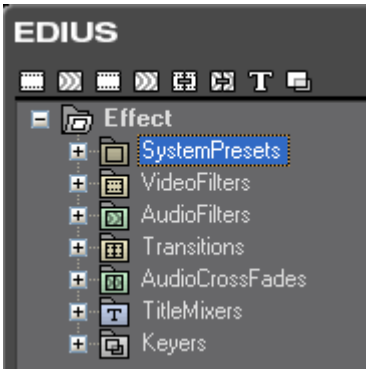


Note The horizontal bar moves up or down the folder list as the folder is dragged to indicate the position of the folder when the mouse button is released. The folder name is added in the example above for clarity, but, it does not appear when dragging the folder.

Folder Shortcuts

When the effect view is disabled and the Effect Palette is in the folder view, folder shortcuts appear across the top of the Effect Palette as illustrated in Figure 691.

Figure 691. Effect Palette Folder View



Each of the folder shortcut icons is assigned to a folder in the Effect Tree as indicated below. If there is no folder associated with a shortcut, the icon is greyed out.

- System Presets
  - Video Filters
  - Audio Filters
- Video Filters
- Audio Filters
- Transitions
- Audio Cross Fades
- Title Mixers
- Keyers

Clicking the shortcut icon opens the linked folder in the Effect tree.

Shortcut Assignments with Drag and Drop

If you wish to assign a different folder to a shortcut icon, drag the folder from the Effect tree and drop it on the desired icon at the top of the Effect Palette.

Shortcut Assignments in the Effect View

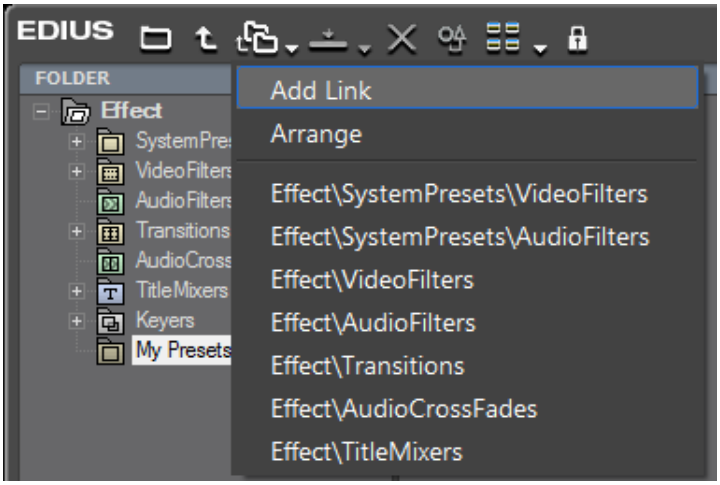
In the effect view, making a shortcut assignment is done in the following manner:

1. Select the folder in the Effect tree for which you wish to add a shortcut.

Note By default, all the top-level folders in the expanded Effect tree already have shortcut links. If you wish to assign a shortcut to a sub-folder, expand the appropriate folder tree and select the desired folder.

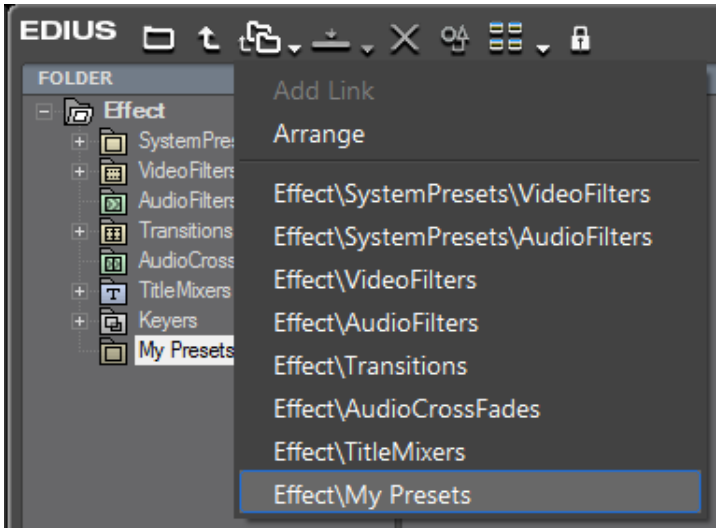
2. Click the **Folder Link** button and select "Add Link" from the menu as illustrated in Figure 692.

Figure 692. Effect Palette Select Folder



The selected folder is added to the **Folder Link** button list as shown in Figure 693.

Figure 693. Effect Palette Folder Link Button Link List



Note There is a limit of eight (8) folder shortcuts in the folder link list. If the list already contains eight shortcuts, an existing shortcut must be deleted before a new one can be added.

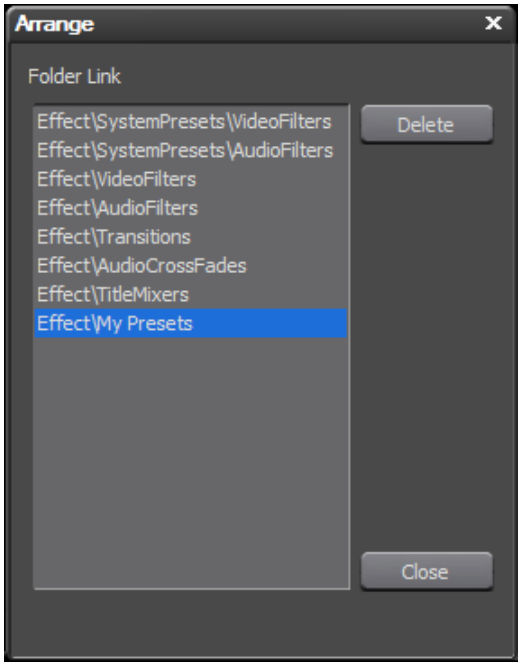
Deleting a Folder Shortcut

To delete a folder shortcut do the following:

1. Click the **Folder Link** button and select "Arrange" from the menu.

The Arrange dialog shown in Figure 694 appears.

Figure 694. Effect Palette - Folder Link Arrange Dialog

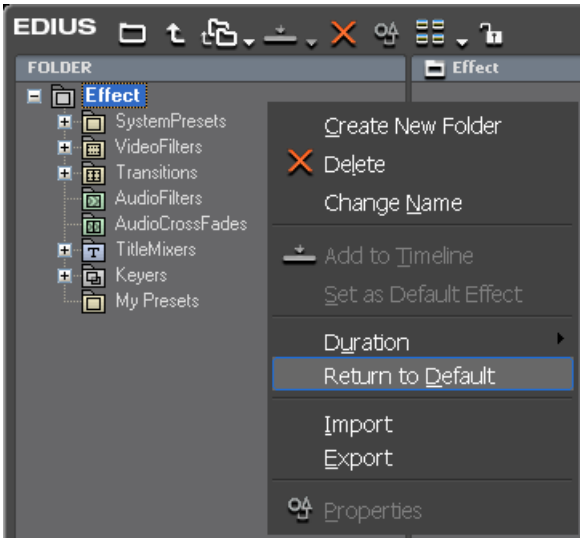


2. Select the folder link to delete and click the **Delete** button.
3. Click the **Close** button to exit the Arrange dialog.

Resetting Effect Palette to Defaults

To reset the Effect Palette to its default state, right click on the Effect Palette and select "Return to Default" from the menu as illustrated in Figure 695.

Figure 695. Effect Palette Menu - Return to Default



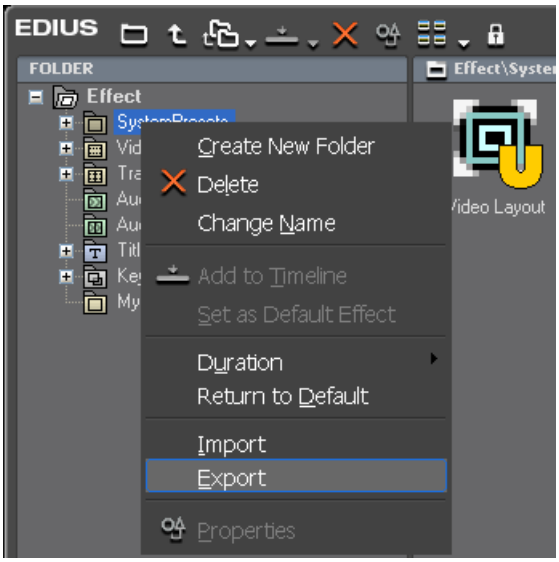
Export User Preset Effects

User preset effects can be exported to a .tpd file. When upgrading to a new version of EDIUS or after a reinstallation of EDIUS, exported user preset effects can be imported into the system.

To export user preset effects, do the following:

1. Right-click on the user preset effect or folder containing user preset effects which you wish to export and select “Export” from the menu as shown in Figure 696.

Figure 696. Effect Palette Right-Click Menu - Export



A Save As dialog appears.

2. Navigate to the location in which you wish to save the folder or file and enter the desired file name.

3. Click the **Save** button.

Note User preset effects files are saved with a .tpd extension.

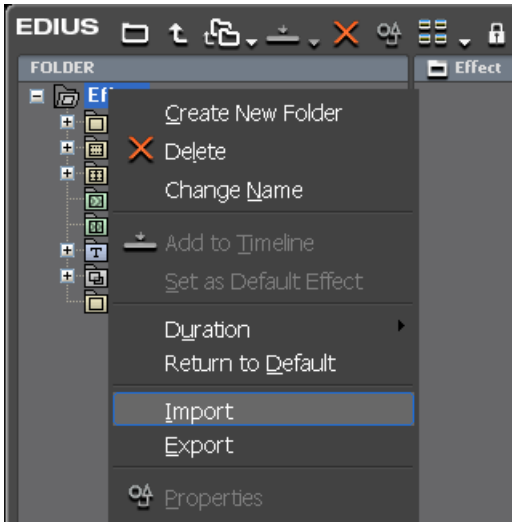
Import User Preset Effects

When upgrading to a new version of EDIUS or to restore the user preset effects after reinstalling EDIUS, exported user preset effects can be imported into EDIUS.

To import user preset effects, do the following:

1. In the Effect Palette, right-click on the folder into which you wish to import user preset effects and select "Import" from the menu. See Figure 697

Figure 697. Effect Palette Right-Click Menu - Import



A File Open dialog appears.

2. Navigate to the location contain the .tpd file to be imported and select the desired user preset effect file.

3. Click the **Open** button.

Note A new folder containing the imported effect(s) is created under the folder which was right-clicked in Step 1.

Verifying Color Data for TV Display

Video displayed on a PC monitor may not display with the same detail on a television screen if the TV monitor has a lower luminance range than the PC monitor. To correct this problem, the video signal must be adjusted before it is output for viewing on a television.

To properly adjust the video signal, it must be measured with a Vector Scope/Waveform Analyzer. The Vector Scope adjusts color balance and the Waveform Analyzer adjusts the brightness.

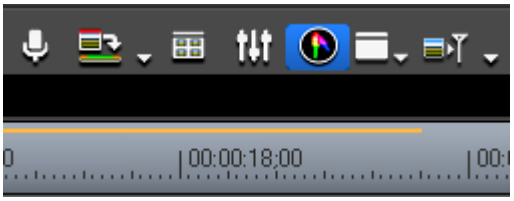
To adjust the video display with the Vector Scope/Waveform, do the following:

Note Displaying the Vector Scope/Waveform increases the CPU load. Display it only when necessary

1. Move the Timeline cursor to the position at which you wish to check the video display properties.
2. Click the **Toggle vector scope/waveform display** button on the Timeline (highlighted in blue in Figure 698).

Note An alternative method is to select View>Vector Scope/WaveForm from the Preview window menu bar.

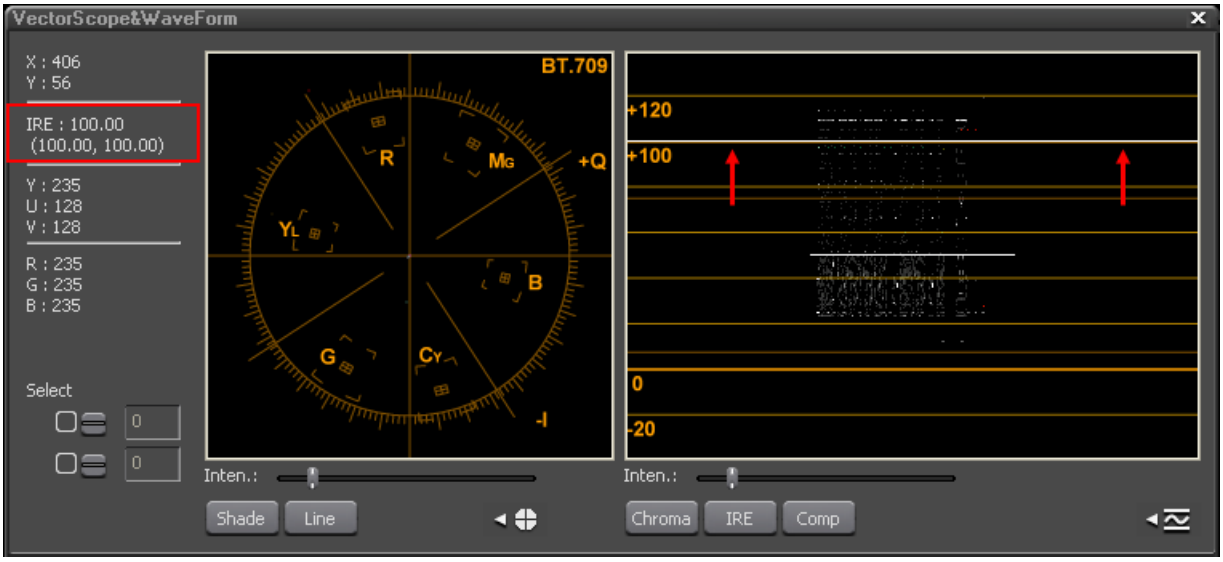
Figure 698. Timeline Toggle Vector Scope/Waveform Display Button



The Vector Scope/Waveform Dialog appears as illustrated in Figure 699.

Note Figure 699 shows the measuring of a white color matte clip (see *Create a Color Matte Clip* *on page 259*). Note that it measures IRE100.

Figure 699. Vector Scope&Waveform Dialog - White Matte Clip

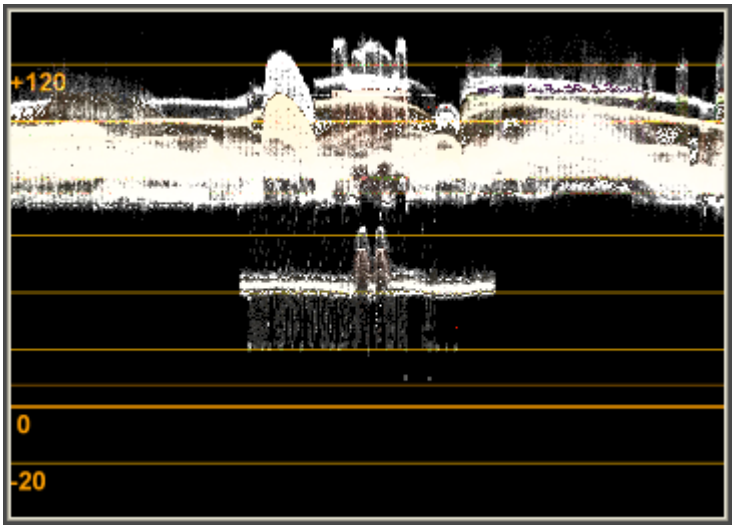


Note Figure 700 shows the measuring of a black color matte clip (see *Create a Color Matte Clip on page 259*). Note that it measures IRE7.5. IR7.5 is commonly used as the black reference level in North America. IRE0 is used in Japan.

Figure 700. Vector Scope&Waveform Dialog - Black Matte Clip

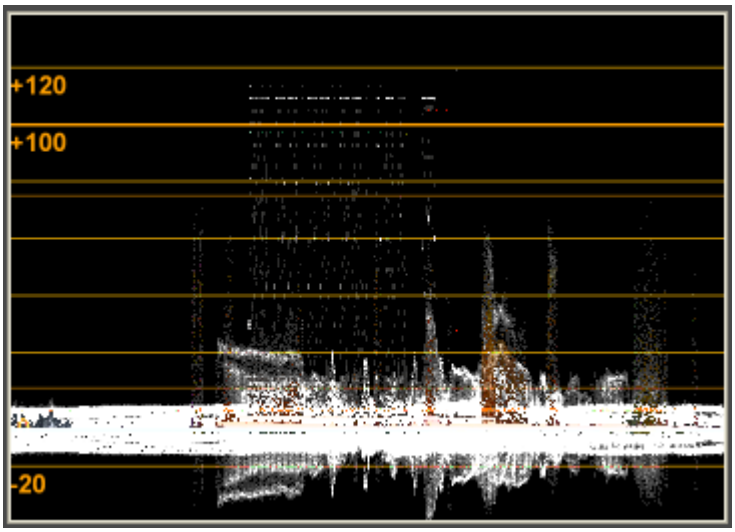
A clip with high luminance will have a waveform such as the one illustrated in Figure 701. In this example, a large portion of the clip is at an IRE level greater than 100 and some portions exceed IRE 120.

Figure 701. High Luminance Clip Waveform



A clip with low luminance will have a waveform such as the one illustrated in Figure 702. In this example, a large portion of the clip is at an IRE level lower than IRE 7.5 (IRE 0 in Japan) and some portions are lower than the IRE -20 level.

Figure 702. Low Luminance Clip Waveform

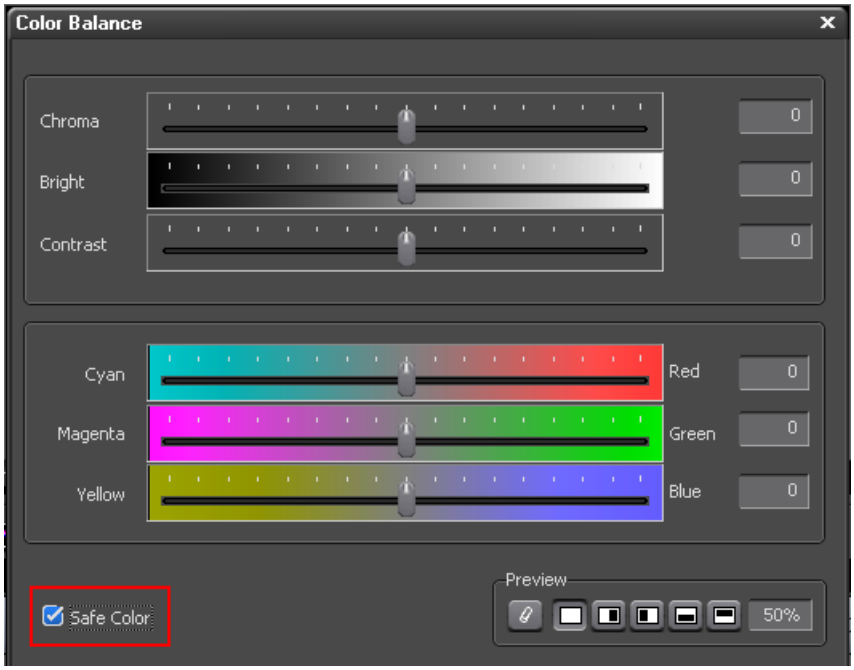


To adjust the IRE of a clip within the safe range of IRE 7.5 (IRE 0 in Japan) to IRE 100, do the following:

1. Apply the Color Balance filter to the clip.
2. Open the Color Balance dialog by double-clicking the Color Balance filter in the Information Palette.

3. In the Color Balance dialog shown in Figure 703, select the 'Safe Color" option to automatically adjust the clip to the safe range of IRE 7.5 to IRE 100.

Figure 703. Color Balance Dialog

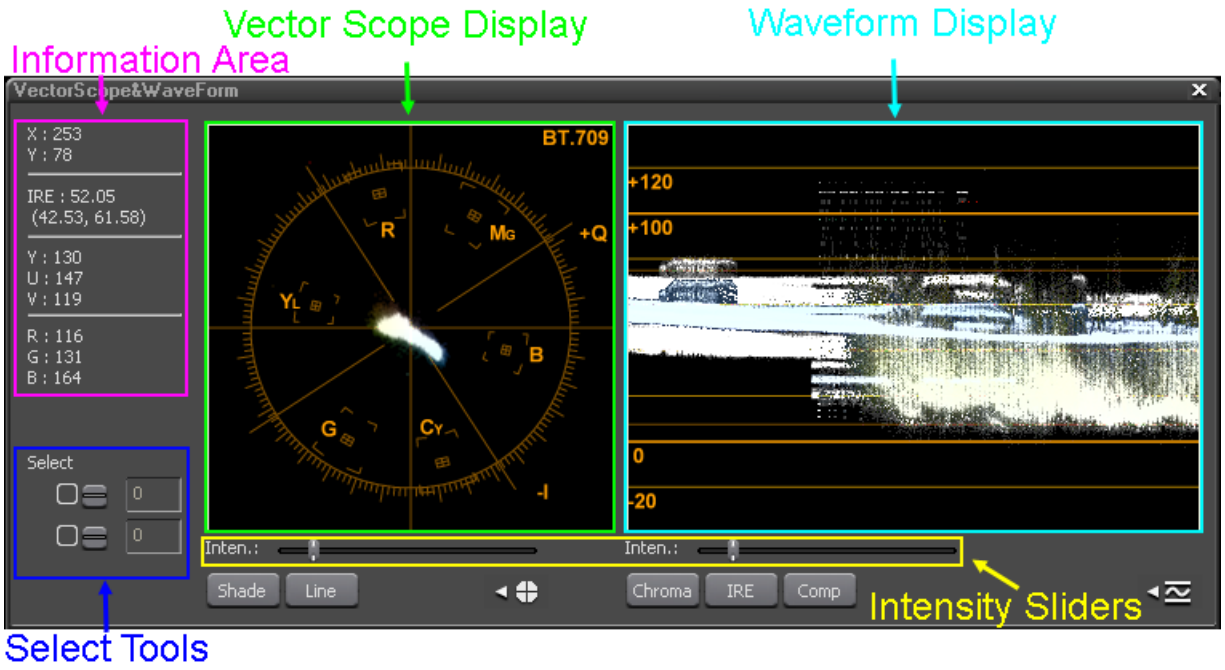


Note The Brightness slider may also be used to further refine the IRE levels of the video clip.

Vector Scope and Waveform Details

Figure 704 shows details of the Vector Scope and Waveform dialog. The tools and functions of this dialog are explained below.

Figure 704. Vector Scope and Waveform Details



Information Area

This area displays information such as screen coordinates (X,Y) of the cursor location in the Recorder, as well as the IRE, YUV, and RGB values of that location.

Vector Scope

The color distribution of the image displayed in the Recorder is shown in the Vector Scope display. To zoom in, click on a area of the Vector Scope you wish to magnify. To zoom out, right-click on the Vector Scope display.

Waveform

Chroma and luminance levels of the image displayed in the Recorder are shown in the Waveform display. To zoom in, click on a area of the Waveform you wish to magnify. To zoom out, right-click on the Waveform display.

Select Tool

The select tool is used to display Y Axis (vertical) information for the selected image position. Select the checkbox and click the button, then,

click on the image in the Recorder to see the Y-Axis information for the selected image position. You may also directly enter coordinate values

The display in the Vector Scope and Waveform are set to the color data of the selected position.

If the select tool is disabled (checkmark removed) the Vector Scope and Waveform display last shown when the select tool was active is restored when the select tool is again enabled.

Note Two different image positions may be selected simultaneously.

Shade Button

Clicking this button shows the color distribution in the Vector Scope display as dots (this is the default display method).

Line Button

Clicking this button changes the Vector Scope display to show the color distribution by connecting the dots with lines.

- Show/Hide Vector Scope Button

This button toggles the display of the Vector Scope on and off.

Chroma Button

Clicking this button changes the Waveform display to show all color elements centered around 7.5 IRE (0 IRE in Japan)

IRE Button

Clicking this button shows only luminance elements on the Waveform display.

Comp Button

Clicking this button displays a composite of the luminance (IRE) and color elements (Chroma) in the Waveform display.

- Show/Hide Waveform Button

This button toggles the display of the Waveform on and off.

Intensity Sliders

The intensity sliders adjust the brightness of the Vector Scope and Waveform displays on the monitor.

Titles

There are two titling applications available with EDIUS; QuickTitler (the built-in default titling application) and TitleMotion Pro for EDIUS which must be installed separately.

QuickTitler

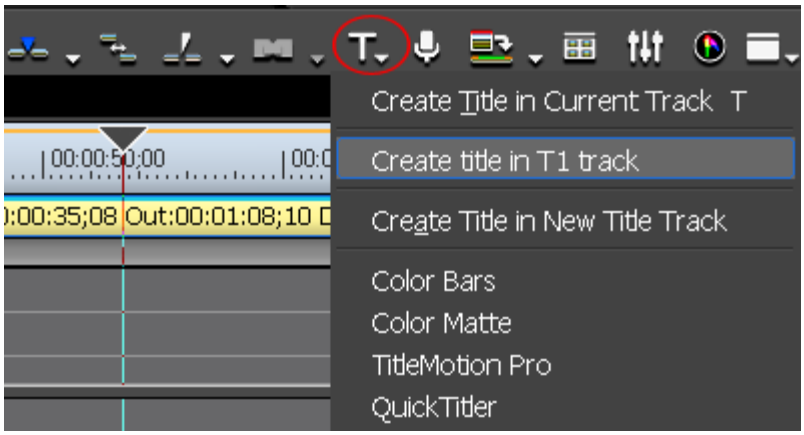
The steps below assume QuickTitler has been selected as the default titling application in Application Settings. For more information, see *Application Settings* *on page 151*.

To use QuickTitler:

1. Position the Timeline cursor at the point at which you wish to insert a title.
2. Click the **Create Title** button on the Timeline.
3. From the menu, select the track to which to add the title. See Figure 705 for an example.

- Create Title in Current Track - Place the title clip in the currently selected track.
- Create Title in T[X} track - Place the title clip in the specified title track where {X} is the number of a specific title track.
- Create Title in New Title Track - Create a new track and place the title clip in that track.

Figure 705. Create Title Menu



Alternative Methods:

- Click the **Add Title** button in the Asset Bin. See *Create a Title Clip on page 262* for more information.
- Select Clip>Create Clip>QuickTitler from the Preview window menu bar.
- Right-click on a blank space in the clip view and select "Add Title" from the menu.
- Select File>New>QuickTitler from the Preview window menu bar.

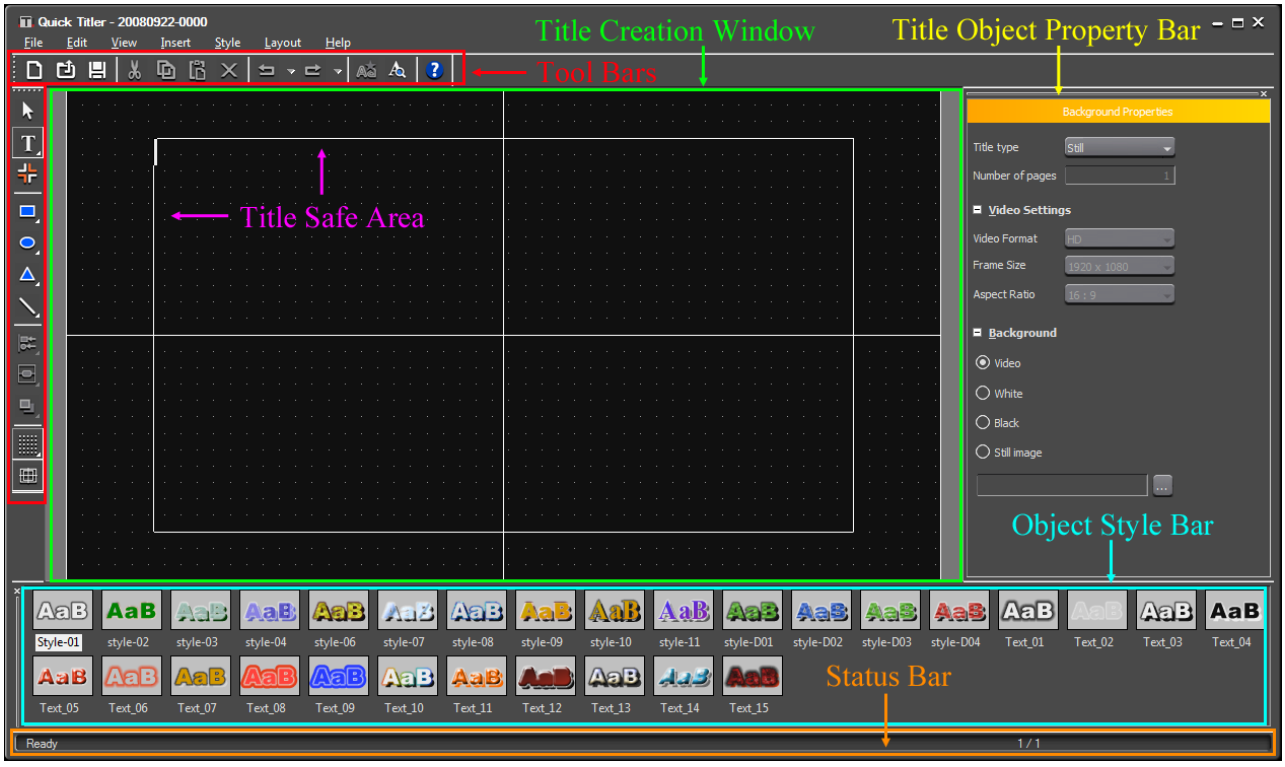
Note The title clip is placed with the Timeline cursor position of the active track as the In point. If In and Out points exist on the Timeline, The clip is placed between the In and Out points.

- Define In and Out points on the Timeline and right-click on the track on which you wish to place a title clip; select New Clip>QuickTitler from the menu.

Note The clip is placed on the Timeline between the In and Out points.

The QuickTitler starts up as shown in Figure 706.

Figure 706. QuickTitler Application Detail



QuickTitler Application Details

Tool Bars

The tools used to create ,save, open and edit title clips are located in the horizontal and vertical tool bars.

Title Creation Window

This is the display area in which titles objects are displayed during the title creation and editing processes.

Title Safe Area

The title safe area outline is activated by selecting View>Title Safe Area from the QuickTitler menu bar. The “Title Safe Area” is the area of the screen in which titles will be properly displayed regardless of the display attributes of the monitor on which the output is viewed.

Grid

A grid can be displayed in the title creation window to aid in the placement of title objects. To activate the grid, select View>Grid>Dot Grid or View>Grid>Line Grid from the QuickTitler menu bar to display the desired grid type.

Title Object Property Bar

Sets the properties of the selected title object. Background properties, text properties, image properties and object properties may be displayed from this property bar.

Video Settings

When the QuickTitler application is launched as an independent application (not from within EDIUS) from the Windows Start menu or desktop, video properties for the title objects may be set. When launched from within EDIUS, these settings are automatically configured to match project settings.

Background

Click the ‘+” button the expand the background tree if necessary and select the desired background (Video, White, Black or Still Image) for the Title clip. See *Importing Background Files on page 637* for more information.

Object Style Bar

Displays the available styles for the currently-selected title object.

Status Bar

Displays keyboard status, title position status and other status information.

4. Create the desired title(s) using the QuickTitler tools as illustrated in Figure 707.

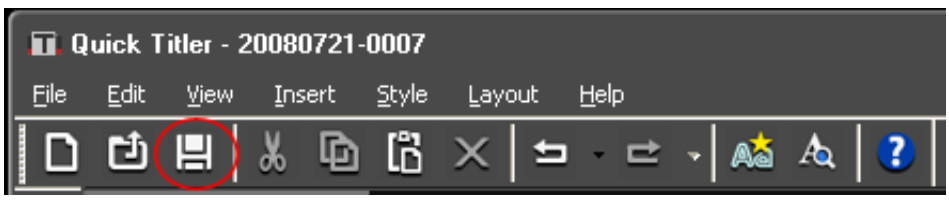
Figure 707. QuickTitler Application - Create Title

Note The order or alignment of multiple text or image objects can be defined by selecting and object and selecting Layout>Order or Layout>Align from the QuickTitler menu bar.

5. Click the **Save** button (see Figure 708) to save changes and close the QuickTitler window.

Note An alternative method is to select File>Save from the QuickTitler menu bar.

Figure 708. QuickTitler Save Button



The title is added to the clip at the Timeline cursor location (see Figure Note) and is also added to the Asset bin as a title clip.

Note Clicking the **Save** button saves the file automatically as an .etl file with a generated file name containing the year, month, day and a four-digit sequential number.

Figure 709. QuickTitler Title Added

Related Operations:

- After a title is created, select View>Preview on the QuickTitler menu bar to render the currently displayed area.
- Double-click a title clip on the Timeline or in the Asset Bin to start QuickTilter and edit the selected clip.

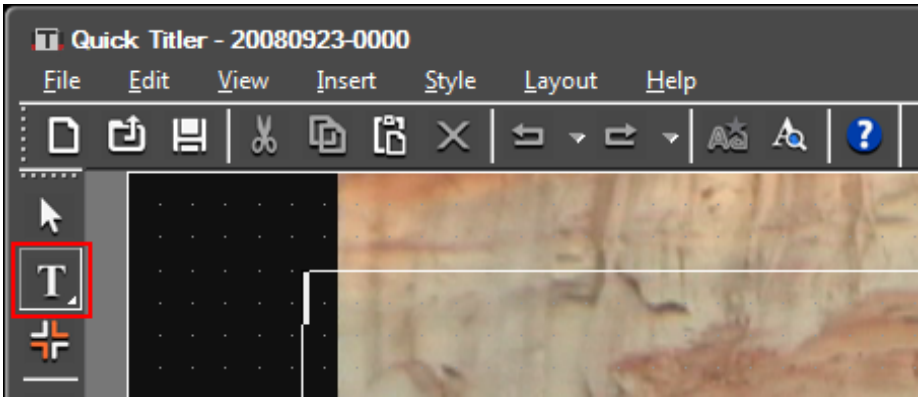
Note When QuickTitler is started from the Asset Bin, the title clip is saved to the Asset Bin.

Entering Text

To enter text in a title object, do the following:

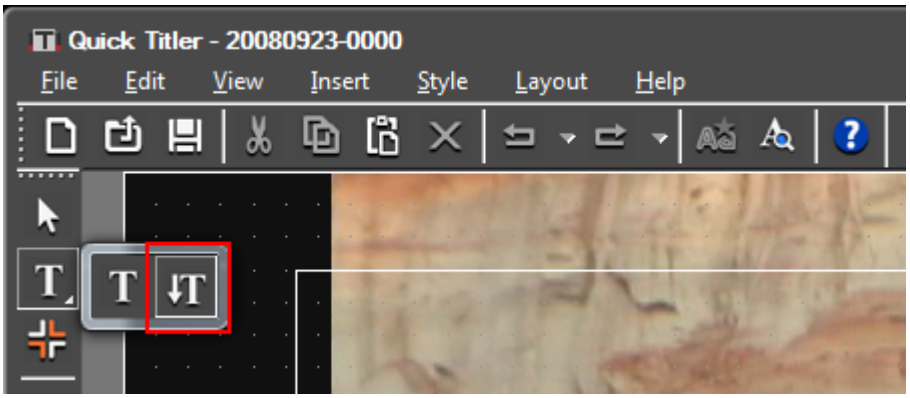
1. Click the **Horizontal Text** button on the vertical tool bar as illustrated in Figure 710.

Figure 710. QuickTitler Horizontal Text Button



Note To enter vertical text, select the Vertical Text button while holding down the mouse button on the Horizontal Text button as shown in Figure 711.

Figure 711. QuickTitler Horizontal Text Button - Select Vertical Text



2. Click on the location in the title creation window at which you wish to begin text entry.

The cursor appears at the selected location ready for text entry.

3. Enter the desired text from the keyboard.

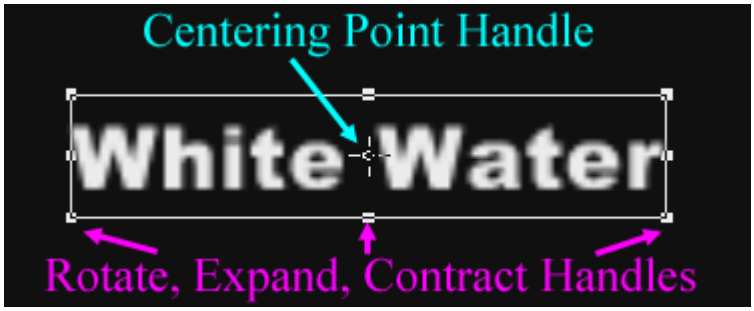
Alternative Methods:

- Select View>Text Input Bar from the QuickTitler menu bar.
- Select Insert>Text>Horizontal or Insert>Text>Vertical from the QuickTitler menu bar.
- Select Insert>Text>File from the QuickTitler menu bar to import a text file.

Changing Text Settings

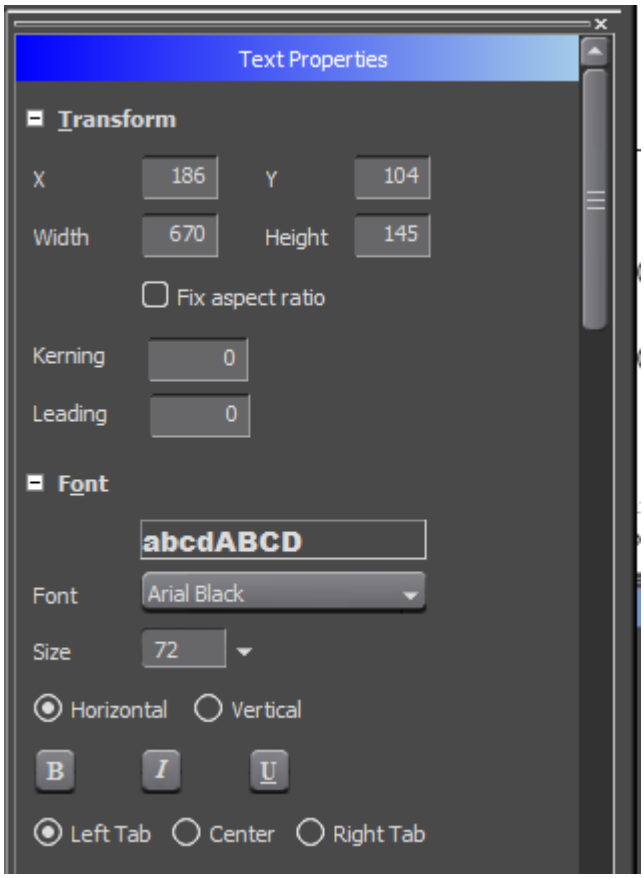
Text changes such as changing text size, moving text and rotating text use the text handles illustrated in Figure 712.

Figure 712. QuickTitler Text Handles



Text properties are changed using the controls shown in Figure 713 and explained below.

Figure 713. QuickTitler Text Properties



X,Y Coordinates

The X, Y coordinates specify the position of text as a pixel offset from the upper left corner.

Width, Height

Specifies the pixel width and height of text. Select the "Fix aspect ratio" option to automatically change the other parameter to maintain the current width/height ratio when one parameter is changed.

Kerning

Specify the desired font kerning value using the slider. To return kerning to the default value, click the [**R**] button.

Leading

Specify the desired font leading value using the slider. To return leading to the default value, click the [**R**] button.

Font

From the drop-down list, select and available font for the text.

Size

Select the desired font size from the drop-down list or by entering the desired font point size directly.

Horizontal, Vertical

Select the desired text orientation; horizontal or vertical.

Bold, Italic, Underline

Select the desired font effects such as **bold,** *italic*, or underline.

Left Tab, Center, Right Tab

Specify the desired alignment of text within the text box.

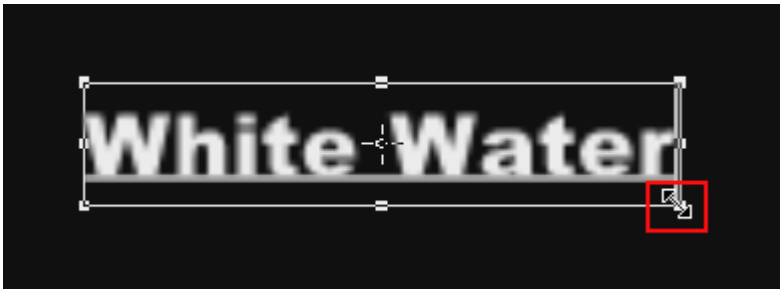
Note For vertical text, the choices are Top, Center or Bottom.

Changing Text Size

To change the text size using the sizing handles, do the following:

1. Move the cursor to the desired rotate/expand/ contract handle on the text object frame.
2. Click and hold the left mouse button and drag the cursor when its shape changes (see Figure 714) to increase or decrease the text size by increasing or decreasing the size of the text frame.

Figure 714. QuickTitler Text Resize Cursor

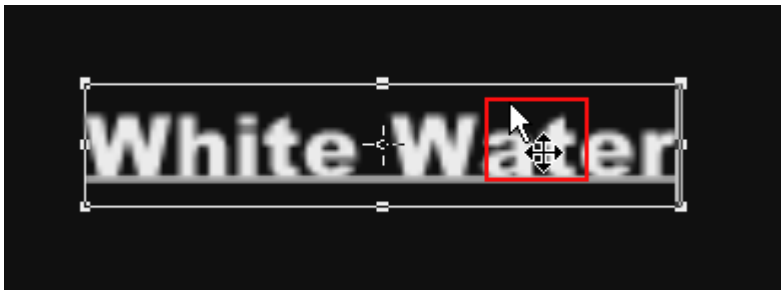


Moving Text

To move a text object to a new location, follow these steps:

1. Move the cursor into the object frame.
2. Click and hold the left mouse button and drag the object frame to a new location when the cursor shape changes as illustrated in Figure 715.

Figure 715. QuickTitler Text Move Cursor

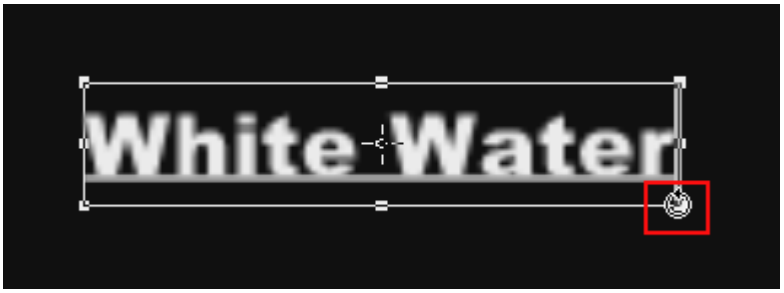


Rotating Text

To rotate a text object, do the following:

1. Move the cursor to a rotate/expand/contract handle on the object frame while holding down the [**CTRL**] key.
2. Click and hold the left mouse button and drag the object frame to rotate the object when the cursor shape changes as illustrated in Figure 716

Figure 716. QuickTitler Text Rotate Cursor



Note When rotating text, press the [**SHIFT**] key to rotate the text by 15 degrees. Press the [**ALT**] key to rotate the text object and center it on the opposite angle.

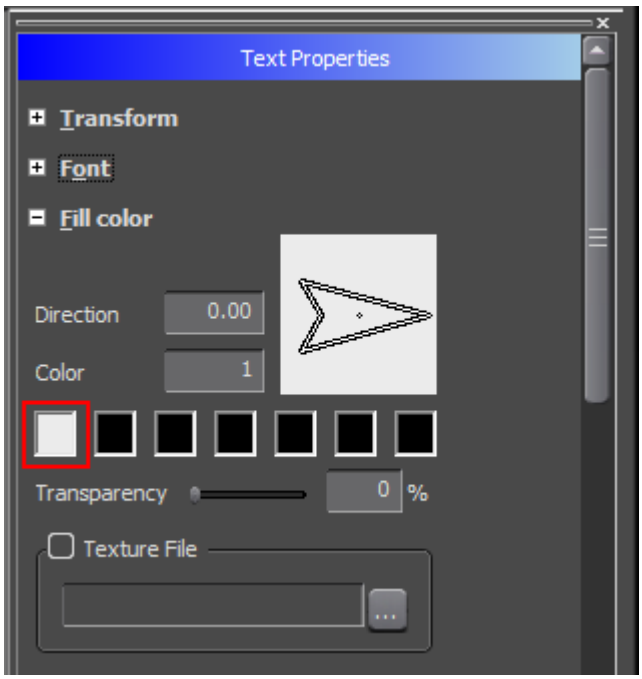
To shift the axis of rotation, move the centering point handle. Click any area outside the object frame and click the object again to return the rotating axis to the center.

Changing Text Color

To change the color of the text, follow these steps:

1. Select the text object for which you wish to change the color.
2. If the Fill Color tree is not already expanded, click the "+" to expand the Fill Color tree.

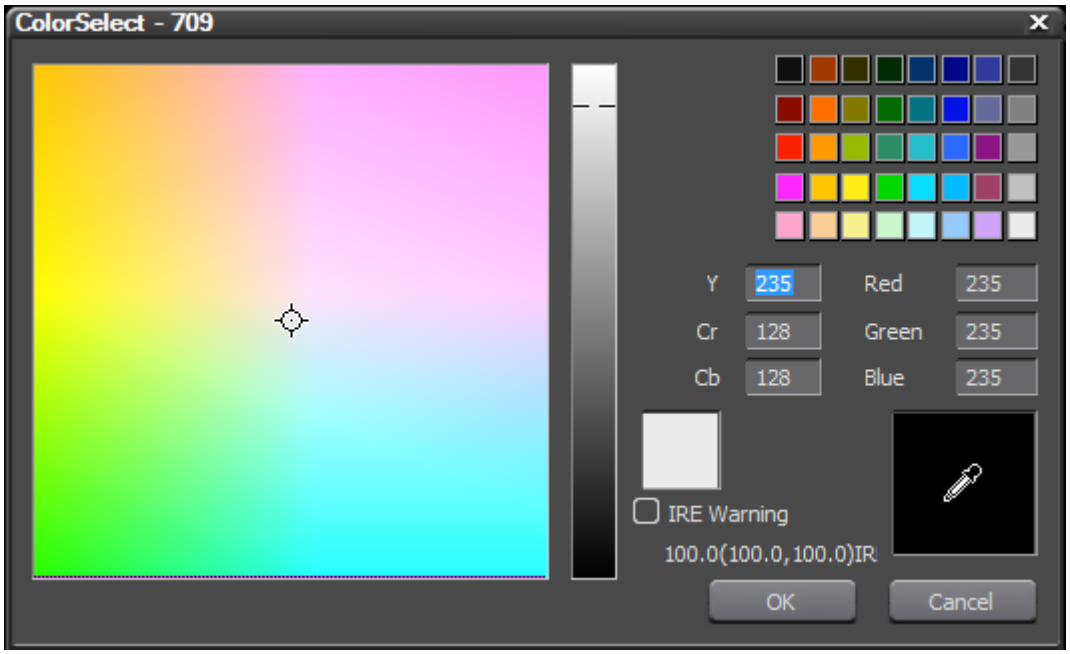
Figure 717. QuickTitler Text Properties - Color Palette



3. Click the color palette (see Figure 717).

The ColorSelect dialog shown in Figure 718 appears.

Figure 718. QuickTitler ColorSelect Dialog



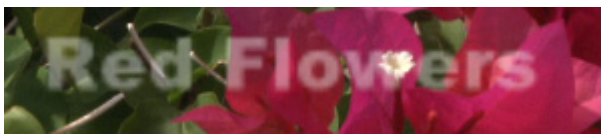
4. Select the desired text color or enter the desired numeric values to select a text color.

Note If the 'Texture File" option is checked, the color change is not applied to the text.

Applying Transparency to Text

Applying transparency to text objects (see Figure 719 for an example) allows the background to be visible through the text.

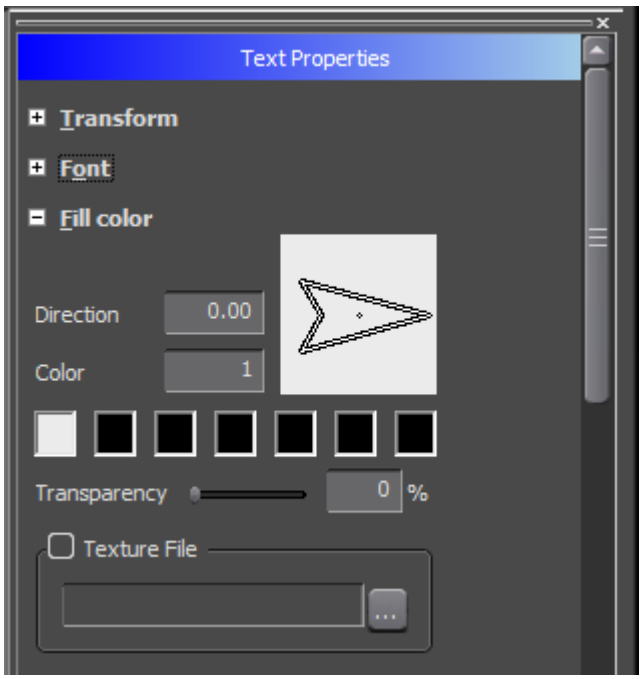
Figure 719. QuickTitler Text Transparency



To apply transparency to an object, do the following:

1. Select the text object to which to apply transparency.
2. If the Fill Color tree is not already expanded, click the "+" to expand the Fill Color tree. See Figure 720.

Figure 720. QuickTitler Text Properties - Fill Color

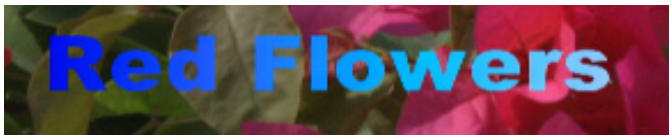


3. Move the transparency slider to set the desired transparency level for the selected text object.

Applying Color Gradations

Applying color gradations to text objects (see Figure 721 for an example) add a color changing effect to the text.

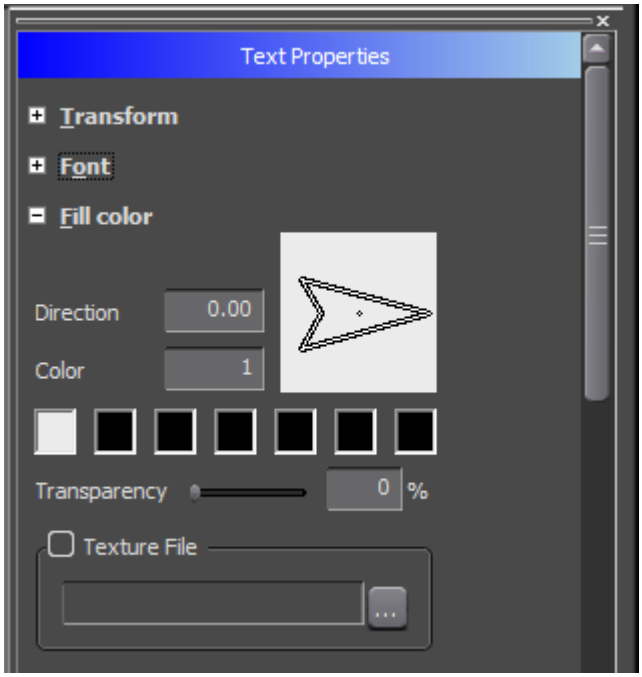
Figure 721. QuickTitler Text Color Gradations



To apply color gradations to an object, do the following:

1. Select the text object to which to apply color gradation.
2. If the Fill Color tree is not already expanded, click the "+" to expand the Fill Color tree. See Figure 720.

Figure 722. QuickTitler Text Properties - Fill Color



3. Enter a number in the “Color” field to specify the desired number of color gradation steps.

4. Click the color palette.

The ColorSelect dialog box appears.

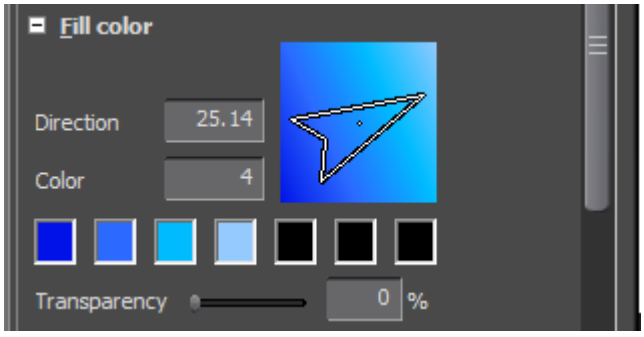
5. Select the desired text color or enter the desired numeric values to select a text color.

6. Repeat Step 4 and Step 5 to select a color value for each gradation step.

7. Drag the direction arrow or enter a numeric value to set the direction of the color gradation.

See Figure 723 for sample text gradation settings.

Figure 723. QuickTitler Color Text Color Gradation Settings



Applying Texture to a Text Object

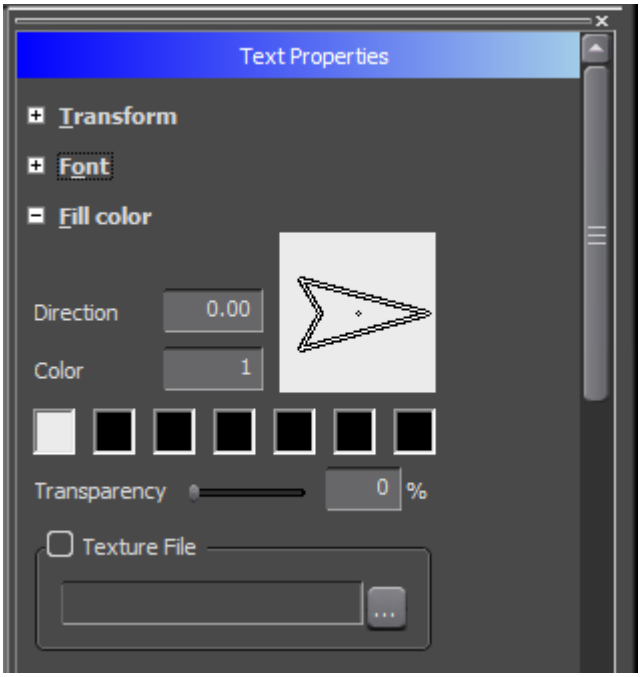
Applying a texture file to text objects (see Figure 724 for an example) adds texture, color and other attributes contained in the file.

Figure 724. QuickTitler Text Texture

To apply texture to an object, do the following:

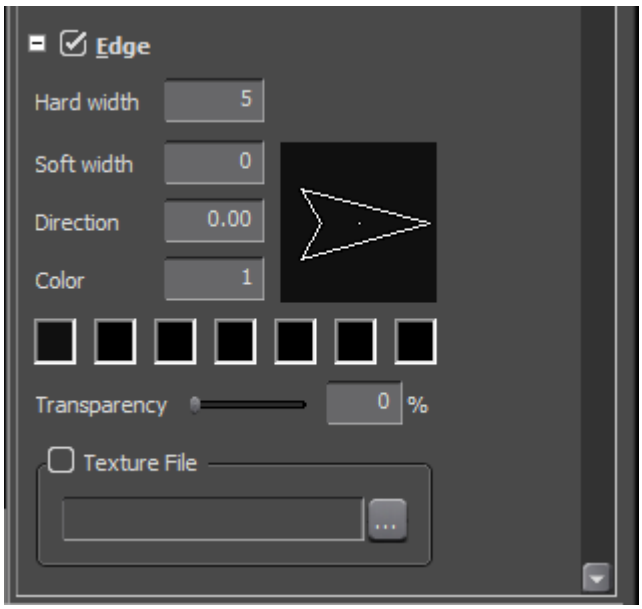
1. Select the text object to which to apply a texture file.
2. If the Fill Color tree is not already expanded, click the "+" to expand the Fill Color tree. See Figure 725.

Figure 725. QuickTitler Text Properties - Fill Color



Note To apply an image on the edge of the text, expand the Edge tree. See Figure 726

Figure 726. QuickTitler Text Properties - Edge Tree



3. Select the 'Texture File" option and click the ... button to locate the desired texture file.

A Select Texture File dialog opens.

4. Navigate to the folder containing texture files and select the texture file you wish to apply to the text object.

5. Click the **Open** button to apply the texture file.

The following file formats are supported for texture files:

- Bitmap (.bmp)
- GIF (.gif)
- JPEG (.jpeg, jpg)
- PNG (.png)
- TIFF (.tiff)
- Windows Enhanced Metafile (.emf, .wmf)
- Photoshop (.psd)
- Targa (.tga, .targa, .vda, .icb, .vcf)

Adding a Text Border (Edge)

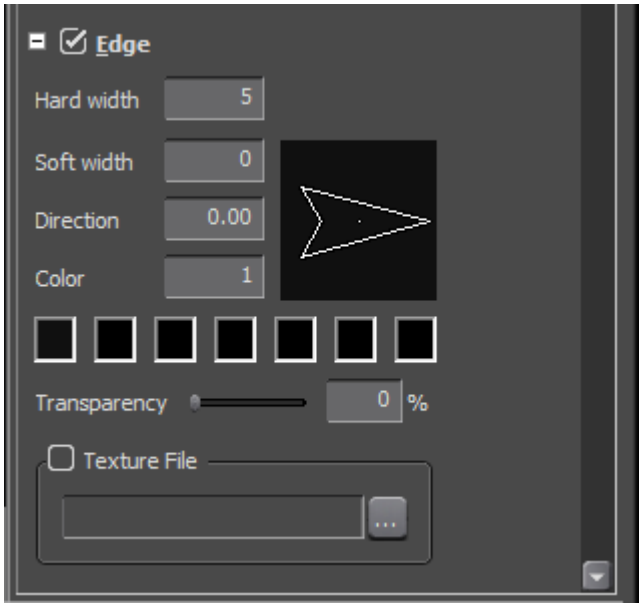
Borders (edges)) may be added to text objects (see Figure 727) to make the text stand out more against the background.

Figure 727. QuickTitler Text Border (Edge)

To add a border to a text object, do the following:

1. Select the text object to which you wish to add the border.
2. If the Edge tree is not already expanded, click the "+" to expand the Edge tree.

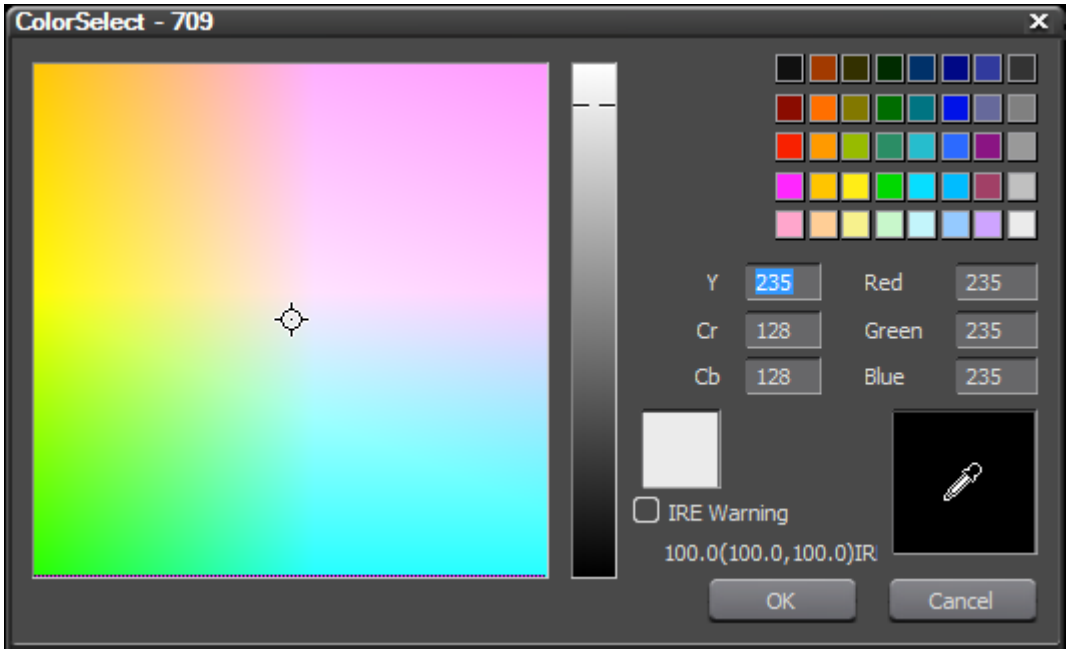
Figure 728. QuickTitler Text Properties - Edge Tree



3. Enable the Edge settings.
4. Click the color palette (see Figure 728).

The ColorSelect dialog shown in Figure 729 appears.

Figure 729. QuickTitler ColorSelect Dialog



5. Select the desired border color or enter the desired numeric values to select a border color.

6. Enter the desired value (in pixels) in the "Hard Width" or "Soft Width" fields to specify the border (edge) width.

Note Color gradations and textures may also be applied to borders. See *Applying Color Gradations* *on page 602* and *Applying Texture to a Text Object* *on page 604* for more information.

7. Apply transparency or texture to the edge, if desired.

Adding Shadows to Text

Shadows add a three-dimensional effect to text and make the text stand out more against the background.

Figure 730. QuickTitler Text Shadow

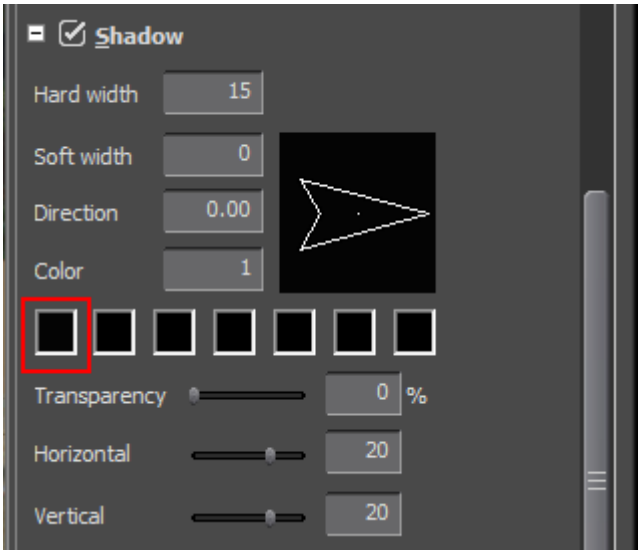
To add a shadow to a text object, do the following:

1. Select the text object to which you wish to add the shadow.

2. If the Shadow tree is not already expanded, click the "+" to expand the Shadow tree.

3. Enable the "Shadow" settings.

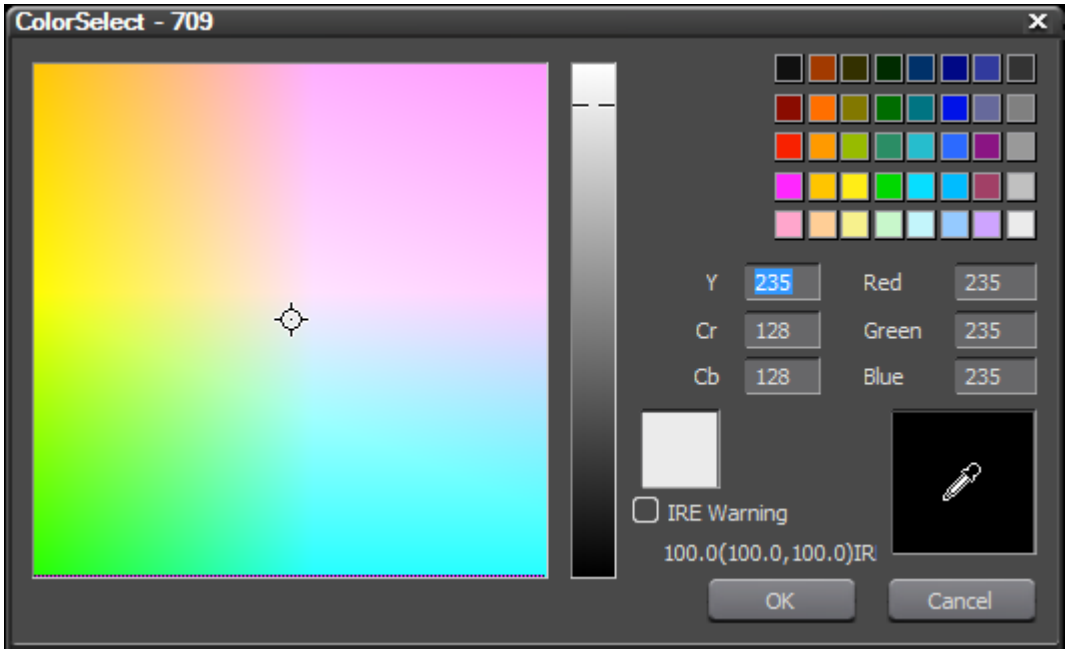
Figure 731. QuickTitler Text Properties - Shadow Tree



4. Click the color palette (see Figure 731).

The ColorSelect dialog shown in Figure 732 appears.

Figure 732. QuickTitler ColorSelect Dialog



5. Select the desired shadow color or enter the desired numeric values to select a shadow color.
6. Enter the desired value (in pixels) in the “Hard Width” or “Soft Width” fields to specify the shadow width.
7. Move the Horizontal and Vertical sliders to adjust the position of the shadow relative to the text object.
8. Move the Transparency slider to adjust shadow transparency.

Note Color gradation may also be applied to shadows. See *Applying Color Gradations* *on page 602*.

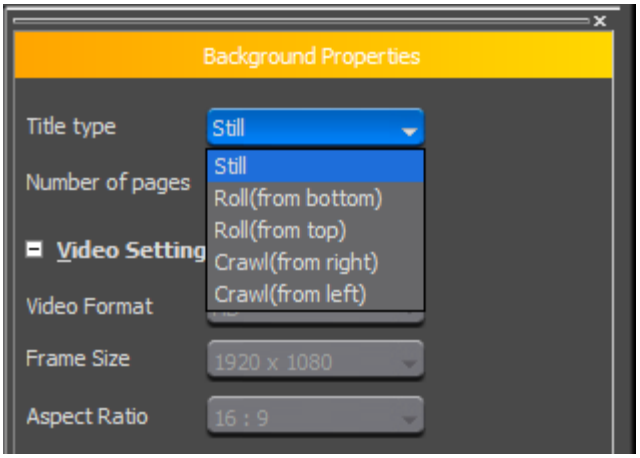
Rolling or Crawling Text

Text can be configured to move across the screen in a vertical (roll) or horizontal (crawl) direction.

To configure text rolls or crawls, do the following:

1. Select a title type from the drop-down list in the Background Properties bar as illustrated in Figure 733.

Figure 733. QuickTitler Text Type Selection



Still

Text is display on screen in the position at which it is placed and does not move.

Roll(from bottom)

Text rolls upward from the bottom of the screen towards the top.

Roll(from top)

Text rolls downward from the top of the screen towards the bottom.

Crawl(from right)

Text moves from the right to left across the screen.

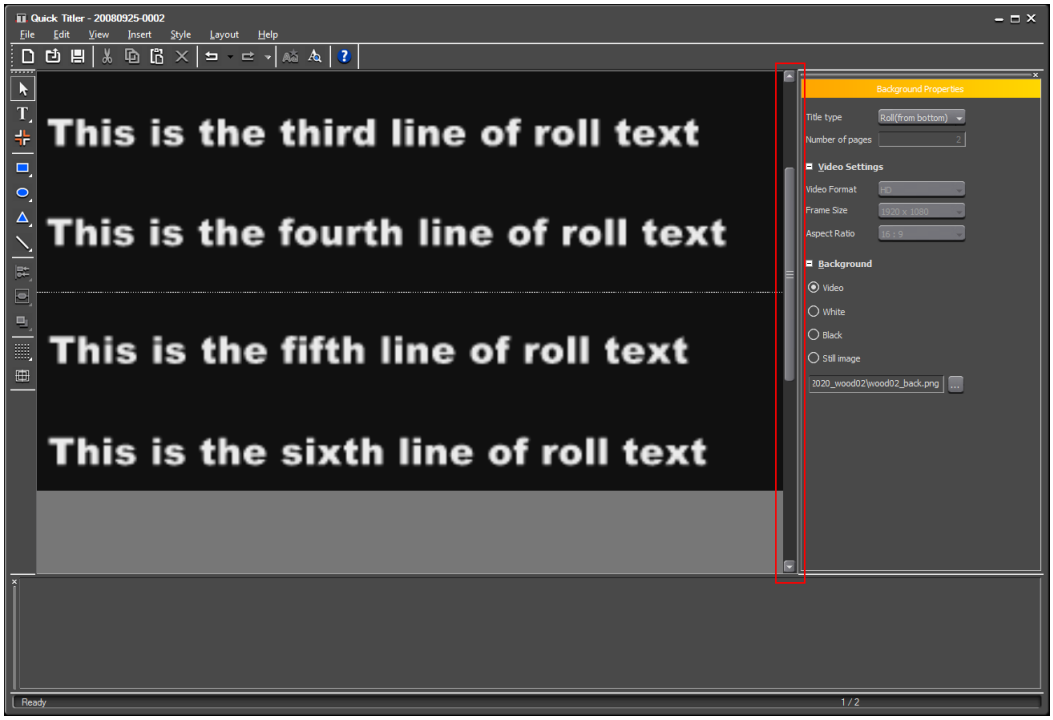
Crawl(from left)

Text moves from left to right across the screen.

Roll

Text moves vertically from the bottom to the top (or from the top to the bottom) across the screen. With a "roll" type selected, if there is more text than will fit in the text object creation window, a vertical scroll bar appears. A white dotted line is also displayed on the screen at the page break position; however, this line is not displayed in the video output. See Figure 734.

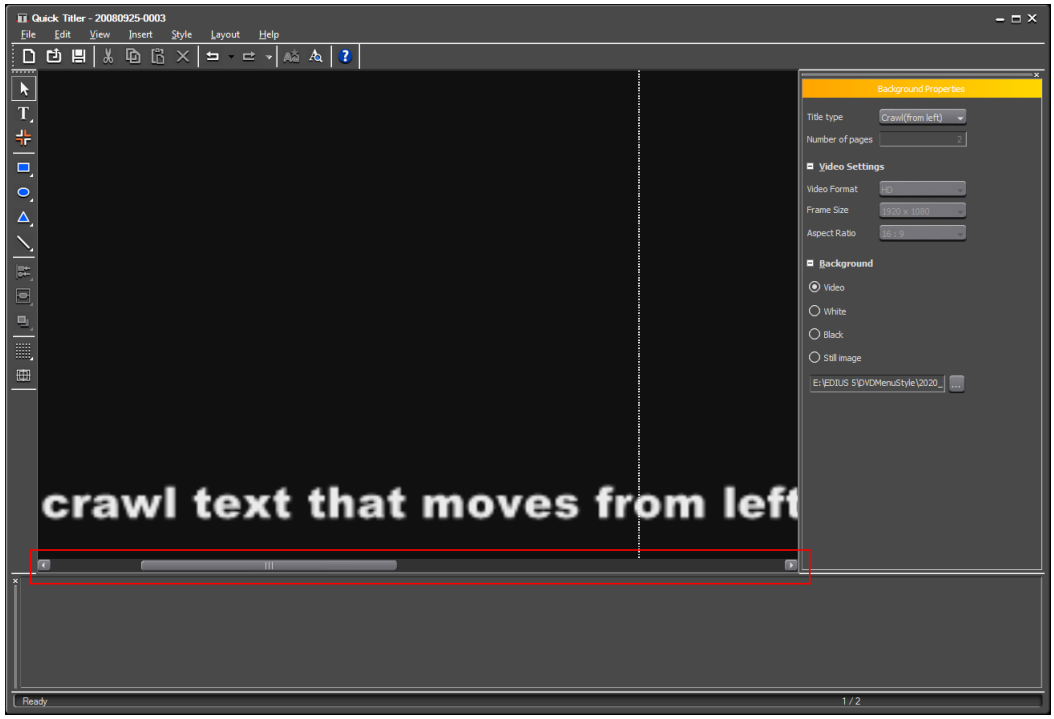
Figure 734. QuickTitler Text Roll



Crawl

Text moves horizontally across the screen from left to right (or right to left). With a "crawl" type selected, when the text is too long to fit in on the text object creation window, a horizontal scroll bar appears. See Figure 735.

Figure 735. QuickTitler Text Crawl



2. Enter the title text.

Adjusting Roll or Crawl Speed

Roll or Crawl speed is determined by the length of the title clip on the Timeline. Shorten the length of the clip to speed up the roll or crawl. Lengthen the clip to slow down the roll or crawl.

Embossing Text

Embossing text makes it appear to stand out from the background.

Figure 736. QuickTitler Embossed Text

To emboss text, do the following:

1. Select the text object to emboss.
2. If the Emboss tree is not already expanded, click the "+" to expand the Emboss tree. See Figure 737.

3. Enable the “Emboss” settings.

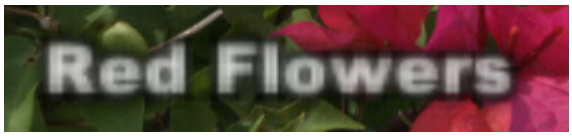
Figure 737. QuickTitler Text Properties - Emboss Tree

4. Select “Inside” or “Outside” to specify the edge to emboss.
5. Enter the desired values in the emboss settings fields.

Blur Text

Blurring text makes it blend in more with the background.

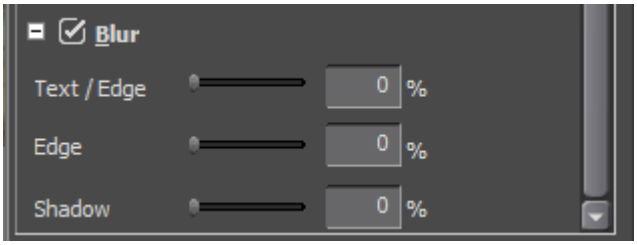
Figure 738. QuickTitler Blurred Text



To blur text, do the following:

1. Select the text object to blur.
2. If the Blur tree is not already expanded, click the ‘+” to expand the Blur tree. See Figure 737.

Figure 739. QuickTitler Text Properties - Blur Tree



3. Enable the Blur settings.

4. Adjust the blur settings by moving the sliders to blur the Text/Edge, Edge only or shadow.

Note If no shadow or border (edge) is applied, only the text can be blurred.

Text Styles

This section explains the text styles that can be selected in the Object Style Bar. Image and graphic styles may also be used in conjunction with text styles and are explained in the next section.

Applying Text Styles

To apply a text style from the Object Style bar, do the following:

1. Select the text object to which to apply the style.

2. Select a style sample from the Object Style Bar. See Figure 740 for an example.

Figure 740. QuickTitler Text Styles

3. Select Style>Apply Style from the QuickTitler menu bar.

Note The style sample may also be double-clicked to apply it to the selected text object.

The selected style is applied as shown in Figure 741.

Figure 741. QuickTitler Text Style Applied

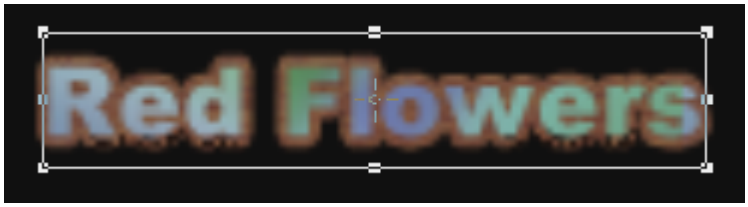
Saving Text Styles

Attributes applied to text objects such as color gradations, textures, borders, embossing, etc. may be saved as a new text style.

To save a new text style, follow these steps:

1. Select the text object containing the attributes you wish to save as a new style as shown in Figure 742.

Figure 742. QuickTitler Text Object with Style to be Saved

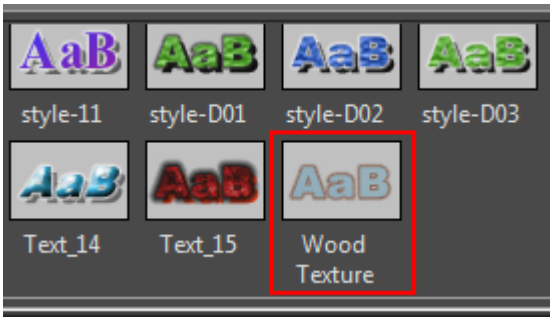


2. Select Style>Save As New Style from the QuickTitler menu bar.
3. Enter a name for the saved style

Note If the entered style name already exists, you will be prompted to enter a different name for the style.

As illustrated in Figure 743, a new style sample is created in the Object Style Bar which represents the saved style.

Figure 743. QuickTitler New Text Style Saved



Changing Text Style Names

The style names of saved style samples may be changed.

Note The names of the default styles installed with QuickTitler may not be changed. Only the names of user-created styles may be changed.

To change a style name, do the following:

1. In the Object Style Bar, select the style sample for which you wish to change the name.
2. Select Style>Change Style Name from the QuickTitler menu bar.
3. Enter a new name for the style sample.

Note An alternative method is to click once on the style name you wish to change and enter a new name.

Deleting Text Styles

User-created text styles may be deleted from the Object Style Bar.

Note Default styles installed with QuickTitler may not be deleted.

To delete a saved text style, do the following:

1. Select the text style sample you wish to delete in the Object Style menu bar.
2. Select Style>Delete Style from the QuickTitler menu bar.

Note An alternative method is to select the style sample and press the [**Delete**] key on the keyboard.

Image and Graphic Styles

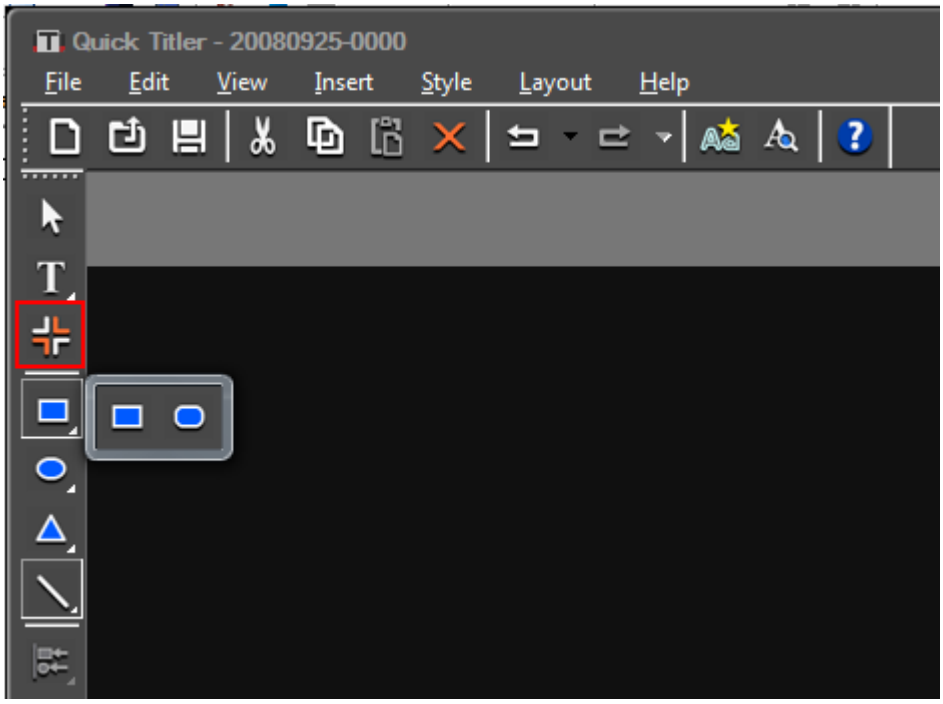
Image and graphic styles can be created and used as title objects.

Creating Images and Graphics

To create a graphic to use as a title object, follow these steps:

1. Click the **Image** tool button on the Object Tool Bar as shown in Figure 744.

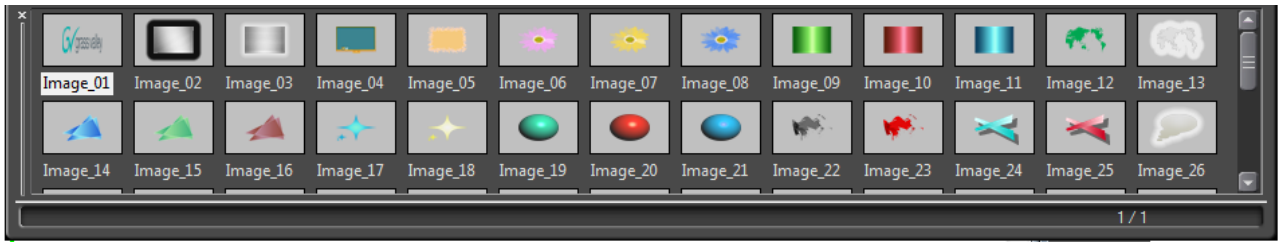
Figure 744. QuickTitler Image Tool



Note Rectangle, Oval, Triangle and Line tools are also available for creating title object graphics. Click and hold the mouse button on the desired tool to see the available graphics styles related to that tool. See example in Figure 744.

Style examples for the selected image tool appear in the Object Style Bar as illustrated in Figure 745.

Figure 745. QuickTitler Image Tool Styles



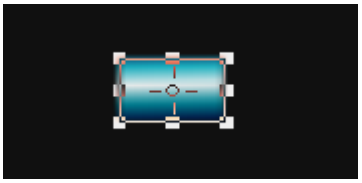
2. Select the object style to apply.

3. Click on the Title Object Creation window.

The selected object style is added to the object creation window (as shown in Figure 746) and can be modified as needed.

Note After adding an object to the object creation window, you may also click on the **...** button in the Image Properties Bar File Tree to import a still image.

Figure 746. QuickTitler Image Object Added



Alternative Method:

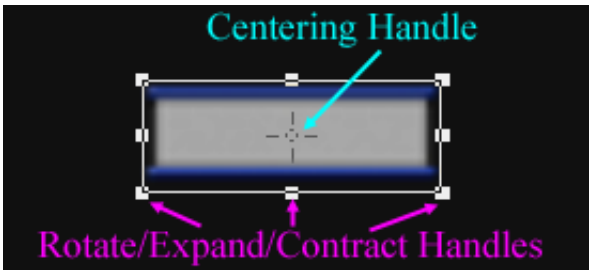
Select Insert>Image (or Rectangle, Oval, Triangle or Line) on the QuickTitler menu bar.

Note The Rectangle, Oval, Triangle and Line menus have a sub-menu for selecting the shape style.

Changing Image or Graphic Settings

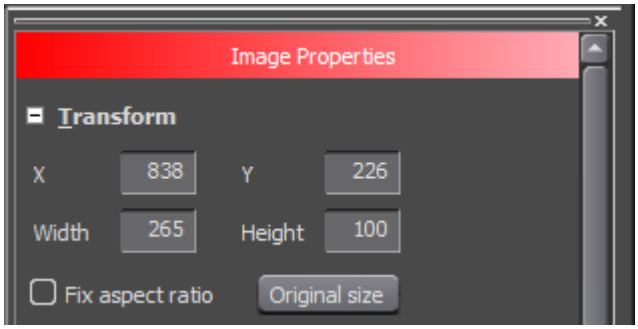
The size of an image can be adjusted by dragging an edge of the object frame using the Rotate/Expand/Contract handles illustrated in Figure 747.

Figure 747. QuickTitler Graphic Object Handles



The object size and position can also be changed by entering the desired values directly into the X, Y, Width and Height fields in Transform tree in the Image Properties Bar. See Figure 748.

Figure 748. QuickTitler Image Properties - Transform Tree



Note Select the “Fix aspect ratio” option to automatically change the width or height setting to maintain the current width/height ratio when either width or height is changed.

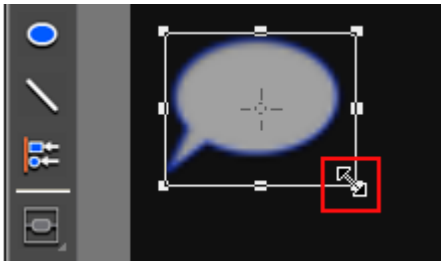
Click the **Original size** button to return the object to its original size before any changes.

Changing the Image or Graphic Object Size

To change the image or graphic object size using the sizing handles, do the following:

1. Move the cursor to the desired rotate/expand/contract handle on the graphic object frame.
2. Click and hold the left mouse button and drag the cursor when its shape changes (see Figure 749) to increase or decrease the text size by increasing or decreasing the size of the graphic object frame.

Figure 749. QuickTitler Object Resize Cursor

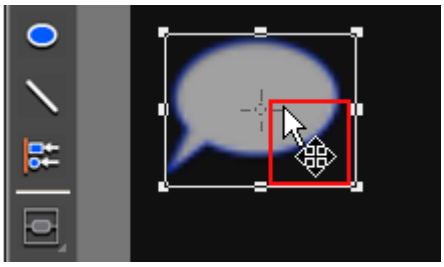


Moving Graphic Objects

To move a graphic object to a new location, follow these steps:

1. Move the cursor into the object frame.
2. Click and hold the left mouse button and drag the object frame to a new location when the cursor shape changes as illustrated in Figure 750.

Figure 750. QuickTitler Object Move Cursor

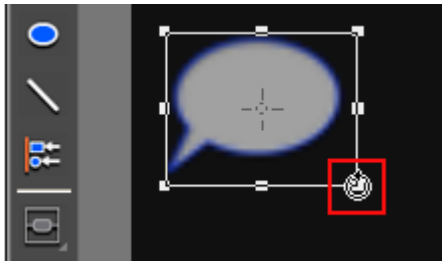


Rotating Graphic Objects

To rotate a graphic object, do the following:

1. Move the cursor to a rotate/expand/contract handle on the object frame while holding down the [**CTRL**] key.
2. Click and hold the left mouse button and drag the object frame to rotate the object when the cursor shape changes as illustrated in Figure 751

Figure 751. QuickTitler Graphic Rotate Cursor



Note When rotating a graphic, press the [**SHIFT**] key to rotate the graphic by 15 degrees. Press the [**ALT**] key to rotate the graphic object and center it on the opposite angle.

To shift the axis of rotation, move the centering point handle. Click any area outside the object frame and click the object again to return the rotating axis to the center.

Applying Transparency to Images and Graphics

Transparency can be applied to graphic objects as illustrated in Figure 752.

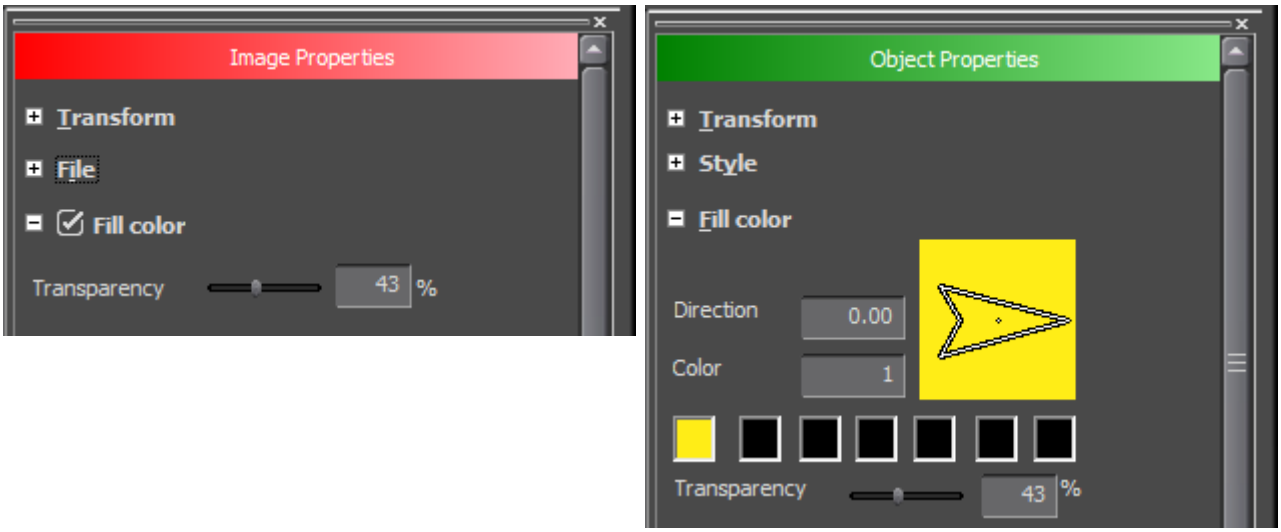
Figure 752. QuickTitler Graphic Transparency

To change the transparency of an image or graphic, do the following:

1. Select the image or graphic for which you wish to change the transparency.
2. If the Fill Color tree is not already expanded, click the "+" to expand the Fill Color tree in the Image or Object Properties bar. See Figure 737.

3. Enable the “Fill Color” settings.

Figure 753. QuickTitler Image and Object Properties - Fill Color Tree

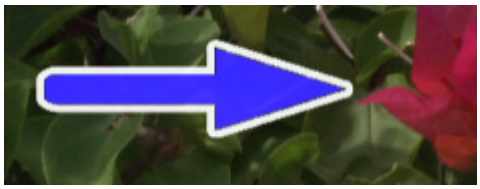


4. Move the Transparency slider to adjust the transparency of the selected object.

Adding a Border to Graphics

Borders can be applied to graphic objects as illustrated in Figure 754.

Figure 754. QuickTitler Graphic Border

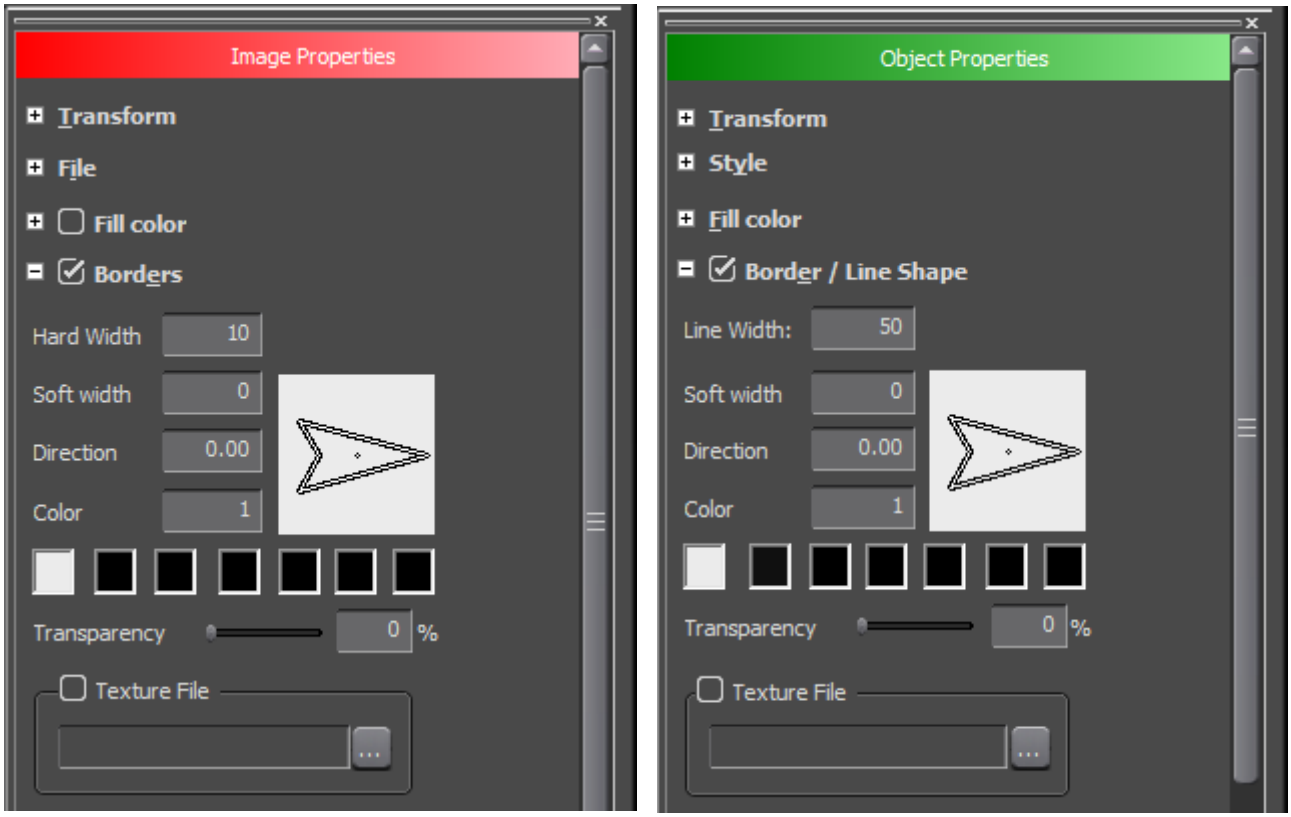


1. Select an image or graphic to which to add a border.
2. If the Borders tree is not already expanded, click the “+” to expand the Border tree. See Figure 755.

Note If the selected object is a graphic (Rectangle, Oval, Triangle or Line object), expand the Border/Line Shape tree in the Object Properties Bar. See Figure 755.

3. Enable the Borders (or Border/Line Shape) settings.

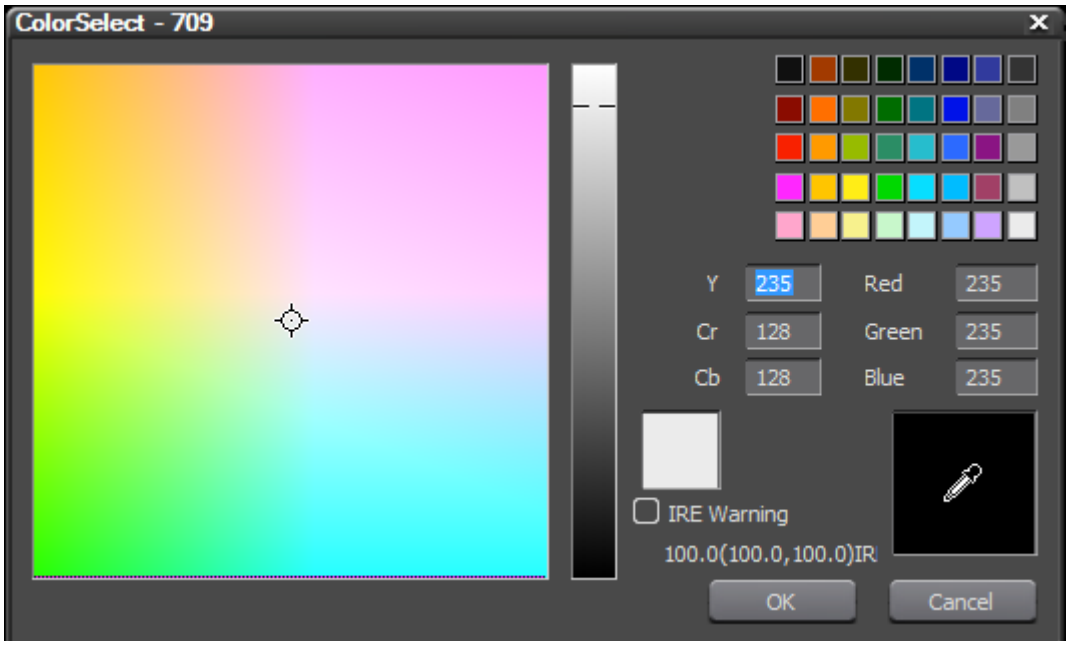
Figure 755. QuickTitler Image and Object Properties - Border Tree



4. Click the color palette.

A ColorSelect dialog as illustrated in Figure 756 appears.

Figure 756. QuickTitler ColorSelect Dialog



5. Select a border color from the color chart or enter the desired color value number directly into the value input fields.

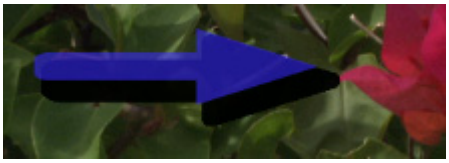
6. Enter the desired Hard Width or Soft Width value (in pixels) to specify the border width.

Note Color gradations can also be applied to the border. See *Applying Color Gradations* *on page 602* for more information.

Applying Shadows

Shadows can be applied to graphic objects as illustrated in Figure 757.

Figure 757. QuickTitler Graphic Shadow

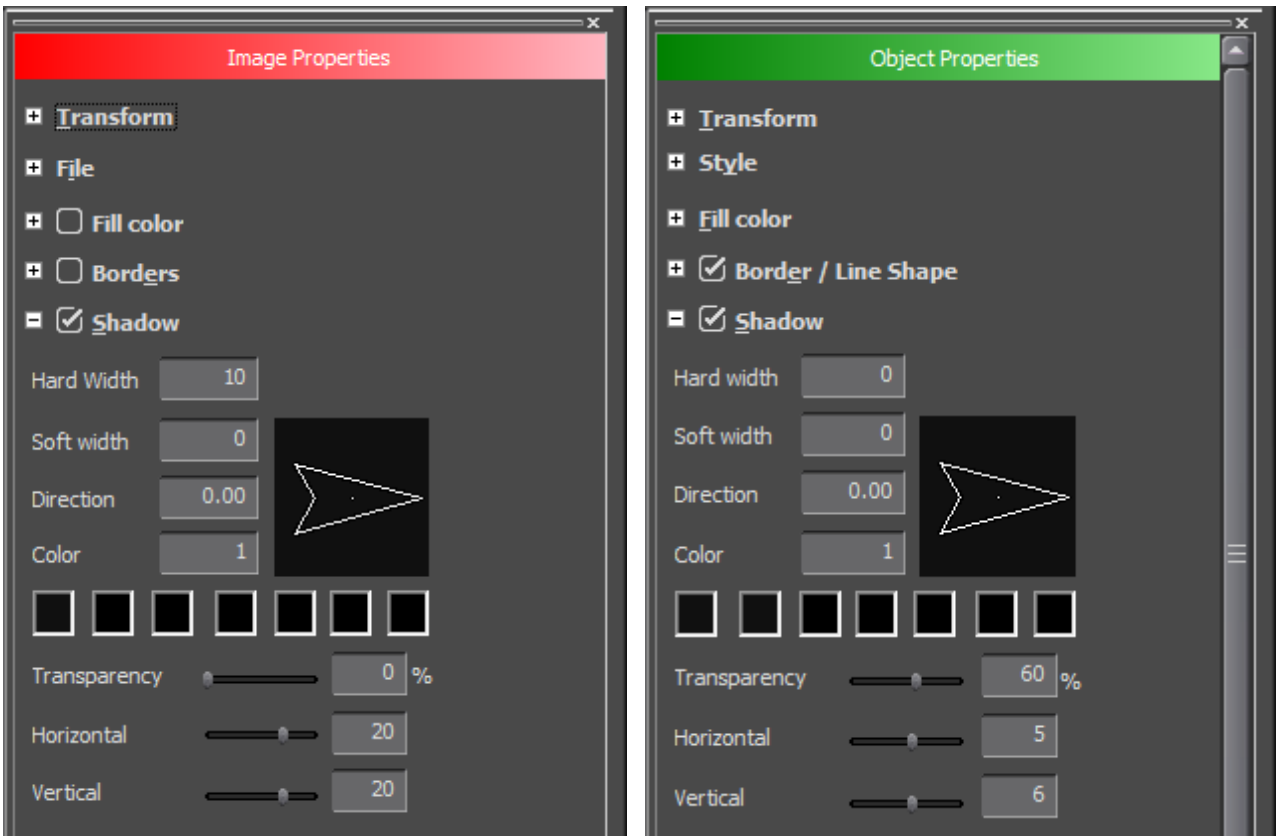


1. Select an image or graphic to which to add a shadow

2. If the Shadow tree is not already expanded, click the "+" to expand the Shadow tree in the Image or Object Properties bar. See Figure 758.

3. Enable the Shadow settings.

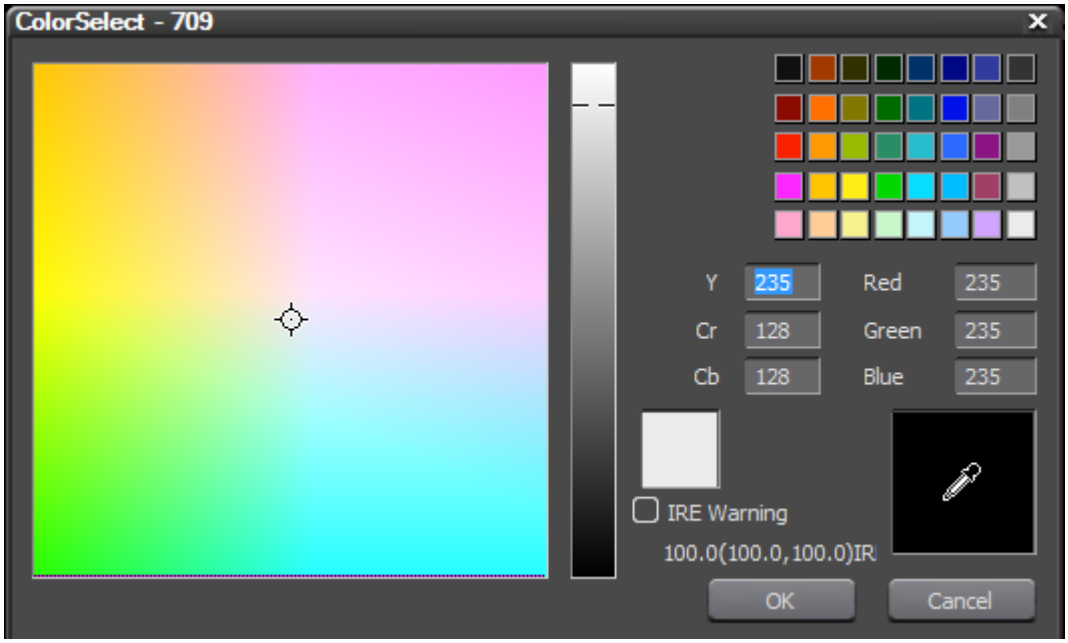
Figure 758. QuickTitler Image and Object Properties - Shadow Tree



4. Click the color palette.

A ColorSelect dialog as illustrated in Figure 759 appears.

Figure 759. QuickTitler ColorSelect Dialog



5. Select a shadow color from the color chart or enter the desired color value number directly into the value input fields.
6. Enter the desired Hard Width or Soft Width value (in pixels) to specify the shadow width.
7. Move the Horizontal and Vertical sliders to adjust the shadow position as an offset from the graphic object.
8. If desired, move the shadow Transparency slider to adjust the transparency of the shadow.

Note Color gradations can also be applied to the shadow. See *Applying Color Gradations* *on page 602* for more information.

Blur a Graphic or Image

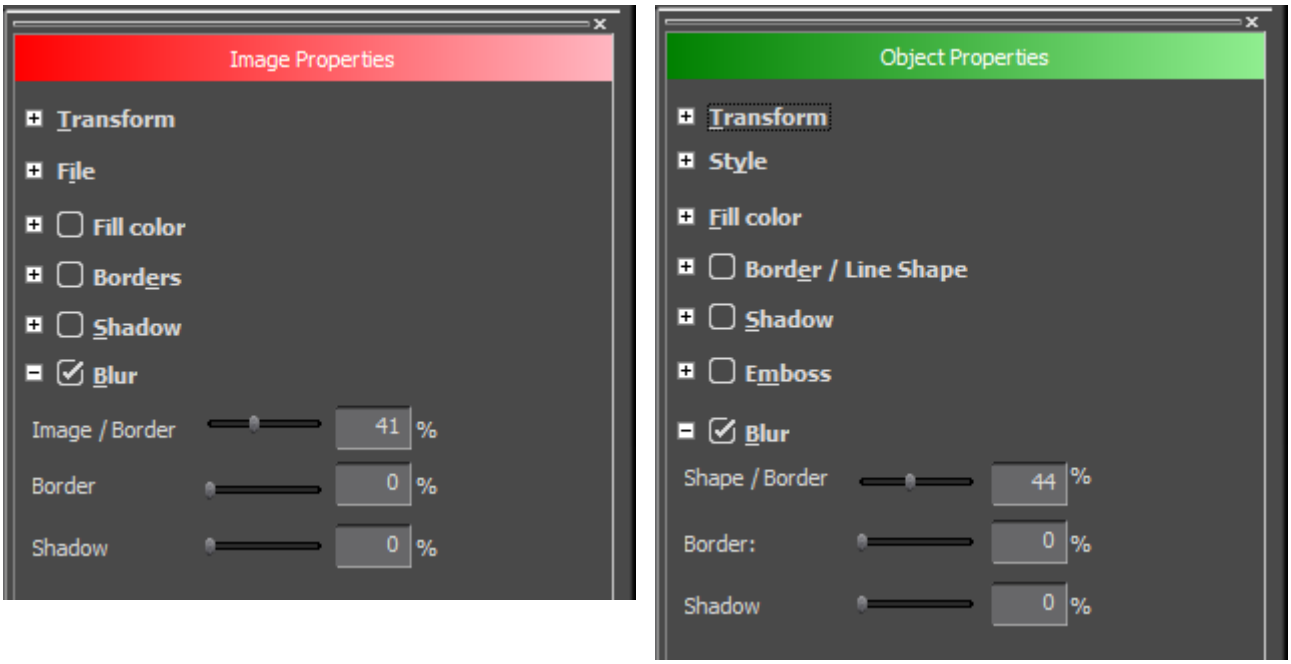
The blur effect can be applied to graphic objects as illustrated in Figure 760.

Figure 760. QuickTitler Blurred Graphic

To blur a graphic object, do the following:

1. Select the graphic object to blur.
2. If the Blur tree is not already expanded, click the '+" to expand the Blur tree in the Image or Object Properties bar. See Figure 761.

Figure 761. QuickTitler Image or Object Properties - Blur Tree

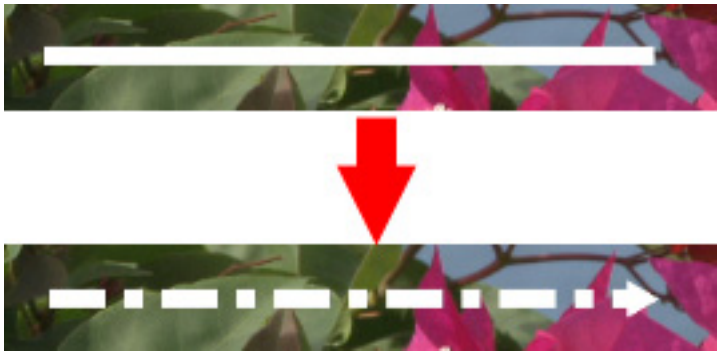


3. Enable the Blur settings.
4. Adjust the blur settings by moving the sliders or entering values directly to Image/Border (Shape/Border), Border or Shadow to blur the respective image or graphic element.

Changing Line Styles

The style of a line object can be changed as illustrated in Figure 762.

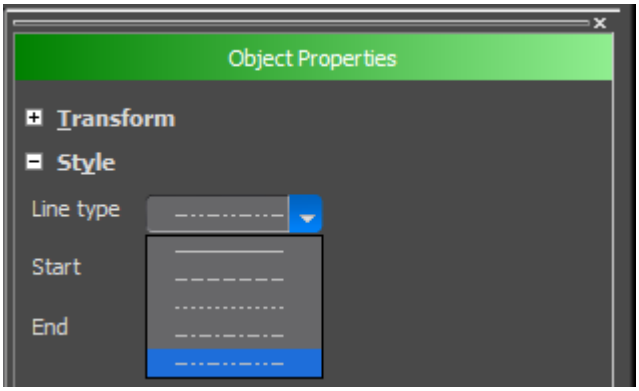
Figure 762. QuickTitler Line Styles



To change the line style, do the following:

1. Select the line object for which you with to change the style.
2. If the Style tree is not already expanded, click the "+" to expand the Style tree in the Object Properties bar. See Figure 763.

Figure 763. QuickTitler Line Styles



3. Enable the Style settings.
4. Select the desired line style, start style (arrowhead or no arrowhead) and end style (arrowhead or no arrowhead) by selecting styles from the drop-down lists. The Line Style drop down list is shown in Figure 763.

Embossing Graphics

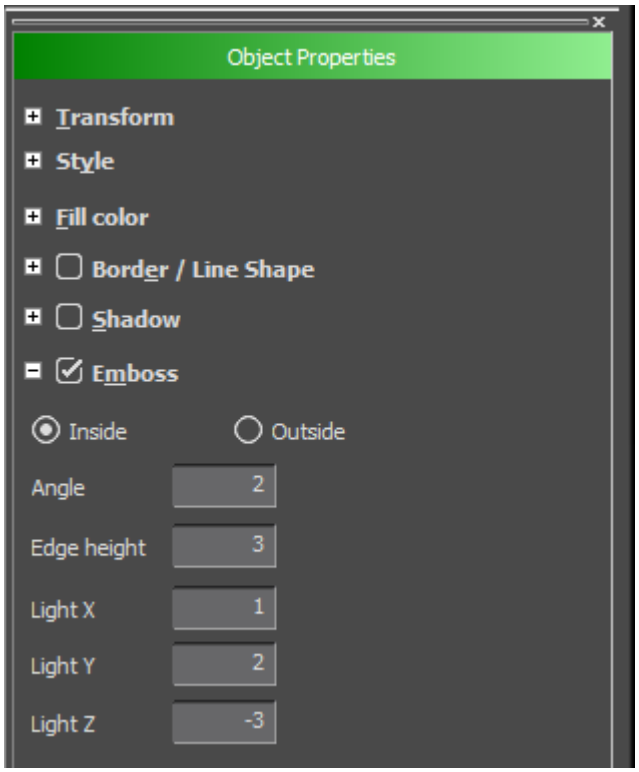
Emboss effects may be applied to graphic objects as illustrated in Figure 764.

Figure 764. QuickTitler Graphic Object Embossed

To emboss a graphic object, do the following:

1. Select the graphic object to which to apply emboss effects.
2. If the Emboss tree is not already expanded, click the "+" to expand the Emboss tree in the Object Properties bar. See Figure 765.

Figure 765. QuickTitler Object Propertied - Emboss Tree

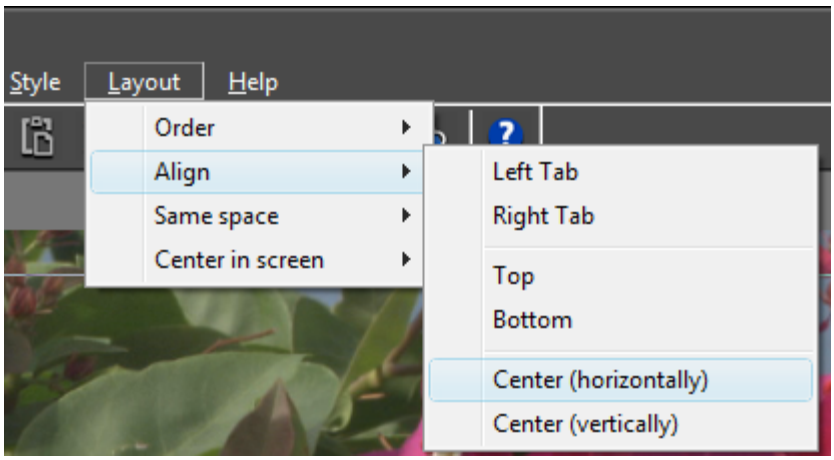


3. Enable the Emboss settings.
4. Select "Inside" or "Outside" to specify the edge to emboss.
5. Enter the desired values in the emboss settings fields.

Title Object Layout

The Layout menu is used to adjust the position of one or more title objects. As illustrated in Figure 766, the Layout menu provides Order, Align, Same space and Center in screen, adjustments.

Figure 766. QuickTitler Layout Menu



Order

The Order menu provides for layering adjustment to a single selected title object. The layering order of the object may be adjusted by the following operations:

- Front - moves the selected object forward one layer
- Back - moves the object back one layer
- Top - makes the object the top layer over all others
- Bottom - makes the object the bottom layer under all others.

Unless object overlap each other, the object order is not important as all objects are layered on top of the background image. However, object layer is important if one or more objects overlap or occupy the same position on the background image. The order adjustments set the layer of object so that the desired object(s) are on top of or under other title objects as desired.

Align

The align function is only available with multiple selected objects. The functions available from this menu are the following:

- Left Tab - align object to the left tab location
- Right Tab - align object to the right tab location
- Top - align objects at top with respect to each other
- Bottom - align object at bottom with respect to each other
- Center (horizontally) - center selected objects horizontally with respect to each other. See *Center in Screen* below to center objects horizontally on the screen.
- Center (vertically) - center selected objects vertically with respect to each other. See *Center in Screen* below to center objects vertically on the screen.

Figure 767 shows three title objects selected in their original positions.

Figure 767. Multiple Title Objects Selected

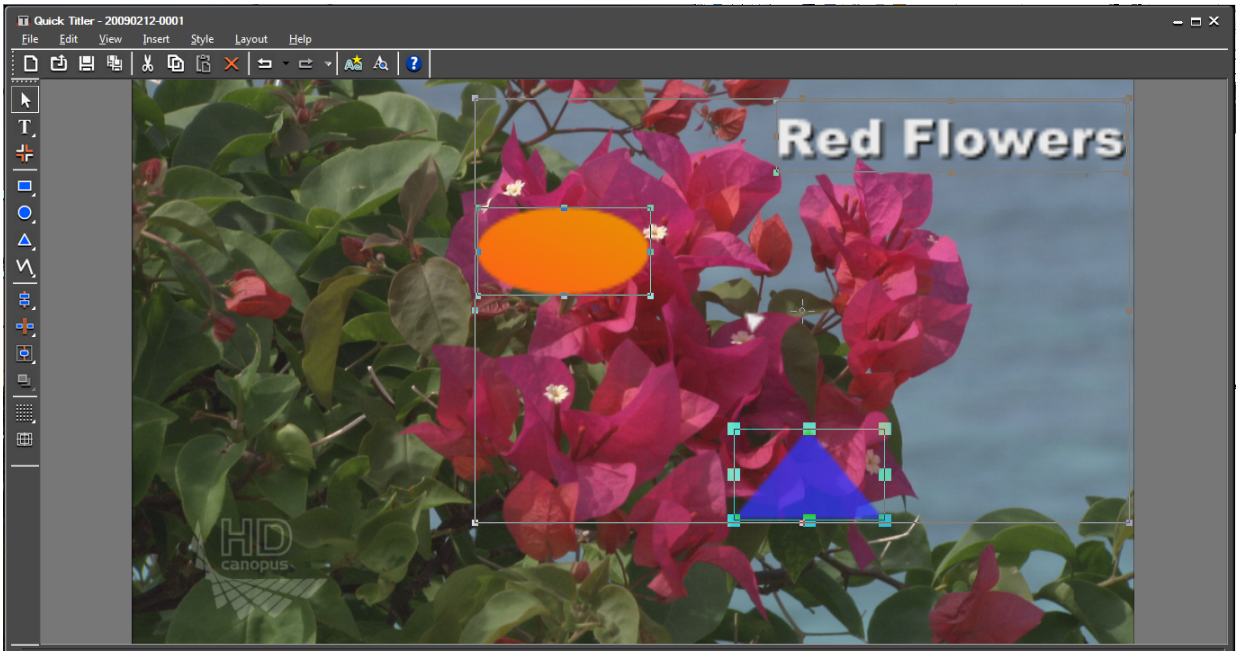
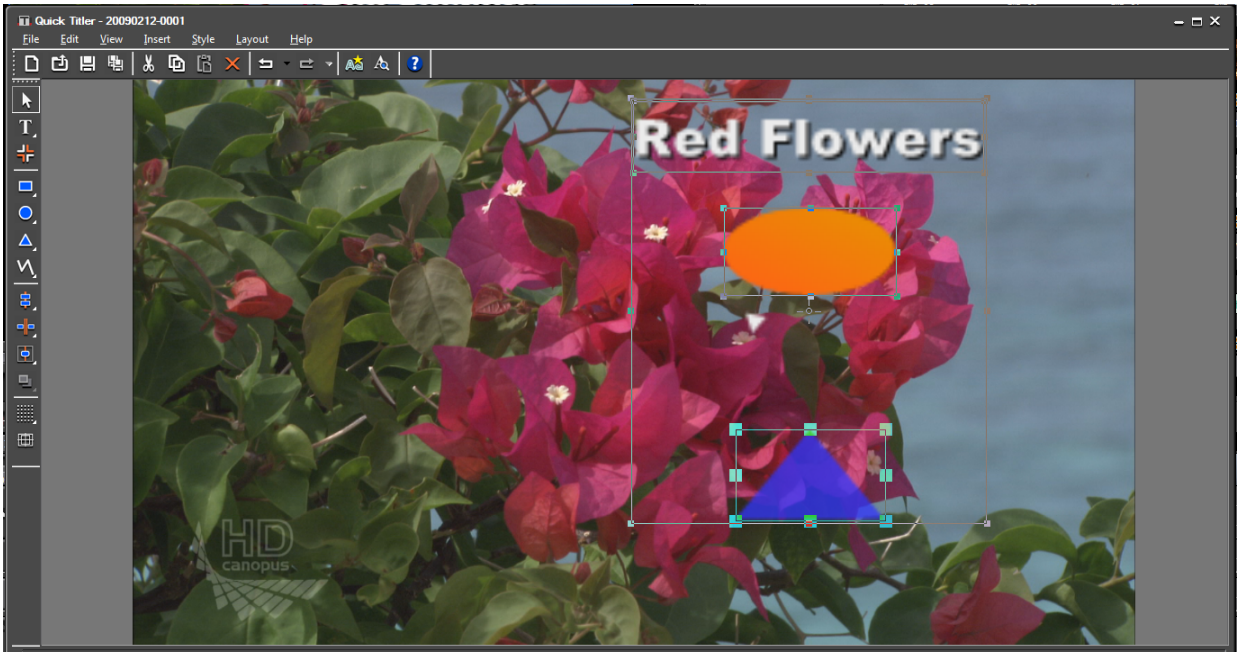


Figure 768 shows these same objects after Center (horizontally) alignment.

Figure 768. Title Object s Aligned Center Horizontally



Note that the objects have not been centered on the screen. They have been centered with respect to each other in their original positions. To center objects on the screen use the Center in Screen menu.

Same Space

This option is available only when three or more objects are selected. I t provides tools for evenly spacing or aligning objects with respect to each other.

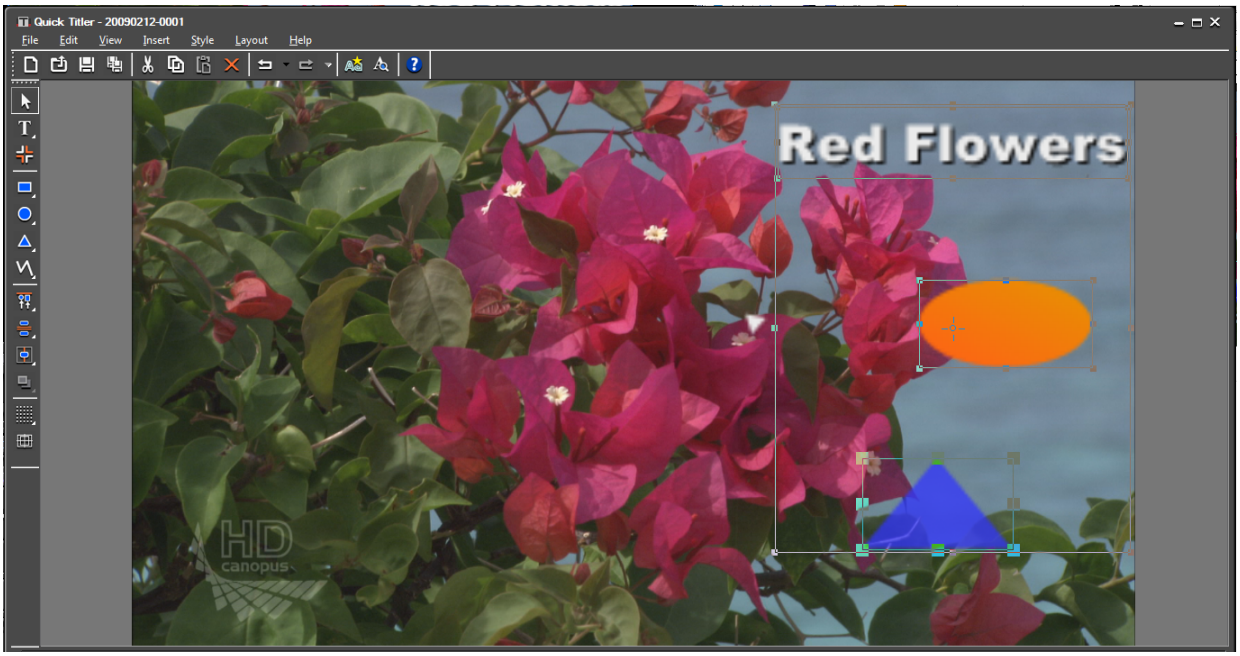
- Align at right and left - adjust three or more objects so they are aligned at their right and/or left edges.
- Align at top and bottom - adjust three or more object so they are evenly spaced from top to bottom.

Figure 769 shows three selected objects which are not evenly spaced from top to bottom.

Figure 769. Objects Note Evenly Spaced from Top to Bottom

Figure 770 shows these same objects after being aligned from top to bottom in the same space.

Figure 770. Objects Evenly Spaced from top to Bottom



Center in Screen

This centering functions is available with one or more selected objects and provide the following options:

- Horizontally - center the selected object(s) horizontally on the screen
- Vertically - center the selected object(s) vertically on the screen

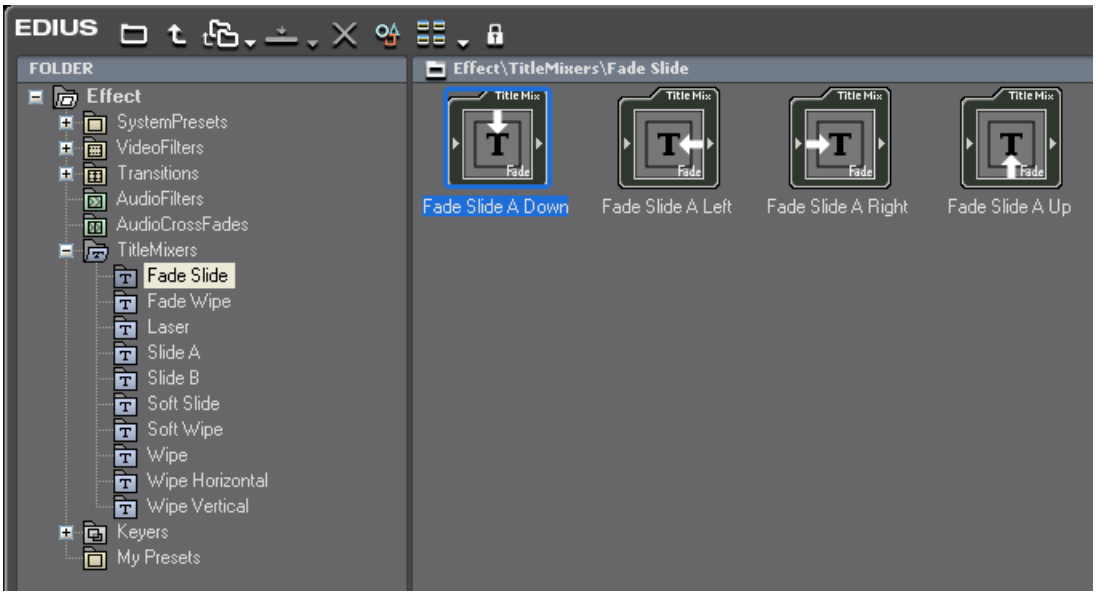
Title Mixer Effects

Title mixer effects determine how a title appears and disappears in a video project. Title mixer effects are found in the Effect Palette.

To add a title mixer effect to a title clip, do the following:

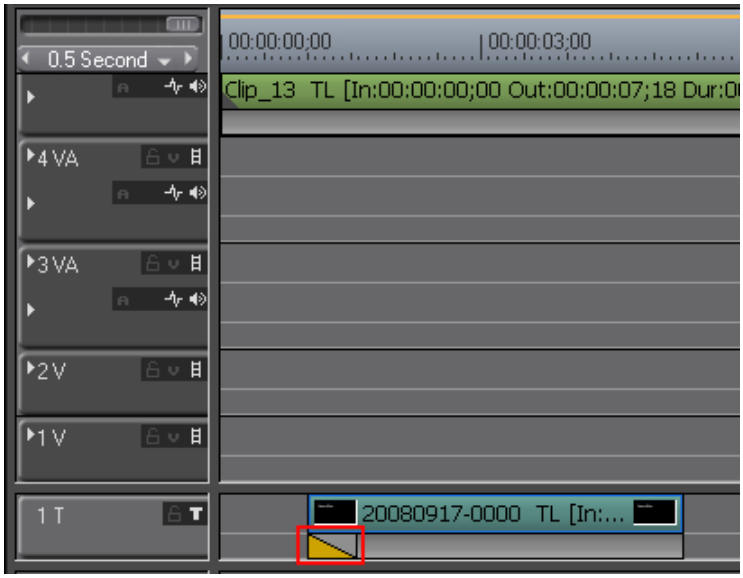
1. In the Effect Palette, select the desired Title Mixer effect. See Figure 771.

Figure 771. Effect Palette Title Mixer Effects



2. Drag the effect to the mixer track of a Title clip on the Timeline and drop it at the beginning or end of the Title clip.

Figure 772. Title Mixer Effect Added at Beginning of Title Clip



Note Effects dropped at the beginning of the clip determine how the title appears in the project. Effects dropped at the end determine how the title disappears.

Alternative Methods:

- Select the mixer area of a Title clip and select the TitleMixer tree in the Effect Palette. Right-click on the title mixer effect to be added to the title clip and select "Add to Timeline" from the menu and select the add point (In, Out or Both).
- Select the mixer area of a Title clip and drag and drop the desired title mixer effect from the Effect Palette to the Information Palette.

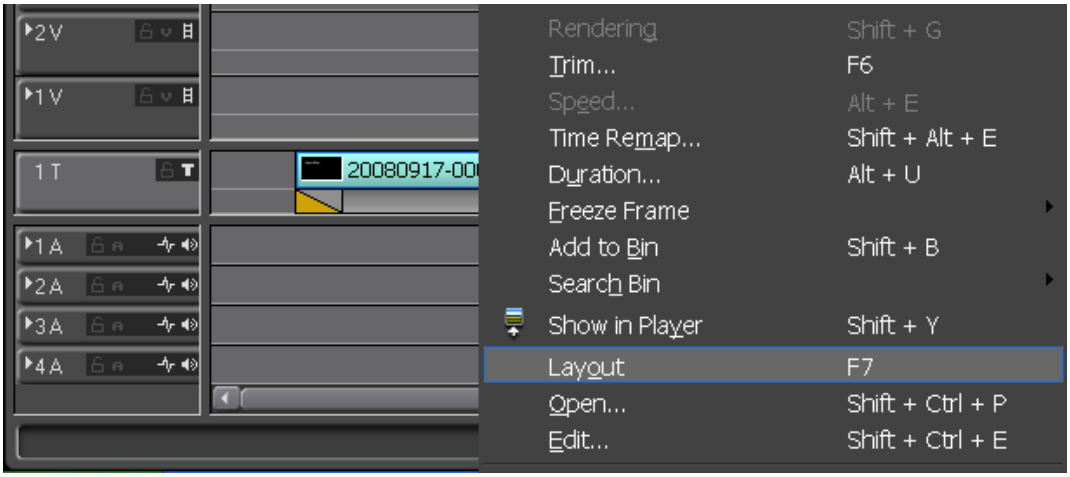
Note When a Title clip is placed on the Timeline, the default title mixer effect is added automatically. The default effect can be changed as can the default Title clip duration. See *Changing Default Effects* *on page 520* and *Duration Settings* *on page 137* for more information.

Adjusting Title Position

To precisely adjust the position of a title in a video clip, follow these steps:

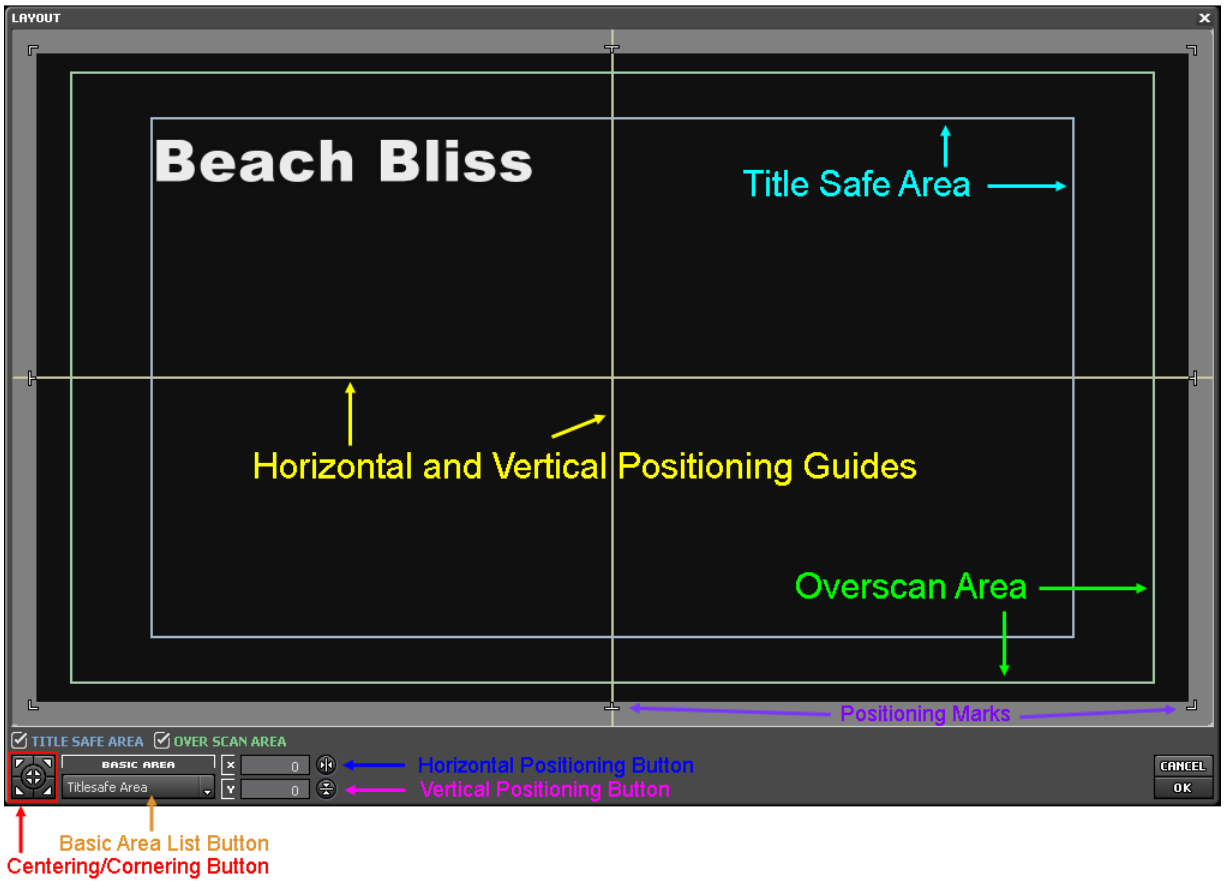
1. Right-click on the Title clip for which you wish to adjust the on-screen position and select "Layout" from the menu as illustrated in Figure 773.

Figure 773. Timeline Title Clip - Layout Menu



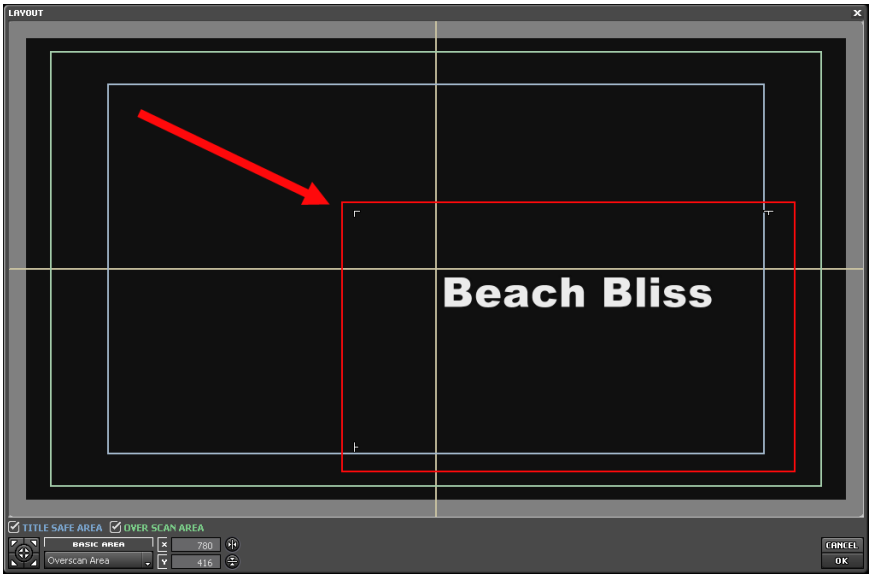
The LAYOUT dialog shown in Figure 774 appears.

Figure 774. Title Layout Dialog



2. Drag the title to change its position and position precisely by using the title layout guides and tools explained below. See Figure 775.

Figure 775. Title Layout - Title Repositioned



3. Click the **OK** button to close the LAYOUT dialog.

Horizontal, Vertical Positioning Guides

These guides help you position a title along the horizontal or vertical axis and mark the center location on the screen.

Positioning Marks

These marks indicate the boundary of the title area.

Title Safe Area

The title safe area boundaries are displayed by enabling TITLE SAFE AREA in the bottom left corner. When the check mark is present, the boundary is displayed.

Over Scan Area

The Over Scan area boundaries are displayed by enabling OVER SCAN AREA in the bottom left corner. When the check mark is present, the boundary is displayed.

Centering/Cornering Button

This button contains five small buttons that correspond to the outside corners and the center positions of the area selected as the BASIC AREA." Clicking one of these buttons aligns the positioning marks with the selected corner/center position. For example, if the upper left corner button is clicked, the upper left positioning mark is aligned with the upper left corner of the BASIC AREA and the text is repositioned accordingly.

Basic Area List Button

Select from the drop-down list the area (underscan, overscan or title safe) to be used when adjusting positioning marks with the Centering/Cornering button.

Vertical Positioning Button

Clicking this button returns the title to a vertical position of 0 on the Y scale.

Horizontal Positioning Button

Clicking this button returns the title to a horizontal position of 0 on the X scale.

Note When a title is dragged to a new position, the X, Y coordinates are changed to indicate the new position. You may also enter X,Y coordinates directly to reposition the title.

Editing a Linked Title Clip

If the same Title clip is used multiple times on the Timeline, all instances of the Title clip are linked. Editing one instance changes all the linked instances as they refer to the same clip.

To edit a single instance of a clip used more than once on the Timeline, do the following:

1. On the Timeline, double-click the instance of the clip you wish to edit.

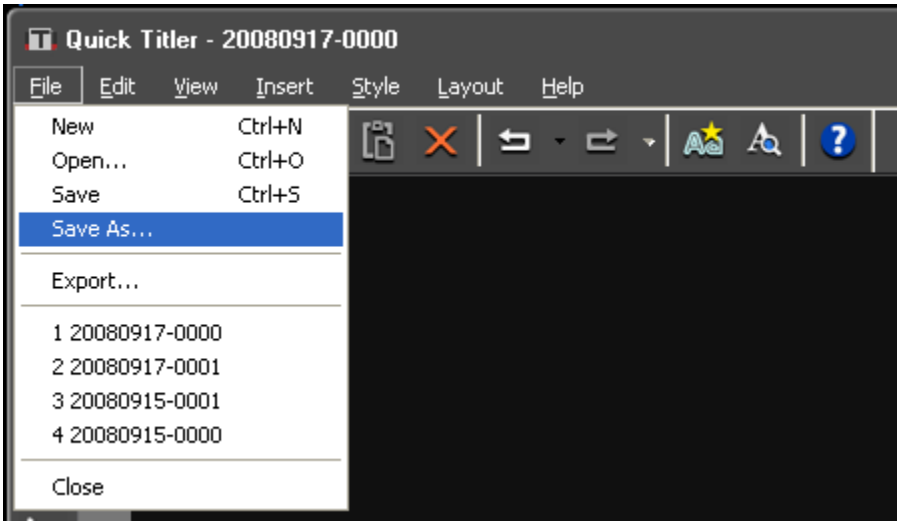
Note A Title clip may also be double-clicked in the Asset Bin in order to release its link with other instances of the clip.

2. Edit the Title clip in QuickTitler (or TitleMotion Pro).

Note TitleMotion Pro is not installed with EDIUS. If you received a copy of TitleMotion Pro with EDIUS it must be installed separately.

3. Select File>Save As on the QuickTitler (or TitleMotion Pro) menu bar. See Figure 776.

Figure 776. QuickTitler File Save As



A Save As dialog appears.

4. Enter a new name for the edited Title clip and click the **Save** button.

The new Title clip is saved in the Asset Bin.

The edits apply only to the new Title clip which is no longer linked with the other clips.

Note Title clips created in QuickTitler have a file extension of .etl. Those created with TitleMotion Pro have an .icg extension.

Importing Background Files

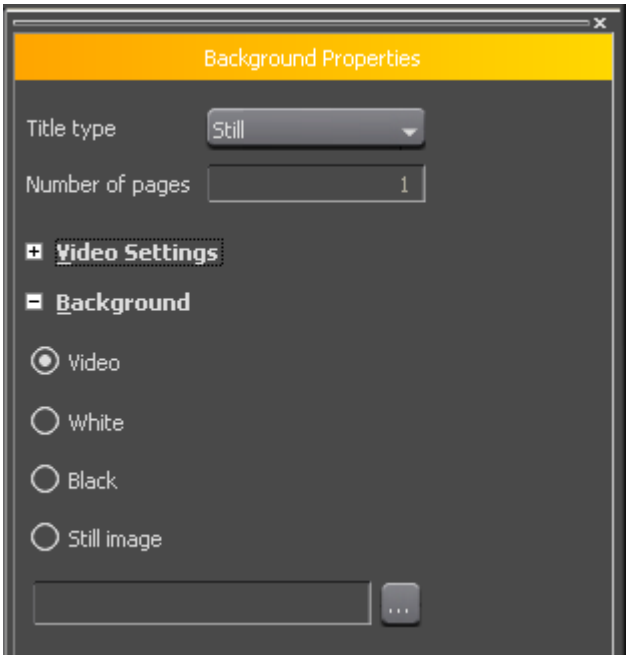
An image may be imported and used as the background for editing Title clips.

Note The background image is used in the editing process only. It is not saved with the Title clip.

To import a background image for title editing, do the following:

1. If the Background tree is not already expanded, click the "+" to expand the Background tree in the Background Properties bar.
2. Click the … button in the Background tree of the Background Properties bar. See Figure 777.

Figure 777. QuickTitler Background Properties - Background Tree



A Select Background File dialog appears.

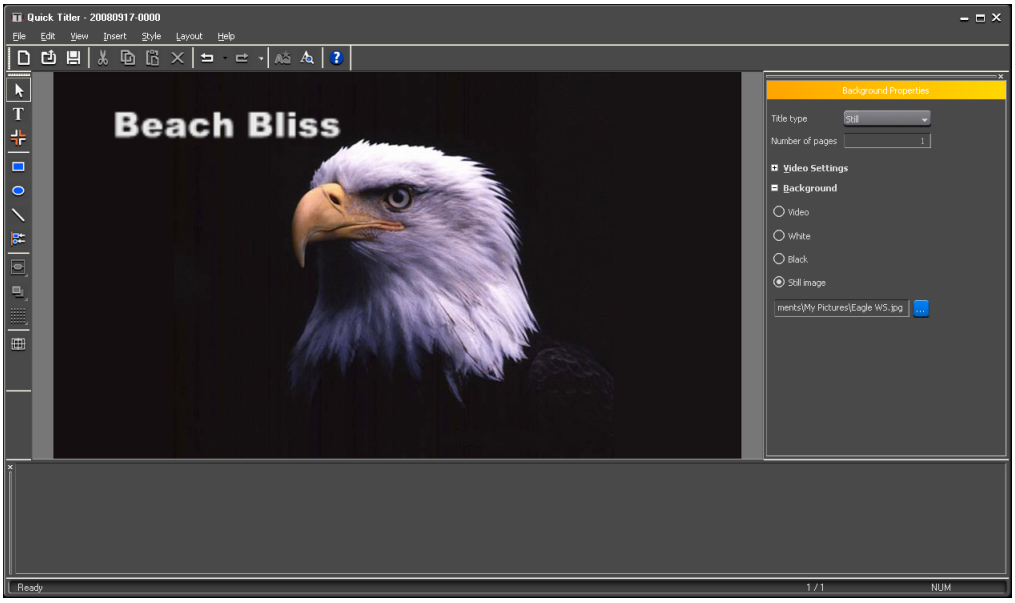
3. Navigate to the location containing the image you wish to import, select the image file and click the **Open** button.

4. Select the “Still Image” background type in the Background tree. See Figure 777.

Note ‘Video” displays the video at the position of the Timeline cursor. “White” or "Black” sets the editing background to one of these colors.

The selected image is applied as the editing background as illustrated in Figure 778.

Figure 778. QuickTitler Background Image Applied

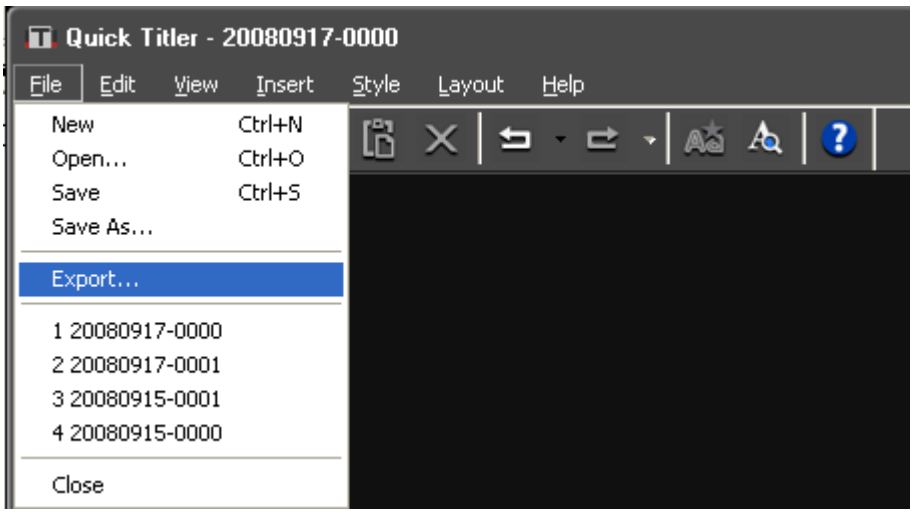


Exporting Title as a Still Image

A title object can be exported as a still image. To export the title object as a still image, do the following:

1. In QuickTitler, select the title object to be exported and select File>Export from the QuickTitler menu bar as illustrated in Figure 779.

Figure 779. QuickTitler File Export



A Save As dialog appears.

2. Navigate to the location in which to save the file, specify the desired file name and format and click the **Save** button.

TitleMotion Pro

Note TitleMotion Pro is not installed with EDIUS. If you received a copy of TitleMotion Pro with EDIUS it must be installed separately.

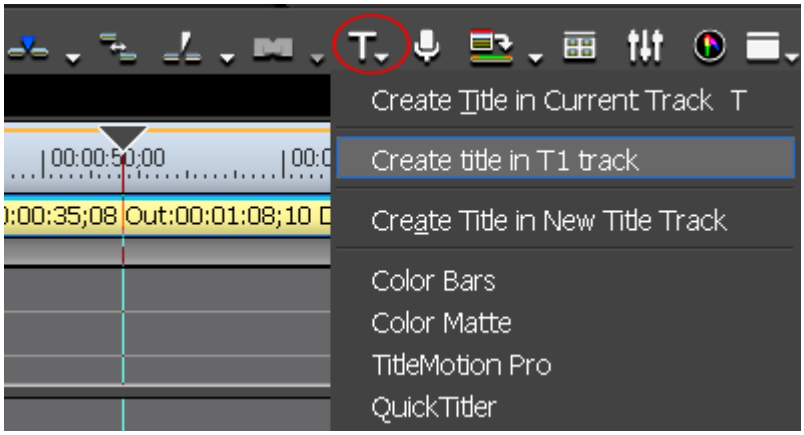
The steps below assume TitleMotion Pro has been selected as the default titling application in Application Settings. For more information, see *Application Settings* *on page 151*.

To use TitleMotion Pro:

1. Position the Timeline cursor at the point at which you wish to insert a title.
2. Click the **Create Title** button on the Timeline.
3. From the menu, select the track to which to add the title. See Figure 780 for an example.

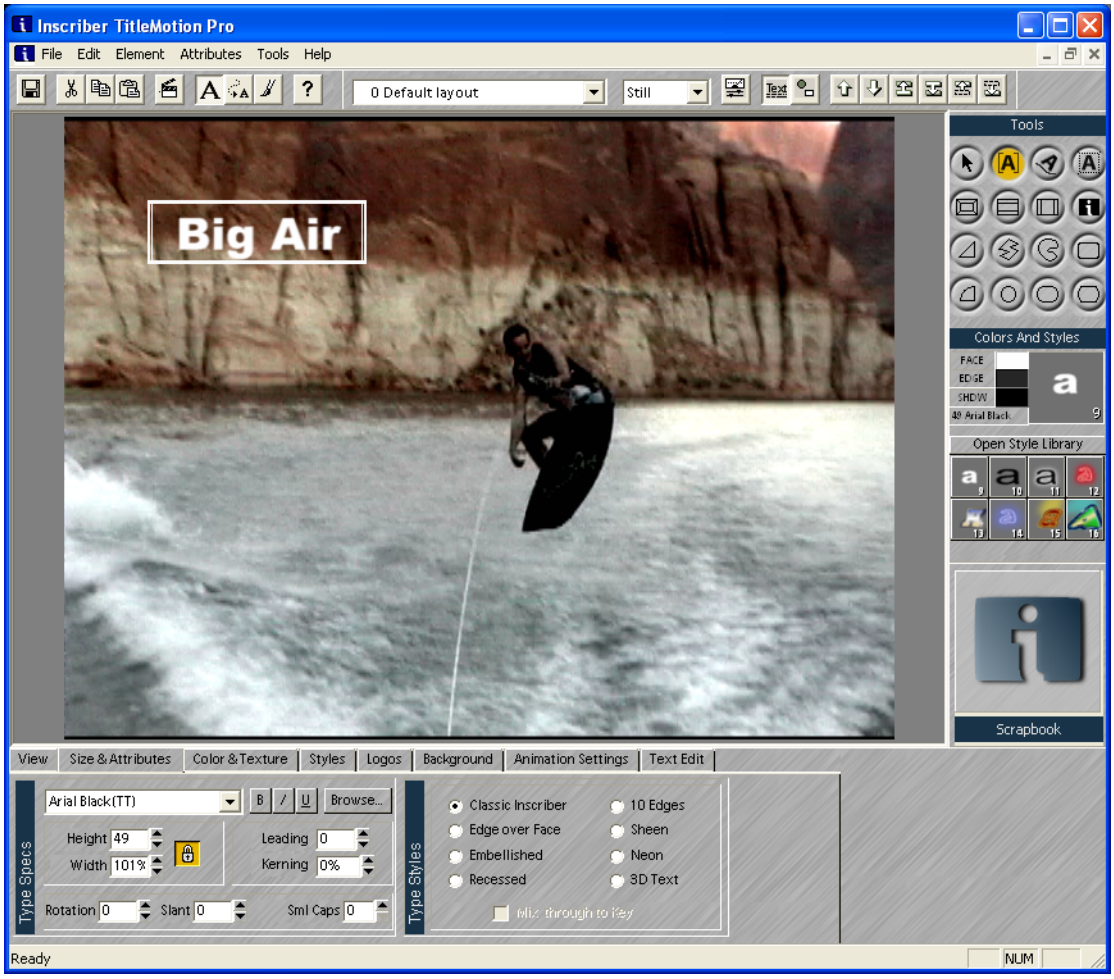
- Create Title in Current Track - Place the title clip in the currently selected track.
- Create Title in T[X} track - Place the title clip in the specified title track where {X} is the number of a specific title track.
- Create Title in New Title Track - Create a new track and place the title clip in that track.

Figure 780. Create Title Menu



After selecting the track, TitleMotion Pro start up as shown in Figure 781.

Figure 781. TitleMotion Pro



Create the desired title(s) using the TitleMotion Pro tools and click the Save and Exit button (see Figure 782) to save changes and close the TitleMotion Pro window.

Figure 782. TitleMotion Pro Save and Exit

The title is added to the clip at the Timeline cursor location. See Figure 783.

Figure 783. TitleMotion Pro Title Added

For more information concerning TitleMotion Pro and it capabilities, see the TitleMotion Pro documentation and Help files.

Section 7

Audio Operations

EDIUS has very extensive audio controls which allow audio to be adjusted and manipulated to achieve the desired audio levels, balance, effects, etc.

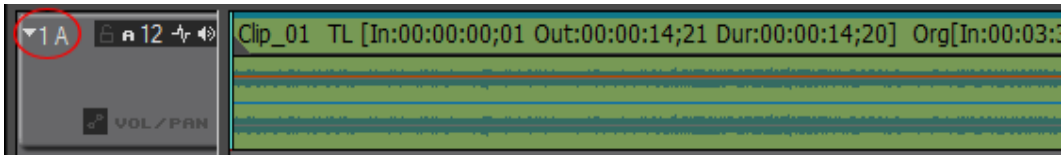
Adjusting Volume and Pan

Both the volume and the Left/Right balance (pan) of audio clips placed on the Timeline can be adjusted. Both are controlled by rubber bands; orange for the volume and blue for the L/R stereo balance. The shape of the rubber bands controls the volume and pan along the time axis.

To adjust volume and pan, do the following:

1. Click the **Expand** button in a track containing audio. See Figure 784.

Figure 784. Audio Track Expand



The track expands to the display the volume and pan rubber bands and an audio waveform.

Note The first time the track is expanded, an audio waveform cache is created. On long clips, it may take several minutes to create this cache depending upon your system configuration. See Figure 785.

Figure 785. Generating Waveform Cache

Note [ALT]+[S] can also be used to expand and contract the audio display.

2. Click the **Volume/Pan** button to toggle between volume (orange line) and pan (blue line) adjust modes. See Figure 786 and Figure 787.

Figure 786. Volume/Pan Toggle - Volume

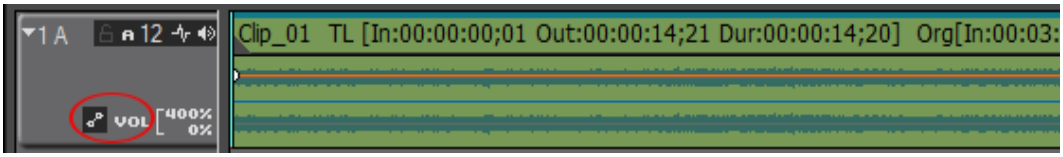
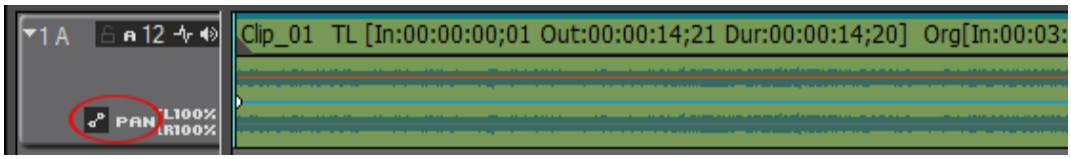


Figure 787. Volume/Pan Toggle - Pan



3. Click the volume or pan rubber band line at the point at which you want to make an adjustment.

An adjustment point is added to the rubber band.

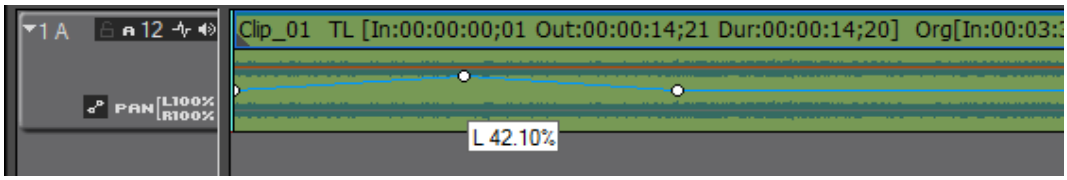
Note An alternative method for adding an adjustment point is to right-click on the rubber band and select “Add/Delete” from the menu.

4. Drag the point vertically or horizontally to adjust the shape of the rubber band.

Note Regardless of the display mode - linear (%) or logarithmic (dB) - of the audio rubber bands, node to node adjustments are always linear.

- When VOL is selected, drag the point upwards to increase the volume and downward to decrease the volume.
- When PAN is selected, drag the point upward to increase the sound in the left speaker, drag the point downward to increase the sound in the right speaker. See Figure 788 for an example.

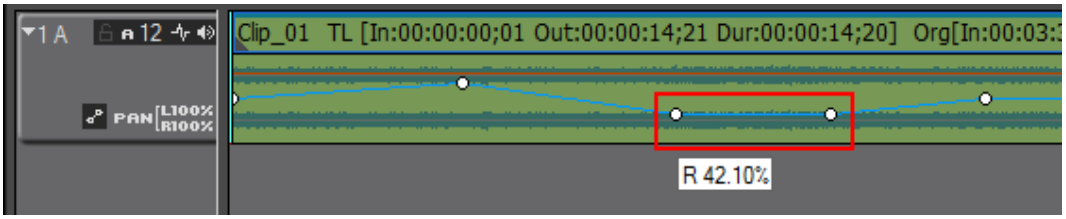
Figure 788. Pan Point Adjusted for Left Speaker



Additional Rubberband Adjustments

- Dragging the point horizontally changes the position of the point on the Timeline at which the adjustment takes place.
- Dragging the point while pressing the [SHIFT] key adjusts the entire rubber band from the adjustment point to the end of the clip or to the next adjustment point. See Figure 789.

Figure 789. Pan Point Adjusted with SHIFT Key



- Dragging the point while pressing the [CTRL] key provides fine vertical adjustments.
- Pressing the [SHIFT]+[ALT] keys and dragging the rubber band adjusts the entire rubber band vertically.
- Pressing the [ALT] key and clicking on the rubberband where no adjustment point exists add points and adjusts the rubber band between these new points.

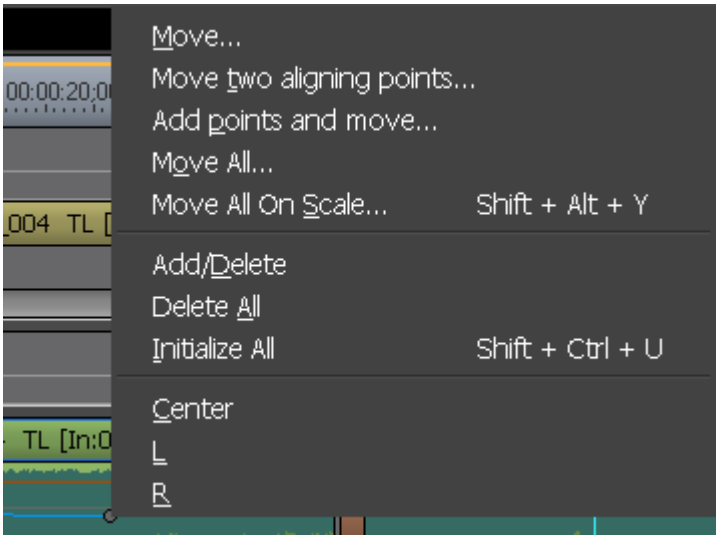
To delete a point from the rubber band, right-click on the point and select Add/Delete from the menu.

Entering Value Adjustments

Volume and pan can also be adjusted by right clicking on a rubber band point and selecting the adjustment method from the menu. See Figure 790.

1. If the audio track is not expanded, click the **Expand** button.
2. Click the **Volume/Pan** toggle button to select the desired rubber band.
3. Right-click the desired rubber band point. The menu in Figure 790 appears.

Figure 790. Volume/Pan Right-Click Menu



4. Select the type of adjustment you wish to make.
   - Move - Adjust the volume/pan or timecode of the selected point
   - Move Two Aligning Points - Adjusts the selected point and the next point on the rubber band to the same value.
   - Add Points and Move - Adds two points at the location of the selected point and the next point and adjusts them to the entered value.
   - Move All - Other points move vertically to maintain their relative position to the entered value.
   - Move All On Scale - Adjust the volume/pan of all points by the same amount.

An entry dialog appears for either Volume or Pan depending on what is selected. See Figure 791 and Figure 792.

Figure 791. Volume Entry Dialog

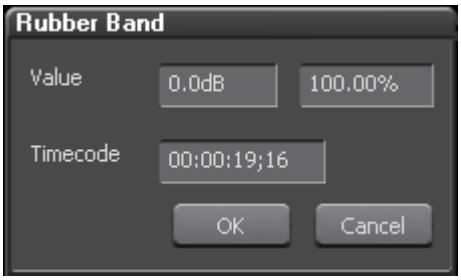
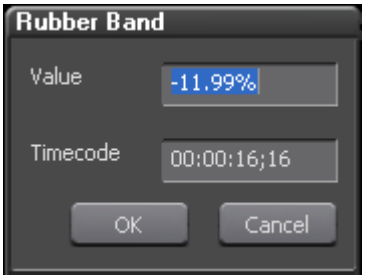


Figure 792. Pan Entry Dialog



5. Enter the desired value or timecode (if applicable).
6. Click the **OK** button to close the dialog.

Resetting the Pan Rubber Band

To reset the Pan rubber band to a balanced left/right audio state, do the following:

1. Expand the audio panel if necessary.
2. Click the **Volume/Pan** button to switch to Pan mode.
3. Right-click the Pan rubber band.
4. Select "Center" from the menu.

The Pan rubber band is returned to the center position on the audio waveform.

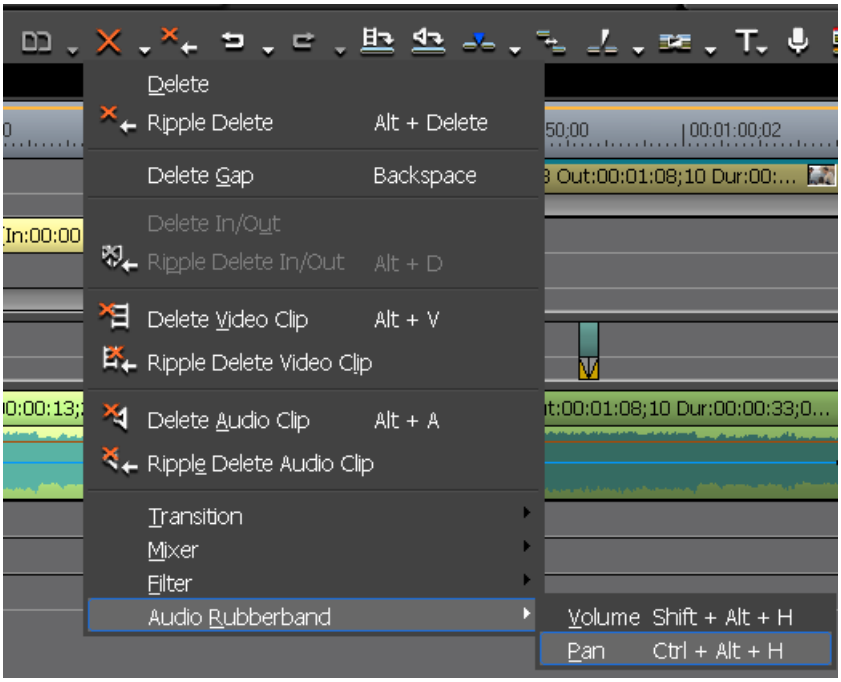
Deleting or Initializing Rubber Band Points

Initializing the Rubber Band

All points on a rubber band can be deleted and the rubber band returned to its default state (initialized) by doing the following:

1. Select the clip on which the rubber band is to be initialized.
2. Click the list button (▽) of the **Delete** button. The menu in Figure 793 appears.

Figure 793. Delete Button Menu



3. Select Audio Rubberband>Volume or Audio Rubberband>Pan to delete all points from the desired rubber band and return the rubber band to the default position.

Alternative Methods:

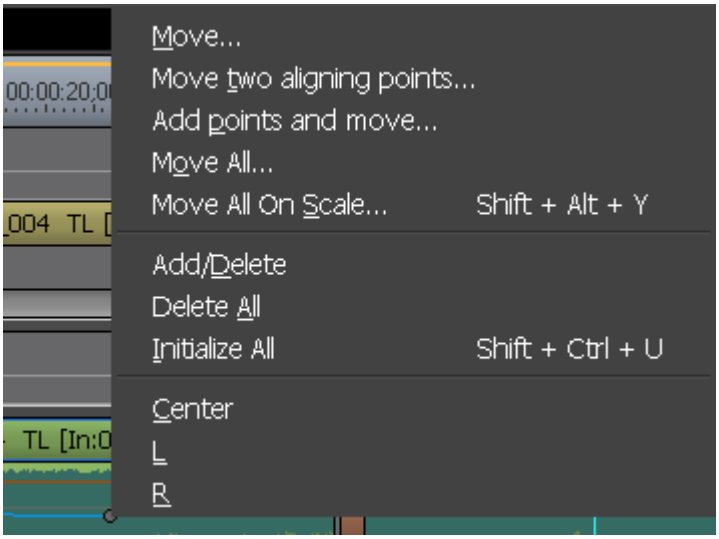
- Right-click a clip and select Delete Parts>Audio Rubberband>Volume or Delete Parts>Audio Rubberband>Pan from the menu.
- From the Preview window menu, Select Edit>Delete Parts>Audio Rubberband>Volume or Edit>Delete Parts>Audio Rubberband>Pan.
- Select a clip and press [SHIFT]+[ALT]+[H] on the keyboard to delete all points and initialize the Volume rubber band.
- Select a clip and press [CTRL]+[ALT]+[H] on the keyboard to delete all points and initialize the Pan rubber band.

Delete Selected Rubber Band Points

To delete all or selected rubber band points or to initialize (return to default position) all points, do the following:

1. If necessary, expand the audio track on the track panel.
2. Click the **Volume/Pan** button to select the desired rubber band.
3. Right-click the desired point. The menu in Figure 794 appears.

Figure 794. Volume/Pan Right-Click Menu



4. Select the desired action from the menu.
   - Add/Delete - Delete the selected rubber band point.
   - Delete All - Delete all points on the selected rubber band and initialize the rubber band to the default position.
   - Initialize All - Initialize all points on the selected rubber band to the default position without deleting the points.

Normalize Audio

The normalize function simultaneously adjusts the audio level of one or more clips to the level specified.

Audio normalization cannot be applied to the following clip types:

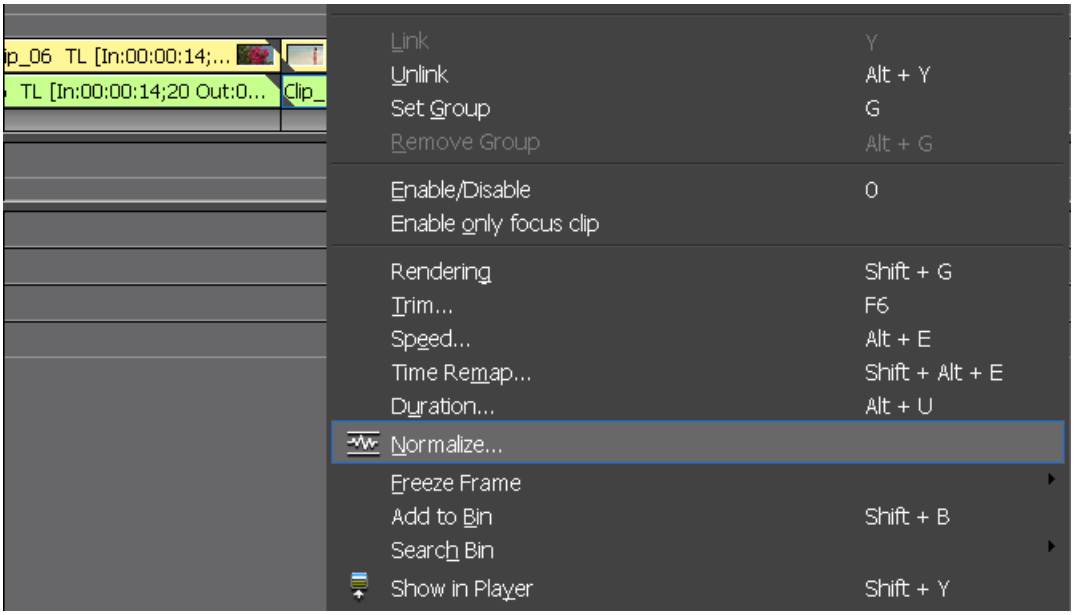
- Timeline sequence clips
- Clips created by time remap editing
- Proxy clips

To normalize audio, do the following:

1. Select one or more clips on the Timeline.
2. Right click on one of the selected clips and select "Normalize" from the menu as illustrated in Figure 795.

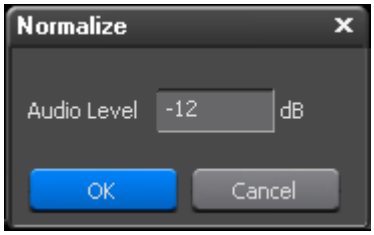
Note The Normalize function is also accessed by selecting Clip>Normalize from the Preview window menu bar.

Figure 795. Clip Menu - Normalize



The Normalize dialog shown in Figure 796appears.

Figure 796. Audio Normalize Dialog



3. Enter the audio level to which all selected clips will be normalized and click the **OK** button.

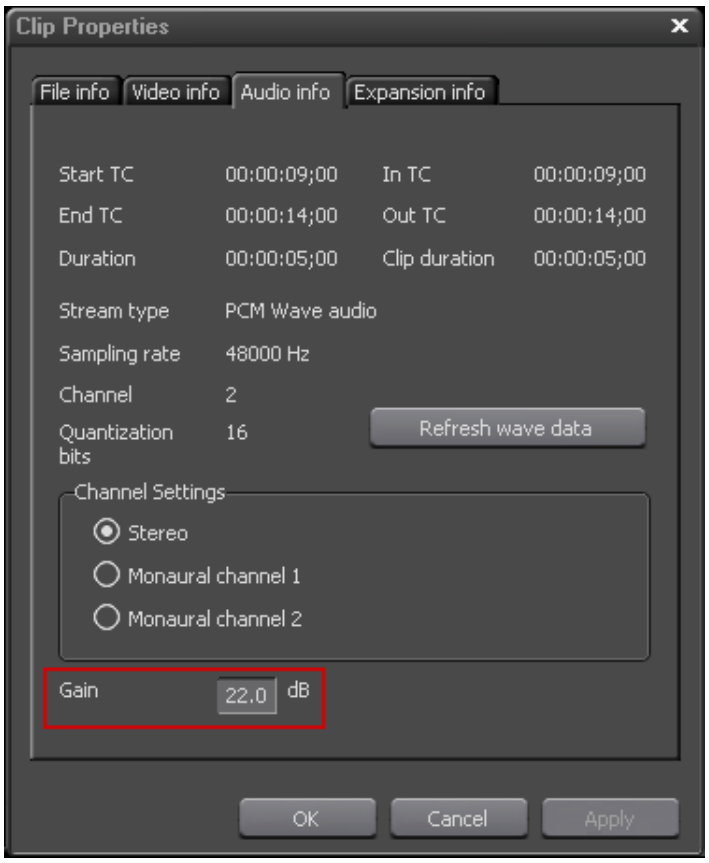
Note The maximum allowable audio gain is 24dB (400%)

Audio in the selected clips is normalized. If a gain value other than 0 dB was applied, normalized clips will have an aqua line under the audio portion of the clip as illustrated in

Figure 797. Audio Normalization Applied

Based on the specified normalization level, EDIUS calculates the appropriate gain value for each clip for all channels. This calculated gain value is displayed in the Clip Properties Audio Info tab as illustrated in Figure 798.

Figure 798. Audio Info - Normalized Clip



The calculated gain value can be changed by entering another value. When the **Apply** button is clicked to apply the change, the dialog shown in Figure 799 appears.

Figure 799. Apply Gain Change Dialog

If the **Yes** button is clicked the gain values is applied to all channels in the clip. If the **No** button is clicked, the gain values is applies to only the channel selected in the Channel Settings of the Clip Properties Audio Info tab.

Note A gain value applied to a clip on the Timeline through normalization or manual entry will be preserved if the clip is dragged from the Timeline and dropped in the Asset Bin.

The gain applied to a clip is one of the clip parameters that may be selected for viewing in the Asset Bin detailed view.

Audio Mixer Operations

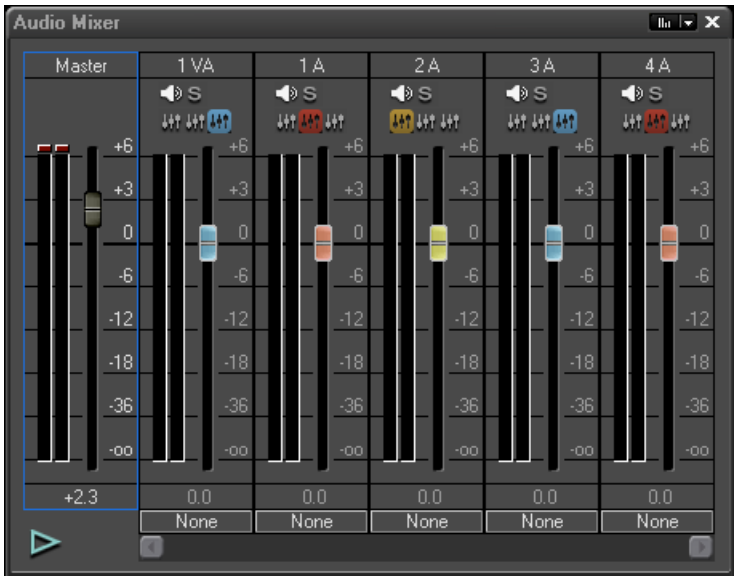
Adjusting Audio in the Mixer

To adjust audio using the audio mixer, perform the following actions:

1. Click the **Toggle Audio Mixer Display** button in the Timeline Window.

The Audio Mixer (see Figure 800) appears.

Figure 800. Audio Mixer



2. Move the fader on the "Master" controls up and down to adjust the volume of all audio tracks.

3. Move the fader of a specific track up and down to adjust the volume for only that track.

Alternative Methods:

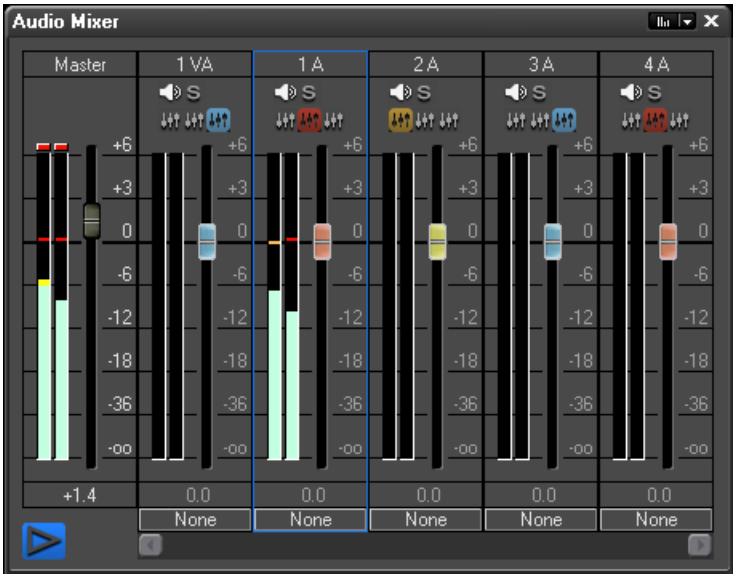
- Select View>Audio Mixer from the Preview window menu.
- To select a track in the Audio Mixer, use the [←] and [→] keys.
- To adjust the fader (in 1dB units), use the [↑] and [↓] keys. (the same operation is available with the mouse).
- Adjust the fader (in 0.1dB units), use [SHIFT]+[↑] and [SHIFT]+[↓].

Playing Clips From the Audio Mixer

Click the **Play** button in the Audio mixer.

The clip at the position of the Timeline cursor begins to play and the appropriate audio meters are displayed. See Figure 801 for an example.

Figure 801. Playing Clips in the Audio Mixer



While playing clips from the audio mixer, the sliders can be used to adjust volume to the desired level.

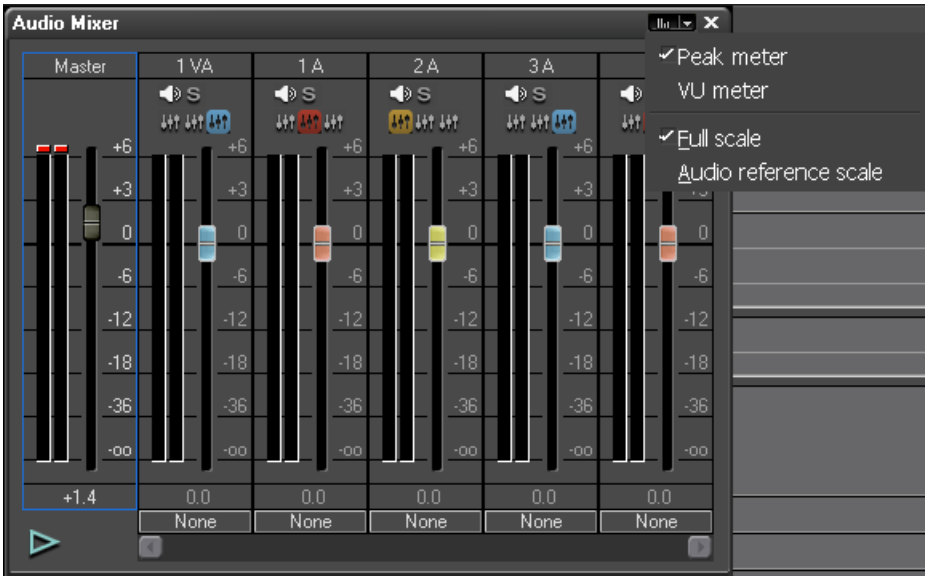
Switching the Indicator Display

To change the indicator display, do the following:

1. In the audio mixer, click the **Indicator Display** button.

The menu in Figure 802 appears.

Figure 802. Audio Mixer Indicator Display Menu



2. Select the desired indicator display and scale.
   - Peak Meter - Shows the volume variation of each audio signal in real time.
   - VU Meter - Displays the average volume of each audio signal. This is useful for adjusting the volume balance of each track.
   - Full Scale - "0" in the scale represents the maximum allowable sampling value.
   - Audio Reference Scale - Specifies the value "0" in the scale as the sampling value preset in "Audio Reference Level" in the project settings.

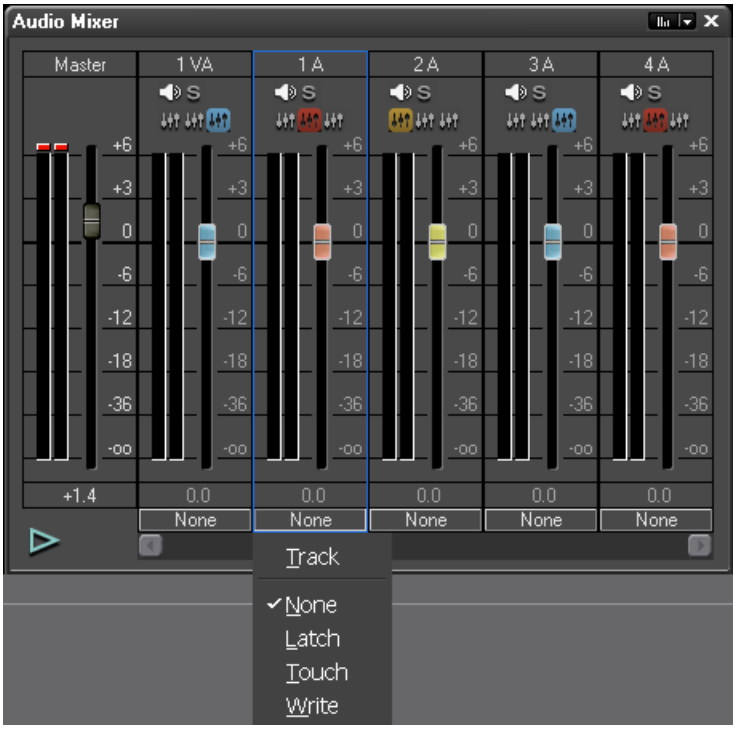
Audio Track Operations

To change track operations do the following:

1. In the audio mixer, click the **Operation** button under the track for which you wish to change the operation.

The operation menu appears. See Figure 803 (The operation buttons on each track are set to "None" in this example).

Figure 803. Audio Mixer Track Operations



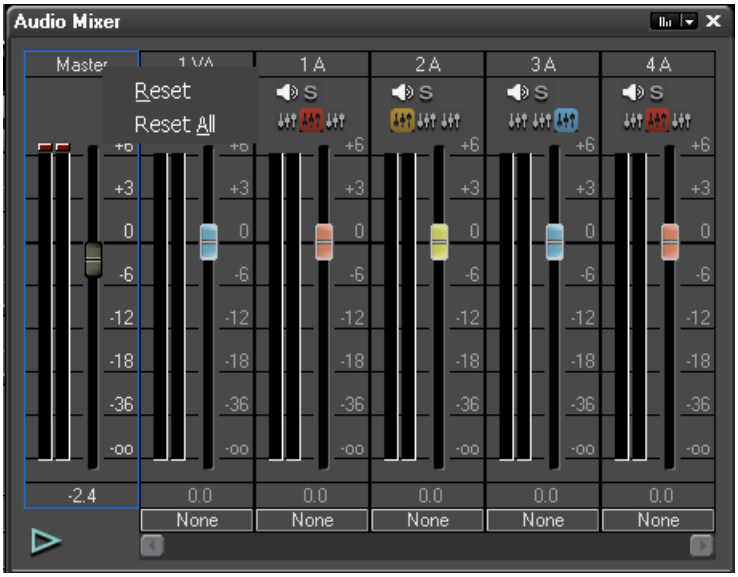
2. Select the desired track operation from the menu.

- Track - Adjustments to the track volume are not applied to the Timeline.
- None - Audio mixer adjustments with the slider are not available.
- Latch - Apply the changes to the Timeline from the position where you start dragging the fader to the end of playback.
- Touch - Apply the changes to the Timeline from the position at which you start dragging the fader until the fader is released.
- Write - Apply the changes to the Timeline through the entire playback. This mode overwrites all previously set volume values irrespective of and fader dragging actions.

Note Track operation set to “Latch”, “Touch” and “Write” all return to “None” when playback ends.

To reset the settings of all or selected tracks to the defaults, right-click on the track name in the Audio Mixer and select “Reset” or “Reset All” from the menu. See Figure 804.

Figure 804. Audio Mixer Track Reset



Ganging Audio Tracks

Audio tracks may be ganged together in order to adjust all ganged tracks simultaneously. Three separate gangs may be created and are assigned the colors of yellow (Gang 1), red (Gang 2) and, blue (Gang 3).

Each audio track has three **Gang** buttons above the meter bars and fader. From left to right these are Gang1, Gang2 and Gang3.

To gang tracks and adjust them simultaneously, do the following:

1. On any audio track you wish to gang, click the **Gang** button (Gang1, Gang2 or Gang3) to which you wish to assign the track.

The gang button and audio track fader change to the color of the selected gang (yellow, red or blue).

2. Adjust the fader on one of the ganged tracks.

All ganged track faders move together. See Figure 805

Note The fader is not active if the track operation is set to "None." See *Audio Track Operations* *on page 654* for more information.

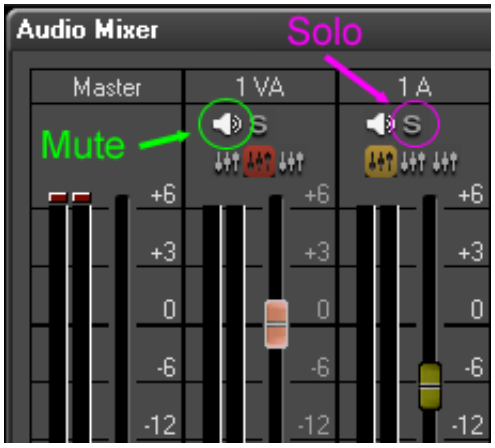
Figure 805. Adjusting Ganged Tracks

Note When tracks are ganged, the relative volume difference between tracks is maintained as the fader on one of the tracks is moved. When one of the faders (other than the one being adjusted) reaches the upper or lower scale limit, its movement stops, but, the other faders in the gang continue to move towards the limit.

Playing or Muting a Specified Track

Each audio track has a **Solo** button and a **Mute** button. See Figure 806.

Figure 806. Audio Mixer Solo and Mute Buttons



These buttons function as follows:

- Clicking the **Solo** button plays back audio from that track when the **Play** button in the Audio Mixer is selected.
- Clicking the **Mute** button mutes audio for the selected track during Audio Mixer playback.

Figure 807 shows the Mute button selected for track 1VA and the Solo button selected for track 1A.

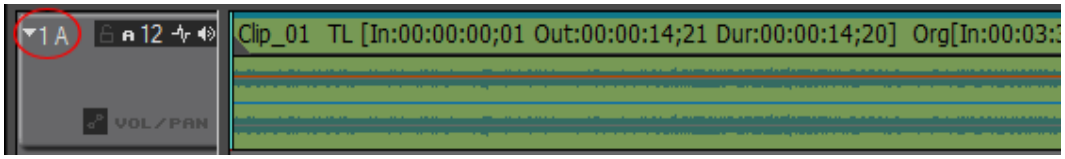
Figure 807. Mute and Solo Buttons Selected

Applying V-Mute

V-mute allows you to specify a point on the audio waveform Timeline at which the audio should be muted. This is useful for eliminating small amounts of unwanted audio noise. This noise will likely be visible in the audio waveform. To V-mute audio, do the following:

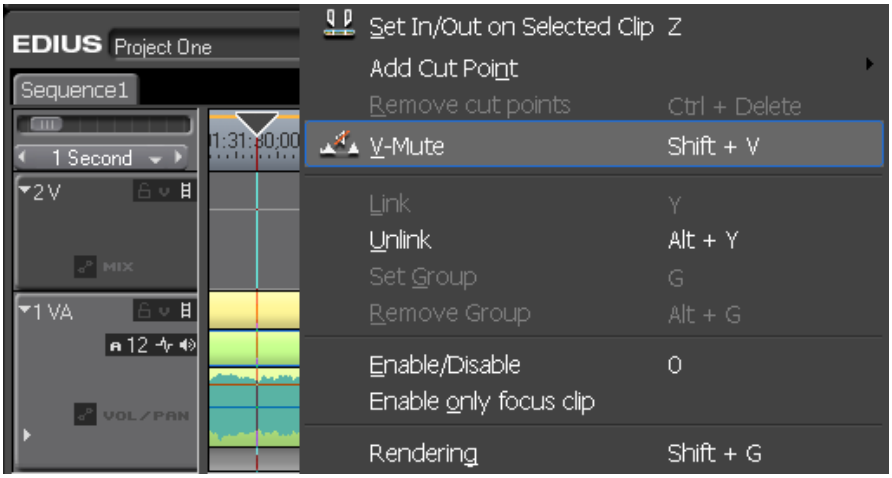
1. If the audio waveform is not currently displayed for the track on with you wish to set a V-mute, click the Expand button on the track panel. See Figure 808.

Figure 808. Audio Track Expand



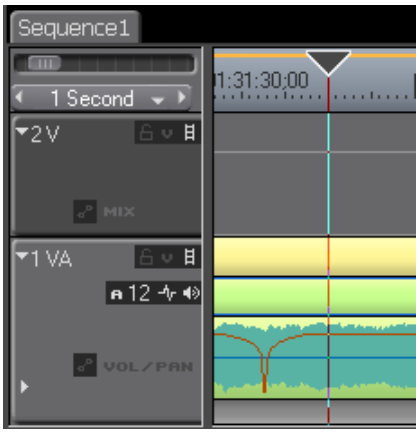
2. Move the Timeline cursor to the point at which you wish to set a V-mute.
3. Right-click on the clip and select V-Mute from the menu as shown in Figure 809.

Figure 809. Set V-Mute



The level on the audio volume rubber band at the point of the Timeline cursor is set to 0. See Figure 810.

Figure 810. V-Mute Set on Audio Volume Rubberband



Note The default duration of a V-Mute can be adjusted in the Duration Settings dialog. See *Duration Settings* *on page 137* and *V-Mute* *on page 139* for more information.

Adding Voice Overs and Sound Effects

Voice overs (narrations) and sound effects can be added to clips placed on the Timeline.

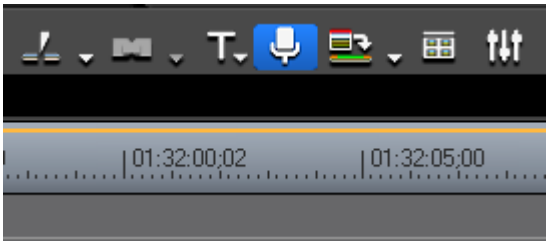
To add a voice over or sound effect, perform the following actions:

1. Select the A audio track on which to place the voice over or sound effect and set an In point for the voice over or sound effect. See *Setting In and Out Points on Timeline* *on page 326* for more information.

2. Click the **Toggle Voice Over Display** button (highlighted in blue in Figure 811.

Note Selecting Capture>Voice Over from the Preview window menu bar also display the Voice Over dialog.

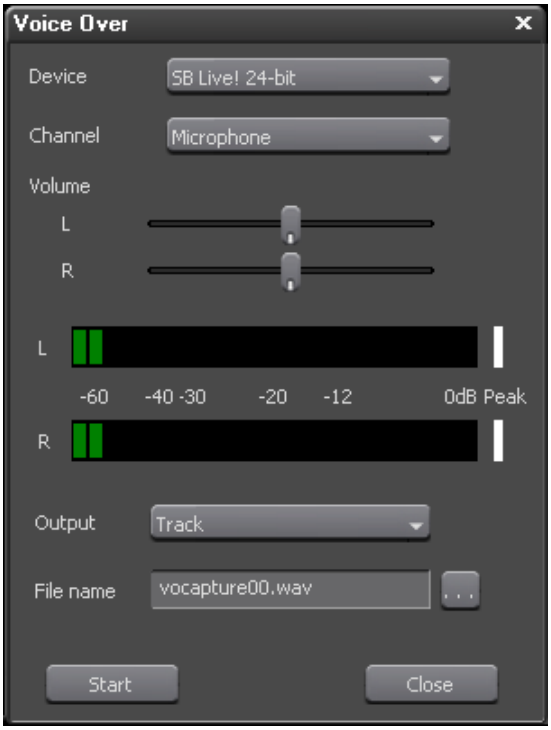
Figure 811. Toggle Voice Over Display Button



The Voice Over dialog illustrated in Figure 812 appears.

Note Depending upon the audio card installed in the EDIUS computer, the Voice Over dialog may differ from the one shown in Figure 812.

Figure 812. Voice Over Dialog



3. Click the list button (▽) on the **Device** button and select an input device from the list of available devices.

4. Click the list button (▽) on the **Channel** button and select an audio source (microphone, line-in, aux, etc).

Note The Voice Over dialog options may change depending upon the selected source. For example, if a monaural source is selected, the volume and meter bar displays change to monaural.

5. Adjust the volume of the source with the Volume slider.

Note Maximum volume setting is 0 dB.

6. Click the list button (▽) on the **Output** button and select "Track" from the Output list.

- Bin - Add the audio clip only in the Asset Bin
- Track - Add the audio clip to the A track specified in Step 1.

7. In the File name field, enter the desired name for the audio clip and select the location in which to store the clip by clicking the ... button.

8. Prepare the source (microphone, line-in, aux, etc), and click the **Start** button.

Note When the **Start** button is clicked, the button name changes to **End**. In the upper left corner of the Recorder window, a white dot starts blinking and a 5 second countdown begins. At 1 second, the dot turns yellow and at 0, the dot turns to red and recording begins.

9. Click the **End** button to end voice over or sound effect recording.

Note Recording stops automatically if Timeline playback cannot keep up to speed.

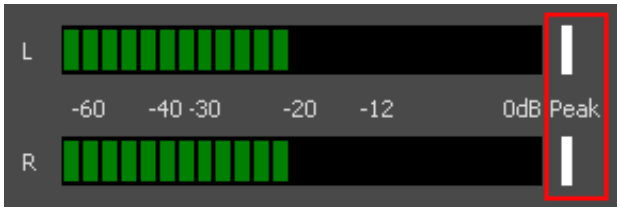
The dialog shown in Figure 813 appears.

Figure 813. Use Wave File Confirmation Dialog

10. Click the **Yes** button to save the file and insert the voice over or sound effect on the selected A track.

The white bars (shown in Figure 814) at the right end of the level meters change to red if the volume exceeds 0 dB. Click the bars to return to the default settings.

Figure 814. Peak Level Reset



Section 8

Exporting/Project Output

The last step in the typical project workflow is exporting the project in its final output format. Capturing clips, editing clips in the Timeline, adding transitions and titles, and adjusting audio is all completed before the project is ready to be rendered and exported to its final format.

Exporting in Various File Formats

This section covers the selection of output formats for video and still images.

Export Settings

Before beginning the export process, make sure the following settings are configured per your preferences:

- Set IN and OUT points to specify the export range if only a portion of the project is to be exported.
- If exporting still images, make sure still image plug-in settings are set according to your preferences,
- If chapters are desired, make sure the appropriate chapter marker points are set. See *Setting Markers* *on page 414*.

Using Exporter

The Exporter Plug-In is used to export projects in various media formats. The Exporter supports the following file formats (other formats are supported with third-party plug-ins):

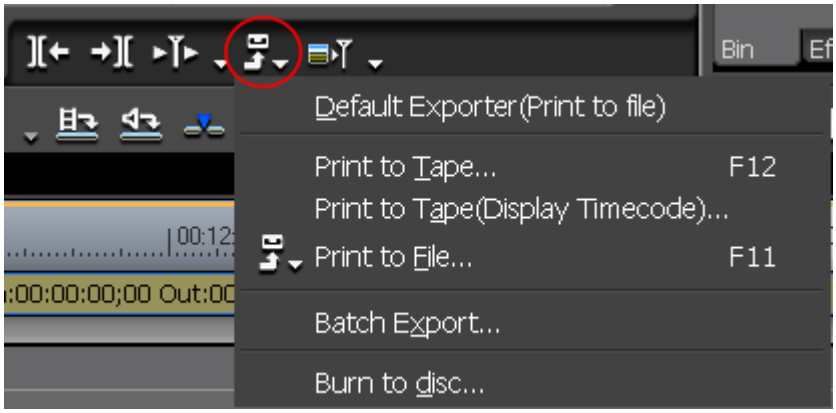
- Canopus HQ AVI
- Canopus Lossless AVI
- DV AVI (available only when the export format is DV)
- DVCPRO HD AVI
- Dolby Digital (AC-3)

- AVCHD
- H.264/AVC
- Blu Ray
- Playstation Portable
- Uncompressed RGB AVI
- Still Image
- Uncompressed (UYVY) AVI
- PCM AIFF
- PCM WAVE
- Uncompressed (YUY2 AVI)
- iPod
- HD P2 Clip
- Infinity MPEG
- MPEG Elementary Stream
- MPEG (Generic)
- MPEG (HDV)
- AVCIntra MXF
- MPEG2 MXF
- QuickTime
- Windows Media Audio
- Windows Media Video
- XDCAM HD
- XDCAM EX

To use the Exporter, do the following (this example shows exporting to Windows Media Video format - procedures for other formats may vary):

1. Click the **Export** button in the Recorder as shown in Figure 815.

Figure 815. Export Button Menu

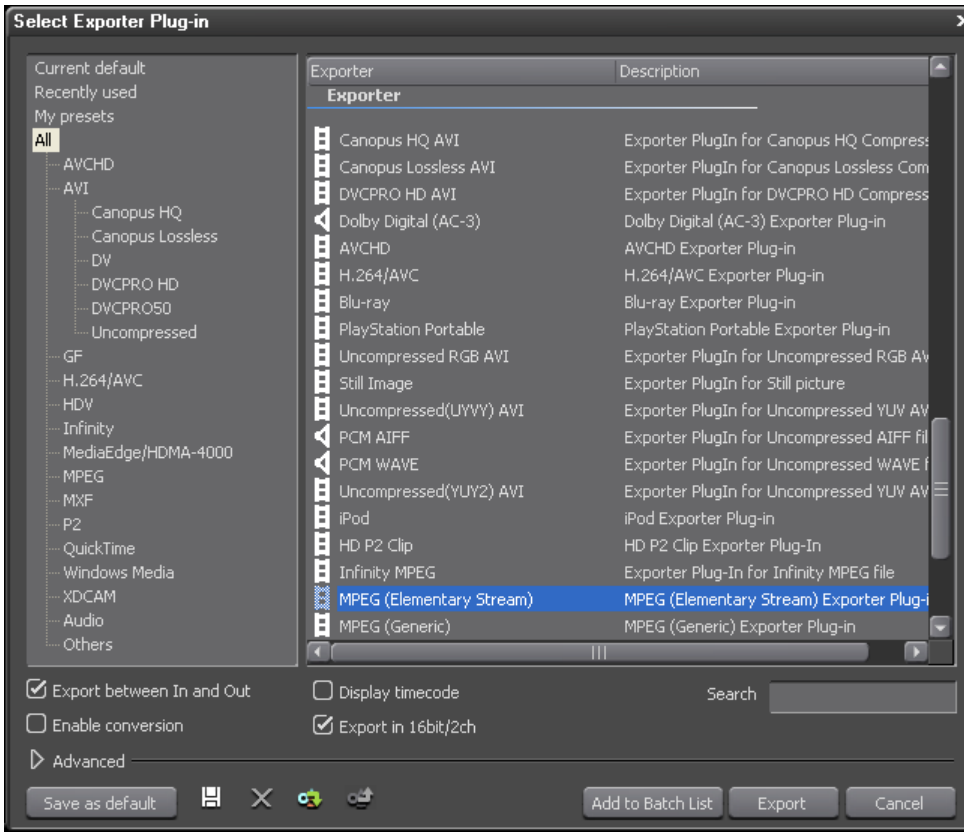


The Export menu appears.

2. Select “Print to File” from the menu.

The Select Exporter Plug-In Dialog appears as illustrated in Figure 816.

Figure 816. Exporter Plug-In Dialog



Note The Exporter list is divided in two sections; Preset and Exporter. Presets have pre-determined export parameters. The Exporter list shows all available file formats to which projects can be exported. Export parameters are set at the time the export is initiated.

3. Select "MPEG (Elementary Stream)" from the Exporter List.

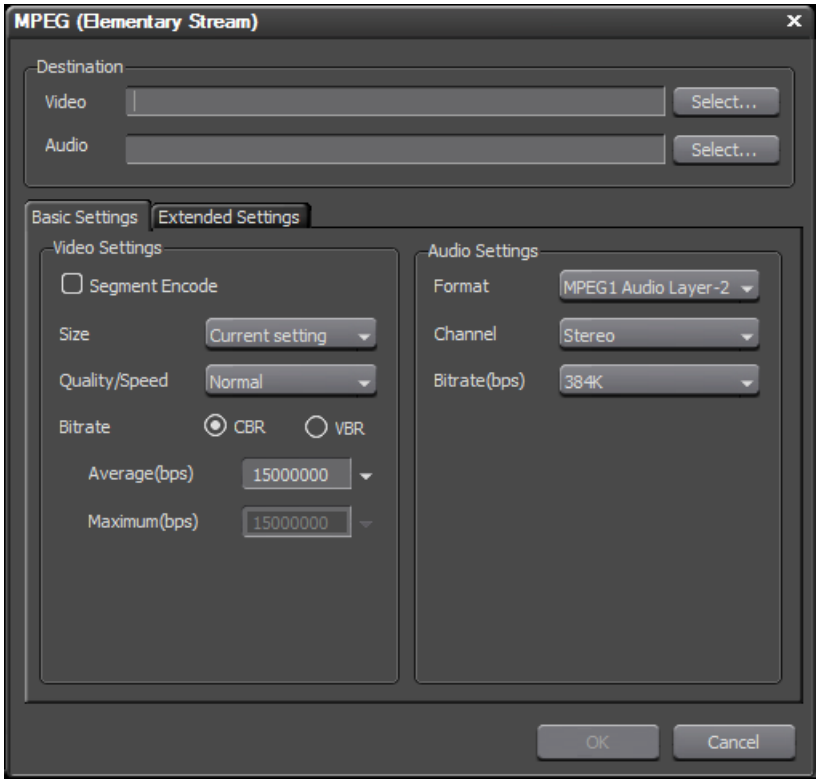
Note This tutorial is based on the MPEG (Elementary Stream) Exporter. If another Exporter is selected, the export settings dialogs may differ substantially from those illustrated in this tutorial.

4. Select any of the desired optional export parameters:

- Export between In and Out - Exports only the portion of the Timeline contents between the In and Out points. De-select this option to export the entire Timeline contents ignoring the In an Out points.
- Display timecode - Displays the timecode in the exported file.
- Enable conversion - If selected, video and audio conversion parameters may be adjusted individually in the "Advanced" window. See *Advanced Exporter Settings* *on page 669* for more information.
- Export in 16bit/2ch - if selected, audio will be exported as 16-bit, 2-channel audio regardless of the exporter preset or project settings. If not selected, audio will be exported according to exporter preset or project settings.

5. Click the **Export** button. The dialog in Figure 817 appears.

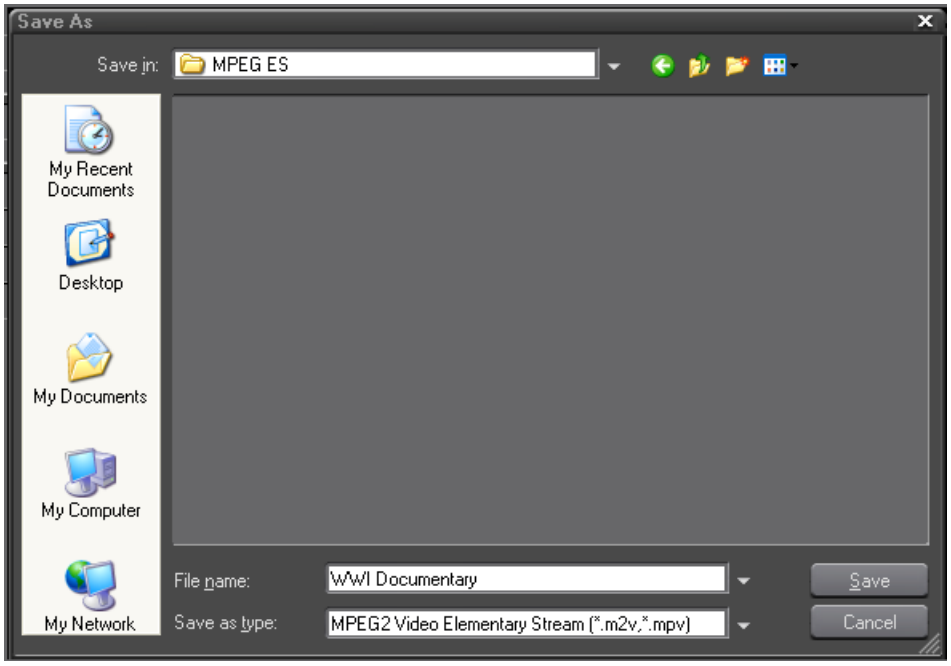
Figure 817. MPEG Elementary Streams Export Parameters



6. Use the **Select...** button to browse to the location to which to save the Video and Audio Elementary streams as illustrated in Figure 818.

Note The location for the elementary streams is selected for both Video and Audio streams by browsing with either **Select...** button. When the file name is entered, the .m2v extension is automatically added for the video stream and .mpa is added for the audio stream.

Figure 818. Select Elementary Streams Location

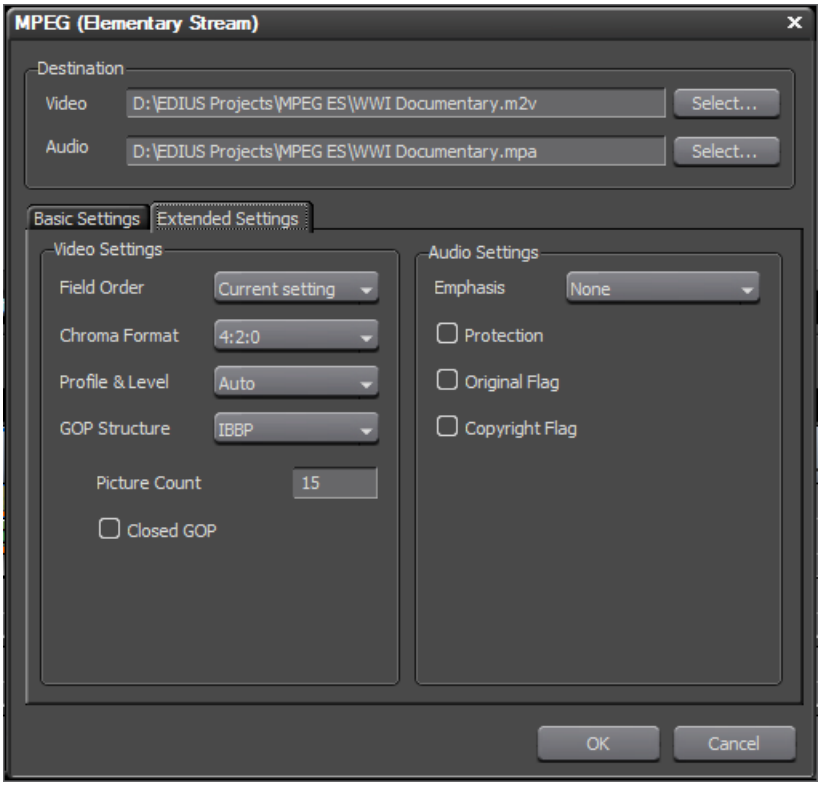


7. In the "Basic Settings" tab set the desired Video and Audio encoding parameters from the available options in the drop-down lists.

Note If Linear PCM is the selected audio format, it is exported as a .WAV file with timecode included.

8. Select the 'Extended Settings" tab (Illustrated in Figure 819) to define additional export parameters.

Figure 819. MPEG Elementary Streams Extended Settings



9. Select the desired extended Video and Audio encoding parameters from the available options in the drop-down lists and check boxes.

10. Click the **OK** button to export the project to a file of the selected format.

Note Procedures from Step 3 to the end may differ substantially depending upon the selected export format.

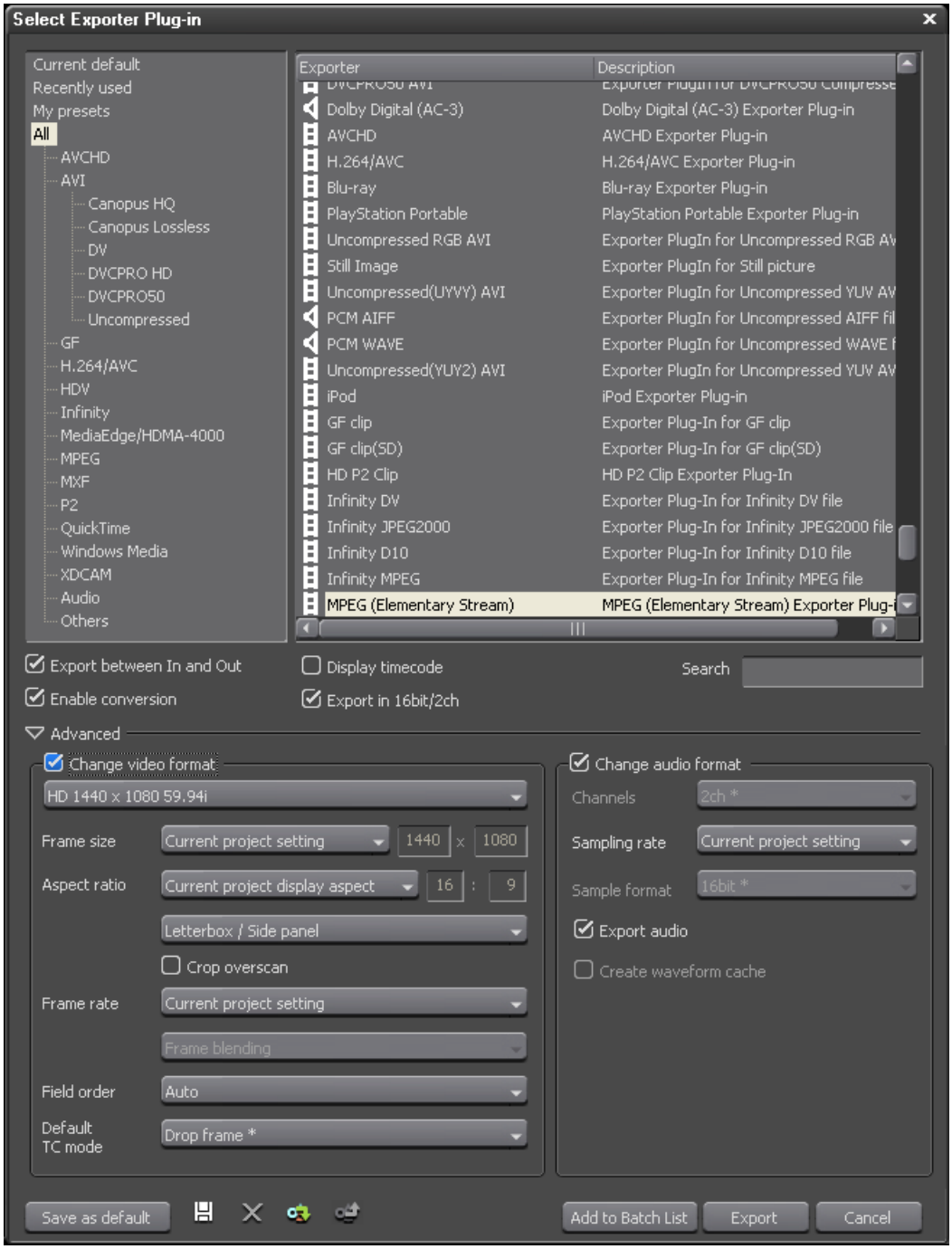
Advanced Exporter Settings

If the "Enable conversion" option is selected in the Exporter, advanced video and audio conversion parameters may be defined. To use advanced settings after selecting the "Enable conversion" option, click on the

button in the Exporter Plug-In dialog.

The Exporter Plug-In dialog expands to display advanced video and audio conversion settings as illustrated in Figure 820.

Figure 820. Advanced Conversion Settings



Although the exact settings will vary depending upon the selected export format, the dialog depicted in Figure 820 shows the types of advanced video and audio conversion settings that are available.

- If the "Change video format" box is checked, individual video conversion parameters may be modified.
- If the "Change audio format" box is checked, individual audio conversion parameters may be modified.

Video Settings

Note In all video settings, any selection marked with an "*" is the value of that setting in the current project settings.

Frame Size

From the drop-down list box select the desired frame size. "Current project setting" is the frame size defined in the project settings from which the current project will be exported. If you wish to export the project in a different frame size, select it from the list.

Aspect Ratio

From the drop-down list box select the desired aspect ratio. Standard and custom aspect ratios are available. "Current project display aspect" is the aspect ratio defined in the project settings from which the current project will be exported. If you wish to export the project in a different aspect ratio, select it from the list.

Letterbox/Crop Settings

Select the type of letterbox or cropping to take place when the project is displayed on a screen that does not have the same aspect ratio as the project.

Crop Overscan

If an overscan was designated in the project settings, selecting the crop overscan option crops the overscan region from the output.

Frame Rate

From the drop-down list box select the desired frame rate. Standard and custom aspect ratios are available. "Current project setting" is the frame rate defined in the project settings from which the current project will be exported. If you wish to export the project with a different frame rate, select it from the list. Frame rate from 1 to 60 are available.

Frame Blending/Nearest Frame

If the selected output frame rate does not match the project frame rate, the Frame Blending option will interpolate frames to achieve the selected output frame rate. The Nearest Frame option will pick and duplicate the frame nearest to the source frame without interpolation in order to achieve the selected output frame rate.

Note If it is not possible to match the project frame rate and the output frame rate Frame Blending or Nearest Frame will be used depending upon the selection made. Frame Blending may result in ghosting (particularly in motion scenes) and Nearest Frame may produce a slight stutter effect.

Field Order

Select the desired field order; Auto, Progressive, or Top Field First or Bottom Field First for interlaced output.

Default TC Mode

Select the default time code mode; Drop-frame or Non-drop frame.

Audio Settings

Note In all audio settings, any selection marked with an "*" is the value of that setting in the current project settings.

Channels

Select the number of audio channels to be included in the project output.

Sampling Rate

From the drop-down list box, select the desired audio sampling rate. "Current project setting" is the sampling rate defined in the project settings from which the current project will be exported. If you wish to export the project with a different sample rate, select it from the list.

Sample Format

From the drop-down list box, select the desired audio sample format.

Export Audio

Select or de-deselect this option depending upon whether or not audio needs to be exported.

Create Waveform Cache

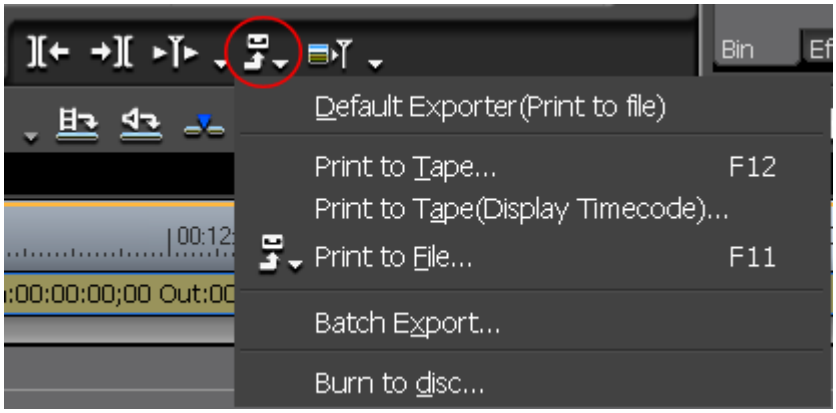
Select this option if you want a cache of the audio waveform created as part of the project output.

Other Exporter Functions

The Exporter is pre-configured with many Exporter plug-in presets for different file formats. While the Select Exporter Plug-In dialog is open, the Exporter preset functions explained below are available. To open the Select Exporter Plug-In dialog, do the following:

1. Click the **Export** button in the Recorder as shown in Figure 815.

Figure 821. Export Button Menu

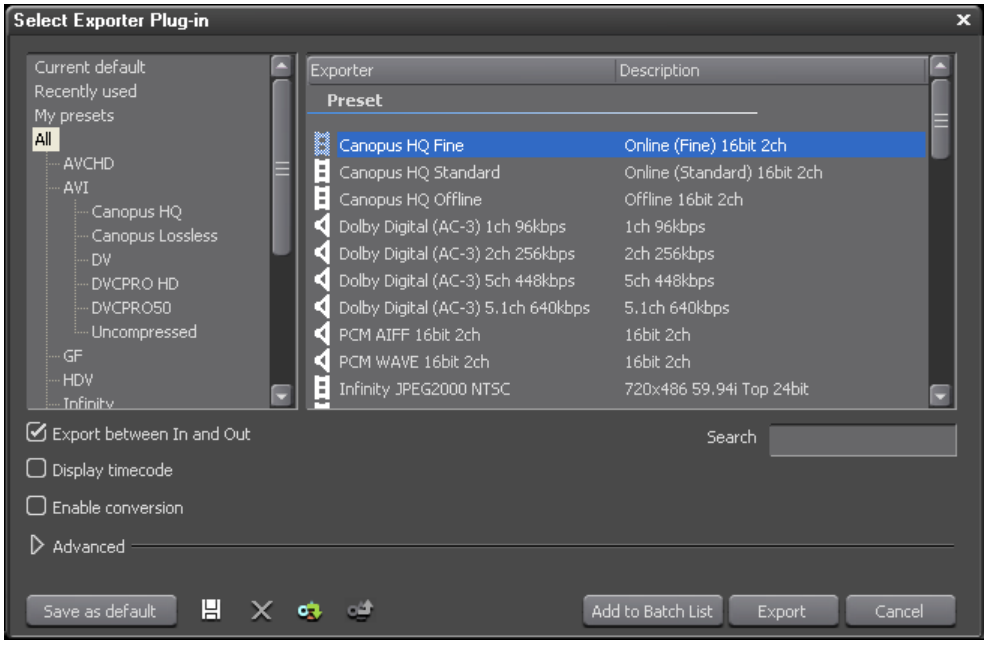


The Export menu appears.

2. Select “Print to File” from the menu.

The Select Exporter Plug-In dialog in appears.

Figure 822. Select Exporter Plug-In Dialog



Save Preset As Default

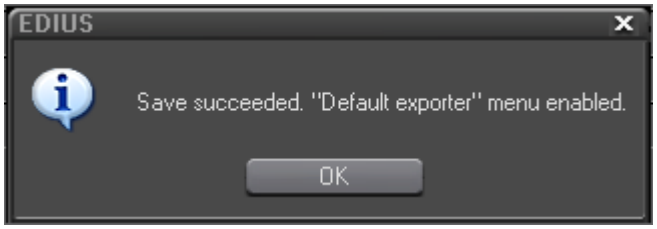
Any Exporter preset may be set as the default exporter. With the Select Exporter Plug-In dialog open, do the following to save a preset as the default:

1. Select the desired default Exporter preset from the Preset list.

2. Click the **Save as default** button.

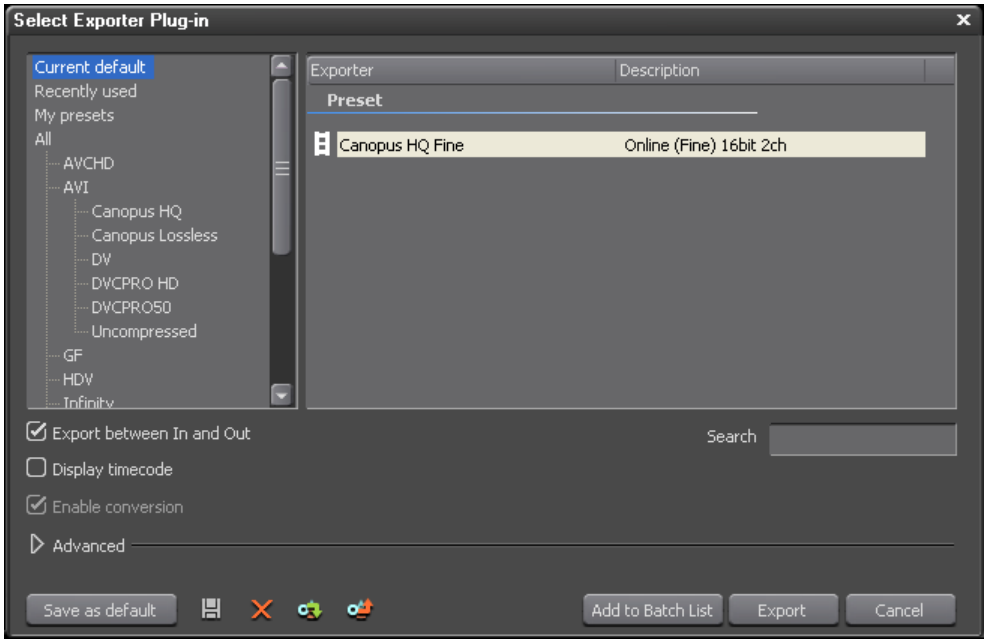
The message shown in appears.

Figure 823. Preset Save ass Default Confirmation



The selected preset is saved as the default and is available by selecting "Current default" from the menu on the left. See Figure 824 for an example.

Figure 824. Exporter Preset Default Selected



Save Preset

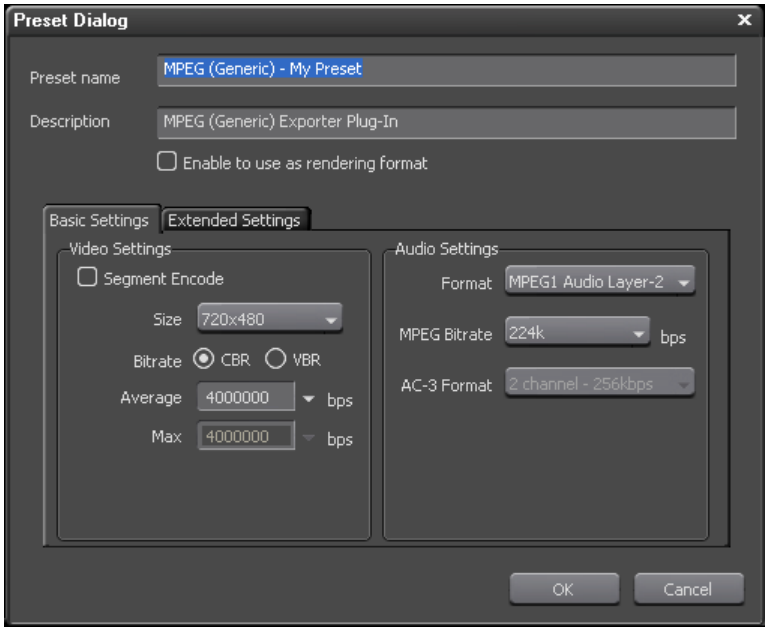
The list of available presets in EDIUS is very extensive; however, your projects may commonly use only a few file formats and Exporter presets. To save your commonly used presets to the "My presets" list on the menu, do the following:

1. Select the Preset you wish to save.
2. Click the **Save** button.

The Preset dialog illustrated in Figure 825 appears.

Note When saving a preset, the Preset dialog may differ significantly from the example in Figure 825. Different formats have different available settings.

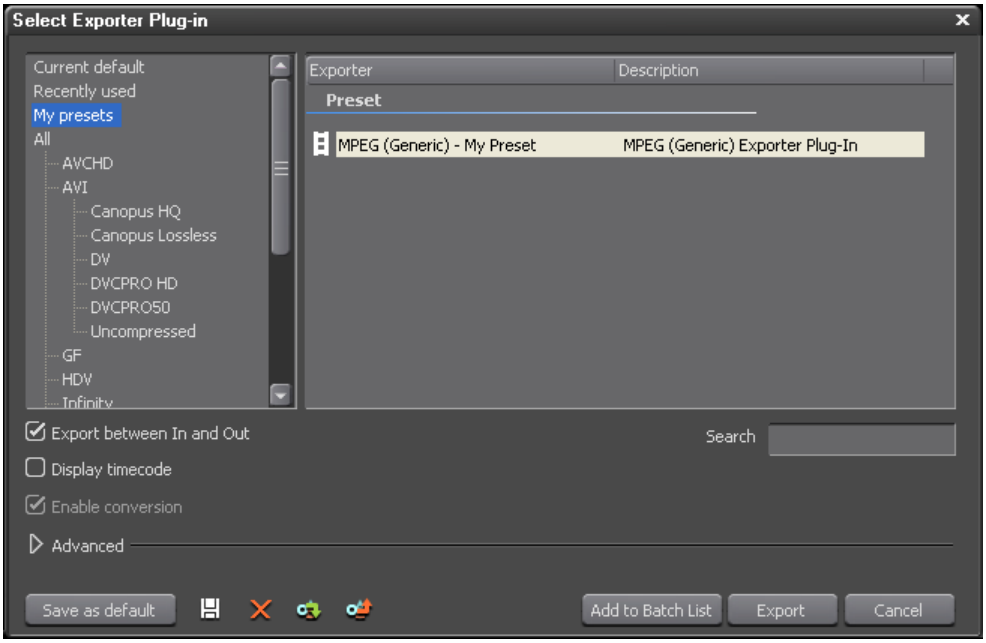
Figure 825. Save Preset Dialog



3. Modify the name and description, if desired.
4. Modify any settings or parameters that may be associated with the selected Preset.
5. Click the **OK** button.

The Preset is saved in the "My presets" list in the menu as shown in Figure 826.

Figure 826. Saved Presets in My Presets List



Delete Preset

Only saved presets may be deleted. The default presets and Exporters installed with EDIUS may not be deleted.

To delete a preset, do the following.

1. Select the preset to be deleted
2. Click the **Delete preset** button.

The preset is deleted.

Export Preset

Exporting presets is particularly useful in preparation for an upgrade to a new version of EDIUS. Any custom user presets that you may want to use in the new version may be exported from the current version.

It is also useful to export these presets should EDIUS need to be reinstalled.

To export Exporter presets as a .tpd file, do the following:

1. Select the preset to be exported from the “My presets” list in the preset menu.
2. Click the **Export preset** button.

A Save As dialog appears.

3. Select the folder location and enter file name for the exported preset.

4. Click the **Save** button.

The preset is exported.

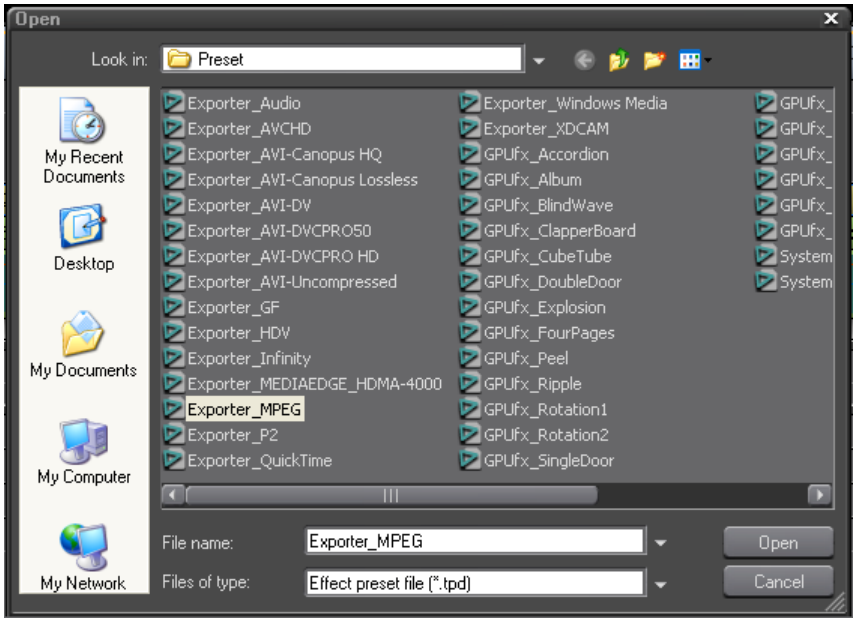
Import Preset

To import presets, do the following:

1. Click the **Import preset** button.

An Open dialog like the one shown in Figure 827 appears.

Figure 827. Preset Import Open File Dialog



2. Navigate to the folder location in which exported preset files are located.
3. Select the preset file (.tpd) to be imported.
4. Click the **Open** button.

The preset is imported.

Add to Batch List

Sequence, or portions of a sequence, may be added to a batch list for batch processing and export at a later time. Sequences in the batch list may use the same or different Exporter Presets.

It is also possible to export multiple ranges from the same sequence to the batch list by setting different In and Out points before adding the sequence to the batch list.

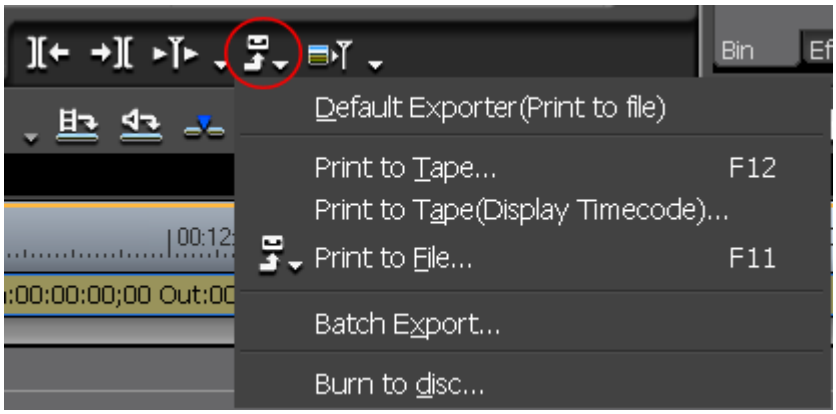
To add a sequence to the batch list, execute the following steps:

1. Set the In and Out points, if desired, for the range to be exported.

Note If no In and Out points are set, the entire sequence will be exported when the batch list is executed.

2. Click the **Export** button in the Recorder as shown in Figure 815.

Figure 828. Export Button Menu



The Export menu appears.

3. Select "Print to File" from the menu.

The Select Exporter Plug-In dialog in appears.

4. Select an Exporter and click the **Add to Batch List** button.

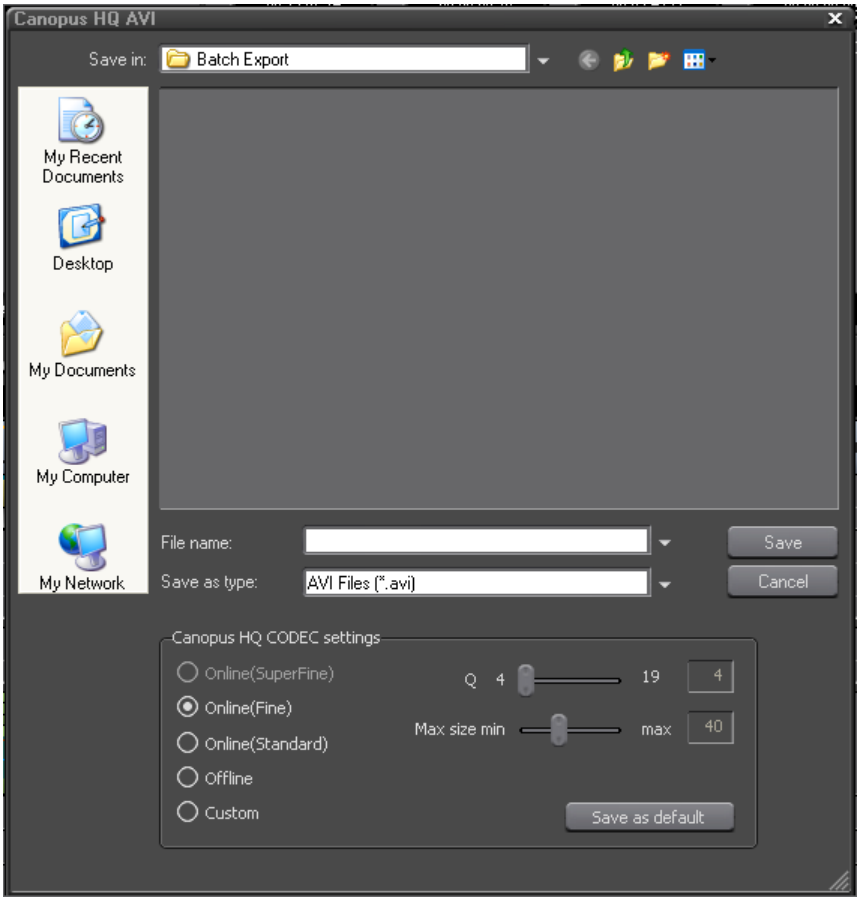
Note Some Exporters do not support batch export. If one of these Exporters is selected, the **Add to Batch List** button is disabled.

A File Save dialog appears with the name of the selected Exporter.

5. Navigate to the folder in which you wish to save the batch export and enter a file name. See Figure 829.

Note Depending upon the Exporter selected, some export settings may appear in the File Save dialog as shown in Figure 829.

Figure 829. Batch Export Save Dialog



6. Click the **Save** button.

The sequence is added to the batch list with the specified Exporter.

Alternative Methods:

- After setting In and Out points, right-click the Timeline scale and select "Add Batch Export Item."

Note If a default Exporter has been set, the menu option "Add Batch Export Item(Default Exporter)" is available. If this menu option is selected, the file name and destination are set automatically. File name: Exp[month][date]_000.[extension based on Exporter type]. The three-digit number increments for each file and is sequential. Sample file name with MPEG (Generic) Exporter: Exp0820_000.mpg. The destination is the same as the project folder.

Note If "Add Batch Export Item(Rendering format)" is selected from the menu, the specified range is added to the batch export list with the rendering format specified in the Project Settings Detail dialog.

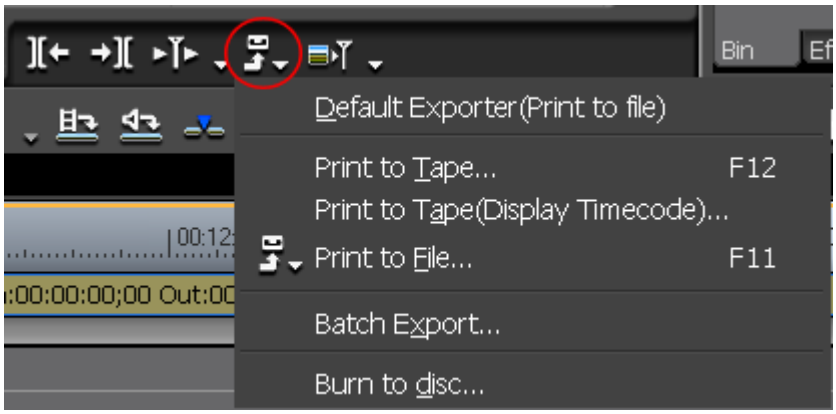
- After setting In and Out points, right-click on the export list in the Batch Export dialog and select "New." See *Batch Export* for more information.

Delete from Batch Export List

To delete an entry previously added to the batch export list, do the following:

1. Click the **Export** button in the Recorder as shown in Figure 815.

Figure 830. Export Button Menu



The Export menu appears.

2. Select "Batch Export" from the menu.

The Batch Export dialog appears.

3. In the batch export list, right-click the entry to be deleted and select "Delete" from the menu.

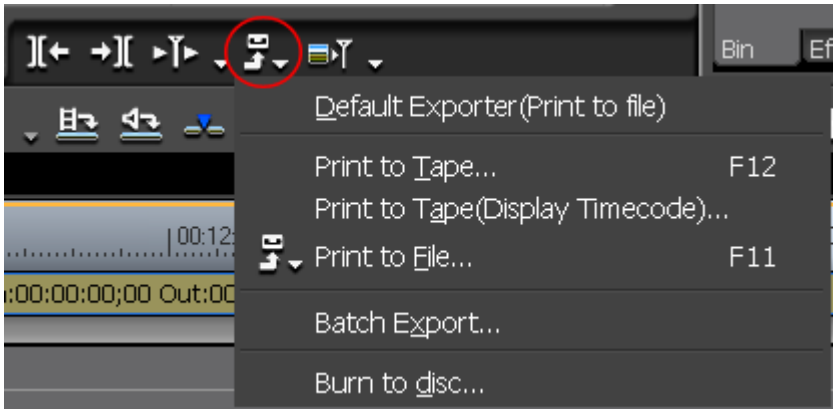
The entry is deleted from the batch export list.

Batch Export

To execute a batch export and process the export list, do the following:

1. Click the **Export** button in the Recorder as shown in Figure 815.

Figure 831. Export Button Menu

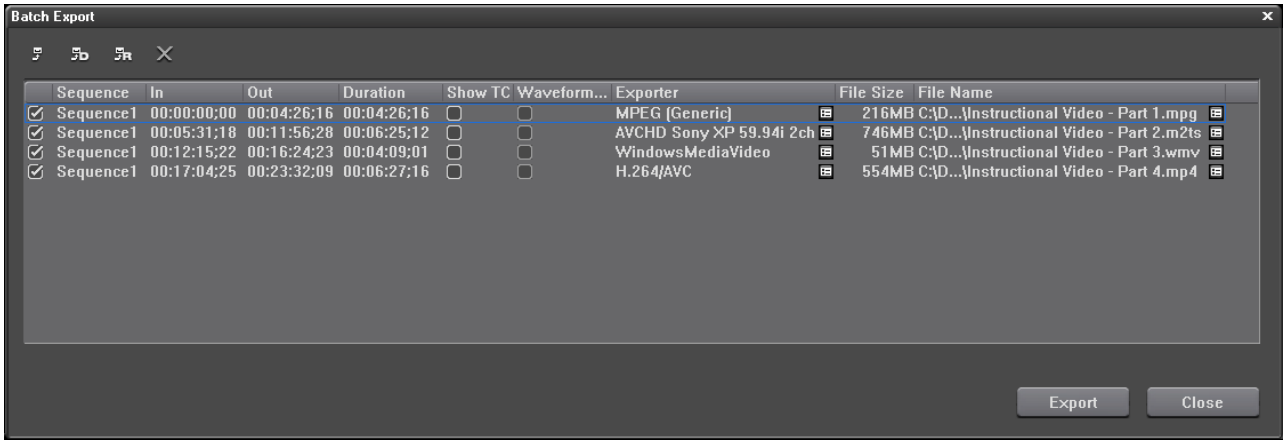


The Export menu appears.

2. Select “Batch Export” from the menu.

The Batch Export dialog appears as illustrated in Figure 832.

Figure 832. Batch Export Dialog



3. Make any desired changes to the batch export list. See *Modifying the Batch Export List* for more information.

4. Select or de-select sequences in the export list as desired.

Note All sequences in the list may be selected by right-clicking on the export list and selecting “Select All” from the menu.

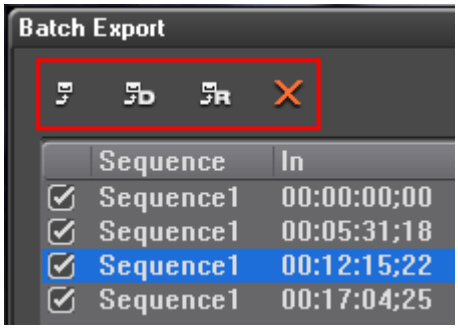
Note Sequences de-selected for export remain in the batch list; however, they are not exported.

5. Click the **Export** button to begin the batch export.

Modifying the Batch Export List

As illustrated in Figure 833, function button are available for managing the items in the batch export list. These buttons and their functions are explained below:

Figure 833. Batch Export Dialog Function Buttons



Add Batch Export Item

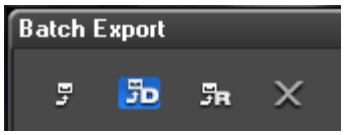
Clicking the **Add Batch Export Item** button (highlighted in blue in Figure 834) opens the Select Exporter Plug-In Dialog (see Figure 822 on page 673) from which an exporter may be selected for adding and additional item to the batch export list. The portion of the current sequence between the In and Out points is automatically added to the list. As explained below, these settings may be adjusted in the batch export list.

Figure 834. Add Batch Export Item Button Highlighted

Add Batch Export Item (Default Exporter)

Clicking the **Add Batch Export Item (default exporter)** button (highlighted in blue in Figure 835) adds the portion of the current sequence between the In and Out points to the batch list using the default exporter. As explained below, these settings may be adjusted in the batch export list.

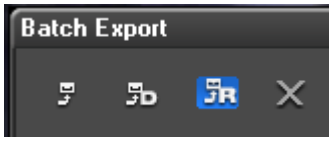
Figure 835. Add Batch Export Item (Default Exporter) Button Highlighted



Add Batch Export Item (Render Format)

Clicking the **Add Batch Export Item (render format)** button (highlighted in blue in Figure 836) adds the portion of the current sequence between the In and Out points to the batch list using the current render format. As explained below, these settings may be adjusted in the batch export list.

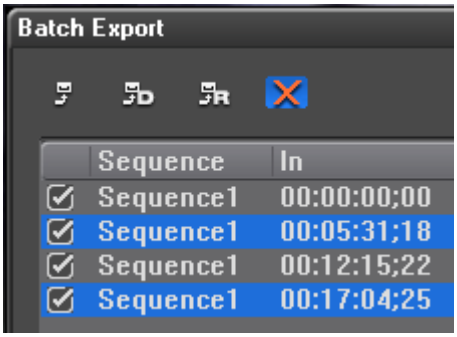
Figure 836. Add Batch Export Item (Render Format) Button Highlighted



Delete Batch Export Item

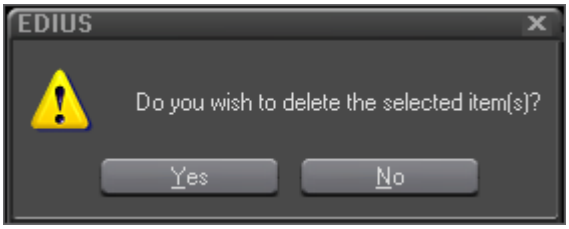
Clicking the **Delete Batch Export Item (render format)** button (highlighted in blue in Figure 837) deletes the selected item(s) from the batch export list.

Figure 837. Delete Batch Export Item Button Highlighted



The confirmation dialog shown in Figure 838 appears. Click the **Yes** button to confirm deletion of the selected item(s).

Figure 838. Delete Batch List Item Confirmation Dialog



Modify List Item Settings

Sequences added to the batch list contain the information explained below. Much of this information may be edited in the batch list before export is initiated.

Sequence

The name of the sequence in the project to be exported.

Note If a sequence stored in the batch list is deleted from both the Timeline and the Asset Bin before being exported, that sequence is displayed in red and cannot be exported.

Note If sequence settings or project settings of a sequence stored in the batch list are changed, those changes will also be reflected in the batch list. If the Exporter is changed to one that does not support batch export, the Exporter in the batch list is displayed in red and exporting is disabled.

In/Out/Duration

The specified In and Out points and duration of the clip to be exported. The In and Out points may be edited in the batch list. To edit, click on a timecode and enter a new value.

Note If an In point time is set before the Out point time or the time falls outside the range of the clip, the timecode is displayed in red text and export of the clip is disabled.

Note A new export range may be specified and added to the batch list by right-clicking on the export list and selecting “New” from the menu.

Show TC

Select this option if you wish the timecode to be displayed on the exported sequence.

Waveform Cache

Enable this option if an audio waveform is desired with the exported sequence.

Note This setting may not be available depending on the selected Exporter.

Exporter

The name of the selected Exporter for the sequence. Clicking the icon next to the Exporter name displays the Select Exporter Plug-In dialog.

Note The selected Exporter can be changed by right-clicking on the export list and selecting “Change Exporter” from the menu.

Note If the selected Exporter is a user preset Exporter, its original Exporter name is displayed in the batch list.

File Size

The estimated file size of the exported file.

Note If the estimated file size exceeds the free space in the selected destination, a warning dialog may appear and the export will not be performed.

File Name

The specified file name and location for the exported file. These may be edited in the Batch export list, if desired.

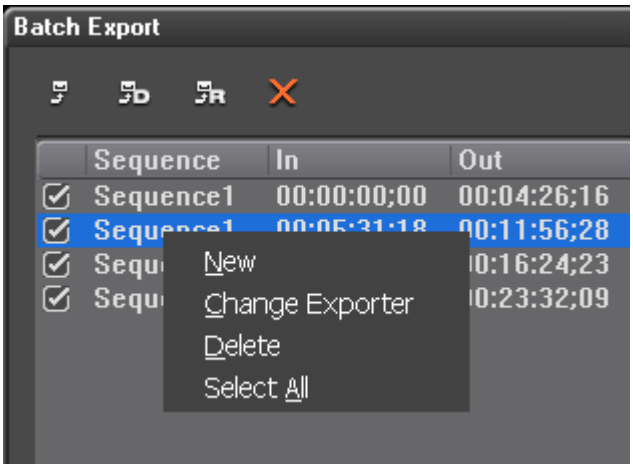
Status

When export is in progress, the status is displayed in this field.

Batch List Menu

Right clicking on an item in the list selects that item and displays the menu illustrated in Figure 839.

Figure 839. Batch List Item Menu



From this menu, items can be added (New) and deleted. In addition all items in the list can be selected and the designated exporter changed for all selected items.

Export to DVD or Blu Ray

EDIUS projects can be exported to DVD or Blu Ray with the Burn to Disc application. Burn to Disc allows you to create title and chapter menus, define menu backgrounds and create menu buttons.

Sources that can be output to disc with the Burn to Disc application include the following:

- EDIUS Sequences
- MPEG-2 files
- AVCHD (H.264)

Note The FireCoder Blu hardware encoding card is supported for H.264 encoding.

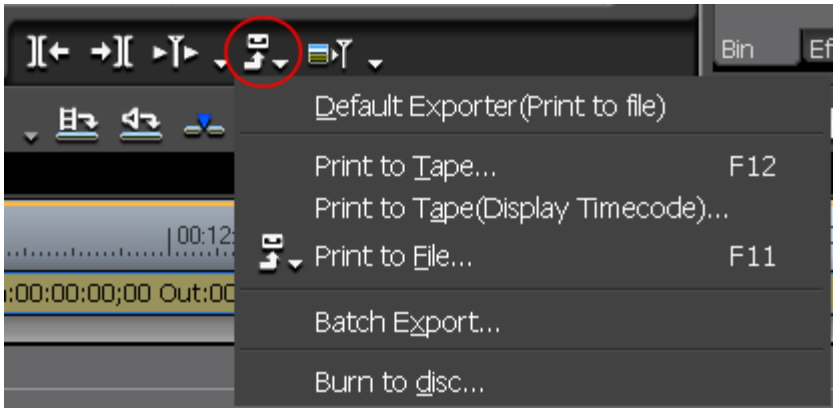
Note H.264 (.m2ts extension) is not supported for Blu Ray output.

Note When exporting to DVD or Blu Ray, free space on the computer hard drive must be at least twice as large as the size of the file to be exported.

To export a project to disc, do the following:

1. Click the **Export** button in the Recorder. See Figure 840.

Figure 840. Export Button Menu

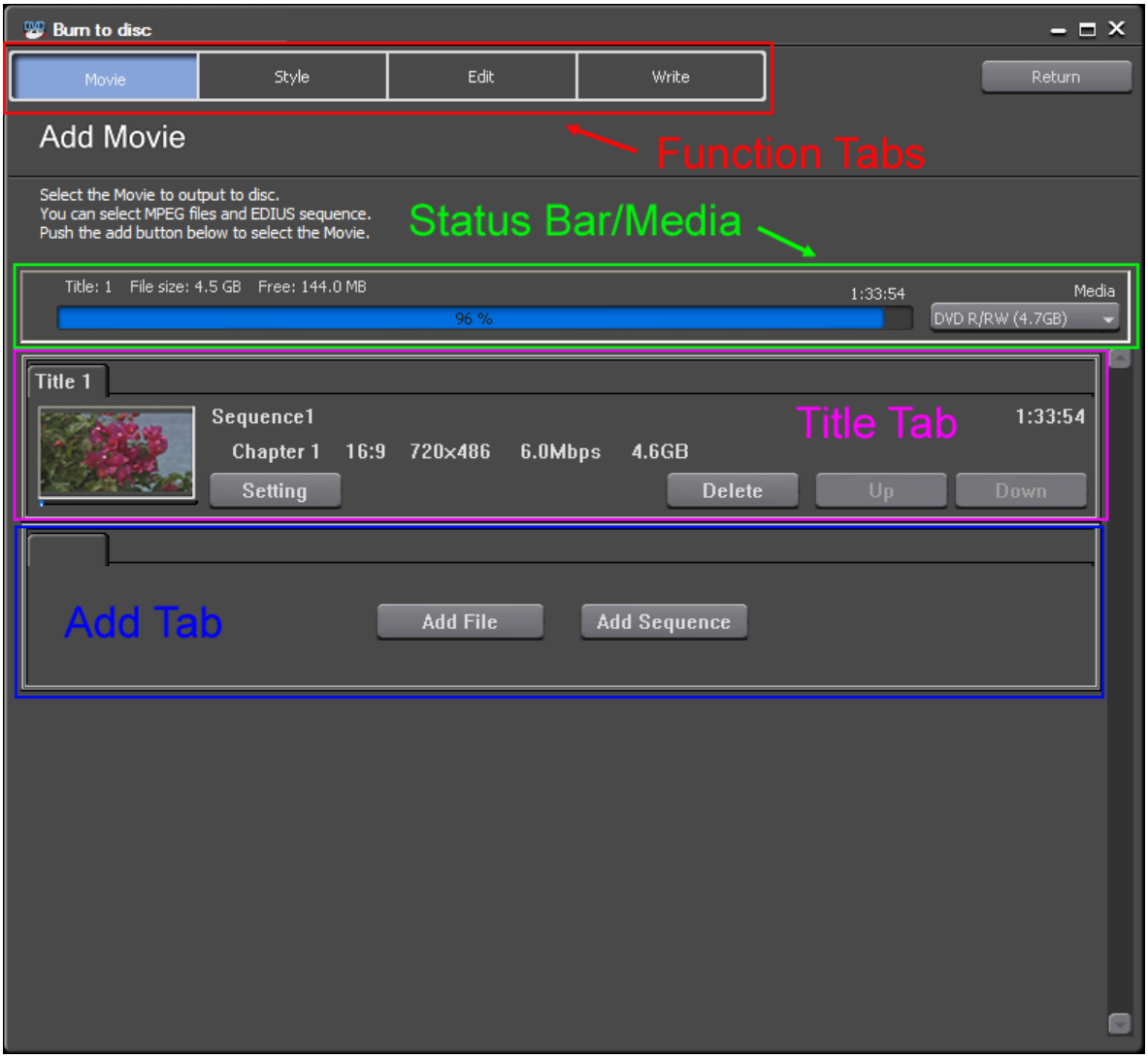


2. Select "Burn to disc" from the menu.

Note You may also select File>Print>Burn to disc on the Preview window menu bar.

The Burn to Disc application starts up with the "Movie" tab selected as illustrated in Figure 841.

Figure 841. Burn to Disc



Note To exit Burn to Disc and return to EDIUS, click the **Return** button. If you click the Return button without writing any files to disc, the project and settings will be saved.

The Title tab(s) show the movie(s) currently included in the project as well as the current aspect ratio, frame size, encoding bit rate and file size on the disc.

3. If you wish to add more titles to the project, click the **Add File** or **Add Sequence** Button in the blank Add tab and select the desired title(s) to be added.

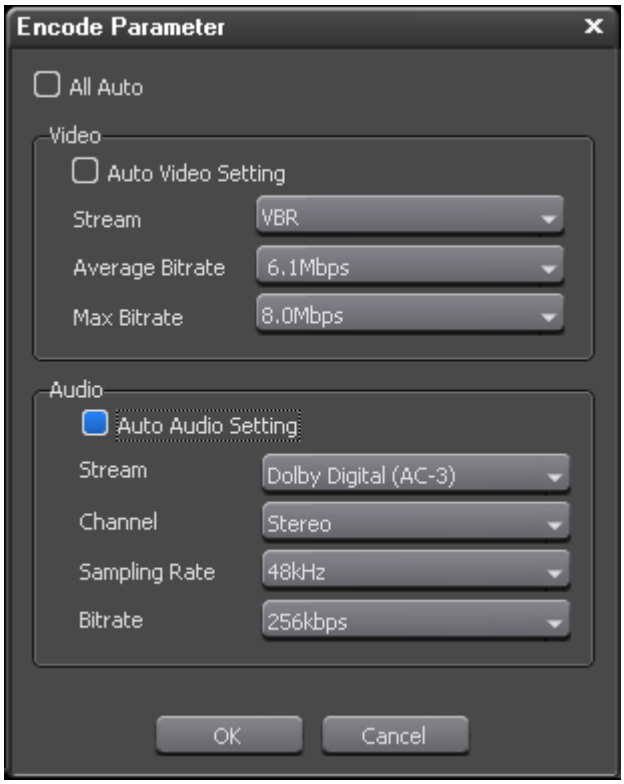
Note **Add File** allows you to add files in supported formats such as MPEG, VOB, etc. **Add Sequence** allows you to add EDIUS Sequences.

Note If adding files to the project results in exceeding the capacity of the disc media - as indicated in the Status Bar - the encoding bit rate is automatically adjusted on all files to allow them to fit on the selected media. If you wish to increase the encoding bit rate, you will need to select higher-capacity media by clicking the **Media** button.

4. If you wish to change or view the encoding parameters of any title, click the **Setting** button in the appropriate Title tab.

The Encode Parameters dialog shown in Figure 842 appears.

Figure 842. Encode Parameters



Note In order to change the Video or Audio encoding parameters, the "Auto" settings must be de-selected as shown in Figure 842.

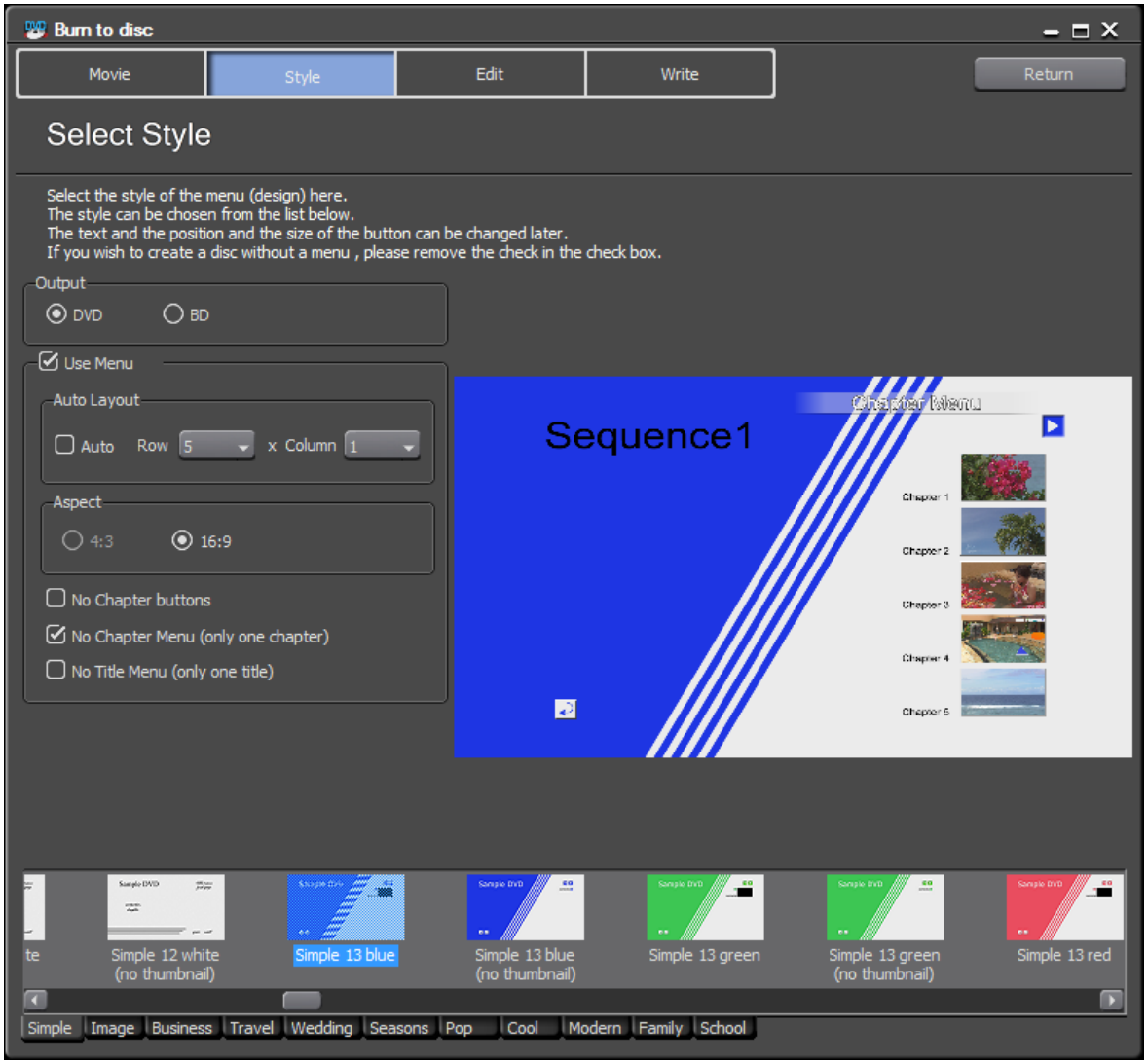
5. Make any desired changes to the video an audio encoding parameters and click the **OK** button.

6. If more than one title is included in the project, click the **Delete** button if you wish to remove a title from the project or the **Up** and **Down** buttons to reposition a title within the project.

7. Click the "Style" tab to select the menu style for the project.

The Select Style dialog shown in Figure 843 appears.

Figure 843. Burn to Disc Style Dialog



8. Create the menu for the project by setting the following parameters as desired:

Output

Select the disc format to which to burn the project; DVD or BD (Blu Ray)

Use Menu

If you want a menu created for the project select this option. If you want no menu, de-select this option. If this option is de-selected, all other menu options are disabled and the menu preview window goes black.

Auto Layout

Select "Auto" if you want Burn to Disc to automatically arrange title and chapter buttons on the menus. If this option is de-selected, you may

specify the number of rows and columns of buttons to be displayed on each menu.

Screen Size

Select 4:3 or 16:9 (wide) aspect ratio for the menu.

Note If BD (Blu Ray) is the selected output format, the 4:3 aspect ratio is greyed out and not available.

No Chapter Buttons

Select this option if you wish to use thumbnails as chapter buttons

No Chapter Menu (only one chapter)

Select this option if there is only one chapter in the movie. This will create a title menu only with no chapter menu.

No Title Menu (only one title)

Select this option if there is only one title in the project. This will create a chapter menu only for the single title with no title menu.

Select the menu style from the tabs across the bottom of the screen. The available categories are:

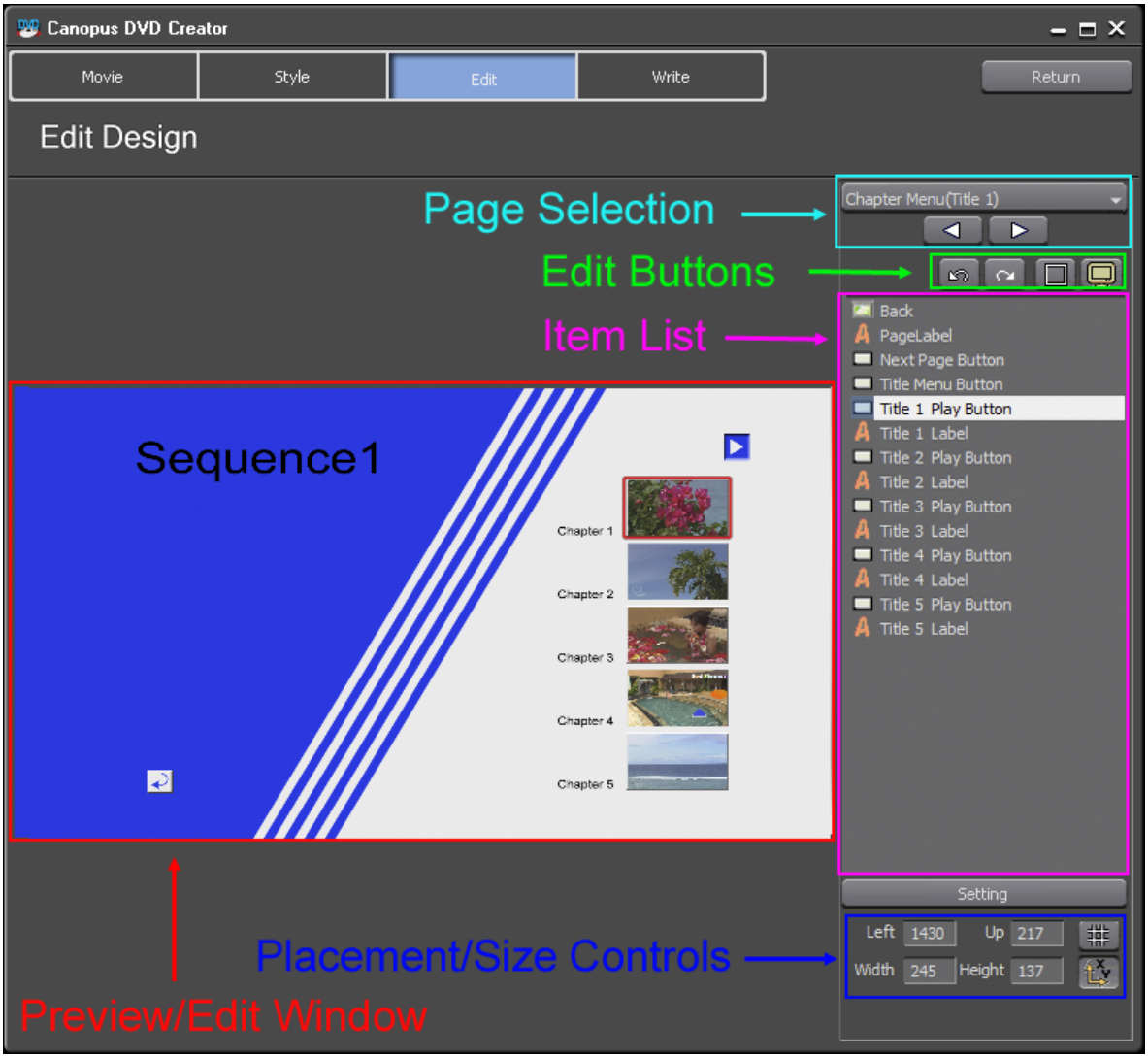
- Simple
- Image
- Business
- Travel
- Wedding
- Seasons
- Pop
- Cool
- Modern
- Family
- School

Select a style category and use the scroll bar to see the styles in that category. Click on a style to see it in the menu preview window.

9. Click the "Edit" tab to edit the menu.

The Edit Design dialog illustrated in Figure 844 appears.

Figure 844. Edit Design Dialog



The Preview/Edit window show the changes made to the menus using the controls and buttons in the Edit Design dialog.

10. Make any desired changes to the menus using the Edit Design controls and buttons.

Page Selection

Use these buttons to select the menu page to be displayed in the Preview/Edit window. The drop-down list provides a list of the title and chapter menus in a project. The right and left arrow buttons allow you to chose the menu page if the selected menu has multiple pages.

Edit Buttons

- Undo the previous operation

- Redo the previously undone operation

- Show grid lines for aligning menu elements.

Each click of this button cycles through the available grid patterns. The button as shown displays no grid lines. Subsequent clicks of the button display grid patterns with fewer to more grid lines. More grid lines allow finer placement and alignment of menu elements.

- Show TV Preview

Shows how the menu might look on a TV screen by showing the "TV Safe Area" of the menu.

Item List

The items in the menu which can be edited are displayed in this list. When an item from this list is selected, a red frame appears around that item in the Preview/Edit window. If an item is double-clicked, the Item Setting dialog appears. See *Item Settings* below for more information.

Placement/Size Controls

Menu element placement and size may be modified by entering values for the X (Left) and Y (Up) coordinates and the Width and Height. All values are expressed in pixel measurements.

- Show Item Grid

Displays grid lines around the selected item as an aid in aligning and placing that item in the menu.

- Adjust the aspect ratio of the selected item

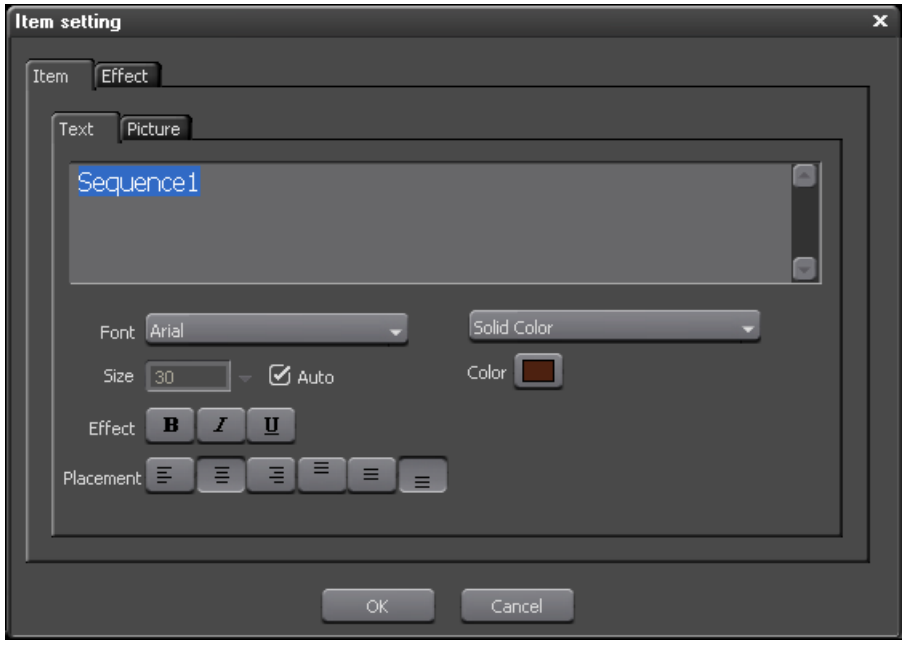
Note Multiple items may be selected by holding down the [SHIFT] key while selecting items. With multiple items selected, they may all be aligned in the same direction (Up, Down, Left, or Right) by right-clicking an item and selecting Placement>{alignment direction} from the menu.

Item Settings

To edit item settings, select the item from the item list and click the **Setting** button. The Item Setting dialog illustrated in Figure 845 appears.

Note An item may also be double-clicked in the list to open the Item Setting dialog for that item.

Figure 845. Burn to Disc Menu Item Setting Text Dialog



If the item selected is a text item such as the menu title or chapter label, the Item Setting dialog appears with the 'Text" tab selected.

To modify the text for a title or label, do the following:

- Select the font from the Font drop-down list
- Select the font coloring from the drop-down list:
  - Solid Color - Select the color by clicking on the color box
  - Gradation Color - Select a beginning and ending color from the color boxes as well as the number of gradations steps (count) between the colors. Set the gradation angle by holding down the mouse button while rotating the arrow.
  - Texture File - select a texture file to be used by clicking the ... button and navigating to the desired file name.
- Enter the font size

Note If the "Auto" option is selected, the font size is automatically determined by Burn to Disc. To enter a font size manually, de-select this option.

- Select any desired font effects
  - Bold
  - Italic
  - Underline

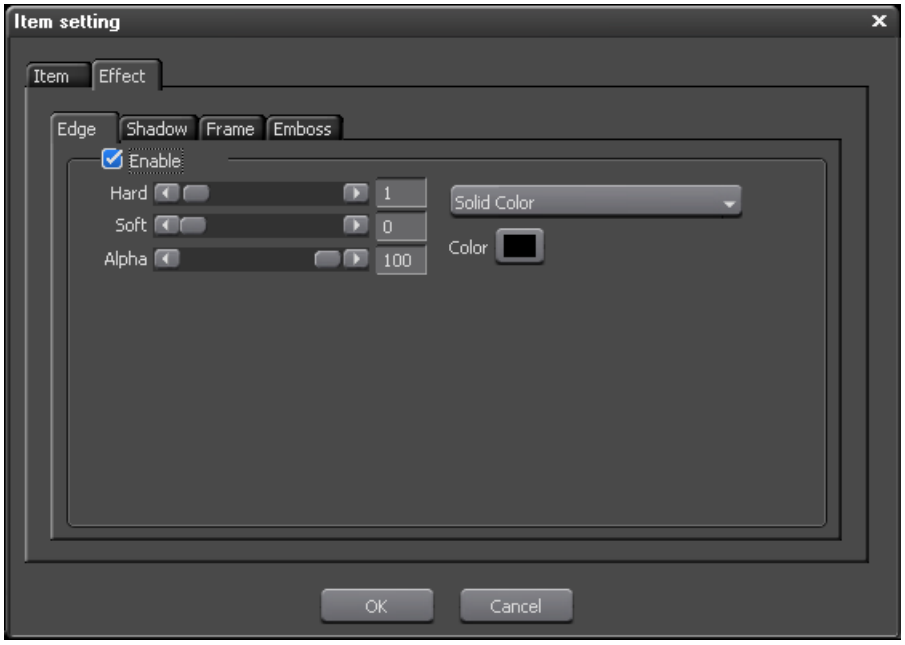
- Select the text placement
  - Left justified
  - Center justified
  - Right justified
  - Top of text box
  - Centered in text box
  - Bottom of text box

Note One of Left, Center, Right and one of Top, Centered, Bottom may be selected simultaneously.

Click the "Effect" tab to add effects to the text. Click the tab for each desired effect (select the 'Enable" option to enable the effect) and set the desired effect parameters for the following effects (see Figure 846):

- Edge
- Shadow
- Frame
- Embossing

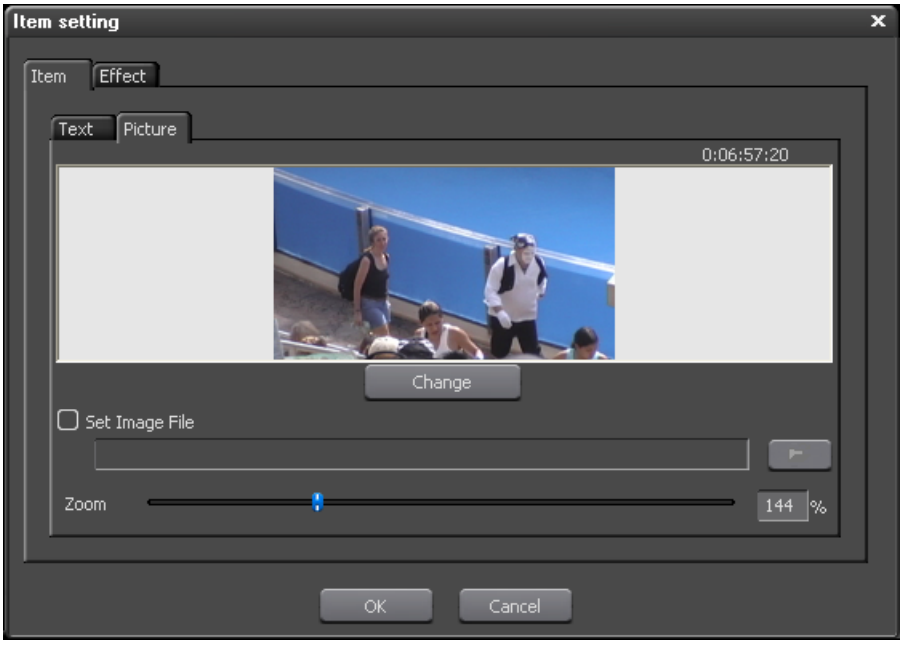
Figure 846. Burn to Disc Item Setting Text Effects Dialog



Click the **OK** button to close the Item Setting dialog.

If the item selected is a picture item such as a title or chapter button thumbnail, the Item Setting dialog appears with the 'Picture" tab selected. See Figure 847.

Figure 847. Burn to Disc Item Setting Picture Dialog



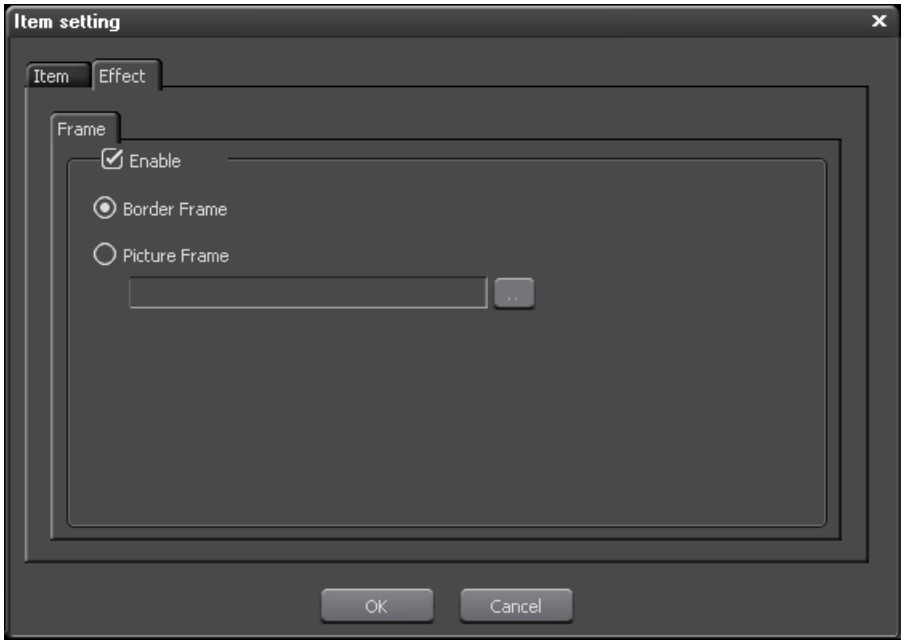
To modify the parameters associated with the picture, do the following:

- Click the **Change** button to change the thumbnail image within EDIUS. Move the Timeline cursor in EDIUS until the image you wish to use as the thumbnail appears in the EDIUS Preview window. Return to the Item Setting dialog and click the **Set** button to change the image.
- Select the "Set Image File" option to import an image from an external file. Click the button to browse for an image file.
- Move the Zoom slider to zoom in or zoom out on the picture to select the portion of image to use as the thumbnail.

Click the "Effect" tab to add a border effects to the picture. See Figure 848 for an illustration of the Picture Effect dialog.

- Select the 'Enable" option top enable a border effect
- Select "Border Frame" to automatically add a border to the picture
- Select "Picture Frame" and click the ... button to browse for a border from a file.

Figure 848. Burn to Disc Item Setting Picture Effect Dialog

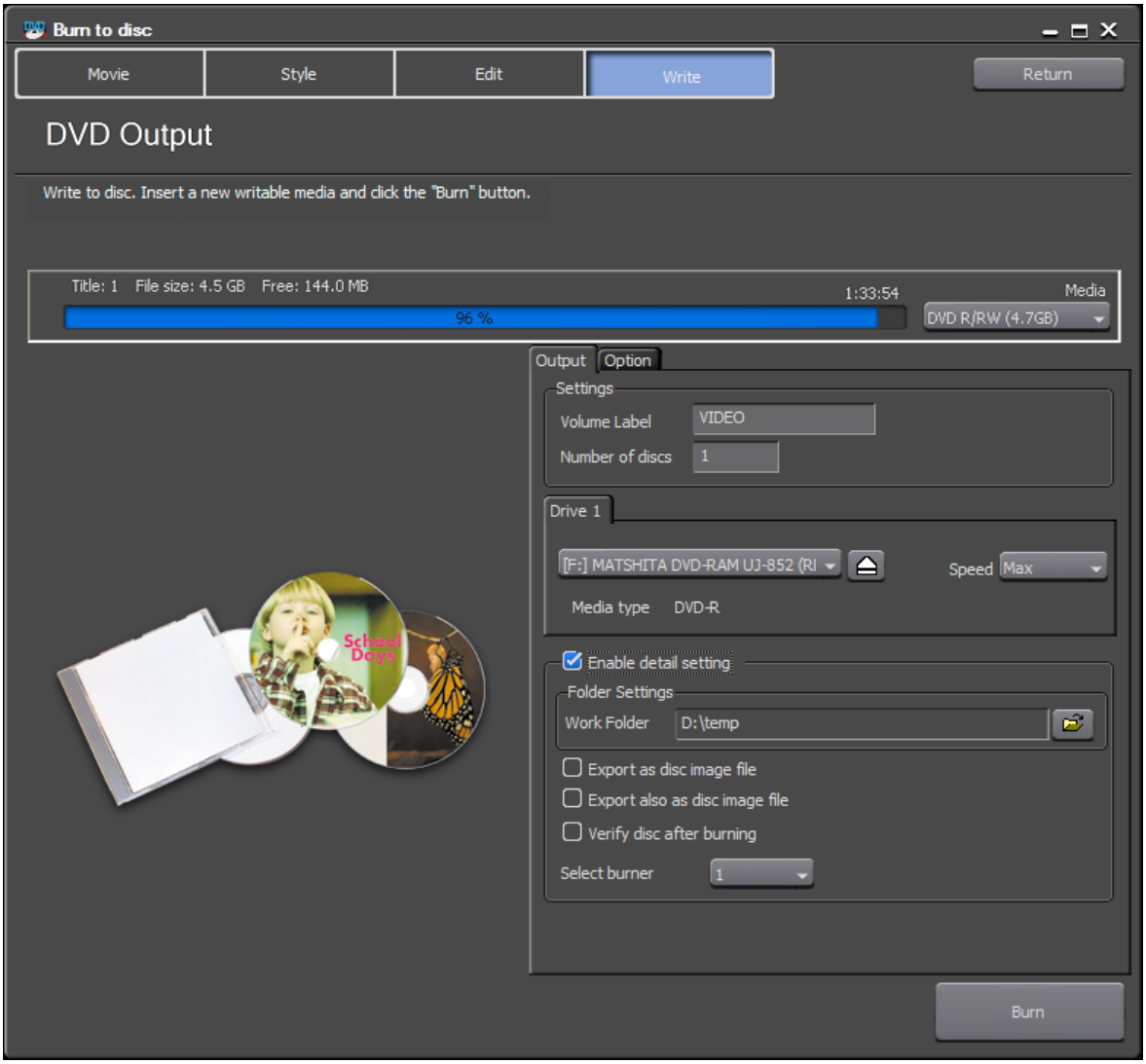


Click the **OK** button to close the Item Setting dialog.

11. Click the "Write" tab to set the project output parameters.

The Burn to Disc Output to DVD dialog shown in Figure 849 appears.

Figure 849. Burn to Disc Output to Dialog



12. Set the disc (DVD or BD) Output parameters

Volume Label

Enter the volume label for the disc.

Number of Discs

Enter the number of copies of the disc you wish to burn.

Note A prompt to insert another disc will appear as each copy is successfully burned. When all copies are burned, the message “burn to disc completed” will appear.

Drive

Select an installed burner to be assigned to each drive number.

Note If multiple burners are installed in the computer, a tab will be available for each drive. Any available drive can be assigned to Drive 1, Drive 2, etc.

Speed

Set the maximum speed at which the disc should be burned.

Note The write speed is media and drive dependent. Setting a higher speed than the rating of the media or drive will not result in higher write speeds.

Enable Detail Setting

Select this option to enable the settings described below.

Work Folder

Specifies the folder for files created while preparing the disc output.

Export as Disc Image File

Creates a disc image file in the work folder that can be burned to disc or mounted as a virtual drive.

Export Also as Disc Image File

Created a disc image file in addition to burning the content to disc.

Note Files saved by selecting this option are overwritten by the next disc output operation. If you need to keep the files in this directory, either specify a different work directory for subsequent output operations or move the existing files to another directory.

Verify Disc After Burning

After burning content to disc, the disc will be verified to ensure that the burn was successful. Verification is performed at the maximum read speed of the drive.

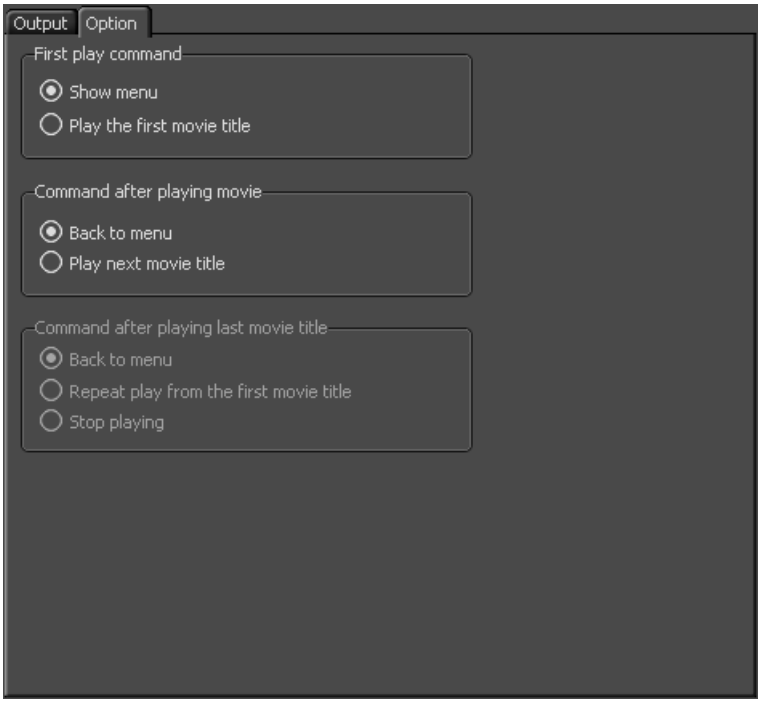
Select Burner

Select the drive number of the drive you wish to use to burn the disc.

Note It is possible to burn on multiple drives simultaneously.

Select the “Option” tab to set disc play options. The options shown in Figure 850 are available for selection.

Figure 850. Burn to Disc Output Options



Select the desired “First Play” action (what happens when the disc is inserted in a disc player) :

- Show menu
- Play the first movie title

Select the desired action after playing a title:

- Back to menu
- Play next movie title

Select the desired action after playing the last title on the disc (this selection is only available if “Play next movie title” is selected in the previous option):

- Back to menu
- Repeat play from the first movie title
- Stop playing

13. Click the **Burn** button to output the project to disc using the parameters and options selected in the previous steps.

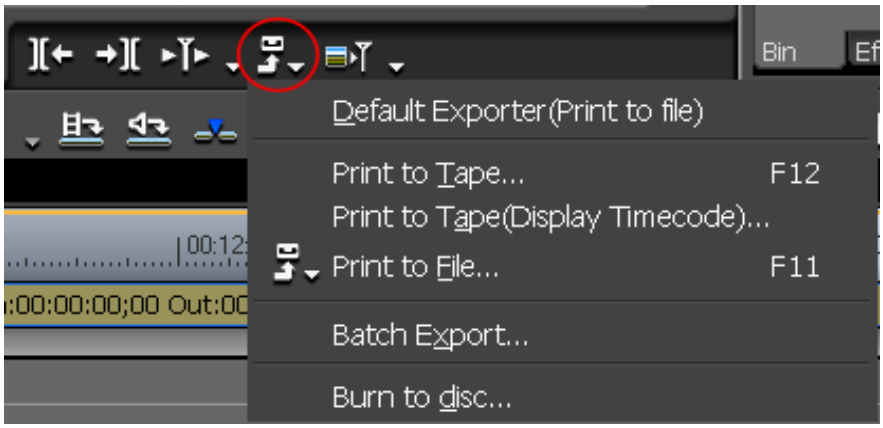
Writing to disc media and/or disc files begins.

Export Still Images

To export an image or a scene in a video sequence as a still image, perform the following actions:

1. Move the Timeline cursor to the point at which the desired image or scene is located.
2. Click the **Export** button in the Recorder. See Figure 851.

Figure 851. Export Button Menu



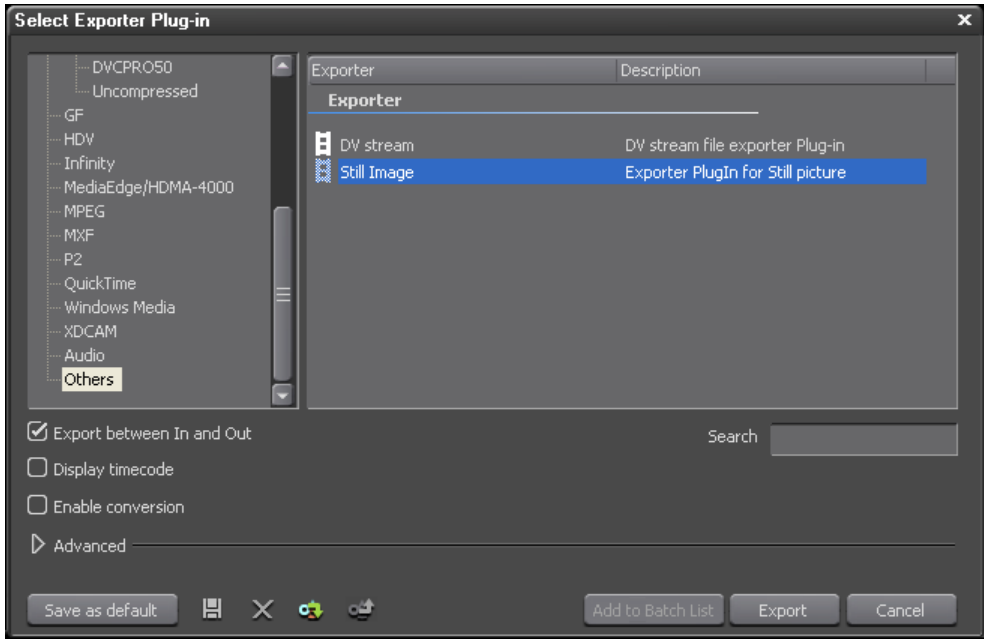
3. Select "Print to File" from the menu.

Note Alternative methods are: pressing [F11] on the keyboard and selecting File>Print>Print to File from the Preview window men bar.

The Select Exporter Plug-In dialog appears.

4. Select the "Others" from the category list on the left and "Still Image" from the Exporter list as illustrated in Figure 852.

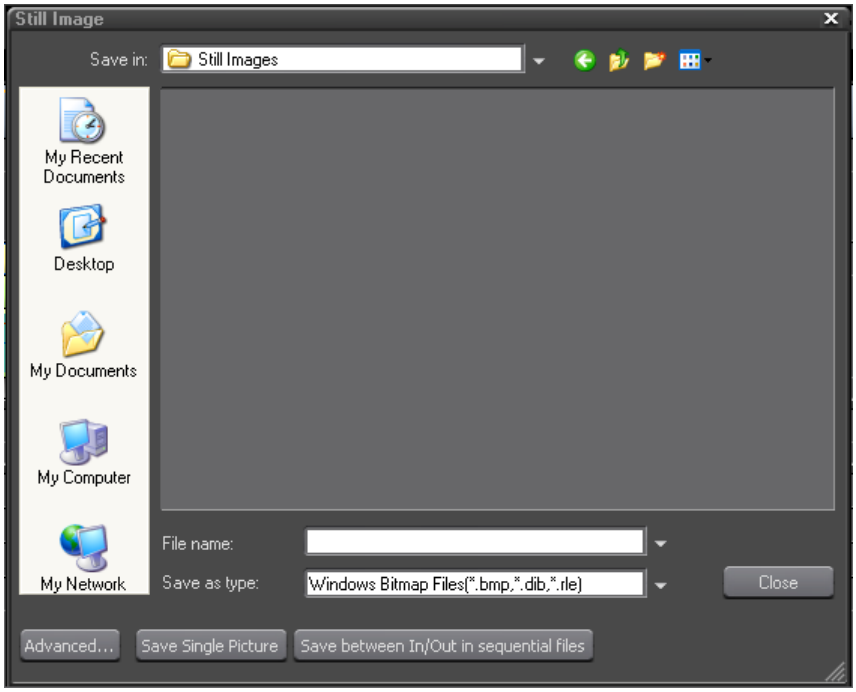
Figure 852. Still Image Exporter



5. Click the **Export** button.

The Still Image Save dialog shown in Figure 853 appears.

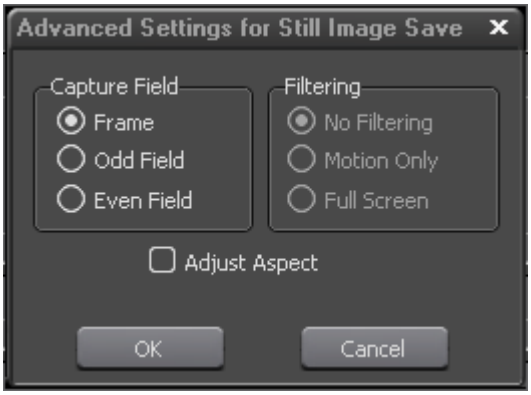
Figure 853. Still Image Save Dialog



6. Select the folder location, file name and file type in which to save the exported image(s)

7. Select advanced still image save parameters, if desired, by clicking the **Advanced** button. The Advanced Settings dialog in Figure 854 appears.

Figure 854. Advanced Still Image Save Settings



8. Click the **Save Single Picture** button or the **Save between In/Out in sequential files** button to save still image(s) to the selected location.

   Save Single Picture

   Exports the frame at the Timeline cursor position as a still image.

   Save Between In/Out in Sequential Files

   Exports all frames between In and Out points on the Timeline as still image files. 8-digit sequential numbers are added to the end of each file name.

Images are exported as explained above depending on the selected file save button.

9. Click the **Close** button to close the Still Image Exporter.

Export to Tape

Projects may be exported to tape on any device than can be connected to and controlled by the EDIUS computer and many devices through which control via deck settings is not possible.

Output to HDV (Generic HDV) Device

To output an HDV file (.m2t format) to a tape in an HDV device, do the following:

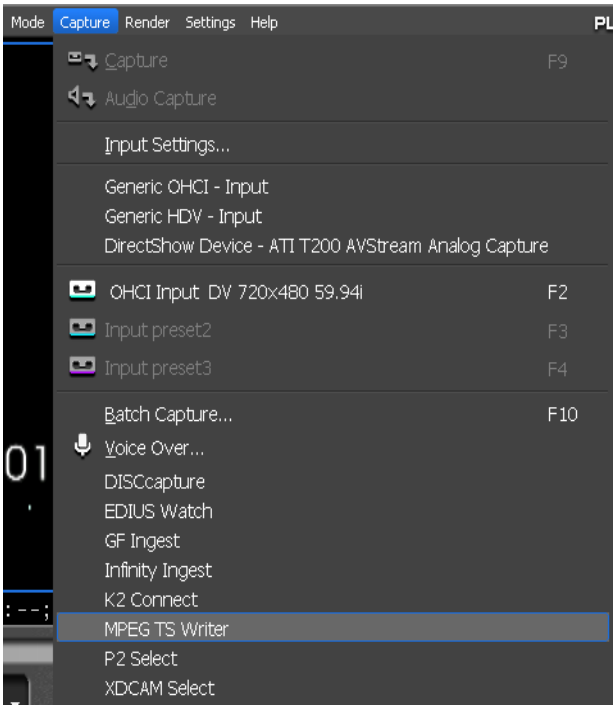
1. Connect the HDV device to the IEEE1394 port on the EDIUS computer with a FireWire/IEEE1394 cable.

Note If the HDV device supports HDV mode, set the device to this mode. For more information see the instruction manual for the HDV device.

2. Select Capture>MPEG TS Writer on the Preview window menu bar. See Figure 855.

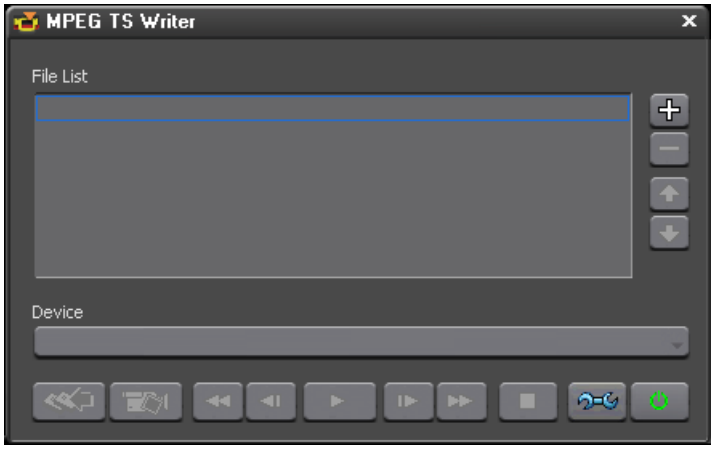
Note An alternative method is to click the **Tools** button in the Asset Bin and select “MPEG TS Writer” from the menu.

Figure 855. Capture Menu - MPEG TS Writer



The MPEG TS Writer dialog in Figure 856 appears.

Figure 856. MPEG TS Writer Dialog



3. Select "Microsoft AV/C Tape Subunit Device" from the device drop-down list.

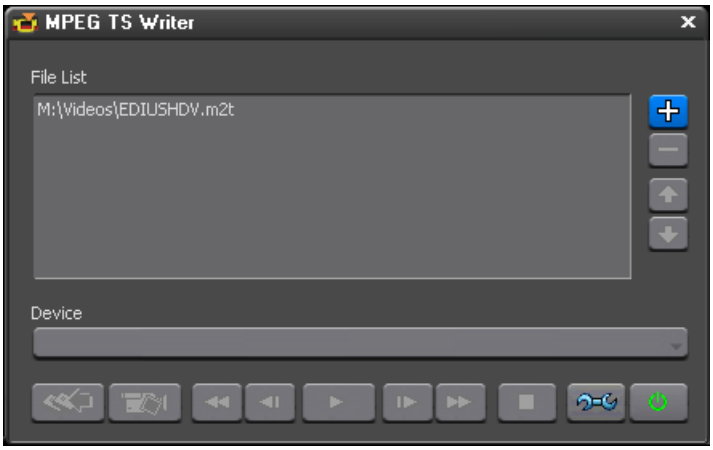
Note To use HDV devices, Windows XP Service Pack 2 or higher must be installed. If the HDV device is not recognized, check the Windows Device Manager to see if an entry for "AV/C Tape Device" appears in the "Sound, video and game controllers" category. Also, check that the HDV camera is in HDV fixed mode and that HDV-DV convert is off.

4. Click the **Add File to List** button.

5. Select the .m2t output file and click the **Open** button.

The file is added to the file list (see Figure 857).

Figure 857. MPEG TS Writer Output File List



6. Click the **Write** button.

Note To output the video is from the HDV device component output for previewing without recording to tape, click the **Preview** button,

7. Click the **OK** button.

8. Click the **Exit** button to close the MPEG TS Writer dialog.

Output to DV (Generic OHCI) Device

To output to a DV tape through a generic OHCI connection, do the following:

1. Connect the DV device to the IEEE1394 port on the EDIUS computer with a FireWire/IEEE1394 cable.

2. Set the DV device to "Play" mode.

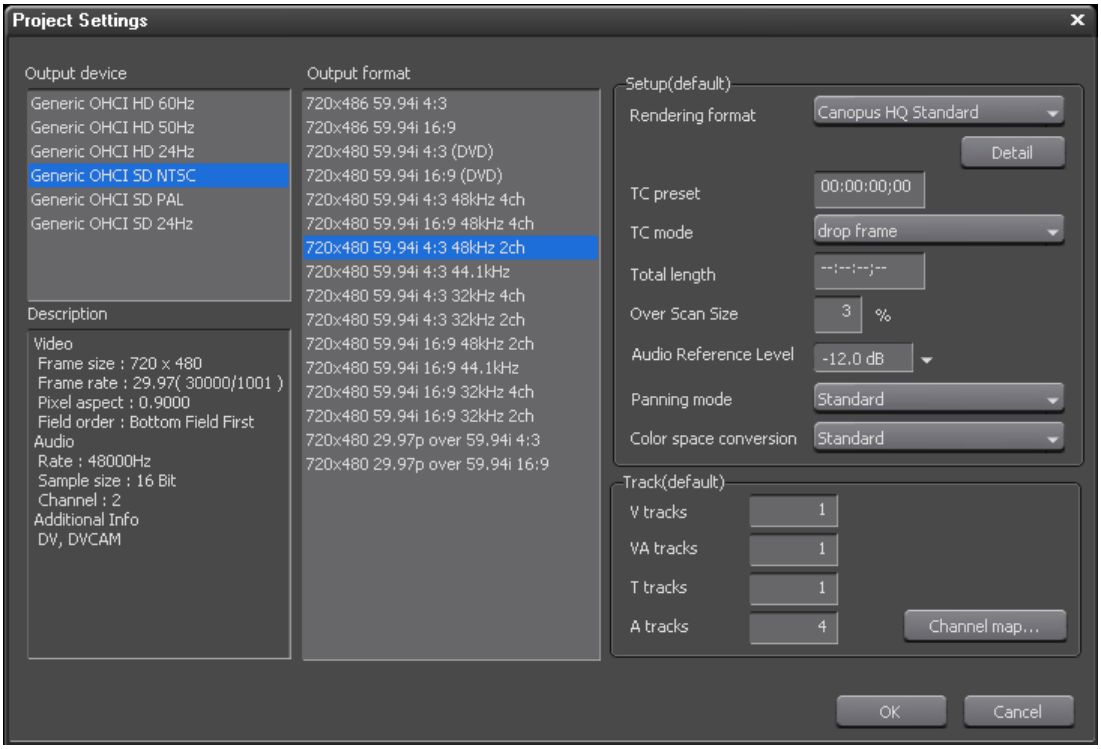
3. Select Settings>Project Settings in the Preview window menu bar.

The Project Settings dialog appears.

4. Click the **Change Current Setting** button.

The Project Settings dialog shown in Figure 858 appears.

Figure 858. Project Settings Dialog

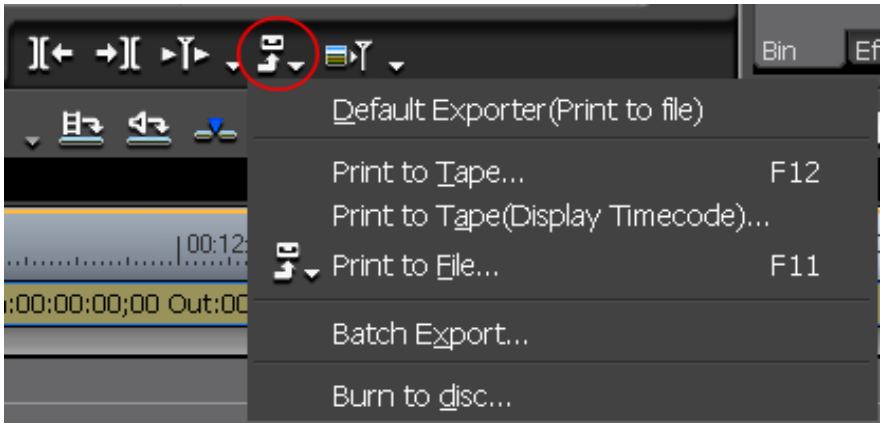


5. Select “Generic OHCI SD NTSC” in the “Output Device” section and select the desired output format.

6. Click the **OK** button to close the Project Settings dialog.

7. Click the **Export** button in the Recorder. See Figure 859.

Figure 859. Export Button Menu

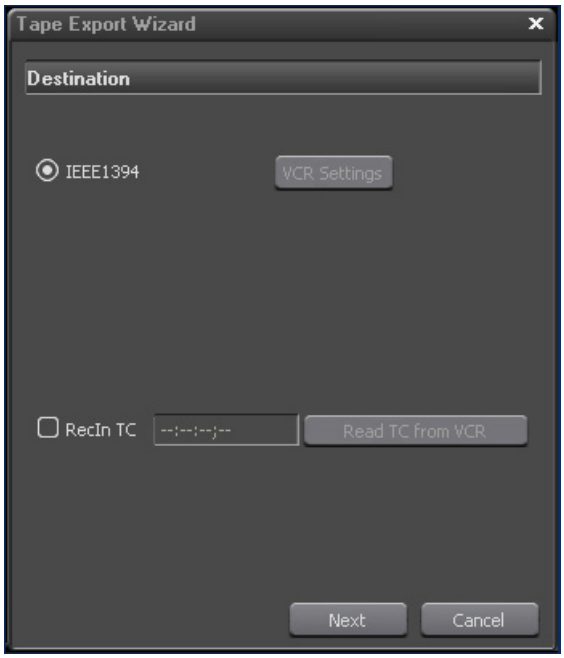


8. Select “Print to Tape” or “Print to Tape(Display Timecode) from the menu.

Note Alternative methods are: pressing [F12] on the keyboard and selecting File>Print>Print to Tape or Print to Tape(Display Timecode) from the Preview window men bar.

The Tape Export Wizard dialog in Figure 860 appears.

Figure 860. Tape Export Wizard



9. Click the **Next** button.

The Tape Export Wizard Confirmation dialog illustrated in Figure 861 appears.

Figure 861. Tape Export Wizard Confirmation Dialog

10. Click the **Export** button to begin exporting to tape.

Click the **Abort** button during the export operation if you wish to cancel the export.

Note If In and Out points are set on the Timeline, only the portion of the project between these points is exported.

Export to Devices Not Controlled by Deck Settings

Some external playback/recording devices cannot be controlled (started, stopped, etc) from EDIUS. Deck Settings (see *Deck Settings* *on page 142* for more information) do not apply to these devices and all source control operations must be performed manually on the device.

To export to a device not controlled by deck settings, do the following:

1. Connect the device to the EDIUS computer.
2. Set the device to external input for recording.
3. Click **Play** button in the Recorder.

Export begins

4. Click the **Stop** button in the Recorder, to stop exporting to the external device.

Appendix A

Hardware Settings

This appendix explains settings for various optional EDIUS hardware capturing and editing boards and hardware that may be installed in the EDIUS computer. Also covered are common video, audio and interface devices installed in the computer.

EDIUS SP/SP-SDI (SHX) Settings

EDIUS SP hardware displays as "SHX-E1" in EDIUS settings screens and the Windows Device Manager. EDIUS SP-SDI displays as "SHX-E2." The settings for both are identical with the only difference being the name.

SHX-E1 or SHX-E2 Settings are accessed by selecting Settings>Hardware Settings from the Preview window and then selecting SHX-E1 or SHX-E2 Settings.

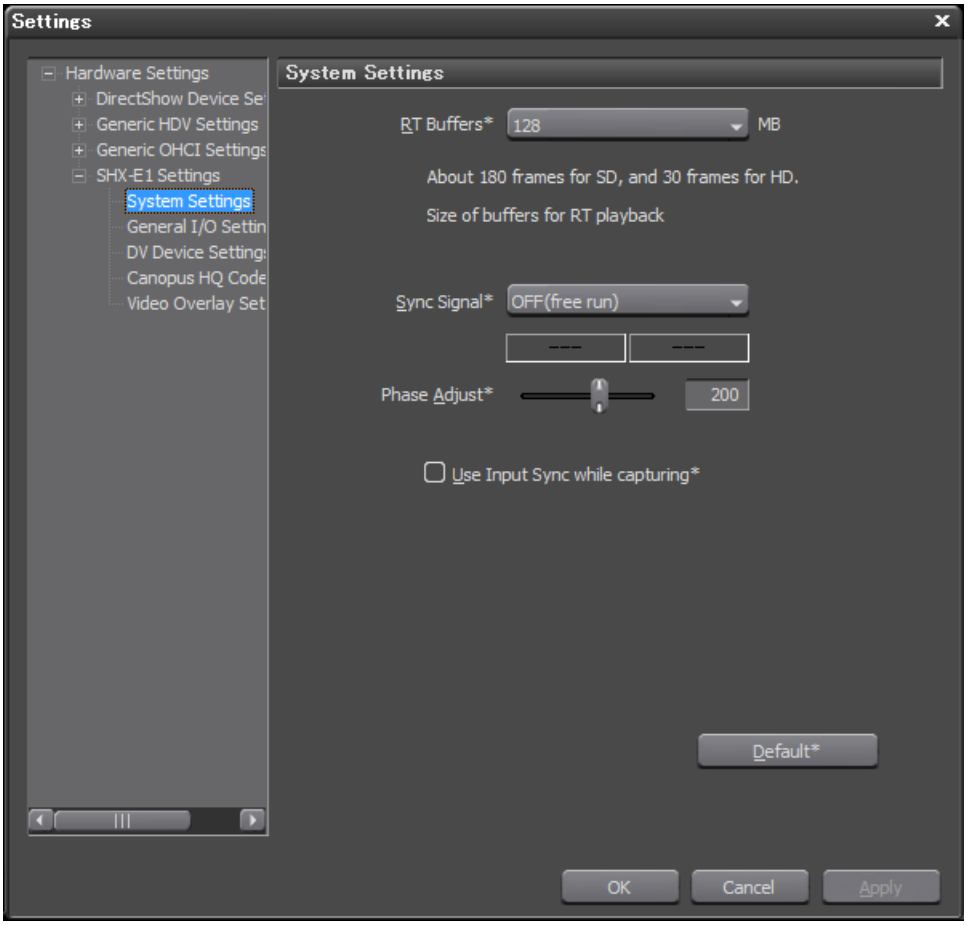
Note If the Hardware Settings tree is collapsed, click the "+" to expand the tree.

System Settings

To define System Settings for an SHX-E1 or SHX-E2 device, do the following:

1. If necessary, click the "+" to expand the SHX-E1/SHX-E2 Settings tree.
2. Select "System Settings" from the SHX-E1/SHX-E2 Settings tree. The dialog in Figure 862 appears.

Figure 862. SHX-E1/SHX-E2 System Settings Dialog



3. From the drop-down list, select the RT buffer frame size (stated as a number of Megabytes). Choices are: 128 (default), 256, 384, 512.

Note EDIUS renders ahead using the Real-Time playback buffer from which frames are then taken for playback. Memory reserved for the RT buffer is not available to other programs. If the RT buffer is too large, the system may run out of physical memory which will degrade real-time playback performance. Adjust the RT buffers with caution.

Note After changing the size of RT buffers, EDIUS must be restarted for the change to take effect.

4. From the Sync Signal drop-down list, select the desired Sync Signal type. The choices are “REF input sync”, “Input sync” and “OFF(free run).”

Note If the selected reference method does not supply the correct sync signal, it will be automatically adjusted to a suitable method. For example, during playback, if there is no sync signal, the settings will change to “OFF(free run).” During capture, it will be set to “Input Sync” automatically.

The sync status is displayed in the windows below the Sync Signal button. Either NO SYNC or SYNC OK will be displayed depending on whether or not an input reference signal is detected.

5. If applicable, move the Phase Adjust slider to fine tune the sync signal.

6. Select “Use Input Sync while capturing” if sync signal is normally off but you want to use the input sync while capturing.

Note If “Input Sync" is set as the Sync Signal type and no sync signal is present, “Off(free run)” is automatically used even though the setting remains at “Input Sync.” If an input sync source is then supplied, the system will continue to operate in Off(free run) mode. To force the detection of the sync source, Click on the Player and then the Recorder in the Preview window. Switching the active preview window will force the system to recognize the sync signal and operate in “Input Sync” mode.

7. Click the **OK** button to save settings and close the SHX-E1/SHX-E2 settings dialog.

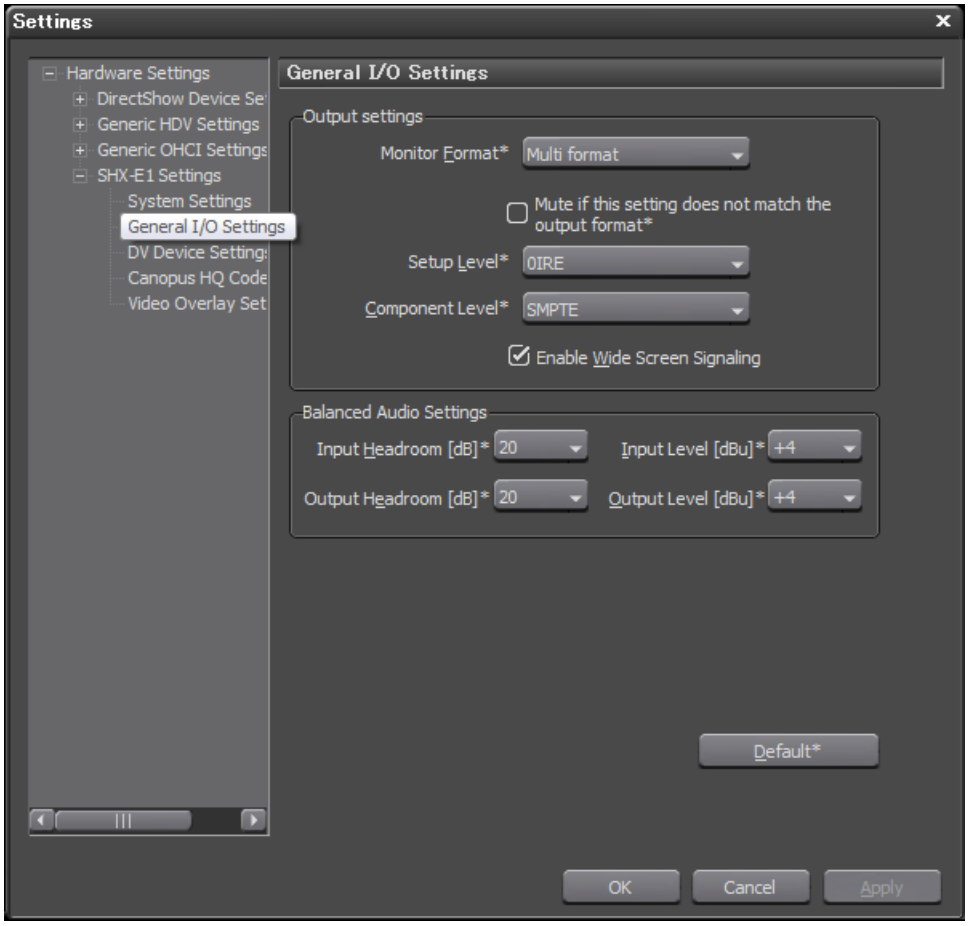
While in the SHX-E1/SHX-E2 Settings dialog, clicking the **Default*** button will return all settings to their default values.

General I/O Settings

1. If necessary, click the “+” to expand the SHX-E1/SHX-E2 Settings tree.

2. Select “General I/O Settings” from the SHX-E1/SHX-E2 Settings tree. The dialog in Figure 863 appears.

Figure 863. SHX-E1/SHX-E2 General I/O Dialog



Note If SHX-E2 is installed, the General I/O Settings screen will have additional settings as explained below.

3. From the "Monitor Format" drop-down list, select the appropriate monitor format. Choices are: "Multi format" for a monitor that can automatically recognize SD and HD input sources and switch accordingly; "HD" for monitors with HD input only and; "SD" for monitors with SD inputs only.

4. Select the "Mute if this setting does not match the output format" option if you wish to mute output when the monitor format is different than the format selected on the Timeline.

5. Select the desired setup level (black level) for NTSC format.

Note 0 IRE is commonly used in Japan and 7.5 IRE is commonly used in North America.

6. Select the desired NTSC Component level from the "Component Level" drop-down list.

7. Select the "Enable Wide Screen Signaling" if content is to be displayed on televisions that support WSS with automatic aspect ratio (4:3 or 16:9) switching.

8. Set the desired Balanced Audio Settings for "Input Headroom [dB]", "Input Level [dBu]", "Output Headroom [dB]", and "Output Level [dBu]" by selecting the desired setting from the associated drop-down lists.

For SXH-E1, proceed to Step 11.

Note Step 9 and Step 10 apply to SHX-E2 hardware only.

9. From the "Analog Audio Monitoring" drop-down list box, select the desired channel for audio monitoring. Choices are: Ch 1/2, Ch 3/4 or Ch 1+3/2+4.

10. If applicable, select the two VBI lines on which VITC (vertical interval timecode) data is present. Typically, this is lines 14 and 16 for NTSC and lines 19 and 21 for PAL video.

11. Click the **OK** button to save the settings and close the General I/O Settings dialog.

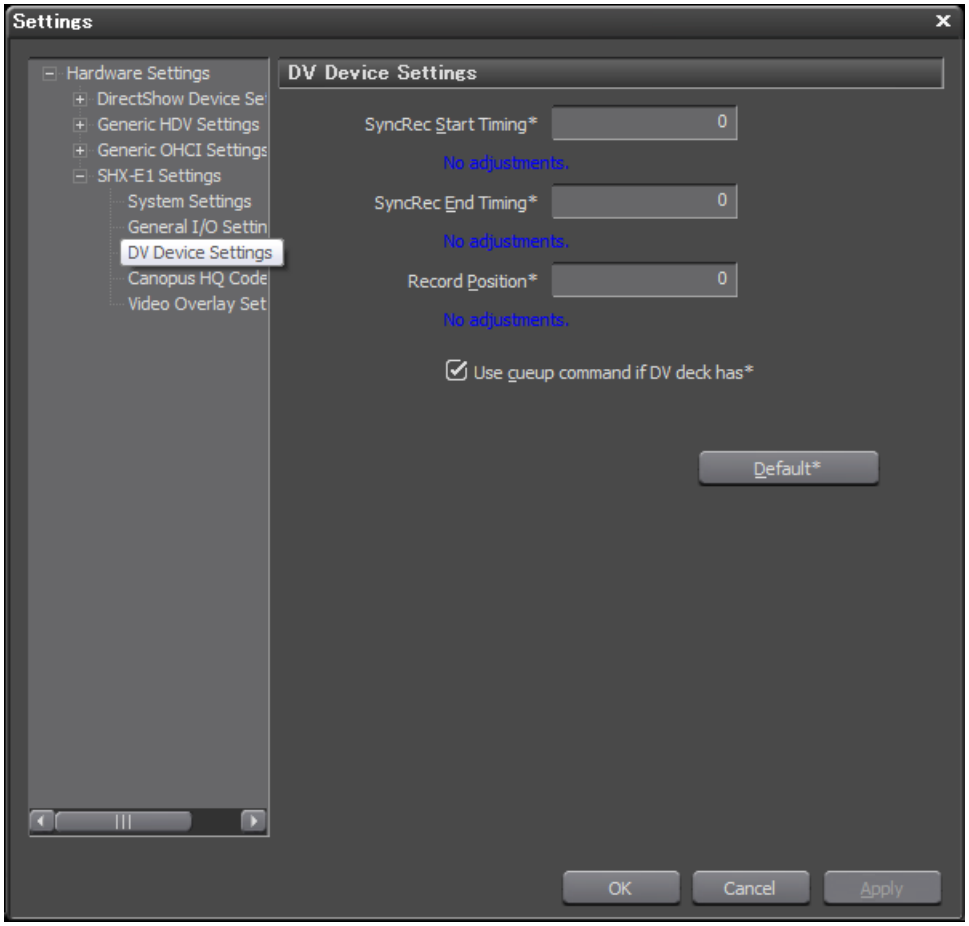
While in the General I/O Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

DV Device Settings

1. If necessary, click the "+" to expand the SHX-E1/SHX-E2 Settings tree.

2. Select "DV Device Settings" from the SHX-E1/SHX-E2 Settings tree. The dialog in Figure 864 appears.

Figure 864. SHX-E1/SHX-E2 DV Device Settings Dialog



3. In the “SyncRec Start Timing” field enter the timing adjustment, in number of frames, before playback begins on the EDIUS computer. Zero (0) = no adjustment.

4. In the “SyncRec End Timing” field enter the timing adjustment, in number of frames, when recording on a VCR is stopped. Zero (0) = no adjustment.

5. In the “Record Position” field enter the position adjustment, in number of steps, when beginning to record. Zero (0) = no adjustment

6. Select the “Use cueup command if DV deck has” option if the DV deck supports the cueup feature.

7. Click the **OK** button to save the DV Device settings and close the dialog.

While in the DV Device Settings dialog, clicking the **Default*** button returns all settings marked with an “*” to their default values.

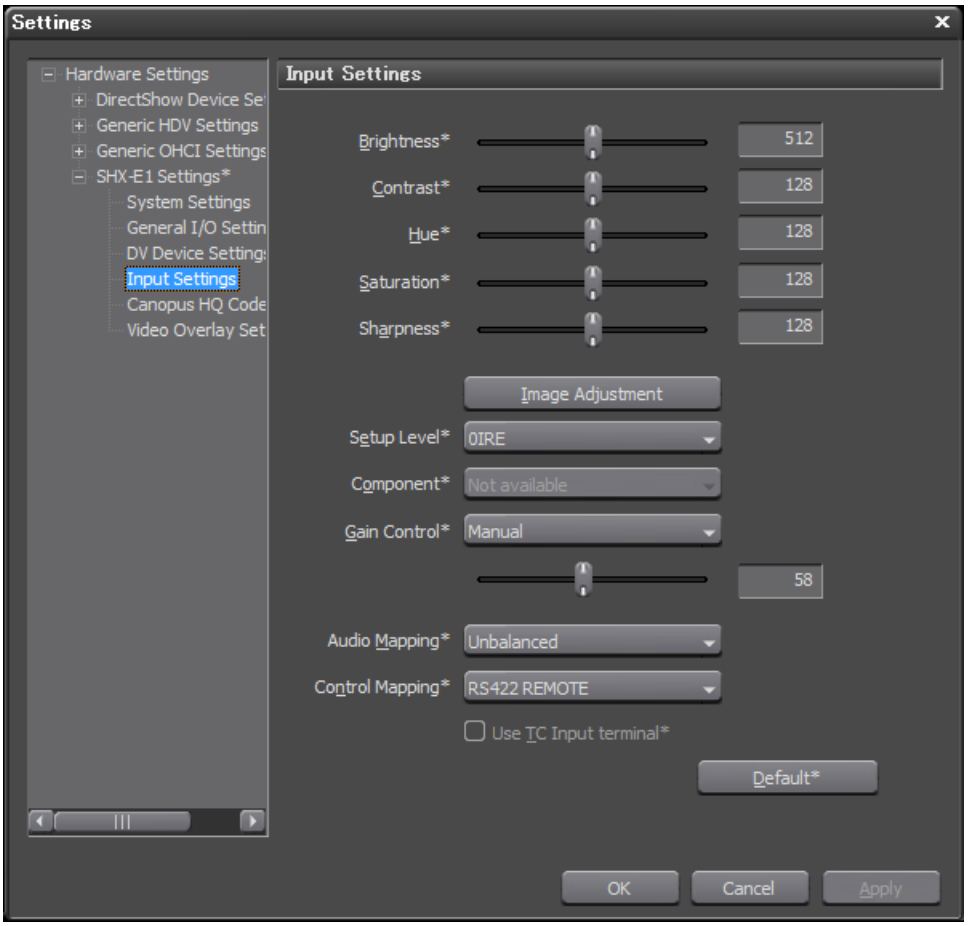
Input Settings

The hardware devices described in this section all have input settings; however, the input settings selection only appears in the Hardware Settings tree for a device if that device is selected in the Capture menu in the Preview window.

To define input settings for any device, do the following:

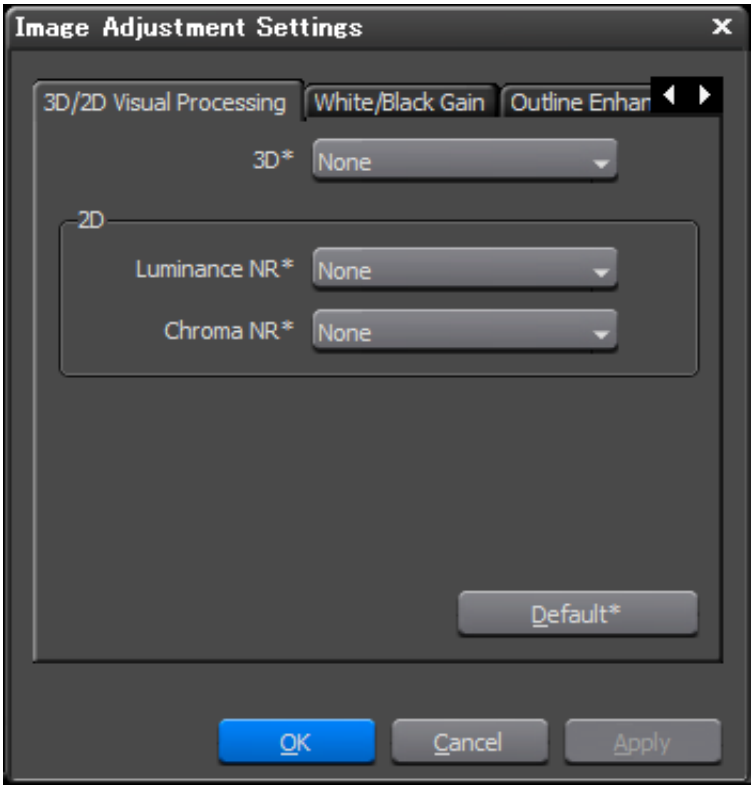
1. If necessary, click the "+" to expand the settings tree for the device.
2. Select "Input Settings" from the settings tree. A dialog similar to that in Figure 865 appears.

Figure 865. Input Settings



3. Adjust the Brightness, Contrast, Hue, Saturation and Sharpness sliders to the desired levels.
   - Brightness - A smaller value produces a darker image.
   - Contrast - A larger value results in stronger contrast.
   - Hue - The smaller the value, the closer the image is to dark red. The larger the value, the closer the image is to dark green.
   - Saturation - The smaller the value, the less saturated (lighter) the color. A value of zero (0) produces grey scale images.
   - Sharpness - The smaller the value, the more blur in the image outline. The larger the value the sharper the image.
4. Click the **Image Adjustment** button. The dialog in Figure 866 appears.

Figure 866. 3D/2D Visual Processing Dialog

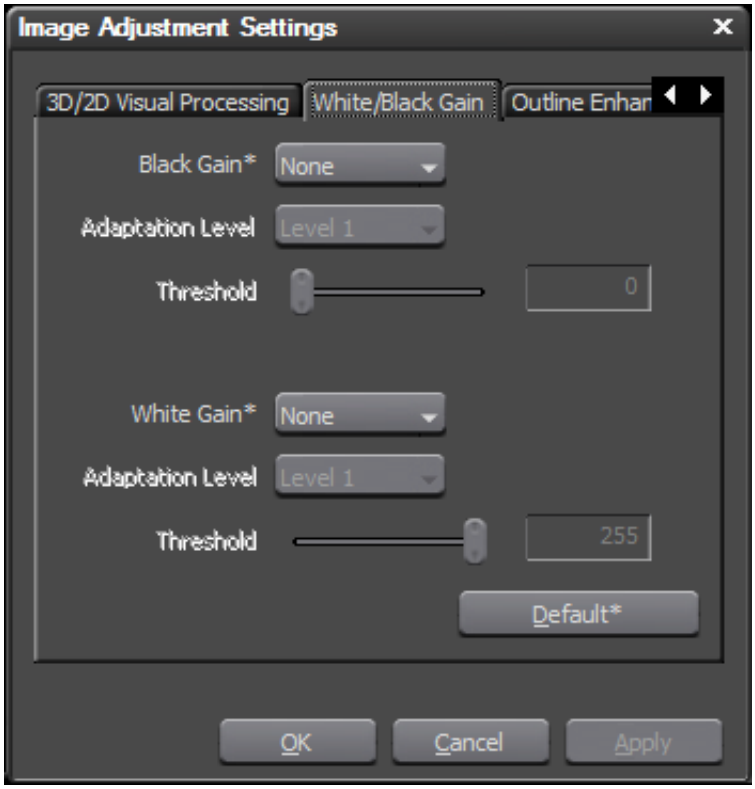


5. Select the desired noise reduction (NR) setting from the drop-down list for 3D Visual Processing (applies to composite inputs only).
6. Select the desired luminance (Y) NR setting from the “Luminance NR” drop-down list.
7. Select the desired chroma (C) NR setting from the “Chroma NR” drop-down list.

8. Click the **Apply** button to apply the changes.

9. Click on the "White/Black Gain" tab. The dialog in Figure 867 appears.

Figure 867. White/Black Gain Dialog

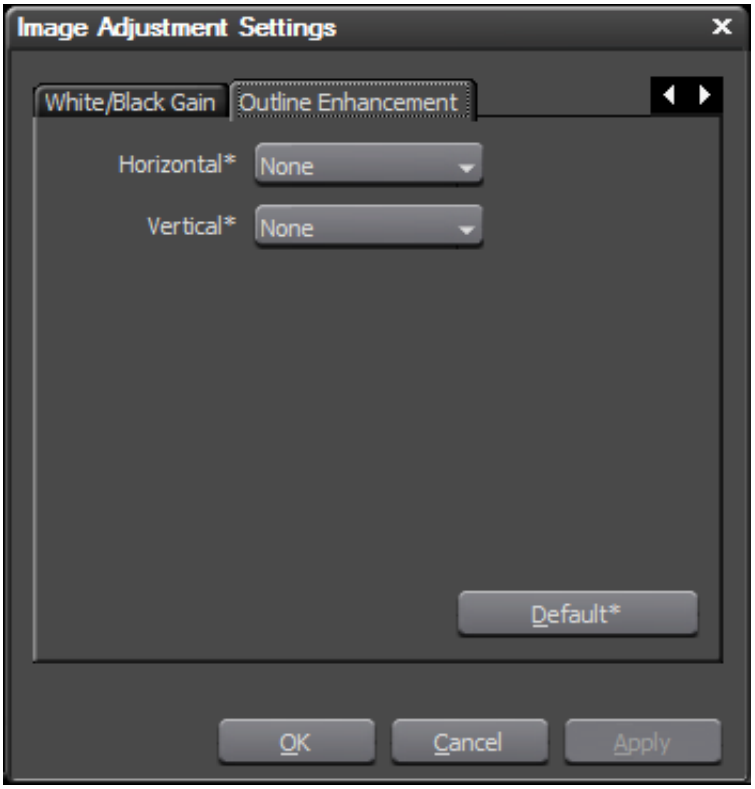


10. Set the desired Black Gain values with the drop-down lists and sliders.

- Black Gain - Strengthens the gain in low luminance areas of the luminance signal. The higher the setting, the more the emphasis on black gain.
- Adaptation Level - Not available if Black Gain is set to "None." Sets the adjustment limit for black expansion. The higher the level the more emphasized the black gain.
- Threshold - Not available if Black Gain is set to "None." Sets the level of luminance for black. The higher the number, the brighter the level of black.

11. Set the desired White Gain values with the drop-down lists and sliders.
    - White Gain - Strengthens the gain in high luminance areas of the luminance signal. This option improves gradation levels in areas that appear washed out due to high luminance.
    - Adaptation Level - not available if White Gain to "None." Sets the adjustment limit for white gain. A higher level results in less white gain adjustment.
    - Threshold - Not available if White Gain is set to "None." Sets the level of luminance towards which white gain will be adjusted. The higher the number, the darker the level of white.
12. Click the **Apply** button to apply the changes.
13. Click on the "Outline Enhancement" tab. The dialog in Figure 868 appears.

Figure 868. Outline Enhancement Dialog



14. Select the desired Horizontal and Vertical outline enhancement settings from the drop-down lists.
15. Click the **OK** button to save the settings and close the Image Adjustment Settings dialog.

16. Select the desired setup level (black level) from the "Setup Level" drop-down list.

    Note 0 IRE is commonly used in Japan and 7.5 IRE is commonly used in North America.

17. Select the desired component level from the "Component " drop-down list.

18. Set the gain control as desired by selecting "Manual" or "Auto" from "Gain Control" drop-down list and adjusting the Gain Control slider.

    Gain Control adjusts the image brightness. When set to 'Auto" luminance is automatically adjusted to the optimum level. When set to "Manual," luminance is adjusted manually.

19. From the "Audio Mapping" drop-down list, select "Balanced" or "Unbalanced" audio as desired.

    Note This option is not available on all hardware devices.

20. From the "Control Mapping" drop-down list, select "RS422 REMOTE" if you wish to enable remote control through the RS422 serial port.

    Note This option is not available in all hardware devices.

21. Select the "Use TC Input Terminal" option if you want to use the timecode terminal for remote control.

    Note This option is not available in all hardware devices.

22. Click the **OK** button to save the changes and close the Input Settings dialog.

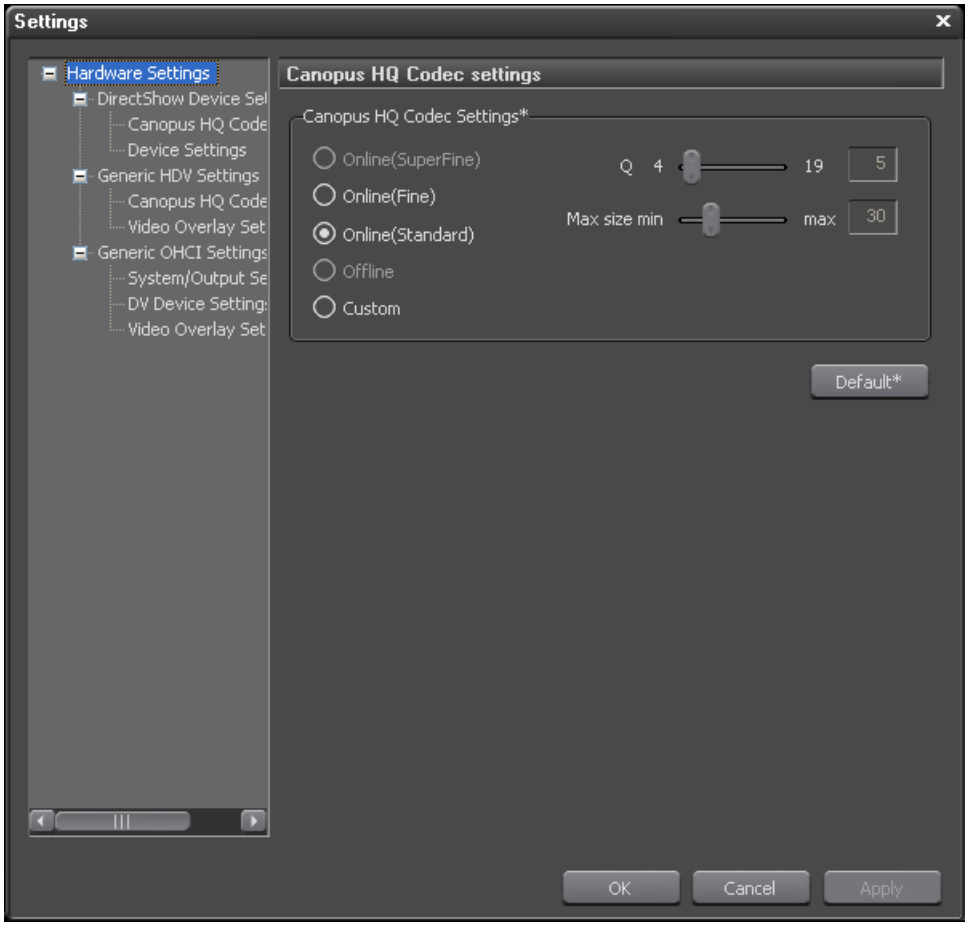
While in the Input Settings dialog or any of the Image Adjustment Settings dialogs, clicking the **Default*** button returns all settings marked with an "*" to their default values.

Canopus HQ Codec Settings

To define Canopus HQ Codec Settings for any hardware device, do the following:

1. If necessary, click the "+" to expand the settings tree for the device.
2. Select "Canopus HQ Codec Settings" from the settings tree. A dialog similar to that in Figure 869 appears.

Figure 869. Canopus HQ Codec Settings



3. Select the desired Codec quality settings. Choices are:

- Online(Superfine) - not currently available
- Online(Fine) - this setting can produce large file sizes, select this setting when high quality image capture is needed.
- Online(Standard) - default
- Offline - not currently available
- Custom

Note Only the “Custom” selection allows you to adjust the “Q” and “Max size min” sliders.

4. If the “Custom” codec setting was selected, adjust the “Q” and “Max size min” sliders as desired.

Note The scale on the “Q” slider is from 4 to 19. The lower the number, the higher the quality.

Note The “Max size min” allows you to limit the capture bitrate. 100% means no codec compression and the bitrate will be the same as the captured source. Setting a lower limit - e.g. 40 - limits the capture to a bitrate that is 40% (or whatever number is selected) of the original source. A 1440x1080 59.94i source has a bitrate of approximately 750 Mbps. If you want the upper limit to be 200 Mbps, for example, set the “Max size min” slider at 27 (200 is approximately 27% of 750).

Clicking the **Default** button resets all settings to the defaults.

5. Click the **OK** button to save settings and exit the settings dialog.

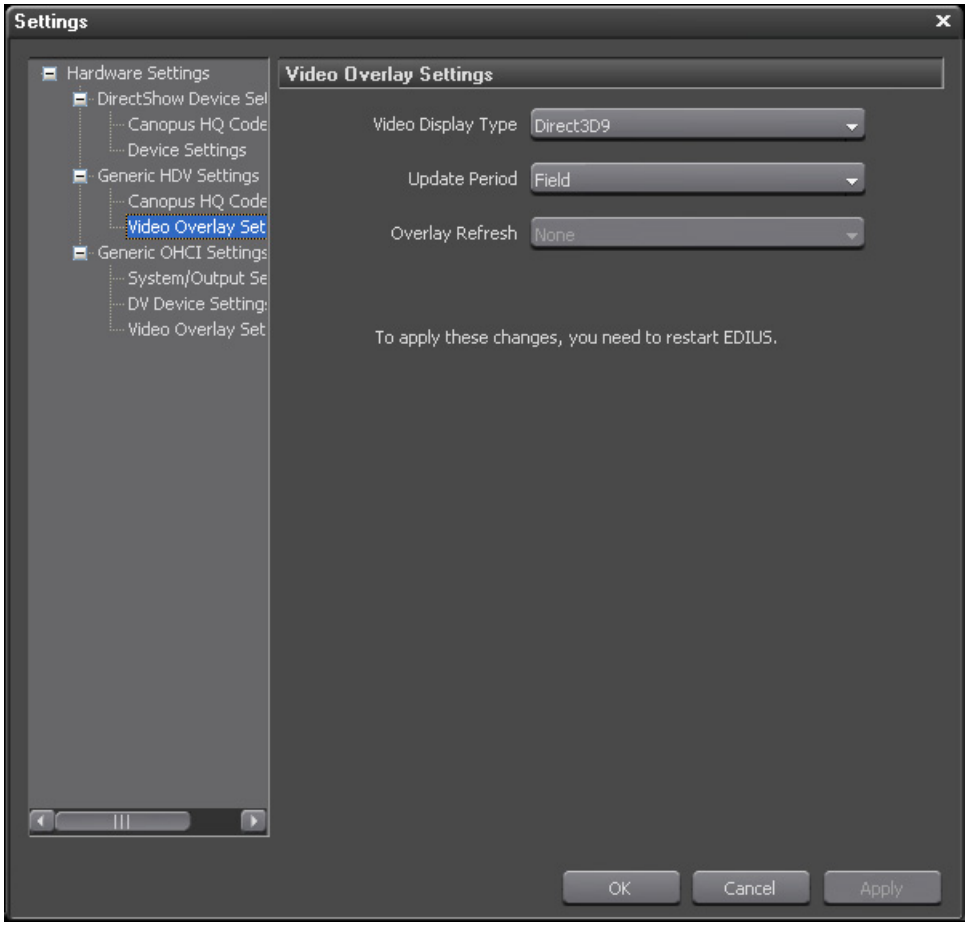
Video Overlay Settings

Video playback on the EDIUS computer monitor is performed using video overlay.

To define Video Overlay Settings for any device, do the following:

1. If necessary, click the “+” to expand the settings tree for the device.
2. Select “Video Overlay Settings” from the device settings tree. A dialog similar to that in Figure 870 appears.

Figure 870. Video Overlay Settings



Note The “Overlay Refresh” drop-down list does not appear for all hardware devices.

3. From the drop-down list, select the desired Video Display Type. Choices are:

- DirectDraw Overlay (displays video using the DirectDraw Overlay surface)
- Direct3D9 (displays video using Graphics Processing Unit - GPU functions) - default

4. From the drop-down list, select the desired Update Period (screen refresh rate).

Note When displaying interlaced images the 'Field" refresh rate provides the best setting for visually checking for errors such as reversed fields.

- Field (at a frame rate of 29.97 fps, the screen is refreshed 59.94 times per second) - default
- Frame (at a frame rate of 29.97 fps, the screen is refreshed 29.97 times per second

Note With progressive images, there is no difference between the two settings.

5. Select the Overlay Refresh setting. Unless video preview does not display properly, this setting should be left at "None."

Note This option is enabled only if specific devices and their software is installed on the EDIUS computer.

- None (no refresh is performed. This setting provides the highest speed) - default
- Lock/Unlock (relatively high speed video processing)
- Update Overlay (lowest speed video processing)

6. Click the **OK** button to save changes and exit the dialog.

Note EDIUS must be restarted for any changes in Video Overlay settings to take effect.

EDIUS NX/NX Express (NHX) Settings

Depending upon the type of NX board installed in the EDIUS Computer, the device will display as NHX-E1 or NHX-E2 in both the Hardware Settings dialogs and the Windows device manager. The setting for both are the same with the name being the only difference.

NHX-E1 or NHX-E2 Settings are accessed by selecting Settings>Hardware Settings from the Preview window and then selecting NHX-E1 or NHX-E2 Settings.

Note If the Hardware Settings tree is collapsed, click the "+" to expand the tree.

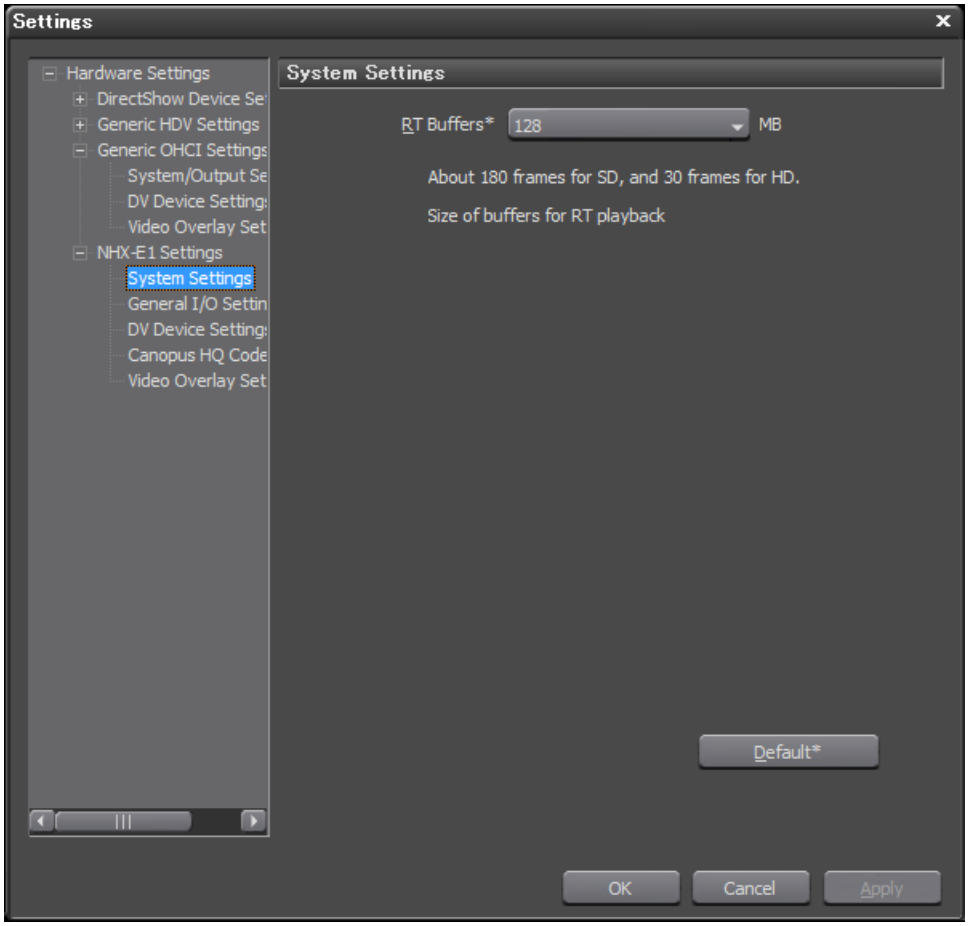
System Settings

To define System Settings for an NHX-E1 or NHX-E2 device, do the following:

1. If necessary, click the "+" to expand the NHX-E/NHX-E2 Settings tree.

2. Select “System Settings” from the NHX-E1/NHX-E2 Settings tree. The dialog in Figure 871 appears.

Figure 871. NHX-E1/NHX-E2 System Settings Dialog



3. From the drop-down list, select the RT buffer frame size (stated as a number of Megabytes). Choices are: 128 (default), 256, 384, 512.

Note EDIUS renders ahead using the Real-Time playback buffer from which frames are then taken for playback. Memory reserved for the RT buffer is not available to other programs. If the RT buffer is too large, the system may run out of physical memory which will degrade real-time playback performance. Adjust the RT buffers with caution.

Note After changing the size of RT buffers, EDIUS must be restarted for the change to take effect.

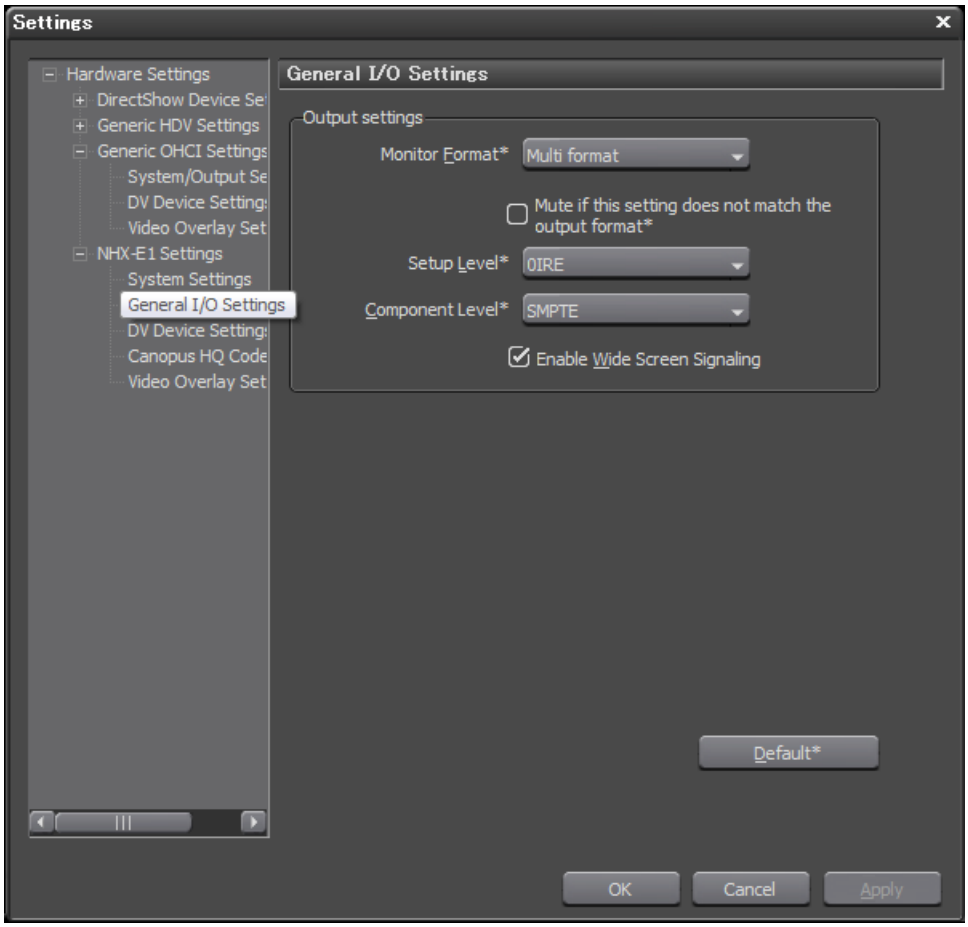
4. Click the **OK** button to save the settings and close the System Settings dialog.

While in the System Settings dialog, clicking the **Default*** button returns all settings marked with an “*” to their default values.

General I/O Settings

1. If necessary, click the "+" to expand the NHX-E1/NHX-E2 Settings tree.
2. Select "General I/O Settings" from the NHX-E1/NHX-E2 Settings tree. The dialog in Figure 872 appears.

Figure 872. NHX-E1/NHX-E2 General I/O Dialog



3. From the "Monitor Format" drop-down list, select the appropriate monitor format. Choices are: "Multi format" for a monitor that can automatically recognize SD and HD input sources and switch accordingly; "HD" for monitors with HD input only and; "SD" for monitors with SD inputs only.
4. Select the "Mute if this setting does not match the output format" option if you wish to mute output when the monitor format is different than the format selected on the Timeline.
5. Select the desired setup level (black level) for NTSC format.

Note 0 IRE is commonly used in Japan and 7.5 IRE is commonly used in North America.

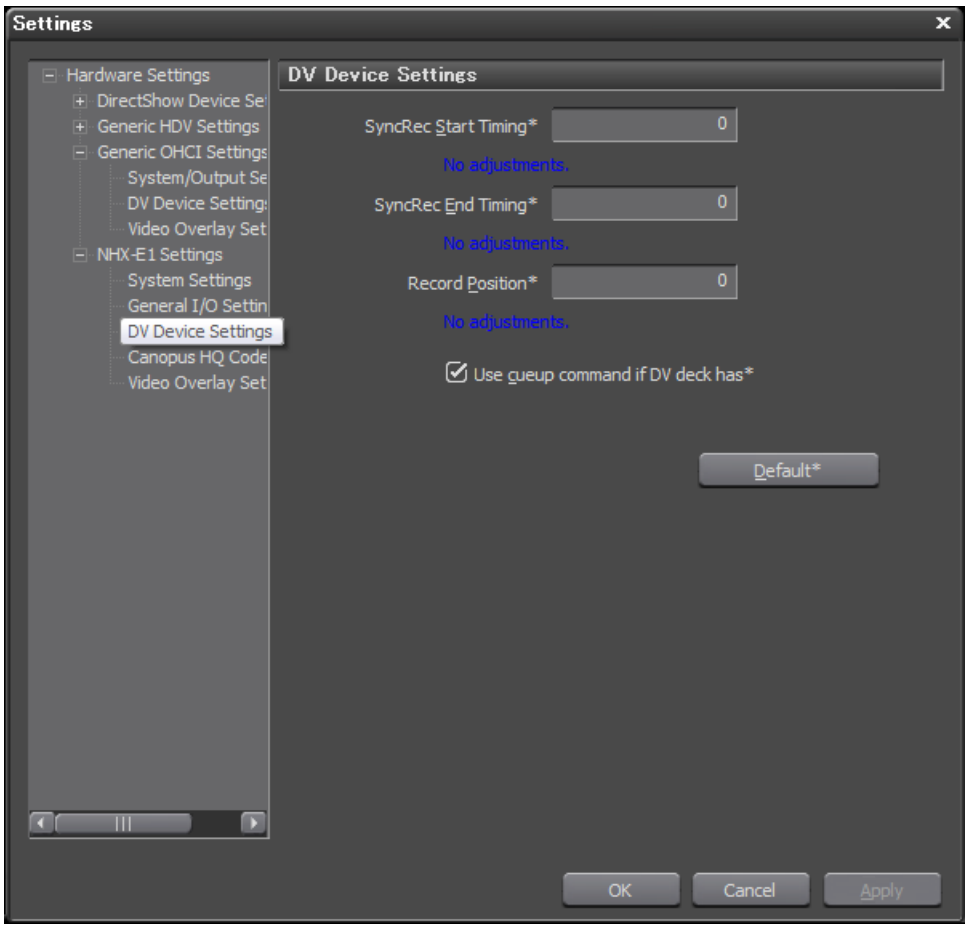
6. Select the desired NTSC Component level from the "Component Level" drop-down list.
7. Select the "Enable Wide Screen Signal" if content is to be displayed on televisions that support WSS with automatic aspect ratio (4:3 or 16:9) switching.
8. Click the **OK** button to save the settings and close the General I/O Settings dialog.

While in the System Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

DV Device Settings

1. If necessary, click the "+" to expand the NHX-E1/NHX-E2 Settings tree.
2. Select "DV Device Settings" from the NHX-E1/NHX-E2 Settings tree. The dialog in Figure 873 appears.

Figure 873. NHX-E1/NHX-E2 DV Device Settings Dialog



3. In the “SyncRec Start Timing” field enter the timing adjustment, in number of frames, before playback begins on the EDIUS computer. Zero (0) = no adjustment.

4. In the “SyncRec End Timing” field enter the timing adjustment, in number of frames, when recording on a VCR is stopped. Zero (0) = no adjustment.

5. In the “Record Position” field enter the position adjustment, in number of steps, when beginning to record. Zero (0) = no adjustment

6. Select the “Use cueup command if DV deck has” option if the DV deck supports the cueup feature.

7. Click the **OK** button to save the DV Device settings and close the dialog.

While in the DV Device Settings dialog, clicking the **Default*** button returns all settings marked with an “*” to their default values.

Input Settings

See *Input Settings* *on page 715*.

Canopus HQ Codec Settings

See *Canopus HQ Codec Settings* *on page 719*.

Video Overlay Settings

Video Overlay Settings *on page 721*.

EDIUS SD/HD (RX-E1) Settings

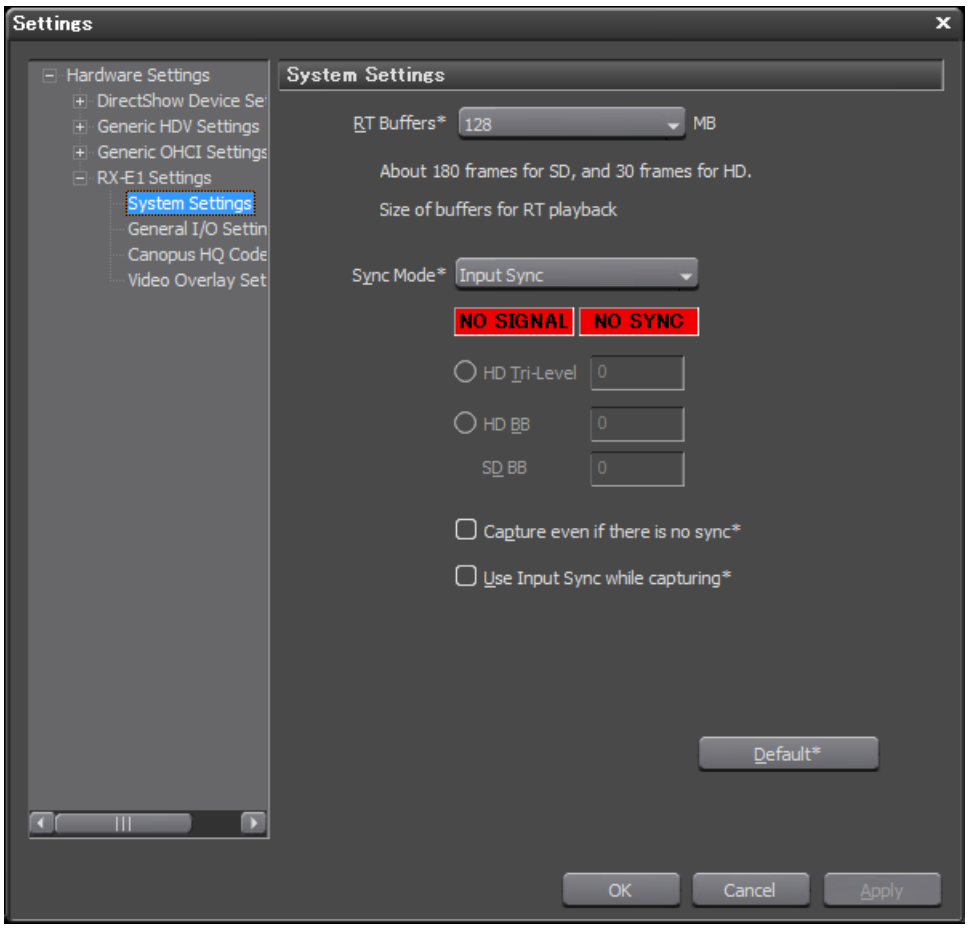
EDIUS RX-E1 hardware is available in either an SD or HD version. The SD and HD settings dialogs vary, however, both versions display as RX-E1 in the Hardware Settings dialog and the Windows Device Manager.

System Settings (SD and HD)

To define System Settings for an RX-E1 device, do the following:

1. If necessary, click the "+" to expand the RX-E1 Settings tree.
2. Select "System Settings" from the RX-E1 Settings tree. The dialog in Figure 874 appears.

Figure 874. RX-E1 System Settings Dialog



3. From the drop-down list, select the RT buffer frame size (stated as a number of Megabytes). Choices are: 128 (default), 256, 384, 512.

Note EDIUS renders ahead using the Real-Time playback buffer from which frames are then taken for playback. Memory reserved for the RT buffer is not available to other programs. If the RT buffer is too large, the system may run out of physical memory which will degrade real-time playback performance. Adjust the RT buffers with caution.

Note After changing the size of RT buffers, EDIUS must be restarted for the change to take effect.

4. From the Sync Signal drop-down list, select the desired Sync Signal type. The choices are “REF input sync”, “Input sync” and “OFF(free run).”

Note If the selected reference method does not supply the correct sync signal, it will be automatically adjusted to a suitable method. For example, during playback, if there is no sync signal, the settings will change to “OFF(free run).” During capture, it will be set to “Input Sync” automatically.

The sync status is displayed in the windows below the Sync Signal button. Either NO SYNC or SYNC OK will be displayed depending on whether or not an input reference signal is detected.

5. If “Ref Input Sync” is selected, select the reference input type; HD Tri-Level, HD BB (Black Burst) or SD BB (Black Burst).

6. Select “Capture even if there is no sync” if you desire to allow capture with no sync source defined or detected.

7. Select “Use Input Sync while capturing” if sync signal is normally off but you want to use the input sync while capturing.

Note If “Input Sync" is set as the Sync Signal type and no sync signal is present, “Off(free run)” is automatically used even though the setting remains at “Input Sync.” If an input sync source is then supplied, the system will continue to operate in Off(free run) mode. To force the detection of the sync source, Click on the Player and then the Recorder in the Preview window. Switching the active preview window will force the system to recognize the sync signal and operate in “Input Sync” mode.

8. Click the **OK** button to save settings and close the RX-E1settings dialog.

While in the System Settings dialog, clicking the **Default*** button will return all settings to their default values.

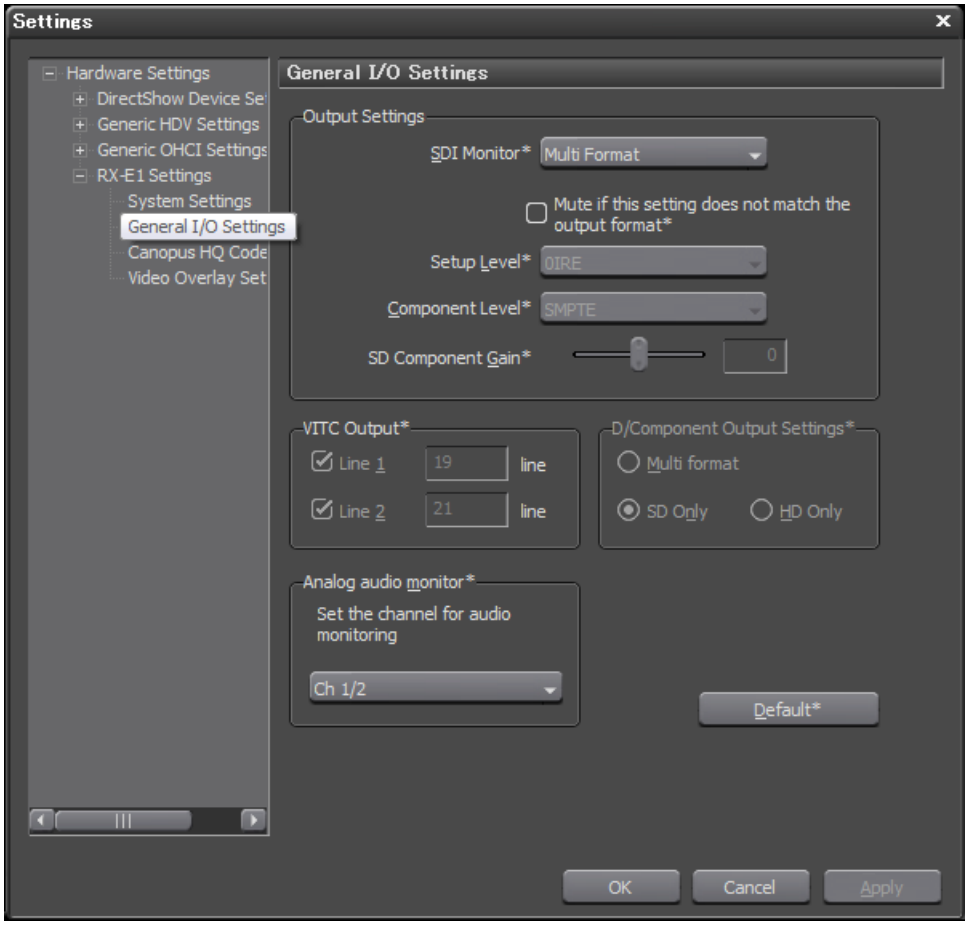
General I/O Settings (SD and HD)

Note Some of the settings described below are SD only or HD only. Items that are greyed out are not available in the installed RX-E1format.

1. If necessary, click the “+” to expand the RX-E1 Settings tree.

2. Select “General I/O Settings” from the RX-E1 Settings tree. The dialog in Figure 875 appears.

Figure 875. RX-E1 General I/O Settings Dialog



3. From the “SDI Monitor” drop-down list, select the appropriate monitor format. Choices are: “Multi format” for a monitor that can automatically recognize SD and HD input sources and switch accordingly; “HD” for monitors with HD inputs only and; “SD” for monitors with SD inputs only.

4. Select the “Mute if this setting does not match the output format” option if you wish to mute output when the monitor format is different than the format selected on the Timeline.

5. Select the desired setup level (black level) for NTSC format.

Note 0 IRE is commonly used in Japan and 7.5 IRE is commonly used in North America.

6. Select the desired component level from the “Component Level” drop-down list.

7. Set the desired SD component gain by moving the SD Component Gain slider to the desired level.

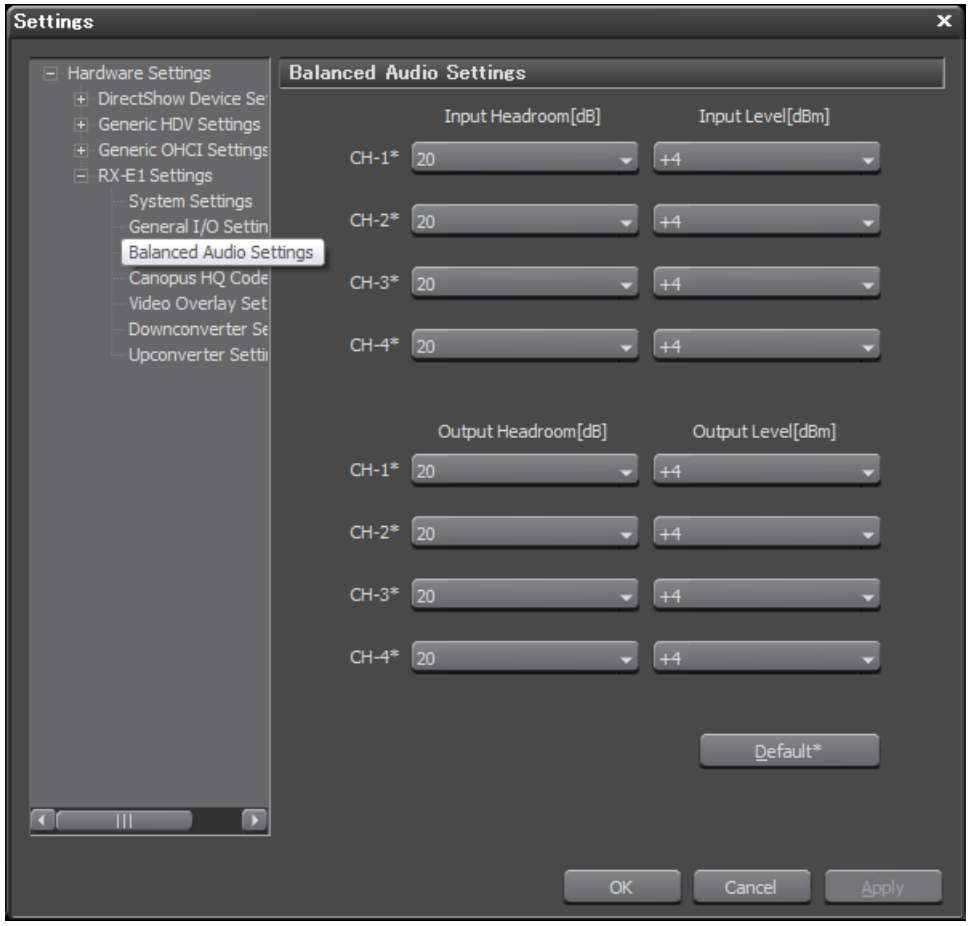
8. Select the two VBI lines on which VITC (vertical interval timecode) data is present. Typically, this is lines 14 and 16 for NTSC and lines 19 and 21 for PAL video.
9. Select the desired D/Component Output settings.
10. From the "Analog Audio Monitor" drop-down list box, select the desired channel for audio monitoring. Choices are: Ch 1/2, Ch 3/4 or Ch 1+3/2+4.
11. Click the **OK** button to save the settings and close the General I/O Settings dialog.

While in the General I/O Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

HD Balanced Audio Settings (HD Only)

1. If necessary, click the "+" to expand the RX-E1 Settings tree.
2. Select "Balanced Audio Settings" from the RX-E1 Settings tree. The dialog in Figure 876 appears.

Figure 876. RX-E1 Balanced Audio Settings Dialog



3. From the drop-down lists for each audio channel 1-4, select the audio "Input Headroom[dB]", "Input Level[dBm]", "Output Headroom[dB]" and "Output Level[dBm]" settings.

4. Click the **OK** button to save the settings and close the Balanced Audio Settings dialog.

While in the Balance Audio Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

Input Settings (HD Only)

See *Input Settings* *on page 715*.

Canopus HQ Codec Settings (SD and HD)

See *Canopus HQ Codec Settings* *on page 719*.

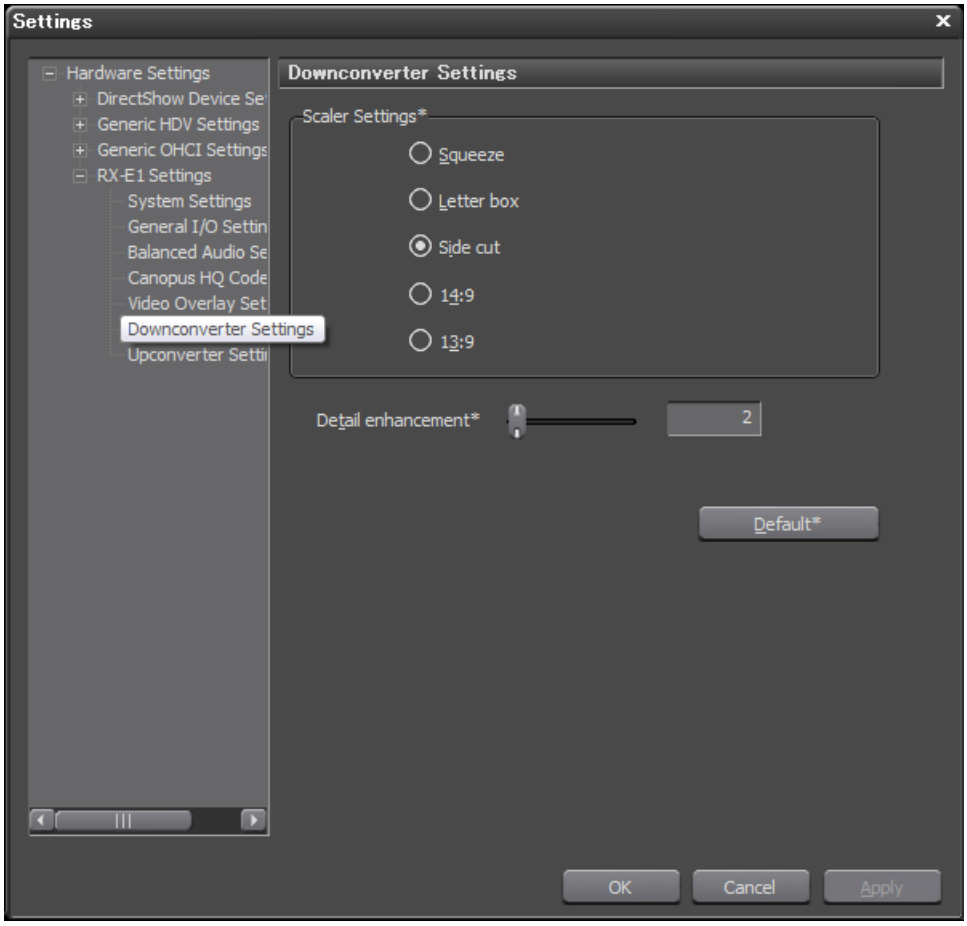
Video Overlay Settings (SD and HD)

See *Video Overlay Settings* on page 721.

Downconverter Settings (HD Only)

1. If necessary, click the "+" to expand the RX-E1 Settings tree.
2. Select "Downconverter Settings" from the RX-E1 Settings tree. The dialog in Figure 877 appears.

Figure 877. RX-E1 Downconverter Settings Dialog



3. Select the desired method for downconverting and scaling HD content to SD. The scaler selections are Squeeze, Letter box. Side cut, 14:9, and 13:9.
4. Move the "detail enhancement" slider to the appropriate level of detail sharpening as desired.

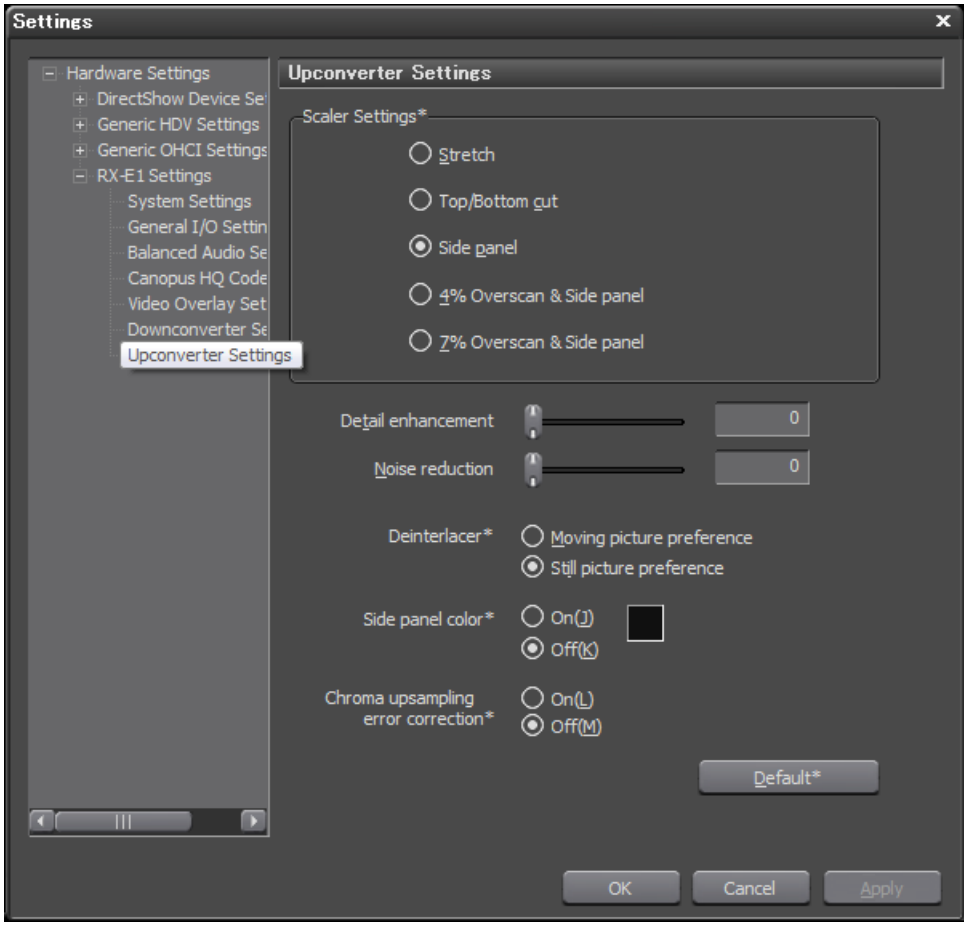
5. Click the **OK** button to save the settings and close the Downconverter Settings dialog.

While in the Downconverter dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

Upconverter Settings (HD Only)

1. If necessary, click the "+" to expand the RX-E1 Settings tree.
2. Select "Upconverter Settings" from the RX-E1 Settings tree. The dialog in Figure 878 appears.

Figure 878. RX-E1 Upconverter Settings Dialog



3. Select the desired method for upconverting and scaling SD content to HD. The scaler selections are Stretch, Top/Bottom cut, Side panel, 4% Overscan and Side panel, and 7% Overscan and Side Panel.

4. Move the "detail enhancement" slider to the appropriate level of detail sharpening as desired.

5. Move the "Noise reduction" slider to increase or decrease the amount of noise reduction as desired.

Note Noise reduction can decrease video blocking and other upconversion artifacts; however, it can also result in the loss of detail. This option should be used carefully.

6. Select the desired Deinterlacer preference; "moving picture preference" or "still picture preference."

Note Still picture preference can decrease artifacts such as jagged diagonal lines and other common upconversion artifacts; however, it can also increase the blur in moving pictures. Conversely, a moving picture preference decreases motion blur but can increase jagginess diagonal lines.

7. If "Side Panel" is the selected scaler setting, enable "Side panel color" and select the desired color for the side panels.

8. Enable or disable Chroma upsampling error correction.

Note If enabled, chroma upsampling can reduce common upsampling artifacts such as streaky lines through the chroma channel. This error is usually confined to MPEG 4:2:0 compression.

9. Click the **OK** button to save the settings and close the Upconverter Settings dialog.

While in the Upconverter dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

HD STORM (HXQ-E1) Settings

The HD STORM displays in Hardware Settings dialogs and the Windows Device Manager as HXQ-E1.

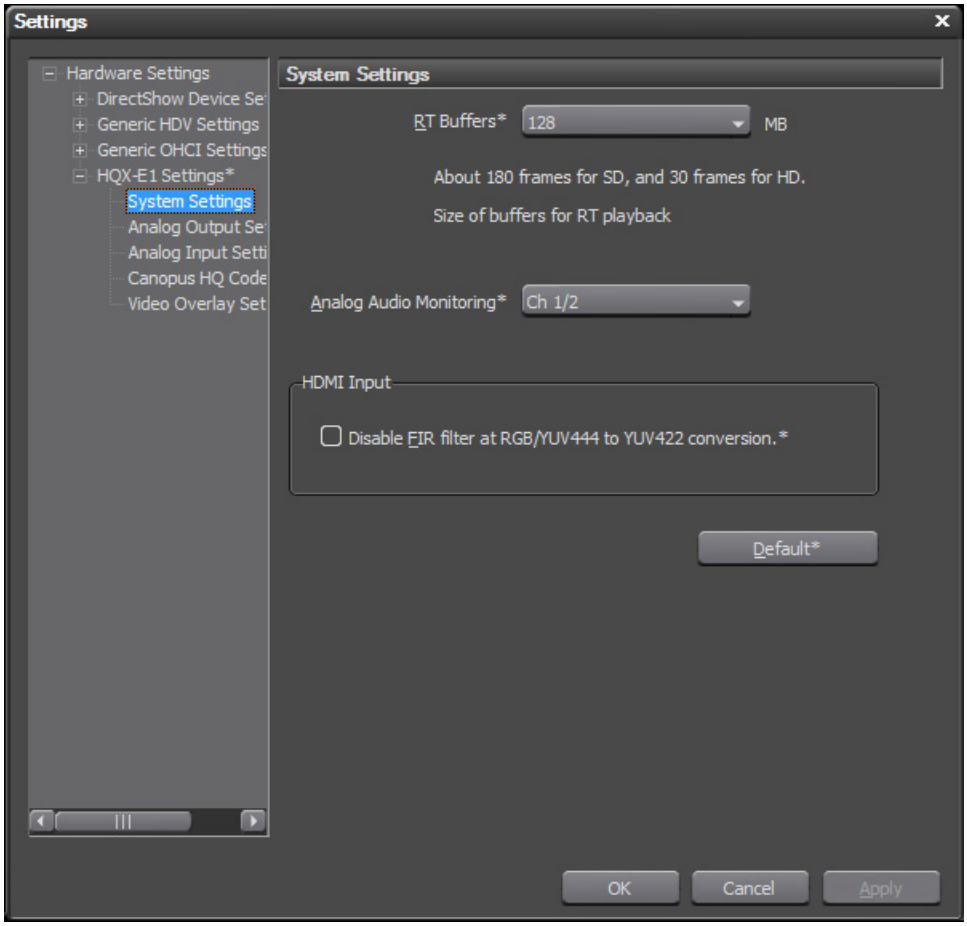
System Settings

To define System Settings for an HXQ-E1 device, do the following:

1. If necessary, click the "+" to expand the HXQ-E1 Settings tree.

2. Select "System Settings" from the HXQ-E1 Settings tree. The dialog in Figure 879 appears.

Figure 879. HXQ-E1System Settings Dialog



3. From the drop-down list, select the RT buffer frame size (stated as a number of Megabytes). Choices are: 128 (default), 256, 384, 512.

Note EDIUS renders ahead using the Real-Time playback buffer from which frames are then taken for playback. Memory reserved for the RT buffer is not available to other programs. If the RT buffer is too large, the system may run out of physical memory which will degrade real-time playback performance. Adjust the RT buffers with caution.

Note After changing the size of RT buffers, EDIUS must be restarted for the change to take effect.

4. For Analog Audio Monitoring, select the desired channels for monitoring purposes. Choices are: Ch 1/2, Ch 3/4 and Ch 1+3/2+4.

5. For HDMI Input, select the "Disable FIR filter at RGB/YUV444 to YUV422 conversion" option if applicable.

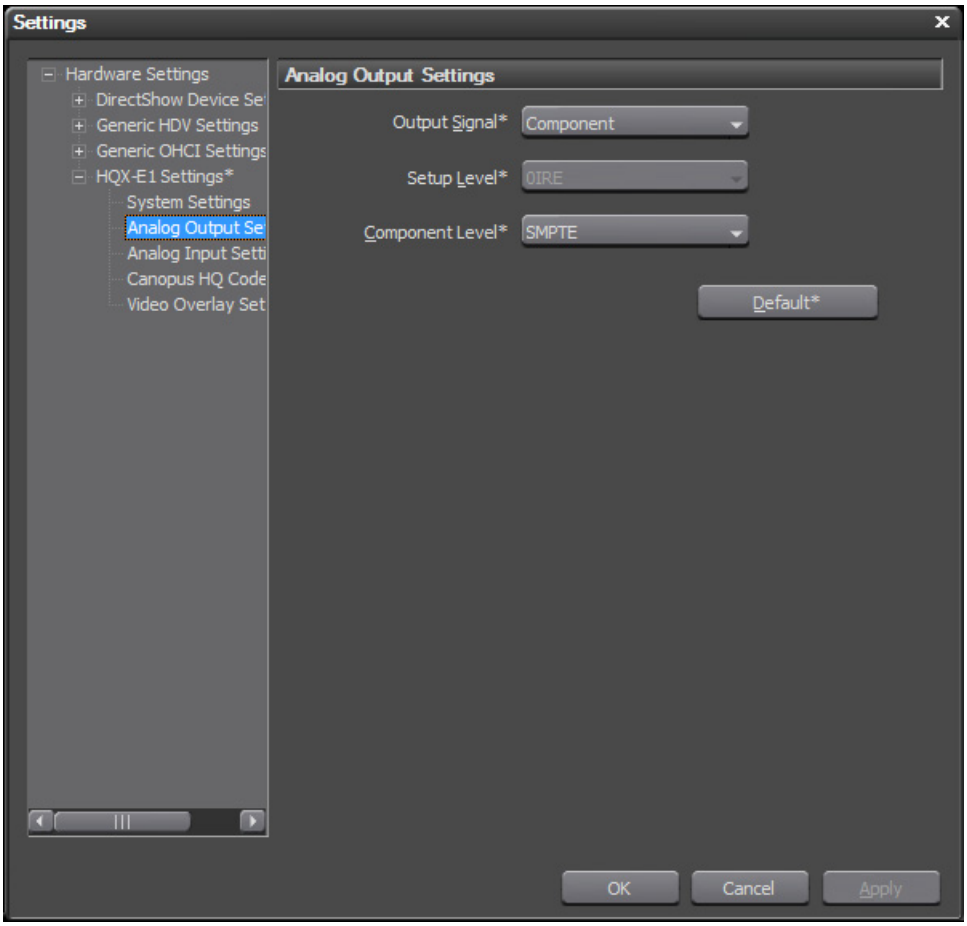
6. Click the **OK** button to save the settings and close the System Settings dialog.

While in the System Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

Analog Output Settings

1. If necessary, click the "+" to expand the HXQ-E1 Settings tree.
2. Select "Analog Output Settings" from the HXQ-E1 Settings tree. The dialog in Figure 880 appears.

Figure 880. HXQ-E1Analog Output Settings Dialog



3. From the "Output Signal" drop-down list, select the desired output signal type.
4. Select the desired setup level (black level) from the "Setup Level" drop-down list.

Note In analog video, 0 IRE is commonly used in Japan and 7.5 IRE is commonly used in North America.

5. Select the desired component level from the “Component Level” drop-down list.

6. Click the **OK** button to save the settings and close the Analog Output Settings dialog.

While in the Analog Output Settings dialog, clicking the **Default*** button returns all settings marked with an “*” to their default values.

Analog Input Settings

See *Input Settings on page 715*.

Canopus HQ Codec Settings

See *Canopus HQ Codec Settings on page 719*.

Video Overlay Settings

See *Video Overlay Settings on page 721*.

HDSPARK (HSX) Settings

EDIUS HDSPARK hardware displays as “HSX-E1” in the EDIUS settings screen and the Windows Device Manager.

HSX-E1 settings are accessed by selecting Settings>Hardware Settings from the Preview window and then selecting HSX-E1 Settings.

Note If the Hardware Settings tree is collapsed, click the “+” to expand the tree.

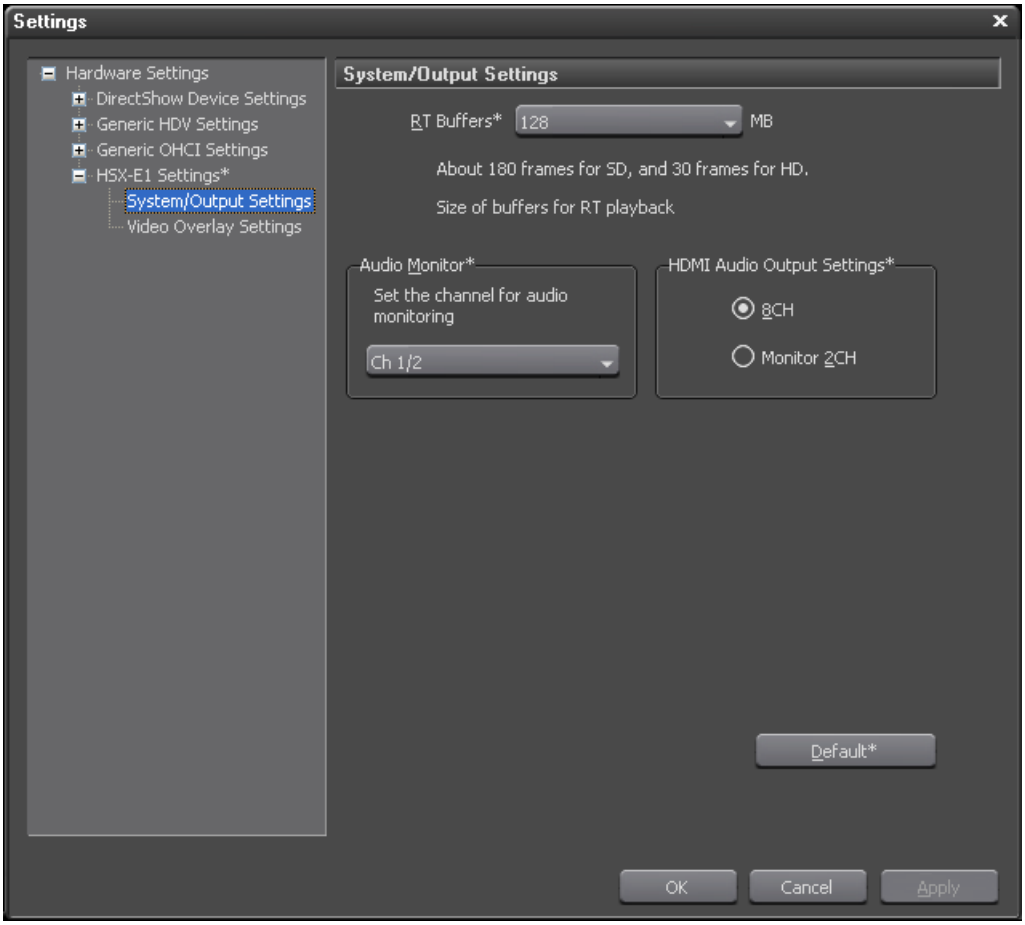
System/Output Settings

To define System Settings for an HSX-E1 device, do the following:

1. If necessary, click the “+” to expand the HSX-E1 Settings tree.

2. Select “System/Output Settings” from the HSX-E1 Settings tree. The dialog in Figure 881 appears.

Figure 881. HSX-E1 System/Output Settings Dialog



3. From the drop-down list, select the RT buffer frame size (stated as a number of Megabytes). Choices are: 128 (default), 256, 384, 512.

Note EDIUS renders ahead using the Real-Time playback buffer from which frames are then taken for playback. Memory reserved for the RT buffer is not available to other programs. If the RT buffer is too large, the system may run out of physical memory which will degrade real-time playback performance. Adjust the RT buffers with caution.

After changing the size of RT buffers, EDIUS must be restarted for the change to take effect.

4. From the Audio Monitor drop-down list, select the desired channel(s) for audio monitoring.

5. If audio is output via HDMI, select the desired audio channel output.

6. Click the **OK** button to save the settings and close the System Settings dialog.

While in the System Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

Video Overlay Settings

See *Video Overlay Settings* *on page 721*.

HDTHUNDER (HTX) Settings

EDIUS HDTHUNDER hardware displays as “HTX-E1” in the EDIUS settings screen and the Windows Device Manager.

HTX-E1 settings are accessed by selecting Settings>Hardware Settings from the Preview window and then selecting HTX-E1 Settings.

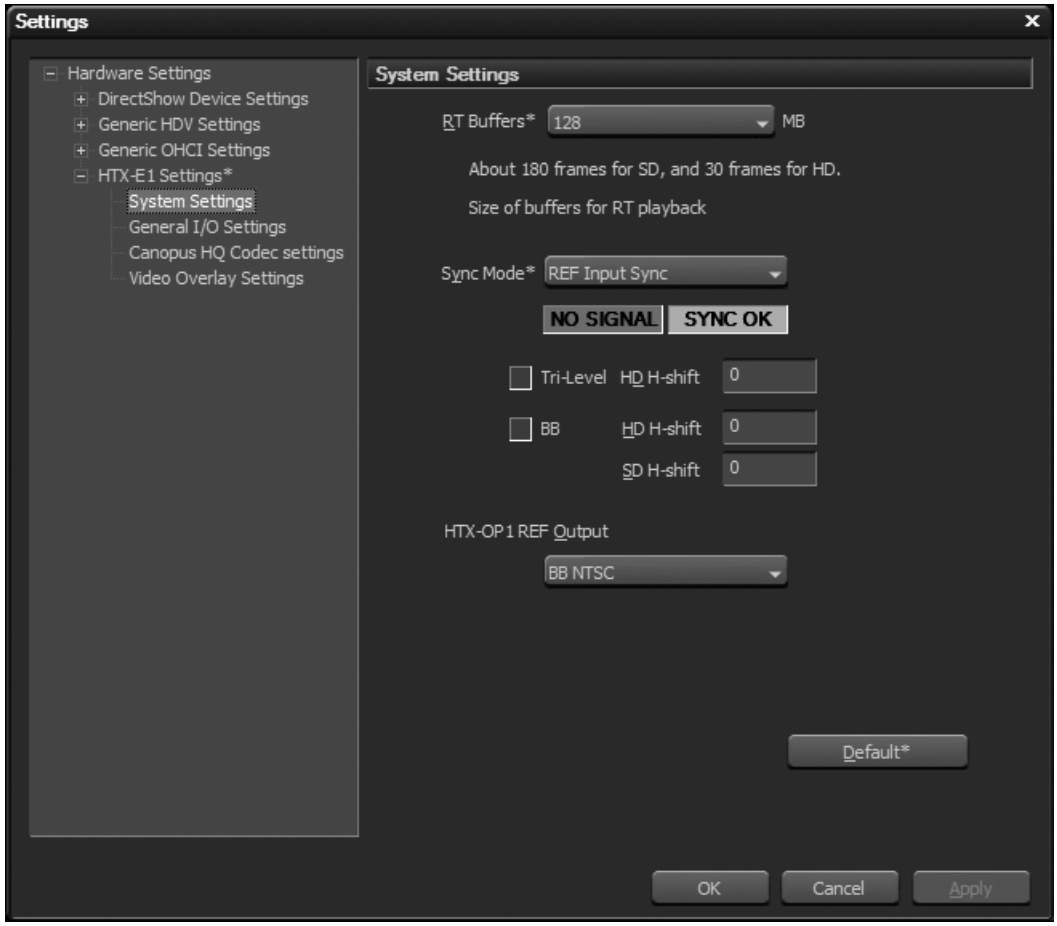
Note If the Hardware Settings tree is collapsed, click the “+” to expand the tree.

System Settings

To define System Settings for an HTX-E1 device, do the following:

1. If necessary, click the “+” to expand the HTX-E1 Settings tree.
2. Select “System/Output Settings” from the HTX-E1 Settings tree. The dialog in Figure 881 appears.

Figure 882. HTX-EI System Settings Dialog



3. From the drop-down list, select the RT buffer frame size (stated as a number of Megabytes). Choices are: 128 (default), 256, 384, 512.

Note EDIUS renders ahead using the Real-Time playback buffer from which frames are then taken for playback. Memory reserved for the RT buffer is not available to other programs. If the RT buffer is too large, the system may run out of physical memory which will degrade real-time playback performance. Adjust the RT buffers with caution.

After changing the size of RT buffers, EDIUS must be restarted for the change to take effect.

4. Select the desired Sync Mode from the Sync Mode drop-down list.

Note SYNC OK illuminates if the selected reference signal is detected on the HTX-E1. If No signal is detected, the NO SIGNAL indicator is illuminated.

5. Select the appropriate check box for Tri-Level Sync or Black Burst (BB) and if necessary, select the horizontal shift value.

6. Select the desired reference output from the HTX-OP 1 REF Output drop-down list.

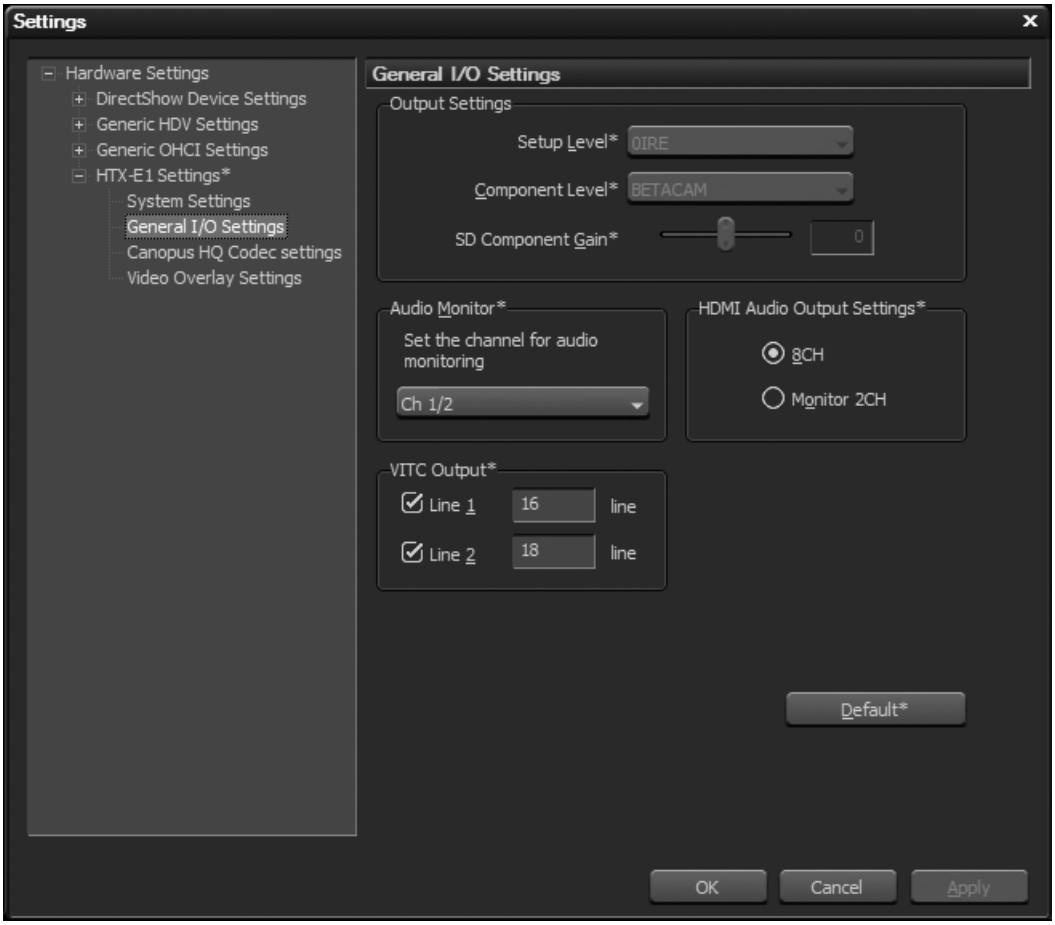
7. Click the **OK** button to save the settings and close the System Settings dialog.

While in the System Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

General I/O Settings

1. If necessary, click the "+" to expand the HTX-E1 Settings tree.
2. Select "General I/O Settings" from the HTX-E1 Settings tree. The dialog in Figure 883 appears.

Figure 883. HTX-E1 General I/O Settings Dialog



3. Select the desired setup level (black level) from the "Setup Level" drop-down list.
4. Select the desired component level from the "Component Level" drop-down list.

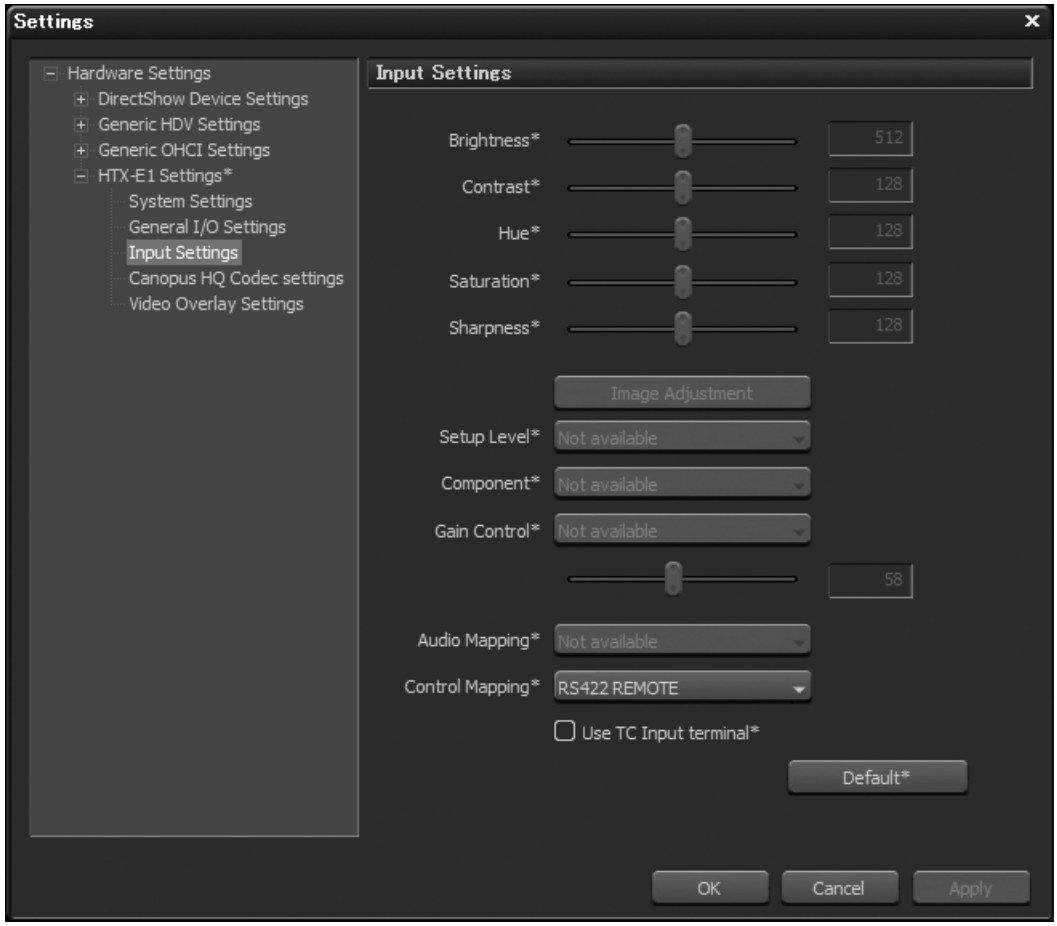
5. Set the SD Component Gain by moving the slider to select the desired value.
6. From the Audio Monitor drop-down list, select the desired channel(s) for audio monitoring.
7. If audio is output via HDMI, select the desired audio channel output.
8. Enter the vertical blanking interval line(s) on which VITC (vertical interval timecode) is output.
9. Click the **OK** button to save the settings and close the General I/O Settings dialog.

While in the General I/O Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

Input Settings

1. If necessary, click the "+" to expand the HTX-E1 Settings tree.
2. Select "Input Settings" from the HTX-E1 Settings tree. The dialog in Figure 884 appears.

Figure 884. HTX-E1 Input Settings Dialog



3. Set the desired Brightness, Contrast, Hue, Saturation and Sharpness levels by moving the related slider to adjust the value.

In the Image Adjustment settings, if available, do the following:

4. Select the desired setup level (black level) from the “Setup Level” drop-down list.

5. Select the desired component level from the “Component Level” drop-down list.

6. Adjust the Gain Control by moving the slider to select the desired value.

7. If available, select the desired audio mapping from the Audio Mapping drop-down list.

8. For control purposes, select the desired control mechanism from the Control Mapping drop-down list.

9. If you wish to use the TC input terminal for control, select this option.

10. Click the **OK** button to save the settings and close the Input Settings dialog.

While in the Input Settings dialog, clicking the **Default*** button returns all settings marked with an "*" to their default values.

Canopus HQ Codes Settings

See *Canopus HQ Codec Settings* *on page 719*.

Video Overlay Settings

See *Video Overlay Settings* *on page 721*.

EDIUS DirectShow Device Settings

DirectShow device settings should be set when you are using a DirectShow web camera or microphone as a capture device. If these devices have been configured, the device is available for selection as an "Input" device in the "Input Settings" dialog.

Direct Show Device Settings are accessed by selecting Settings>Hardware Settings from the Preview window and then selecting DirectShow Device Settings.

Note If the Hardware Settings tree is collapsed, click the "+" to expand the tree.

There are two settings dialogs for DirectShow Devices; "Canopus HQ Codec Settings" and Device Settings.

Canopus HQ Codec Settings

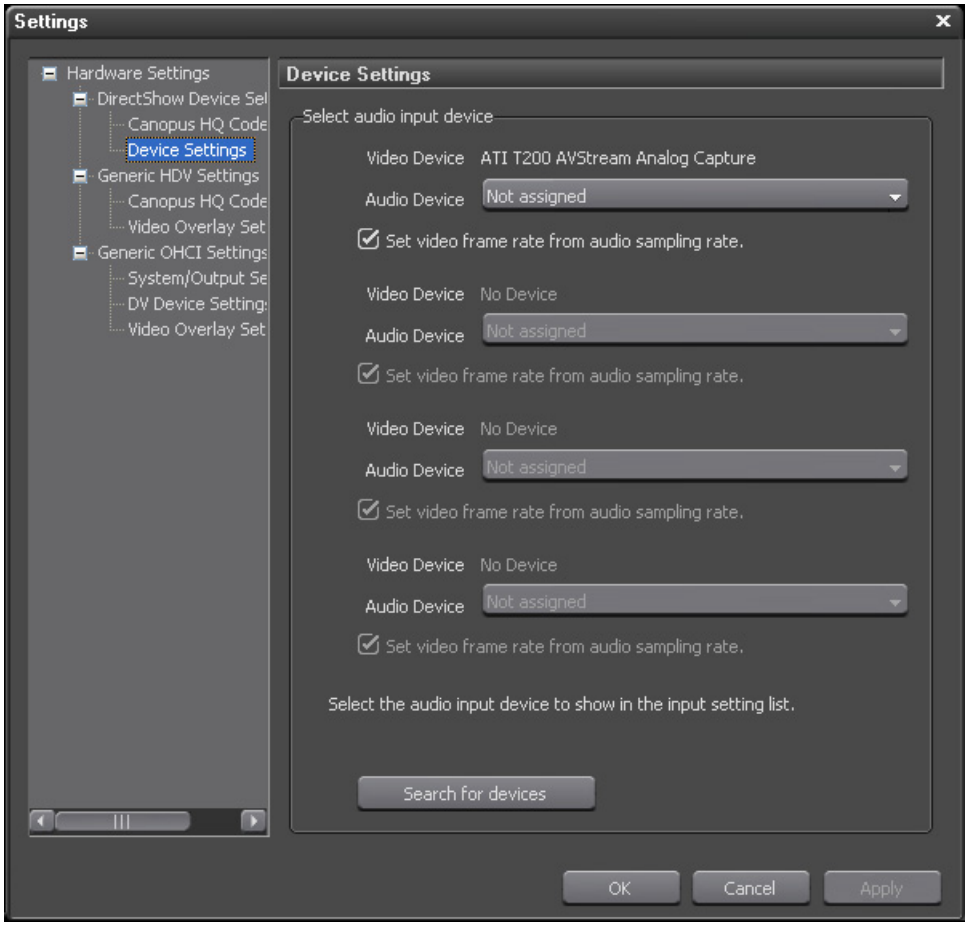
See *Canopus HQ Codec Settings* *on page 719*.

Device Settings

To define Device Settings for a DirectShow device, do the following:

1. If necessary, click the "+" to expand the DirectShow Device Settings tree.
2. Select "Device Settings" from the DirectShow Device Settings tree. The dialog in Figure 885 appears.

Figure 885. DirectShow Device Settings



Installed video capture device(s) are detected and displayed.

3. From the drop-down list, select the audio input device that supports the displayed video device The available choices depend upon the installed audio devices.

Note Select “Not Assigned” to clear the current selection.

The **Search for devices** button is clicked to force detection of all attached devices if a new device is attached after opening the Hardware Settings dialog.

4. Select the desired video frame rate calculation method by selecting or de-selecting the “Set video frame rate from audio sampling rate” check box. Default = Checked.

- Checked = calculate the video frame rate from the number of samples and duration time of the audio.
- Not Checked = calculate the video frame rate from the video capture device and convert the audio sampling rate accordingly.

5. Click the **OK** button to save settings and close the settings dialog.

EDIUS Generic HDV Settings

Generic HDV Settings are accessed by selecting Settings>Hardware Settings from the Preview window and then selecting Generic HDV Settings.

Note If the Hardware Settings tree is collapsed, click the "+" to expand the tree.

There are two settings dialogs for Generic HDV devices; "Canopus HQ Codec Settings" and "Video Overlay Settings."

Canopus HQ Codec Settings

See *Canopus HQ Codec Settings* *on page 719*.

Video Overlay Settings

See *Video Overlay Settings* *on page 721*.

EDIUS Generic OHCI Settings

Generic OHCI Settings are accessed by selecting Settings>Hardware Settings from the Preview window and then selecting Generic OHCI Settings.

Note If the Hardware Settings tree is collapsed, click the "+" to expand the tree.

There are three settings dialogs for Generic OHCI devices; "System/Output Settings", "DV Device Settings" and "Video Overlay Settings."

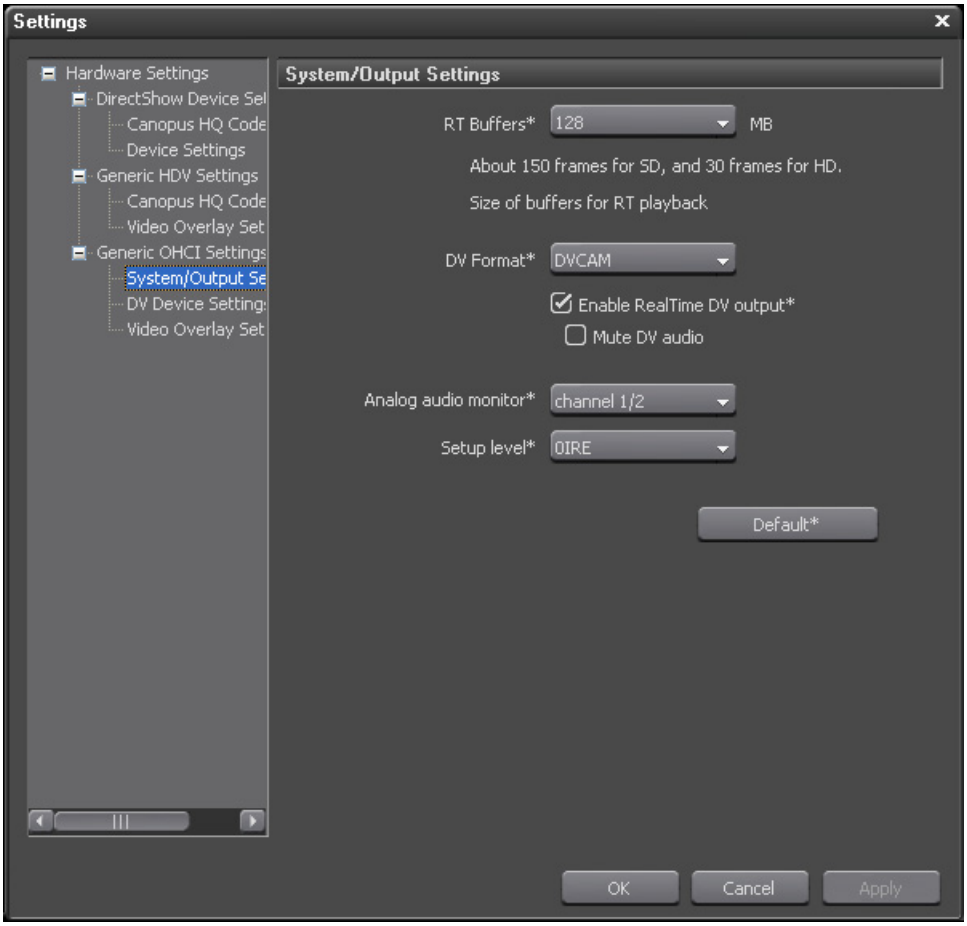
System/Output Settings

To define System/Output Settings for a generic OHCI device, do the following:

1. If necessary, click the "+" to expand the Generic OHCI Settings tree.

Select "System/Output Settings" from the Generic OHCI Settings tree. The dialog in Figure 886 appears.

Figure 886. Generic OHCI System/Output Settings



2. From the drop-down list, select the RT buffer frame size (stated as a number of Megabytes). Choices are: 128 (default), 256, 384, 512.

Note EDIUS renders ahead using the Real-Time playback buffer from which frames are then taken for playback. Memory reserved for the RT buffer is not available to other programs. If the RT buffer is too large, the system may run out of physical memory which will degrade real-time playback performance. Adjust the RT buffers with caution.

Note After changing the size of RT buffers, EDIUS must be restarted for the change to take effect.

3. From the drop-down list, select the desired encoding format. Choice are DVCAM (default) and DV.

4. If real-time DV encoding is desired, select Enable RealTime DV Output. Default = Checked.

With this option checked, EDIUS always performs real-time DV encoding.

5. Select the “Mute DV audio” option if you wish to mute audio during DV output. Default = Not Checked.

Note This selection is only available if RealTime DV output is enabled.

6. When an output format is selected that supports more than three audio track channels, select the sound card output channel. Choices are: Channel 1/2 (default), Channel 3/4, Channel 5/6, Channel 7/8.

7. Set the setup (black) level as desired. Choices are 0IRE (default) or 7.5IRE.

Note 0 IRE is used in Japan and 7.5 IRE is used in North America.

Click the **Default*** button to return all settings to their defaults.

8. Click the **OK** button to save changes and exit the dialog.

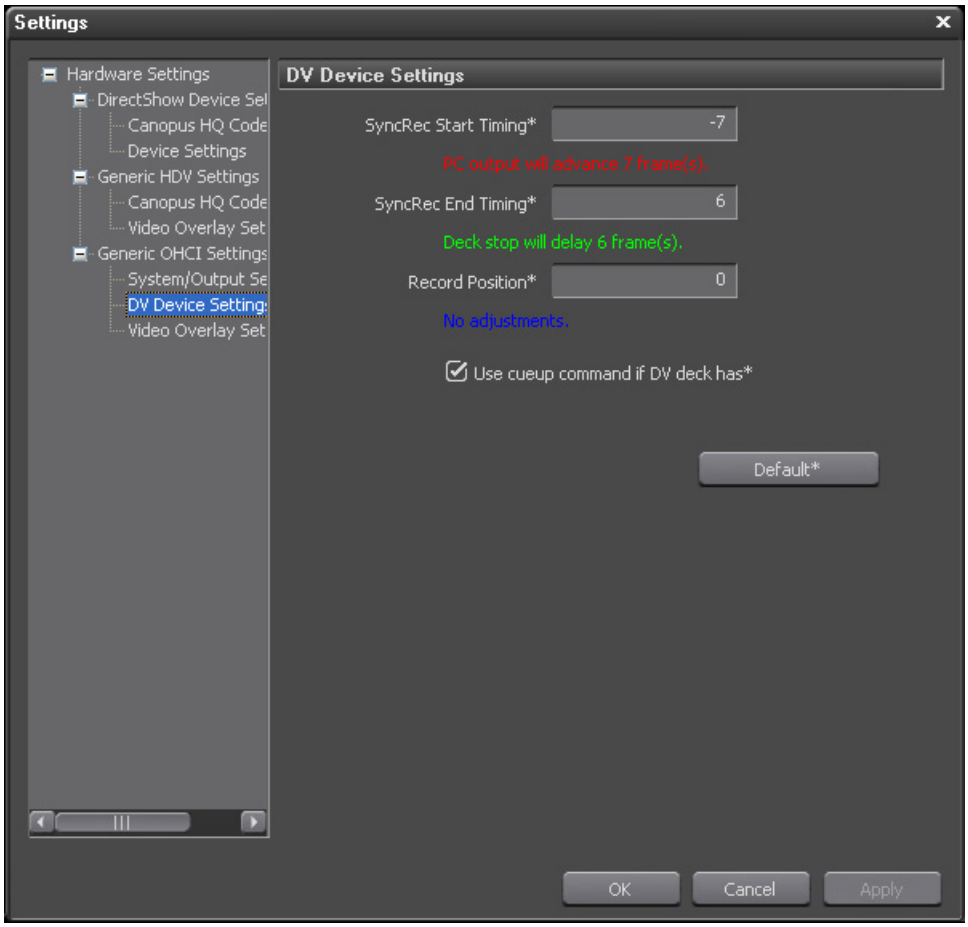
DV Device Settings

To define DV Device Settings for a generic OHCI device, do the following:

1. If necessary, click the “+” to expand the Generic OHCI Settings tree.

Select “DV Device Settings” from the Generic OHCI Settings tree. The dialog in Figure 887 appears.

Figure 887. Generic OHCI DV Device Settings



2. Set the desired SyncRec Start Timing by entering the desired timing adjustment (in frames) at the beginning of playback on the PC. Default = -7

3. Set the desired SyncRec End Timing by entering the desired timing adjustment (in frames) when stopping recording. Default = 6.

4. Set the Record Position adjustment (in steps) when beginning recording. Default = 0.

5. Select "Use cueup command if DV deck has" to speedup the cueup operation if the deck supports this function.

Click the **Default*** button to reset all settings to their defaults.

6. Click the **OK** button to save changes and close the dialog.

Video Overlay Settings

See *Video Overlay Settings* *on page 721*.

Appendix B

Special Procedures

This appendix explains special procedures that are possible using the tools and features of EDIUS.

Keyframeable 2D Picture-in-Picture

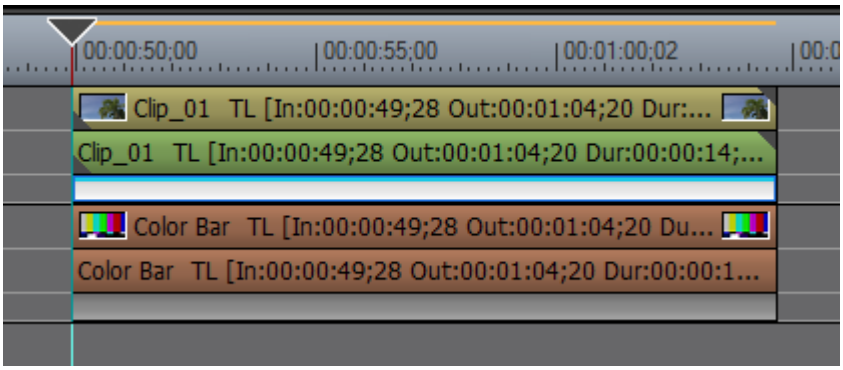
Unlike other keyframe operations, the Motion Keyframe function in the Picture in Picture (PIP) effect is not time based. This procedure documents the use of the Motion Keyframe in creating a keyframeable PIP effect.

To create a keyframeable 2D Picture-in-Picture effect, do the following:

1. Place a clip in the Timeline on a track above the track containing a color bar clip as illustrated in Figure 888.

Note The color bar clip is not required, you could use any clip you desire as the background clip; however, the color bar clip as the background makes some actions easier to see as you experiment with and learn this procedure.

Figure 888. Keyframeable 2D PIP - Clips on Timeline



2. Position the Timeline cursor at the beginning of the clip as shown in Figure 888.
3. Apply the Picture in Picture effect to the keyer area of the clip in the upper track.

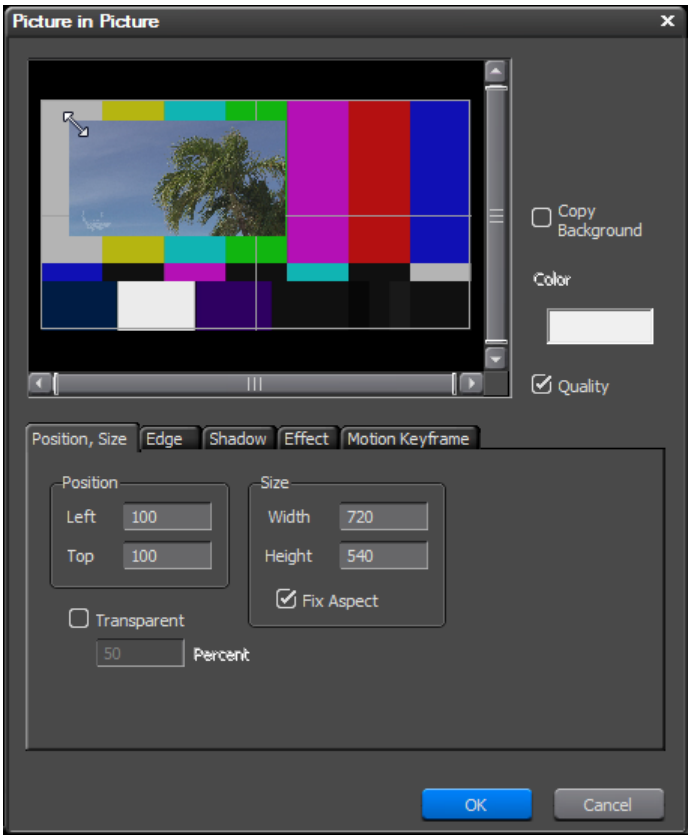
The Recorder window will look similar to the example in Figure 889.

Figure 889. Keyframeable 2D PIP - Recorder Preview

4. Open the Picture in Picture effect settings by double clicking the Picture in Picture effect in the effects list of the Information Palette.

The Picture in Picture settings dialog shown in Figure 890 opens.

Figure 890. Picture in Picture Settings Dialog



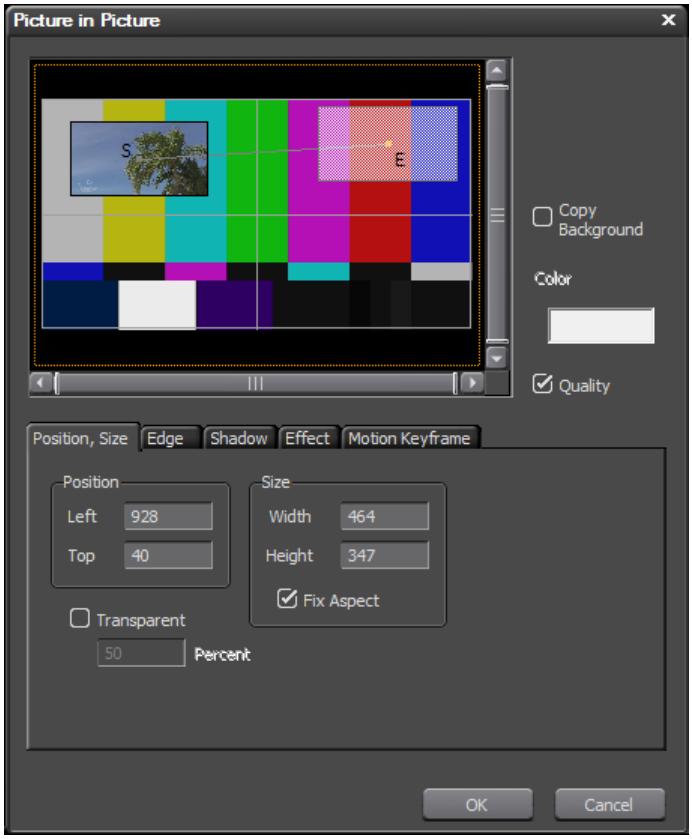
5. Move the cursor to the edge of the PIP image and the cursor will change to a resize cursor as illustrated in Figure 890 (upper left corner of the PIP image. Click the left mouse button and drag the cursor to resize the PIP image as desired.

6. If you wish to change the start position of the PIP image, place the cursor over the image (the cursor changes to a move cursor), click the left mouse button and drag the image to the desired position

7. Click the location in the preview window at which you want to position the center of the end location.

A checkerboard representation of the PIP image appears with a square in the middle and an "E" under the square. This is the End position. The image at the Start position has a point in the center with an "S" above it. A line connects the two points. This is the motion path for the Picture in Picture image. See the example in Figure 891.

Figure 891. Keyframeable 2D PIP - Motion Path Defined



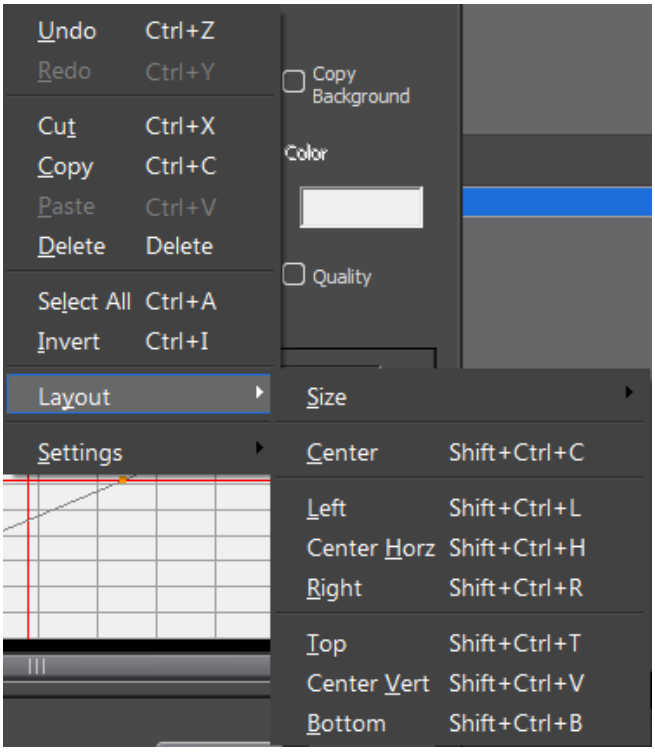
8. Resize the End frame if desired by placing the cursor on the edge of the frame and clicking and dragging the mouse cursor.

9. Move the End image if desired by positioning the cursor over the square in the middle of the image (an orange outline around the square will appear). Click and drag the square to the new center location for the End frame.

Note Be careful not to click anywhere except the square in the center of the image or you will add another keyframe position. If you need to delete a keyframe position, right-click on the center square (the orange outline appears) and select 'Delete" from the menu or press the [**DELETE**] key on the keyboard.

As illustrated in Figure 892, there are several layout options on the right-click menu which affect the selected keyframe. These may be used to set the keyframe position.

Figure 892. Keyframeable 2D PIP - Right-Click Layout Menu



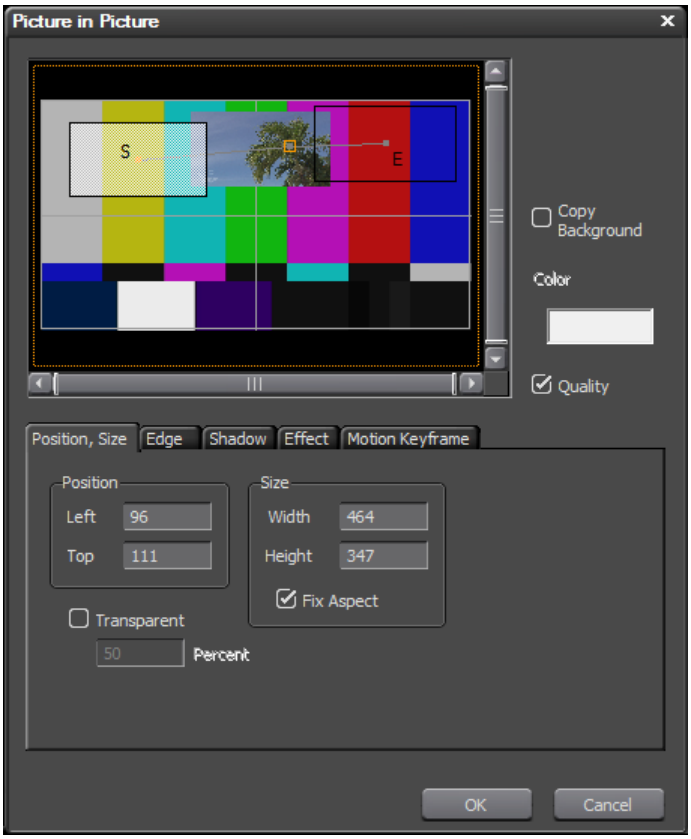
10. Move the Timeline cursor back and forth to see the image move and scale between the Start and End points. Make any adjustments that need to be made in image size or Start and End position.

11. Add a third keyframe position at a point between the Start and End position by clicking at the desired location.

12. Move the Timeline cursor to the center of the clip.

Note Unless the intermediate keyframe position (framed in orange) happens to be exactly at the center point of the motion path, the middle of the clip does not correspond to the intermediate keyframe position. With the Timeline cursor positioned in the middle of the clip, the middle of the clip is at the center point of the motion path as illustrated in Figure 893.

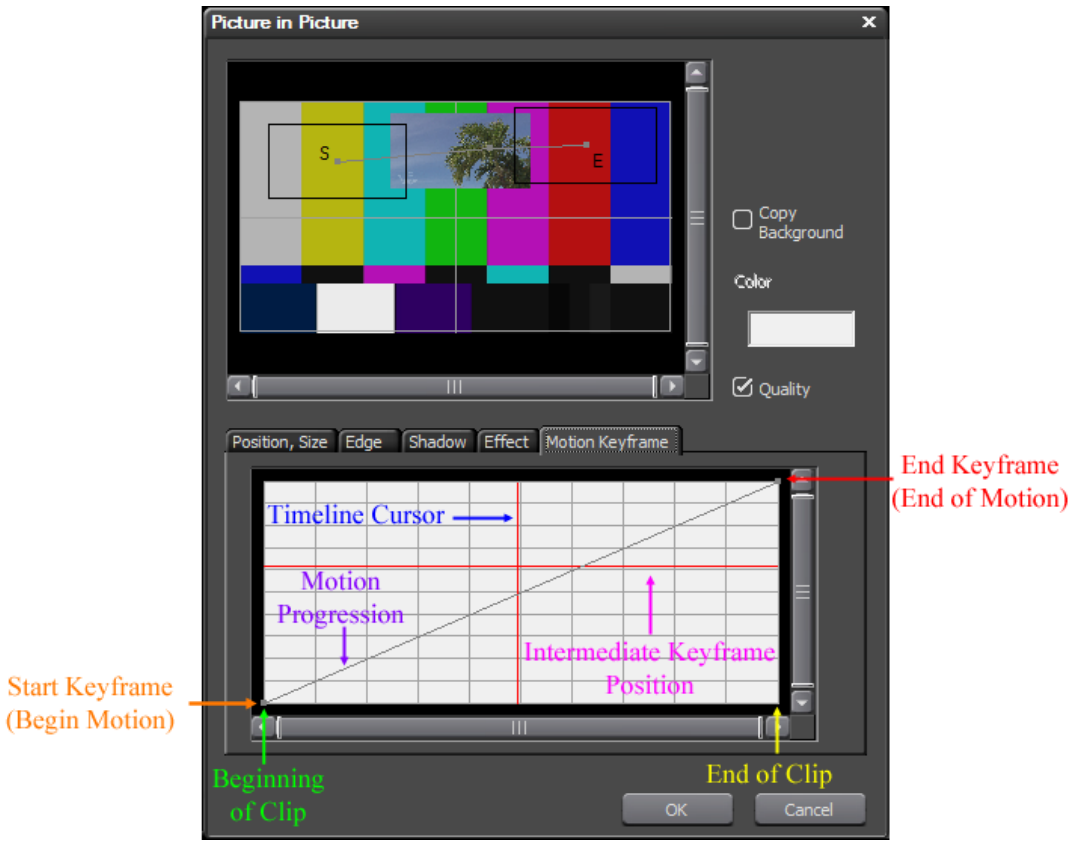
Figure 893. Keyframeable 2D PIP - Intermediate Keyframe



13. Click on the Motion Keyframe tab in the Picture in Picture settings dialog.

The dialog now looks like the example in Figure 894.

Figure 894. Keyframeable 2D PIP - Motion Keyframe Tab



As noted in Figure 894. the Motion Keyframe tab displays the following information:

- Vertical Red Line - Timeline cursor position
- Horizontal Red Line(s) - Intermediate keyframe positions

Note If there is more than one intermediate keyframe, there will be a red horizontal line for each intermediate keyframe.

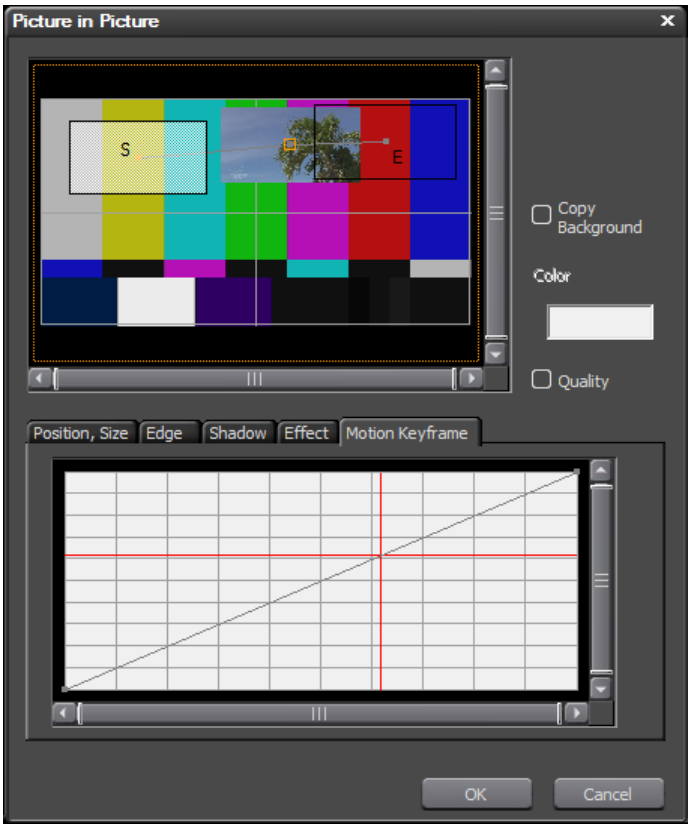
- Point at Bottom Left Corner - Start Keyframe (S)
- Point at Upper Right Corner - End Keyframe (E)
- Horizontal Axis - Beginning to end of clip
- Vertical Axis - Movement of image over the length of the clip
- Diagonal Grey Line - Motion progression of the PIP image

14. Move the Timeline cursor and watch the vertical red line change positions.

15. Move the Timeline cursor to the point at which the vertical red line, horizontal red line and grey line intersect.

As shown in Figure 895, this is the point at which the center of the image is at the intermediate keyframe position.

Figure 895. Keyframeable 2D PIP - Image at Intermediate Keyframe Position



16. Click somewhere on the graph other than the end points of the grey line or the point where the red lines intersect. This will create a new node - highlighted in orange - on the grey line.

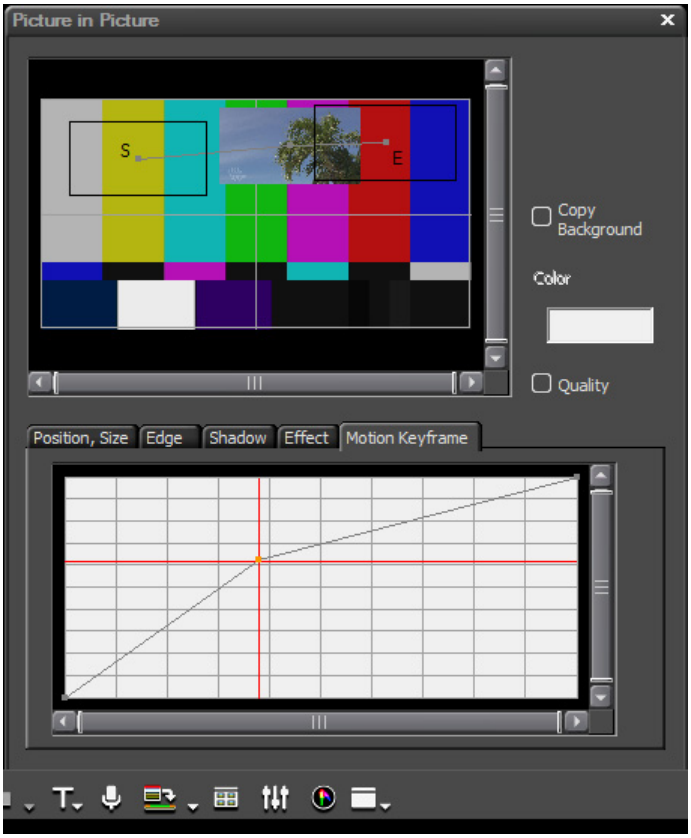
17. Move the node until it touches the red horizontal line.

18. Move the Timeline cursor towards the point at which the new node touches the red horizontal line.

Notice how the position of the PIP image moves towards the intermediate keyframe position and meets it when the vertical and horizontal red lines intersect at the orange square representing the new node.

The graph and preview window now appear similar to the example illustrated in Figure 896.

Figure 896. Keyframeable 2D PIP - Intermediate Keyframe Moved



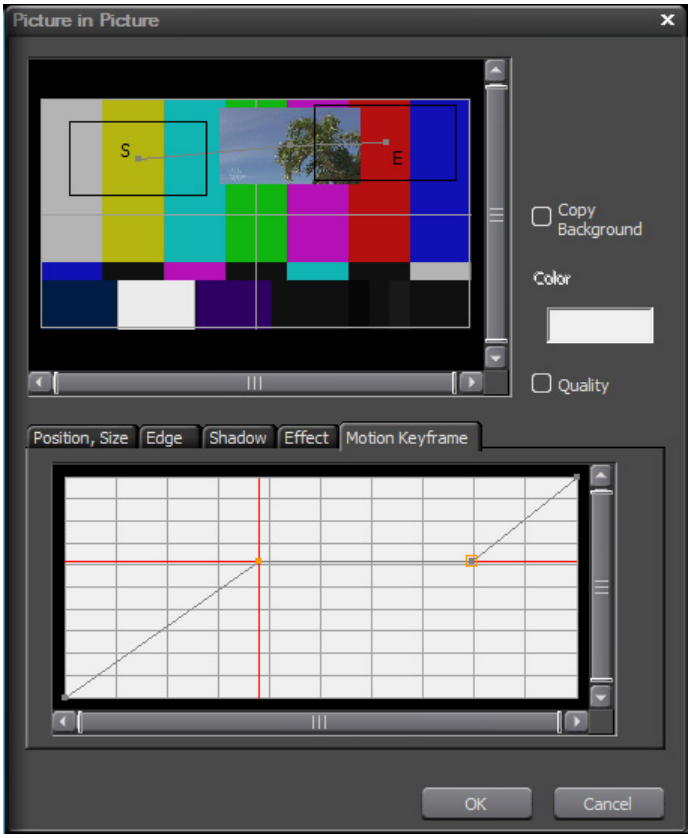
By changing the point at which the grey line intersects the horizontal red line, the movement progression from the Start point to the End point changes. When the grey line crosses a horizontal red line, the PIP images hits a defined keyframe.

19. Add another node to the grey line by clicking somewhere else on the line.

20. Click on the new node and move it until it touches the red horizontal line.

The grey line should now be riding (horizontal and on top of) the red horizontal line as illustrated in Figure 897.

Figure 897. Keyframeable 2D PIP - Two Nodes Flat on Grey Line



21. Move the Timeline cursor through the clip.

Notice how the clip holds at the intermediate keyframe position while the cursor moves through the area in which the grey line is riding the red horizontal line.

22. Click on the graph between the two existing nodes and add another node to the grey.

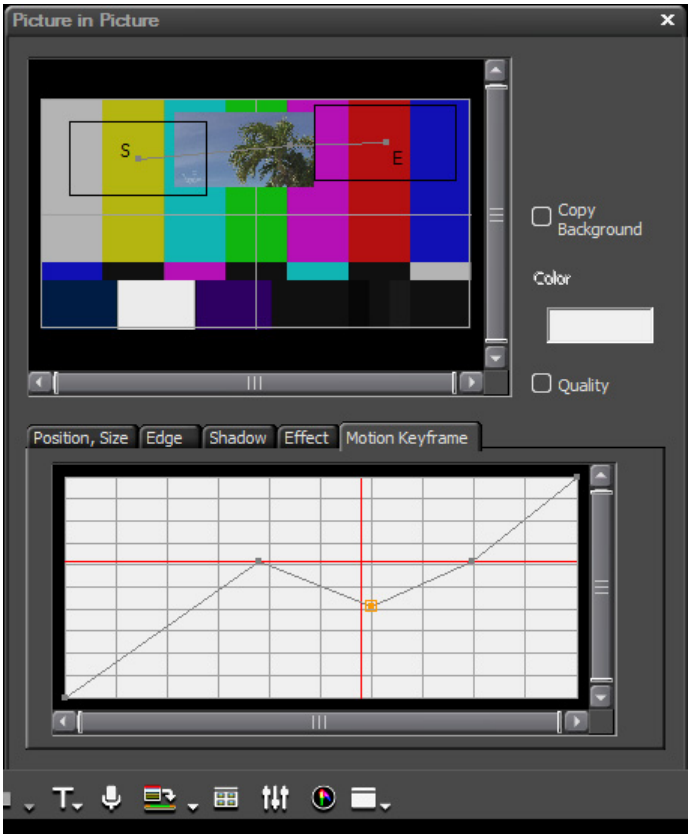
23. Drag the new node to a position under the red horizontal line.

24. Move the Timeline cursor through the clip.

Notice that the PIP image moves toward the intermediate keyframe position and then backtracks as it moves towards the node that is under the red line. It then continues its progression towards the End keyframe position after passing through the second node.

See Figure 898 for an example that illustrates this concept.

Figure 898. Keyframeable 2D PIP - Node Under Red Horizontal Line

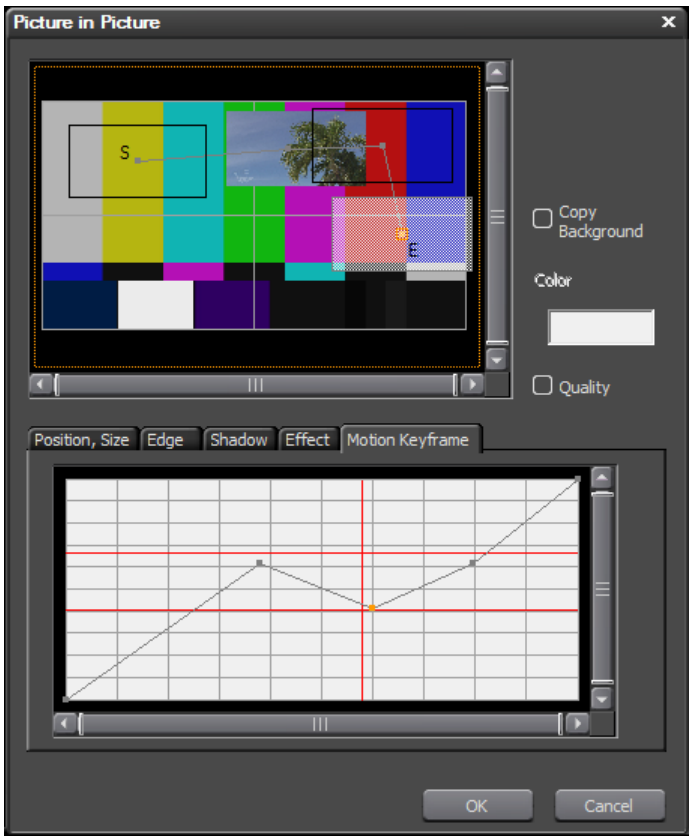


25. Click in the PIP preview window to add a new keyframe.

As shown in Figure 899, another red horizontal line appears on the motion keyframe graph and the previous End keyframe position becomes an intermediate keyframe. The position at which you added the new keyframe is now the new End keyframe position.

The red horizontal line representing the first key frame has now moved. Adding the new End keyframe changed the length of the motion path - it is now longer. Since the vertical axis represents the beginning to the end of the motion path, the position of the keyframes (red horizontal lines) changes to show their relative position over the entire length of the motion path.

Figure 899. Keyframeable 2D PIP - New End Keyframe



26. Move the nodes on the grey line to adjust the points at which the grey line intersects the red horizontal lines.

These intersection points correspond to timecodes in the clip at which the PIP image hits keyframes.

The best strategy is to define all the keyframe (hit points) first and then enter the Motion Keyframe tab and adjust the grey line so that the PIP image hits the keyframe points at the desired clip timecodes.

Appendix C

Input/Output Formats

Output Devices

Generic OHCI HD 60Hz

Table 8. Generic OHCI HD 60Hz

Output Format	Video Device
1920x1080 59.94i	AVCHD, Infinity, HD-D5, AVC-Intra 100, HDCAM-SR
1920x1080 29.97p	AVC-Intra 100, HDCAM-SR
1440x1080 59.94i	HDV (Sony, Canon), AVCHD, AVC-Intra50, HDCAM
1440x1080 29.97p	HDV (Sony, Canon)
1280x720 59.94p	HDV (JVC), Infinity, AVC Intra100
1280x720 29.97p over 59.94i	HDV (JVC)
1280x1080 59.94i	DVCPRO HD
1280x1080 29.97p over 59.94i	
960x720 59.94p	DVCPRO HD, AVC-Intra50
960x720 29.97p over 59.94p	DVCPRO HD

Generic OHCI HD 50Hz

Table 9. Generic OHCI HD 50Hz

Output Format	Video Device
1920x1080 50i	AVCHD, Infinity, HD-D5, AVC-Intra100, HDCAM-SR
1920x1080 25p	AVC-Intra 100, HDCAM-SR
1440x1080 50i 48kHz 2ch	HDV (Sony, Canon), AVCHD, AVC-Intr50, HDCAM
1440x1080 25p	HDV (Sony, Canon)
1280x720 50p	HDV (JVC), Infinity, AVC-Intra100
1280x720 25p	HDV (JVC)

Table 9. Generic OHCI HD 50Hz

Output Format	Video Device
1440x1080 50i 48kHz 2ch	DVCPRO HD
1440x1080 25p over 50i	
960x720 50p	DVCPRO HD, AVC-Intra50
960x720 25p over 50p	DVCPRO HD
960x720 50p over 60p	
960x720 25p over 60p	

Generic OHCI HD 24Hz

Table 10. Generic OHCI HD 24Hz

Output Format	Video Device
1920x1080 24p	HDCAM-SR
1920x1080 23.98p	AVC-Intra 100, HDCAM-SR
1440x1080 24p	HDCAM-SR
1440x1080 23.98p	HDV (Sony, Canon)
1280x720 23.98p	HDV (JVC)
1280x1080 23.98p over 59.94i	DVCPRO HD
1280x1080 23.98pA over 59.94i	
960x1080 23.98p over 59.94p	
960x1080 24p over 60p	

Generic OHCI SD NTSC

Table 11. Generic OHCI SD NTSC

Output Format	Video Device
720x486 59.94i 4:3	D1
720x486 59.94i 16:9	
720x480 59.94i 4:3 (DVD)	DVD
720x480 59.94i 16:9 (DVD)	
720x480 59.94i 4:3 48kHz 4ch	DVCPRO50
720x480 59.94i 16:9 48kHz 4ch	
720x480 59.94i 4:3 48kHz 2ch	DV, DVCAM
720x480 59.94i 4:3 44.1kHz	
720x480 59.94i 4:3 32kHz 2ch	
720x480 59.94i 4:3 32kHz 4ch	
720x480 59.94i 16:9 48kHz 2ch	
720x480 59.94i 16:9 44.1kHz	
720x480 59.94i 16:9 32kHz 2ch	
720x480 59.94i 16:9 32kHz 4ch	
720x480 29.97p over 59.94i 4:3	
720x480 29.97p over 59.94i 16:9	
720x480 59.94p 16:9	HDV (JVC)

Generic OHCI SD PAL

Table 12. Generic OHCI SD PAL

Output Format	Video Device
720x576 50i 4:3	D1, DVD
720x576 50i 16:9	
720x576 50i 4:3 48kHz 4ch	DVCPRO50
720x576 50i 16:9 48kHz 4ch	
720x576 50i 4:3 48kHz 2ch	DV, DVCAM
720x576 50i 4:3 44.1kHz	
720x576 50i 4:3 32kHz 2ch	
720x576 50i 4:3 32kHz 4ch	
720x576 50i 16:9 48kHz 2ch	
720x576 50i 16:9 44.1kHz	
720x576 50i 16:9 32kHz 2ch	
720x576 50i 16:9 32kHz 4ch	
720x576 25p over 50i 4:3	
720x576 25p over 50i 16:9	
720x576 50p 4:3	HDV (JVC)
720x576 50p 16:9	
720x576 25p 16:9	

Generic OHCI SD 24Hz

Table 13. Generic OHCI SD 24Hz

Output Format	Video Device
720x480 23.98p over 59.94i 4:3 48kHz	DV, DVCAM
720x480 23.98p over 59.94i 16:9 48kHz	
720x480 23.98pA over 59.94i 4:3 48kHz	
720x480 23.98pA over 59.94i 16:9 48kHz	

Input Devices

Generic OHCI Input

Table 14. Generic OHCI Input

Input Format	Codec	Video Device
DDCPRO HD 1280x1080 59.94i	DVCPRO HD	DVCPRO HD
DVCPRO50 720x480 59.94i	DVCPRO50	DVCPRO50
DV 720x480 59.94i	Canopus DV	
DVCPRO HD 1440x108 50i	DVCPRO HD	DVCPRO HD
DVCPRO50 720x576 50i	DVCPRO50	DVCPRO50
DV 720x576 50i	Canopus DV	
DVCPRO HD 960x720 59.94p	DVCPRO HD	DVCPRO HD
DVCPRO HD 960x720 Constant Rate Shooting over 59.94p		
DVCPRO HD 960x720 Constant Rate Shooting over 60p		
DVCPRO HD 960x720 50p		
DVCPRO HD 960x720 29.97p		
DVCPRO HD 960x720 25p		
DVCPRO HD 960x720 23.98p		

Generic HDV Input

Table 15. Generic HDV Input

Input Format	Codec	Video Device
Canopus HQ 1920x1080 59.94i	Canopus HQ	ADVC-HDM1
Canopus HQ 1440x1080 59.94i		HDV (Sony, Canon)
Canopus HQ 1440x1080 50i		
Canopus HQ 1440x1080 29.97		
Canopus HQ 1440x1080 23.98p over 59.94i		
Canopus HQ 1440x1080 23.98pA over 59.94i		HDV (Canon)
Canopus HQ 1440x1080 25p		HDV (Sony, Canon)
Canopus HQ 720 59.94p		HDV (JVC)
Canopus HQ 720 29.97p		
Canopus HQ 720 23.98p over 59.94p		
Canopus HQ 720 50p		
Canopus HQ 720 25p	Canopus HQ	HDV (JVC)
Canopus HQ 480 59.94p		
Canopus HQ 576 25p		
Canopus HQ 576 50p		

Table 16. HDV Output of Captured MPEG TS

Output Format	Video Device
MPEG TS 1920x1080 59.94i	ADVC-HDM1
MPEG TS 1440x1080 59.94i, 29.97p, 23.98p	HDV (Sony, Canon)
MPEG TS 1440x1080 50i, 25p	
MPEG TS 1280x720 29.97	HDV (JVC)
MPEG TS 1280x720 59.94p, 23.98p over 59.94p	
MPEG TS 1280x720 50p, 25p	

File Formats Supported In Trimming Operations

The Supported Operations are designated as follows:

- C - Copy
- M - Move
- D - Delete
- T - Trim

Table 17. Non-MPEG Video and Audio Formats

Format	File Composition	Supported Operations	Comments
DV AVI	Single File	C, M, D, T	Trimming is not allowed if the codec is DirectShow.
DIF Stream	Single File	C, M, D, T	
QuickTime	Single File	C, M, D	
WAVE	Single File	C, M, D	
Ogg Vorbis	Single File	C, M, D	
AIFF	Single File	C, M, D	
DirectShow Audio FIle	Single File	C, M, D	
Still	Single File	C, M, D	
QuickTitler	Single File	C, M, D	
Inscriber/ICG File	Single File	C, M, D	
Windows Media Video (WMV)	Single File	C, M, D	
Window Media Audio (WMA)	Single File	C, M, D	
DirectShow	Single File	C, M, D	
TelopStation Format	Multiple Files	C	
Frontec VZ50 (crawl)	Single File	C, M, D	
Frontec VZ50 (roll)	Single File	C, M, D	
Frontec VZ50 (still)	Single File	C, M, D	
AVCHD	Single File	C, M, D	
XDCAM EX	Multiple/Single File	C, D	When the clip is in XDCAM EX Media format, it cannot be deleted.
Dolby Digital AC-3	Single File	C, M, D	
GF	Multiple Files	C, M, D, T	After trimming, clip is saved as a single MXF file.

Table 17. Non-MPEG Video and Audio Formats

Format	File Composition	Supported Operations	Comments
Infinity	Multiple Files	C, M, D, T	After trimming, clip is saved as a single MXF file.
MXF	Single File	C, M, D, T	An MXF file containing only audio cannot be trimmed
XDCAM	Multiple Files	C, M, D, T	Trimming is available only when editing in high definition. After trimming, the clip is saved as a single MXF file.
P2 Clip	Multiple Files	C, M, D, T	
NEC GFX	XML (memory)	None	
VMF	XML (memory)	C	

Table 18. MPEG Video and Audio Formats

Format	File Composition	Supported Operations	Comments
MPEG 1/2 Video			MPEG1 and MOD pull-down streams cannot be trimmed.
- SD 720x480(576) 60i, 50i, 30p, 25p, 24p	Single File	C, M, D, T	
- SD 720x480 24p over 60i	Single File	C, M, D	
- SD 352x480(576) 60i, 50i, 30p, 25p, 24p	Single File	C, M, D, T	
- SD 352x480 24p over 60i	Single File	C, M, D	
- SD 352x240(288) 30p, 25p, 24p	Single File	C, M, D, T	
- SD 352x240 24p over 60i	Single File	C, M, D	
- HD 960x720 60i, 50i, 30p, 25p, 24p	Single File	C, M, D, T	
- HD 960x720 24p over 60i	Single File	C, M, D	
- HD 1280x1080 60i, 50i, 30p, 25p, 24p	Single File	C, M, D, T	
- HD 1280x1080 24p over 60i	Single File	C, M, D	
- HD 1440x1080 60i, 50i, 30p, 25p, 24p	Single File	C, M, D, T	
- HD 1440x1080 24p over 60i	Single File	C, M, D	
- HD 1920x1080 60i, 50i, 30p, 25p, 24p	Single File	C, M, D, T	
- HD 1920x1080 24p over 60i	Single File	C, M, D	
- HDV 1280x720 24p over 60p (JVC)	Single File	C, M, D	
- HDV 1280x720 24p over 50p (JVC)	Single File	C, M, D, T	
- HDV 1280x720 30p (JVC)	Single File	C, M, D, T	
- HDV 720x480 60p (JVC)	Single File	C, M, D, T	
- HDV 720x576 50p (JVC)	Single File	C, M, D, T	
- HDV 1440x1080 60i, 50i, 30p, 25p	Single File	C, M, D, T	
- HDV 1440x1080 24p over 60i	Single File	C, M, D	
- HDV 1440x1080 30p over 60i (Sony)	Single File	C, M, D	
- HDV 1440x1080 25p over 50i (Sony)	Single File	C, M, D	
- HDV 1440x1080 24p over 60i (Sony)	Single File	C, M, D	
MPEG 1/2 HVR-DR60	Multiple Files	C, D, T (for same formats as MPEG 1/2)	When the clip is loaded directly from the HVR-DR60, it cannot be deleted.
MPEG Audio Layer -3	Single File	C, M, D	
MPEG Audio	Single File	C, M, D	

Default Keyboard Shortcuts

The default keyboard shortcuts, organized by functional groupings, are presented in the tables below. However, keyboard shortcuts are customizeable and may be changed following the procedures outlined in *Keyboard Shortcut Settings* *on page 172*.

Asset Bin Shortcuts

Table 19. Asset Bin Shortcuts

Function	Shortcut	Function	Shortcut
Add clip in Player to Asset Bin	[SHIFT]+[CTRL]+[B]	Open project	[CTRL]+[O]
Open clip source file	[SHIFT]+[CTRL]+[P]	Delete unused rendered files	[ALT]+[Q]
Add file to Recorder	[SHIFT]+[CTRL]+[O]	Save as	[SHIFT]+[CTRL]+[S]
Print to Tape	[F12]	New sequence	[SHIFT]+[CTRL]+[N]
Search frame - Player	[SHIFT]+[CTRL]+[F]	New project	[CTRL]+[N]
Search frame - Recorder	{SHIFT]+[F]	Create new freeze frame	[CTRL]+[T]
Save project	[CTRL]+[S]		

Edit Shortcuts

Table 20. Edit Shortcuts

Function	Shortcut	Function	Shortcut
+1 frame trim	[.]	Set default transition	[CTRL]+[P]
+10 frame trim	[SHIFT]+[.]	Duration	[ALT]+[U]
-1 frame trim	[,]	Track lock	[ALT]+[L]
-10 frame trim	[SHIFT]+[,]	Paste transition to In point	[SHIFT]+[ALT]+[K]
Overwrite copied clip to Timeline	[SHIFT]+[]]	Set transition (1 sec)	[ALT]+[1]
Overwrite to Timeline	[]]	Set transition (2 sec)	[ALT]+[2]
Insert copied clip to Timeline	[SHIFT]+[[]	Set transition (3 sec)	[ALT]+[3]
Insert to Timeline	[[]	Set transition (4 sec)	[ALT]+[4]
V-mute	[SHIFT]+[V]	Set transition (5 sec)	[ALT]+[5]
Redo	[SHIFT]+[CTRL]+[Z]	Set add video	[SHIFT]+[J]
Redo	[CTRL+[Y]	Video mute	[SHIFT]+[W]
Set add audio	[SHIFT]+[K]	Toggle focus - Up	[CTRL]+[ALT]+[UP]
Remove cut points	[CTRL]+[DELETE]	Toggle focus - Down	[CTRL]+[ALT]+[DOWN]
Add cut point to selected track	[C]	Toggle focus - Right	[CTRL]+[ALT]+[RIGHT ARROW]
Paste transition to cursor position	[CTRL]+[ALT]+[K]	Toggle focus - Left	[CTRL]+[ALT]+[LEFT ARROW]
Paste to Timeline cursor position	[SHIFT]+[INSERT]	Move focus - Up	[SHIFT]+[CTRL]+[ALT]+[UP]
Paste to Timeline cursor position	[CTRL]+[V]	Duration - track transition Out	[CTRL]+[ALT]+[U]
Clip properties	[ALT]+[ENTER]	Mute	[SHIFT]+[S]
Clip enable/disable	[0]	Monaural channel 1 - selected track	[1]
Release clip channel - audio	[8]	Monaural channel 2 - selected track	[2]
Release clip channel - all	[9]	Monaural channel 3 - selected track	[3]
Set clip channel - video	[7]	Monaural channel 4 - selected track	[4]
Set clip channel - monaural channel	[SHIFT]+[X]	Initialize rubber band setting	[SHIFT]+[CTRL]+[U]
Copy to clipboard from Timeline	[CTRL]+[INSERT]	Ripple cut	[ALT]+[X}
Copy to clipboard from Timeline	[CTRL]+[C]	Unlink	[ALT]+[Y]
Cut to clipboard from Timeline	[SHIFT]+[DELETE]	Link	[Y]
Cut to clipboard from Timeline	[CTRL]+[X]	Undo	[CTRL]+[Z]
Remove group	[ALT]+[G]	Edit clip setting	[SHIFT]+[CTRL]+[E]
Stereo Channel 1, 2 - selected track	[5]	Replace clip on Timeline	[CTRL]+[R]
Stereo Channel 3, 4 - selected track	[6]	Speed	[ALT]+[E]
Split slide trim (Out mode)	[SHIFT]+[CTRL]+[ALT]+[M]	Add to Asset Bin	[SHIFT]+[B]
Create title in current track	[T]	Replace parts - clip	[SHIFT]+[R]
Add to Timeline	[E]	Replace parts - clip and filter	[SHIFT]+[ALT]+[R]
Time remap	[SHIFT]+[ALT]+[E]	Replace parts - filter	[ALT]+[R]
		Replace parts - mixer	[SHIFT]+[CTRL]+[R]

Edit - Delete Shortcuts

Table 21. Edit - Delete Shortcuts

Function	Shortcut	Function	Shortcut
Ripple delete between In/Out	[ALT]+[D]	Delete audio from selected clip	[ALT]+[A]
Delete between In/Out	[D]	Delete parts - audio filter	[CTRL]+[ALT]+[F]
Delete pan settings	[CTRL]+[ALT]+[H]	Delete parts - key	[CTRL]+[ALT]+[G]
Delete gap	[BACKSPACE]	Delete parts - cross fade	[CTRL]+[ALT]+[T]
Delete gap	[SHIFT]+[ALT]+[S]	Delete parts - transition	[SHIFT]+[ALT]+[T]
Delete volume setting	[SHIFT]+[ALT]+[H]	Delete parts - transparency	[SHIFT]+[CTRL]+[ALT]+[G]
Ripple delete	[[ALT]+[DELETE]	Delete video of selected clip	[ALT]+[V]
Delete	[DELETE]	Delete parts - video filters	[SHIFT]+[ALT]+[F]
Delete transition between selected clips	[ALT]+[T]	Delete parts - all filter	[SHIFT]+[CTRL]+[ALT]+[F]

Edit - Select Shortcuts

Table 22. Edit - Select Shortcuts

Function	Shortcut	Function	Shortcut
Select from Timeline cursor position to the start point of all tracks	[SHIFT]+[HOME]	Add focus - left	[SHIFT]+[ALT]+[LEFT ARROW]
Select from Timeline cursor position to the end point of all tracks	[SHIFT]+[HOME]	Add focus - right	[SHIFT]+[ALT]+[RIGHT ARROW]
Move selected track - Up	[UP]	Move selected focus - up	[ALT]+[UP]
Move selected track - Down	[DOWN]	Move selected focus - down	[ALT]+[DOWN]
Add focus	[ALT]+[SPACE]	Move selected focus - left	[ALT]+[LEFT ARROW]
Add/remove focus	[SHIFT]+[CTRL]+[ALT]+[SPACE]	Move selected focus - right	[ALT]+[RIGHT ARROW]]
Move focus - down	[SHIFT]+[CTRL]+[ALT]+[DOWN	Select a clip to move forward	[ALT]+[PAGE UP]
Move focus - right	[SHIFT]+[CTRL]+[ALT]+[RIGHT ARROW]	Select a clip to move backward	[ALT]+[PAGE DOWN]
Move focus - left	[SHIFT]+[CTRL]+[ALT]+[LEFT ARROW]	Select all tracks	[SHIFT]+[A]
Add focus - up	[SHIFT]+[ALT]+[UP]	Select all clips in selected tracks	[CTRL]+[A]
Add focus - down	[SHIFT]+[ALT]+[DOWN]	Clear focus	[SHIFT]+[ESC]

Edit - Move Shortcuts

Table 23. Edit - Move Shortcuts

Function	Shortcut	Function	Shortcut
Timecode jump (+)	[+] on numeric keypad only	Move to end	[END]
Timecode jump (-)	[-] on numeric keypad only	Next edit point	[CTRL]+[RIGHT ARROW]
Print to file	[F11]	Next edit point	[AS
Display master clip	[ALT]+[F]	Next edit point - trim	[PAGE DOWN]
Match frame Player>Recorder	[CTRL]+[F]	Select 1A track	[SHIFT]+[1]
Match frame Recorder>Player	[F]	Select 1VA/V track	[SHIFT]+[5]
Move to start	[HOME]	Select 2A track	[SHIFT]+[2]
Previous edit point	[CTRL]+[LEFT ARROW]	Select 2VA/V track	[SHIFT]+[6]
Previous edit point	[A]	Select 3A track	[SHIFT]+[3]
Previous edit point - trim	[PAGE UP]	Select 4A track	[SHIFT]+[4]

View Shortcuts

Table 24. View Shortcuts

Function	Shortcut	Function	Shortcut
Expand audio track display	[ALT]+[S]	Time scale - fit	[CTRL]+[0]
Display Asset Bin window	[B]	Time scale - undo	[CTRL]+[U]
Expand mixer track	[ALT]+[W]	Time scale - 1 frame	[CTRL]+[1]
Toggle Player/Recorder	[TAB]	Time scale - 1 min	[CTRL]+[6]
Switch to Player	[CTRL]+[ALT]+[P]	Time scale - 1 hour	[CTRL]+[9]
Switch to Recorder	[CTRL]+[ALT]+[R]	Time scale - 1 sec	[CTRL]+[3]
Display waveform	[CTRL]+[W]	Time scale - 15 min	[CTRL]+[8]
Clip channel setting - stereo channel	[SHIFT]+[CTRL]+[X]	Time scale - 15 sec	[CTRL]+[5]
Set group	[G]	Time scale - 5 frame	[CTRL]+[2]
Display thumbnail	[ALT]+[H]	Time scale - 5 min	[CTRL]+[7]
Switch Timeline sequence	[CTRL]+[TAB]	Time scale - 5 sec	[CTRL]+[4]
Scroll - up	[SHIFT]+[CTRL]+[PAGE UP]	Track height - low	[CTRL]+[DOWN]
Scroll - down	[SHIFT]+[CTRL]+[PAGE DOWN]	Track height - high	[CTRL]+[UP]
Scroll - right	[CTRL]+[PAGE DOWN]	Toggle batch capture display	[F10]
Scroll - left	[CTRL]+[PAGE UP]	Toggle palette display	[H]
Time scale - zoom out	[CTRL]+[-] numeric keypad only	Help (cannot be changed)	[F1]
Time scale - zoom in	[CTRL]+[+] numeric keypad only	Focus menu	[SHIFT]+[F1]
Toggle status display	[CTRL]+[G}	Rubber band scale	[SHIFT]+[ALT]+[Y]
Toggle center - line display	[SHIFT]+[H]	Layout - Normal	[SHIFT]+[ALT]+[L]
Toggle safe area display	[CTRL]+[H]		

Play Shortcuts

Table 25. Play Shortcuts

Function	Shortcut	Function	Shortcut
10 frames back	[SHIFT]+[LEFT]	Pause	[K]
10 frames forward	[SHIFT]+[RIGHT]	Stop	[SHIFT]+[DOWN]
Play the cursor area	{CTRL]+[/]	Play/stop	[SPACE]
Play the cut point area	[/]	Play/stop	[ENTER]
Jog (forward)	[CTRL]+[L]	1 frame back	[LEFT ARROW]
Jog (rewind)	[CTRL]+[J]	Reverse	[[J]
Buffer playback	[SHIFT]+[SPACE]	Fast forward	[L]
Buffer playback	[SHIFT]+[ENTER]	1 frame forward	[RIGHT ARROW]
Loop	[CTRL]+[SPACE]	Display in Player	[SHIFT]+[Y]
Pause	[CTRL]+[K]		

Marker Shortcuts

Table 26. Marker Shortcuts

Function	Shortcut	Function	Shortcut
Move to audio In	[SHIFT]+[U]	Slide trim In	[CTRL]+[ALT]+[N]
Set audio In	[U]	Slide trim Out	[CTRL]+[ALT]+[M]
Move to audio Out	[SHIFT]+[P]	Shift cut point to cursor - transition	[SHIFT]+[CTRL]+[T]
Set audio Out	[P]	Paste transition to Out point	[ALT]+[K]
Clear In/Out	[X]	Set transition to In point	[SHIFT]+[ALT]+[P]
Set In	[I]	Set transition to Out point	[ALT]+[P]
Go to In	[Q]	Trim - In point	[N]
Go to In	[SHIFT]+[I]	Trim - Out point	[M]
Clear In	[ALT]+[I]	Add marker	[V]
Set out	[O]	Clear mark - all	[SHIFT]+[ALT]+[V]
Go to Out	[W]	Duration - track transition In	[SHIFT]+[ALT]+[U]
Go to Out	[SHIFT]+[O]	Ripple trim In	[ALT]+[N]
Clear Out	[ALT]+[O]	Ripple trim Out	[ALT]+[M]
Add cut point - In/Out - all	[SHIFT]+[ALT]+[C]	Move to previous marker	[SHIFT]+[PAGE UP]
Add cut point - In/out - selected tracks	[ALT]+[C]	Move to next marker	[SHIFT]+[PAGE DOWN]
Add cut point - all	[SHIFT]+[C]	Set focus clip In/Out point	[Z]
Set In/Out on current clip	[SHIFT]+[Z]		

Mode Shortcuts

Table 27. Mode Shortcuts

Function	Shortcut	Function	Shortcut
Split slide trim In	[SHIFT]+[CTRL]+[ALT]+[N]	Trim	[F6]
Split trim In	[SHIFT]+[N]	Video layout	[F7]
Split trim Out	[SHIFT]+[M]	Set ripple mode	[R]
Split ripple trim In	[SHIFT]+[ALT]+[N]	Toggle insert/overwrite	[INSERT]
Split ripple trim Out	[SHIFT]+[ALT]+[M]	Normal	[F5]
Mode - Multi Cam			
Multi cam	[F8]		
Mode - Capture			
Capture	[F9]	Input preset 2	[F3]
Add to batch capture list	[CTRL]+[B]	Input preset 3	[F4]
Input preset 1	[F2]		
Mode - Render			
Render In/Out - render loaded area (orange)	[CTRL]+[ALT]+[Q]	Render and add to Timeline	[SHIFT]+[Q]
Render In/Out - all	[SHIFT]+[ALT]+[Q]	Render all - render loaded area (orange)	[SHIFT]+[CTRL]+[ALT]+[Q]
Render In/Out - render overload area (red)	[CTRL]+[Q]	Render all - render overload area (red)	[SHIFT]+[CTRL]+[Q]
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