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IGNITE/IGNITE KONNECT

LIVE PRODUCTION CONTROL SYSTEM

User Manual

Software Version 7.1

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OCTOBER 2013

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Grass Valley Web Site

The http://www.grassvalley.com/support 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.

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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, and ask to be connected to the EH&S Department. Additional information concerning the program can be found at: www.grassvalley.com/about/environmental-policy

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Preface

About This Manual

This manual is a part of the Ignite/Ignite Konnect Live Production Control System documentation set (refer to *Standard Documentation*). As a part of the documentation set, the contents of this manual support a specific purpose in either planning, installation/service, configuration, or use/operation. In all cases, the user is presumed to be familiar with associated concepts and terminology and to have the skills and experience necessary for that purpose.

Standard Documentation

The standard Ignite/Ignite Konnect documentation set comprises:

- Release Notes—Describes any release-specific information. New features and corrected problems not included in the base manual set are included, as well as software installation procedures.
- Release Notes Addendum – When applicable, describes corrected problems in the current and previous releases as well as any known software problems.
- User Manual—Intended for an Ignite/Ignite Konnect system operator, this manual describes basic operational procedures and provides background information users should understand before they operate the system.
- Installation Manual—Intended for facility engineering staff, this manual describes how to install the product within the customer environment.
- XSWITCH Instruction Manual—Provides an overview,hardware installation. interconnection, and software setup information.

Other Documentation

This Ignite/Ignite Konnect Live Production Control System documentation provides information on the use of the peripheral components as they

relate to the Ignite/Ignite Konnect system. For any other peripheral component information, refer to the respective support documentation.

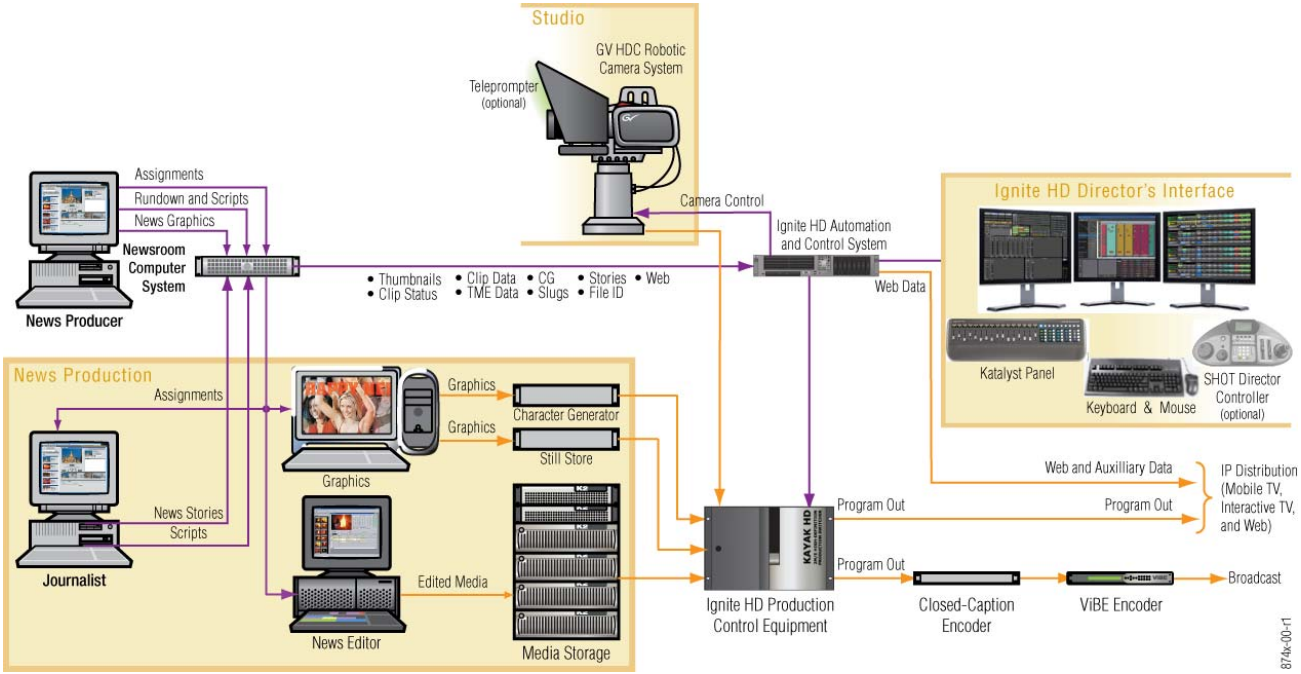
Section 1

System Overview

The Ignite™ Live Production Control System (Figure 1) is an integrated software and hardware production solution that enables one or two operators to produce and broadcast live high-definition (HD) programs. The Ignite/Ignite Konnect system accomplishes this by functioning as a single point-of-control for the devices used in live television production. This design places special emphasis on live broadcast news and therefore, it is also perfect for non-scripted events such as: election coverage, talk shows, live entertainment segments, and breaking-news stories.

Ignite/Ignite Konnect systems are fully scalable, enabling the video professional to choose the configuration that best fits both their capital budget and production needs.

Figure 1. Ignite/Ignite Konnect System Overview Example



Software Overview

Ignite/Ignite Konnect software combines single-point device control and sophisticated production automation features into a single tri-monitor graphical user interface (GUI) (Figure 2) where:

- The left monitor contains the Audio, Device Control, Device Manager, CG/SS Hotkeys, Camera Preset Hotkeys, and Clock modules.
- The middle monitor contains the Event Timeline, Late Breaking News (LBN), and Script/CG List modules.
- The right monitor contains the Switcher module with Mix/Effects (M/E) buses and DPMs.

Figure 2. Ignite/Ignite Konnect Three-Monitor Sample GUI Display

Single-Point Device Control

Control of all production devices (video servers, VTRs, audio servers, audio mixers, video switchers, and cameras) is accomplished from the Ignite/Ignite Konnect GUI via individual device GUIs. Each device GUI has a unique look and color relationship specific to the device being emulated (Figure 3).

Note For a current list of supported/controlled devices, contact an authorized Grass Valley reseller or contact Grass Valley sales directly (refer to *Contacting Grass Valley* *on page 4*).

Figure 3. Device Control Module Examples (Video Server, VTR, Audio, RAM Recorder, ENCO)

A Device Manager (Figure 4) monitors the status of each device and provides event messages and status indicators to the operator. It provides the ability to change device configurations, and it also provides the ability to take or relinquish control of all production devices with the click of a button, by placing the workstation in the **LIVE** or **PREP** mode, in Ignite/Ignite Konnect systems with redundancy (refer to *Redundancy Options* on page 23).

Figure 4. Device Manager GUI

Production Automation

Production automation is accomplished using Transition Macro™ Events (TME). A TME is a group of individual production tasks that are combined to create an automated video production event. TMEs are created, saved, and recalled as necessary to automate and control the look, feel, and flow of a broadcast. Show-specific TMEs are then placed, in order, on the Event Timeline GUI. The timeline cursor sequentially executes each of the TMEs as its progresses along the timeline. Dynamic script synchronization keeps scripts synced to the timeline event changes.

A Newsroom Computer System (NCS) interface supports rundown conversion of news commands using TME associations. TME associations are automation directives embedded by the Director into news items on iNEWS and ENPS (MOS based) news systems. The Ignite/Ignite Konnect rundown converter retrieves and parses the rundown from the NCS, then automatically creates a show on the Ignite/Ignite Konnect event timeline based on the TME associations.

Late Breaking News (LBN) events are quickly and easily handled via LBN hotkeys. TMEs or sequences of multiple TMEs stored on any of 308 LBN hotkeys are inserted into the timeline for execution anytime during a show.

Hardware Overview

Ignite™ Live Production Control Systems are modular and fully scalable, enabling the video professional to choose the configuration that best fits their production needs. Ignite/Ignite Konnect systems are available in HD switchable formats from 1 – 5 M/Es. The number of available M/Es depend on the installed switcher.

Core Components

Ignite/Ignite Konnect systems include the core hardware components listed in Table 1. Core component configurations are determined by selecting a standard system and adding production specific and redundancy options (refer to *Options* on page 21).

Table 1. Ignite/Ignite Konnect System Basic Configuration

Component	Description
Firewall	Provides intrusion prevention for the Ignite/Ignite Konnect network and reduces Ignite/Ignite Konnect system network traffic by isolating it from the facility (house) LAN (with the exception of a connection to the facility provided XMOS/MOP server).
Network Switch	28-port, 10/100/1000 Gigabit Ethernet switch provides connection to all Ignite/Ignite Konnect TCP/IP network devices. RJ45, auto-sensing ports detect and adjust their speed and duplex (half or full) to the connected device. A 24-port model is provided with fully redundant systems.

Table 1. Ignite/Ignite Konnect System Basic Configuration

Component	Description
Automation CPU	Dual-processor with quad VGA graphics card and internal RAID drive array running Ignite/Ignite Konnect application software in a Windows™ operating system environment.
Video Switcher	Grass Valley™ Kayenne™, Kayak™, Kalypso™ digital production switchers
Serial Control Module	Enables communications with serial controlled devices over an Ethernet network. Device ports are software configurable RS-422 or RS-232 for controlling a wide range of devices.
Tally Expander	64 GPO relays for external device control operated through logic parameters or commands on the Ignite/Ignite Konnect event timeline. 32 GPI connections to control the Ignite/Ignite Konnect event timeline. Controlled through network connection using standard IP protocol.
Multi-Monitor Display Workstation	3 Ignite/Ignite Konnect GUI 20" VGA LCD monitors, keyboard, optical mouse, Ignite Katalyst™ panel, audio processor 19" VGA LCD monitor, keyboard, and optical mouse.
Ignite Katalyst Panel	A compact, tactile, Ignite/Ignite Konnect automation-interface panel that works dynamically with Ignite/Ignite Konnect software to replace cumbersome traditional switchers and audio panels. It has 10-pages of 24-programmable keys (240 total) and 16 motorized, dynamic audio faders with audio control buttons for Hold. Button and fader configurations are easily programmed to store and recall simple or complex functions such as Manual Video Switching & Audio Mixing, Event Timeline Next Event Command, Manual CG & Keyer Controls, GPI Triggers, ShowBuilder Key Insert & Take Commands, Audio Talk-Back, Cue, Hold, & Group Commands. NOTE: The Ignite Katalyst™ panel is not required for Ignite/Ignite Konnect Live Production Control system operation but rather provides an alternate, manual event-triggering capability. NOTE: Not available with Ignite/Ignite Konnect without audio option.

Options

Customer-specific production and redundancy options are integrated into a selected standard system to produce a cost-effective, customized production solution for every user.

Production Options

Production options are listed in Table 2.

Table 2. Production Options

Option	Description
Ignite	This option is for GV Kayak switchers
Ignite Konnect	This option is for GV Kayenne and Kalypso switchers.
Yamaha Audio Control	This option provides Ignite/Ignite Konnect with the capabilities to use Yamaha Mixer LS9 (-16 and -32) series as an alternative choice to the Klotz audio processor. Standard Ignite/Ignite Konnect system audio processor hardware is omitted from the purchase order, and the Ignite/Ignite Konnect application is installed with Yamaha audio control component/functionality. **Note** The customer must provide all necessary audio processing hardware.

Table 2. Production Options

Option	Description
Wheatstone Audio Control	This option provides Ignite/Ignite Konnect with an automation interface to the D-10 panel. For panel-specific user and set up information, refer to the manufacturer's documentation. Standard Ignite/Ignite Konnect system audio processor hardware is omitted from the purchase order, and the Ignite/Ignite Konnect application is installed with Yamaha audio control component/functionality. **Note** The customer must provide all necessary audio processing hardware.
Calrec Audio Control	This option provides Ignite/Ignite Konnect with an automation interface to the Calrec panel. For panel-specific user and set up information, refer to the manufacturer's documentation. Standard Ignite/Ignite Konnect system audio processor hardware is omitted from the purchase order, and the Ignite/Ignite Konnect application is installed with Yamaha audio control component/functionality. **Note** The customer must provide all necessary audio processing hardware.
Ignite/Ignite Konnect Without Audio	This option is for customers who for financial or technical reasons, wish to control audio outside of the Ignite/Ignite Konnect system. Standard Ignite/Ignite Konnect system audio processor and Ignite Katalyst™ hardware are omitted from the purchase order, and the Ignite/Ignite Konnect application is installed without audio control component/functionality **Note** The customer must provide all necessary audio processing hardware. .
Audio Processor	Optional Klotz audio processor provides 24/8, 32/16, 48x24, 64x40, or, 96x48 line level analog or AES/EBU stereo pair audio inputs/outputs. Other interfaces available, refer to supported devices list.
Audio I/O:	Additional audio inputs/outputs can be added to the Ignite/Ignite Konnect base system (32x16, 48x24, 64x40, or 96x48). **Note** Not available with Yamaha/Wheatstone/Calrec audio control or Ignite/Ignite Konnect without audio options.
Serial Control:	16 serial control ports can be added to the 16 serial control ports of the Ignite/Ignite Konnect base system (for a total of 32).
Video – Manual Control Panel:	The control panel is not intended to work while the automation is running. The intent is for either the automation to control the Kayak mainframe or the Control Panel to control the Kayak mainframe. The two should never be operated together.
Prep Workstation:	The second system that allows one director to prepare their show while another show is aired from the LIVE system. The Prep workstation includes 3 Ignite/Ignite Konnect GUI 20" VGA LCD monitors, keyboard, optical mouse.
Grass Valley HDC Robotic Camera	High Definition, multi-format Robotic Camera for global HD support 1080/60i/59.94i/50i/30p/25p/24p 720/60p/59.95p/50p HD - SDI standard output Fully integrated robotics, lenses, and camera With/without integrated, high-quality, through-the-lens teleprompter NOTE: Requires SHOT Director robotics/camera controller.
SHOT Director Robotics/Camera Controller	Robotics/Multi-camera controller with joystick, knob, and keypad controls that provide: focus, iris, pan/tilt control and pan/tilt speed control, zoom and zoom speed control, location, motion, and scene preset set up. Also includes IP connectivity between the SHOT Director controller and the Grass Valley HDC robotic cameras. NOTE: Required to operate Grass Valley HDC robotic cameras.

Redundancy Options

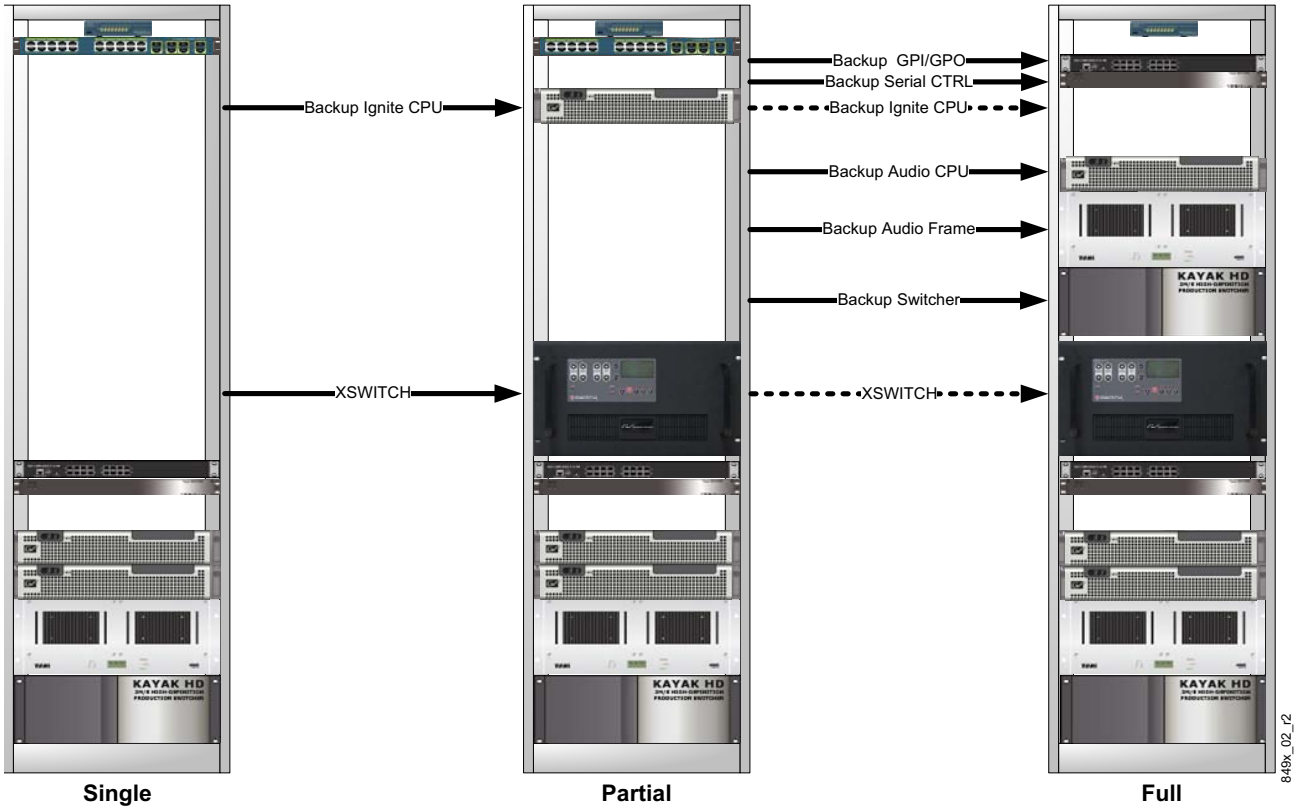
Note Redundancy is the duplication of critical components of the system to increase system reliability in the form of backup (or fail-safe) operation.

Redundancy options are listed in Table 3 and illustrated in Figure 5.

Table 3. Redundancy Options

Option	Description
Single (Non-Redundant)	Single Ignite/Ignite Konnect systems have no backup for prep or recovery other than dual power supplies, dual controllers, dual NIC cards, and/or circuit card hot-swap capabilities built into individual system components.
Partially Redundant (Type 1)	Adds a backup Ignite/Ignite Konnect CPU and an XSWITCH matrix router for routing between the primary (A system) and backup (B system) CPUs. **Note** Does not include additional component mainframes or additional workstation. **Note** With only one workstation, a second operator cannot check converted TMEs on a timeline.
Partially Redundant (Type 2)	Includes all Type 1 components plus a Prep workstation. The Prep workstation includes 3 Ignite/Ignite Konnect GUI 20” VGA LCD monitors, keyboard, and optical mouse. **Note** Does not include additional component mainframes. With this configuration, one workstation is in LIVE mode with full device control while the other is in PREP mode with the ability to rundown convert and check converted TMEs on the Ignite/Ignite Konnect timeline.
Fully Redundant	All Ignite/Ignite Konnect rack mounted modules are doubled, providing two complete systems that are switched via the XSWITCH matrix router to toggle between the LIVE system and the PREP system. This configuration also includes two workstations. **Note** In a fully redundant system, if an additional M/E, video input, and/or audio I/O (e.g., Kayak mainframes and Klotz audio frames) is added to the base system, the corresponding hardware for that M/E or audio I/O package is doubled also. **Note** With this configuration, one workstation is in LIVE mode with full device control while the other is in PREP mode with the ability to rundown convert and check converted TMEs on the Ignite/Ignite Konnect timeline.

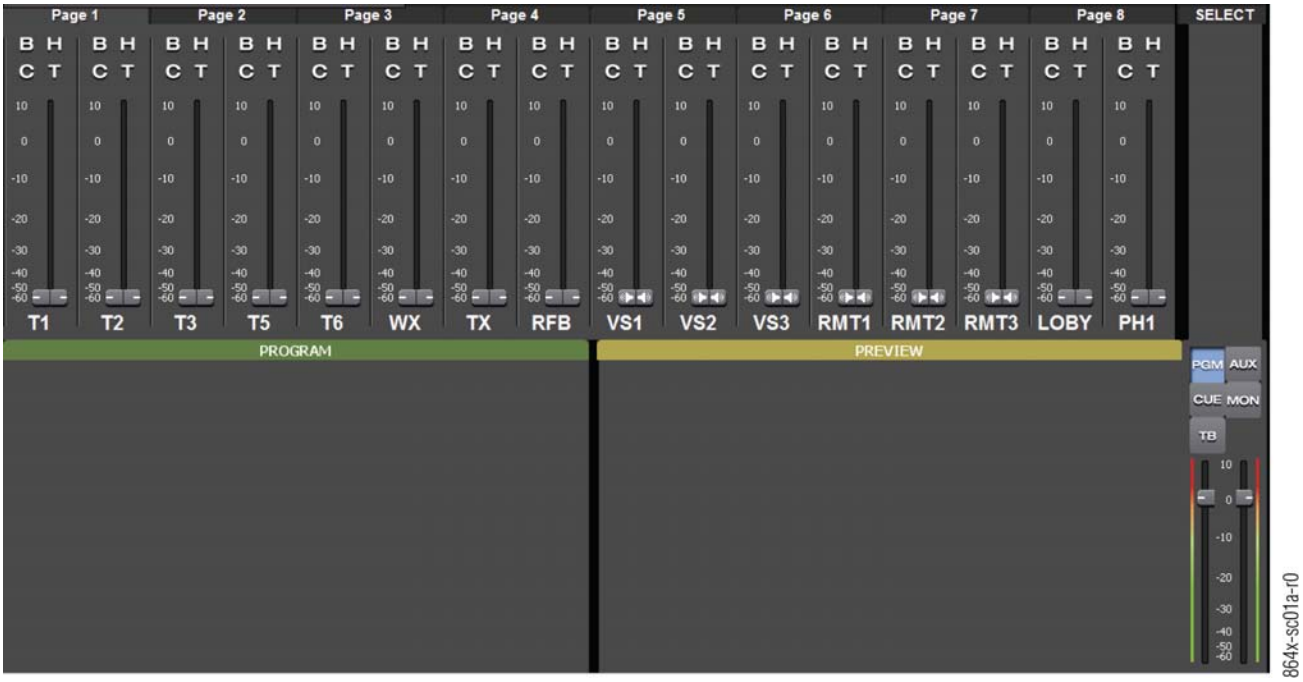
Figure 5. Redundancy Options



Section 2

Audio Module

Figure 6. Example Audio Module - Klotz Audio Configuration



Overview

Note This Audio Module section covers the Klotz, Yamaha, Wheatstone, and Calrec configurations only. For a No Audio configuration, the entire audio module area is blank and this Audio Module information does not apply.

Depending upon the Ignite/Ignite Konnect system configuration, there are five possible audio control configurations:

- Klotz Audio control (*Klotz Audio* on page 29)
- Yamaha (LS9) Audio control (*Yamaha Audio* on page 89)
- Wheatstone [D-8 and D-10 only] Audio control (*Wheatstone Audio* on page 119)

- Calrec Audio control (*Calrec Audio* on page 159)
- No Audio control, where audio is controlled solely from a separate control panel with no Ignite/Ignite Konnect user interface.

Note For a specific audio interface, refer to that respective audio description in this section.

From an Ignite/Ignite Konnect Audio Module perspective, the differences among the Klotz audio, Yamaha audio, Wheatstone audio, and Calrec audio configurations are listed in Table 4.

Table 4. Ignite/Ignite Konnect Audio Configuration Comparisons

Characteristic	Klotz Vadis Audio	Yamaha Mixer LS9	Wheatstone [D-10 only]	Calrec Mixer
Inputs	up to 96 stereo/192 mono	32 mono inputs (up to 64 with an add-in card)	**Note** Dependent on the Wheatstone configuration installed	**Note** Dependent on the Calrec configuration installed
Outputs	up to 48 stereo/96 mono	16 mono outputs (up to 48 with an add-in card)	**Note** Dependent on the Wheatstone configuration installed	**Note** Dependent on the Calrec configuration installed
Input Faders	16 mono/stereo faders	64 mono faders and 64 mono input channels. All 64 inputs can be on-air simultaneously	up to 36	**Note** Dependent on the Calrec console model. Calrec Alpha, Omega, Sigma, and Zeta models are supported by Ignite
Cue Bus	One independent cue bus	Cue Input and Output.	Pre-fade and post-fade cue for channel strips only	Pre-fade Listen for channel faders and main faders
Monitor Channels	4	1	4	4
Monitor Sources	1 source at a time. Route sources to monitor channel for monitoring.	Selectable multiple monitor sources. Cue the source for monitoring (prefader)	N/A	N/A
Foldback Destinations	Uses Klotz dynamic mix minus features. 16 stereo mixers available for Foldback destinations	N/A	N/A	N/A
Aux Buses	6 aux buses	No aux buses provided. Up to 4 aux mixers can be used as aux buses	4 (Master fader control only)	Up to 4 (Main fader control only)
Mix type input channels	Stereo, stereo L(eft), stereo R(ight), and mono	Stereo and mono. A control is used to select either left or right source.	N/A	N/A
Input Channel Trim Gain Min/Max	-120 dB / +18 dB	-60 dB / +10 dB	N/A	N/A
Program and Aux Fader Min/Max	-60 dB / 0 dB	-60 dB / +10 dB	-72dB/0 dB	-100dB/ +10 dB
Cue Fader Min/Max	-60 dB / 0 dB	-20 dB / +10 dB	-72dB/0 dB	-100dB/ +10 dB

There are eight pages of user definable audio faders that provide the ability to customize the audio setup. Each fader control label is user definable. The Audio Module (Figure 6) includes:

- Individual faders – depending on the Ignite/Ignite Konnect system configuration, up to 16 available slots on each of 8 available pages for user definable audio faders that provide a user with the ability to customize the audio setup.

Note Each of the 8 available pages is logically subdivided into 16 fader slots. Every two slots span the width of a Page Tab.

- Master Output faders – user controlled fader for the overall audio output level of the channel
- Audio **Preview** – shows the sources set to move On Air next
- Audio **On Air** – shows the Program sources
- Set Points – the minimum or maximum positions for the actual fader control. Set points can be assigned custom colors and names to distinguish among them.
- **Audio Main Context Menu** for each fader control (refer to Table 5 and *Audio Main Context Menu* on page 36)

Note The Calrec audio interface does not use an Audio Main Context Menu. Instead, the Calrec audio configuration is accomplished through a Virtual Source Configuration dialog box.

Table 5. Audio Main Context Menu

Klotz Audio Main Context Menu	Yamaha Audio Main Context Menu	Wheatstone Audio Main Context Menu
• Clear Fader	• Clear Fader	• Clear Virtual Source
• Virtual Source Maintenance	• Virtual Source Maintenance	• Virtual Source Maintenance
• Source Maintenance		• Import Virtual Source
• Audio Profile Maintenance		• Layouts
• Aux Configuration		
• Talk Back Source Selection		
• Monitor Source Selection		
• Point-to-Point Routing		

The Audio Module does not directly act on sources when setting levels, creating mixes, or applying signal processing. Any action that would change how a source is used in the mixer is actually accomplished through an entity known as a virtual source.

A virtual source acts as a container for a target source (known as the Primary Source), the primary source's optional back up source (known as the Backup Source), and the source's optional Foldback Path (the destination to which the source's mix minus is sent).

Note Only the Klotz implementation currently has the ability to route mix minus and foldback content. For the other implementations, these tasks are manually configured on the mixer by the user.

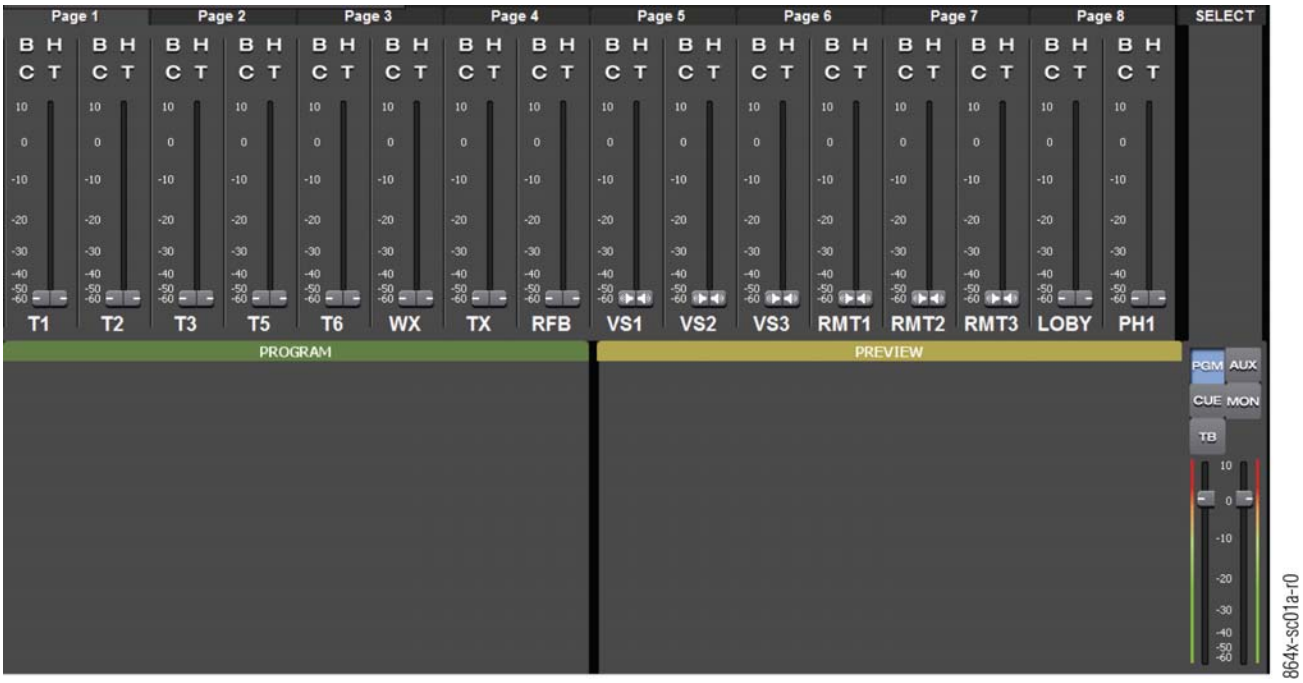
Because the Audio Module uses a virtual source to manipulate the audio content of the mixer, actions triggered either by automation or by the user manually are executed regardless of whether the primary or back up sources are currently active.

Note Before the audio can be controlled, virtual sources must be created and configured. Typically this is accomplished during initial installation.

The Audio Module also provides the ability to configure certain audio properties that are closely tied to specific sources independent of the controlling virtual source. The properties are adjusted via the virtual source control as the virtual source active source changes. These settings include Trim Gain, Mix Type, EQ, Compression, Expansion, Limiting, and Delay.

Klotz Audio

Figure 7. Audio Module - Klotz Audio



Overview

Note The Ignite/Ignite Konnect system provides an automation interface (Figure 7) to the Klotz Audio.

Fader Manual Virtual Source Control

In order to control a virtual source from within the Audio Module, a fader control must be created to represent the virtual source visually (refer to *Create a Fader Control* on page 57). Otherwise, the virtual source idly waits in the background for commands from Ignite/Ignite Konnect Timeline Automation or external fader control surfaces such as the QUICbox™ panel.

Individual Faders

Each fader control has four buttons (Figure 8) at the top:

- **B** (Backup)
- **C** (Cue)
- **T** (Talk Back)
- **H** (Hold)

When either the **B**, **C**, or **T** button is clicked, the button background highlights blue to indicate it is selected. When the **H** button is clicked, both the button background and the fader perimeter highlight amber to indicate it is selected.

Note For all of the buttons, a gray background indicates it is not selected.

Figure 8. Fader Buttons – Klotz

Selected	Function
	Backup – switches to a backup. Click to make the attached backup source the active source in the mix. This button has no effect if a backup source was not selected for the virtual source during configuration.
	Hold – holds a source on or off air. Click to hold the fader control at the current level. If the fader control is currently engaged in a fade triggered by automation, the fade is allowed to continue and the fader will be held at the final level resulting from the fade.
	Cue – monitors a channel. Click to add the attached virtual source into the Cue mix bus. The Cue bus mix is a pre-fade mix where sources enter the mix at unity gain.
	Talk back – provides a talk back channel. Click to insert talk back audio into the Fold Back path of the attached virtual source. This button has no effect if the attached virtual source did not have a Foldback Destination selected during virtual source configuration.

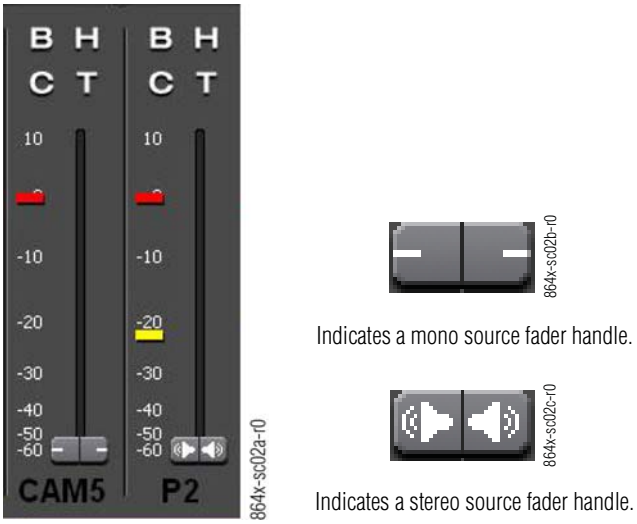
Fader control handles are used to adjust the virtual source active source level in the Program mix and any Aux mix in which the virtual source is included. Double-click the fader control above or below the fader handle to

force the active source to jump or cut to the desired volume. A manual fade is achieved by dragging the fader handle to the desired level.

Also, there are two different fader control handles (Figure 9):

- Mono – a single fader control that functions individually
- Stereo – a pair of handles that move as a single fader

Figure 9. Fader Control Handless – Klotz Audio

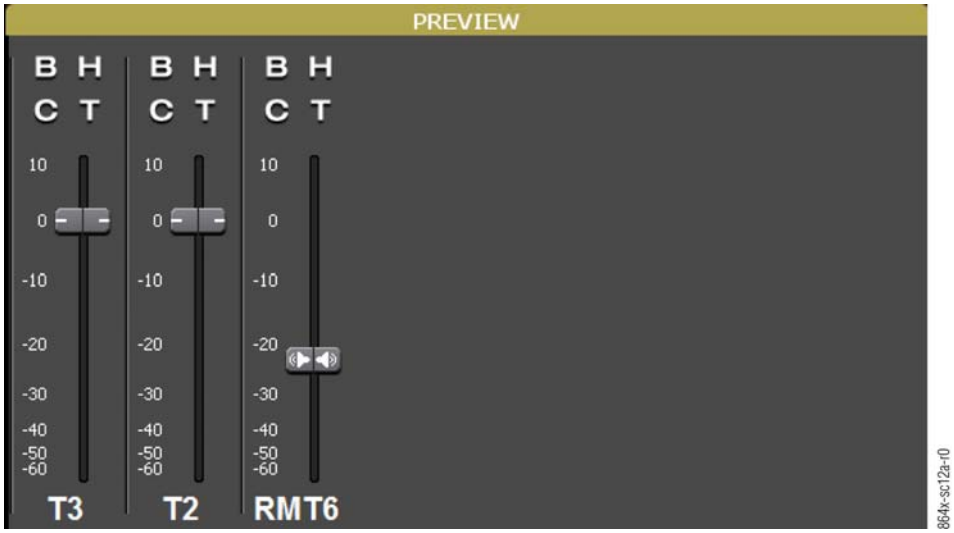


Klotz

Audio Preview

Virtual sources transitioned via the Ignite/Ignite Konnect Event Timeline are populated into the **Audio Preview** area (Figure 10) as each TME is prepped. The virtual sources set to move to air next are shown in the **Audio Preview** area.

Figure 10. Audio Preview Area

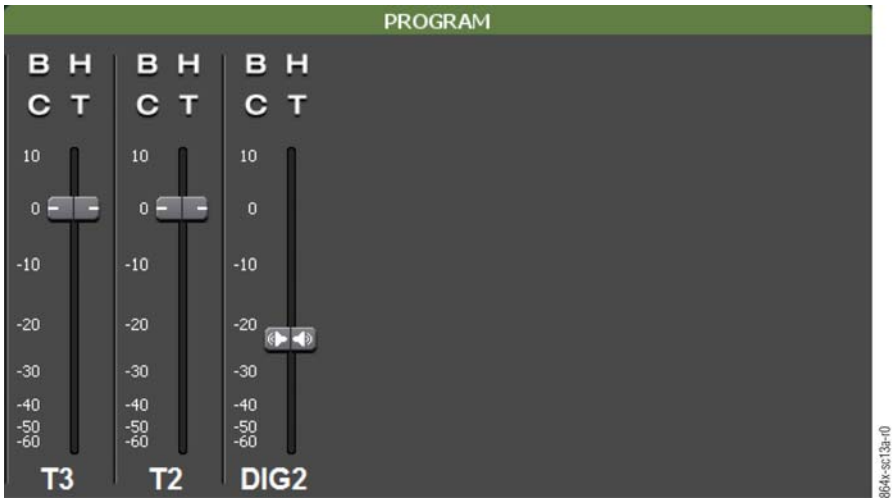


Audio Program (LIVE)

The **Audio Program** area (Figure 11) shows the virtual sources presently On Air. Any virtual source that is moved above its off point is taken to air instantly and is shown in the **Audio Program** area.

Note Only the 8 most recent virtual sources to go on air and still exist on air are shown. Once 9 virtual sources are on air, the oldest on-air virtual source disappears and reappears if another is taken off air.

Figure 11. Audio Program Area



Set Points

Set Points are pre-established fader settings that are referenced via a TME (Transition Macro Event), refer to *TME™ (Transition Macro Event™) on*

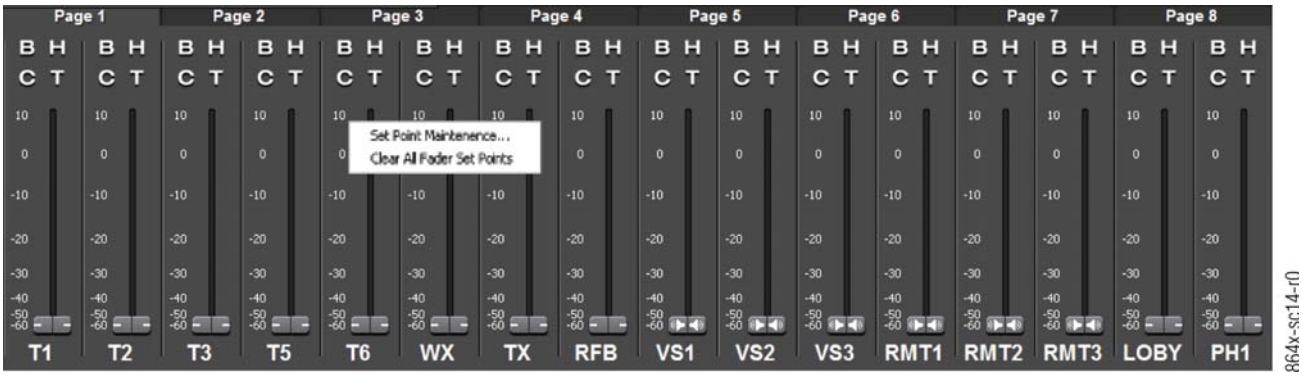
page 255. These set points set a source level for each source. Set Points can be named for easy reference. Via Event Timeline automation, each TME provides the system with the audio set point needed for that particular event.

To access the **Set Points Menu** (Figure 12), within a fader, right-click near the left edge of the fader control. The **Set Points Menu** has two selections:

- **Set Point Maintenance** – accesses the **Set Point Maintenance** dialog box
- **Clear All Fader Set Points** – clears all fader set points

Note The **Set Point Maintenance** dialog box opens in the same state regardless of where the user right-clicked to access the **Set Point Menu**. However, if a set point is loaded from this dialog, the set point is loaded to the fader that was right-clicked to access the **Set Point Menu**.

Figure 12. Set Point Menu



Set points must be created before creating audio tasks. A set point does not need to be assigned to a virtual source in order for the virtual source to use the set point, but at least one set point must exist. There are two default set-points that are system defined and non-editable by the user:

- **OFF** – used to bring a Virtual Source off the air.
- **IGNORE** – used to flag a Virtual Source so that it will not be affected by the **Take All Sources to Zero** feature of Audio TMEs.

A set point does not need to be loaded in order to be assigned in a task. However, it does need to be loaded if the user wishes to modify the set point position for a particular virtual source during a show.

Set Point Maintenance

The **Set Point Maintenance** dialog box (Figure 13) is accessed from the **Set Points Menu**. This dialog box is used to create, edit, delete, or load set points.

Figure 13. Set Point Maintenance Dialog Box

Note All set points created via Set Point Maintenance are available globally for use by every virtual source in creating tasks for audio timeline objects.

The **Set Point Maintenance** dialog box includes:

- **OK** – saves the changes and closes the dialog box.
- **Load** - loads the selected set point to the fader that was right-clicked to access the **Set Point Menu**. A fader can only have one instance of the same set point loaded. When attempting to load a set point to a fader that already has the set point loaded, a Set Point already loaded message appears.
- **Add** - accesses the **Set Point Editor** dialog box with a new Set Point definition. If appropriately configured, the set point is created and added to the list.
- **Edit** - accesses the **Set Point Editor** for the selected Set Point changes.
- **Delete** – the **Delete Entry?** message appears.

Note Any TME audio task referencing a deleted setpoint will be unable to affect the associated virtual source during a transition. Such audio tasks automatically execute their transition using the OFF setpoint.

Click **Yes** to continue deleting the selected Set Point and immediately save the configuration to reflect the deletion. Click **No** to keep/not delete the item at this time and continue making changes.

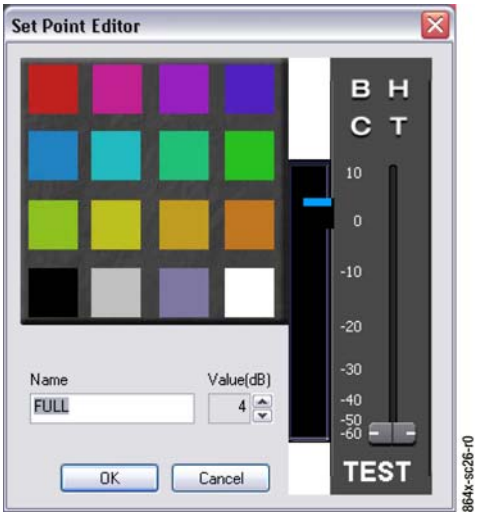
- **Close** button– closes the dialog box without saving changes.

Set Point Editor

The **Set Point Editor** dialog box (Figure 14) is accessed from the **Set Point Maintenance** dialog box **Edit** button (Figure 13 on page 33).

Note All set points created via Set Point Maintenance are available globally for use by every source in creating tasks for audio timeline objects.

Figure 14. Set Point Editor Dialog Box



The **Set Point Editor** dialog box includes:

- **Color Selection** - changes the color of the target Set Point. Click a color to assign.
- **Volume Level** - click and drag to set the target volume level. Users can also use the Up-Down control attached to the **Value(dB)** field to achieve the same results.
- **OK** – saves the new/edited changes and closes the dialog box.

Note Before changing/saving, verifies that the Set Point Name is unique among Set Points and that the name does not match the default **Off** or **Ignore** Set Points name in any way. If invalid, a message appears stating the need and nature of the required change.

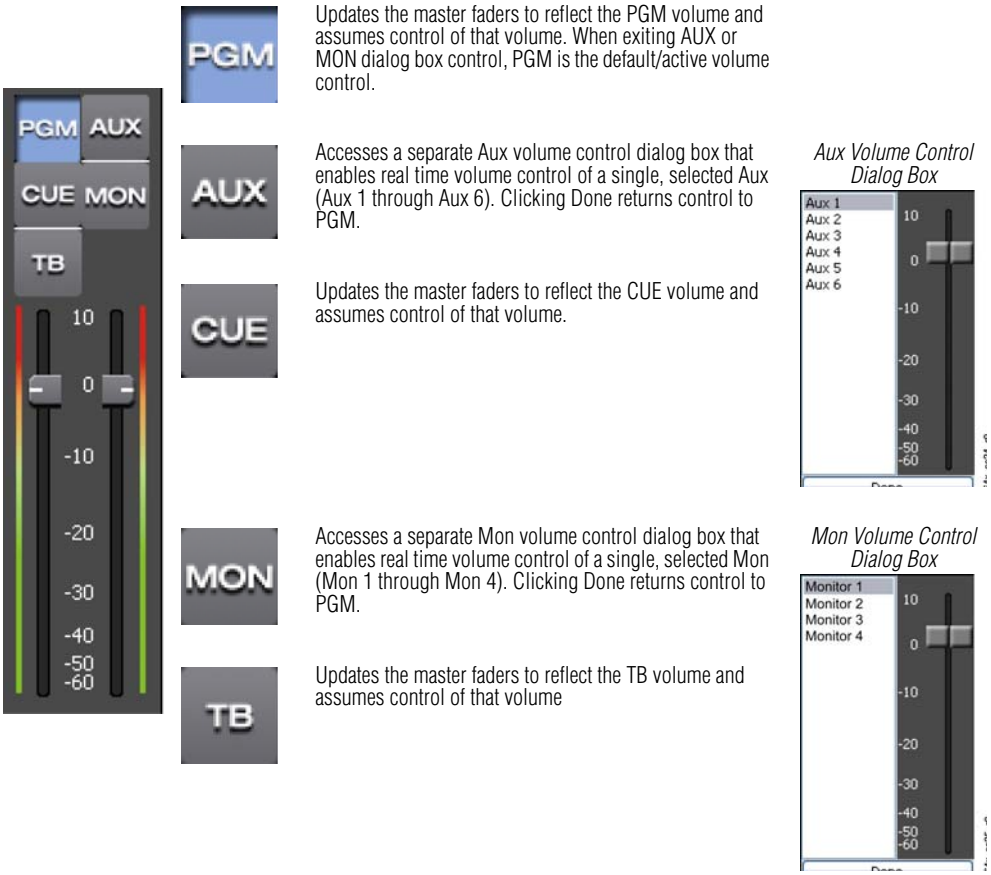
- **Cancel** – compares the saved configuration and the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

  Click **Yes** to undo changes in real time and close the **Set Point Editor** dialog box. Click **No** to continue making configuration changes.
- **Close** button – closes the dialog box without saving changes.

Master Output Faders

The **Master Output Fader** (Figure 15) provides master control of the overall audio output level of the **Master Out Left** and **Master Out Right** channels. Five buttons comprise the various Master Volume Controls.

Figure 15. Master Output Fader



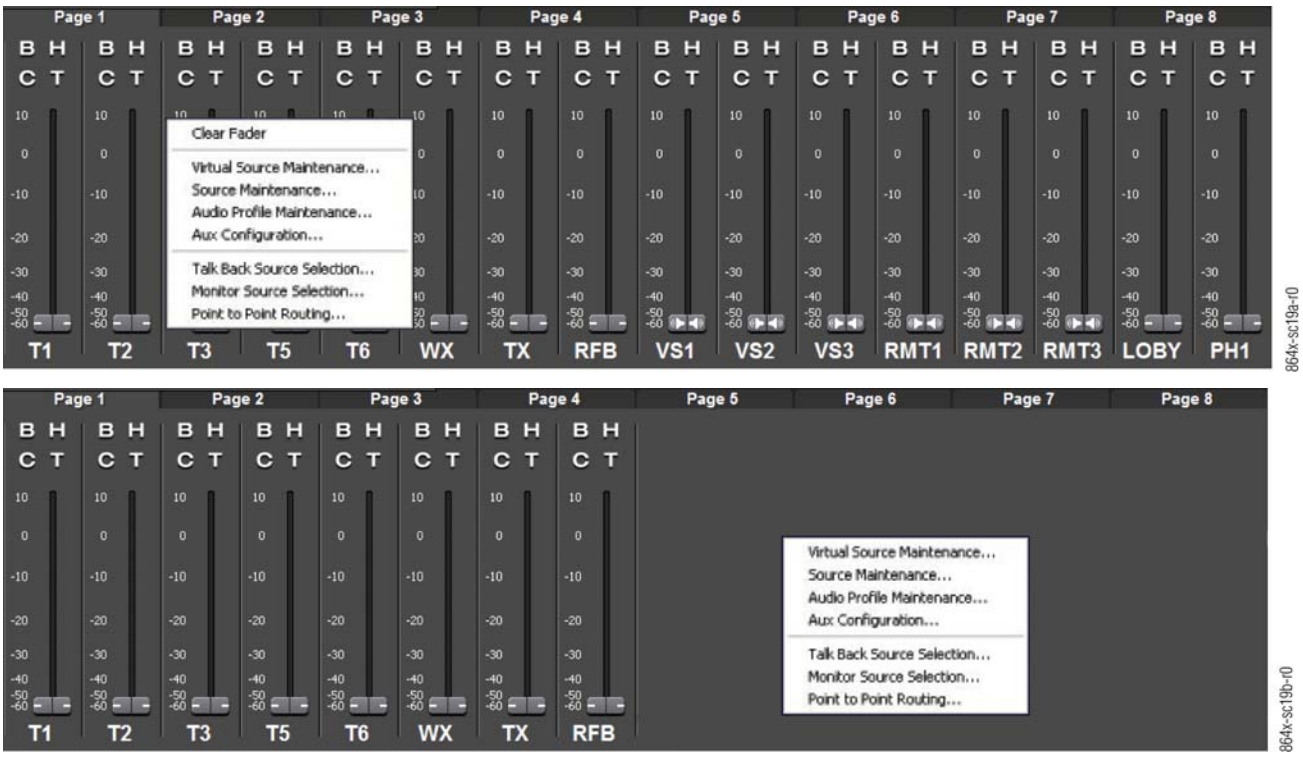
The **PGM**, **CUE**, and **TB** buttons function similarly. When the respective button is clicked, the main faders update to reflect and assume control of that volume; i.e., **PGM**, **CUE**, or **TB**. When either the **AUX** or **MON** button is selected, a separate dialog box appears to enable specific selection of a particular Aux or Monitor to control. In any case, all changes are real time and take effect immediately

Note When exiting **AUX** or **MON** dialog box control, **PGM** is the default/active volume control.

Audio Main Context Menu

To access the **Audio Main Context Menu** (Figure 16), right-click near the right edge of a fader control.

Figure 16. Audio Main Context Menu – Klotz Audio



The **Audio Main Context Menu** items for the Klotz audio configuration are:

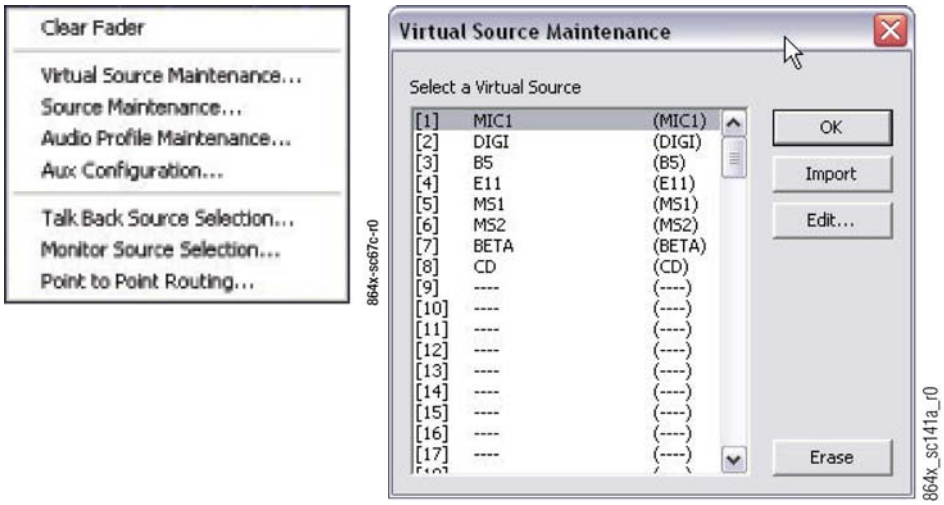
Audio Main Context Menu Item	Purpose
Clear Fader	Removes the selected fader (virtual source control) from view and replaces it with an empty slot. This does not delete the fader-associated virtual source, but that specific virtual source control (fader) is simply not shown. That audio virtual source (or any available audio virtual source) can be imported to an empty slot as a fader control using the Virtual Source Maintenance menu item. Refer to *Virtual Source Maintenance Dialog Box* on page 38 NOTE: This menu item is only available if a fader is selected (right-click). Refer to Figure 16.
Virtual Source Maintenance	Accesses the Virtual Source Maintenance dialog box that enables a user to either edit or import a virtual audio source. Refer to *Virtual Source Maintenance Dialog Box* on page 38
Source Maintenance	Accesses the Source Maintenance dialog box that enables a user to edit source-specific properties; e.g., Trim Gain, Mixing Mode (whether or not the source is inserted into the mix as Stereo, Mono, Left Only, or Right Only), and the Audio Profile to be used by the Source. The Audio Profile can include settings for Parametric EQ, Dynamics, or Delay depending on the system type. Refer to *Source Maintenance Dialog Box* on page 42
Audio Profile Maintenance	Accesses the Audio Profile Maintenance dialog box that enables a user to create and edit Audio Profiles. Each created Audio Profile is edited using this dialog box. Refer to *Audio Profile Maintenance* on page 44
Aux Configuration	Accesses the Aux Configuration dialog box that enables a user to add and remove the configured virtual sources from the available Aux Bus mixes. Refer to *Aux Configuration* on page 51
Talk Back Source Selection	Accesses the Talk Back Source Selection dialog box that enables a user to select the System's Talk Back source. Refer to *Talk Back Source Selection* on page 52

Audio Main Context Menu Item -	Purpose - (continued)
Monitor Source Selection	Selecting this option opens the Monitor Source Selection Dialog Box. The user can select sources to drive the inputs of the available Monitors in the system using this configuration tool. Refer to *Monitor Source Selection* on page 53
Point-to-Point Routing	This option presents the user with the Point to Point Routing dialog box. The Point to Point Routing feature enables the user to route physical inputs (sources) directly to physical outputs (destinations). Refer to *Point To Point Routing* on page 55

Virtual Source Maintenance Dialog Box

The **Virtual Source Maintenance** dialog box (Figure 17) is accessed from the **Audio Main Context Menu**. The **Virtual Source Maintenance** dialog box provides a list of available virtual audio sources and from that list a user can either import a virtual source to the selected slot or edit/configure an already assigned virtual source.

Figure 17. Virtual Source Maintenance Dialog Box



Note If the **Audio Main Context Menu** is accessed via right-click near the edge of a fader, the **Virtual Source Maintenance** dialog box opens with the virtual source for the targeted fader already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty fader slot, the first virtual source in the list is selected by default.

The **Virtual Source Maintenance** dialog box (Figure 18) includes:

- **Select a Virtual Source** – lists a source ID, virtual source name, and source abbreviation for each available virtual source. Any un-configured virtual source name and abbreviation is shown as a series of dashes.
- **OK** – saves the changes and closes the dialog box.

- **Import** – imports the selected virtual source to either a fader or an empty fader slot. The import position is based on the fader slot used to access the **Audio Main Context Menu**. If the fader slot is already populated by a fader, that virtual source is replaced with the virtual source selected from the **Select a Virtual Source** list.

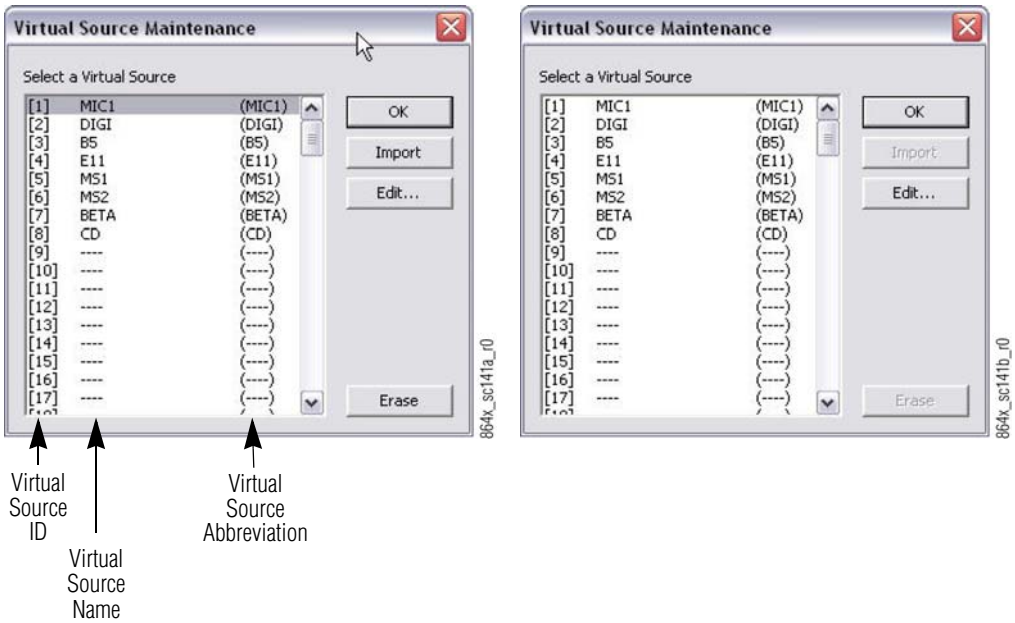
Note Import is unavailable if an non-configured virtual source is selected.

- **Edit** – opens the **Virtual Source Editor** dialog box (refer to *Virtual Source Editor Dialog Box* on page 39). The **Virtual Source Editor** dialog box opens in one of two modes, either **Edit** mode (if the selected virtual source is already configured) or **Configuration** mode (if the selected virtual source is not configured).

Note When in Edit Mode, the Editor forces real time configuration change updates to the virtual source but in Configuration Mode it does not.

- **Erase** – deletes the virtual source entry. Any TME audio task associated with an erased virtual source will cease to function properly until the virtual source is re-configured.
- **Close** button – closes the dialog box without saving changes.

Figure 18. Virtual Source Maintenance Dialog Box



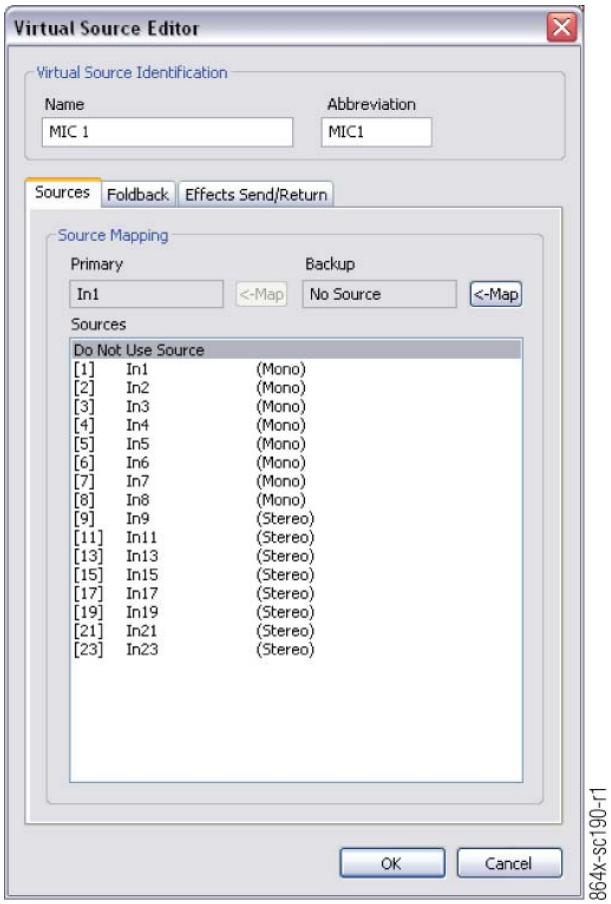
Virtual Source Editor Dialog Box

The **Virtual Source Editor** dialog box (Figure 19) is accessed from the **Virtual Source Maintenance** dialog box **Edit** button (Figure 18 on page 39). It enables a user to create and configure virtual sources for use in TMEs and to edit the configuration of an existing virtual source in real time. The **Virtual Source Editor** dialog box opens in one of two modes, either **Edit** mode (if the

selected virtual source is already configured) or **Configuration** mode (if the selected virtual source is not configured).

- **Edit** Mode - when configuring a pre-existing virtual source, the changes to **Primary**, **Backup**, and **Foldback Destination Mappings** take effect in real time. This feature enables a user to make critical alterations while Audio is live.
- **Configuration** Mode - when configuring a brand new virtual source. Since there is no way for an non-configured virtual source to be associated with a **fader control** or become part of a mix, there is little reason or validity to sending real time updates to any of the settings that the user alters.

Figure 19. Virtual Source Editor Dialog Box



The **Virtual Source Editor** dialog box (Figure 19) includes:

- **Virtual Source Identification** – text boxes for a user defined **Virtual Source Name** and **Abbreviation**.
  - **Name** – limited to 25 characters and is system monitored to prevent duplicates. This name is used to identify the virtual source in other configuration dialog boxes as well as System Error Logs.

- **Abbreviation** – limited to 4 characters and is system monitored to prevent duplicates. This abbreviation is the only identifier that appears on the fader control associated with that virtual source. This abbreviation is also used, along with the name, to identify the virtual source in other configuration dialog boxes as well as System Error Logs.

- **Sources** tab – Source Mapping enables a user to select the **Primary** and **Backup** source audio content that is inserted into a mix when the virtual source is either in Cue or On-Air.

  - **Primary** – shows the name of the currently mapped **Primary** source or **No Source** if a source is not mapped. A virtual source must have a mapped **Primary** source in order to complete the configuration.

    The **Map** button assigns the selected source as the **Primary** source. Since a primary source must exist before the configuration can be completed, the **Map** button is disabled when the user selects **Do not use Source** from the **Sources** list box.

  - **Backup** – shows the name of the currently mapped **Backup** source or **No Source** if a source is not mapped. The **Map** button assigns the selected source as the **Backup** source. A **Backup** source does not have to be mapped. Selecting **Do not use Source** and clicking **Map** removes any previously mapped backup source and replaces it with a **No Source** entry. If a virtual source does not have a mapped backup source, the **Backup** button on any fader control to which that virtual source is associated has no effect when clicked.

- **Foldback** tab – enables a user to select the destination where the **Virtual Source Foldback** (return) audio is sent. This could include Mix Minus, Talk back, or Program Audio. The **Foldback** path is the physical output to which that audio content will be routed. If the virtual source does not have a Foldback path, the **Foldback** box shows **No Foldback**.

- Effects Send/Return tab (optionally):

  - Provides **Effects Send Destination Mapping** for the Virtual Source. When **Effects Send** is enabled and the Virtual Source is on air, the input channel signal path will be routed to this mapped destination.

  - Provides **Effects Return Source Mapping** for the Virtual Source.

  - Provides the ability to Enable/Disable the Effects Send/Return loop for the Virtual Source.

    Enables/Disables the Effects Send. Effects Send is automatically disabled if the Effects Send Destination mapping is set to **Do not use Effects Send**.

CAUTION Failure to specify an Effects Return Source when Effects Send is enabled prevents the Virtual Source signal from getting to the mixer. The Virtual Source will not be present in the Program mix or any of the Aux mixes.

CAUTION Using Effects Send/Return loops introduces a point of failure into the input channel signal path. If the outboard processing unit fails to return audio to the Return Source, the Virtual Source signal does not reach the mixer and is not be present in the Program mix or any of the Aux mixes.

Note When the Effects Send is enabled and the Virtual Source is on air, the mapped Source is routed into the next stage in the input signal path.

- **OK** – verifies that the **Name** and **Abbreviation** boxes contain valid entries, confirms that a primary source is mapped to the virtual source, updates and saves the virtual source entry, then closes the dialog box.

Note If any **OK** condition is not met, an error dialog box appears to notify the user about the discrepancy, the change is not saved, and the **Virtual Source Editor** dialog box is not closed.

- **Cancel** – click functionality depends on the current dialog box mode: **Edit** or **Configuration**.
  - When in **Edit** Mode, if configuration changes have been made, a **Cancel Changes?** message appears.

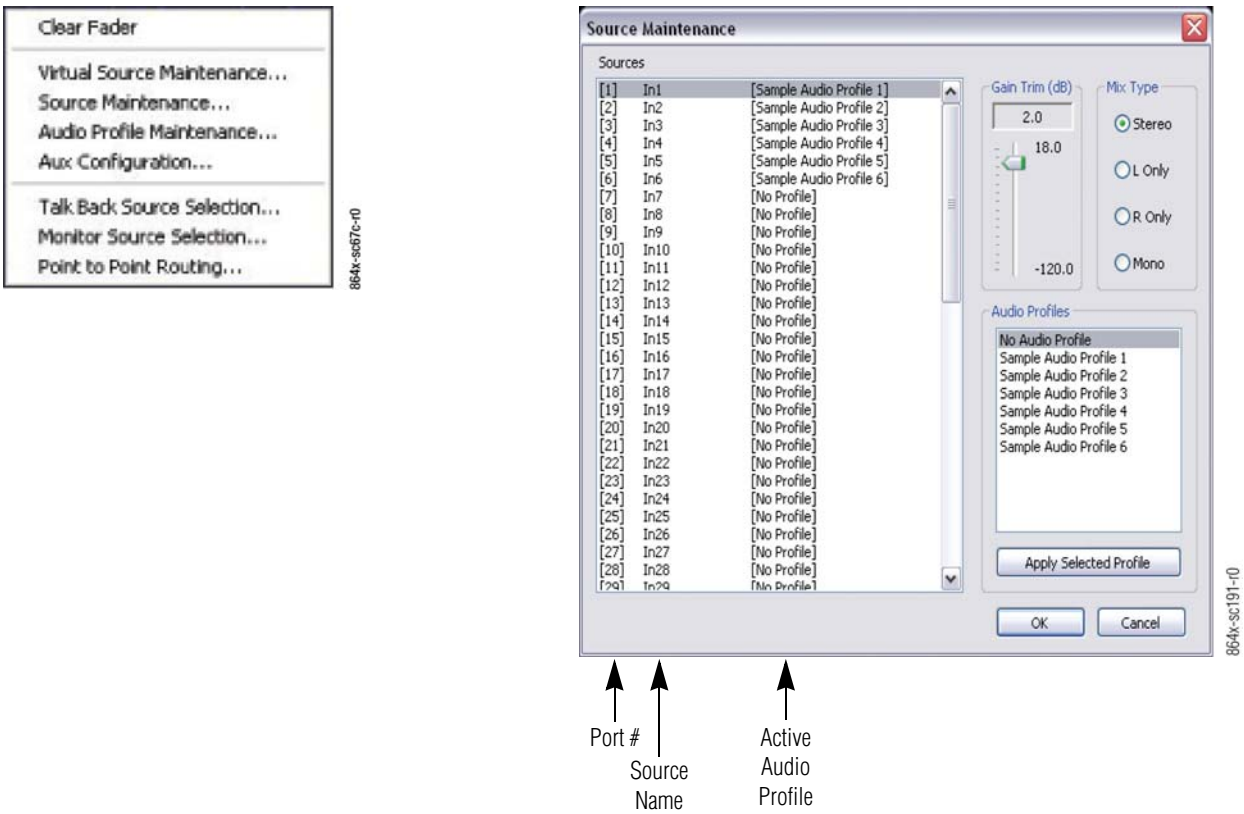
    Click **Yes** to undo changes and close the **Virtual Source Editor** dialog box. Click **No** to continue making configuration changes.
  - When in **Configuration** mode, the new virtual source entry is not created or saved and the dialog box closes.
- **Close** button – closes the dialog box without saving changes.

Source Maintenance Dialog Box

The **Source Maintenance** dialog box (Figure 20) is accessed from the **Audio Main Context Menu**. This dialog box is used to control audio content properties specific to **Sources**, not **Virtual Sources**. For instance, microphone EQ settings should be tied to the microphone itself and not the virtual source that uses it.

Note The Source Maintenance dialog box opens in the same state regardless of which strip was right-clicked to open the **Audio Main Context Menu**.

Figure 20. Source Maintenance Dialog Box



The **Source Maintenance** dialog box (Figure 20) includes:

- **Sources** – lists all user defined sources present in the Audio configuration. Included in each entry are the source port number, name, and active audio profile name.
- **Gain Trim (dB)** – edits the selected source gain trim value. Changes are updated in real time.
- **Mix Type** – edits the selected source mix type. Changes made using this control are updated in real time. There are 4 Mix Types:
  - **Stereo** – inserts the source L channel into the L channel of the stereo mix and inserts the source R channel into the R channel of the stereo mix.
  - **L Only** – the L channel of the source is inserted into both the L and R channels of the stereo mix.
  - **R Only** – the R channel of the source is inserted into the L and R channels of the stereo mix.
  - **Mono** – the L and R channels of the sources are summed with a -3 dB gain drop and the sum is inserted into both the L and R channels of the stereo mix.

- **Audio Profiles** – lists all available Audio Profiles. This control is used to assign the selected source Audio Profile. Making a selection with this control does not affect the selected source active profile.
- **Apply Selected Profile** – assigns the selected Audio Profile to the selected source. This update is made in real time.
- **OK** – saves the changes and closes the dialog box.
- **Cancel** – compares the saved configuration with the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

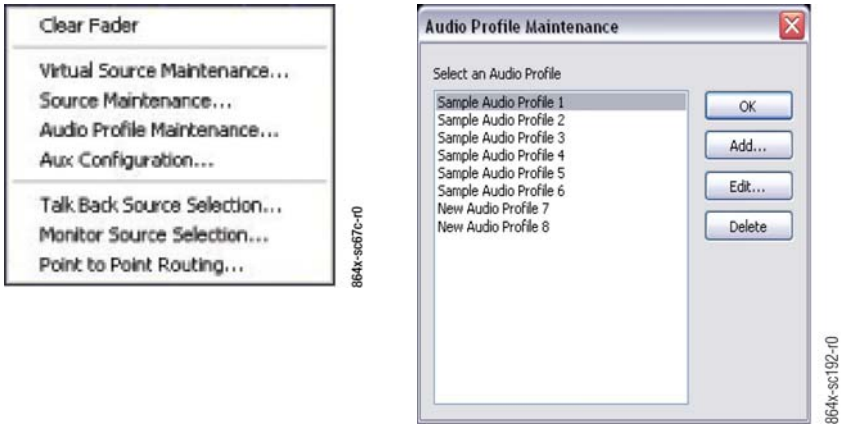
  Click **Yes** to undo changes in real time and close the **Source Maintenance** dialog box. Click **No** to continue making configuration changes.
- **Close** button – closes the dialog box without saving.

Audio Profile Maintenance

The **Audio Profile Maintenance** dialog box (Figure 21) is accessed from the **Audio Main Context Menu**. This dialog box is used to create, delete, and/or edit Audio Profiles.

Note The **Audio Profile Maintenance** dialog box is not specific to individual faders. Therefore, the **Audio Profile Maintenance** menu item is available regardless of where, in the Audio fader area, a right-click is used to access the **Audio Main Context Menu**; i.e., either a fader or an empty fader slot.

Figure 21. Audio Profile Maintenance Dialog Box



The **Audio Profile Maintenance** dialog box (Figure 21) includes:

- **OK** – saves the changes and closes the dialog box.
- **Add** – causes the dialog to retrieve the next available Audio Profile ID and apply it to a newly created Audio Profile. The new Audio Profile is given the default name New Audio Profile X; where X is the Audio Profile ID. The name of the Audio Profile is then added to the list of existing profiles and the configuration is saved to reflect the addition of the new profile.
- **Edit** – loads the selected Audio Profile into a new instance of the **Audio Profile Editor** dialog box (refer to *Audio Profile Editor Dialog Box* on page 45). If there are no available or selected Audio Profiles, this button has no effect.
- **Delete** – the **Delete Entry?** message appears.

  Click **Yes** to continue deleting the selected Audio Profile, update all affected sources, in real time, to **[No Profile]**, and immediately save the configuration to reflect the deletion. Click **No** to keep/not delete the item at this time and continue making configuration changes.
- **Close** button – closes the dialog box without saving changes.

Audio Profile Editor Dialog Box

The **Audio Profile Editor** dialog box (Figure 22) is accessed from the **Audio Profile Maintenance** dialog box **Edit** button (Figure 21 on page 44).

Figure 22. Audio Profile Editor Dialog Box

The **Audio Profile Editor** dialog box includes:

- A **Profile Name** box that shows the Audio Profile name selected for editing. That name can also be edited in this box.
- Depending on system configuration, Dynamic Audio tabs for each enabled module in the Audio configuration:
  - Equalizer (*Audio Profile Editor Equalizer Dialog Box* on page 46)
  - Dynamics (*Audio Profile Editor Dynamics Dialog Box* on page 48)
  - Delay (*Audio Profile Editor Delay Dialog Box* on page 50)

Note Each available tab has the current settings and available editing controls for the selected Audio Profile.

- **OK** – saves the changes and closes the dialog box.
- **Cancel** – compares the saved configuration and the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

  Click **Yes** to undo changes in real time and close the **Audio Profile Editor** dialog box. Click **No** to continue making configuration changes.
- **Close** button – closes the dialog box without saving changes.

Audio Profile Editor Equalizer Dialog Box

The **Audio Profile Editor Equalizer** current settings and available editing controls (Figure 23) are accessed by clicking the **Audio Profile Editor Equalizer** tab (Figure 22 on page 45).

Figure 23. Audio Profile Editor Equalizer Dialog Box

The **Audio Profile Editor Equalizer** dialog box has 7 setup functions:

- **Master Control**:
  - **Insert EQ** check box
  - **Level (dB)** fader
  - **Defaults** button
- **Low Band**
- **Mid Band 1**
- **Mid Band 2**
- **Mid Band 3**
- **Mid Band 4**
- **High Band**

Each of the **Low**, **Mid**, and **High Band** areas contain the same control functions:

- **Q Ratio** – controls the EQ band effective bandwidth. Values range from 0.1 to 3.0. Larger Q ratios result in wider effective bandwidths. The default setting is 1.0.

Note This setting is restricted to 1.0 on the Low and High bands.

- **Frequency** – controls the EQ band center frequency. Available values and default values depend on the band. Default values are:
  - **Low Band** – 100 Hz
  - **Mid Band 1** – 250 Hz
  - **Mid Band 2** – 630 Hz
  - **Mid Band 3** – 1.6 kHz
  - **Mid Band 4** – 4.0 kHz
  - **High Band** – 10 kHz
- **Level (dB)** fader – controls the EQ band gain. This gain value only applies to the target band. Settings range from -15 to +15 dB. The default value is unity.
- **Flat** button – resets the target band settings to default. This button effectively flattens the target band's effective contribution to the overall EQ curve.

Audio Profile Editor Dynamics Dialog Box

The **Audio Profile Editor Dynamics** current settings and available editing controls (Figure 24) are accessed by clicking the **Audio Profile Editor Dynamics** tab (Figure 22 on page 45).

Figure 24. Audio Profile Editor Dynamics Dialog Box

The **Audio Profile Editor Dynamics** dialog box has 5 setup functions:

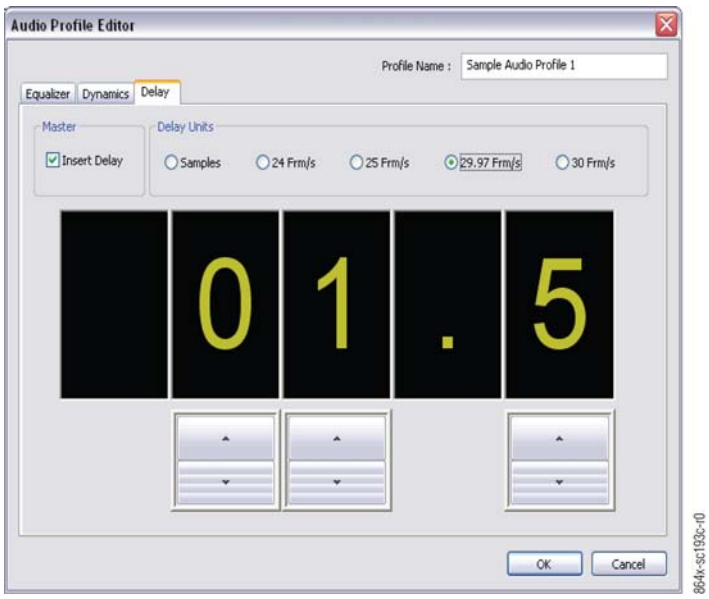
- **Master Control**:
  - **Insert Dynamics**
  - **Input Delay**
  - **Level (dB)**
  - **Defaults**
- **Limiter**:
  - **Attack** – sets the speed at which the Limiter effects are applied to the channel once the threshold condition has been met
  - **Release** – sets the speed at which the Limiter effects are removed from the channel once the threshold condition is no longer met.
  - **Threshold** – sets the dB value that the channel signal must meet before the effects of the limiter are applied.
- **Side Chain**:
  - **Soft Knee** – sets whether or not the application of the expander and compressors effects should be smoothed to produce a less abrupt (and less noticeable) effect in the audio.
  - **Crest** – sets the Crest value for the side chain.
  - **Low Cut** – sets the corner frequency of the high pass filter associated with the side chain channel.
  - **Level** – sets the gain of the audio signal entering the side chain.
- **Expansion**:
  - **Ratio** – sets the ratio of applied gain versus actual gain for every dB of gain the channel exceeds the expander's threshold setting.
  - **Attack** – sets the speed at which the Expander effects are applied to the channel once the threshold condition has been met.
  - **Release** – sets speed at which the Expander effects are removed from the channel once the threshold condition is no longer met.
  - **Threshold** – sets the dB value that the channel signal must meet before the effects of the Expander are applied.
  - **Range** – sets the maximum dB level processed by the expander.
- **Compression**:
  - **Ratio** – sets the ratio of applied gain versus actual gain for every dB of gain the channel exceeds the Compressor's threshold setting.
  - **Attack** – sets the speed at which the Compressor effects are applied to the channel once the threshold condition has been met.

- **Release** – sets the speed at which the Compressor effects are removed from the channel once the threshold condition is no longer met.
- **Threshold** – sets the dB value that the channel signal must meet before the effects of the Compressor are applied.
- **Reference** – sets the reference dB level processed by the Compressor.

Audio Profile Editor Delay Dialog Box

The **Audio Profile Editor Delay** current settings and available editing controls (Figure 25) are accessed by clicking the **Audio Profile Editor Delay** tab (Figure 22 on page 45).

Figure 25. Audio Profile Editor Delay Dialog Box



The **Audio Profile Editor Delay** dialog box has 2 setup functions:

Insert Delay – sets whether or not delay should be included as a part of the audio profile.

Delay Units – selects the unit for showing the current delay time; either **Samples** or **Frm/s** (frames per second). If the delay unit is set to show frame values, the delay value is still set via the Klotz Audio Server using the equivalent number of samples.

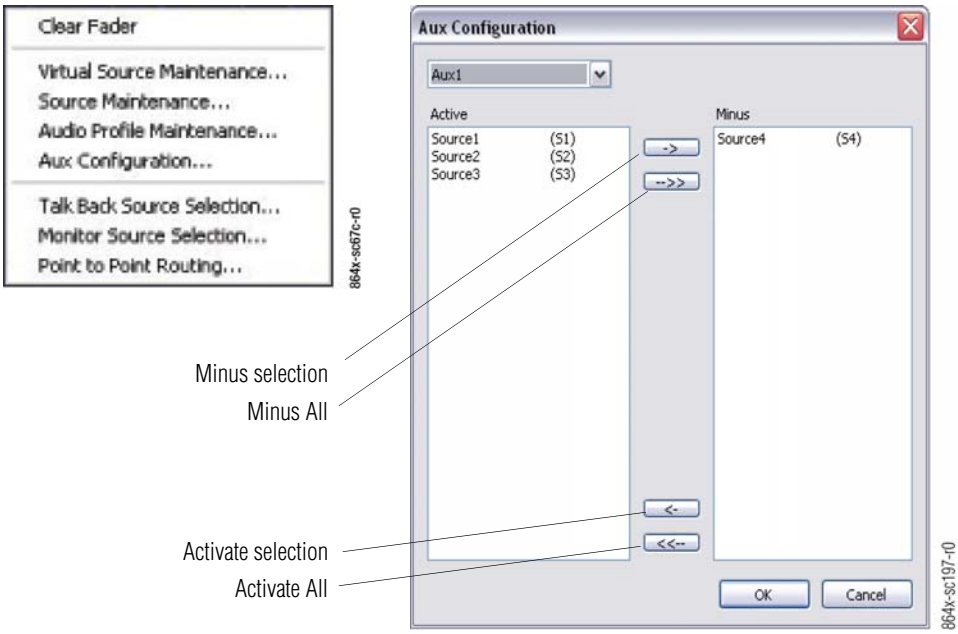
- If set to **Samples**, and the delay value is set to a sample number somewhere between the frame delay values, the result is the corresponding number of samples to the nearest 10th of a frame.
- If set to **Frm/s**, the result is frame values to a tenth of a frame, whereas the Vadis GUI does not. The frame settings for 10^{ths} of a frame are verified by setting both the Vadis and Ignite/Ignite Konnect Display Units to **Sample** and comparing the results for synchronization and accuracy.

Aux Configuration

The **Aux Configuration** dialog box (Figure 26) is accessed from the **Audio Main Context Menu**. This dialog box is used to add or remove configured virtual sources to/from the available Aux mixes. When the **Aux Configuration** dialog box is accessed, it shows the current Aux Configuration of the first available Aux.

Note The **Aux Configuration** dialog box is not specific to individual faders. Therefore, the **Aux Configuration** menu item is available regardless of where, in the Audio fader area a right-click is used to access the **Audio Main Context Menu**; i.e., either a fader or an empty fader slot.

Figure 26. Aux Configuration Dialog Box



Note The **Aux Configuration** dialog box opens in the same state regardless of which strip was right-clicked to open the **Audio Main Context Menu**.

The **Aux Configuration** dialog box includes:

- **Aux Selector** – selects the Aux to be configured/edited and shows the respective:
  - **Active** virtual sources list – contains all virtual sources that are currently configured to be inserted into the selected Aux bus according to the current the configuration.
  - **Minus** virtual sources list – contains all virtual sources that are currently configured to be absent from the selected Aux bus according to the current configuration.

- **Minus Selection** button – moves the selected **Active** virtual sources to the **Minus** virtual sources list and sends the Audio Server the appropriate trigger commands to update the virtual source status in the selected Aux. If no virtual source is selected in the **Active** virtual sources list, this button has no effect.
- **Minus All** button – moves all **Active** virtual sources, whether selected or not, to the **Minus** virtual sources list and sends the Audio Server the appropriate trigger commands to update the virtual source status in the selected Aux.
- **Activate** button – moves the selected **Minus** virtual sources to the **Active** virtual sources list and sends the Audio Server the appropriate trigger commands to update the virtual source status in the selected Aux. If no virtual source is selected in the Active virtual sources list, this button has no effect.
- **Activate All** button – moves all **Minus** virtual sources, whether selected or not, to the **Active** virtual sources list and sends the Audio Server the appropriate trigger commands to update the virtual source status in the selected Aux.
- **OK** – saves the changes and closes the dialog box.
- **Cancel** – compares the saved configuration and the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

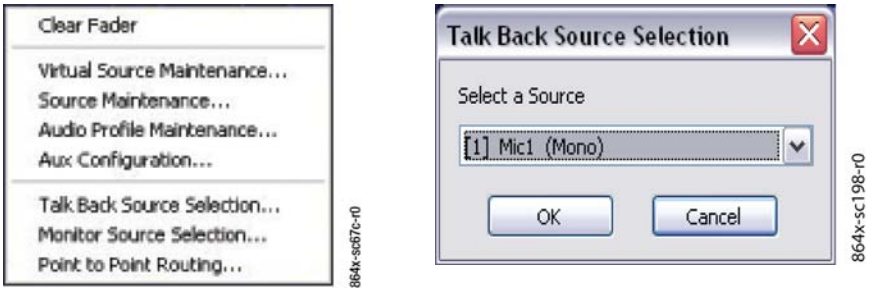
  Click **Yes** to undo changes in real time and close the **Aux Configurator** dialog box. Click **No** to continue making configuration changes.
- **Close** button – closes the dialog box without saving changes.

Talk Back Source Selection

The system employs a single Talk Back source. The **Talk Back Source Selection** dialog box (Figure 27) is accessed from the **Audio Main Context Menu**. This dialog box is used to select the source to be sent along a virtual source Foldback Path when the virtual source has the **Talk Back** button (*Individual Faders* on page 29) selected.

Note The **Talk Back Source Selection** dialog box is not specific to individual faders. Therefore, the **Talk Back Source Selection** menu item is available regardless of where, in the Audio fader area, a right-click is used to access the **Audio Main Context Menu**; i.e., either a fader or an empty fader slot.

Figure 27. Talk Back Source Selection Dialog Box



The **Talk Back Source Selection** dialog box includes:

- Select a Source – a list of selectable sources to drive the Talk Back. To avoid unnecessary routing there is also a **No Talk Back Source** available.
- **OK** – saves the changes and closes the dialog box.
- **Cancel** – compares the saved configuration and the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

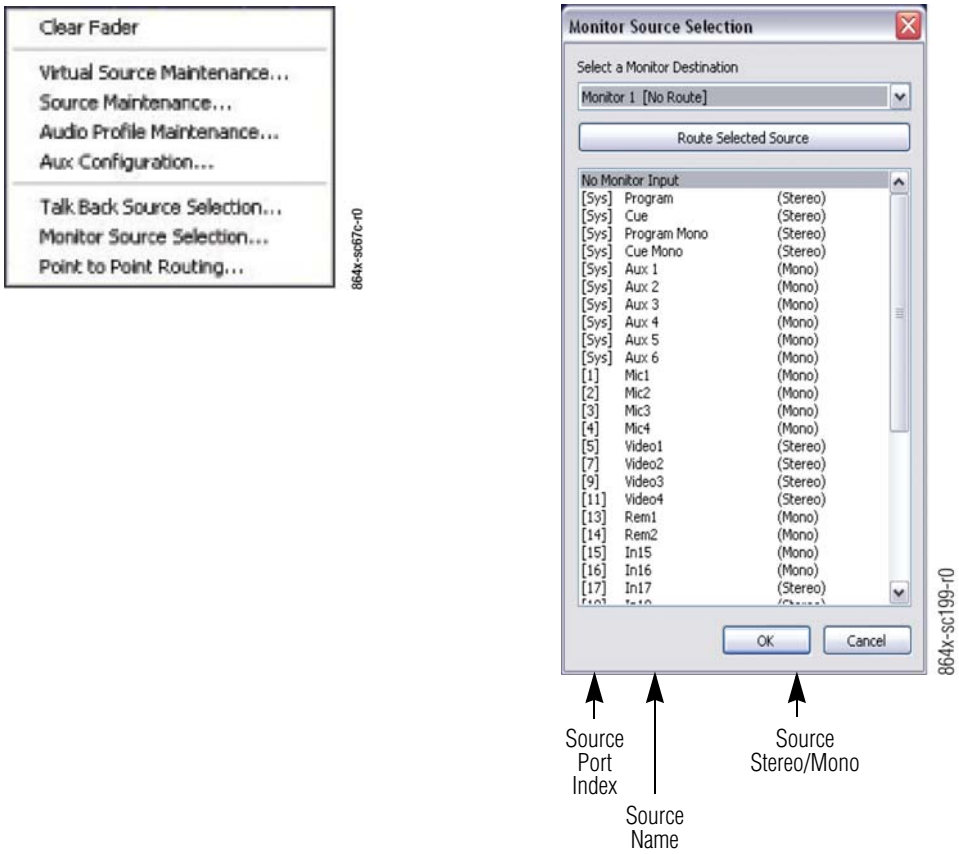
  Click **Yes** to undo changes in real time and close the **Talk Back Source Selection** dialog box. Click **No** to continue making configuration changes.
- **Close** button – closes the dialog box without saving changes.

Monitor Source Selection

The **Monitor Source Selection** dialog box (Figure 28) is accessed from the **Audio Main Context Menu**. This dialog box is used to route Sources into a Monitor structure. Gain is then applied to the Source and the output of the Monitor is routed to any physical output on the system.

Note The **Monitor Source Selection** dialog box is not specific to individual faders. Therefore, the **Monitor Source Selection** menu item is available regardless of where, in the Audio fader area, a right-click is used to access the **Audio Main Context Menu**; i.e., either a fader or an empty fader slot.

Figure 28. Monitor Source Selection Dialog Box



The **Monitor Source Selection** dialog box includes:

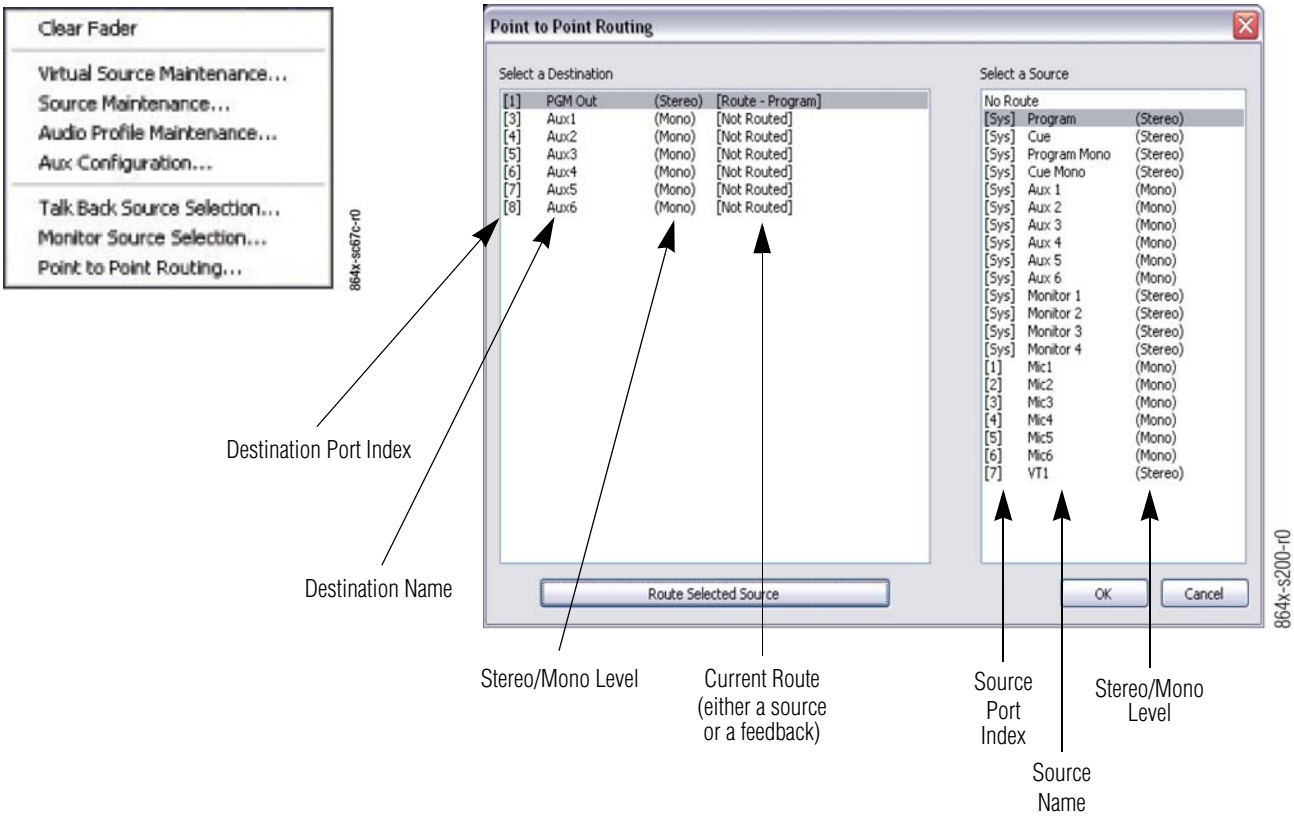
- **Select a Monitor Destination** – list of available monitors from which the user selects the monitor to assign a source.
- **Route Selected Source** – routes the selected source to the input of the selected monitor. If **No Monitor Input** is selected in the **Source List**, any source previously routed into the monitor input is removed.
- **Source List** – shows the sources for monitoring. From left to right, the list box entries show the source Port Index (or Sys for system defined sources that originate from within the frame itself), the Source Name, and the Stereo/Mono level of the source. Refer to Figure 28.
- **OK** – saves the changes and closes the dialog box.
- **Cancel** – compares the saved configuration and the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

  Click **Yes** to undo changes in real time and close the **Monitor Source Selection** dialog box. Click **No** to continue making configuration changes.
- **Close** button – closes the dialog box without saving changes.

Point To Point Routing

The **Point to Point** dialog box (Figure 29) is accessed from the **Audio Main Context Menu**. This dialog box is used to route Sources.

Figure 29. Point-to-Point Routing Dialog Box



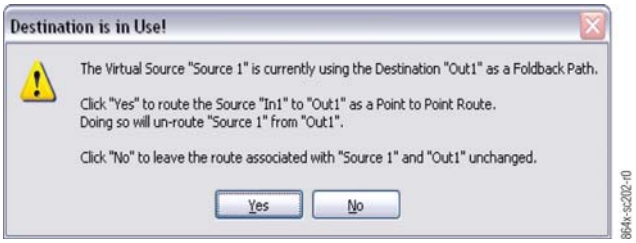
Note The **Point to Point** dialog box opens in the same state regardless of which strip was right-clicked to open the **Audio Main Context Menu**.

The **Point to Point** dialog box includes:

- **Select a Destination** – lists the physical outputs available for routing. The list contains the Port Index, Destination Name, Stereo/Mono level, and Current Destination.
- **Select a Source** – lists the sources available for routing to the destinations listed in **Select a Destination**. From left to right, the list box entries show the Port Index (Sys for system sources that originate from within the frame), Source Name, and Stereo/Mono level of the source. Also contained is an option for **No Route**.

- **Route Selected Source** – routes the selected source to the selected destination. If the **No Route** option is selected in **Select a Source**, any source that was previously routed to the selected destination is removed. If the destination is currently in use, a **Destination is in Use!** message (Figure 30) appears. The message explains the options and provides button selection instructions for proceeding.

Figure 30. Destination is in Use Message!



- **OK** – saves the changes and closes the dialog box.
- **Cancel** – compares the saved configuration and the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

  Click **Yes** to undo changes in real time and close the **Point to Point** dialog box. Click **No** to continue making configuration changes.
- **Close** button – closes the dialog box without saving changes.

Operation

Note Before the audio can be controlled, virtual sources must be created and configured. Typically this is accomplished during initial installation.

Adjust an Audio Source

Note The fader handle(s) is used to adjust the level of the active virtual source in the Program mix and any Aux mix in which the virtual source is included.

Note While the **Hold** button is active, the fader cannot be controlled by automation.

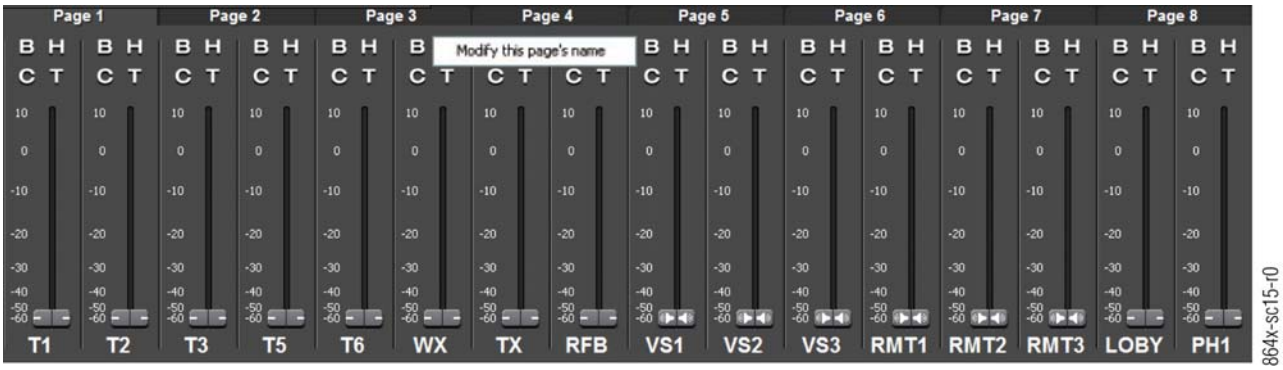
- To manually adjust the level, click and drag the fader handle.
- To jump or cut the active source to a desired volume, double-click above or below the fader handle.

Change a Page Name

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 467*.

1. Right-click the fader label. The **Modify this page's name** menu (Figure 31) appears.

Figure 31. Modify Page Name – Klotz Audio



2. Click **Modify this page's name**. The **Edit Tab Name** dialog box (Figure 32) appears.

Figure 32. Page Tab Naming Dialog Box

3. In the **Page Name** box, type the new name. Click **OK**.

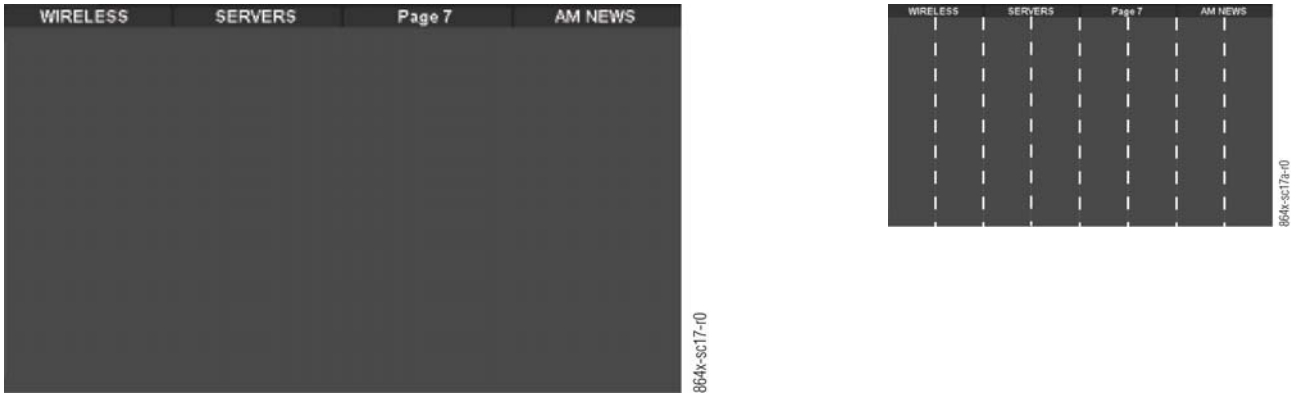
Fader Manual Virtual Source Control

Note If the **Audio Main Context Menu** is accessed via right-click on a fader, the **Virtual Source Maintenance** dialog box appears with the virtual source for the targeted fader already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty fader slot, the first virtual source in the list is selected by default.

Create a Fader Control

1. Click the **Page Tab** where the fader control is to be added. The selected **Page Tab** highlights (Figure 33).

Figure 33. Page Tabs/Fader Slots



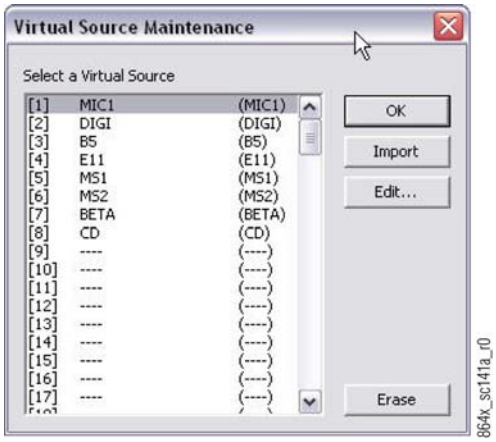
Note Each of the 8 available pages is logically subdivided into 16 fader slots. Every two slots span the width of a Page Tab (refer to Figure 33 inset).

2. Right-click the desired fader slot to create the fader control. The **Audio Main Context Menu** (Figure 34) appears.

Figure 34. Audio Main Context Menu - Virtual Source Maintenance

3. Click **Virtual Source Maintenance**. The **Virtual Source Maintenance** dialog box (Figure 35) appears.

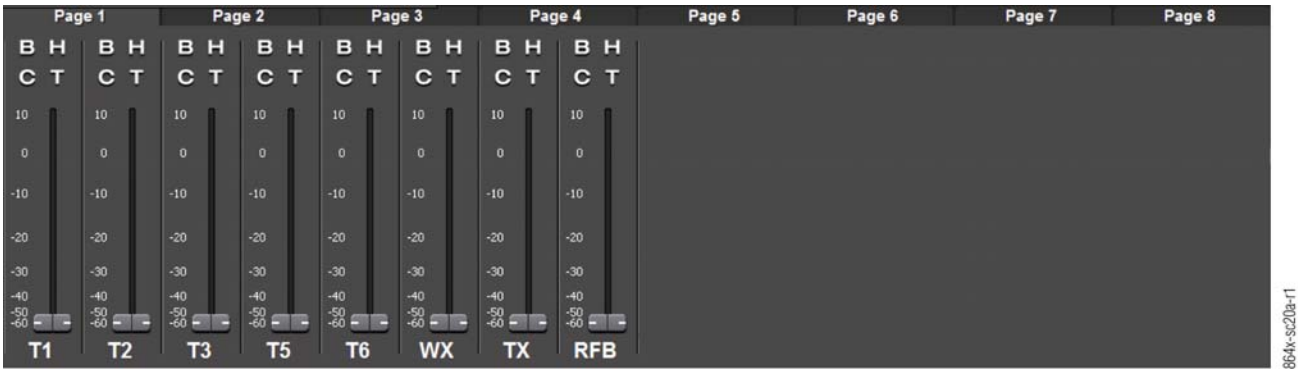
Figure 35. Virtual Source Maintenance Dialog Box



4. From the **Select a Virtual Source** list, click a virtual source for the fader to control and then click **Import**. A fader control (Figure 36) is placed in the selected fader slot.

Note The new fader control is labeled with the abbreviation of the selected virtual source.

Figure 36. New Fader Control Example – Klotz Audio



Clear/Remove a Fader Control

1. Right-click near the right edge of the fader control to be removed. The **Main Context Menu** appears.
2. Click **Clear Fader** (Figure 37).

Figure 37. Remove/Clear Fader Control

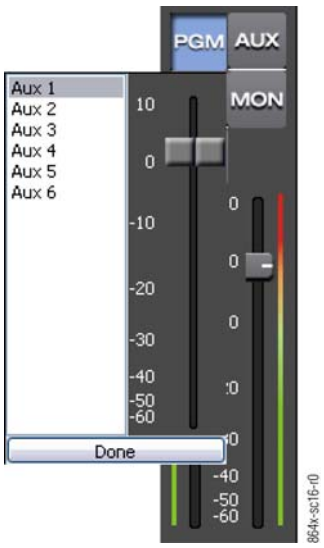
Adjust Master Fader

- Click and drag the left or right fader control to the required level.

Adjust/Setup/View Aux 1–Aux 6

1. Click the **Master Fader AUX** button. The **Master Fader AUX** button highlights and the **Aux Fader** dialog box (Figure 38) appears.

Figure 38. Aux Fader Dialog Box – Klotz Audio



2. In the **Aux Fader** dialog box, click the desired Aux bus (1–6). Click and drag the **Aux Fader** dialog box fader control to the desired level.
3. Repeat Step 2 for each **Aux** to be viewed or adjusted.
4. Click **Done**.

Source Setting Independent of Virtual Sources

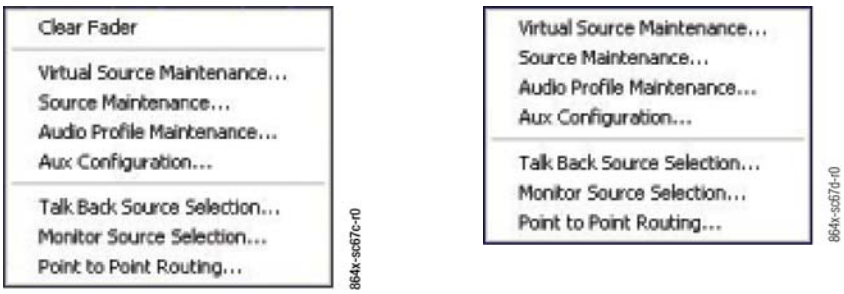
These settings include Trim Gain (*Adjust Source Trim Gain* on page 60), Mix Type (*Adjust Source Mix Type* on page 62), EQ, Dynamics, and Delay (*Adjust Source Audio Profile* on page 62).

Adjust Source Trim Gain

Note If the **Audio Main Context Menu** is accessed via right-click near the edge of a fader control, the V**irtual Source Maintenance** dialog box opens with the virtual source for the targeted fader already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty fader slot, the first virtual source in the list is selected by default.

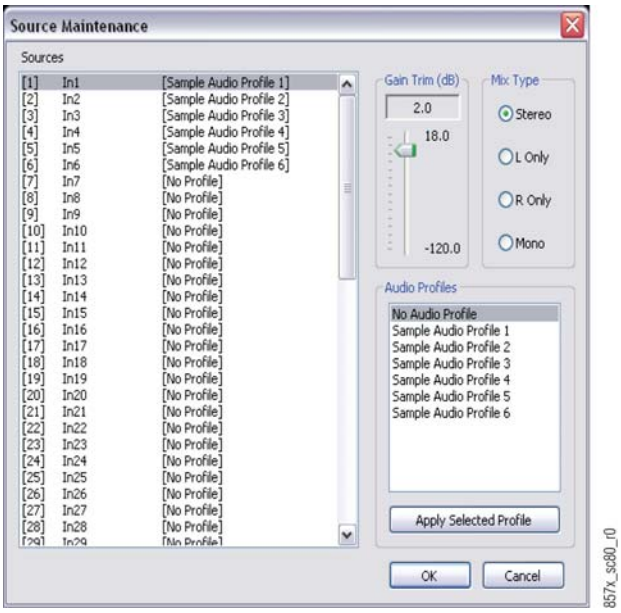
1. Right-click anywhere in the Audio Module fader controls. The **Audio Main Context Menu** (Figure 39) appears.

Figure 39. Audio Main Context Menu



2. Click **Source Maintenance**. The **Source Maintenance** dialog box (Figure 40) appears.

Figure 40. Source Maintenance Dialog Box

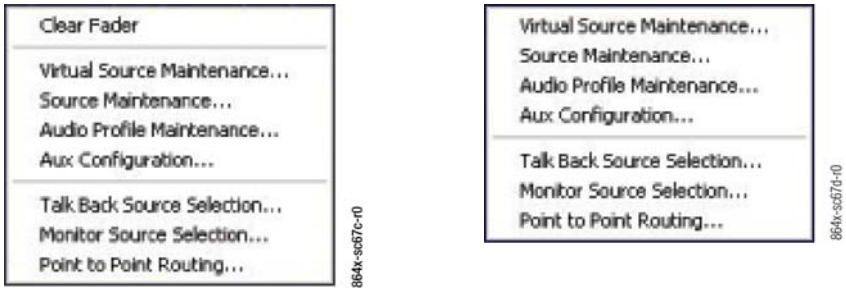


3. In the **Sources** list, click the target source.
4. Adjust the gain trim by doing one of the following:
   a. Click and drag the **Gain Trim (dB)** fader handle until the display reflects the desired gain value.
   b. Click the fader handle and then press the keyboard arrow up and down keys until the display reflects the desired gain value.
   c. Click the fader handle and then press the keyboard **Page Up** and **Page Down** keys until the display reflects the desired gain value.
5. Click **OK**.

Adjust Source Mix Type

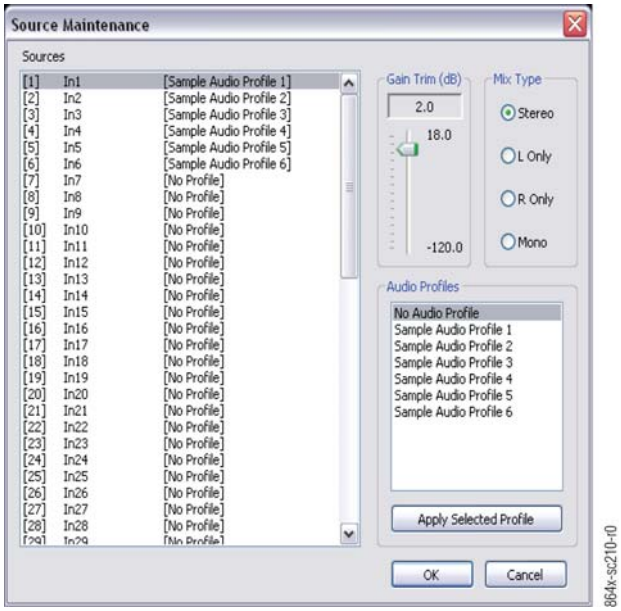
1. Right-click anywhere in the Audio Module fader controls. The **Audio Main Context Menu** (Figure 41) appears.

Figure 41. Audio Main Context Menu



2. Click **Source Maintenance**. The **Source Maintenance** dialog box (Figure 42) appears.

Figure 42. Source Maintenance Dialog Box



3. Select the desired **Mix Type** (Stereo, L Only, R Only, or Mono).

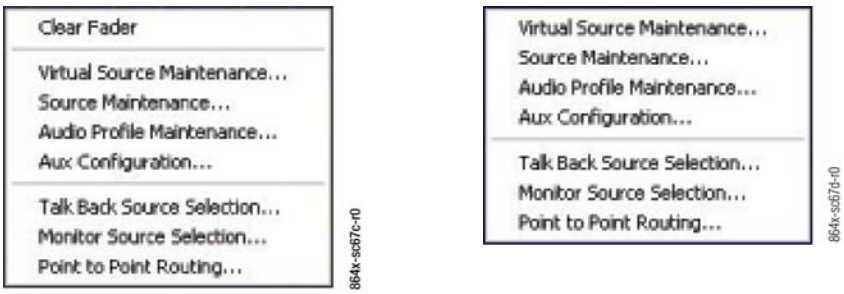
Note This setting only affects stereo sources in stereo buses.

4. Click **OK**.

Adjust Source Audio Profile

1. Right-click anywhere in the Audio Module fader controls. The **Audio Main Context Menu** (Figure 43) appears.

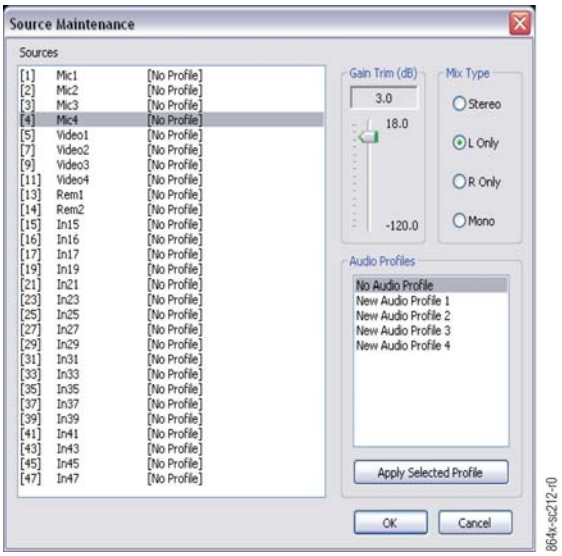
Figure 43. Audio Main Context Menu



2. Click **Source Maintenance**. The **Source Maintenance** dialog box appears. Refer to Figure 44.

Note The current Audio Profile for the source is listed in the right most column of the **Sources** list.

Figure 44. Source Maintenance Dialog Box



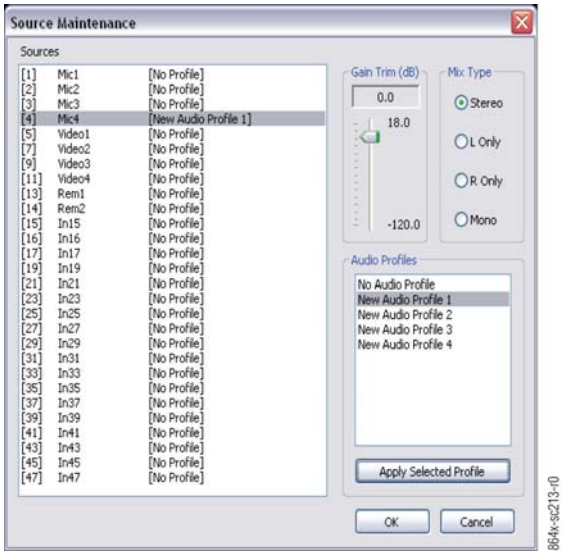
3. In the **Sources** list, click the target source.

Note The current Audio Profile is listed in the right most column of the **Sources** list.

4. In the **Audio Profiles** list, click the desired audio profile. Click **Apply Selected Profile**. In the **Sources** list, the selected Audio Profile (Figure 45) updates accordingly.

5. Click **OK**.

Figure 45. Change Source Audio Profile

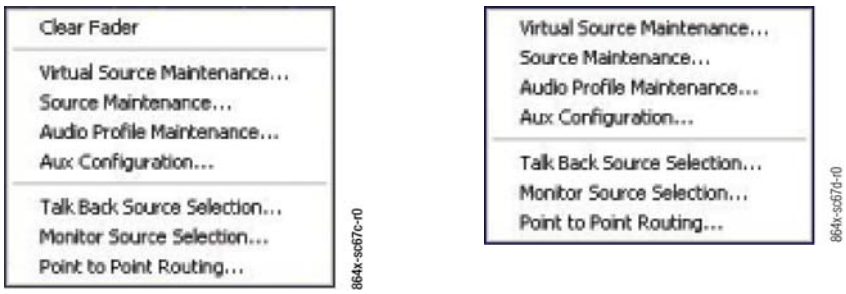


Control EQ, Dynamics, and Delay via Audio Profiles

Create An Audio Profile

1. Right-click anywhere in the Audio Module fader controls. The **Audio Main Context Menu** (Figure 46) appears.

Figure 46. Audio Main Context Menu



2. Click **Audio Profile Maintenance**. The **Audio Profile Maintenance** dialog box appears. Refer to (Figure 47).

Figure 47. Audio Profile Maintenance Dialog Box

3. Click **Add**. A new Audio Profile (Figure 48) is created and added to the list.

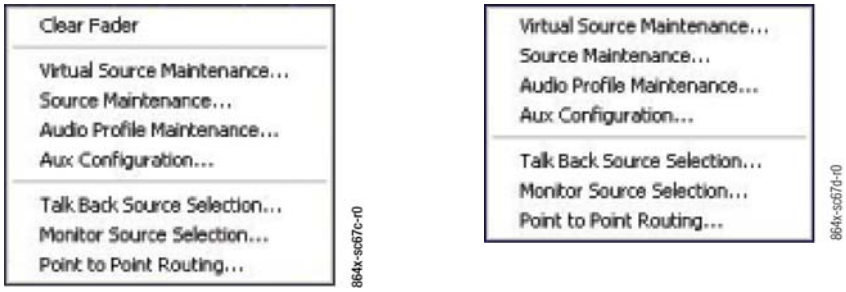
Note By default, newly created Audio Profiles are named **New Audio Profile x** where x is the next sequential number for Audio Profiles using the default **New Audio Profile** name.

Figure 48. Add New Audio Profile

Edit an Audio Profile

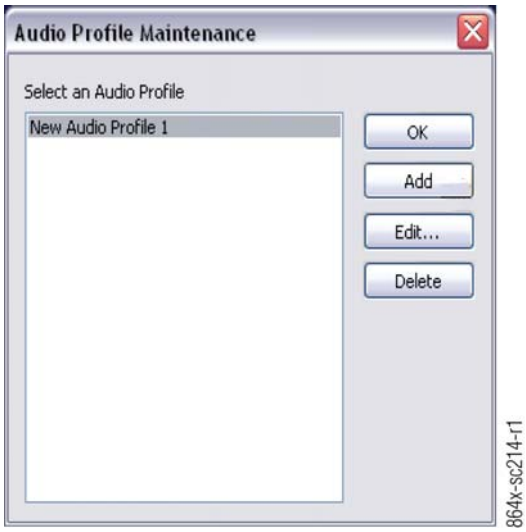
1. Right-click anywhere in the Audio Module fader controls. The **Audio Main Context Menu** (Figure 49) appears.

Figure 49. Audio Main Context Menu



2. Click **Audio Profile Maintenance**. The **Audio Profile Maintenance** dialog box appears. Refer to (Figure 50).

Figure 50. Audio Profile Maintenance Dialog Box



3. Click **Edit**. The **Audio Profile Editor** (Figure 51) dialog box appears.

Note This dialog box can contain a varying number of tabs, depending on the DSP capabilities of the system audio configuration.

Note EQ and DYN tabs only appear with a V880, 884, or 888 frame configuration.

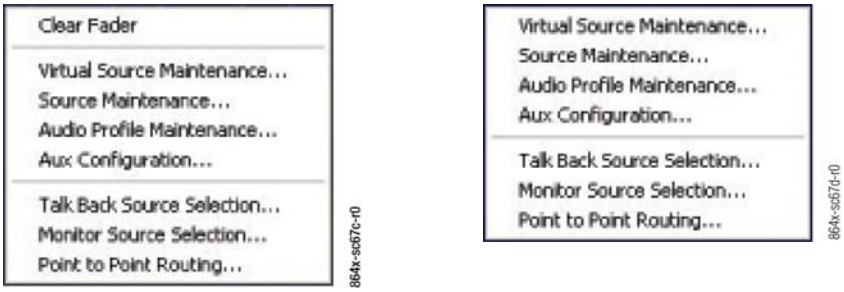
Figure 51. Audio Profile Editor Dialog Box

4. Refer to *Audio Profile Editor Dialog Box* on page 45 for Audio Profile Editor controls functionality.

Delete an Audio Profile

1. Right-click anywhere in the Audio Module fader controls. The **Audio Main Context Menu** (Figure 52) appears.

Figure 52. Audio Main Context Menu



2. Click **Audio Profile Maintenance**. The **Audio Profile Maintenance** dialog box appears. Refer to (Figure 53).

Figure 53. Audio Profile Maintenance Dialog Box

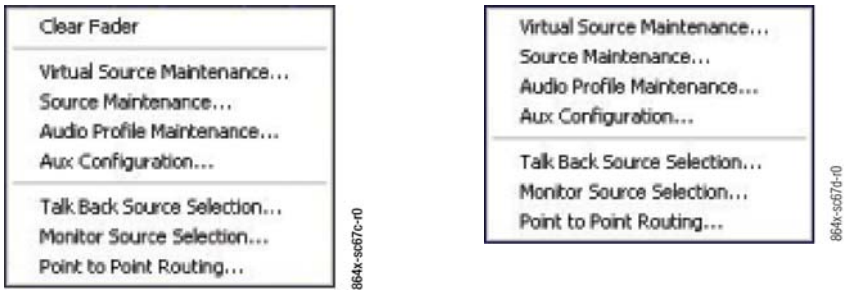
3. Click **Delete**. The **Delete Entry?** message appears:
   - Click **Yes** to continue deleting the selected Audio Profile.
   - Click **NO** to keep/not delete the item.

Note Deleting the selected Audio Profile, updates all affected sources, in real time, to **[No Audio Profile]** and immediately saves the configuration to reflect the deletion.

Select A Talk Back Source

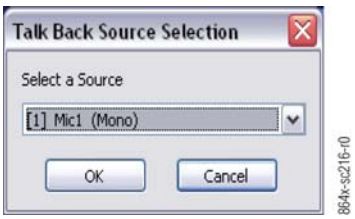
1. Right-click anywhere in the Audio Module fader controls. The **Audio Main Context Menu** (Figure 54) appears.

Figure 54. Audio Main Context Menu



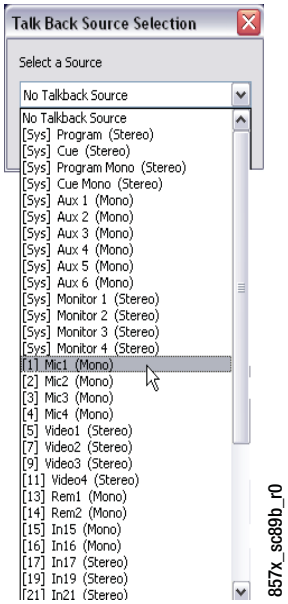
2. Click **Talk Back Source Selection**. The **Talk Back Source Selection** dialog box appears. Refer to (Figure 55).

Figure 55. Talk Back Source Selection Dialog Box



3. In the **Select a Source** box (Figure 56), type or select the desired talk back source.

Figure 56. Talk Back Select A Source Box Example

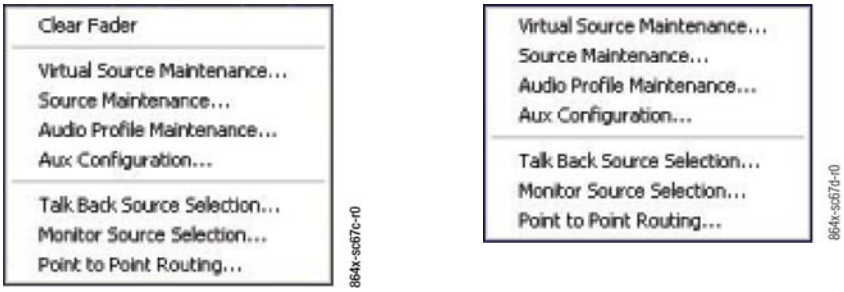


4. Click **OK**.

Select/Edit Monitor Sources

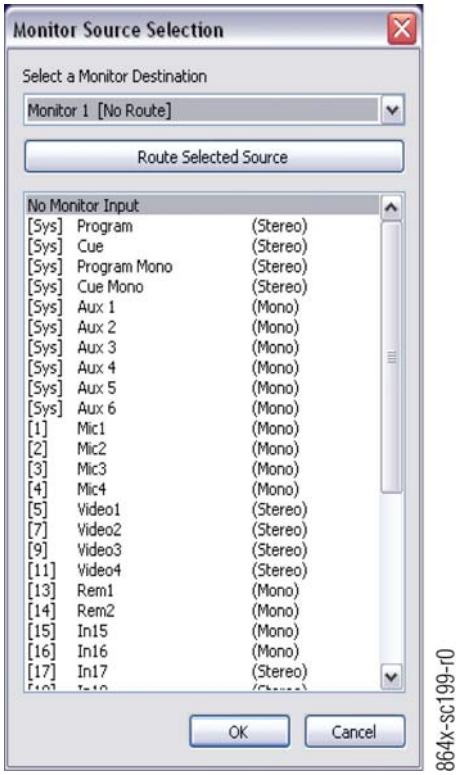
1. Right-click in the fader control area. The **Audio Main Context Menu** (Figure 57) appears.

Figure 57. Audio Main Context Menu



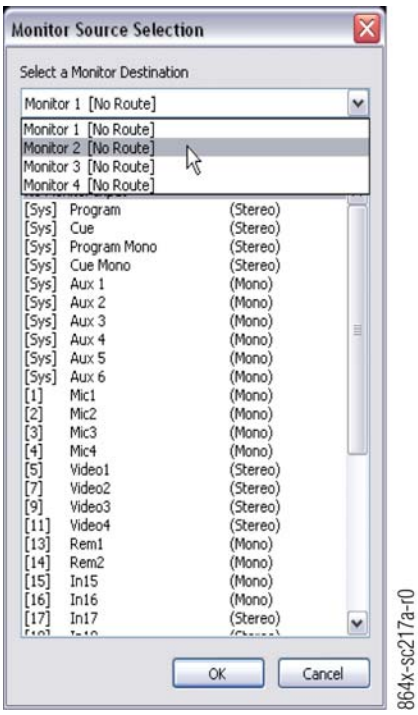
2. Click **Monitor Source Selection**. The **Monitor Source Selection** dialog box appears. Refer to Figure 58.

Figure 58. Monitor Source Selection Dialog Box Example



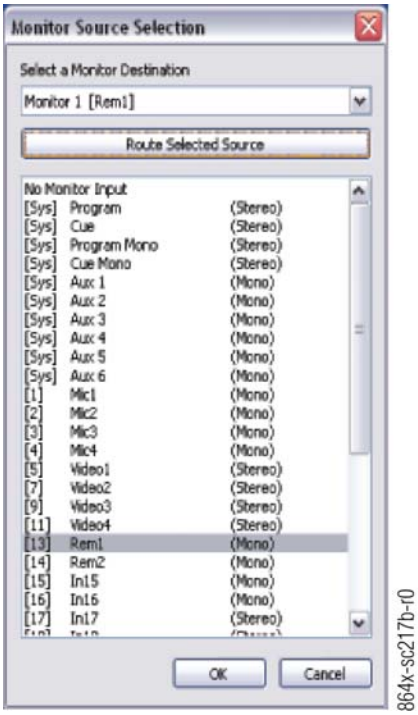
3. In the **Select a Monitor Destination** box (Figure 59), select the target monitor.

Figure 59. Select a Monitor Destination List Example



4. In the **Source** list (Figure 60), click the **Source** to route to the monitor.

Figure 60. Monitor Source Selection - Source To Monitor Example

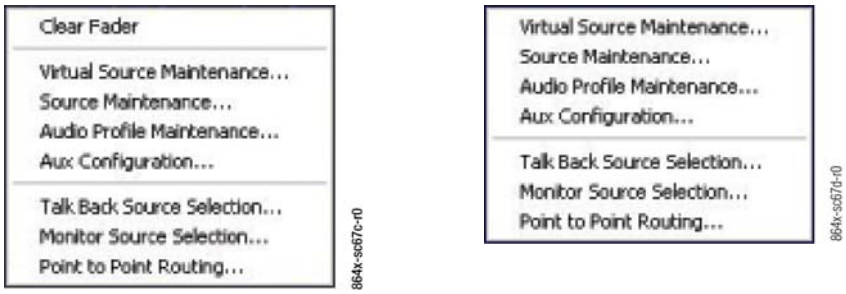


5. Click **Route Selected Source**, and then click **OK**. Refer to Figure 60.

Point To Point Routing

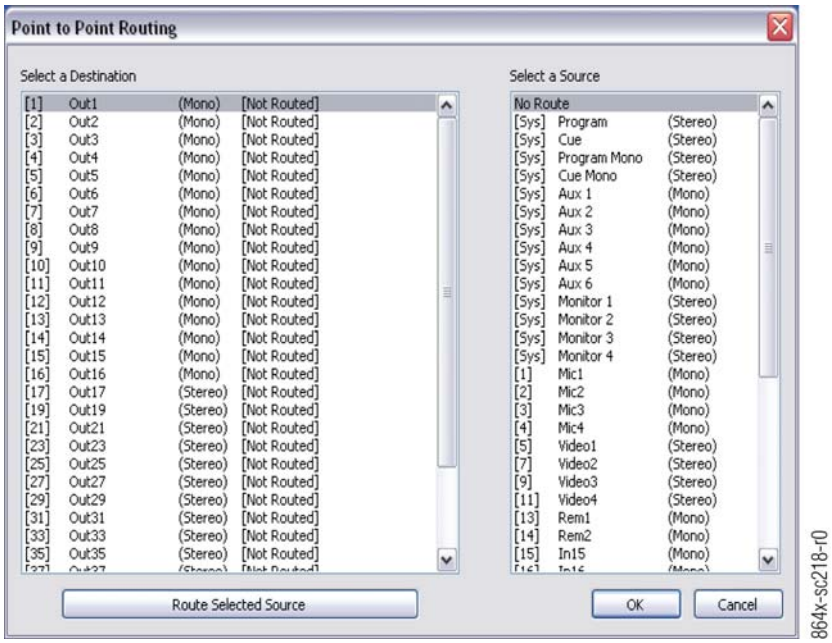
1. Right-click in the fader control area. The **Audio Main Context Menu** (Figure 61) appears.

Figure 61. Audio Main Context Menu



2. Click **Point to Point Routing**. The **Point to Point Routing** dialog box appears. Refer to Figure 62.

Figure 62. Point to Point Routing Dialog Box



3. In the **Select a Destination** list, click the target destination.
4. In the **Select a Source** list, click the target source.
5. Click **Route Selected Source**, and then click **OK**.

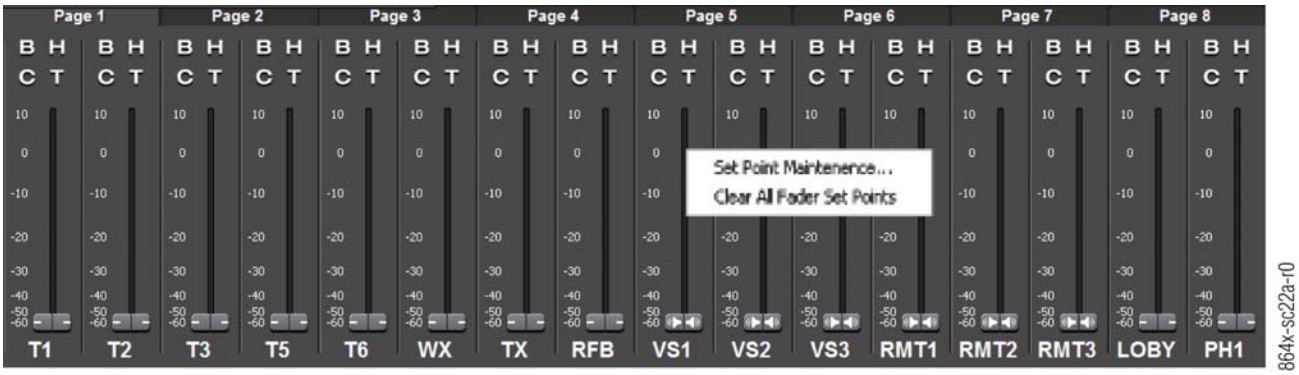
Set Points

Note A set point does not need to be loaded in order to be assigned in a task. However, it does need to be loaded if the user wishes to modify the set point position for a particular source during a show.

Create a Set Point

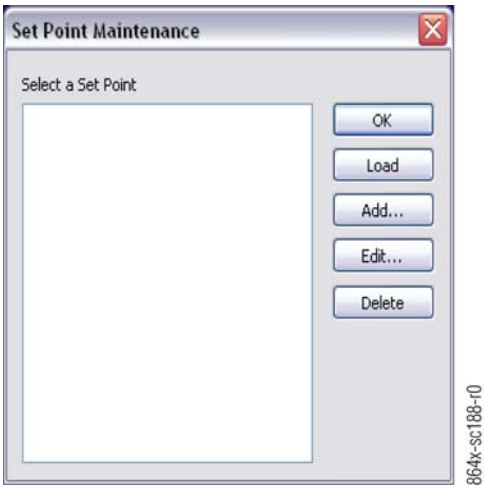
1. Right-click in the fader control volume level area. The **Set Point Context Menu** (Figure 63) appears.

Figure 63. Set Point Context Menu – Klotz Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 64.

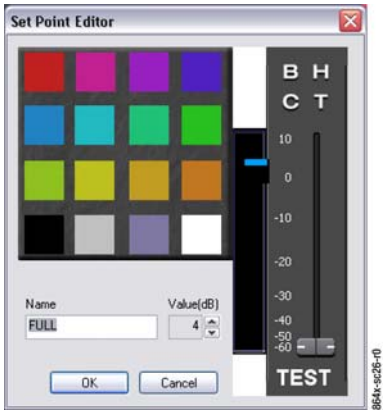
Figure 64. Set Point Maintenance Dialog Box



Note All set points created via Set Point Maintenance are available globally for every source to use in creating tasks for audio timeline objects.

3. Click **Add**. The **Set Point Editor** dialog box (Figure 65) appears.

Figure 65. Set Point Editor Dialog Box – Klotz Audio



Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 467*.

4. Either:

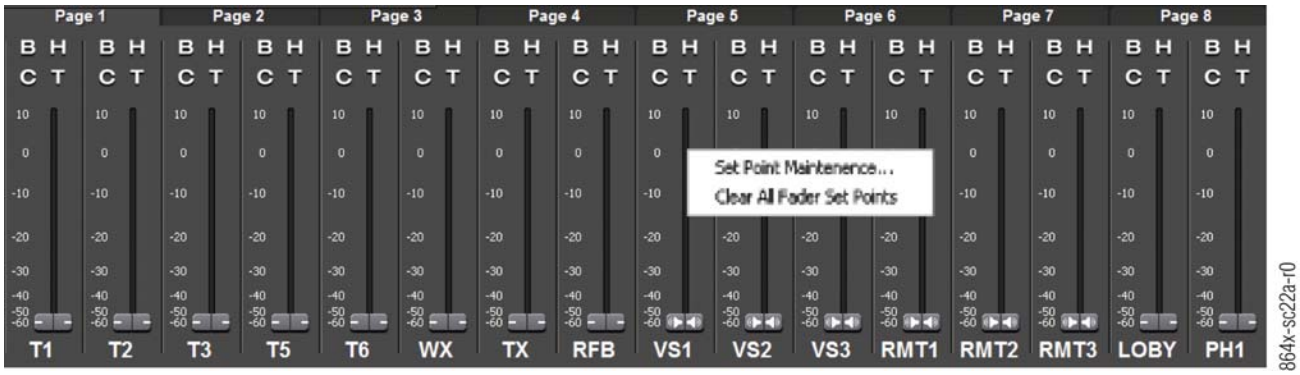
- In the **Name** box, type a Set Point name
- On the **Color Menu**, click a Set Point color
- Assign a Set Point value by either:
  - Using the **Value(dB)** up and down arrows
  - Clicking and dragging the Set Point indicator on the **TEST** fader

5. Click **OK**.

Edit a Set Point

1. Right-click in the fader control volume level. The **Set Point Context Menu** (Figure 66) appears.

Figure 66. Set Point Context Menu – Klotz Audio



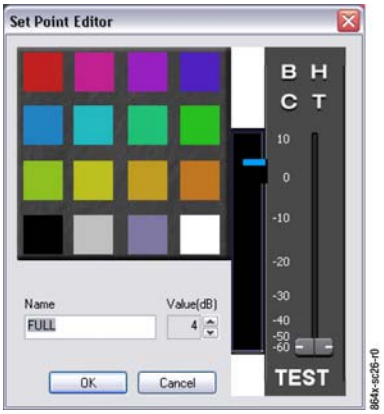
2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 67.

Figure 67. Set Point Maintenance Dialog Box

3. From the **Select a Setpoint** list, click a Set Point to edit.

4. Click **Edit.** The **Set Point Editor** dialog box (Figure 68) appears.

Figure 68. Set Point Editor Dialog Box – Klotz Audio



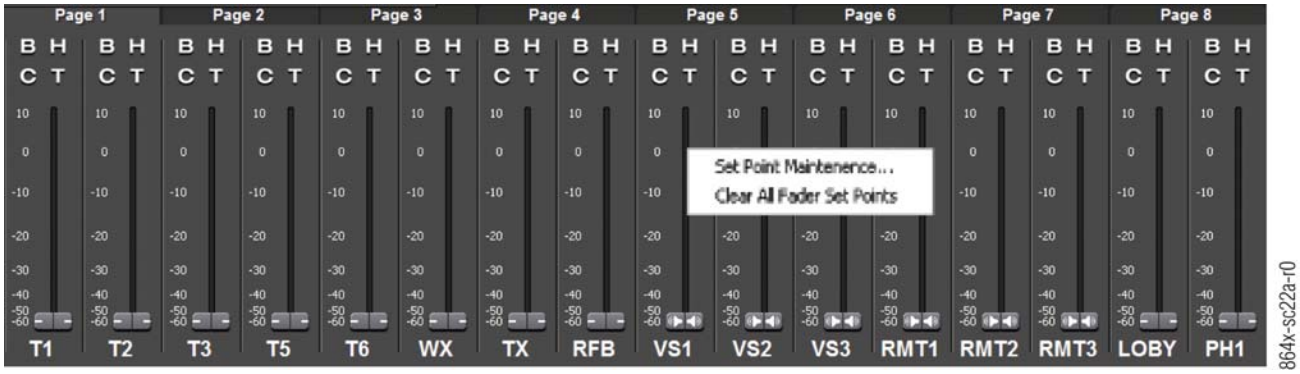
5. Edit the Set Point as necessary.

6. Click **OK**.

Load a Set Point to a Virtual Source

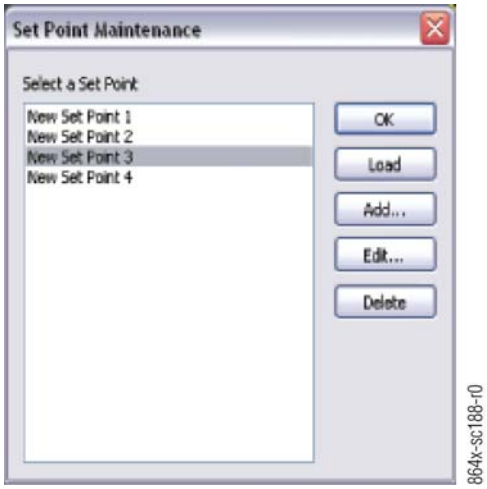
1. Right-click on the fader control that controls the target virtual source. The **Set Point Context Menu** (Figure 69) appears.

Figure 69. Set Point Context Menu - Virtual Source – Klotz Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 70.

Figure 70. Set Point Maintenance Dialog Box



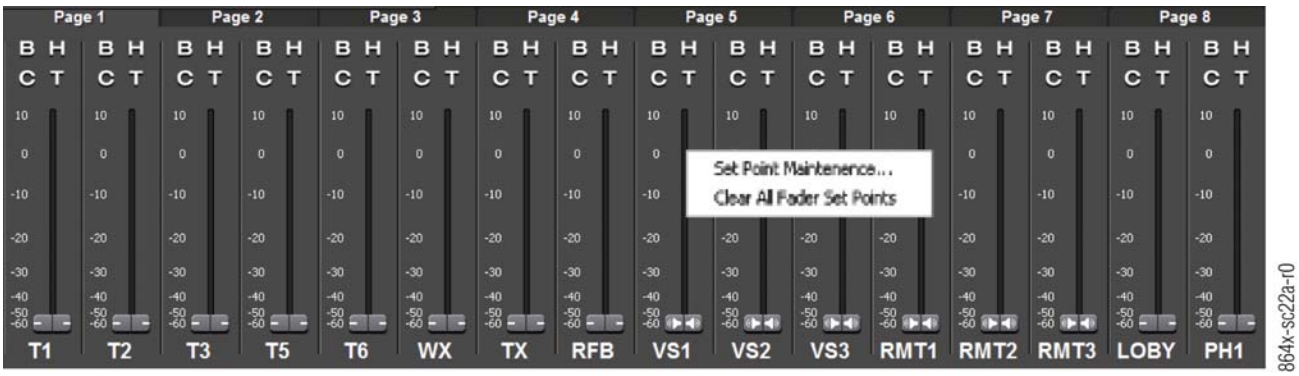
3. From the **Select a Setpoint** list, click a Set Point to load, and then click **Load**
4. Click **OK**. The Set Point appears on the selected fader control.

Note Click and drag a Set Point to a virtual source-specific volume level up or down to force audio automation to use that level instead of the volume level associated with the global setpoint.

Delete a Set Point

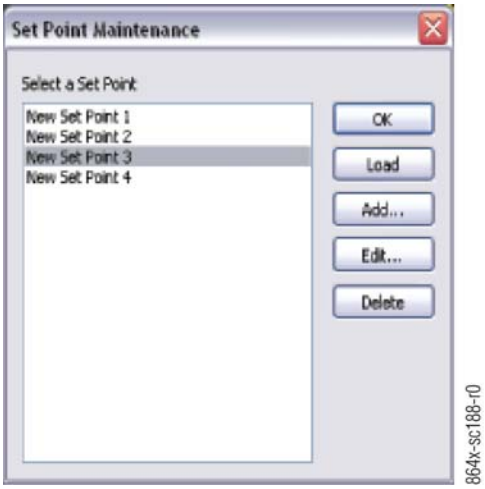
1. Right-click in the fader control volume level area. The **Set Point Context Menu** (Figure 71) appears.

Figure 71. Set Point Context Menu – Klotz Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 72.

Figure 72. Set Point Maintenance Dialog Box

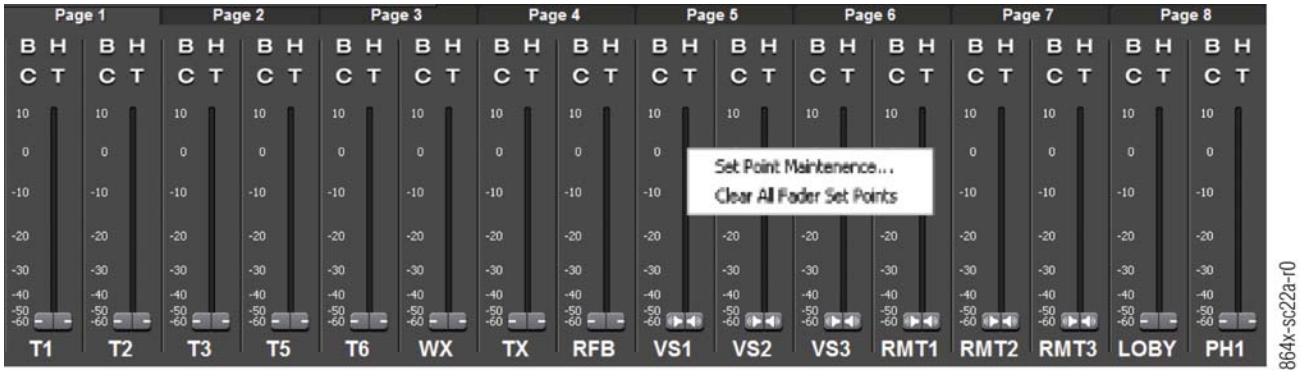


3. From the **Select a Setpoint** list, click a Setpoint to delete.
4. Click **Delete**. The **Delete Entry?** message appears:
   - Click **Yes** to continue deleting the selected Set Point.
   - Click **No** to keep/not delete the item.

Clear Set Points from a Virtual Source

1. Right-click on the fader control that controls the target virtual source. The **Set Point Context Menu** (Figure 73) appears.

Figure 73. Set Point Context Menu – Klotz Audio



2. Click **Clear All Fader Set Points**. All Set Points specific to the virtual source controlled by the fader control are removed.

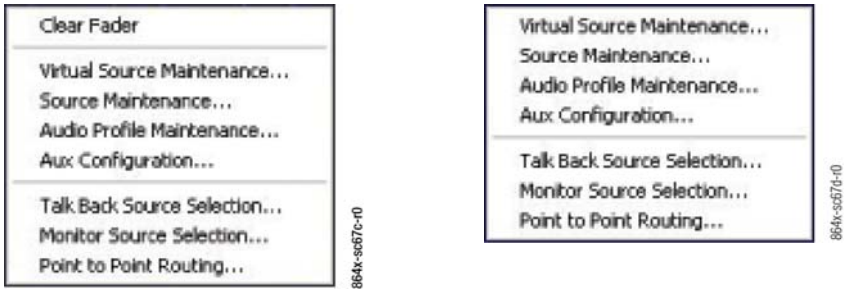
Virtual Sources

Edit a Virtual Source Entry

Note If the **Audio Main Context Menu** is accessed via right-click on a fader, the **Virtual Source Maintenance** dialog box appears with the virtual source for the targeted fader already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty fader slot, the first virtual source in the list is selected by default.

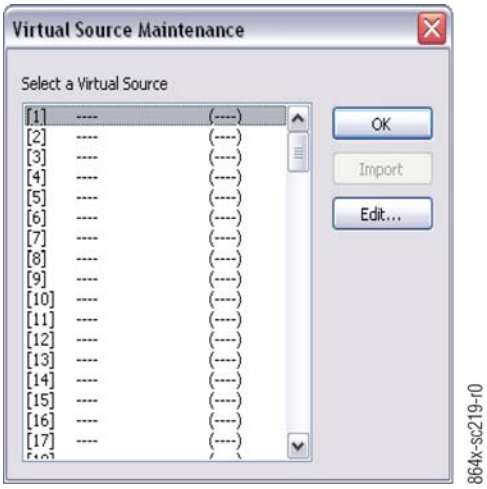
1. Right-click near the right edge of the fader control to be edited. The **Audio Main Context Menu** (Figure 74) appears.

Figure 74. Audio Main Context Menu



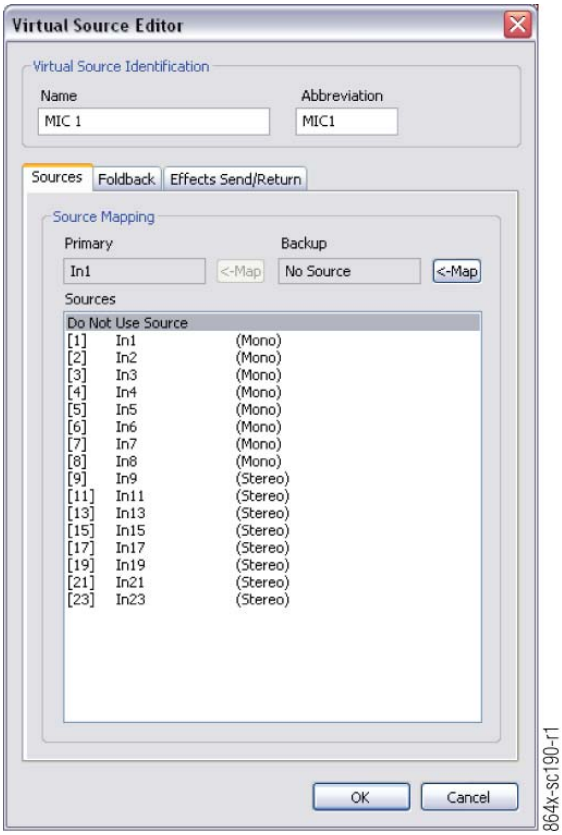
2. Click **Virtual Source Maintenance**. The **Virtual Source Maintenance** dialog box appears. Refer to Figure 75.

Figure 75. Virtual Source Maintenance Dialog Box



3. In the **Select a Virtual Source** list, click a virtual source to edit and then click **Edit**. The **Virtual Source Editor** dialog box (Figure 76) appears.

Figure 76. Virtual Source Editor Dialog Box

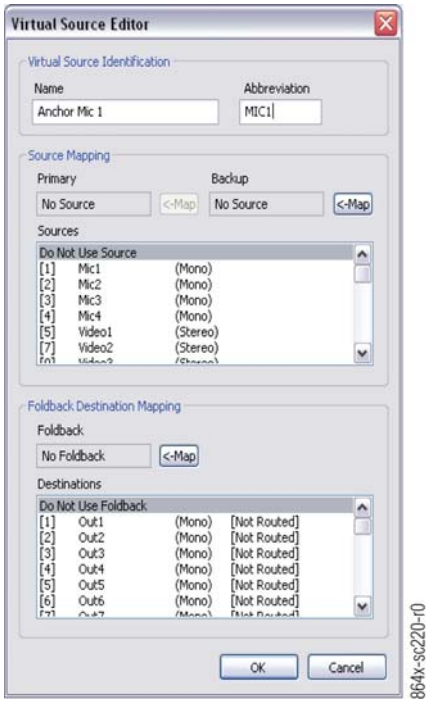


4. Within **Virtual Source Identification** (Figure 77):

   a. In the **Name** text box, type a name for the virtual source (required)

b. In the **Abbreviation** text box, type an abbreviation for the virtual source (required)

Figure 77. Virtual Source Identification

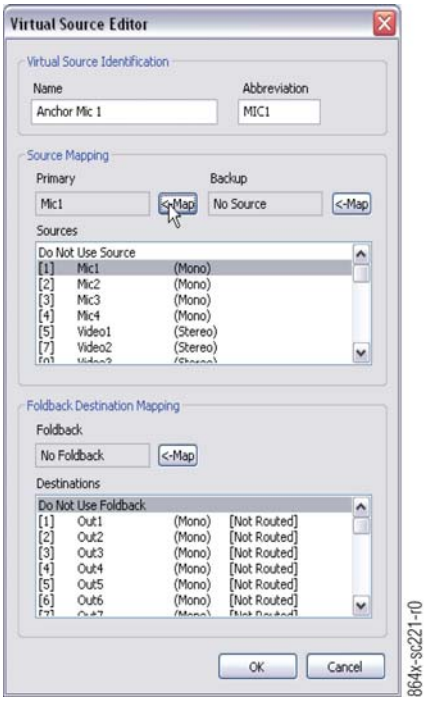


5. Within **Source Mapping** (Figure 78):

a. In the **Sources** list, click a **Primary** source

b. Click **Primary Map** to assign the selected source as the Primary Source

Figure 78. Virtual Source Primary Mapping



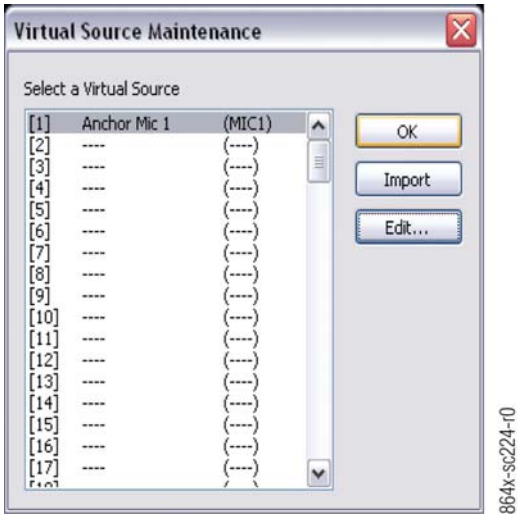
Note The following Backup Mapping step is optional.

6. Within **Source Mapping** (Figure 78):
   a. In the **Sources** list, click a Backup source.
   b. Click **Backup Map** to assign the selected source as the Backup Source.

Note The following Foldback Mapping step is optional. This is the destination to which the active source mix-minus will be routed when the source is on air. Otherwise, program audio is routed instead.

7. Within **Foldback Destination Mapping** (Figure 78):
   a. In the **Destinations** list, click a **Foldback** Destination.
   b. Click **Foldback Map** to assign the selected source as the Foldback Destination.
8. Click **OK**. The **Virtual Source Maintenance** (Figure 79) dialog box appears with the just configured virtual source showing in the **Select a Virtual Source** list.

Figure 79. Select a Virtual Source List Example



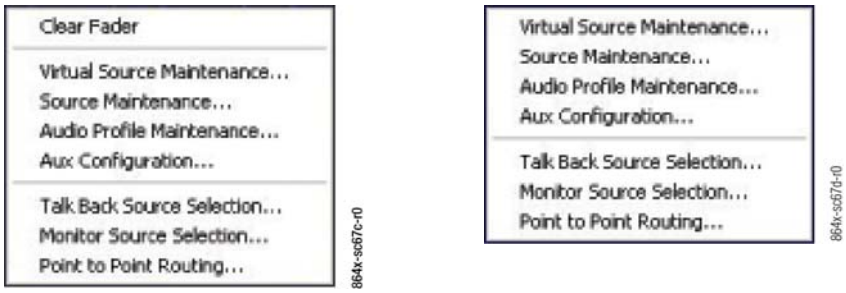
Note To create more sources, click a different virtual source and perform Step 1 through Step 8.

9. Click **OK**.

Adding/Removing Virtual Sources From Aux Mixes

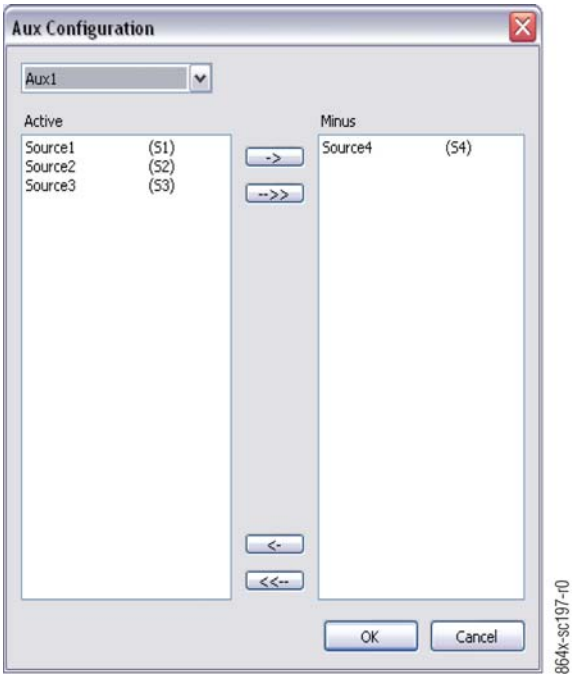
1. Right-click in the fader control area. The **Audio Main Context Menu** (Figure 80) appears.

Figure 80. Audio Main Context Menu



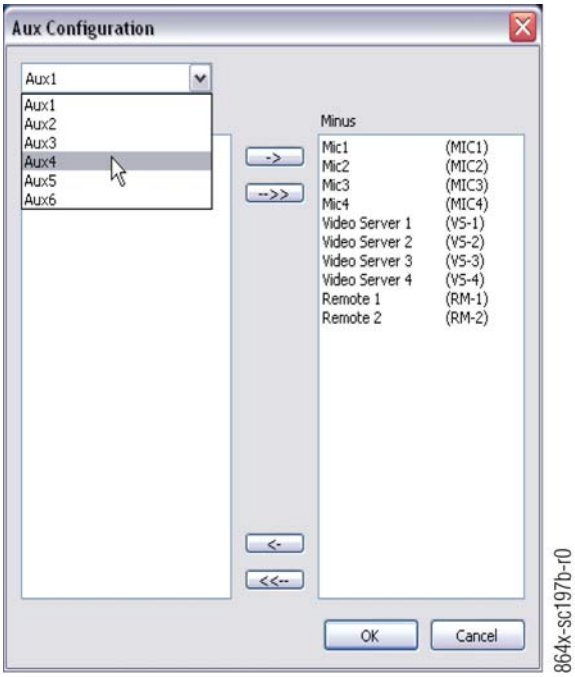
2. Click **Aux Configuration**. The **Aux Configuration** dialog box appears. Refer to Figure 81.

Figure 81. Aux Configuration Dialog Box Example



3. In the **Aux** text box (Figure 82), type or select the target Aux Bus.

Figure 82. Aux Configuration Dialog Box - Aux Buses

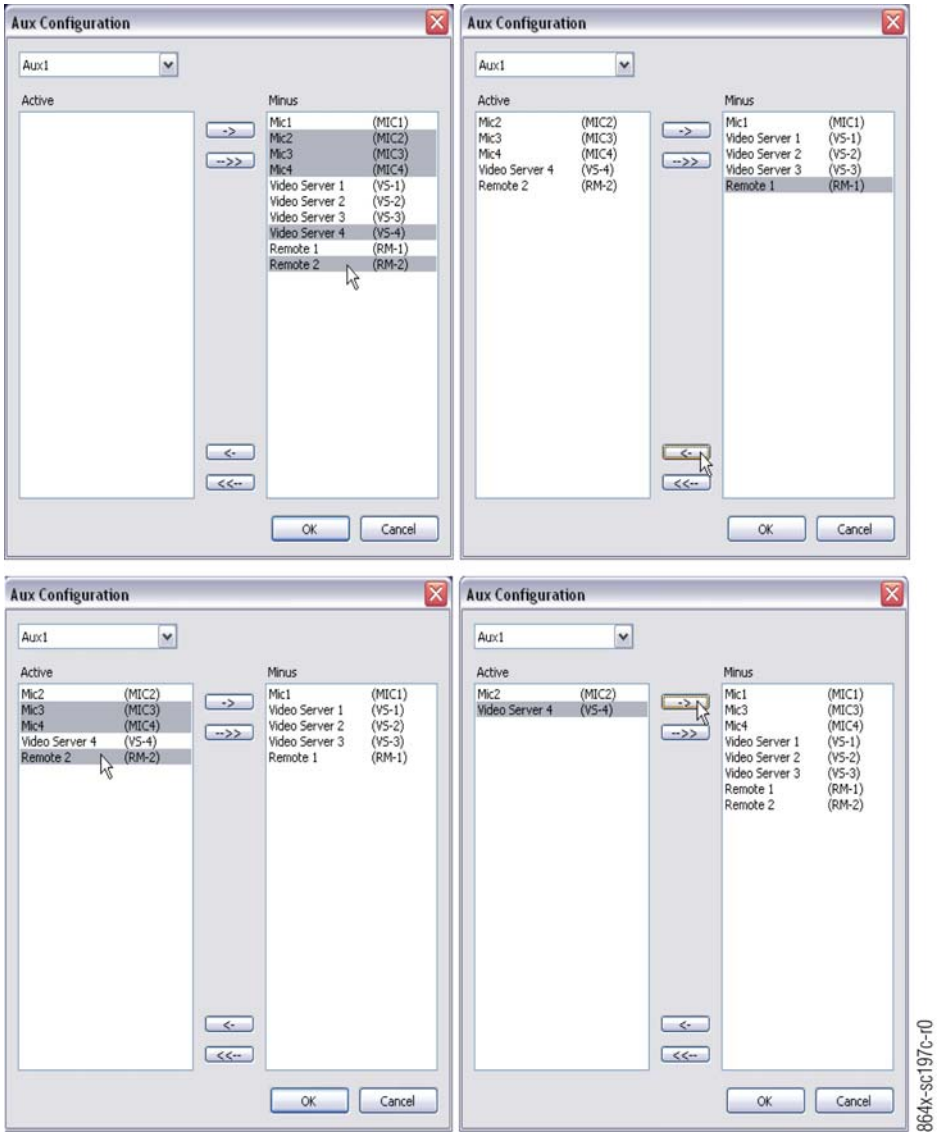


Note Refer to *Aux Configuration* on page 51 for button functionality.

Note Typical of most Windows functionality, the mouse, **SHIFT** key, and **CTRL** key can be used to perform ranged selections and line item selections.

4. Using the mouse and key combinations and the available buttons, add and/or remove virtual sources between the **Active** and **Minus** lists as necessary. Refer to the examples in Figure 83.

Figure 83. Aux Configuration Dialog Box - Add/Remove Examples



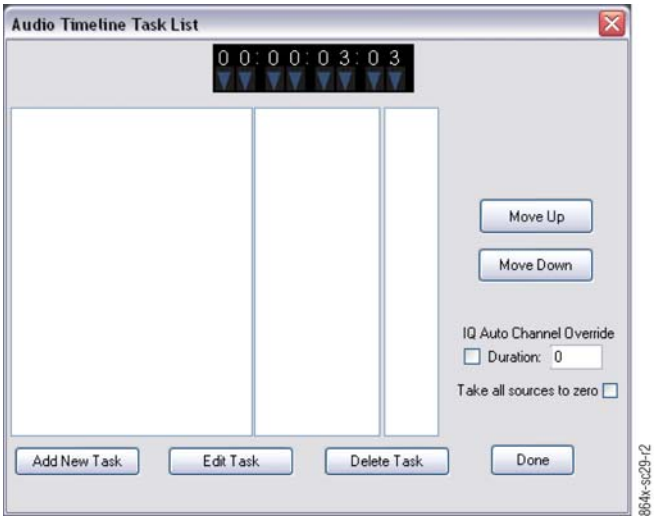
5. When complete, click **OK**.

Set Up Audio Task Properties

Note Set points must be created before creating audio tasks. A set point does not need to be assigned to a source in order for the source to use the set point, but at least one set point must exist. There are two default set points **OFF** and **IGNORE** that are system defined and non-editable by the user.

1. On the timeline, drag an audio command over. Double-click the Audio Property icon. The **Audio Timeline Task List** dialog box (Figure 84) appears.

Figure 84. Audio Timeline Task List Dialog Box

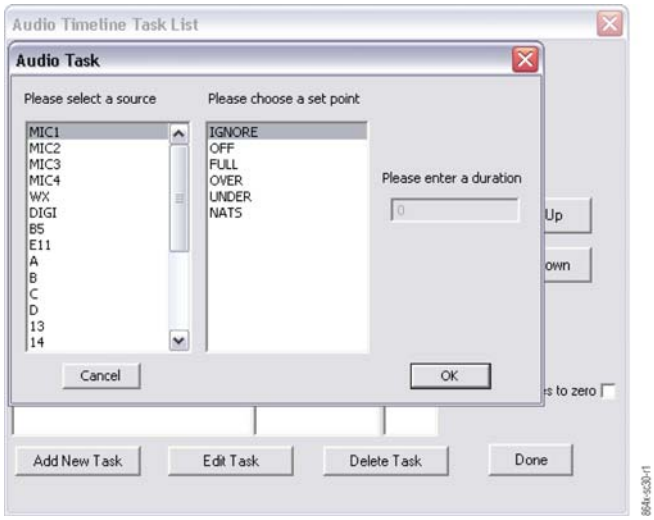


2. Click a task and then click either **Add New Task**, **Edit Task**, **Delete Task**, **Move Up**, or **Move Down** as needed. If either **Add New Task** or **Edit Task** is chosen an **Audio Task** dialog box (Figure 85) appears.
   - Complete the entries in this dialog box, click **OK**, and then proceed to the next step.

Note The duration field should be set to the number of frames over which the fade will occur. If left blank or set to 0, a cut is performed instead.

Note Click **IGNORE** to set an audio source so that the **Take all to Zero** command ignores that specific source when setting all sources to zero. Clicking **IGNORE** sets the duration to 0 frames and disables the **Please enter a duration** box. The **Ignore** feature is accessed through the individual Audio Module TME icon properties

Figure 85. Audio Task Dialog Box



3. Repeat Step 1 and Step 2 for adding tasks for each individual task in the same audio command.

4. Click **OK**.

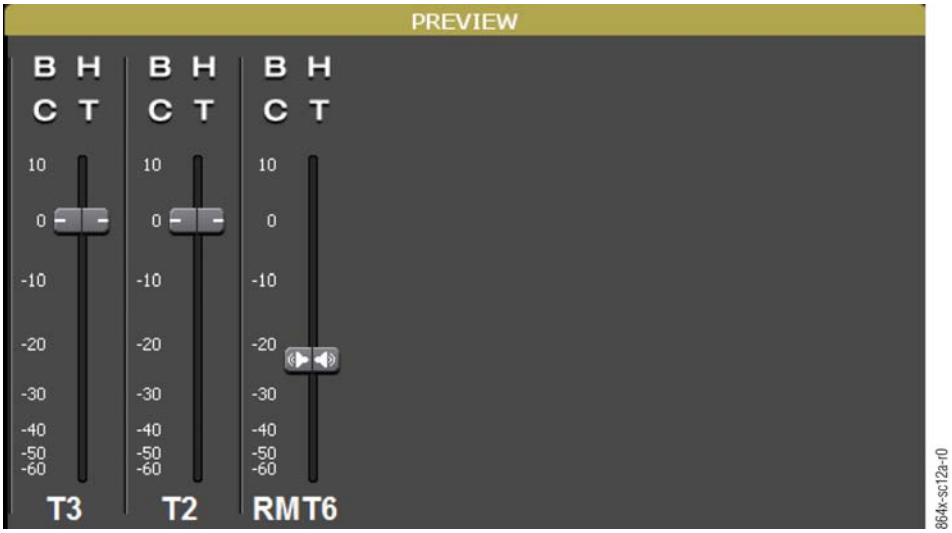
Note Click the **Take All Sources to Zero** check box (Figure 84) to have all other sources without a task assigned to go off air at 0 duration.

5. Click **Done**.

Audio Preview

Audio sources transitioned via the Ignite/Ignite Konnect Event Timeline are populated into the Audio Preview area (Figure 86) as each TME is prepped. The sources set to move to air next are shown in the Audio Preview area.

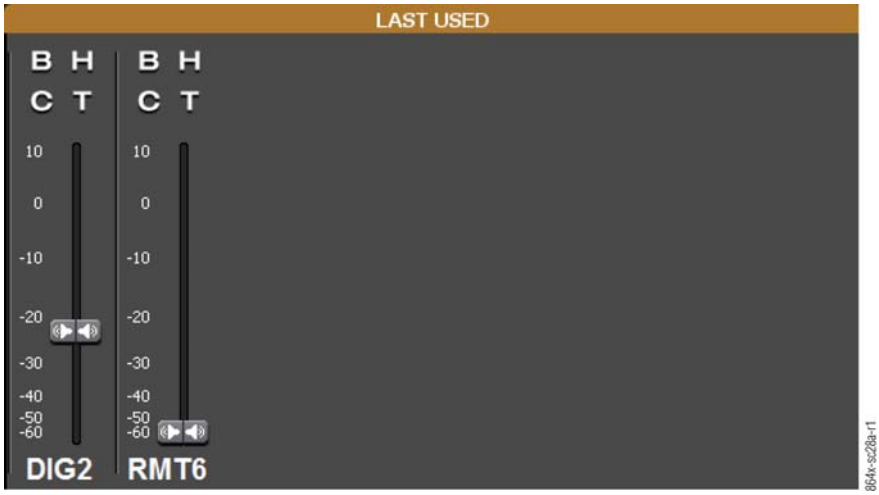
Figure 86. Audio Preview Area Example – Klotz Audio



Note The previewed audio shows the audio fader level when the source is transitioned to air. If a different transition level is desired before going to air, adjust the level while it is in Preview.

- To set the desired program output, move the master output fader handle to the corresponding level.
- To prevent a source from going to air, after a TME has been prepped, click **H** to hold the source in preview.
- To toggle between this view and a view that is populated with the most recently used audio faders, click **Preview**. The **Last Used** view (Figure 87) appears.

Figure 87. Audio Last Used View Example – Klotz Audio

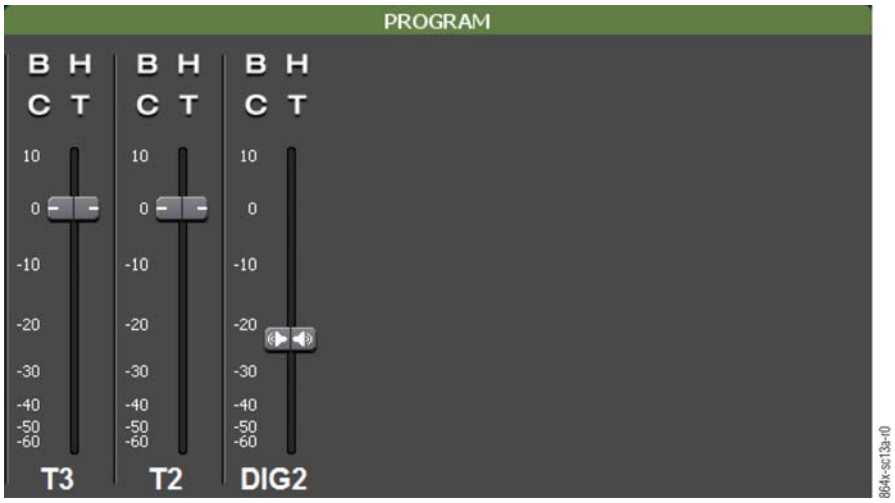


- In **Preview**, right-click an audio source to select either:
  - Send it to air immediately
  - Remove it from Preview and not go to air

Audio Program (LIVE)

The **Audio Program** area (Figure 88) shows the sources presently On Air. Any source that is moved above its off point is taken to air instantly and is shown in the **Audio Program** area.

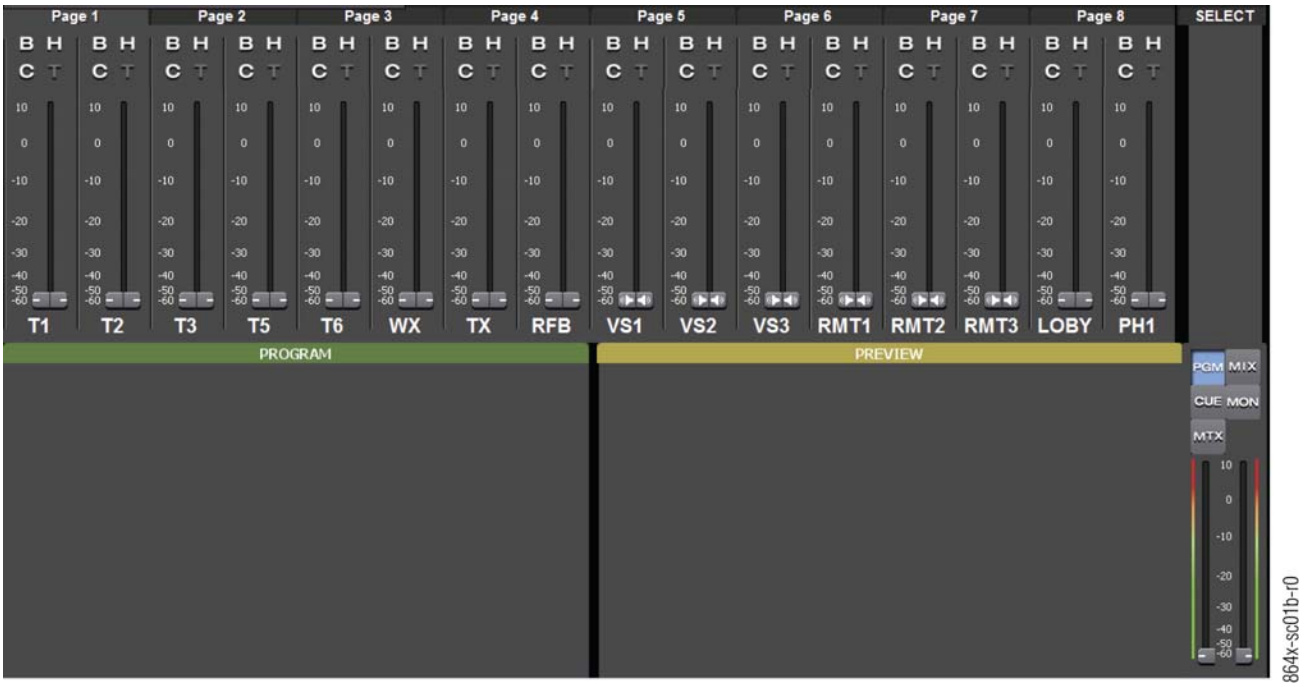
Figure 88. Audio Program Area Example – Klotz Audio



- To remove the audio mix, right-click any source and then click **Take Off Air Now.**
- To hold the source on air, click **H** while the source is in the area.

Yamaha Audio

Figure 89. Audio Module - Yamaha Audio



Overview

Note The Ignite/Ignite Konnect system provides an automation interface (Figure 89) to this panel. For panel-specific user and set up information, refer to the manufacturer's documentation.

Fader Manual Virtual Source Control

Virtual Sources provide a mapping between Automation Events and Input Channels on the Yamaha Mixer. Virtual Sources play a significant role in Automation Events by enabling Automation Events to control target Sources regardless of which Input Channels the Sources have been assigned to on the Yamaha Mixer. As many as 64 pre-configured Virtual Sources are possible.

In order to control a virtual source from within the Audio Module, a fader control must be created to represent the virtual source visually (refer to *Create a Fader Control* on page 103. Otherwise, the virtual source idly waits in the background for commands from Ignite/Ignite Konnect Timeline Automation or external control surfaces such as the QUICbox™ panel.

Individual Faders

Each fader control has three available buttons (Figure 90) at the top:

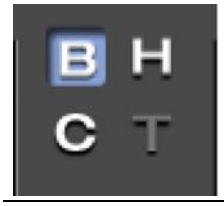
- **B** (Backup)
- **H** (Hold)
- **C** (Cue)

Note The **T** (Talk Back) function is unavailable with the Yamaha audio control configuration. Therefore the **T** button is dimmed in this configuration

When either the **B** or **C** button is clicked, the button background highlights blue to indicate it is selected. When the **H** button is clicked, both the button background and the fader perimeter highlight amber to indicate it is selected.

Note For all of the buttons, a gray background indicates it is not selected.

Figure 90. Fader Buttons - Yamaha Audio

Selected	Function
	Backup – switches to a backup. Click to make the attached backup source the active source in the mix. This button has no effect if a backup source was not selected for the virtual source during configuration.
	Hold – holds a source on or off air. Click to hold the fader control at the current level. If the fader control is currently engaged in a fade triggered by automation, the fade is allowed to continue and the fader will be held at the final level resulting from the fade.
	Cue – monitors a channel. Click to add the attached virtual source into the Cue mix bus. The Cue bus mix is a pre-fade mix where sources enter the mix at unity gain.
	Note The Talk Back function is unavailable with the Yamaha audio control configuration. Therefore the T (Talk Back) button is dimmed in that configuration.

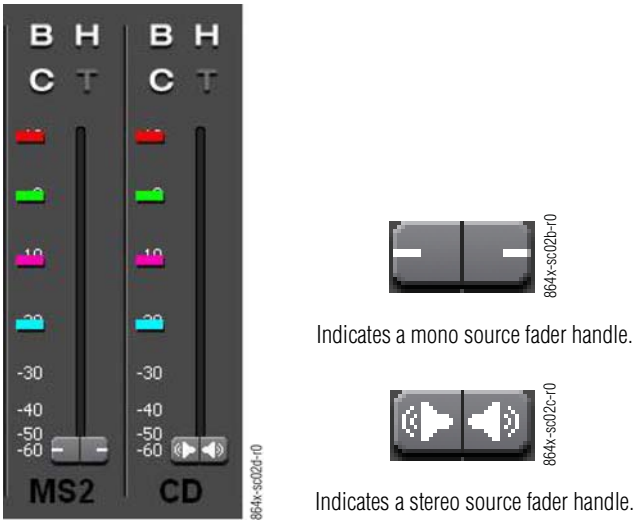
Fader control handles are used to adjust the virtual source active source level in the Program mix and any Aux mix in which the virtual source is

included. Double-click the fader control above or below the fader handle to force the active source to jump or cut to the desired volume. A manual fade is achieved by dragging the fader handle to the desired level. The level can not be controlled with the fader while the **Hold** button is active.

Also, there are two different fader control handles (Figure 91):

- Mono – a single fader control that functions individually
- Stereo – a pair of handles that move as a single fader

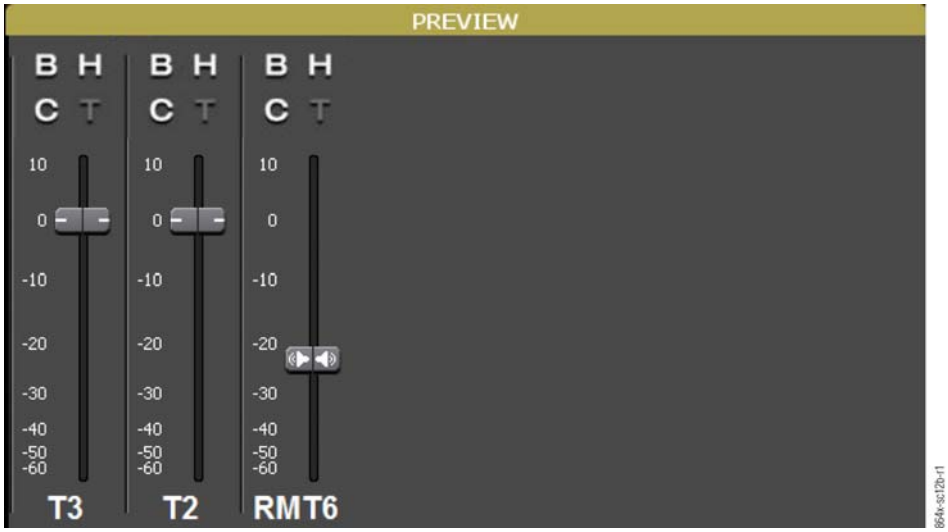
Figure 91. Fader Control Handless - Yamaha Audio



Audio Preview

Virtual sources transitioned via the Ignite/Ignite Konnect Event Timeline are populated into the **Audio Preview** area (Figure 92) as each TME is prepped. The virtual sources set to move to air next are shown in the **Audio Preview** area.

Figure 92. Audio Preview Area - Yamaha Audio

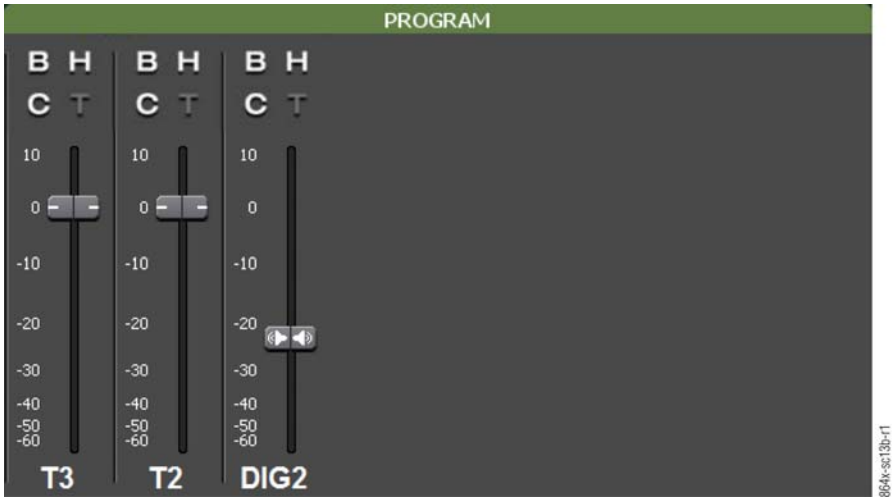


Audio Program (Live)

The **Audio Program** area (Figure 93) shows the virtual sources presently On Air. Any virtual source that is moved above its off point is taken to air instantly and is shown in the **Audio Program** area.

Note Only the 8 most recent virtual sources to go on air and still exist on air are shown. Once 9 virtual sources are on air, the oldest on-air virtual source disappears and reappears if another is taken off air.

Figure 93. Audio Program Area - Yamaha Audio



Set Points

Set Points are pre-established fader settings that are referenced via a TME (Transition Macro Event), refer to *TME™ (Transition Macro Event™)* *on page 34*. These set points set a source level for each source. Set Points can be

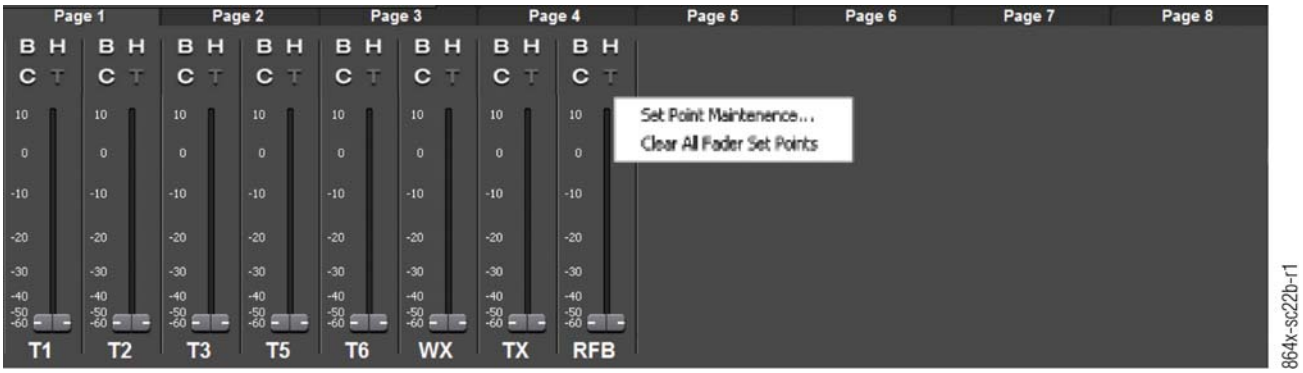
named for easy reference. Via Event Timeline automation, each TME provides the system with the audio set point needed for that particular event.

To access the **Set Points Menu** (Figure 94), within a fader, right-click near the left edge of the fader control. The **Set Points Menu** has two selections:

- **Set Point Maintenance** – accesses the **Set Point Maintenance** dialog box
- **Clear All Fader Set Points** – clears all fader set points

Note The **Set Point Maintenance** dialog box opens in the same state regardless of where the user right-clicked to access the **Set Point Menu**. However, if a set point is loaded from this dialog, the set point is loaded to the fader that was right-clicked to access the **Set Point Menu**.

Figure 94. Set Point Menu - Yamaha Audio



Set points must be created before creating audio tasks. A set point does not need to be assigned to a virtual source in order for the virtual source to use the set point, but at least one set point must exist. There are two default setpoints that are system defined and non-editable by the user:

- **OFF** – used to bring a Virtual Source off the air.
- **IGNORE** – used to flag a Virtual Source so that it will not be affected by the **Take All Sources to Zero** feature of Audio TMEs.

A set point does not need to be loaded in order to be assigned in a task. However, it does need to be loaded if the user wishes to modify the set point position for a particular virtual source during a show.

Set Point Maintenance

The **Set Point Maintenance** dialog box (Figure 95) is accessed from the **Set Points Menu**. This dialog box is used to create, edit, delete, or load set points.

Figure 95. Set Point Maintenance Dialog Box

Note All set points created via Set Point Maintenance are available globally for use by every source in creating tasks for audio timeline objects.

The **Set Point Maintenance** dialog box includes:

- **OK** – saves the changes and closes the dialog box.
- **Load** - loads the selected set point to the fader that was right-clicked to access the **Set Point Menu**. A fader can only have one instance of the same set point loaded. When attempting to load a set point to a fader that already has the set point loaded, a **Delete Entry** message appears.
- **Add** - accesses the **Set Point Editor** dialog box with a new Set Point definition. If appropriately configured, the set point is created and added to the list.
- **Edit** - accesses the **Set Point Editor** for the selected Set Point changes.
- **Delete** – the **Delete Entry?** message appears.

  Click **Yes** to continue deleting the selected Set Point and immediately save the configuration to reflect the deletion. Click **No** to keep/not delete the item at this time and continue making changes.
- **Close** button – closes the dialog box without saving changes.

Set Point Editor

The **Set Point Editor** dialog box (Figure 96) is accessed from the **Set Point Maintenance** dialog box **Edit** button (Figure 97 on page 95).

Note All set points created via Set Point Maintenance are available globally for use by every source in creating tasks for audio timeline objects.

Figure 96. Set Point Editor Dialog Box

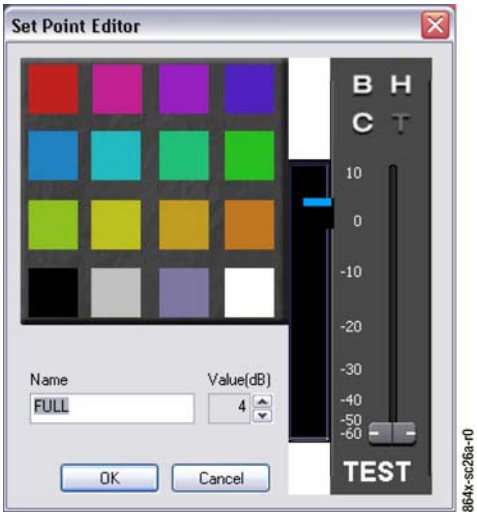
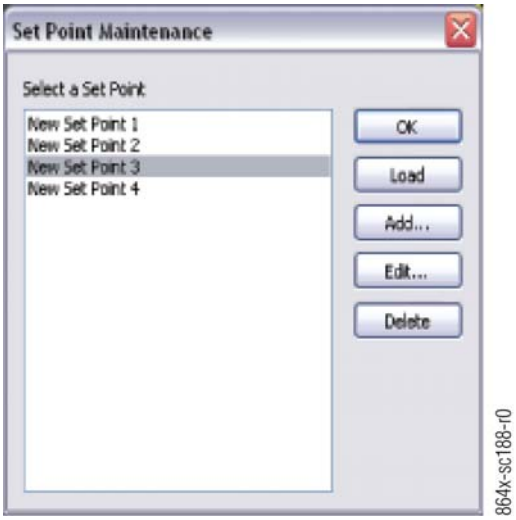


Figure 97. Set Point Maintenance Dialog Box



The **Set Point Editor** dialog box includes:

- **Color Selection** - changes the color of the target Set Point. Click a color to assign.
- **Volume Level** - click and drag to set the target volume level. Users can also use the Up-Down control attached to the **Value(dB)** field to achieve the same results.
- **OK** – saves the new/edited changes and closes the dialog box.

Note Before changing/saving, verifies that the Set Point Name is unique among Set Points and that the name does not match the default **Off** Set Points name in any way. If invalid, a message appears stating the need and nature of the required change.

- **Cancel** – compares the saved configuration and the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

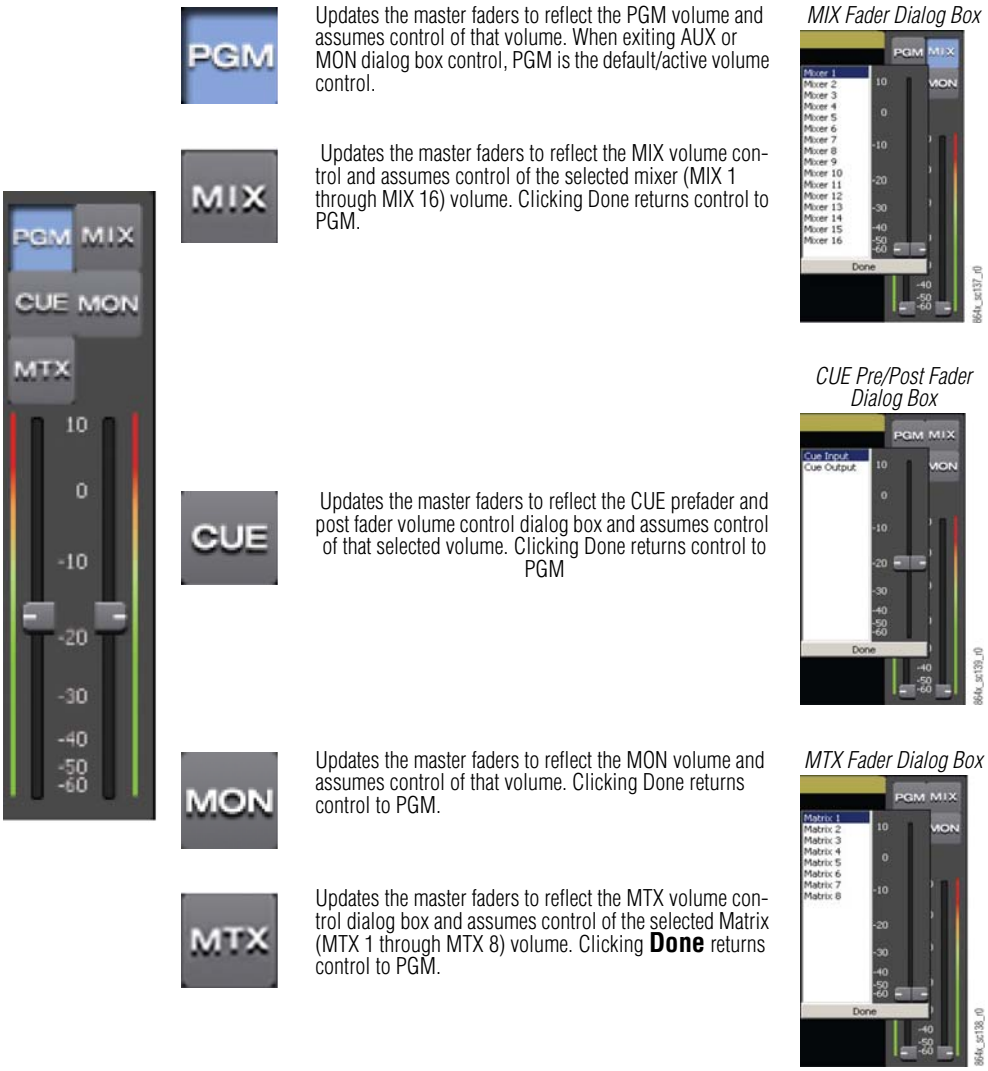
  Click **Yes** to undo changes in real time and close the **Set Point Editor** dialog box. Click **No** to continue making configuration changes.

- **Close** button – closes the dialog box without saving changes.

Master Output Faders

The **Master Output Fader** (Figure 98 on page 96) provides master control of the overall audio output level of the **Master Out Left** and **Master Out Right** channels. Six buttons comprise the various Master Volume Controls.

Figure 98. Master Output Fader - Yamaha Audio

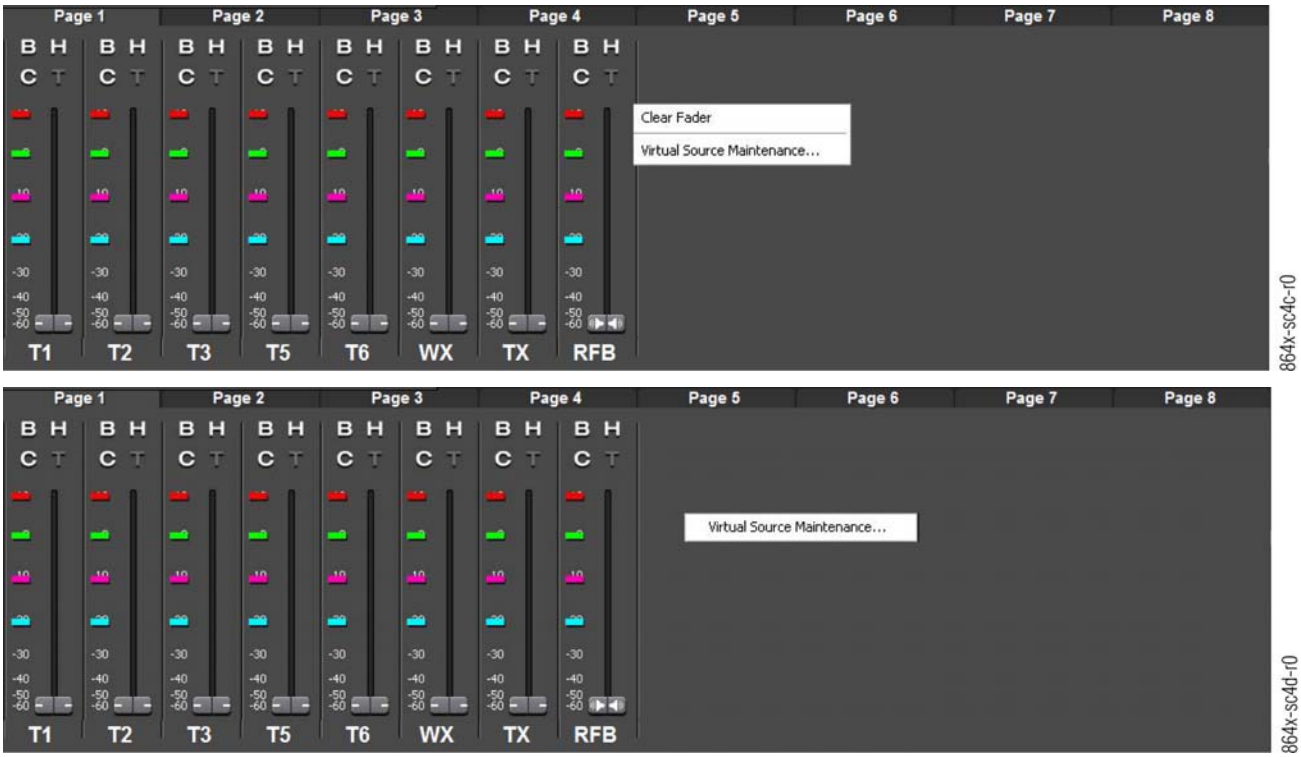


The **PGM** and **CUE** buttons function similarly. When the respective button is clicked, the main faders update to reflect and assume control of that volume; i.e., **PGM**, **CUE**, or **TB**. When either the **AUX** or **MON** button is selected, a separate dialog box appears to enable specific selection of a particular Aux or Monitor to control. In any case, all changes are real time and take effect immediately

Audio Main Context Menu

To access the **Audio Main Context Menu** (Figure 99), right-click near the right edge of a fader control.

Figure 99. Audio Main Context Menu - Yamaha Audio



The **Audio Main Context Menu** items for the Yamaha audio configuration are:

Audio Main Context Menu Item	Purpose
Clear Fader	Removes the selected fader (virtual source control) from view and replaces it with an empty slot. This does not delete the fader-associated virtual source, but that specific virtual source control (fader) is simply not shown. That audio virtual source (or any available audio virtual source) can be imported to an empty slot as a fader control using the Virtual Source Maintenance menu item. Refer to *Virtual Source Maintenance Dialog Box* on page 98 NOTE: This menu item is only available if a fader is selected (right-click). Refer to Figure 99.
Virtual Source Maintenance	Accesses the Virtual Source Maintenance dialog box that enables a user to either edit or import a virtual audio source. Refer to *Virtual Source Maintenance Dialog Box* on page 98.

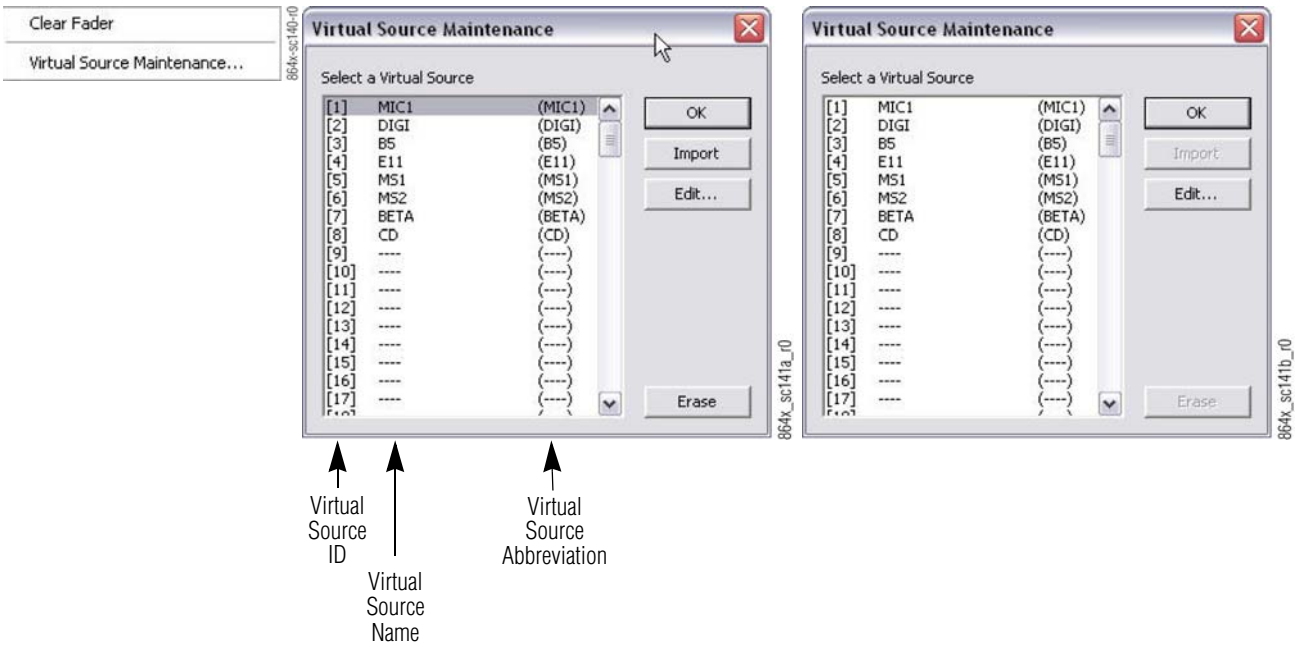
Virtual Source Maintenance Dialog Box

The **Virtual Source Maintenance** dialog box (Figure 100) is accessed from the **Audio Main Context Menu**. The **Virtual Source Maintenance** dialog box provides a list of available virtual audio sources and from that list a user can either import a virtual source to the selected slot or edit/configure an already assigned virtual source.

Note If the **Audio Main Context Menu** is accessed via right-click near the edge of a fader, the **Virtual Source Maintenance** dialog box opens with the virtual source for the targeted fader already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty fader slot, the first virtual source in the list is selected by default.

The **Virtual Source Maintenance** dialog box (Figure 100) includes:

Figure 100. Virtual Source Maintenance Dialog Box



- **Select a Virtual Source** – lists a source ID, virtual source name, and source abbreviation for each available virtual source. Any un-configured virtual source name and abbreviation is shown as a series of dashes.
- **OK** – saves the changes and closes the dialog box.
- **Import** – imports the selected virtual source to either a fader or an empty fader slot. The import position is based on the fader slot used to access the **Audio Main Context Menu**. If the fader slot is already populated by a fader, that virtual source is replaced with the virtual source selected from the **Select a Virtual Source** list.

Note Import is unavailable if an non-configured virtual source is selected.

- **Edit** – opens the **Virtual Source Editor** dialog box (refer to *Virtual Source Editor Dialog Box* on page 100). The **Virtual Source Editor** dialog box opens in one of two modes, either **Edit** mode (if the selected virtual source is already configured) or **Configuration** mode (if the selected virtual source is not configured).

Note When in Edit Mode, the Editor forces real time configuration change updates to the virtual source but in Configuration Mode it does not.

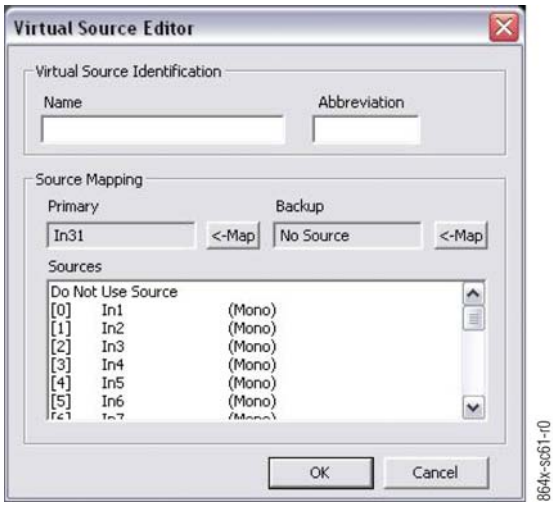
- **Erase** – deletes the virtual source entry
- **Close** button – closes the dialog box without saving changes.

Virtual Source Editor Dialog Box

The **Virtual Source Editor** dialog box (Figure 101) is accessed from the **Virtual Source Maintenance** dialog box **Edit** button (Figure 100 on page 99). It enables a user to create and configure virtual sources for use in TMEs and to edit the configuration of an existing virtual source in real time. The **Virtual Source Editor** dialog box opens in one of two modes, either **Edit** mode (if the selected virtual source is already configured) or **Configuration** mode (if the selected virtual source is not configured).

- **Edit** Mode - when configuring a pre-existing virtual source, the changes to **Primary**, and **Backup** take effect in real time. This feature enables a user to make critical alterations while Audio is live.
- **Configuration** Mode - when configuring a brand new virtual source. Since there is no way for an non-configured virtual source to be associated with a **fader control** or become part of a mix, there is little reason or validity to sending real time updates to any of the settings that the user alters.

Figure 101. Virtual Source Editor Dialog Box (Yamaha)



The **Virtual Source Editor** dialog box (Figure 101) includes:

- **Virtual Source Identification** – text boxes for a user defined **Virtual Source Name** and **Abbreviation**.
  - **Name** – limited to 25 characters and is system monitored to prevent duplicates. This name is used to identify the virtual source in other configuration dialog boxes as well as System Error Logs.
  - **Abbreviation** – limited to 4 characters and is system monitored to prevent duplicates. This abbreviation is the only identifier that appears on the fader control associated with that virtual source. This abbreviation is also used, along with the name, to identify the virtual source in other configuration dialog boxes as well as System Error Logs.

- **Source Mapping** – enables a user to select the **Primary** and **Backup** source audio content that is inserted into a mix when the virtual source is either in Cue or On-Air.
  - **Primary** – shows the name of the currently mapped **Primary** source or **No Source** if a source is not mapped. A virtual source must have a mapped **Primary** source in order to complete the configuration.

    The **Map** button assigns the selected source as the **Primary** source. Since a primary source must exist before the configuration can be completed, the **Map** button is disabled when the user selects **Do not use Source** from the **Sources** list box.
  - **Backup** – shows the name of the currently mapped **Backup** source or **No Source** if a source is not mapped. The **Map** button sets the selected source as the **Backup** source. A **Backup** source does not have to be mapped. Selecting **Do not use Source** and clicking **Map** removes any previously mapped backup source and replaces it with a **No Source** entry. If a virtual source does not have a mapped backup source, the **Backup** button on any fader control to which that virtual source is associated has no effect when clicked.
  - **OK** – verifies that the **Name** and **Abbreviation** boxes contain valid entries, confirms that a primary source is mapped to the virtual source, updates and saves the virtual source entry, then closes the dialog box.

Note If any **OK** condition is not met, an error dialog box appears to notify the user about the discrepancy, the change is not saved, and the **Virtual Source Editor** dialog box is not closed.

- **Cancel** – click functionality depends on the current dialog box mode: **Edit** or **Configuration**.
  - When in **Edit** Mode, if configuration changes have been made, a **Cancel Changes?** message appears. Click **Yes** to undo changes and close the **Virtual Source Editor** dialog box. Click **No** to continue making configuration changes.
  - When in **Configuration** mode, the new virtual source entry is not created or saved and the dialog box closes.
- **Close** button – closes the dialog box without saving changes.

Operation

Note The Ignite/Ignite Konnect system provides an automation interface to this panel.
For panel-specific user and set up information, refer to the manufacturer's documentation.

Note Before the audio can be controlled, virtual sources must be created and configured. Typically this is accomplished during initial installation.

Adjust an Audio Source

Note The fader handle(s) is used to adjust the level of the active virtual source in the Program mix and any Aux mix in which the virtual source is included.

Note The level can not be controlled with the fader while the **Hold** button is active.

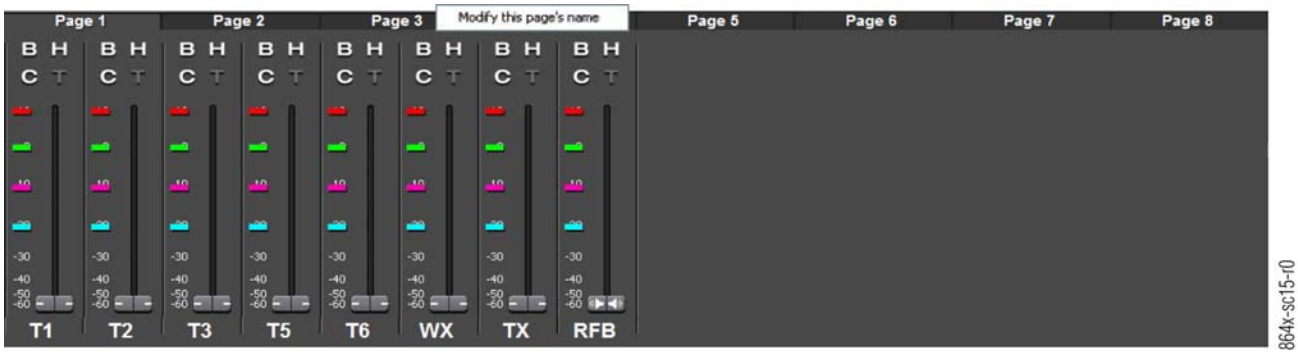
- To manually adjust the level, click and drag the fader handle.
- To jump or cut the active source to a desired volume, double-click above or below the fader handle.

Change a Page Name

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

1. Right-click the fader label. The **Modify this page's name** menu (Figure 102) appears.

Figure 102. Modify Page Name - Yamaha Audio



2. Click **Modify this page's name**. The **Page Tab Naming** dialog box (Figure 103) appears.

Figure 103. Page Tab Naming Dialog Box

3. In the **Page Name** box, type the new name. Click **OK**.

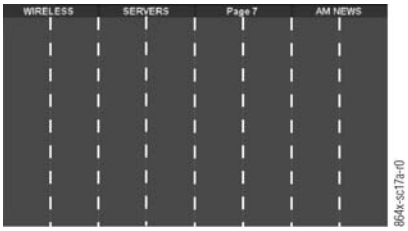
Fader Manual Virtual Source Control

Note If the **Audio Main Context Menu** is accessed via right-click on a fader, the **Virtual Source Maintenance** dialog box appears with the virtual source for the targeted fader already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty fader slot, the first virtual source in the list is selected by default.

Create a Fader Control

1. Click the **Page Tab** where the fader control is to be added. The selected **Page Tab** highlights (Figure 104).

Figure 104. Page Tabs/Fader Slots



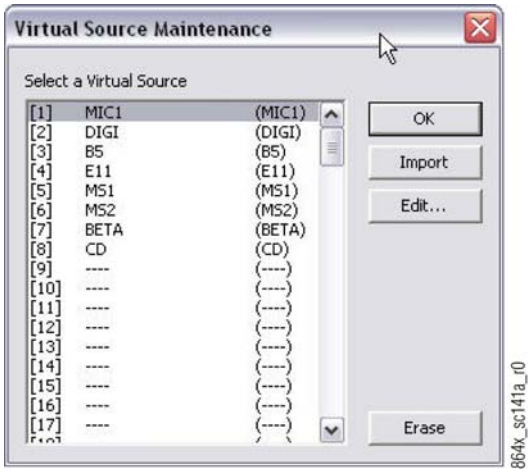
Note Each of the 8 available pages is logically subdivided into 16 fader slots. Every two slots span the width of a Page Tab (refer to Figure 154 inset).

2. Right-click the desired fader slot to create the fader control. The **Audio Main Context Menu** (Figure 105) appears.

Figure 105. Audio Main Context Menu - Virtual Source Maintenance

3. Click **Virtual Source Maintenance**. The **Virtual Source Maintenance** dialog box (Figure 106) appears.

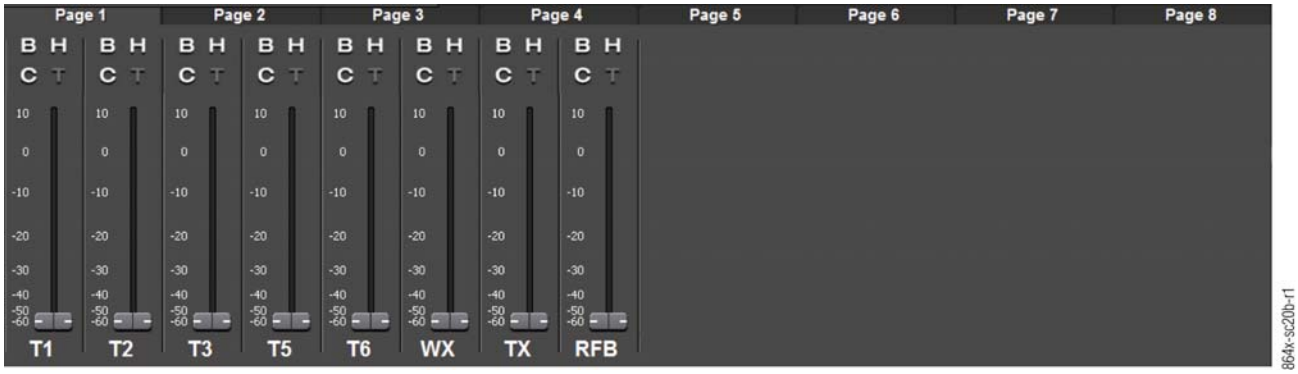
Figure 106. Virtual Source Maintenance Dialog Box



4. From the **Select a Virtual Source** list, click a virtual source for the fader to control and then click **Import**. A fader control (Figure 107) is placed in the selected fader slot.

Note The new fader control is labeled with the abbreviation of the selected virtual source.

Figure 107. New Fader Control Example - Yamaha Audio

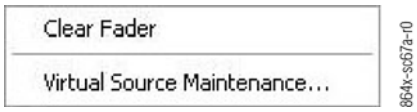


Clear/Remove a Fader Control

1. Right-click near the right edge of the fader control to be removed. The **Main Context Menu** appears.

2. Click **Clear Fader** (Figure 108).

Figure 108. Remove/Clear Fader Control



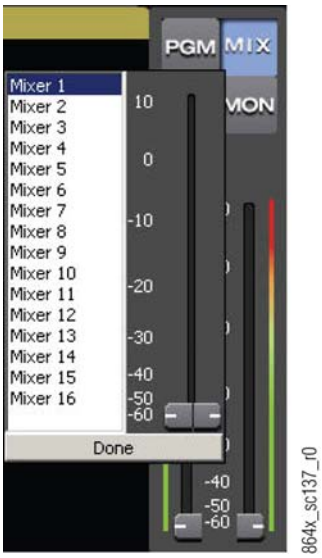
Adjust Master Fader

- Click and drag the left or right fader control to the required level.

Adjust/Set Up/View Mixer Faders 1–16

1. Click the **Master Fader MIX** button. The **Master Fader MIX** button highlights and the **MIX Fader** dialog box (Figure 109) appears.

Figure 109. Mixer Faders Dialog Box - Yamaha Audio

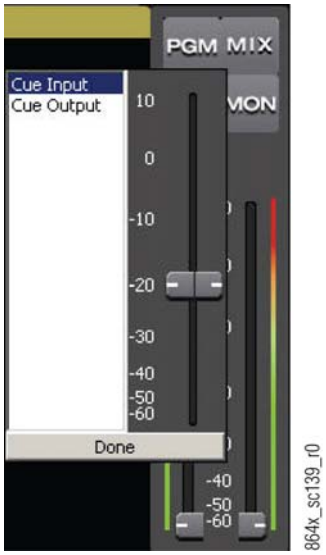


2. In the **MIX Fader** dialog box, click the desired Mix bus (1–16) to adjust. Click and drag the **Mix Fader** dialog box fader control to the desired level.
3. Repeat Step 2 for each **Mixer** bus to be viewed or adjusted.
4. Click **Done**.

Adjust/Set Up/View Cue Input/Output Faders

1. Click the **Master Fader CUE** button. The **Master Fader CUE** button highlights and the **CUE Fader** dialog box (Figure 110) appears.

Figure 110. Cue Fader Dialog Box - Yamaha Audio

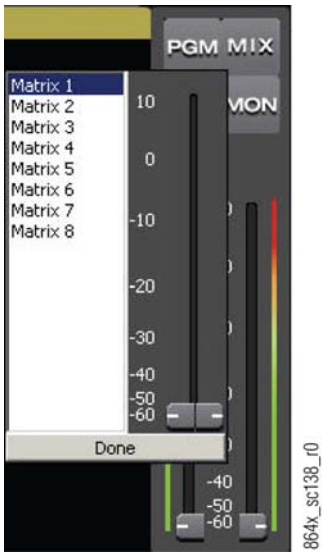


2. In the **CUE Fader** dialog box, click the desired CUE (Input – Output) to adjust. Click and drag the **CUE Fader** dialog box fader control to the desired level.
3. Repeat Step 2 for each **CUE** to be viewed or adjusted.
4. Click **Done**.

Adjust/Set Up/View Matrix Faders 1–8

1. Click the **Master Fader MTX** (Matrix) button. The **Master Fader MTX** button highlights and the **MTX Fader** dialog box (Figure 111) appears.

Figure 111. Matrix Fader Dialog Box - Yamaha Audio



2. In the **MTX Fader** dialog box, click the desired Matrix bus (1–8) to adjust. Click and drag the **MTX Fader** dialog box fader control to the desired level.
3. Repeat Step 2 for each **Matrix** bus to be viewed or adjusted.
4. Click **Done**.

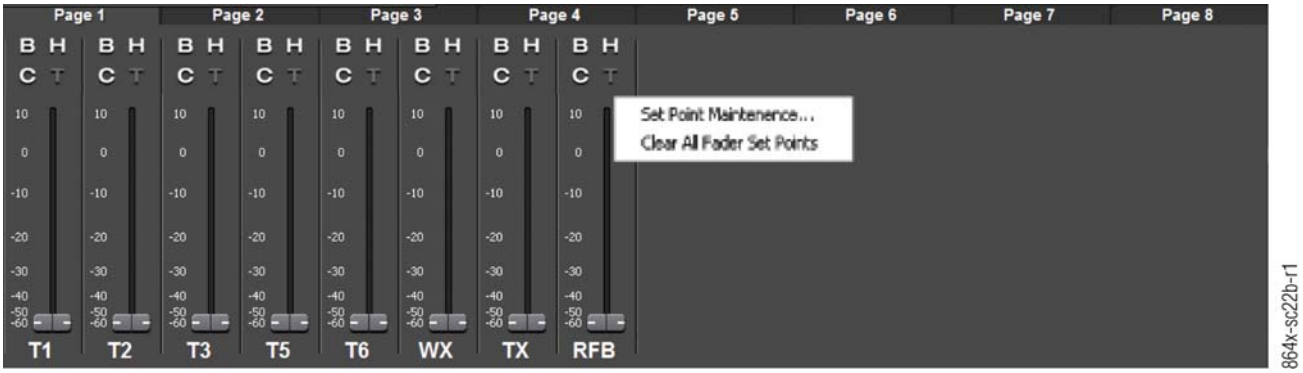
Set Points

Note A set point does not need to be loaded in order to be assigned in a task. However, it does need to be loaded if the user wishes to modify the set point position for a particular source during a show.

Create a Set Point

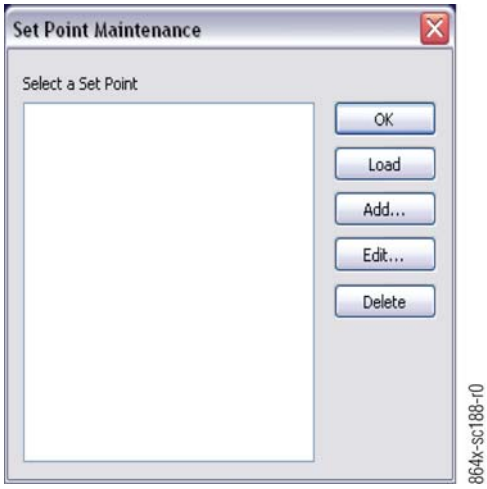
1. Right-click in the fader control volume level area. The **Set Point Context Menu** (Figure 112) appears.

Figure 112. Set Point Context Menu - Yamaha Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 113.

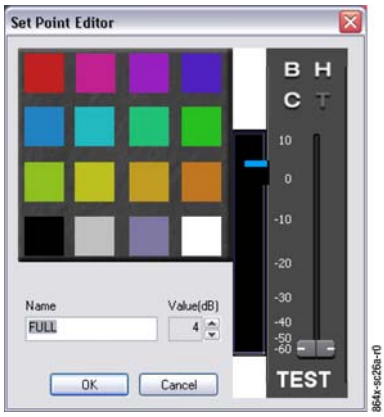
Figure 113. Set Point Maintenance Dialog Box



Note All set points created via Set Point Maintenance are available globally for every source to use in creating tasks for audio timeline objects.

3. Click **Add**. The **Set Point Editor** dialog box (Figure 114) appears.

Figure 114. Set Point Editor Dialog Box



Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

4. Either:

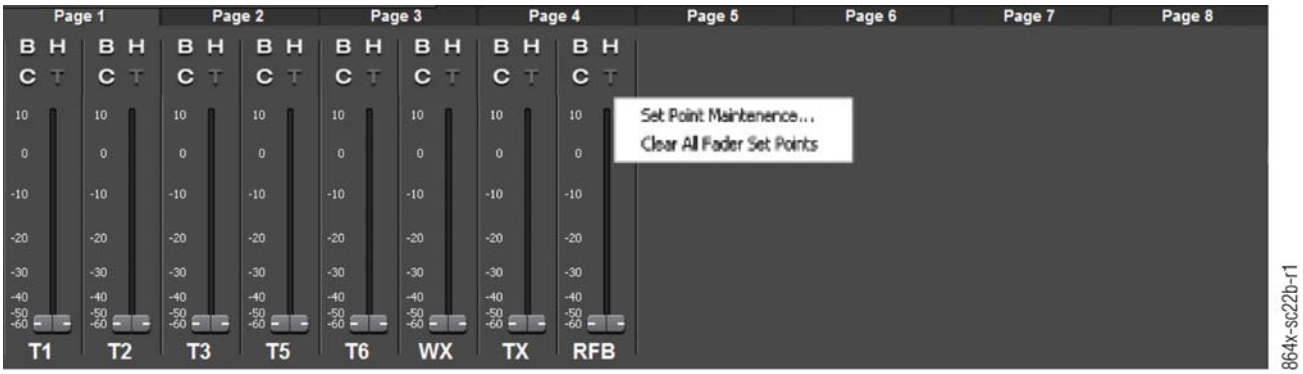
- In the **Name** box, type a Set Point name
- On the **Color Menu**, click a Set Point color
- Assign a Set Point value by either:
  - Using the **Value(dB)** up and down arrows
  - Clicking and dragging the Set Point indicator on the **TEST** fader

5. Click **OK**.

Edit a Set Point

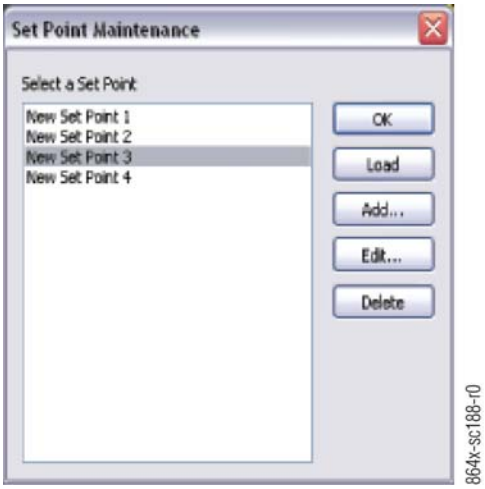
1. Right-click in the fader control volume level. The **Set Point Context Menu** (Figure 115) appears.

Figure 115. Set Point Context Menu - Yamaha Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 116.

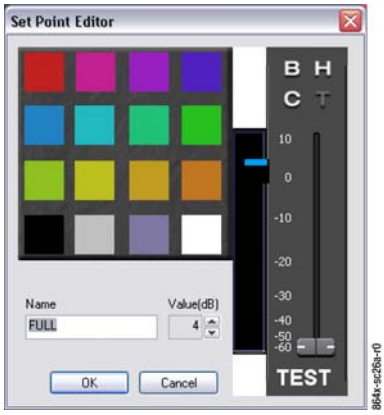
Figure 116. Set Point Maintenance Dialog Box



3. From the **Select a Setpoint** list, click a Set Point to edit.

4. Click **Edit.** The **Set Point Editor** dialog box (Figure 117) appears.

Figure 117. Set Point Editor Dialog Box

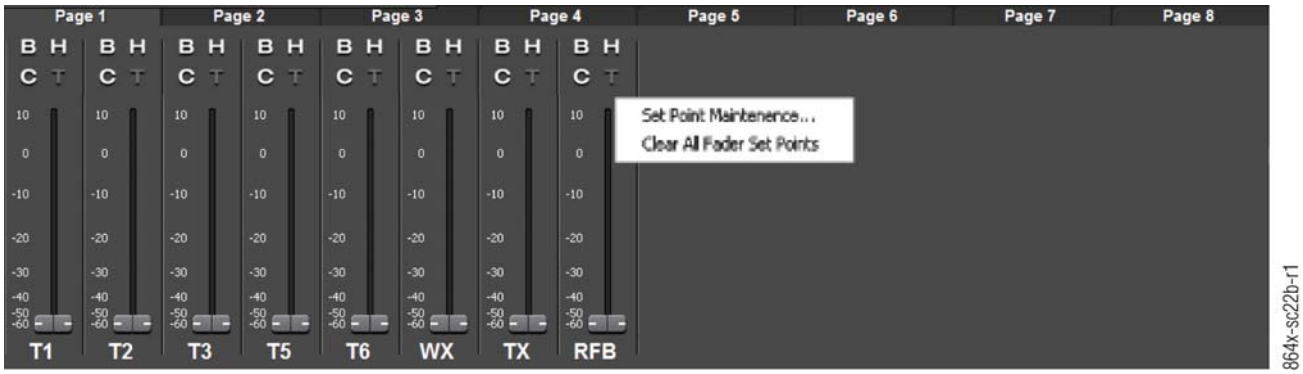


5. Edit the Set Point as necessary.
6. Click **OK**.

Load a Set Point to a Virtual Source

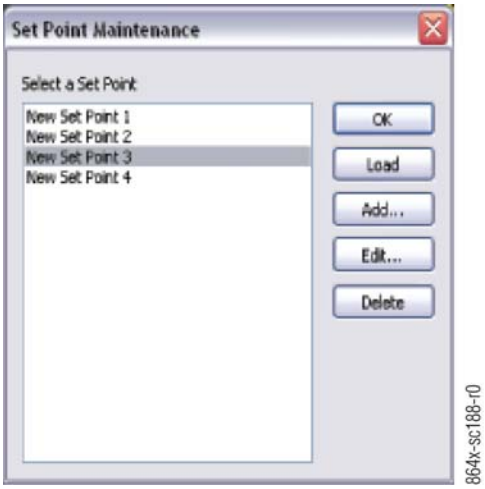
1. Right-click on the fader control that controls the target virtual source. The **Set Point Context Menu** (Figure 118) appears.

Figure 118. Set Point Context Menu - Virtual Source - Yamaha Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 119.

Figure 119. Set Point Maintenance Dialog Box



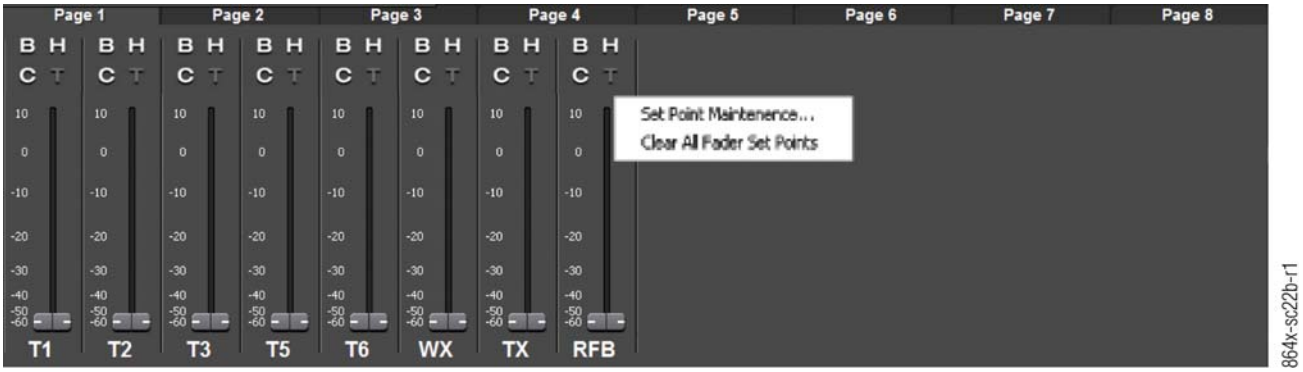
3. From the **Select a Setpoint** list, click a Set Point to load, and then click **Load**
4. Click **OK**. The Set Point appears on the selected fader control.

Note Click and drag a Set Point to a virtual source-specific volume level up or down to force audio automation to use that level instead of the volume level associated with the global setpoint.

Delete a Set Point

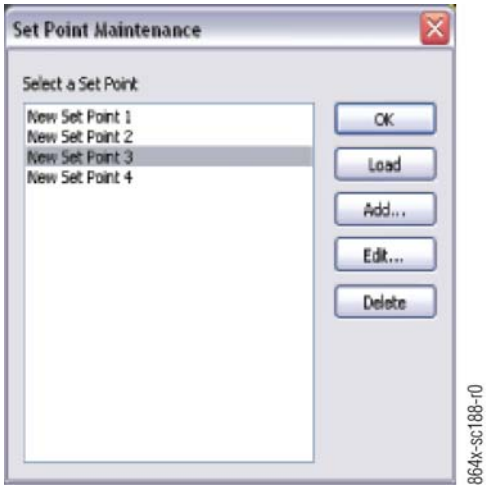
1. Right-click in the fader control volume level area. The **Set Point Context Menu** (Figure 120) appears.

Figure 120. Set Point Context Menu - Yamaha Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 121.

Figure 121. Set Point Maintenance Dialog Box

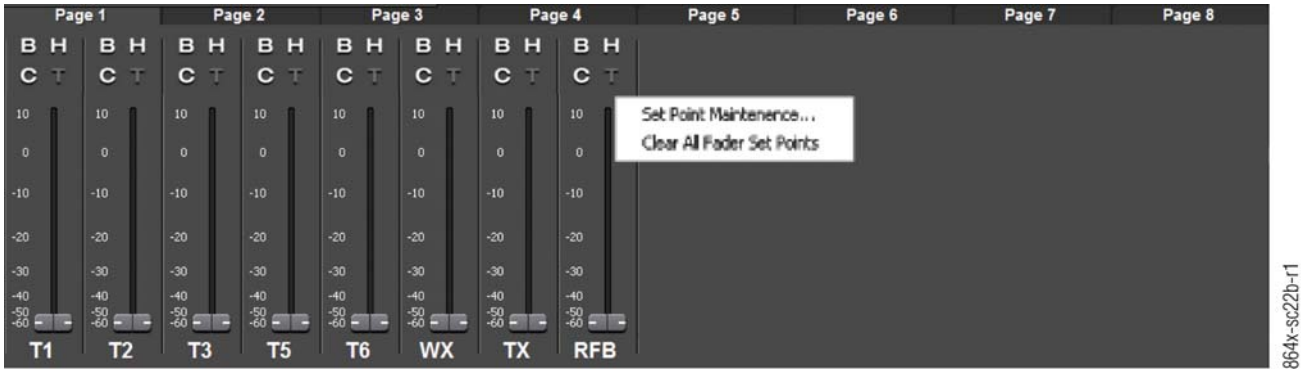


3. From the **Select a Setpoint** list, click a Setpoint to delete.
4. Click **Delete**. The **Delete Entry?** message appears:
   - Click **Yes** to continue deleting the selected Set Point.
   - Click **No** to keep/not delete the item.

Clear Set Points From a Virtual Source

1. Right-click on the fader control that controls the target virtual source. The **Set Point Context Menu** (Figure 122) appears.

Figure 122. Set Point Context Menu - Yamaha Audio



2. Click **Clear All Fader Set Points**. All Set Points specific to the virtual source controlled by the fader control are removed.

Virtual Sources – Edit a Virtual Source Entry

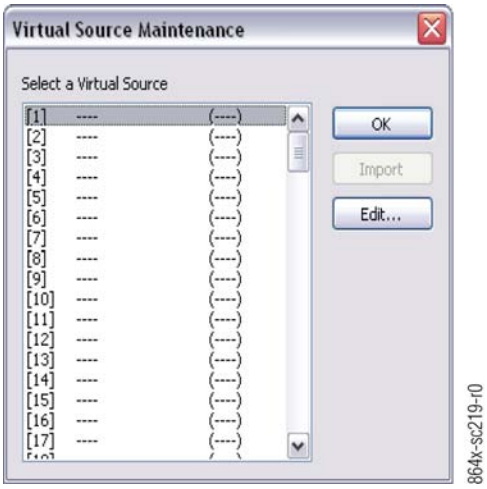
Note If the **Audio Main Context Menu** is accessed via right-click on a fader, the **Virtual Source Maintenance** dialog box appears with the virtual source for the targeted fader already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty fader slot, the first virtual source in the list is selected by default.

1. Right-click near the right edge of the fader control to be edited. The **Audio Main Context Menu** (Figure 123) appears.

Figure 123. Audio Main Context Menu

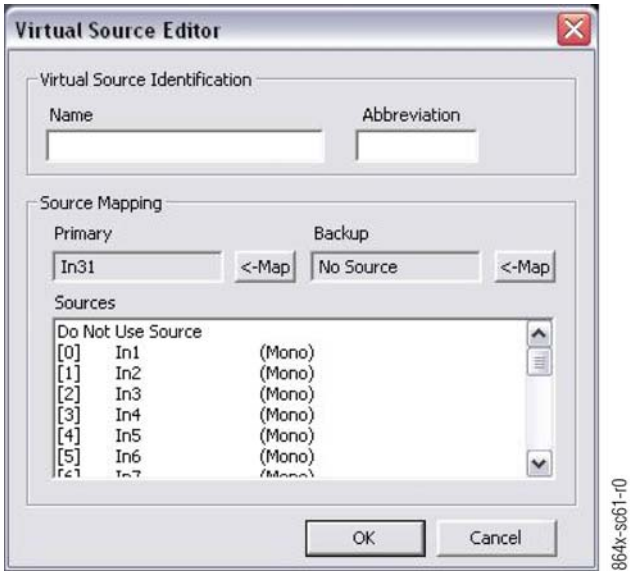
2. Click **Virtual Source Maintenance**. The **Virtual Source Maintenance** dialog box appears. Refer to Figure 124.

Figure 124. Virtual Source Maintenance Dialog Box



3. In the **Select a Virtual Source** list, click a virtual source to edit and then click **Edit**. The **Virtual Source Editor** dialog box (Figure 125) appears.

Figure 125. Virtual Source Editor Dialog Box

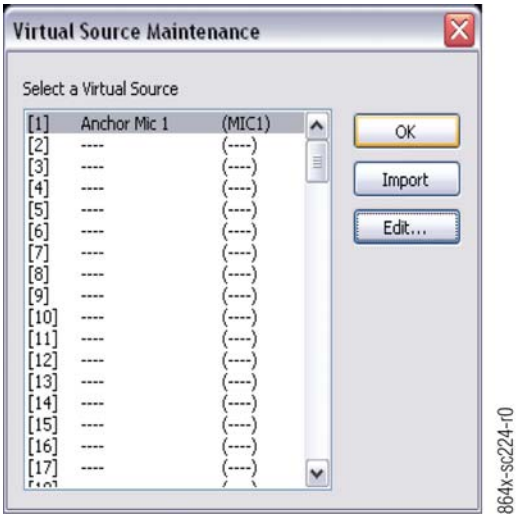


4. Within **Virtual Source Identification**:
   a. In the **Name** text box, type a name for the virtual source (required)
   b. In the **Abbreviation** text box, type an abbreviation for the virtual source (required)
5. Within **Source Mapping**:
   a. In the **Sources** list, click a **Primary** source
   b. Click **Primary Map** to assign the selected source as the Primary Source

Note The following Backup Mapping step is optional.

6. Within **Source Mapping** (Figure 125):
   a. In the **Sources** list, click a **Backup** source.
   b. Click **Backup Map** to assign the selected source as the Backup Source.
7. Click **OK**. The **Virtual Source Maintenance** (Figure 126) dialog box appears with the just configured virtual source showing in the **Select a Virtual Source** list.

Figure 126. Select a Virtual Source List Example



Note To create more sources, click a different virtual source and perform Step 1 through Step 7.

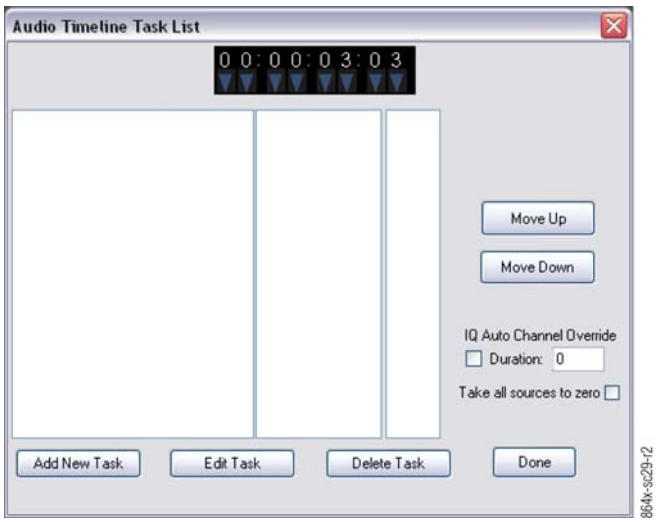
8. Click **OK**.

Set Up Audio Task Properties

Note Set points must be created before creating audio tasks. A set point does not need to be assigned to a source in order for the source to use the set point, but at least one set point must exist. There is a default set point called OFF that is system defined and non-editable by the user. that always brings the source off-air.

1. On the timeline, drag an audio command over. Double-click the Audio Property icon. The **Audio Timeline Task List** dialog box (Figure 127) appears.

Figure 127. Audio Timeline Task List Dialog Box

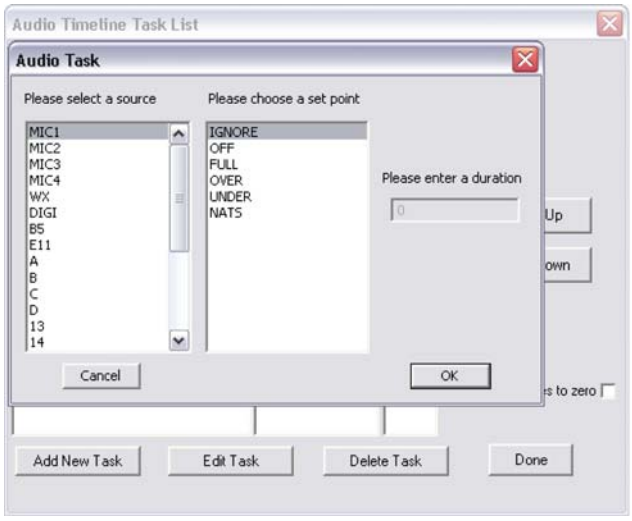


2. Click a task and then click either **Add New Task**, **Edit Task**, **Delete Task**, **Move Up**, or **Move Down** as needed. If either **Add New Task** or **Edit Task** are chosen an **Audio Task** dialog box (Figure 128) appears.
   - Complete the entries in this dialog box, click OK, and then proceed to the next step.

Note The duration field should be set to the number of frames over which the fade will occur. If left blank or set to 0, a cut is performed instead.

Note Click **IGNORE** to set an audio source so that the **Take all to Zero** command ignores that specific source when setting all sources to zero. Clicking **IGNORE** sets the duration to 0 frames and disables the **Please enter a duration** box. The **Ignore** feature is accessed through the individual Audio Module TME icon properties

Figure 128. Audio Task Dialog Box



3. Repeat Step 1 and Step 2 for adding tasks for each individual task in the same audio command.
4. Click **OK**.

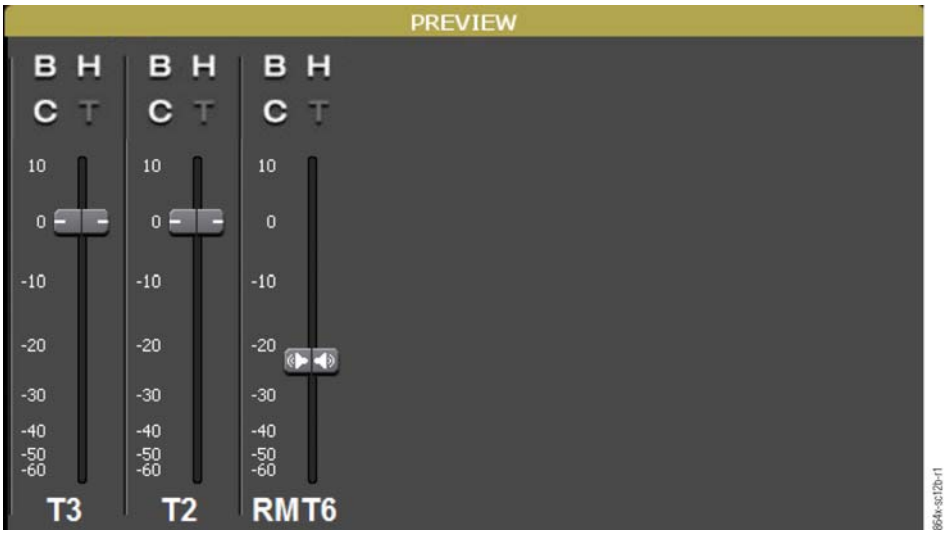
Note Click the **Take All Sources to Zero** check box (Figure 127) to have all other sources without a task assigned to go off air at 0 duration.

5. Click **Done**.

Audio Preview

Audio sources transitioned via the Ignite/Ignite Konnect Event Timeline are populated into the Audio Preview area (Figure 129) as each TME is prepped. The sources set to move to air next are shown in the Audio Preview area.

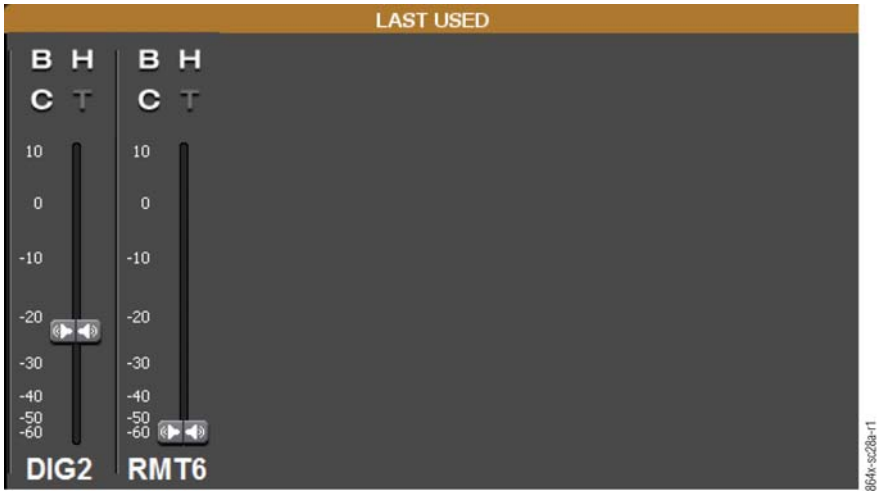
Figure 129. Audio Preview Area Example - Yamaha Audio



Note The previewed audio shows the audio fader level when the source is transitioned to air. If a different transition level is desired before going to air, adjust the level while it is in Preview.

- To set the desired program output, move the master output fader handle to the corresponding level.
- To prevent a source from going to air, after a TME has been prepped, click **H** to hold the source in preview.
- To toggle between this view and a view that is populated with the most recently used audio faders, click **Preview**. The **Last Used** view (Figure 130) appears.

Figure 130. Audio Last Used View Example - Yamaha Audio

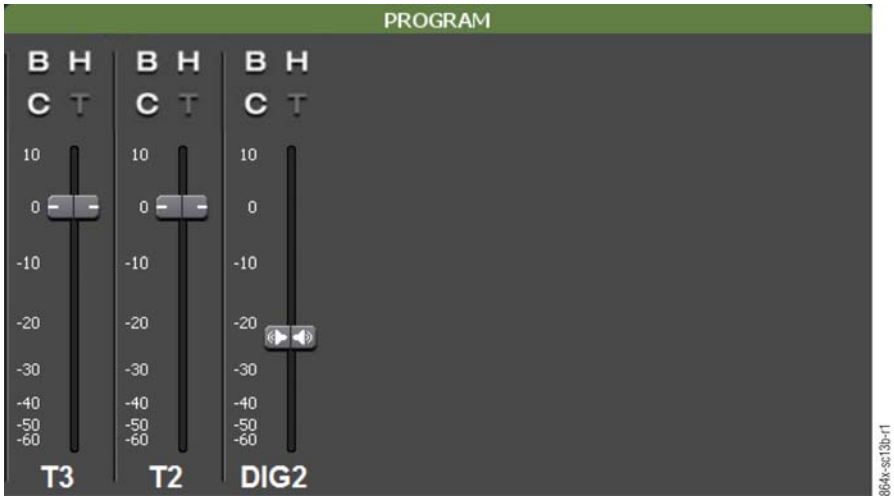


- In **Preview**, right-click an audio source to select either:
  - Send it to air immediately
  - Remove it from Preview and not go to air

Audio Program (LIVE)

The **Audio Program** area (Figure 131) shows the sources presently On Air. Any source that is moved above its off point is taken to air instantly and is shown in the **Audio Program** area.

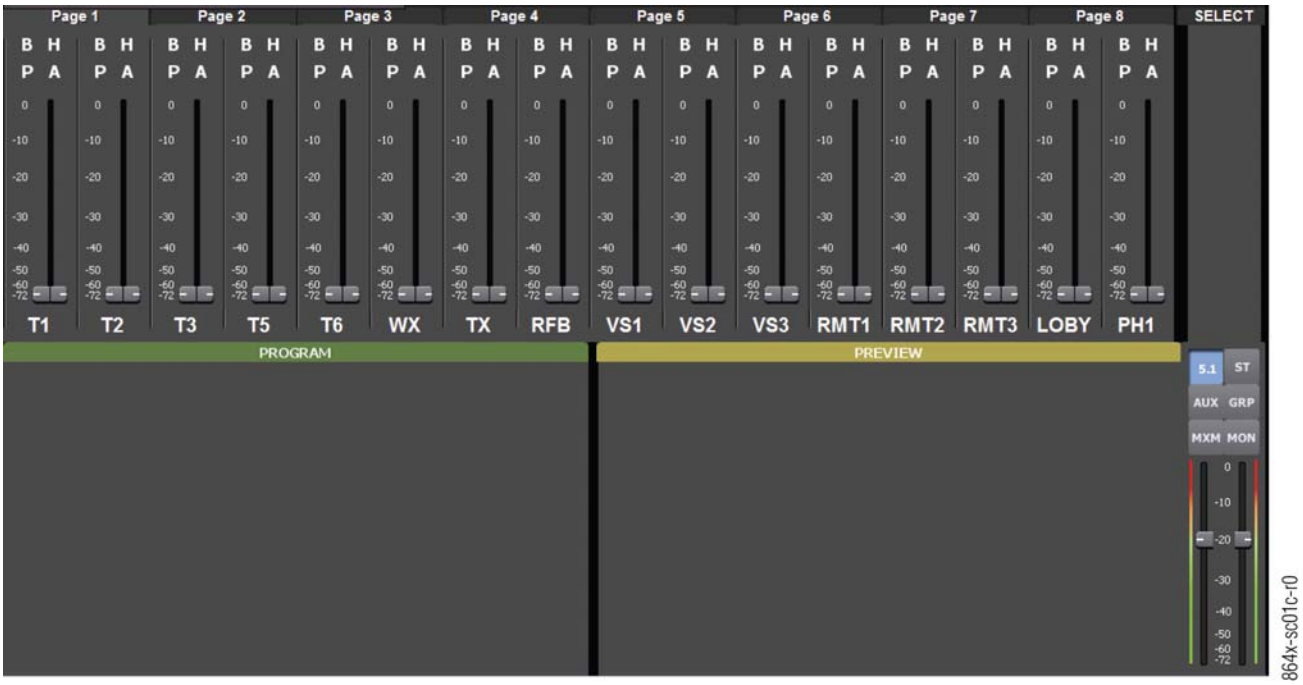
Figure 131. Audio Program Area Example - Yamaha Audio



- To remove the audio mix, right-click any source and then click **Take Off Air Now.**
- To hold the source on air, click **H** while the source is in the area.

Wheatstone Audio

Figure 132. Audio Module - Wheatstone Audio



Overview

Note The Ignite/Ignite Konnect system provides an automation interface (Figure 132) to the D-10 panel. For panel-specific user and set up information, refer to the manufacturer's documentation.

Manual Virtual Source Control

Virtual Sources provide a mapping between Automation Events and Input Channel Faders on the Wheatstone Mixer. Virtual Sources play a significant role in Automation Events by enabling Automation Events to control target Sources regardless of which Input Channels the Sources have been assigned to on the Wheatstone Mixer.

In order to control a virtual source from the Audio GUI, a program fader control must be created, on the Audio Module GUI, to represent the virtual source visually (refer to *Create a Program Fader Control – Select a Virtual Source* on page 138). Otherwise, the virtual source idly waits in the background for commands from Ignite/Ignite Konnect Timeline Automation or external control surfaces such as the QUICbox™ panel.

Individual Program Fader Controls

Each program fader control has four available buttons (Figure 133) at the top:

- **B** (Backup) – Triggers the fader's Source Preset button, effectively assigning the preset source to the fader (if one exists).
- **H** (Hold) – Enables/Disables the associated Virtual Source Automation Hold feature (latching).
- **P** (PFL) – Activates/Deactivates PFL (Pre-fade Listen) Cue for the associated Virtual Source (latching).
- **A** (AFL) – Activates/Deactivates AFL (Post-fade Listen) Solo for the associated Virtual Source (latching).

Figure 133. Fader Buttons – Wheatstone Audio

Selected	Function
	Backup Toggles between the associated Fader's current source and preset source (non-latching). Click to assign the associated fader's preset source to the fader. If the fader has not preset source assigned, this feature will act as a mute for the fader.
	Hold Enables/Disables the associated Virtual Source's Automation Hold feature (latching). When selected, both the button and the fader outline turn bright orange.This is an alert that the Program Fader and associated Virtual Source will ignore all Automation events until the Program Fader is taken off of Hold. **Note** If the Virtual Source does not have a mapped Fader, the outline of the Program Fader is red instead (Figure 134 on page 121).
	PFL (Pre Fade Listen/Cue)) Activates or de-activates the PFL button for the Input Channel. **Note** PFL is disabled automatically by Automation Events that take the Virtual Source from OFF to any other level.
	AFL (Post Fade Listen/Cue) Activates or de-activates the AFL button for the Input Channel. **Note** AFL is disabled automatically by Automation Events that take the Virtual Source from OFF to any other level.

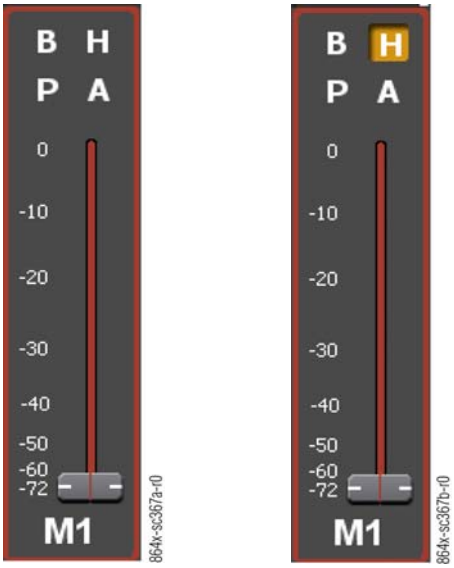
Note For all of the buttons, a gray background indicates it is not active.

When either the **B**, **P**, or **A** button is clicked, the button background highlights blue to indicate it is selected. When the **H** button is clicked, both the

button background and the program fader control perimeter highlight amber to indicate it is selected.

If the Virtual Source does not have a mapped Fader, the outline of the Program Fader is red (Figure 134). Also refer to *Virtual Source Maintenance Dialog Box* on page 129 and *Layouts* on page 132.A Virtual Source that does not have a fader mapped to it does not actually control any elements on the mixer. If a fader is later mapped to such a Virtual Source, the properties of the Virtual Source (level, AFL, PFL, etc.) will be applied to the Fader.

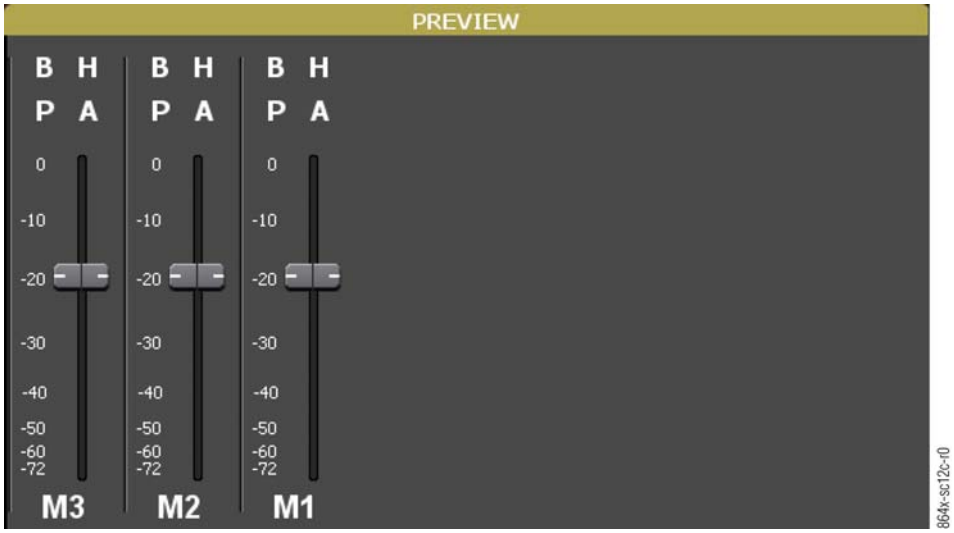
Figure 134. Example – Virtual Source Without Mapped Fader – Wheatstone Audio



Audio Preview

Virtual sources transitioned via the Ignite/Ignite Konnect Event Timeline are populated into the **Audio Preview** area (Figure 135) as each TME is prepped. The virtual sources set to move to air next are shown in the **Audio Preview** area.

Figure 135. Audio Preview Area – Wheatstone Audio

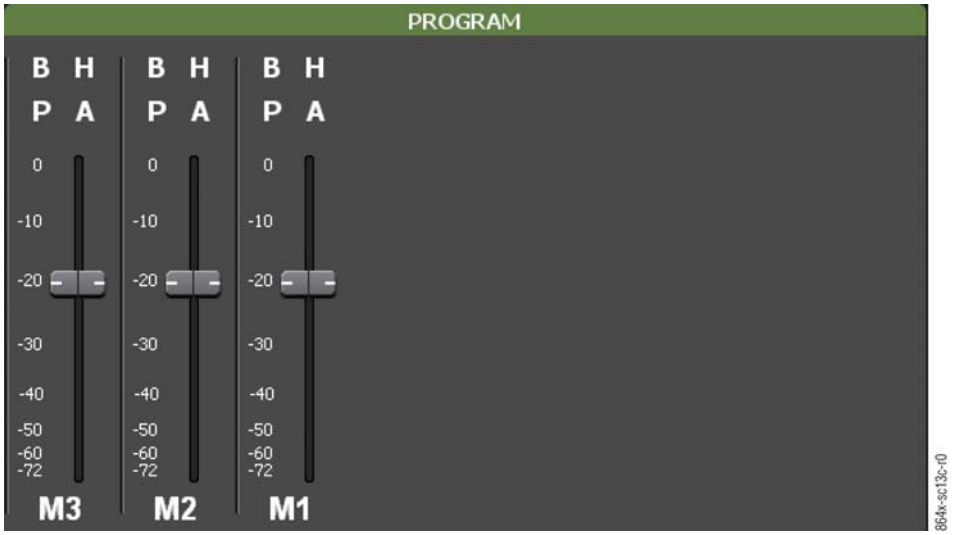


Audio Program (Live)

The **Audio Program** area (Figure 136) shows the virtual sources presently On Air. Any virtual source that is moved above its off point is taken to air instantly and is shown in the **Audio Program** area.

Note Only the 8 most recent virtual sources to go on air and still exist on air are shown. Once 9 virtual sources are on air, the oldest on-air virtual source disappears and reappears if another is taken off air.

Figure 136. Audio Program Area – Wheatstone Audio



Set Points

Set Points are pre-established fader levels that are referenced via a TME (Transition Macro Event), refer to *TME™ (Transition Macro Event™) on*

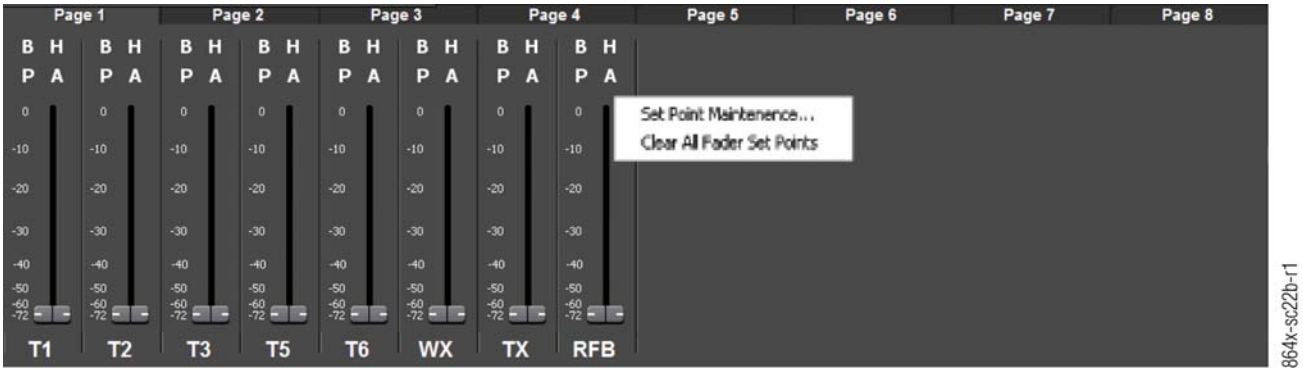
page 34. Set points are used to set the fader level of a Virtual Source during a transition. Set Points can be named for easy reference. Via Event Timeline automation, each TME provides the system with the audio set point needed for that particular event.

To access the **Set Points Menu** (Figure 137), within a program fader control, right-click near the left edge of the program fader control. The **Set Points Menu** has two selections:

- **Set Point Maintenance** – accesses the **Set Point Maintenance** dialog box
- **Clear All Fader Set Points** – clears all fader set points

Note The **Set Point Maintenance** dialog box opens in the same state regardless of where the user right-clicked to access the **Set Point Menu**. However, if a set point is loaded from this dialog, the set point is loaded to the fader that was right-clicked to access the **Set Point Menu**.

Figure 137. Set Point Menu – Wheatstone Audio



Set points must be created before creating audio tasks. A set point does not need to be assigned to a virtual source in order for the virtual source to use the set point, but at least one set point must exist. There are two default set-points that are system defined and non-editable by the user:

- **OFF** – used to bring a Virtual Source off the air.
- **IGNORE** – used to flag a Virtual Source so that it will not be affected by the **Take All Sources to Zero** feature of Audio TMEs.

A set point does not need to be loaded in order to be assigned in a task. However, it does need to be loaded if the user wishes to modify the set point position for a particular virtual source during a show.

Set Point Maintenance

The **Set Point Maintenance** dialog box (Figure 138) is accessed from the **Set Points Menu**. This dialog box is used to create, edit, delete, or load set points.

Figure 138. Set Point Maintenance Dialog Box – Wheatstone Audio

Note All set points created via Set Point Maintenance are available globally for use by every virtual source in creating tasks for audio timeline objects.

The **Set Point Maintenance** dialog box includes:

- **OK** – saves the changes and closes the dialog box.
- **Load** - loads or assigns the selected set point to the virtual source associated with the program fader control that was right-clicked to access the **Set Point Menu**. A Virtual Source can only have one instance of the same set point loaded.
- **Add** - accesses the **Set Point Editor** dialog box with a new Set Point definition. If appropriately configured, the set point is created and added to the list.
- **Edit** - accesses the **Set Point Editor** for the selected Set Point changes.
- **Delete** – the **Delete Entry?** message appears.

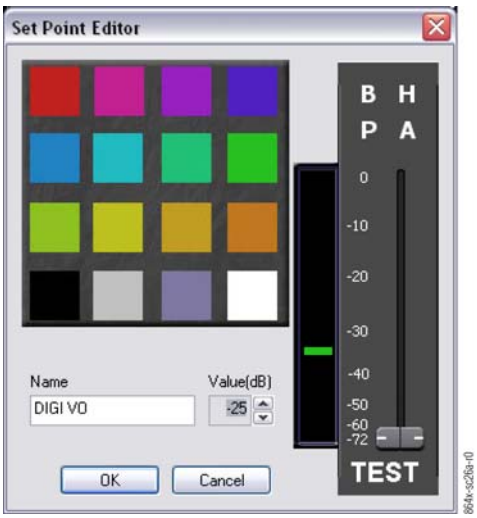
  Click **Yes** to continue deleting the selected Set Point and immediately save the configuration to reflect the deletion. Click **No** to keep/not delete the item at this time and continue making changes.
- **Close** button – closes the dialog box without saving changes.

Set Point Editor

The **Set Point Editor** dialog box (Figure 139) is accessed from the **Set Point Maintenance** dialog box **Edit** button (Figure 138).

Note All set points created via Set Point Maintenance are available globally for use by every virtual source in creating tasks for audio timeline objects.

Figure 139. Set Point Editor Dialog Box – Wheatstone Audio



The **Set Point Editor** dialog box includes:

- **Color Selection** - changes the color of the target Set Point. Click a color to assign.
- **Volume Level** - click and drag to set the target volume level. Users can also use the Up-Down control attached to the **Value(dB)** field to achieve the same results.
- **OK** – saves the new/edited changes and closes the dialog box.

Note Before changing/saving, verifies that the Set Point Name is unique among Set Points and that the name does not match the default **OFF** and **IGNORE** Set Points names in any way. If invalid, a message appears stating the need and nature of the required change.

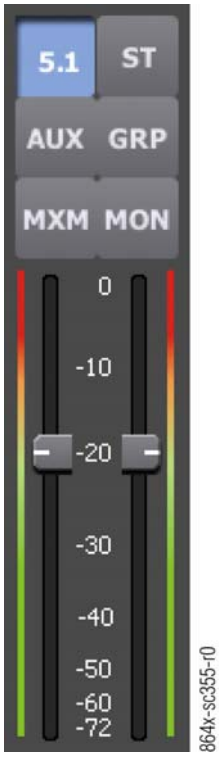
- **Cancel** – compares the saved configuration and the currently shown configuration. If no changes exist, the dialog box closes. If changes have been made, a **Cancel Changes?** message appears.

  Click **Yes** to undo changes in real time and close the **Set Point Editor** dialog box. Click **No** to continue making configuration changes.
- **Close** button – closes the dialog box without saving changes.

Master Output Faders

The **Master Output Fader** (Figure 140) provides master control of the overall audio output level of the **Master Out Left** and **Master Out Right** channels. Six buttons comprise the various Master Volume Controls.

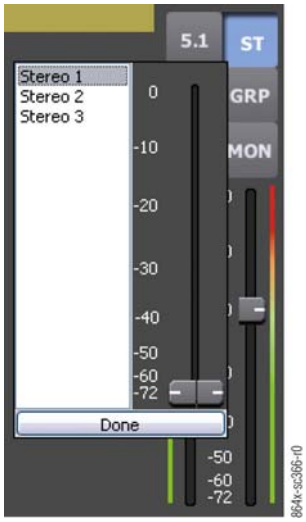
Figure 140. Master Output Fader – Wheatstone Audio



5.1 Surround Source Master
Adjusts the Surround Sound Master's level.

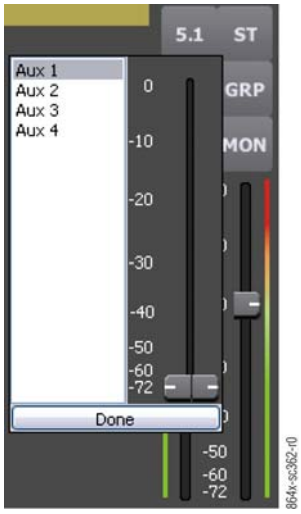
Stereo Master
Adjusts the selected Stereo Master's level.

ST Fader Dialog Box



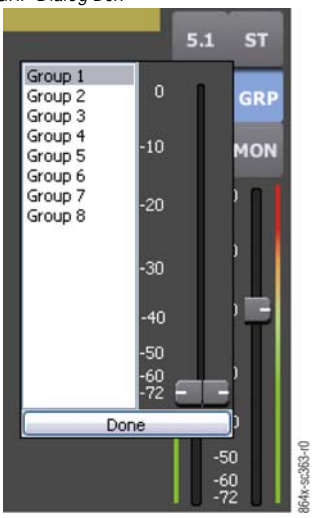
Aux Master
Adjusts the selected Aux Master's level.

AUX Fader Dialog Box



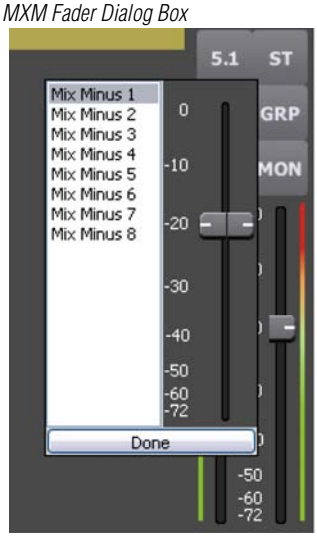
Group Submix Master
Adjusts selected Group Submix Master's level.

GRP Dialog Box



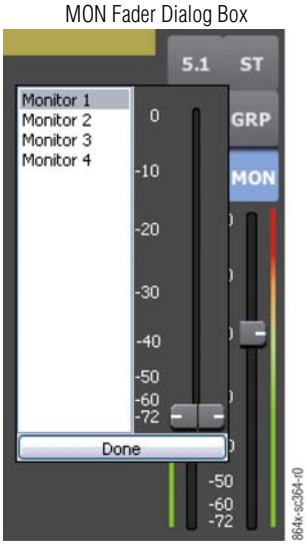
Mix Minus Master
Adjusts the selected Mix Minus Master's level.

MXM Fader Dialog Box



Monitor Master
Adjusts the selected Monitor Master's level.

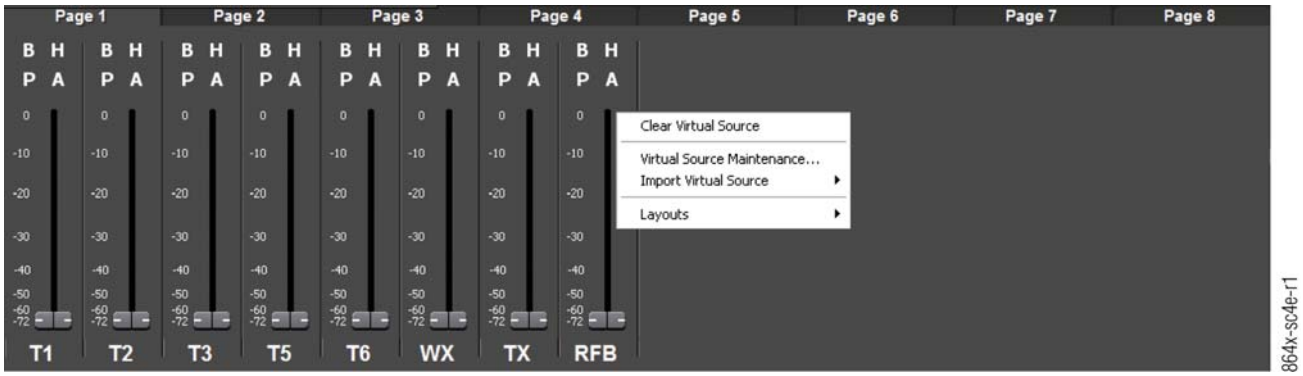
MON Fader Dialog Box

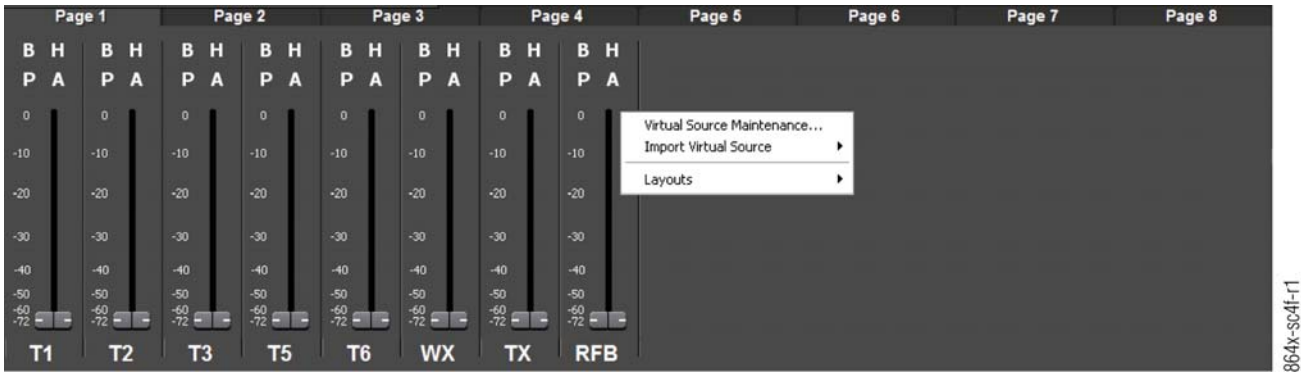


Audio Main Context Menu

To access the **Audio Main Context Menu** (Figure 141), right-click near the right edge of a program fader control.

Figure 141. Audio Main Context Menu - Wheatstone Audio





The **Audio Main Context Menu** items for the Wheatstone audio configuration are:

Audio Main Context Menu Item	Purpose
Clear Virtual Source	Removes the selected program fader control (virtual source control) from view and replaces it with an empty slot. This does not delete the program fader control-associated virtual source, but that specific virtual source control (program fader control) is simply not shown. That audio virtual source (or any available audio virtual source) can be imported to an empty slot as a fader control using either the Virtual Source Maintenance menu item or the Import Virtual Source menu item. Refer to *Virtual Source Maintenance Dialog Box* on page 129 NOTE: This menu item is only available if a program fader control is selected (right-click).
Virtual Source Maintenance	Accesses the Virtual Source Maintenance dialog box that enables a user to either edit or import a virtual audio source. Refer to *Virtual Source Maintenance Dialog Box* on page 129.

Audio Main Context Menu Item -	Purpose - (continued)
Import Virtual Source	This menu item has 4 submenus. Each submenu contains 16 items, each item represents a Virtual Source by name. The selected virtual source is imported into the program fader slot the user right clicked to gain access to the short cut menu. This feature serves as a short cut for importing virtual sources. Refer to *Import Virtual Source* on page 132.
Layouts	Automatically contains 2 submenu items, "Create Layout..." and "Save Current Layout As...". Create Layout and Save Current Layout As menu items both invoke the Layout Editor dialog box. Also contains a submenu representing each existing Layout by name. Each Layout menu item contains submenu options to Load, Edit, or Delete the layout. Load triggers the mixer to load the named layout and then proceed to update the virtual source to the fader mapping contained in the layout. Edit displays the Layout Editor dialog box, enabling the user to make changes to the associated layout. Delete causes the associated layout to be deleted. Refer to *Layouts* on page 132.

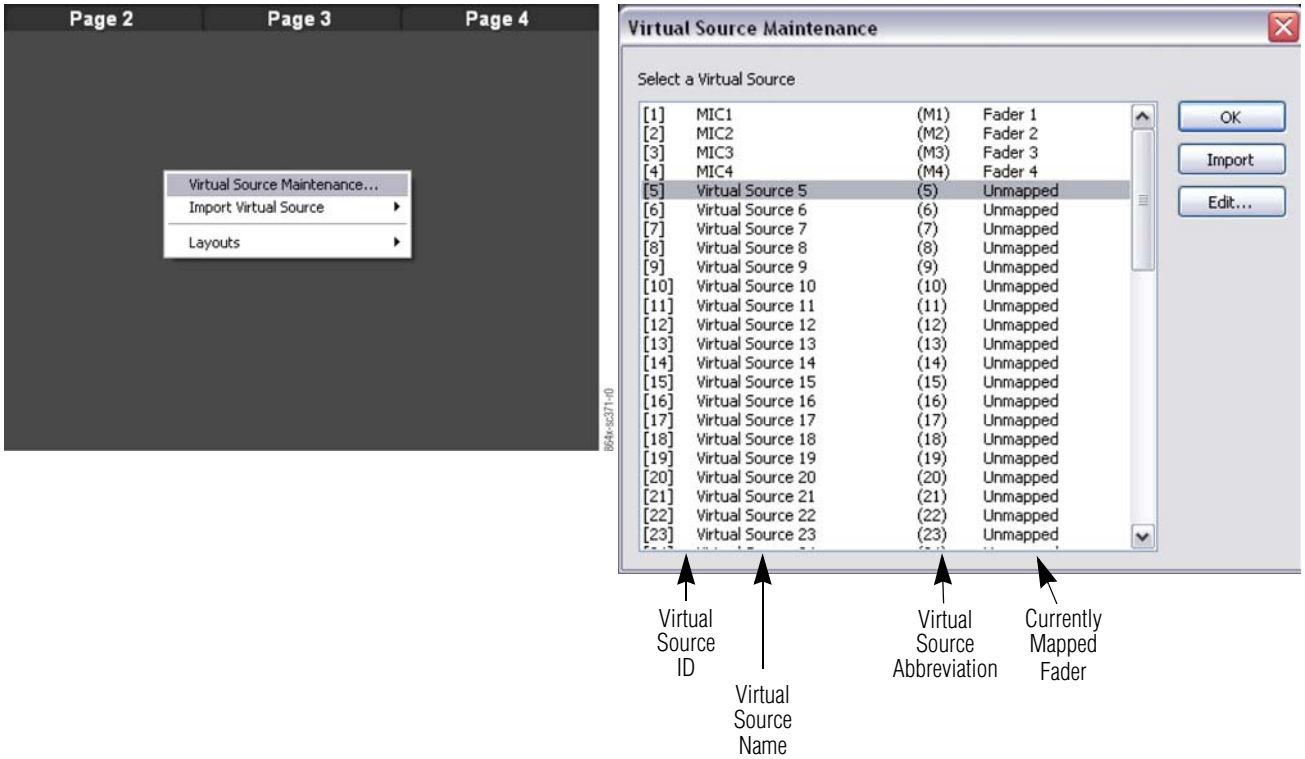
Virtual Source Maintenance Dialog Box

The **Virtual Source Maintenance** dialog box (Figure 142) is accessed from the **Audio Main Context Menu**. The **Virtual Source Maintenance** dialog box provides a list of available virtual audio sources and from that list a user can either import a virtual source to the selected slot or edit the properties of a virtual source.

Note If the **Audio Main Context Menu** is accessed via right-click near the edge of a program fader control, the **Virtual Source Maintenance** dialog box opens with the virtual source for the targeted fader already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty program fader slot, the first virtual source in the list is selected by default.

The **Virtual Source Maintenance** dialog box (Figure 142) includes:

Figure 142. Virtual Source Maintenance Dialog Box



- **Select a Virtual Source** – lists a source ID, virtual source name, source abbreviation, and the currently mapped fader for each available virtual source. (Unmapped if one is not mapped.)
- **OK** – saves the changes and closes the dialog box.
- **Import** – imports the selected virtual source to either an existing program fader control or an empty program fader slot. The import position is based on the program fader slot used to access the **Audio Main Context Menu**. If the program fader slot is already occupied by a virtual source, that virtual source is replaced with the virtual source selected from the **Select a Virtual Source** list. Refer to *Import Virtual Source* on page 132.
- **Edit** – opens the **Virtual Source Editor** dialog box (refer to *Virtual Source Editor Dialog Box* on page 130). The **Virtual Source Editor** dialog box opens in one of two modes, either **Edit** mode (if the selected virtual source is already configured) or **Configuration** mode (if the selected virtual source is not configured).
- **Close** button – closes the dialog box without saving changes.

Virtual Source Editor Dialog Box

The **Virtual Source Editor** dialog box (Figure 143) is accessed from the **Virtual Source Maintenance** dialog box **Edit** button (Figure 142 on page 130). It enables a user to edit the properties of virtual sources.

Figure 143. Virtual Source Editor Dialog Box – Wheatstone Audio)

The **Virtual Source Editor** dialog box (Figure 143) includes:

- **Virtual Source Identification** – text boxes for a user defined **Virtual Source Name** and **Abbreviation**.
  - **Name** – limited to 25 characters and is system monitored to prevent duplicates. This name is used to identify the virtual source in other configuration dialog boxes as well as System Error Logs.
  - **Abbreviation** – limited to 4 characters and is system monitored to prevent duplicates. This abbreviation is the only identifier that appears on the program fader control associated with that virtual source. This abbreviation is also used, along with the name, to identify the virtual source in other configuration dialog boxes as well as System Error Logs.
- **Input Channel Mapping** – enables a user to select the fader to be controlled by the virtual source.
  - **Input Channel** – displays the currently mapped fader or **No Source** if a source is not mapped. A virtual source that does not have a mapped fader will appear on screen with a red outline. Though this type of virtual source can still be controlled manually or via automation events, such actions will not manipulate the mixer until a fader is mapped to the virtual source.

    The **Map** button assigns the selected fader to the virtual source. If **Unmapped** is selected from the **Available Input Channel** drop down list, clicking the Map button will unmap any currently mapped fader.
  - **OK** – verifies that the **Name** and **Abbreviation** boxes contain valid entries, updates and saves the virtual source entry, then closes the dialog box.

Note If any **OK** condition is not met, an error dialog box appears to notify the user about the discrepancy, the change is not saved, and the **Virtual Source Editor** dialog box is not closed.

- **Cancel** – closes the dialog box without saving changes.
- **Close** button – closes the dialog box without saving changes.

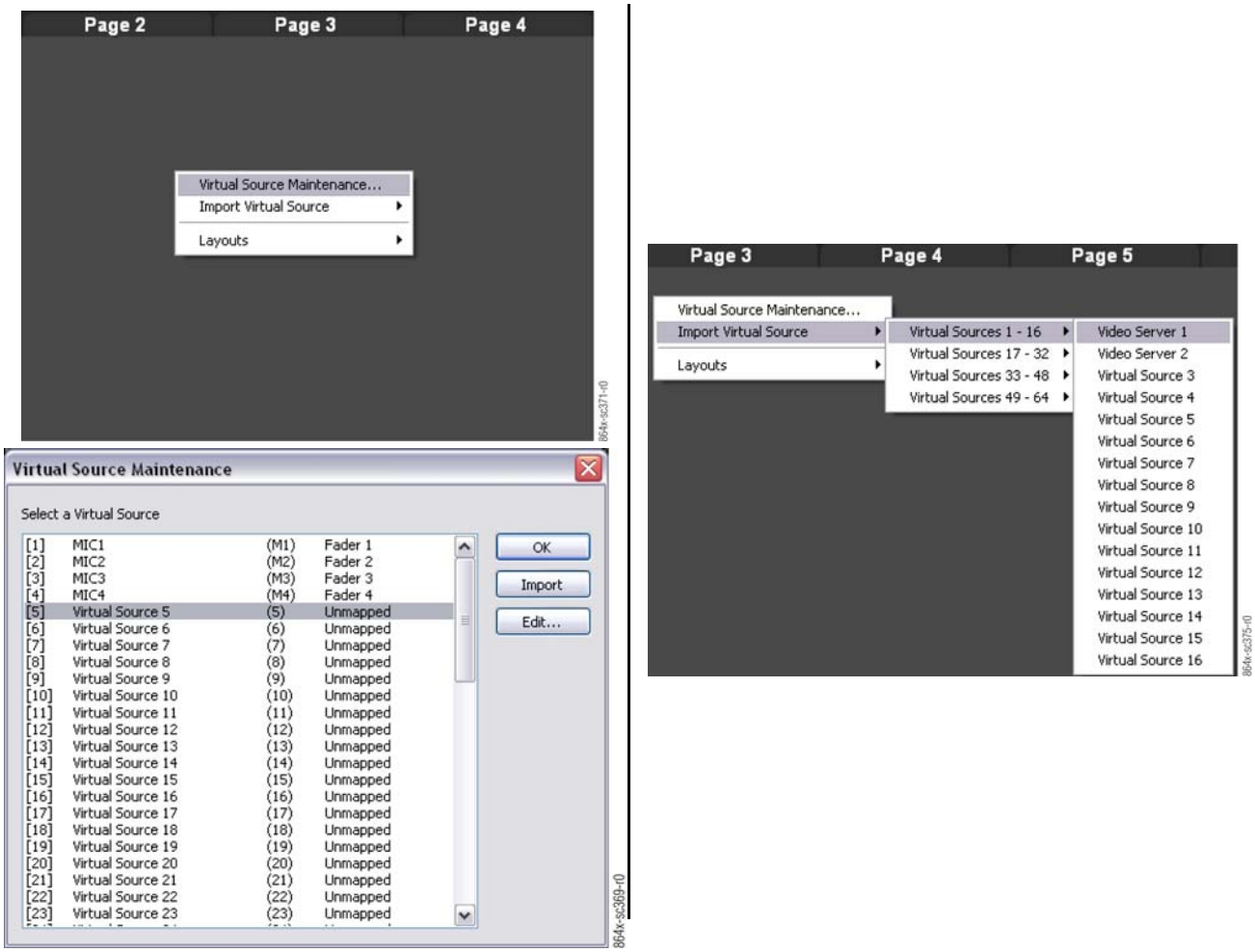
Import Virtual Source

The Import Virtual Source function is accomplished in one of two ways:

- From the **Virtual Source Maintenance** dialog box (Figure 144 A)
- From the **Audio Main Context Menu** (Figure 144 B)

Figure 144. Virtual Source Maintenance Dialog Box

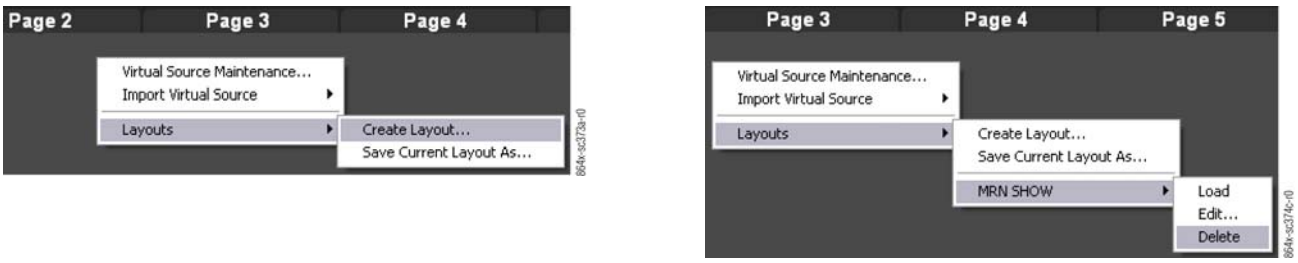
A B



Layouts

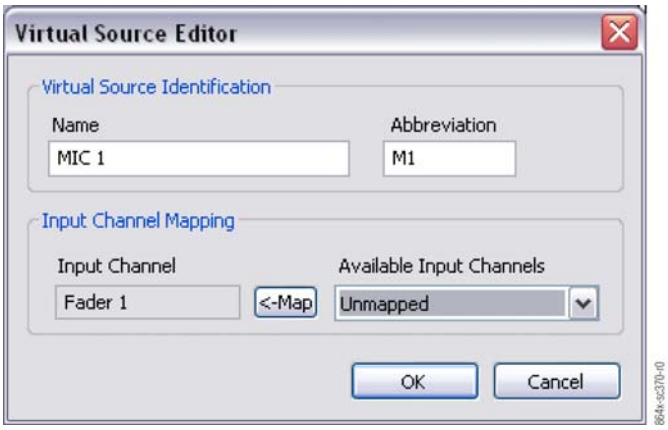
The (Audio) **Layouts** (Figure 145) functionality, associated submenus, and dialog boxes are accessed from the **Audio Main Context Menu**. The Audio Layout functionality enables the user to manage Virtual Sources to Faders mapping for a particular Program Event.

Figure 145. (Audio) Layouts Submenus Example



The Wheatstone Audio starts with a blank undefined layout each time the application is started. This means that every Virtual Source is unmapped at application start up. The current layout can then be adjusted by updating the Fader mapping of Virtual Sources using the **Virtual Source Editor** dialog box (Figure 146). Refer to *Virtual Source Editor Dialog Box* on page 130

Figure 146. Virtual Source Editor Dialog Box – Wheatstone Audio)



Note When the application closes, changes made to the default layout are not automatically retained. To retain changed layout information, the user must either create a new layout or save the current layout.

Layout Editor Dialog Box

The **Layout Editor** dialog box is accessed from the **Audio Main Context Menu** (Figure 147):

- Click **Layouts**, and then click **Create Layout**
- Click **Layouts**, and then click **Save Current Layout As**
- Click **Layouts**, then click the <layout name>, and then click **Edit** – where <layout name> is chosen from the list of existing Audio Layouts.

Note If no Audio Layouts have been created or saved, the <layout name> option is not available.

Figure 147. Example Layout Name – MRN SHOW

The **Layout Editor** dialog box (Figure 148) includes:

- **Layout Identification** where:
  - **Name** is used to uniquely identify the layout. This field is limited to 20 characters and must be unique. The **Layout Editor** disables the **Name** field when the user has elected to edit an existing Layout.
  - **Preset** should contain the name of the associated Program Event from the Wheatstone mixer. This field is case sensitive and is limited to 8 characters just like Program Event names on the Wheatstone mixer.
- **Virtual Source Fader Assignments** where the mapping between each Virtual Source and mixer Fader is set up:
  - Option (radio) buttons **1 - 16**, **17 - 32**, **33 - 48**, and **49 - 64**. Each option button loads the virtual source names and fader mappings for that range into the **Virtual Source Fader Assignments**.
  - Virtual Source Names and Drop-down Lists - the label that appears just above each drop down list represents a virtual source from within the range selected by the respective option button; e.g., **1 - 16**, **17 - 32**. The drop down list displays the current fader mapping and provides a list of available faders that can be use to change the virtual source to fader mapping.

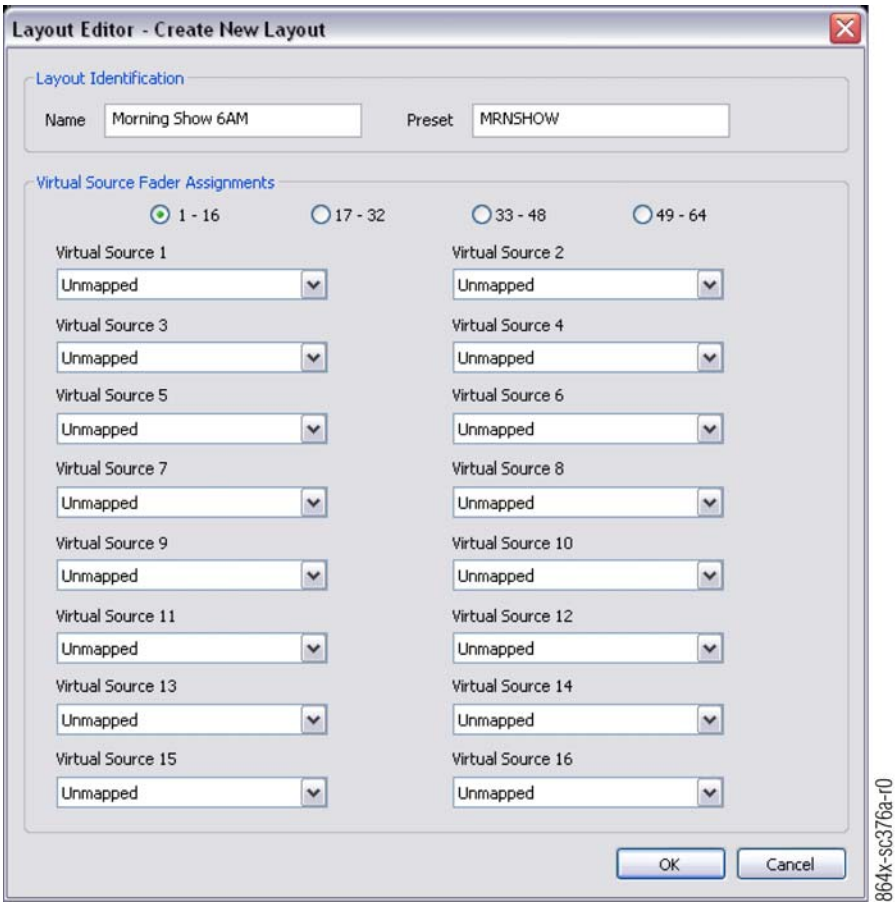
  If a Virtual Source should not control a Fader for the given Program Event, the Virtual Source should be set as **Unmapped**. Virtual Source to Fader mappings default to **Unmapped**.

Note Each Fader can be mapped to one and only one Virtual Source.

- **OK** – saves the Audio Layout and closes the dialog box. Note that a user prompt occurs if the:
  - **Name** field is empty
  - **Name** field contains a name that is already in use by another layout. This only happens when the user is creating a layout.

- **Preset** field is empty
- **Cancel** – closes the dialog box without saving changes.
- **Close** button – closes the dialog box without saving changes.

Figure 148. Layout Editor Dialog Box



Operation

Note The Ignite/Ignite Konnect system provides an automation interface to the D-10 panel.
For panel-specific user and set up information, refer to the manufacturer's documentation.

Note Before the audio can be controlled, virtual sources must be configured. Typically this is accomplished during initial installation.

Adjust an Audio Source

Note The program fader control handle is used to adjust the level of the virtual source's associated fader.

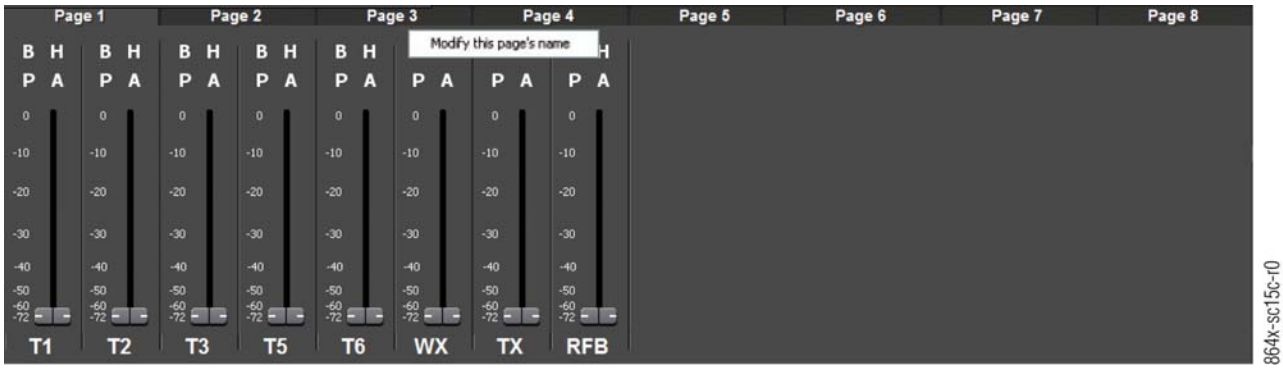
- To manually adjust the level, click and drag the program fader control handle.
- To jump or cut the active source to a desired volume, double-click above or below the program fader control handle.

Change a Page Name

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

1. Right-click the page label. The **Modify this page's name** menu (Figure 149) appears.

Figure 149. Modify Page Name – Wheatstone Audio



2. Click **Modify this page's name**. The **Page Tab Naming** dialog box (Figure 150) appears.

Figure 150. Page Tab Naming Dialog Box

3. In the **Page Name** box, type the new name. Click **OK**.

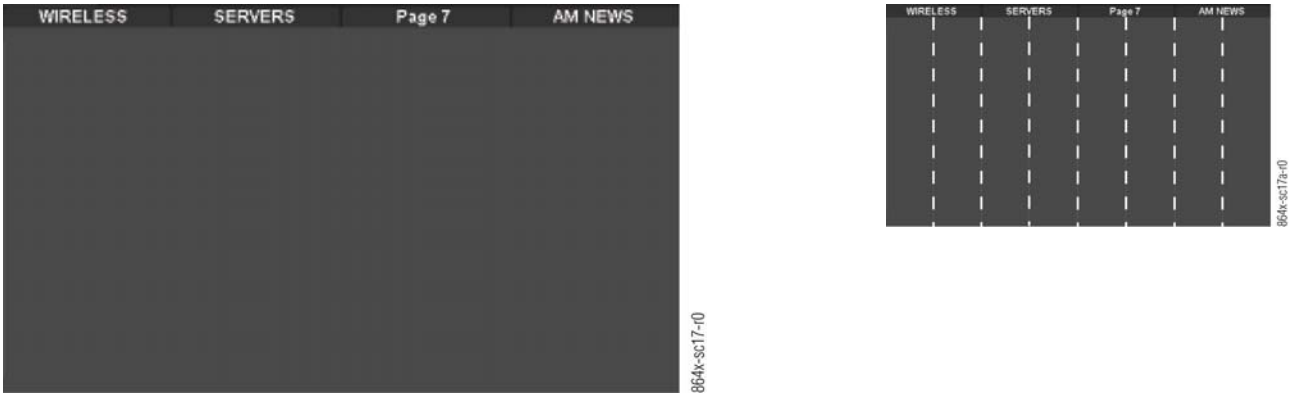
Manual Virtual Source Control

Note If the **Audio Main Context Menu** is accessed via right-click on a program fader control, the **Virtual Source Maintenance** dialog box appears with the virtual source for the targeted program fader control already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty program fader slot, the first virtual source in the list is selected by default.

Create a Program Fader Control – Import a Virtual Source

1. Click the **Page Tab** where the program fader control is to be added. The selected **Page Tab** highlights (Figure 151).

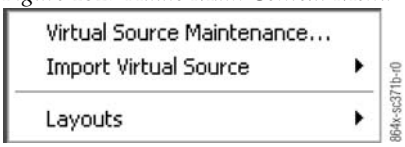
Figure 151. Page Tabs/Program Fader Slots



Note Each of the 8 available pages is logically subdivided into 16 program fader slots. Every two slots span the width of a Page Tab (refer to Figure 151 inset).

2. Right-click the desired program fader slot to create the program fader control. The **Audio Main Context Menu** (Figure 152) appears.

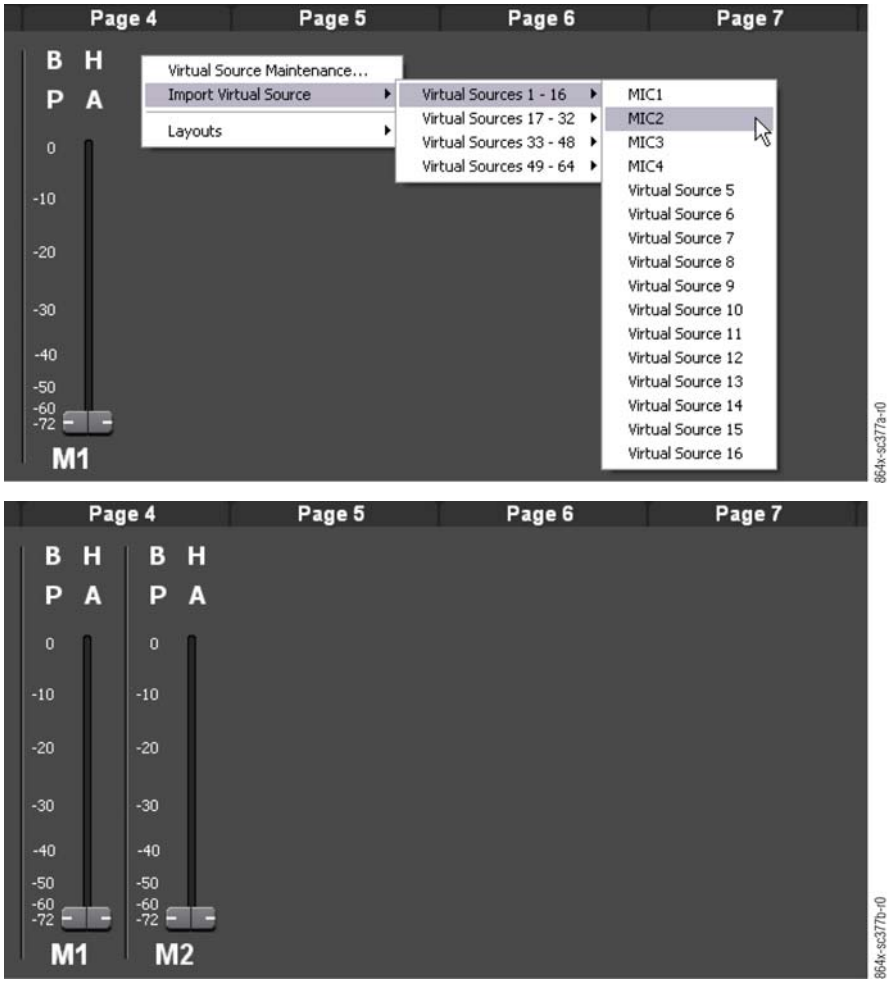
Figure 152. Audio Main Context Menu - Virtual Source Maintenance



3. On the **Audio Main Context Menu**, click **Import Virtual Source**, then click **Virtual Sources** x – y, and then click a **Virtual Source Name** (refer to Figure 153) where:
   - **Virtual Sources** x – y is the Virtual Source ID range from which a Virtual Source will be selected for import
   - **Virtual Source Name** is the name of the Virtual Source to be imported

   The program fader control is imported.

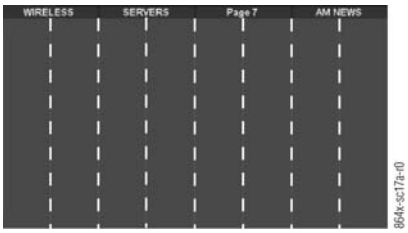
Figure 153. Virtual Source Name



Create a Program Fader Control – Select a Virtual Source

1. Click the **Page Tab** where the program fader control is to be added. The selected **Page Tab** highlights (Figure 154).

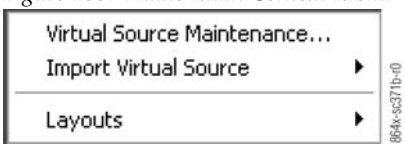
Figure 154. Page Tabs/Program Fader Slots



Note Each of the 8 available pages is logically subdivided into 16 program fader slots. Every two slots span the width of a Page Tab (refer to Figure 154 inset).

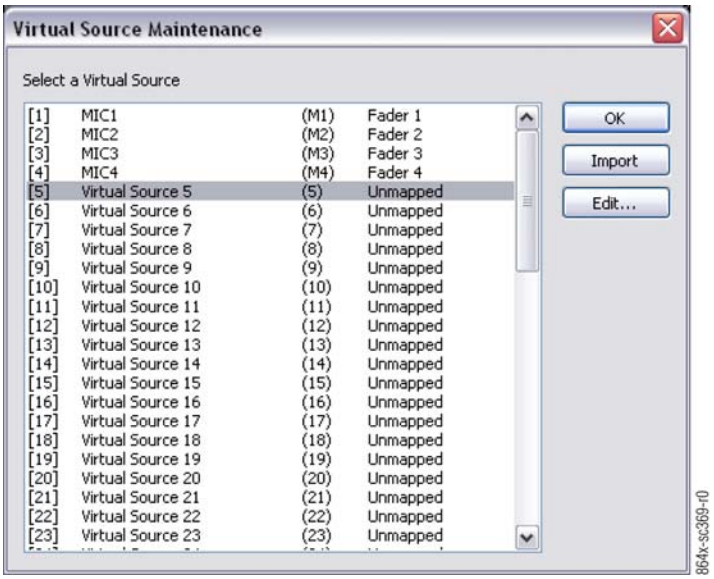
2. Right-click the desired program fader slot to create the program fader control. The **Audio Main Context Menu** (Figure 155) appears.

Figure 155. Audio Main Context Menu - Virtual Source Maintenance



3. Click **Virtual Source Maintenance**. The **Virtual Source Maintenance** dialog box (Figure 156) appears.

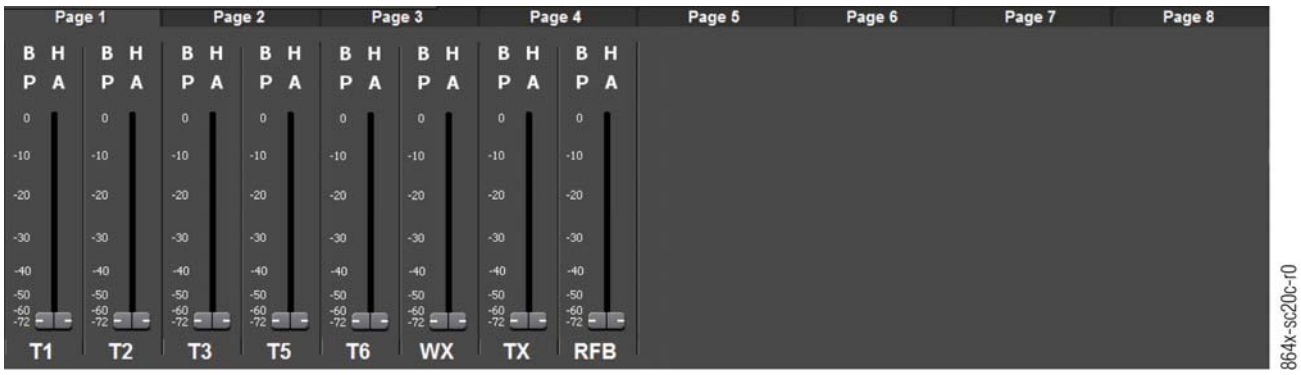
Figure 156. Virtual Source Maintenance Dialog Box



4. From the **Select a Virtual Source** list, click a virtual source for the program fader to control and then click **Import**. A program fader control (Figure 157) is placed in the selected program fader slot.

Note The new program fader control is labeled with the abbreviation of the selected virtual source.

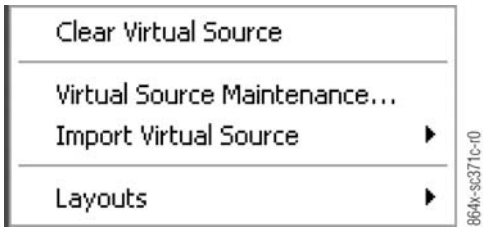
Figure 157. New Program Fader Control Example – Wheatstone Audio



Clear/Remove a Program Fader Control/Virtual Source

1. Right-click near the right edge of the program fader control to be removed. The **Main Context Menu** appears.
2. Click **Clear Virtual Source** (Figure 158).

Figure 158. Remove/Clear Program Fader Control or Virtual Source



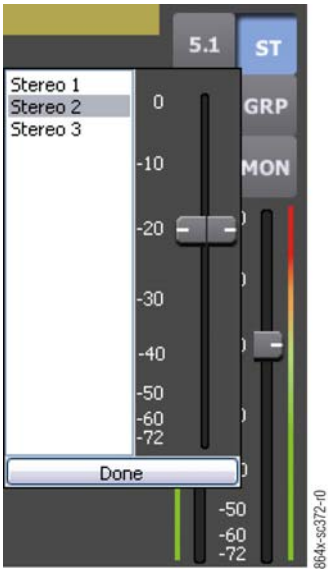
Adjust a Single Master Fader

- Click and drag the left or right fader control to the required level.

Adjust/Set Up/View a Group of Masters

1. Click the **Master Fader** button for the proper group of masters (e.g., AUX, ST, GRP). The **Master Fader** button highlights and the **Master Fader** dialog box (Figure 159) appears.

Figure 159. Master Fader Dialog Box – Wheatstone Audio



2. In the **Master Fader** dialog box, from the list click the desired master.
3. Click and drag the **Master Fader** dialog box fader control to the desired level.
4. Repeat Step 2 for each **Master** to be viewed or adjusted.
5. Click **Done**.

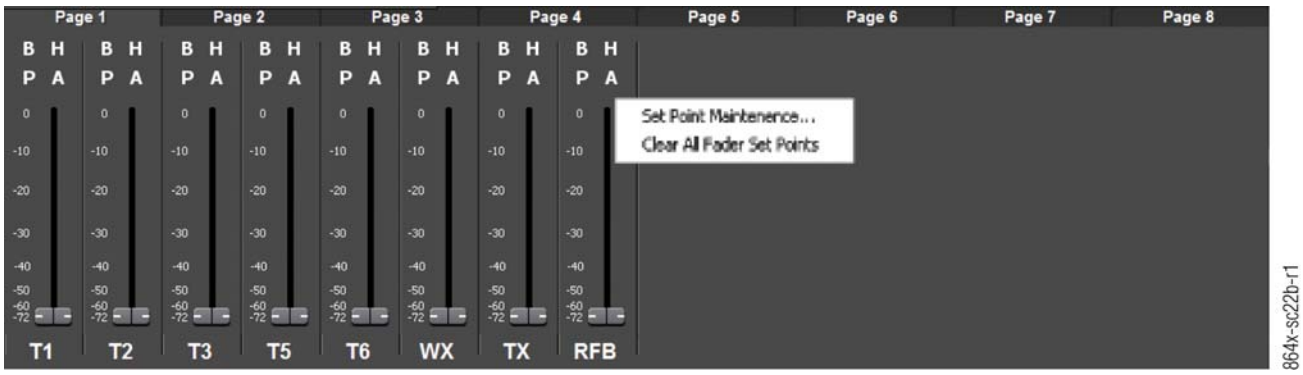
Set Points

Note A set point does not need to be loaded in order to be assigned in a task. However, it does need to be loaded if the user wishes to modify the set point position for a particular source during a show.

Create a Set Point

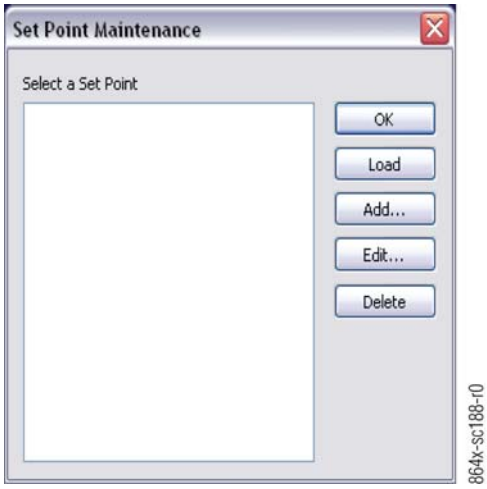
1. Right-click in the program fader control volume level area. The **Set Point Context Menu** (Figure 160) appears.

Figure 160. Set Point Context Menu – Wheatstone Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 161.

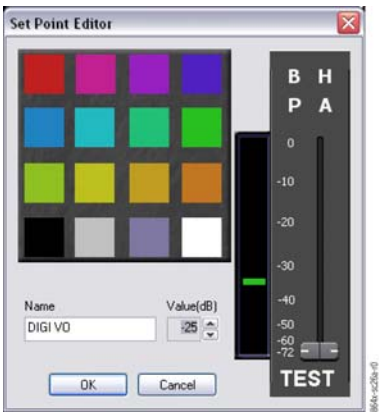
Figure 161. Set Point Maintenance Dialog Box



Note All set points created via Set Point Maintenance are available globally for every virtual source to use in creating tasks for audio timeline objects.

3. Click **Add**. The **Set Point Editor** dialog box (Figure 162) appears.

Figure 162. Set Point Editor Dialog Box – Wheatstone Audio



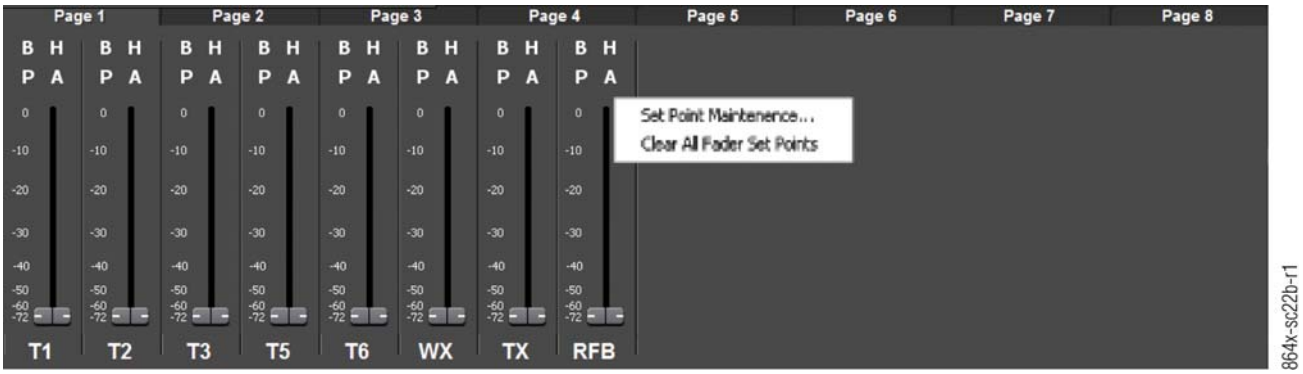
Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

4. Either:
   - In the **Name** box, type a Set Point name
   - On the **Color Menu**, click a Set Point color
   - Assign a Set Point value by either:
     - Using the **Value(dB)** up and down arrows
     - Clicking and dragging the Set Point indicator on the **TEST** fader
5. Click **OK**.

Edit a Set Point

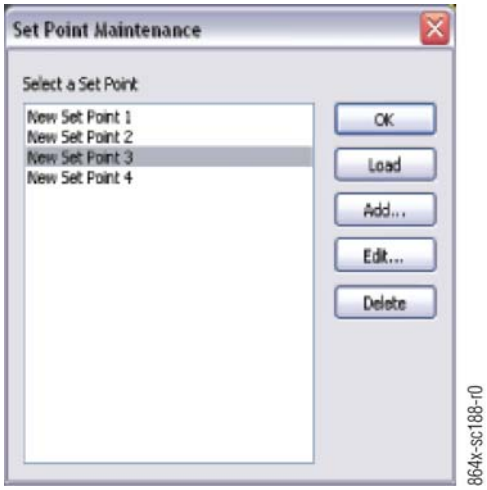
1. Right-click in the program fader control volume level. The **Set Point Context Menu** (Figure 163) appears.

Figure 163. Set Point Context Menu – Wheatstone Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 164.

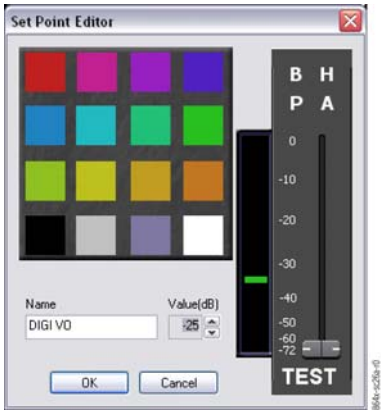
Figure 164. Set Point Maintenance Dialog Box



3. From the **Select a Setpoint** list, click a Set Point to edit.

4. Click **Edit.** The **Set Point Editor** dialog box (Figure 165) appears.

Figure 165. Set Point Editor Dialog Box – Wheatstone Audio



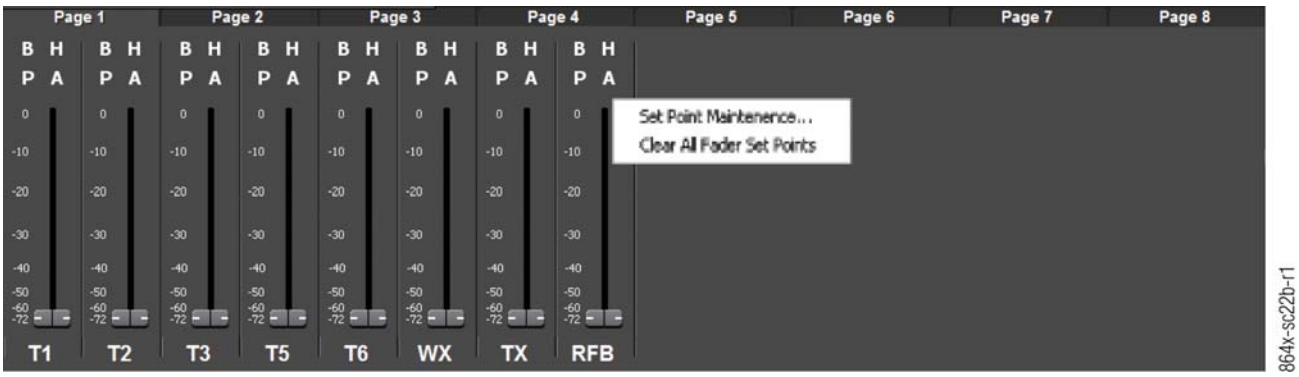
5. Edit the Set Point as necessary.

6. Click **OK**.

Load a Set Point to a Virtual Source

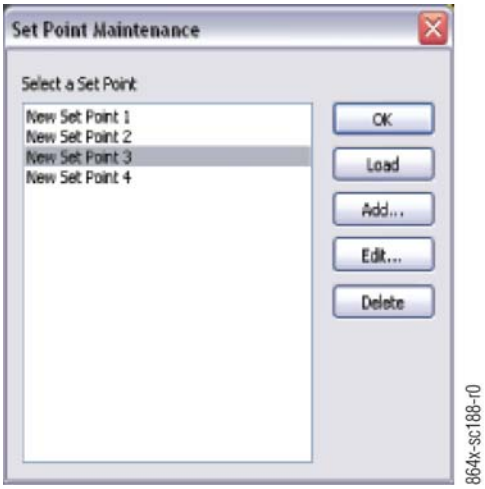
1. Right-click on the program fader control that controls the target virtual source. The **Set Point Context Menu** (Figure 166) appears.

Figure 166. Set Point Context Menu - Virtual Source – Wheatstone Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 167.

Figure 167. Set Point Maintenance Dialog Box



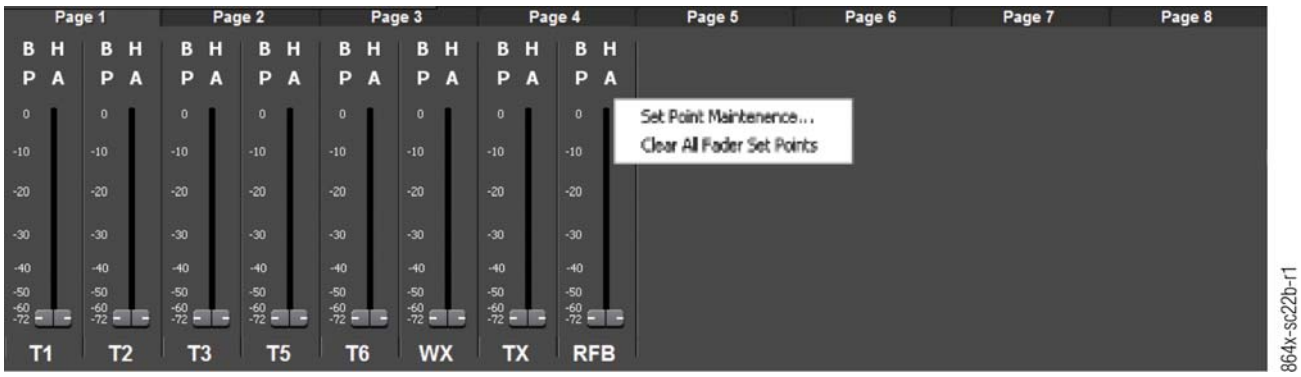
3. From the **Select a Setpoint** list, click a Set Point to load, and then click **Load**
4. Click **OK**. The Set Point appears on the selected program fader control.

Note Click and drag a Set Point to a virtual source-specific volume level up or down to force audio automation to use that level instead of the volume level associated with the global setpoint.

Delete a Set Point

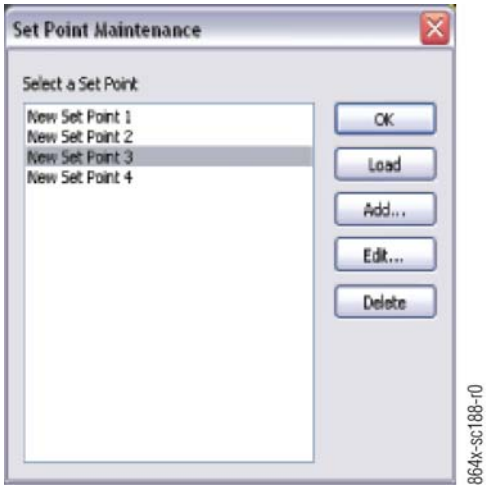
1. Right-click in the program fader control volume level area. The **Set Point Context Menu** (Figure 168) appears.

Figure 168. Set Point Context Menu – Wheatstone Audio



2. Click **Set Point Maintenance**. The **Set Point Maintenance** dialog box appears. Refer to Figure 169.

Figure 169. Set Point Maintenance Dialog Box

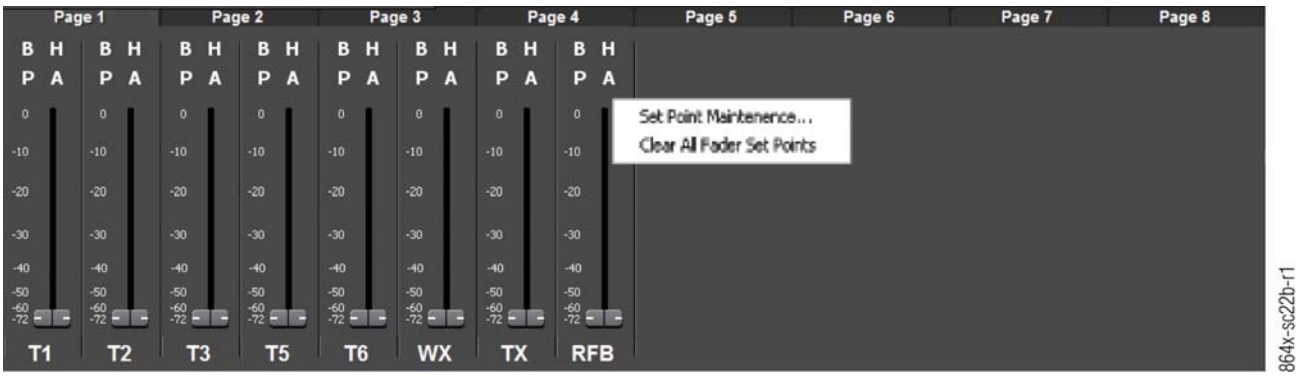


3. From the **Select a Setpoint** list, click a Setpoint to delete.
4. Click **Delete**. The **Delete Entry?** message appears:
   - Click **Yes** to continue deleting the selected Set Point.
   - Click **No** to keep/not delete the item.

Clear Set Points From a Virtual Source

1. Right-click on the program fader control that controls the target virtual source. The **Set Point Context Menu** (Figure 170) appears.

Figure 170. Set Point Context Menu – Wheatstone Audio



2. Click **Clear All Fader Set Points**. All Set Points specific to the virtual source controlled by the program fader control are removed.

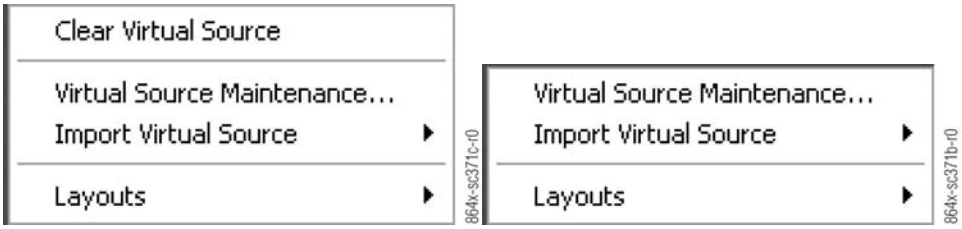
Virtual Sources

Edit a Virtual Source Entry

Note If the **Audio Main Context Menu** is accessed via right-click on a program fader control, the **Virtual Source Maintenance** dialog box appears with the virtual source for the targeted program fader control already selected. If the **Audio Main Context Menu** is accessed via right-click on an empty program fader slot, the first virtual source in the list is selected by default.

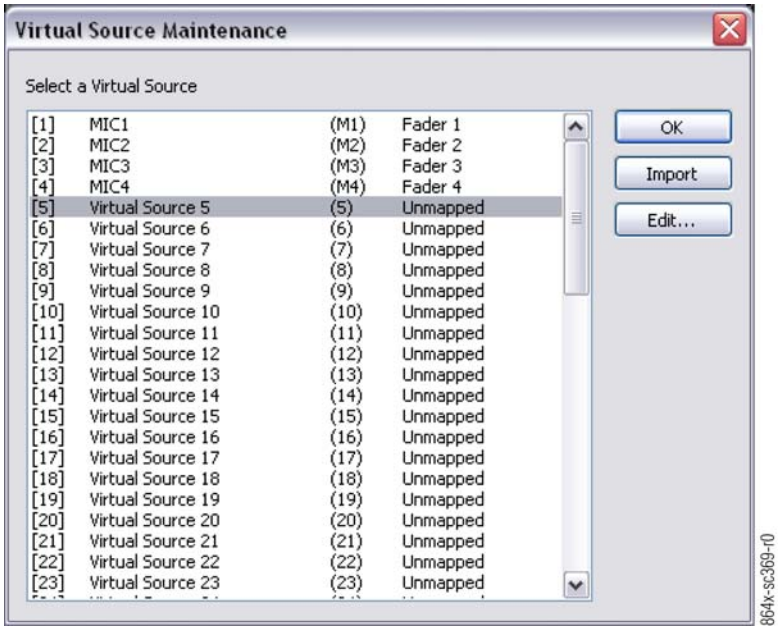
1. Right-click near the right edge of the program fader control to be edited. The **Audio Main Context Menu** (Figure 171) appears.

Figure 171. Audio Main Context Menu



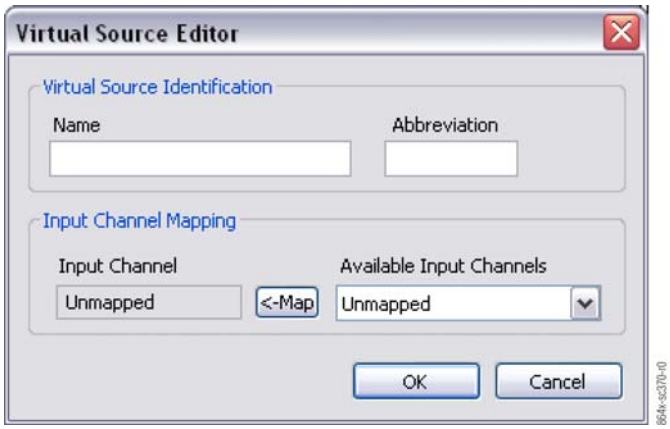
2. Click **Virtual Source Maintenance**. The **Virtual Source Maintenance** dialog box appears. Refer to Figure 172.

Figure 172. Virtual Source Maintenance Dialog Box



3. In the **Select a Virtual Source** list, click a virtual source to edit and then click **Edit**. The **Virtual Source Editor** dialog box (Figure 173) appears.

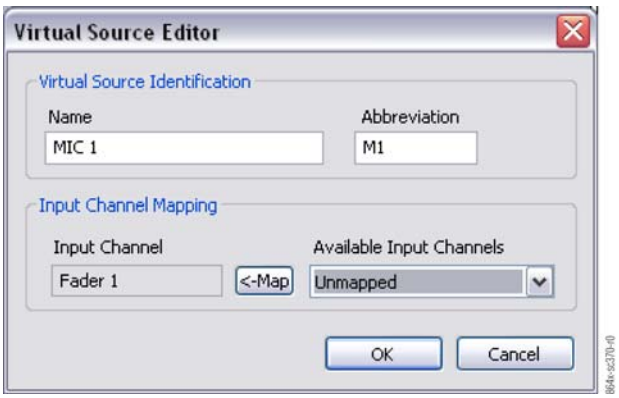
Figure 173. Virtual Source Editor Dialog Box – Wheatstone Audio)



4. Within **Virtual Source Identification** (Figure 174):

- **a.** In the **Name** text box, type a name for the virtual source (required)
- **b.** In the **Abbreviation** text box, type an abbreviation for the virtual source (required)

Figure 174. Virtual Source Identification



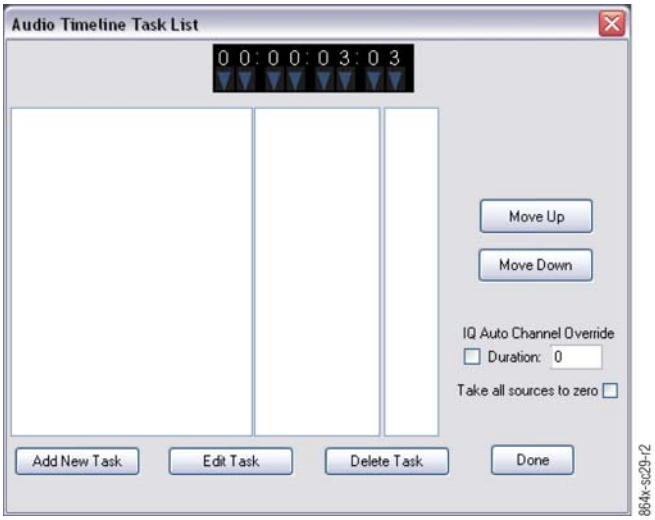
5. Within **Input Channel Mapping** (Figure 174):
   a. In the **Available Input Channels** list, click a fader (or Unmapped if the virtual source should not control a fader).
   b. Click **Map** to map the selected fader

Set Up Audio Task Properties

Note Set points must be created before creating audio tasks. A set point does not need to be assigned to a virtual source in order for the virtual source to use the set point, but at least one set point must exist.

1. On the timeline, drag an audio command over. Double-click the Audio Property icon. The **Audio Timeline Task List** dialog box (Figure 175) appears.

Figure 175. Audio Timeline Task List Dialog Box

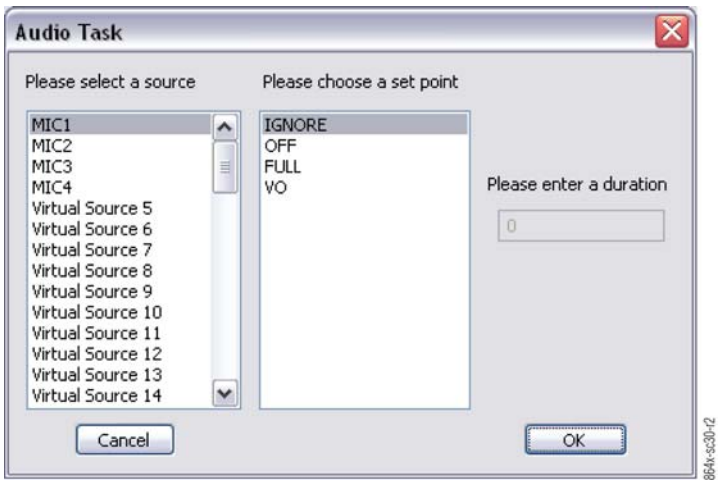


2. Click a task and then click either **Add New Task**, **Edit Task**, **Delete Task**, **Move Up**, or **Move Down** as needed. If either **Add New Task** or **Edit Task** are chosen an **Audio Task** dialog box (Figure 176) appears.
   - Complete the entries in this dialog box, click OK, and then proceed to the next step.

Note The duration field should be set to the number of frames over which the fade will occur. If left blank or set to 0, a cut is performed instead.

Note Click **IGNORE** to set an audio source so that the **Take all to Zero** command ignores that specific source when setting all sources to zero. Clicking **IGNORE** sets the duration to 0 frames and disables the **Please enter a duration** box. The **Ignore** feature is accessed through the individual Audio Module TME icon properties

Figure 176. Audio Task Dialog Box



3. Repeat Step 1 and Step 2 for adding tasks for each individual task in the same audio command.
4. Click **OK**.

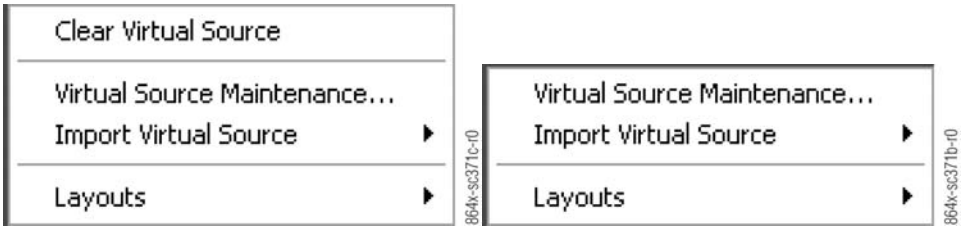
Note Click the **Take All Sources to Zero** check box (Figure 175) to have all other sources without a task assigned to go off air at 0 duration.

5. Click **Done**.

Create an Audio Layout

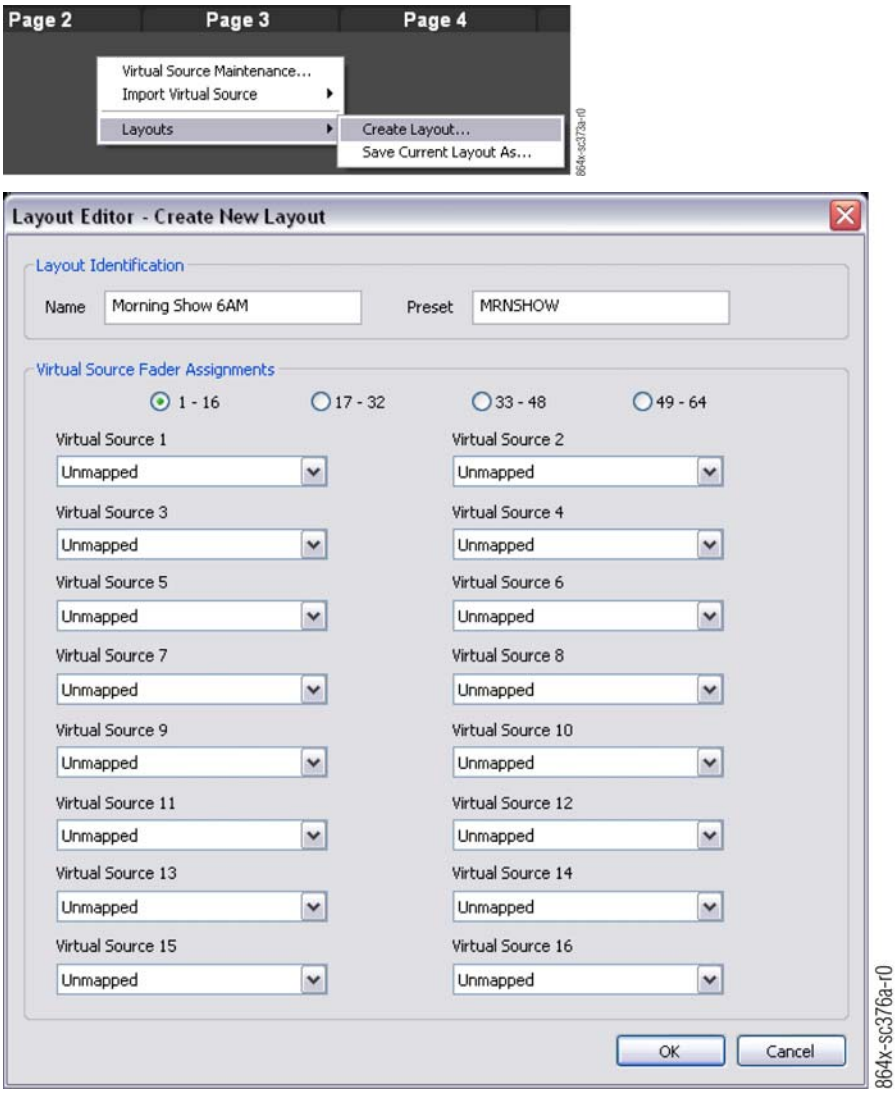
1. Right-click near the right edge of a program fader control or in an empty program fader slot. The **Audio Main Context Menu** (Figure 177) appears

Figure 177. Audio Main Context Menu



2. Select **Layouts**, and then select **Create Layout**. The **Layout Editor** dialog box appears. Refer to Figure 178.

Figure 178. Create an Audio Layout – Menu



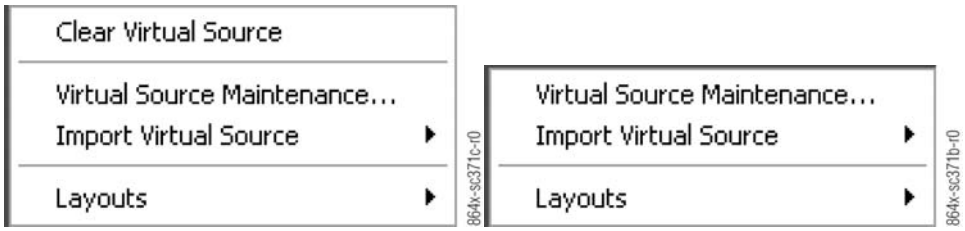
Note The **Layout Identification Name** is limited to 20 characters and must be unique.

3. In **Layout Identification Name**, enter a unique name for the new Audio Layout.
4. In **Layout Identification Preset**, enter the name of the Wheatstone Mixer Program Event to be associated with the new Audio Layout.
5. In the **Virtual Source Fader Assignments** section, use the option buttons and drop-down lists to select the fader that should be controlled by each Virtual Source while the associated Program Event is loaded on the mixer.
6. Either:
   - Click **OK** to save the Audio Layout
   - Click **Cancel** to discard it.

Save Current Audio Layout

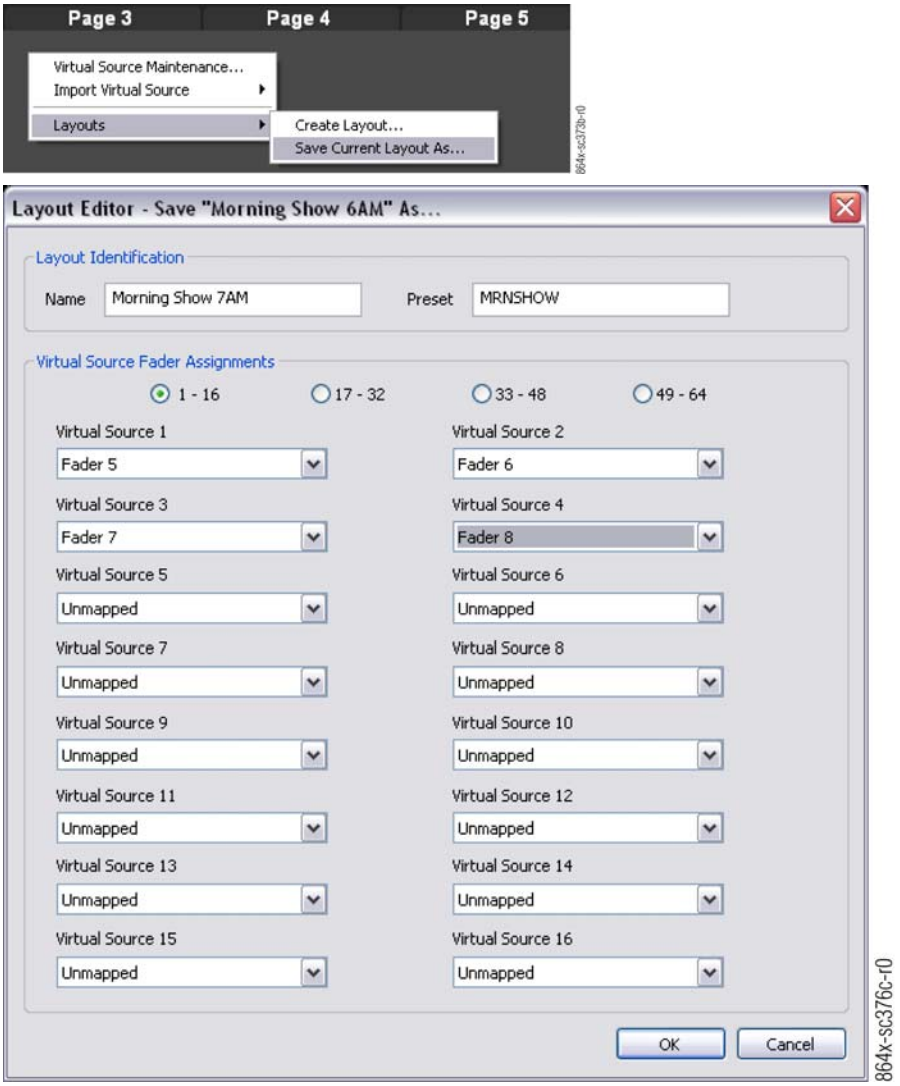
1. Right-click near the right edge of a program fader control or in an empty program fader slot. The **Audio Main Context Menu** (Figure 179) appears.

Figure 179. Audio Main Context Menu



2. Select **Layouts**, and then select **Save Current Layout As...** The **Layout Editor** dialog box appears. Refer to Figure 180.

Figure 180. Create an Audio Layout – Menu



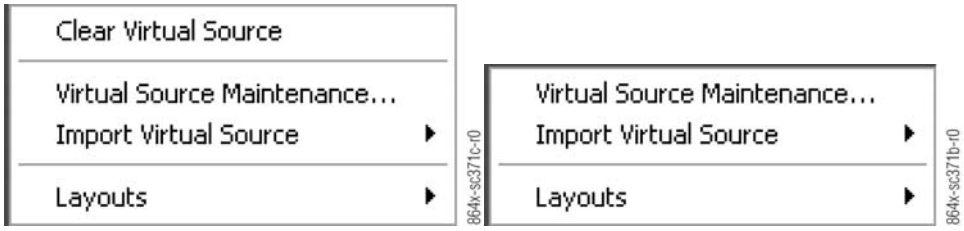
Note The **Layout Identification Name** is limited to 20 characters and must be unique.

3. In the **Layout Identification Name** box, enter a unique name for the new Audio Layout.
4. In **Layout Identification Preset**, enter the name of the Wheatstone Mixer Program Event to be associated with the new Audio Layout.
5. In the **Virtual Source Fader Assignments** section, update the option buttons and drop-down lists as necessary.
6. Either:
   - Click **OK** to save the Audio Layout
   - Click **Cancel** to discard it

Load An Audio Layout

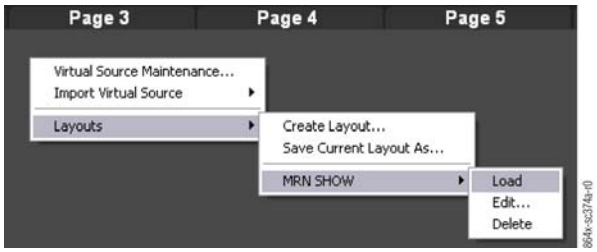
1. Right-click near the right edge of a program fader control or in an empty program fader slot. The **Audio Main Context Menu** (Figure 181) appears

Figure 181. Audio Main Context Menu



2. Click **Layouts**, then click the <layout name>, and then click **Load** where <layout name> is chosen from the list of existing Audio Layouts (Figure 182). The **Load Layout?** message appears.

Figure 182. Load An Audio Layout Example

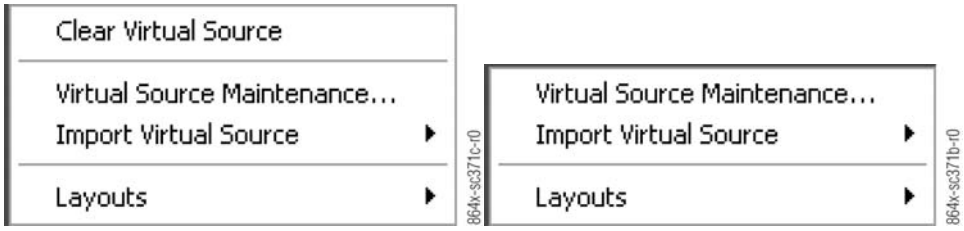


3. Either:
   - Click **Yes** to continue loading the selected layout
   - Click **No** to cancel loading

Edit an Audio Layout

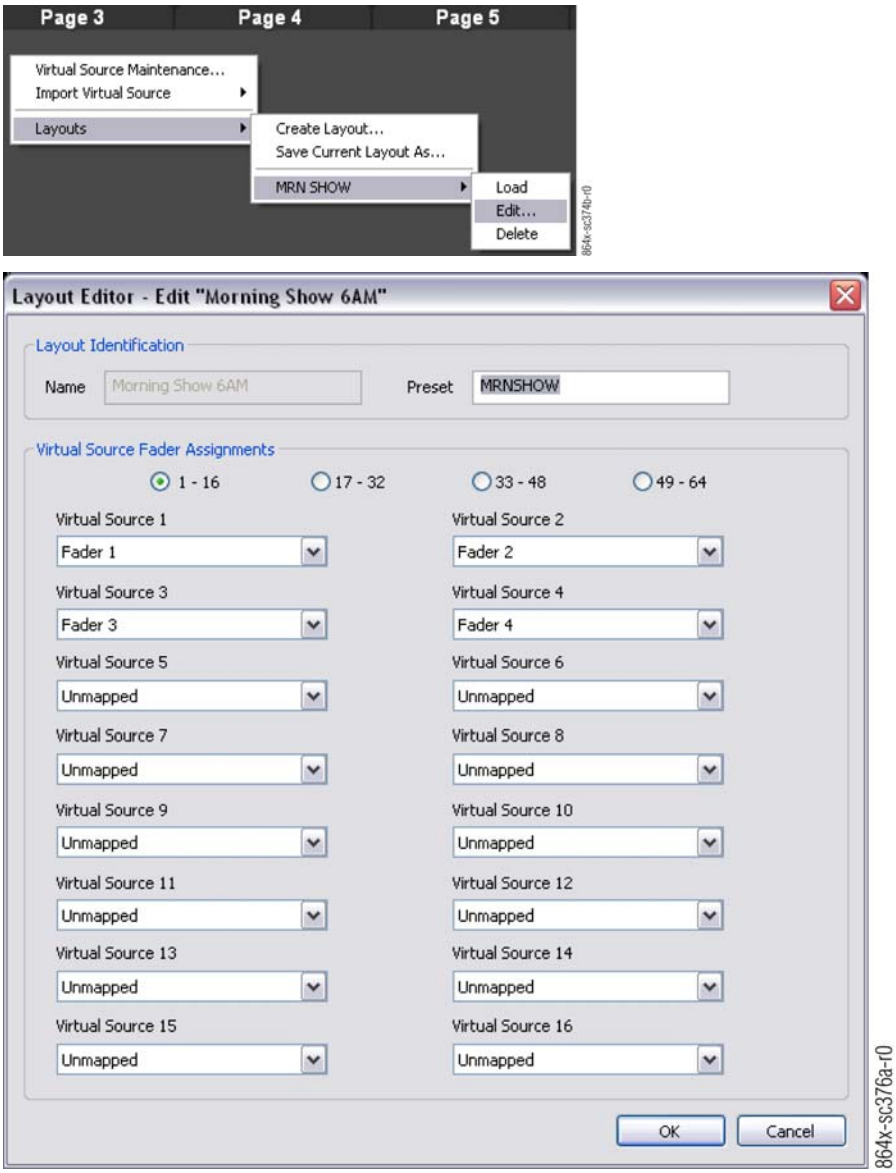
1. Right-click near the right edge of a program fader control or in an empty program fader slot. The **Audio Main Context Menu** (Figure 183) appears.

Figure 183. Audio Main Context Menu



2. Click **Layouts**, then click the <layout name>, and then click **Edit** where <layout name> is chosen from the list of existing Audio Layouts. The Layout Editor dialog box appears with the selected audio layout loaded. Refer to Figure 184.

Figure 184. Edit An Audio Layout Example



Note The **Layout Identification Name** is limited to 20 characters and must be unique.

3. In the **Layout Identification Name** box, edit the unique name as desired.
4. In the **Layout Identification Preset** box, edit the preset as desired.
5. In **Virtual Source Fader Assignments**, edit the option buttons and fader mapping drop-downs as desired.

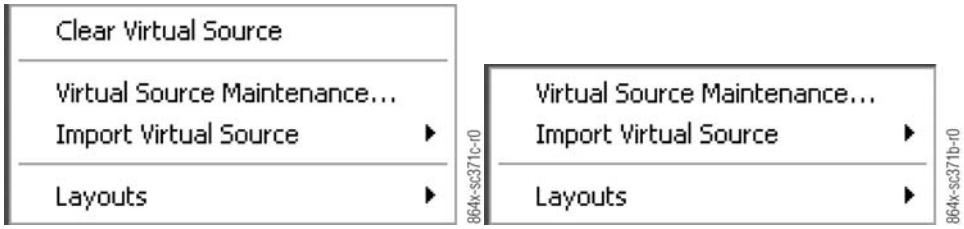
6. Either:
   - Click **OK** to save the edited Audio Layout
   - Click **Cancel** to close without making the edit changes.

Note An Audio Layout must be reloaded in order for the saved changes to take effect if the layout in question was used to load the current audio layout.

Delete an Audio Layout

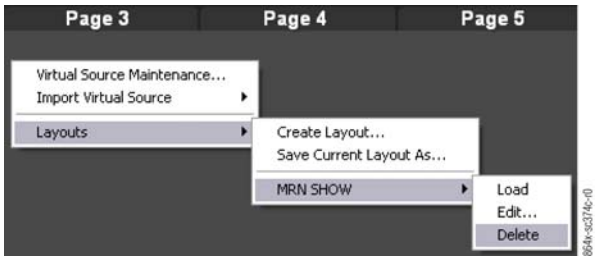
1. Right-click near the right edge of a program fader control or in an empty program fader slot. The **Audio Main Context Menu** (Figure 185) appears.

Figure 185. Audio Main Context Menu



2. Click **Layouts**, then click the <layout name>, and then click **Delete** (Figure 186) where <layout name> is chosen from the list of existing Audio Layouts. The **Delete Entry?** message appears.

Figure 186. Delete An Audio Layout Example

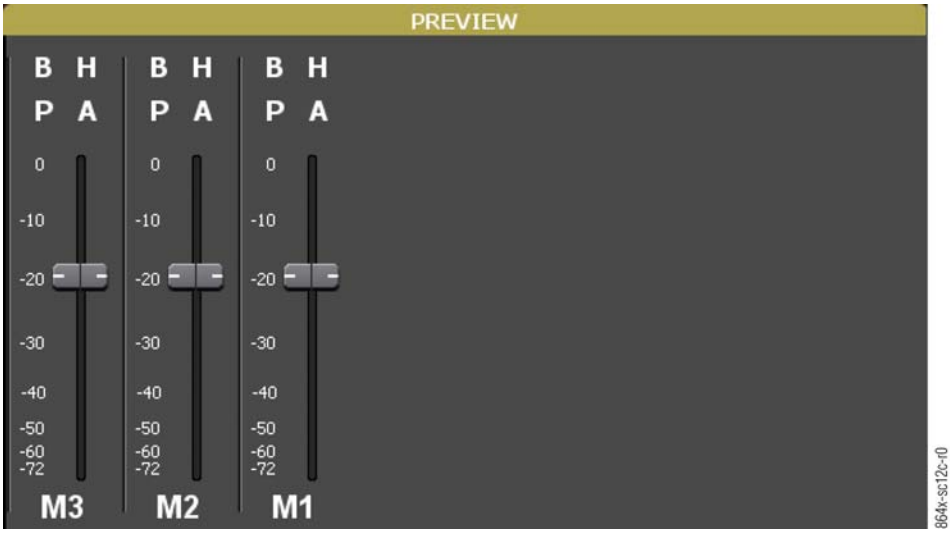


3. Either:
   - Click **OK** to save the edited Audio Layout
   - Click **Cancel** to close without making the edit changes.

Audio Preview

Audio sources transitioned via the Ignite/Ignite Konnect Event Timeline are populated into the Audio Preview area (Figure 187) as each TME is prepped. The sources set to move to air next are shown in the Audio Preview area.

Figure 187. Audio Preview Area Example – Wheatstone Audio



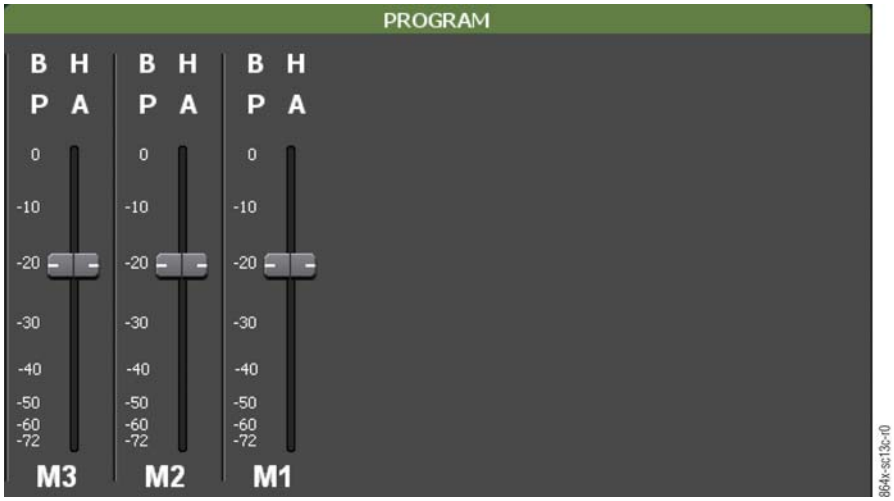
Note The previewed audio shows the program fader control level when the source is transitioned to air. If a different transition level is desired before going to air, adjust the level while it is in Preview.

- To set the desired post-transition fader level, move the program fader control handle to the desired level.
- To prevent a source from going to air, after a TME has been prepped, click **H** to hold the source in preview.
- In **Preview**, right-click an audio source to select either:
  - Take to Air Now – send it to air immediately
  - Remove From Preview – remove it from Preview and not go to air

Audio Program (LIVE)

The **Audio Program** area (Figure 188) shows the virtual sources presently On Air. Any source that is moved above its level point is taken to air instantly and is shown in the **Audio Program** area.

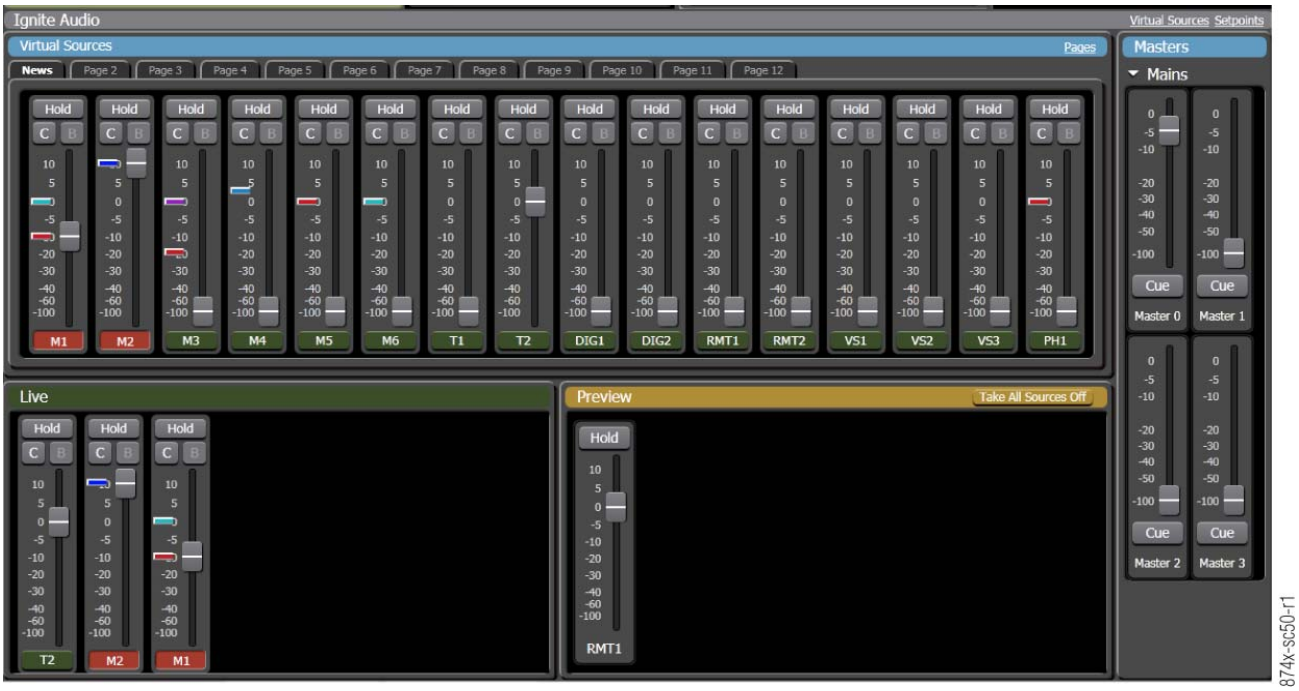
Figure 188. Audio Program Area Example – Wheatstone Audio



- To remove the audio mix, right-click any source and then click **Take Off Air Now**.

Calrec Audio

Figure 189. Audio Module - Calrec Audio



Overview

Note The Ignite/Ignite Konnect system provides an automation interface (Figure 189) to the Calrec panel. For panel-specific user and set up information, refer to the manufacturer's documentation.

The Ignite Calrec control interface provides the ability to control the following functions of a supported Calrec mixer:

- Control an available input channel fader on a mixing console. A Calrec mixer offers up to 192 possible faders depending on the model of mixer.
- Manually control an available main fader on the console. Calrec console offers up to 4 main faders depending on the model of mixer. Main faders are controlled from Ignite using the Masters Mains faders.
- Switch between backup and primary fader control from Ignite.
- Execute fades from automation.
- Turn On/Off PFL.
- Enable/disable channel Cut/On for channel faders (not controllable for master faders). This feature turns On/Off the CUT button located above a channel fader on the mixer. NOTE: the Cut feature in Calrec is completely different from a fader being cut to a level.

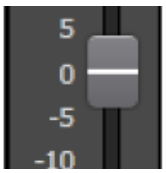
Fader Manual Virtual Source Control

Virtual Sources provide a mapping between Automation Events and Input Channel Faders on the Calrec Mixer. Virtual Sources play a significant role in Automation Events by enabling Automation Events to control target Sources regardless of which Input Channels the Sources have been assigned to on the Calrec Mixer.

In order to control a virtual source from the Audio GUI, configure a virtual source to a slot, via the **Page Configuration** dialog box, on the Audio Module GUI, to represent the virtual source visually. Otherwise, the virtual source idly waits in the background for commands from Ignite/Ignite Konnect Timeline Automation or external control surfaces such as the QUICbox™ panel.

Individual Program Fader Controls and Indicators

Figure 190. Fader Buttons – Calrec Audio

Selected	Function
	Hold Enables/Disables the associated Virtual Source's Automation Hold feature (latching). This is an alert that the Program Fader and associated Virtual Source will ignore all Automation events until the Program Fader is taken off Hold. **Note** If the Virtual Source does not have a mapped Fader, the outline of the Program Fader is red instead).
	C (Cue - Pre Fade Listen/Cue) Activates or de-activates the PFL/Cue button for the Input Channel. **Note** PFL is disabled automatically by Automation Events that take the Virtual Source from OFF to any other level.
	B (Backup) Toggles between the associated Fader's primary and backup sources. When selected, it highlights blue and trnasfers control to the backup source. If no backup fader is assigned the button is unavailable. **Note** "The backup fader button, **B**, is unavailable if a backup fader is unassigned.
	Fader Level Control Displays and adjusts the volume level of the Virtual Source's Active Fader. When being adjusted, the handle turns blue and the dB/dBFS value displays in place of the Source Abbreviation at the bottom of the respective virtual source control.

Selected	Function
	Off / On Toggles a Cut on or off for the Virtual Source's Active Fader. When Cut is Off, highlights green. When Cut is On, highlights red.
	Displays either the Virtual Source Abbreviation or, when the fader is moved, a dB/dBFS value.

Note For all of the buttons, a gray background indicates it is not active.

Each program fader control (Figure 190) has:

- **Hold** – Enables/Disables the associated Virtual Source Automation Hold feature (latching).
- **C** – (Cue) Activates/Deactivates PFL (Pre-fade Listen) Cue for the associated Virtual Source (latching).
- **B** – (Backup) Toggles between the associated primary and backup sources. If no backup fader is assigned the button is unavailable.
- Fader level control handle – Adjusts the virtual source dB/dBFS level. The fader control handle highlights blue when being adjusted. When adjusted the **Abbreviation/Level** display changes from the assigned abbreviation to the current dB level setting.
- **Off/On/Abbr/Value** – Selects and indicates:
  - **Off** (green) – (Toggled off) Deactivates **Cut** for the Virtual Source fader.
  - **On** (red) – (Toggled on) Activates **Cut** for the Virtual Source fader.
  - **Abbr** – Displays the assigned abbreviation when the fader is static
  - **Value** – Displays the numeric dB level setting when the fader control handle is moving.

When either the **C** or **B** button is clicked, the button background highlights blue to indicate it is selected. When the **Hold** button is clicked, the button background highlights amber to indicate it is selected.

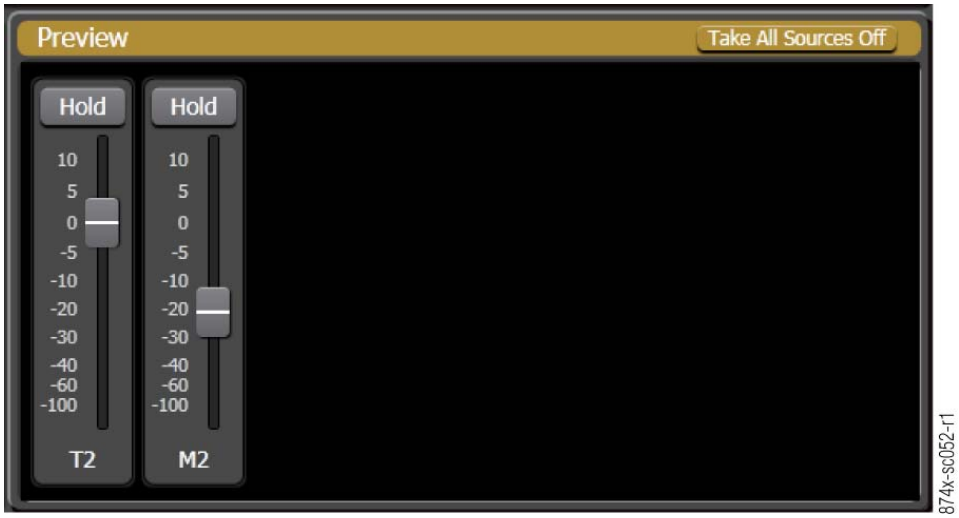
If the Virtual Source does not have a mapped Fader, the outline of the Program Fader is red (Figure 191). A Virtual Source that does not have a fader mapped to it does not actually control any elements on the mixer. If a

fader is later mapped to such a Virtual Source, the properties of the Virtual Source will be applied to the Fader.

Figure 191. Example – Virtual Source Without Mapped Fader – Calrec Audio

Audio Preview

Figure 192. Audio Preview Area – Calrec Audio



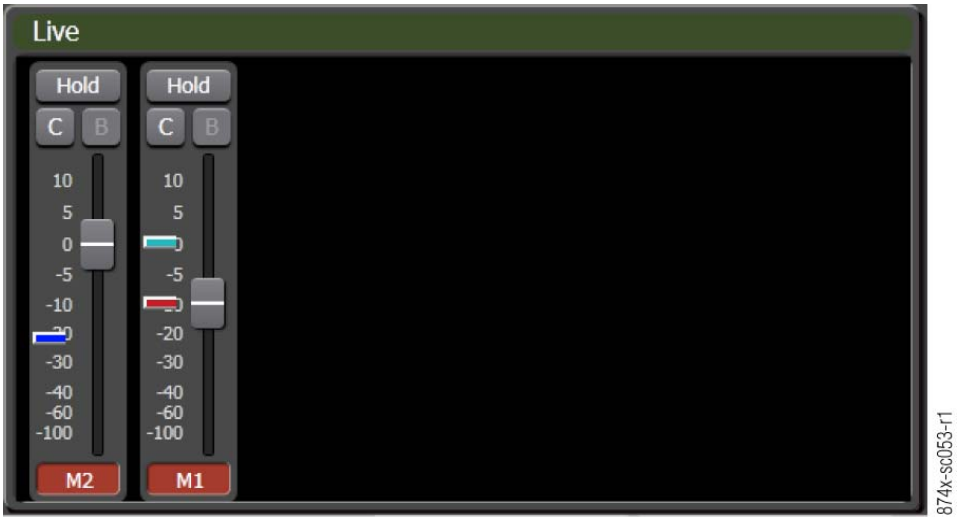
Virtual sources transitioned via the Ignite/Ignite Konnect Event Timeline are populated into the **Preview** pane (Figure 192) as each TME is prepped. The virtual sources set to move to air next are shown in the **Preview** pane.

Available controls within the **Preview** pane are:

- **Take All Sources Off Air** - toggles the **Take All Sources Off Air** setting for the prepped audio automation task.

Audio Live

Figure 193. Audio Program Area – Calrec Audio

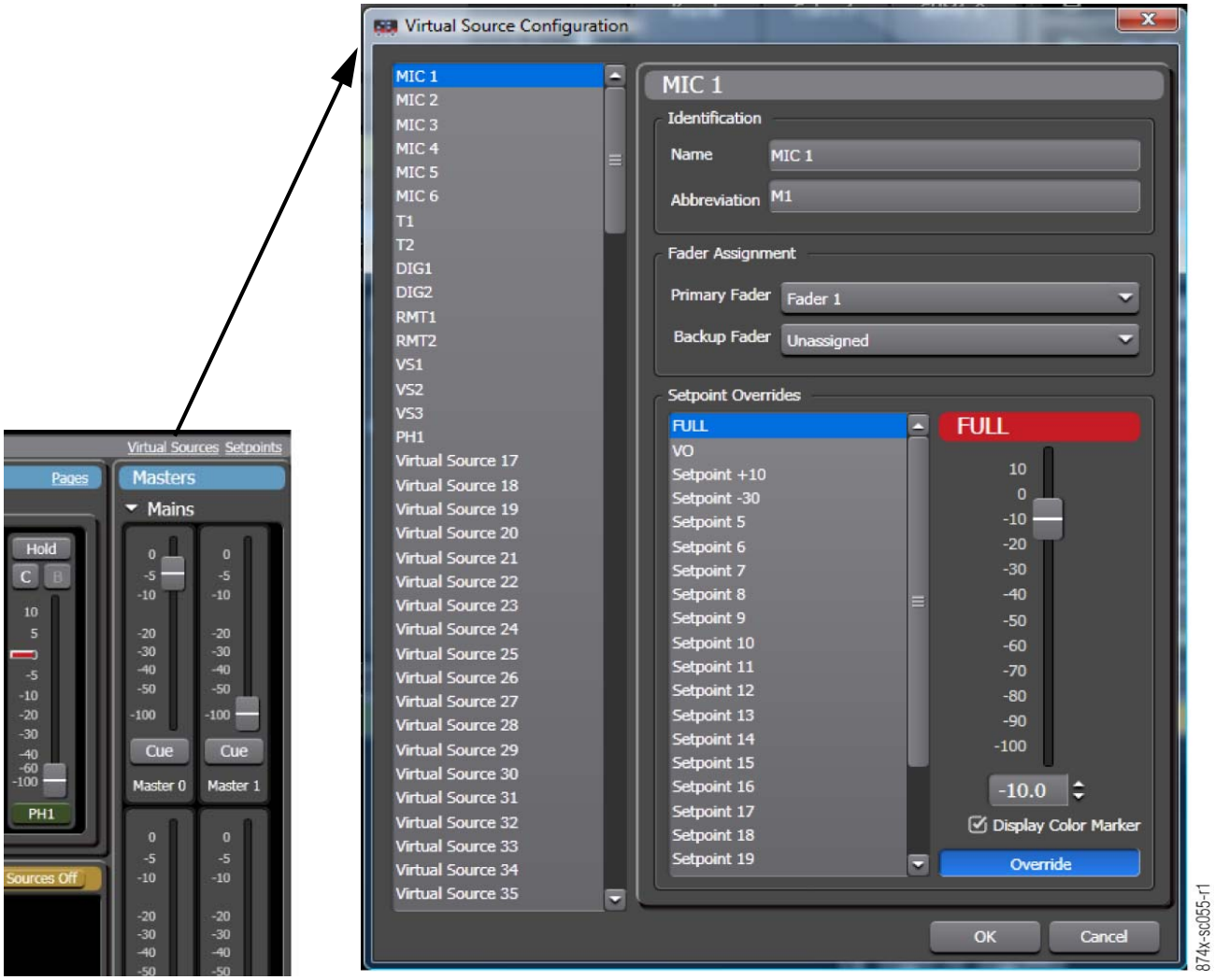


The **Live** pane (Figure 193) shows the virtual sources presently On Air. Any virtual source that is moved above its off point is taken to air instantly and is shown in the **Live** pane.

Note Only the 8 most recent virtual sources to go on air and still exist on air are shown. Once 9 virtual sources are on air, the oldest on-air virtual source disappears and reappears if another is taken off air.

Virtual Source Configuration

Figure 194. Virtual Source Configuration – Calrec Audio



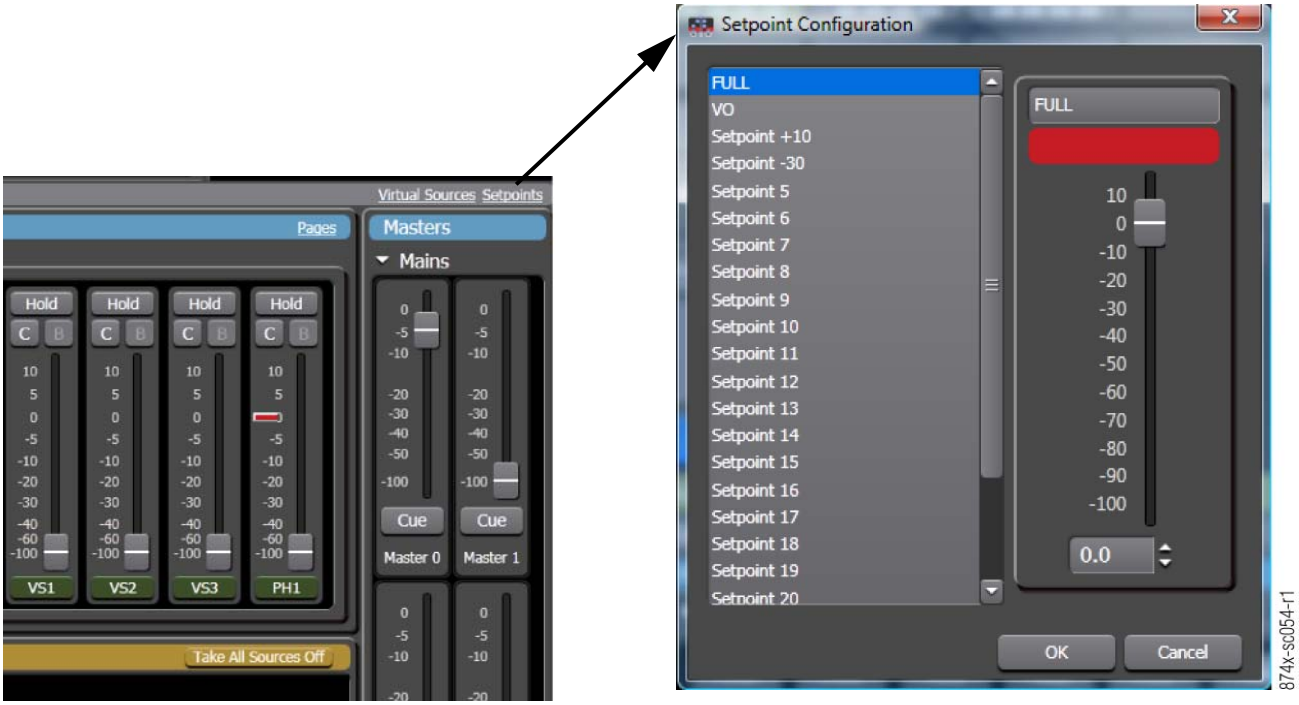
To access the **Virtual Source Configuration** dialog box, (Figure 194), click **Virtual Source** at the top right corner above **Masters** (Figure 194). Up to 192 mixer faders (depending on Calrec model) can be assigned, or mapped, to Ignite Virtual Sources. The **Virtual Source Configuration** dialog box comprises a:

- **Virtual Source** list – selects the Virtual Source to edit .
- **Virtual Source** pane –
  - **Identification** area –
    - **Name** – text box for assigning/editing the virtual source name (1 – 20 characters)
    - **Abbreviation** – text box for assigning/editing the virtual source abbreviation (1 – 4 characters).

- **Fader Assignment** area
  - **Primary Fader** – combo box for assigning a primary fader.
  - **Secondary Fader** – combo box for assigning a secondary fader.
- **Setpoint Overrides** area
  - **Setpoint** list – selects the Setpoint to override for the Virtual Source.
  - **Level** fader – displays and edits the level of the selected Setpoint override
  - **Display Color Marker** – check this option to display a color marker control on the Virtual Source control in the Audio GUI. This color marker control can be dragged to update the override level dynamically.

Setpoint Configuration

Figure 195. Set Point Configuration – Calrec Audio



Setpoints are pre-established fader levels that are referenced via a TME (Transition Macro Event), refer to *TME™ (Transition Macro Event™)* *on page 34*. Set points are used to set the fader level of a Virtual Source during a transition. Setpoints can be named for easy reference. Via Event Timeline automation, each TME provides the system with the audio setpoint needed for that particular event. To access the **Setpoint Configuration** dialog box, (Figure 195), click **Setpoints** at the top right corner above **Masters** (Figure 195).

Two default setpoints are system defined and non-editable by the user:

- **OFF** – used to bring a Virtual Source off the air
- **IGNORE** – used to flag a Virtual Source so that it will not be affected by the **Take All Sources Off** feature of Audio TMEs

There are 24 configurable setpoints. The **Set Point Configuration** dialog box comprises:

- **Setpoint** list – used to select the setpoint to configure.
- **Setpoint** configuration pane.
  - **Name** – text box for assigning/editing up to a 16 character name.
  - Level fader – slide to select/set the setpoint level.
- **OK** – saves the changes and closes the dialog box.
- **Cancel** – closes the dialog box without saving changes.
- **Close** button – closes the **Setpoint Configuration** dialog box without saving changes.

Masters Mains Output Faders

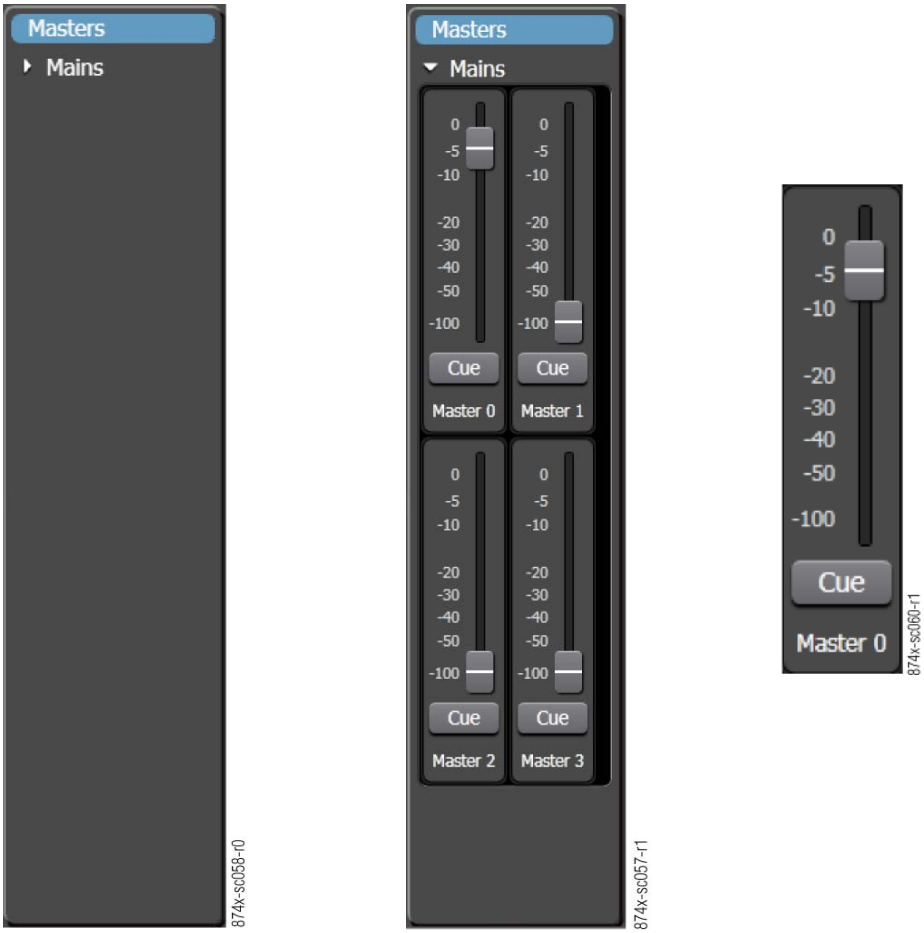
The **Masters Mains Faders** (Figure 196 on page 167) are located on the **Masters** pane. The main fader(s) provide master control of the overall audio output level of the Master Out channels. Depending on system configuration, there are two to four Main faders:

- Master 0
- Master 1
- Master 2
- Master 3

If master fader(s) are hidden (not visible on the **Masters** pane), clicking the **Mains** expand arrow displays the available master output faders. To hide the displayed master faders, click the **Mains** collapse arrow.

Each fader has a **Cue** button (Figure 196 on page 167) that, when selected, highlights blue, updates that master fader to reflect the **Cue** volume, and assumes control of that volume.

Figure 196. Master Output Fader – Calrec Audio



Audio Task Configuration

Audio Task Configuration is accomplished via the **Audio Task Editor** dialog box. Access to the **Audio Task Editor** dialog box (Figure 197 on page 168) is via a TME Audio icon placed on the Event Timeline (refer to *TME™ (Transition Macro Event™) on page 333*).

The Audio Task Editor comprises:

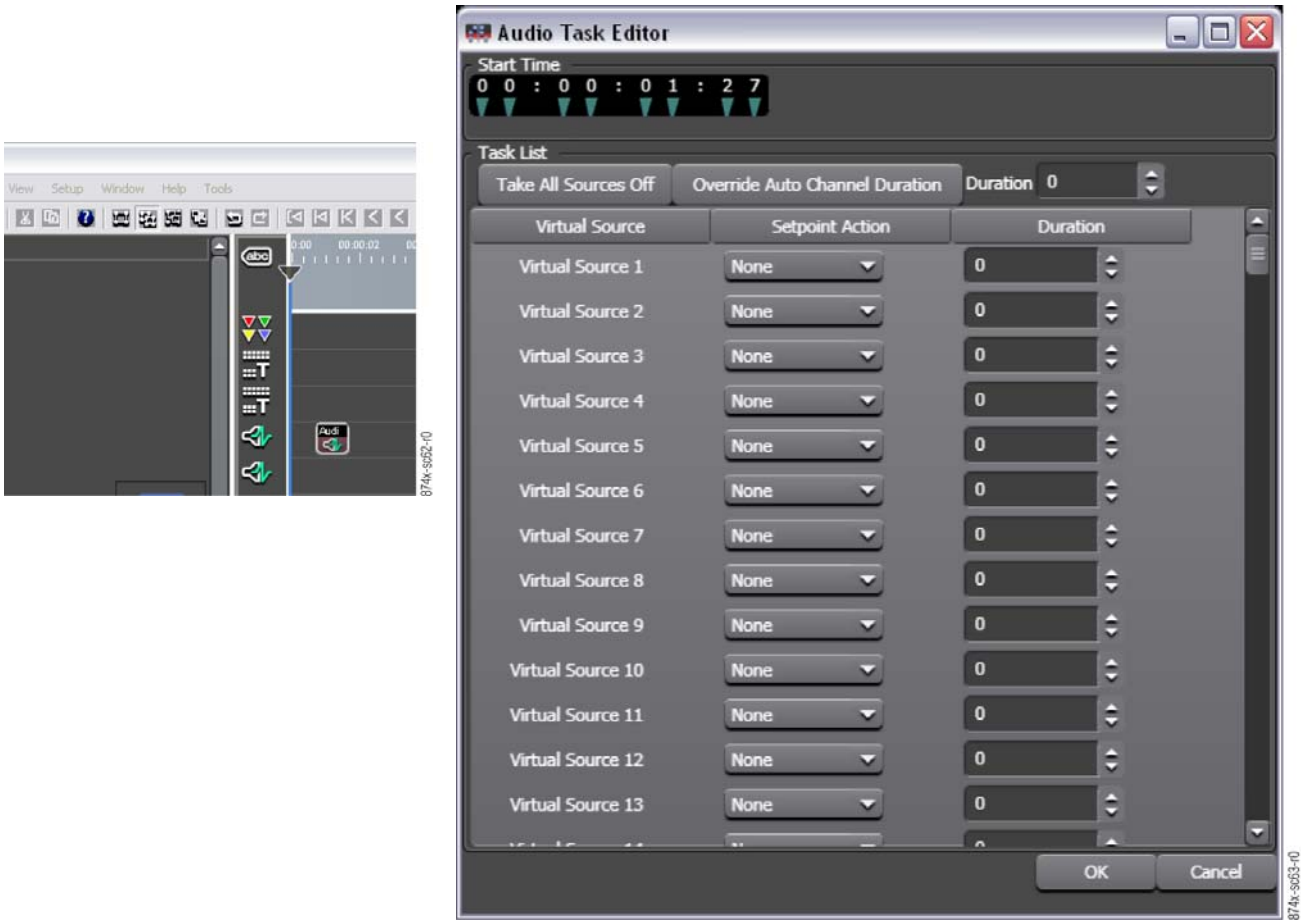
- **Start Time** – displays and edits the task's starting time as it relates to the beginning of the timeline in frames.
- **Task List –** displays an entry for each Virtual Source and indicates what action should take place for that Virtual Source when the Audio Task is executed.
  - **Virtual Source** – displays the name of the Virtual Sources
  - **Setpoint Action (None, Off, Ignore)** – displays and edits the Setpoint Action to be executed on the Virtual Source when the Audio Task is executed. The setpoint action can also be to take one of the 24 configurable setpoints (i.e. Take Setpoint 1).

- **Duration** – displays and edits the duration time (in frames) that the virtual source takes (if applicable) to move to that setpoint when the Audio Task is executed.
- **Take All Sources Off** – enables/disables the Take All Sources Off feature of the target Audio Task. When selected, highlights blue and takes every source that is not part of the current audio task to off.

  In contrast, a virtual source set to setpoint action None is simply not included in the current audio task. So it may or may not be cut to off depending on whether it happens to be on air currently.

- **Override Auto Channel Duration** – enables/disables the override of the auto channel task duration specified by IQ. When selected, highlights blue and instead of the default duration set in IQ Auto Channel Pool setup, the IQ Auto Channel uses the duration entered in the box to bring the other channels off.
- Override **Duration** box – sets the **Override Auto Channel Duration**

Figure 197. Audio Task Editor Dialog Box



Operation

Note The Ignite/Ignite Konnect system provides an automation interface to the Calrec panel.
For panel-specific user and set up information, refer to the manufacturer's documentation.

Note Before the audio can be controlled, virtual sources must be configured. Typically this is accomplished during initial installation.

Adjust an Audio Source

Note The program fader control handle is used to adjust the level of the virtual source's associated fader.

- To manually adjust the level, click and drag the program fader control handle.
- To jump or cut the active source to a desired volume, double-click above or below the program fader control handle.

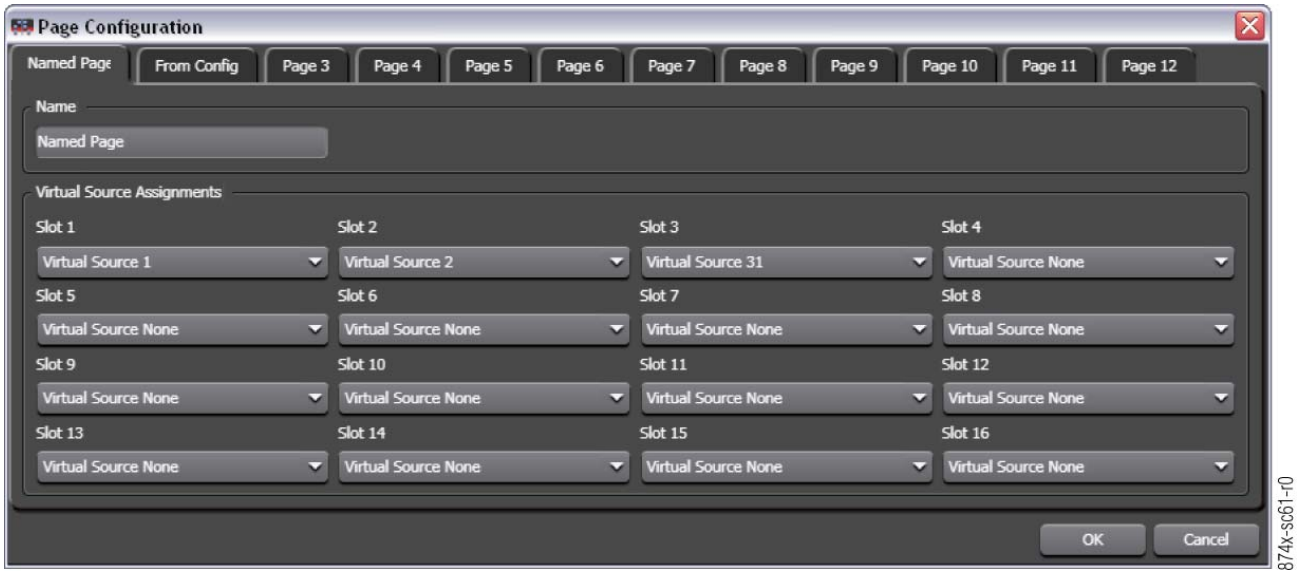
Configure Pages

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

1. At the top right of the **Virtual Sources** pane (Figure 198) , click **Pages**. The **Page Configuration** dialog box (Figure 199 on page 170) appears.

Figure 198. Modify Page Name – Calrec Audio

Figure 199. Page Configuration Dialog Box



2. Click the **Page** tab to configure.
3. In the **Name** text box, type/edit the name.
4. Configure the page with the desired slots and virtual sources.
5. Click **OK**.

Name or Rename a Page

1. If the**Page Configuration** dialog box is not open, at the top right of the **Virtual Sources** pane, click **Pages**. The **Page Configuration** dialog box appears.
2. In the **Name** text box, type/edit the desired name.
3. Click **OK**.

Add/Assign/Edit a Slot or Virtual Source

1. If the**Page Configuration** dialog box is not open, at the top right of the **Virtual Sources** pane, click **Pages**. The **Page Configuration** dialog box appears.
2. Click the **Page** tab to configure.
3. Click the respective **Slot** (1 – 16) arrow and select the the desired virtual source from the drop-down list.
4. Click **OK**.

Remove a Slot or Virtual Source

1. If the**Page Configuration** dialog box is not open, at the top right of the **Virtual Sources** pane, click **Pages**. The **Page Configuration** dialog box appears.

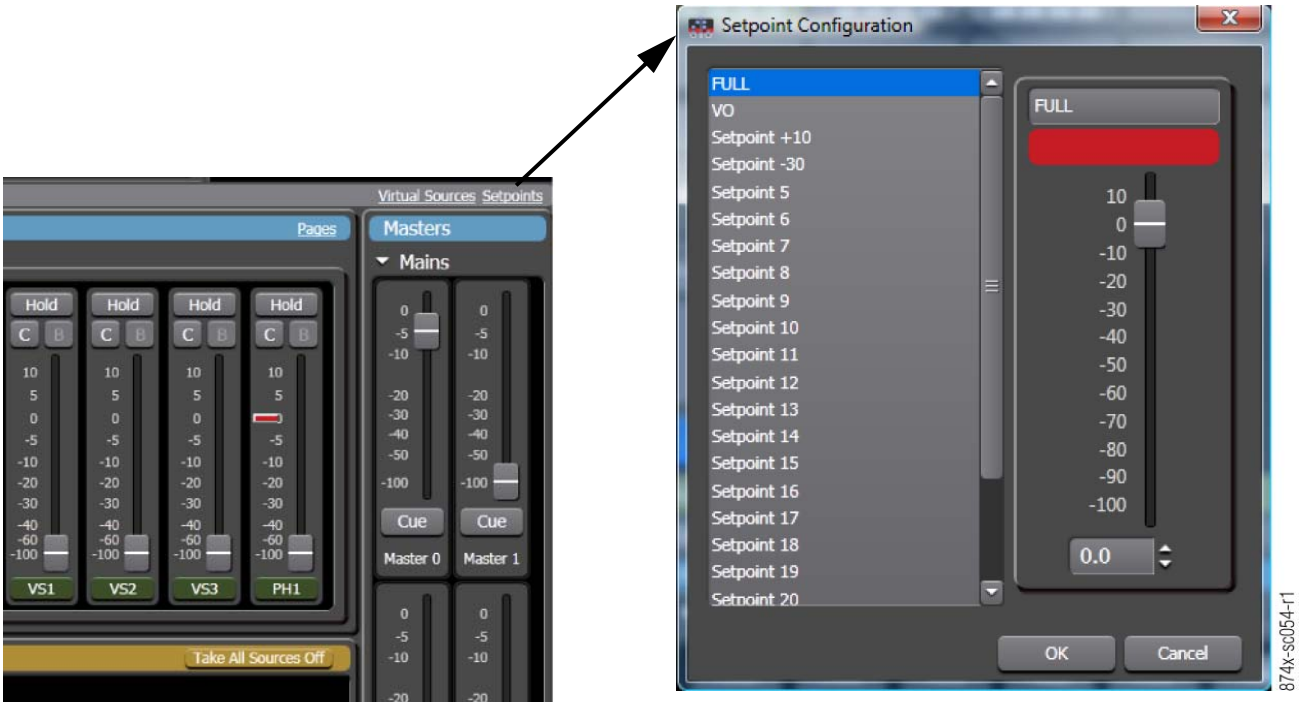
2. Click the Page tab to configure.
3. Click the respective slot arrow and select **Virtual Source None** from the drop-down list.
4. Click **OK**.

Setpoint Configuration

To configure a Setpoint:

1. Click **Setpoints** at the top right corner above **Masters**. The **Setpoint Configuration** dialog box appears. Refer to (Figure 200).

Figure 200. Set Point Configuration – Calrec Audio



2. Select a Setpoint from the Setpoint list.
3. In the **Name** box, type/edit up to a 16-character name.
4. Using the Setpoint level fader, select a value.

Note For fine tune adjustment (0.1 db) use either the up/down arrow control next to the level text box or left click the thumb control and use the up/down arrows on the keyboard.

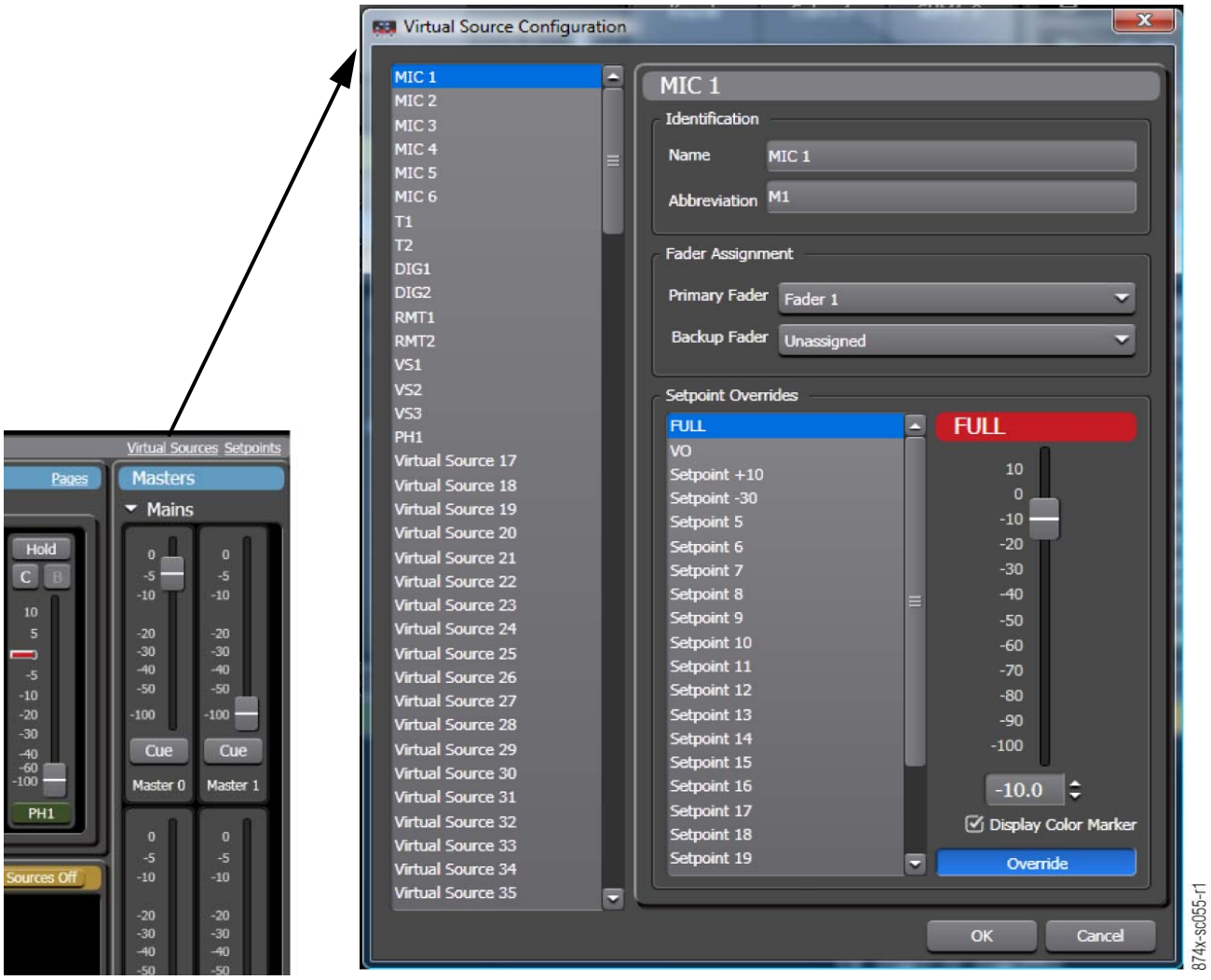
5. Repeat Steps 1– 4 for each Setpoint.
6. Click **OK**.

Virtual Source Configuration

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

1. Click **Virtual Source** at the top right corner above **Masters** (Figure 201). The Virtual Source Configuration dialog box appears.

Figure 201. Virtual Source Configuration – Calrec Audio



2. In the **Virtual Source** list, click a virtual source to configure.
3. In the **Virtual Source** pane under **Identification**:
   - In the **Name** text box type a name.
   - In the **Abbreviation** text box type an abbreviation.

4. In the **Virtual Source** pane under **Fader Assignment**:
   - Click the **Primary Fader** arrow and select a Primary Fader from the drop-down list.
   - Click the **Backup Fader** arrow and select a Backup Fader from the drop-down list.

Note The same fader cannot be assigned as both primary and backup.

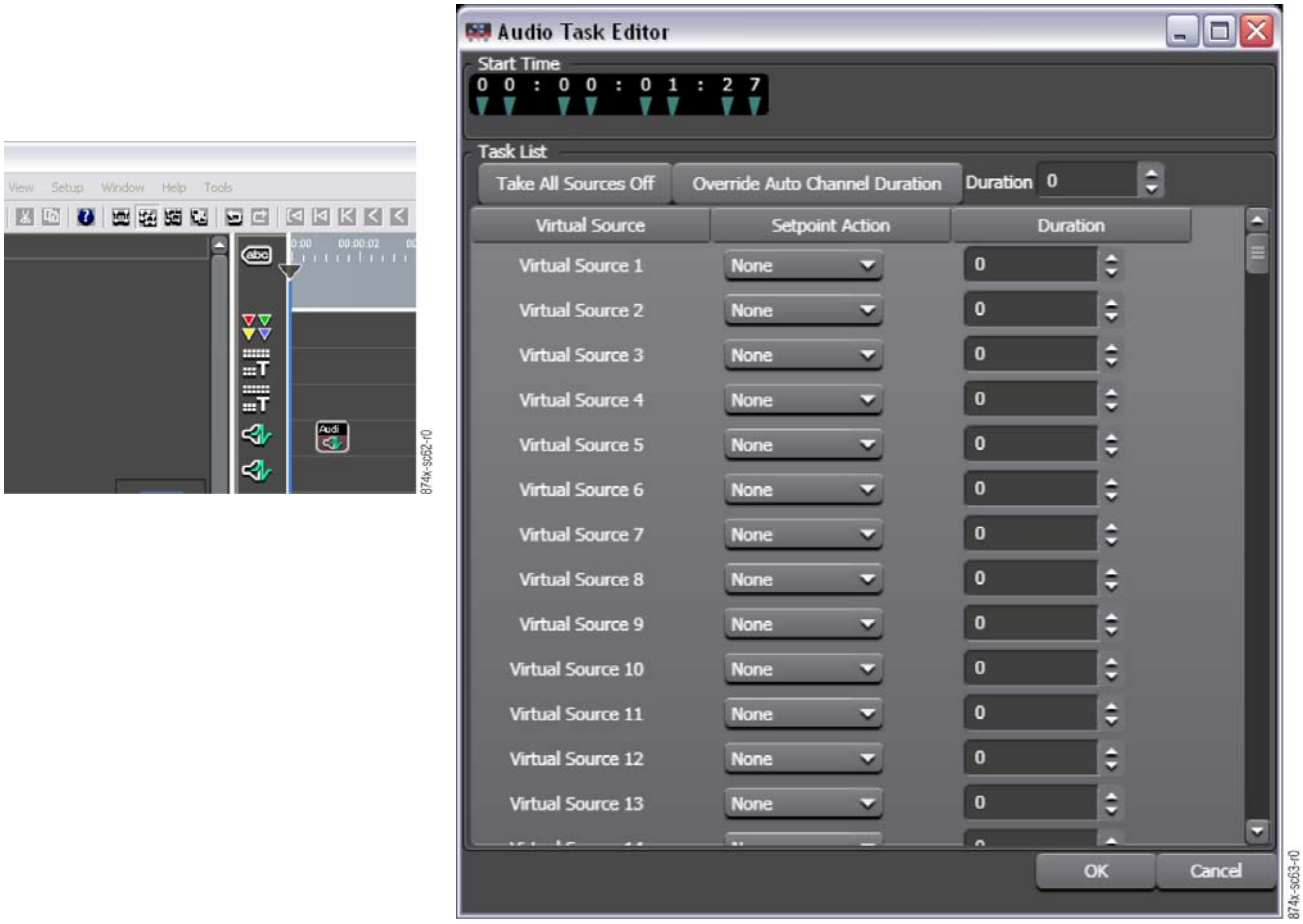
5. In the **Virtual Source** pane **Setpoint Overrides** list, select a setpoint to override.
6. In the **Virtual Source** pane, **Setpoint Overrides**, **Setpoint** fader, slide the fader to the desired override level.
7. Select the **Display Color Marker** cneck box to display a color marker onthe Virtual Souce control in the Audio user interface.
8. Click **Override** to apply this Setpoint Override setting to the selected Virtual Source.
9. Click **OK**.

Set Up/Edit Audio Task Properties

Note Setpoints should be configured prior to creating an audio task. However, if a setpoint is not configured it's given a default value of unity so if a task references a nonconfigured setpoint the worst case senario is that that souce's level will be set to 0 db.

1. On the **Event Timeline**, drag an audio command over. Double-click the Audio Property icon. The **Audio Task Editor** dialog box (Figure 202) appears.

Figure 202. Audio Timeline Task List Dialog Box



2. Complete the entries in this dialog box for each task property.

Note The duration field should be set to the number of frames over which the fade will occur. If left blank or set to 0, a cut is performed instead.

Note Click **IGNORE** to set an audio source so that the **Take All Sources Off** command ignores that specific source when setting all sources to zero. Clicking **IGNORE** sets the duration to 0 frames and disables the **Please enter a duration** box. The **Ignore** feature is accessed through the individual Audio Module TME icon properties

Note Click the **Take All Sources Off** check box (Figure 175) to have all other sources without a task assigned to go off air at 0 duration.

3. Click **OK**.

Audio Preview

Audio sources transitioned via the Ignite/Ignite Konnect Event Timeline are populated into the Audio **Preview** pane (Figure 203 on page 175) as each

TME is prepped. The sources set to move to air next are shown in the **Preview** pane.

Figure 203. Audio Preview Area – Calrec Audio

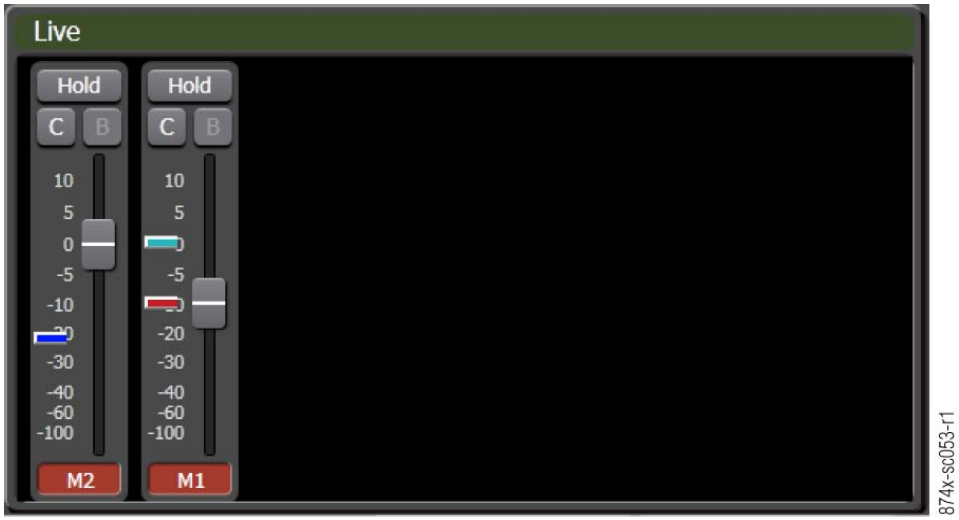
Note The previewed audio shows the program fader control level when the source is transitioned to air. If a different transition level is desired before going to air, adjust the level while it is in Preview.

- To set the desired post-transition fader level, move the program fader control handle to the desired level.
- To prevent a source from going to air, after a TME has been prepped, click **Hold** to hold the source in preview.

Audio Live

The Audio **Preview** pane (Figure 204 on page 176) shows the virtual sources presently On Air. Any source that is moved above its level point is taken to air instantly and is shown in the **Preview** area.

Figure 204. Audio Program Area – Calrec Audio



- To remove from the audio mix, right-click any source and then click **Take Off Air**.
- To hold the source on air, click **Hold** while the source is in the area.
- To take off air, right-click the source and then click **Take Off Air**.

Section 3

Automation Control Panels

Ignite Katalyst Automation Control Panel

Figure 205. Ignite Katalyst Panel Examples

Overview

The Ignite Katalyst™ panel (Figure 205) works dynamically with Ignite/ Ignite Konnect software to provide programmable buttons and audio con-

trols that meet the workflow requirements of both individual stations and individual operators:

Note The **Ignite Katalyst** Automation Control Panel is not required for Ignite/Ignite Konnect Live Production Control system operation but rather provides an alternate, manual event-triggering capability

- Profiles are selected at runtime by the user
- Profiles are selected using the **Ignite Katalyst Profiles** dialog box, which is accessed from the **Event Timeline Setup** menu.
- Profiles are edited using the **Ignite Katalyst Profiles Editor**, which is accessed from the Windows **Start** button
- Buttons are configured using the **Ignite Katalyst Button Toolbox**.

Note In an Ignite/Ignite Konnect No-Audio configuration, the audio user interface area is blank and an Ignite Katalyst Panel is not supported; therefore, this Ignite Katalyst Panel information does not apply.

A modular and scalable peripheral Ignite Katalyst panel provides tactile control of Ignite system functions for:

- Events [up to 10 banks of 20 buttons per bank] (refer to *Button Module* on page 179)
- Audio faders (*Audio Module* on page 185)

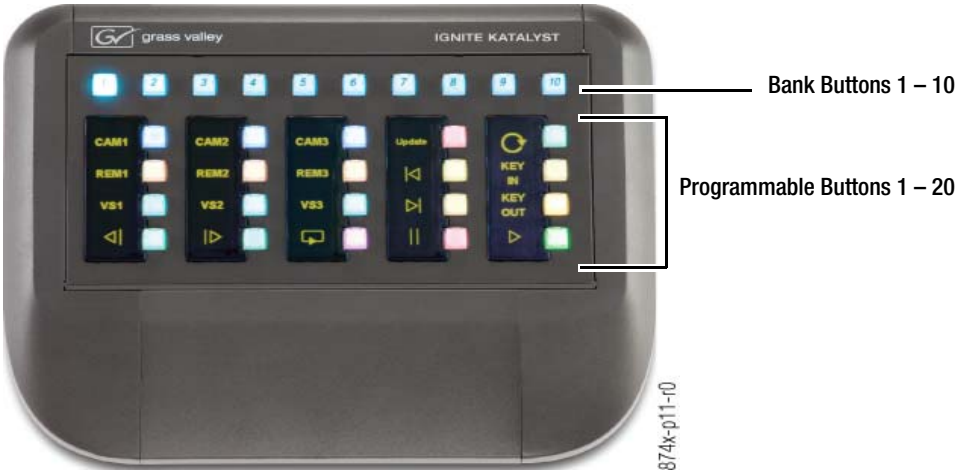
Note Button programming is accomplished using the **Ignite Katalyst Button Toolbox**. The **Ignite Katalyst Button Toolbox** is accessed via the Windows **Start** button or from the Profile Editor, Button module, and Fader module **Tools** menus. Ignite Katalyst Profiles are configured/edited via the **Ignite Katalyst Profiles Editor**. The **Ignite Katalyst Profiles** Editor is accessed from the Windows **Start** button.

Programming includes the ability to store and recall both simple and complex functions such as:

- Manual Video Switching & Audio Mixing
- Event Timeline Next Event command
- Manual CG & Keyer Controls
- GPI Triggers
- ShowBuilder Key Insert & Take Commands
- Audio Talkback, Cue, Hold, & Group Commands

Button Module

Figure 206. Button Module Example



The Programmable Buttons Module (Figure 206) comprises 1 row of 10 bank selection buttons and 20 programmable buttons with associated OLED displays (4 rows with 5 buttons in each row).

Note To increase the number of available buttons, more than one Button Module can be used with an Ignite system.

The 10 bank selection buttons serve a fixed purpose and only button colors are configurable. Selecting a bank button causes all twenty programmable buttons to assume the programmed configuration for that bank.

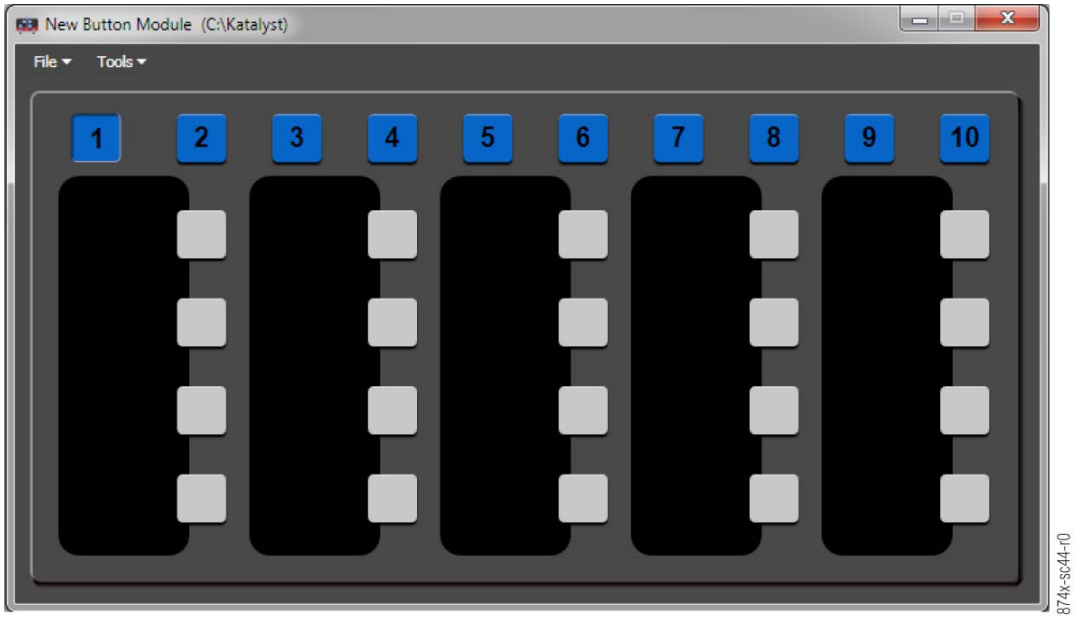
Each of the 20 programmable buttons can be color coded in 1 of 20 colors and configured to execute either an Ignite timeline command or a TME

This bank/programmable buttons combination provides 200 programmable buttons. That is:

- When the **Bank 1** button is pressed, each of the 20 programmable buttons is individually configured to Bank 1
- When the **Bank 2** button is pressed, each of the 20 programmable buttons is individually configured to Bank 2
- When the **Bank 3** button is pressed, each of the 20 programmable buttons is individually configured to Bank 3
- And so on for each of the remaining Bank buttons **4** through **10**

Programmable Buttons

Figure 207. New Button Module Dialog Box



A button can be programmed to execute either a TME or an Ignite command. This one-button TME/Ignite command functionality can comprise either:

- Insert a TME at the current cursor position on the Ignite timeline
- Auto-execute as a normal or hidden TME
- Perform an Ignite action

Note Button programming is accomplished using the **Ignite Katalyst Button Toolbox**.

Typical programmable-button functionality includes but is not limited to:

- Bus switching – the ability to program an Ignite Katalyst programmable button to manually change sources on PGM, PVW, AUX, or KEY buses.
- Switcher Events.
  - Set program (PP and any M/E) to black, matte, pattern, or any available video input.
  - Set preview (PP and any M/E) to black, matte, pattern, or any available video input.
  - Set Auxiliary Buses to black, matte, pattern, or any available video input.

  - Set Keyer buses to black, matte, pattern, or any available video input.
- GPO/GPI triggering – the ability to manually trigger any device that can accept a GPO/GPI.
- Timeline control – provides one-button control for functions such as:
  - Next Step (skips the Event Timeline cursor to the next GPI mark).
  - Previous Step (skips the Event Timeline cursor to previous GPI mark).
  - Next Group (skips the Event Timeline cursor to the left edge of next group).
  - Previous Group (skips the Event Timeline cursor to left edge of previous group).
  - Next Slug (skips the Event Timeline cursor to left edge of next slug/page).
  - Previous Slug (skips the Event Timeline cursor to previous slug/page).
  - Next Story (skips the Event Timeline cursor to left edge of next story).
  - Previous Story (skips the Event Timeline cursor to previous story).
  - Cue (ALT+Q) moves the Event Timeline cursor to the beginning of the timeline.
  - Run (ALT+SPACEBAR) starts the Event Timeline cursor.
  - Pause (ALT+P) stops the Event Timeline cursor.
  - Go to Cursor (ALT+G) shifts timeline view to current cursor location.
  - Update Rundown (imports rundown to the Event Timeline when changes are made to rundown – if rundown is monitored). The button blinks if an Ignite rundown update is available.
- CG list control (TME assigned to a button):
  - Load next CG in list (advance CG list).
  - Load previous CG in list (moves to previous CG in CG list).
- Downstream CG keying – the ability to manually insert lower third or other keys from a CG device. This eliminates the need for a third party downstream key box or having to use the mouse for CG insertion.

Programmable Button Display Attributes

Note Button programming is accomplished using the **Ignite Katalyst Button Toolbox**. Refer to *Ignite Katalyst Button Toolbox* on page 183.

Color

Color is configured individually for each button. Programmable buttons are configured either to:

- Be off (inactive)
- Display in one of 20 colors

Note The ten bank selection buttons serve a fixed purpose and only button colors are configurable. Pressing a bank selection button illuminates the button and causes all twenty programmable buttons to assume their configuration for that bank.

Text or Graphics

Ignite Katalyst programmable buttons are configurable to display either text or a graphic image.

- Text display is:
  - Proportional (variable-width) type
  - Upper and lower case, sans-serif font (similar to Arial Bold)
  - Either 3 lines of 9 point type (typically 1-9 characters/line), 3 lines of 12 point type (typically 1-6 characters/line, 2 lines of 16 point type (typically 1-5), or 1 line of 28 point type (typically 1-3 characters/line)
  - Aligned left, right, or center for the individual button as a whole
- Graphic displays can be either:
  - Bitmaps provided via the Button Toolbox
  - User-provided bitmaps

Ignite Katalyst Button Toolbox

Figure 208. Ignite Katalyst Button Toolbox Style, Color, Action, and Bitmap Pages

The **Ignite Katalyst Button Toolbox** (Figure 208) is accessed from the **Ignite Katalyst Profile Editor** (refer to *Profile Editor* on page 188). A physical button panel is configured using any/all of the four **Ignite Katalyst Button Toolbox** icons located along the top of the button toolbox (Figure 208):

- **Style** – assigns the type size (9 pt, 12 pt, 16 pt, or 28 pt) and justification (left, centered, right)
- **Color** – assigns a color from the available color pallet
- **Action** – assigns an action; e.g., Update Rundown, Next, Previous, Play,
- **Bitmap** – assigns a bitmap

All configuration is performed either by:

- Typing text in a programmable button display area
- Dragging a button from the **Ignite Katalyst Button Toolbox** and dropping it on a new or existing button
- Dragging and dropping a file from Windows Explorer and dropping it on a new or existing button

Features of the **Ignite Katalyst Button Toolbox** dialog box include:

- Copying Banks – the entire content of the currently selected bank can be copied to another bank by dropping one bank button on another.
  - When copying within the same button module, the current bank can be copied to any other bank.
  - When copying to another button module, to prevent inadvertently replacing a bank whose data is not currently displayed, the copy can only be to the currently selected bank in the target module.
- Bank Selection Buttons **1–10** – the top row of 10 bank buttons are dedicated to bank selection only; therefore, only button color is assigned.
- Action (command) buttons – The 20 programmable buttons are user configured for color, action (either execute an action or place a TME on the Ignite timeline), text, or a bitmap.
  - **Color** page – provides 20 standard button colors. Assign a button color by dragging and dropping the desired color button from the **Color** page onto a programmable button—either a bank or a programmable.
  - **Action** page – provides 13 standard Ignite commands. Assign an action by dragging and dropping the desired **Action** button onto a programmable button.

    A TME **Action** is assigned to a button by dragging the desired .tmx or .iqt file from Windows Explorer and dropping it on a button. Ignite Katalyst stores only the file location, not the contents, so the latest version of a .tmx or .iqt is always used by Ignite Katalyst. Mark a TME **Auto Execute** or **Auto Execute Hidden** by dropping either of those buttons onto a programmable button.

Note To remove an Action or a TME from a button, drag and drop the **Remove Action** button onto a programmable button.

- **Style** page – provides a choice of 9-, 12-, 16-, and 28-point type in left, center, and right alignment combinations. A **Style** is assigned by dragging and dropping the desired **Style** button onto a programmable button.

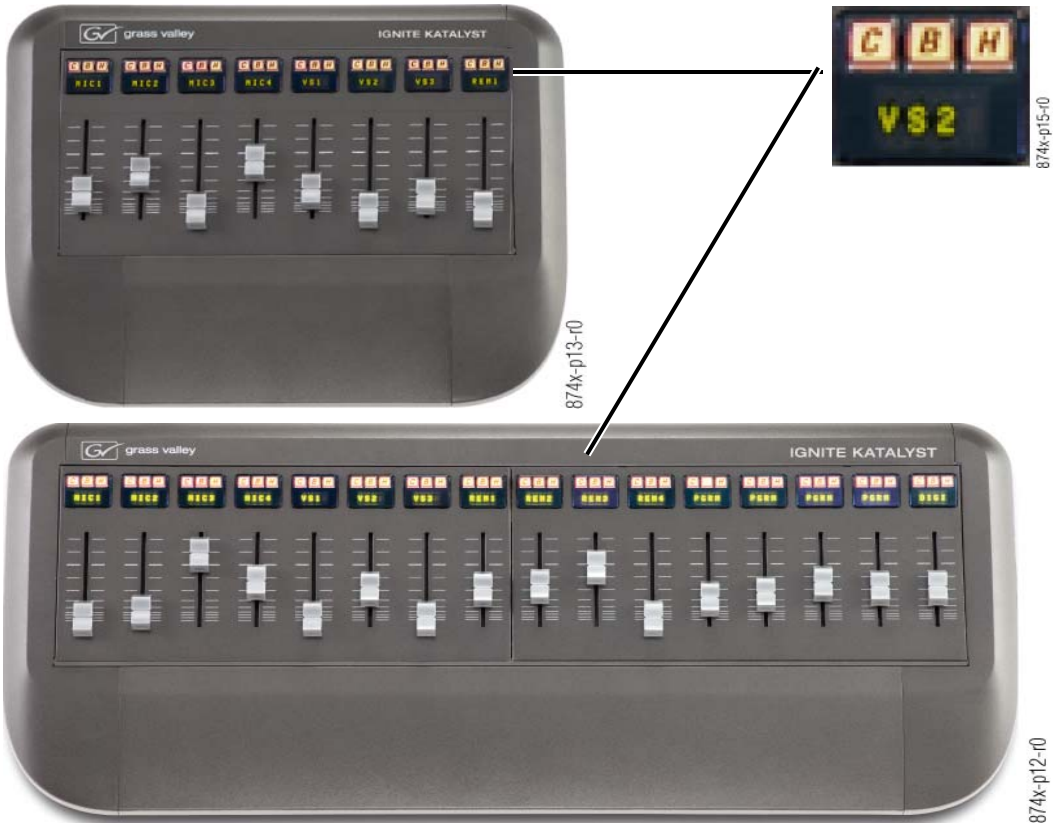
  Text is entered by clicking in the text area of a programmable button and typing up to four lines of text. The typed text closely approximates that of the physical Ignite Katalyst panel but the text should be downloaded to the Ignite Katalyst panel for a final text proofread.
- **Bitmap** page – enables assigning a bitmap to a programmable button either by dragging and dropping:
  - The desired bitmap from the **Bitmap** page onto a programmable button.
  - A customer provided .bmp file from Windows Explorer onto a programmable button.

Note User supplied graphics must be exactly 64 x 64 pixels, 4-Bit Monochrome bitmaps. The programmed button is changed from bitmap to text mode by dragging and dropping a style button onto a programmable button.

- **Save Configuration** – save the current button configuration.
- **Save Configuration As** – saves the current configuration as a different name.

Audio Module

Figure 209. Audio Module



An Audio Module (Figure 209) provides tactile control of Ignite system fader functions. Each motorized fader provides quick, tactile control of audio input. The motorized audio faders and related buttons operate in unison with, and mirror, the respective Ignite Audio Fader module controls, buttons, and button indications.

Note To increase the number of available faders, more than one Audio Module can be used with an Ignite system.

The displays across the top are automatically assigned to identify the fader type and the source being controlled. The three fader-related buttons are:

- **C** – (Cue) monitors a channel pre-fader
- **B** – (Backup) switches a channel to backup
- **H** – (Hold) holds a source on or off air

Note An illuminated **C**, **B**, or **H** button indicates that the button is selected.

Panel Profiles

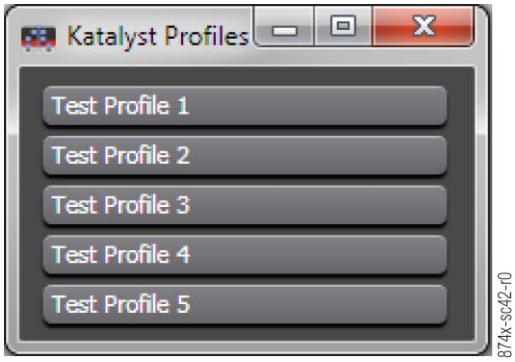
A panel profile describes how Ignite Katalyst Button and/or Audio Modules are configured. Each individual profile contains all the information that an Ignite system needs to configure and communicate with the physical panels defined in that profile. A profile can describe more than one physical panel.

There are two profile dialog box versions:

- Run time (refer to *Ignite Katalyst Profiles (Run Time) Dialog Box* on page 186)
- Design time (refer to *Ignite Katalyst Profiles (Design Time) Dialog Box* on page 187)

Ignite Katalyst Profiles (Run Time) Dialog Box

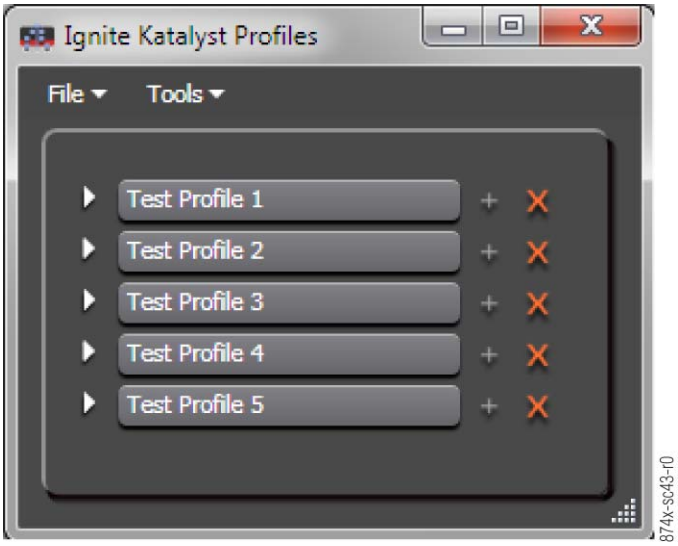
Figure 210. Ignite Katalyst Profiles (Run Time) Dialog Box Example



The Ignite Katalyst Profiles (Run Time) dialog box (Figure 210), which is accessed from the **Event Timeline** module **Setup** menu, only allows a user to select an existing profile. All existing profiles are displayed in a list sorted by profile name. Selecting a profile button from the list uploads that profile information to the Ignite system and closes the profile selection window.

Ignite Katalyst Profiles (Design Time) Dialog Box

Figure 211. Ignite Katalyst Profiles (Design Time) Dialog Box Example



The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 211), which is accessed via the Windows **Start** button, displays all existing profiles in a list sorted by profile name. Accessing this dialog box enables a user to either:

- Select a profile from the list and upload that hardware configuration information to the appropriate Ignite Katalyst panel(s).
- Preview and edit a profile.
- Delete a profile

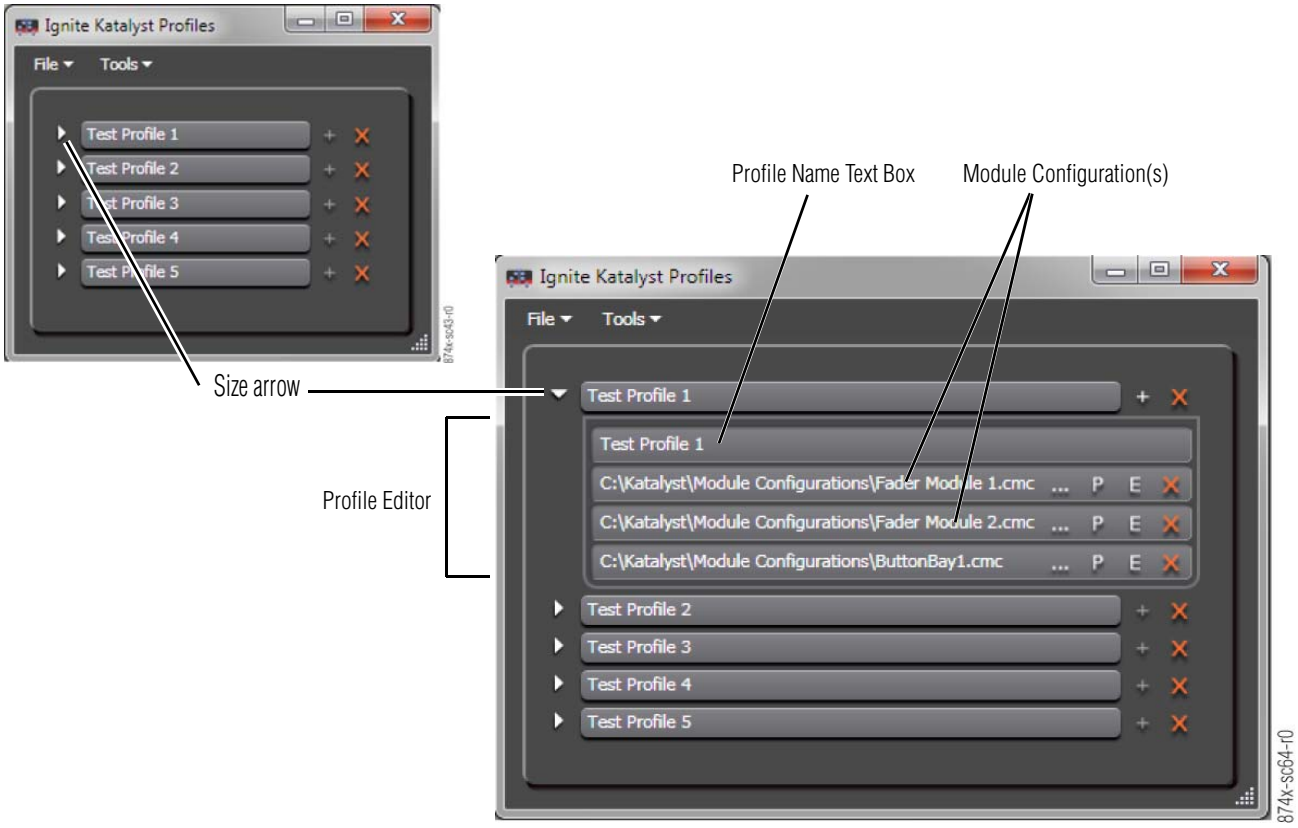
Note Uploaded profile configuration information is stored in non-volatile memory and is automatically reloaded once Ignite connects to the panel(s).

- Use the **Tools** menu to:
  - Add a **New Profile** – adds a new, empty profile to the profile list. The new profile can then be renamed and edited as desired.
  - Create a **New Fader Module** – displays an empty fader module configuration. The new module configuration can then be edited and added to a profile as desired.
  - Create a **New Button Module** – displays an empty button module configuration. The new module configuration can then be edited and added to a profile as desired.
  - **Open Button Toolbox** – opens the **Ignite Katalyst Button Toolbox**.

- Use the **File** menu to:
  - **Save Profiles** – saves all modifications made to the profile configuration. Modifications to the individual button and fader module configurations are not saved by this action.
- **Close** – closes the **Ignite Katalyst Profiles** dialog box, first asking if modified profiles should be saved. Any open button or fader module configuration window remains open.
- Add (**+**) a module configuration(s) – each physical Ignite Katalyst panel contains one or more audio and/or button modules. The user models an Ignite Katalyst physical configuration by adding a module configuration file to the profile for each of a panel's physical modules.
- Delete (**X**) a profile.

Profile Editor

Figure 212. Profile Editor



A **Profile** (Figure 212) is displayed by clicking the **Profile Editor** arrow at the left of the Profile Name to be edited. The **Profile Editor** enables a user to:

- Name/rename a profile – profiles are user named by typing in the **Profile Name** text box. There are no naming restrictions. Duplicate names are allowed but the Ignite system always selects the first occurrence of a profile name.
- Browse (...) to and select a module configuration(s) – button and fader configuration files are created independently of a profile. The configuration file(s) are then added to one or more profiles, as desired, by adding the configuration file path to the profile. Either type a module file path or open a file selection dialog by clicking the browse (**...**) icon.
- Add a module configuration(s) – each physical Ignite Katalyst panel contains one or more audio and/or button modules. The user models an Ignite Katalyst physical configuration by adding a module configuration file to the profile for each panel's physical modules.
- Assign the module configuration to a panel – although a physical Ignite Katalyst panel has only one name (i.e. the panel's modules are not addressed independently), in a profile the panel name is specified for the module configuration. This enables a profile to configure more than one physical panel, as well as allowing a module configuration file to be used in more than one profile.
- View and edit module details – a module configuration file can be opened for viewing and editing directly from the profile selection window.
- Delete a profile.

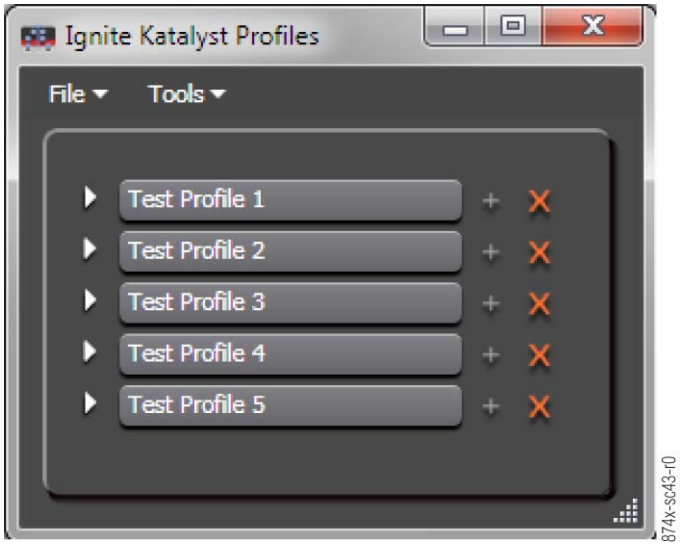
Configuration

Create a Module

Button Module

1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 213) appears.

Figure 213. Ignite Katalyst Profiles (Design Time Dialog Box) Example



2. From the **Tools** menu, click **New Button Module**. The **New Button Module** dialog box (Figure 214) appears.

3. From the **Tools** menu, click **Open Button Toolbox**. The **Ignite Katalyst Button Toolbox** (Figure 214) appears.

Note The Ignite Katalyst Button Toolbox initially opens to the Style page.

4. From the **Ignite Katalyst Toolbox**, drag and drop the desired **Style**, **Color**, **Action**, and **Bitmap** options, to the **Button Module** (Figure 214). Refer to *Assign/Edit/Re-assign Button Style* on page 193, *Assign/Edit Button Color* on page 196, *Assign/Edit a Button Action* on page 198, and *Assign/Edit a Button Bitmap* on page 202.

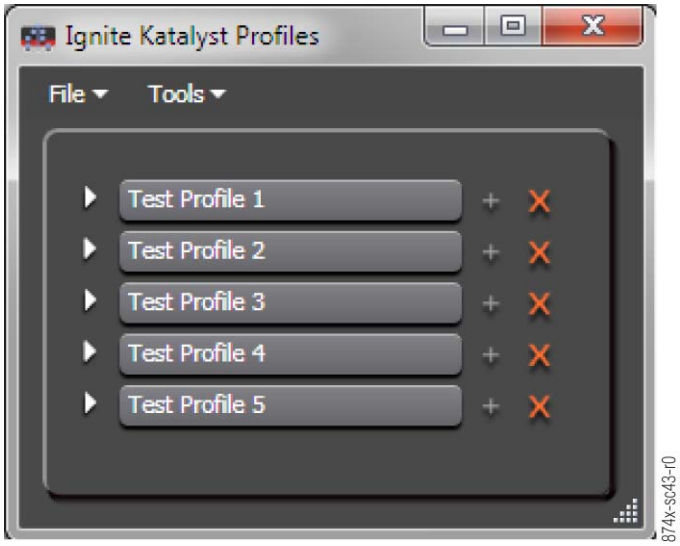
Figure 214. Add New Module Example

5. On the **BUTTON MODULE** dialog box, from the **Files** menu, click either:
   - **Save Configuration** – to save the changes to the existing profile.
   - **Save Configuration As** – to name and save the changes as a new profile.
6. Close the **BUTTON MODULE**.
7. Close the **Ignite Katalyst Button Toolbox**.

Fader Module

1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 215) appears.

Figure 215. Ignite Katalyst Profiles (Design Time Dialog Box) Example

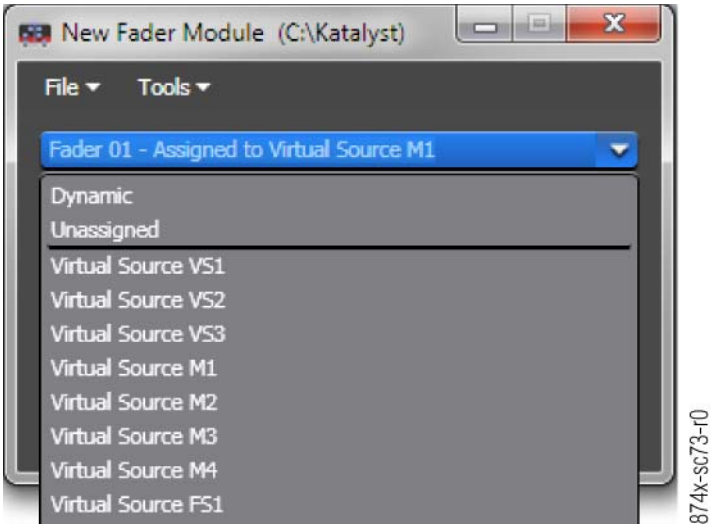


2. From the **Tools** menu, click **New Fader Module**. The **New Fader Module** dialog box (Figure 216) appears.

Figure 216. New Fader Module Dialog Box Example

3. In the **New Fader Module** dialog box, click the **Size** arrow to the right of the fader to be added; e.g., **Fader 06**, **Fader 07**, **Fader 08**. The fader source drop-down list (Figure 217) appears.

Figure 217. Fader Source Drop-down List



4. Select the fader source
5. On the **New Fader Module**, from the **Files** menu, click either:
   - **Save Configuration** – to save the changes to the existing profile.
   - **Save Configuration As** – to name and save the changes as a new profile.
6. Close the **FADER MODULE**.

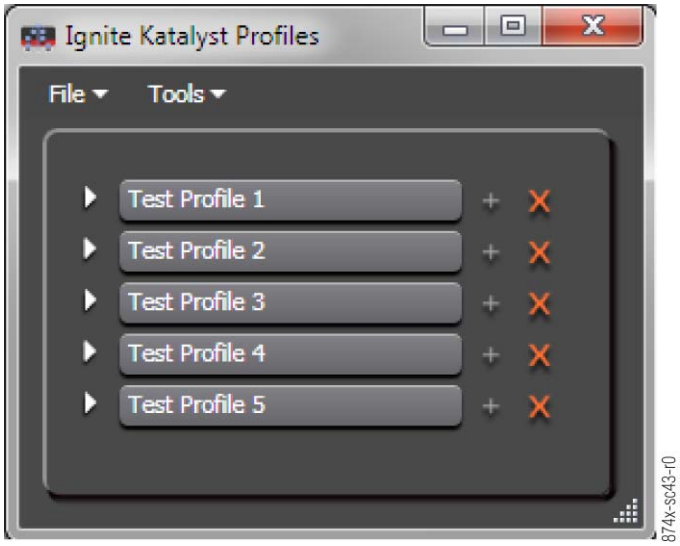
Configure a Button

Note Button configuration is accomplished from the Design Time Ignite Katalyst Profiles dialog box), which is accessed via the Windows Start button. Refer to *Ignite Katalyst Profiles (Design Time) Dialog Box* on page 187.

Assign/Edit/Re-assign Button Style

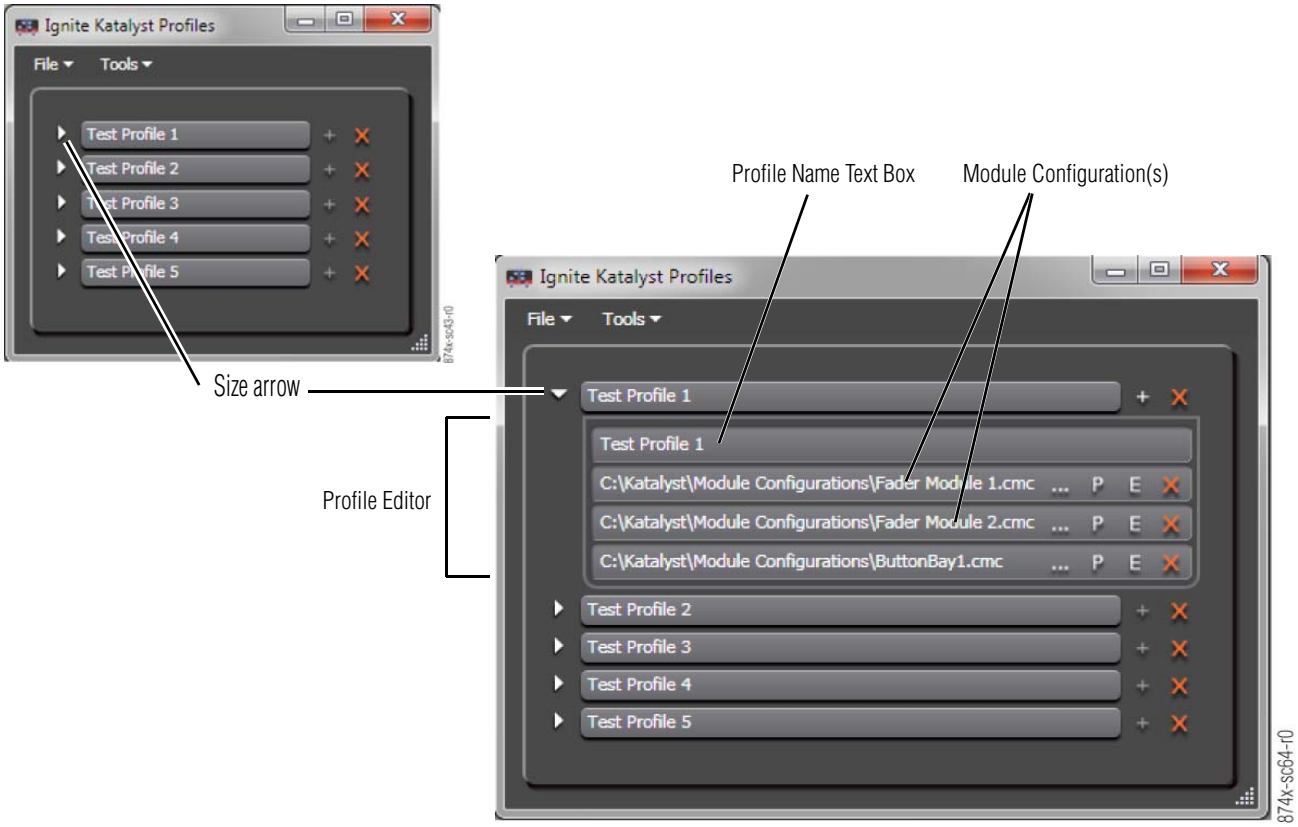
1. On the taskbar, click the **Start button**, and then point to **All Programs**. Point to **Ignite Katalyst** and then click **Katalyst Profiles**. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 218) appears.

Figure 218. Ignite Katalyst Profiles (Design Time Dialog Box) Example



2. Click the **Size** arrow at the left of the Profile to be changed. The **Profile Editor** expands below the profile name and the **Size** arrow points downward (Figure 219).

Figure 219. Profile Editor



3. From the **Profile Editor**, click **E** to the right of the Button Module to be changed. The selected Button Module appears.
4. From the **Tools** menu, click **Open Button Toolbox**. The **Ignite Katalyst Button Toolbox** appears.

Note The Ignite Katalyst Button Toolbox initially opens to the Style page.

5. In the **Ignite Katalyst Toolbox**, if not selected, click the **Style** button (Figure 220).
6. From the **Style** options, drag the desired style from the **Ignite Katalyst Toolbox** to the **Button Module** button to be assigned/edited (Figure 220).

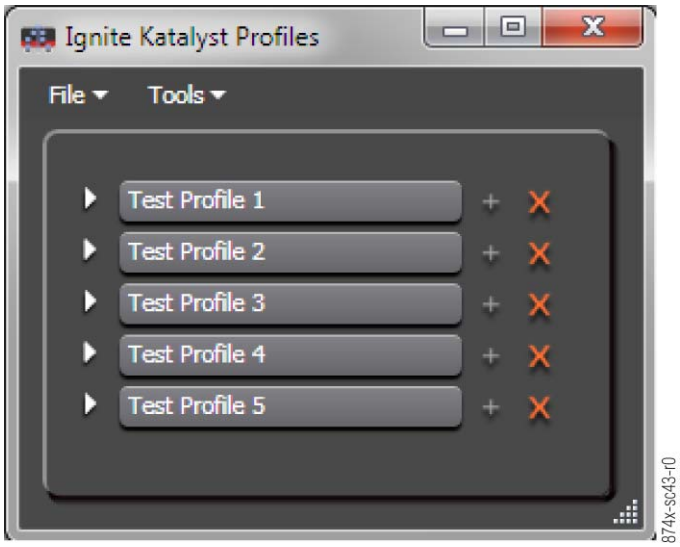
Figure 220. Ignite Katalyst Toolbox – Style Button

7. On the **BUTTON MODULE** dialog box, from the **Files** menu, click either:
   - **Save Configuration** – to save the changes to the existing profile.
   - **Save Configuration As** – to name and save the changes as a new profile.
8. Close the **BUTTON MODULE**.
9. Close the **Ignite Katalyst Button Toolbox**.

Assign/Edit Button Color

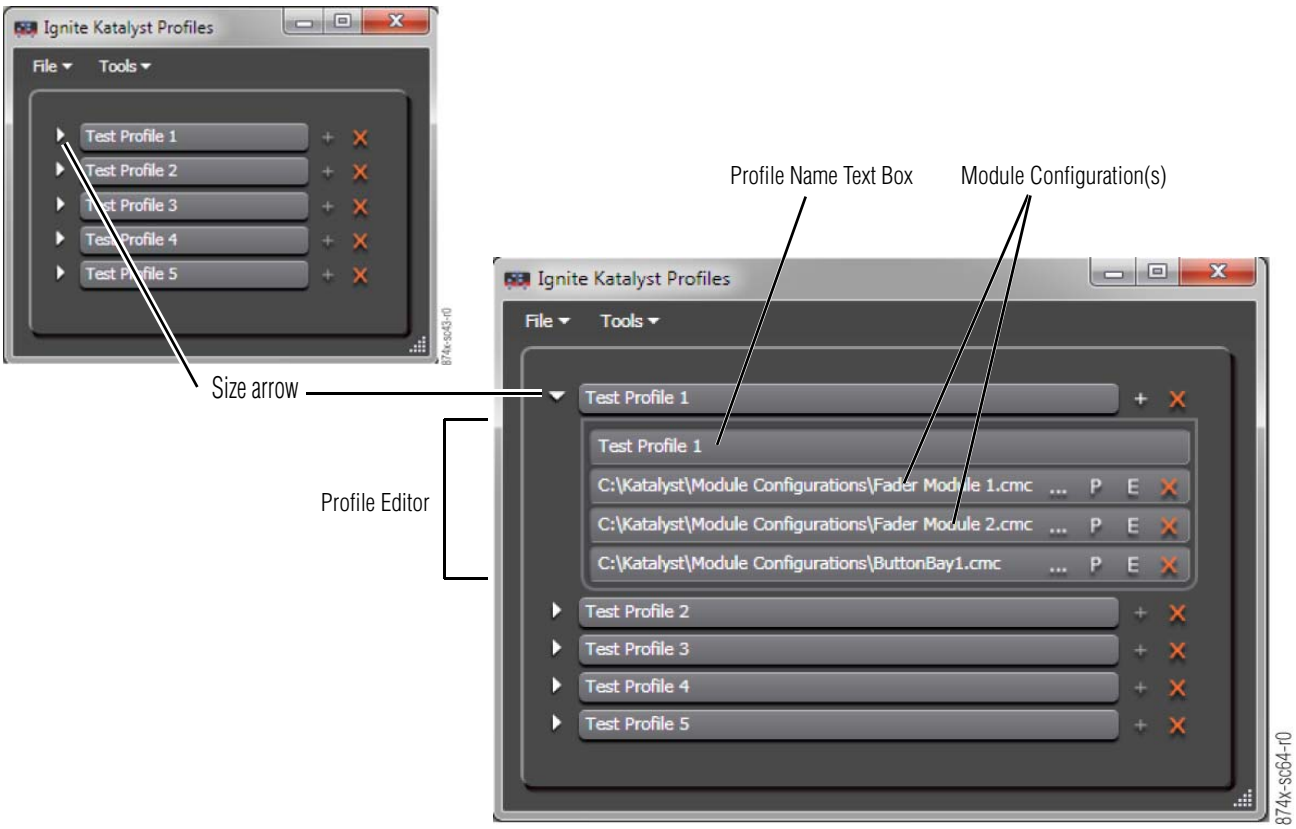
1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 221) appears.

Figure 221. Ignite Katalyst Profiles (Design Time Dialog Box) Example



2. Click the **Size** arrow at the left of the Profile to be changed. The **Profile Editor** expands below the profile name and the **Size** arrow points downward (Figure 222).

Figure 222. Profile Editor



3. From the **Profile Editor**, click **E** to the right of the Button Module to be changed. The selected **Button Module** appears.

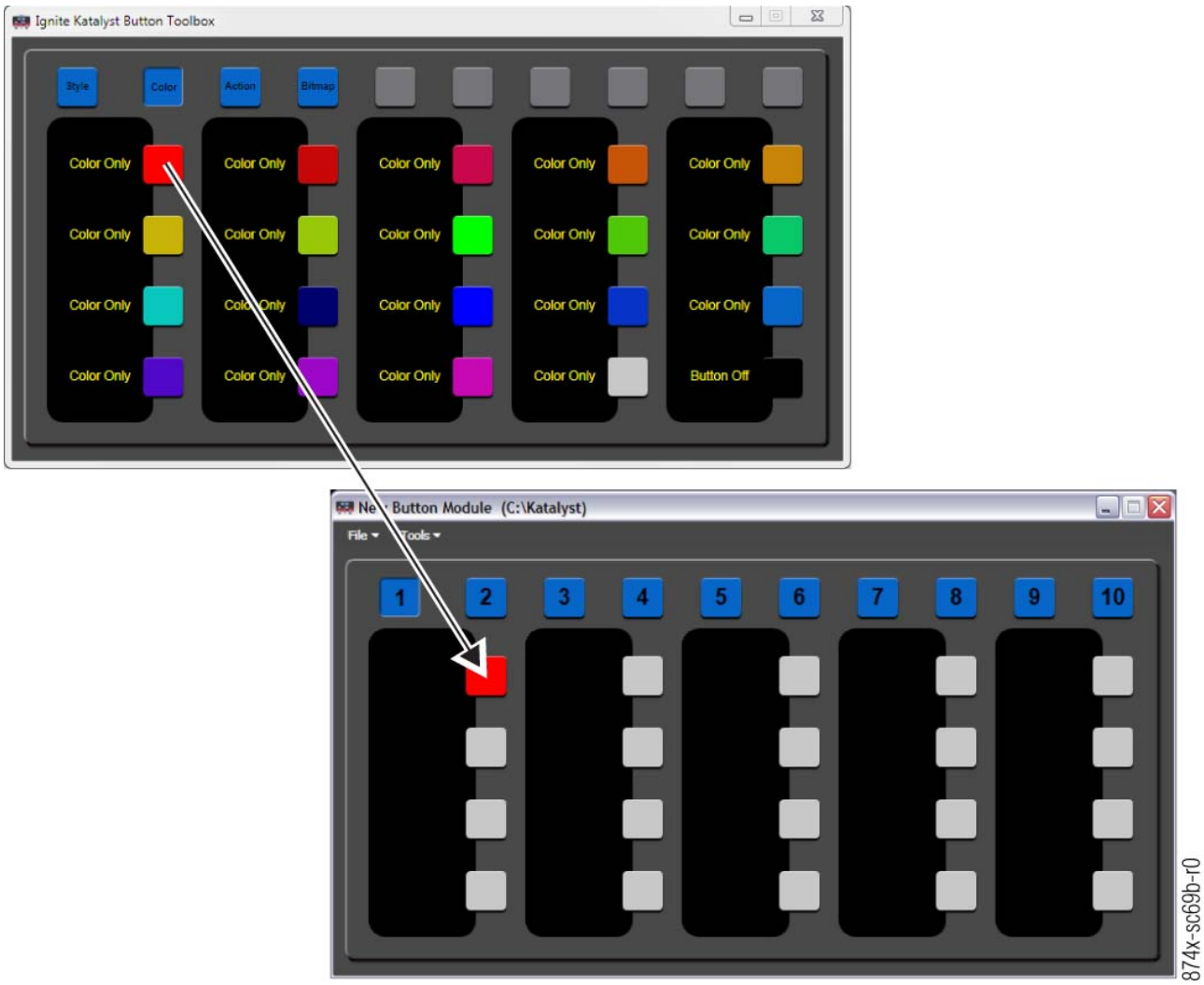
4. From the **Tools** menu, click **Open Button Toolbox**. The **Ignite Katalyst Button Toolbox** appears.

Note The Ignite Katalyst Button Toolbox initially opens to the Style page.

5. In the **Ignite Katalyst Toolbox**, click the **Color** button. The **Color** options page appears.

6. From the **Color** options, drag the desired color from the **Ignite Katalyst Toolbox** to the **Button Module** button to be assigned/edited (Figure 223).

Figure 223. Ignite Katalyst Toolbox – Color Button



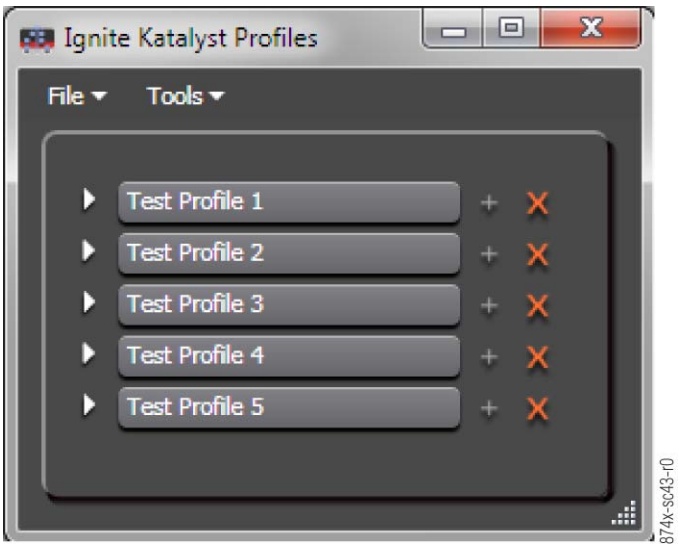
7. On the profile dialog box, **Files** menu, click either:
   - **Save Configuration** – to save the changes to the existing profile.
   - **Save Configuration As** – to name and save the changes as a new profile.
8. Close the profile.
9. Close the **Ignite Katalyst Button Toolbox**.

Assign/Edit a Button Action

Assign/Edit a Button Toolbox Action

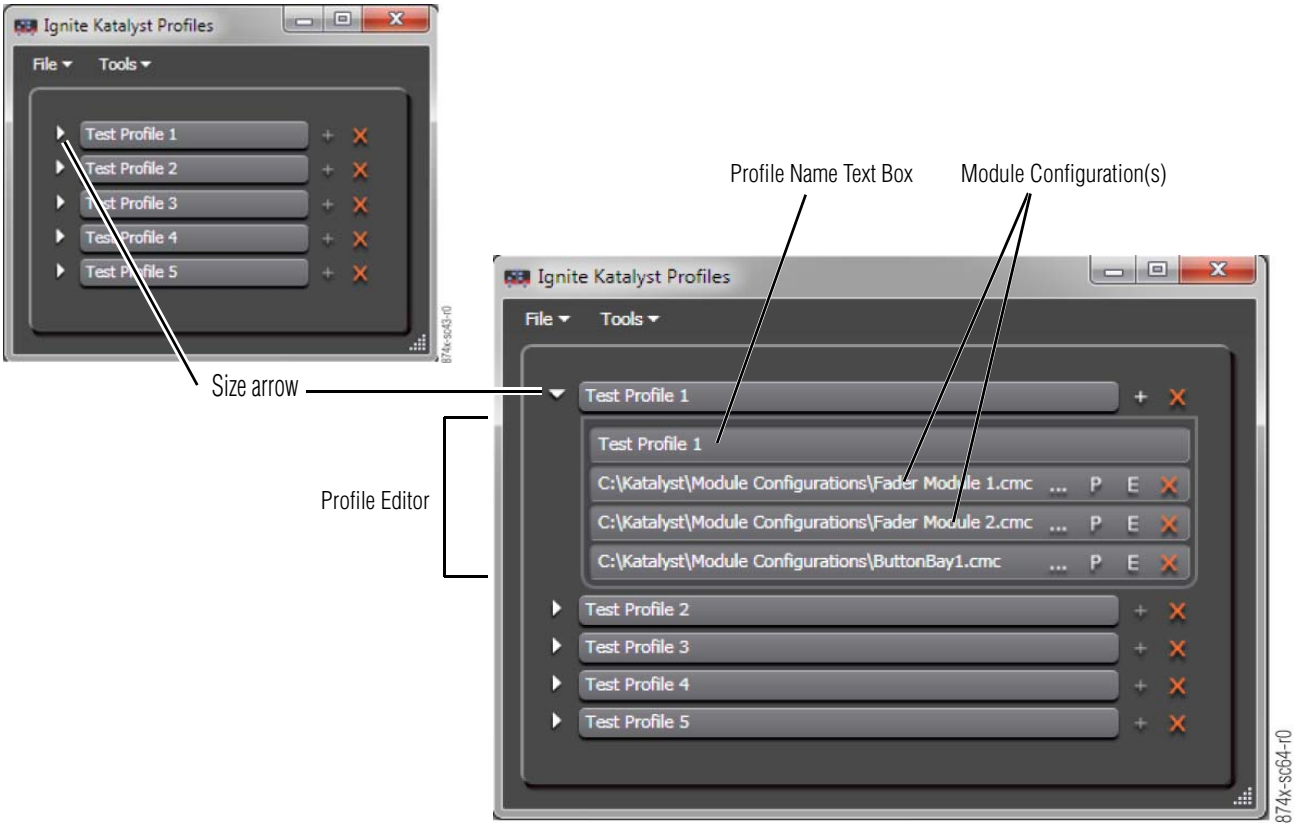
1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 224) appears.

Figure 224. Ignite Katalyst Profiles (Design Time Dialog Box) Example



2. Click the **Size** arrow at the left of the Profile to be changed. The **Profile Editor** expands below the profile name and the **Size** arrow points downward (Figure 225).

Figure 225. Profile Editor



3. From the **Profile Editor**, click **E** to the right of the Button Module to be changed. The selected **Button Module** appears.

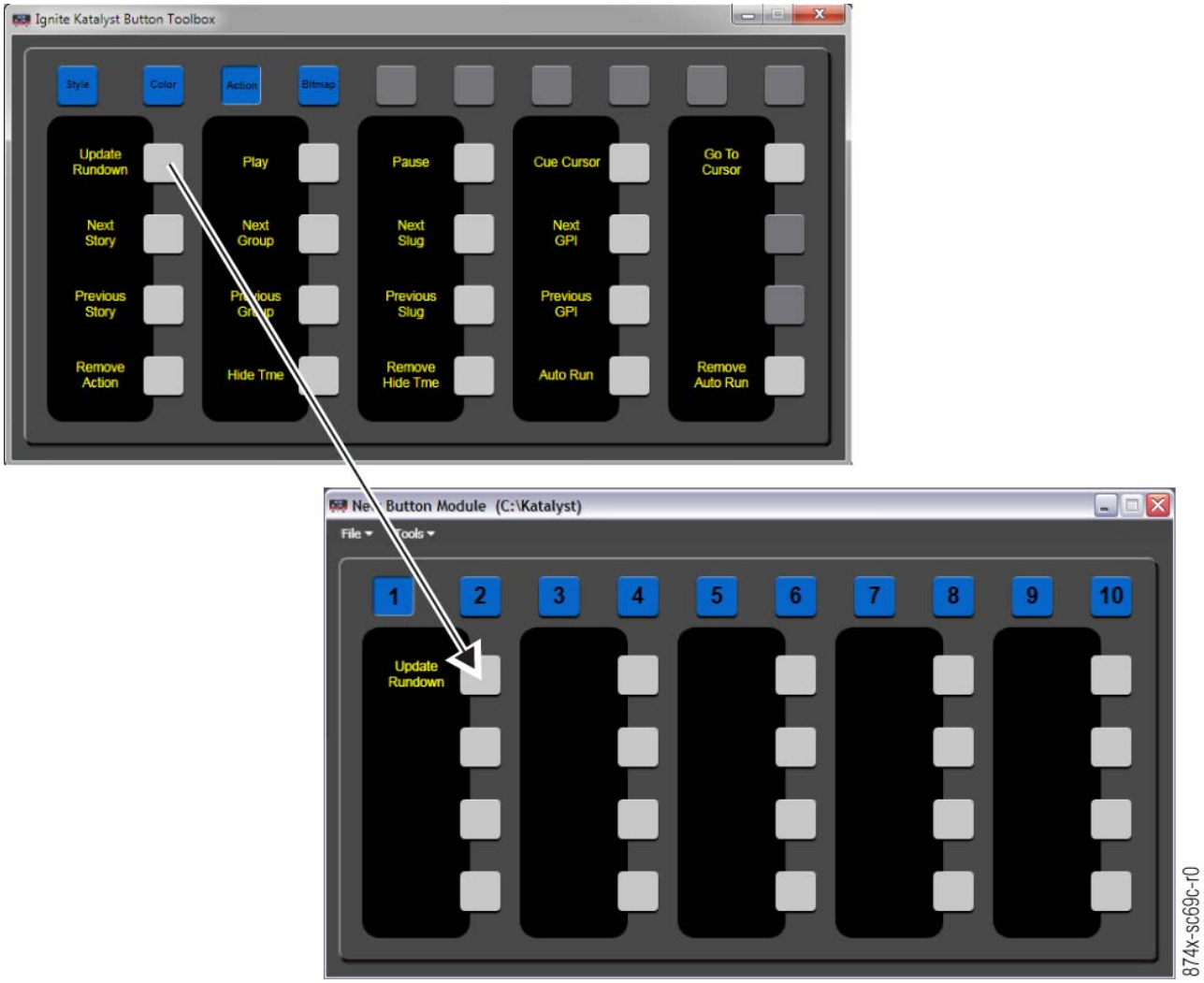
4. From the **Tools** menu, click **Open Button Toolbox**. The **Ignite Katalyst Button Toolbox** appears.

Note The Ignite Katalyst Button Toolbox initially opens to the Style page.

5. In the **Ignite Katalyst Toolbox**, click the **Action** button. The **Action** options page appears.

6. From the **Action** options, drag the desired action from the **Ignite Katalyst Toolbox** to the **Button Module** button to be assigned/edited (Figure 226).

Figure 226. Ignite Katalyst Toolbox – Action Button

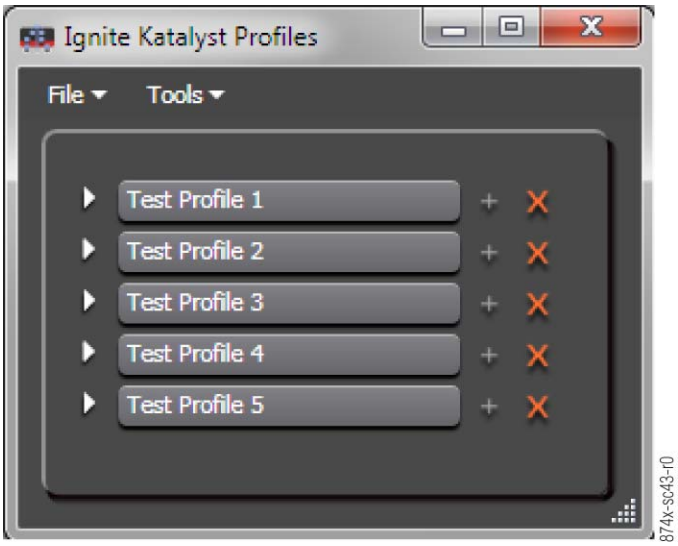


7. On the profile dialog box, **Files** menu, click either:
   - **Save Configuration** – to save the changes to the existing profile.
   - **Save Configuration As** – to name and save the changes as a new profile.
8. Close the profile.
9. Close the **Ignite Katalyst Button Toolbox**.

Assign a Button a TME Action

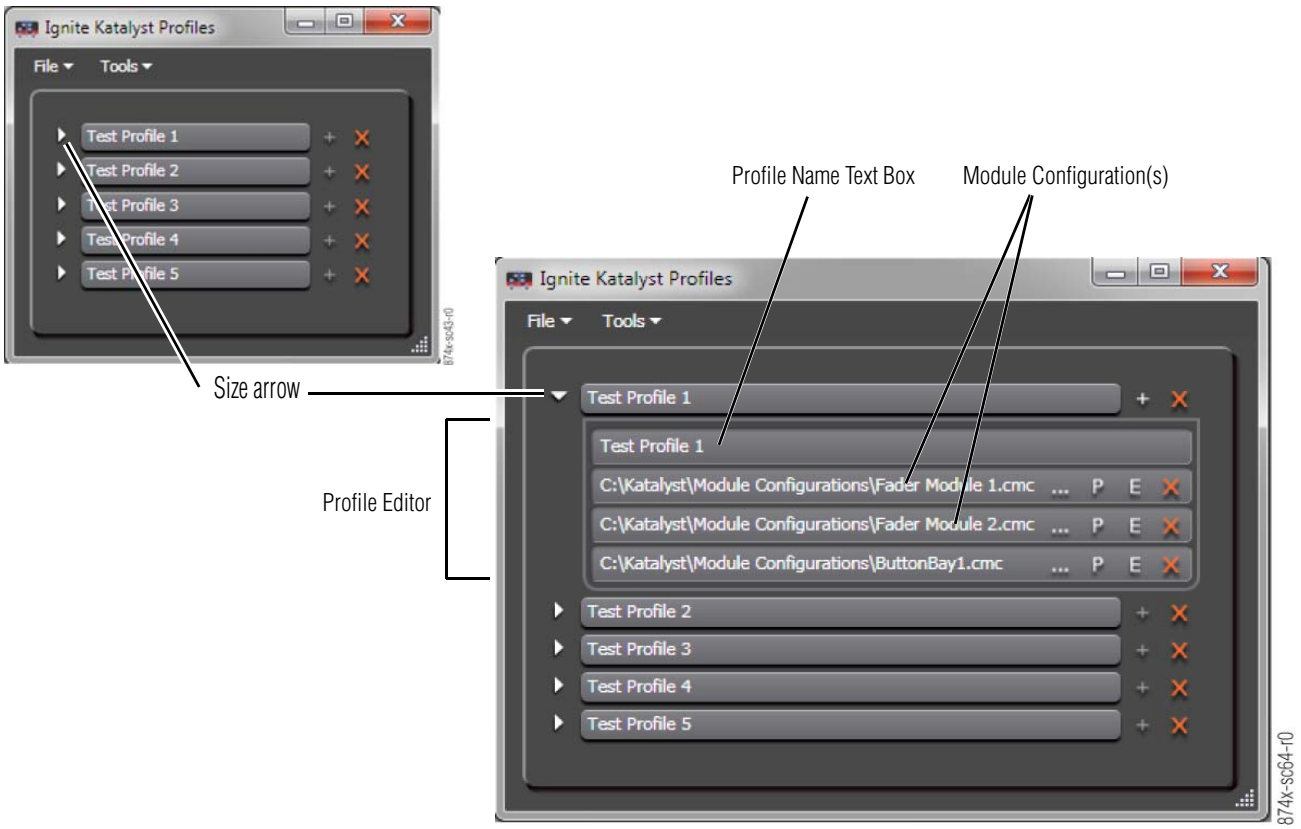
1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 227) appears.

Figure 227. Ignite Katalyst Profiles (Design Time Dialog Box) Example



2. Click the **Size** arrow at the left of the Profile to be changed. The **Profile Editor** expands below the profile name and the **Size** arrow points downward (Figure 228).

Figure 228. Profile Editor



3. From the **Profile Editor**, click **E** to the right of the Button Module to be changed. The selected **Button Module** appears.

4. From the TME folder, drag the desired TME to the button to be assigned/edited.

Note To re-assign a button bitmap to a text button, refer to *Assign/Edit/Re-assign Button Style* on page 193.

5. On the **BUTTON MODULE** dialog box, from the **Files** menu, click either:
   - **Save Configuration** – to save the changes to the existing profile.
   - **Save Configuration As** – to name and save the changes as a new profile.

6. Close the **BUTTON MODULE**.

7. Close the **Ignite Katalyst Button Toolbox**.

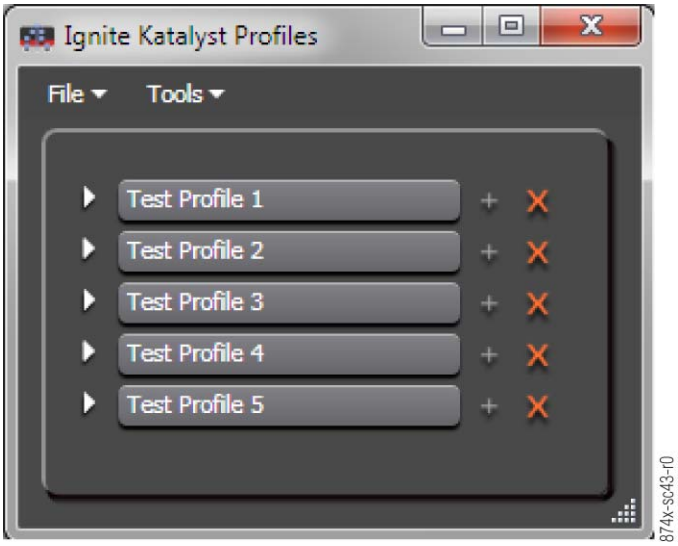
Assign/Edit a Button Bitmap

Note Customer generated/provided bitmaps can also be used instead of those available from the **Ignite Katalyst Toolbox**. Refer to either *Katalyst Toolbox Bitmaps* on page 203 or *User Provided Bitmaps* on page 205.

Katalyst Toolbox Bitmaps

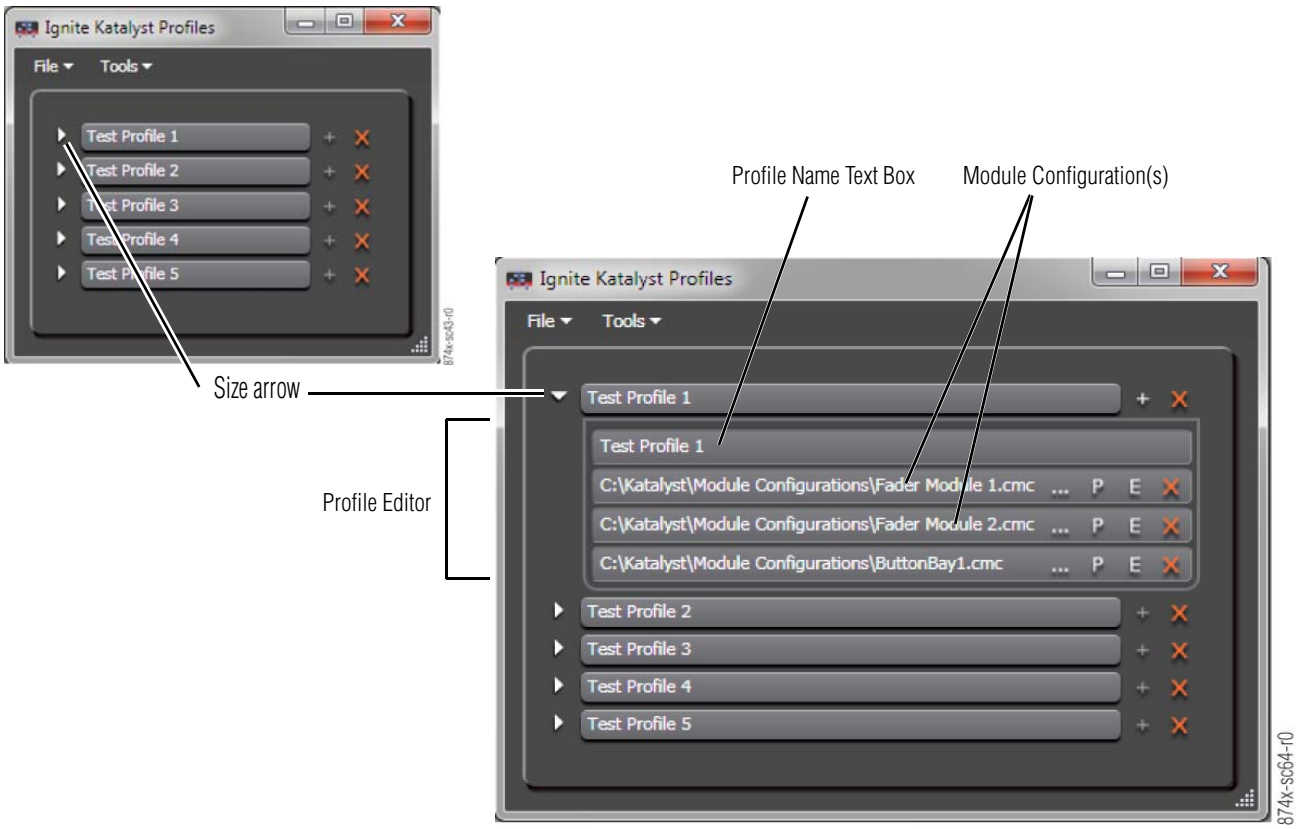
1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 229) appears.

Figure 229. Ignite Katalyst Profiles (Design Time Dialog Box) Example



2. Click the **Size** arrow at the left of the Profile to be changed. The **Profile Editor** expands below the profile name and the **Size** arrow points downward (Figure 230).

Figure 230. Profile Editor



3. From the **Profile Editor**, click **E** to the right of the Button Module to be changed. The selected **Button Module** appears.

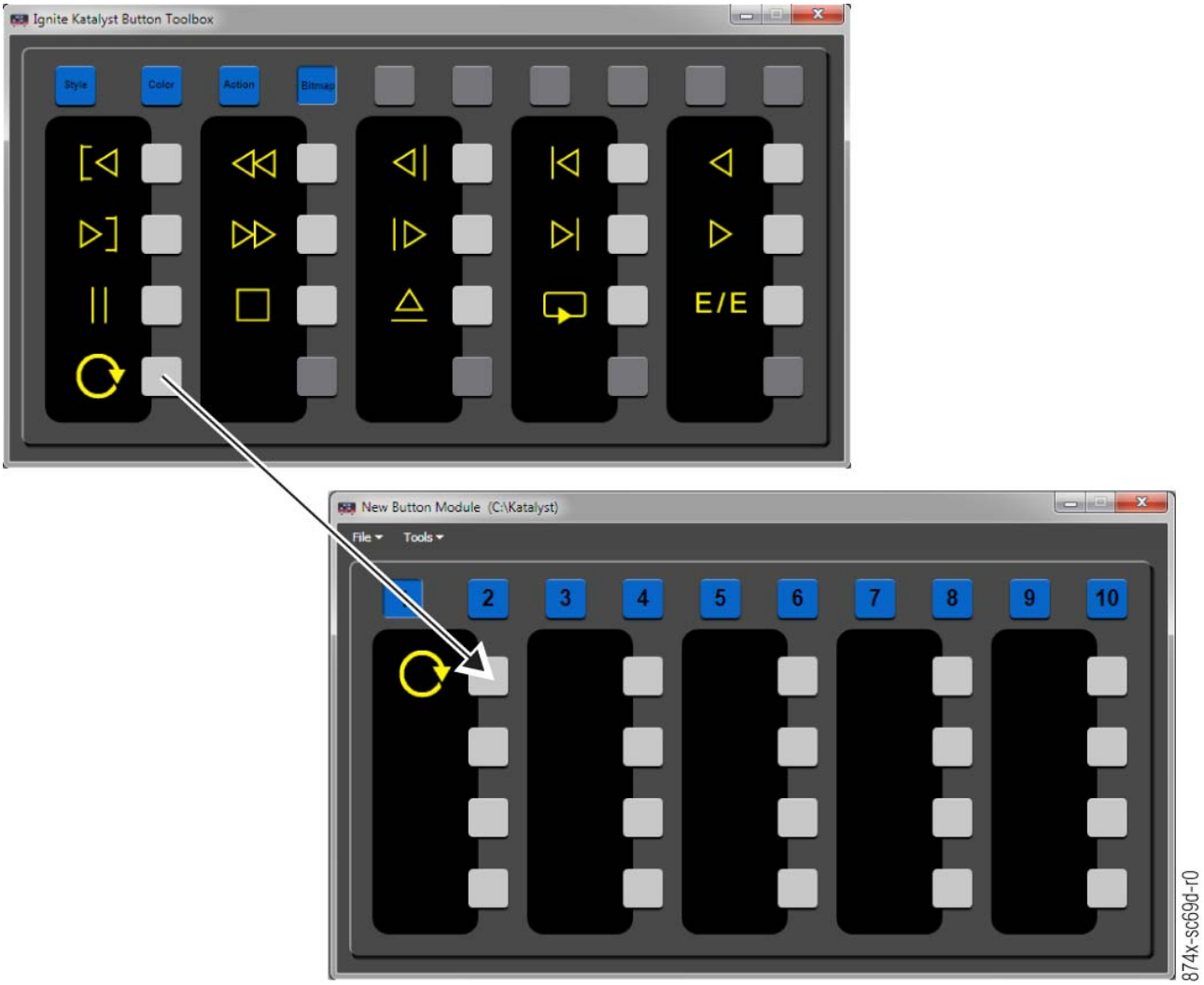
4. From the **Tools** menu, click **Open Button Toolbox**. The **Ignite Katalyst Button Toolbox** appears.

Note The Ignite Katalyst Button Toolbox initially opens to the Style page.

5. In the **Ignite Katalyst Toolbox**, click the **Bitmap** button. The **Bitmap** options page appears.

6. From the **Bitmap** options, drag the desired bitmap from the **Ignite Katalyst Toolbox** to the **Button Module** button to be assigned/edited (Figure 231).

Figure 231. Ignite Katalyst Toolbox – Bitmap Button

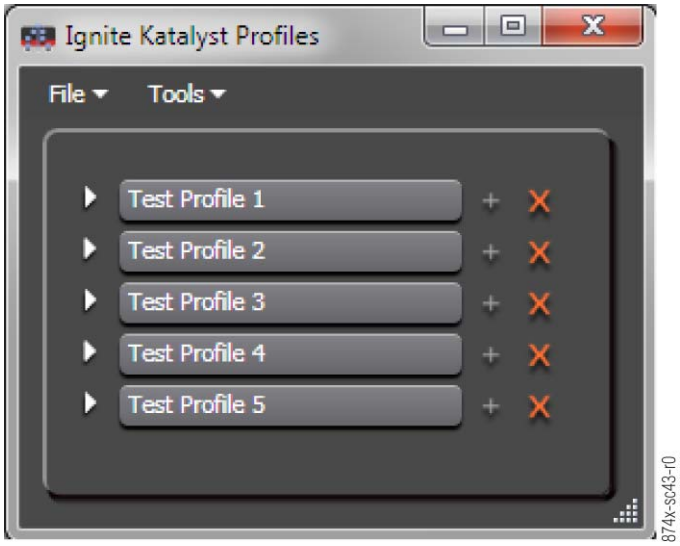


7. On the **BUTTON MODULE** dialog box, from the **Files** menu, click either:
   - **Save Configuration** – to save the changes to the existing profile.
   - **Save Configuration As** – to name and save the changes as a new profile.
8. Close the **BUTTON MODULE**.
9. Close the **Ignite Katalyst Button Toolbox**.

User Provided Bitmaps

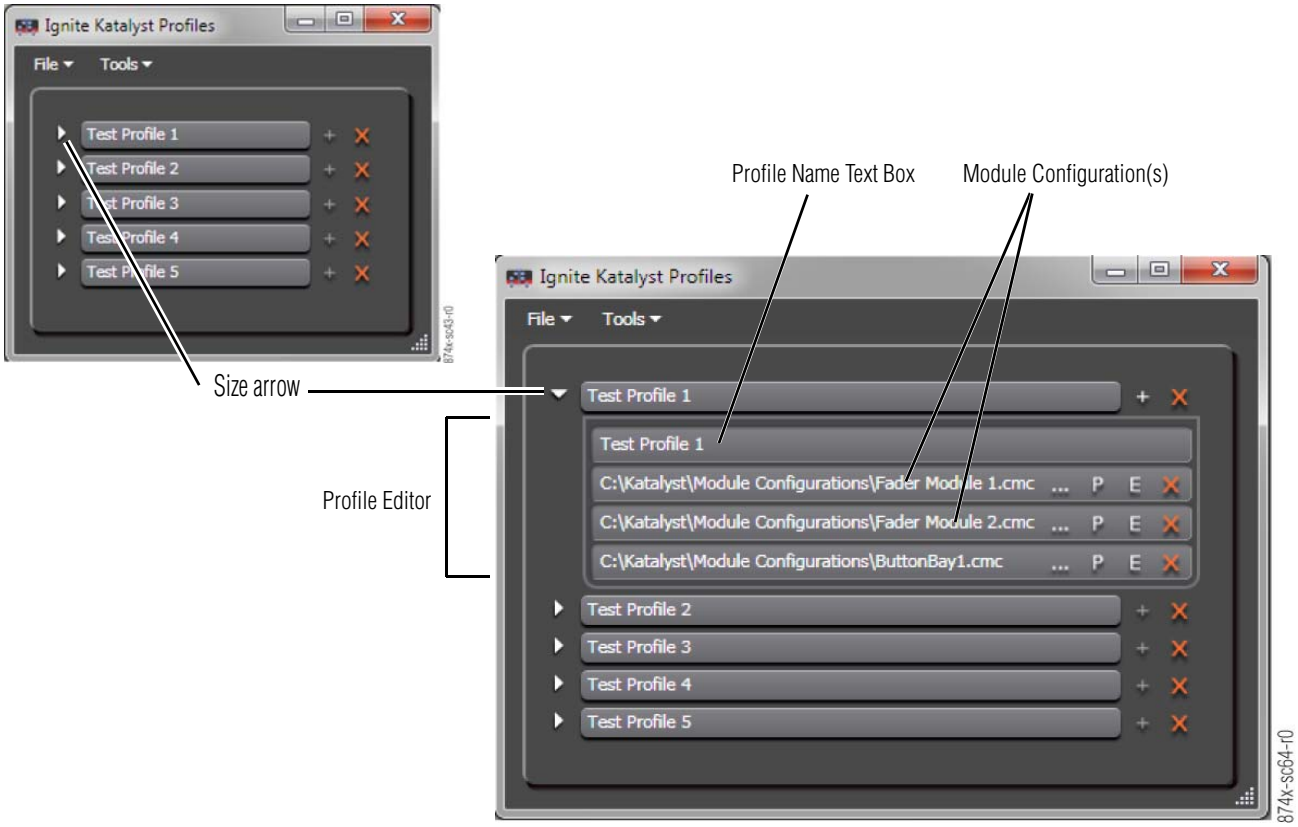
1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 232) appears.

Figure 232. Ignite Katalyst Profiles (Design Time Dialog Box) Example



2. Click the **Size** arrow at the left of the Profile to be changed. The **Profile Editor** expands below the profile name and the **Size** arrow points downward (Figure 233).

Figure 233. Profile Editor



3. From the **Profile Editor**, click **E** to the right of the Button Module to be changed. The selected **Button Module** appears.

Note Any/all user-supplied bitmaps must be exactly 64 x 64 pixels and 4-bit Monochrome bitmaps. The international prohibition symbol (⃠) appears when a non-conforming graphic is dragged across a destination drop button.

4. From a user-defined folder, drag the desired bitmap to the button to be assigned/edited.

Note To re-assign text to a bit mapped button, refer to *Assign/Edit/Re-assign Button Style* on page 193.

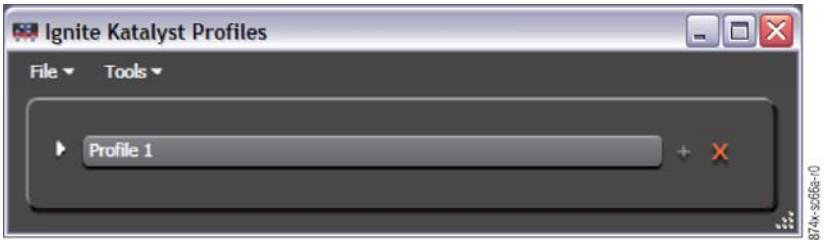
5. On the **BUTTON MODULE** dialog box, from the **Files** menu, click either:
   - **Save Configuration** – to save the changes to the existing profile.
   - **Save Configuration As** – to name and save the changes as a new profile.
6. Close the **BUTTON MODULE**.
7. Close the **Ignite Katalyst Button Toolbox**.

Configure a Panel Profile

Add a Profile

1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 234) appears.

Figure 234. Ignite Katalyst Profiles (Design Time Dialog Box) Examples



2. From the **Tools** menu, click **New Profile** (Figure 235). A **New Profile** is added to the **Katalyst Profiles** dialog box and the **Profile Editor** expands below the new profile name (Figure 236).

Figure 235. Tools Menu – New Profile

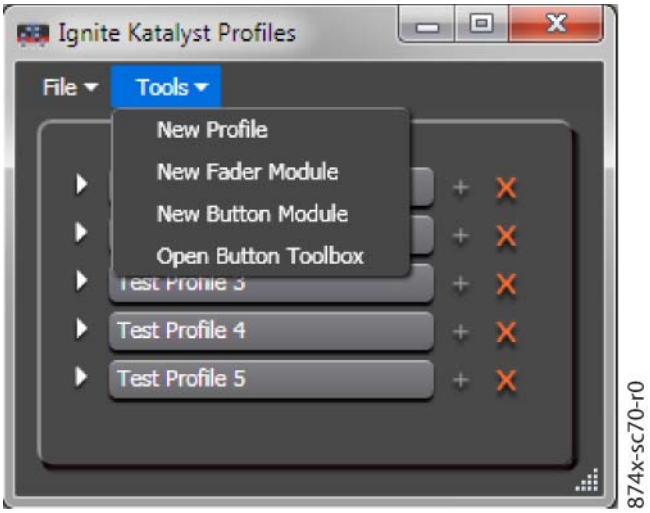
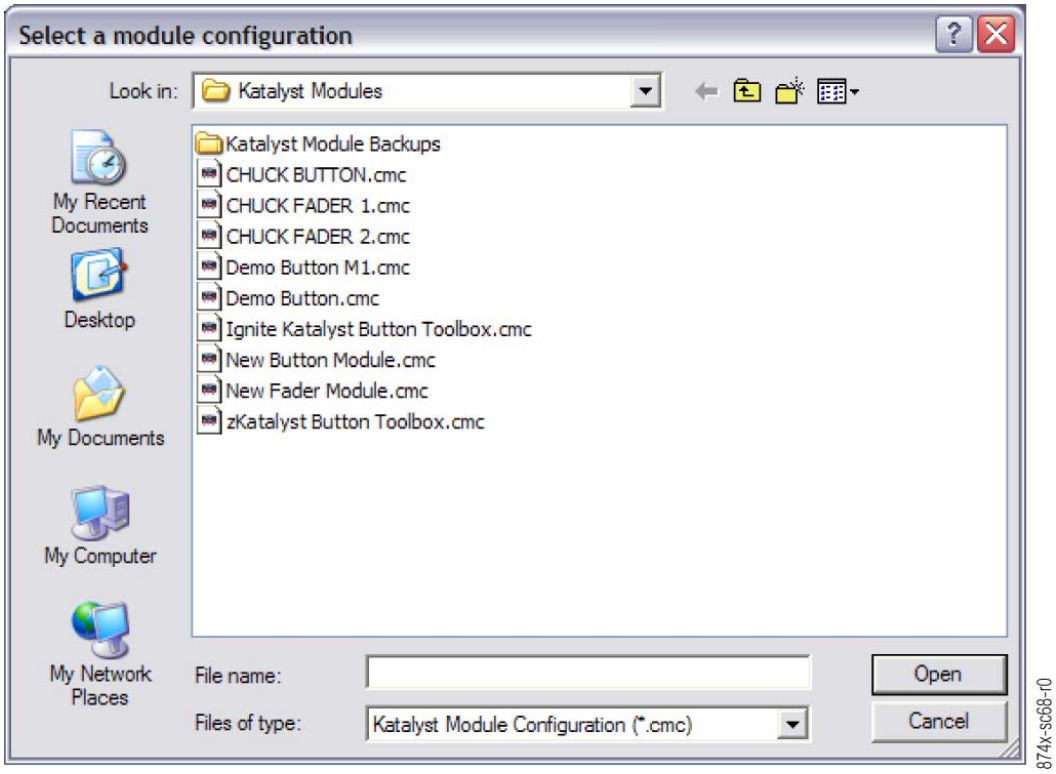


Figure 236. New Profile and Profile Editor

3. From the **Profile Editor**, in the **Profile Name** box (Figure 236), type a name for the new profile.

4. Click the **Browse** (...) icon. The **Select a module configuration** dialog box (Figure 237) appears.

Figure 237. Select a module configuration Dialog Box Example

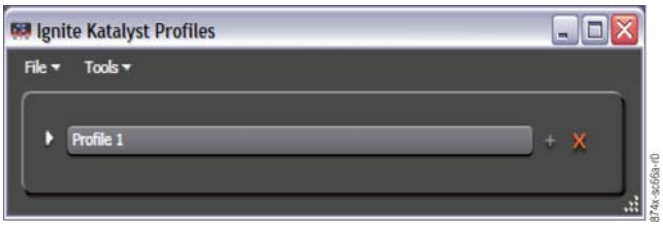


5. In the File Name box, type a name for the profile, and then click **Open**.
6. From the File menu, click **Save Configuration**.

Delete a Profile

1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 238) appears.

Figure 238. Ignite Katalyst Profiles (Design Time Dialog Box) Examples

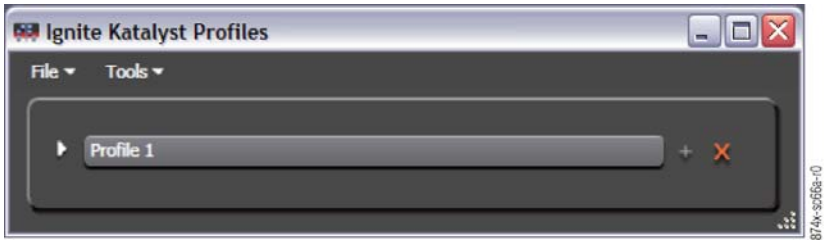


2. From the **Ignite Katalyst Profiles** dialog box, click the red **X** icon to the right of the profile name.
3. Click **Save**.

Edit a Profile

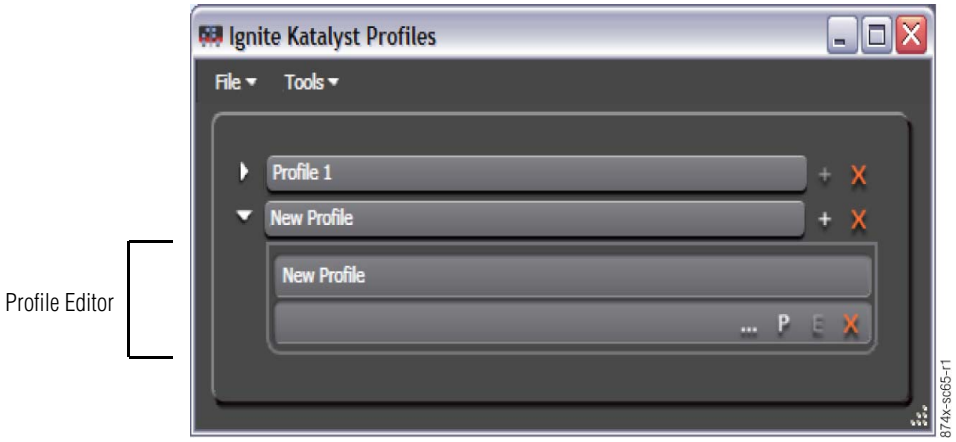
1. On the taskbar, click the Start button, and then point to All Programs. Point to Ignite Katalyst and then click Katalyst Profiles. The **Ignite Katalyst Profiles** (Design Time) dialog box (Figure 239) appears.

Figure 239. Ignite Katalyst Profiles (Design Time Dialog Box) Examples



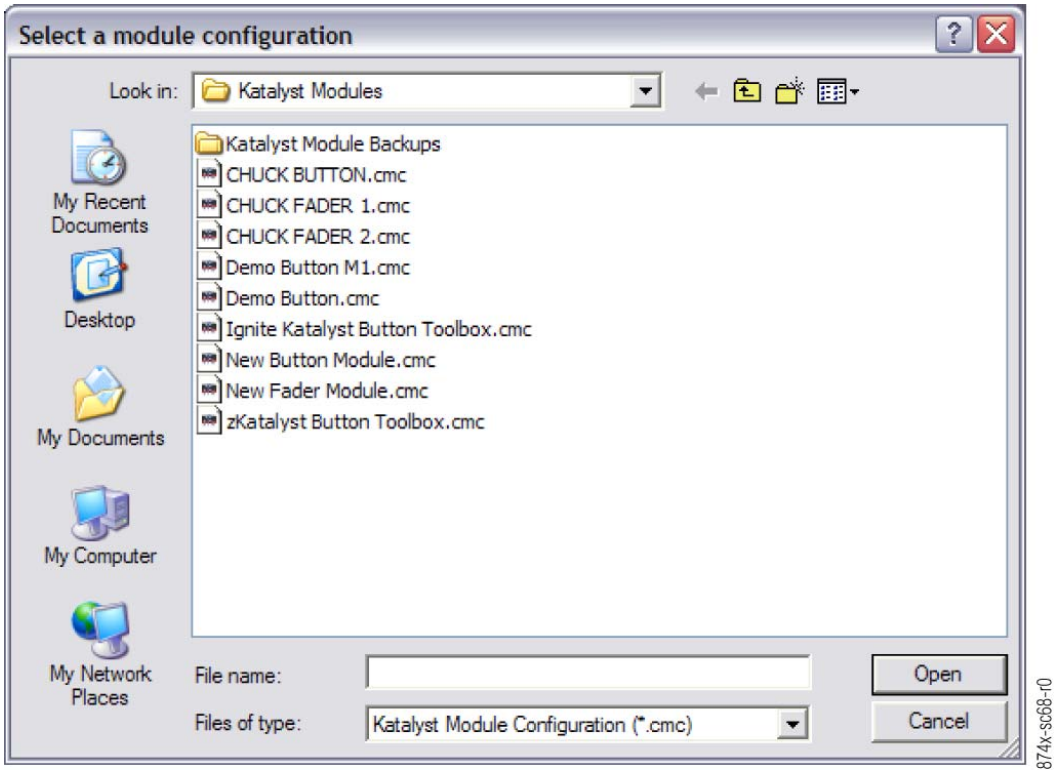
2. From the **Ignite Katalyst Profiles** dialog box, click the **Size** arrow at the left of the Profile Name. The **Profile Editor** expands below the profile name and the **Size** arrow points downward (Figure 240).

Figure 240. New Profile and Profile Editor



3. Click the **Browse** (...) icon. The **Select a module configuration** dialog box (Figure 241) appears.

Figure 241. Select a module configuration Dialog Box Example



4. From the list, select the module for this configuration, and then click **Open**.
5. From the **Profile Editor**, click **P** (Panel). The available panels list appears (Figure 242) appears.

Figure 242. Enter the Katalyst Panel Name Text Box

6. Click the desired panel.
7. From the File menu, click **Save Configuration**.

8. Click the **Size** arrow next to the Profile Name. The **Profile Editor** collapses and the **Size** arrow points to the profile name.

Identify/Change a Module IP Address

Note Defaults:
- IP Address – 10.11.1.41
- Mask – 255.255.255.0
- Gateway – 10.11.1.1

Identify a Hardware Panel IP Address

To begin the identification routine

- Press and hold down any two Ignite Katalyst buttons for 3 seconds. All LEDs and buttons flash for a predefined time and the panel displays its IP configuration.

To stop the identification routine

Note During the Identify Routine, pressing any Ignite Katalyst button stops the routine but does not initiate the typical button action.

- Press any Ignite Katalyst button.

Change a Module IP Address

A module IP Address is changed using the Grass Valley NetConfig program. Refer to the latest version of the *NetConfig NETWORKING CONFIGURATION APPLICATION Instruction Manual* available on the Grass Valley web site.

QUICbox Panel

Figure 243. QUICbox Control Panel

Overview

Note In an Ignite/Ignite Konnect No-Audio configuration, the audio user interface area is blank and a QUICbox Panel is not supported; therefore, this QUICbox Panel information would not apply.

The **QUICbox**™ panel (Figure 243) works dynamically with Ignite/Ignite Konnect software to provide programmable buttons and audio controls that meet the workflow requirements of both individual stations and individual operators. Programming includes the ability to store and recall both simple or complex functions such as:

- Manual Video Switching & Audio Mixing
- Event Timeline Next Event Command
- Manual CG & Keyer Controls
- GPI Triggers
- ShowBuilder Key Insert & Take Commands
- Audio Talk-Back, Cue, Hold, & Group Commands

Note The QUICbox panel is not required for Ignite/Ignite Konnect Live Production Control system operation but rather provides an alternate, manual event-triggering capability

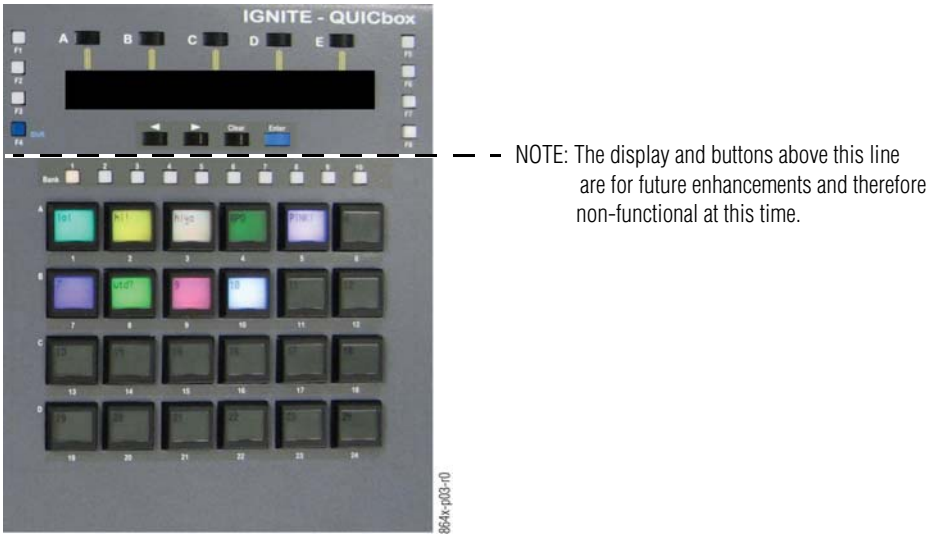
Configurable button programming is accomplished using the QUICbox Configuration Interface.

Programmable Buttons

Physically, there are 24 programmable buttons, 4 rows with 6 buttons in each row (Figure 244). The button rows are labeled from thetop (row **A**) to the bottom (row **D**). The buttons are numbered from the top left (number 1) to the bottom right (number 24):

- Row **A** comprises buttons **1-6**
- Row **B** comprises buttons **7-12**
- Row **C** comprises buttons **13-18**
- Row **D** comprises buttons **19-24**

Figure 244. Programmable Buttons



In addition, there is a row of 10 selectable **Bank** buttons (Figure 244), numbered from left (number **1**) to right (number **10**). These are the small white buttons located just above the larger programmable buttons. Each of the programmable buttons is configured in association with a **Bank** button. This combination provides a functional total of 240 programmable buttons. That is:

- When **Bank** button **1** is pressed, each of the 24 buttons is individually configured for **Bank 1**
- When **Bank** button **2** is pressed, each of the 24 buttons is individually configured for **Bank 2**
- When **Bank** button **3** is pressed, each of the 24 buttons is individually configured for **Bank 3**
- And so on for remaining **Bank** buttons **4** through **10**

Note The display and buttons above the 10 Bank selection buttons are for future enhancements and therefore non-functional at this time.

Each Bank/button configuration is programmed using the QUICbox Configuration Interface and each button is:

- A multi-colored 24 x 32 LCD that can display both text and graphics. This means that button programming includes color and label customization.
- Programmable for one-button control of some switcher and module functionality. This one-button operation simulates either a combination key press command, a combination keyboard and mouse command, or the consolidation of several individual events; e.g., taking video and audio to air instantaneously by inserting a specially built TME group onto an already moving Ignite/Ignite Konnect Event Timeline.

Typical programmable-button functionality includes:

Note Some of the functionality listed below is accomplished by building a TME to perform the desired action(s) and then assigning the TME to a QUICbox button.

- Bus switching – the ability to program a QUICbox button to manually change sources on PGM, PVW, AUX, or KEY buses.
- LBN insertion – the ability to insert LBN hotkeys on any given saved macro file on the timeline.
- Multiple task combination – the ability to program multiple tasks or keystrokes to accomplish a user defined event using a single button press. For example, to drop in an LBN key and then trigger the timeline to move forward.
- Switcher Events.
    - Set program (PP and any M/E) to black, matte, pattern, or any available video input.
    - Set preview (PP and any M/E) to black, matte, pattern, or any available video input.
    - Set Auxiliary Buses to black, matte, pattern, or any available video input.
    - Set Keyer buses to black, matte, pattern, or any available video input.
- GPO/GPI triggering – the ability to program a button to manually trigger any device that can accept a GPO/GPI.
- Timeline control – provides one-button control for functions such as:
    - Next Step (skips the Event Timeline cursor to the next GPI mark).
    - Previous Step (skips the Event Timeline cursor to previous GPI mark).
    - Next Group (skips the Event Timeline cursor to the left edge of next group).

    - Previous Group (skips the Event Timeline cursor to left edge of previous group).
    - Next Slug (skips the Event Timeline cursor to left edge of next slug/page).
    - Previous Slug (skips the Event Timeline cursor to previous slug/page).
    - Next Story (skips the Event Timeline cursor to left edge of next story).
    - Previous Story (skips the Event Timeline cursor to previous story).
    - Cue (ALT+Q) moves the Event Timeline cursor to the beginning of the timeline.
    - Run (ALT+SPACEBAR) starts the Event Timeline cursor.
    - Pause (ALT+P) stops the Event Timeline cursor.
    - Go to Cursor (ALT+G) shifts timeline view to current cursor location.
    - Update Rundown (imports rundown to the Event Timeline when changes are made to rundown – if rundown is monitored).
- CG list control (TME assigned to a button):
    - Load next CG in list (advance CG list).
    - Load previous CG in list (moves to previous CG in CG list).
- Downstream CG keying – the ability to program a button to manually insert lower third or other keys from a CG device. This eliminates the need for a third party downstream key box or having to use the mouse for CG insertion.

Audio Controls, Buttons, and Indicators

Each motorized fader (Figure 245) provides quick, tactile control of audio input. The 16 motorized audio faders and related buttons operate in unison with and mirror the respective Ignite/Ignite Konnect Audio Fader module controls, buttons, and button indications.

Figure 245. Audio Motorized Faders and Control Buttons

The lighted buttons across the top are user-configured to identify the fader type and source being controlled. Button label text is automatically assigned based on the selected or assigned audio source from the Ignite/ Ignite Konnect **Audio** GUI. The button color indicates the fader type as:

- Program - green
- Static Source - blue
- Unassigned/Default - black (unlit)

The three rows of fader-related buttons are:

-C (Cue) monitors a channel pre-fader

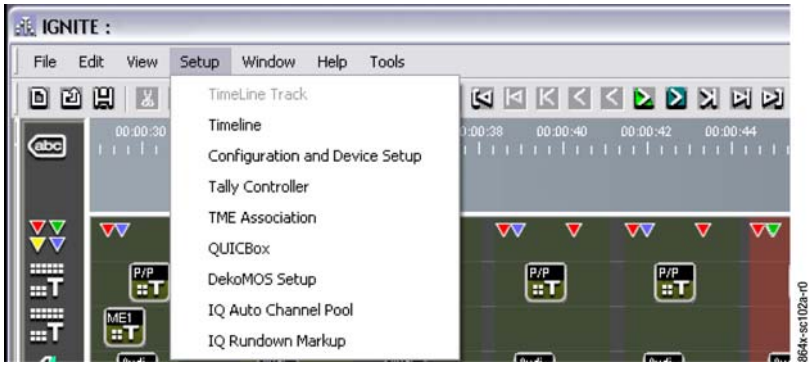
-B (Backup) switches to a backup

-H (Hold) holds a source on or off air

Configuration Interface

The QUICbox control panel is user-programed using the **QUICbox Configuration** interface that is accessed in the **Event Timeline Setup** menu (Figure 246).

Figure 246. Event Timeline Setup Menu



The **QUICbox Configuration** interface (Figure 247) includes:

- A **Main** dialog box for individual button color, label, and command programming elements.
- Two **Audio** dialog boxes (**Module #1** and **Module #2**) for audio fader definition and layout programming elements. **Module #1** is for faders 1-8 and **Module #2** is for faders 9-16.

Figure 247. Button and Fader Configuration Dialog Boxes

Main

Module #1
(Faders 1-8)

Module #2
(Faders 9-16)

Configuration Interface Menu Bar

The **Configuration Interface** menu bar (Figure 248) has two menus:

- **File** menu
- **Switch GUI** menu

Figure 248. Configuration Interface Menu Bar

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* on page 645.

The **File** menu (Figure 249) commands are:

- **Load Layout** - to load a previously saved button layout

Note The default configuration layout file is: Save C:\Program Files\GrassValley\Ignite\misc\QuicBox.xml.

- **Save Layout** - to save a new button layout for future use
- **Save Layout As** - to save a new button layout with a different file name
- **Test QUICbox** - to test the QUICbox hardware and software interface (fader movement, LED on/off, and LCD flashing are tested on the audio modules. Each bank of the main module is cycled and each button is tested for lighting, flashing, and color)
- **Exit** - to exit the **Configuration Interface**

Figure 249. Configuration Interface File Menu

The **Switch GUI** menu (Figure 250) commands are:

- **QUICbox Main** (for the 4 x 6 control buttons)
- **Audio Module #1** (for faders 1–8)
- **Audio Module #2** (for faders 9–16)

Figure 250. QUICbox Configuration Switch GUI Menu

Main Dialog Box (Button Layout)

The **Main** dialog box (Figure 251) provides the 4 x 6 button programming interface necessary to view properties and configure individual QUICbox buttons.

Figure 251. Main Dialog Box (Button Layout)

- Click a button to execute the action configured for that button.
- Right-click a button for access to the **Set up Button Status** dialog box.

Audio Modules #1 and #2 Configuration Dialog Boxes

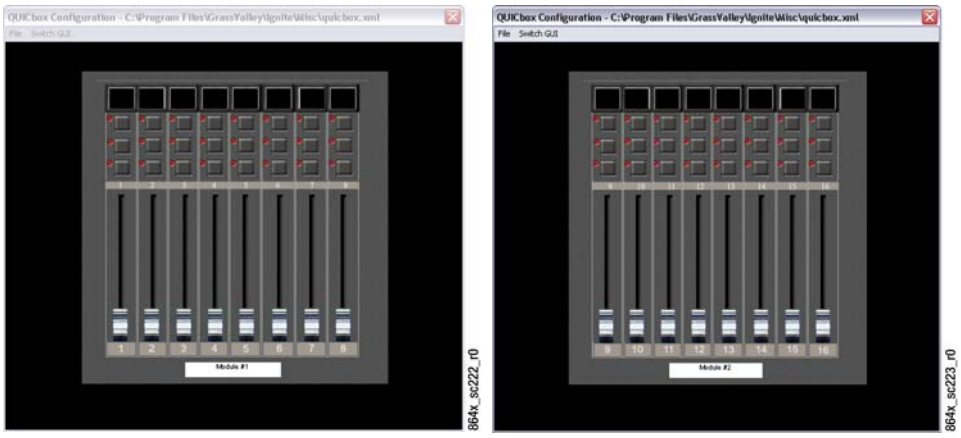
There are two **Audio** dialog boxes (**Module #1** and **Module #2**) for audio fader definition and layout programming elements (Figure 252). **Module #1** is for faders 1-8 and **Module #2** is for faders 9-16. There are four types of programmable fader:

- Program - follows the Audio Module Program presentation

Note Program and Preview faders are assigned first-come first-served.

- Static Source - requires a specific source be statically assigned to the fader

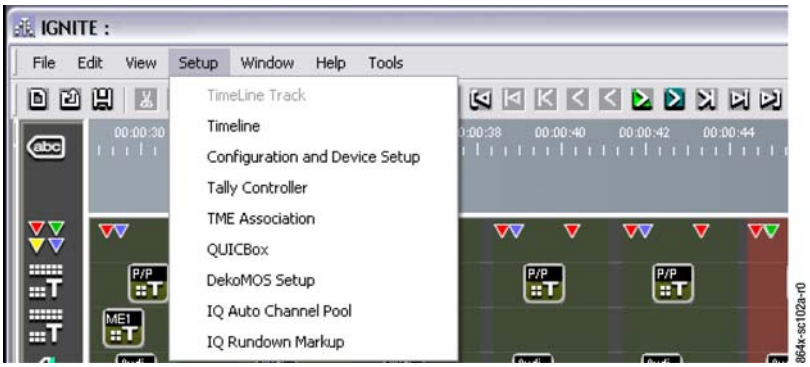
Figure 252. Audio Module #1 and #2 Dialog Boxes



Configuration

1. On the **Setup** menu, click **QUICbox** (Figure 253).

Figure 253. Setup QUICbox Menu



2. Depending on last used, either the **QUICbox Configuration Main**, **Audio Module 1**, or **Audio Module 2** dialog box (Figure 247) appears.

Button Configuration

Note QUICbox button configuration is only possible via the **QUICbox Configuration Main** dialog box.

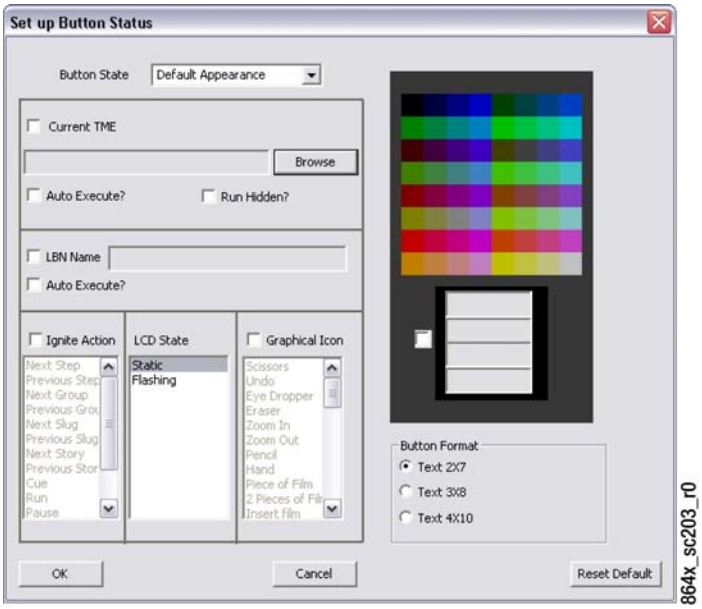
1. If the **Main** dialog box is not displayed, from the **QUICbox Configuration** menu (Figure 250), click **Switch GUI**, then click **QUICbox Main**.
2. Click the **Bank** button (1–10) for the bank and associated button(s) to configure. The selected **Bank** button highlights and the corresponding buttons for the selected bank are displayed.
3. Right-click a button to customize. The **button state select** menu (Figure 254) appears.

Figure 254. Button State Select Box

Default Appearance

1. Click **Default Settings** to set the button up/static condition.
2. The **Button Setup** dialog box (Figure 255) appears.

Figure 255. Button Setup Dialog Box



Note **Current TME**, **LBN Name**, and **Ignite Action** are shaded/unavailable when **Default Appearance** is selected.

3. Choose text or graphic display for the button static state by selecting the **Graphical Icon** or **Text** check box.

Note If the **Graphical Icon** check box is selected, the **Text** check box is shaded/unavailable. Conversely, if the **Text** check box is selected, the **Graphical Icon** check box is shaded/unavailable.

4. If the **Graphical Icon** check box is selected, click one of the 38 available icons from the list box.

Note The Ignite/Ignite Konnect QUICbox Main GUI button always displays a generic icon. Once saved, the QUICbox hardware button displays the selected icon.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* on page 645.

5. If the **Text** check box is selected, select either **Text 2x7**, **Text 3x8**, or **Text 4x10**, and then type the desired text into the **Text** input box using the following parameters:
   - **Text 2x7 –** 2 lines x 7 alphanumeric characters
   - **Text 3x8 –** 3 lines x 8 alphanumeric characters
   - **Text 4x10 –** 4 lines x 10 alphanumeric characters

Note To access lines 2 through 4, click in the desired text line area.

Note Once saved, the entered text will display on both the Ignite/Ignite Konnect QUICbox Main GUI button and the QUICbox hardware button.

6. Click a background color from the **Color Assignment** palette (there are 64 possible color combinations available).
7. Click either **Static** (solid background color) or **Flashing** (on and off background color) from the **LCD State** list box.

On Button Down

1. In the **Button State** list, click **On Button Down**.
2. Determine if the button will initiate a TME, LBN, or Ignite/Ignite Konnect action by selecting the **Current TME**, **LBN Name**, or **Ignite Action** check box.

Note Only one of the three button action types can be assigned to a single button. Selecting any one of the three clears the other two.

3. If the **Current TME** check box is selected, click the **Browse** button and then click the desired TME to populate the TME path/filename box, then do one of the following:

Note The selected show/user (macro) file starts the Event Timeline module with the presets/prebuilds specific to that show or user. Therefore, all changes/ additions/deletions, customization, hotkeys, etc. are specific to that show/ user interface.

   a. To insert the TME into the timeline so that the timeline cursor steps into the TME normally, select the **Auto Execute** check box and ensure that the **Run Hidden** check box is cleared.
   b. To insert the TME into the timeline one frame in front of the timeline cursor, ensure that the **Run Hidden** and **Auto Execute** check boxes are cleared.
   c. To execute the TME immediately, without inserting it into the timeline, select the **Run Hidden** check box.

4. If the **LBN Name** check box is selected, type the name of the desired LBN into the **LBN Name** box, then do one of the following:
   a. To insert the LBN into the timeline so that the timeline cursor steps into the TME normally, select the **Auto Execute** check box.
   b. To insert the LBN into the timeline one frame in front of the timeline cursor, ensure that the **Auto Execute** check box is cleared.

5. If the **Ignite Action** check box is selected, click one of the desired actions from the **Ignite Action** list. Available actions are listed in Table 6.

Table 6. Ignite Actions

Label	Keyboard Equivalent	Action
Next Step	N/A	Jumps the timeline cursor to the next GPI
Previous Step		Jumps the timeline cursor to the previous GPI
Next Group		Jumps the timeline cursor to the next Group level
Previous Group		Jumps the timeline cursor to the previous Group level
Next Slug		Jumps the timeline cursor to the next Slug level
Previous Slug		Jumps the timeline cursor to the previous Slug level
Next Story		Jumps the timeline cursor to the next Story level
Previous Story		Jumps the timeline cursor to the previous Story level
Cue	Alt-Q	Sends the timeline cursor and view to the beginning of the macro
Run	Alt-Space	Advances the timeline cursor
Pause	Alt-P	Pauses the timeline cursor
Go to Cursor	Alt-G	Scrolls the timeline view to where the timeline cursor is located
Update Rundown	N/A	Allows user to import changes when available on a monitored rundown

Accept, Cancel, or Restore Default Button Configuration

1. To accept the current button configuration, click **OK**.

   The **Button Setup** dialog box closes and returns to the **Main** dialog box. The new button configuration is displayed and is functional (for testing purposes) on the **Main** dialog box, but it is not transferred to the QUICbox hardware until a **Save Layout** or **Save Layout As** is initiated from the **Configuration Interface**, **File** menu (see *Save Layout* on page 227).

2. To cancel changes to the current button configuration, click **Cancel**.

   The **Button Setup** dialog box closes without accepting changes and returns to the **Main** dialog box.

3. To restore a button to its default configuration, click **Reset Default**.

   The **Button Setup** dialog box settings are restored to original default configuration.

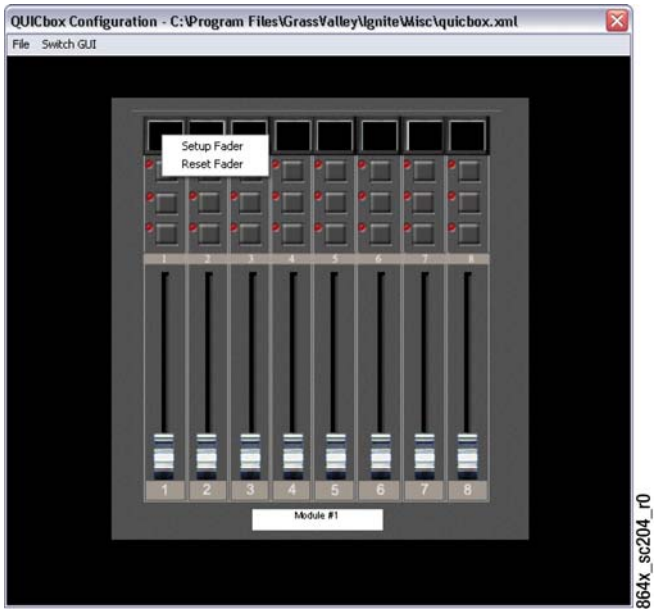
Audio Fader Configuration

Note QUICbox audio fader configuration is only possible via the **QUICbox Configuration Audio Module #1** (for faders 1–8) and **Audio Module #2** (for faders 9–16) dialog boxes.

1. From the **QUICbox Configuration** menu (Figure 250), click **Switch GUI**, then click **Audio Module #1** (for faders 1–8) or **Audio Module #2** (for faders 9–16).

2. Right-click a color button to customize. The **Setup/Reset Fader** menu (Figure 256) appears.

Figure 256. Setup/Reset Fader Select Box



3. To return the fader to its default/non-configured state, click **Reset Fader**.

4. To configure the fader, click **Setup Fader**. The **Setup Audio Fader** dialog box (Figure 257) appears.

Figure 257. Setup Audio Fader Dialog Box

Fader Type and Source

1. To configure the fader as a **Program** fader, click **Program** from the **Fader Type** select box.

   The **Source** select box becomes shaded/unavailable because the fader source is automatically assigned on a first available basis from the Ignite **Audio** GUI, **On Air** sources. Once saved, the button color displays green for **Program** and the button label text mimics the source label displayed on the Ignite **Audio** GUI.

Note A **Program** configured fader will always maintain its button color, but the assigned audio source and associated button text will change (based on the first available automatic assignment rule) as sources are taken **On/Off Air** from the Ignite **Audio** GUI.

2. To configure the fader as a **Source** fader, click **Source** from the **Fader Type** select box, then from the **Source** select box, click one of the available source names.

   Once saved, the button color displays dark blue for **Source** and the button label text mimics the selected source label displayed on the Ignite/Ignite Konnect **Audio** GUI.

Note A **Source** configured fader will maintain its appearance and assigned audio source even when it is assigned to the **On Air**, **Preview**, or **Select** areas of the Ignite/Ignite Konnect **Audio** GUI.

Accept or Cancel Fader Configuration

1. To accept the current fader configuration, click **OK**.

   The **Setup Audio Fader** dialog box closes and returns to the **Audio Module** dialog box. The new button configuration is displayed and is functional (for testing purposes) on the **Audio Module** dialog box, but it is not transferred to the QUICbox hardware until a **Save Layout** or **Save Layout As** is initiated from the **Configuration Interface**, **File** menu (see *Save Layout* on page 227).

2. To cancel changes to the current button configuration, click **Cancel**.

   The **Setup Audio Fader** dialog box closes without accepting changes and returns to the **Audio Module** dialog box.

Save Layout

Note The **Main** and **Audio Module** configurations are not transferred to the QUICbox hardware until **Save Layout** or **Save Layout As** are initiated from the **Configuration Interface**, **File** menu.

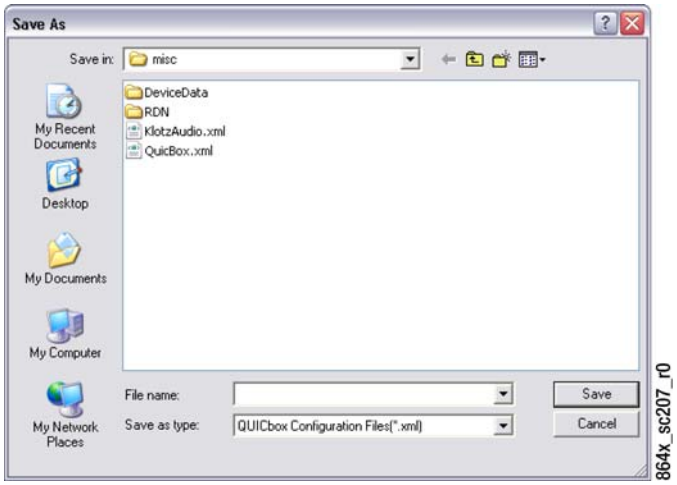
1. To save changes to the current layout, click **Save Layout** from the **QUICbox Configuration** interface **File** menu (Figure 249). The **Save succeeded** dialog box (Figure 258) appears.

Figure 258. Save Succeeded Dialog Box

2. Click **OK**. The **Save succeeded** dialog box closes and returns to the last selected **Main** or **Audio Module** dialog box.

3. To save current changes to a different layout filename, click **Save Layout As** from the **QUICbox Configuration** interface **File** menu (Figure 249). The **Save As** dialog box (Figure 259) appears.

Figure 259. Save As Dialog Box

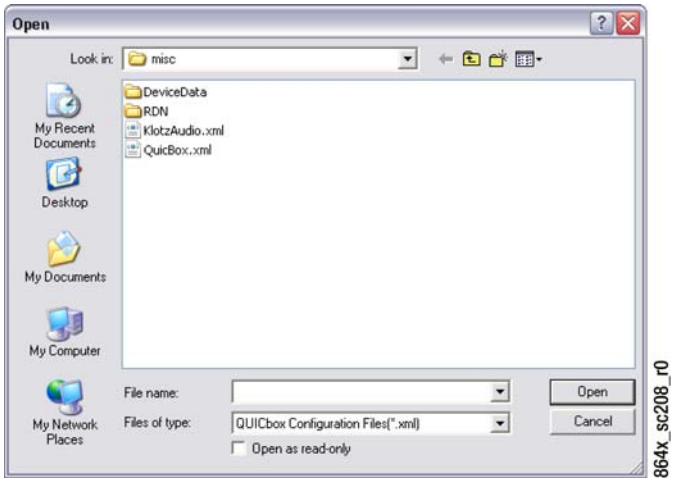


4. Click a directory/folder from the **Save in** list box, enter a filename in the **Filename** list box, then click **Save**. The **Save As** dialog box closes and returns to the last selected **Main** or **Audio Module** dialog box.

Load Layout

1. To load a previously saved layout, click **Load Layout** from the **QUICbox Configuration** interface **File** menu (Figure 249). The **Open** dialog box (Figure 260) appears.

Figure 260. Open Dialog Box



2. Click a directory/folder from the **Look in** list box, enter a filename in the **Filename** list box, then click **Open**. The **Open** dialog box closes and returns to the last selected **Main** or **Audio Module** dialog box with the selected layout loaded to both the GUI and the QUICbox hardware.

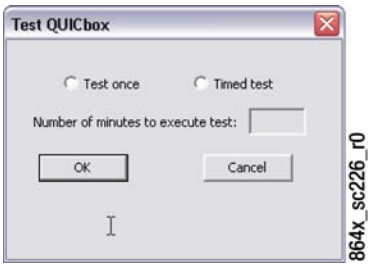
Functional Test

Note The QUICbox test is a functionality test of the hardware panel in which each fader, button, and LED is exercised automatically. The operator must determine the pass/fail status of the panel based on the visual cues observed during the test.

Note This QUICbox test is only available if the Ignite/Ignite Konnect system is LIVE mode. If a user attempts the test in PREP mode, a message appears instructing them to switch to LIVE mode.

1. To test the QUICbox hardware panel, click **Test QUICbox** from the **QUICbox Configuration** interface **File** menu (Figure 249). The **Test QUICbox** dialog box (Figure 261) appears.

Figure 261. Test QUICbox Dialog Box



2. Click either the **Test once** or the **Timed test** check box.

Note **Test once** is a single iteration test of the QUICbox hardware panel. The **Timed test** is the same test repeated continuously for the duration of time (in minutes) entered into the **Number of minutes to execute test** entry field.

3. Click **OK**. The **Cancel QUICbox** dialog box (Figure 262) appears and the lower third of the **Test QUICbox** dialog box (Figure 263) displays the test description and **Time Remaining** (if **Timed test** was selected).

Figure 262. Cancel QUICbox Dialog Box

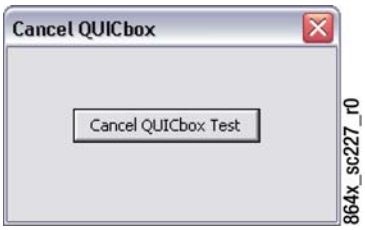
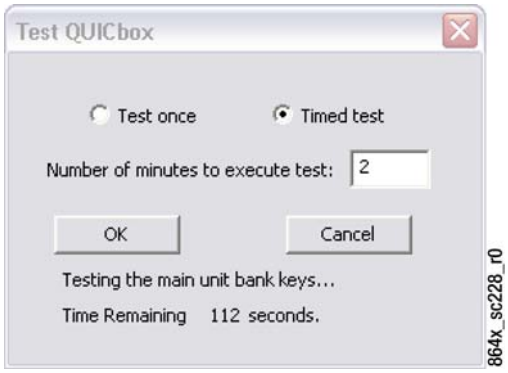


Figure 263. Test QUICbox Dialog Box



4. Allow the selected test to run to completion, or click the **Cancel QUICbox Test** button to cancel the test immediately. Either way, the **Cancel QUICbox** dialog box closes and the **Test Complete** dialog box (Figure 264) appears.

Figure 264. Test Complete Dialog Box

Click **OK** to acknowledge test completion, close the **Test Complete** and **Test QUICbox** dialog boxes (Figure 263 and Figure 264), and return to the **Configuration Interface** (Figure 247)

Section 4

Camera Preset Hotkey Module

Figure 265. Camera Preset Hotkeys Module

Overview

The **Camera Preset Hotkey** Module (Figure 265) provides quick recall for predetermined camera positions. There are 10 page select buttons (1–10) and each page has 24 preset buttons on which to store shots. These pre-established, stored shots are saved for each camera. The information that is stored includes: camera, framing, focus, iris, and gain. The **Camera Preset Hotkeys** recall either presets or macros from the camera systems because some camera systems store the presets in the head, while others store the presets in the controller.

Presets are stored based upon an individual camera, so several cameras could have the same preset number but the pre-established shot could be different. For example, Preset number 1 for Camera 1 might be set for Talent 1 Close-up and Preset number 1 for Camera 2 might be set for Talent 2 Left Side.

Note Camera preset hotkeys are global and load when the Ignite/Ignite Konnect application is started. The selected show/user (macro) file starts the Event Timeline module with the presets/prebuilds specific to that show or user; e.g., CG/SS Hotkeys, LBNs, and any TMEs that are on the timeline.

For ease of reference and use, the recommended procedure is to use blocks of presets for specific cameras. For example, Camera 1 presets are 10-19 and Camera 2 presets are 20-29. Additionally, for ease of reference one page is a

commonly used preset page while the other pages are designated to a specific camera.

Note For quick reference and use, be sure to keep a defined list /log of all camera shots and the appropriate preset numbers.

Establish a default preset that is set up by engineering. Use this preset as a starting point for setting all show presets. This ensures proper color matching and camera setup. If sets/lighting vary from show to show, it is also a good idea to create a default preset for each show.

After presets are originally set, if cameras are moved for any reason, check and adjust the shots before going to air. Check presets before each show in case talent isn't seated in the same position or cameras are not in the exact location.

Common Control Buttons

Table 7 lists the common control buttons.

Table 7. Common Clock Control Buttons

Button	Control Function
	Setup
	Dock
	Undock

Operation

Note Remember, Camera 1 and Camera 2 can be different shots yet be saved under the same preset number. For ease of reference and use, the recommended procedure is to use blocks of preset numbers for each program when the pre-established camera shots are different. As shots are blocked, if the shots are different for each program, be sure to assign camera preset numbers for each program; e.g., save the morning show camera shots in presets 1–30 and the noon show camera shots in presets 31–60.

Create a Preset Hotkey – Grass Valley HDC and CameraMan Robotic Cameras

Note Camera presets should be stored using the SHOT Director robotics/camera controller before assigning preset buttons in the Ignite/Ignite Konnect system. Refer to the respective SHOT Director Instruction Manual for procedures.

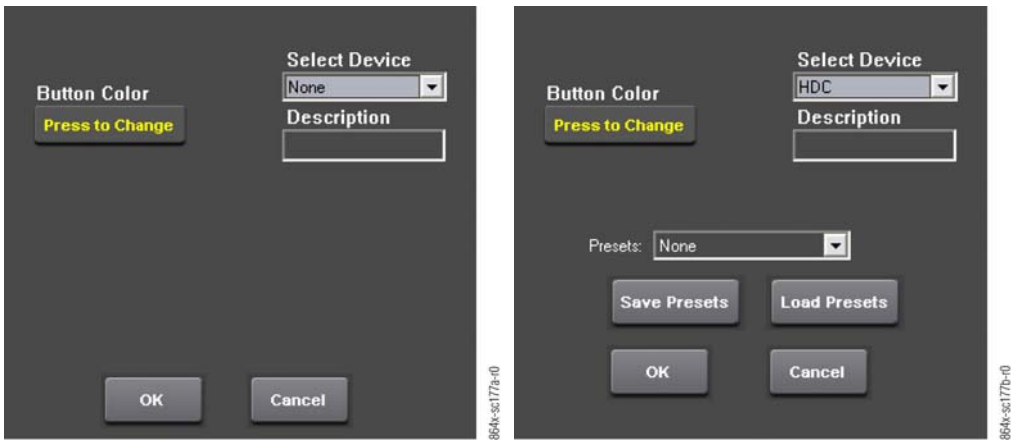
1. On the **Camera Preset** module (on the left monitor), click the **Page** button (1–10) for the page on which to store the hotkey.
2. On the **Camera Preset Hotkeys** module, click the **Setup** button, the **Setup** button highlights (Figure 266).

Figure 266. Camera Preset Hotkeys Setup Button

Note In the following step, if the selected button already has a preset established, that existing preset is replaced.

3. Click either a blank hotkey or a currently used hotkey to replace. The **Setup** dialog box (Figure 267) appears.

Figure 267. Camera Hotkey Setup Dialog Box – Grass Valley HDC Cameras



4. In the **Select Device** box, click a camera in the drop-down list.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

5. In the **Description** box, type a description or abbreviation for the preset using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

6. Click **Button Color Press to Change**. The **Color Palette** dialog box (Figure 268) appears.

Figure 268. Camera Hotkey Color Palette Dialog Box

7. Click the designated color, and then click **OK**.

8. In the **Preset** box, click a preset number in the drop-down list.

Note Depending on camera type, additional options might be available. For example, for Grass Valley cameras proceed to *Save Presets In File* on page 235 and *Load Presets From File* on page 235 and then click **OK**.

9. Complete any remaining options, and then click **OK**.

Save Presets In File

Note Presets for Grass Valley HDC robotic cameras are created and physically stored in the SHOT Director robotics/camera controller. It is good practice periodically, and certainly as presets are modified, to save all presets (**Save Presets in File**) to a file within Ignite/Ignite Konnect (Program Files/Grass Valley/Ignite/misc/GV04CameraPresets.xml). In the unlikely event that the SHOT Director controller fails, simply download the saved presets (**Load Presets from File**) to the replacement SHOT Director controller.

1. In the **Camera Preset Hotkeys** GUI, click the **Setup** button, the **Setup** button highlights (Figure 269).

Figure 269. Camera Preset Hotkeys

2. Click any currently used hotkey assigned to a Grass Valley camera preset. The **Setup** dialog box (Figure 267) appears.

Note In the following steps, the Ignite/Ignite Konnect system must be **ON-AIR**.

3. To upload and save presets for all Grass Valley robotic cameras on the Ignite/Ignite Konnect network, click **Save Presets in File**. The **Save Presets** confirmation dialog appears.

CAUTION Uploading presets from a SHOT Director controller will overwrite any existing saved presets in the Ignite/Ignite Konnect GV04CameraPresets.xml file.

Note Depending on the potential number of Grass Valley robotic cameras (1-16) on the Ignite/Ignite Konnect network, and the number of presets (0-300) stored for each camera, it could take up to two minutes to save or load all presets.

4. Click **Yes** to confirm and close the dialog. The **Presets saved** confirmation dialog appears.
5. Click **OK** to acknowledge/close the dialog.

Load Presets From File

1. In the **Camera Preset Hotkeys** GUI (Figure 266), click the **Setup** button, the **Setup** button highlights.

2. Click any currently used hotkey assigned to an Grass Valley camera preset. The **Setup** dialog box (Figure 267) appears.

Note In the following steps, the Ignite/Ignite Konnect system must be **ON-AIR**.

3. Click **Load Presets from File.** The **Load Presets** confirmation dialog appears.

CAUTION Downloading presets from a file to a SHOT Director controller overwrites any existing presets in the SHOT Director controller.

Note Depending on the potential number of Grass Valley robotic cameras (1-16) on the Ignite/Ignite Konnect network, and the number of presets (0-300) stored for each camera, it could take up to two minutes to save or load all presets.

4. Click **Yes** to confirm and close the dialog. The Presets loaded confirmation dialog appears.
5. Click **OK** to acknowledge/close the dialog.

Create a Preset Hotkey – Vinten/Radamac Cameras

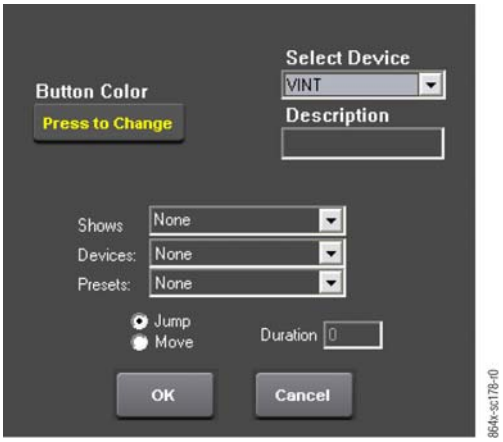
1. On the **Camera Preset** module on the left monitor, click the **Page** button (1–10) for the page on which to store the Hotkey.
2. On the **Camera Preset Hotkeys** module, click the **Setup** button, the **Setup** button highlights (Figure 270).

Figure 270. Camera Preset Hotkeys

Note In the following step, if the selected button already has a preset established, that existing preset is replaced.

3. Click either a blank hotkey or a currently used hotkey to replace. The **Setup** dialog box (Figure 271) appears.

Figure 271. Camera Hotkey Setup Dialog Box – Vinten Cameras



4. In the **Select Device** box, click a camera in the drop-down list.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

5. In the **Description** box, type a description or abbreviation for the preset using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

6. In the **Show** box, click a show in the drop-down list.

7. In the **Devices** box, click a device in the drop-down list.

Note This refers to the actual camera.

8. In the **Presets** box, click a camera preset in the drop-down list.

9. Click either **Jump** or **Move** (to the position). In the **Duration** box, enter the desired time, in seconds, to reach the position.

Note Duration is only selectable if the preset is a Move.

10. Click **Button Color Press to Change**. The **Color Palette** dialog box (Figure 272) appears.

Figure 272. Camera Hotkey Color Palette Dialog Box

11. Click **OK** , and then click **OK**

Create a Preset Hotkey—Telemetrics Cameras

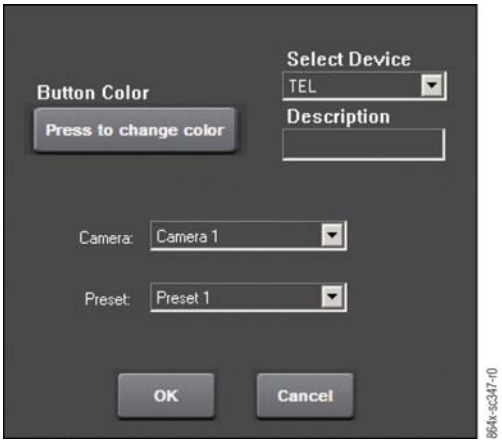
1. In the **Camera Preset** module on the left monitor, click the **Page** button (1–10) for the page on which to store the Hotkey.
2. On the **Camera Preset Hotkeys** module, click the **Setup** button, the **Setup** button highlights (Figure 273).

Figure 273. Camera Preset Hotkeys

Note In the following step, if the selected button already has a preset established, that existing preset is replaced.

3. Click either a blank hotkey or a currently used hotkey to replace. The **Setup** dialog box (Figure 274) appears.

Figure 274. Camera Hotkey Setup Dialog Box – Telemetrics Cameras



4. In the **Select Device** box, click a Telemetrics device in the drop-down list.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

5. In the **Description** box, type a description or abbreviation for the preset using established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

6. In the **Camera** box, click a camera in the drop-down list.

7. In the **Presets** box, click a camera preset in the drop-down list.

8. Click **Button Color Press to change color**. The **Color Palette** dialog box (Figure 275) appears.

Figure 275. Camera Hotkey Color Palette Dialog Box

9. Click **OK** , and then click **OK**

Create a Preset Hotkey—Cambotics

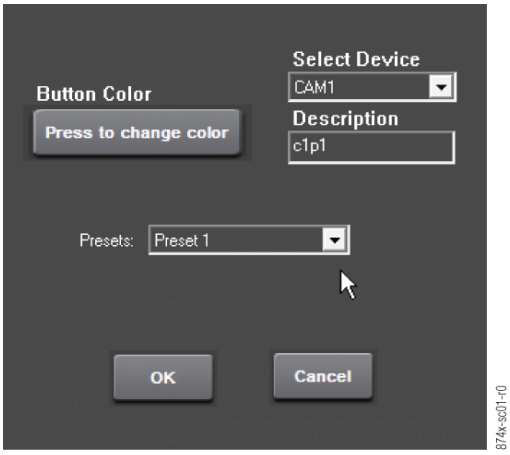
1. In the **Camera Preset** module on the left monitor, click the **Page** button (1–10) for the page on which to store the Hotkey.
2. On the **Camera Preset Hotkeys** module, click the **Setup** button, the **Setup** button highlights (Figure 273).

Figure 276. Camera Preset Hotkeys

Note In the following step, if the selected button already has a preset established, that existing preset is replaced.

3. Click either a blank hotkey or a currently used hotkey to replace. The **Setup** dialog box (Figure 274) appears.

Figure 277. Camera Hotkey Setup Dialog Box – Cambotics



4. In the **Select Device** box, click a Cambotics device in the drop-down list.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

5. In the **Description** box, type a description or abbreviation for the preset using established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

6. In the **Presets** box, click a camera preset in the drop-down list.

7. Click **Button Color Press to change color**. The **Color Palette** dialog box (Figure 278) appears.

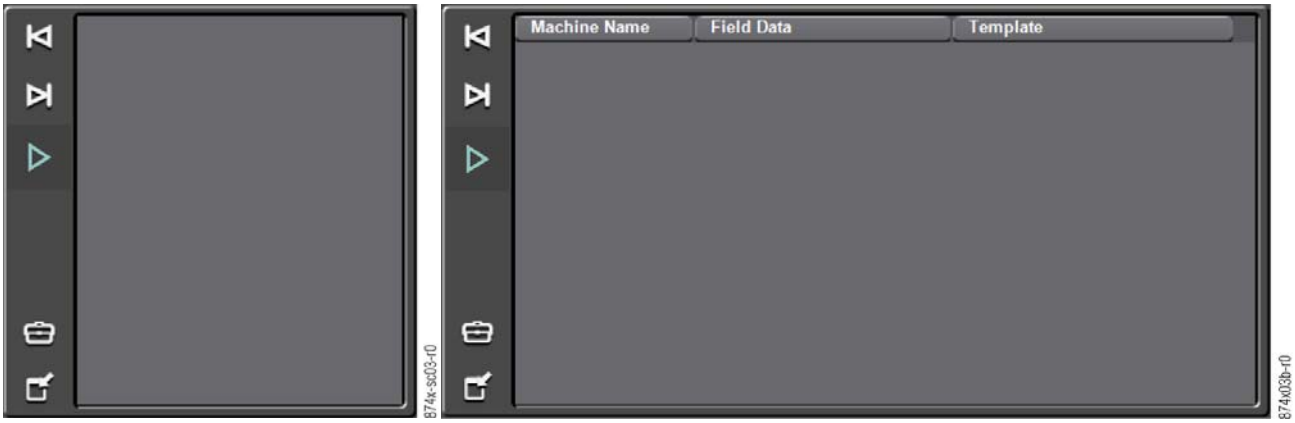
Figure 278. Camera Hotkey Color Palette Dialog Box

8. Click **OK** , and then click **OK**

Section 5

CG List Module

Figure 279. CG List Module



Narrow Mode

Wide Mode

Overview

The **CG List** Module (Figure 279) is located in the lower left corner of the center monitor, below the Event Timeline module. It enables the user to keep track of scripts/stories and their corresponding CGs within a show rundown. Dynamic script synchronization keeps scripts synced to Timeline changes.

The CG List has several user-selectable display options. Display options and settings are accessed by clicking the **Setup** icon.

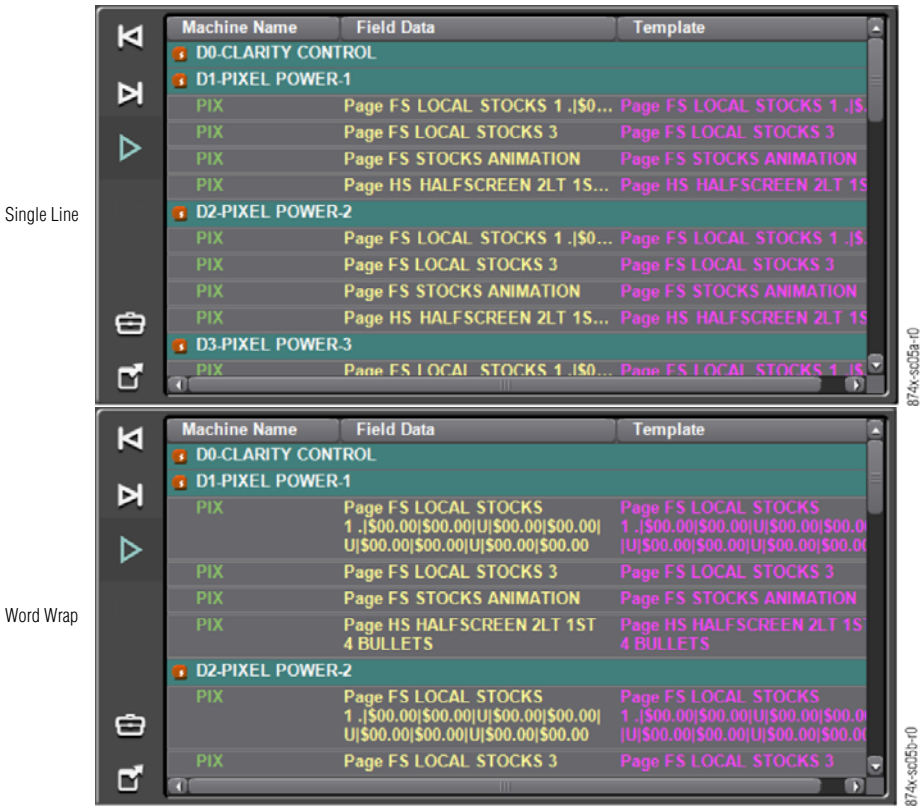
- **Narrow** mode – recommended view when also using the ScriptViewer Module. Refer to Figure 280 for:.
  - Single line display
  - Multiple line display

- **Wide** mode – recommended when the ScriptViewer Module is not used. Wide mode also displays columns for **Machine Name**, **Field Data**, and **Template**. Refer to Figure 281 for:
  - Single line display
  - Word wrap display

Note When the CG list is docked, Wide Mode extends the CG List view over top of the area reserved for the ScriptViewer module.

Figure 280. Narrow Mode – Single Line and Multiple Line Examples

Figure 281. Wide Mode – Single Line and Word Wrap Examples



Note When using MOS templates with Chyron, the Template field displays the page number created in Camio, not the template name.

Common Control Buttons and Indicators

The common control buttons and functions are:

Button	Control Function	Button	Control Function
864x-sc58-r0	Next	864x-sc57-r0	Setup
864x-sc59-r0	Previous	864x-sc40-r0	Undock
864x-sc51-r0	Take – brings the CG to the Program channel	864x-sc39-r0	Dock

The common indicators (Figure 282) are:

Note These indicators (and related features) are only available with Chyron HyperX with Lyric version 6.5 and above.

- **Error** icon – indicates an error with the CG. This could be that either the page or the template doesn't exist or that there is a problem with the data.
- **PGM** icon – indicates a **Take** command was issued to this device for this CG page.
- **PVW** icon – indicates a **Load** command was issued to this device for this CG page.
- Blue Outline – indicates the current story and story CG in the list.

Note Using the **CG Settings** dialog box **Display Settings** tab, the background colors for Error, PGM, and PVW indications are also selectable.

Figure 282. CG List Common Indicators

CG List Setup

CG List settings are configured via the **CG List Setup** dialog box, which is accessed by clicking the **Setup** icon. The dialog box comprises three tabs and three common-command buttons that function regardless of the selected tab:

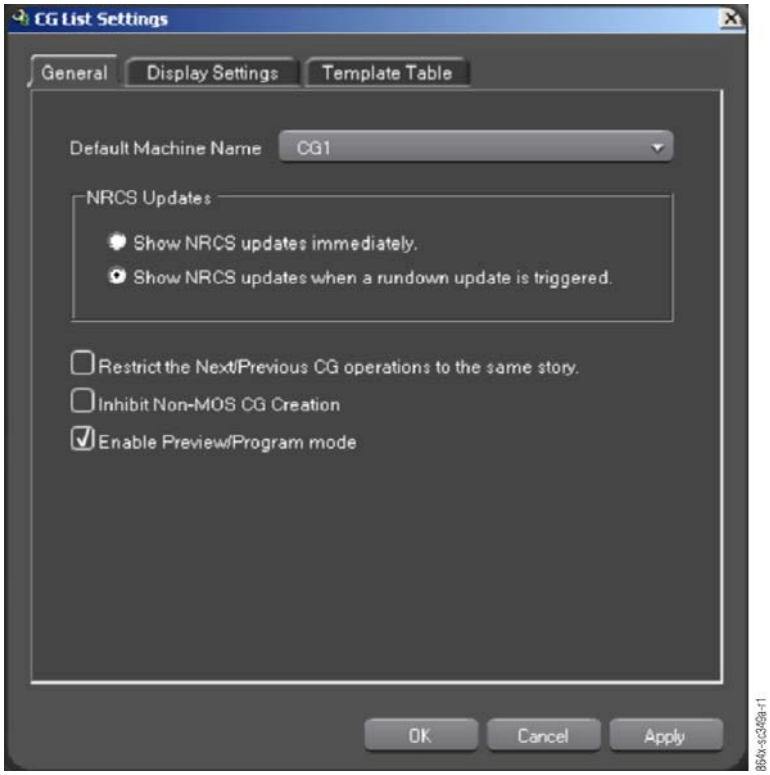
- *General Tab* on page 247 – general operation and display settings
- *Display Settings Tab* on page 248 – configures the CG List display
- *Template Table Tab* on page 251 – provides a Template Name to Template ID reference list
- **OK** – saves the settings and closes the dialog box
- **Cancel** – ignores all changes and closes the dialog box
- **Apply** – saves the settings but does not close the dialog box

General Tab

The **General** tab (Figure 283) provides general operation and display settings including:

- **Default Machine Name** - Defines the default CG Machine Name used if a CG machine name is not provided, is not specified for CG items that are manually entered into the rundown. (Non-MOS CGs only)
- **NRCS Updates** - Selects one of the following options:
  - **Show NRCS updates immediately** - When selected, updates of an imported rundown from the NRCS will be displayed in the CG List immediately without any user intervention.
  - **Show NRCS updates when a rundown update is triggered** - When selected, updates of the rundown will be displayed in the CG List when the user chooses to update the rundown to the Ignite/Ignite Konnect timeline.
- **Restrict the Next/Previous CG operations to the same story:**
  - When selected, the next CG and previous CG operations are restricted to the current story.
  - When not selected, the Next CG and Previous CG operation transcend the current story.
- **Inhibit Non-MOS CG Creation** – When selected, the non-MOS CG items from the NRCS are not created on the CG device, are not displayed on the CG List, and do not populate CG List timeline icons. Also, non-MOS CGs cannot be created from the Ignite/Ignite Konnect CG List or the the Ignite/Ignite Konnect timeline.
- **Enable Preview/Program mode** – When selected, enables Program/Preview for the CG List.

Figure 283. CG List Settings Dialog Box – General Tab



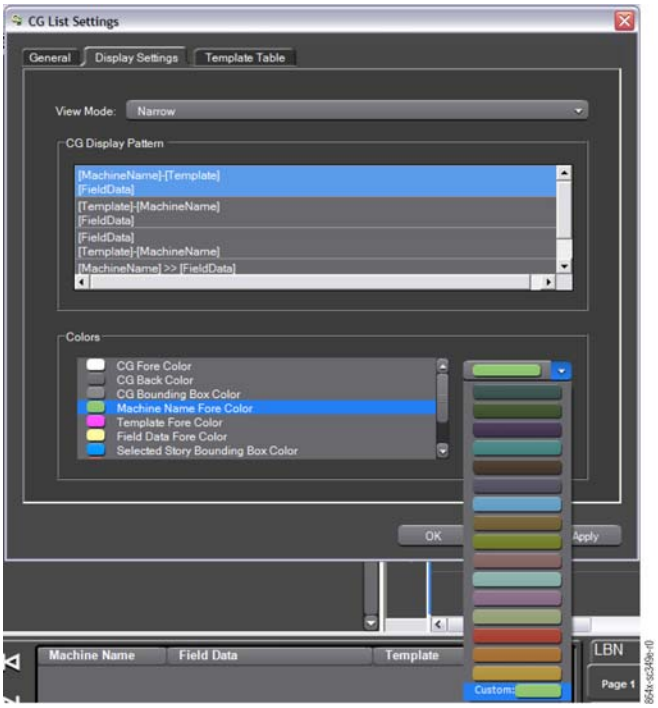
Display Settings Tab

Note Some Display Settings depend on the view selected: narrow or wide mode.

Common to both **Narrow** and **Wide** modes is the **Colors** area near the bottom of the **Display Settings** tab (Figure 284) where the:

- **Colors** list - displays and enables user-defined color assignments for the selected CG List item.
- **Color selection list** – provides both a default color palette and an optional custom color diaolg box for assigning item colors. This list is only available when an item is selected in the **Colors** list.
- **Use defaults** button - resets all colors to the default values assigned when the Ignite/Ignite Konnect system was first installed

Figure 284. Display Settings Tab – Colors



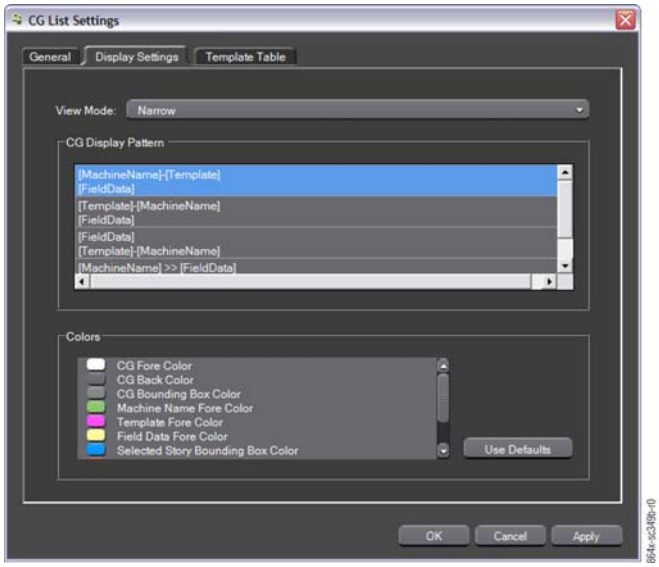
Narrow Mode

The **Display Settings** tab **Narrow** mode (Figure 285) provides CG List display configuration including:

- **View Mode** - sets either **Narrow** or **Wide** mode
- **CG Display Pattern** - displays the pattern and order that CG data will be displayed when in Narrow Mode

Note List contents shown in the example below are for illustration only and might differ slightly.

Figure 285. CG List Dialog Box – Display Settings Tab (Narrow Mode) Example



Wide Mode

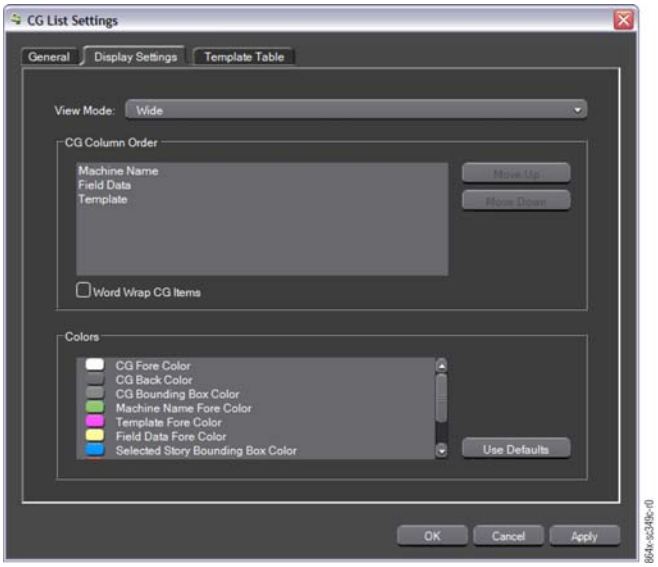
The **Display Settings** tab **Wide** mode (Figure 286) provides CG List display configuration including:

- **View Mode** – sets either **Narrow** or **Wide** mode
- **CG Column Order –** user-defined order for column appearances.

Note The top list position corresponds to the left-most (1st) column and the bottom list position corresponds to the right-most (last) column of the CG list module.

- **Word Wrap CG Items**:
  - When selected, word-wraps CG item text that does not fit on one line in the column.
  - When not selected, CG text that does not fit on one line in the column is truncated and restricted to one line.

Figure 286. CG List Dialog Box – Display Settings Tab (Wide Mode)



Template Table Tab

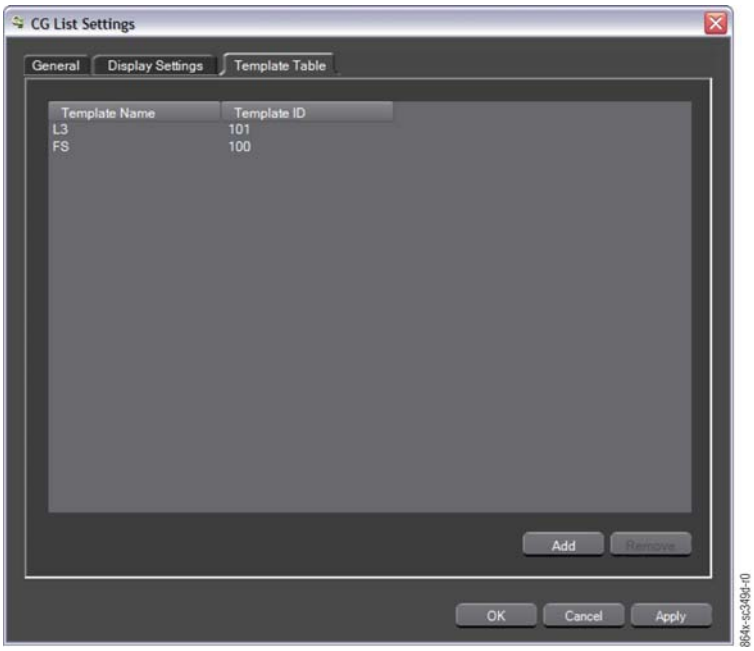
Note The Template Table tab is for non-MOS CGs only.

The **Template Table** tab (Figure 287) provides a Template Name to Template ID reference list. It also has two available command buttons:

Add – Appends a new entry to the template table.

Remove – Removes the selected entry from the template table.

Figure 287. CG List Dialog Box – Template Table Tab



Operation

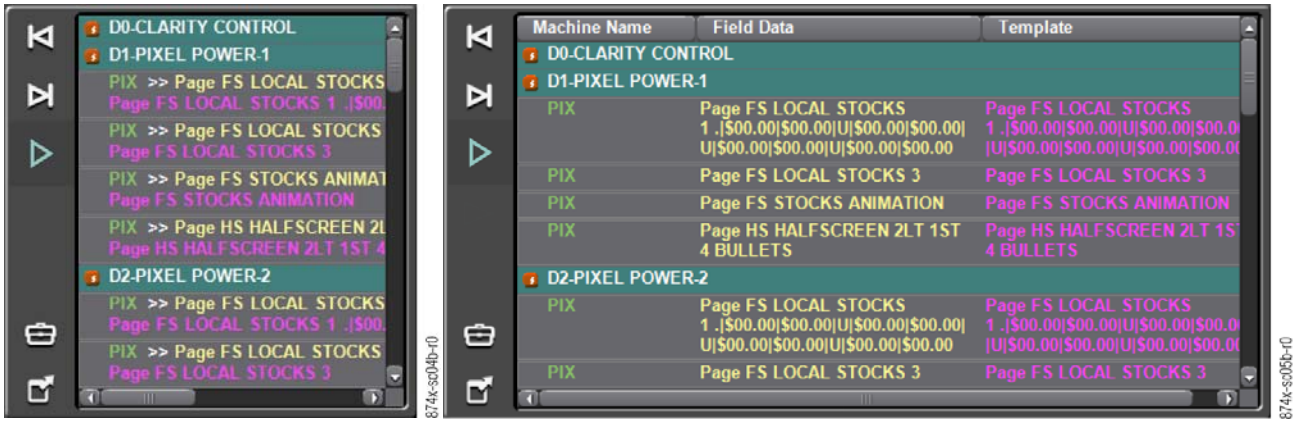
Note The CG List Preview features are only available with Chyron HyperX with Lyric version 6.5 and above.

Use the **Next** and **Previous** buttons as necessary.

Populate CG List

- On the **Event Timeline Tools** menu, click **Import Rundown**. The rundown appears to the left of the **Event Timeline** and in the **CG List** module (Figure 288).

Figure 288. CG List Rundown



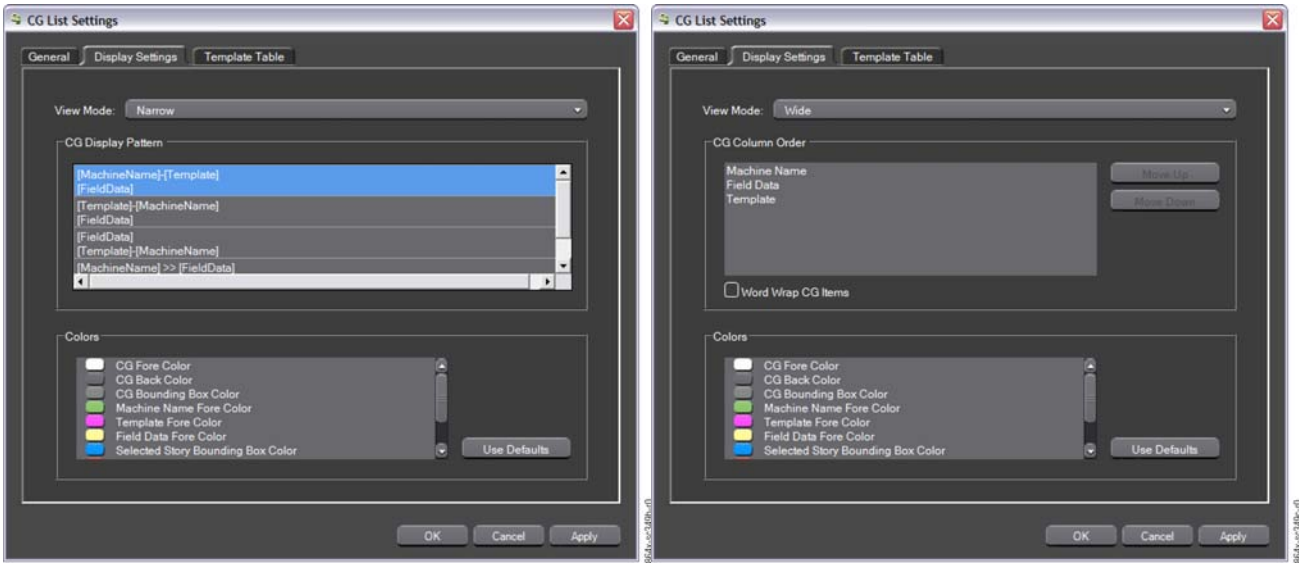
Narrow Mode Wide Mode

Set Display Mode

Narrow or Wide Mode

1. Click the **Setup** icon. The **CG List Settings** dialog box appears (Figure 289).
2. Click the **Display Settings** tab (Figure 289).

Figure 289. CGList Dialog Box – Display Settings Tab



Narrow Mode

Wide Mode

3. In the View Mode listbox, click either:

- **Narrow**
- **Wide**

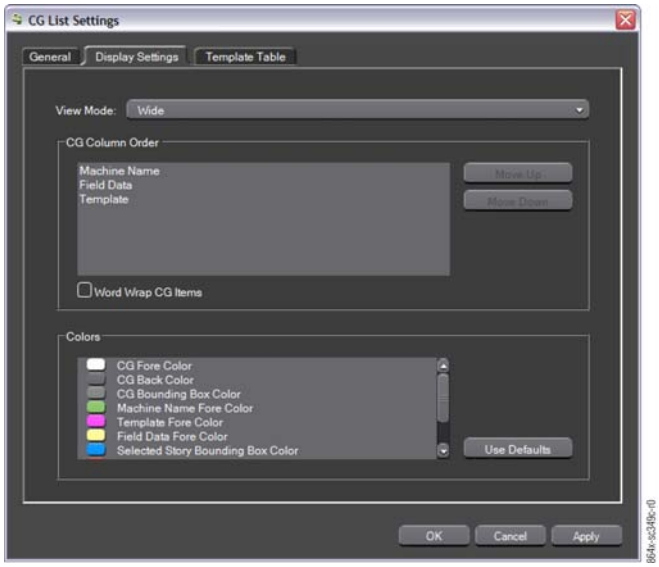
4. Click either:

- **OK** – to save the settings and close the dialog box
- **Cancel** – to ignore all changes and close the dialog box
- **Apply** – to save the settings but not close the dialog box

CG Column Order (Wide Mode Only)

1. Click the **Setup** icon. The **CG List Settings** dialog box appears (Figure 290).
2. Click the **Display Settings** tab.
3. In the **View Mode** list, click **Wide** and then click **Apply**.

Figure 290. CGList Dialog Box – Display Settings Tab



Note The **CG List** module column displays (left to right) are represented in the **CG Column Order** (top to bottom) where the top column name is viewed as the left most column in the CG List module, the second down is the next column to the right, etc.

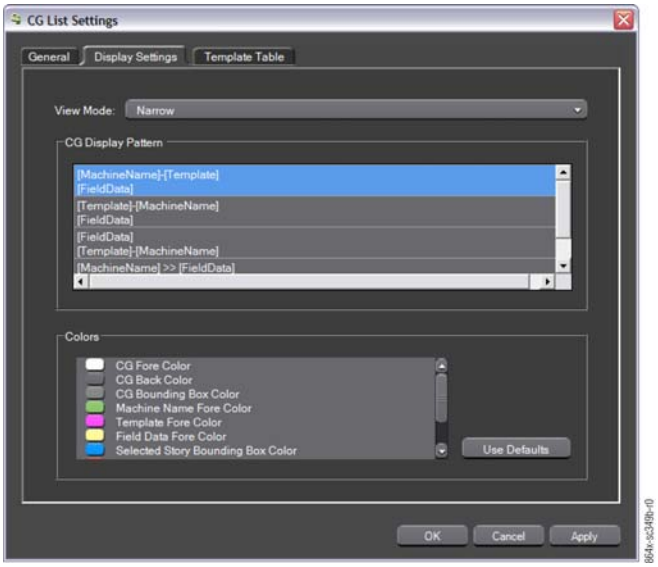
4. In the **CG Column Order** list, click a column to move, and then click either Move Up or Move Down as necessary to reposition that column.
5. Repeat Step 4 as necessary until all columns are positioned as desired.
6. Click either:

- **OK** – to save the settings and close the dialog box
- **Cancel** – to ignore all changes and close the dialog box
- **Apply** – to save the settings but not close the dialog box

CG Display Pattern (Narrow Mode Only)

1. Click the **Setup** icon. The **CG List Settings** dialog box appears (Figure 291).
2. Click the **Display Settings** tab.
3. In the **View Mode** list, click **Narrow** and then click **Apply**.

Figure 291. CGList Dialog Box – Display Settings Tab



4. Double-click a blank area (or at the end of the current list) within the **CG Display Pattern** list. A new Display Pattern entry field highlights.
5. Type the preferred display pattern variable(s); e.g., [MachineName], [Template], [FieldData].

Note Each variable or a combination of variables can be entered on an individual row in the Display Pattern Field. To add another row in the Display Pattern Field, type **SHIFT**+**ENTER**.

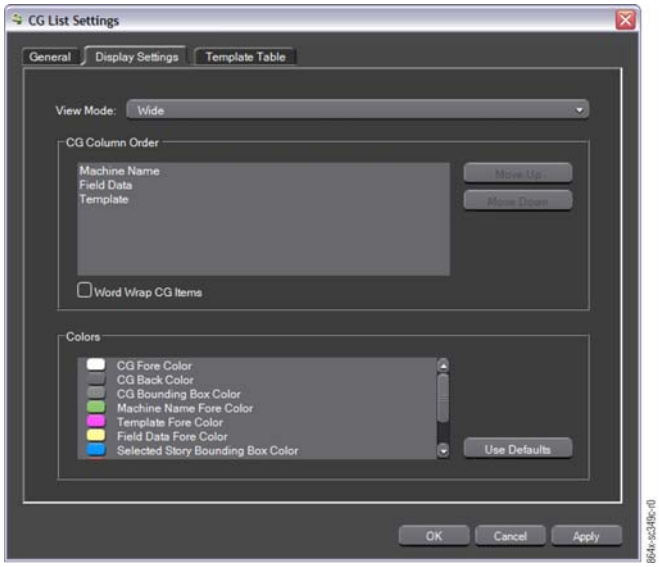
6. Press **Enter** and then click either:

- **OK** – to save the settings and close the dialog box
- **Cancel** – to ignore all changes and close the dialog box
- **Apply** – to save the settings but not close the dialog box

CG Column Word Wrap (Wide Mode Only)

1. Click the **Setup** icon. The **CG List Settings** dialog box appears (Figure 292).
2. Click the **Display Settings** tab.
3. In the **View Mode** list, click **Wide** and then click **Apply**.

Figure 292. CGList Dialog Box – Display Settings Tab



4. Either:

- Select the **Word Wrap CG Items** check box to use column word wrap and display on multiple lines as necessary.
- Clear the **Word Wrap CG Items** check box to remove column word wrap and display on a single line.

5. Click either:

- **OK** – to save the settings and close the dialog box
- **Cancel** – to ignore all changes and close the dialog box
- **Apply** – to save the settings but not close the dialog box

Edit a CG Display Pattern

Note Editing the default Display Patterns is not recommended. Instead, edit or create custom Display Patterns that provide the preferred CG List dispaly.

1. Double-click the **Display Pattern** field and edit as necessary.

2. Click either:

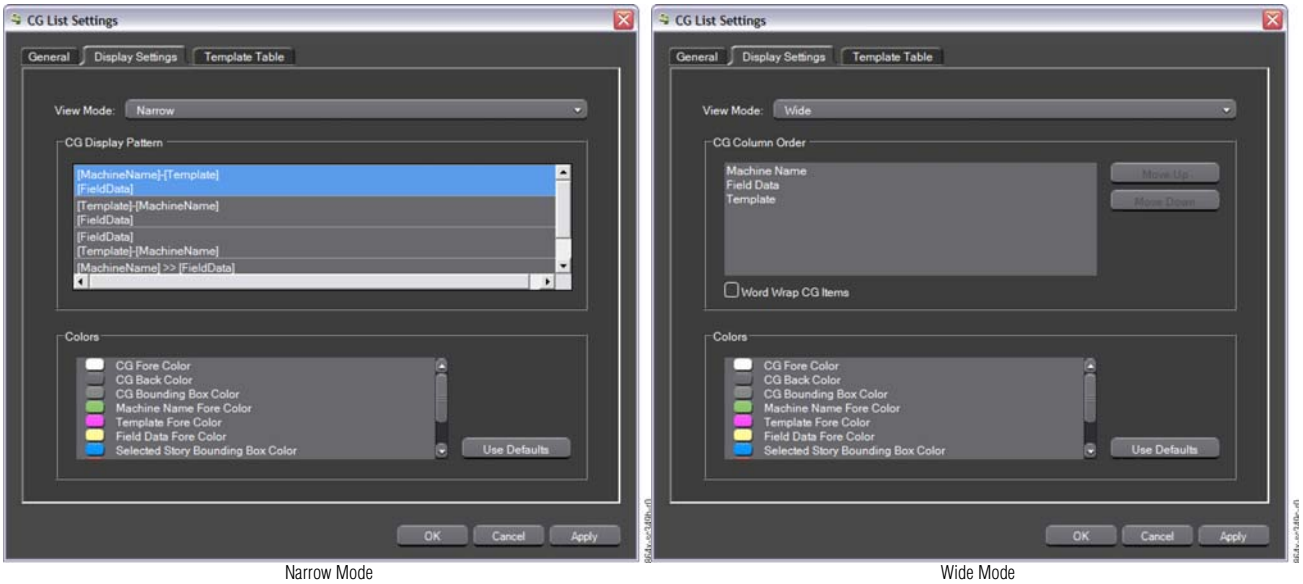
- **OK** – to save the settings and close the dialog box
- **Cancel** – to ignore all changes and close the dialog box
- **Apply** – to save the settings but not close the dialog box

Set Display Colors

Note To return colors to the default color, click **Use Defaults**.

1. Click the **Setup** icon.
   The **CG List Settings** dialog box appears (Figure 293).
2. Click the **Display Settings** tab.

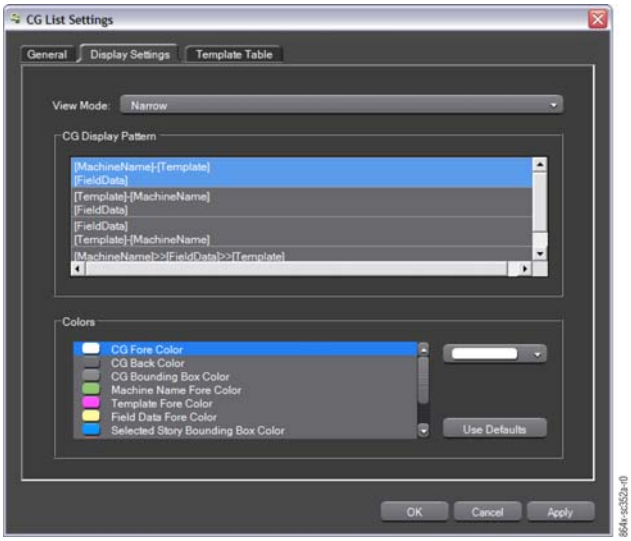
Figure 293. CGList Dialog Box – Display Settings Tab



Narrow Mode Wide Mode

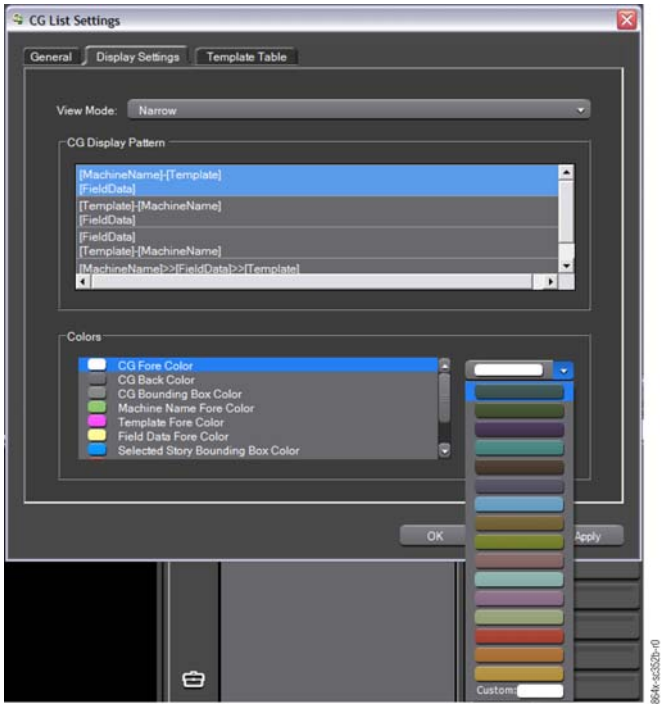
3. In the **Colors** list, click the display item to be colored.
   The currently assigned color appears in a list box to the right above the **Use Defaults** button (Figure 294).

Figure 294. CG Display Settings Color Example



4. Click the Color arrow to view more color options.
The Default Colors list appears (Figure 295).

Figure 295. CG Display Settings Default Colors List

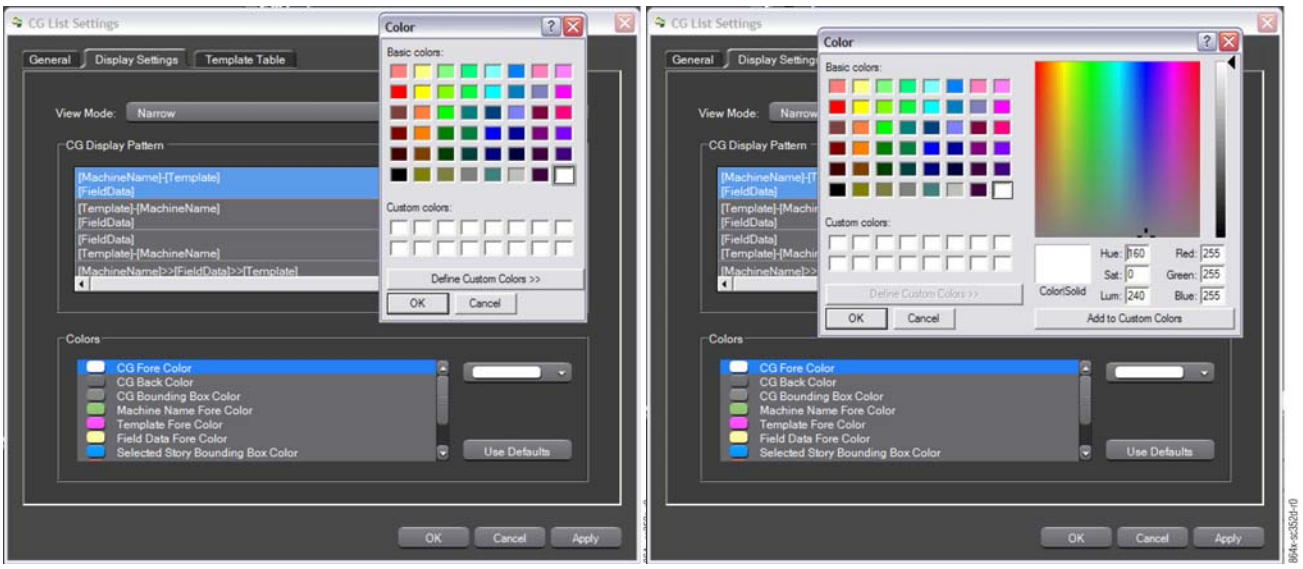


5. In the Colors List, either:

- Select a default color and then click either:
  - **OK** – to save the settings and close the dialog box
  - **Cancel** – to ignore all changes and close the dialog box
  - **Apply** – to save the settings but not close the dialog box
- Click **Custom** to select a custom color.
  The **Color** dialog box appears (Figure 296).

Note Click **Define Custom Colors** to customize/create a specific color.

Figure 296. CG Display Settings Custom Colors Dialog Box



6. Either:
   - In the **Basic colors** or **Custom colors**, click the desired color
   - Type in the **R**, **G**, and **B** color coordinates
   - Point and click the desired color in the color palette

Note To add the color as a palette **Custom color**, click **Add to Custom Colors**

7. Click either:
   - **OK** – to save the settings and close the dialog box
   - **Cancel** – to ignore all changes and close the dialog box
   - **Apply** – to save the settings but not close the dialog box

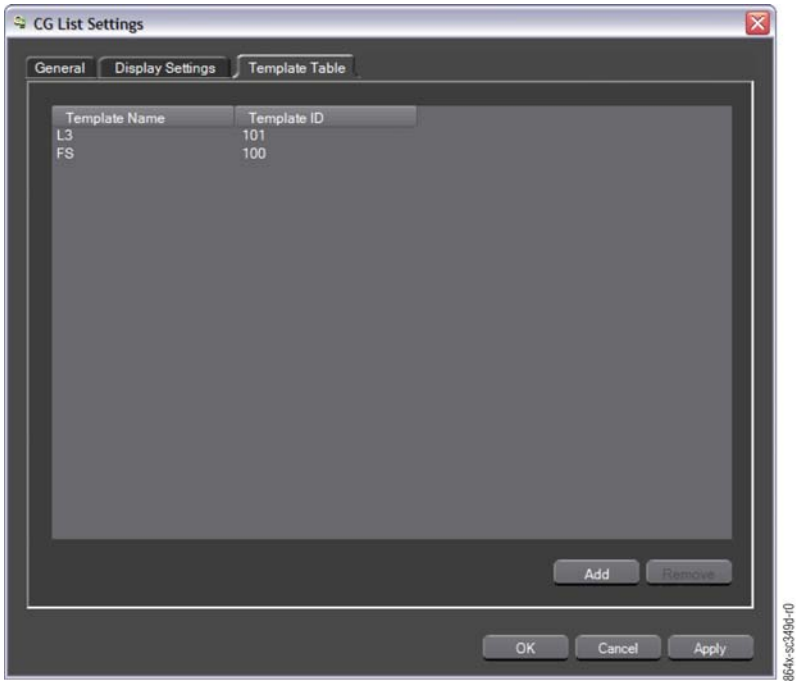
CG Template Table

Note The Template Table tab is for non-MOS CGs only.

Add a Template

1. Click the **Setup** icon. The **CG List Settings** dialog box appears (Figure 297).
2. Click the **Template Table** tab.

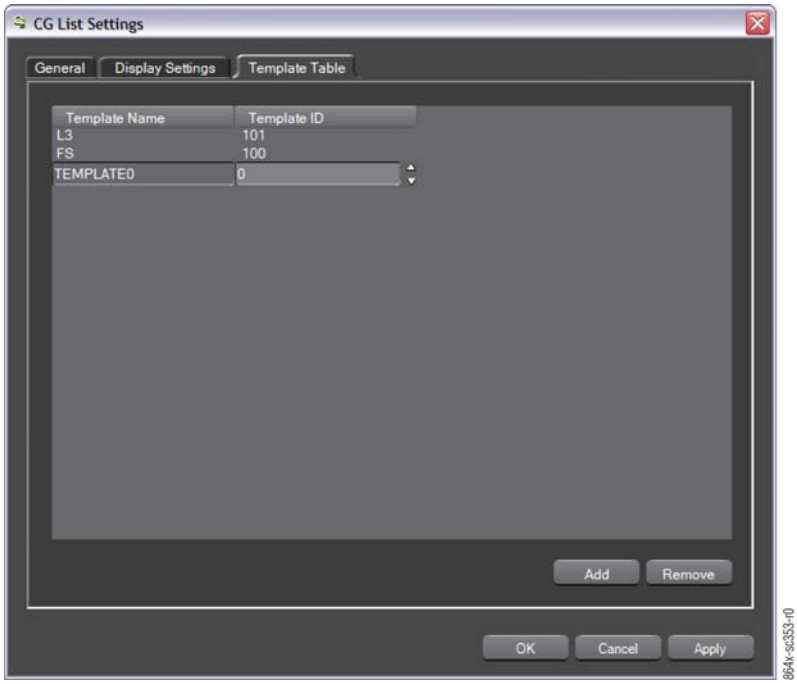
Figure 297. CG List Dialog Box – Template Table Tab



3. Click **Add.** A new default CG template is added to the list (Figure 298).

Note Added templates have a default name and default ID until changed. The default name is TEMPLATEn where n is the next sequential number starting from 0. The default ID is the next sequential number starting from 0.

Figure 298. Add a Template - Example



Note In the following two steps, the template name is restricted to 64 characters and the template ID must be between 0 and 99999999. Template names cannot be duplicated. Template IDs can be duplicated if desired.

Note The Template Name and Template ID columns are resizable. They can also be sorted either alphabetically by template name or numerically by template ID.

4. Click the default template name and type a new Template Name. The Template Name corresponds to a bracket CG or Star CG template from the NRCS system. Click the default template ID and type a new template ID.

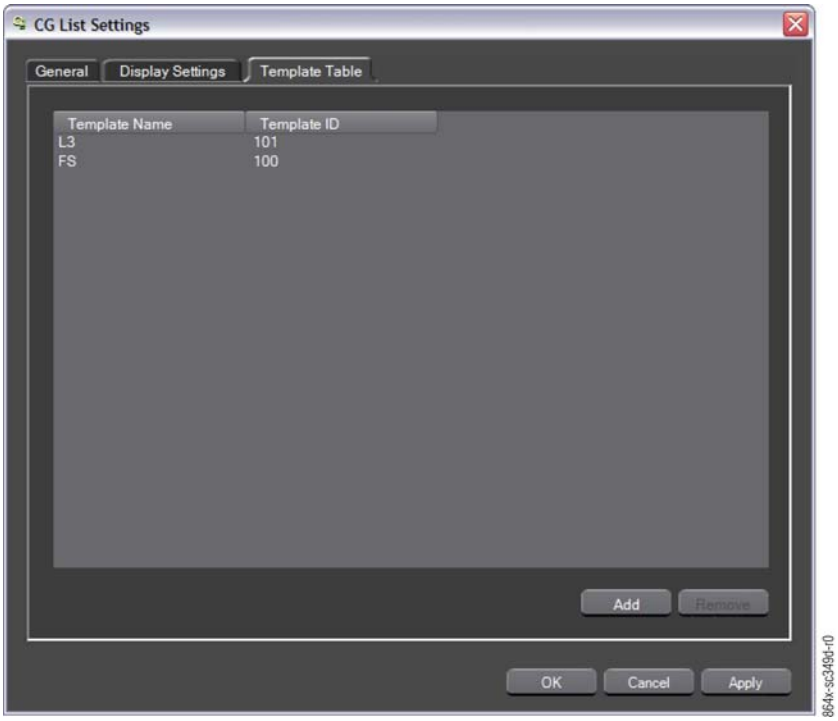
Note The Template ID must correspond with a template graphic page number on the CG device.

5. Click either:
   - **OK** – to save the settings and close the dialog box
   - **Cancel** – to ignore all changes and close the dialog box
   - **Apply** – to save the settings but not close the dialog box

Delete A Template

1. Click the **Setup** icon.
   The **CG List Settings** dialog box appears (Figure 299).

Figure 299. CG List Dialog Box – Template Table Table



2. Click the **Template Table** tab, and then click the template to be removed.
3. Click **Remove** A warning message (Figure 300) appears to confirm deletion.

Figure 300. Delete A Template – Confirmation

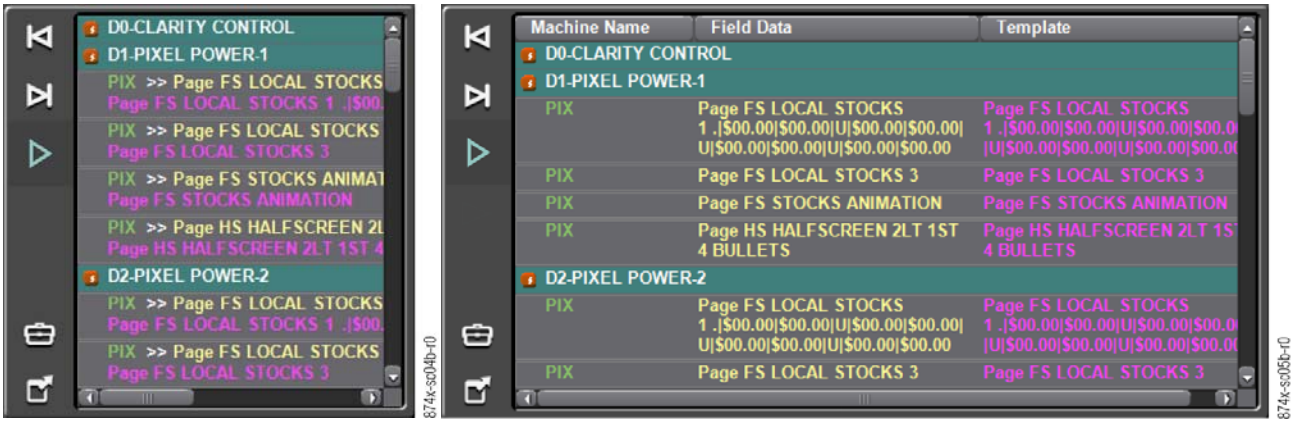
4. Either:
   - Press **ENTER** to confirm and delete the template
   - Click **Yes** to confirm and delete the template
   - Click **No** to cancel and not delete the template.

Load a Script

Note ScriptViewer must be configured, connected, and monitoring the corresponding Ignite/Ignite Konnect rundown for Load Script to function properly. Miniview mode is optional.

1. On the **Event Timeline Tools** menu, click **Import Rundown**. The rundown appears to the left of the **Event Timeline** and in the **CG List** module (Figure 301).

Figure 301. CG List Rundown



Narrow Mode

Wide Mode

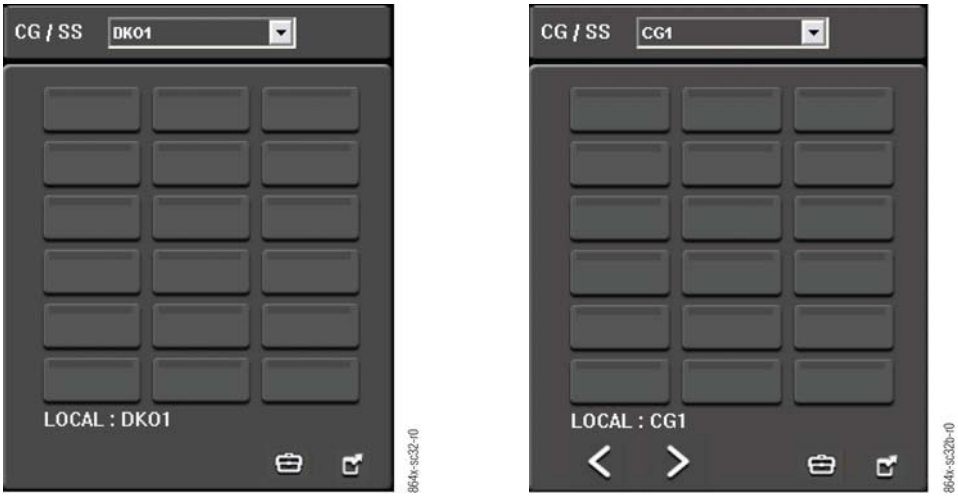
2. Double-click a story name in the CG List to select it.
The selected story bounding box pointer moves to the selected story. The currently loaded script is cleared and the selected story script loads into the prompter.

Note If Miniviewer is enabled, the currently loaded script is also cleared and the selected story script loads into the Miniviewer.

Section 6

CG/SS Module

Figure 302. CG/SS Hotkeys Module



Overview

The **CG/SS** Module (Figure 302) provides hotkey access to preset static or animated text and graphics (e.g., crawls, tickers) such as name captions, other word graphics, and simple symbols that can be added to a program. Each generated graphic is assigned a CG/SS identifier and saved as a preset hotkey on the CG/SS Module. Channels are selected via the drop-down list. A total of 18 preset hotkeys can be assigned to each channel of a device. Up to 9999 pages can be recalled from the TME timeline.

Each device channel has its own CG/SS hotkeys page. There are 18 configurable hotkeys for each device channel. To change device channels, in the drop-down list at the top of the module, click the device.

Note The forward arrow advances forward by one ID number and the back arrow moves backward by one ID number.

Common Control Buttons

Table 8 lists the common control buttons.

Table 8. Common CG/SS Control Buttons

Button	Control Function	Button	Control Function
864x-sx58-r0	Next	864x-sx57-r0	Setup
864x-sx59-r0	Previous	864x-sx40-r0	Undock
		864x-sx39-r0	Dock

Operation

Create CG/SS Hotkeys

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

1. Click the **Setup** button, the **Setup** button (Figure 303) highlights.

Figure 303. Hotkey Setup Button

2. Click a hotkey (either a blank one or one currently in use that will be replaced). The **Setup** dialog box (Figure 4) appears.

Note The number of text boxes and options depend on the CG being set up.

Note In the following steps, not all CGs use IDs. Some require template & field information (e.g., DekoMOS) and others want full MOS data (e.g., Vertigo).

Figure 304. CG Setup Dialog Box Example

3. If an ID field is present, type the ID for the CG/SS and label it.
4. Type the page number in the **Page Number** text box.
   Type the button label information in the **Button Label** text box.
5. To change the color, click **Press to change color** .
   The Color Palette (Figure 305) appears.

Figure 305. Color Palette

6. Click the desired color
   a. Either:
      - Click **OK** to save and close the color palette
      - Click **Cancel** to close the color palette without saving.
7. Either:
   a. Click **OK** to save and close the CG Setup dialog box.
   b. Click **Cancel** to cancel the setup and close the CG dialog box without saving.
8. When complete, click **OK**.

Note Remember that CG/SS hotkeys store with the current show/user macro.

9. On the Event Timeline module, click the **File** menu, and then click either **Save** or **Save As**.

Place a CG on the Event Timeline

- Right-click the desired Hotkey and then drag and drop the CG onto the Event Timeline.

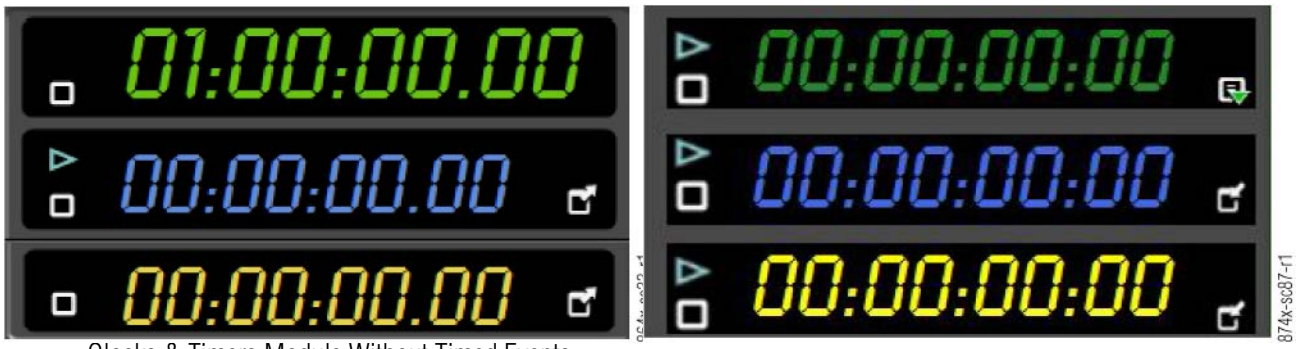
Delete CG/SS Hotkeys

Once created, hotkeys can not be deleted. Instead, create a blank hot key to replace a hotkey instead of deleting a hotkey.

Section 7

Clocks and Timers Module

Figure 306. Clocks & Timers Module



Clocks & Timers Module Without Timed Events

Server Countdown Timer

Overview

The **Clocks and Timers** Module (Figure 306) has several clocks and timers that function within the Ignite/Ignite Konnect application only. As a default, the clocks are grouped together near the center of the left monitor. Timers are typically associated to and located with a specific Ignite/Ignite Konnect module function.

Without Timed Events active, these clocks work within the Ignite/Ignite Konnect system only and cannot be controlled by an outside device such as a switch or foot pedal, nor can time code nor house time be sent to them. The Event Clock and Manual Clock can be docked/undocked.

With Timed Events, these clocks work within the Ignite/Ignite Konnect system only and cannot be controlled by a switch, foot pedal, or house time. The difference with Timed Events is that the Show Clock can be set either manually to a set time or it can be set to use the system clock on the workstation where Ignite is installed. This enables setting Global commands

based on actual time instead of a predetermined show back-time. The Event Clock and Manual Clock can be docked/undocked.

Common Control Buttons

Table 9 lists the common control buttons for clocks and timers.

Table 9. Common Clock Control Buttons

Button	Control Function	Button	Control Function
	Start		Dock
	Stop		Undock

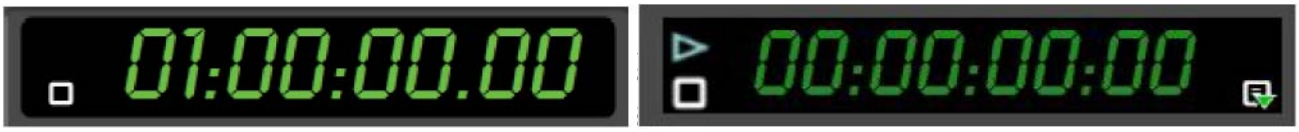
Clocks

Each clock has a different purpose within the Ignite/Ignite Konnect application. They cannot be controlled by an outside device such as a switch or foot pedal nor can time code or house time be sent to them.

Show Clock (Green)

The **Show Clock** (Figure 307) is a countdown clock that is triggered when a Time Line Timer Mark, with a time greater than zero assigned, is encountered on the Ignite/Ignite Konnect Event Timeline. When the assigned countdown duration is completed, the **Show Clock** display changes to red and the clock begins counting up from zero. The **Show Clock** can be stopped manually at any time.

Figure 307. Show Clock



Manual Clock (Blue)

The **Manual Clock** (Figure 308) is a count up clock with both a manual **Start** button and a manual **Stop** button. Subsequent clicks of the **Start** button reset and restart the **Manual Clock** from zero.

Figure 308. Manual Clock

Event Clock (Yellow)

The **Event Clock** (Figure 309) is a count up clock triggered when a Time Line Timer Mark, with zero time assigned, is encountered on the Ignite/ Ignite Konnect event timeline When triggered, it begins counting up from zero. The **Event Clock** can be stopped manually at any time.

Figure 309. Event Clock

Timers

Server Countdown Timer

Display

The **Server Countdown Timer** (Figure 310), when configured, initially appears on the center monitor, at the top-right of the Event Timeline Module. The timer can be repositioned to any of the Ignite/Ignite Konnect monitors using the Dock/Undock control function.

The **Server Countdown Timer** displays video clip duration, which is obtained from the server, in either:

- Countdown mode - displays time remaining.
- Count up mode - displays elapsed time.

Note Typically the Server Countdown Timer docks on the Event Timeline module but it can be undocked and/or pinned in another location—anywhere on the tri-monitor display.

Figure 310. Server Countdown Timer

Clip duration can be either the clip length (the physical length of the clip) or a segment of the clip as specified in the NRCS by the user. If the duration is not specified, the total clip length is assumed.

Also, four specific, user-defined timepoints can be set for assigned timer actions. Timepoints are formatted as time codes and display hours, minutes, and seconds as Hours:Minutes:Seconds. Each timepoint can be assigned one or both of the following actions.

- Change color to red, green, or amber.
- Trigger a user selectable GPI output

These timepoints are configured using either the beginning or the end of the clip as the reference point. timepoints and actions are globally assigned and are shared among all server devices.

To include a standard pad time at the end of a VO or SOT, the Server Countdown Timer is configured for a standard pad time in order to automatically calculate duration. The pad time amount is globally assigned and shared among all server devices. The allowed range of pad time is 0 to 90.

- Calculated duration = Clip length - Pad.
- NRCS duration < Calculated duration, where Calculated duration = NRCS duration.
- (NRCS duration > Calculated duration) and (NRCS duration <= Clip length), where Calculated duration = NRCS duration.
- NRCS duration > Clip length, where Calculated duration = Clip length.
- Once calculated duration expires, the clock runs negative for the remaining clip length.

In addition, the Server Countdown Timer is used to configure the count mode for supported Grass Valley UMD (Under Monitor Display) devices. in either:

- Countdown mode – UMD displays time remaining
- Count up mode – UMD displays elapsed time

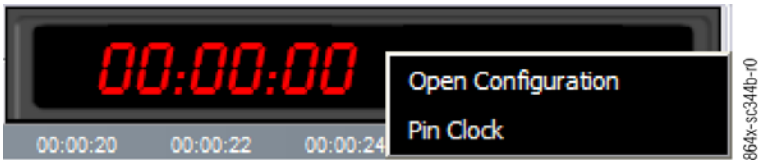
The UMD driver supports serial communication and is responsible for transmitting time data to the UMD device. The supported Grass Valley UMD devices are:

- Grass Valley UMD-CTRL/16 (can be daisy chained with more controllers)
- Grass Valley UMD-TD/19 (16 per controller)

The **Server Countdown Timer Context Menu** (Figure 311) provides access to the **Open Configuration** and **Pin Clock** menu items. Right-click the **Server Countdown Timer** to display the context menu.

Note Typically the Server Countdown Timer docks on the Event Timeline module but it can be undocked and/or pinned in another location—anywhere on the tri-monitor display.

Figure 311. Server Countdown Timer Context Menu.



- **Open Configuration** – opens the timer configuration dialog box
- **Pin Clock** – docks and locks the timer at its current position. When pinned, the timer remains at that location, even if the Ignite/Ignite Konnect system is restarted. To move the timer it must be undocked first.

Configuration

Note Initially the **Server Countdown Timer** is pre-configured in the **Device Control** module, via the VDCP setup dialog box, during Ignite/Ignite Konnect installation.

The **Server Countdown Timer** is configured, via the **Context Menu**, by clicking the **Open Configuration** menu item. Configuration comprises:

- **Clip Settings**
  - **Count Mode** – sets the timer mode for either count up or count down.
  - **Pad time** – the amount of time, in seconds, included at the end of the clip. The default is zero and the allowed range is between 0 and 90.
  - **Negative Duration** – enables/disables ability to run negative for the remaining clip length after calculated duration expires.
- **Timepoint Configuration** – configures/enables user selected, color-coded (Red, green, or amber) timepoints. Up to four timepoints can be set for:
  - **TimePoint** –
  - **Reference point** – Clip Start or Clip End
  - **Color** – red, green, or amber
- **UMD Configuration** – lists all configured UMDs and the respective count mode.
- **OK** – saves the changes and closes the dialog box.
- **Cancel** – closes the dialog box without saving changes

Timed Events

Timed Events are pre-defined actions that occur at specific times. These Timed Events can be either:

- Global Timed Events – that follow the Show Clock (green clock).
- Production Timed Events – that follow the Event Clock (yellow clock).

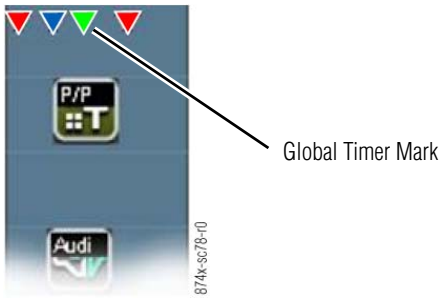
These timed events are triggered via TME. When it's time to play an event, the TME contained within the event is executed.

Global Timed Events

Global Timed Events are TMEs that automatically run at a certain preset time on the Program Clock. These are usually set to trigger events that must happen at a fixed time in the program (e.g. rolling a closing server clip to time out a program).

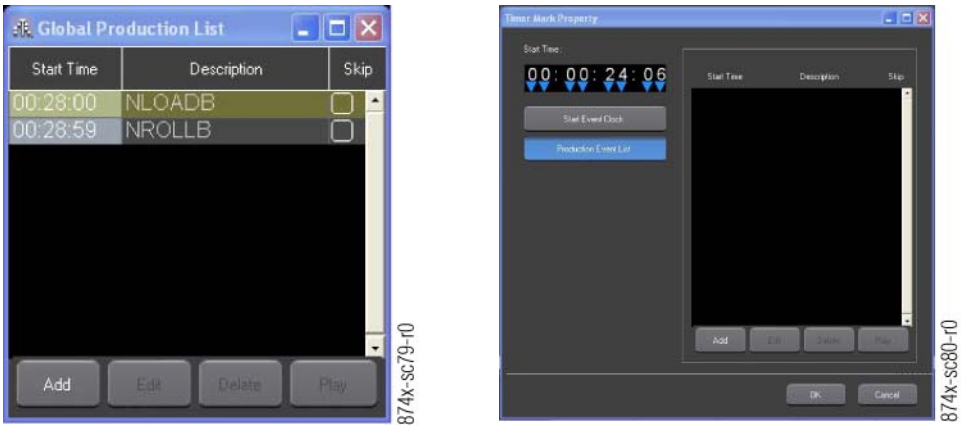
The Global Clock is triggered when a green Global Timer Mark with its properties set to **Start Clock** is encountered in the timeline (Figure 312).The green Global Timer Mark is usually put in the first TME of a program timeline at the appropriate position to trigger at the start of the program.

Figure 312. Green Global Timer Mark



A Global Timed Event is set up by adding it directly to either the **Global Production List** or the **Timer Mark Property** dialog box.

Figure 313. Global Production List and Timer Mark Property Dialog Box Examples



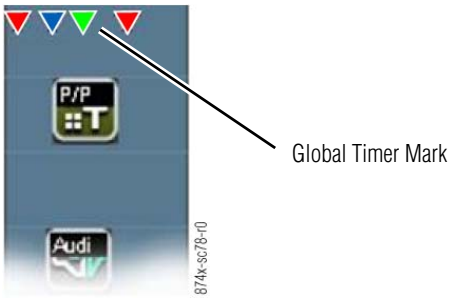
If there are Global Events in an NCS rundown, the **Global Event List** is loaded when a rundown is imported and is displayed in the top-right of the left screen (over the top of the **CG Hot Keys** module). The **Global Production List** can be hidden and redisplayed by clicking the toggle icon on the **Green Clock** display (Figure 314).

Note The Global Production List can be set up to auto-toggle, so that it does not impede access to the CG Hot Keys. Refer to *Auto-toggle Production List* on page 292

Figure 314. Show Clock

Once the Global Clock (Green) is set running the TMEs in the Global Production List will execute at the set time. The clock is usually triggered from a green timer mark at the beginning of the program (Figure 315)

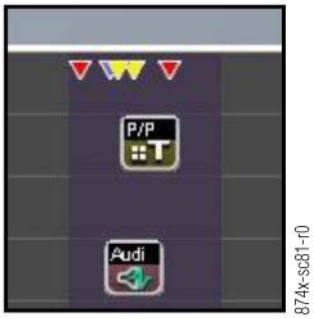
Figure 315. Green Global Timer Mark



Production Timed Events

Production Events are tied to a specific item in a rundown. Production events are triggered by the yellow Event Clock that is reset at the beginning of each TME requiring timed events. A TME that requires timed events must contain two yellow timer marks. The first mark re-sets and triggers the Event Clock and the second mark opens the Production Event window.

Figure 316. TME With Yellow Timer Marks



When the TME executes, the cursor crosses the first yellow mark to reset and trigger the yellow **Event Clock**. The cursor continues executing all icons until it reaches the second yellow mark where it stops and opens the **Event List** for the item in question. After all the events in the **Event List** have executed, the cursor continues and bus preps the next TME.

To keep the TME principle of only one operation per frame on the timeline, the first yellow mark (to trigger the clock) is placed 2 frames after the blue stop mark, as shown in Table 10.

Table 10. Production Timed Events – TME Structure With Yellow Markers

Frame	Operation
0	Blue Stop Mark
1	Roll Server
2	First Yellow Mark
3	Audio
4	-

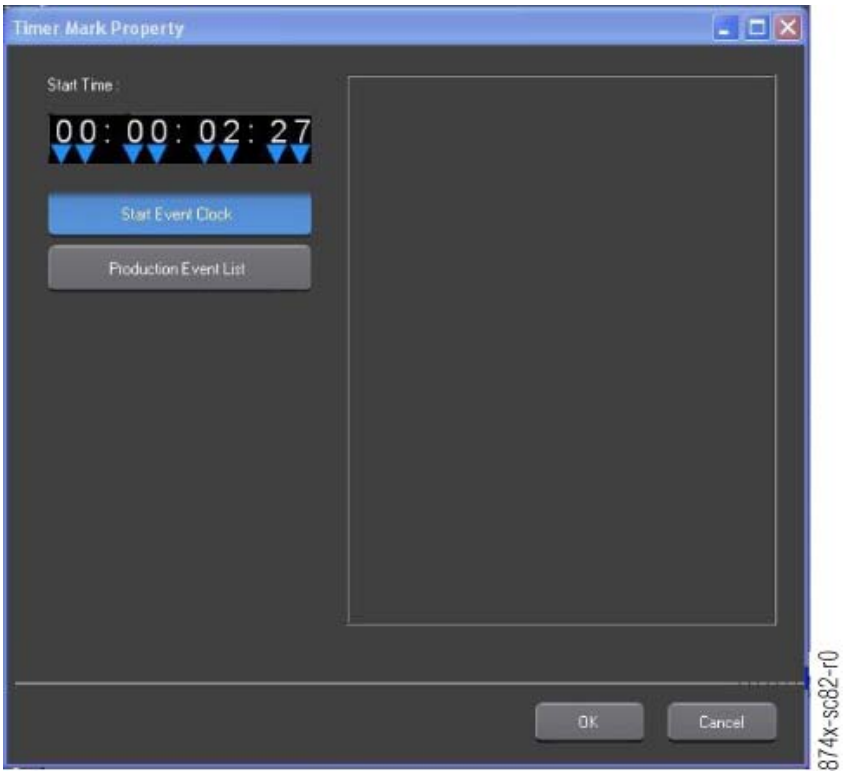
Table 10. Production Timed Events – TME Structure With Yellow Markers

Frame	Operation
5	Kayak
6	Second Yellow Mark

Where:

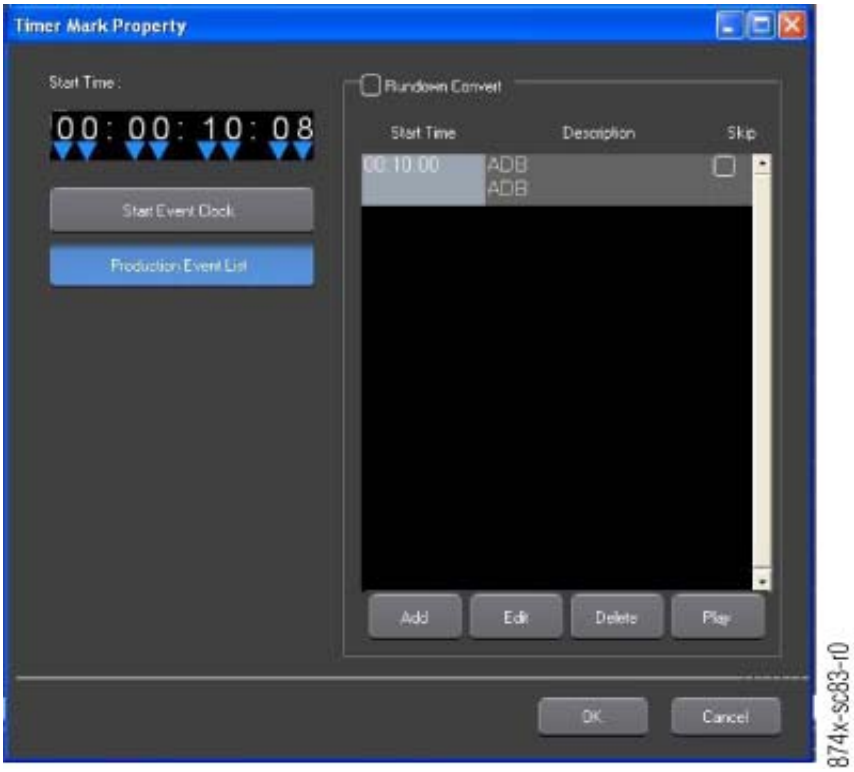
- The first yellow mark is set to trigger the **Event Clock**, by opening its properties window (right click mark and select properties or double click yellow mark) and selecting **Start Event Clock**, and then clicking **OK** (Figure 317).

Figure 317. Timer Mark Property Dialog Box - Start Event Clock



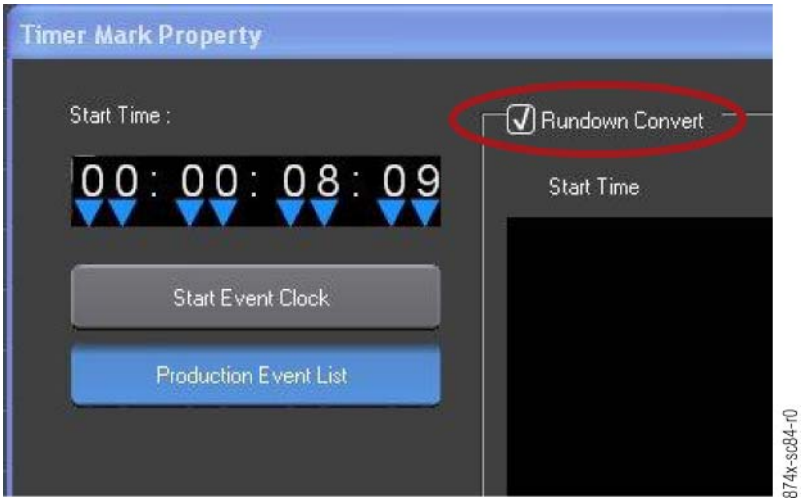
- The second yellow mark is set to open the **Event List**, by opening its properties window (right-click the mark and select properties or double-click the yellow mark) and select **Production Event List** (Figure 318).

Figure 318. Timer Mark Property Dialog Box - Yellow Mark Production Event List



Although **Timed Events** can be added directly to the **Timed Event List** using the **Timer Mark Property** dialog box (Figure 318), **Timed Events** are usually added to the list by adding codes to the NCS Rundown. To enable importing timed events from the rundown, the **Rundown Convert** check box (Figure 319) must be selected.

Figure 319. Timer Mark Property Dialog Box - Rundown Convert Check Box



MOS Objects can also be used to populate Timed Events. Newsroom Computer Systems (NCS) that support MOS (Media Object Server) protocol when paired with character generators that also support the MOS protocol generate CGs automatically from the NRCS script. Ignite uses these same MOS objects to populate the CG List when **Rundown Convert** is selected in a TME yellow **Timer Mark Property** dialog box.

When using MOS Objects and Ignite Timed Events, the in and out time of the CG is entered in the slug field.

Note If in/out time is not entered the page is still created and entered into the CG List, but a timed event is not generated.

For example, The CG MOS Objects entered in Figure 320 would create the **CG List** shown in Figure 321 and the **Timed Events Production List** shown in Figure 70.

Figure 320. CG MOS Objects in iNEWS Example

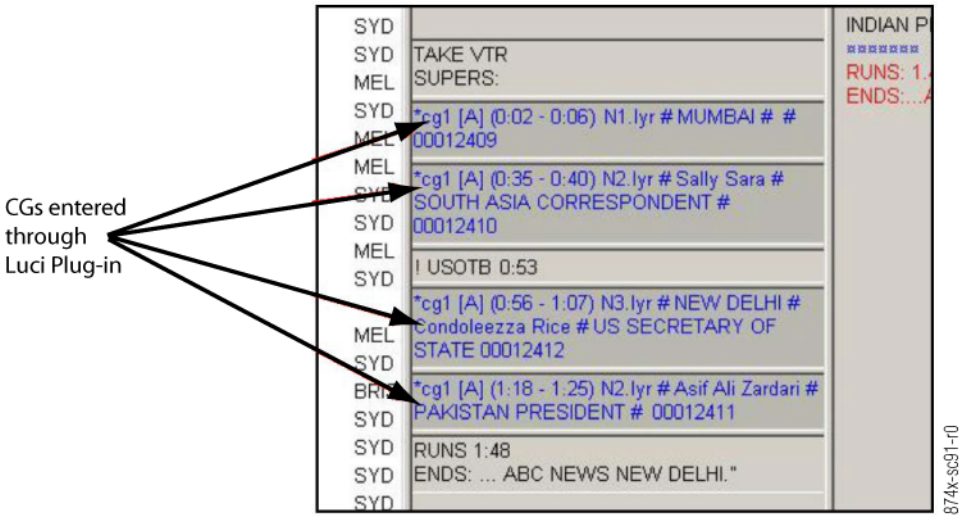


Figure 321. CG List From NCS Example

Figure 322. Generated Timed Event Production List Example

Operation

Clocks

Note Without Timed Events active, these clocks work within the Ignite/Ignite Konnect system only and cannot be controlled by an outside device such as a switch or foot pedal, nor can time code nor house time be sent to them.

With Timed Events active, these clocks work within the Ignite/Ignite Konnect system only and cannot be controlled by a switch, foot pedal, or house time. The difference with Timed Events is that the Show Clock can be set either manually to a set time or it can be set to use the system clock on the work-station where Ignite is installed. This enables setting Global commands based on actual time instead of a predetermined show back-time.

Show Clock (Green)

- The **Show Clock** (Figure 323) is triggered and begins counting down when an Event Timeline Timer Mark (with a time greater than zero assigned) is encountered on the Ignite/Ignite Konnect Event Timeline. When the assigned countdown duration is completed, the **Show Clock** display changes to red and the clock begins counting up from zero.
- To manually stop the clock at any time, click the **Stop** button in the lower left of the clock.

Figure 323. Show Clock

Manual Clock (Blue)

The Manual Clock (Figure 324) has a manual **Start** button and counts up.

- To start the clock, click the **Start** button.
- To reset and restart the clock at zero, click the **Start** button
- To stop the clock, click the **Stop** button.

Figure 324. Manual Clock

Event Clock (Yellow)

The event clock (Figure 325) is designed for any TME that is to automatically start a clock, such as a TME that rolls a tape.

- The Event Clock is triggered and begins counting up from zero when a Time Line Timer Mark with zero time assigned is encountered on the Ignite/Ignite Konnect Event Timeline.

Note The Event Clock restarts at zero every time a Time Line Timer Mark is encountered.

- To manually stop the clock at any time, click the **Stop** button in the lower left of the clock.

Figure 325. Event Clock

Timers

Server Countdown Timer Configuration

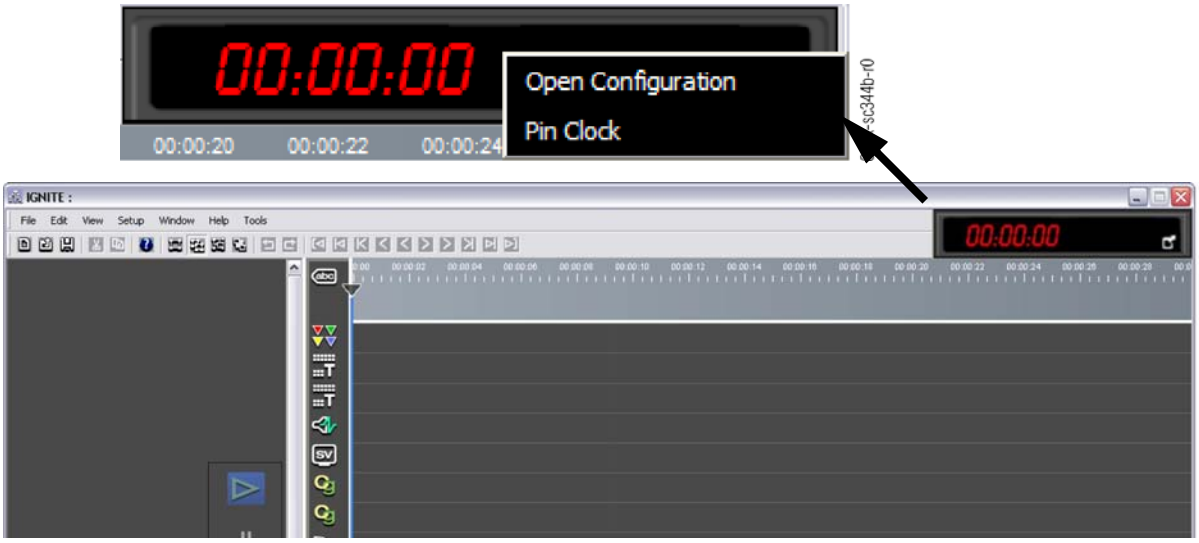
Operation of the Server Countdown timer is via the Event Timeline through TMEs. To be functional, the timer must be configured via the Device Control module using the VDCP and AMP setup dialog boxes.

Note Initially the **Server Countdown Timer** is pre-configured in the **Device Control** module, via the VDCP setup dialog box, during Ignite/Ignite Konnect installation.

1. Right-click the **Server Countdown Timer** to access the context menu (Figure 326).

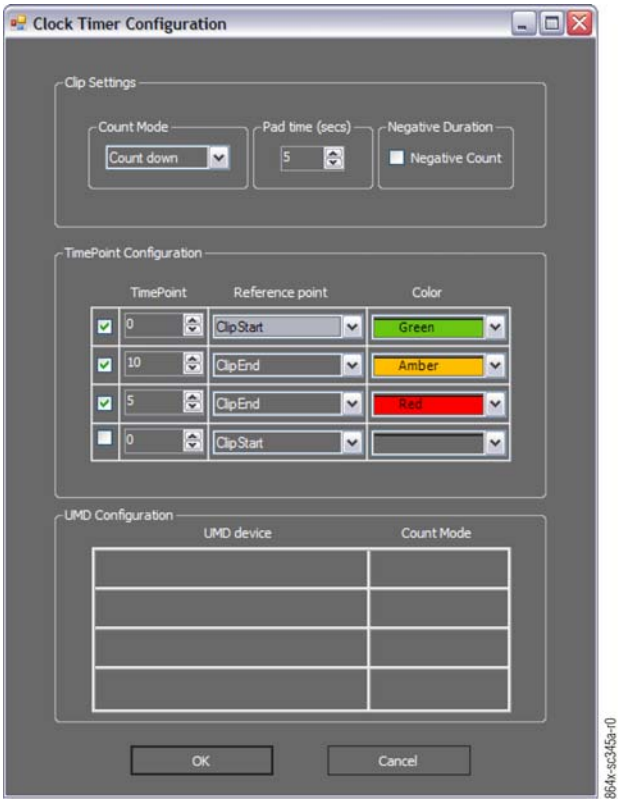
Note Typically the Server Countdown Timer docks on the Event Timeline module but it can be undocked and/or pinned in another location—anywhere on the tri-monitor display.

Figure 326. Server Countdown Timer Context Menu



2. Click **Open Configuration**.
   The **Clock Timer Configuration** dialog box appears (Figure 327).

Figure 327. Clock Timer Configuration Dialog Box



3. Configure the Clip Settings:
   a. In the **Count Mode** list, click the relevant count mode, either **Count up** or **Count down**.
   b. In the **Pad Time (secs)** box, type or select a pad time between 0 and 90 seconds.
   c. For duration, either:
      - Click the **Negative Count** check box for negative duration
      - Clear the **Negative Count** check box to remove negative duration
4. Setup Timepoint Configurations:

Note There are four timepoint rows. Each row represents a single timepoint.

   a. Click a timepoint check box to enable that timepoint.
   b. In the **TimePoint** list, type or select a timepoint.
   c. In the **Reference Point** list select either:
      - Clip Start
      - Clip End

d. In the Color list select either:

- **Red**
- **Green**
- **Amber**

5. Click either:

- **OK** – to save the configuration and close the dialog box.
- **Cancel** – to close the dialog box without saving changes.

Global Timed Events

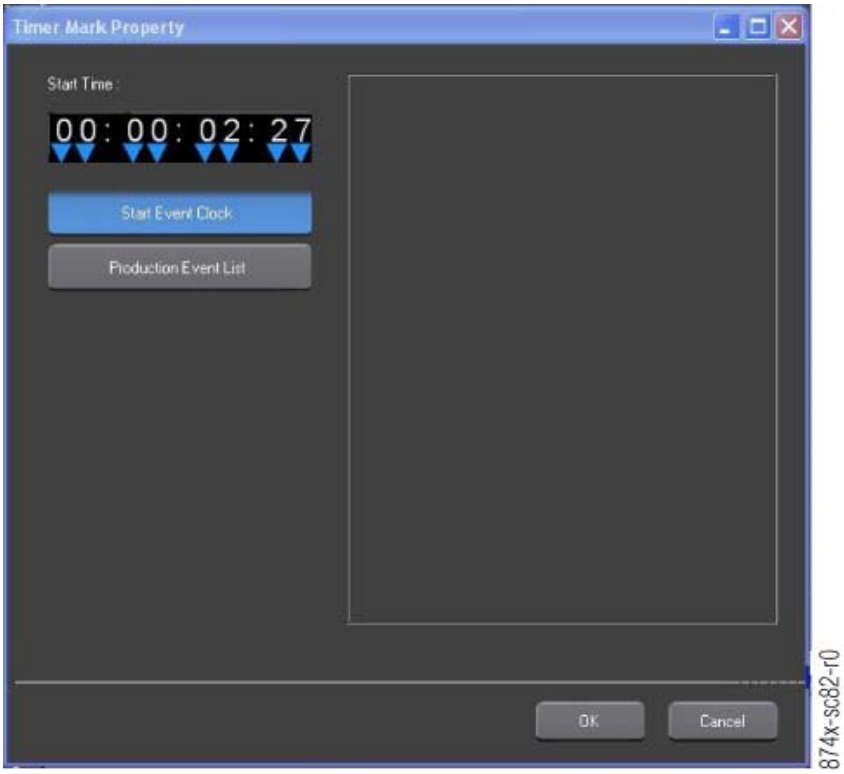
Trigger Global (Program) Clock

Note The green Global Timer Mark is usually placed in the first TME of a program timeline at the appropriate position to trigger at the start of the program.

1. Drag a green timer mark onto the TME.

2. Double-click the green mark. The properties dialog box (Figure 328) appears.

Figure 328. Timer Mark Property Dialog Box - Start Event Clock



3. Click **Start Event Clock**.

4. Click **OK**.

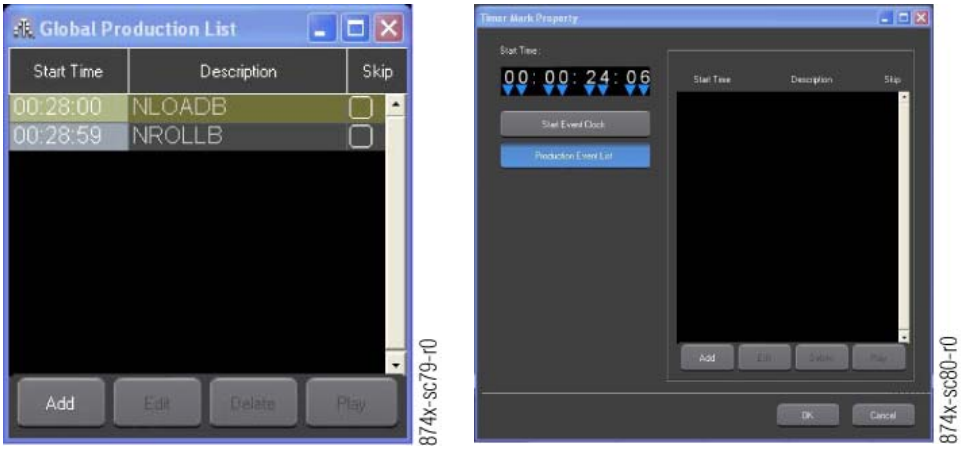
Note Start Time refers to the position of the timer mark on the timeline not the clock start time.

Setup Global Timed Events – Direct Entry

Note Global timed events can be added directly either to the Global Production List or to the Timer Mark Property Dialog.

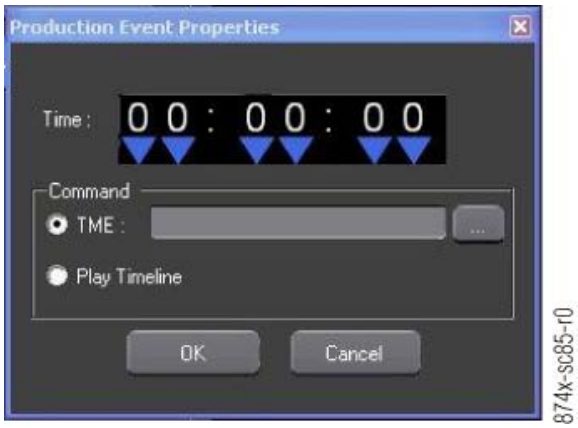
1. Access either the Global Production List or the Timer Mark Property List dialog box. Refer to Figure 329.

Figure 329. Global Production List and Timer Mark Property Dialog Box Examples



2. Click **Add**. A **Production Event Property** dialog box (Figure 330) appears.

Figure 330. Production Event Property Dialog Box



3. Click **…** (Browse), and then click the desired TME.

4. In the Time box, to set the desired Global Time either:
   - Click the respective blue down arrow and select a number from the drop-down list.
   - Right/Left click a digit to increment the numbers up/down.
5. Click **OK**.

Note Events entered directly into the **Global Production List** are removed if an NCS Rundown update is performed.

Insert Production Cues – Global Timed Events (NCS Rundown)

Note The **@** (At) symbol is the default symbol for Global Timed Events. If **@** is used for other purposes in the NCS, Ignite is reconfigurable to use a different symbol.

- Enter the Global timed event(s) into the NCS rundown using the @ (At) symbol to designate a global event. The format of the production cue is: **@ TME Time** (refer to Figure 331).

Note The position of a global event production cue in the NCS rundown is not important unless the TME refers to another MOS object (e.g. a Video Clip MOS Object). Then the cue and the object must obviously be in the same NCS item.

Figure 331. Production Cues for Global Timed Events in the iNEWS NCS

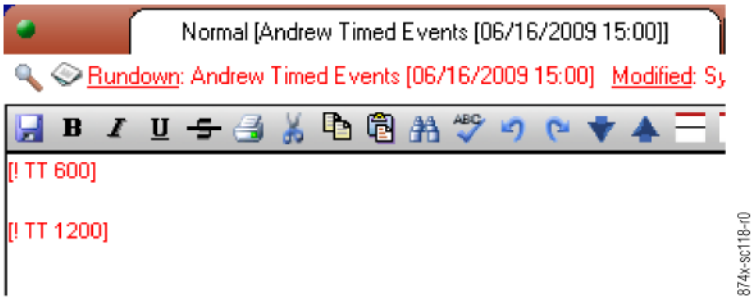
Insert Production Cues – Global Timed Events (ENPS Rundown)

Square Bracket Markup

1. Open Notepad or similar equivalent software.
2. Type the markup.

3. Copy and paste the Notepad markup into ENPS.

Figure 332. ENPS Square Bracket Markup Example

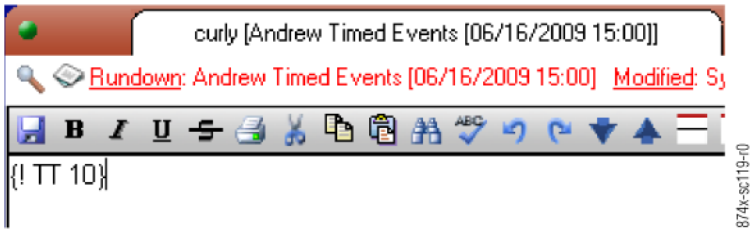


Curly Bracket Markup

Note The ENPS manual mentions that curly braces are used by Teleprompters and this could cause the teleprompter to misread.

- Type the markup directly in the story body.

Figure 333. ENPS Curly Bracket Markup Example



Insert Event

1. Either:

- Right-click and select **Insert** (Figure 334).
- Press **Ctrl-J**.

The **INSERT** dialog box (Figure 335) appears.

Figure 334. Insert Menu Selection

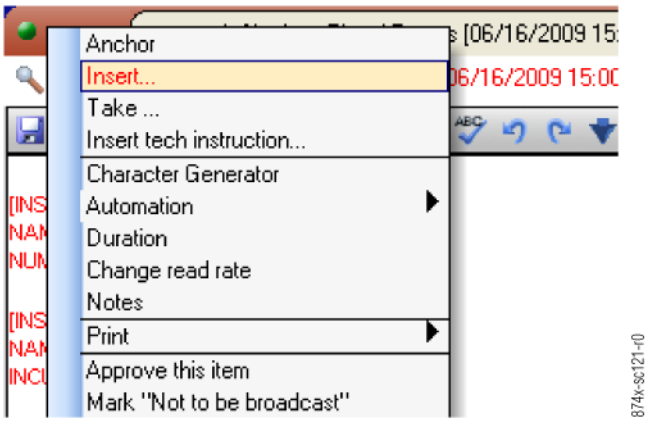
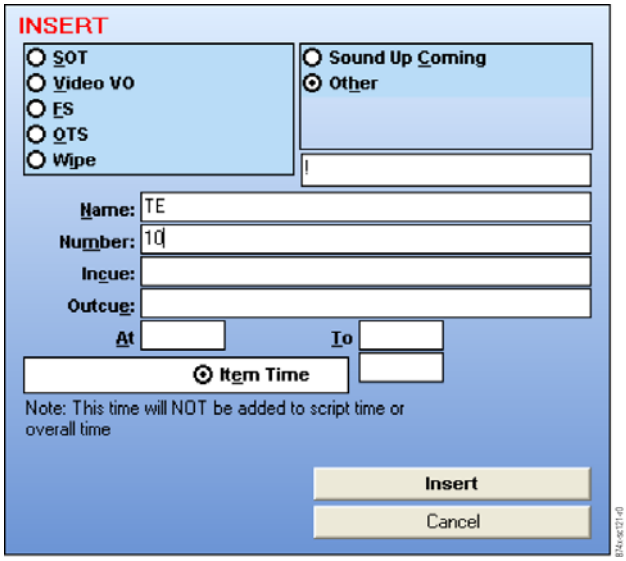


Figure 335. Insert Dialog Box



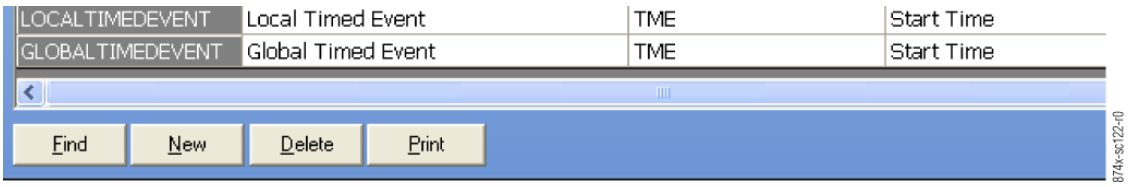
2. Select **Other**.
3. Enter the markup information; e.g., **Name**, **Number**, **Incue**, **Outcue**, **At**, and **To** information.
4. When complete, click **Insert**.

Note Once the markup is ine=serte, double-clicking it reopens the Insert dialog box.

Automation Macro

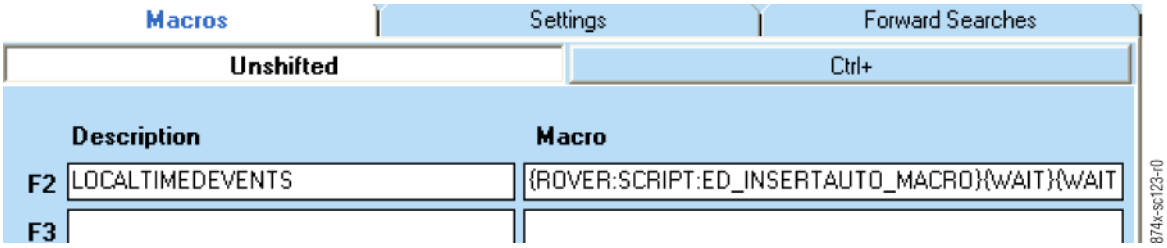
1. Create the desired automation macro as shown in the Figure 336 example.

Figure 336. Create Automation Macro Example



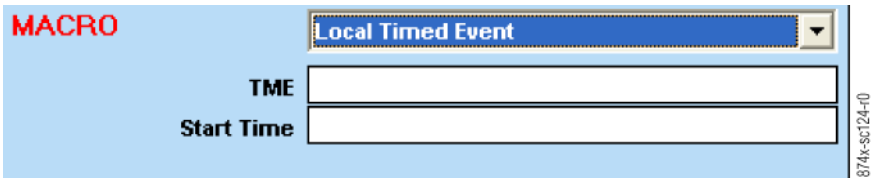
2. Program the macro into ENPS (). The full macro string example is: {ROVER:SCRIPT:ED_INSERTAUTO_MACRO}{WAIT}{WAIT}L

Figure 337. Program Macro Into ENPS Example



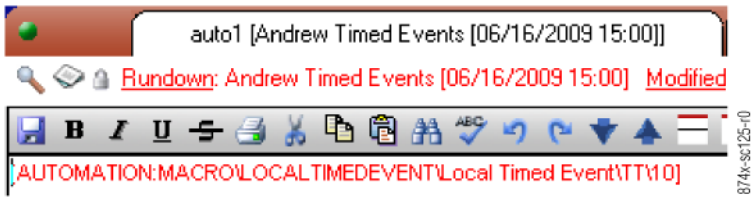
3. Within a story body, press F2 . The MACRO dialog box (Figure 338) appears.

Figure 338. MACRO Dialob Box Example



4. In the **MACRO** dialog box, enter the **TME** and **Start Time** information.
5. Click **Save**. The production cue is saved within the story body (Figure 339).

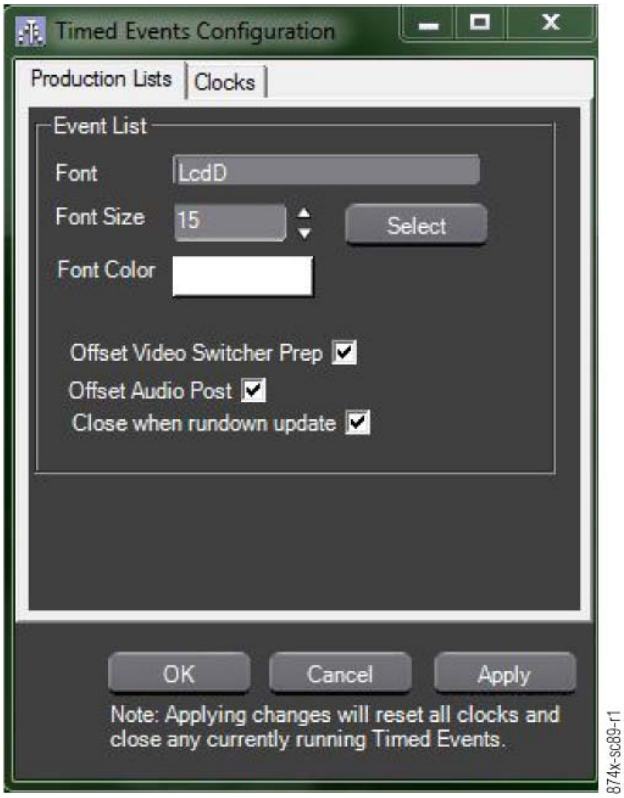
Figure 339. Production Cue Within Story Body Example



Auto-toggle Production List

1. On the **Event Timeline Setup** menu, click **Timed Events Setup**. The **Timed Events Configuration** dialog box (Figure 340) appears.

Figure 340. Timed Events Configuration Dialog Box



2. Select the **Clocks** tab.
3. Set **Global List ReOpen Time** to the number of seconds that you want the Global Production Event window to appear before the next event.
4. Set **Global List Linger** to the number of seconds to linger before minimizing after an event.

Note To prevent inadvertently loss of program timing and all future scheduled Global Timed Events, it is recommended that the **Confirm Clock Stop** check box is selected.

5. When **Confirm Clock Stop** is selected, a confirmation appears when you click the **Global Clock** stop button.
6. Click **Apply**, and then click **OK**.

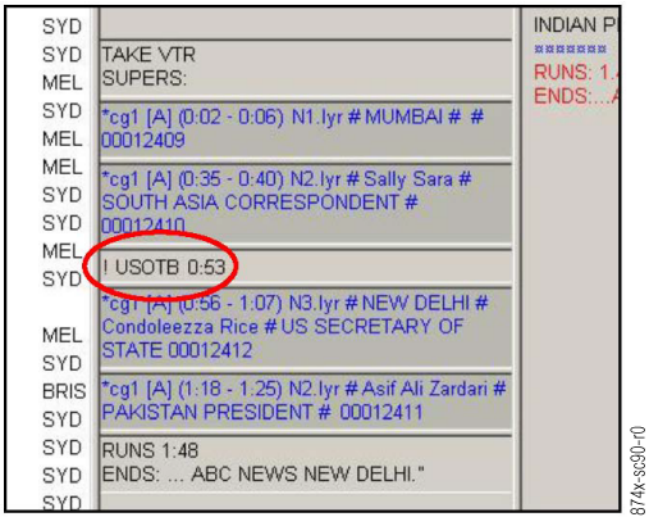
Production Timed Events (NCS Coding)

Insert Production Cues – Production Timed Events (NCS Rundown)

Note The **!** (Exclamation point) character is the default character for Production Timed Events. If **!** is used for other purposes in the NCS, Ignite is reconfigurable to use a different symbol.

- Enter the Production timed event(s) into the NCS rundown using the **!** (Exclamation) character to designate a production timed event. The format of the production cue is:
  ! TME Time (refer to Figure 341).

Figure 341. Production Cues for Production Timed Events in the iNEWS NCS



Use MOS Objects for Timed Events

Newsroom Computer Systems (NCS) that support MOS (Media Object Server) protocol when paired with character generators that also support the MOS protocol generate CGs automatically from the NRCS script. Ignite uses these same MOS objects to populate the CG List when **Rundown Convert** is selected in a TME yellow **Timer Mark Property** dialog box

Section 8

Device Control Module

Figure 342. Device Control Module Examples (Video Server, VTR, Audio, RAM Recorder, ENCO)

Overview

The **Device Control** Module provides individual controls (Figure 342) for connected VTRs, video servers, audio servers, and RAM recorders. Video, VTR, RAM Recorder, and Audio device operation is basically the same. Each device control has a unique look and color relationship specific to that device. The color band at the bottom of each device control matches the highlight color on Device Select area (refer to Figure 342).

Device Color Indications

The Device Control bottom bar color depends on the device selected. That same color is also used as the background color in the **Device Select** area (Figure 343 on page 298).

Table 11. Device Color Relationships

DIGI (Digicart)	MDS (Minidisk)	RAM Recorder	VDCP/AMP	VTR

Device Controls

Though available device controls differ in function and operation, common control buttons are used regardless of device type. Table 12 lists the common device control buttons and the controlled device relationship.

Table 12. Common Device Controls

	Control Function	Video Server (VDCP)	VTR	Audio Server	Mini-Disk	RAM Still	RAM Clip	ENCO Audio Server
864x-sc318-r0	Active Area					✓	✓	
864x-sc50-r0	Add	✓		✓	✓	✓	✓	✓
864x-sc42-r0	Begin						✓	
0000 sc348-r0	Cue Track							✓
864x-sc45-r0	Delete Clip/Still					✓	✓	
864x-sc39-r0	Dock	✓	✓	✓	✓	✓	✓	✓
E/E 864x-sc49-r0	E/E					✓	✓	
864x-sc36-r0	Eject		✓	✓	✓			
864x-sc41-r0	End						✓	
864x-sc47-r0	Fast Forward	✓	✓					

Table 12. Common Device Controls - (continued)

	Control Function	Video Server (VDCP)	VTR	Audio Server	Mini-Disk	RAM Still	RAM Clip	ENCO Audio Server
864x-sc37-r0	Forward Jog	✓						
864x-sc52-r0	Loop			✓				✓
864x-sc53-r0	New	✓						
864x-sc58-r0	Next	✓		✓	✓			✓
864x-sc54-r0	Pause	✓	✓	✓	✓		✓	✓
864x-sc51-r0	Play	✓	✓	✓	✓	✓	✓	✓
864x-sc59-r0	Previous			✓	✓			✓
864x-sc55a-r0	Record					✓	✓	
864x-sc55c-r0	Record Edit						✓	
864x-sc55b-r0	Record ID					✓	✓	
864x-sc43-r0	Remove	✓		✓	✓			✓
864x-sc56-r0	Reverse	✓				✓	✓	
864x-sc38-r0	Reverse Jog	✓					✓	
864x-sc48-r0	Rewind		✓					
864x-sc57-r0	Setup		✓	✓		✓	✓	
	Start Time Code Search	✓	✓					
864x-sc60-r0	Stop	✓	✓	✓	✓	✓		✓

Table 12. Common Device Controls - (continued)

	Control Function	Video Server (VDCP)	VTR	Audio Server	Mini-Disk	RAM Still	RAM Clip	ENCO Audio Server
00:00:00:0	Time Code	✓	✓					
864x-sc40-r0	Undock	✓	✓	✓	✓	✓	✓	✓

Individual devices are selected using the **Device Select** area (Figure 343). All device controls appear below the Device Select area and they are typically docked and layered on top of each other with only the selected device control visible. Available devices are displayed in 3 rows of 4 devices each. If there are more than 12 available devices, a scroll bar appears at the right of the displayed devices.

To view and use individual device controls simultaneously, each one can be undocked and moved to another location on any of the three monitors. If undocked, each device control can also be docked to the Device Control Module.

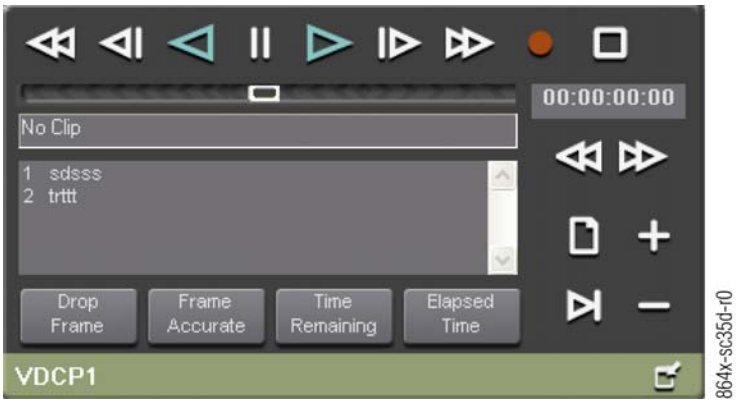
Figure 343. Device Select Area

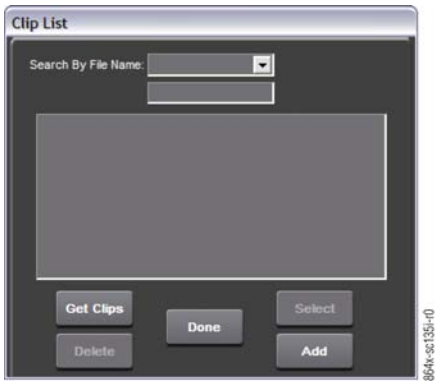
For specific device control button availability and location, refer to:

- *Video Server Device Control* on page 299
- *VTR Device Control* on page 300
- *Audio Clip Device Control* on page 301
- *RAM Recorder Device Control* on page 301
- *ENCO Audio Server Device Control* on page 305

Video Server Device Control

Figure 344. Video Server Device Control Example





The **Video** server device control (Figure Note) provides the following device controls:

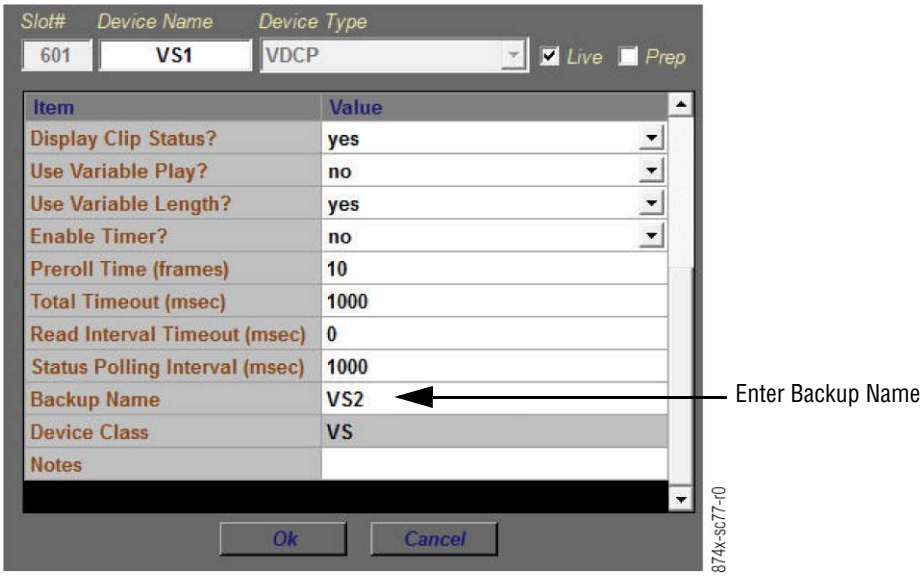
• Rewind	• Play	• Time Code	• Next
• Reverse Jog	• Forward Jog	• Start Time Code Search	• Remove
• Reverse	• Fast Forward	• New	• Dock/Undock
• Pause	• Stop	• Add	

Note Refer to Table 12 on page 296 for device control buttons, respective functionality, and device relationship.

In addition, the Video server device control can provide an automatic backup/mirroring function that operates behind the scene to provide failover in the event of a primary video server malfunction. To implement backup/mirroring capabilities, all mirrored devices must be of the same type. That is, primary and backup video servers must be the same make and model or at least have the same timing parameters; e.g., Cue time and Preroll time. Device set up requires that each primary server be given a **Backup Name** (Figure 345).

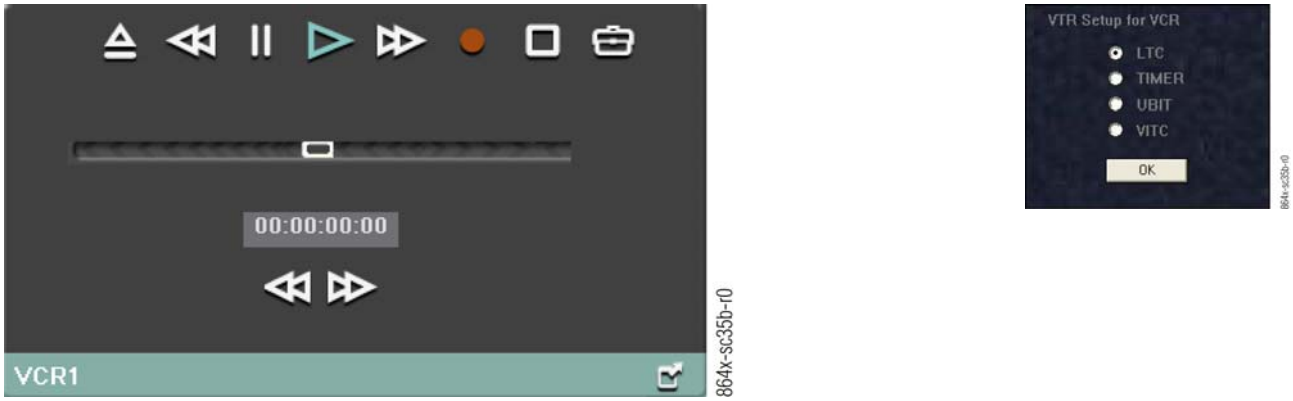
Note Manually switching to a backup server can also be accomplished from either the switcher panel or the Ignite Katalyst panel if configured.

Figure 345. Device Setup Backup/Mirroring Example



VTR Device Control

Figure 346. VTR Device Control Example



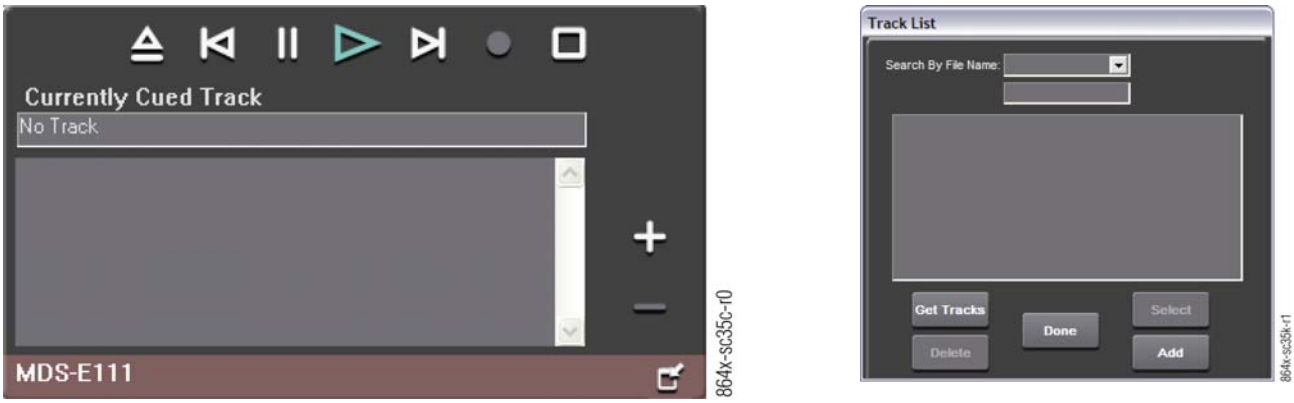
The **VTR** device control (Figure 346) provides the following device controls:

• Eject	• Fast Forward	• Time Code
• Rewind	• Record	• Start Time Code Search
• Pause	• Stop	• Dock/Undock
• Play	• Setup	

Note Refer to Table 12 on page 296 for device control buttons, respective functionality, and device relationship.

Audio Clip Device Control

Figure 347. Audio Clip Device Control Examples



The **Audio Clip** device control (Figure 347) provides the following device controls:

• Eject	• Play	• Add
• Previous	• Next	• Remove
• Pause	• Stop	• Dock/Undock

Note Refer to Table 12 on page 296 for device control buttons, respective functionality, and device relationship.

RAM Recorder Device Control

Figure 348. RAM Recorder Device Control Example

(Stills View) (Clips View)

The **RAM Recorder** device control enables the user to record up to 30 seconds of still images, video clips, or both stills and clips. The RAM

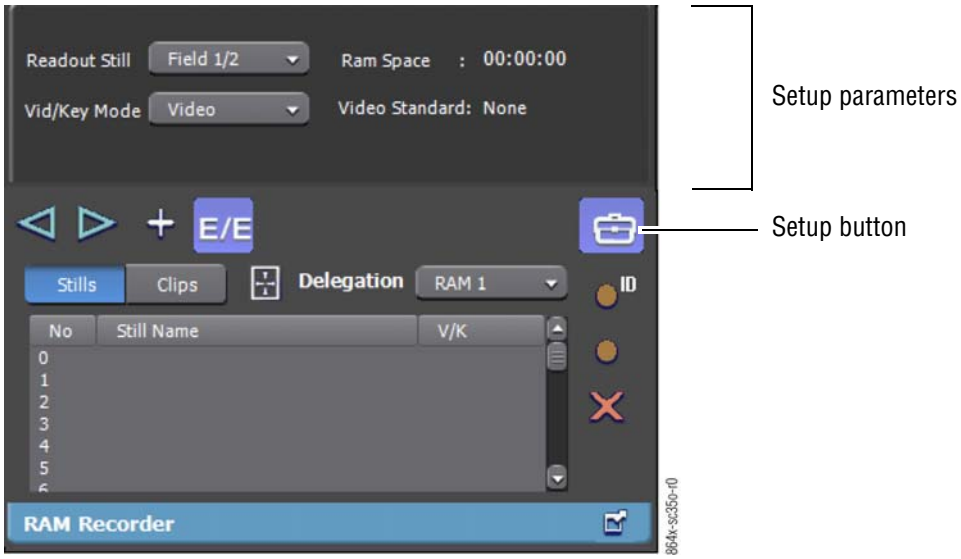
Recorder displays up to four channels on a DD/SD switcher and up to six channels on an HD switcher.

The **RAM Recorder** device control interface has two views (Figure):

- **Stills** control
- **Clips** control

Stills Device Control

Figure 349. RAM Recorder Device Control – Stills Setup



The **Stills** view (Figure 349) enables the user to load or store stills using the delegated channels and provides the following device controls:

Note Refer to Table 12 on page 296 for device control buttons, respective functionality, and device relationship.

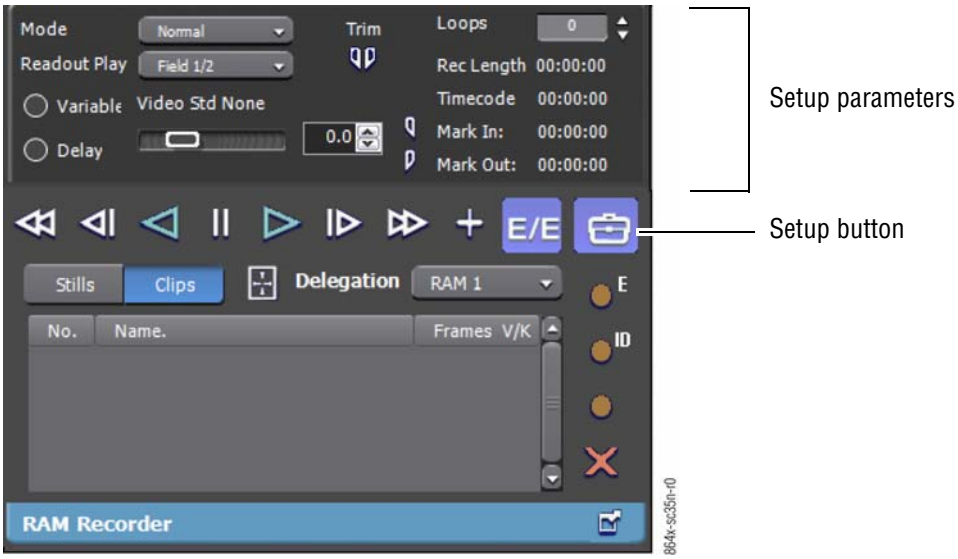
The **Setup** button – toggles access to the following **Stills** setup parameters:

- **Readout Still** – sets readout options that include:
  - **Field ½** – this mode is useful when a still is made from a graphic source that has generated motion, which is not in the expected field dominance.
  - **Field 1** – only field 1 is played out that results in “film look”, 25/30 motion updates per second.
  - **Field 2** – only field 2 is played out that results in “film look”, 25/30 motion updates per second.

  - **Frame** – standard playout mode that consists of two fields: field 1 and field 2, a top field and a bottom field.
- **Vid/Key Mode** – sets the video/key mode where:
  - **Video** – the video part of the still is loaded in the selected channel.
  - **Video+Key** – the RAM pairs work together as a video/key pair.
  - **Key** – Displays the Key signal only
- **Ram Space** – displays the remaining RAM Memory space, in **hh:mm:ss:ff** format, that is available to record stills or clips.
- **Delegation** – lists RAM Recorder channels to designate either a still or clip.
- **Stills List** – lists the available stills in the switcher. The currently loaded still highlights green.

Clips Device Control

Figure 350. RAM Recorder Device Control– Clips Setup



The **Clips** view (Figure 350) enables the user to load, store, or play clips using the delegated channels and provides the following device controls:

Note Refer to Table 12 on page 296 for device control buttons, respective functionality, and device relationship.

The **Setup** button – toggles access to the following **Clips** setup parameters:

- **Mode** – sets the clip play mode:
  - **Normal** – standard mode.
  - **Clip** – the clip is always played from Mark In to Mark Out.

- **Simple Loop** – the clip starts at the current position, plays to Mark Out, and executes the total range from Mark In to Mark Out n times, where "n" is the number of loops (0 = forever).
- **Extended Loop** – play may start before Mark In and Offset determines the post Mark Out play duration.

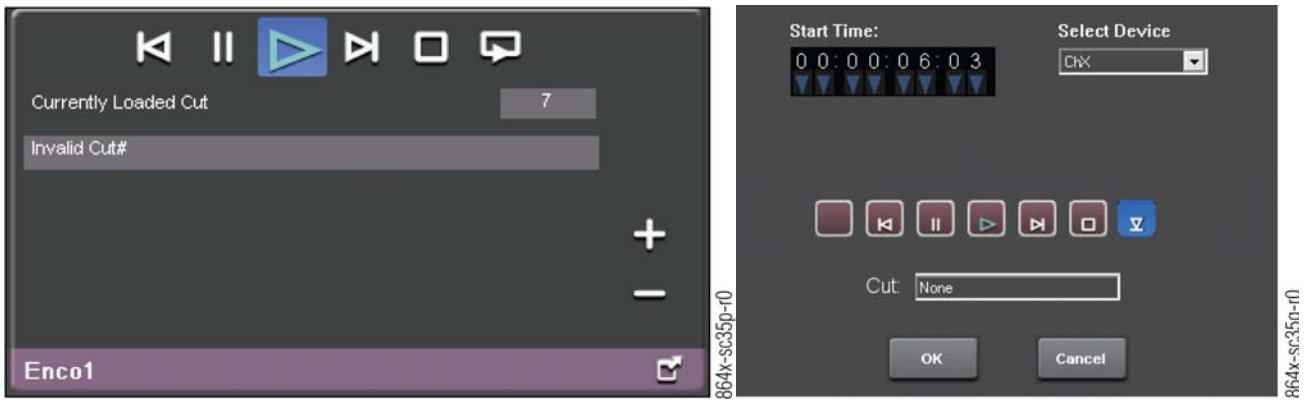
Note Mark In and Mark Out limit the accessible timecode range for **Clip**, **Simple Loop**, and **Extended Loop** modes.

- **Loops** – sets the number of loops to play in Loop mode. Zero indicates an infinite loop.
- **Readout Play** – sets the clip readout options:
  - **Field ½** – this mode is useful when a still is made from a graphic source that has generated motion that is not in the expected field dominance.
  - **Field 1** – only field 1 is played out that results in “film look”, 25/30 motion updates per second.
  - **Field 2** – only field 2 is played out that results in “film look”, 25/30 motion updates per second.
  - **Frame** – standard playout mode that comprises two fields: field 1 and field 2, a top field and a bottom field.
- **Mark In** – sets the **Mark In** point where the clip begins to play.
- **Mark Out**– specifies the **Mark Out** point where the clips stops.
- **Trim** – shortens the clip based on the **Mark In** and **Mark Out** points.
- **Rec Length** – sets the delay length for the delay line.
- **Delay Line** – turns delay line mode on so a user can delay a routed source for a specific RAM Channel by the amount of time entered in the **Rec Length** field.
- **Variable** – sets a variable clip speed where:
  - **3** = Triple speed
  - **1** = Normal speed
  - **2** = Double speed
  - **0.5** = Half speed
  - **0.25** = Reverse ¼ speed
  - **0.5** = Reverse half speed
  - **1** = Reverse normal speed
- **Timecode** – in mm:ss:ff, the time that is used to identify video frames on a recorded format.

Note In the **Clips** tab, the **Record ID** playout control button only appears on a Kayak HD.

ENCO Audio Server Device Control

Figure 351. Enco Audio Server Device Control Examples



The **ENCO Audio Clip** device control (Figure 351) provides the following device controls:

• Previous	• Loop
• Pause	• Setup
• Play	• Add
• Next	• Remove
• Stop	• Dock/Undock

Note Refer to Table 12 on page 296 for device control buttons, respective functionality, and device relationship.

Operation

Select A Device Control

The device controls are stacked upon each other with only the selected device control visible below the **Device Select** area (Figure 352).

- To select a device control, click the respective **Device Select** button.
- To simultaneously view and use all device controls, individually undock and move each device control to another location on any of the three monitors. Refer to *Dock/Undock Modules on page 262*.

Figure 352. Device Select Area Example

Add A Video Clip

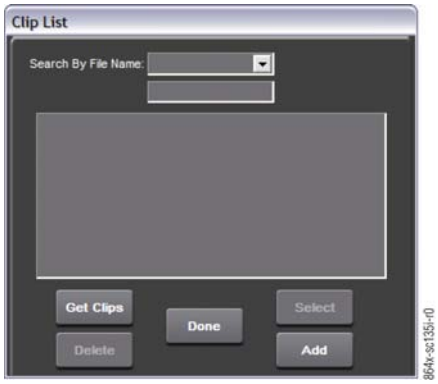
1. From the **Device Select** area (Figure 352), click a video device. The **Video Server Device Control** appears (Figure 353).

Figure 353. Video Server Device Control Example

Note In the following step, retrieving a large Clip List could take an extended period of time.

2. Click the **Add** button. A **Clip List** dialog box (Figure 354) appears.

Figure 354. Clip List Dialog Box Example



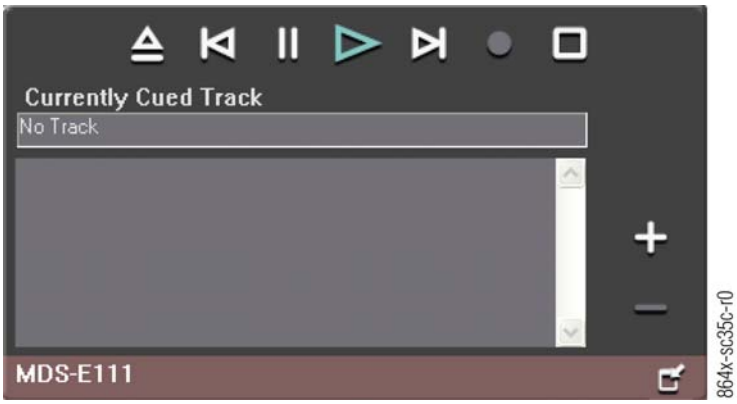
3. Click **Get Clips**.

4. Click **Done**.

Add An Audio Clip

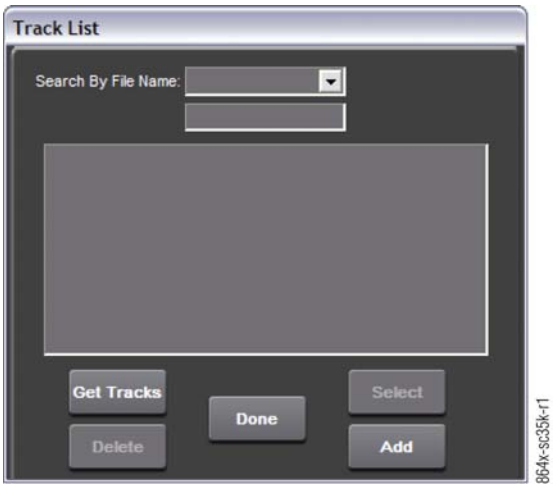
1. From the **Device Select** area (Figure 352), click an audio device. The audio device control appears (Figure 355).

Figure 355. Audio Device Control Example



2. Click the **Add** button. A **Track List** dialog box(Figure 356) appears.

Figure 356. Track List Dialog Box Example



3. Double-click the clips to add them to the Track List. An **Add Clip** dialog box appears.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Figure 357. Add Clip Dialog Box

4. In the **Input Name** box, type a name using common naming conventions. Refer to *Standardization* *on page 577*.
5. Click **Done**.

Search For A Time Code

Note This only applies to a loaded clip.

1. Click **Time Code**.
2. Enter the video time code.

Note In the following step, click the right side to search forward. Click the left side to search backward.

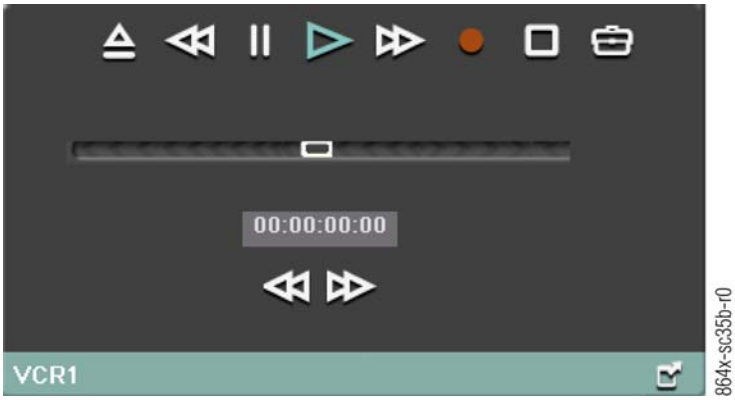
3. Click **Start Time Code Search**.

Note Use the Shuttle knob to scan a video and locate a particular frame.

Scan/Shuttle A Video

1. From the **Device Select** area (Figure 352), click an audio device. The audio device control appears (Figure 358).

Figure 358. VTR Device Control Example



2. Click and drag the **Shuttle** slider.
   - Drag right to fast forward.
   - Drag left to rewind.

Note The scan/shuttle speed changes proportionately with the position of the slider handle.

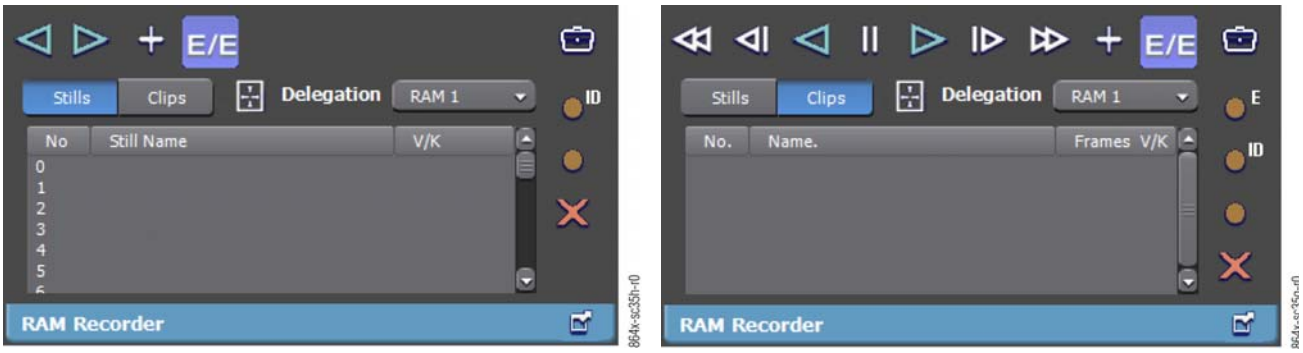
RAM Recorder

Record A Still

1. From the **Device Select** area, click an available RAM Recorder channel. The **RAM Recorder** device control appears (Figure 359).

Note When the RAM Recorder device control appears, either the **Stills** or the **Clips** button is highlighted, indicating the current view.

Figure 359. RAM Recorder Device Control Interface

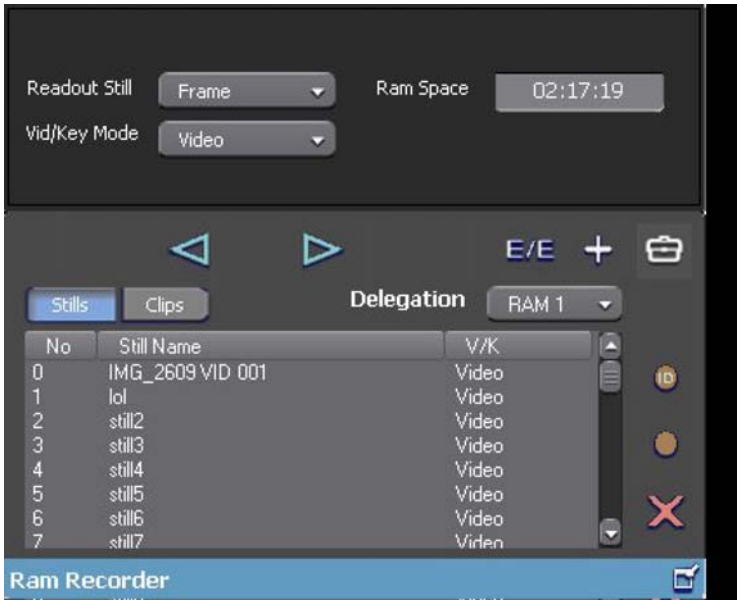


(Stills View) (Clips View)

2. Select the **Stills** view. The **Stills** button (Figure 360) highlights.

3. Click the **Setup** button. The **Stills** setup parameter options (Figure 360) appear above the controls.

Figure 360. RAM Recorder Device Control Interface – Stills View (Setup Parameters)



4. Click the **Delegation** arrow to view a list of available RAM Recorder channels, and then from the list click the desired channel. The selected channel appears as the delegation.

5. To view the input routed to the RAM Recorder, click the **E/E** button.

6. On the P/P switcher bank, click the appropriate RAM Recorder channel. For example, if RAM Recorder channel 2 was originally delegated, then click RAM Recorder channel 2 on the P/P switcher bank.

7. From the P/P switcher bank, click the **Browse Program Master Routing** button (Figure 361) to open the **Master Routing** dialog box (Figure 362):

Figure 361. Access Master Routing Button

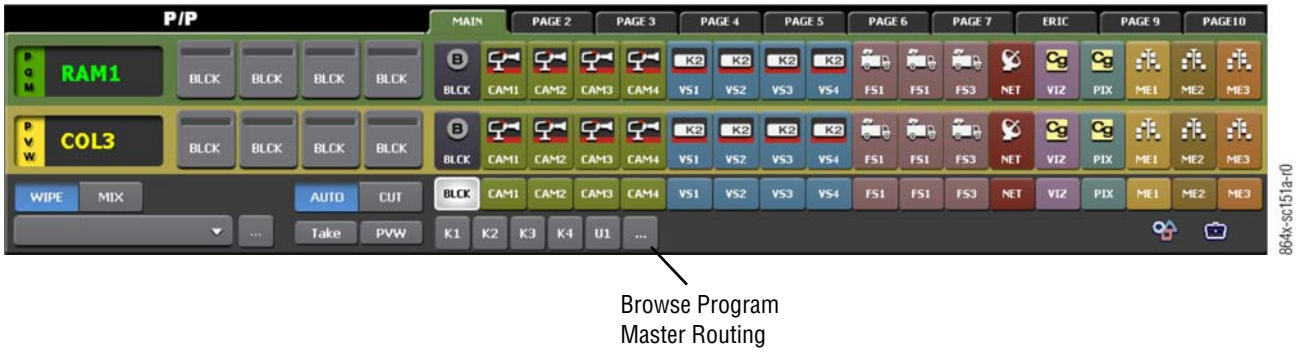
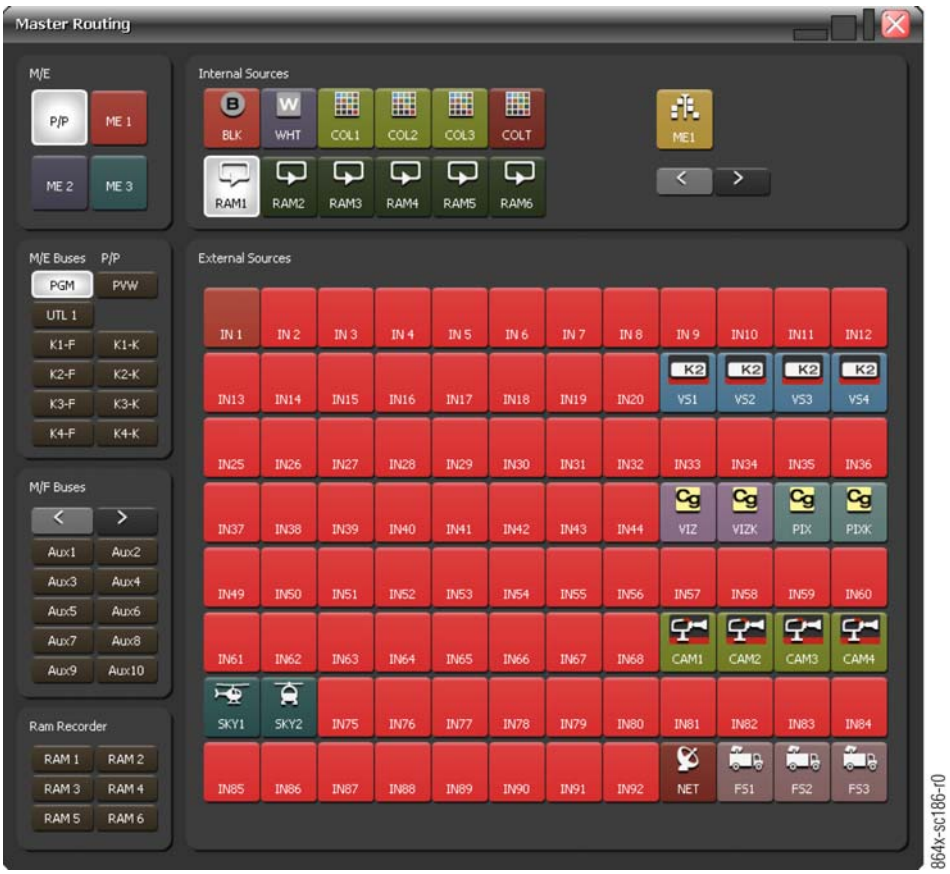


Figure 362. Master Routing Dialog Box – Destination and External Source



8. Click the appropriate values for the **M/E BUSES**, **INTERNAL SOURCES**, and **RAM RECORDER**.

   To route external sources into a RAM channel, first click the RAM Recorder Channel and then click the External Source. The destination (RAM Recorder Channel of **Ram1**) is always selected first and then the external source (**IN96**) is selected second.

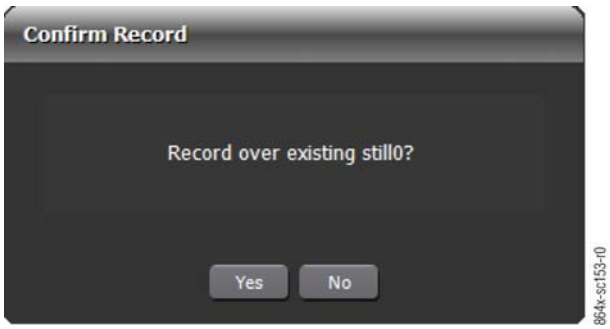
Note In order to properly record a still, the RAM Recorder Channel in the **Master Routing** dialog box should match the designated channel in the **RAM Recorder** device control interface

9. From the **Stills** tab, to record a new still, click the **Record** button. The newly recorded still appears in the **Stills List**.

10. From the **Stills** view, to record over an existing still, do the following:

    a. Select the desired still and click the **Record ID** button. The **Confirm Record** dialog box appears:

Figure 363. Confirm Record Dialog Box (Record ID a Still)

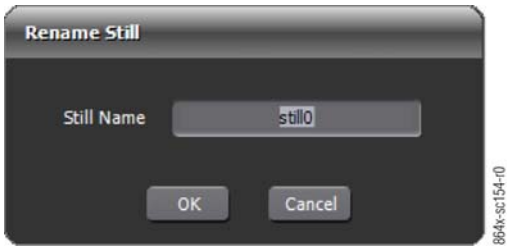


b. Either:

- To record over the existing still, click **Yes**. The default still name, still plus position number, appears in the stills list.
- To cancel recording over the existing still, click **No**.

11. To rename the still, right-click the still, and then click **Rename**. The **Rename Still** dialog box appears (Figure 364):

Figure 364. Rename Still Dialog Box



12. Either:

- Type the new name of the still in the **Still Name** text box and click **OK**.
- Keep the original name of the still and click **Cancel**.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

13. To verify still recording:

a. On the P/P switcher bank, click the appropriate page source.

b. To load the still, from the list, click the still and then click the **Load Still** button.

Record A Clip

Note After a clip has been recorded, it is recommended that you trim or shorten the clip to reduce space in the **Clip List**. Trimming clips also manages clutter on the Event Timeline module. Refer to *Trim A Clip* on page 318.

1. From the **Device Select** area, click an available RAM Recorder channel. The **RAM Recorder** device control appears (Figure 365).

Note When the RAM Recorder device control appears, either the **Stills** or the **Clips** button is highlighted, indicating the current view.

Figure 365. RAM Recorder Device Control Interface

(Stills View) (Clips View)

2. Select the **Clips** view. The **Clips** button (Figure 360) highlights.
3. Click the **Setup** button. The **Clips** setup parameter options (Figure 360) appear above the controls.

Figure 366. RAM Recorder Device Control Interface – Clips View (Setup Parameters)

4. Click the **Delegation** arrow to view a list of available RAM Recorder channels, and then from the list click the desired channel. The selected channel appears as the delegation.

5. To enter the recording length of the clip, click in the **Rec Length** text box. The **Timecode Editor – Record Length** dialog box appears:

Figure 367. Timecode Editor – Record Length Dialog Box

6. In **mm:ss:ff** format, either:
   - Type the time in the **Time Code** text box and click **OK**.
   - Use the key pad to enter time and click **OK**.

7. To bypass any video playout and display what is routed into the RAM Recorder channel as that channel's output, click the **E/E** button.

8. On the P/P switcher bank, click the appropriate RAM Recorder channel. For example, if RAM Recorder channel 2 was originally delegated, then click RAM Recorder channel 2 on the P/P switcher bank.

9. From the P/P switcher bank, click the **Access Master Routing** button (Figure 368) to open the **Master Routing** dialog box (Figure 369):

Figure 368. Access Master Routing Button

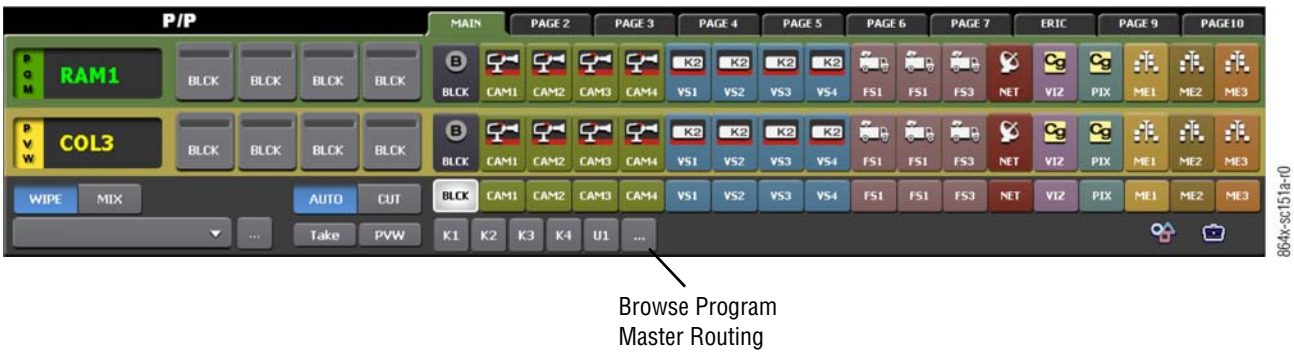
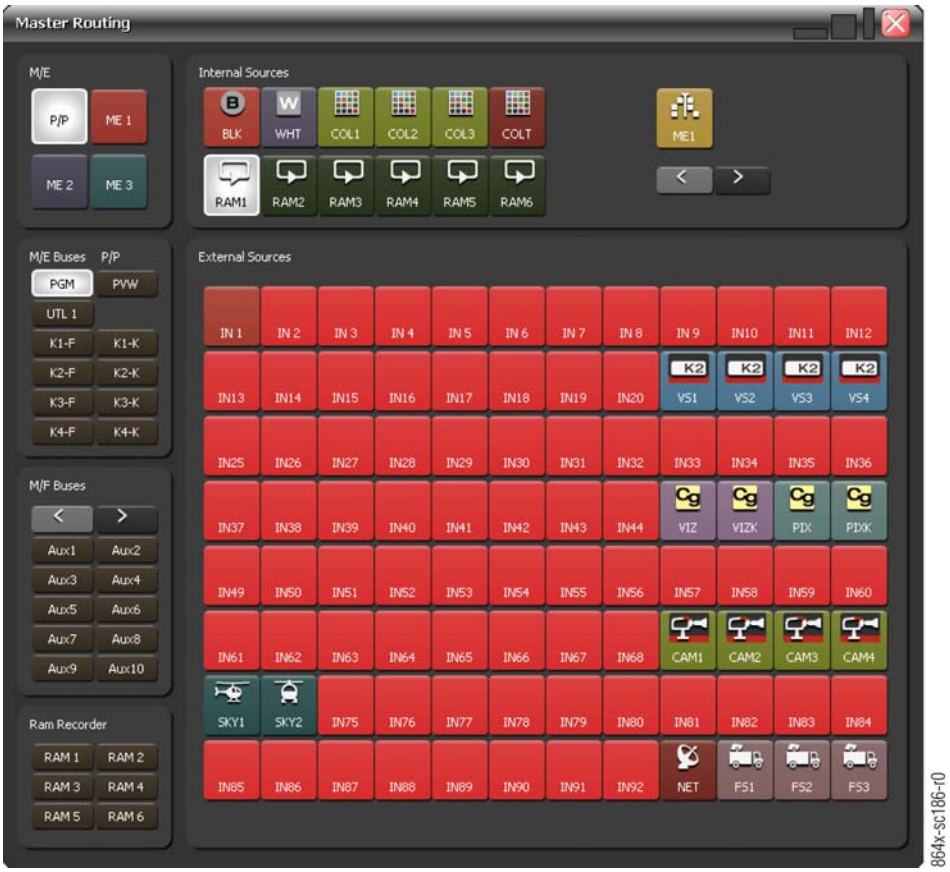


Figure 369. Master Routing Dialog Box – Destination and External Source



10. Click the appropriate values for the **M/E Buses**, **Internal Sources**, and **RAM Recorder**.

To route external sources into a RAM channel, first click the RAM Recorder Channel and then click the External Source. The destination (RAM Recorder Channel of **Ram1**) is always selected first and then the external source (**IN96**) is selected second.

Note The RAM Recorder Channel in the **Master Routing** dialog box must match the delegated RAM Recorder Channel in the **RAM Recorder** device control interface.

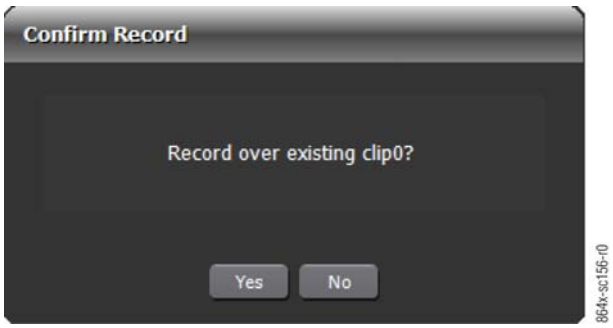
11. From the **Clips** tab, to record a new clip, click the **Record** button. A newly recorded clip appears in the **Clips List**.

12. From the **Clips** tab, to record over an existing clip, perform the following steps:

    a. Select the desired clip and click the **Record ID** button. The **Confirm Record** dialog box appears:

Note On the **Clips** tab, the **Record ID** button only appears on a Kayak HD.

Figure 370. Confirm Record Dialog Box (Record ID a Clip)



    b. Either:

    - To record over the existing clip, click **Yes**. The default clip name, clip plus position number, appears in the clips list.
    - To cancel recording over the existing clip, click **No**.

13. From the **Clips** tab, to append to an existing clip, perform the following steps:

    a. Select the desired clip.

    b. In the **Rec Length** text box, set the timecode. Refer to Step 5.

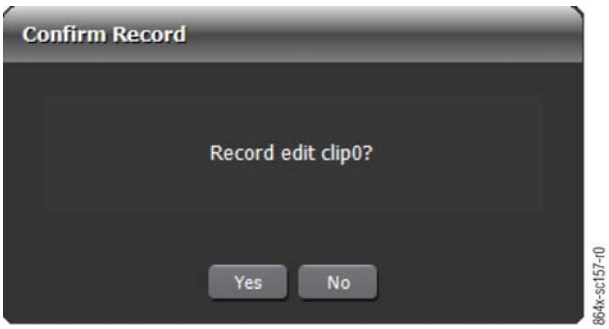
CAUTION Since the length of time entered in the **Timecode Editor – Record Length** dialog box appends the current clip from its current timecode position, be careful not to record over sections of a clip.

A typical scenario for a recording length of a clip:

- The beginning of a clip at 15 sec
- The recording length of 5 sec
- The **Record Edit** function records over the first 5 sec of the 15 second clip

    c. Click the **Record Edit** button. The **Confirm Record** dialog box appears:

Figure 371. Confirm Record Dialog Box (Record Edit a Clip)



14. To rename the clip, right-click the clip. The **Rename Clips** dialog box appears (Figure 372):

Figure 372. Rename Clips Dialog Box

15. Either:

- Type the new name of the clip in the **Clip Name** text box and click **OK**.
- Keep the original name of the clip and click **Cancel**.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

16. To verify clip recording:

a. On the P/P switcher bank, click the appropriate page source.

b. To load the clip, from the clip list click the clip and then click the **Load Clip** button.

c. To go to the beginning of the clip, click the **Begin** button

d. Click the **Play** button.

Note After a clip has been recorded, it is recommended that you trim or shorten the clip to reduce space in the **Clip List**. Trimming clips also manages clutter on the Event Timeline module. Refer to *Trim A Clip* on page 318.

Trim A Clip

CAUTION Once a clip has been trimmed, the clip cannot go back to its original **Mark In** and **Mark Out** settings.

1. From the **Device Select** area, click an available RAM Recorder channel. The **RAM Recorder** device control appears (Figure 373).

Note When the RAM Recorder device control appears, either the **Stills** or the **Clips** button is highlighted, indicating the current view.

Figure 373. RAM Recorder Device Control Interface

(Stills View) (Clips View)

2. Select the **Clips** view. The **Clips** button (Figure 360) highlights.
3. From the **Clips List**, click a clip.
4. To load the clip, click the **Load Clip** button. The clip highlights green.
5. Set the **Mark In** and **Mark Out** times.
6. Click **Trim**. The **Trim Clip** confirmation dialog box appears:

Figure 374. Trim Clip Confirmation Dialog Box

7. Either:
   - To trim the clip, click **Yes**.

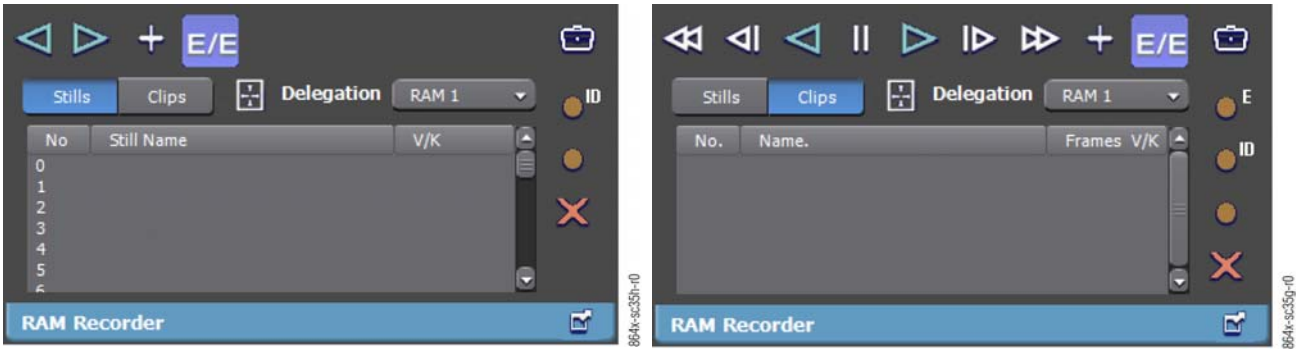
     The clip is trimmed based on the **Mark In** and **Mark Out** time settings.
   - To cancel the function and return to the **Clip List**, click **No**.

Play A Still

1. From the **Device Select** area, click an available RAM Recorder channel. The **RAM Recorder** device control appears (Figure 2).

Note When the RAM Recorder device control appears, either the **Stills** or the **Clips** button is highlighted, indicating the current view.

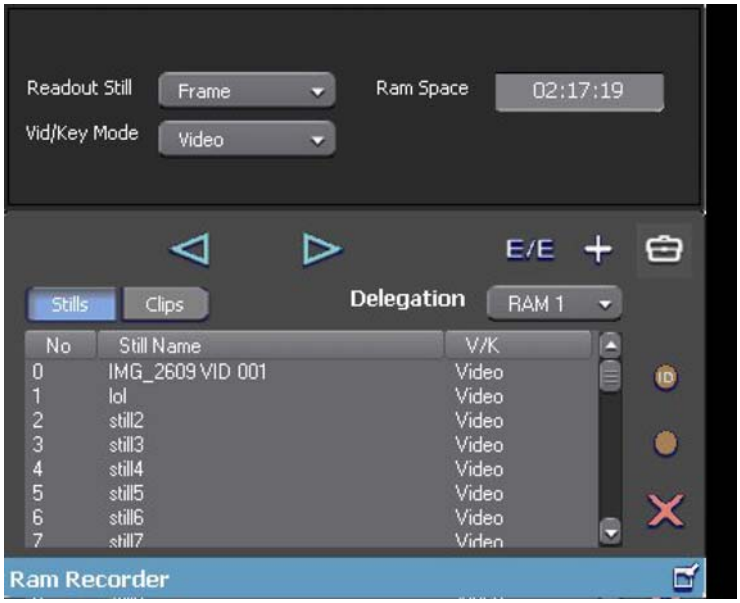
Figure 375. RAM Recorder Device Control Interface



(Stills View) (Clips View)

2. Select the **Clips** view. The **Clips** button (Figure 360) highlights.
3. Click the **Setup** button. The **Stills** setup parameter options (Figure 376) appear above the controls.

Figure 376. RAM Recorder Device Control Interface – Clips Tab (Expanded View)



4. On the **Stills** tab, from the **Delegation** drop-down list, click an available RAM Recorder channel.
5. From the **Stills List**, double-click the still.
6. Set the following parameters as necessary:
   - **Readout Still**
   - **Vid/Key Mode**
7. On the P/P switcher bank, click the appropriate RAM Recorder channel.

Note The RAM Recorder channel on the P/P switcher and the delegated RAM Recorder channel need to be the same.

Play A Clip

1. From the **Device Select** area, click an available RAM Recorder channel. The **RAM Recorder** device control appears (Figure 377).

Note When the RAM Recorder device control appears, either the **Stills** or the **Clips** button is highlighted, indicating the current view.

Figure 377. RAM Recorder Device Control Interface

(Stills View) (Clips View)

2. Select the **Clips** view. The **Clips** button (Figure 377) highlights.
3. Click the **Setup** button. The **Clips** setup parameter options (Figure 378) appear above the controls.

Figure 378. RAM Recorder Device Control Interface – Clips View (Setup Parameters)

4. From the **Delegation** drop-down list, click an available RAM Recorder channel.
5. From the **Clips List**, double-click the clip.
6. Set the following parameters as necessary:
   - **Mode**
   - **Loops**
   - **Readout Play**
   - **Variable**
7. To set the Mark In point, click in the **Mark In** text box. The **Timecode Editor – Mark In** dialog box appears (Figure 379).

Figure 379. Timecode Editor – Mark In Dialog Box

a. To enter time for the **Mark In** setting in **mm:ss:ff**, either:

- Type the time in the **Time Code** text box and click **OK**.
- Use the key pad to enter time and click **OK**.

b. To apply the time setting, click the **Mark In** button.

8. To set the Mark Out point, click in the **Mark Out** text box, the **Timecode Editor – Mark Out** dialog box appears:

Figure 380. Timecode Editor – Mark Out Dialog Box

a. To enter time the **Mark Out** setting in **mm:ss:ff**, either:

- Type the time in the **Time Code** text box and click **OK**.
- Use the key pad to enter time and click **OK**.

b. To apply the time setting, click the **Mark Out** button.

9. On the P/P switcher bank, click the appropriate RAM Recorder channel.

Note The RAM Recorder channel on the P/P switcher and the delegated RAM Recorder channel need to be the same.

10. To go to the beginning of the clip, click the **Begin** button.
11. Click the **Play** button.

Clips and Stills Maintenance

CAUTION The Ignite/Ignite Konnect switcher does not save stills and clips.

In case of a power failure or each time the switcher is turned off to update firmware, all clips and stills are removed from memory and no longer appear in the **Stills List** or **Clips List** of the RAM Recorder. It is recommended that you export all stills and clips before turning off the switcher and save them to an external storage device.

The only way to export stills and clips from the switcher to the PC or import them from the PC back to the RAM Recorder is via the switcher Sidepanel program. Refer to the current manual supporting your switcher product.

For a more detailed explanation on how to export/import stills and clips using the Sidepanel™ program. Refer to the current manual supporting your switcher product.

Delete Clips and Stills

1. From either the **Stills** view or the **Clips** view, click the still or clip for deletion.
2. Click the **Delete** button. The **Delete Still** or the **Delete Clip** confirmation dialog box appears:

Figure 381. Delete Still Confirmation Dialog Box

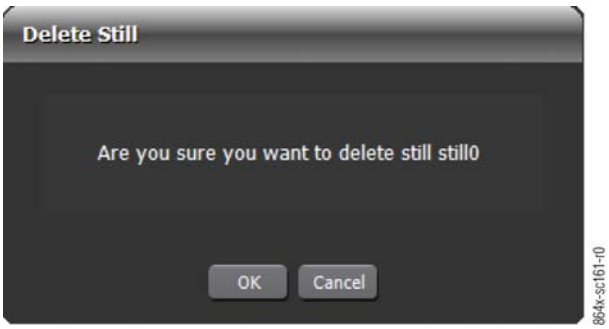
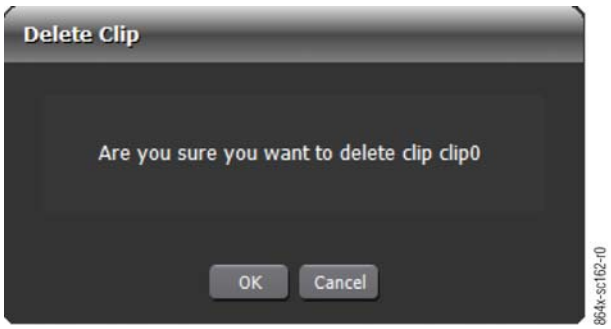


Figure 382. Delete Clip Confirmation Dialog Box



3. Either:

- To delete the still or clip from the list, click **OK**.
- To cancel the function and return to the stills list or the clips list, click **Cancel**.

Section 9

Device Manager Module

Figure 383. Device Manager Module

Overview

The Device Manager module (Figure 383) enables the operator to set the system operating mode (**LIVE** or **PREP**), and control/monitor the physical devices (hardware) used to produce a live broadcast. It also plays a key role in device sharing and failure recovery in redundant Ignite/Ignite Konnect systems. Refer to *Redundancy* *on page 28* and *Failure Recovery* *on page 427*.

The Device Manager module has three monitoring/control areas:

- *Devices Tab* on page 326
- *Messages Tab* on page 327
- *Mode and Configuration Control* on page 327

Devices Tab

Figure 384. Device Manger - Devices Tab

The **Devices** tab (Figure 384) displays the status of all devices configured for use in either **LIVE** or **PREP** mode. Device information is displayed in a column and row presentation where the number of columns and rows shown depends upon the number of configured devices. Device status is provided by either a green, red, or gray color indication:

- Green (Active) - indicates a device that is active in the current mode and communicating properly with the Device Manager.

  Example: If **DKO1** is configured for **LIVE** use, the workstation is in **LIVE** mode, and **DKO1** is communicating properly with the Device Manager, it displays green (active).

- Red (Error) - indicates a device that should be active (based on current mode and configuration selection), but is unable to properly communicate with the Device Manager.

  Example: If **DKO1** is configured for **LIVE** use, the workstation is in **LIVE** mode, but **DKO1** cannot communicate with the Device Manager, it displays red (communication error).

- Gray (Inactive) - indicates a device that is configured for use, but not active in the current mode.

  Example: If **DKO1** is configured for **LIVE** use, but the workstation is in **PREP** mode, it displays gray (not active).

Messages Tab

Figure 385. Device Manager Messages Tab

The **Messages** tab (Figure 385) shows real-time messages generated by various Ignite/Ignite Konnect modules. Message status is shown as:

- Green - Information message.
- Yellow - Warning message - indicates a potential problem that requires operator evaluation.
- Red - Severe/Error message - indicates a severe error has occurred. These errors must be evaluated to determine if corrective action must be taken prior to attempting to produce a show.

Note Initial warning/error messages are normal at system startup.

Initial warning/error messages may occur at system startup when devices are unable to provide a timely reply to initial Device Manager status requests. These initial warning/error messages should be cleared by the operator (refer to *Verify/Clear Message Status* on page 335).

Subsequent warning/error messages indicate device or communication problems, and must be evaluated and corrected prior to attempting to produce and/or air a live show.

Mode and Configuration Control

There are two control buttons (Figure 386) at the bottom of the Device Manager module:

- Mode Control (LIVE/PREP)
- Active Device Configuration

Figure 386. Device Manager Control Buttons

Mode Control

The **Mode Control** button enables the user to change the workstation operating mode.

- In **LIVE** mode, the button is green to indicate to the operator that the system is configured to produce/air a live show.
- In **PREP** mode, the button is gray to indicate to the operator that the system is configured to prepare a show (rundown convert and check TME associations on the event timeline) but not to air a live show.

To change modes, click the button, then click yes to the popup confirmation dialog box; the workstation status and control button indicator changes to gray and indicates **WAIT** until all mode change request/acknowledge dialog boxes are processed and the appropriate devices are disconnected/connected. The mode then toggles to, and indicates, the requested state.

Active Devices Configurations

Device Configuration button

The **Device Configuration** button displays the current device configuration and enables the operator to change device configurations on-the-fly without changing operating mode or restarting the Ignite/Ignite Konnect application. The color of the device configuration button matches that of the Mode Control button.

To change the device configuration, click the Device Configuration button and then click a different configuration or reload the current configuration as described in *Set Active Devices Configuration Dialog Box* on page 329.

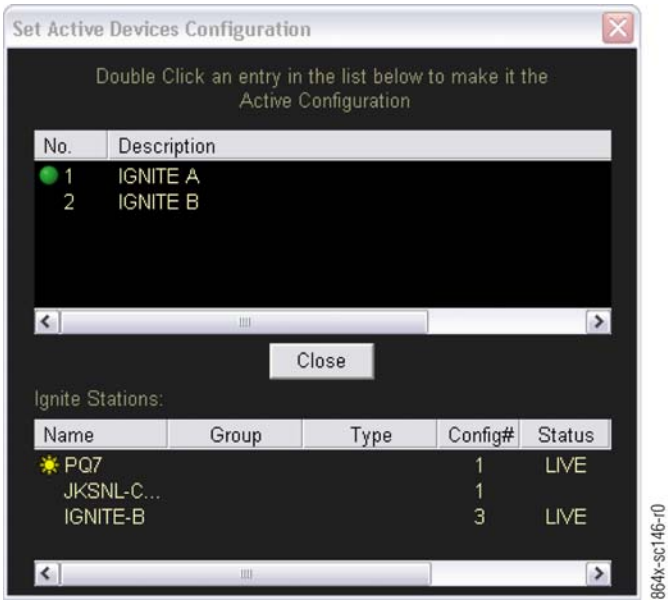
Note If the device configuration is changed, all devices disconnect and then reconnect. Therefore, it is recommended that device configuration is not changed during a live show.

Set Active Devices Configuration Dialog Box

The **Set Active Devices Configuration** dialog box (Figure 387) is accessed by clicking the **Device Configuration** button. It supports:

- Up to 99 user-defined device configurations.
- Enables runtime configuration switching.
- Synchronizes grouped systems and device configurations at start-up.
- Saves the last used configuration as the default for system restarts, as changes occur.

Figure 387. Set Active Devices Configuration Dialog Box



The available configurations list at the top of the dialog box displays all available device configurations by identification **No.** and **Description**. A green **(LIVE)** or red (**PREP)** circle to the left of the **No.** column identifies the active device configuration and current mode status of the workstation. Double-click an inactive configuration to make it active. Double-click an active configuration to reload it (reloading an active configuration is useful for adding or deleting devices from a configuration).

Note Reloading an active configuration is necessary when adding or deleting devices from the active configuration. It is the only way to enact the changes. Adding or deleting devices, is done in the device configuration and setup (On the Event timeline Setup menu, click Device Configuration and Setup).

- The **Close** button, in the middle of the dialog box, closes the dialog box.
- The **Ignite Stations** list at the bottom of the dialog box displays all stations that are connected to the network, and powered-up with the Ignite/ Ignite Konnect application running. Each listed station is identified by **Name**, **Group**, **Type**, **Config#**, **Status**, **IP Address**, and **Port** assignment. A sun icon identifies the workstation displaying the dialog box. In the listing, systems with an identifier in the **Group** column are considered grouped. Systems sharing a common **Group** identifier are part of that common group. Stand-alone systems do not have **Group** identifiers.
    - Grouped systems communicate their presence and status to all other systems on the network; as do stand-alone systems. But unlike stand-alone systems, grouped systems employ a mode/ device configuration relationship to synchronize their mode and device configuration with other systems within the group.
    - Stand-alone systems also communicate their presence and status to all systems on the network, but operate independently.

All systems startup in the **WAIT** mode. During startup:

- A stand-alone system automatically switches to the default mode (PREP) and last used device configuration.
- A grouped system first checks for the presence of other active systems within the group.
    - If no other system in the group is detected, the system starts in the default mode (LIVE) and last used device configuration.
    - If a startup workstation detects an active workstation in its group, the startup workstation device configuration is matched and the mode is set to not conflict with the active system.

Note To avoid the possibility of device conflict at startup, never start two or more grouped Ignite/Ignite Konnect systems simultaneously. Wait for one system to fully start before starting the second grouped system.

Operation

Note The following procedures assume that the display of **Optional Information dialog boxes** is set to **NO** (default) and that **Auto-Accept** for mode and device configuration changes is set to **YES** (default). If not, the operator may see additional information and mode/device configuration change acknowledge dialog boxes not discussed here. These self-documented dialog boxes provide the operator real-time visual cues of system operation when performing mode or device configuration changes.

Note **Optional Information dialog boxes** and **Auto-Accept** settings should only be changed by qualified Grass Valley Field Service Engineers (refer to *Contacting Grass Valley on page 4*).

Use the following procedures to:

- *Place Workstation in LIVE Mode* on page 331
- *Set Active Devices Configuration* on page 332
- *Verify Device Status* on page 334
- *Verify/Clear Message Status* on page 335
- *Place Workstation in PREP Mode* on page 335

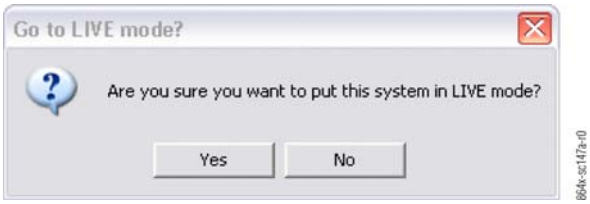
Place Workstation in LIVE Mode

Note The following procedure assumes the system is currently in **PREP** mode.

1. From the Device Manager module (Figure 388), click **PREP**.
   The **Go to LIVE mode?** dialog box (Figure 389) appears.

Figure 388. Device Manager - Prep Mode

Figure 389. Go to LIVE Mode Dialog Box



2. Click **Yes** to continue.

   In Stand-alone Systems:

   The mode changes to **WAIT** while devices are disconnected, then changes to **LIVE** and connects to the required **LIVE** mode devices.

In Grouped Systems (System A and B):

Note The following assumes that System A is currently in **PREP** mode and is changing to **LIVE** mode.

System A changes to **WAIT** mode while devices are disconnected and the system checks for other active systems in the group.

- If no other grouped system is detected, System A changes to **LIVE** and connects to **LIVE** mode devices.
- If another system (System B) is detected, it changes to **WAIT** mode while devices are disconnected. System A then changes to **LIVE** and connects to **LIVE** mode devices. System B then changes to **PREP**, and connects to **PREP** mode devices.

Note If a user tries to change the configuration while in Prep mode, a message appears stating the system must be in Live mode to change configurations.

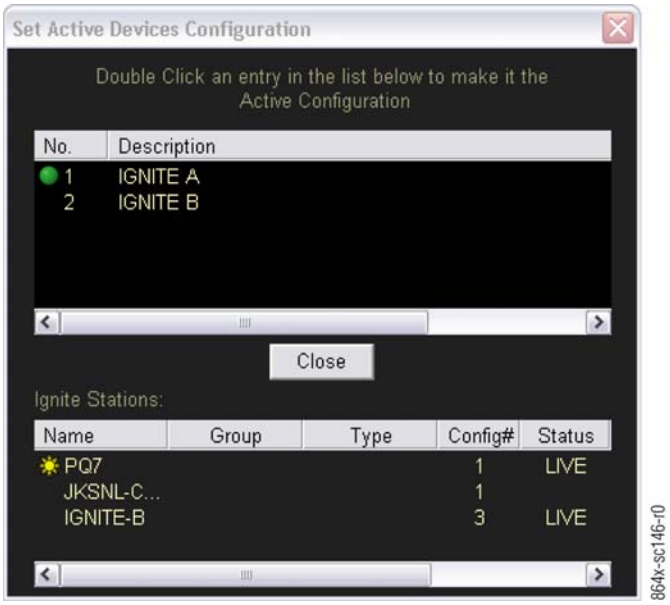
Set Active Devices Configuration

Note that:

- At startup, the active device configuration is set to the configuration that was active at shutdown, or in grouped systems, set to match the configuration of the active system in the group.
- In stand-alone systems, device configuration changes are possible in either **LIVE** or **PREP** mode.
- In grouped systems, only the **LIVE** system can change the active device configuration; the **PREP** system configuration is automatically synchronized with the **LIVE** system at start-up, and as changes occur.
- This is also how a current configuration is reloaded after it has been modified—either devices added or removed.

1. From Device Manager, click the configuration button.
   The **Set Active Devices Configuration** dialog box(Figure 390) appears.

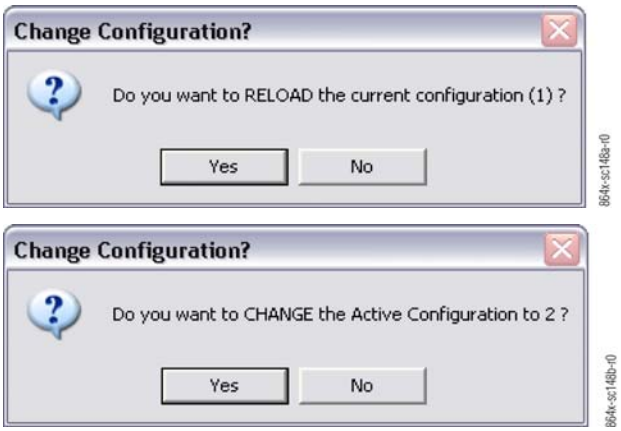
Figure 390. Set Active Configuration Dialog Box



2. Double-click the active entry (red/green circle) to reload it, or an inactive entry to load and make it active.

A **Change Configuration?** dialog box (Figure 391) is displayed to confirm **RELOAD** or **CHANGE** of the current configuration.

Figure 391. Change Configuration? Dialog Box – RELOAD or CHANGE



3. Click **Yes** to confirm and close the **Change Configuration?** dialog box.

The **Change Configuration?** and **Set Active Devices Configuration** dialog boxes close.

In Stand-alone Systems:

The mode changes to **WAIT** while devices are disconnected, the selected configuration loads, and the required devices are connected in **PREP** or **LIVE**.

In Grouped Systems (System A and B):

Note In grouped systems, only the **LIVE** system can change the active device configuration; the **PREP** system configuration is automatically synchronized with the **LIVE** system.

Note The following assumes that System A is **LIVE** using configuration 1.

System A changes to **WAIT** mode while the system checks for other active systems in the group.

- If no other grouped system is detected, devices are disconnected, the selected configuration is loaded, and the required devices are connected in **LIVE** mode.
- If another system (System B) is detected, it changes to **WAIT** mode while devices are disconnected. System A then changes to **LIVE** and connects to **LIVE** mode devices. System B then changes to **PREP**, and connects to **PREP** mode devices.

Note If a user tries to change the configuration while in Prep mode, a message appears stating the system must be in Live mode to change configurations.

Verify Device Status

1. From Device Manager, click the **Devices** tab (Figure 392).

Figure 392. Device Manger - Devices Tab

Note Devices that display red (error), are not communicating with the Device Manager module, and could adversely affect **LIVE** show production. Devices that display gray (inactive) are available in **PREP** mode, but not used in **LIVE** mode.

2. Verify that all devices are displayed in green (that no devices are displayed in red [error]).

Verify/Clear Message Status

Note Messages that display yellow (warning) or red (error) indicate processes that could adversely affect **LIVE** show production.

1. From Device Manager, click the **Messages** tab.

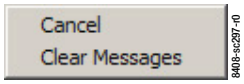
Note Initial warning/error messages at system startup are normal and should be cleared. Subsequent warning/error messages indicate device or communication problems, and must be evaluated and corrected prior to attempting to produce and/or air a live show.

Figure 393. Device Manager Messages Tab

2. Evaluate any yellow and red messages to determine their effect on the **LIVE** production. If necessary, troubleshoot and repair prior to attempting to air a **LIVE** show.

3. To clear messages, right-click in the messages area.
   The **Cancel/Clear Messages** dialog box (Figure 394) appears.

Figure 394. Cancel/Clear Messages Dialog Box



4. Click **Clear Messages**.
   The **Cancel/Clear Messages** dialog box closes and all messages are cleared (Figure 385).

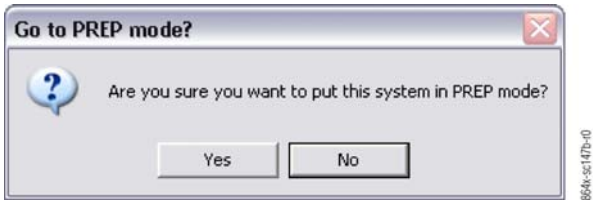
Place Workstation in PREP Mode

Note The following procedure assumes the system is currently in **LIVE** mode.

1. From Device Manager, click **LIVE** (Figure 395).
   The **Go to PREP mode?** dialog box (Figure 396) appears.

Figure 395. Device Manger - Live Mode

Figure 396. Go to PREP Mode Dialog Box



2. Click **Yes** to continue.

In Stand-alone Systems:

The mode changes to **WAIT** while devices are disconnected, then changes to **PREP**, and connects to the required **PREP** mode devices.

In Grouped Systems (System A and B):

Note The following assumes that System A is currently in **LIVE** mode and is changing to **PREP** mode.

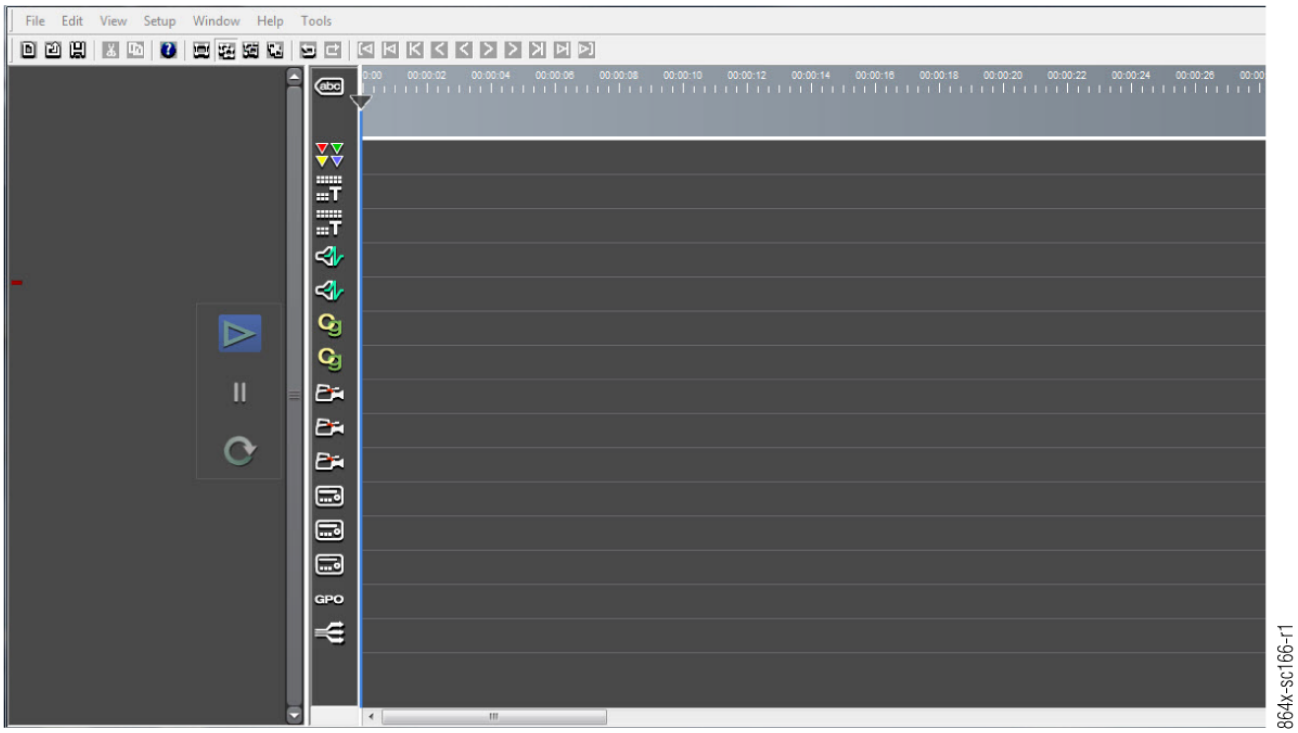
System A changes to **WAIT** mode while devices are disconnected and the system checks for other active systems in the group.

- If no other grouped system is detected, System A changes to **PREP** and connects to **PREP** mode devices.
- If another system (System B) is detected, it changes to **WAIT** mode while devices are disconnected, then changes to **LIVE** mode and connects to the required **LIVE** mode devices. System A then matches its configuration with System B, changes to **PREP** mode, and connects to **PREP** mode devices.

Section 10

Event Timeline Module

Figure 397. Event Timeline Module



Overview

The Event Timeline Module (Figure 397) is the central control area for show production. Basically it is an event occurrence line that is populated with a series of TMEs (refer to *TME™ (Transition Macro Event™)* on page 346). Collectively, the TMEs automate the tasks necessary to sequence and produce up to a two hour show. Event timeline control uses a combination of the associated TMEs, Timeline menus, manual controls, and LBN hotkeys.

The selected show/user (macro) file starts the Event Timeline module with the presets/prebuilds specific to that show or user. Therefore, all changes/additions/deletions, customization, hotkeys, etc. are specific to that show/user interface.

Event Timeline Controller

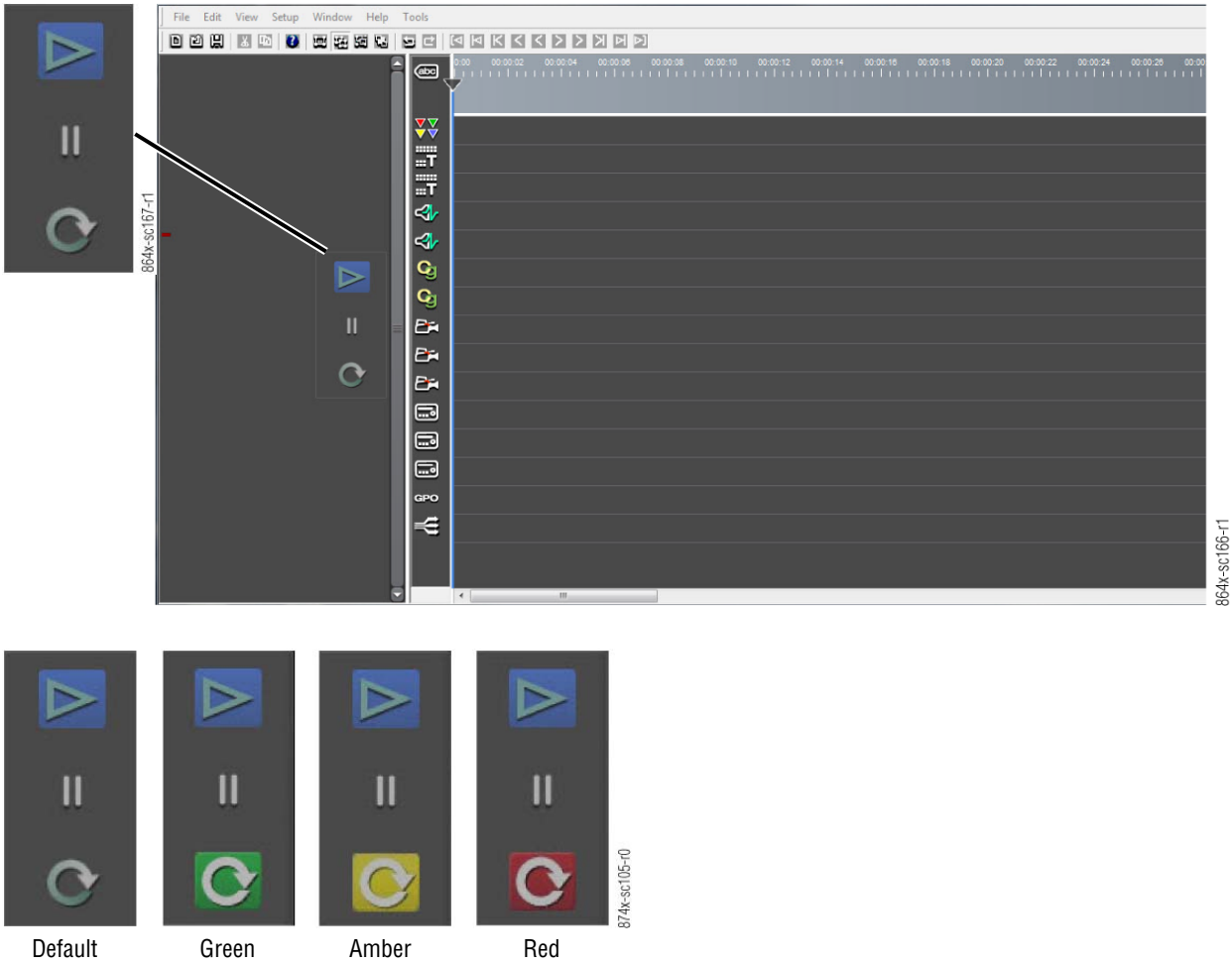
There are four basic methods of Event Timeline control:

- The Event Timeline control GUI (Figure 398) provides play, pause, and timeline control.
- The timeline can also be controlled by the ALT and SPACEBAR keys on the keyboard. This is the most common method of advancing through a show.
- The Ignite Katalyst Automation Control Panel
- An external GPI to the Ignite/Ignite Konnect system so that the timeline may be advanced by switches, foot pedals, or other external controls.

Note A user can manually override anything on the timeline at any time.

Note For FuseIGNITE specific Event Timeline controller functionality, refer to *Section 11-FuseIGNITE Module*.

Figure 398. Event Timeline Controller



The Event Timeline Controller has four indication states (Figure 398 on page 338);

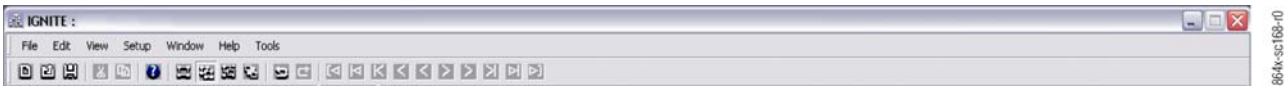
- Off – default state (gray) indicates there are no pending updates.
- Green – indicates there is a pending update and that update is all good—contains only messages and no warnings or errors.
- Amber – indicates there is a pending update, but that update contains one or more warnings.
- Red – indicates there is a pending update, but that update contains one or more errors

Note Red might also contain warnings but a more severe red indicator supersedes an amber.

Menu Bar

The Event Timeline menu bar (Figure 399) is located below the title bar at the top of the Event Timeline module. Each menu item displays a list of available commands.

Figure 399. Event Timeline Menus

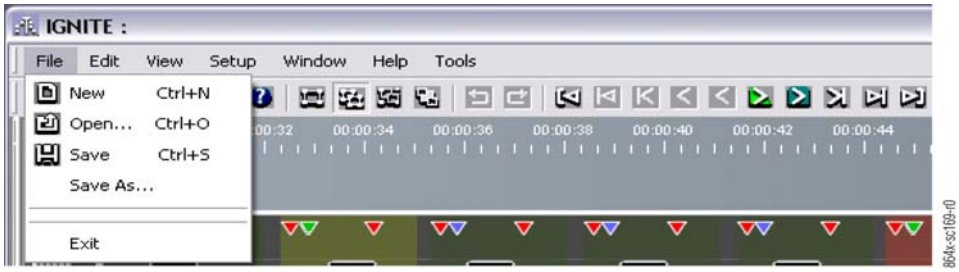


File Menu

The File (Figure 400) menu commands are:

File Menu Command	Purpose
New	To create a new show/user macro file.
Open	To open an existing show/user macro file.
Save	To save the currently open show/user macro file with timeline and LBNs, including any changes made. Also to save CG preset hotkeys.
Save As	To save the currently open show/user macro file with timeline and LBNs, including any changes made, with a different show/user macro file name. Also to save CG preset hotkeys.
Exit	To close the Ignite/Ignite Konnect live production control system application.

Figure 400. Event Timeline File Menu

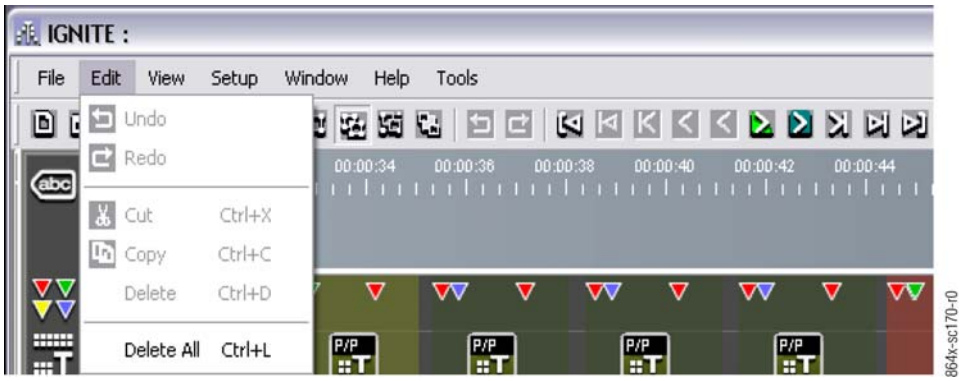


Edit Menu

The Edit (Figure 401) menu commands are:

Edit Menu Item	Purpose
Undo: Add Object	To reverse the last action
Redo: Move	To reverse the UNDO
Cut	To remove selected items, placing them on the clipboard
Copy	To leave the selected item, also placing them on the clipboard
Paste	To put the current clipboard items on the timeline
Delete	To remove the selected item(s) from the timeline
Select All	To select all items on the Timeline

Figure 401. Event Timeline Edit Menu



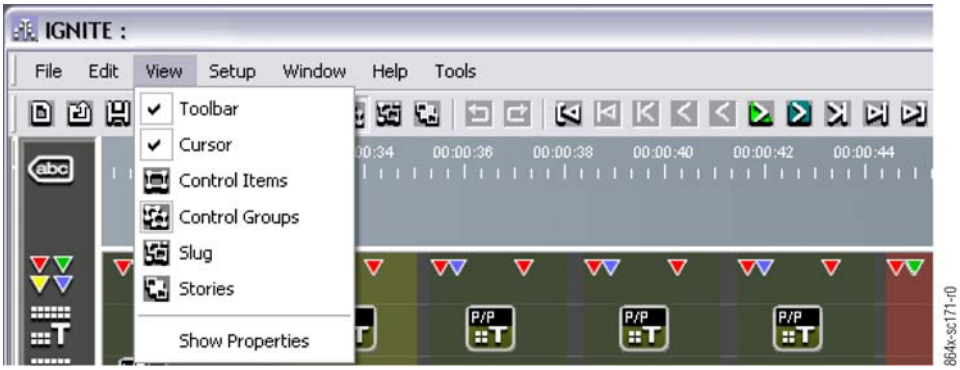
View Menu

The View (Figure 402) menu commands are:

View Menu Item	Purpose
Toolbar	To show or hide the timeline toolbar.
Cursor	To show or hide the cursor.
Control Items	To bring objects to the foreground.
Control Groups	To bring groups to the foreground.
Slug	To bring slugs to the foreground.

View Menu Item	Purpose
Stories	To bring stories to the foreground.
Show Properties	To display timeline data.

Figure 402. Event Timeline View Menu



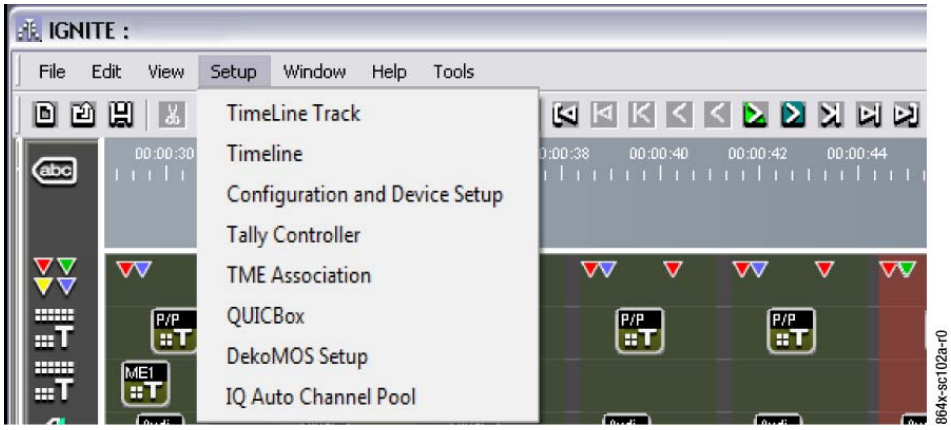
Setup Menu

The Setup (Figure 403) menu commands are:

Note In Ignite/Ignite Konnect systems configured as No Audio, no QUICbox Panel is available on this menu. Also, all audio control is outside the Ignite/Ignite Konnect system and the Ignite/Ignite Konnect Audio Module user interface area is blank.

Setup Menu Item	Purpose
Timeline Track	To customize the Timeline layout.
Timeline	To configure GPI mark settings. Also to configure rundown import save options.
Configuration and Device Setup	To assign ports for peripheral devices; e.g., CG, camera, server.
Tally Controller	To create tally logic. Also to allow configuration of the Tally Expander settings, as well as enabling / disabling the device.
TME Associations	To associate TME column names with the actual TME within the Ignite/Ignite Konnect system and also Ignite IQ Module. (Refer to *Manage TME Associations* on page 373)
Ignite Katalyst	To setup Ignite Katalyst buttons and events (Refer to *Configuration on page 37*)
QUICbox	To setup QUICbox buttons and events. (Refer to *Configuration on page 70*) NOTE No QUICbox Panel option is available in Ignite/Ignite Konnect systems configured as No Audio.
DekoMOS Setup	To select/set template styles, show or hide manual play controls during playout, and configure DekoMOS Gateway IP address and port assignment.

Figure 403. Event Timeline Setup Menu Example



Window Menu

The Window (Figure 403-Figure 407) menu commands are:

Window Menu Item	Purpose
Narrow View	To shift the timeline right, allowing more space to move smaller Ignite/Ignite Konnect modules to the left of the timeline (Figure 404).
Wide View	To display an extended view of the timeline.
Rundown List	To display the standard two-column rundown list, at the left of the timeline, that contains Story and Slug information (Figure 405).
Rundown List Detailed	To display a three-column rundown list that includes TME information (Figure 406). **Note** If configured with Aurora DNP, then clip status and thumbnails are included. **Note** If configured with Video Server Status (VDCP Device Control) thumbnails are not included.
Hide	To hide the rundown list (Figure 407).

Figure 404. Event Timeline Window Menu – Narrow View

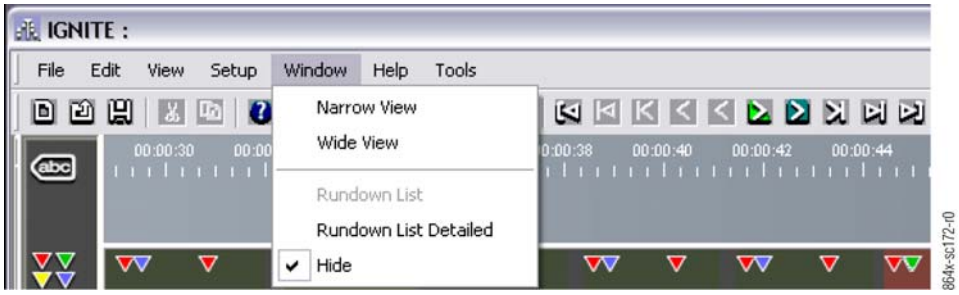


Figure 405. Event Timeline Window Menu – Rundown List

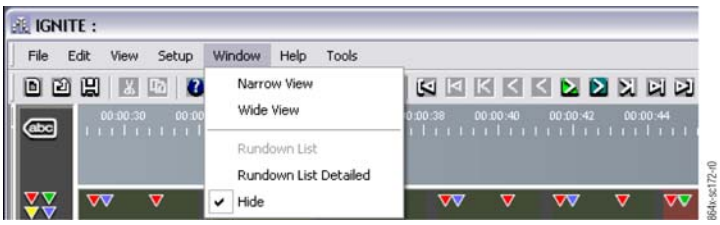
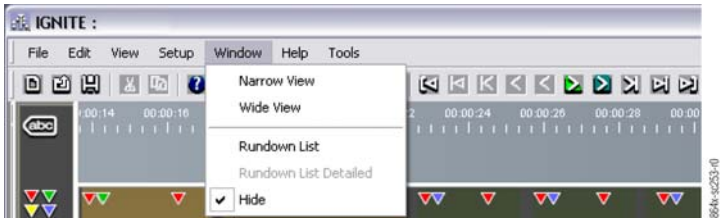


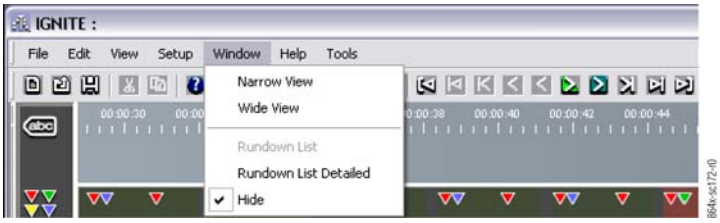
Figure 406. Event Timeline Window Menu – Rundown List Detailed



Aurora DNP

Note If configured with Video Server Status (VDCP Device Control) thumbnails are not included.

Figure 407. Event Timeline Window Menu – Hide



Help Menu

The Help menu (Figure 408) displays version information.

Help Menu	Purpose
About	To display Ignite/Ignite Konnect software version information.

Figure 408. Event Timeline Help Menu

Tools Menu

The Tools menu (Figure 409) selection is:

Tools Menu Command	Purpose
Import Rundown	To enable the import of a coded rundown from the NRCS into the Ignite/Ignite Konnect system or the Ignite IQ Module. (Refer to *Import Rundowns* on page 352)

Note For Ignite/Ignite Konnect systems supporting the optional MediaFUSE™ Content Repurposing System, an additional FuseIGNITE menu item is available on the Tools menu. Refer to the optional FuseIGNITE module for details.

Figure 409. Event Timeline Tools Menu

TME™ (Transition Macro Event™)

A Transition Macro™ Event (TME) is a group of individual production tasks that are combined to create an automated video production event. Show-specific TMEs (Figure 410) on the event timeline then sequence these programmed production events via cursor movement along the Event Timeline.

Figure 410. Sample TMEs

Individual icons representing those tasks are located on the Event Timeline icon toolbox (Table 411) to the left of the Event Timeline. A TME is created by dragging and dropping task icons on the timeline, defining the individual task properties, and then saving as a TME.

Note These icons are not dependent on device ID. Several devices may be duplicated on the list; however these device icons can be any device of that type.

For example, any of the three camera icons can represent any of the three cameras. The Event Timeline tracks are customizable to reflect on site devices. So tracks accurately depict the TME icon, track setup must be completed before starting to build the TME library

Figure 411. .Event Timeline Icon Toolbox Icons

Icon	Description
	Notes Label – TME file identification
	Step Marks (red = Jump, green = Clock Timer for local timed events, blue = GPO/GPI, yellow = Clock Timer for global timed events) – control the timeline cursor as it travels along the timeline.
	Switcher – video transitions and effects
	Audio – audio processor
	ScriptViewer
	CG – still stores and character generator controls
	Camera – camera presets recall
	Device Control – video servers, VTRs, and/or audio servers
	GPO/GPI – external device triggers
	FuseIGNITE **Note** This icon is only available in Ignite/Ignite Konnect systems supporting the optional Media-FUSE™ Content Repurposing System. Refer to the optional FuseIGNITE module for details

There are key components to a TME other than the Icons. Marks at the top of each TME control what the timeline cursor does as it travels along the Event Timeline and crosses each TME. There are four marks:

- Red = Jump (start)
- Green = Clock Timer to trigger local timed events
- Blue = GPO/GPI (stop)
- Yellow = Clock Timer to trigger global timed events

Basically, when the cursor encounters a red jump mark, it jumps to the next blue GPI mark, stops, and waits for the next transition. When it jumps, it takes all the TME information between the red and blue marks and executes it in preparation for the next transition. This is called bus prepping and it is why the section between the first red mark and the blue GPI is called the TME prep area.

Show-specific TMEs on the Event Timeline then sequence these programmed production events via cursor movement along the Event Timeline.

Note On the Event Timeline, a user can manually override anything, at any time. Refer to *Manual Override* on page 366,

Since there is a corresponding TME for each show event, each event is implemented as the cursor travels along the Event Timeline (Figure 412).

Figure 412. TME Examples

864x-sc238b-r0

TMEs should have:

Note Refer to *Standardization* *on page 577*

- Standard and consistent naming
- Standard and consistent abbreviations
- Standard and consistent color use
- Standard and consistent file structure

Structure

When building a TME, there are basic mark and icon placements to consider (Figure 413). Refer to *Marks* and *Icons* below.

Figure 413. TME Mark and Icon Structure

Marks

Typically, Jump mark placement includes the following considerations:

- Place a red Jump mark at an even number on the Timeline; e.g., 00:00:01:00.
- Place a blue GPI mark 15 frames after the red Jump Mark.
- Place a green Clock Timer mark in the same frame as the first Switcher Icon
- Place the last red Jump mark 1 frame after the last icon in the TME.

Icons

Typically, icon placement (Figure 414) includes the following considerations:

- Place the first TME prep icon 1 frame after first red Jump Mark and any additional icons are staggered. This includes server load, CG load, camera preset recall, etc.
- Place the first ME icon 1 frame before the blue GPI mark.

Note For each additional ME icon in TME Prep area, stagger 1 frame working toward the red Jump Mark.

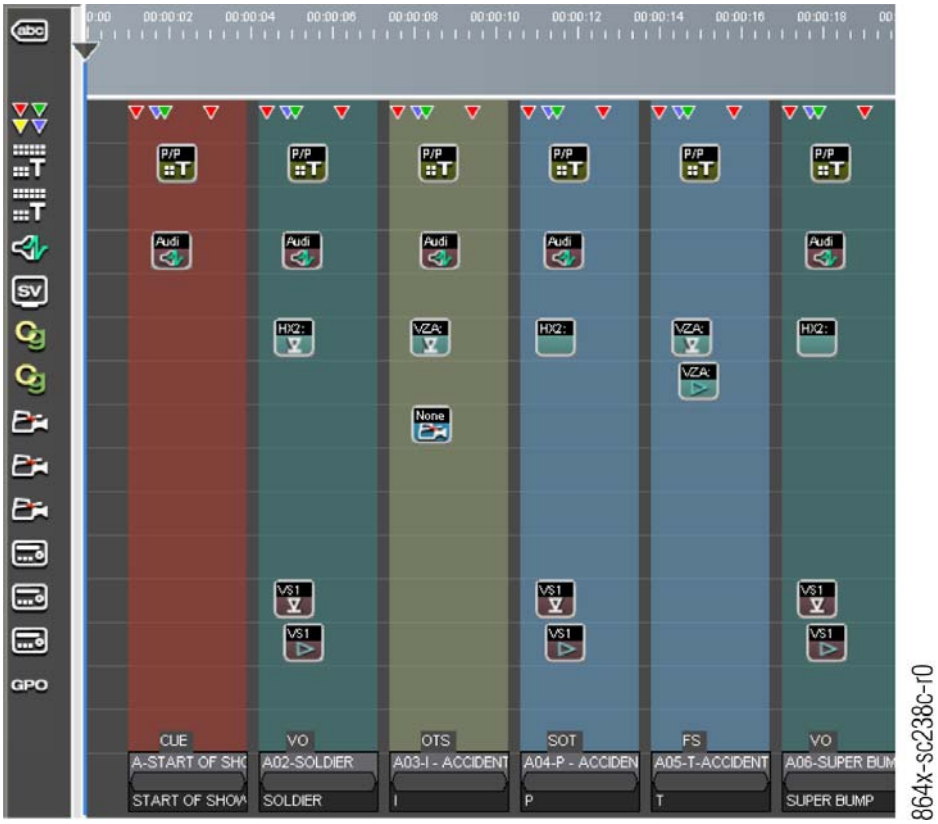
Note When using a server cue icon, always place the icon one frame after the first red jump mark.

- Place the Server Play icon 1 frame after the GPI
- Place the GPO to play servers 1 frame after the blue GPI/GPO mark
- Place the CG Play icon 2 frames from the GPI
- Place the Audio icon 3 frames from the GPI
- Place the first Preview/Program Switcher icon 5 frames after the first Blue GPI

Note If this value must be increased, be sure to increase the Bus Prep area by the same increment; e.g. adding 5 frames to Bus Prep also requires adding 5 frames to the Bus Prep area. Anything over 10 requires a registry change.

- Place the second GPO to play servers 15 frames after the start of the previous blue GPI/GPO mark

Figure 414. TME Mark and Icon Placement

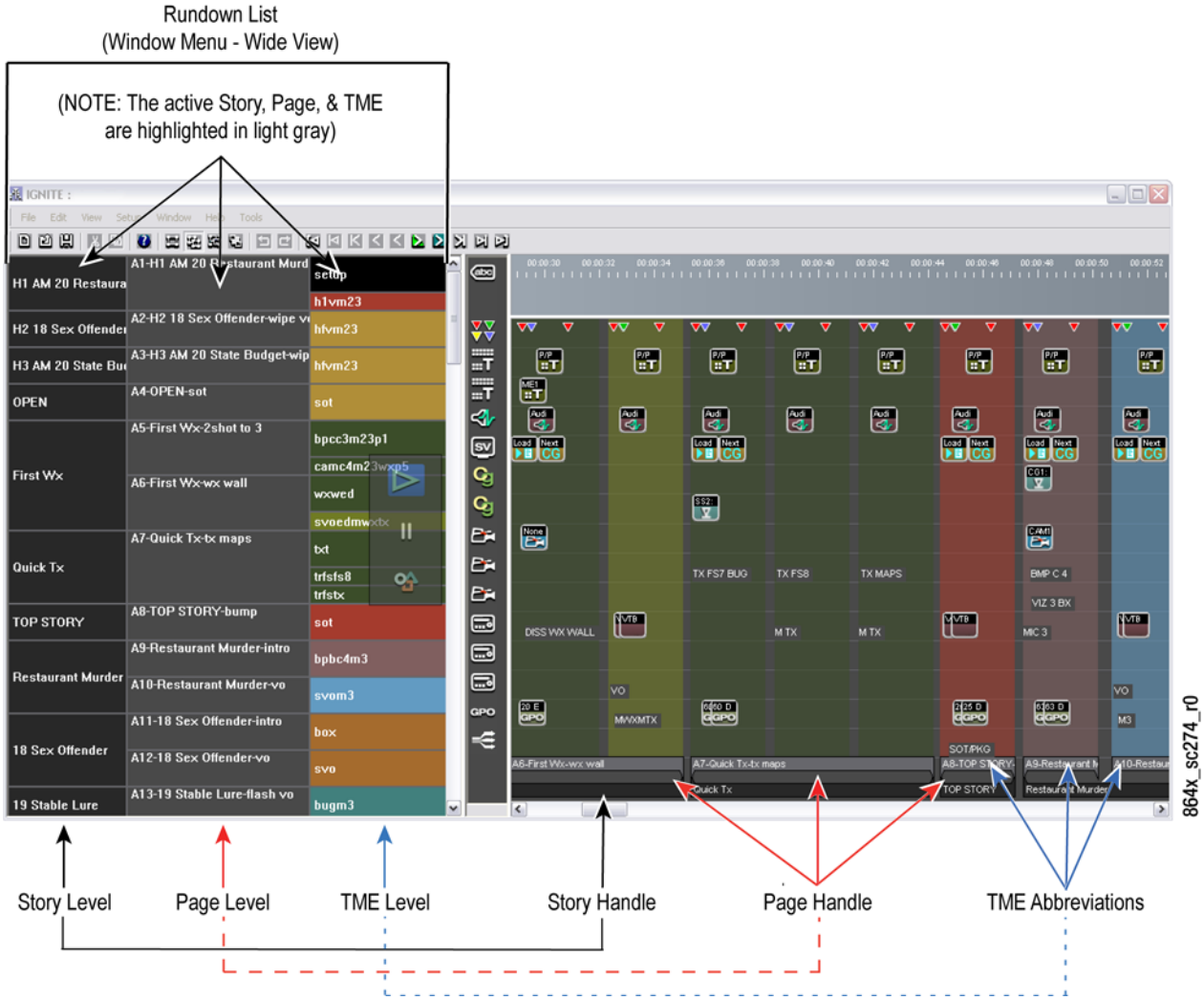


Rundown List/Event Timeline Correlation

After producing, editing, and coding a show in the NRCS, the Rundown list is imported from the NRCS into the Ignite/Ignite Konnect system. The rundown list then appears in the Event window both textually in the rundown list and graphically along the Event Timeline as an event driven process. Refer to Figure 415.

Note Back-to-back Pages/Slugs with the same Title before the dash are grouped under the same Story.

Figure 415. Rundown List/Event Timeline Correlation



Import Rundowns

Rundown convert is a part of the Ignite/Ignite Konnect program that imports a rundown graphical representation in preparation for taking a show to air. During processing, the rundown converter retrieves and parses the rundown from the NRCS, then automatically creates a show on the Ignite/Ignite Konnect event timeline. The director then has the ability to refine the show that has been created while being free of the time involved in recreating segments that are standard from show to show.

After producing, editing, and coding a show in the NRCS, import that rundown onto the Ignite/Ignite Konnect Event Timeline. Once a rundown is imported onto the timeline, it is automatically monitored until a different rundown is imported or a different show is pre-loaded.

The **Import Rundowns** dialog box (Figure 416) provides detailed rundown data and the associated user options. A color-coded and highlighted indicator identifies every change and its accuracy in the currently pending update. Once an update is accepted, the indicators clear from the dialog box and it begins to collect information for the next update.

Figure 416. Import Rundowns Dialog Box

A user has the ability to filter changes to the rundown to prevent them from hitting the Event Timeline. Filtering information in the message window eliminates all unwanted or unneeded data from appearing in the rundown update window for an operator to process and filtered items do not trigger an update. The data and options include (refer to Figure 416 and Figure 417):

- **File** menu:

Note The following three **File** menu selections are also available using the **Pre-Load**, **Import**, and **Close** buttons at the bottom right of the **Import Rundowns** dialog box.

  - **Pre-Load** button – enables a user to quickly get large rundowns to the timeline, especially when only a small window of time exists to import the new rundown. Refer to *Import Rundowns Pre-Load Function* on page 355
  - **Import** – immediately imports the currently expanded/selected rundown to the Event Timeline.
  - **Close** – closes the **Import Rundowns** dialog box

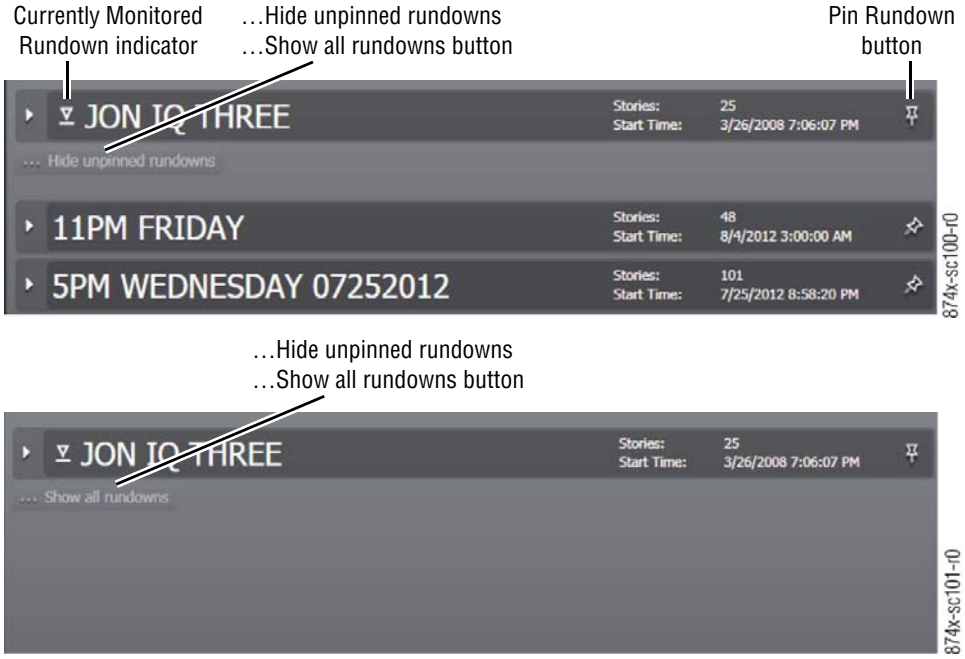
- **Edit** menu:
  - **Clear Cache** – clears all TMEs/IQTs cached in memory and forces them to be re-read from the disk during the next import.
  - **Configure** – opens the Configuration dialog box for the rundown filtering function. Refer to *Rundown Import Configuration (Filtering)* on page 358
- **Name**, **Story**, and **Start Time** buttons – sort the visible rundowns by either name, stories, or start time. Clicking the same button again toggles between ascending and descending sort orders.
- Rundown List – shows all currently active and viewable rundowns (Note: Some rundowns can be hidden during pinning process.)
- **Expand/Collapse** button – expands or collapses the selected rundown.

Note When a rundown is selected, it highlights blue and when expanded, all stories in that rundown are also highlighted blue.

When a selected rundown is expanded, all the stories in that rundown are shown. If that rundown is currently monitored, all rundown import information is also shown.

- **Currently Monitored Rundown** indicator (Figure 417) – indicates the rundown that is currently monitored for updates by the Event Timeline.

Figure 417. Pin Rundown



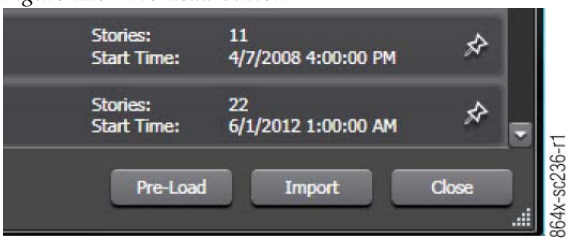
- Pin Rundown button (Figure 417) – regardless of the selected sort option, pins that rundown to the top of the rundown list. When multiple rundowns are pinned, they are sorted as a group using the currently active sort option but they remain grouped at the top of the list.
- **…Hide unpinned rundowns**/**…Show all rundowns** button (Figure 417) – when rundowns are pinned, the … Hide/Show all button toggles between hiding or showing all unpinned rundowns.
- **Error**, **Warning**, and **Info** check boxes – selecting the checkbox(es) sets the view filtering.
- **Pre-Load** button – enables a user to quickly get large rundowns to the timeline, especially when only a small window of time exists to import the new rundown. Refer to *Import Rundowns Pre-Load Function* on page 355.
- **Import** button – immediately imports the currently expanded/selected rundown to the Event Timeline.
- **Close** button– closes the **Import Rundowns** dialog box

Import Rundowns Pre-Load Function

The **Pre-Load** button (Figure 418) enables a user to quickly load large rundowns to the timeline when only a small window of time exists to import the new rundown. This is accomplished by staging the new rundown to allow for a quicker, more time-sensitive timeline update.

Note Pre-Load does not change the time it takes to process the new rundown, it simply allows you to process it while still executing existing events on the timeline. So it's important to provide a sufficient amount of time for the new rundown to pre-load.

Figure 418. Pre-Load Button



Unlike the **Import** button, which processes a rundown and then instantly replaces the current timeline with the newly imported show, the **Pre-Load** button starts importing the next rundown but the timeline is not immediately overwritten. Once the new rundown is fully processed the update icon is replaced by a corresponding Preload update icon ((Figure 419 on page 356)). The current timeline is not replaced by the pre-loaded rundown until the user clicks the preload update icon.

Note Once a new rundown has been selected for preload and the preload button clicked, the operator loses the ability to make changes/updates to the current show on the timeline.

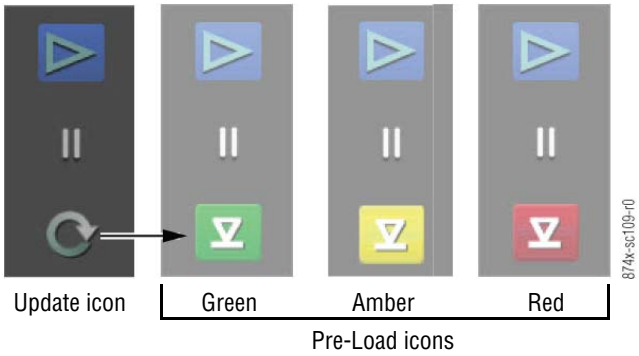
The Pre-Load icon on the Event Timeline Controller has three indication states;

Note Operators must distinguish between the preload update icon and the update rundown icon to avoid accidentally taking a show that has been pre-loaded to the timeline prematurely.

- Green – indicates there is a pending update and that update is all good—contains only messages and no warnings or errors.
- Amber – indicates there is a pending update, but that update contains one or more warnings.
- Red – indicates there is a pending update, but that update contains one or more errors

Note Red might also contain warnings but a more severe red indicator supersedes an amber.

Figure 419. Import Rundowns Pre-Load Indication



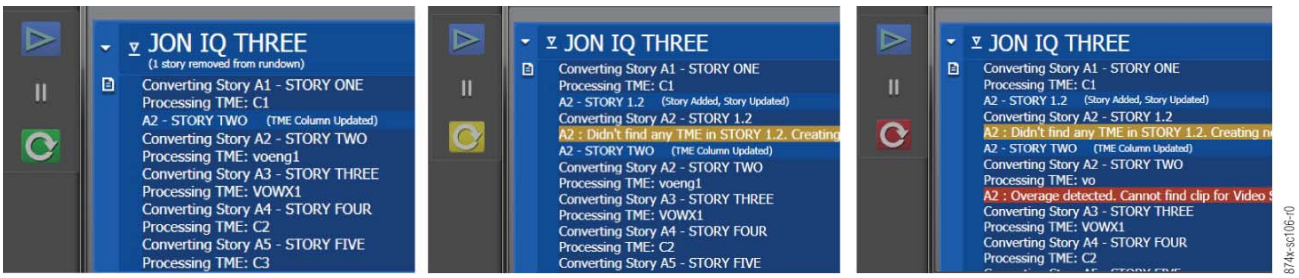
Import Rundown Update Indicator

The Event Timeline Controller icon provides three import rundown indications (Figure 420):

- Green – indicates there is a pending update and that update is all good—contains only messages and no warnings or errors.
- Amber – indicates there is a pending update, but that update contains one or more warnings.
- Red – indicates there is a pending update, but that update contains one or more errors

Note Red might also contain warnings but a more severe red indicator supersedes an amber.

Figure 420. Rundown Import Indicators

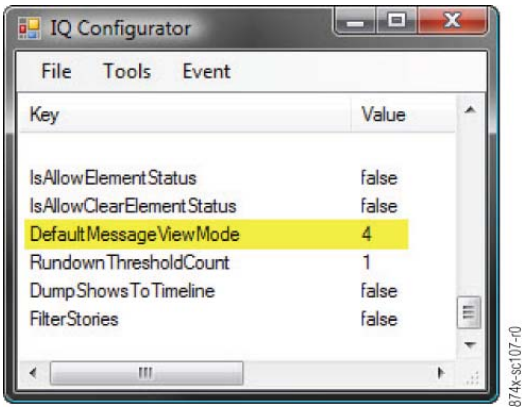


Recommended Standard Settings

The following settings are recommended for the most efficient implementation that takes full advantage Import Rundown features:

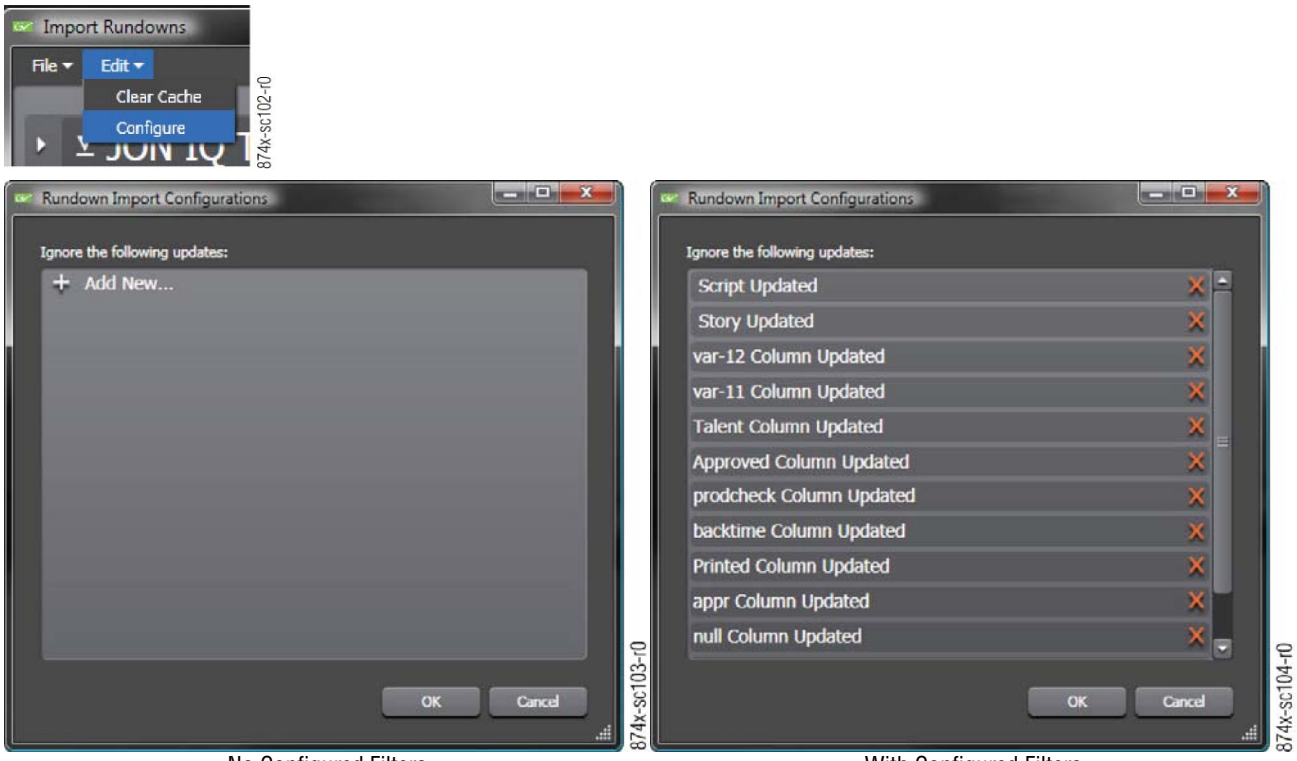
- Configuration (*Rundown Import Configuration (Filtering)* on page 358) should be set to eliminate unwanted information from reaching rundown import
- Clear the **Info** message check box.
- View Mode default is set to 4 – the default view mode is set as a global Ignite variable in the IQ Configurator (Figure 421). DefaultMessageViewMode can be set to 1, 2, 3, or 4

Figure 421. IQ Configurator Dialog Box



Rundown Import Configuration (Filtering)

Figure 422. Rundown Import Configurations Dialog Box



No Configured Filters

With Configured Filters

Rundown Import Configuration is accessed from the **Edit** menu (Figure on page 359). There are three types of filters:

- **Script Updated** – where any changes to the script text of any story in a monitored rundown are completely ignored and not passed on to the Ignite timeline
- **Story Updated** – where any changes to the story body contents of any story in a monitored rundown are completely ignored and not passed on to the Ignite timeline.

Note There are no options for this filter.

- **Column Updated** – where any changes to the configured column of any story in a monitored rundown are completely ignored and not passed on to the Ignite rundown. When a monitored rundown is updated, each update shows the type of change (in parentheses) that triggered the update. When a column triggered the change, the column name, as defined in the NRCS, is visible. If this type of update is undesirable, then that is the text string that should be entered.

Add a new filter by clicking **+ Add New…** in the **Rundown Import Configurations** dialog box. A new row (Figure 423) appears that

includes a **Column Name** text box for entering a column name. When a monitored rundown is updated, each update shows, in parentheses, the type of change that triggered the update. When a column triggered the change, the column name, as defined in the NRCS, is visible. If this type of update is undesirable, then that's the text string that should be entered here. For rundown monitoring, that information also appears in the Import Rundowns dialog box.

Note Multiple entries can be created and individually identified at that time. That column information appears later in the Import Rundown dialog box for rundown monitoring.

Figure 423. +Add New… Filter Dialog Box

Delete a filter by clicking the associated red **X**.

OK – saves the changes and closes the dialog box.

Cancel – closes the dialog box without saving changes.

Operation

Event Timeline operation is accomplished using a combination of:

- The **Play** button and **Pause** button at the left for rolling and pausing the timeline (Figure 424)

Note The Play/Pause control can be docked/undocked and might be found in other than the default location.

- The associated TMEs
- External GPO/GPI to the Ignite/Ignite Konnect system so that the Event Timeline can be advanced by switches, foot pedals, or other external controls
- Late Breaking News Hotkeys (Figure 425)
- Timeline menus (refer to *Menu Bar* on page 339)
- The ALT+SPACEBAR on the keyboard

Figure 424. Timeline Play and Pause Buttons

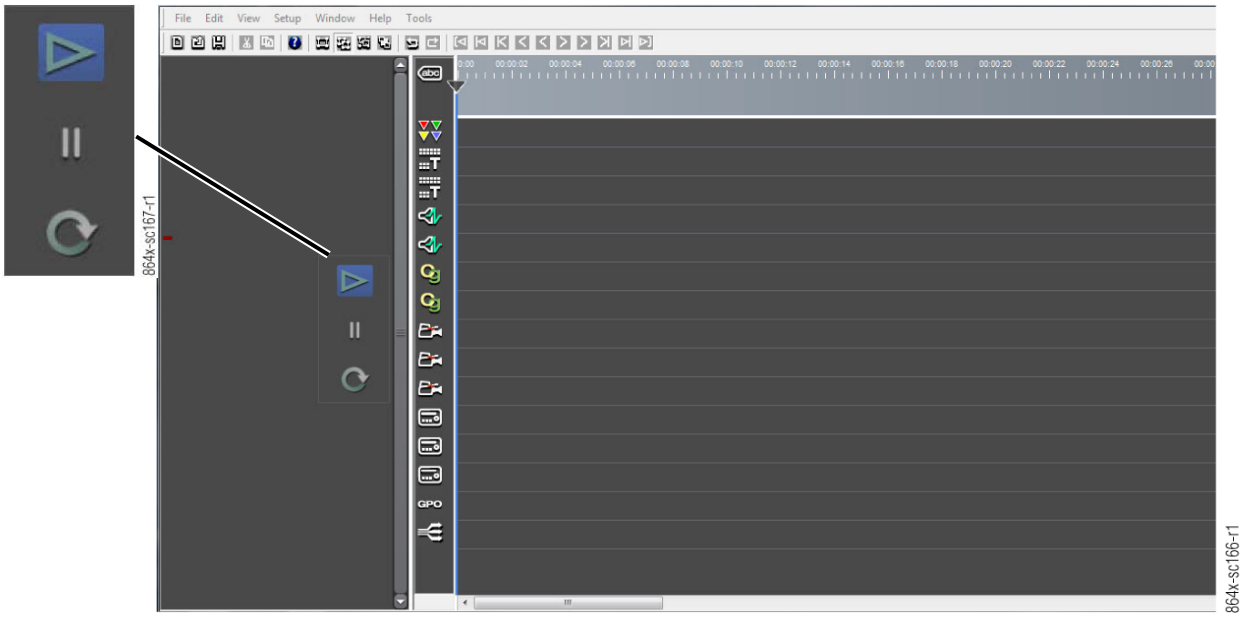
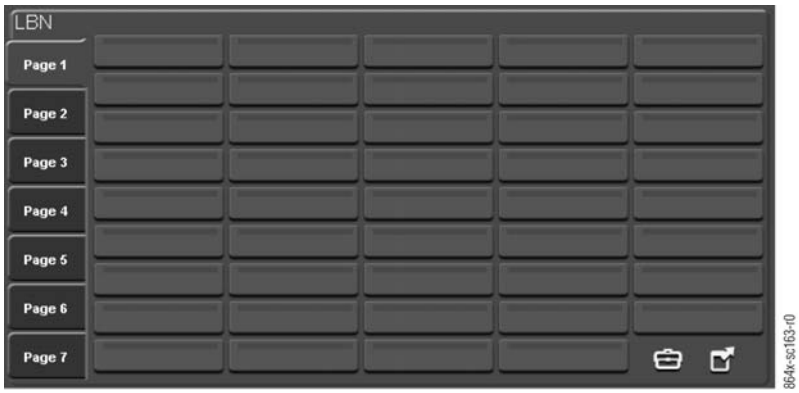


Figure 425. LBN Hotkeys



Note The selected show/user macro file opens the Ignite/Ignite Konnect Live Production Control system with the presets/prebuilds specific to that show or user. Therefore, all changes/additions/deletions, customization, hotkeys, etc. are specific to that show/user interface.

Once a show is ready for air, a user triggers the cursor using ALT+SPACEBAR to cross each TME (production event). As the cursor crosses the commands within the TMEs, the corresponding production events occur, such as take camera one with the talent one mic full.

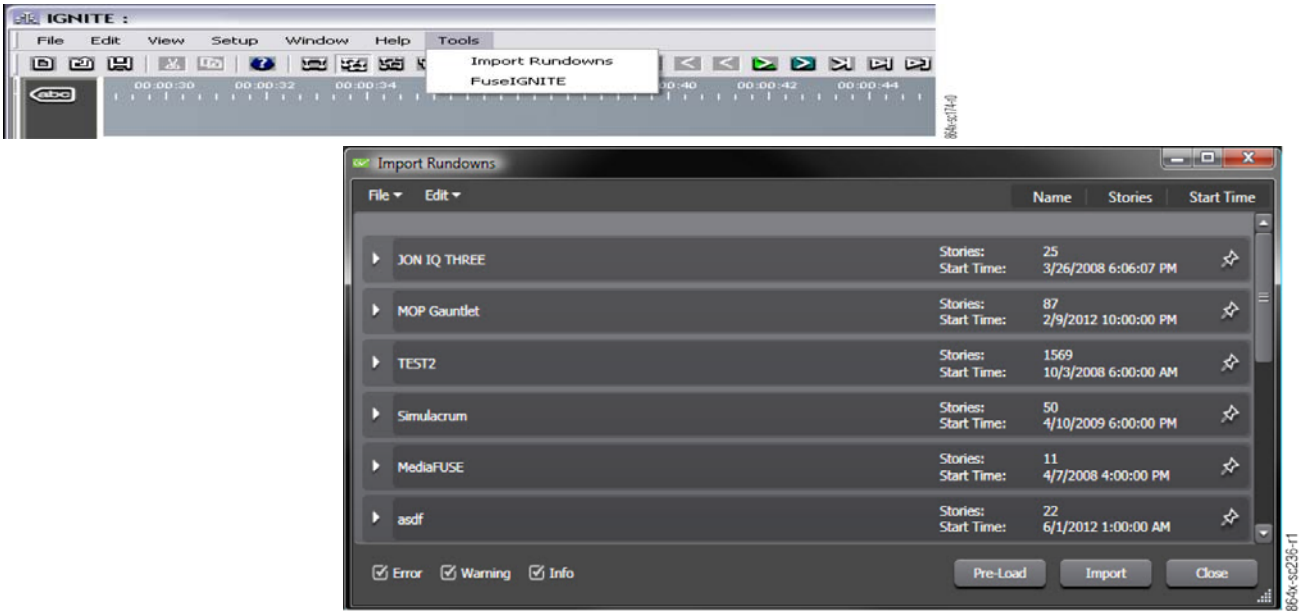
Note A user can manually override anything on the timeline at any time.

Import Rundowns

Import and Monitor Rundowns

1. On the **Event Timeline Tools** menu, click **Import Rundowns**. The **Import Rundowns** dialog box (Figure 426) appears.

Figure 426. Import Rundowns Dialog Box



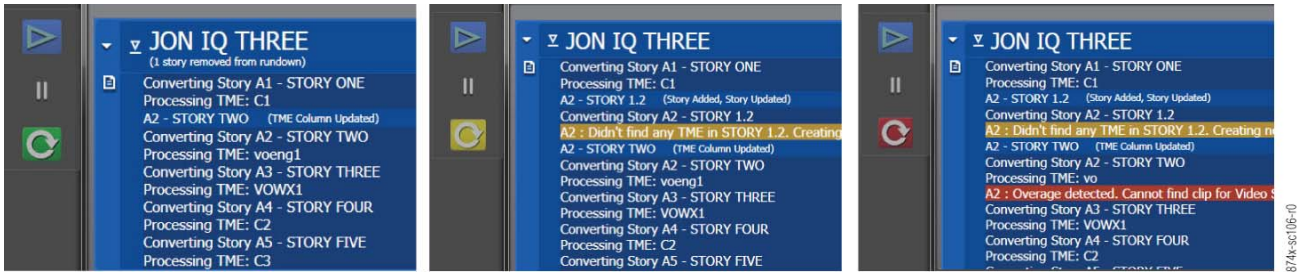
Note As a best practice, view mode #4 is recommended. This mode shows all messages without the story tree, but it displays the changes made since the last update to the timeline was accepted.The view mode default can be configured. Refer to *Recommended Standard Settings* on page 357.

Regardless of the view mode, stories removed from the rundown (floated, deleted) are always displayed just below the rundown name. Since they are gone there are no name references, but a count is maintained to indicate how many story deletions are present in the current update.

2. Click a rundown in the dialog box list. The selected rundown expands to show the status and highlight any warning messages (Figure 427).

Note If errors in rundown conversion appear in the dialog box, correct any errors in the NRCS and then re-import the rundown.

Figure 427. Import Rundowns Dialog Box — Status and Warning Messages



3. Click **Import**.
4. To close the **Import Rundowns** dialog box, either:
   - Click the **Close** button.
   - Click the **Close** icon.

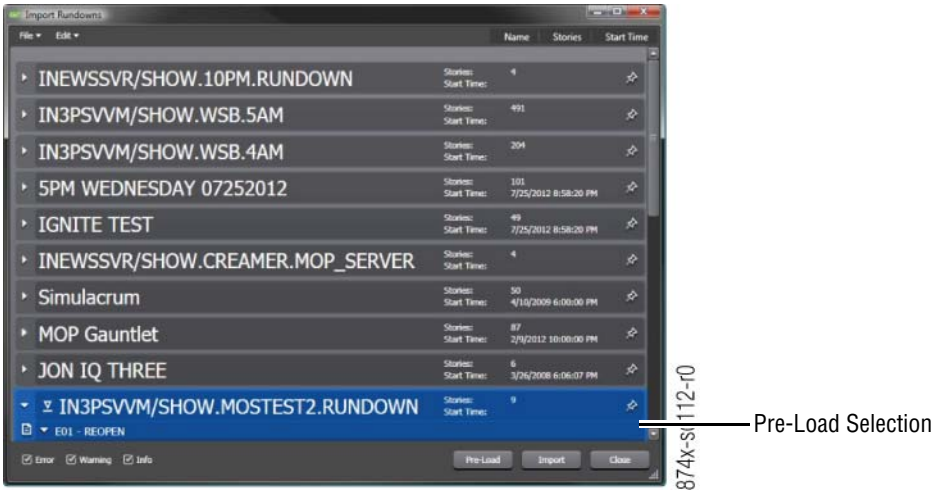
Pre-Load Rundown

1. Execute show (e.g. rundown #1) as usual until near the end when no further rundown updates are desired.

Figure 428. Pre-Load Timeline Example

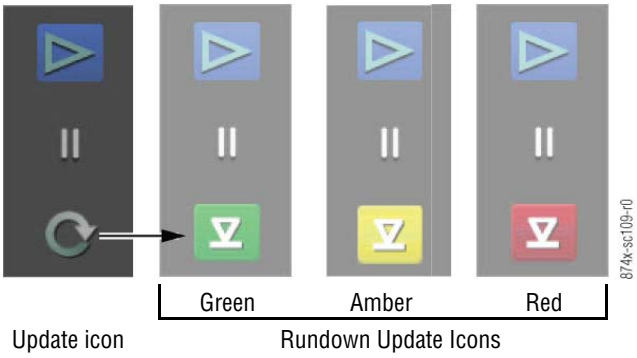
2. In the **Import Rundowns** dialog box (Figure 429), click the rundown to pre-load (e.g. rundown #2).

Figure 429. Pre-Load Selection Example



3. Click **Pre-Load**. Once show (#2) is processed, the update icon is replaced by a highlighted rundown update icon.

Figure 430. Import Rundowns Pre-Load Indication



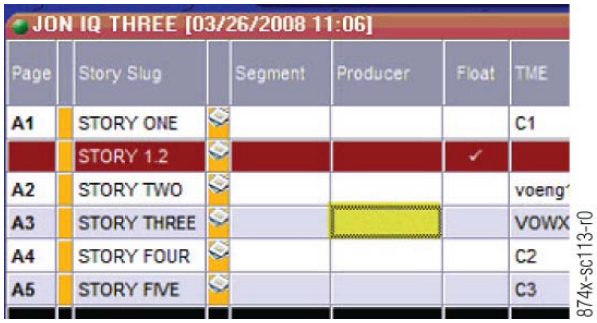
4. Finish playing out first show (i.e. rundown #1).
5. Enter commercial break.
6. Click the preload update icon to accept the pre-loaded show (i.e. rundown #2).
7. Pre-loaded show (i.e. rundown #2), which is already pre-processed, then pastes to the timeline in a few seconds.
8. Execute show (i.e. rundown #2).

Column Filtering

Note Data for columns to be filtered might or might not be named the same as the visible tag in the NCS.

1. Monitor a rundown that contains the column.
2. Make a change (Figure 431) to that column in a story.

Figure 431. Make a Column Change Example



3. In the Import Rundowns dialog box, check that the story shows an update and the column data name is visible; i.e., the column name is shown as [x] in [x] Column Updated.
4. Configure filters from Edit>Configure in IR window.
5. Press ENTER and then click OK.
6. Repeat Step 2 & Step 3, but ensure the change does not appear in Import Rundowns dialog box.

Insert a Note

1. Click and drag a **Note** icon onto the TME Event Timeline.
2. Double-click the **Note** icon.
3. In the Note dialog box, type the note text.
4. Click **OK**.

Play/Restart

There are three different ways to play an event on the timeline:

- On the keyboard, press ALT+SPACEBAR
- On the timeline control module, click the **Play** button.
- On the QUICbox control panel, click a pre-programmed (ALT+SPACEBAR) button.

Pause/Stop

There are three different ways to pause an event on the timeline:

- On the keyboard, press either:
  - ALT+P
  - ALT+S
- On the timeline control module, click the **Pause** button.
- On the QUICbox control panel, click a pre-programmed **Pause Ignite** action button.

LBN (Late Breaking News)

Note The selected show/user (macro) file starts the Event Timeline module with the presets/prebuilds specific to that show or user. Therefore, all changes/ additions/deletions, customization, hotkeys, etc. are specific to that show/ user interface.

There are two ways to add an LBN to the Timeline:

- Right-click and hold an LBN hotkey to drag the it anywhere on the timeline
- Click an LBN hotkey to insert it at the current cursor position on the timeline.

Note It is inserted just to the right of the cursor (as the next event).

Manual Override

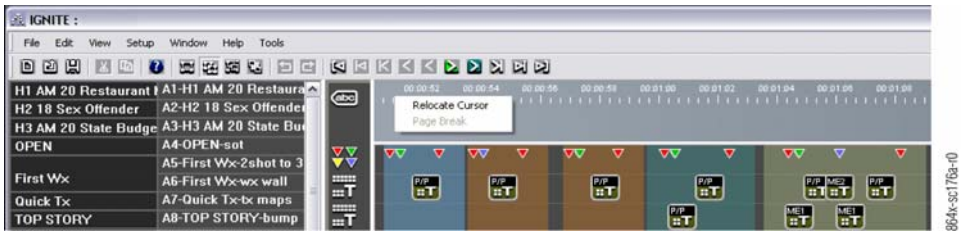
Users can manually override anything on the timeline at any time. To override any video source after a TME has been bus-prepped:

- Select a new source on the preset bus of the switcher. This allows the new source to transition to **Program** when the TME is transitioned. This overrides the original source that was prepped in the TME, provided that the prepped effect included a background transition.

Cursor Relocate/Jump

1. Right-click in the **Event Timeline** sequencer at the position to relocate the cursor. A **Relocate Cursor** dialog box (Figure 432) appears.

Figure 432. Relocate (Jump) Cursor



2. Click **Relocate Cursor**. The cursor jumps to the selected new position.

Re-cue

- Press **Alt+Q**.

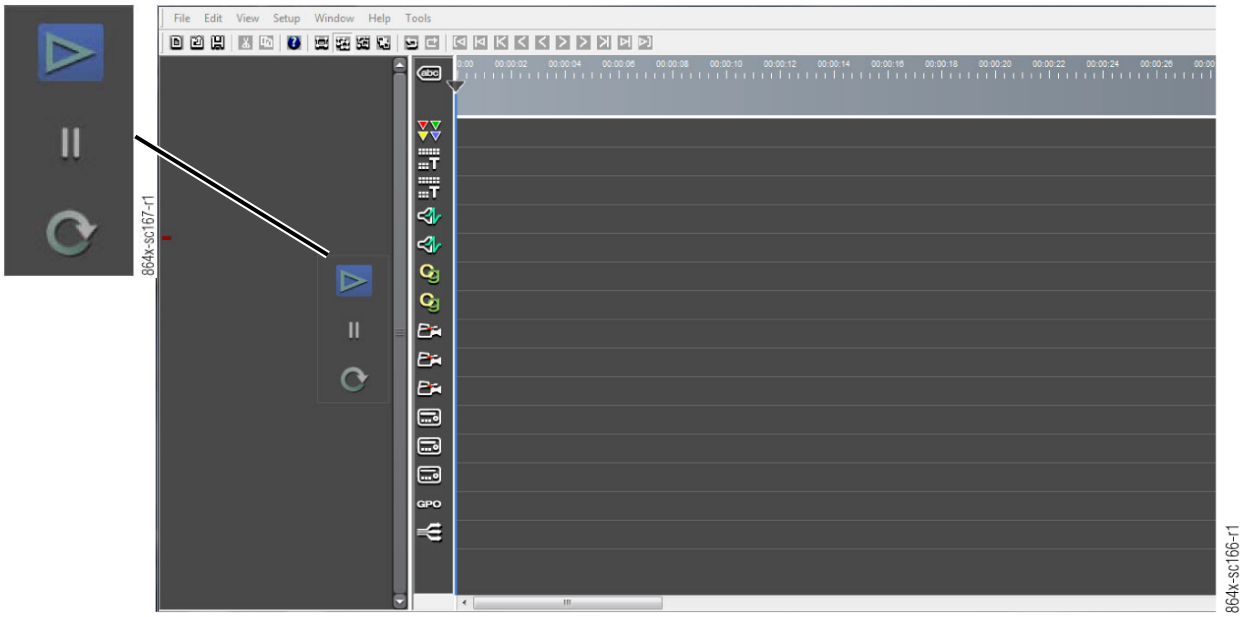
Note **Alt+Q** places the cursor at the beginning of the Event Timeline.

Advance Timeline

The Timeline is advanced by:

- TME, Slug, or story.
- The **Play** button and **Pause** button at the left for rolling and pausing the timeline (Figure 433).
- The ALT+SPACEBAR on the keyboard.
- A foot pedal via a GPI.
- Using the buttons on the top of the timeline to advance through show events.

Figure 433. Timeline Play and Pause Buttons



Page Break

The default page break occurs when the cursor reaches the right most position of the viewable Event Timeline. At that time, the viewable Event Timeline jumps left and the next full Event Timeline page appears. This page break can be reset to occur before reaching the right-most position.

1. Right-click in the **Event Timeline** sequencer at the position to relocate the cursor. A Relocate Cursor/Page Break dialog box appears (Figure 434).

Figure 434. Page Break

2. Click **Page Break**. The page break resets to the selected new position.

TMEs (Transition Macro Event)

Build a TME

Note So tracks accurately depict the TME icon, track setup must be completed before starting to build the TME library.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

Note If more than 8 audio tasks are required on any single audio icon, place a 2nd audio icon next to the first for 9-16 and so on.

Following is a sample TME build procedure. All the necessary build icons are located on the icon toolbox left of the Event Timeline window. Refer to Table 411 on page 347.

1. On the icon toolbox, click and drag a red Jump mark to an even number on the Timeline; e.g., 00:00:01:00.
2. Double-click directly below the red Jump mark on the timeline. The Group Properties dialog box appears.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

3. Assign a TME color and a TME name. Click **OK**.
4. On the icon toolbox, click and drag a blue GPI mark to 15 frames after the red Jump mark.
5. On the icon toolbox, click and drag a Switcher icon to 5 frames after that blue GPI mark on the timeline.
6. Double-click that Switcher icon. An M/E Properties dialog box (Figure 435) appears (refer to the Switcher module).

Figure 435. ME Properties Dialog Box

7. Define the M/E properties for the desired video transition (Figure 8).
   a. Click an M/E button. The respective M/E effects list appears.
   b. From the effects drop-down list, Click an effect for the TME. All buttons related to the selected effect change to yellow, indicating Preview.
   c. If an effect with a key source is selected, click the bottom half of the PVW button. The **Select Source** dialog box (Figure 436) appears.

Figure 436. Select Source Dialog Box

   d. From the drop-down list, select a source. Click **OK**.
8. Click **Save**.
9. On the icon toolbox, click and drag a red Jump mark to 1 frame after the last icon in that TME.

Note Typically, there are approximately 15 frames between the first jump mark and the GPI. Rare occasions might require increasing the frame rate between the first jump mark and GPI.

10. For events that need to take place in prep (e.g., to setup a server cue, cameras, or CG/Still Store recall before taking to air), click and drag the first task icon 1 frame after the first red Jump mark. Stagger any additional icons. Stagger each additional icon at least one frame after the previous icon. Be sure to define the desired properties for each icon.

Note When using a server cue icon, always place the icon one frame after the first red jump mark.

11. On the icon toolbox, click and drag an Audio icon to 3 frames after the blue GPI mark. Define the desired properties.
12. On the icon toolbox, click and drag a Notes icon to identify the TME. In the Notes label, assign a name to the TME using established standards and consistent techniques and practices. This name should be the same as the TME name assigned in Step 3. Refer to *Standardization on page 577*.
13. Save the TME. Refer to *Save a TME* on page 370.

Save a TME

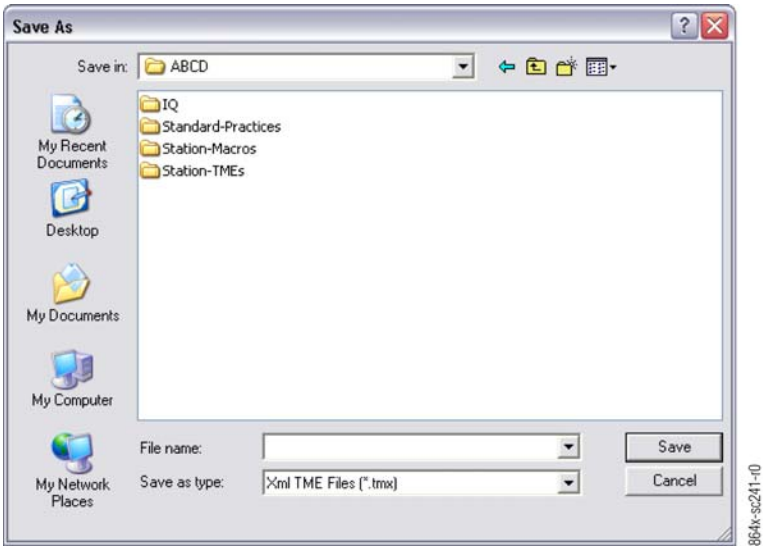
Note In the following step, be sure to right-click in the color area. Right-clicking in the color area selects the entire TME. Hash marks through a TME indicate it is selected. Right-clicking an icon only saves that particular icon.

1. Right-click in the color area of the TME and then click **Export TME**. The **Save** dialog box appears.
2. Navigate to the appropriate C:\(*station call letters)*\TMEs subfolder for that TME.

Note In the next step it is strongly recommended that the TME name entered is the same name that is on the TME Notes label (refer to *Build a TME* on page 368 Step 12). This makes a TME easier to locate. All TME names should be based upon established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

3. In the **Name** box (Figure 437), type or copy the TME name from the **Notes** label.

Figure 437. TME Name and Save



4. Click **Save**.

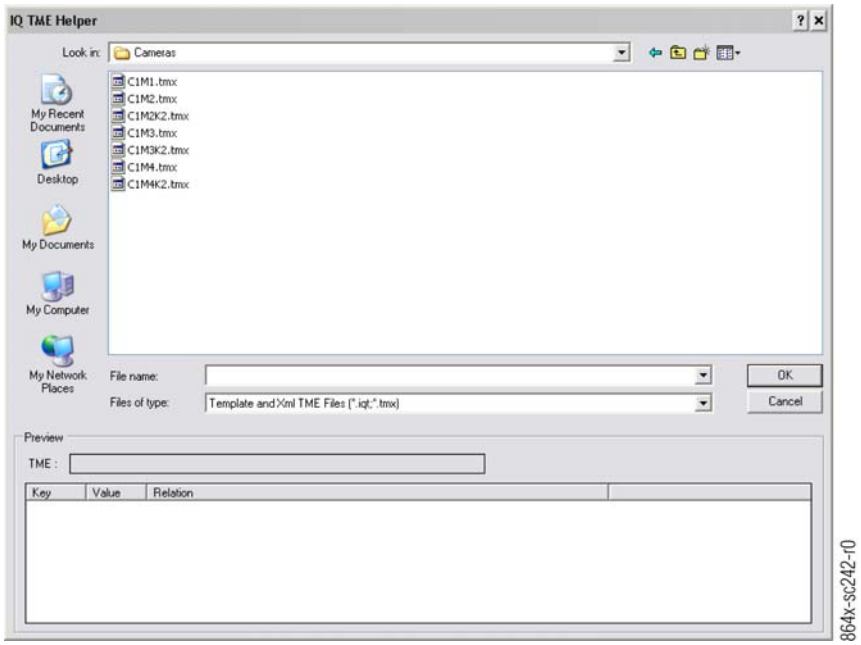
Modify/Open a TME

Note In the following step, be sure to right-click in the color area. Right-clicking in the color area selects the entire TME. Hash marks through a TME indicate it is selected. Right-clicking an icon only saves that particular icon.

1. Click the TME.

- If the TME is on the Event Timeline:
  - Right-click in the color area and go to Step 2.
- If the TME is not on the Event Timeline:
  - **a.** Right-click anywhere in an open space on the Ignite/Ignite Konnect Event Timeline and then click **Import TME**. An **Open** dialog box appears.
  - **b.** Navigate to the C:\(*station call letters)*\TMEs subfolder (Figure 438) where the TME to modify is stored.

Figure 438. TME Cameras Subfolder Example



c. Either:

- Double-click the appropriate TME file
- Right-click the TME file and then click **Open**.
- Click the TME file and then on the **File** menu, click **Open**.

2. Modify the TME.

3. Refer to *Save a TME* on page 370 to save changes.

Set/Check/Change TME Task Properties

Once a task icon is added to a TME, the properties of that specific task are set/changed via a properties dialog box. Not all tasks have the same properties. Refer to Table 13 for task element type examples.

Table 13. Task Element Type Examples

Button Number	Caret Position	CG Source
Command	Device	DPM Setup
Duration in frames	Message ID	Presets
Program	Set Points	Source
Speed	Start Time	Stop Time

Note To check/verify settings, simply place the cursor over the respective icon to view a pop-up window with the current settings.

1. Within the TME, double-click the task icon. The task properties dialog box appears.
2. Check, set, or change the associated properties as required.
3. Click **OK**, **Save**, **Cancel**, **Done**, or **Close** as appropriate.

Manage TME Associations

The TME Associations are the codes entered when building a rundown in the NRCS. TME Associations are managed in both the Ignite™ Live Production Control System as well as in the Ignite IQ™ Module.

In addition to adding TME Associations, the user can also delete one or multiple TME Associations and print the entire TME Association list as it appears in the **Template Association** dialog box.

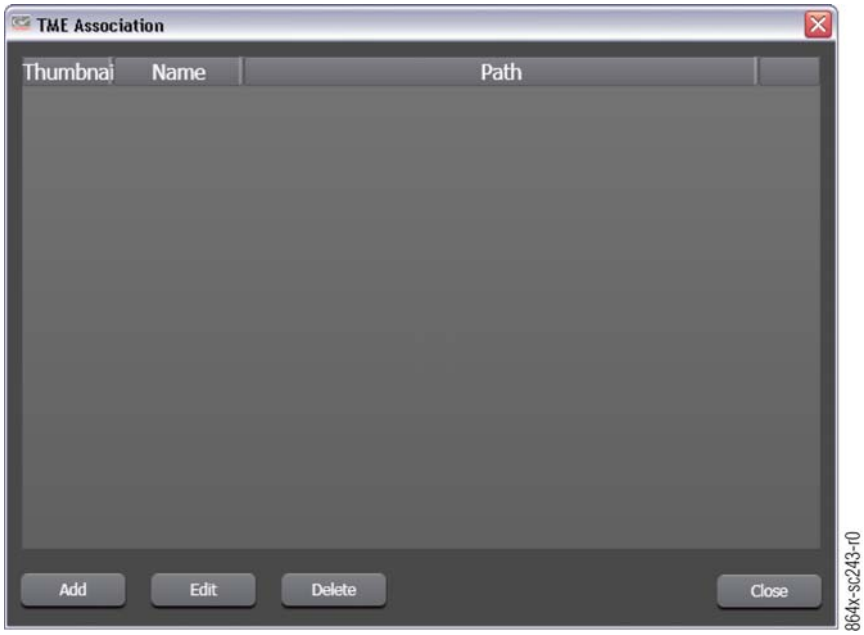
Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

Add TME Associations

Note Neither Ignite IQ templates nor TME files require an association unless these files are saved to a location that is different from the default path specified at installation time of the Ignite IQ™ Module.

1. On the **Event Timeline Setup** menu, click **TME Association**. The **TME Association** dialog box appears (Figure 439).

Figure 439. TME Association Dialog Box



Display information for each TME Association includes:

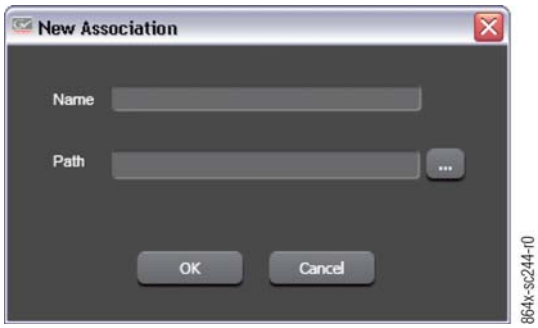
- **Thumbnail** – The graphic associated with the IQ template.

Note Thumbnails automatically appear in the **Thumbnail** column if an IQ template already has an associated thumbnail. However, you cannot assign thumbnails to an IQ template in the **TME Association** dialog box.

- **Name** – name of the TME Association.
- **Path** – location of the TME file.

2. To associate TME column names with the actual TME, click **Add**. The **New Association** dialog box appears (Figure 440).

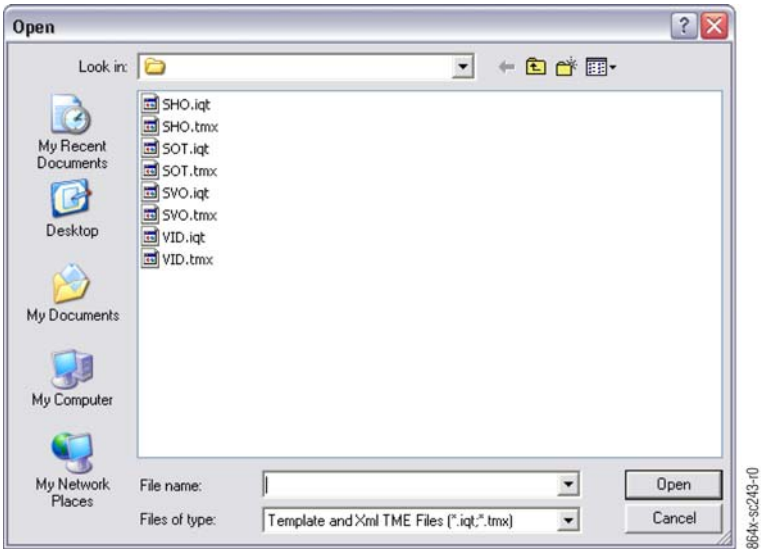
Figure 440. New Association Dialog Box



Note In the next step, it is strongly recommended that IQ template name entered is the same as the IQ template file name. This makes an IQ template easier to locate. All names should be based upon established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

3. In the **New Association** dialog box, do the following:
   a. In the **Name** field, either:
      - For an IQ template association, type the name as it appears in the IQ template filename.
      - For TME association, type the name as it appears on the **Notes** label only if this label is static.
   b. Click the**... (Browse)** button. An **Open** dialog box appears (Figure 441) appears. In the list, find and click the TME file to associate.

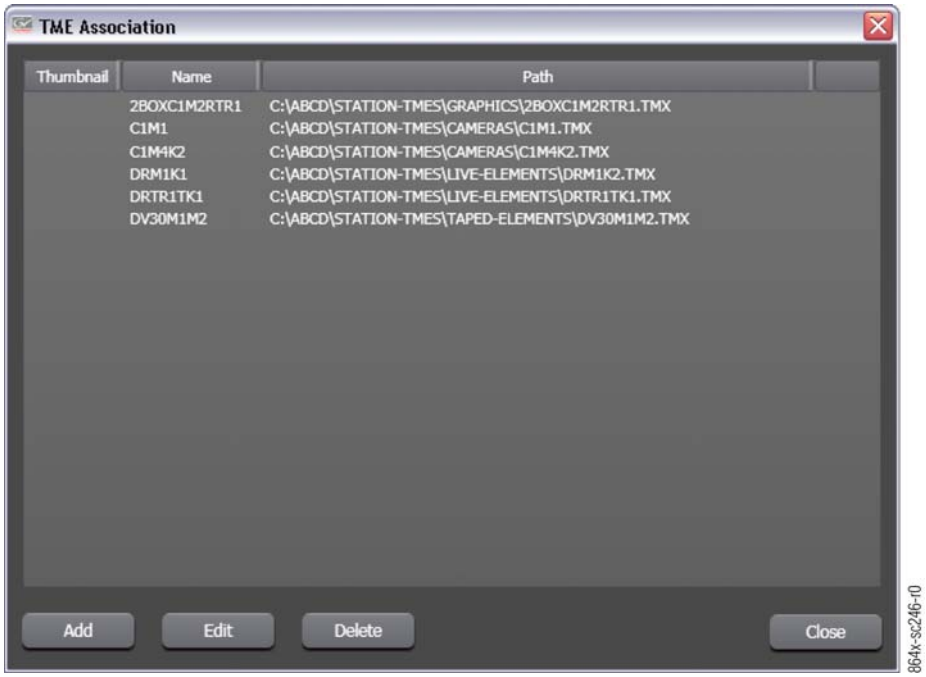
Figure 441. TME Open Dialog Box



4. Navigate to the desired TME folder.
5. From within the folder, double-click the TME to associate. The file name populates the **TME Open** dialog box.
6. In the **New Association** dialog box, either:
   - To save the TME Association, click **OK**.

     The TME association is complete and is added to the association list in the **TME Association** dialog box (Figure 442).

Figure 442. TME Association Dialog Box – TME Association Added



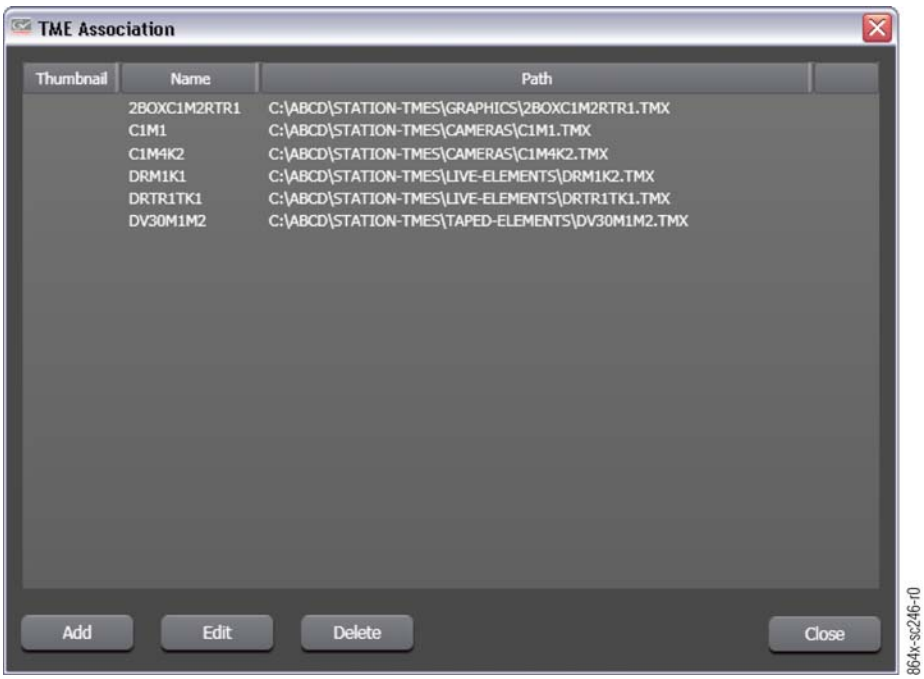
- To cancel the TME Association, click **Cancel**. The **New Association** dialog box closes.

Edit TME Associations

Note Neither Ignite IQ templates nor TME files require an association unless these files are saved to a location that is different from the default path specified at installation time of the Ignite IQ™ Module.

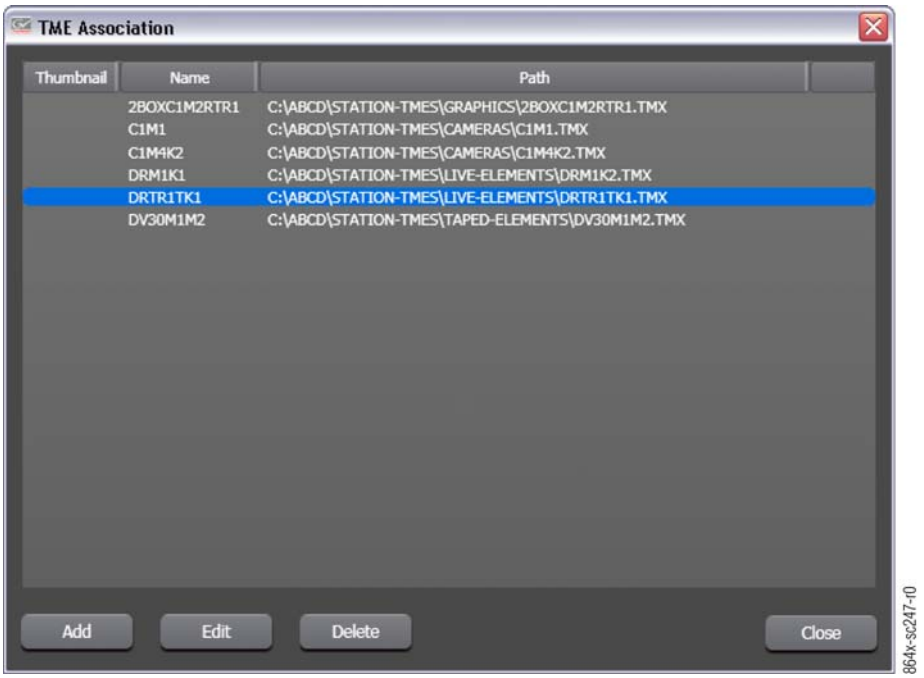
1. On the **Event Timeline Setup** menu, click **TME Association**. The **TME Association** dialog box appears (Figure 443).

Figure 443. TME Association Dialog Box – TME Association Added



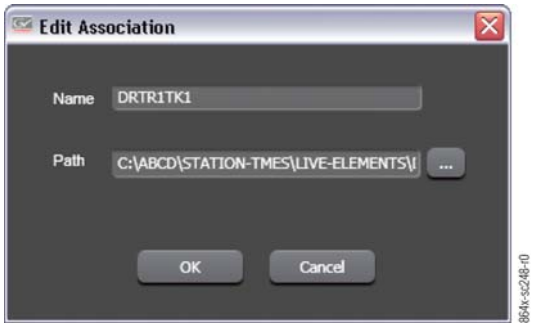
2. From the **TME Association** dialog box, click the TME Association to edit(Figure 444).

Figure 444. Edit Selected TME Association



3. Click **Edit**. The **Edit Association** dialog box (Figure 445) appears:

Figure 445. Edit Association



4. In the **Edit Association** dialog box, either/and:

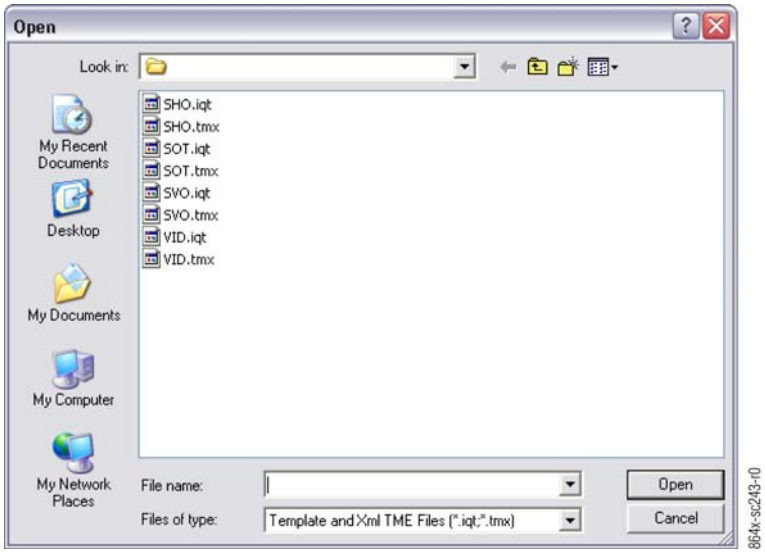
a. Edit the **Name** field:

- For an IQ template association, type the name as it appears in the IQ template filename.
- For TME association, type the name as it appears on the **Notes** label only if this label is static.

Note To cancel the TME Association edit, click **Cancel**. The **Edit Association** dialog box closes.

b. Click the**... (Browse)** button. An **Open** dialog box appears (Figure 446) appears.

Figure 446. TME Open Dialog Box



5. Navigate to and edit as desired.

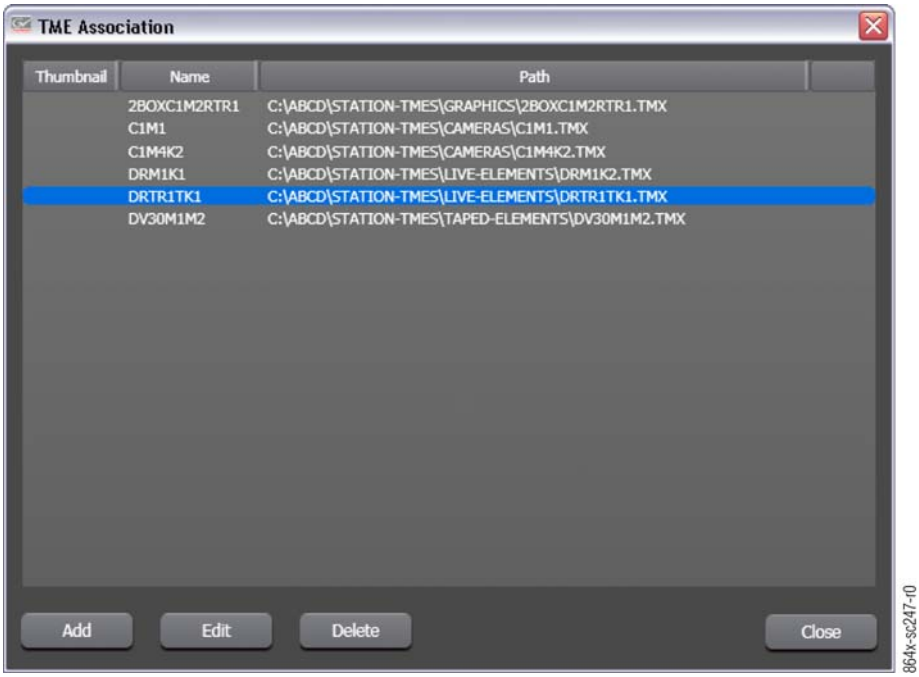
Note To cancel the TME Association, click **Cancel**. The **Open** dialog box closes.

6. To close the **TME Association** dialog box, either:
   - Click the **Close** button.
   - Click the **Close** icon.

Delete TME Associations

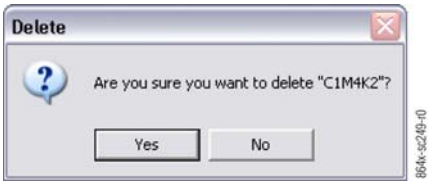
1. On the **Event Timeline Setup** menu, click **TME Association**. The **TME Association** dialog box appears.
2. Select one or multiple TME Associations for deletion (Figure 447).

Figure 447. TME Association Dialog Box



3. Click **Delete**. The **Delete TME Association** dialog box appears (Figure 448):

Figure 448. Delete TME Association Dialog Box

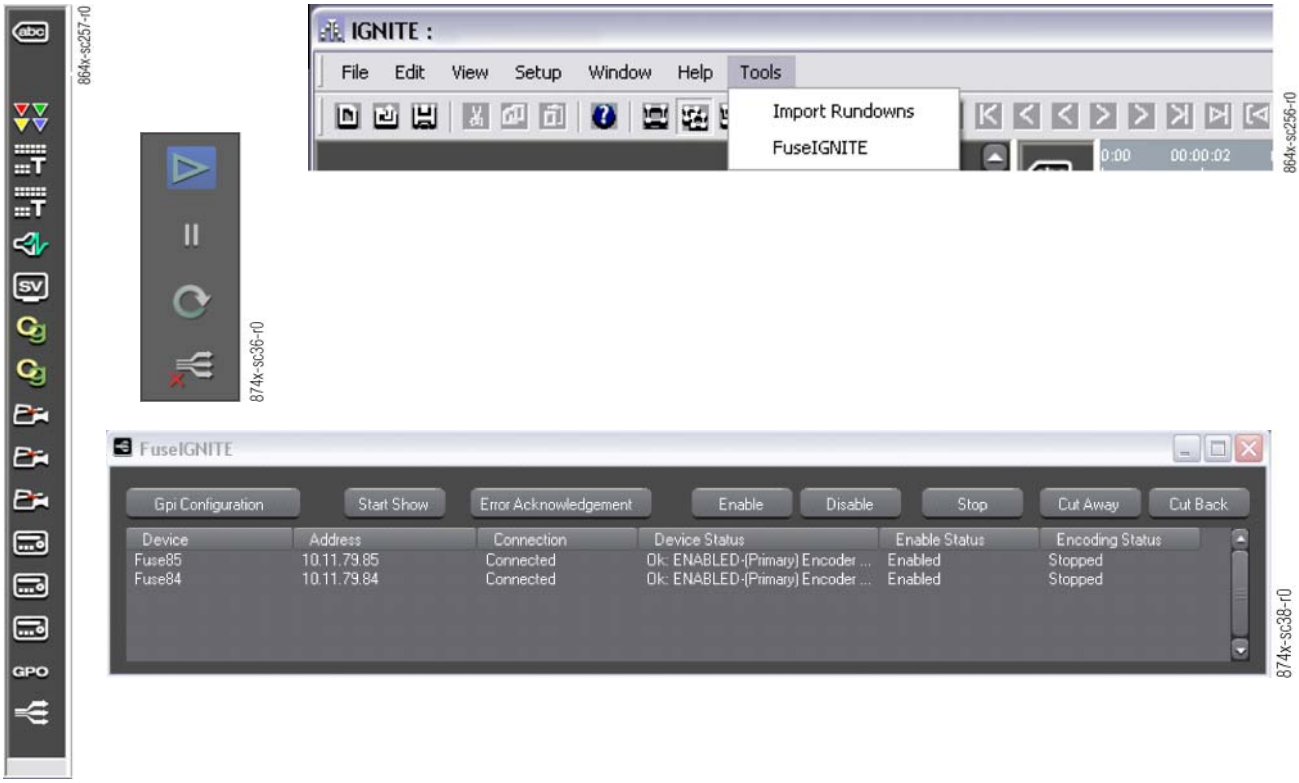


4. Either:
   - To remove the selected TME Associations from the list, click **Yes**.
   - To keep the TME Associations, click **No**.

Section 11

FuseIGNITE Module

Figure 449. FuseIGNITE User Interface



Overview

The FuseIGNITE module is an Ignite/Ignite Konnect system option that is used exclusively as an interface to the Grass Valley MediaFUSE™ Content Repurposing and Multi-distribution System. The FuseIGNITE module is an Ignite-side MediaFUSE management tool that:

- Processes MediaFUSE content, via the MOS-based Ignite/Ignite Konnect Import Rundowns command, for use in the Ignite/Ignite Konnect system
- Processes Ignite-side edits, additions, and deletions of MediaFUSE content via FuseIgnite icons and their assigned properties

The FuseIGNITE dialog box provides status and manual control of the MediaFUSE FuseENCODE servers from the Ignite/Ignite Konnect system. The FuseIGNITE/MediaFUSE user interface (Figure 449) comprises:

- *Event Timeline Tools Menu* on page 383
- *FuseIGNITE Dialog Box* on page 384
- *FuseIGNITE Task Icon* on page 385, placed in TMEs and contain MediaFUSE task properties

Note Refer to the *MediaFUSE™ Content Repurposing and Multi-distribution System* documentation for more information on MediaFUSE system features, workflows, interfaces, and components.

Pre-Production

The FuseIGNITE/MediaFUSE functionality is based on the same NRCS information and metadata used by the Ignite/Ignite Konnect system (refer to General Operation Guidelines – Building a Show for more detailed information). The additional requirements are that:

- The Ignite/Ignite Konnect system must be configured with the FuseIGNITE module option
- The NRCS metadata must also be marked up with MediaFUSE content

In the pre-production phase of the content within the Grass Valley MediaFUSE™ Content Repurposing and Multi-distribution System, a producer or reporter uses the FusePRODUCE pre-production tool to easily and quickly:

- Enter information to mark up a show, segment, or URL.
- Select the appropriate publication points for each show or segment.
- Manage information for show presets and segment presets, such as creating, editing, and deleting presets.
- Move the metadata to the NRCS (Newsroom Computer System).

Note For more detailed information about the FusePRODUCE pre-production tool, refer to the MediaFUSE FusePRODUCE Pre-production Tool user manual.

Production

Note After producing, editing, and coding a show in the NRCS, that rundown is imported onto the Ignite/Ignite Konnect Event Timeline. Once a rundown is imported it is automatically monitored until a different rundown is imported.

In the production phase, the NRCS information, including the MediaFUSE show, segment, and URL tasks, is imported into the Ignite/Ignite Konnect

system via Rundown Conversion. Rundown convert is a part of the Ignite/Ignite Konnect program (also the Ignite IQ™ Module and FuseIGNITE options) that imports a rundown graphical representation in preparation for taking a show to air. During processing, the rundown converter retrieves and parses the rundown from the NRCS, then automatically creates a show by placing pre-program show events (TMEs) on the Ignite/Ignite Konnect Event Timeline. The FuseIGNITE interface supports MediaFUSE elements via the FuseIGNITE icon properties within the TME.

The director then has the ability to refine the show that has been created while being free of the time involved in recreating segments that are standard from show to show.

Note Refer to General Operation – Importing A Rundown for more detailed information.

User Interface

Note For typical Ignite Event Timeline overview and operation information, refer to *Section 10-Event Timeline Module*.

Event Timeline Tools Menu

Figure 450. Event Timeline Tools Menu– FuseIGNITE Command

For Ignite/Ignite Konnect systems supporting the optional MediaFUSE Content Repurposing System an additional FuseIGNITE selection is available on the Event Timeline Tools menu (Figure). Clicking the FuseIGNITE command opens the FuseIGNITE dialog box.

Note For Ignite/Ignite Konnect systems not supporting the optional MediaFUSE™ Content Repurposing System, the FuseIGNITE command is not available on the Tools menu. Refer to the Event Timeline Module for details.

FuseIGNITE Dialog Box

Figure 451. FuseIGNITE Dialog Box

The FuseIGNITE dialog box (Figure Note) displays device status information for the configured FuseENCODE servers and enables manual triggering for encoder **Enable**, **Disable**, **Stop**, **Cut Away**, and **Cut Back** commands.

Note FuseENCODE servers are configured as FuseIGNITE devices and controlled via the Ignite **Device Manager** based on selected mode and configuration settings. Refer to the **Device Manager Module** for more information on **Device Manager** mode and configuration control.

The FuseIGNITE dialog box **Device** list provides a list of FuseENCODE servers configured as available FuseIGNITE devices. Each available FuseIGNITE device is displayed with device specific information for:

- **Device** – the device name assigned to the FuseENCODE server in the **Ignite Devices Configuration** list.
- **Address** – the IP address of the device
- **Connection** – the connection status of the device. Connection status is controlled and reported from the Ignite/Ignite Konnect **Device Manager** based on the active Ignite/Ignite Konnect device configuration and **LIVE** or **PREP** operating mode.
- **Status** – the status of the FuseENCODE server as **Error** or **OK**.

Along the top of the FuseIGNITE dialog box are FuseENCODE server command buttons for the following manual functions:

- **Enable** – enables the FuseENCODE server
- **Disable** – disables the FuseENCODE server
- **Stop** – stops the FuseENCODE server
- **Cut Away** – sends a **Cut Away** command to the MediaFUSE program to cut from the live source and replace it with known content
- **Cut Back** – sends a **Cut Back** command to the MediaFUSE program to return to the live source

Note The FuseIGNITE dialog box can be resized or minimized. It is only necessary for validating a device (FuseENCODE server) and for UI control, especially Enable and Disable during breaks. Manual Enable and Disable control can also be programmed via a QUICbox button.

When the FuseIGNITE dialog box is minimized, a **FuseIGNITE Floating Status GUI** (Figure 452 on page 385) appears with a visual status indication for each available encoder.

Figure 452. Floating Status GUI Example

The encoder status indications are:

Icon	Status Indication	Icon	Status Indication
	Disconnected		Stopping
	Encoding		Stopped

FuseIGNITE Task Icon

Figure 453. Event Timeline Icon Toolbox – FuseIGNITE Icon.

A FuseIGNITE icon (Figure) is added at the bottom of the Event Timeline Icon Toolbox. When placed in a TME, the FuseIGNITE icon properties establish the MediaFUSE functionality via either automatic, MOS-generated configuration (import rundown), or manual configuration of a MediaFUSE show, segment, or URL task (Figure 454 on page 387).

Note For typical Ignite Event Timeline overview and operation information, refer to *Section 10-Event Timeline Module*.

FuseIGNITE TME Item Type

Right-clicking a FuseIGNITE task icon accesses the **TME Item Type** dialog box (Figure 454) where the task is assigned an Event **[Create Event]** (Table 14 and Figure 454) and an optional Operating Mode **[Set Operating Mode]** (Figure 454).

Table 14. FuseIGNITE TME Icons – MOS, Show, Segment, and URL

TME Icon	Event	Purpose
	MOS Populated	Used if the task is to be automatically populated from the Import Rundowns MOS data
	Show	Indicates the task is a Show event containing manually entered metadata that is not updated by the Import Rundowns MOS data
	Segment	Indicates the task is a Segment event containing manually entered metadata that is not updated by the Import Rundowns MOS data
	URL	Indicates the task is a URL event containing manually entered metadata that is not updated by the Import Rundowns MOS data
	NONE	Indicates the icon is not yet configured with a TME Item Type

Figure 454. FuseIGNITE TME Item Types

NOTE: The Offset (frames) text box enables a user to enter either a positive or negative offset value (represented in frames) for either MOS Populated, Show, Segment, or URL.

The **Set Operating Mode** commands are the same FuseENCODE server commands:

- **Enable** – enables the FuseENCODE server
- **Disable** – disables the FuseENCODE server
- **Stop** – stops the FuseENCODE server
- **Cut Away** – sends a **Cut Away** command to the MediaFUSE program
- **Cut Back** – sends a **Cut Back** command to the MediaFUSE program

These can be embedded in the TME task instead of using the manual functions. Also, when embedded in a TME, that TME can be assigned to a QUICbox button for one-button activation.

MOS Managed FuseIGNITE Task

In the production phase, the show, segment, and URL elements are created in the FusePRODUCE pre-production tool and then moved to the NRCS. From that point on, the Ignite/Ignite Konnect Import Rundowns function also routes the MediaFUSE MOS data to the event timeline using FuseIGNITE MOS show, segment, and URL TMEs.

Manually Managed FuseIGNITE Task

As a TME task, a MediaFUSE/FuseIGNITE icon can be manually added, edited, or deleted at anytime.

Operation

Start

- On the Ignite/Ignite Konnect Event Timeline menu bar, click **Tools**, and then click **FuseIGNITE**. The **FuseIGNITE** dialog box appears.

Figure 455. Tools Menu – FuseIGNITE

Figure 456. FuseIGNITE Dialog Box

Close

On the FuseIGNITE dialog box, either:

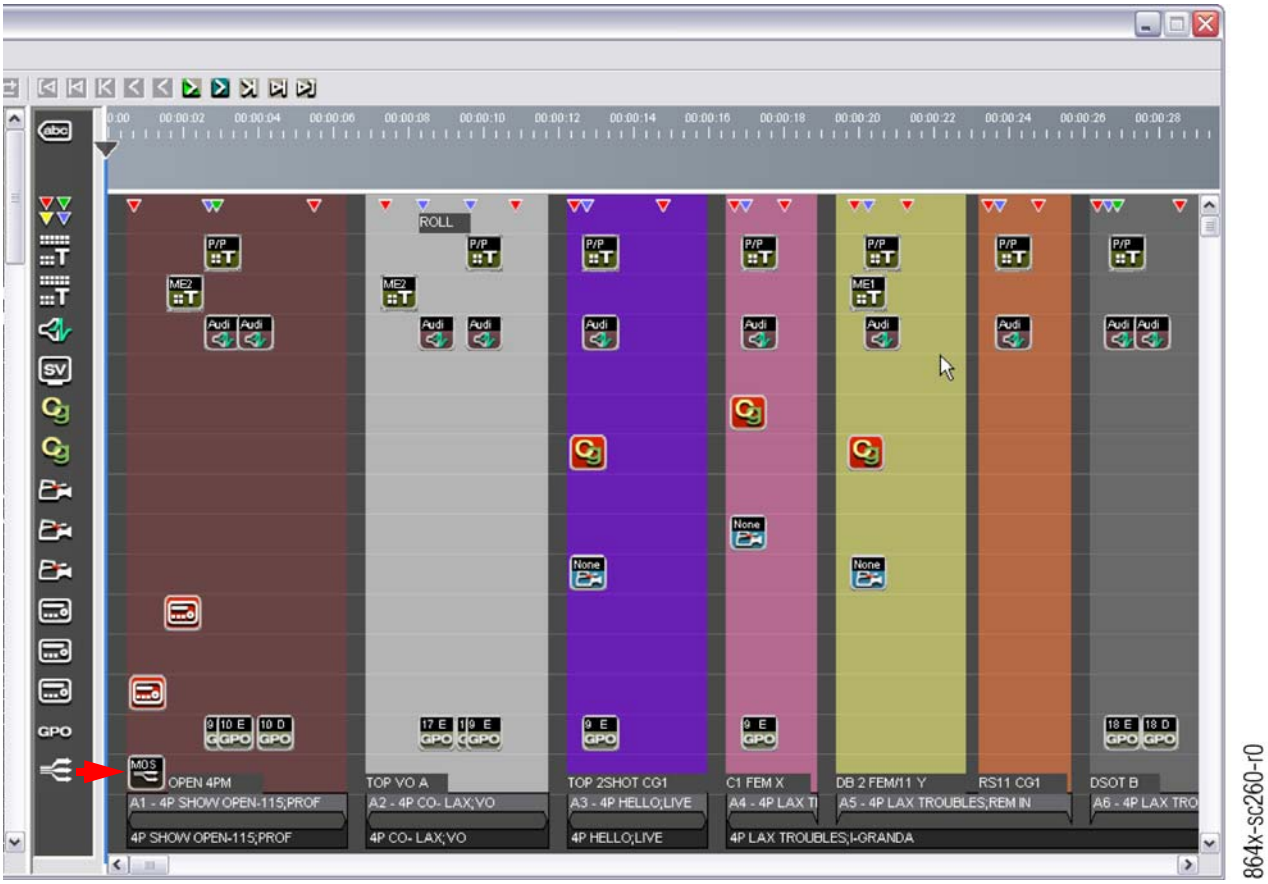
- Click **Close**.
- Click the **FuseIGNITE** button, and then click **Close**.

Event Timeline

Add FuseIGNITE Icon to TME

- From the Event Timeline Icon toolbox, drag and drop a FuseIGNITE icon into the TME (Figure 457 on page 389).

Figure 457. FuseIGNITE Toolbox Icon



Configure/Edit FuseIGNITE TME Icon

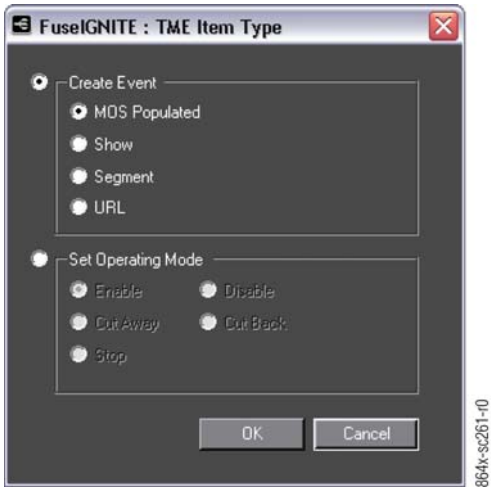
Note When manually adding a FuseIGNITE icon into a TME, it is initially labeled **None** and the TME icon properties must be updated to either MOS, Show, Segment, or URL.

MOS

1. Add a FuseIGNITE icon to the TME.
2. Either:
   - Double-click the FuseIGNITE icon.
   - Right-click the FuseIGNITE icon, and then click **Properties**

   The **FuseIGNITE: TME Item Type** dialog box (Figure 458 on page 390) appears.

Figure 458. TME Item Type Dialog Box



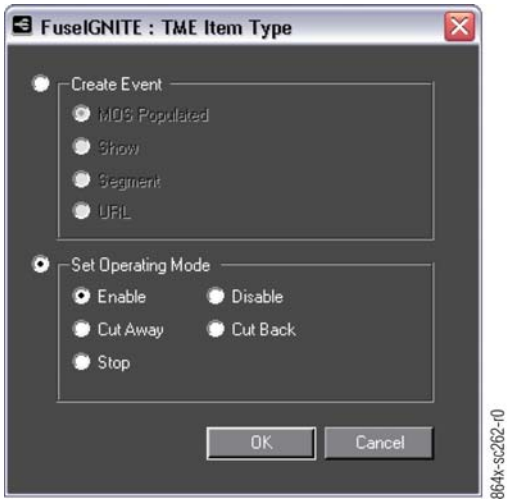
3. Select **Create Event**, and then select **MOS Populated**. Refer to Figure 459.

4. To include an automatic operating mode, click **Set Operating Mode**, and then click the desired mode (Figure 459). Otherwise, go to the next step.

Note The lower half of the **FuseIGNITE TME** dialog box, **Set Operating Mode**, are the same selections as the manual command buttons on the **FuseIGNITE: TME Item Type** dialog box. When selected here, the command is part of the TME task and is initiated automatically by the TME.

Note When an operating mode is included in a TME, that TME can be assigned to a QUICbox button for one-button activation.

Figure 459. MOS TME Properties



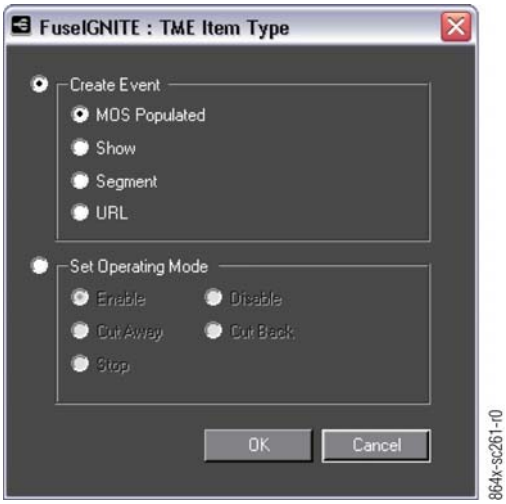
5. Click **OK**.

Show

1. Add a FuseIGNITE icon to the TME.
2. Either:
   - Double-click the FuseIGNITE icon.
   - Right-click the FuseIGNITE icon, and then click **Properties.**

   The **FuseIGNITE: TME Item Type** dialog box (Figure 460) appears.

Figure 460. TME Item Type Dialog Box

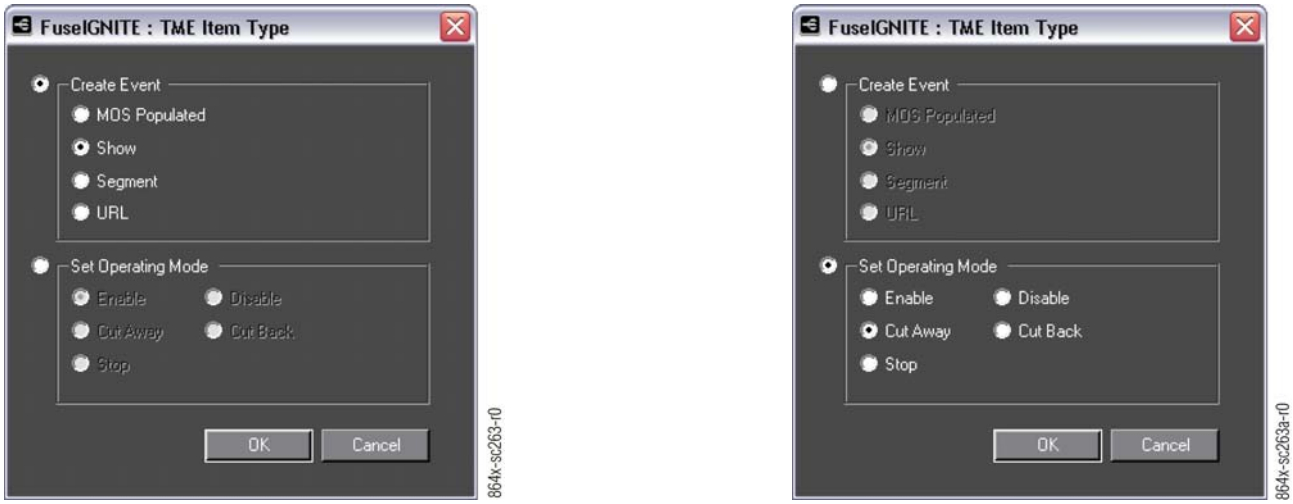


3. Select **Create Event**, and then select **Show**. Refer to Figure 461.
4. To include an automatic operating mode, click **Set Operating Mode**, and then click the desired mode (Figure 461). Otherwise, go to the next step.

Note The lower half of the **FuseIGNITE TME** dialog box, **Set Operating Mode**, are the same selections as the manual command buttons on the **FuseIGNITE: TME Item Type** dialog box. When selected here, the command is part of the TME task and is initiated automatically by the TME.

Note When an operating mode is included in a TME, that TME can be assigned to a QUICbox button for one-button activation.

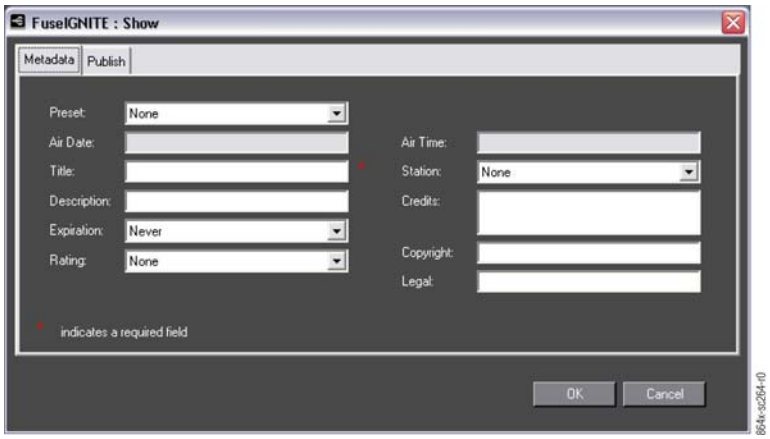
Figure 461. Show TME Properties



5. Click **OK**.

6. The **FuseIGNITE: Show** dialog box (Figure 462 on page 392) appears.

Figure 462. FuseIGNITE Show Dialog Box – Metadata Tab



7. On the **Metadata** tab, do the following:

   a. In the **Preset** list, click **(None)** or any existing show preset.

      The information associated with the selected preset automatically fills in the lists and boxes on the **Show Metadata** and **Show Publish** dialog boxes.

Note A new FuseIGNITE Show TME icon can be based on any existing preset.

Note All current settings from the selected preset are copied to the FuseIGNITE Show TME icon, eliminating the need to re-enter any information.

   b. Type or modify the information in the following boxes:

Note Air Date is not required. The FuseENCODE server records the current air date when the FuseIGNITE module produces the show.

Note Air Time is not required. The FuseENCODE server records the current time when the FuseIGNITE module produces the show.

• **Title** (This field is required)	• **Copyright**
• **Description**	• **Legal**
• **Credits**	

c. Select values for the following lists:

- **Expiration**
- **Rating**
- **Station**

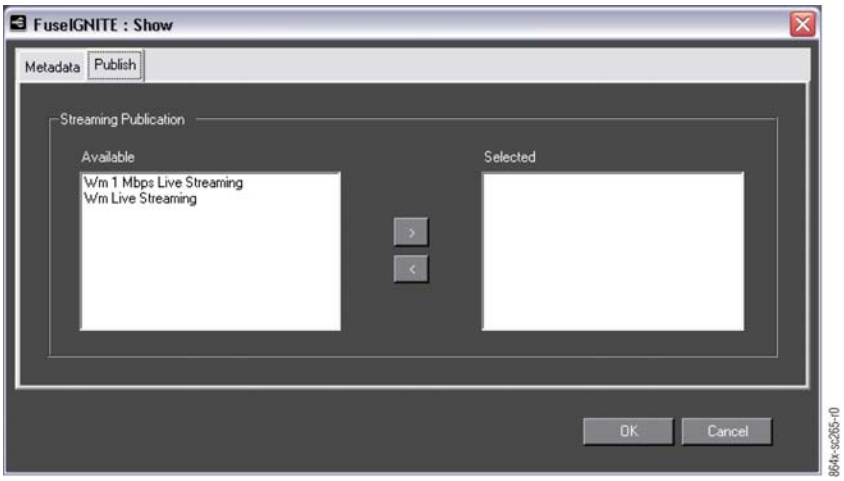
Note Values for Rating and Station are user defined via the FuseFLOW interface. Refer to the *MediaFUSE FuseFLOW Workflow Manager User Manual*.

8. Click the **Publish** tab.

The available publishing points for live show streaming appear on the **Available** list (Figure 463).

Note Stream publication points for a show are set up and created via the Fuse-FLOW interface. Refer to the *MediaFUSE FuseFLOW Workflow Manager User Manual*.

Figure 463. FuseIGNITE Show Dialog Box – Publish Tab – Available Stream Publication Points

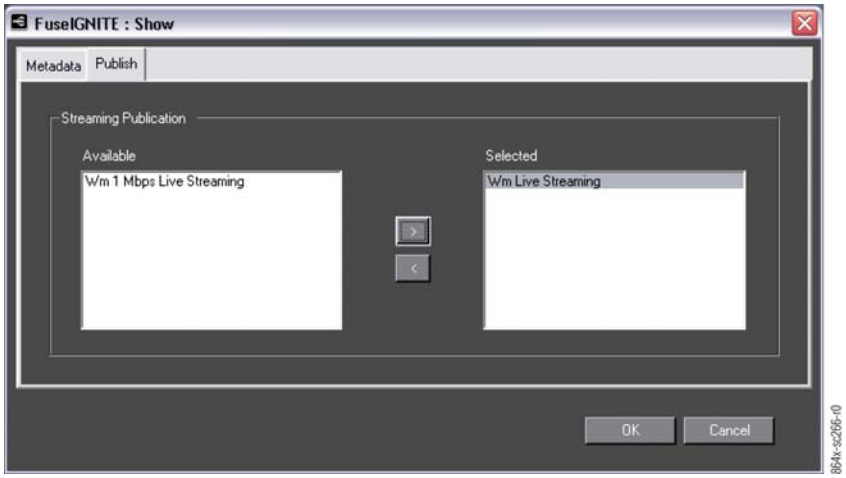


a. In the **Available** list, click one or more publication points and then click the **right-arrow** button.

The publication points now appear in the **Selected** list (Figure 464 on page 394) and are selected for the FuseIGNITE Show TME icon.

Note Use the mouse, SHIFT key, and CTRL key to perform ranged selections and line item selections.

Figure 464. FuseIGNITE Show Dialog Box – Publish Tab –Selected Stream Publication Points



b. Conversely, in the **Selected** list, click one or more publication points and then click the **left-arrow** button.

The publication points now appear in the **Available** list as available publication points.

Note Use the mouse, SHIFT key, and CTRL key to perform ranged selections and line item selections.

9. Either:

- Click **OK**. Selections made on the **Publish** tab are saved to the FuseIGNITE Show TME icon.
- Click **Cancel**. The **FuseIGNITE: Show** dialog box closes without saving the changes.

Segment

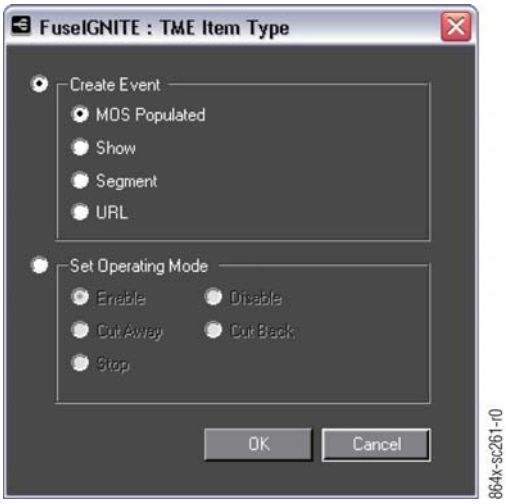
1. Add a FuseIGNITE icon to the TME.

2. Either:

- Double-click the FuseIGNITE icon
- Right-click the FuseIGNITE icon, and then click **Properties**

The **FuseIGNITE: TME Item Type** dialog box (Figure 465 on page 395) appears.

Figure 465. TME Item Type Dialog Box



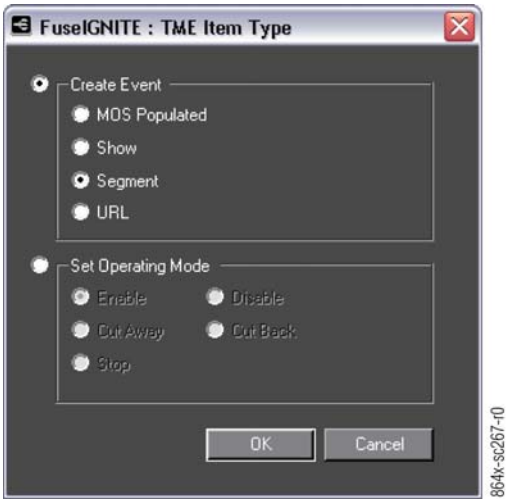
3. Select **Create Event**, and then select **Segment**. Refer to Figure 466.

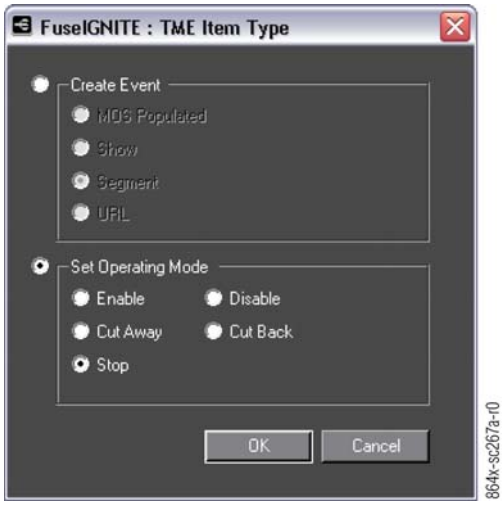
4. To include an automatic operating mode, click **Set Operating Mode**, and then click the desired mode (Figure 461). Otherwise, go to the next step.

Note The lower half of the **FuseIGNITE TME** dialog box, **Set Operating Mode**, are the same selections as the manual command buttons on the **FuseIGNITE: TME Item Type** dialog box. When selected here, the command is part of the TME task and is initiated automatically by the TME.

Note When an operating mode is included in a TME, that TME can be assigned to a QUICbox button for one-button activation.

Figure 466. Segment TME Properties

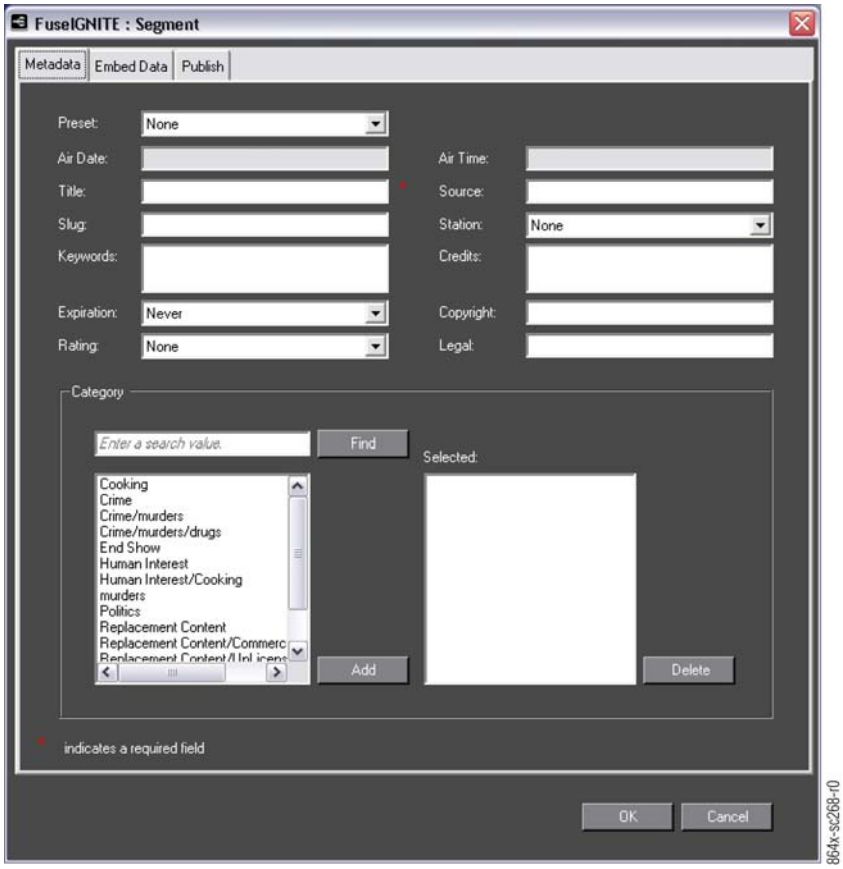




5. Click **OK**.

6. The **FuseIGNITE: Segment** dialog box (Figure 467 on page 396) appears.

Figure 467. FuseIGNITE Segment Dialog Box – Metadata Tab



7. On the **Metadata** tab, do the following:

a. In the **Preset** list, click **(None)** or any existing segment preset.

The information associated with the selected preset automatically fills in the lists and boxes on the **Segment Metadata**, **Segment Embed Data**, and **Segment Publish** dialog boxes.

Note A new FuseIGNITE Segment TME icon can be based on any existing preset.

Note All current settings from the selected preset are copied to the FuseIGNITE Segment TME icon, eliminating the need to re-enter any information.

b. Type or modify the information in the following boxes:

Note Air Date is not required. If the Air Date is not specified, then the FuseENCODE server records the current air date when the FuseIGNITE module produces the show.

Note Air Time is not required. If the Air Time is not specified, then the FuseENCODE server records the current time when the FuseIGNITE module produces the show.

• **Title** (This field is required)	• **Credits**
• **Slug**	• **Copyright**
• **Keywords**	**Legal**
• **Source**	

c. Select values for the following lists:

• **Expiration**	• **Rating**	• **Station**

Note Values for Rating and Station are user defined via the FuseFLOW interface. Refer to the *MediaFUSE FuseFLOW Workflow Manager User Manual*.

d. Type a keyword phrase in the **Category** box and then click **Find**. Sample categories may include, but are not limited to:

• **Nation**	• **Travel**
• **World**	• **Sports**

Note Values for categories are user defined/configured via the FuseFLOW interface. Refer to the *MediaFUSE FuseFLOW Workflow Manager User Manual*.

A list of categories appears in the left category list.

If no categories match the keyword phrase that was entered, then the returned list is empty and the following message appears (Figure 468).

Figure 468. Result Is Not Found Message

Note Any part of a category will be matched. For example, a search for NBA finds a match with the following category: Sports>Basketball>NBA>Players.

e. Add categories to a FuseIGNITE Segment TME icon:

- In the left category list, click one or multiple categories.

Note Use the mouse, SHIFT key, and CTRL key to perform ranged selections and line item selections.

- Click **Add**.

  The categories appear in the right category list or the **Selected** list as selected categories for the FuseIGNITE Segment TME icon.

f. Delete categories from a FuseIGNITE Segment TME icon:

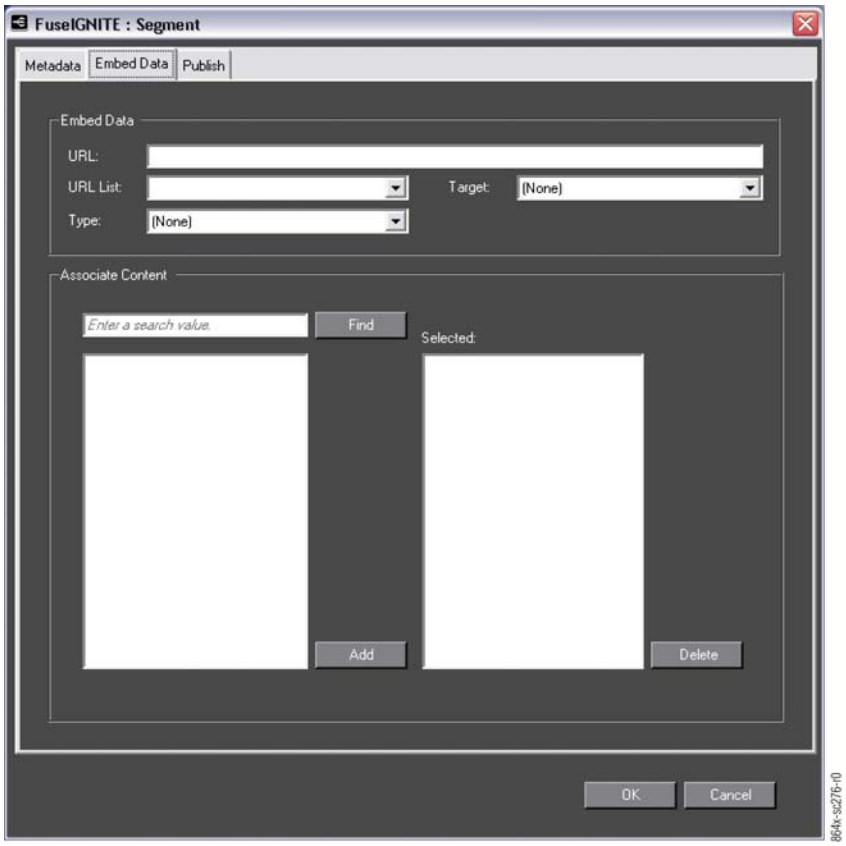
- In the right category list or the **Selected** list, click one or multiple categories.

Note Use the mouse, SHIFT key, and CTRL key to perform ranged selections and line item selections.

- Click **Delete**. The categories are removed from the **Selected** list.

8. Click the **Embed Data** tab. The lists and boxes associated with this tab appear (Figure 469 on page 398).

Figure 469. FuseIGNITE Segment Dialog Box – Embed Data Tab



a. In the **Type** list, click the type of data to embed into the FuseIGNITE Segment TME icon.

Sample URL categories may include, but are not limited to:

- **(None)**
- **Interaction event** – pop-up window, poll, or survey
- **Data Page** – any Web site page that contains data
- **RSS Feed** – news feeds
- **Ticker** – advertisement

Note Once the type is selected, a list of related web content automatically appears in the **URL List** box.

b. In the **URL List** box, click the desired web content.

Note Once the web content is selected, the full Web site address appears in the **URL** box.

c. In the **Target** list, click a value where the segment is to appear in the publication point. Sample values may include, but are not limited to:

- **Main** – main window

Note **Main** is the default value for the **Target** list.

- **New –** new window
- **Tab –** new tab
- **Frame (X) –** new frame where "X" is the frame name

d. In the **Associate Content** box, type a category and then click **Find**.

Content that matches the category is returned and displayed in the left content list.

If no content matches the category that was entered, then the returned list is empty and the following message appears (Figure 470).

Figure 470. Result Is Not Found Message

Note Any part of a category will be matched. For example, a search for NBA finds a match with the following category: Sports>Basketball>NBA>Players.

e. Add associated content to list:

- In the left content list, click one or multiple content items.

Note Use the mouse, SHIFT key, and CTRL key to perform ranged selections and line item selections.

- Click **Add**.

  The content items appear in the right content list or the **Selected** list.

f. Delete content from list:

- In the **Selected** list, click one or multiple content items.

Note Use the mouse, SHIFT key, and CTRL key to perform ranged selections and line item selections.

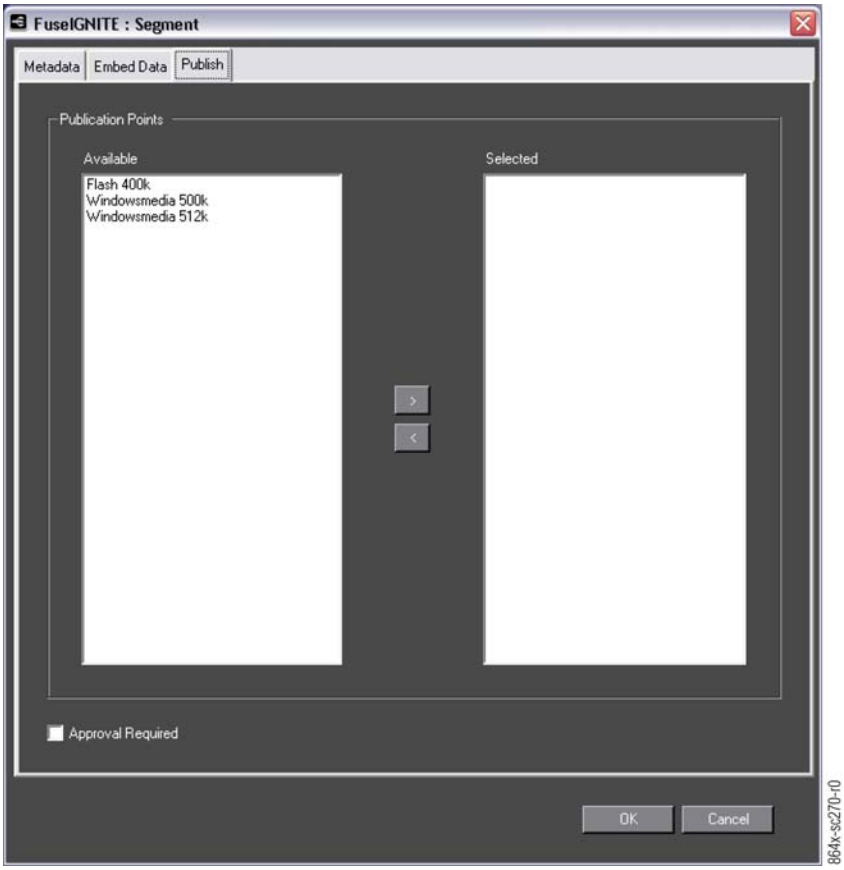
- Click **Delete**. The content items are removed from the **Selected** list.

9. Click the **Publish** tab.

The available publishing points for segments appear in the **Available** list (Figure 471 on page 401).

Note Publication points for a segment are set up and created via the FuseFLOW interface. Refer to the *MediaFUSE FuseFLOW Workflow Manager User Manual*.

Figure 471. FuseIGNITE Segment Dialog Box – Publish Tab – Available Publishing Points

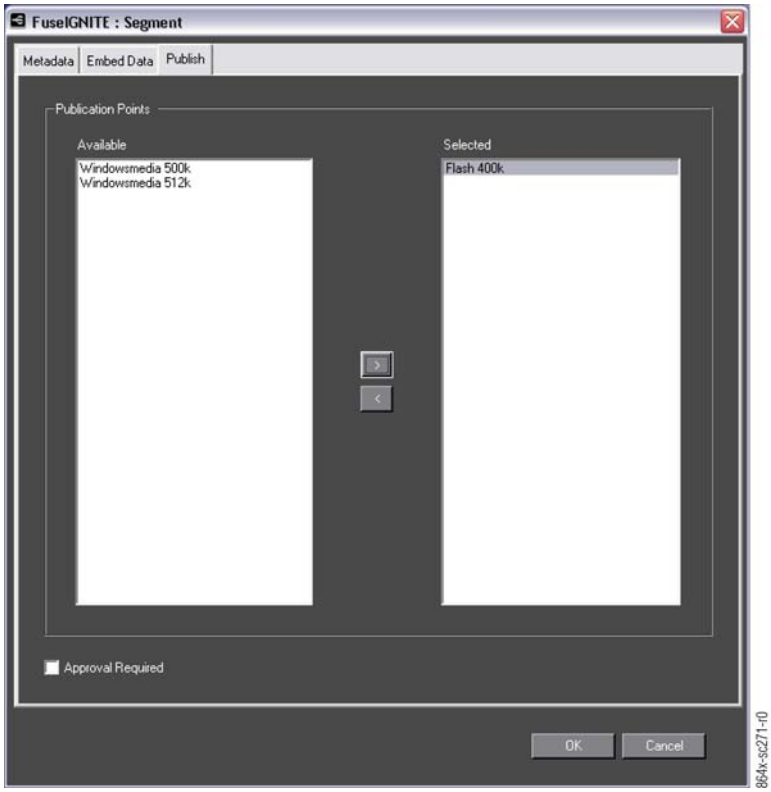


a. In the **Available** list, click one or more publication points and then click the **right-arrow** button.

The publication points now appear in the **Selected** list (Figure 472 on page 402) and are selected for the FuseIGNITE Segment TME icon.

Note Use the mouse, SHIFT key, and CTRL key to perform ranged selections and line item selections.

Figure 472. FuseIGNITE Segment Dialog Box – Selected Publication Points



b. Conversely, in the **Selected** list, click one or more publication points and then click the **left-arrow** button.

The publication points now appear in the **Available** list as available publication points.

Note Use the mouse, SHIFT key, and CTRL key to perform ranged selections and line item selections.

c. Select the **Approval Required** check box only if the segment must be held for approval (in MediaFUSE FuseAPPROVE) before the MediaFUSE system publishes it.

Note Weather, for example, is content that the MediaFUSE system can publish automatically without being held for approval.

d. Either:

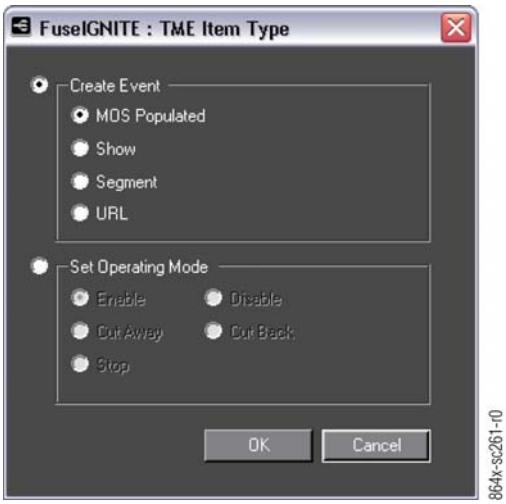
- Click **OK**. Selections made on the **Metadata**, **Embed Data**, and **Publish** tabs are saved to the FuseIGNITE Segment TME icon.
- Click **Cancel**. The **FuseIGNITE: Segment** dialog box closes without saving the changes.

URL

1. Add a FuseIGNITE icon to the TME.
2. Either:
   - Double-click the FuseIGNITE icon
   - Right-click the FuseIGNITE icon, and then click **Properties**

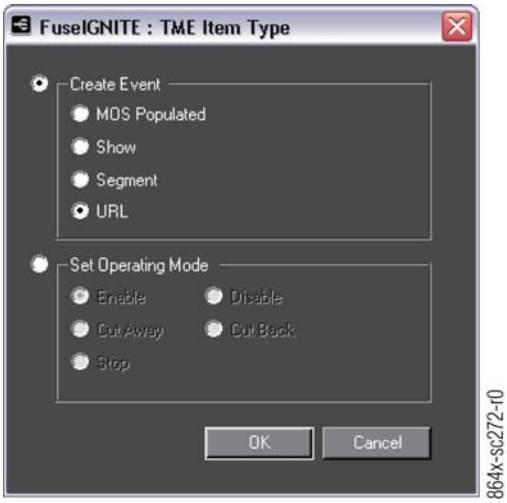
   The **FuseIGNITE TME Item Type** dialog box (Figure 473 on page 403) appears.

Figure 473. TME Item Type Dialog Box



3. Select **Create Event**, and then select **URL**. Refer to Figure 474.

Figure 474. URL TME Properties

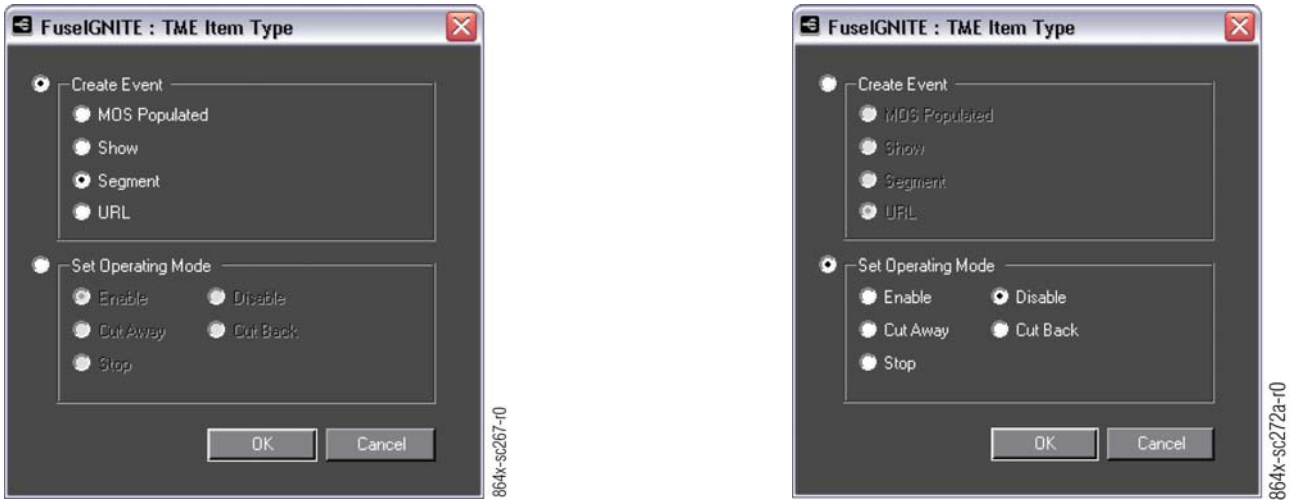


4. To include an automatic operating mode, click **Set Operating Mode**, and then click the desired mode (Figure 461). Otherwise, go to the next step.

Note The lower half of the **FuseIGNITE TME** dialog box, **Set Operating Mode**, are the same selections as the manual command buttons on the **FuseIGNITE: TME Item Type** dialog box. When selected here, the command is part of the TME task and is initiated automatically by the TME.

Note When an operating mode is included in a TME, that TME can be assigned to a QUICbox button for one-button activation.

Figure 475. Segment TME Properties



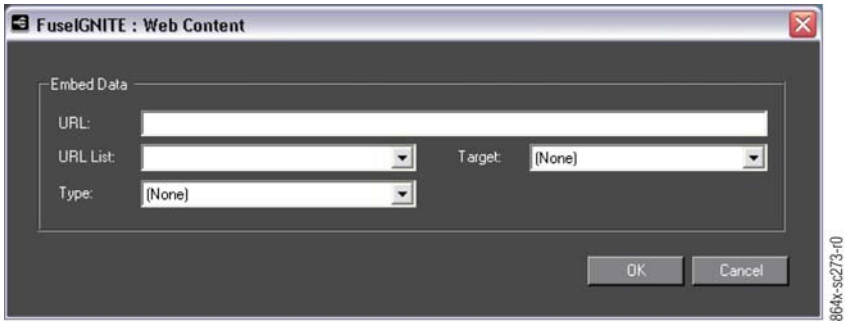
5. Click **OK**.

Note The lower half of the **FuseIGNITE TME** dialog box, **Set Operating Mode**, has the same selections as the command buttons on the **FuseIGNITE: TME Item Type** dialog box. The commands can be selected in either dialog box.

6. Click **OK**.

7. The **FuseIGNITE: Web Content** (URL) dialog box (Figure 476) appears.

Figure 476. FuseIGNITE Web Content (URL) Dialog Box



8. In the **Type** list, click the type of data to embed into the data page.

   Sample URL categories may include, but are not limited to:

   - **(None)**
   - **Interaction event** – pop-up window, poll, or survey
   - **Data Page** – any Web site page that contains data
   - **RSS Feed** – news feeds
   - **Ticker** – advertisement

Note Once the type is selected, a list of related web content automatically appears in the **URL List** box.

9. In the **URL List** box, click the desired web content.

Note Once the web content is selected, the full Web site address appears in the **URL** box.

10. In the **Target** list, click where the data page is to appear in the publication point. Sample values may include, but are not limited to:

    - **Main** – main window

Note **Main** is the default value for the **Target** list.

    - **New –** new window
    - **Tab –** new tab
    - **Frame (X) –** new frame where "X" is the frame name

11. Either:

    - Click **OK**. Selections made on the FuseIGNITE Web Content (URL) dialog box are saved to the FuseIGNITE URL TME icon.
      - Click **Cancel**. The **FuseIGNITE: URL** dialog box closes without saving the changes.

Delete FuseIGNITE Icon From TME

1. On the Event Timeline, click the desired FuseIGNITE icon:
   - **MOS**
   - **Show**
   - **Segment**
   - **URL**
2. Right-click the FuseIGNITE icon, and then click **Delete**. The FuseIGNITE icon is removed from the TME.

Section 12

Ignite IQ Module

Overview

The Ignite IQ™ Module is an optional set of features that is purchased in addition to the Ignite™ Live Production Control System. The optional features that comprise the Ignite IQ Module include:

- *Ignite IQ Templates* on page 407
- *Ignite IQ Auto Channel Assignment* on page 415
- *Common Features: Ignite/Ignite Konnect System and Ignite IQ Module* on page 418

The feature set in the Ignite IQ Module adds automation to the Ignite/Ignite Konnect system and assists in entering production data, managing resources, and identifying resource conflict.

Ignite IQ Templates

Through the *Ignite IQ Template Manager* application, a new type of TME (refer to *TME™ (Transition Macro Event™) on page 38*) is created, which is known as an Ignite IQ Template. IQ templates provide flexibility to adapt to future changes in newsroom equipment and talent.

The following items comprise an IQ template (Figure 477 on page 408):

- IQ Template Names
- Parameter Names
- Parameter Name Values
- TME Device Data Values

Note For Ignite IQ template name abbreviations, parameter name abbreviations, and suggested parameter name values, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

Typically, an IQ template contains multiple parameter names where each parameter name is assigned a set of parameter name values. Each param-

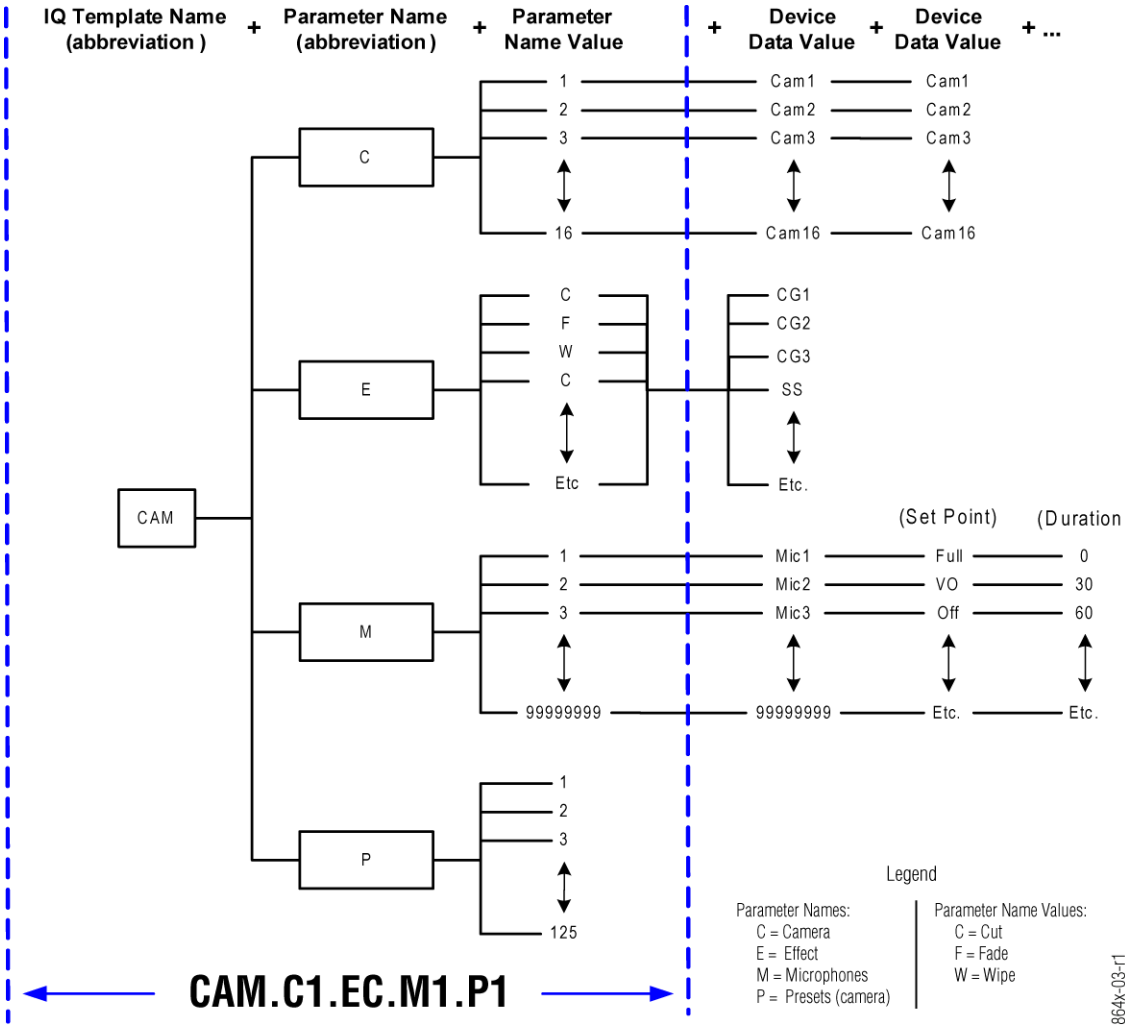
eter name value is then assigned its own set of values, TME device data values. Refer to *Create an Ignite IQ Template* on page 420 for the steps on how to add and remove these names and values to and from an IQ template.

The example of the Camera Template (Figure 477) shows the association between the template name, **CAM**, and all components that comprise this template. The sequence of components to enter for a TME in either the NRCS or the Rundown Markup dialog box is:

- **IQ Template Name.ParameterNameParameterNameValue. ParameterName.ParameterNameValue.ParameterName.ParameterNameValue…**

Note A period separates the IQ template name from each parameter name and parameter name value group. Each TME can have multiple parameter name and parameter name value groups and each group can be entered in any order.

Figure 477. Example of an Ignite IQ Camera Template



At the bottom of (Figure 477) the example TME, **CAM.C1.EC.M1.P1**, means that the **CAM** template contains this specific TME when imported into the rundown, where **CAM**:

- **C1** – uses Camera 1
- **EC** – contains an Effect that is a Cut
- **M1** – uses Microphone 1
- **P1** – uses Camera Preset 1

Ignite IQ Template Manager

The Ignite IQ Template Manager is a standalone application that runs separately from the Ignite/Ignite Konnect system. To access the template manager, either:

- In Windows, On the **Start** menu, click **Programs** > **Ignite Software** > **IQ Template Manager**.
- Double-click the desktop shortcut – **IQT**

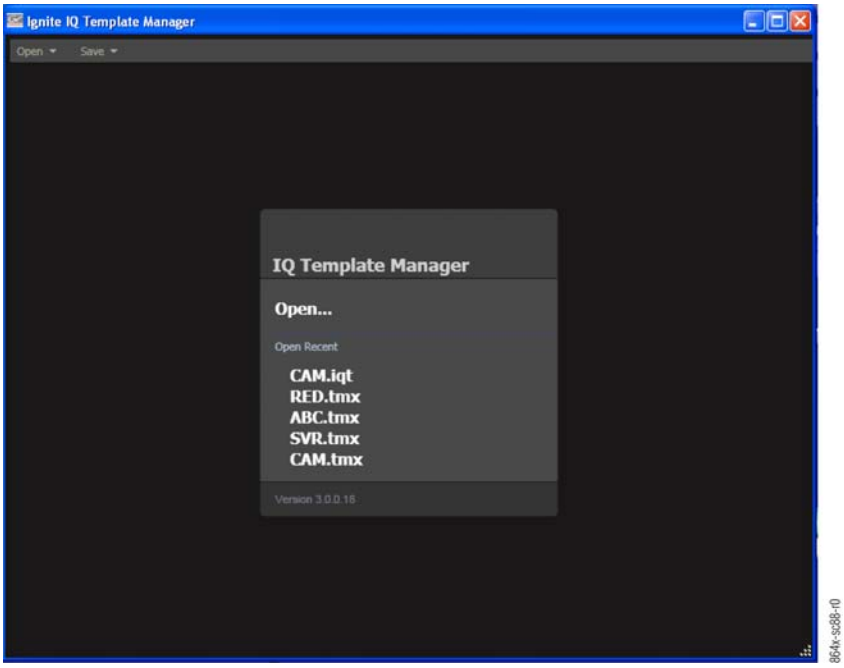
.

Ignite IQ Template Manager – Initial Window

Note For Ignite Konnect IQ Template Manager information refer to *IQ Template Manager Dialog Box* on page 620.

The initial window (Figure 478) of the Ignite IQ Template Manager GUI appears:

Figure 478. Ignite IQ Template Manager GUI– Initial Window



In the initial window, either:

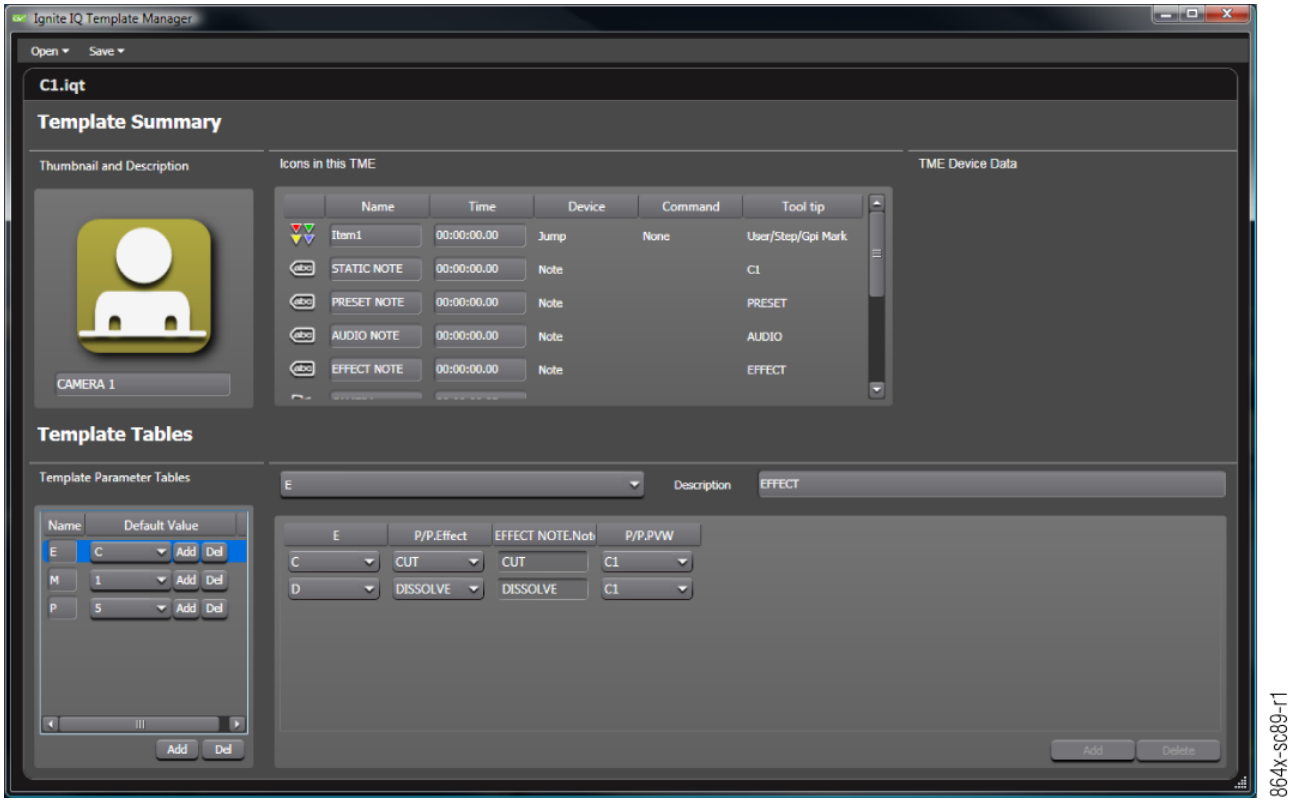
- To open an existing TME or IQ template file, click **Open...**
- To open a recently used file, click the file under **Open Recent**.

Note The last five files that were previously opened are listed under **Open Recent**.

Ignite IQ Template Manager – Main Window

After opening an existing TME file or recently used file, the main window (Figure 479) of the Ignite IQ Template Manager GUI appears:

Figure 479. Ignite IQ Template Manager – Main Window



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The **Ignite IQ Template Manager – Main Window** is the interface used to manage TME and IQ template information. The window, from top to bottom, comprises the following main areas:

- **Template Summary** (Refer to *Template Summary* on page 412)
- **Template Tables** (Refer to *Template Tables* on page 413)
- **Close** button – closes the window without saving changes.

Menu Bar

The Ignite IQ Template Manager (Figure 480) menu bar is located below the title bar at the top of the Ignite IQ Template Manager module. Each menu item displays a list of available commands.

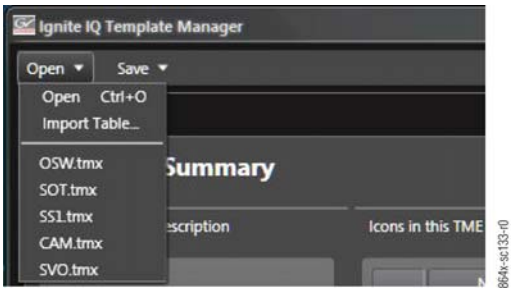
Figure 480. Ignite IQ Template Manager Menus

Open Menu

The **Open** (Figure 481) menu commands are:

Open Menu Command	Purpose
Open	To open an existing TME or IQ template file.
Open Recent	To open one of the last five previously opened files, either TME files (.tmx) or IQ template files (.iqt).

Figure 481. Ignite IQ Template Manager Open Menu

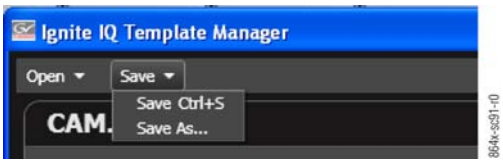


Save Menu

The Save (Figure 482) menu commands are:

Save Menu Command	Purpose
Save	To save the currently opened TME file, including any changes made, such as a template. For detailed information, refer to *Create an Ignite IQ Template* on page 420.
Save As	To save the currently opened TME file, including any changes made, as an IQ template file.

Figure 482. Ignite IQ Template Manager Save Menu

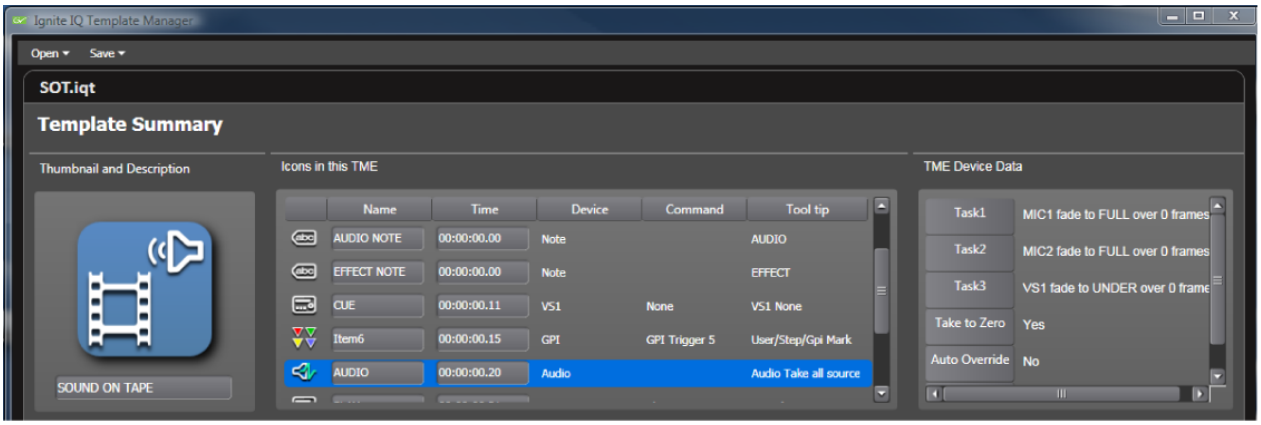


Template Summary

The **Template Summary** area (Figure 483) contains descriptive information about the template, lists the devices used in the TME, and lists the device data associated with each device in the TME. Sections in the **Template Summary** area include:

- *Thumbnail and Description* on page 412
- *Icons in this TME* on page 412
- *TME Device Data* on page 413

Figure 483. Ignite IQ Template Manager – Template Summary



864xsc92-r1

Thumbnail and Description

Area that enables a user to assign a thumbnail graphic and description to a template. Parameters include:

- **Thumbnail display** – displays the selected thumbnail.
- **Thumbnail select** – enables a user to select one of several default thumbnails (Figure 484) or a customer provided image.
- **Description text box** – text that describes the template.

Figure 484. Default Thumbnail Selections

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Icons in this TME

Area that displays information about each device item in a TME. Parameters and display information include:

- **Name** – name of the TME icon.

Note For all TME device names and abbreviations, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

- **Time** – position of the TME in the Event Timeline Module in **hh:mm:ss:ff** format. Change the time as necessary and then press **Enter**. Time is reflected in the following places:
  - Icons in the Event Timeline module. This is only reflected when a user imports the IQT after it has been saved with the update time info.
  - Icons in an IQ Template file (.iqt)

The following parameters consist of read-only information, obtained during TME import:

- **Device** – displays the device type used in the TME.
- **Command** – displays the TME function.
- **Tool tip** – provides additional information about the device used in the TME.

TME Device Data

When a TME element is selected under **Icons in this TME**, then the corresponding device data for that TME appears under **TME Device Data**.

For example, when the **Camera** icon is selected (Figure 483), then the Camera and Preset information appears under **TME Device Data**.

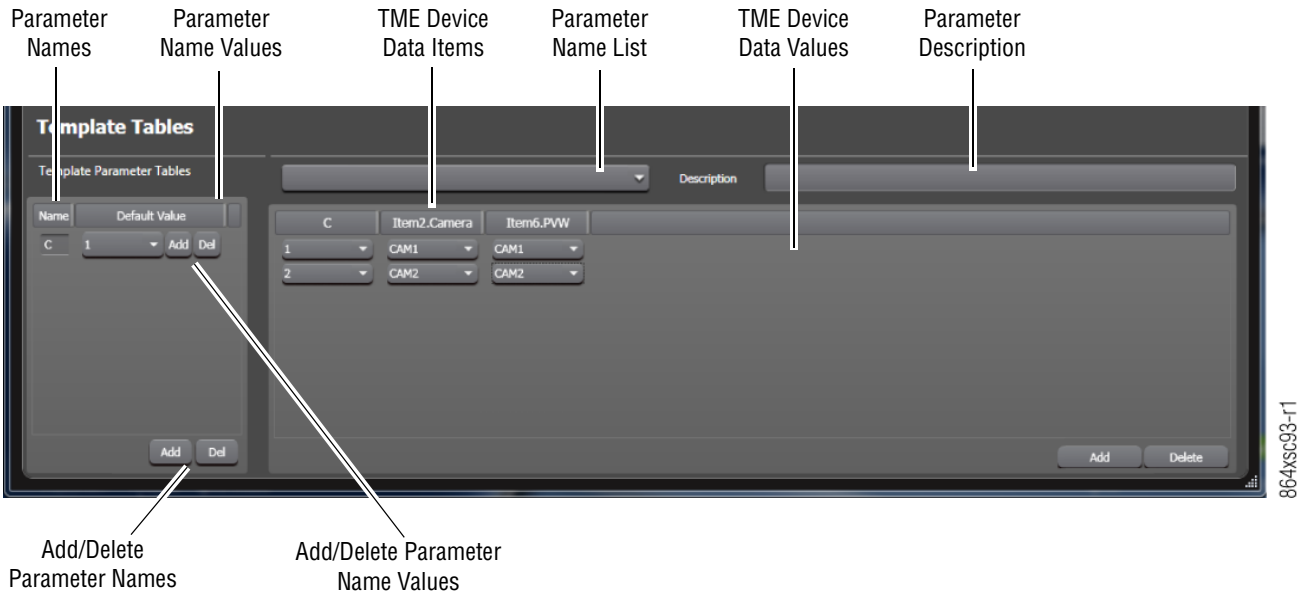
Template Tables

The **Template Tables** area enables a user to create, edit, and maintain the following items within a TME (Figure 485):

- *Parameter Names and Parameter Name Values* on page 414
- *TME Device Data Values* on page 414

Note Parameter names, parameter name values, and TME device data items and values are required to create an IQ template. Without completing this information, a template does not exist, only the original, base TME.

Figure 485. Ignite IQ Template Manager – Parameter Name Information



Parameter Names and Parameter Name Values

- **Name** – the name of the parameter.

Note As a best practice, it is recommended that parameter names are letters, one character in length. For IQ parameter names, use established standards, recommended abbreviations, and consistent techniques and practices. Refer to *Standardization* *on page 577*.

- **Default Value** – The parameter name value(s) and default value assigned to the parameter name.

Note When parameters contain more than one value, only one value is the default value for each parameter. It is recommended that you save the first value as the default value. For example, parameter **C** has the default value of **1**. It is also recommended that the Default value should be the one most commonly used.

- **Add/Del** – one set of Add/Del buttons adds and deletes parameter names. The other set of buttons adds and deletes parameter name values. Refer to Figure 485.

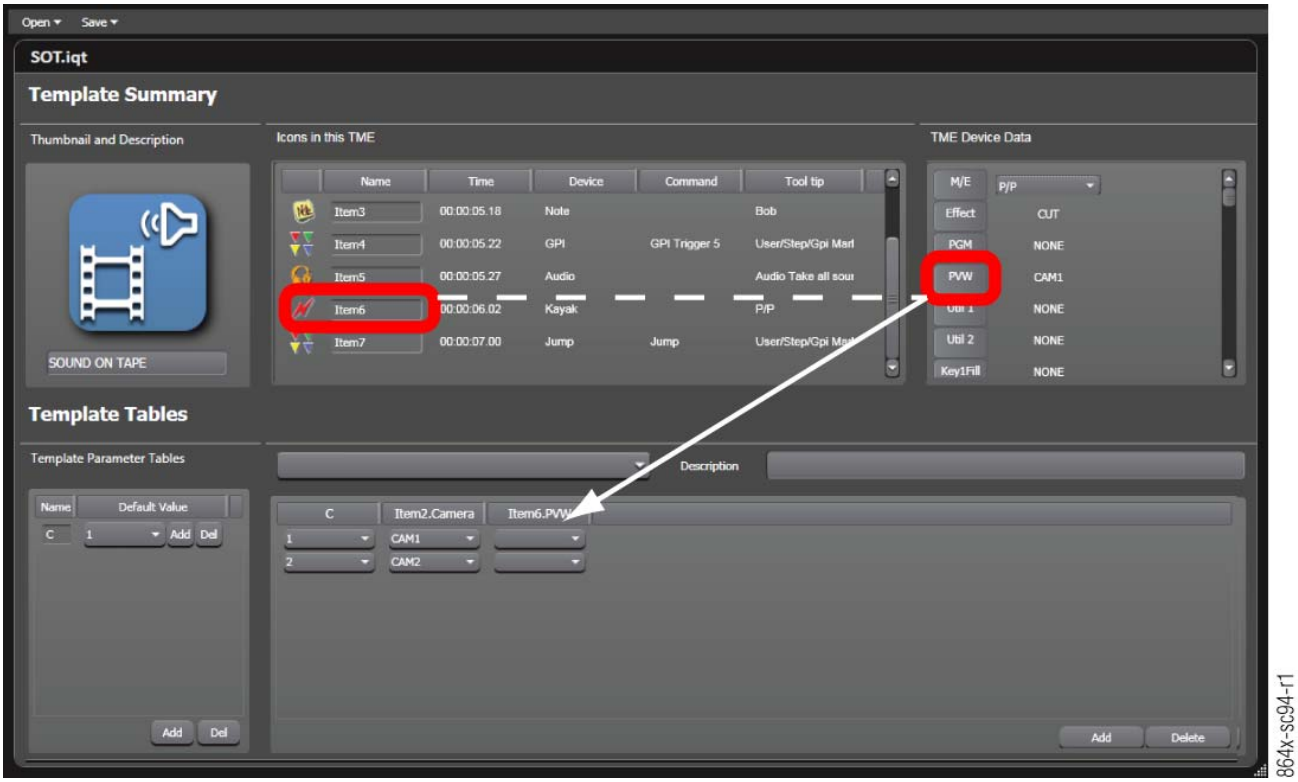
Note For more information on deleting parameter names and parameter name values and the overall the deletion hierarchy, refer to *Delete Parameter Name, Name Value, or TME Device Data Value* on page 431.

TME Device Data Values

- **TME Device Data Items** – device data items that pertain to a specific TME.

Note TME device data items are added by dragging the selected item down from the **TME Device Data** area to the TME device data values area. Device data items receive their names from the combination between the TME name and the selected TME device data (Figure 486 on page 415).

Figure 486. Adding TME Device Data Items



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- **TME Device Data Values** – values assigned to the TME device data item as well as the parameter name value. Refer to Figure 485 on page 414.
- **Parameter Name List** – drop-down list of all parameter names that comprise an IQ template Refer to Figure 485 on page 414.
- **Parameter Description** –

Ignite IQ Auto Channel Assignment

Note For Ignite Konnect IQ Auto Channel information refer to *IQ Auto Channel Pool Dialog Box* on page 617.

The Ignite IQ Auto Channel Assignment feature enables the user to create auto channel pools and assign the channels to designated pools. Auto channel assignment is accessed via the Event Timeline Module in the Ignite system. From the Event Timeline Module, on the **Setup** menu (Figure 487)

click **IQ Auto Channel Pool**. The **IQ Auto Channel Pool** dialog box (Figure 488) appears:

Figure 487. Event Timeline Setup Menu Example

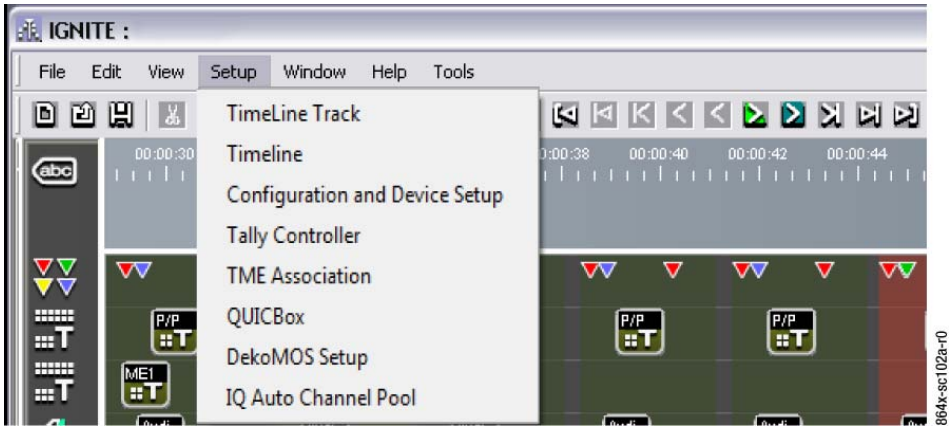
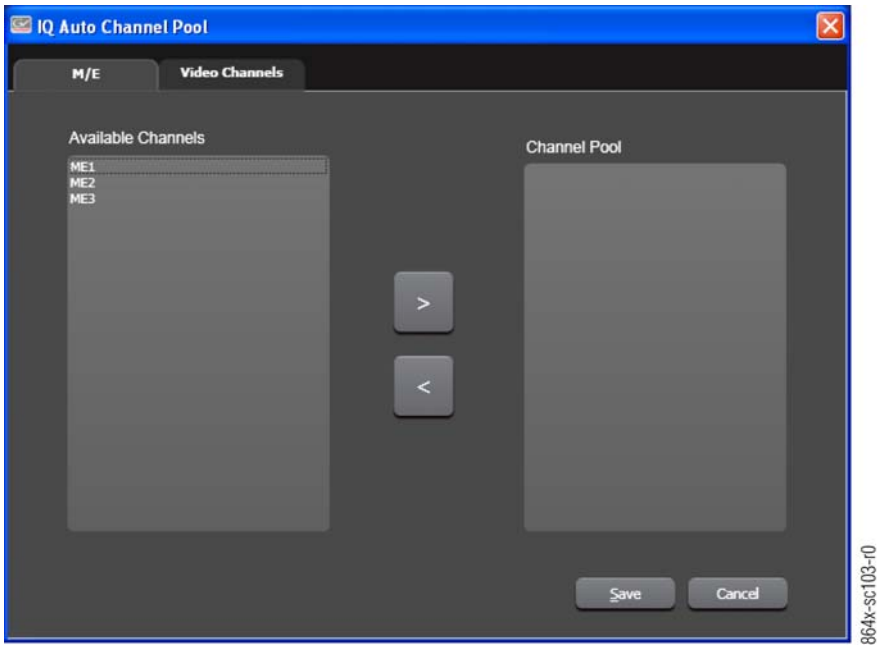


Figure 488. IQ Auto Channel Pool Dialog Box – M/E Tab



The **IQ Auto Channel Pool** dialog box contains two tabs:

- **M/E**
- **Video Channels**

M/E Tab

Parameters, functional areas, and control functions on the **M/E** tab (Figure 488) comprise:

- **Available Channels** – a list of M/E channels that are not assigned to a channel pool.
- **Channel Pool** – a list of channels that are currently assigned in the channel pool.
- **Assign Channel** or **Right Arrow** icon – moves and assigns available channels to a designated channel pool. The channels no longer appear in the **Available Channels** list.
- **Remove Channel** or **Left Arrow** icon – moves the designated channels pools back as available channels. The channels no longer appear under the **Channel Pool** list.
- **Save** – saves changes made to the Auto M/E pool.
- **Cancel** – cancels changes made to the Auto M/E pool and closes the **IQ Auto Channel Pool** dialog box.

Video Channels Tab

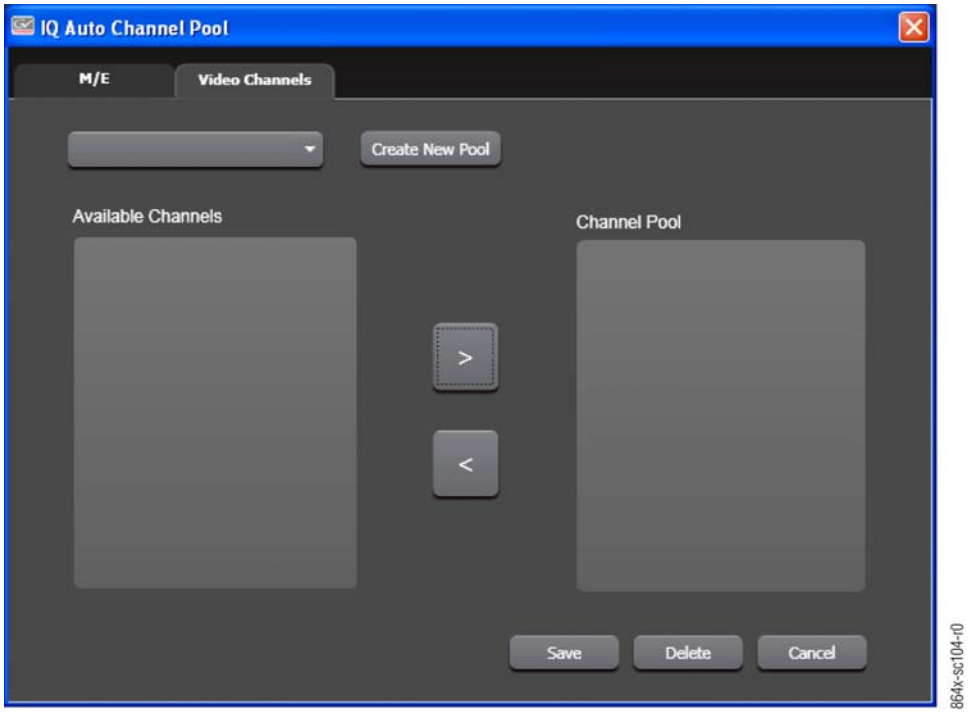
Click the **Video Channels** tab (Figure 489) on the **IQ Auto Channel Pool** dialog box. All parameters, functional areas, and control functions for the **Video Channels** tab appear:

- **Video Channel Pools list** – drop-down list that displays names of the video channel pools.
- **Create New Pool** button – opens the **New Channel** dialog box to create a new video channel.
- **Available Channels** – a list of video channels that are not assigned to a channel pool.
- **Channel Pool** – a list of channels that are currently assigned to a channel pool.
- **Assign Channel** or **Right Arrow** icon – moves and assigns available channels to a designated channel pool. The channels no longer appear in the **Available Channels** list.
- **Remove Channel** or **Left Arrow** icon – moves the designated channels pools back as available channels. The channels no longer appear under the **Channel Pool** list.
- **Save All** – save changes made to all channel pools.
- **Delete** – deletes the currently selected pool and removes it from either list: **Available Channels** or **Channel Pool** list.

Note The channels associated with the deleted channel pool are moved back and made available under the **Available Channels** area.

- **Cancel** – cancels changes made to the video channel pools and closes the **IQ Auto Channel Pool** dialog box.

Figure 489. IQ Auto Channel Pool Dialog Box – Video Channels Tab



Common Features: Ignite/Ignite Konnect System and Ignite IQ Module

Common or shared features exist between the Ignite/Ignite Konnect system and the Ignite IQ Module. Shared features include:

- **TME Associations** – For more information on the TME Associations feature and how to manage TME Associations, refer to *Manage TME Associations* *on page 57*.
- **Import Rundowns** – For more information on the Import Rundowns feature and how to import a rundown, refer to *Importing a Rundown* *on page 423*.

- **Linked Fields Table** – This table is a key component of the Auto Assign function. A user must define the values selected in the Auto ME and VS pools. If this table is not completed then the auto assign functionality does not work.

  After configuring and saving a linked fields table, unless a device is added or removed in an auto channel pool, it only needs done once in IQTM but it must be done when saving an IQT to hold a global setting.

  For more information in defining the Linked Fields Table, refer to *Configure Linked Fields* on page 432.

Operation

Ignite IQ Template Manager

Prerequisites for Creating Ignite IQ Templates

The following is a list of useful guidelines to assist in the design of your IQ template before template creation begins:

- Follow the recommended steps to create a TME in the Event Timeline module. Refer to *Event Timeline Control* *on page 32* for more information on building and saving a TME.

Note All IQ templates are based on an existing TME file that has a file extension of **.tmx**. You cannot create an IQ template without first creating a TME.

- In the TME file, verify that all required icons are in the TME and that these icons are fully populated with the correct properties.
- Define all channel pools: Auto M/E channel pools and video channel pools. Refer to the operations for *Ignite IQ Auto Channel Assignment* on page 443.
- Properly configure the Linked Fields Table in the **Ignite IQ Template Manager** dialog box. Refer to *Configure Linked Fields* on page 432.
- Define a list of static values associated with each commonly used TME in your current TME library.

Create an Ignite IQ Template

The general procedures to create and maintain an Ignite IQ Template, using the Ignite IQ Template Manager, include the following:

- *Import an Existing TME File* on page 420
- *Add a Thumbnail and a Description* on page 422
- *Add/Rename Parameter Name and Parameter Name Values* on page 424
- *Add TME Device Data Values to Parameter Name Values* on page 427
- *Delete Parameter Name, Name Value, or TME Device Data Value* on page 431
- *Configure Linked Fields* on page 432
- *Save TME File as an IQ Template* on page 433

Note The following procedures are based on a simulated camera TME file named **CAM.tmx**.

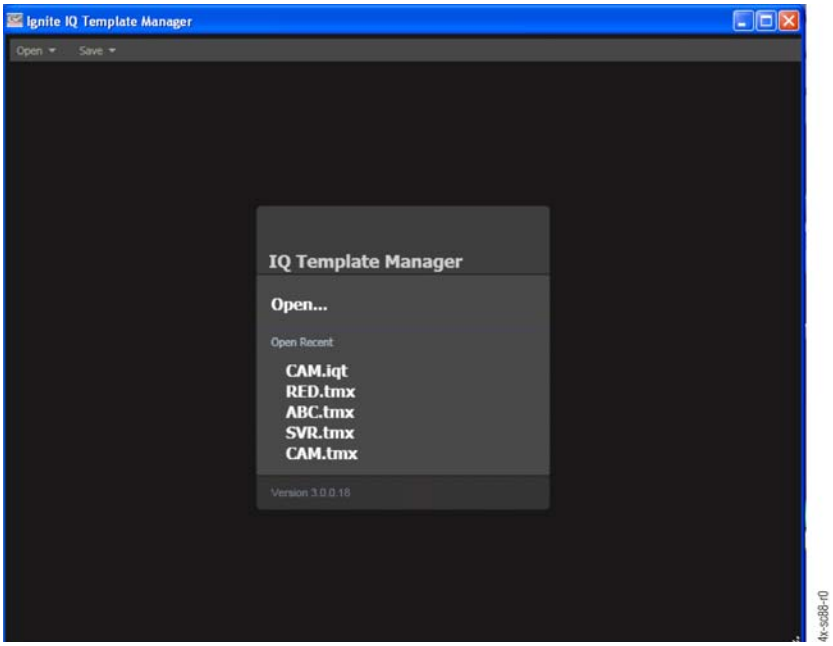
Import an Existing TME File

Note The Ignite IQ Template Manager GUI can only open TMEs that have a file extension of either **.tmx** or **.iqt**.

Note This procedure is based on a simulated camera TME file named **CAM.tmx**.

1. To access the **Ignite IQ Template Manager** GUI, either:
   - Click **Start** > **Programs** > **Ignite Software** > **IQ Template Manager**.
   - Click the desktop shortcut: **IQ Template Manager**. The initial window of the **Ignite IQ Template Manager** dialog box (Figure 490) appears.

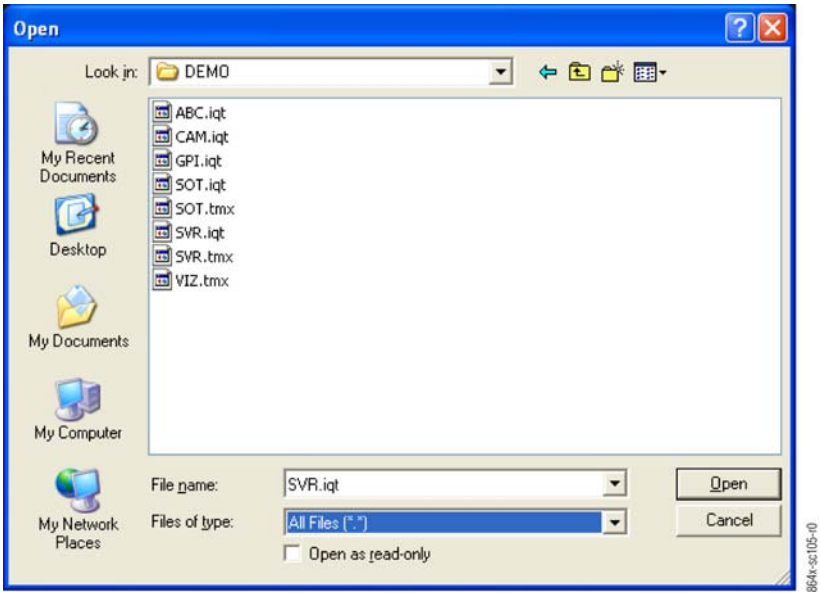
Figure 490. Ignite IQ Template Manager Dialog Box– Initial Window



2. Either:

- Click **Open…** The **Open** dialog box appears.
  Browse to the TME file and click **Open**. The main window of the Ignite IQ Template Manager GUI (Figure 492) appears.

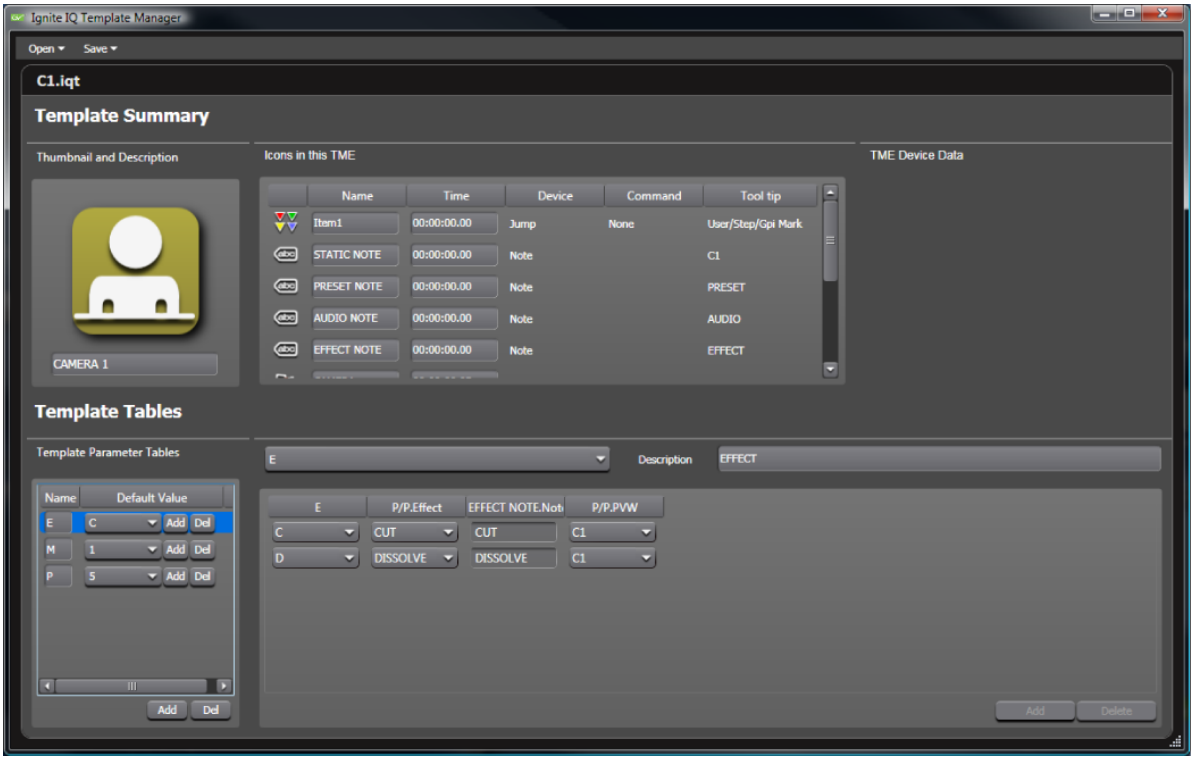
Figure 491. Open TME or IQ Template Dialog Box



- Click **Open Recent** and then click the desired TME file. The main window of the Ignite IQ Template Manager GUI (Figure 492) appears.

Note The information associated with the TME file now appears in the **Icons in this TME** and **TME Device Data** areas of the initial window.

Figure 492. Ignite IQ Template Manager – Main Window



864x-sc89-r1

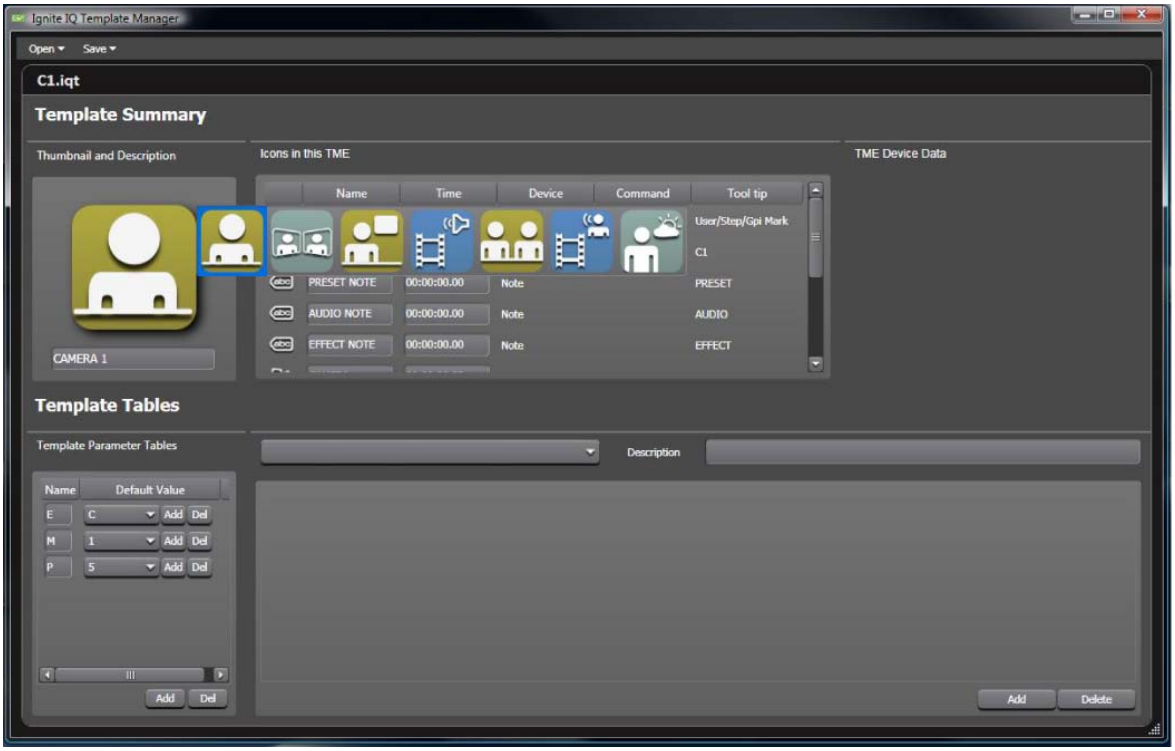
Add a Thumbnail and a Description

There are seven default thumbnails images. Adding a description to an IQ template is optional. The selected thumbnail image and description are displayed in the Active X plug-in within the NRCS as well as the **TME Association** dialog box, which makes the template easier to recognize. Refer to *Manage TME Associations* *on page 57*.

Note If no thumbnail has been added previously, the default icon is the first of the seven icons available in the selection.

1. In the **Thumbnail and Description** area, click the existing icon. The default icon selections appear at the right (Figure 493).

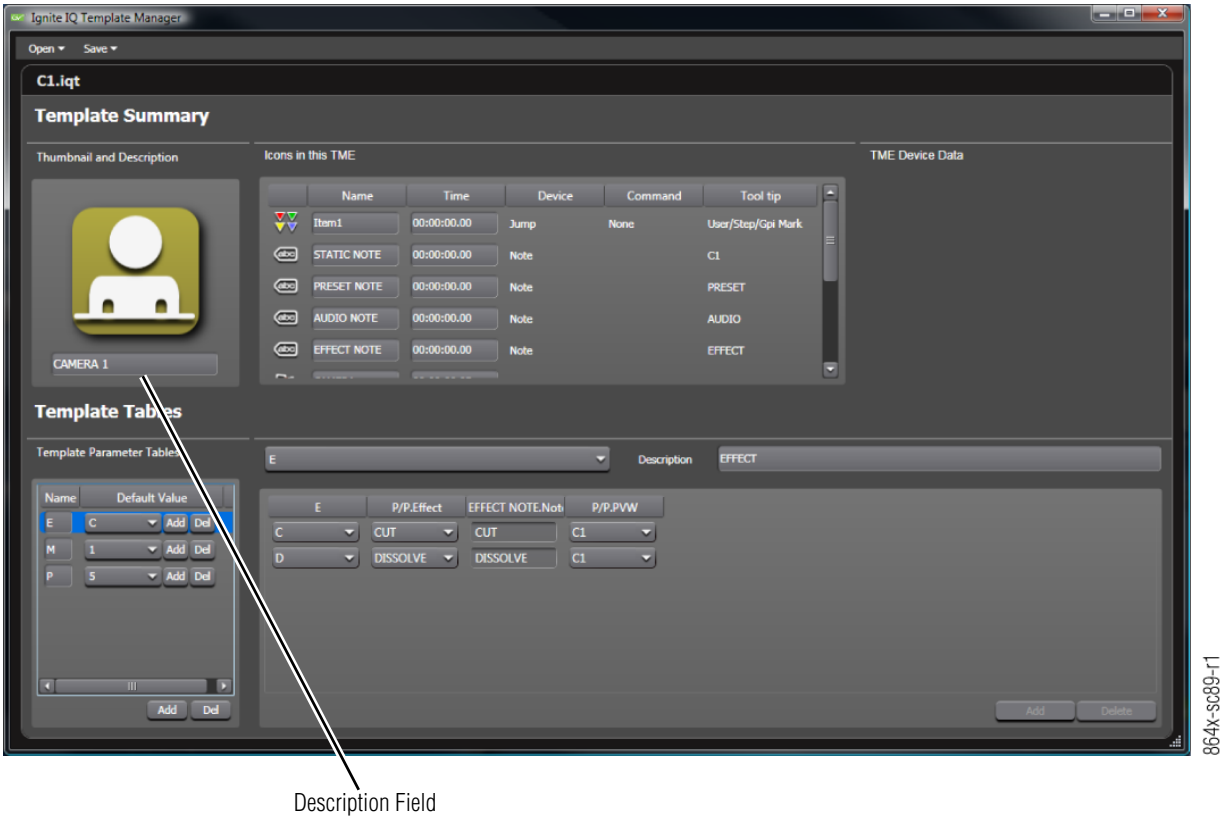
Figure 493. Add a Thumbnail



874x-sc76-r0

2. Either
   - Select an image from the default icons.
   - Select a customer provided image
3. In the **Thumbnail and Description** area, click in the description field (Figure 494) and type a description.

Figure 494. Add a Description



Description Field

864x-sc89-r1

Add/Rename Parameter Name and Parameter Name Values

Parameter names and parameter name values are required to create an IQ template. In the camera template example, to create the template, based on the imported camera TME file, the following parameter names are required:

- C (Camera)
- E (Switcher and DPM Effects)
- G (Graphics)
- M (Microphones)
- P (Camera Presets)

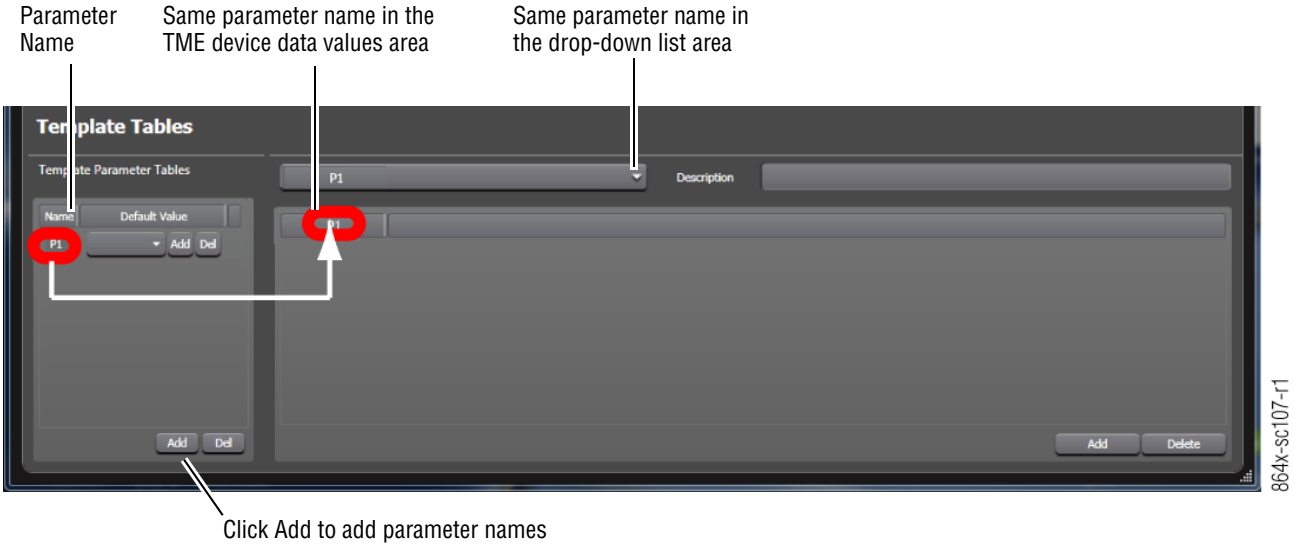
Note For example purposes, only the steps on how to add the parameter name C to the camera template are outlined.

Note As a best practice, it is recommended that parameter names are letters, one character in length. For IQ parameter names, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Note This procedure is based on a simulated camera TME file named **CAM.tmx**.

1. To add parameter names, under the **Template Tables** area, click **Add** (Figure 495). The default parameter name, **P1**, appears in the parameter name and in the area where the TME device data values will be populated. (Figure 495).

Figure 495. Adding Parameter Names



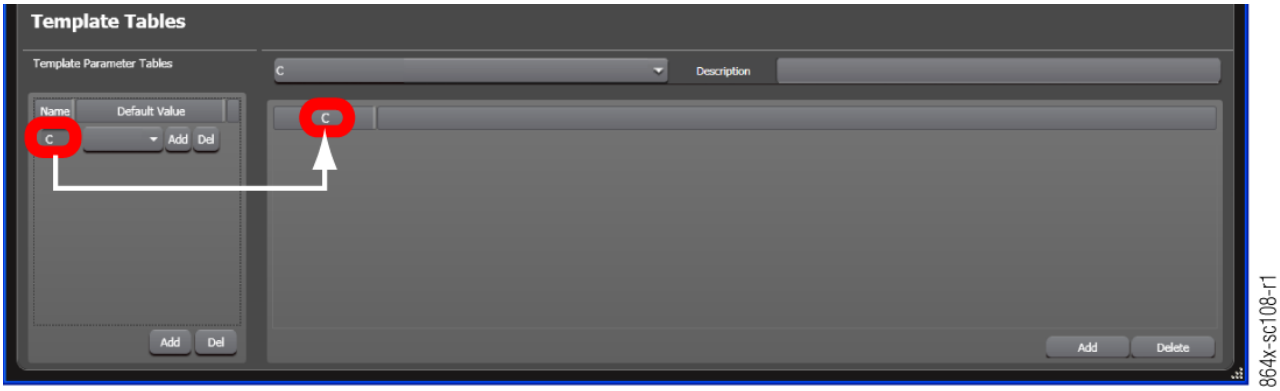
2. To change the parameter name from the default value of **P1** to **C**, do the following:

   a. In the **Name** column, click the parameter and type the new parameter name, **C**.

   b. Press **Enter**.

   C appears as the parameter name. The parameter name is automatically renamed in the TME device data area and the parameter drop-down list to match the parameter name, **C** (Figure 496).

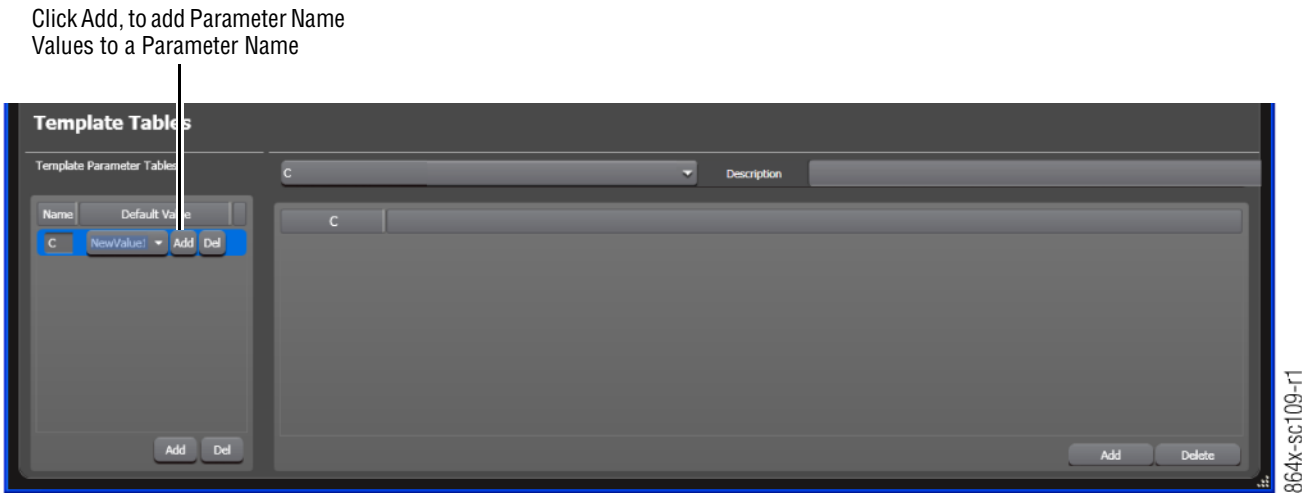
Figure 496. Renaming Parameter Names



3. To add parameter name values to parameter name, **C**, click **Add**. A value of **NewValue1** appears (Figure 497).

Note As a best practice, it is recommended that the parameter name values are one character in length. Parameter value names should not exceed four characters and cannot exceed eight characters. For IQ parameter name values, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Figure 497. Adding Parameter Name Values to Parameter C



4. To rename the default value of the parameter name value, do the following:
   a. In the **Default Value** column, click the value.
   b. Right-click and click **Rename**.
   c. Type a new value and press **Enter**.

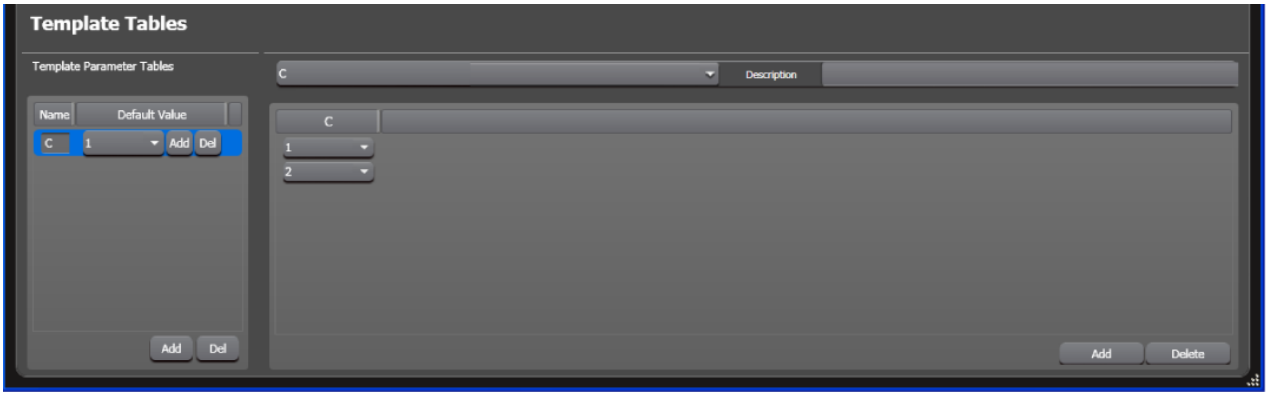
   For the camera example, add two values: **1** and **2**. The two values represent the number of cameras in the Camera IQ Template.

Note In the **Default Value** column, when parameters contain more than one value, only one value is the default value for each parameter. It is recommended that you save the first value as the default value. For example, parameter **C** has the default value of **1**. It is also recommended that the Default value should be the one most commonly used.

Once the parameter name values, 1 and 2, are added to parameter name, C, note that the system automatically creates two row entries for the parameter name values in the TME device data area (Figure 498).

Each parameter name value, 1 and 2, requires an assigned value. Refer to *Add TME Device Data Values to Parameter Name Values*.

Figure 498. Renaming Parameter Name Values



864x-sc110-r1

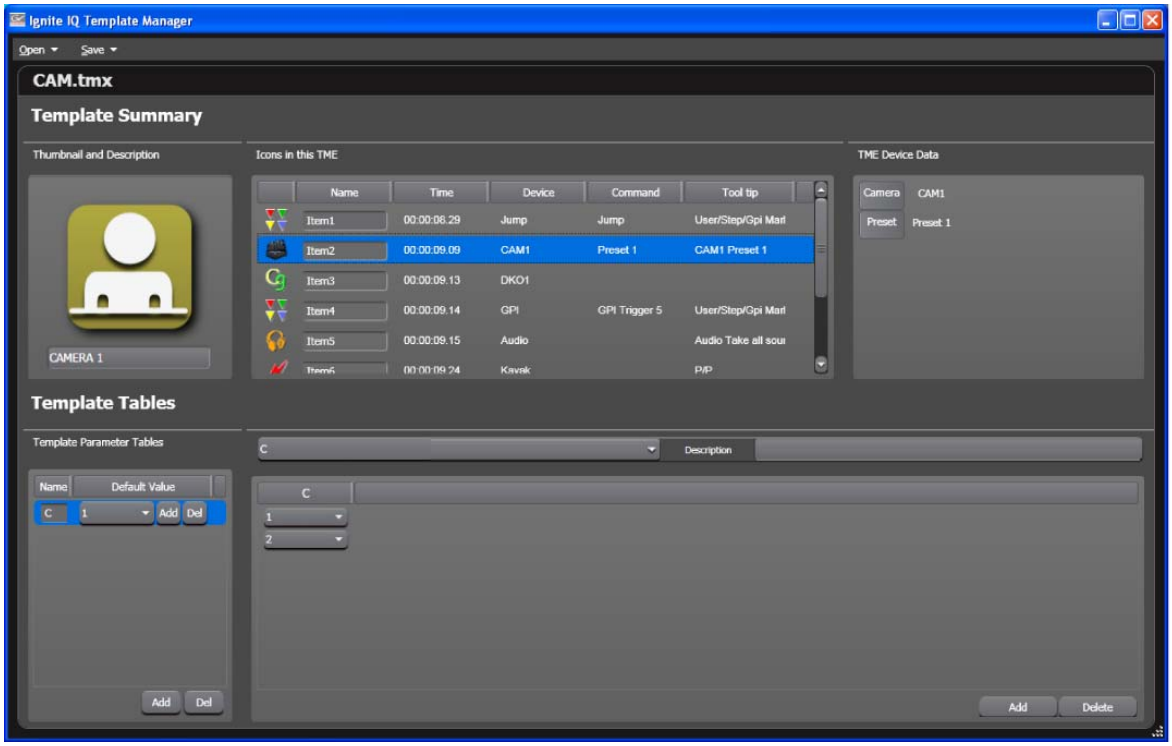
Add TME Device Data Values to Parameter Name Values

Note This procedure is based on a simulated camera TME file named **CAM.tmx**.

1. Under **Template Summary**, in the **Icons in this TME** area, click the Camera icon. The information associated with the Camera icon appears under the TME Device Data area (Figure 499).

Note In the **Name** field, the default names are **Item1**, **Item2**, etc. To rename the icons, select the text and type a new name that coincides with each TME icon.

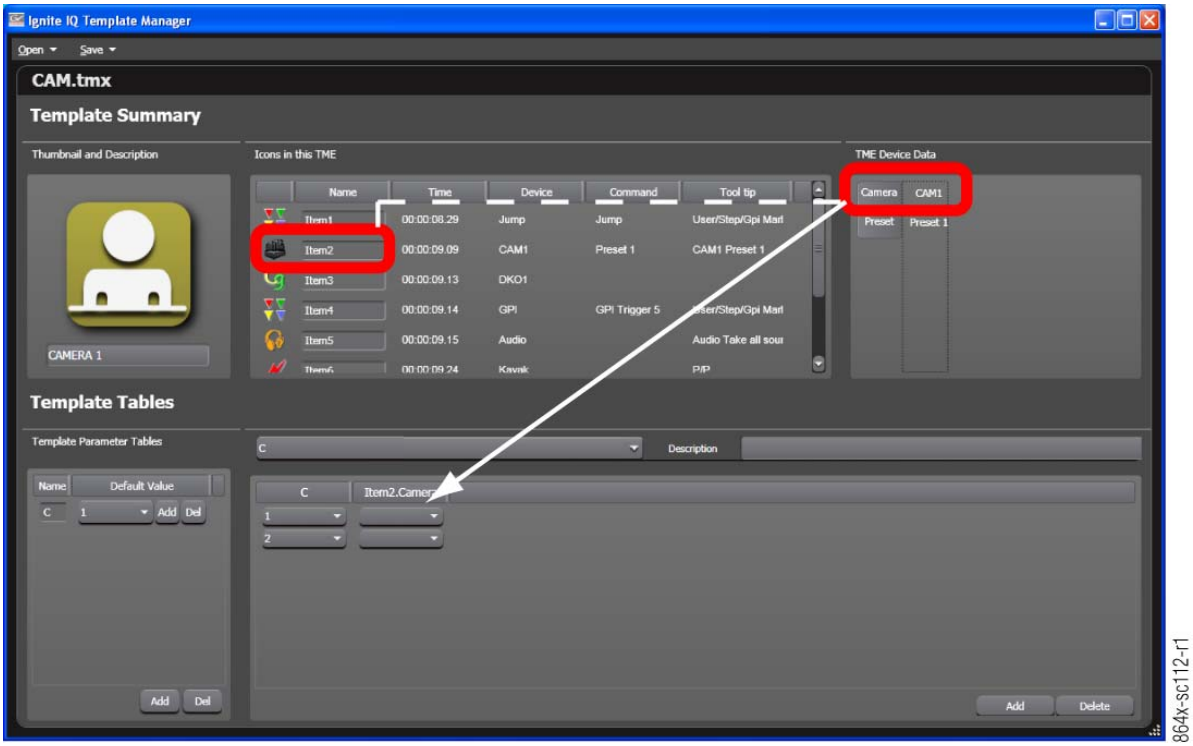
Figure 499. Camera TME Device Data



864x-sc111-r1

2. Drag the Camera data from the TME Device Data to column **C**. The default name of the column is **Item2.Camera** (Figure 500)

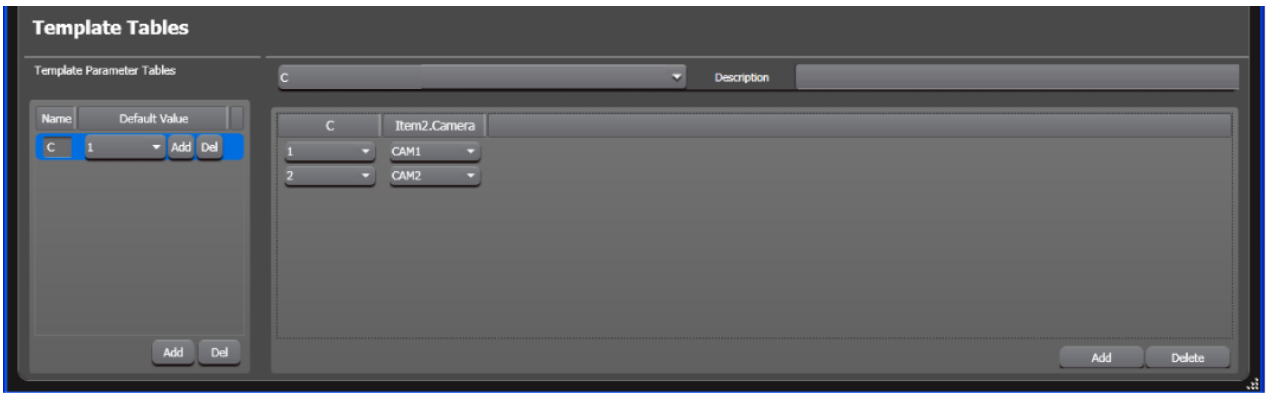
Figure 500. Adding Camera TME Device Data



Note Item2 is the name of the Camera TME icon and Camera is the name of the selected TME device data. The name of the item now appears as **Item2.Camera**.

3. To select a value, click the drop-down arrow, and click an item value for each parameter name value (Figure 501):
   - The logical TME device data value to select for the parameter name and parameter name value group, **C1**, is **CAM1**.
   - The logical TME device data value to select for the parameter name and parameter name value group, **C2**, is **CAM2**.

Figure 501. Adding Values to Camera TME Device Data

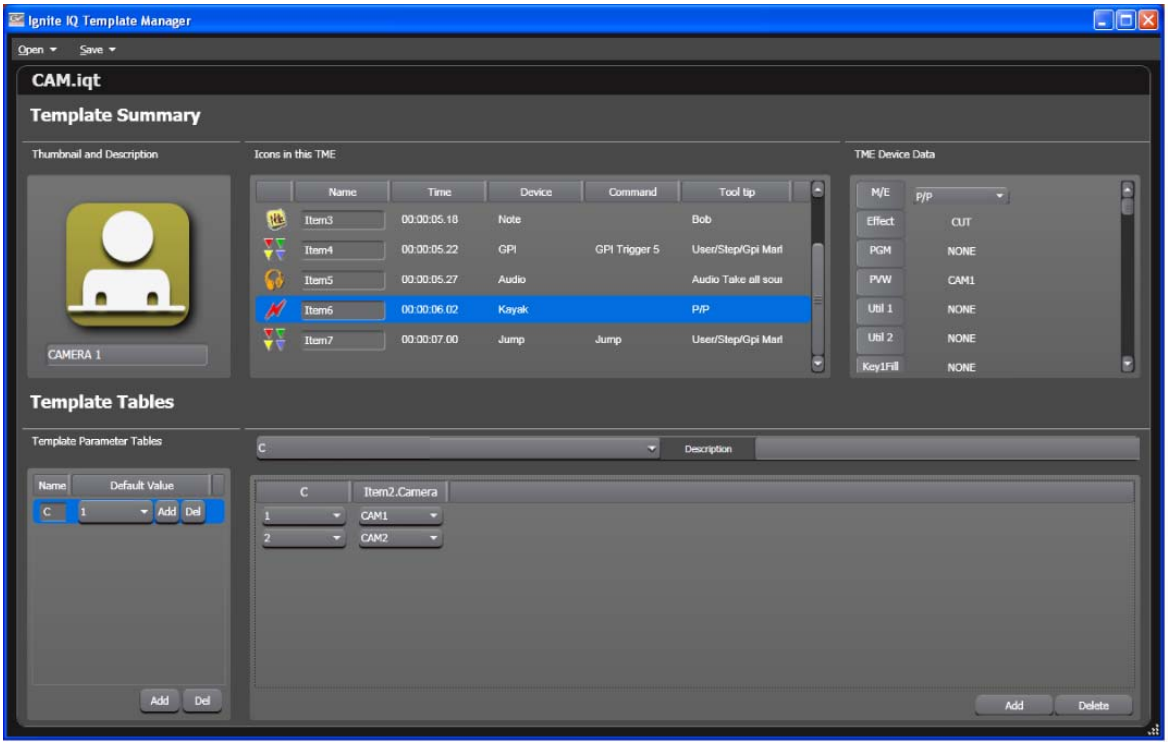


864x-sc113-r1

Note It is common for the same parameter to have device data that comes from more than one device item and TME icons. In the next step, the Switcher PVW device data is added as an item value.

4. Under **Template Summary**, in the **Icons in this TME** area, click the Switcher icon. The information associated with the Switcher icon appears under the **TME Device Data** area (Figure 502).

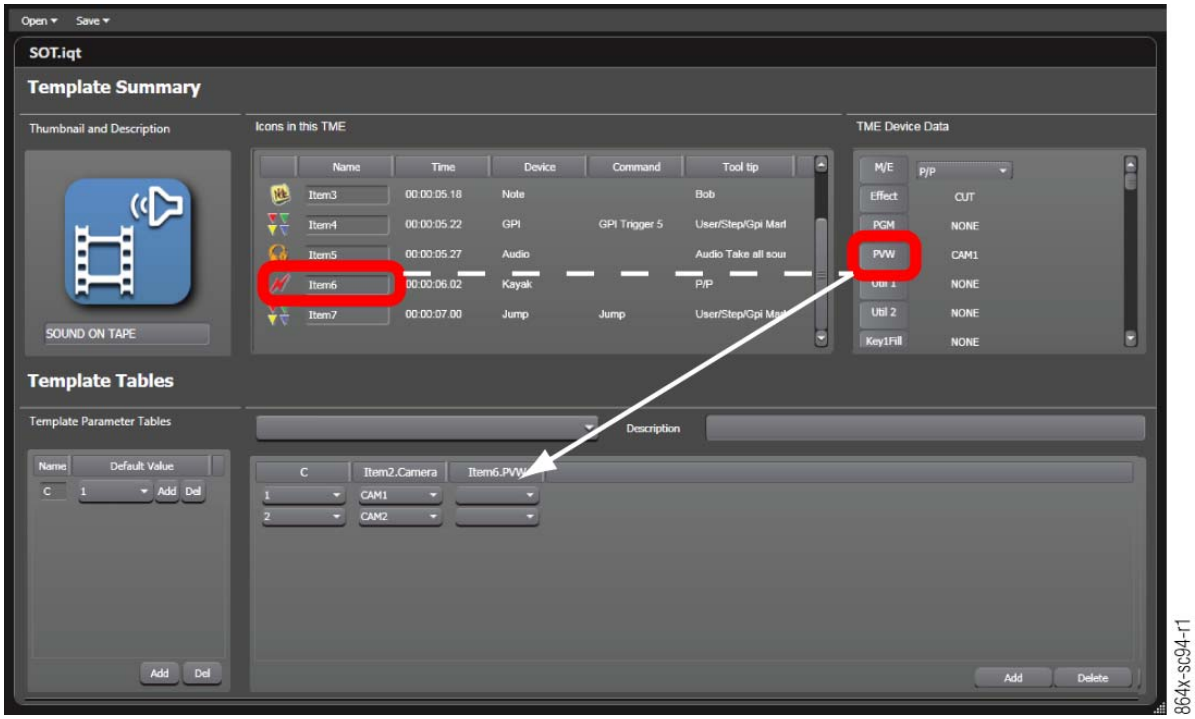
Figure 502. Switcher TME Device Data



864x-sc114-r1

5. Drag the PVW item next to **Item2.Camera**. The name of the PVW item now appears as **Item6.PVW** (Figure 503)

Figure 503. Adding Switcher TME Device Data

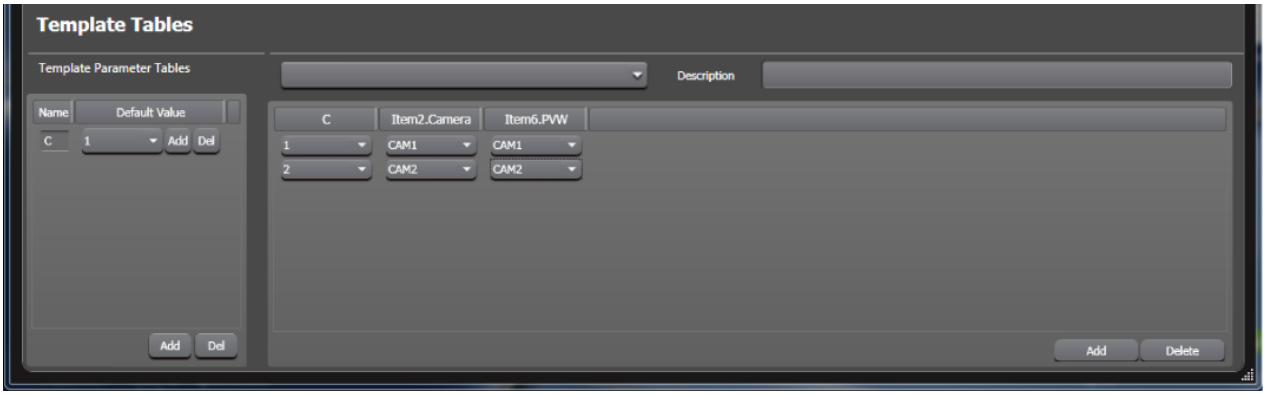


864x-sc94-r1

Note Item6 is the name of the Switcher TME icon and PVW is the name of the selected TME device data.

6. To select a value for **Item6.PVW**, click the drop-down arrow, and click an item value for each parameter name value. Refer to Figure 504.
   - The logical TME device data value to select for the parameter name and parameter name value group, **C1**, is **CAM1**.
   - The logical TME device data value to select for the parameter name and parameter name value group, **C2**, is **CAM2**.

Figure 504. Adding Values to Switcher TME Device Data



864xsc93-r1

Delete Parameter Name, Name Value, or TME Device Data Value

Parameter names, parameter name values, and TME device data values are deleted in the **Template Tables** area (Figure 505) of the **Ignite IQ Template Manager** dialog box.

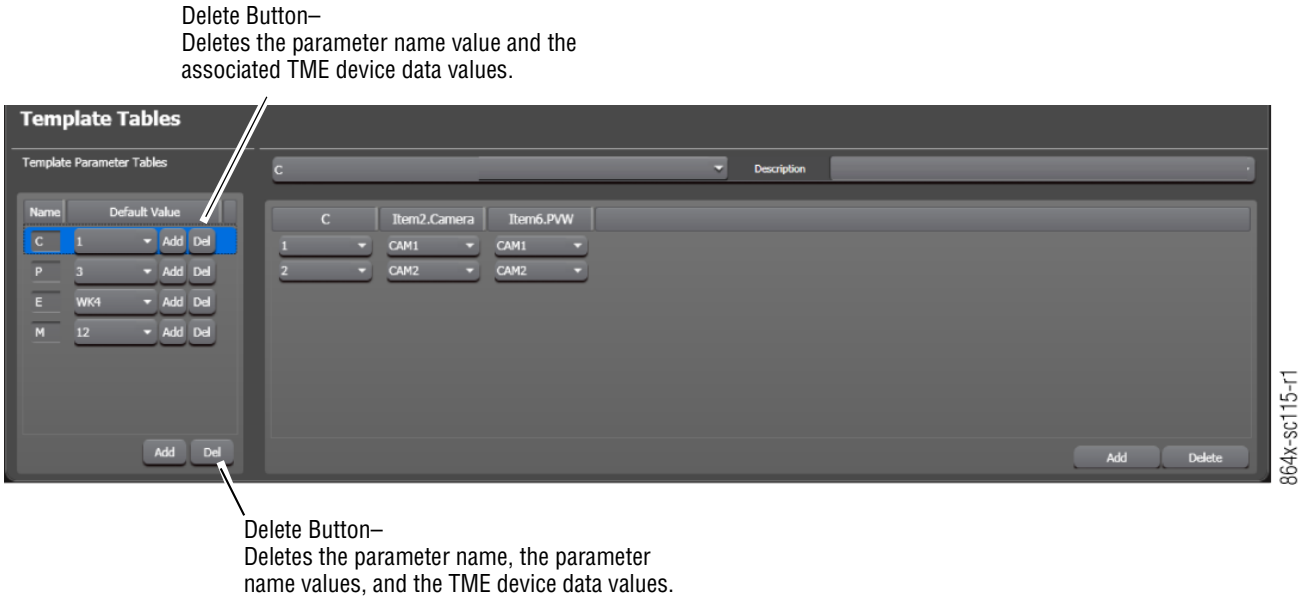
Note This procedure is based on a simulated camera TME file named **CAM.tmx**.

To delete a parameter name

a. Click next to the parameter name for deletion. The entire parameter name appears in blue.

Note Only one parameter name can be deleted at a time.

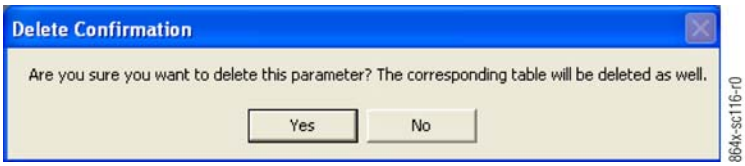
Figure 505. Parameter Name Selected



CAUTION In the next step, once a parameter name is deleted, all associated parameter name values and TME device data are also deleted.

b. Click **Del** (Figure 505) located at the bottom right-hand corner of the parameter name area. The **Delete Confirmation** dialog box appears (Figure 506).

Figure 506. Parameter Name Delete Confirmation Dialog Box



c. Either:

- Click **Yes** to delete the parameter name, all associated parameter name values, and the TME device data values.
- Click **No** to cancel the action.

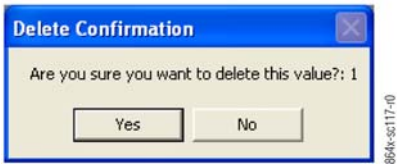
To delete a parameter name value associated with a parameter name:

a. Under the **Default Value** column, click the drop-down arrow, and click the parameter name value for deletion.

CAUTION In the next step, once a parameter name value is deleted, all associated TME device data values are also removed from the parameter name value.

b. Click **Del** (Figure 505) located next to the parameter name value. The **Delete Confirmation** dialog box appears (Figure 507):

Figure 507. Parameter Name Value Delete Confirmation Box



c. Either:

- Click **Yes** to delete the parameter name value and the associated TME device data.
- Click **No** to cancel the action.

To delete TME device data values associated with a parameter name value

a. Click the appropriate parameter name.

CAUTION The selected TME device data values for all parameter name values for the specified parameter name are deleted.

b. In the TME device data area, right-click the item value at the top of the column, and click **Delete**.

Configure Linked Fields

Note To hold a global setting, this procedure must be done once when saving an IQT.

The following procedure is an example only. The exact procedure depends on the specific IQT. This particular example is based on the Auto ME

having two MEs in the pool and AutoVS having three server channels selected.

1. Access the link fields table via the middle drop down tab in IQTM. A warning message appears stating that any changes made affect existing IQTs. Click **OK**.
2. At the bottom right hand corner of the IQTM, click **Add**.

Note In the following step, to determine the number of rows necessary, add the number of sources in the auto pools. In this example that is five—two for the MEs and three for the servers.

3. Enter the number of rows necessary. The resulting table contains the following information:

Channel	Kayak	Audio
ME1	ME1	*(blank)*
ME2	ME2	*(blank)*
VS1	VS1	VS1
VS2	VS2	VS2
VA3	VA3	VA3

4. Save the IQT.

Save TME File as an IQ Template

Note This procedure is based on a simulated camera TME file named **CAM.tmx**.

1. On the **Save** menu, click **Save as** to save the camera TME file as a camera template file.
2. In the **Save as** dialog box, do the following:
   a. In the **Save in:** field, click the drop-down arrow and browse to a location to save the camera template file.
   b. In the **File name:** field, type a name for the camera template file, such as **CAM**.

Note All IQ template files in your library should contain a consistent number of characters. As a best practice, it is recommended that IQ template files contain three characters. For IQ template name abbreviations, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

   c. In the **Save as type:** field, click the drop-down arrow and click **.iqt**.
3. Either:
   - Click **Save** to save the file as a template to the desired location

- Click **Cancel**, to cancel the changes to the existing TME file

Import a Parameter Name From An Existing IQ Template

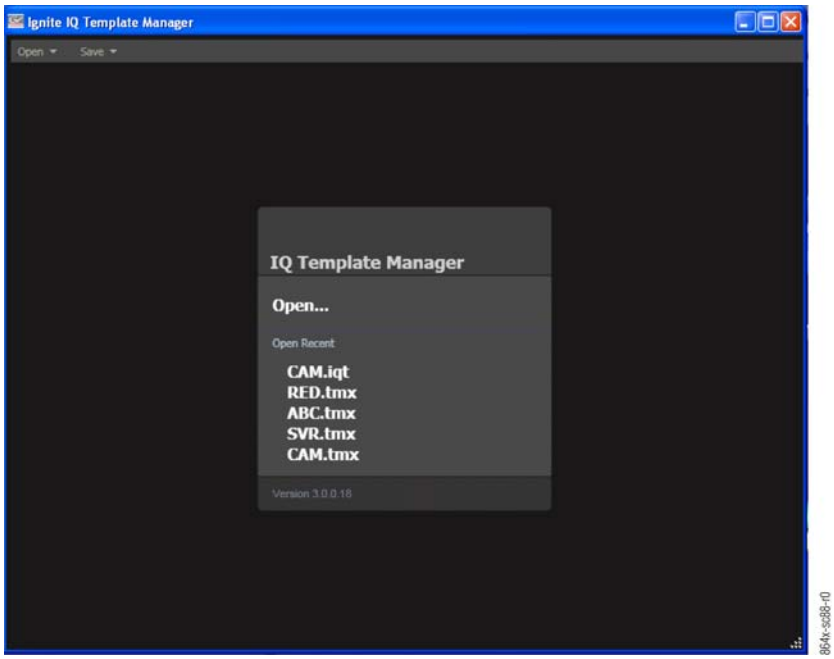
Import parameter names from an existing IQ template into either:

- An IQ Template file
- A TME (.tmx) file

Note The Ignite IQ Template Manager GUI only accepts and is only compatible with TME files that have a file extension of .tmx or .iqt.

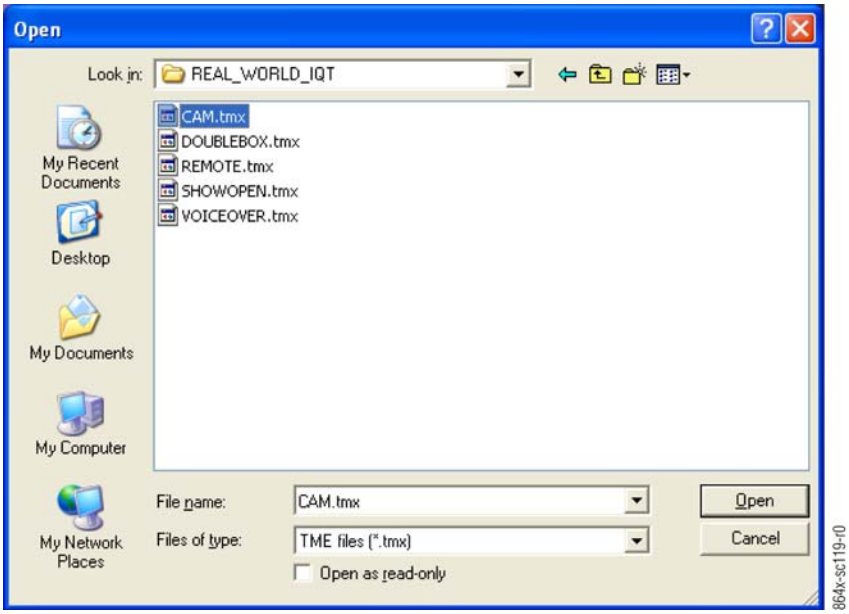
1. To access the **Ignite IQ Template Manager** GUI, either:
   - Click **Start** > **Programs** > **Ignite Software** > **IQ Template Manager**.
   - Click the desktop shortcut: **IQ Template Manager**.
     The initial window of the **Ignite IQ Template Manager** GUI appears (Figure 508).

Figure 508. Ignite IQ Template Manager GUI– Initial Window:



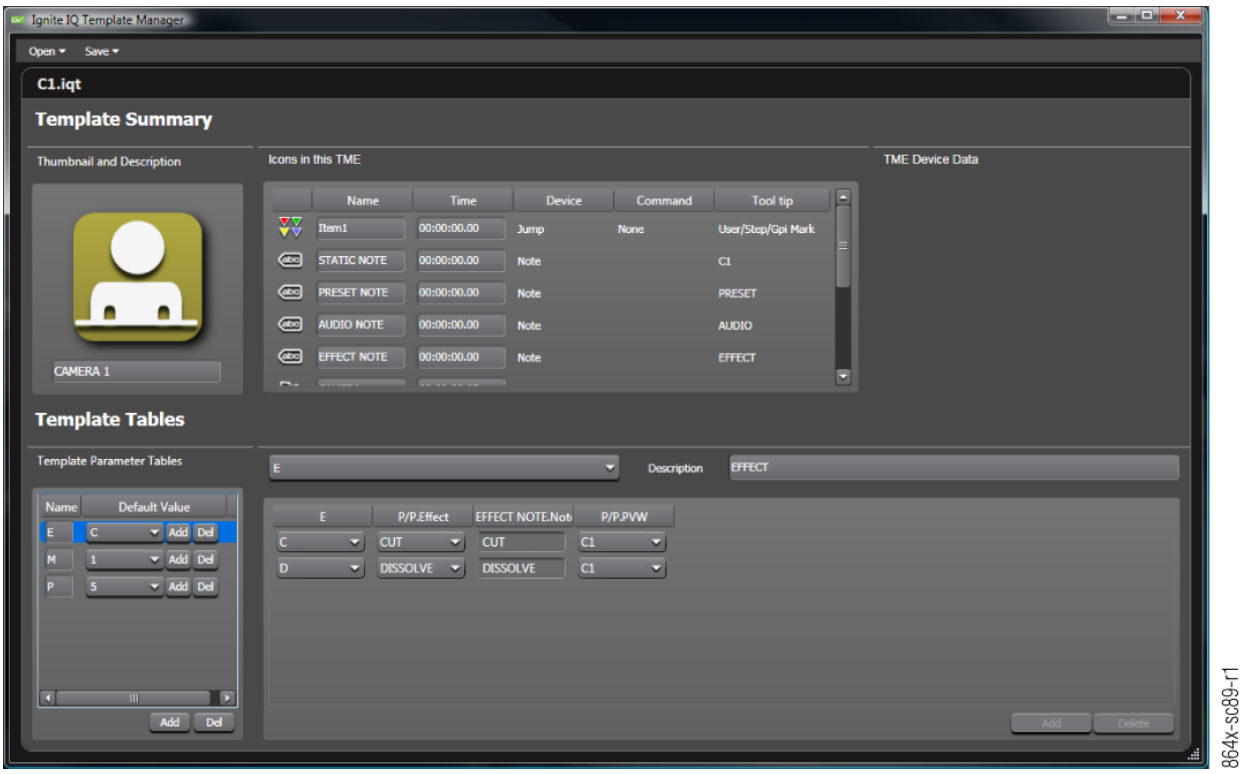
2. Under **IQ Template Manager**, click **Open…** The **Open** dialog box appears (Figure 509 on page 435).

Figure 509. Open TME or IQ Template Dialog Box



3. Browse to the TME file and click **Open**. The main window of the Ignite IQ Template Manager GUI (Figure 510 on page 435) appears.

Figure 510. Ignite IQ Template Manager – Main Window



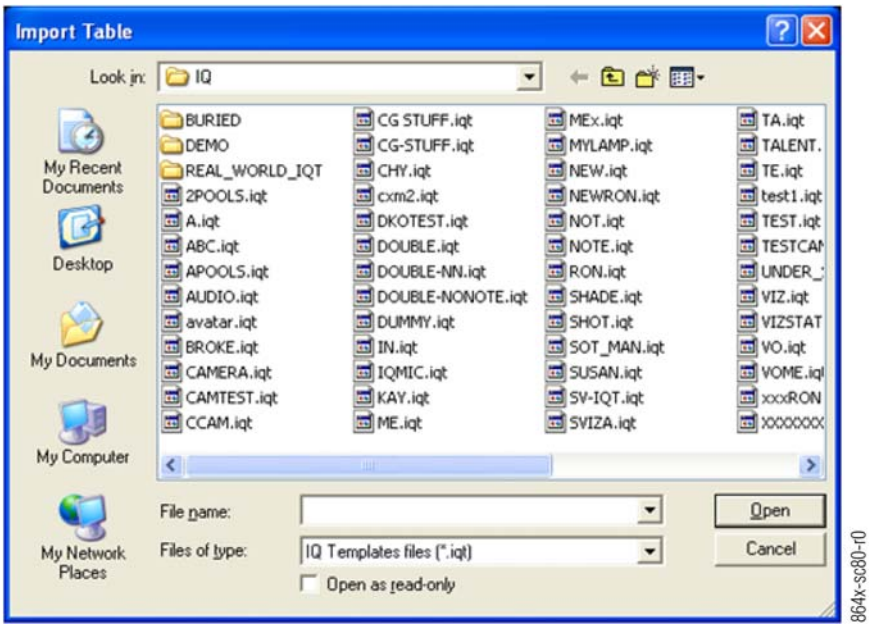
4. Under **Open Recent**, click the desired TME file. The main window of the Ignite IQ Template Manager GUI (Figure 510 on page 435) appears.

Note The information associated with the TME file now appears in the **Icons in this TME** and **TME Device Data** areas of the initial window.

Import a Parameter Name

1. On the **Open** menu, click **Import Table**. The **Import Table** dialog box appears (Figure 511 on page 436).

Figure 511. Import Table Dialog Box



2. Browse to the existing Ignite IQ template file (.iqt file) and click **Open**. The **Import Table(s)** dialog box appears (Figure 512).

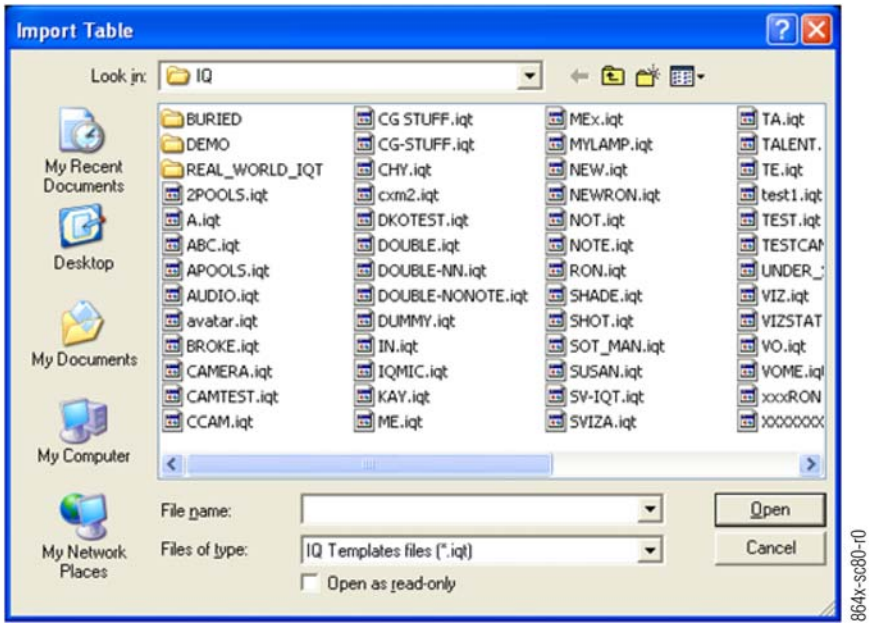
Figure 512. Import Table(s) Dialog Box

Note This dialog box lists the available parameter tables to import, associated with the existing Ignite IQ template.

3. Click the available parameter table to import and either:

a. Click **Change Template**. The **Import Table** dialog box re-appears (Figure 513).

Figure 513. Import Table Dialog Box



b. Either:

- Browse to a different Ignite IQ template file (.iqt file) and click **Open**. All the selected tables are imported into the new template unless there is a duplicate name. If a duplicate name exists, it must be renamed or that table will not import.

Note If the **Import Table(s) Change Template** button is clicked but a selection has not been made, no tables are imported into the previous IQT.

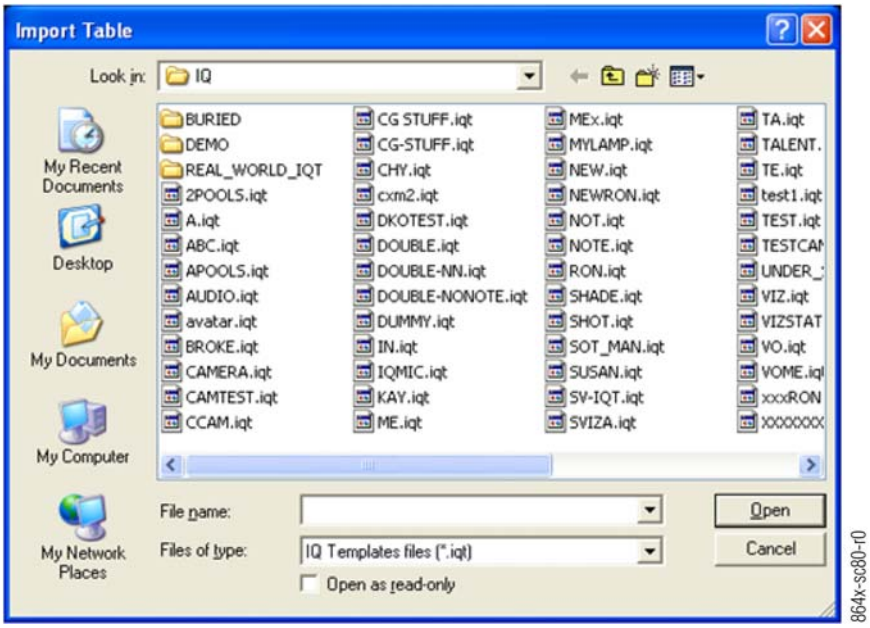
- Click **Cancel**. The **Import Table** dialog box closes and you are returned to the **Import Table(s)** dialog box.

c. Click **Import**. An import additional tables dialog box appears.

d. Either:

- Click **Yes** to select another table. The **Import Table** dialog box (Figure 514) re-appears and allows you to import additional parameters from a different IQ Template file.
- Click **No** to close the dialog box and have the selected tables appear in the IQ Template Manager.

Figure 514. Import Table Dialog Box



e. Either:

- Repeat steps Step 2 and Step 3 as many times as necessary.

Note There is no limit on the number of IQ Template files from which to import parameter names.

- Click **Cancel**. The **Import Table** dialog box closes and you are returned to the **Import Table(s)** dialog box (Figure 515).

Figure 515. Import Table(s) Dialog Box

- Once finished selecting parameter names from different IQ Template files, click **Import**.

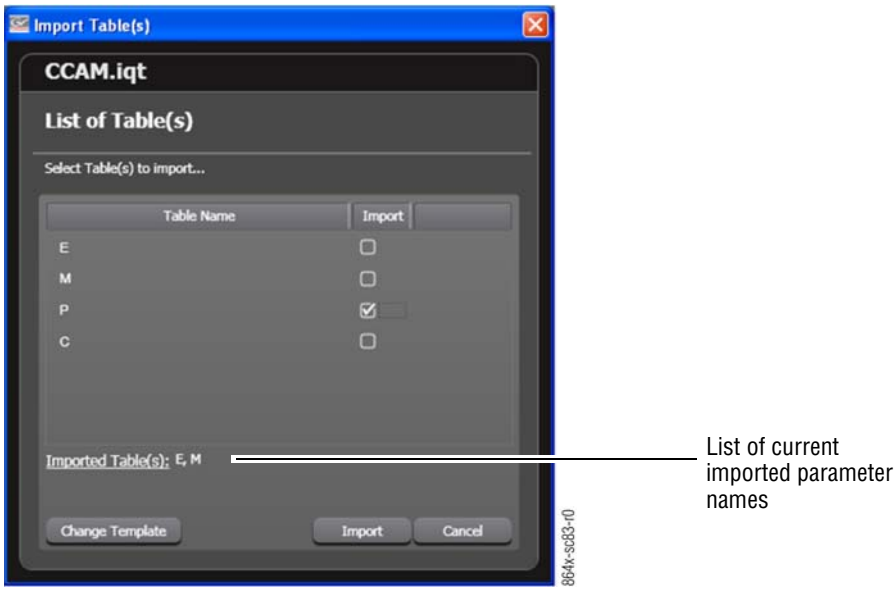
  The **Import more table(s)** confirmation dialog box (Figure 516) appears.

Figure 516. Import More Table(s) Confirmation Dialog Box

- Either:
  - Click **Yes** to import additional parameter names from different IQ Template files. (Repeat steps Step 2 and Step 3 as necessary.)

    The **Import Table(s)** dialog box lists the number of parameter names for import (Figure 517 on page 440).

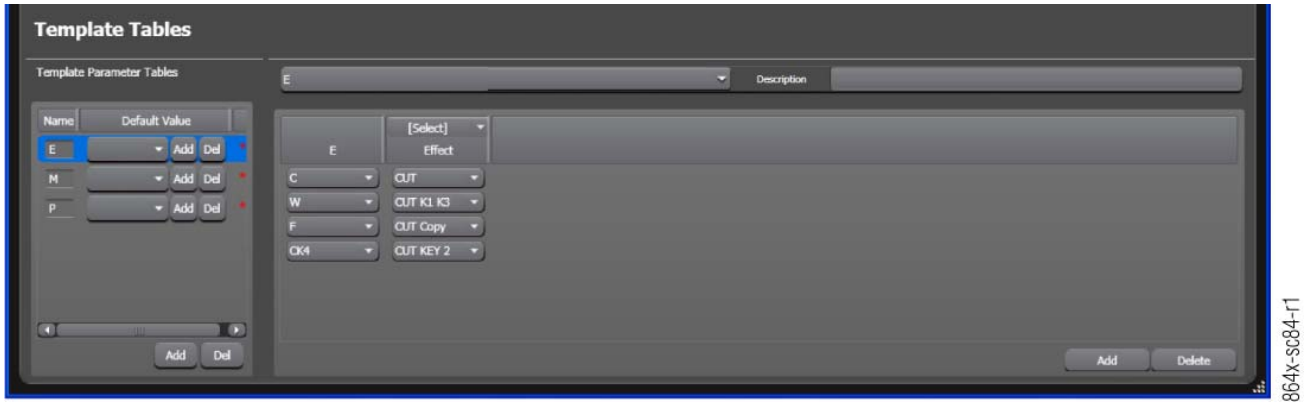
Figure 517. Import Table(s) Dialog Box – Listed Parameter Names



- Click **No**. Parameter names from the previous IQ Template file(s) are imported in to the **IQ Template Manager** GUI (Figure 518).

Note An asterisk next to the parameter names indicates that they are imported from an IQ Template file.

Figure 518. Imported Parameter Names



- Optionally rename the imported parameter names.

Note As a best practice, it is recommended that the parameter name values are one character in length. Parameter value names should not exceed four characters and cannot exceed eight characters. For IQ parameter name values, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

f. Click **Cancel**.

The **Import Table(s)** dialog box closes and you are returned to the IQ Template Manager main window.

Rename Parameter Name at Import

The **Parameter name conflict** warning dialog box (Figure 519) appears when any of the selected parameter names for import have the same names as the ones in the existing file. The IQ Template Manager does not accept identical parameter names.

Figure 519. Parameter Name Conflict Warning Dialog Box

1. When this warning dialog box appears, either:
   - Click **Yes** to rename the parameter. The **Rename Table** dialog box appears (Figure 520). Go to Step 2.
   - Click **No** to close the **Parameter name conflict** dialog box and return to the **Import Table(s)** dialog box.

Figure 520. Rename Table Dialog Box

Note At this point, you are unable to select parameter names until the parameter name in conflict is renamed.

2. Either:
   - In the **New Name Box** (Figure 521), type a new name for the parameter. In this example, the parameter name is changed from E to Y.
   - Click **Cancel** to close the **Rename Table** dialog box and return to the **Import Table(s)** dialog box.

Note When **Cancel** is clicked, that table is no longer available for import. To import the table refer to *Import a Parameter Name* on page 436.

Figure 521. New Parameter Name

Note As a best practice, it is recommended that parameter name values be one character in length. Parameter value names should not exceed four characters and cannot exceed eight characters. For IQ parameter name values, use established standards and consistent naming techniques and practices. Refer to *Standardization* *on page 577*.

3. Either:

- Click **OK**. The new parameter name now appears on the **Import Table(s)** dialog box (Figure 522).
- Click **Cancel** to close the **Rename Table** dialog box without renaming and return to the **Import Table(s)** dialog box.

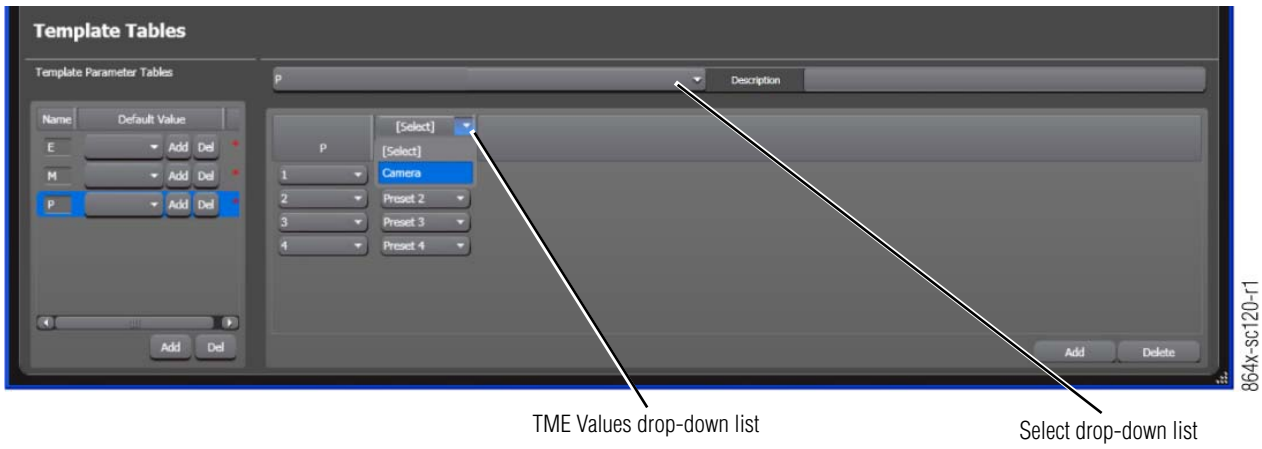
Figure 522. New Parameter Name on Import Table(s) Dialog Box

Save Imported Parameter Name

Before you can save the imported parameter names, you need to first assign the appropriate TME device data information.

1. Click the **Select** drop-down list box and select the icon to associate with the TME device data (Figure 523).

Figure 523. Select Icons for TME Device Data



2. Click the drop-down list box to select values for the TME icons.

Note To add additional values, first associate the device data and save the IQT (Step 3). Then refer to *Import a Parameter Name* on page 436.

3. On the **Save** menu, either:

- Click **Save**. The imported parameter names are saved to the IQ Template file.

Note If the file currently in IQTM is a TMX, **Save** will not save as an IQT without first naming the file in the file save dialog box. If it is an IQT, then **Save** uses the same name as the IQTM.

- Click **Save As** to save the IQ Template file under a different name.

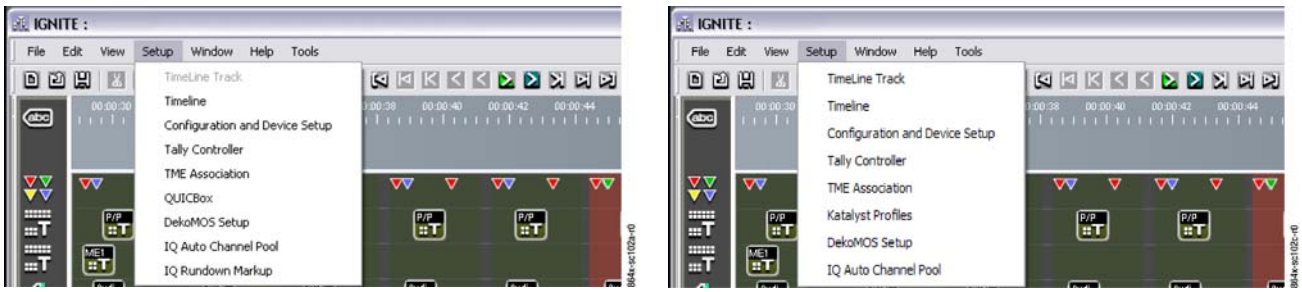
Note All IQ template files in your library must contain a consistent number of characters. As a best practice, it is recommended that IQ template files contain three characters. For IQ template name abbreviations, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

Ignite IQ Auto Channel Assignment

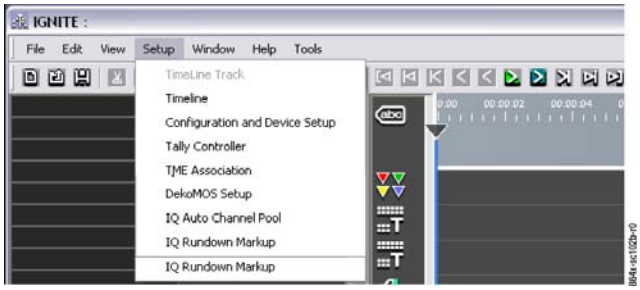
Assign Available Channels to an M/E Pool

1. On the **Event Timeline Setup** menu (Figure 524), click **IQ Auto Channel Pool**. The **IQ Auto Channel Pool** dialog box appears (Figure 525 on page 444). Click the **M/E** tab.

Figure 524. Event Timeline Setup Menu

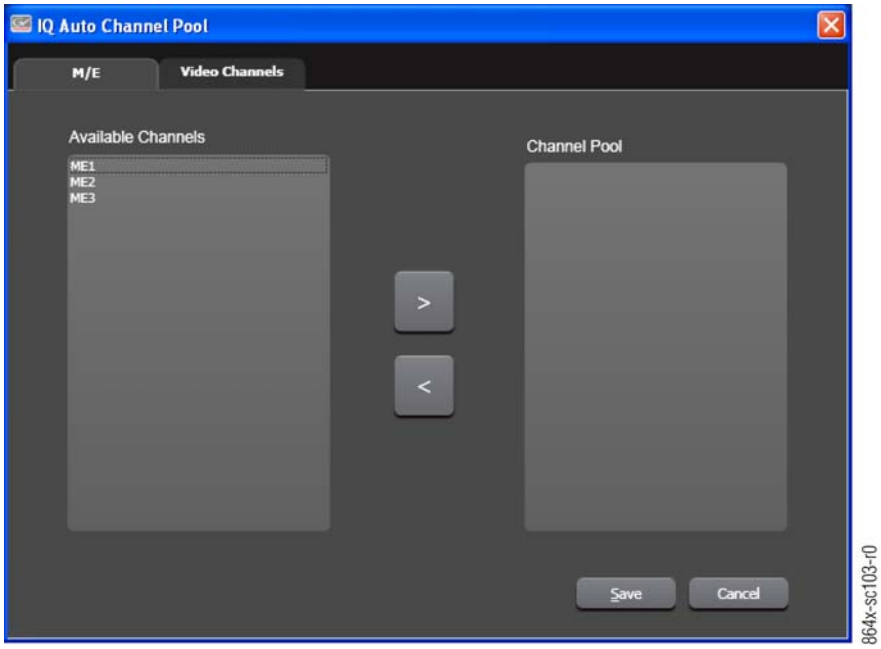


(System with QUICbox) (System with Ignite Katalyst)



(System without audio)

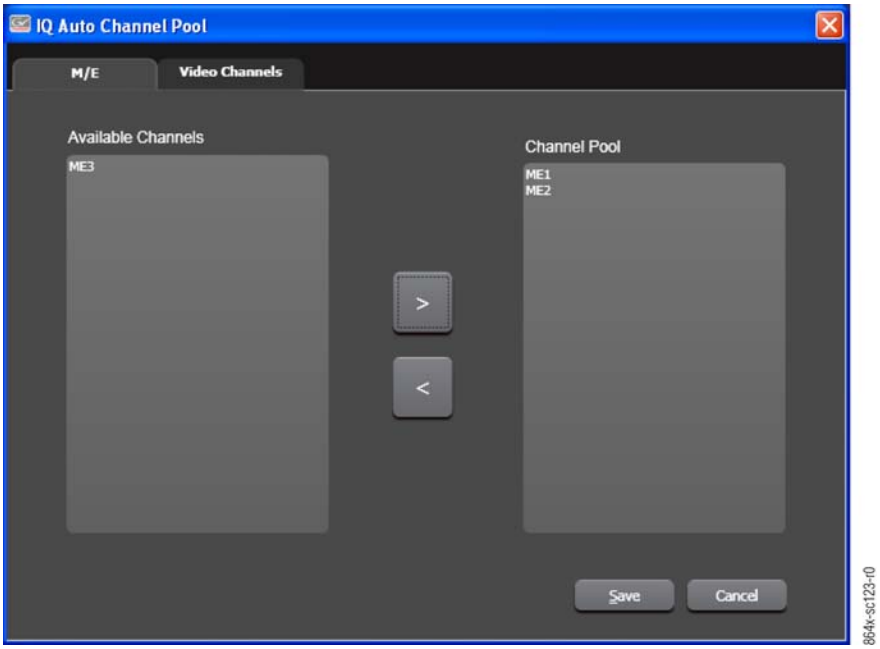
Figure 525. IQ Auto Channel Pool Dialog Box



2. Under the **Available Channels** column, select one or more channels, and click the **right-arrow** button.

   The selected channels now appear under the **Channel Pool** column and comprise a designated channel pool (Figure 526).

Figure 526. Auto Channels Assigned to a Pool



3. Conversely, under the **Channel Pool** column, select one or more pools, and click the **left-arrow** button.

   The selected pools now appear under the **Available Channels** column.

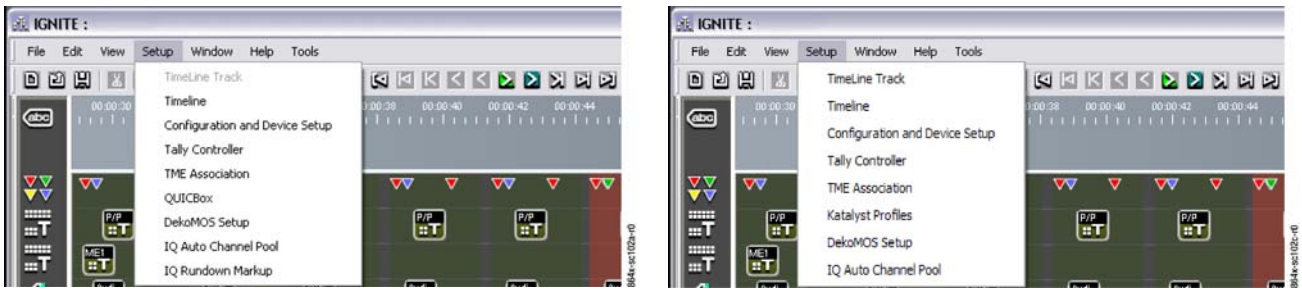
4. Either:

   - Click **OK t**o save the M/E channel pool, click **Save** and then,
   - Click **Cancel** to close the **IQ Auto Channel Pool** dialog box without saving the changes.

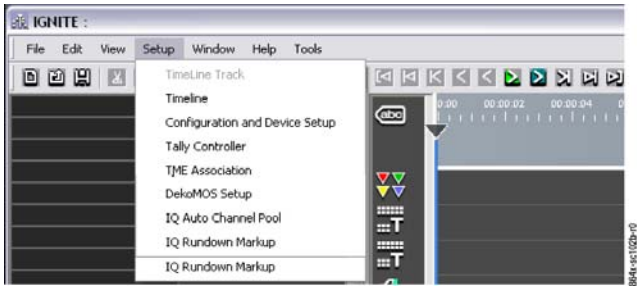
Create a Video Channel Pool

1. On the **Event Timeline Setup** menu (Figure 527), click **IQ Auto Channel Pool**. The **IQ Auto Channel Pool** dialog box appears (Figure 528).

Figure 527. Event Timeline Setup Menu

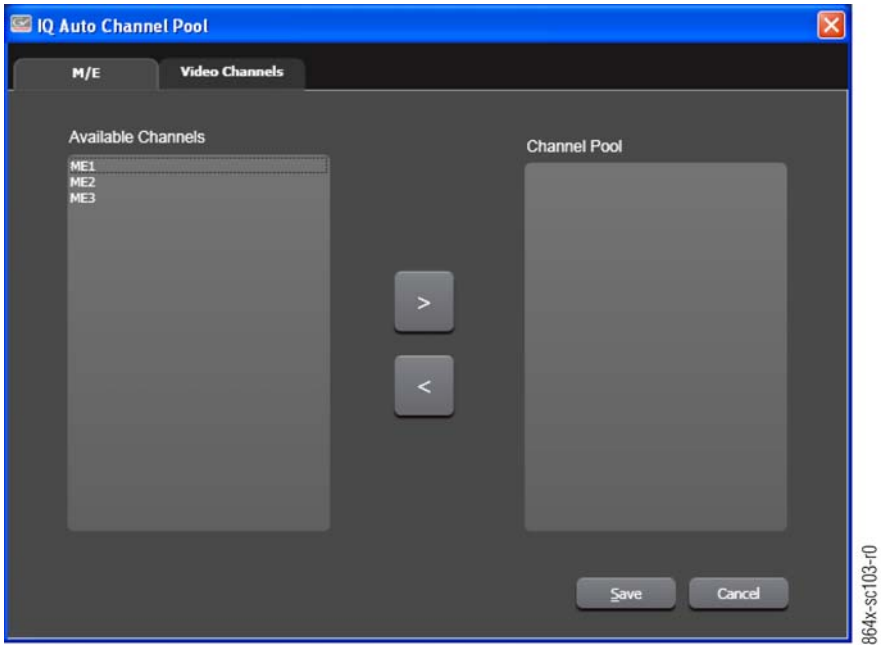


(System with QUICbox) (System with Ignite Katalyst)



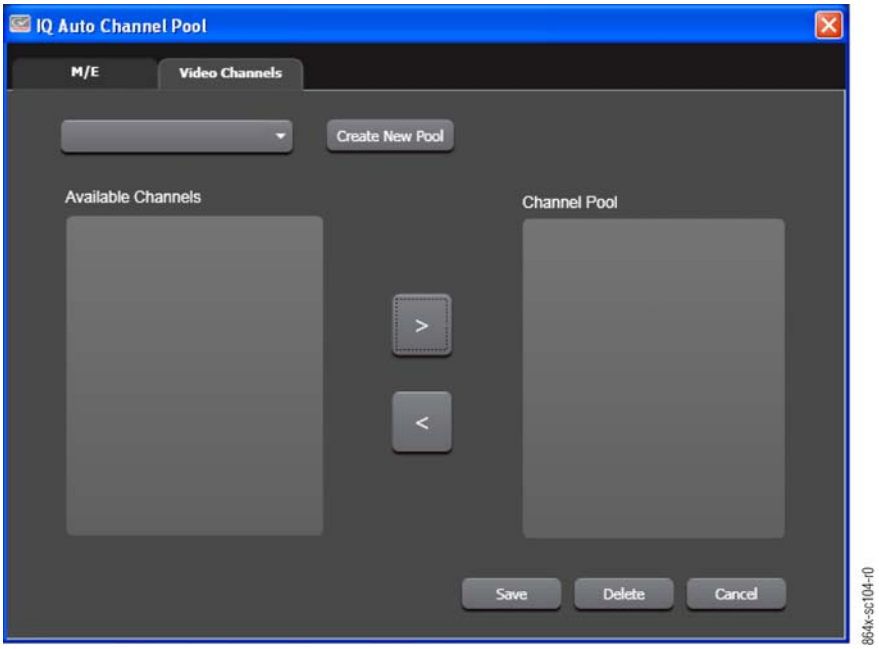
(System without audio)

Figure 528. IQ Auto Channel Pool Dialog Box



2. Click the **Video Channels** tab. Information about the video channels appears (Figure 529):

Figure 529. IQ Auto Channel Pool – Video Channels Tab



3. Click **Create New Pool**. The **Create New Pool** dialog box appears (Figure 530).

Figure 530. Create New Pool Dialog Box

4. In the **Name** field, type the name of the video channel pool.

Note For video channel pools, it is recommended to begin the name of the pool with "AUTO" followed by the abbreviation name of the device. For suggested abbreviations on device names, refer to *Standardization* *on page 577*.

5. Either:

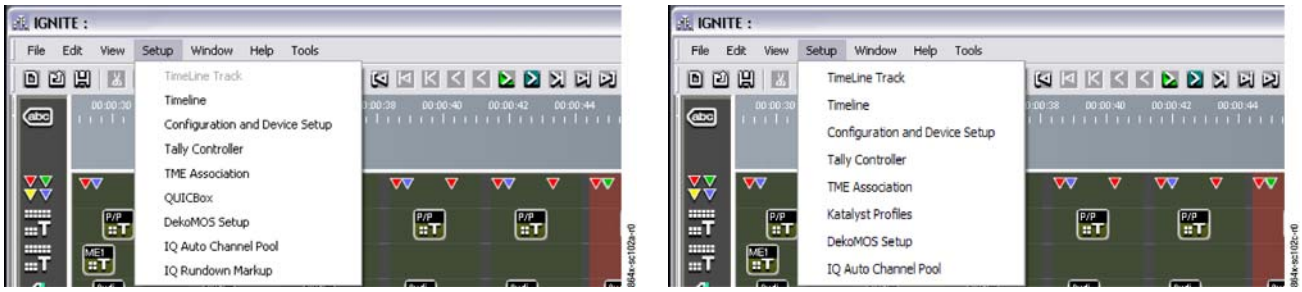
- Click **OK** to save and add the new video channel pool to the drop-down list. All available channels associated with the video channel pool appear under the **Available Channels** column.
- Click **Cancel** to cancel the video channel pool.

Assign Available Channels to a Video Channel Pool

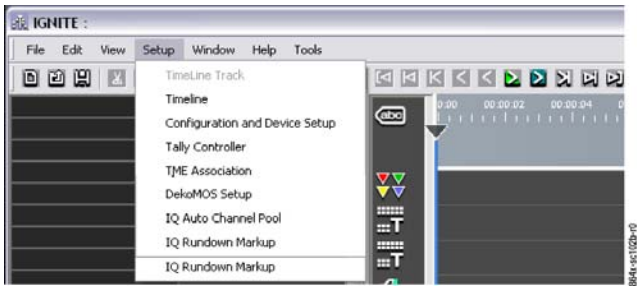
Note A channel assigned to a pool cannot be used in multiple pools. A channel can be re-assigned to another pool.

1. On the **Event Timeline Setup** menu (Figure 531), click **IQ Auto Channel Pool**. The **IQ Auto Channel Pool** dialog box appears (Figure 532).

Figure 531. Event Timeline Setup Menu

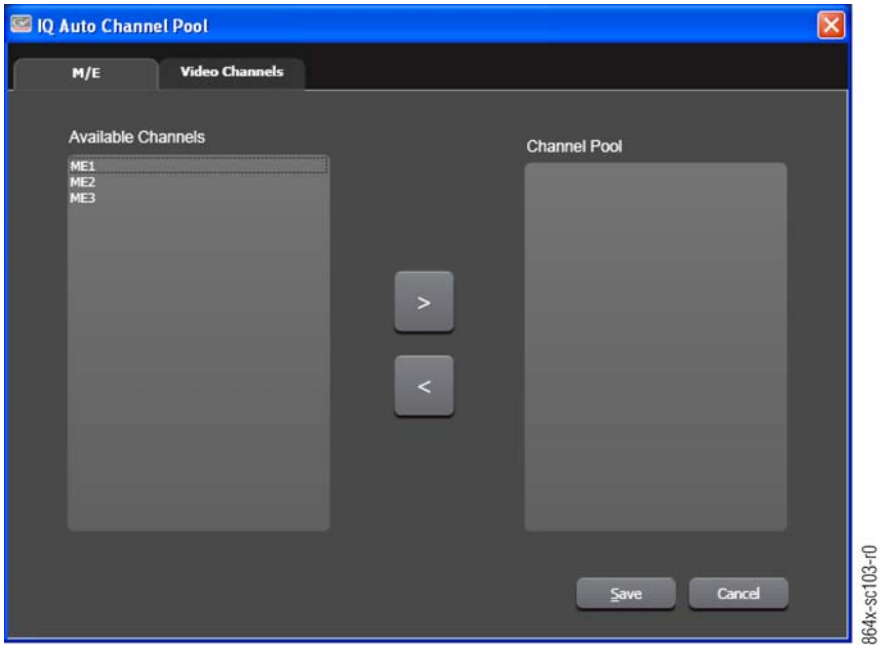


(System with QUICbox) (System with Ignite Katalyst)



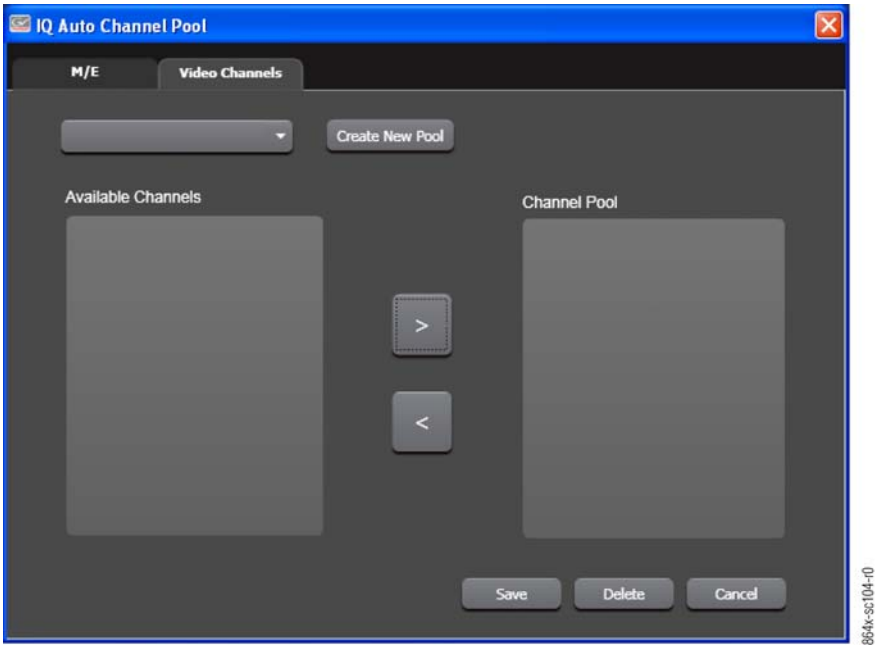
(System without audio)

Figure 532. IQ Auto Channel Pool Dialog Box



2. Click the **Video Channels** tab. Information about the video channels appears (Figure 533):

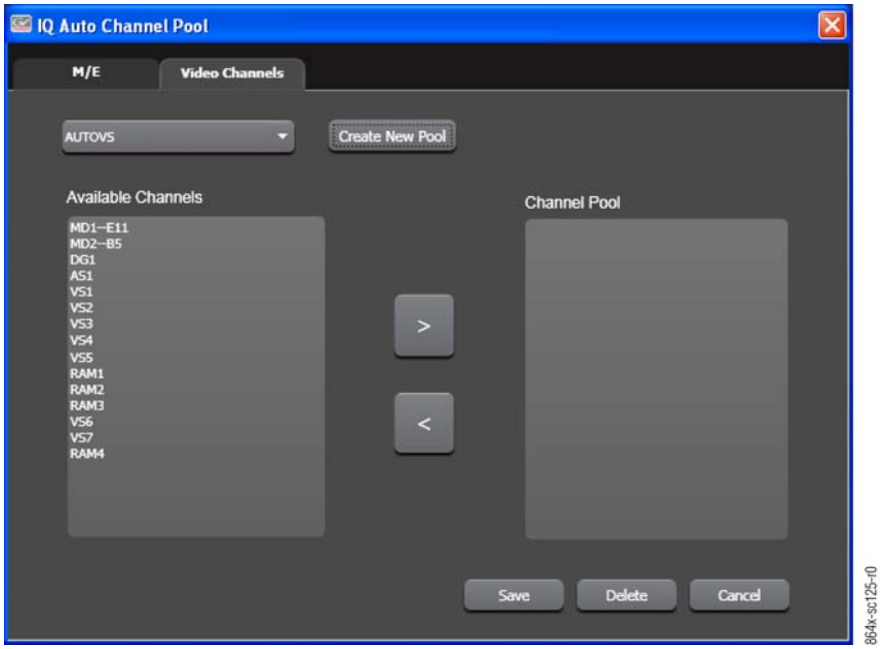
Figure 533. IQ Auto Channel Pool – Video Channels Tab



3. From the **Video Channel Pool** drop-down list box, click the down arrow and then click the desired pool.

   All available channels associated with the video channel pool appear under the **Available Channels** column (Figure 534).

Figure 534. Available Channels for a Video Channel Pool

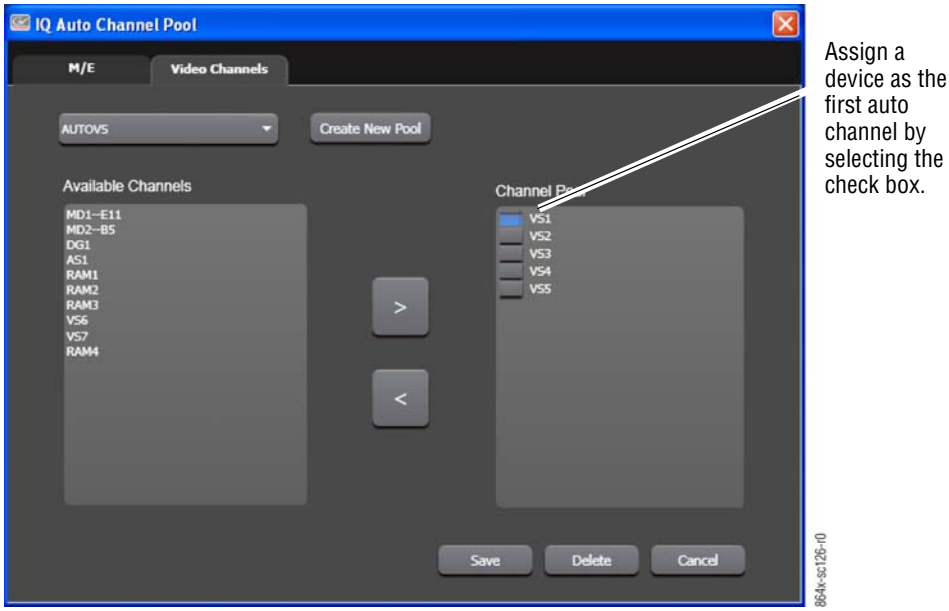


4. Under the **Available Channels** column, do the following:

a. Select one or more channels, and click the **right-arrow** button.

The channels appear under the **Channel Pool** column and are now assigned to the selected video channel pool (Figure 535).

Figure 535. Channels Assigned to a Video Channel Pool



b. Under the **Channel Pool** column, to assign a device as the first auto channel, click the box next to the device. The selected box appears in blue (Figure 535).

5. Conversely, under the **Channel Pool** column, select one or more channels and click the **left-arrow** button. The channels now appear under the **Available Channels** column.

6. To save the channels to the selected video channel pool, click **Save** and then click **OK**.

Note The channels associated with the video pool also appear in each server element under the **TME Device Data** column in the **Ignite IQ Template Manager** dialog box.

7. To remove the video channel pool from the drop-down list, click the desired video channel and then click **Delete**. The **Delete Confirmation** dialog box appears (Figure 536).

Figure 536. Video Channel Pool – Delete Dialog Box

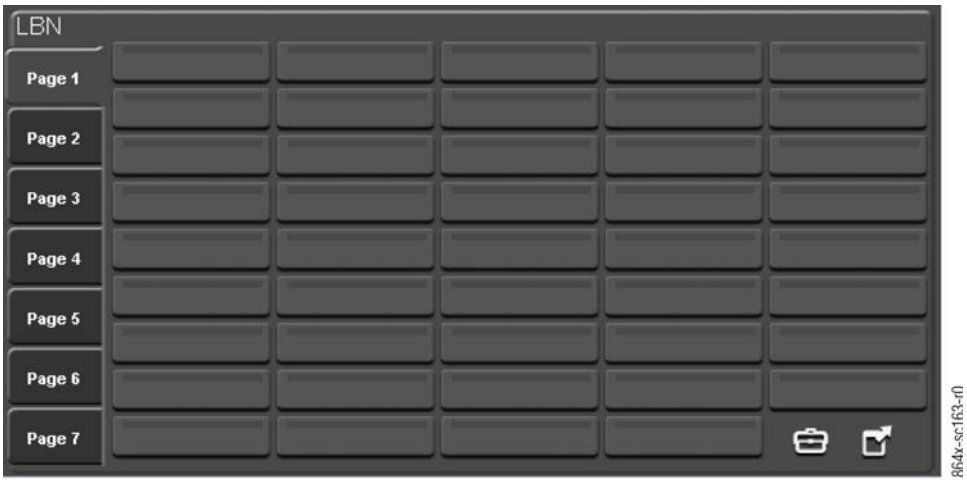
Either:

- Click **Yes** to remove the video channel pool from the drop-down list. The channels associated with the video channel pool are returned to the **Available Channels** column.
- Click **No** to keep the video channel pool in the drop-down list.
- Click **Cancel** to close the dialog box without saving any changes.

Section 13

LBN (Late Breaking News) Module

Figure 537. LBN (Late Breaking News) Module



Overview

The **LBN** (Late Breaking News) Module (Figure 537) is a quick way to insert a stored element onto the Event Timeline during a show. There are a total of 308 hotkeys—7 pages with 44 hotkeys each. TMEs or sequences of multiple TMEs can be stored on a single LBN hotkey. LBNs are set up quickly, so selected events or tasks can be easily added to the buttons anytime during an On Air show. LBNs save with the current show/user macro.

Note The selected show/user (macro) file starts the Event Timeline module with the presets/prebuilds specific to that show or user. Therefore, all changes/additions/deletions, customization, hotkeys, etc. are specific to that show/user interface.

Operation

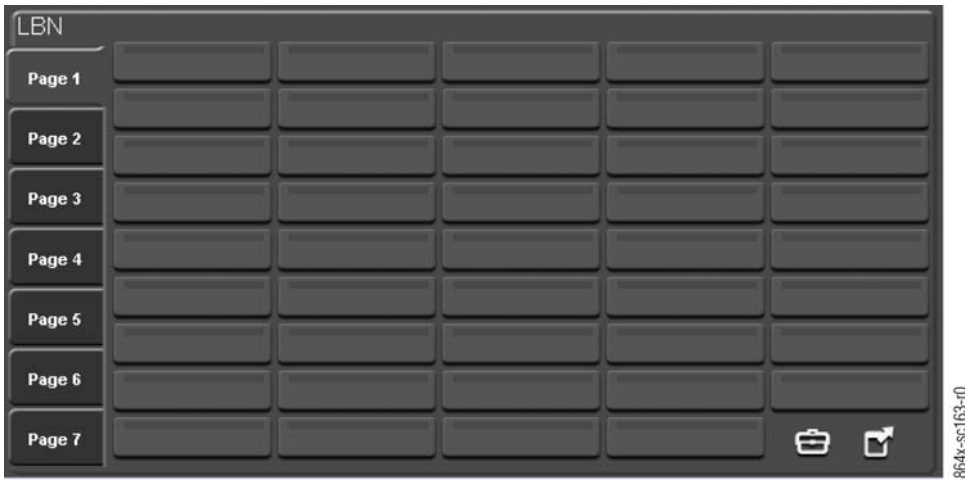
Note LBNs save with the current show/user macro.

Create an LBN Hotkey

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

1. Click and drag any TME group from the Event Timeline down to an available LBN hotkey (Figure 538). Make sure to click and drag from inside the color group so that the complete TME is included on the LBN hotkey.

Figure 538. Timeline TMEs/LBN Hotkeys



2. The **LBN Properties Dialog** box (Figure 539) appears.

Figure 539. LBN Properties Dialog Boxes

Note In the next step, the TME Notes label is automatically entered in the Description. It is strongly recommended that the LBN name retain the same name that is on the TME Notes label. All names should be based upon established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*. By default the LBN is given a name based on the TME name from its' Notes label.

3. In the **Description** box, verify the name from the **Notes** label or type a new name.

Note In the following step, the LBN hotkey color selected should match the related TME color used. All colors used should be based upon established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

4. In the **LBN Properties Dialog** box (Figure 539), click a color for the LBN label.

Note The Setup button, when clicked, also enables editing for LBN color and Description (name).

5. Click **OK**.

6. On the **File** menu click either **Save** or **Save As…**

Note LBNs save with the current show/user macro.

Modify an LBN Hotkey

LBN hotkeys can be edited to change color, text, and text color. For function, LBN hotkeys are replaced/over written rather than deleted.

1. ON the LBN module, click the **Setup** button.
2. Click the LBN to modify. The **LBN Properties Dialog** box (Figure 540) appears.

Figure 540. LBN Properties Dialog Box

Note In the following step, the LBN hotkey Description and color selected should match the related TME. All colors used should be based upon established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

To Change the Color:

a. In the **LBN Properties Dialog** box (Figure 539), click a color for the LBN label.

Note The Setup button, when clicked, also enables editing for LBN color and Description (name).

b. Click **OK**.

c. On the **File** menu click either **Save** or **Save As…**

Note LBNs save with the current show/user macro.

To Change the Description:

a. In the **LBN Properties Dialog** box (Figure 539), type a new **Description** (name).

Note The Setup button, when clicked, also enables editing for LBN color and Description (name).

b. Click **OK**.

c. On the **File** menu click either **Save** or **Save As...**

Note LBNs save with the current show/user macro.

Add an LBN to the Event Timeline

Either:

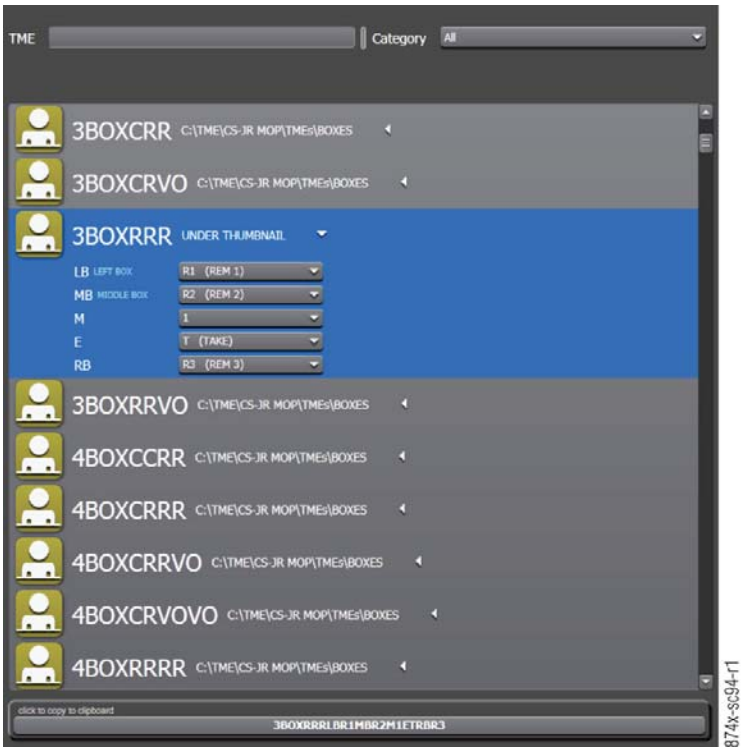
- Click the desired LBN to place it right of the current Event Timeline cursor location.
- Right-click and drag the desired LBN to any position on the Event Timeline.

Section 14

Show Builder Assistant Module

Overview

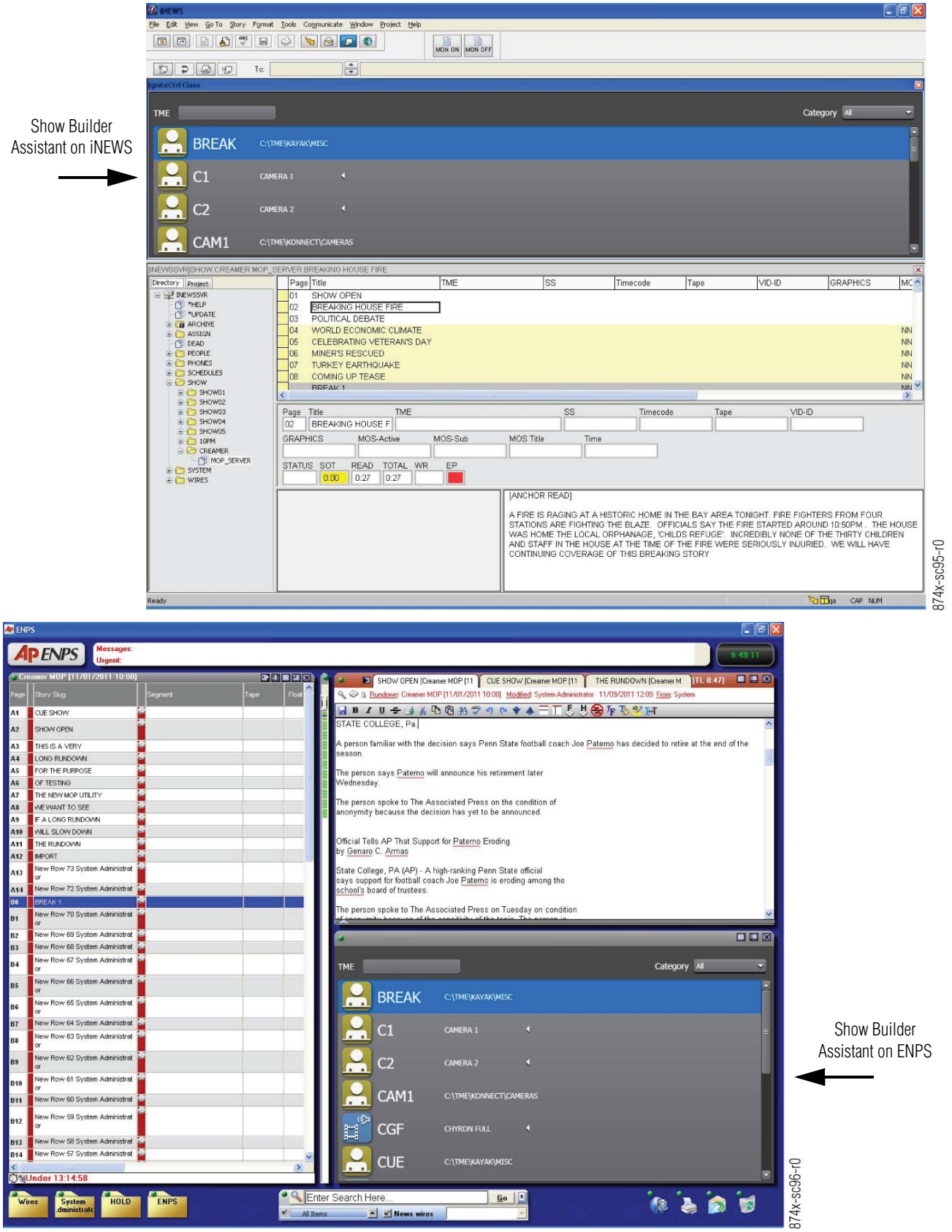
Figure 541. Show Builder Assistant



The Ignite Show Builder Assistant (Figure 541) is an NCS add-in for either iNEWS or ENPS (Figure 542). Using this add-in, Ignite users can either:

- Type TME/IQT names into a TME/IQT Production field.
- Select a TME/IQT from a list (with icons representing the production event) and drag & drop the production event into the NCS (Newsroom Computer System) script to be included in the MOS data sent to Ignite.

Figure 542. Show Builder Assistant – iNEWS and ENPS Add-in



The Ignite Show Builder Assistant is a second method for adding production MOS commands to the rundown. Using this add-in makes it easier for new or less experienced Ignite users to build automated shows. Instead of typing TME codes in a rundown column, Show Builder enables users to:

- Select templated production events
- Modify variable fields from a list of selectable items for that field
- Validate accuracy of the production data
- Copy/paste bar in the **ShowBuilder Assistant** that allows for quick coding via the TME column from **ShowBuilder Assistant**.
- Drag & drop the production event into the NCS script.

When using the Ignite Show Builder Assistant add-in, both the traditional quick-text input commands and the Show Builder Assistant can be used to create a show, providing complete flexibility and ease of use for both experienced and newer users.

Using the Ignite Show Builder Assistant add-in also removes the requirement for the user to be tied to the Ignite system when trying to find an Event Template. A user has access to the complete template library from anywhere in the Ignite system, which eliminates the need for separate template files that would have to be created and updated, or obsoleted.

One Ignite Show Builder Assistant license is included as a component of an Ignite system. Additional Show Builder Assistant licensing can be purchased.

Note Ignite Show Builder Assistant does not provide MediaFUSE FusePRODUCE functions. MediaFUSE FusePRODUCE functionality must be purchased separately.

Show Builder Assistant is started from the NCS.

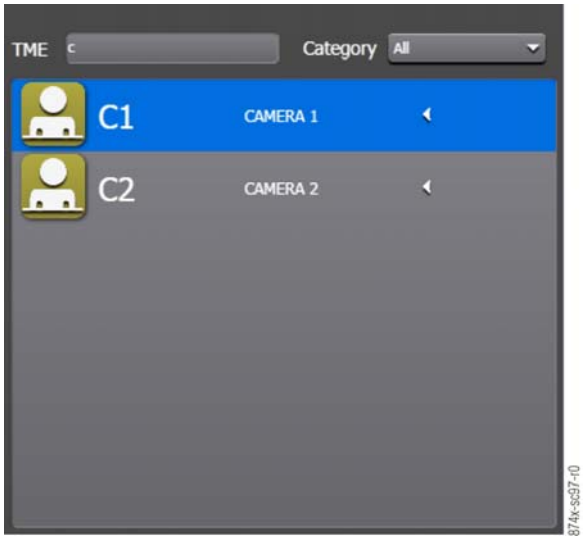
Operation

Search for TMX/IQT via TME Search

1. From the NCS, open **ShowBuilder Assistant**. The Show Builder Assistant pane appears in the NCS and displays the available TMX/IQTs from the Ignite TME folder.
2. In the **TME** box, type an existing TMX/IQT. The search information displays (Figure 543).

Note The list of TMX/IQTS in search window is limited to the search criteria.

Figure 543. Search for TMX/IQT via TME Search



3. Double-click an IQT.

- The IQT expands to display parameter values.
- All table names for the IQT are displayed.

Note This relates to the Table name in IQTM.

- All table values for the IQT are displayed.

Note This relates to the Values within the tables in IQTM.

Refer to Figure 544.

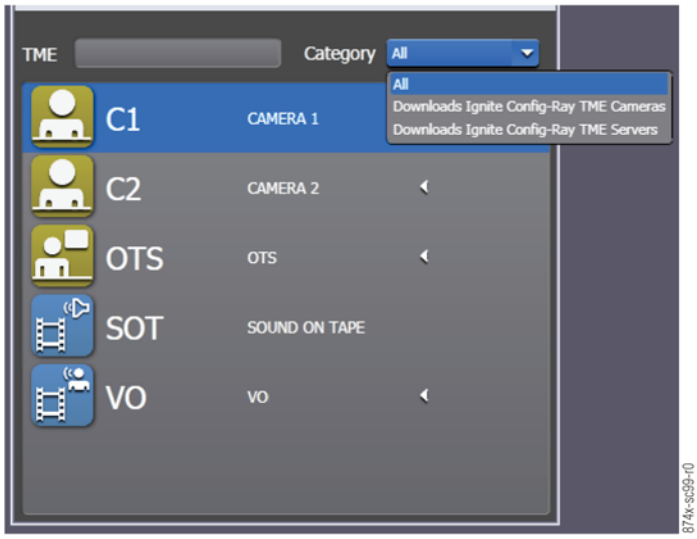
Figure 544. IQT Parameter Values

4. Select the desired table value from the drop-down list. The selected table value appears in the drop-down box and the drop-down list collapses.
5. Click and drag the TME from the list into a story script within the NCS. The MOS ID appears in the script with the name of the selected IQT in the MOS ID.

Search for TMX/IQT via Category

1. From the NCS, open **ShowBuilder Assistant**. The Show Builder Assistant pane appears in the NCS and displays the available TMX/IQTs from the Ignite TME folder.
2. Click the **Category** drop-down list (Figure 545), the:
   - drop-down list expands downward.
   - drop-down list displays the names of the subfolders in the Ignite TME folder.

Figure 545. Search for TMX/IQT via Category



3. Select a category.
   - TMX/IQTs are displayed from the selected category.
   - Sub folders of the main folder are displayed as sub categories directly under the main category.

Note Example would be main category is Cameras, sub-category would be OTS. The OTS folder is a sub folder of Camera

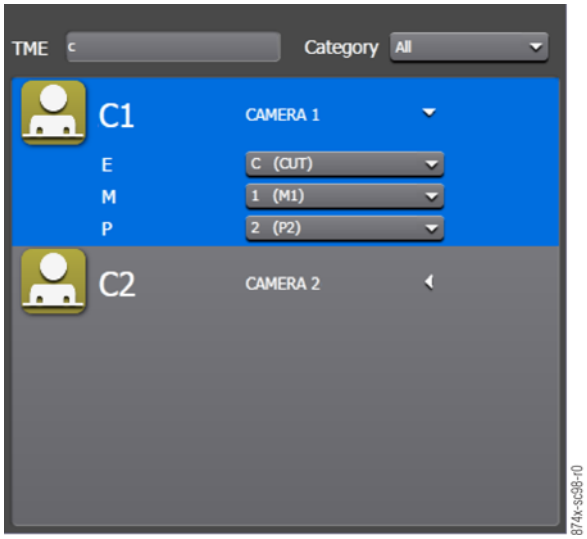
4. Double-click an IQT.
   - The IQT expands to display parameter values.
   - All table names for the IQT are displayed.

Note This relates to the Table name in IQTM.

   - All table values for the IQT are displayed.

Note This relates to the Values within the tables in IQTM.

Figure 546. IQT Parameter Values



5. Select the desired table value from the drop-down list. The selected table value appears in the drop-down box and the drop-down list collapses.
6. Click and drag the IQT from the list into a story script within the NCS. The MOS ID appears in the script with the name of the selected IQT in the MOS ID.

Selecting a TMX

Note TMXs should not expand since there are no parameters available.

- Double-click a TMX from the list. The file is selected, but does not expand

Import TMX via Import Rundown

1. From the Ignite Event Timeline menu, select **Tools** and then click **Import Rundowns**. The **Import Rundown** dialog box appears displaying active rundowns.
2. Double-click a rundown. The rundown expands showing stories from the NCS.
3. Click **Import**. The:
   - Rundown Import pane shows story specific information including processed information, warnings, and errors.
   - Ignite timeline is populated with TMX/IQT files in the same order they appear in the show in the NCS.

Note MOS IDs should appear in the order they are in the script.

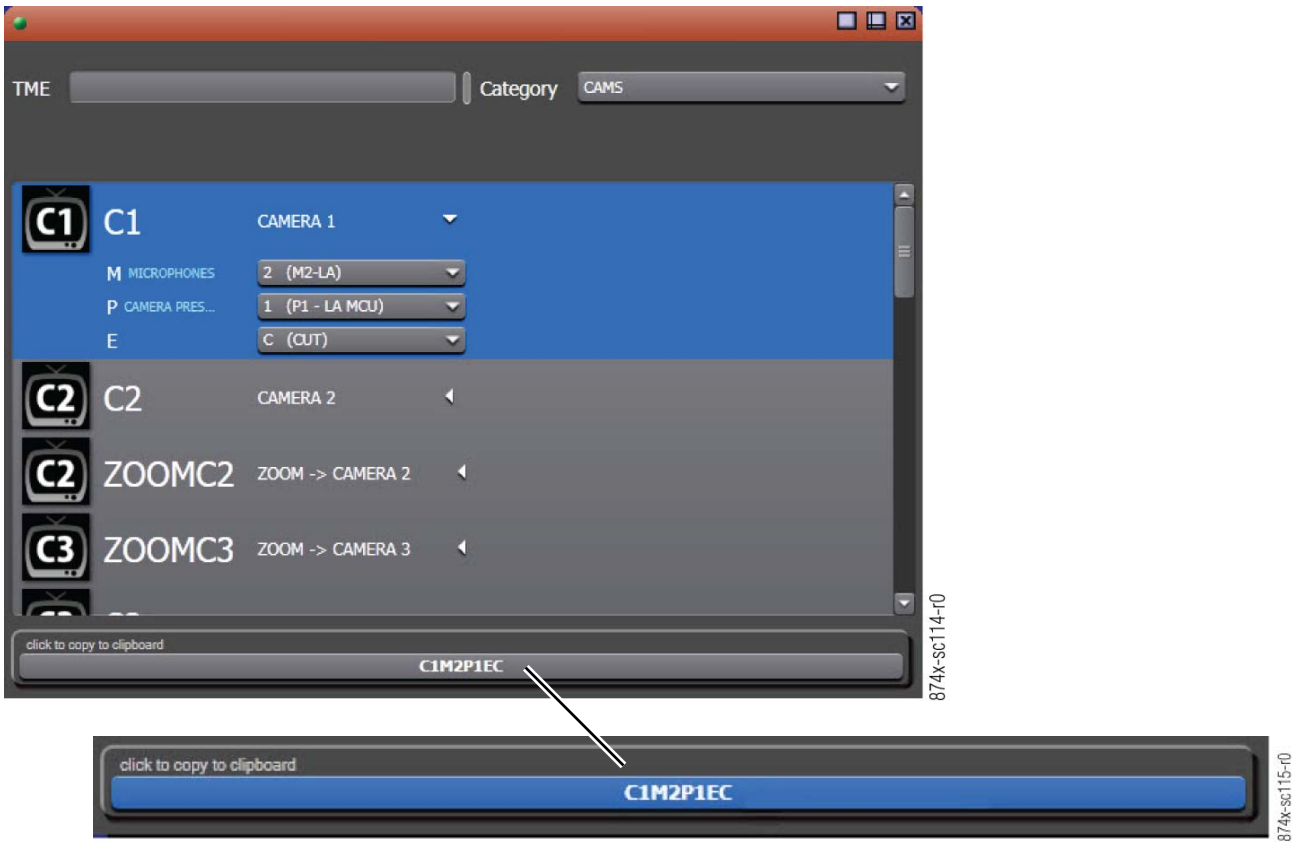
   - Rundown list window next to the Ignite Event Timeline, displays the name of the TMX or IQT with the chosen parameters if other than the defaults.
   - Column data populates, however MOP data only displays the IQT name and not the selected values.

Note The Rundown List needs to be set to Rundown List Detailed to view this. From the Ignite Event Timeline menu select Window and then click Rundown List Detailed.

Copy/Paste Function

1. Select either a TME or IQT from the Show Builder Assistant (Figure 547). The selected item highlights blue and the Copy bar at the bottom displays either the TME or the entire IQT, including currently selected table options.

Figure 547. Copy/Paste Copy Bar Example



2. Click the **Copy Bar**. (The string is copied to the Clipboard.
3. From the NCS, select the TME field where the markup is to be pasted.
4. Either (Figure 548):
   - Right-click and select paste
   - On the keyboard, click **Ctrl** + **V**.

   The information is pasted into the TME column (Figure 549).

Figure 548. Paste Example

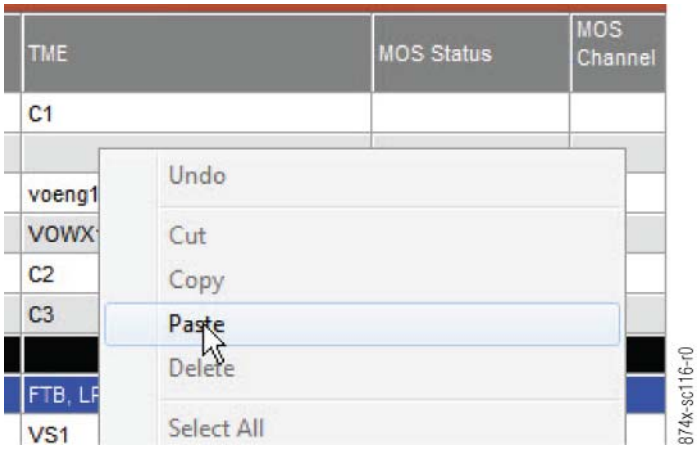
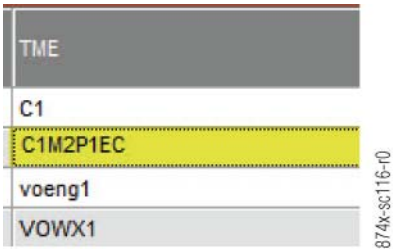


Figure 549.



Refreshing Rundowns

1. After making a change to the actively monitored show in the NCS.
   - Import Rundown window displays changes made and the correct information, error or warnings.
   - Information in the Timeline does not change.
   - Update Rundown button is highlighted in RED.
2. Click **Import** in the Rundown Window. The updated information appears in the Timeline.
3. Click **Update Rundown**. The updated information appears in the Timeline.

Section 15

Switcher Module - Kayak

Figure 550. Switcher Module User Interface Example

Overview

For Switcher Module [Konnect] overview and operation information, refer to *Section 16-Switcher Module - Konnect*.

The Switcher Module – Kayak version (Figure 550) provides Ignite interface control of the Kayak switcher. Depending on system configuration, the Switcher Module (Kayak version) can be one, two, three, or four Mix Effects banks—P/P, M/E 1, M/E 2, and M/E 3 respectively. The Switcher Module (Figure 550) routes video device inputs (including cameras, VTRs, VRs, character generators, or the internally generated matte/pattern or black screens) to:

- Preview outputs – (Prep) outputs display the next image before it is used
- Program outputs – (Active) outputs are linked to the devices indicated by the current image.
- Keyer Fill
- Keyer Key or Hole
- Aux Outputs
- Utility Bus

The number of Inputs and Outputs depends on the Ignite system installed (refer to Table 15).

Table 15. System Video Inputs/Output

System	Video	
	Standard	
	In	Out
1 M/E DD	16	15
2 M/E DDa	32	20
SD 2 M/E	48	24
SD 3 M/Eb	72	36
SD 4 M/Eb	96	48
HD 1 M/E	24	12
HD 2 M/Ec	48	24
HD 3 M/Ec	72	36
HD 4 M/Ec	96	48

The Ignite Switcher module is available with up to four total Mix Effects (M/E) banks (refer to Figure 550 on page 469) labeled:

- **P/P** – Program/Preview
- **M/E 1** – Mix Effects One
- **M/E 2** – Mix Effects Two
- **M/E 3** – Mix Effects Three

Each M/E bank has four Key layers. Any of the keyers can be assigned DPM (Digital Picture Manipulator) properties. DPM properties cannot be seen if the key layer is not on.

There are 10 customizable switcher pages and each page can have up to 24 buttons. When an M/E bank page is customized, the customization applies to that page across all M/E banks. The Switcher Module uses a Master Routing dialog box for quick source routing to destinations on any of the four effects banks. For descriptions of the basic interface, refer to Figure 551 and Table 16.

Note One and two M/E systems have one Utility Bus select button (U1); three and four M/E systems have two Utility Bus selection buttons (U1 and U2).

Note Only the first M/E has the Source Setup and the Setup icons.The Switcher module basic interface is shown in Figure 551.

Figure 551. Switcher Module Basic Interface

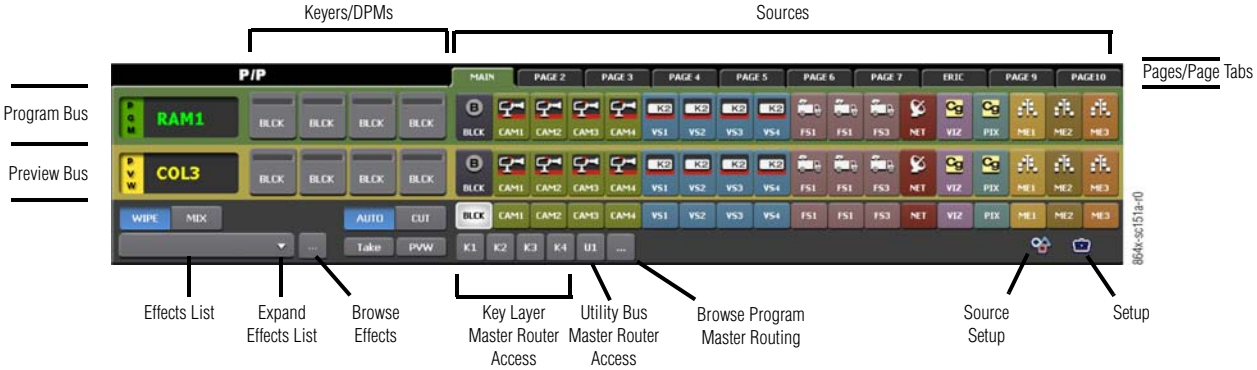


Table 16. Basic Interface Functionality

Name	Description
Program Bus	
Preview Bus	
Keyers/DPMs	Shows the current Keyer fill (refer to *Keyer* on page 484).
Sources	Shows the current PGM, PVW, and Utility Bus bus sources.
Pages/Page Tabs	Selects a Page of source buttons.
Setup (General)	Opens the Setup dialog box (refer to *General Setup Dialog Boxes* on page 472).
Source Setup	Opens the Source Setup dialog box (refer to *Source Setup Dialog Box* on page 479).
Browse Program Master Routing	Opens the Program Bus Master Routing dialog box (refer to *Master Routing Dialog Box* on page 482).
PGM/PVW Bus source buttons	Shows the current PGM and PVW bus sources.
U1 – U2	Opens the respective Utility Bus Master Routing dialog box (refer to *Master Routing Dialog Box* on page 482).
K1– K4	Opens the respective Key Layer Master Routing dialog box (refer to *Master Routing Dialog Box* on page 482).
AUTO	Depending upon either the Mix or Wipe button selection, preps the next transition to be executed when Take is clicked. Also highlights blue when a TME with either a Mix or a Wipe effect is prepped on the timeline.
CUT	Preps the next transition to execute as a Cut when Take is clicked. Also highlights blue when a cut effect is prepped.
Take	Takes the selected effect to air.

Table 16. Basic Interface Functionality

PVW	Displays the selected effect transition to PGM on the PVW (Preview) monitor.
Browse Effects	Opens the Effects Definition dialog box (refer to *Keyer* on page 484).
Expand Effects List	Enables a user to expand, view, select, and take an effect directly to air.
Effects List	Lists available programmed effects.

The Switcher M/E banks can be customized to meet show/user requirements via the **Master Routing** dialog box (refer to *Master Routing Dialog Box* on page 482). Each of the 10 switcher pages can be customized. When an M/E bank page is customized, the customization applies to that page across all available M/E banks.

General Setup Dialog Boxes

Access to the **General Setup** dialog boxes is from the Switcher Module **Setup** icon (Figure 552). The **General Setup** dialog box is the interface used to configure the Switcher module general parameters. When accessed, the General Setup dialog box appears in either Mainframe Setup (Figure 553) or M/E Setup (Figure 554) state.

Note The General Setup dialog box appears either as Mainframe Setup or M/E Setup. This is determined by the appearance the General Setup dialog box was in when last closed.

Figure 552. General Setup – Setup Icon

Figure 553. General Setup Dialog Box – Mainframe Setup

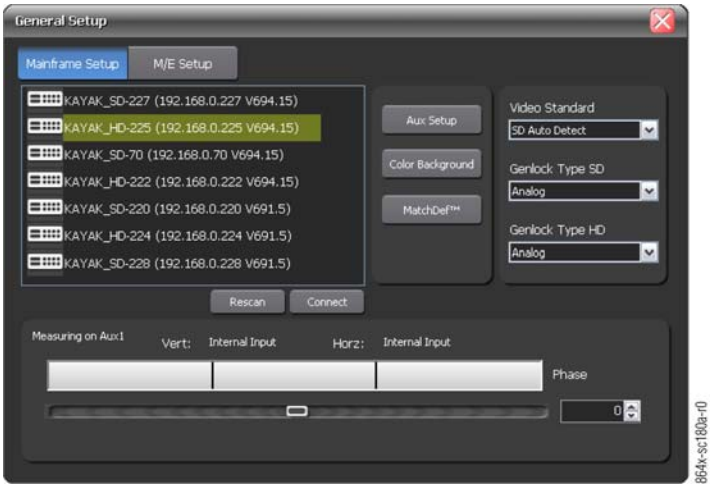
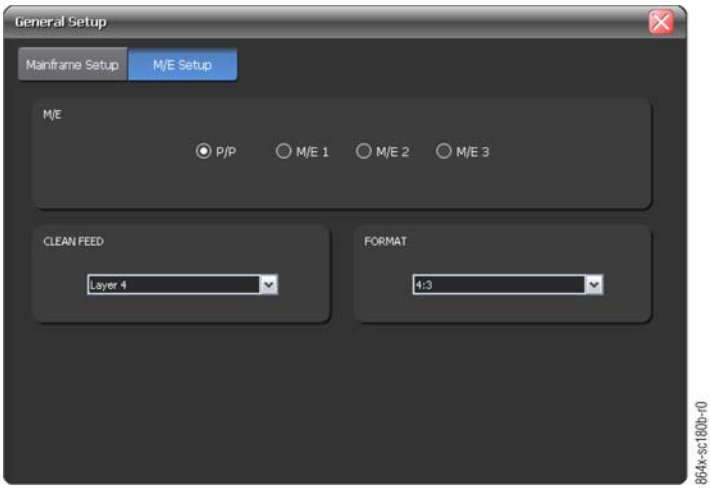


Figure 554. General Setup Dialog Box – M/E Setup



Mainframe Setup

The **Mainframe Setup** (Figure 553) includes:

- List of the currently connected switcher frames and the version.
- Selection lists for –
  - **Video Standard** – only shows the standards supported by the connected switcher.
  - **Genlock Type SD** –
  - **Genlock Type HD** – only enabled if the switcher is HD.
- **Aux Setup** button – opens the **Aux Setup** dialog box.

- **MEASURING ON AUX 1** – timing phase setting. (The AUX 1 bus must be delegated to an external source first.) When the phase is in range, the center bar turns green. The phase range is -32768 to +32767.
- **Color Background** button – opens the **Color Background** dialog box.
- **MatchDef™** button – opens the **MatchDef™ Scalar Configuration** dialog box.
- **Close** button – saves the current parameters and closes the dialog box.

Aux Setup Dialog Box

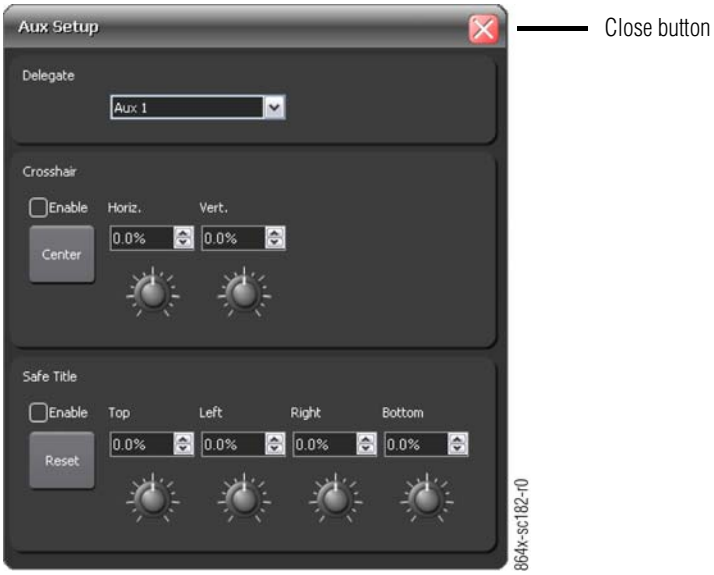
Access to the **Aux Setup** dialog box is from the **General Setup** dialog box **Aux Setup** button. The **Aux Setup** dialog box (Figure 555) includes:

- **Delegate** – Aux bus selection list.

Note The available Aux selections are listed automatically based on current system configuration.

- **CROSSHAIR** changes the Aux crosshair for the selected Aux bus –
  - **Enable** – on/off crosshair selection.
  - **Center** – resets the crosshair to the center position.
  - Crosshair position is set via either the **Horiz.** and **Vert.** knobs or typing in the respective text box.
- **SAFE TITLE** changes the Aux safe title for the selected Aux bus –
  - **Enable** on/off safe title selection
  - **Reset** to the center position
  - Position settings via either the **Top**, **Left**, **Right**, and **Bottom** knobs or typing in the respective text box.
- **Close** button – saves the current parameters and closes the dialog box.

Figure 555. Aux Setup Dialog Box



Color Background Dialog Box

Access to the **Color Background** dialog box is from the **General Setup** dialog box **Color Background** button (Figure 553). The **Color Background** dialog box (Figure 556) includes:

- **MATTE SETUP** – selects one of three internal backgrounds: **BACKGROUND 1**, **BACKGROUND 2**, or **WASH** for adjustment
- **COLOR OUTPUT** – select the background color output mode: **MATTE 1**, **MATTE 2**, or **WASH**
- **HUE**, **CHROMA**, and **LUMA** – adjusts the hue, chroma, and/or luma of the selected background color. It is set via either slider or typed into the respective text box.
- **MATTE 1** Tab
- **MATTE 2** Tab
- **WASH** Tab
- **Save** button – saves the current parameters and closes the dialog box.
- **Close** button – closes the dialog box without saving changes.

Figure 556. Color Background Dialog Box

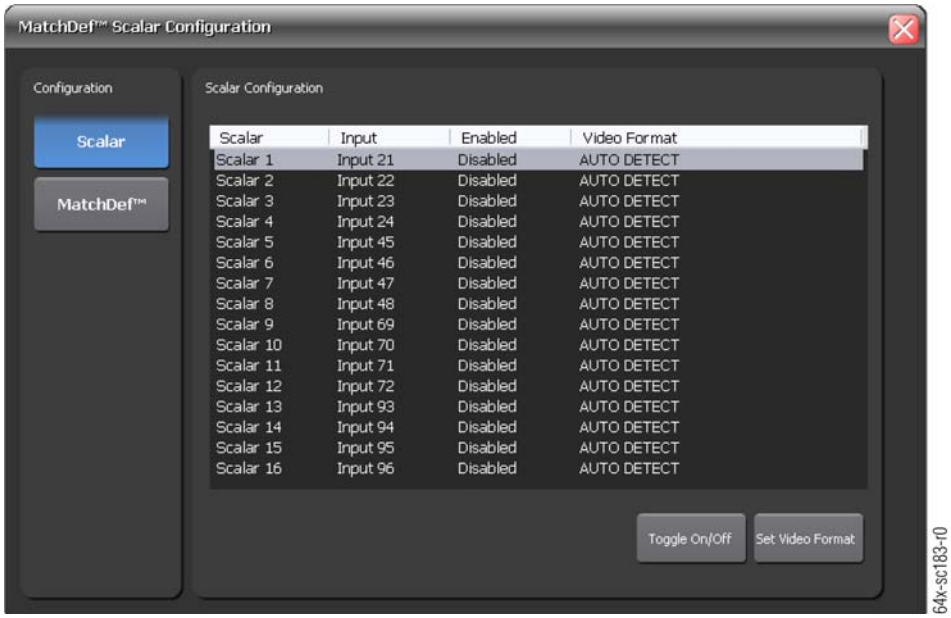
MatchDef™ Scalar Configuration Dialog Box

The MatchDef™ feature is provided with the following types of switchers:

- SD/HD switchable video formats
- Large frame switcher that has up to four M/E banks

To appear on the **General Setup** dialog box, the MatchDef feature must be licensed to either of these switchers. Access to the **MatchDef™ Scalar Configuration** dialog box (Figure 557) is from the **General Setup** dialog box **MatchDef™** button.

Figure 557. MatchDef™ Scalar Configuration Dialog Box

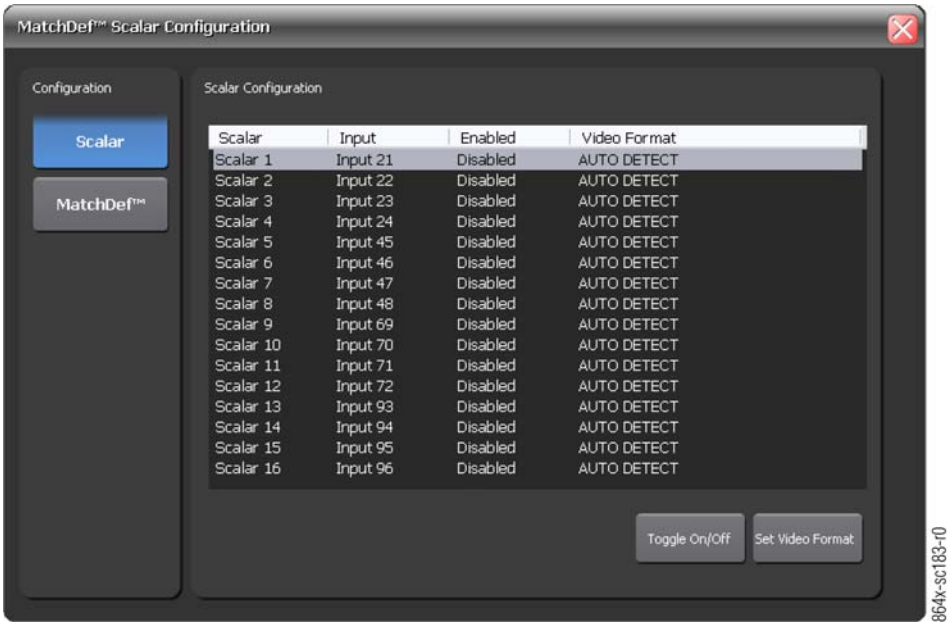


Scalar Configuration

To access the scalar configuration parameters, click the **Scalar** button on the **MatchDef Scalar™ Configuration** dialog box. Scalar setup and configuration parameters include (Figure 558):

- **Scalar** button – shows a list of available scalar objects along with input, enabled/disabled state, and video format.
- **MatchDef™** button – shows the properties of the scalar object for review or modification.
- **Toggle On/Off** button – toggles the selected scalar object on or off.
- **Set Video Format** button – displays a list of available and supported video formats used to associate with the selected scalar object.
- **Close** button – closes the dialog box.

Figure 558. MatchDef™ Scalar Configuration Dialog Box – Scalar Configuration



MatchDef™ Configuration

To access the MatchDef configuration parameters, click the **MatchDef™** button on the **MatchDef Scalar™ Configuration** dialog box. MatchDef setup and configuration parameters include (Figure 559):

- **Scalar** button – shows the scalar object that is being viewed.
- **Aspect Ratio Conversion** button – shows the aspect ratio conversion associated with the current scalar object.

- **Color Background Set** button – modifies the color background of a scalar object. Color background parameters include:
  - **Hue**
  - **Chroma**
  - **Lum**
- **Crop Set** button – modifies the crop settings of a scalar object. Crop parameters include:
  - **Right**
  - **Left**
  - **Top**
  - **Bottom**

Note After parameter selection is made, parameters appear in the **COLORBACK-GROUND** and **CROP** areas in the dialog box.

- **Crop On** button – enables/disables crop properties.
- **Default Settings** button – resets all settings of the current scalar object to its default value of zero.
- **Control** knobs – changes the value of the selected setting, either the color background settings or the crop settings.
- **Close** button – closes the dialog box.

Figure 559. MatchDef Scalar Configuration Dialog Box – MatchDef™ Configuration

M/E Setup

The **M/E Setup** (Figure 554) includes:

- **M/E** selection – **P/P**, **M/E 1**, **M/E 2**, **M/E 3**

Note The available M/E selections are listed automatically based on current system configuration.

- **CLEAN FEED** – sets the clean feed layer for the selected M/E.
- **FORMAT** – sets the format for the selected M/E
- **Close** button – saves the current parameters and closes the dialog box.

Source Setup Dialog Box

Access to the **Source Setup** dialog box is from the Switcher Module (Figure 551) Source Setup icon. The **Source Setup** dialog box (Figure 560) includes:

- **Page Configuration**
  - **Page Name** – name for the currently selected page.
  - **# of Buttons** – number of source buttons to show (24 maximum) for the currently selected page; an entry in this box is effective immediately.
- **Text Color** – page name text color/opens the **Color Chooser** dialog box (refer to *Configure Source Dialog Box* on page 480).
- **Back Color** – page button background color/opens the **Color Chooser** dialog box (refer to *Configure Source Dialog Box* on page 480).
- **Source** – opens the **Configure Source** dialog box (refer to *Configure Source Dialog Box* on page 480). An external source must be selected for this button to appear (Figure 561).
- **Undo** – undoes the last operation.
- **Internal Sources** – currently available internal sources that can be configured to a Switcher Module button on the currently selected page
- **External Sources** – currently available external sources that can be configured to a Switcher Module button on the currently selected page.
- **Close** button – closes the dialog box.

Figure 560. Source Setup Dialog Box

Figure 561. Source (Source) Setup Dialog Box

Configure Source Dialog Box

Accessed from the **Source Setup** dialog box, the **Configure Source** dialog box (Figure 562) enables a user to configure the currently selected internal/external source button. It includes:

- **Source Name** – (limited to 9 characters)
- **Source Title** – (limited to 4 characters)
- **Key Source** – shows available key sources that can be coupled to the currently selected source. The currently coupled key source does not appear in this list.

- **BUTTON COLOR** – color selection palette. Additional colors are available by clicking the **Preview Source** icon.
- **BUTTON DECAL** – decal selection library
- **KEY SOURCE** – depicts the selected key source
- **Save** button – saves the current parameters (only available if/when a change is made).
- **Next** – Moves the configuration ahead to the next button configuration.
- **Previous** – Moves the configuration back to the previous button configuration.
- **Copy** – When checked, copies the current configuration and, using the **Next** or **Previous** button, applies that configuration to the next/previous button.
- **Close** button – closes the dialog box without saving changes.

Note The **Configure Source** dialog box is only accessible from the **Source Setup** dialog box **Source** button. The **Source** button is available only after either an Internal or External Source button is selected for configuration.

The dialog box also has a **Source** preview to depict the color, decal, and source configuration before saving and closing the dialog box. Clicking the **Source** preview, opens the **Color Chooser** dialog box to enable a color change.

Figure 562. Configure Source Dialog Box

Note To move the dialog box, click the title bar and drag.

When configuring more than one source, the **Configure Source** dialog box **Previous** and **Next** buttons provide sequential navigation through the **Source Setup** dialog box **INTERNAL SOURCES** and **EXTERNAL SOURCES**.

Note The **Next** and **Previous** buttons provide navigation from button to button and any/all changes are maintained but not saved until the **Save** button is clicked.

Note To move the dialog box, click the title bar and drag.

Master Routing Dialog Box

The **Master Routing** dialog box (Figure 563) is the initial interface used to set up both the Switcher module and the keyers. The dialog box has two main areas:

- Destinations on the left–
  - **M/E** – depicts and enables selection of the available M/E banks.
  - **M/E BUSES** – depicts and enables selection of the available buses and keyers.
  - **M/F BUSES** – depicts and enables selection of the available mainframe (Aux) buses.

Note Ignite 3000 and 4000 systems also have page left/page right navigation buttons.

- Sources on the right–
  - **INTERNAL SOURCES** – depicts and enables selection of hard inputs in the switcher.

Note Ignite 3000 and 4000 systems also have page up/page down navigation buttons.

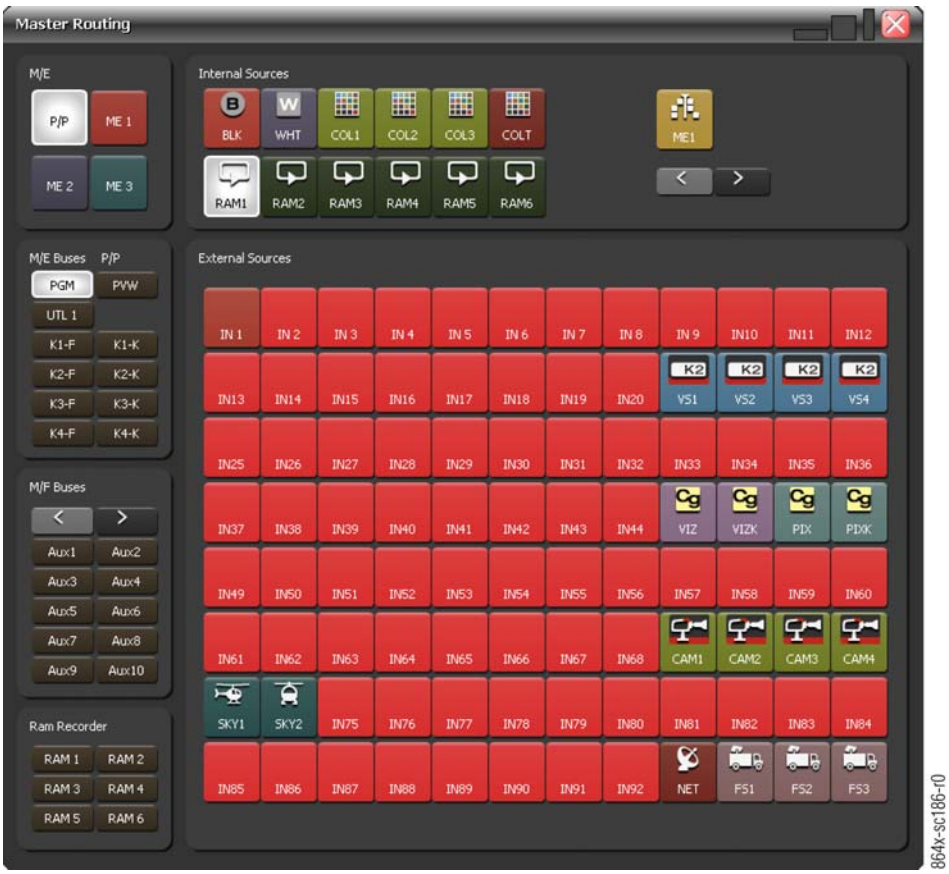
  - **EXTERNAL SOURCES** – depicts and enables selection of sources connected to the switcher

Note The Master Routing dialog box automatically scales to match the current Ignite system configuration and the number of inputs available on the licensed Kayak™ frame.

- **Close** button – closes the dialog box.

The M/E button indications are interactive and reflect the status/assignments for that particular button. That is, when an M/E or bus destination is selected, that button highlights and the associated internal and external sources also highlight.

Figure 563. Master Routing Dialog Box - Example Normal View Scaled With 96 Inputs



Access to the **Master Routing** dialog box is from several Switcher module (Figure 551) icons/buttons:

- Right-click a keyer button
- Access Key Layer Master Routing icon (K1–K4)
- Access Utility Bus Master Routing icon (U1 and U2)
- Right-click PGM Master Routing icon

Note Depending on which access method is used, the Master Routing dialog box opens for viewing/editing that respective selection; i.e., K1, K2, K3, K4, U1, U2, ...

Note To move the dialog box, click the title bar and drag.

The dialog box also has three user-selectable view options (Figure 564):

- Normal
- Narrow
- Wide

These view options are selected using the associated resize icon at the bottom right of the dialog box.

Figure 564. Master Routing Dialog Box

- **Close** button – closes the dialog box.

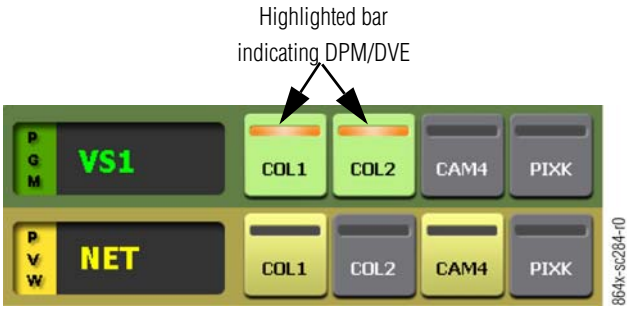
Keyer

Each M/E bank has up to four key layers (K1 through K4) active at once. Each has a corresponding switcher button on both the Program Bus and the Preview Bus. Keyers can also act as DPM/DVE channels where clicking the gray area of a keyer turns on a channel of the DPM/DVE, which then fills with the source routed to that keyer. It is designated as on air by a color

highlight and a small yellow DPM icon in the upper right hand corner. Highlight colors correspond to their respective bus (Figure 565):

- Green with a yellow bar for keys on the DPM/DVE Program bus
- Yellow with a yellow bar for keys on the DPM/DVE Preview bus

Figure 565. Keyers On Air



- Click the top half of keyer to toggle the keyer
- Right-click the top half of keyer to access the DPM context menu (Figure 566). Click **Set Keyer Fade Rate** to access the **Keyer Fade Rate** dialog box and enter a transition time for the fade.

Figure 566. DPM Context Menu

- Click the lower half of keyer to change source routing.
- Click the respective P/P, M/E 1, M/E 2, or M/E 3 **Browse Effects** button (Figure 567) to open the **Effects Definition** dialog box (Figure 568).

Figure 567. Browse Effects Definition button

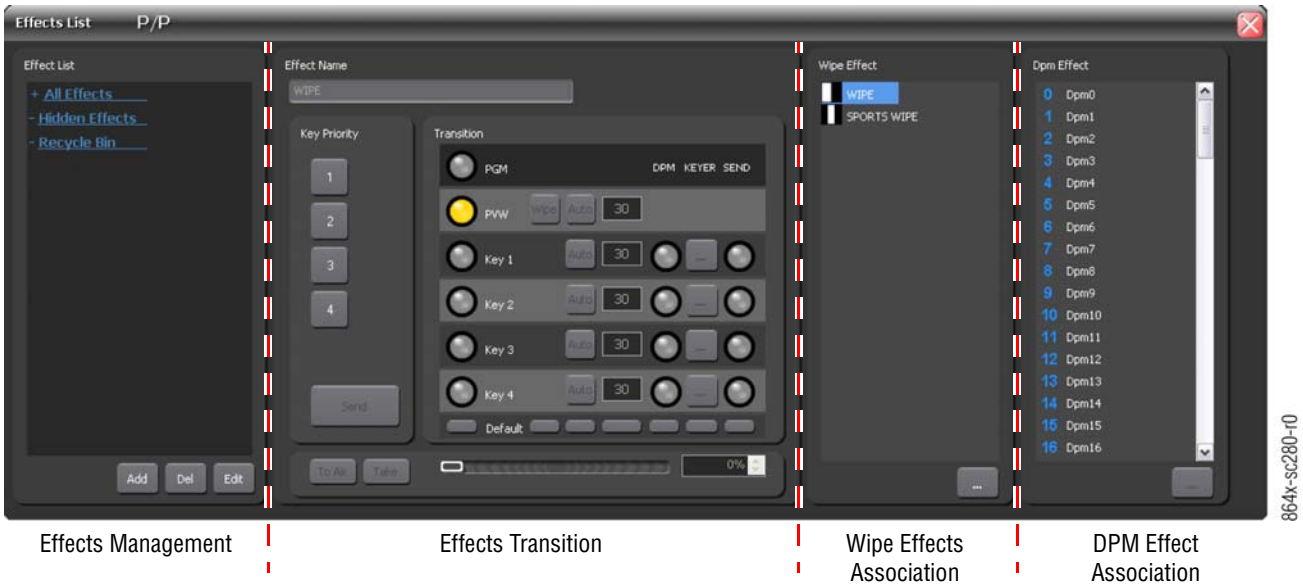
Figure 568. Effects Definition Dialog Box

Note Displays the current M/E to which the current effects are saved. Possible values (P/P, M/E 1, M/E 2, M/E 3).

The **Effects Definition** dialog box is a consolidated interface for effects management, transition, and association. The dialog box segments, from left to right, include (Figure 569):

- Effects management (Refer to *Effects Management* on page 487)
- Effect transitions (Refer to *Effect Transition* on page 488)
- Wipe Effect Setup (Refer to *Wipe Effect Setup Dialog Box* on page 490)
- DPM Effect Setup (Refer to *DPM Effect Setup Dialog Box* on page 491)

Figure 569. Effects Definition Dialog Box Groups



- **Save** button – saves the current parameters.
- **Close** button – closes the dialog box without saving changes.

Effects Management

The **Effects List** is a list of user created effects. These effects are managed using a right-click and shortcut menu. The **Effects List** separated into three sub-lists:

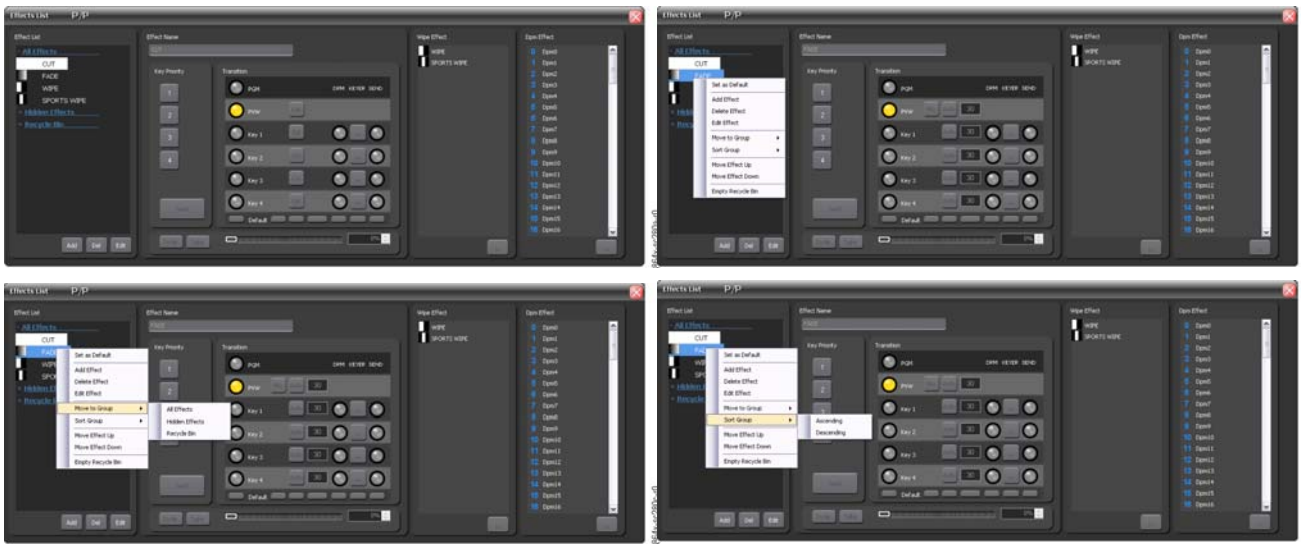
Note Effects in each of the three sub-lists are managed easily via shortcut menu selections (Figure 570). The shortcut menus are accessed via right-click.

- **All Effects** – lists all effects that are visible on the Switcher module. Using shortcut menu selections (Figure 570), a user manages the **All Effects** sub-list. Effects deleted from the **All Effects** sub-list are recoverable from the **Recycle Bin** using a right-click and shortcut menu selection.
- **Hidden Effects** – lists effects that are not visible on the Switcher module. Using shortcut menu selections (Figure 570), a user manages the **Hidden Effects** sub-list. Effects deleted from the **Hidden Effects** sub-list are recoverable from the **Recycle Bin** using a right-click and shortcut menu selection.

CAUTION Effects deleted from the **Recycle Bin** cannot be recovered.

- **Recycle Bin** – all effects deleted from both **All Effects** sub-list and **Hidden Effects** sub-list are automatically moved to the **Recycle Bin** sub-list and can be recovered/moved from the **Recycle Bin** sub-list using shortcut menu selections (Figure 570). Effects deleted from the **Recycle Bin** sub-list cannot be recovered.

Figure 570. Effects List Management



Three command buttons comprise the remainder of the Effect Management function. These commands are also available by using a right-click and shortcut menu.

- **Add** – create/add a new effect to the Effects List. A default name is automatically generated for the new effect but it should be renamed to conform with established standard naming conventions.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

- **Del** (Delete) – Removes the selected effect and places it in the **Effects List Recycle Bin**.
- **Edit** – enables the **Effect Transition**, **Wipe Effects**, and **DPM Effects** functions for editing the selected effect.

Note Effects created by prepping an existing effect and adding keyers to create a new effect, will be executed once and deleted immediately after use. Only permanent effects will be selectable from the main GUI drop down list indefinitely.

Note Effects can be placed on the Ignite **Event Timeline** by right-clicking and dragging an effect.

Effect Transition

The **Effect Transition** function includes the following areas:

- **EFFECT NAME** – in edit mode, the effect name can be changed by entering a different name in the **EFFECT NAME** box.

- **KEY PRIORITY** – changes the keyer priorities.

  Send – sends the new key priority data that is utilized when the effect is taken to air.

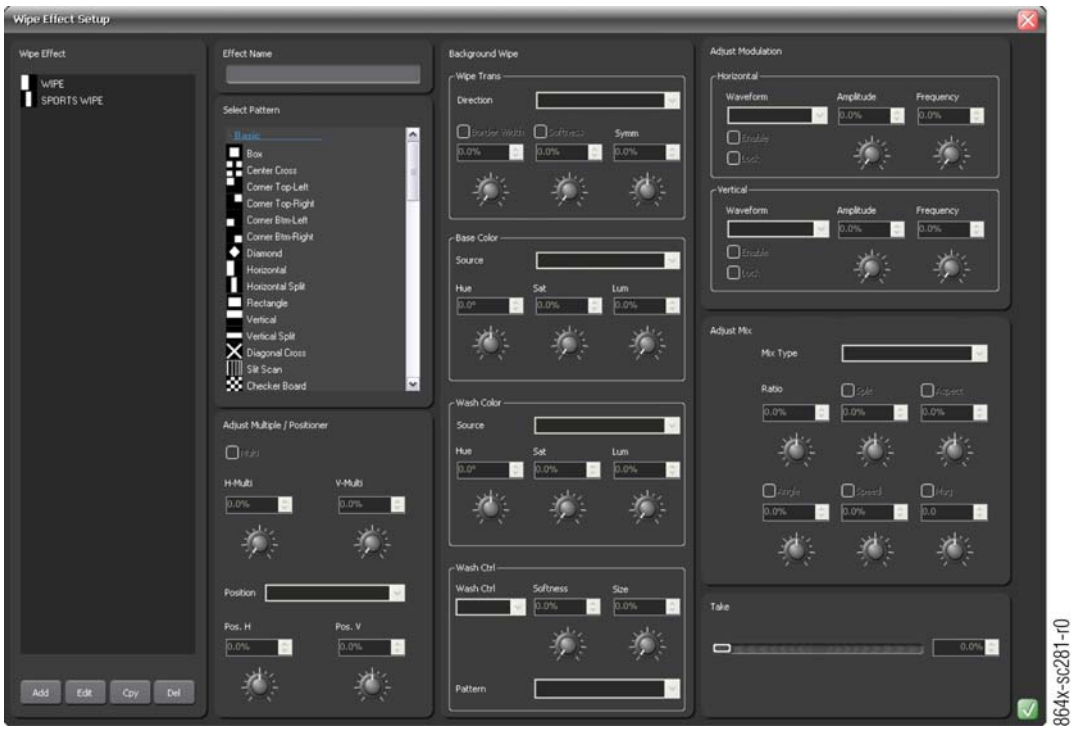
- **Transition** – Sets the components to include in the transition. From left to right:
  - The first column of buttons/indicators settings:
    - Gray – the component is not included
    - Red – use the current setting
    - Yellow – include the component.
  - The second column of buttons/indicators sets whether the effect is a Wipe or a Mix.
  - The third column of buttons/indicators sets whether the effect is a Cut or an Auto transition.
  - The fourth column sets the Auto transition time (in frames) for the effect.
  - The fifth column of buttons/indicators sets DPM control:
    - Gray – off
    - Red – use current
    - Yellow – on
  - The sixth column of button/indicators opens the keyer effects dialog box.
  - The seventh column of button/indicators sets whether or not to send the keyer effect data when the effect is taken to air:
    - Green – send
    - Gray – do not send
- **Default** (button below each column) – Resets the respective column data to default values.
  - Reset keyers to OFF state on a PVW transition
  - Reset to MIX
  - Reset to AUTO
  - Reset to 30 Frames
  - Reset to DPM OFF
  - Reset to keyer Luma defaults
  - Reset send keyer data to OFF
- **To Air** – sends the effect to the switcher but does not start the transition.
- **Take** – sends the effect to air and begins the transition.

- **Transition Slider** – enables a user to manually control the transition.

Wipe Effect Setup Dialog Box

When the effect is a wipe transition, a wipe pattern must be associated with the wipe. Click the **Access** button at the bottom right of the **WIPE EFFECTS** function to access the **Wipe Effect Setup** dialog box.

Figure 571. Wipe Effect Setup Dialog Box



The **Wipe Effect Setup** dialog box is the interface used to set up/edit a wipe pattern. Available setup/edit configuration includes:

- **WIPE EFFECT** list – This list contains wipe effects created by a user.
  - **Add** – create/add a new effect to the **WIPE EFFECT** List. A default name is automatically generated for the new effect but it should be renamed to conform with established standard naming conventions.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

- **Cpy** (Copy) – copies the selected effect parameters for edit/re-use as a modified/different effect.
- **Edit** – enables parameter editing of the selected effect.
- **Del** (Delete) – removes the selected effect. A confirmation dialog box appears to confirm the deletion.

- **Effect Name** – the wipe effect name can be changed here.
- **SELECT PATTERN** – lists the pre-defined wipe patterns in the switcher. A wipe pattern must be selected from this list and used as the base pattern for the wipe effect.
- **BACKGROUND WIPE** – set by a user to adjust the wipe effect parameters:
  - **ADJUST MULTIPLE**
  - **ADJUST COLOR**
  - **ADJUST MODULATION**
  - **ADJUST MIX**

Note For a detailed explanation of the BACKGROUND WIPE parameters, refer to the Kayak User Manual.

- **TAKE** – wipe slider that enables a user to preview the wipe effect as it would appear in a transition.
- **Save** button – saves the current parameters.
- **Close** button – closes the dialog box without saving changes.

DPM Effect Setup Dialog Box

Click the **Access** button at the bottom right of the **DPM EFFECTS** function to access the **DPM Effect Setup** dialog box. The Ignite Digital Picture Manipulator (DPM) function provides transition control over picture position, shape, luminance, chroma key, luma, and motion.

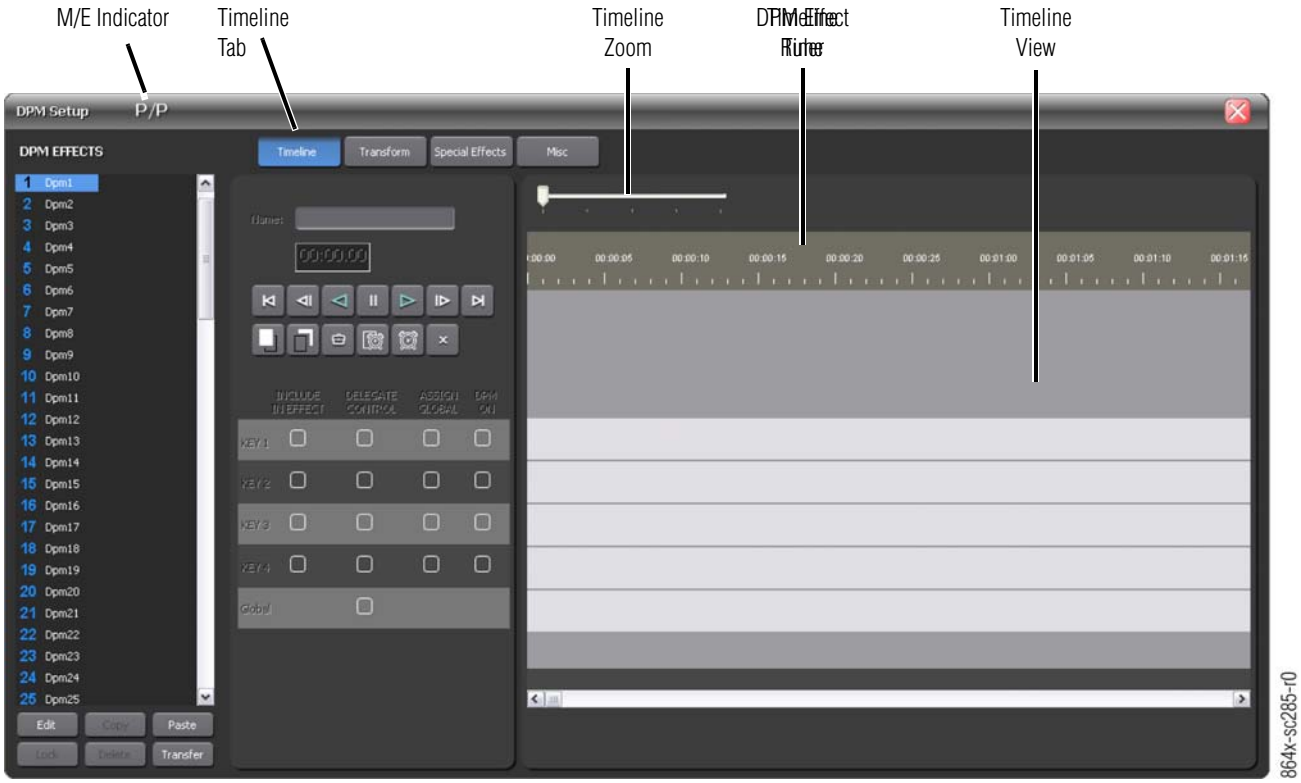
The dialog box contains three tabs:

- **Timeline** tab (Refer to the *Timeline Tab* on page 491)
- **Transform** tab (Refer to the *Transform Tab* on page 494)
- **Special Effects** tab (Refer to the *Special Effects Tab* on page 498)

Timeline Tab

From the **DPM Effect Setup** dialog box (Figure 572), click the **Timeline** tab to access the initial interface used to set up/edit the DPM effect, display key-frame duration, and display the DPM timeline.

Figure 572. Timeline Tab



Setup and configuration parameters include:

- **DPM EFFECTS** list – displays the DPM effects in the current M/E of the switcher. This is the same DPM effects list as seen in the **Effects Definition** dialog box (Figure 568).
  - **Edit** – enables the DPM effect to be edited from the **DPM EFFECTS** list.
  - **Copy/Paste** – when not in editing mode, enables the user to copy the selected effect and paste this effect into a different DPM register.
  - **Delete** – when not in editing mode, removes the selected effect from the list. All keyframes associated with the DPM effect are also removed.

Note The **DPM Delete** dialog box (Figure 592 on page 515) appears when any effects are associated with the current DPM effect.

  - **Lock** – when not in editing mode, enables the user to lock an effect.
- **Name** – allows the DPM effect to be renamed.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

- **Current DPM Effect Time** – shows the current position of the DPM timeline cursor. Format is hh:mm:ss:ff; ff = 1 second.

- **Playout Controls** – playout controls for the keyframe include:

Control	Function
	Go to the first keyframe in the timeline
	Go to the previous keyframe in the timeline
	Reverse play
	Pause
	Play
	Go to next keyframe
	Go to last keyframe

- **Keyframe Editing Controls** – keyframe editing controls include:

Control	Function
	Insert keyframe before the current cursor position
	Insert keyframe after the current cursor position
	Modify the keyframe with current effect parameters
	Modify DPM timeline duration
	Modify DPM keyframe duration
	Delete current keyframe

- **Keyframe Delegation** – keyframe delegation options include:
  - **INCLUDE IN EFFECT** – includes the selected channel in the effect. Channels that are not included cannot be delegated.

- **DELEGATE CONTROL** – delegates a channel and allows it to be edited. For example, if channels 1 and 2 are delegated, then clicking the **Insert Keyframe** icon inserts a keyframe into each channel. Channels that are not delegated are not affected.
- **ASSIGN GLOBAL** – determines whether a channel is affected by the global transformation, the last channel is green.
- **DPM ON** – turns the DPM effect on and off for the keyer.
- **GLOBAL** – sets the modifications to a channel keyframe at the global level.

Note It is recommended that you set all channel keyframes to the **Global** keyframe delegation option. Keyframe channels that are not set to **Global** may recall off screen.

- **Timeline Zoom** – enables zoom-in and zoom-out capabilities in the DPM timeline.
- **Timeline Ruler** – displays the timeline ruler in hh:mm:ss:ff format, where ff = 1 second.
- **Timeline View** – displays the current keyframes in the DPM effect.
- **M/E Indicator** – displays the current M/E to which the current effects are saved. Possible values (P/P, M/E 1, M/E 2, M/E 3).
- **Close** button – closes the dialog box.

Transform Tab

From the **DPM Effect Setup** dialog box, click the **Transform** tab (Figure 573) to access the interface used to change the appearance of a DPM effect.

Note The **Transform** tab contains functions that are common to the **Timeline** tab and **Special Effects** tab such as editing and deleting a DPM effect and applying keyframe options to channels.

Figure 573. Transform Tab

The main functions of the **Transform** tab include:

- **Reset GEO PARMS** – resets geometric parameters for the delegated channels.
- **Reset ALL PARMS** – resets all parameters for all channels.
- **Close** button – closes the dialog box.

The **Transform** tab has three subtabs:

- **Locate** – manipulates the position of a two-dimensional picture on the X, Y, or Z axis.
- **Skew** – slants the two-dimensional picture in the X and Y directions.
- **Crop** – trims and manipulates the size of a two-dimensional picture.
- **DPM Knob Controls** – All three subtabs contain DPM knob controls used to adjust the parameters, either ranged or unranged. Click and drag the knob either to the left or right to manipulate the parameters.

DPM Transform – Locate Subtab

Parameters on the **Locate** subtab enable movement, rotation, or spin of the keyers from the viewpoint of source or target. From the **Transform** tab, click the **Locate** subtab to access the parameters.

Parameters are organized in the following categories:

- **SOURCE/TARGET** – options for source or target viewpoint. When **Source** is selected, the **Size** parameter appears.
- **LOCATE** – X, Y, Z location coordinates and path parameters for transform location.
- **LOCATE AXIS** – X, Y, Z location coordinates and path parameters for pivot point location.
- **TARGET ROTATE** – X, Y, Z location coordinates and path parameters for target rotation.
- **SPIN** – X, Y, Z location coordinates and path parameters for spin effect.

Note For a detailed explanation of the parameters on the **Locate** subtab, refer to the Kayak User Manual.

Figure 574. DPM Transform – Locate Subtab

DPM Transform – Skew Subtab

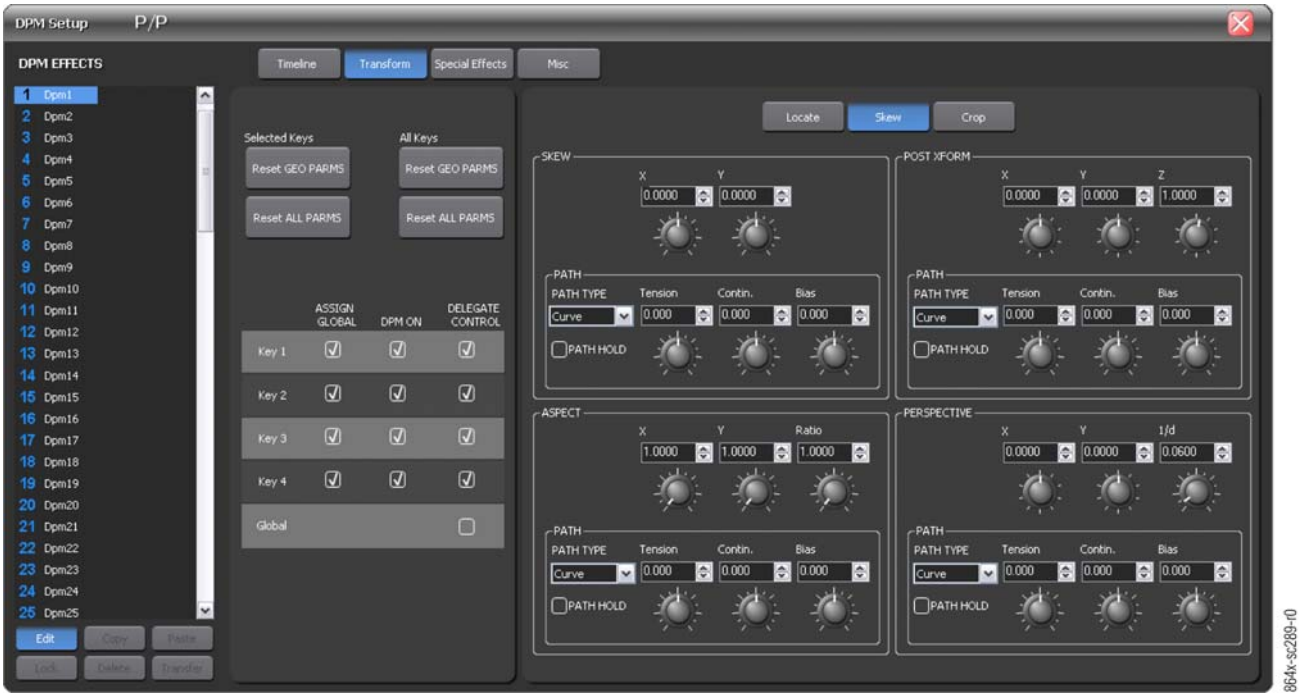
Parameters on the **Skew** subtab enable perspective transformation, which allows the keyers to be stretched. From the **Transform** tab, click the **Skew** subtab to access the parameters.

Parameters are organized in the following categories:

- **SKEW** – X, Y components and path parameters that scale the picture.
- **ASPECT** – X, Y scaling components and path parameters that slant the picture.
- **PERSPECTIVE** – X, Y components and path parameters that change the viewer's apparent viewpoint of the picture.
- **POST XFORM** – X, Y components and path parameters that may affect the size and location operations and picture projection.

Note For a detailed explanation of the parameters on the **Skew** subtab, refer to the Kayak User Manual.

Figure 575. DPM Transform – Skew Subtab



DPM Transform – Crop Subtab

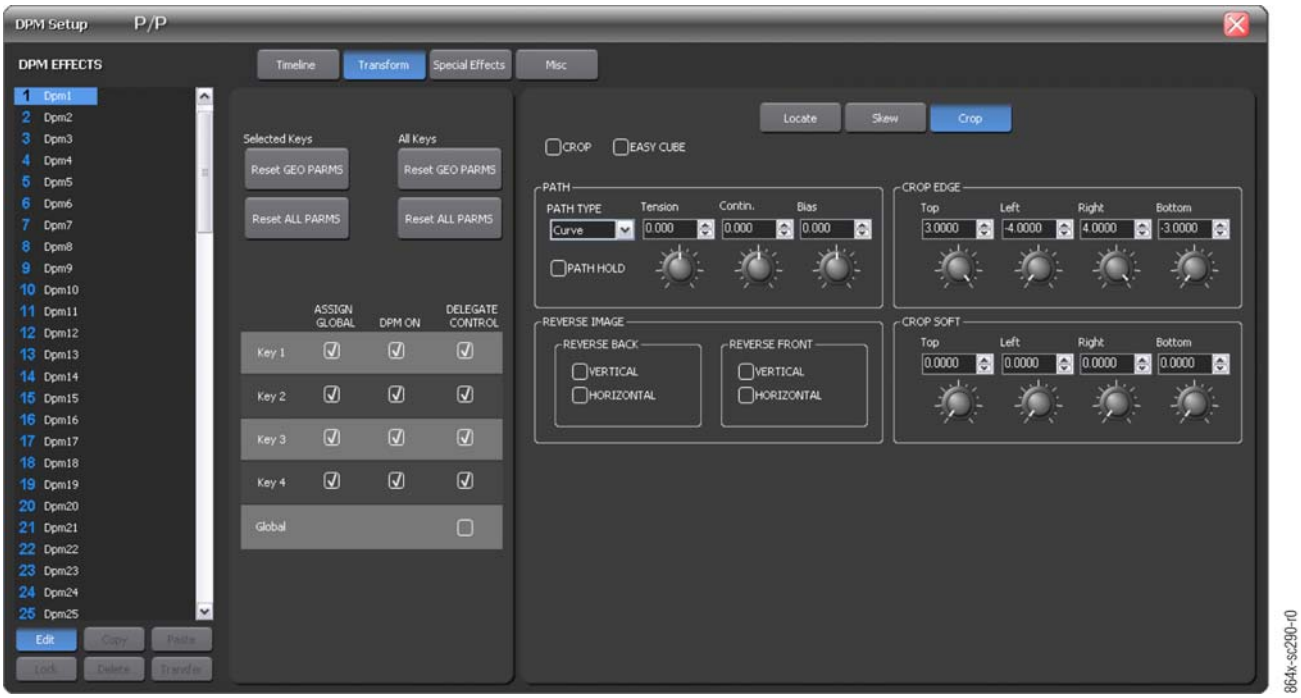
From the **Transform** tab, click the **Crop** subtab to access the parameters. Parameters are organized in the following categories:

- **CROP** – option that applies the cropping parameters to the picture.
- **PATH** – selection of path type such as curve, linear, or S-linear.
- **CROP EDGE** – parameters that crop the edge of the picture.

- **CROP SOFT** – parameters that apply a gradient edge to the picture.
- **EASY CUBE** – option that creates a cube out of three keyers.
- **REVERSE IMAGE** – parameters that enable the picture to be mirrored horizontally and vertically.

Note For a detailed explanation of the parameters on the **Crop** subtab, refer to the Kayak User Manual.

Figure 576. DPM Transform – Crop Subtab

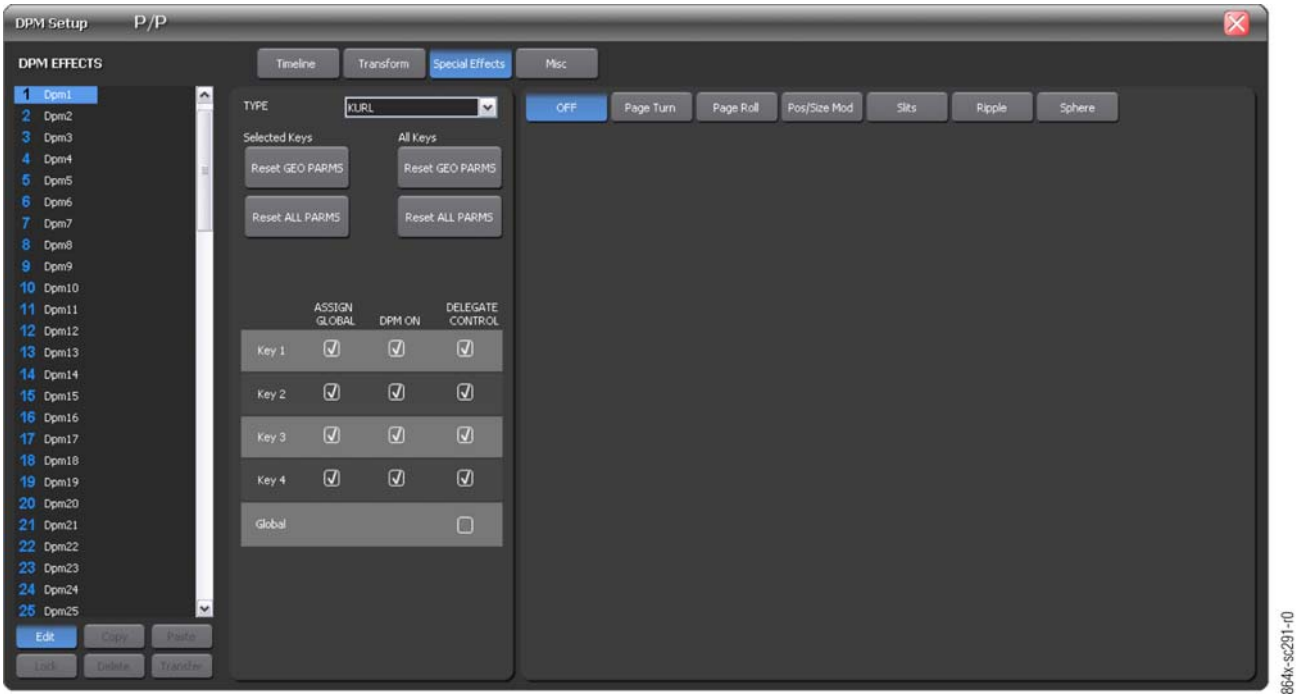


Special Effects Tab

From the **DPM Effect Setup** dialog box, click the **Special Effects** tab (Figure 577) to access the interface used to apply special effect parameters to a DPM effect.

Note The **Special Effects** tab contains functions that are common to the **Timeline** tab and **Transform** tab such as editing and deleting a DPM effect and applying keyframe options to channels.

Figure 577. Special Effects Tab – KURL OFF Subtab



Special effect functions and parameters include:

- **Reset GEO PARMS** – resets geometric parameters for the delegated channels.
- **Reset ALL PARMS** – resets all parameters for all channels.
- **Type** – special effect types include:
  - **KURL**– From the **Type** drop-down list box, when **KURL** is selected, seven subtabs appear.
    - **OFF** (Refer to Figure 577)
    - **Page Turn** (Refer to Figure 578 on page 501)
    - **Page Roll** (Refer to Figure 579 on page 502)
    - **Pos/Size Mod** (Refer to Figure 580 on page 503)
    - **Slits** (Refer to Figure 581 on page 504)
    - **Ripple** (Refer to Figure 582 on page 505)
    - **Sphere** (Refer to Figure 583 on page 506)
  - **SPLITS** – From the **Type** drop-down list box, when **SPLITS** is selected, the **SPLITS** subtab appears. Refer to Figure 584 on page 507.
  - **ADVANCED EFFECT** – From the **Type** drop-down list box, when **ADVANCED EFFECT** is selected, six additional subtabs appear:
    - **Defocus** (Refer to Figure 585 on page 508)

- **Glow** (Refer to Figure 586 on page 509)
- **Drop Shadow** (Refer to Figure 587 on page 510)
- **Shadow Crop** (Refer to Figure 588 on page 511)
- **Output Recursive** (Refer to Figure on page 512)
- **Light Path** (Refer to Figure 590 on page 513)
- **Light Sources** (Refer to Figure 590 on page 513)

- **DPM Knob Controls** – knobs for parameter adjustment are ranged or unranged. Values for ranged knobs are limited to the minimum and maximum. Unranged knobs are limitless; the user can click and drag repeatedly.
- **Close** button – closes the dialog box.

DPM Special Effects – Kurl – OFF Subtab

The **OFF** subtab turns off all Kurl special effects. This subtab does not have any parameters.

DPM Special Effects – Kurl – Page Turn Subtab

Parameters on the **Page Turn** subtab simulate a page-turning effect that starts from a specific point on the edge of the keyer. To access the parameters on this subtab:

- From the **Special Effects** tab, click **KURL** from the **TYPE** drop-down list
- Click the **Page Turn** subtab

Figure 578. DPM Special Effects – – KURL Page Turn Subtab

Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **PAGE FOLD** – parameters that adjust the radius, angle, and offset of the picture.
- **BACK COLOR** – parameters that change the color of the matte on the back side of the turned picture.
- **SPLIT AXIS** – parameters that control split page turn and roll effects.
- **FOLD** – options that determine the orientation of the fold.
- **SIDES** – options that determine which side of the picture displays.

Note For a detailed explanation of the parameters on the **Page Turn** subtab, refer to the Kayak User Manual.

DPM Special Effects – Kurl – Page Roll Subtab

Parameters on the **Page Roll** subtab are similar to the parameters on the **Page Turn** subtab. The difference is that a Page Roll effect is where the entire edge of the keyer is curled. To access the parameters on this subtab:

- From the **Special Effects** tab, click **KURL** from the **TYPE** drop-down list
- Click the **Page Roll** subtab

Figure 579. DPM Special Effects – KURL Page Roll Subtab

Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **PAGE FOLD** – parameters that adjust the radius, angle, and offset of the picture.
- **BACK COLOR** – parameters that change the color of the matte on the back side of the rolled image.
- **SPLIT AXIS** – parameters that control split page turn and roll effects.
- **FOLD** – options that determine the orientation of the fold.
- **SIDES** – options that determine which side of the picture displays.

Note For a detailed explanation of the parameters on the **Page Roll** subtab, refer to the Kayak User Manual.

DPM Special Effects – Kurl – Pos/Size Mod Subtab

Parameters on the **Pos/Size Mod** subtab adjust the position of the keyer and associate the keyer with another pattern such as Sine wave, triangle, source, circle, etc. To access the parameters on this subtab:

- From the **Special Effects** tab, click **KURL** from the **TYPE** drop-down list
- Click the **Pos/Size Mod** subtab

Figure 580. DPM Special Effects – KURL – Pos/Size Mod Subtab

Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **HORIZONTAL** – selection of effect pattern such as Sine, triangle, circle, etc., mode selection, and additional parameters that are applied to the horizontal axis of the picture.
- **VERTICAL** – selection of effect patterns such as Sine, triangle, circle, etc., mode selection, and additional parameters that are applied to the vertical axis of the picture.

Note For a detailed explanation of the parameters on the **Pos/Size Mod** subtab, refer to the Kayak User Manual.

DPM Special Effects – Kurl – Slits Subtab

Parameters on the **Slits** subtab divide and cut the keyer into separate, parallel slits. To access the parameters on this subtab:

- From the **Special Effects** tab, click **KURL** from the **TYPE** drop-down list
- Click the **Slits** subtab

Figure 581. DPM Special Effects – Kurl – Slits Subtab

Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **MODULATION** – waveform-pattern options and parameters applied to the picture.
- **SLITS** – parameters applied to each separate slit that is created.

Note For a detailed explanation of the parameters on the **Slits** subtab, refer to the Kayak User Manual.

DPM Special Effects – Kurl – Ripple Subtab

Parameters on the **Ripple** subtab apply wave effects to the keyer. To access the parameters on this subtab:

- From the **Special Effects** tab, click **KURL** from the **TYPE** drop-down list
- Click the **Ripple** subtab

Figure 582. DPM Special Effects – Kurl – Ripple Subtab

Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **RIPPLE** – parameters that manipulate the angle, aspect, and cycle of the ripple effect and also selection of effect pattern
- **POSITION** – parameters that manipulate the position of the effect on the X, Y axes.

Note For a detailed explanation of the parameters on the **Ripple** subtab, refer to the Kayak User Manual.

DPM Special Effects – Kurl – Sphere Subtab

Parameters on the **Sphere** subtab wrap the keyer into a ball-like shape. To access the parameters on this subtab:

- From the **Special Effects** tab, click **KURL** from the **TYPE** drop-down list
- Click the **Sphere** subtab

Figure 583. DPM Special Effects – Kurl – Sphere Subtab

Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **SPHERE** – parameters that alter the size and aspect of the effect.
- **POSITION** – parameters that manipulate the position of the effect on the X, Y axes.
- **WRAP** – parameters that create a “wrap around” effect on the X, Y axes.

Note For a detailed explanation of the parameters on the **Sphere** subtab, refer to the Kayak User Manual.

DPM Special Effects – Splits – Splits Subtab

Parameters on the **Splits** subtab enable the keyer to be split and mirrored. To access the parameters on this subtab:

- From the **Special Effects** tab, click **Splits** from the **TYPE** drop-down list. The **Splits** subtab appears.

Figure 584. DPM Special Effects – Splits – Splits Subtab

Parameters are organized in the following categories:

- **MODE** – option that applies the splits parameters to the picture.
- **PATH** – selection of path type such as curve, linear, or S-linear
- **SPLITS** – parameters that adjust the modulation values of the split effect on the X, Y axes.
- **SEP SIDES** – parameters that adjust the sides of the effect.
- **SPLIT MODIFIERS** – type of splits to select. Values include:
  - **DOUBLE IMAGE**
  - **MIRROR TOP**
  - **MIRROR LEFT**
  - **MIRROR RIGHT**
  - **MIRROR BOTTOM**

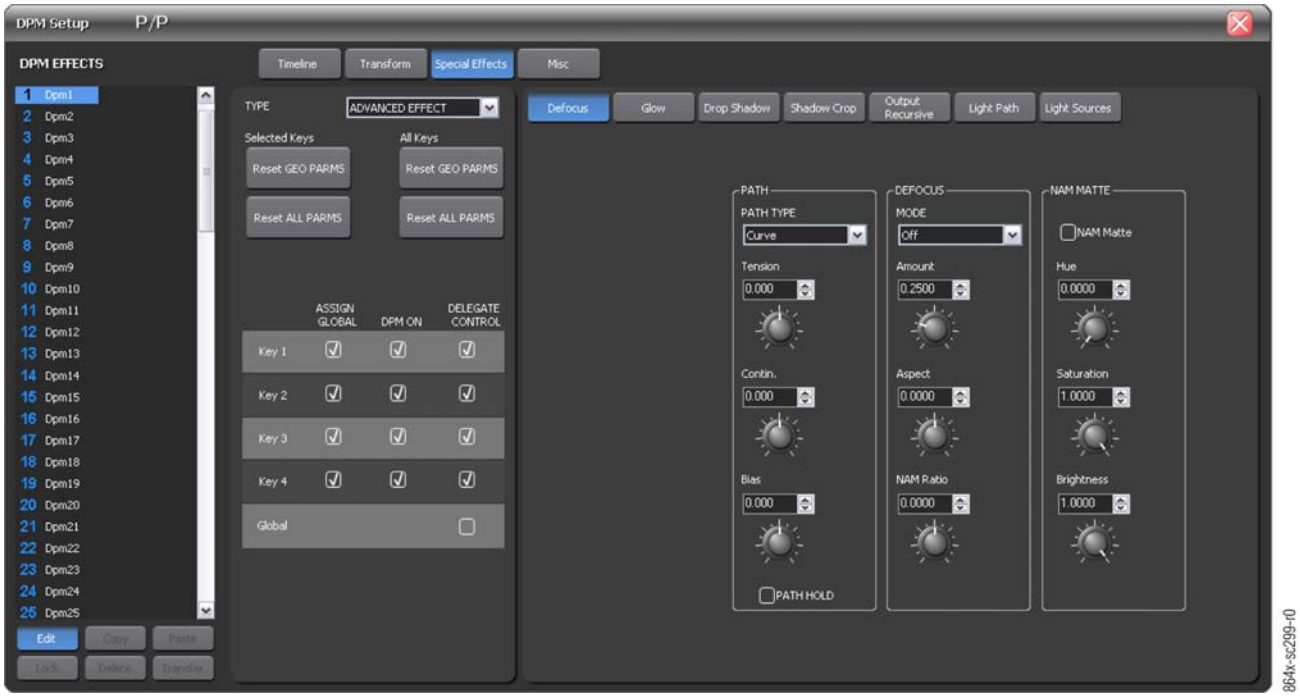
Note For a detailed explanation of the parameters on the **Splits** subtab, refer to the Kayak User Manual.

DPM Special Effects – Advanced Effect – Defocus Subtab

Parameters on the **Defocus** subtab apply a blurring effect to the keyer. To access the parameters on this subtab:

- From the **Special Effects** tab, click **ADVANCED EFFECT** from the **TYPE** drop-down list
- Click the **Defocus** subtab

Figure 585. DPM Special Effects – Advanced Effect – Defocus Subtab



Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **DEFOCUS** – on/off mode selection and additional parameters that adjust the mode.
- **NAM MATTE** – parameters that manipulate the matte color and brightness of the effect.

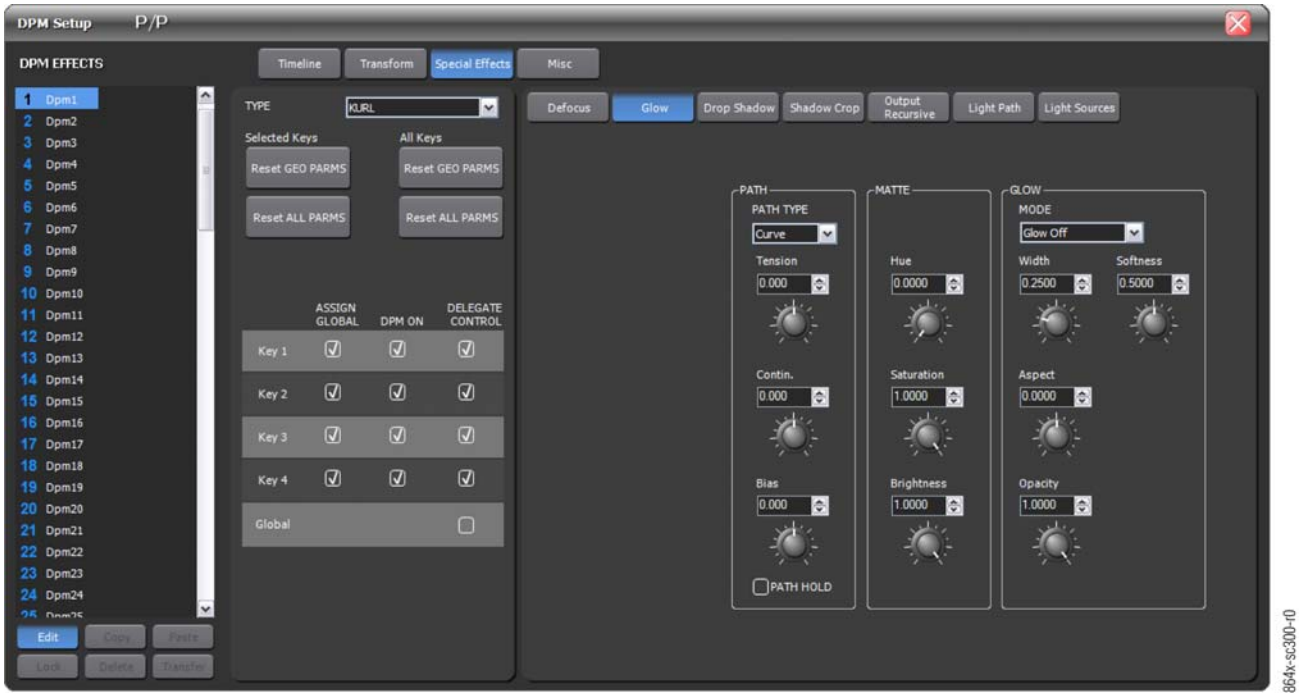
Note For a detailed explanation of the parameters on the **Defocus** subtab, refer to the Kayak User Manual.

DPM Special Effects – Advanced Effect – Glow Subtab

The parameters on the **Glow** subtab add a glow effect of a specific color to the keyer. To access the parameters on this subtab:

- From the **Special Effects** tab, click **ADVANCED EFFECT** from the **TYPE** drop-down list
- Click the **Glow** subtab

Figure 586. DPM Special Effects – Advanced Effect – Glow Subtab



Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **GLOW** – on/off mode selection and additional parameters that adjust the mode.
- **MATTE** – parameters that manipulate the matte color and brightness of the effect.

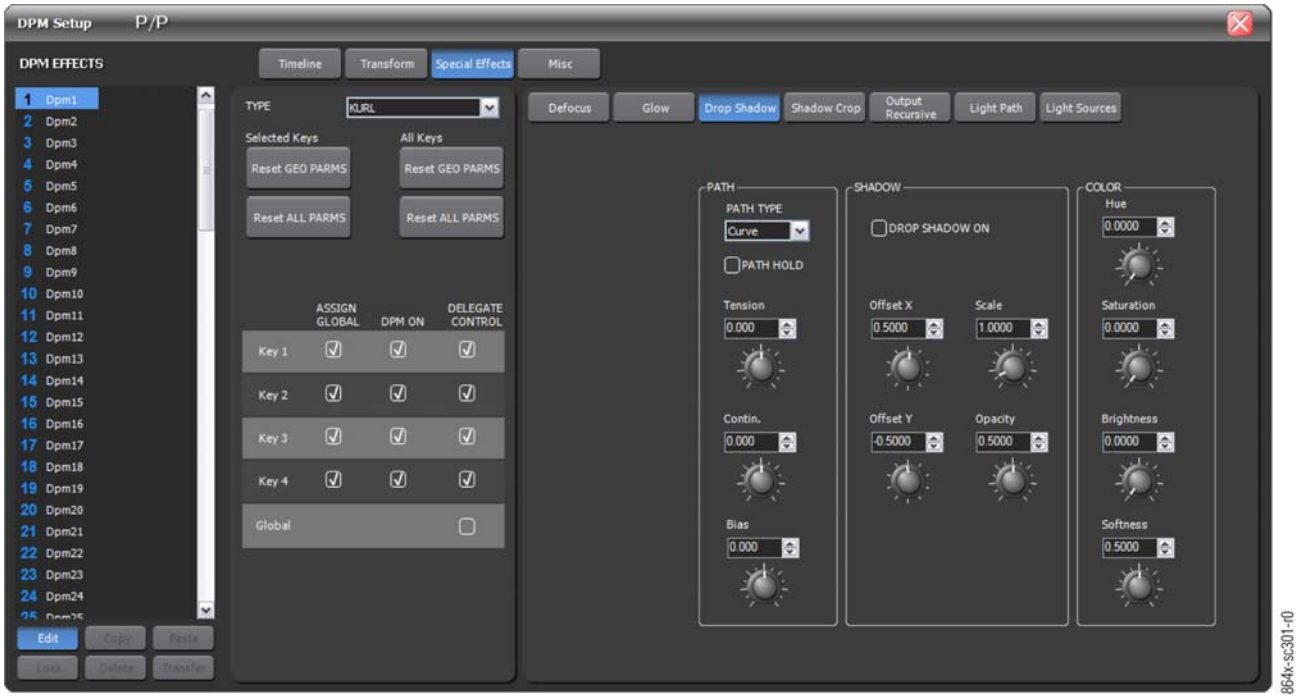
Note For a detailed explanation of the parameters on the **Glow** subtab, refer to the Kayak User Manual.

DPM Special Effects – Advanced Effect – Drop Shadow Subtab

Parameters on the **Drop Shadow** subtab add a shadow behind the keyer of a specific color and the same shape of the keyer. To access the parameters on this subtab:

- From the **Special Effects** tab, click **ADVANCED EFFECTS** from the **TYPE** drop-down list
- Click the **Drop Shadow** subtab

Figure 587. DPM Special Effects – Advanced Effect – Drop Shadow Subtab



Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **SHADOW** – on/off mode selection and additional parameters that adjust the mode.
- **COLOR** – parameters that adjust the color of the shadow.

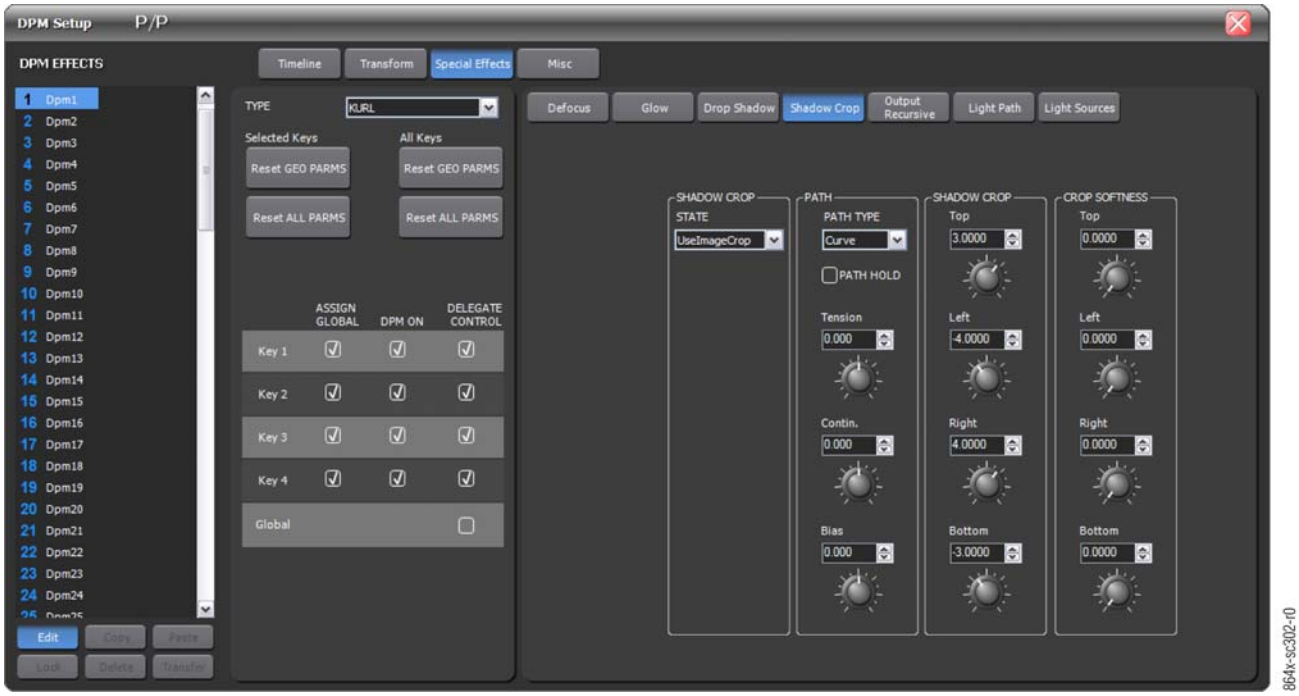
Note For a detailed explanation of the parameters on the **Drop Shadow** subtab, refer to the Kayak User Manual.

DPM Special Effects – Advanced Effect – Shadow Crop Subtab

Parameters on the **Shadow Crop** subtab crop the shadow that was added to the keyer with the drop shadow. To access the parameters on this subtab:

- From the **Special Effects** tab, click **ADVANCED EFFECT** from the **TYPE** drop-down list
- Click the **Shadow Crop** subtab

Figure 588. DPM Special Effects – Advanced Effect – Shadow Crop Subtab



Parameters are organized in the following categories:

- **STATE** – values include:
  - **UseImageCrop** – crop values of the shadow match the crop values used for the primary image.
  - **UseShadow Crop** – the edges of the drop shadow can be given crop values that are different from the primary image.
- **PATH** – selection of path type such as curve, linear, or S-linear.
- **SHADOW CROP** – parameters that adjust the drop shadow edges.
- **CROP SOFTNESS** – parameters that adjust the softness of the drop shadow edges.

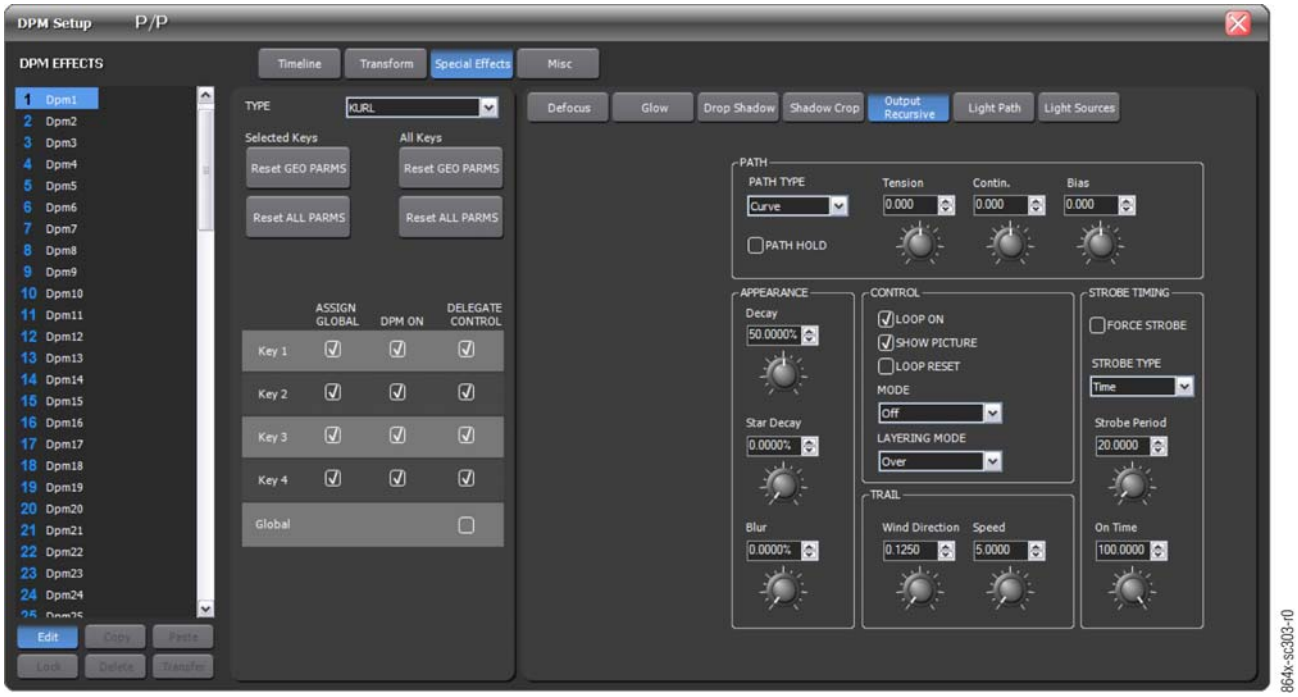
Note For a detailed explanation of the parameters on the **Shadow Crop** subtab, refer to the Kayak User Manual.

DPM Special Effects – Advanced Effect – Output Recursive Subtab

Parameters on the **Output Recursive** subtab add a trail to the keyer. To access the parameters on this subtab:

- From the **Special Effects** tab, click **ADVANCED EFFECT** from the **TYPE** drop-down list
- Click the **Output Recursive** subtab

Figure 589. DPM Special Effects – Advanced Effect – Output Recursive Subtab



Parameters are organized in the following categories:

- **PATH** – selection of path type such as curve, linear, or S-linear.
- **OUTPUT RECURSIVE** – parameters that apply the trail effect to a keyer as well as mode and layering mode.
- **STROBE** – parameters that apply a strobe effect to the keyer.
- **APPEARANCE** – parameters that affect the appearance of the keyer.

DPM Special Effects – Advanced Effect – Light Path Subtab

Parameters on the **Light Path** subtab are used in conjunction with the parameters on the **Light Sources** subtab. To access the parameters on this subtab:

- From the **Special Effects** tab, click **ADVANCED EFFECT** from the **TYPE** drop-down list
- Click the **Light Path** subtab

Figure 590. DPM Special Effects – Advanced Effect – Light Path Subtab

Parameters are organized in the following categories:

- **SOURCE** – sources can include four light sources.
- **AMBIENT SHADING** – parameters that adjust the ambient shading of the effect.
- **AMBIENT PATH** – selection of path type such as curve, linear, or S-linear.
- **POS/ROT PATH** – parameters that adjust the position and rotation of the effect's path.
- **ATTRIB PATH** – selection of path type.

Note For a detailed explanation of the parameters on the **Light Path** subtab, refer to the Kayak User Manual.

DPM Special Effects – Advanced Effect – Light Sources Subtab

Parameters on the **Light Sources** subtab allow simulated lighting from up to four light sources. To access the parameters on this subtab:

- From the **Special Effects** tab, click **ADVANCED EFFECTS** from the **TYPE** drop-down list
- Click the **Light Sources** subtab

Figure 591. DPM Special Effects – Advanced Effect – Light Sources Subtab

Parameters are organized in the following categories:

- **SOURCE** – sources can include up to light four sources.
- **LIGHT** – on/off mode.
- **FLARE** – parameters that adjust the ratio and intensity of flare suppression applied to the effect.
- **POSITION** – parameters that adjust the position of the light on the X, Y, Z axes.
- **ROTATION** – parameters that adjust the rotation of the light on the X, Y, Z axes.
- **APPEARANCE** – parameters that manipulate the appearance of the light.
- **LIGHT COLOR** – parameters that manipulate the color of the light.
- **FLARE COLOR** – parameters that adjust the flare color of the light.

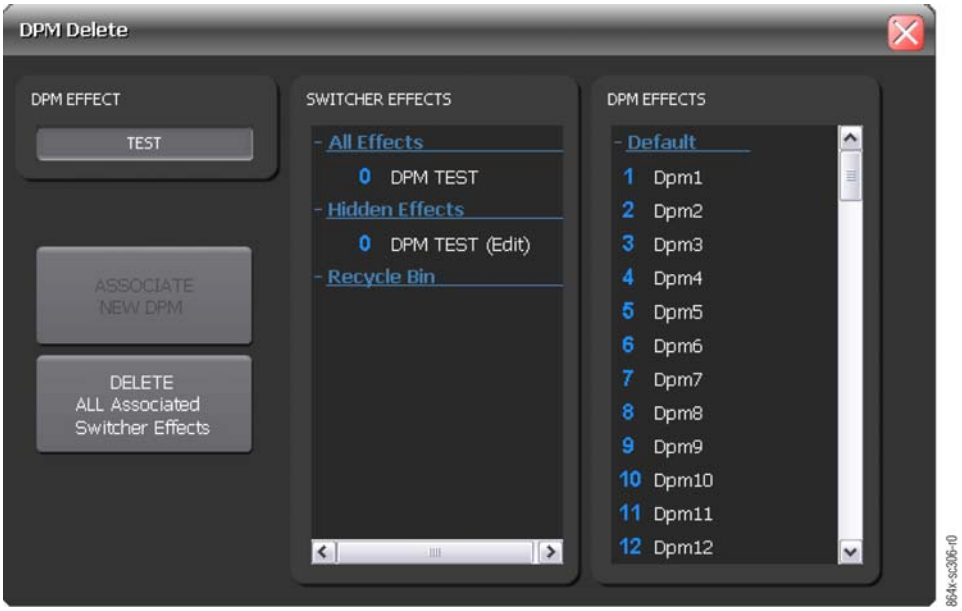
Note For a detailed explanation of the parameters on the **Light Sources** subtab, refer to the Kayak User Manual.

DPM Delete Dialog Box

Functions and parameters in the **DPM Delete** dialog box (Figure 592) include:

- **DPM EFFECT** – the associated DPM effect as seen in the **SWITCHER EFFECTS** list.
- **ASSOCIATE NEW DPM** – associates the listed switcher effects with a new DPM effect in the **DPM EFFECTS** list.
- **DELETE ALL Associated Switcher Effects** – deletes all associated switcher effects as listed in the **SWITCHER EFFECTS** list.
- **SWITCHER EFFECTS** – switcher effects that are associated with the DPM effect and are marked for deletion.
- **DPM EFFECTS** – list of DPM effects for reassignment.
- **Close** button – closes the dialog box.

Figure 592. DPM Delete Dialog Box



Keying

Keying inserts part of one picture into another to create a composite picture. Keying involves three signals:

- Background
- Key cut, used to specify where to cut a hole in the background

- Key fill, used to fill the hole in the background

  The fill can be an incoming video signal or it can be an internally generated matte fill. A separate key cut input signal is not necessarily required for keying. The Ignite system supports:

Key	Function
Luma	Uses the luminance values in a layer to determine the transparency of that layer.
Luma-Linear	The gain is approximately one, preserving the shaping of key source edges. Linear keying using anti-aliased sources produces smooth key edges
Additive	Creates a composite image from two complementary video signals that have already been shaped by multiplication with a key signal
Chroma	Renders a specific color in a layer transparent.
Preset Pattern	Uses a preset pattern

Key Setup Controls

Available keying setup controls are:

Luma	Luma-Linear	Additive	Chroma				Preset Pattern
			Key Control	Primary Suppression	Secondary Suppression	Miscellaneous	
Matte	Matte	Matte	Matte				
Mask	Mask	Mask	Mask				
Invert	Invert	Invert	Invert	Invert	Invert	Invert	
Matte Fill	Matte Fill	Matte Fill	Matte Fill	Matte Fill	Matte Fill	Matte Fill	Matte Fill
			FGD Fade	FGD Fade	FGD Fade	FGD Fade	
			Cursor				
	Auto		Auto				
	Clip Hi/Lo		Clip Hi/Lo				
Clip	Clip	Clip	Clip				
Gain	Gain	Gain	Gain				
Opacity	Opacity	Opacity	Opacity				
			Output	Output	Output	Output	
				Luma	Luma		
				Chroma	Chroma		
				Flare Suppr	Second Suppr		
				Hue	Hue		
				Selection	Selection		
				Flare S.			
					Angle		
							Wipe Effect
							Size
Size Pos/Size	Size Pos/Size	Size Pos/Size	Size Pos/Size				
Reset/Position	Reset/Position	Reset/Position	Reset/Position				
						Shadow	

Luma	Luma-Linear	Additive	Chroma				Preset Pattern
			Key Control	Primary Suppression	Secondary Suppression	Miscellaneous	
						Coring	
						Fringe	
							Border/Width
							Border/Opacity
							Soft/Softness
							Border/Symmetr

Key Control Signal Adjustment

During keying, the selected key cut signal can be converted into a key control signal. It is the key control signal that actually cuts the hole in the background video. Adjusting the key control signal (Clip and Gain) is essential in the keying process. The art of setting up a good key is to use just enough Gain to suppress any imperfections in the incoming key signals. Setting Gain too high can cause ragged key edges.

The Ignite system provides two methods for adjusting the key control signal, Clip and Gain, and Clip Hi and Clip Lo. Note that the same basic keying process is controlled by either of these methods.

Clip and Gain

The Clip and Gain operation selects a threshold of the selected key cut video that will be used to cut the hole in the background video. Clip controls the threshold, and Gain controls the softness of the key edges and any translucent areas. High portions of the key cut signal specifies what video is retained, and low portions determine what video is removed. Intermediate levels specify a soft blend of the background and fill video.

Clip Hi/Lo

Clip Hi/Lo is available on both the *Luma-Linear Key Setup Dialog Box* (page 521) and the *Additive Key Setup Dialog BoxChroma Key Setup Dialog Box* (page 524). With Clip Hi/Lo, two thresholds are established. The upper threshold specifies at what point video will be completely removed from the background, and the lower threshold determines at what point background video will be retained completely intact.

In this mode, Gain changes when either control is adjusted. The difference between the upper and lower keying thresholds is equivalent to gain:

- Clip Hi = Clip + Gain/2
- Clip Lo = Clip – Gain/2

Clip Hi/Lo control is more appropriate for low gain keys, to enable independent control of the two thresholds. For example, when adjusting a linear key the operator wants to control where the fill becomes opaque

(Clip Hi) and where the fill becomes transparent (Clip Low). In Clip Hi/Lo mode adjusting the point of opacity does not change the point of transparency, and vice versa.

Clip, Gain, and Clip Hi/Lo adjustments always interact. Changing one always results in changes to two other values. Changing Clip Hi/Lo changes both Clip and Gain, not just Gain.

Opacity

The opacity of a key is adjustable. When opacity is reduced below 100% some background video is allowed to show through areas where it is normally excluded. Key opacity is an adjustment to the overall intensity of the key, and is separate from Clip and Gain controls. Note that a common mistake is to set opacity to zero and forget the adjustment was made, which can cause confusion later when that key is selected but not visible.

Invert

Keys can be inverted, causing holes to be cut in the background where a normal key retains the background, and vice versa. Key invert makes the white areas of the key cut signal produce transparency, and the black areas produce opacity, the opposite of a standard key.

Matte Fill

Serves to select a color matte as a fill signal for the respective key in place of the Fill bus signal.

Key Size

Key size allows the key cut signal to be narrowed slightly. This can greatly enhance self keys and chroma keys that have been reshaped.

Key Positioning

Key positioning allows slight adjustment of the horizontal position of the key cut signal relative to the key fill signal. This is useful if the timing of the two signals at the switcher inputs are not matched properly. This is generally only a problem if the cut or fill follow analog paths from source to switcher or if the source has video/key timing adjustments which have been set to compensate for other delays within the facility.

Chroma Key Control Signal Adjustment

The terms foreground and background are often a source of confusion when used for chroma keys. Foreground refers to the people or objects in a chroma key scene that are in front of the colored backdrop. Background refers to the scene that will replace the backing color (same as a linear or

luminance key) in the final picture. Background does not refer to the backdrop of the foreground scene.

Coring

When noise exists in areas that are supposed to be transparent, it can appear in the background portion of the keyed composite. To help reduce this video noise in chroma keys, when luminance signal pixels are below the adjustable threshold after primary suppression, Coring replaces them with black. In other words, to eliminate the noise resulting from incomplete suppression, Coring replaces the noisy black areas outside the shaped fill with clean black before it is summed.

While coring can improve some keys, it can easily be over done. Coring thresholds much above black will affect dark grays that are actually part of the foreground subject, making the chroma key composite look unnatural.

Flare Suppression

Flare suppression can be used to compensate for backing color reflected onto foreground objects, or for lens flare (backing color reflections within the camera lens). In these cases, the foreground object will take on a slight greenish or bluish tint. Flare suppression subtracts a slight amount of the primary suppression color from the foreground.

Primary (Color) Suppression

Primary suppression is the most critical chroma key parameter, and the easiest to set. Auto Setup should take care of this, but manual adjustments can be made if desired. Primary color suppression replaces the old backing color with black before replacing it with the new background video. It usually has a very low selectivity and therefore suppresses a wide range of colors. The goal is to suppress as much of the backing color as possible without affecting foreground regions.

Note If primary suppression is set wrong, it is impossible to achieve a good chroma key with the other controls.

Secondary (Color) Suppression

The goal of secondary suppression is to restore the natural color of the foreground object. Secondary suppression is essentially a second chroma keyer that is intended to improve the color of translucent areas (e.g., glass or smoke) or fine detail near the edge of a foreground subject (e.g., hair). These areas can take on some of the backing color. Much less secondary suppression is needed than is used for primary suppression, because the foreground color is only partially corrupted by the backing color. Because there is a mixture of backing color and fore-ground color, the secondary suppression Hue and the direction (Angle) will be different from primary suppression.

Primary and secondary suppression adjustments are used to select the hue to be replaced and for adjusting the luminance and chrominance levels in the areas of the picture where suppression is applied. In general, medium to high selectivity values will be used.

Note If FGD Fade has been applied, it is unlikely enough edge detail will remain to use secondary color suppression.

FGD Fade

FGD Fade is useful when shading variations exist in the backing color. A better alternative, if time permits, is to adjust the lighting on the set to even out the backing color. This may improve the key so that FGD Fade is not needed. FGD Fade helps with backing color suppression at the expense of a harder looking key with more noticeable edge artifacts.A drawback of FGD Fade is loss of detail in the keyed edge. For example, smoke and hair in the foreground will probably be lost.

Key Setup Dialog Boxes

The **KEY Setup** dialog box is the interface used to select and configure a **KEY MODE**: **Luma**, **Luma-Linear**, **Additive**, **Chroma**, or **Preset Pattern**. Each key mode selection accesses the additional dialog boxes necessary to completely configure the key. When finished:

- **Save** button – saves the current parameters and closes the dialog box.
- **Close** button – closes the dialog box without saving changes.

Luma Key Setup Dialog Box

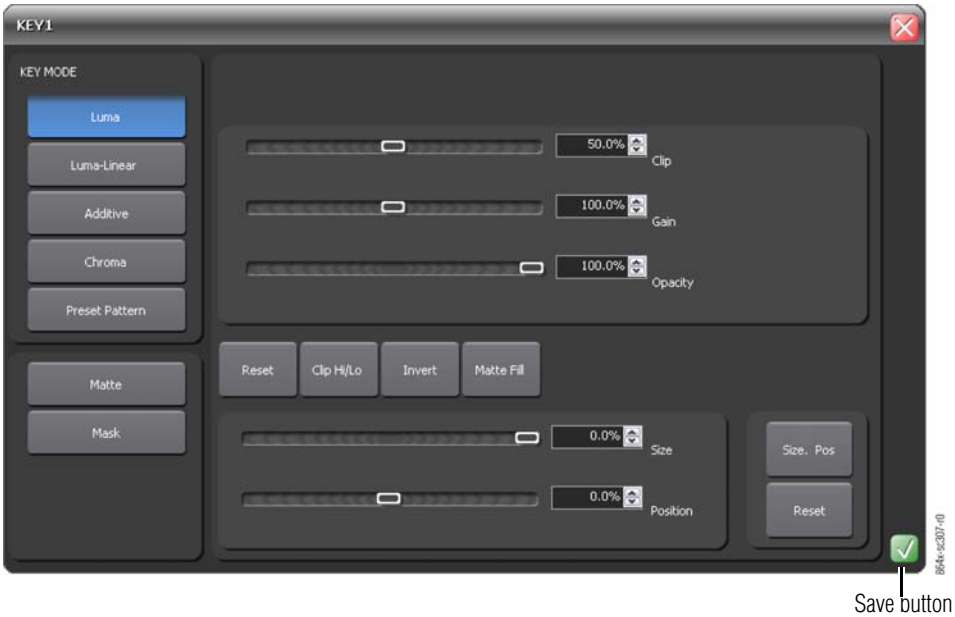
A luminance key uses the luminance of an incoming source to specify where to cut the hole in the background. A matte fill key is a type of luminance key. Luminance keying is typically done on sources that do not have an accompanying key cut signal, like a video camera. The key cut signal must be generated from the incoming video signal, using clip and gain controls. When only one source is used for both key cut and key fill, the same key source signal is multiplied by the key cut signal to create the key fill, and then the signals are summed.

The **Luma** Key setup dialog box (Figure 593) includes:

- Parameter settings for **Clip**, **Gain**, **Opacity**, **Size**, and **Position**. These parameters are set via either slider or typing in the respective text box.
- On/off toggles for **Invert** and **Matte Fill**
- **Reset** – resets parameters to the default settings:
  - Clip – 50%
  - Gain – 100%

  - Opacity – 100%
  - Size – 0%
  - Position – 0%
- **Clip Hi/Lo** – toggles between Clip/Gain mode and Clip Hi/Lo mode. The Clip/Gain sliders and label text will change to reflect this.
- Button access to both the **Mask Setup** dialog box (refer to *Mask Setup Dialog Box* on page 531) and the **Matte Setup** dialog box (refer to *Matte Setup Dialog Box* on page 532).
- **Save** button – saves the changes and closes the dialog box.
- **Close** button – closes the dialog box without saving changes.

Figure 593. Luma Key Setup Dialog Box



Luma-Linear Key Setup Dialog Box

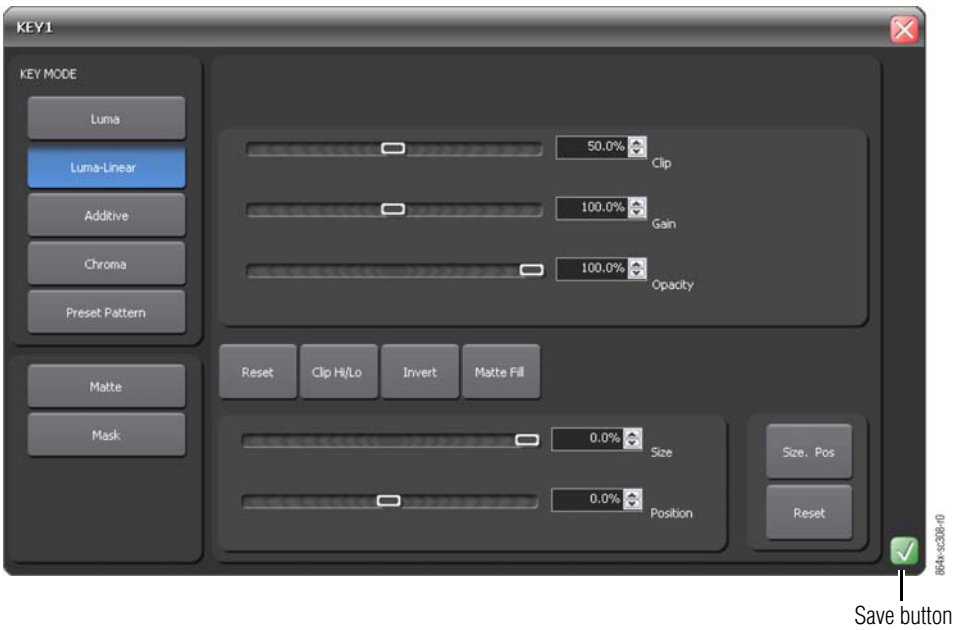
A linear key typically uses separate key cut and key fill input signals that are intended to be used for linear keying. The key cut and key fill are usually anti-aliased (soft edged) shaped signals created by a character generator or graphics system. There may also be translucent areas intended to allow some background to show through the key (watermarks). The level of the key cut signal determines where and how deeply the hole will be cut into the background. The intended soft edge and translucency of the key can then be faithfully reproduced.

The **Luma-Linear** Key setup dialog box (Figure 594) includes:

- Parameter settings for:
  - **Clip**
  - **Gain**
  - **Opacity**
  - **Size**
  - **Position**

  These parameters are set via either slider or by typing in the respective text box.
- **Invert** – on/off toggle
- **Matte Fill** – on/off toggle
- **Reset** – resets parameters to the default settings:
  - Clip – 50%
  - Gain – 100%
  - Opacity – 100%
  - Size – 0%
  - Position – 0%
- **Clip Hi/Lo** – toggles between Clip/Gain mode and Clip Hi/Lo mode. The Clip/Gain sliders and label text will change to reflect this.
- **Mask Setup** – accesses the **Mask Setup** dialog box (refer to *Mask Setup Dialog Box* on page 531)
- **Matte Setup** – accesses the **Matte Setup** dialog box (refer to *Matte Setup Dialog Box* on page 532).
- **Save** button – saves the changes and closes the dialog box.
- **Close** button – closes the dialog box without saving changes.

Figure 594. Luma-Linear Key Setup Dialog Box



Additive Key Setup Dialog Box

Chroma keys are set up by suppressing the backing color in the foreground scene, cutting a hole in the background, and then combining the two processed signals. When conditions are ideal, complete suppression of the backing color is possible and the hole cut in the background will match the suppressed foreground, permitting these two signals to be added successfully.

This is called an additive chroma key. When conditions do not permit adequate backing color suppression, the foreground with its backing color suppressed can be multiplied by the keying signal to prevent contaminating areas of the background outside the keyed area. This is called a multiplicative chroma key.

The **Additive** Key setup dialog box (Figure 595) includes:

- Parameter settings for **Clip**, **Gain**, **Opacity**, **Size**, and **Position**. These parameters are set via either slider or typing in the respective text box.
- On/off toggles for **Invert** and **Matte Fill**
- **Reset** – resets parameters to the default settings:
  - Clip – 50%
  - Gain – 100%
  - Opacity – 100%
  - Size – 0%
  - Position – 0%
- **Clip Hi/Lo** – toggles between Clip/Gain mode and Clip Hi/Lo mode. The Clip/Gain sliders and label text will change to reflect this.
- Button access to both the **Mask Setup** dialog box (refer to *Mask Setup Dialog Box* on page 531) and the **Matte Setup** dialog box (refer to *Matte Setup Dialog Box* on page 532).

Figure 595. Additive Key Setup Dialog BoxChroma Key Setup Dialog Box

A chroma key is a key that detects color (rather than luminance) in a video image and replaces it with a new background. For example, a reporter may be in a studio sitting in front of a backdrop with a blue or green backing color, and the new background can be a mountain scene. The completed chroma key consists the mountain scene replacing the backing color, creating the illusion that the reporter is sitting in front of the mountain.

Note Setting up a successful chroma key involves more adjustments than other keys. However, no amount of adjustment can overcome problems caused by an improperly set up studio chroma key scene.

The **Chroma** key mode setup dialog box (Figure 596) includes setup tabs for:

- **Key Control** – accesses the **Key Control** setup dialog box (refer to *Chroma Key Control Setup Dialog Box* on page 525)
- **Primary Suppression** – accesses the **Primary Suppression** setup dialog box (refer to *Chroma Key Primary Suppression Setup Dialog Box* on page 527)
- **Secondary Suppression** – accesses the **Secondary Suppression** setup dialog box (refer to *Chroma Key Secondary Suppression Setup Dialog Box* on page 528)
- **Miscellaneous** – accesses the **Miscellaneous** setup dialog box (refer to *Chroma Key Miscellaneous Setup Dialog Box* on page 530)

Chroma Key Control Setup Dialog Box

The **Key Control** setup dialog box includes:

- Parameter settings for –
  - **Clip**
  - **Gain**
  - **Opacity**
  - **Size**
  - **Position**

  These parameters are set via either slider or by typing in the respective text box.
- **Invert** button – on/off toggle.
- **Matte Fill** button – on/off toggle.
- **FGD FADE** – on/off toggle.
- **Cursor** – accesses the auto chroma key cursor dialog box (Figure 597). General functions of the **Cursor** dialog box include:
  - Left-click and drag to position the cursor over the color to be keyed out within the dialog box.

Note The position of the cursor in the **Cursor** dialog box is seen on the preview monitor of the current M/E.

  - Right-click and drag to move the entire dialog box to the desired location.
  - Left-click the dialog box a second time to close the dialog box.

Note The aspect ratio of dialog box changes depends on whether the current video mode is 4:3 or 16:9.

- **Auto** – selects the current color under the cursor.
- **Clip Hi/Lo** – toggles between Clip/Gain mode and Clip Hi/Lo mode. The Clip/Gain sliders and label text change to reflect the toggle state.
- **Mask Setup** – accesses the **Mask Setup** dialog box (refer to *Mask Setup Dialog Box* on page 531).
- **Matte Setup** – accesses the **Matte Setup** dialog box (refer to *Matte Setup Dialog Box* on page 532).
- **Save** button – saves the changes and closes the dialog box.
- **Close** button – closes the dialog box without saving changes.

Figure 596. Chroma Key Control Setup Dialog Box

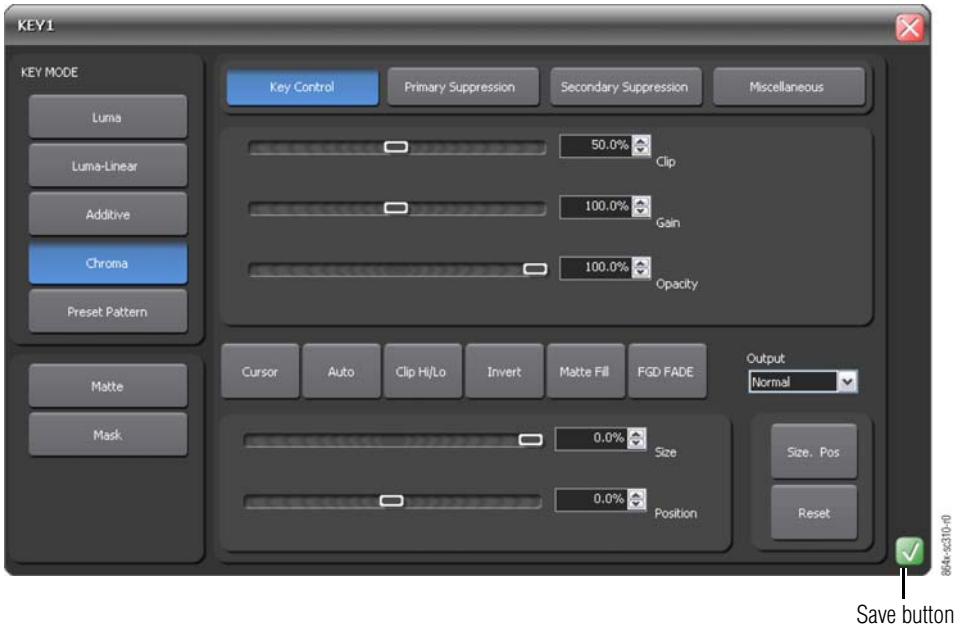
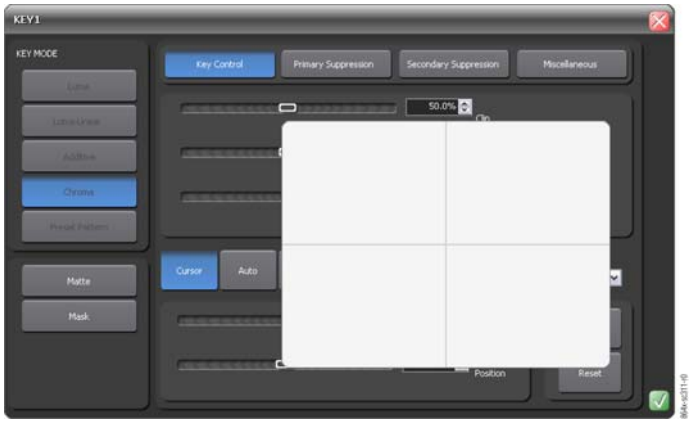


Figure 597. Cursor Dialog Box



Chroma Key Primary Suppression Setup Dialog Box

The **Primary Suppression** setup dialog box adjustments (Figure 598) should be set while looking at the foreground. Ideally the backing color appears as a small dot on the vector scope and a perfectly flat line on the waveform display; but this never occurs due to set lighting variations, shadows, etc. Therefore, pick the best suppression for the overall look of the key. Adjust Hue, Selectivity, Chroma, and Luma primary suppression to eliminate the backing color.

Figure 598. Chroma Primary Suppression Setup Dialog Box

The Primary Suppression setup dialog box includes:

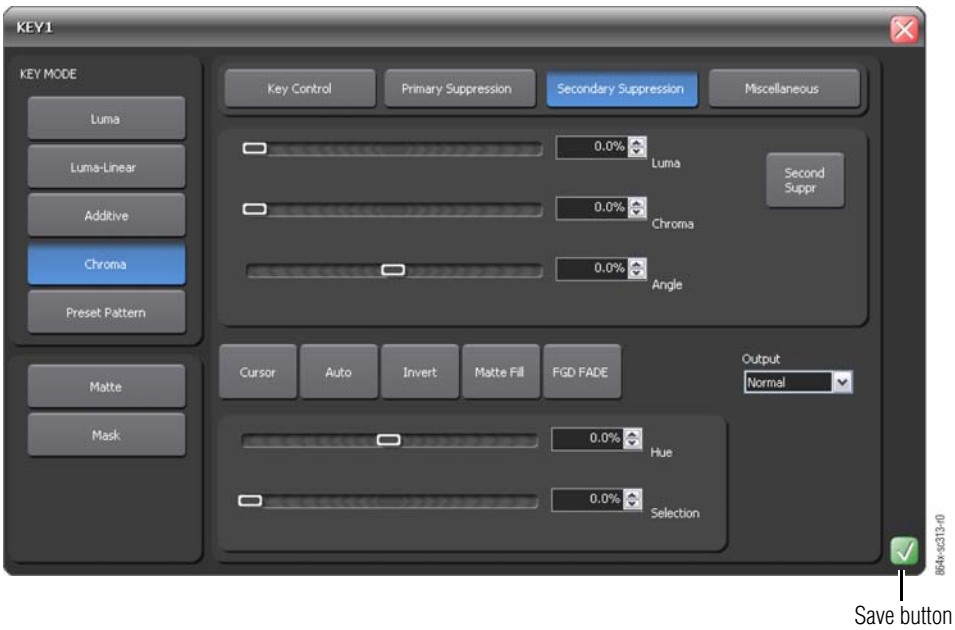
- **Luma** suppression – adjustments may be necessary if shading is visible in the backing area with FG Only selected, or if the shading adversely affects the background image. Primary Luma suppression is hardly ever desired when FGD Fade is on. To adjust, increase Luma suppression and observe the backing color move toward black. You want to make the backing color just black. Increasing this control too much will make the chroma key hard and noisy. When not enough, highlights will be added to the background. Note that incomplete luminance suppression is not necessarily bad. The highlights added to the background will match the shading on the backing wall, adding natural shadows and perhaps eliminating the need to add artificial shadows.

- **Chroma** – suppression can be set accurately with Auto Setup. To adjust, increase Chroma suppression and observe the backing color dot on the vector scope move toward the center. You want to center it exactly, so no chroma exists in the backing area. 100% chroma suppression is the correct setting for all chroma keys. At this point, you will probably see a line through the center of the vector scope. With increased selectivity, this line will become an arc.
- **Flare S.** – (suppression) adds a small amount of color to the entire foreground image to cancel the splash or flare. Typically less than 2% of the backing color is needed to neutralize the flare.
- **Hue** – can be set accurately with Auto Setup. Hue should center on the primary color of the backing area of the foreground scene. Depending on where Luma and Chroma primary suppression are set, adjusting Hue may not make any noticeable change on the scene. Chroma suppression should be preset to 100% and Luma set to 0%. Hue can then be tuned to remove the backing color.
- **Selection** – selectivity may need to be increased if there are colors in the foreground image that are being suppressed. Selectivity should be set as low as possible without including colors that should not be suppressed. For example, when keying on green, a greenish yellow shirt might be affected by the suppression. If so, adjust the selectivity high enough to reject that color. Too high a selectivity is one of the classic causes of a noisy key. If the foreground subject is stationary, consider using a force mask instead of increasing selectivity.
- **Save** button – saves the changes and closes the dialog box.
- **Close** button – closes the dialog box without saving changes.

Chroma Key Secondary Suppression Setup Dialog Box

The **Secondary Suppression** dialog box adjustments (Figure 599) are used to select the hue to be replaced and for adjusting the luminance and chrominance levels in the areas of the picture where suppression is applied.Adjust secondary suppression Hue and Selectivity so that the translucent area is affected, but opaque areas of the foreground are not. The final hue will lie somewhere between the backing color (primary suppression hue) and the uncorrupted foreground color.

Figure 599. Chroma Secondary Suppression Setup Dialog Box



Note When adjusting, it is helpful to turn the secondary Chroma Suppression to maximum, and the secondary Suppression Angle to produce an unnatural color in the affected area. This makes the changes to secondary suppression more obvious.

- **Luma** – increase secondary suppression to balance lightness of the translucent and opaque areas.
- **Chroma** – decrease secondary suppression for the best match between corrupted (translucent) and uncorrupted (opaque) areas. Interaction between secondary suppression Angle and Chroma suppression may require repeating these adjustments.
- **Angle** – adjust the secondary angle so that changing secondary Chroma suppression moves the color in the desired direction. You are trying to match the color of the translucent areas to an opaque (uncorrupted) area of the foreground subject.
- **Selection** – selectivity should be kept as wide as possible. Only narrow (increase its value) selectivity if you cannot avoid changing opaque areas of the foreground.
- **Save** button – saves the changes and closes the dialog box.
- **Close** button – closes the dialog box without saving changes.

Chroma Key Miscellaneous Setup Dialog Box

The **Miscellaneous** setup dialog box (Figure 600) includes:

- **Clip** and **Gain** – appropriate for high gain keys, to easily adjust where the relatively hard transition from background to fill occurs. In this mode, changing the Clip control moves the threshold up and down without affecting Gain, which is adjusted separately with its own Gain control.

Figure 600. Chroma Miscellaneous Setup Dialog Box

- **Opacity** – adjustment to the overall intensity of the key, separate from Clip and Gain controls.
- **Coring** – to help reduce video noise in chroma keys, when luminance signal pixels are below the adjustable threshold after primary suppression.
- **Fringe** – to restore color to the gray portions of the foreground color resulting from secondary suppression adjustments. This control is only active when secondary suppression is on.
- **Save** button – saves the changes and closes the dialog box.
- **Close** button – closes the dialog box without saving changes.

Preset Pattern Setup Dialog Box

A preset pattern uses a wipe pattern generator, rather than an incoming key cut signal to define the hole cut in the background. Key clip and gain controls are not available for a preset pattern, but controls over the location, size, border, opacity, and edge softness are available.

The **Preset Pattern** Key setup dialog box (Figure 601) includes:

- **Wipe Effect** selection
- Parameter settings for **Size** and **Opacity**. These parameters are set via either slider or typing in the respective text box.
- On/off toggle for **Matte Fill**.
- Border **Width** and **Opacity** set via either slider or typing in the respective text box.
- **Softness** and **Symmetr** (Symmetry) set via either slider or typing in the respective text box.
- **Pattern Source** selection via the drop-down list box
- Button access to the **Matte Setup** dialog box (*Matte Setup Dialog Box* on page 532).

Figure 601. Preset Pattern Key Setup Dialog Box

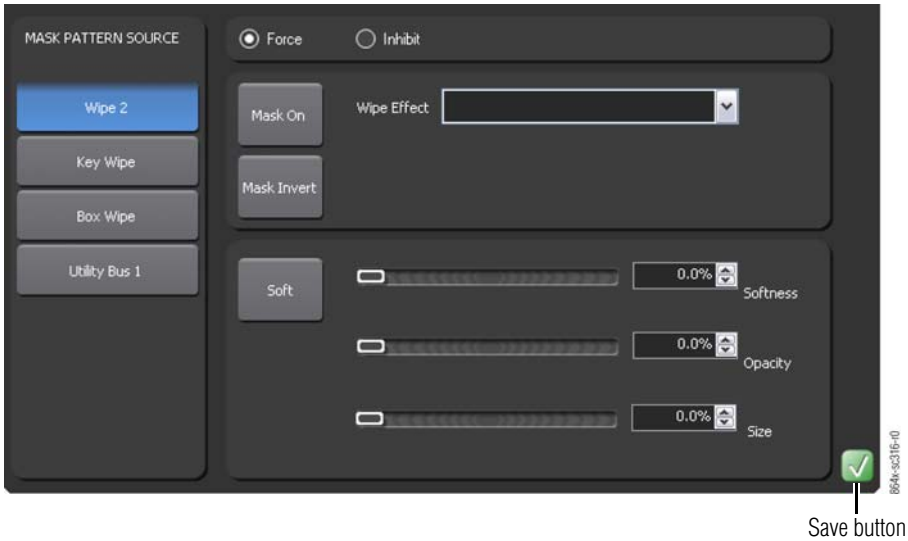
Mask Setup Dialog Box

Masking defines areas that are protected from keying or always key. The shape of the mask can originate from a wipe pattern generator or by a selected mask signal (typically a key fill signal delivered via the Utility bus). The mask signal can be a frozen page of video or a key fill. Complex mask shapes are often easier to draw by hand than to create with multiple wipe patterns.

The **Mask Setup** dialog box (Figure 602) includes:

- **MASK PATTERN SOURCE** selection for –
  - **Wipe**
  - **Key Wipe**
  - **Box Wipe**
  - **Utility Bus**
- **Wipe Effect** selection list for **Wipe2** and **Key Wipe**
- Key Mask parameter for **Size** set via either slider or typed into the respective text box.
- **Force** – on/off toggle
- **Inhibit** – on/off toggle
- **Soft** – on/off toggle
- When selected, softness parameters for **Softness** and **Opacity** set via either slider or typing in the respective text box.

Figure 602. Mask Setup Dialog Box



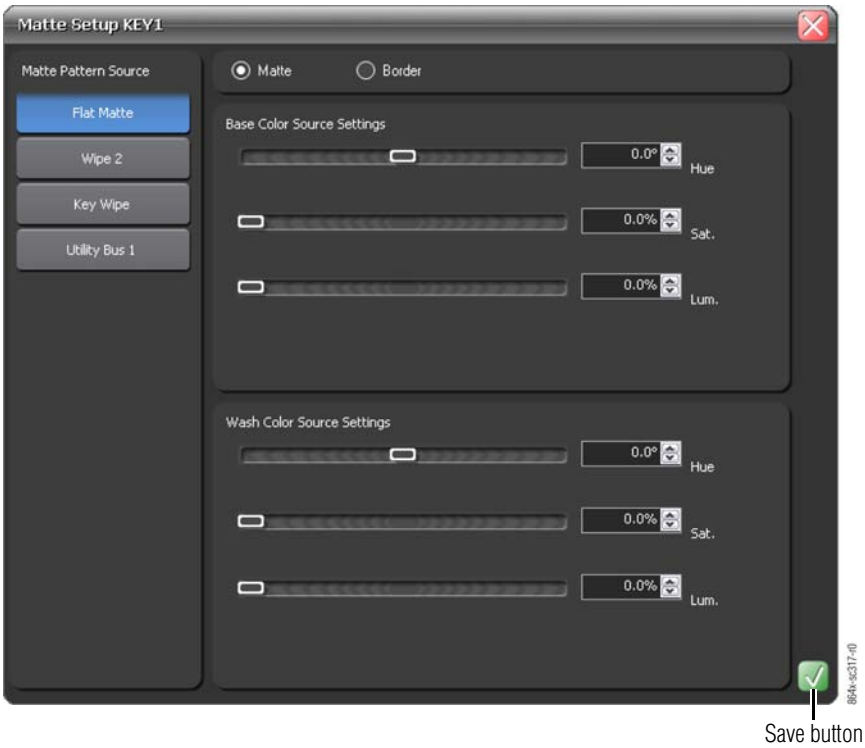
Matte Setup Dialog Box

The **Matte Setup** dialog box enables keyer matte configuration and also the selection of the wipe effect for key wipe and wipe2 pattern source. Select the key matte pattern source and adjust the parameters accordingly.

The **Matte Setup** dialog box (Figure 603) includes:

- **MATTE PATTERN SOURCE** selection for –
  - **Wipe**
  - **Key Wipe**
  - **Box Wipe**
  - **Utility Bus**
- **BASE SOURCE Wipe Effect** selection list for **Wipe2** and **Key Wipe**
- **BASE SOURCE Matte** parameters for **Hue**, **Sat.** (Saturation), and **Lum.** (Luminance) set via either slider or typed into the respective text box.
- **BASE SOURCE Border** parameters for
- **WASH SOURCE** parameters for **Hue**, **Sat.** (Saturation), and **Lum.** (Luminance) set via either slider or typed into the respective text box.

Figure 603. Matte Setup Dialog Box



Transitions

Video transitions transpose two video images from two different internal/external video devices (cameras, VTRs, CGs, Still Stores, etc.). The Ignite Digital Picture Manipulator (DPM) function provides transition control over picture position, shape, luminance, chroma key, luma, and motion. Using inputs from different video input devices (character generators, still

stores), the DPM provides more interesting transitions from one video frame/scene to another rather than just switching scenes. Examples include picture-in-picture, image-squeeze, real-time horizontal and/or vertical resizing effects, fading or dissolving the frame, wiping one frame over another, flipping the frame and simulating a camera lens opening and closing (iris effect). The Ignite DPM can be used to combine multiple DPM images to create a sequence – a continual progression of effects.

Note The Ignite Digital Picture Manipulator (DPM) does not create the effects but rather transposes the images from different input devices (character generators, still stores).

The five available transition types include:

Wipe	Where the switch from one picture to another is by moving a geometric form (circle, line, arrow) through the screen.
Fade	(fade-out) where a full picture dissolves to a black screen (fade-in) where a black screen dissolves to a full picture
Cross-Fade	Involves two pictures where one picture fades in while another picture fades out.
Mix	A transition from one picture to another where the new picture fades in as the existing picture fades out. During a standard mix transition, a superimposition of both pictures at a lower intensity is visible. The KayakDD system allows mixing from one background to another and to mix up to four separate keys on or off over a background. Background and key mixes can be done separately or simultaneously.
Cut	One image is instantly switched to another without using any effects.

Note The transition effects themselves are selected from a drop-down box at the bottom left corner of each M/E bank.

M/E Properties Dialog Box

Accessed from the **Event Timeline** via right-click on a switcher icon (*Build a TME* *on page 46*) and selecting **Properties**, the **M/E Properties** dialog box (Figure 604) includes:

- **Start Time** – sets the start time for the TME item.
- **End Time** – sets the end time for the TME item.

Note For the following, the available selections are listed automatically based on current system configuration.

Note For the following, click the text portion in the lower half to access/select a source.

- **P/P**, **M/E 1**, **M/E 2**, or **M/E 3** selection to setup respective properties for the switcher selected on the **Event Timeline**. Available M/E options are –
- **Aux** – source selection to route a source to a selected Aux bus.
- **M/E Settings**
  - **PGM**, **PVW** – selects whether the transition affects PGM or PVW. The selected button highlights yellow.
  - **Util 1**, **Util 2** – selects the respective Utility bus. Clicking on the text in the lower half will popup a dialog to select the source for that bus.
- **Keyer 1 – 4**
  - **Fill**

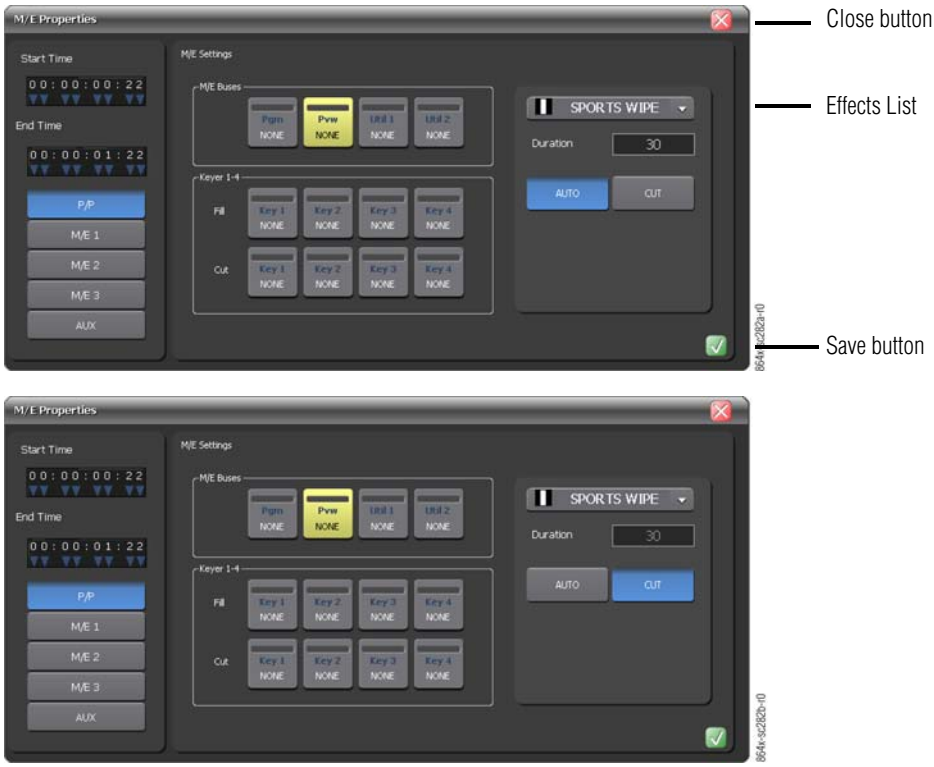
    K1, **K2**, **K3**, **K4** – selects which keyers are on for the selected TME. Clicking the DPM icon determines whether to turn it on for this keyer. Refer to Figure 604 and *Keyer* on page 484. For both keyers and DPMs –
    - Gray – off
    - Yellow – on
    - Red (keyers only) – use current
    - Green – toggle between on and off states (available only when **None** is selected in the **Effects List**)
  - **Cut**

    K1, **K2**, **K3**, **K4** – selects which keyers are on for the selected TME. Clicking the DPM icon determines whether to turn it on for this keyer. Refer to Figure 604 and *Keyer* on page 484. For both keyers and DPMs. –
    - Gray – off
    - Yellow – on
    - Red (keyers only) – use current
    - Green – toggle between on and off states (available only when **None** is selected in the **Effects List**)
- **Effects List** – lists the available effects for the respective TME. Selecting **None** from this list enables keyer toggling without affecting transition types already in prep by TMEs.

  Routes can be assigned when **None** is selected in the **Effects List**. This configuration state is used to either:
  - Enable a user to hot punch sources on the PGM bus
  - Change keyer routes without opening the **Master Routing** dialog box

- **Duration** – sets the duration when **Auto** is selected.
- **Cut** – sets the transition as a cut.
- **Auto** – sets the transition to auto.
- **Close** button – closes the dialog box without saving changes.
- **Save** button – saves the current parameters and closes the dialog box.

Figure 604. M/E Properties Dialog Box



Operation

Customize Switcher Bank

Customize Switcher Page

1. Click the **Page Tab** to select the page for customization.
2. In the lower right of the **Effects Bank**, click the **Source Setup** icon (Figure 605).

Figure 605. Sample Effects Bank

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*

3. The **Source Setup** dialog box (Figure 606) appears. In the **PAGE NAME** box, type a name for the page using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Figure 606. Source Setup Dialog Box

4. In the **# of BUTTONS** box (Figure 606), click or type the number of input buttons for the page.

5. Click a source. The source highlights and a **Source** button(Figure 607) appears in the **Source Configuration** panel above the **Undo** button.

Figure 607. Source Setup Dialog Box

6. Click the **Source** button. The **Configure Source** dialog box (Figure 608) appears.

Figure 608. Configure Source Dialog Box

7. Using the **Configure Source** dialog box selections and the **Next** and **Previous** buttons, configure the page.

Note Use the Next and Previous buttons to move along the page from source to source

8. Click **OK** when complete.

Set Button Properties

1. In the lower right of the **Effects Bank**, click the **Source Setup** icon (Figure 609).

Figure 609. Sample Effects Bank

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*

2. The **Source Setup** dialog box (Figure 610) appears.

Figure 610. Source Setup Dialog Box

3. From **EXTERNAL SOURCES**, click the source to be changed, and then click **Source**. The **Configure Source** dialog box (Figure 611) appears.

Figure 611. Source Configuration Dialog Box

Note Though Step 4 enables changing the Source Name, to easily identify which physical input the source is connected to, it is recommended that the default name (Input #) be left as is. To accept the default name, go to Step 5.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Note In Step 4 and Step 5, if only updating or changing the Source Name or the Source Title, press Enter to Save and Close.

4. In the **Source Name** box, type the button name using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.
5. In the **Source Title** text box, type an input text label.
6. From **Button Color**, click a color.
7. From **Button Decal**, click a decal.
8. If the input requires a key signal, like a CG or SS device, from **Key Sources**, click the appropriate key source.

Note When selected, links the key source with the fill source.

9. Click **Save**.
10. Once button customization is complete, click the **Close** button. The **Button Configuration** dialog box closes.

Switcher Source Setup

1. Click the **Page** tab to indicate the page to customize.
2. In the lower right of the Effects Bank, click the **Source Setup** icon (Figure 612).

Figure 612. Sample Effects Bank

Source Setup icon

3. The **Source Setup** dialog box (Figure 613) appears.

Figure 613. Source Setup Dialog Box

4. From either **INTERNAL SOURCES** or **EXTERNAL SOURCES**, right-click, hold, and drag the desired source to an available position on the Switcher, and then release.

5. Click the **Close** button.

Scalar Objects

The large frame switcher supports the use of up to four scalars per M/E that can be used for up-conversion of SD sources to HD formats. The MatchDef™ dual video input scalars enable the user to match SD sources into an HD production or HD sources into an SD production. Users can associate a video format with a scalar object and cross match different HD formats as well without sacrificing critical production elements such as keyers.

Scalars also enable the user to set up, modify, or view the following MatchDef properties of the scalar object:

- Current scalar objects and select a different object (Refer to *To select a different scalar object* on page 547)
- Aspect ratio conversion methods (Refer to *To select an aspect ratio conversion method* on page 548)

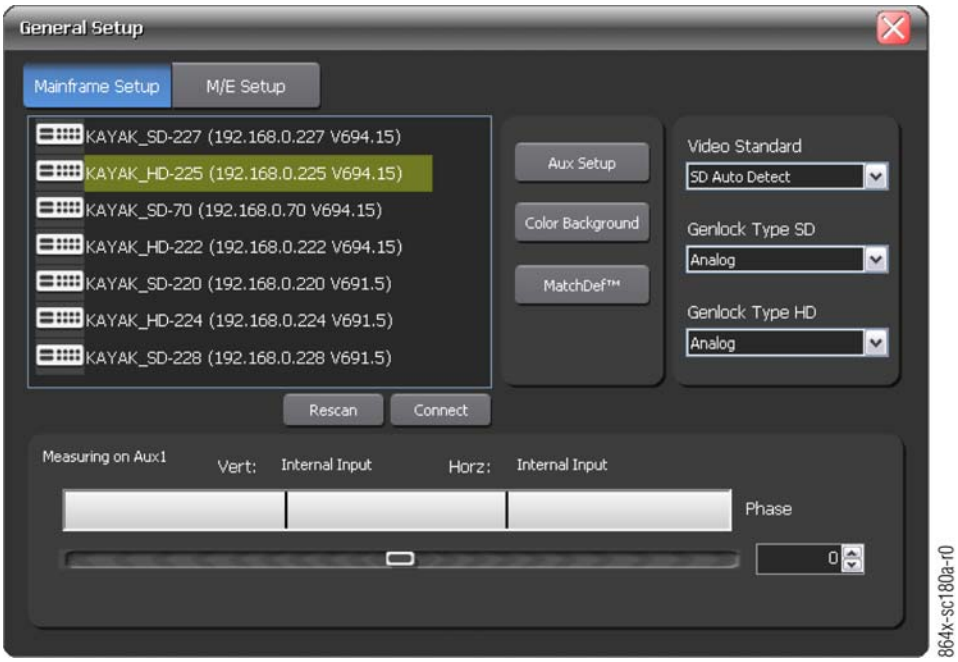
- Color background settings (Refer to *To set the color background of the scalar object* on page 549)
- Crop area settings (Refer to *To set the crop area of the scalar object* on page 550)
- All current settings reset to default setting (Refer to *To reset all parameters of the scalar object* on page 550)

Associate a Video Format with a Scalar Object

1. From the P/P switcher bank, click the **Setup** icon (Figure 614). The **General Setup** dialog box appears (Figure 615).

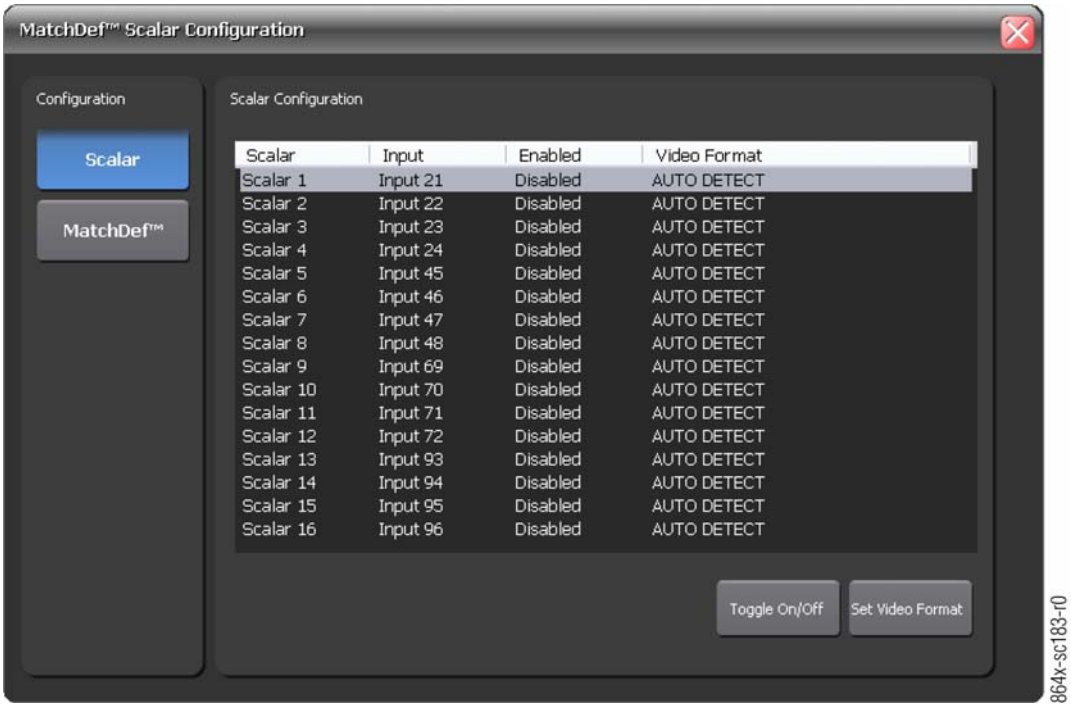
Figure 614. P/P Switcher Bank

Figure 615. General Setup Dialog Box - Mainframe Setup



2. Click the **MatchDef™** button. The **MatchDef™ Scalar Configuration** dialog box appears (Figure 616) with a list of scalar objects.

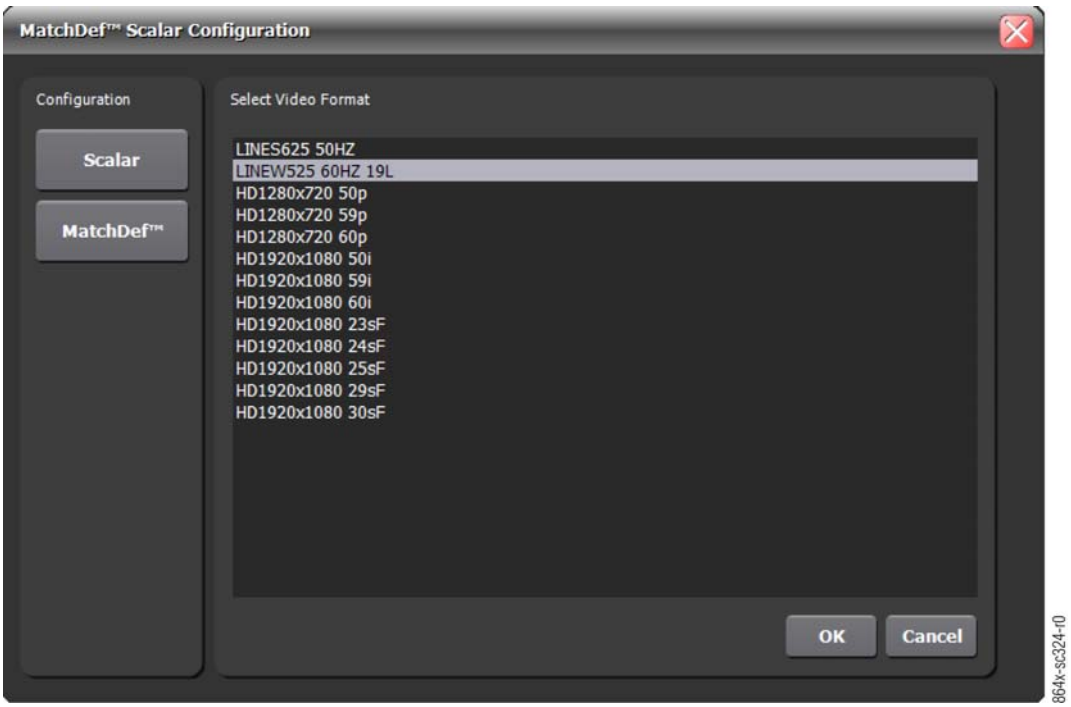
Figure 616. MatchDef™ Scalar Configuration Dialog Box



3. Select the scalar object from the list. To enable the object, click the **Toggle On/Off** button.

4. To associate a video format with the scalar object, click the **Set Video Format** button. The **SELECT VIDEO FORMAT** list of video formats appears (Figure 617).

Figure 617. MatchDef™ Scalar Configuration Dialog Box – Select Video Format



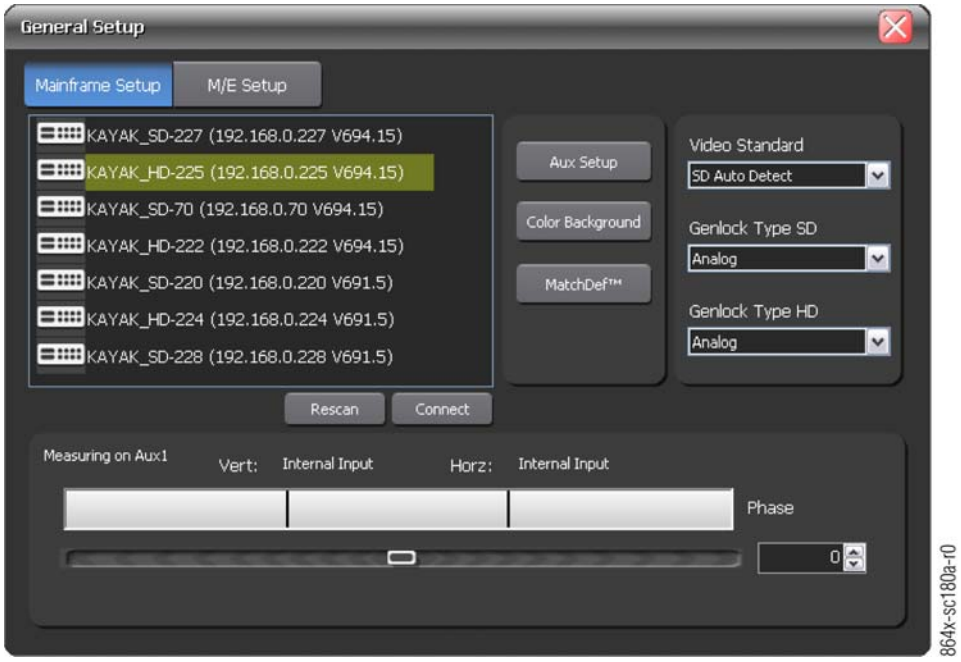
5. Select the video format from the list and either:
   - To associate the selected video format with the scalar object, click **OK**.
   - To cancel the video format selection and return to the **MatchDef™ Scalar Configuration** dialog box, click **Cancel**.

Modify MatchDef™ Properties of a Scalar Object

1. From the P/P switcher bank, click the **Setup** icon (Figure 618). The **General Setup** dialog box (Figure 619) appears.

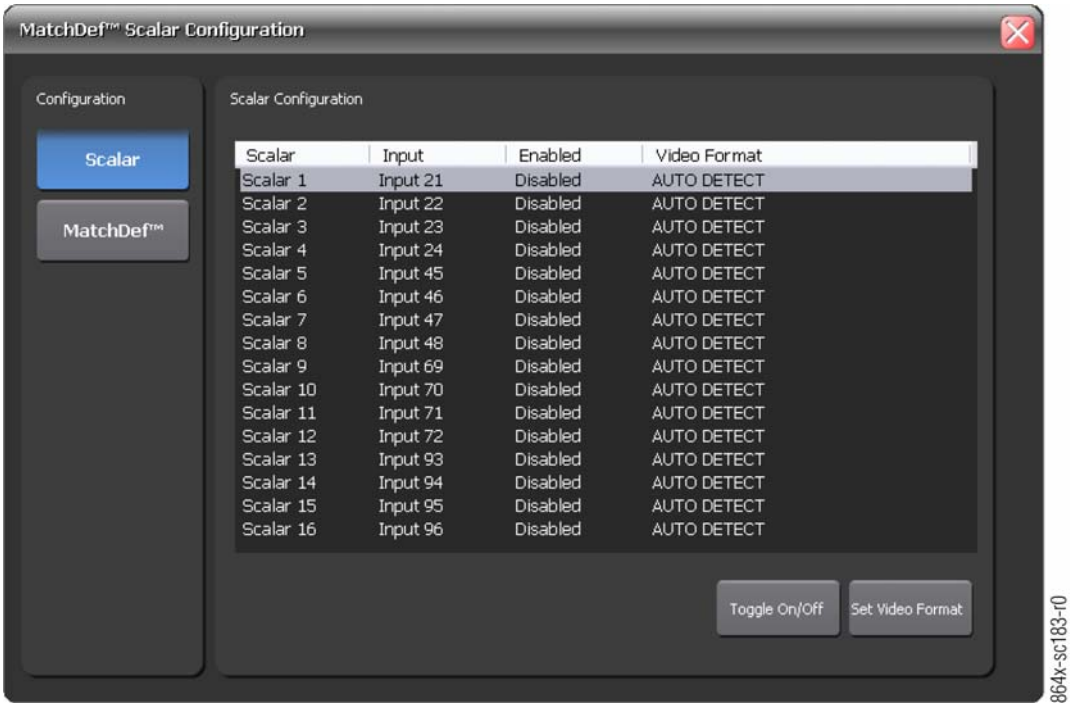
Figure 618. P/P Switcher Bank

Figure 619. General Setup Dialog Box – Mainframe Setup



2. Click the **MatchDef™** button. The **MatchDef™ Scalar Configuration** dialog box (Figure 620) appears with a list of scalar objects.

Figure 620. MatchDef™ Scalar Configuration Dialog Box



3. In the **SCALER CONFIGURATION** list, click a scalar object and then click the **MatchDef™** button. The MatchDef properties for the scalar object appear (Figure 621).

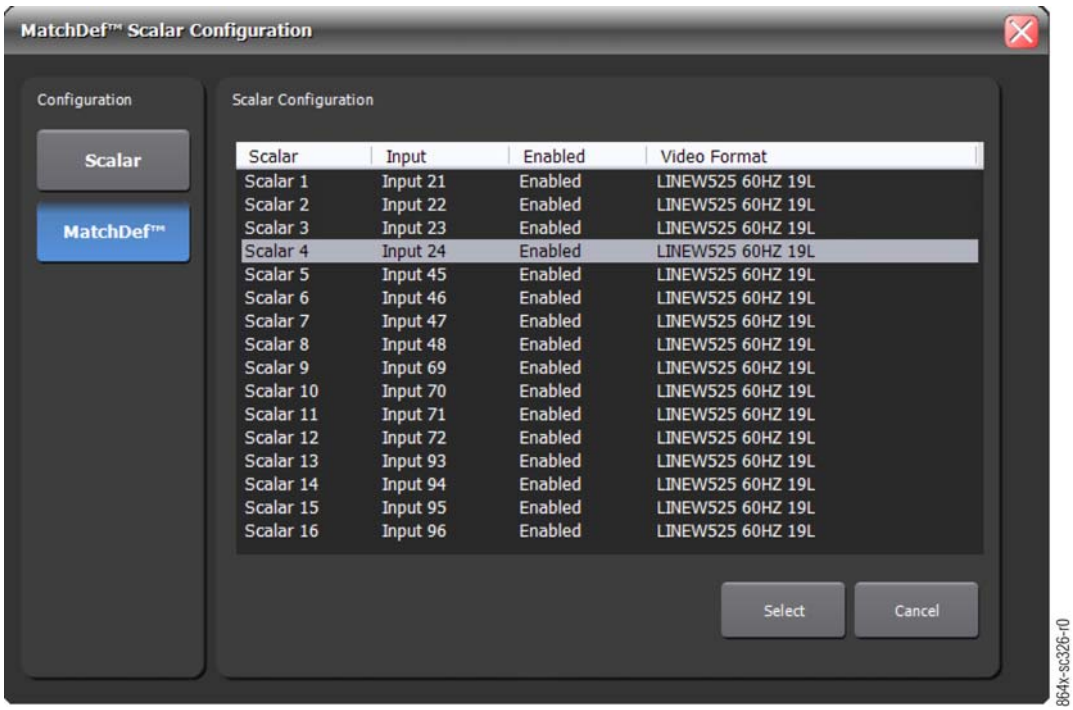
Figure 621. MatchDef™ Scalar Configuration Dialog Box – MatchDef™ Configuration

4. To set up, modify, or view current scalar object MatchDef settings, perform any of the following optional procedures:

To select a different scalar object

a. Click the **Scalar 1** (2, 3, 4 etc.) button (Figure 621). The list of scalar objects (Figure 622) appears:

Figure 622. MatchDef™ Scalar Configuration Dialog Box – List of Scalar Objects



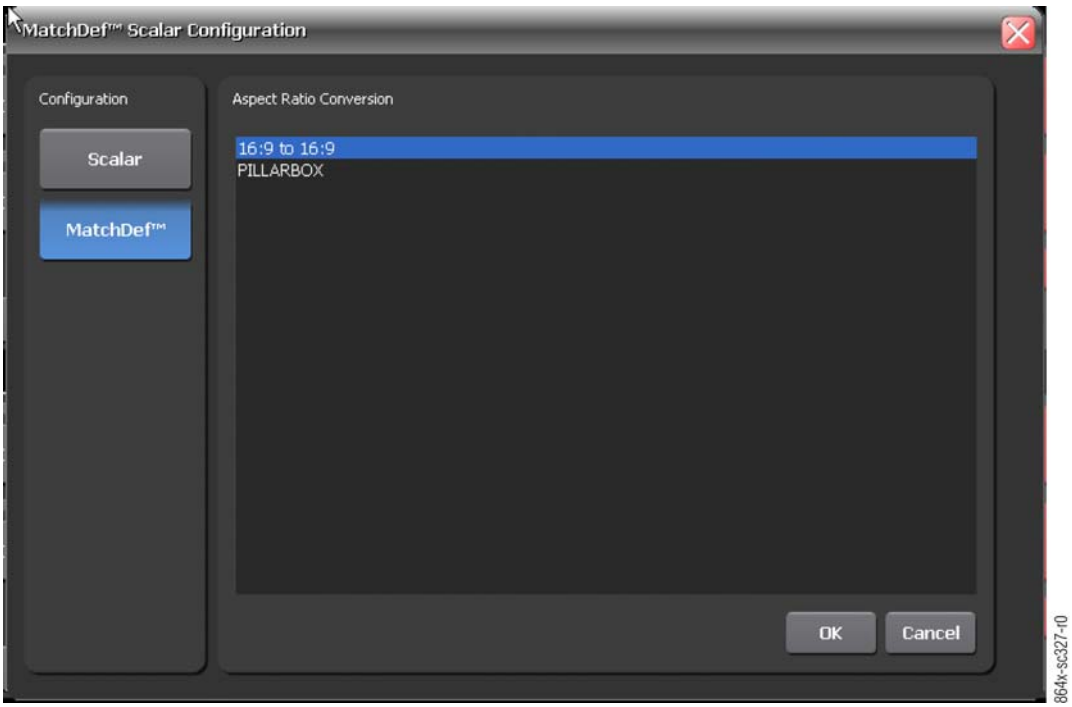
b. Select a different scalar object from the list and either:

- Click **Select** to associate the selected scalar object as the current object, .
- Click **Cancel** to cancel the scalar object selection and return to the **MatchDef™ Scalar Configuration** dialog box.

To select an aspect ratio conversion method

a. Click the **Asp. Ratio Conv.** button (Figure 621). The **ASPECT RATION CONVERSION** list (Figure 623) appears.

Figure 623. MatchDef™ Scalar Configuration Dialog Box – List of Aspect Ratio Conversions



b. Select one of the following aspect ratio conversions from the list:

- **FULLSCREEN 16 9 TO FULLSCREEN 16 9**
- **THROUGH**
- **FULLSCREEN 4 3 TO PILLARBOX 16 9**
- **FULLSCREEN OR LETTERBOX 4 3 TO 16 9**
- **FULLSCREEN 16 9 TO LETTERBOX 4 3**

c. Either:

- Click **OK** to associate the selected aspect ratio conversion mode to the current scalar object.
- Click **Cancel** to cancel the aspect ratio conversion mode selection and return to the **MatchDef™ Scalar Configuration** dialog box.

To set the color background of the scalar object

a. Click the **Color Background Set** button (Figure 621). The color background parameters appear in the right side of the dialog box:

- **Hue**
- **Chroma**
- **Lum**

b. To manipulate the color background parameters, either:

- Click and drag the control knobs left or right.
- Use the **Up/Down** arrow keys.
- Type a value directly in the text box.

  After parameter selection is made, parameters appear in the **COLOR BACKGROUND** area of the dialog box.

To set the crop area of the scalar object

a. Click the **Crop Set** button (Figure 621). The crop parameters appear in the right side of the dialog box:

- **Right**
- **Left**
- **Top**
- **Bottom**

b. Click **Crop On** to turn on the crop settings.

c. To manipulate the crop parameters, either:

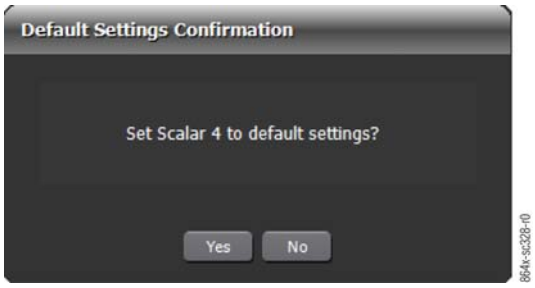
- Click and drag the control knobs left or right.
- Use the **Up/Down** arrow keys.
- Type a value in the text box.

After parameter selection is made, parameters appear in the **CROP** area of the dialog box.

To reset all parameters of the scalar object

a. Click the **Default Settings** button (Figure 621). The **Default Settings Confirmation** dialog box (Figure 624) appears.

Figure 624. Default Settings Confirmation Dialog Box



b. Either:

- Click **Yes** to reset all parameters to the default setting of zero.
- Click **No** to save the current parameters.

Keyer

Note Each effects bank can have up to four layers of keys active at once; K1 through K4. Each has a corresponding button on the switcher for the program bus as well as the preview bus.

Keyer Setup Menu

Note Effects created by prepping an existing effect and adding keyers to create a new effect, will be executed once and deleted immediately after use. Only permanent effects will be selectable from the main GUI drop down list indefinitely.

1. Click the **Browse Effects** button (Figure 625). The **Effects List** dialog box (Figure 626) appears.

Figure 625. Browse Effects Button

Figure 626. Effects ListDialog Box – Effects Controls

2. In the **Effect List** dialog box click **Add**.

3. From **Transition**, click the **Key** number button (**Key 1**, **Key 2**, **Key 3**, or **Key 4**) for the **Add**. The selected button highlights (Figure 627).

   The **Key** button has three different states. Each click advances one state:

   - Gray – keyer will turn off
   - Yellow – keyer will turn on
   - Red – no change to the keyer On Air state

Figure 627. Effects List Dialog Box – Transition Key Selection

4. From **Transition**, click the selected keyer **Access** button. A **Keyer Setup** dialog box (Figure 628 and Figure 629) appears where:

Key	Function
Luma	Uses the luminance values in a layer to determine the transparency of that layer.
Luma-Linear	The gain is approximately one, preserving the shaping of key source edges. Linear keying using anti-aliased sources produces smooth key edges
Additive	Creates a composite image from two complementary video signals that have already been shaped by multiplication with a key signal
Chroma	Renders a specific color in a layer transparent.
Preset Pattern	Uses a preset pattern

Note Chroma setup has four separate tabs for chroma settings (Figure 629). To adjust individual settings, click the respective tab.

Figure 628. Keyer Setup – Luma, Luma-Linear, Additive, and Preset Pattern Dialog Boxes

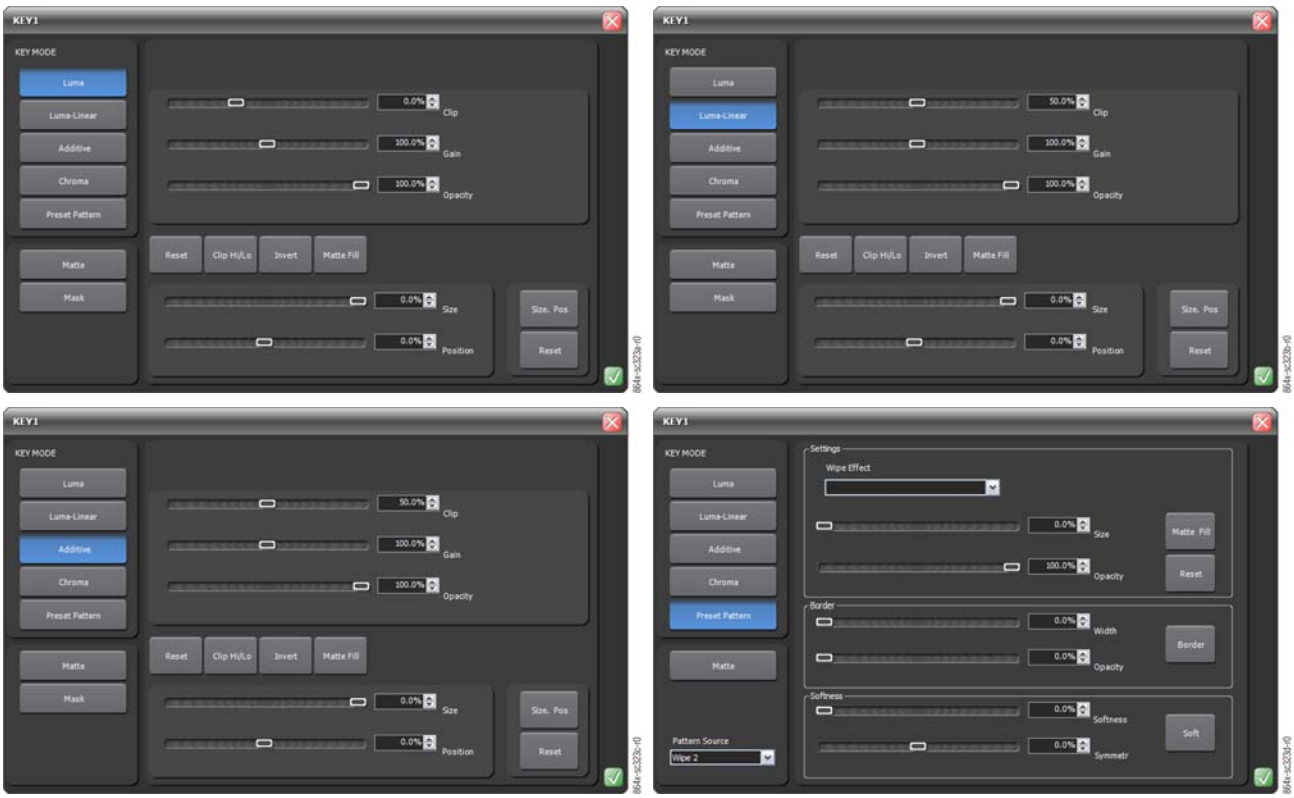
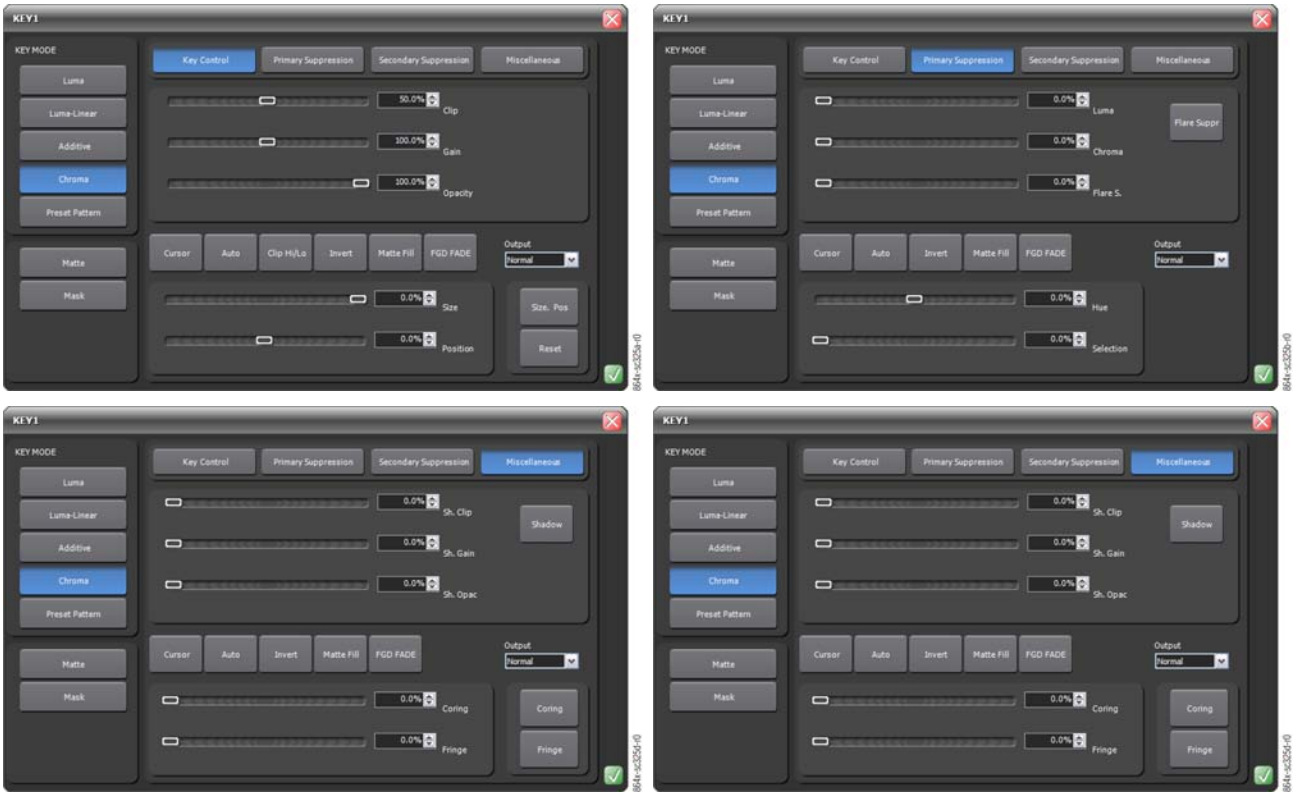


Figure 629. Keyer Setup – Chroma Dialog Boxes



5. Use the faders inside the dialog box(es) (Figure 628 and Figure 629) to adjust levels and create any of the four types of keys as well as a preset pattern.

Note Mask and matte can also be adjusted in this dialog box.

6. Click **Save**.

Take Keyer To Air

- Click the top half (Figure 630) gray area of a keyer. The gray area changes from gray to either yellow or green.

Note Click the top half of a keyer to toggle the keyer, click the lower half of a keyer to change source routing.

Highlight colors correspond to their respective bus:

- Green for keys on the Program bus
- Yellow for keys on the Preview bus

Figure 630. Keyers On Air

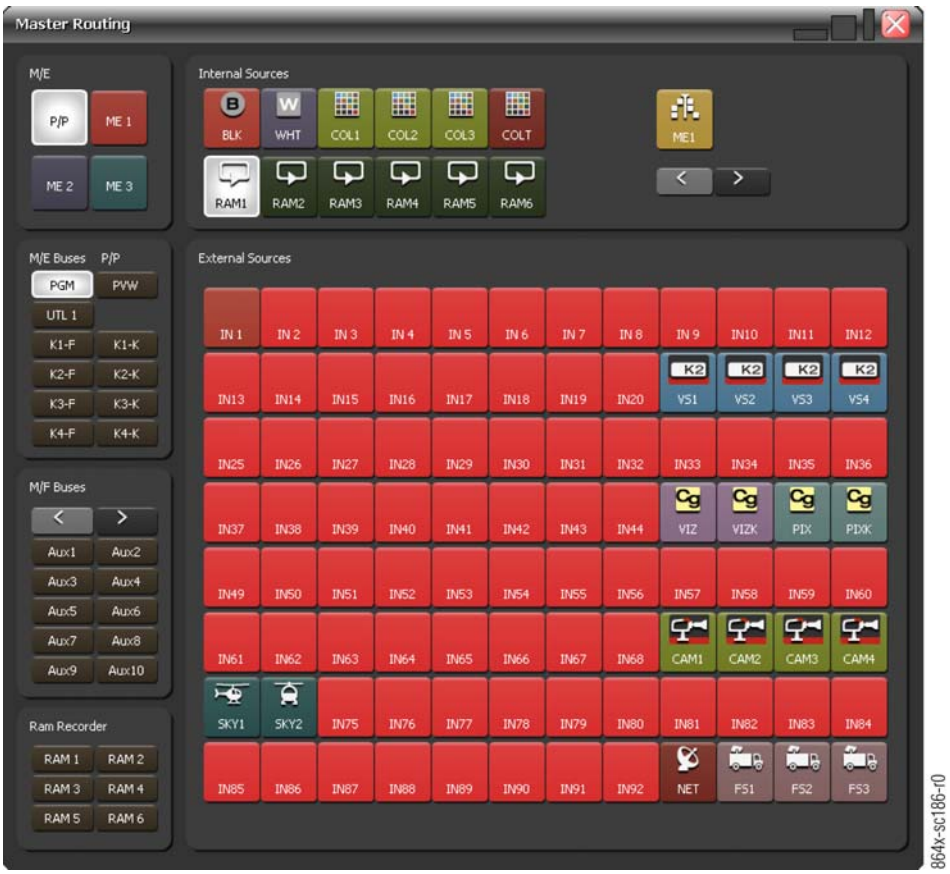
Change Keyer Video Association

Note Click the top half of a keyer to toggle the keyer, click the lower half of a keyer to change source routing.

1. Click the lower half (Figure 631 black/title area) of a keyer. The **Master Routing** dialog box (Figure 632) appears.

Figure 631. Keyers On Air

Figure 632. Master Routing Dialog Box



2. From **M/E BUSES**, check that the desired key fill source (e.g., **K1–F)** button is highlighted. If not, click the desired key fill source (e.g., **K1–F**) button.

3. Click a source from either **INTERNAL SOURCES** or **EXTERNAL SOURCES** to associate with that keyer.

Note If a key fill source is already associated with the selected keyer, unless changed it remains associated.

4. Click **Close**.

Effects

Notes On Building Effects

If building an effect with just the background transition, make sure that all keyers are set to the same transition duration as the background. This applies to all switcher wipes, dissolves, and cuts. Even though the keyers

are not being turned on during the effect, they still transition at whatever frame rate is currently defined in the effect dialog.

- There are three keyer states: On, Off, and No Change. These states are identified by color:
  - Gray is off
  - Green is on
  - Red is no change.
- On the Switcher module, manual effects operation requires that after every transition an effect needs to be re-prepped for use.
  - Click an effect in the **Effects List**.
  - After taking the selected effect to air, the Switcher module defaults to **None**. It must be selected again to continue flip-flopping the video bus.
  - After building an effect, click **Effect List** to verify the effect has been added.
- Right-clicking an effect in the **Effects List** and selecting Set As Default from the shortcut menu makes that effect the default.

Create a New Effect

Note Effects created by prepping an existing effect and adding keyers to create a new effect, will be executed once and deleted immediately after use. Only permanent effects will be selectable from the main GUI drop down list indefinitely.

1. Click the **Browse Effects** button (Figure 633). The **Effects List** dialog box (Figure 634) appears.

Figure 633. Browse Effects Button

Figure 634. Effects List Dialog Box – Effects Controls

2. In the **Effects List** dialog box click **Add**.
3. Click the button(s) next to the properties for the type of effect desired.

   For example, a cut is a simple preview to program transition.

   - Click **PVW**. The **PVW** button highlights. Check that **PVW Auto/Cut** button is toggled to **Cut** (Figure 635). If not, click **Auto** to toggle the button to **Cut**.

Note Cut and Auto are alternate actions of the same button. If the button shows Cut, clicking the button changes it to Auto and vice versa.

Note Selecting PGM indicates that there is no background transition. Selecting PVW indicates that there is a preview to program background transition when the effect is executed.

Note When doing a background transition, the duration set for PVW determines the duration for everything including the four keyer durations. If PVW is selected, ensure that all keyer durations are set the same as PVW. If PGM is selected, keyers can be brought on and off with independent durations.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Figure 635. Effects List - PVW Cut

4. In the **Effect Name** box, enter a name using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

5. Click **Save**.

Build a Wipe

1. Click the **Browse Effects** button (Figure 636). The **Effects List** dialog box (Figure 637) appears.

Figure 636. Browse Effects Button

Browse Effects

Figure 637. Effects List Dialog Box – Effects Controls

2. In the **Effects List** dialog box click **Add**.

3. In the **Effect Name** box, enter a wipe name using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Note Selecting PGM indicates that there is no background transition. Selecting PVW indicates that there is a preview to program background transition when the effect is executed.

4. Click **PVW**. The **PVW** button highlights.

Note When doing a background transition, the duration set for PVW determines the duration for everything including the four keyer durations. If PVW is selected, ensure that all keyer durations are set the same as PVW. If PGM is selected, keyers can be brought on and off with independent durations.

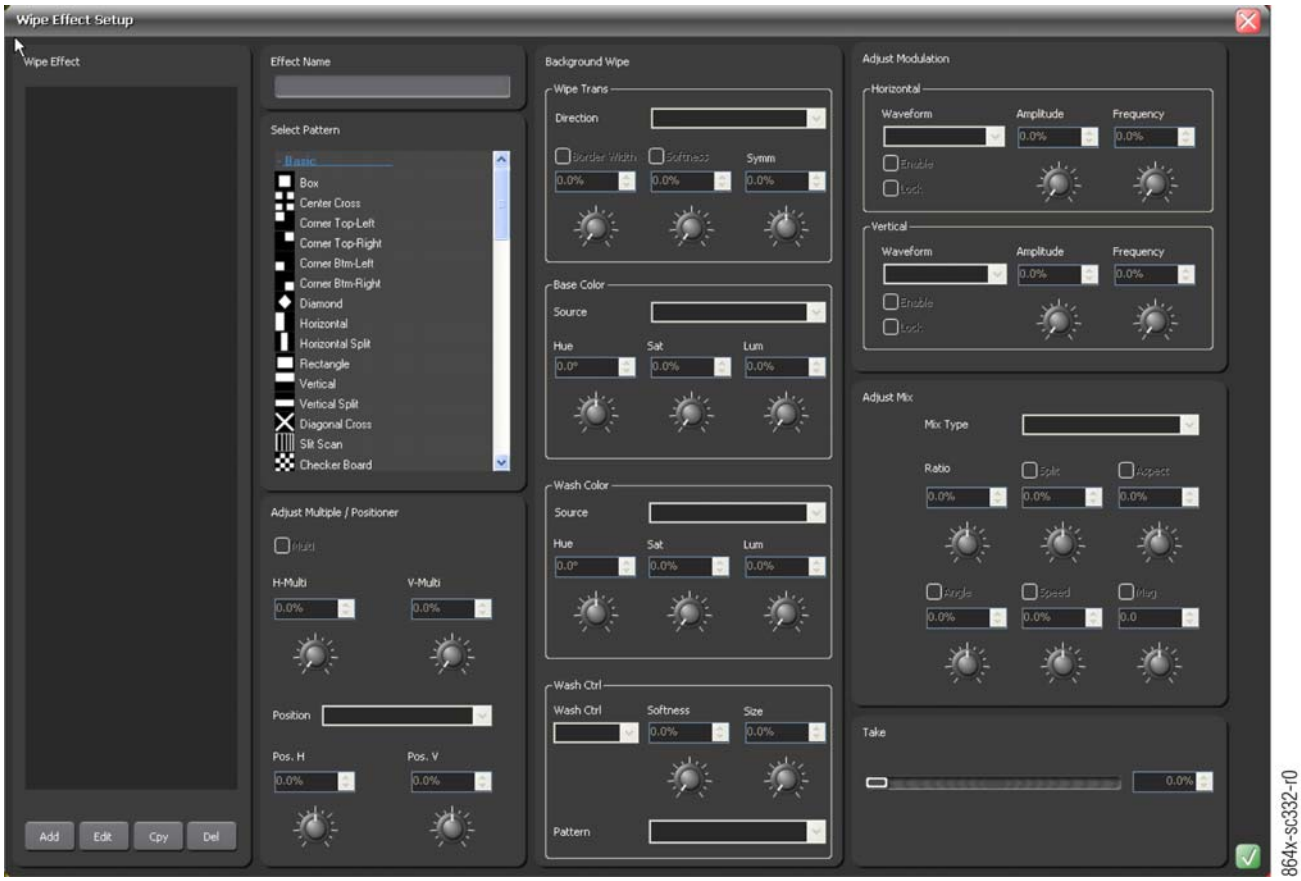
Note Mix and Wipe are alternate actions of the same button. If the button shows Mix, clicking the button changes it to Wipe and vice versa.

5. Check that **PVW Mix/Wipe** button is toggled to **Wipe** (Figure 638). If not, click **Mix** to toggle the button to **Wipe**.

Figure 638. Effects List Dialog Box – Wipe Effects List

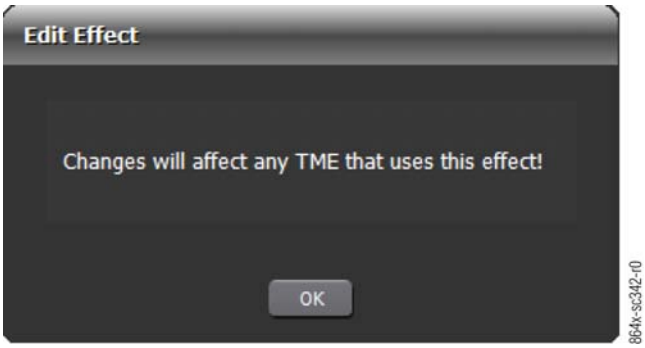
6. In **Transition**, enter the desired transition rate.
7. Click the **Wipe Effects Access** button (Figure 638). The **Wipe Setup** dialog box (Figure 639) appears.

Figure 639. Wipe Effect Setup Dialog Box



8. Click **Add**.
9. From the **WIPE EFFECT** list, click the newly added **Unnamed Effect**.
10. Click **Edit**. An **Edit Effect TME Caution** dialog box appears (Figure 640). Click **OK**.

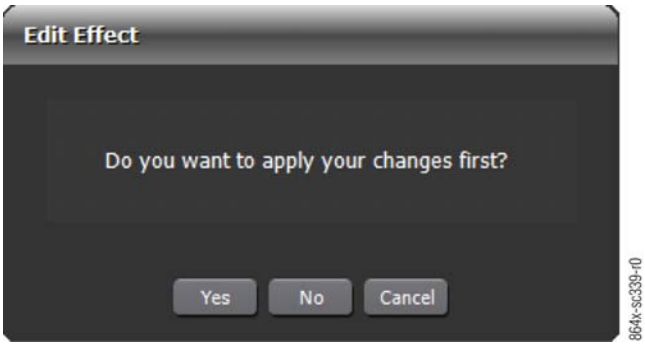
Figure 640. Edit Effect - TME Caution



Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

11. In the **Effect Name** box, enter a wipe name using established standards and consistent techniques and practices. Refer to *Standardization on page 577*.
12. In the **SELECT PATTERN** list, click the desired pattern.
13. Using the buttons and controls available in the **Wipe Effect Setup** dialog box (Figure 639), adjust the new wipe properties as desired.
14. Click **Close** to save effect and close the **Wipe Effect Setup** dialog box. A **Confirm** dialog box appears.

Figure 641. Wipe Effect Addition



15. Click **Yes**. The **Wipe Effect Setup** dialog box (Figure 642) appears.

Figure 642. Effects Definition Dialog Box

16. Either:
    a. To save and close the **Wipe Effect Setup** dialog box, click **Close**.
    b. To save but not close the **Wipe Effect Setup** dialog box, click **Save**.

Build a Cut With a Key

1. Click the **Browse Effects** button (Figure 643). The **Effects List** dialog box (Figure 644) appears.

Figure 643. Browse Effects Button

Browse Effects

Figure 644. Effects List Dialog Box – Effects Controls

2. In the **Effects List** dialog box click **Add**. A new **Unnamed Effect** appears in the **Effects List**.

3. From the **Effects List**, click the newly added **Unnamed Effect**.

4. Click **Edit**. The **Edit** button highlights.

5. In the **Effect Name** box, enter a wipe name using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Note Selecting PGM indicates that there is no background transition. Selecting PVW indicates that there is a preview to program background transition when the effect is executed.

6. Click **PVW**. The **PVW** button highlights.

Note When doing a background transition, the duration set for PVW determines the duration for everything including the four keyer durations. If PVW is selected, ensure that all keyer durations are set the same as PVW. If PGM is selected, keyers can be brought on and off with independent durations.

Note Auto and Cut are alternate actions of the same button. If the button shows Auto, clicking the button changes it to Cut and vice versa.

7. Check that **PVW Auto/Cut** button is toggled to **Cut** (Figure 645). If not, click **Auto** to toggle the button to **Cut**.

Figure 645. Effects Definition Dialog Box - PVW Cut

8. Click **Key 1**. The button for that Key highlights yellow (Figure 646).

Figure 646. Effects List Dialog Box – Key 1 Cut

Note It is recommended that all Key buttons be set to Cut.

Note Auto and Cut are alternate actions of the same button. If the button shows Auto, clicking the button changes it to Cut and vice versa.

9. Change **Key 2** through **Key 4** from **Auto** to **Cut** (Figure 646):

a. Check that **Key 2 Auto/Cut** button is toggled to **Cut** (Figure 646). If not, click **Auto** to toggle the button to **Cut**.

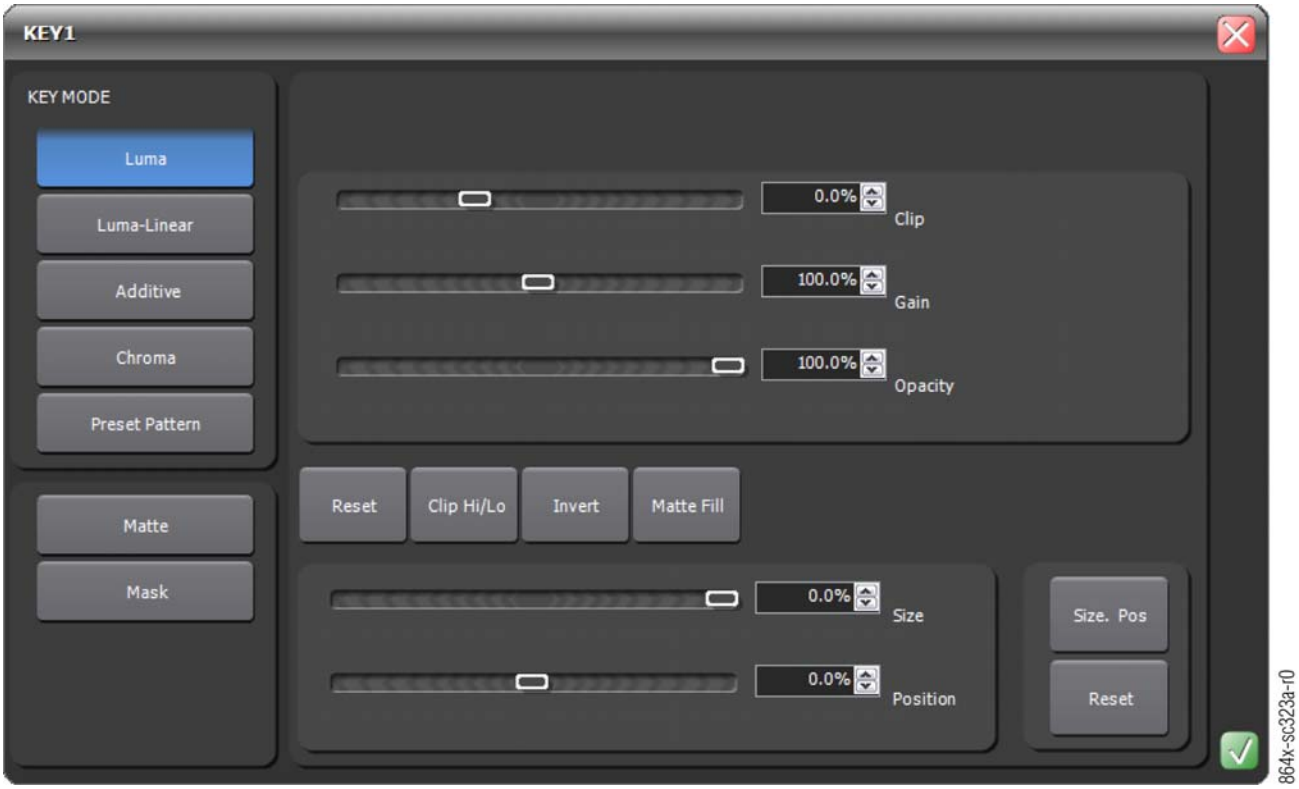
b. Check that **Key 3 Auto/Cut** button is toggled to **Cut** (Figure 646). If not, click **Auto** to toggle the button to **Cut**.

c. Check that **Key 4 Auto/Cut** button is toggled to **Cut** (Figure 646). If not, click **Auto** to toggle the button to **Cut**.

10. Click the **Key 1 Access** button (Figure 646). The **Keyer Setup** dialog box (Figure 647) appears where:

Key	Function
Luma	Uses the luminance values in a layer to determine the transparency of that layer.
Luma-Linear	The gain is approximately one, preserving the shaping of key source edges. Linear keying using anti-aliased sources produces smooth key edges
Additive	Creates a composite image from two complementary video signals that have already been shaped by multiplication with a key signal
Chroma	Renders a specific color in a layer transparent.
Preset Pattern	Uses a preset pattern

Figure 647. Keyer Setup Dialog Box



11. Click **Luma-Linear**. Using the faders, adjust properties as necessary.

12. Click **Save**. The **Keyer Setup** dialog box closes.

Set Keyer as a DPM

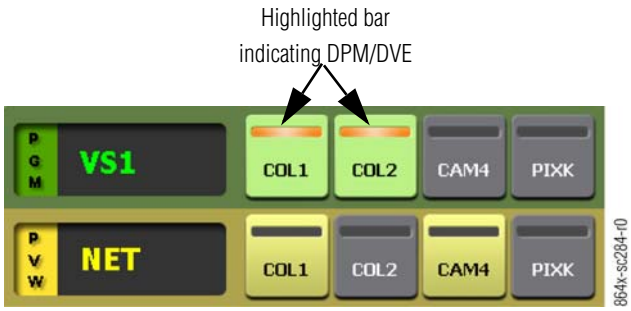
Keyers can also act as DPM/DVE channels where clicking the gray area of a keyer turns on a channel of the DPM/DVE, which then fills with the

source routed to that keyer. It is designated as on air by a color highlight and a small yellow dot in the upper right hand corner (Figure 648).

Highlight colors correspond to their respective bus:

- Green with a yellow dot for keys on the DPM/DVE Program bus
- Yellow with a yellow dot for keys on the DPM/DVE Preview bus

Figure 648. Keyer as a DPM Channel



1. Click the **Browse Effects** button (Figure 649). The **Effects List** dialog box (Figure 650) appears.

Figure 649. Browse Effects Button

Figure 650. Effects List Dialog Box – Effects Controls

2. In the **Effects List** dialog box click **Add**.

3. Click **Edit**. The **Edit** button highlights.

4. In the **Effect Name** box, enter a wipe name using established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

Note Selecting PGM indicates that there is no background transition. Selecting PVW indicates that there is a preview to program background transition when the effect is executed.

5. Click **PVW**. The **PVW** button highlights.

Note When doing a background transition, the duration set for PVW determines the duration for everything including the four keyer durations. If PVW is selected, ensure that all keyer durations are set the same as PVW. If PGM is selected, keyers can be brought on and off with independent durations.

Note Auto and Cut are alternate actions of the same button. If the button shows Auto, clicking the button changes it to Cut and vice versa.

6. Check that **PVW Auto/Cut** button is toggled to **Cut** (Figure 651). If not, click **Auto** to toggle the button to **Cut**.

Figure 651. Effects Definition Dialog Box - PVW Cut

7. Click **Key 1**. The button for that Key highlights yellow (Figure 652).

Figure 652. .Effects List Dialog Box – Key 1 Cut

Note It is recommended that all Key buttons be set to Cut.

Auto and Cut are alternate actions of the same button. If the button shows Auto, clicking the button changes it to Cut and vice versa.

8. Click the **Key 1 DPM** button. The **Key 1 DPM** button highlights yellow (Figure 653).

Figure 653. Keyer – DPM Button

Note The Effects List dialog box DPM EFFECTS list is initially populated with place-holder names such as Dpm1, Dpm2, etc. Typically these are not actual DPM effects and should not be selected. DPMs in the list that follow the standard naming conventions have been created via Kayak switcher/Sidepanel program and represent a pre-determined DPM effect.

9. From the DPM list, click a DPM effect.
10. Click **Save**, and then click **Close**.

Associate An Effect With a Wipe or DPM Effect

To associate an effect with either a Wipe Effect or a DPM Effect:

1. Click the **Browse Effects** button (Figure 654). The **Effects List** dialog box (Figure 655) appears.

Figure 654. Browse Effects Button

Figure 655. Effects List Dialog Box – Effects Controls

2. In the **Effects List**, click the desired effect for association.
3. In either the **WIPE EFFECTS** list or the **DPM EFFECTS** list, click the desired wipe or DPM effect to associate with the effect.
4. Click **Save**.

Effects Management

Note The **Effects List** is divided into three groups: **All Effects**, **Hidden Effects**, and **Recycle Bin** (refer to *Effects Management* on page 487).

Access the Effects List

- Click the **Browse Effects** button (Figure 656). The **Effects List** dialog box (Figure 657) appears.

Figure 656. Browse Effects Button

Figure 657. Effects List Dialog Box – Effects Controls

Note The **Effects List** is divided into three groups: **All Effects**, **Hidden Effects**, and **Recycle Bin** (refer to *Effects Management* on page 487).

Sort an Effects List

1. Right-click anywhere in an **Effects List** group (**All Effects**, **Hidden Effects**, or **Recycle Bin**). A shortcut menu (Figure 658) appears.

Figure 658. Sort Group Shortcut Menu

2. On the shortcut menu, point to **Sort**, and then click either **Ascending** or **Descending** (Figure 659). That **Effects List** sub-list sorts accordingly.

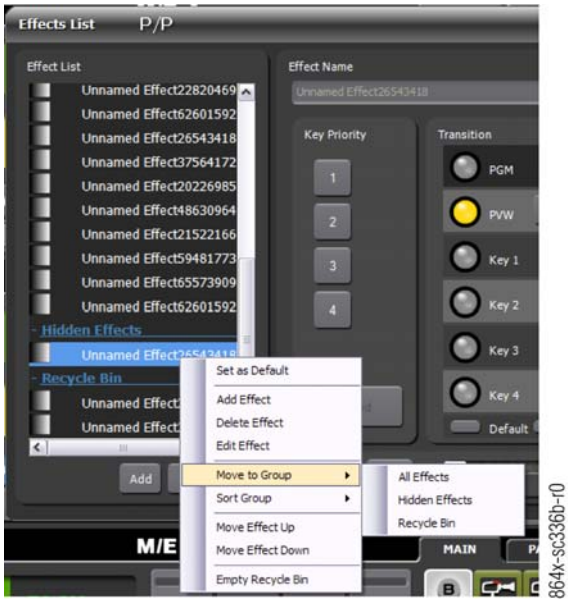
Figure 659. Sort Group - Shortcut Menu - Order

Hide an Effect

Note The **Effects List** is divided into three groups: **All Effects**, **Hidden Effects**, and **Recycle Bin** (refer to *Effects Management* on page 487).

- To hide effects from the Switcher Module drop-down list, either (refer to Figure 660):
  - Drag and drop the effect into the **Hidden Effects** group of the **Effects List**.
  - Right-click and using the shortcut menu, move the selected effect to the **Hidden Effects** group of the **Effects List**.

Figure 660. Effects List Management



Recycle Bin

Note The **Effects List** is divided into three groups: **All Effects**, **Hidden Effects**, and **Recycle Bin**.

All deleted effects are automatically sent to the **Recycle Bin** where a user can **Clear Recycle Bin** (delete all), just like a typical Windows operation. Additionally, using shortcut menus, a user manages listed effects between the **Recycle Bin** and either the **All Effects** or **Hidden Effects** groups of the **Effects List** (Figure 660). Refer to *Effects Management* on page 487.

DPM Effects Management

DPM effects are managed from the **DPM Effect Setup** dialog box and the **DPM Delete** dialog box. Two modes of operation include: outside edit mode and edit mode.

Operations performed outside edit mode include:

- Deleting a DPM Effect (page 573)
- Copying/Pasting a DPM (page 576)
- Locking/Unlocking a DPM (page 577)

Note Make sure that edit mode is not enabled for these procedures.

Operations performed in edit mode include:

- Creating a DPM Effect (page 577)
- Modifying/Deleting Keyframes (page 580)
- Using the Keyframe Playout Controls (page 583)
- Positioning Keyframes on the DPM Timeline (page 583)

Note Make sure that edit mode is enabled for these procedures.

Delete a DPM Effect

1. Click the **Browse Effects** button (Figure 661). The **Effects List** dialog box (Figure 662) appears.

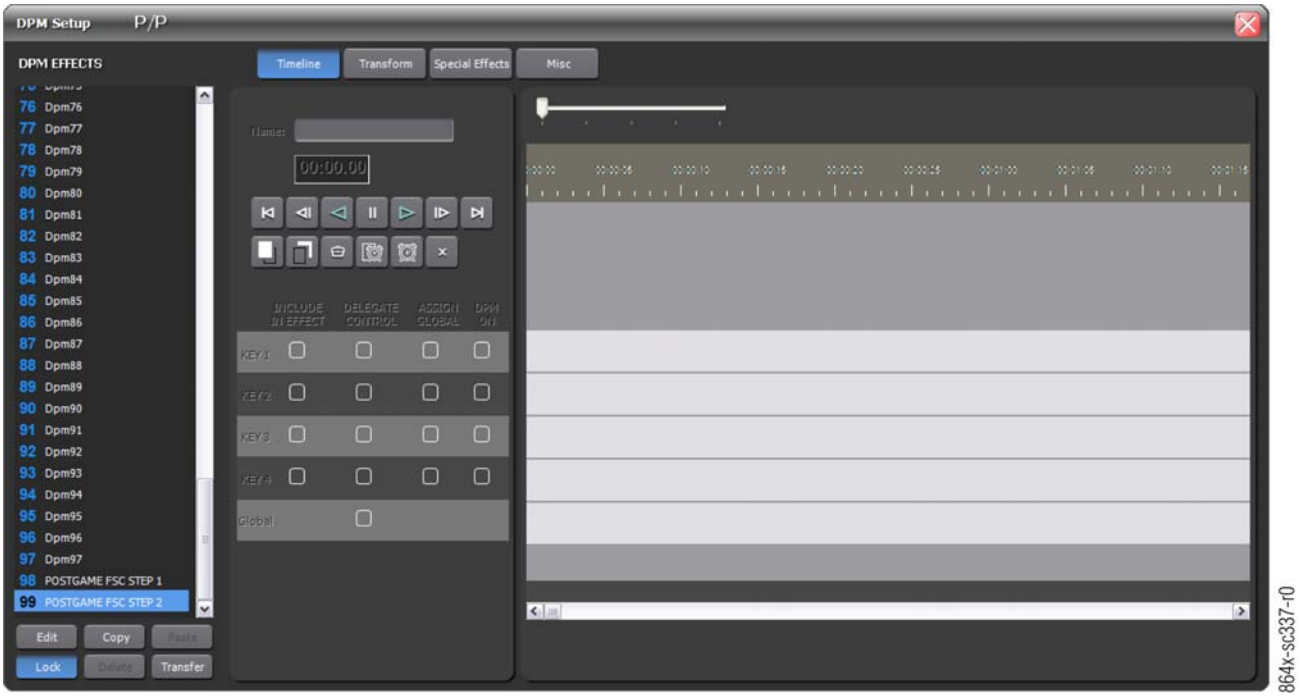
Figure 661. Browse Effects Button

Figure 662. Effects List Dialog Box – Effects Control

2. From the **Effects List**, click an effect and then click **Edit**. The **Access DPM Effects** button (Figure 662) highlights.

3. Click the **Access DPM Effects** button. The **DPM Effect Setup** dialog box (Figure 663) appears.

Figure 663. DPM Effect Setup Dialog Box

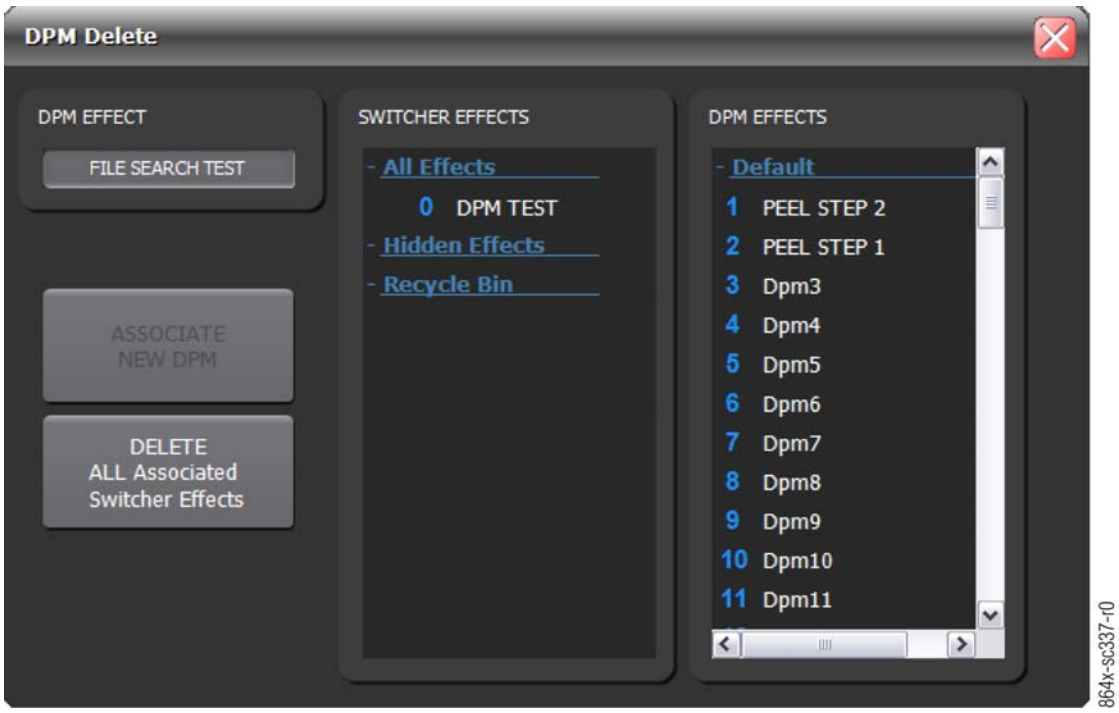


4. From the **DPM EFFECTS** list, click a DPM effect.
5. Click **Delete**. The **Delete Effect** dialog box appears.
6. Either:
   - Click **Yes** to remove the DPM effect from the **DPM EFFECTS** list.
   - Click **No** to cancel the function.

Note Ignite deletes all keyframes in the DPM effect. Keyframes appear in the **DPM EFFECTS** list as DPMXX where XX is the register number.

If any effects are associated with the DPM effect currently selected for deletion, the **DPM Delete** dialog box (Figure 664) appears.

Figure 664. DPM Delete Dialog Box



To associate a new DPM Effect with the current DPM Effect:

a. From the **DPM EFFECTS** list, click a DPM effect.

b. Click **ASSOCIATE NEW DPM**. The **DPM Delete** dialog box closes.

To delete all associated switcher effects from a DPM Effect:

The associated switcher effects for the DPM effect are listed under the **SWITCHER EFFECTS** list.

a. Click **DELETE ALL Associated Switcher Effect**. The **Delete Effect** dialog box appears.

a. Either:

- Click **Yes** to delete all associated switcher effects and remove the DPM effect from the **DPM Effects** list.
- Click **No** to cancel the function and return to the **DPM Effect Setup** dialog box.

Copy/Paste a DPM Effect

1. From the **DPM Effect Setup** dialog box, click a DPM effect from the **DPM EFFECTS** list.
2. Click **Copy**.
3. In the **DPM EFFECTS** list, click a different DPM register.
4. Click **Paste**. The DPM effect is copied into the selected register.

Lock/Unlock a DPM

1. From the **DPM Effect Setup** dialog box, click a DPM effect in the **DPM EFFECTS** list.
2. Either:

- Click **Lock** to lock the selected DPM effect, .

Note The keyframe playout controls are the only active controls that can be applied to a locked DPM effect.

- Click **Lock** to unlock the DPM effect, .

Create a DPM Effect

Creating a DPM effect uses the parameters on the three tabs in the **DPM Effect Setup** dialog box: **Timeline**, **Transform**, and **Special Effects**.

Note Only one DPM effect can be edited at a time.

1. Click the **Browse Effects** button (Figure 665). The **Effects List** dialog box (Figure 666) appears.

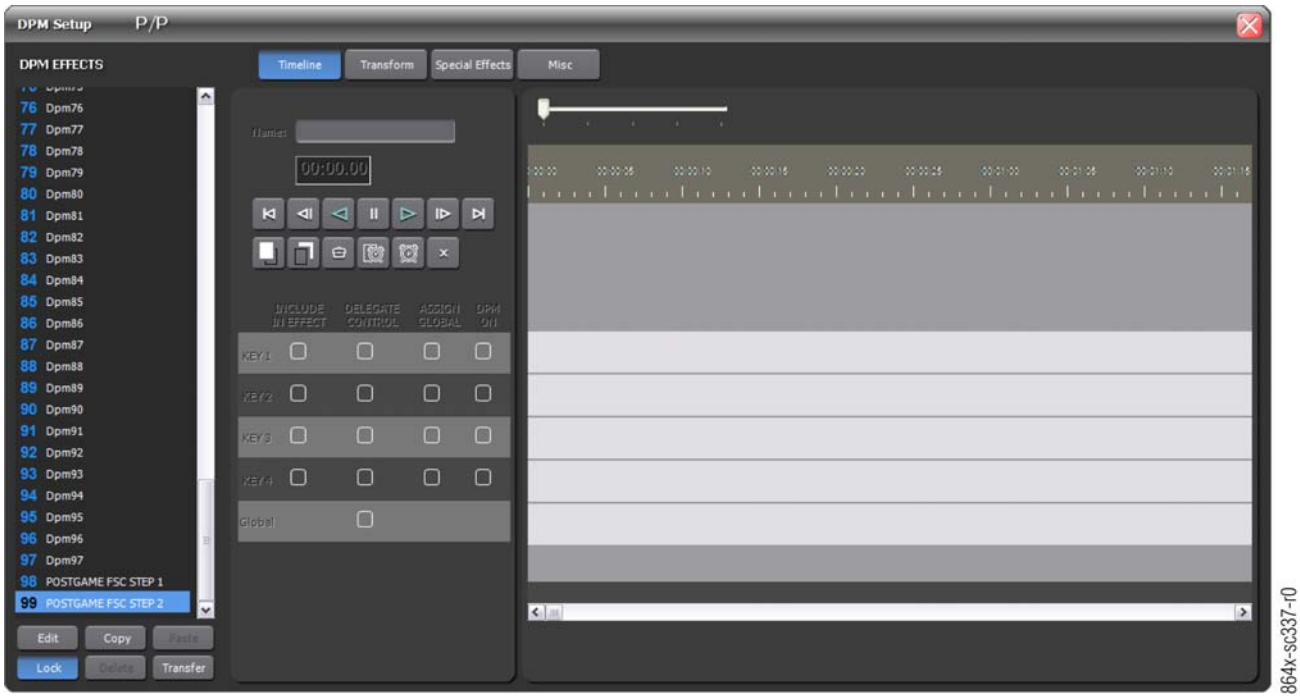
Figure 665. Browse Effects Button

Browse Effects

Figure 666. Effects List Dialog Box – Effects Control

2. From the **Effects List**, click an effect and then click **Edit**.
3. Click the **Access** button at the bottom right of the **DPM EFFECTS** function. The **DPM Effect Setup** dialog box (Figure 667) appears:

Figure 667. DPM Effect Setup Dialog Box



4. From the **DPM EFFECTS** list, click the DPM effect.
5. Click **Edit** to enable edit mode.

6. Click the appropriate keyframe options for each key. Each key corresponds to a DPM channel.

   Keyframe options include:

   - **INCLUDE IN EFFECT**
   - **DELEGATE CONTROL**
   - **ASSIGN GLOBAL**
   - **DPM ON**
   - **GLOBAL**

Note It is recommended that you set all channel keyframes to the **Global** keyframe delegation option. Keyframe channels that are not set to **Global** may recall off screen.

7. From the **Transform** tab and the **Special Effects** tab, manipulate the parameters on the subtabs as necessary. Either:

   a. Click and drag the **DPM Control Knob** left or right.

      - Drag right to reach an ascending value
      - Drag left to reach a descending value

   b. Use the **Up/Down** arrow keys.

   c. Type a value directly into the field.

Note For a detailed explanation of all parameters on the **Transform** tab and the **Special Effects** tab, refer to the Kayak User Manual.

8. Click the **Timeline** tab.

9. To insert a keyframe into the DPM timeline, click either icon on the **Keyframe Editing** toolbar:

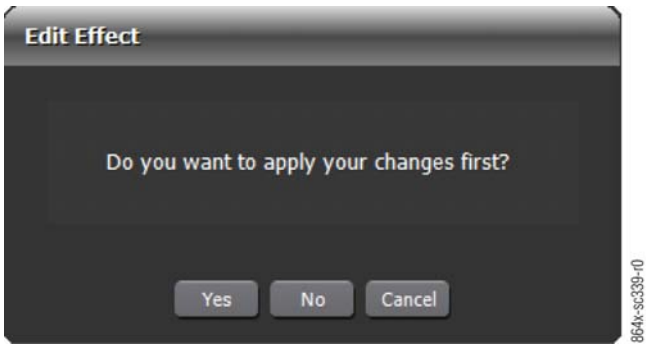
   - **Insert Keyframe Before** icon inserts the keyframe before the current cursor position
   - **Insert Keyframe After** icon inserts the keyframe after the current cursor position

10. If necessary, in the **Name** field, type a new name for the DPM effect, using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Note Effects with no keyframes are considered empty effects and are named “DPMXX” where “XX” is the register number.

11. Click **Edit** to save the entire DPM effect. The **Edit Effect** confirmation dialog box appears.

Figure 668. Edit Effect Confirmation Dialog Box



12. Either:

- Click **Yes** to save the parameters to the DPM effect and save the effect to all M/Es.

Note The user is returned to outside edit mode.

- Click **No** to cancel this function without saving changes to the DPM effect.

Note The user is returned to outside edit mode.

- Click **Cancel** to return to edit mode.

Modify/Delete Keyframes

After the DPM effect is created and saved, using the keyframe editing control buttons, users can:

- Modify current keyframe parameters (Refer to *Modify Current Keyframe Parameters* on page 581)
- Modify DPM timeline and keyframe duration (Refer to *Modify DPM Timeline Duration* on page 581 and *Modify DPM Keyframe Duration* on page 582)
- Delete keyframes (Refer to *Delete a Keyframe* on page 582)
- The keyframe buttons are located in the **Keyframe Editing** toolbar (Figure 669) on the **DPM Effect Setup** dialog box. Refer to *DPM Effect Setup Dialog Box* on page 491 for control functions.

Figure 669. Keyframe Editing Control Buttons

Modify Current Keyframe Parameters

a. Select the keyframe on the DPM timeline.

b. Click **Edit**.

c. From the **Timeline** tab and **Special Effects** tab, manipulate the parameters as necessary.

d. From the **Keyframe Editing** toolbar, click the **Modify Keyframe** button.

The keyframe is updated with the modified DPM effect parameters.

Modify DPM Timeline Duration

a. Select the keyframe on the DPM timeline.

b. Click **Edit**.

c. From the **Keyframe Editing** toolbar, click the **Modify Timeline Duration** button. The **Modify Timeline Duration** dialog box appears.

Figure 670. Modify Timeline Duration Dialog Box

d. To enter timeline duration in the **Time Code** box in **hh:mm:ss** format, either:

- Use the key pad numbers and click **OK**.
- Type the duration directly into the **Time Code** box and click **OK**.

Modify DPM Keyframe Duration

a. Select the keyframe on the DPM timeline.

b. Click **Edit**.

c. From the **Keyframe Editing** toolbar, click the **Modify Keyframe Duration** button. The **DPM Keyframe Duration** dialog box appears.

Figure 671. Modify Keyframe Duration Dialog Box

d. To enter keyframe duration in the **Time Code** box in **hh:mm:ss** format, either:

- Use the key pad numbers and click **OK**.
- Type the duration directly into the **Time Code** text box and click **OK**.

Delete a Keyframe

a. Select the keyframe on the DPM timeline.

b. Click **Edit**.

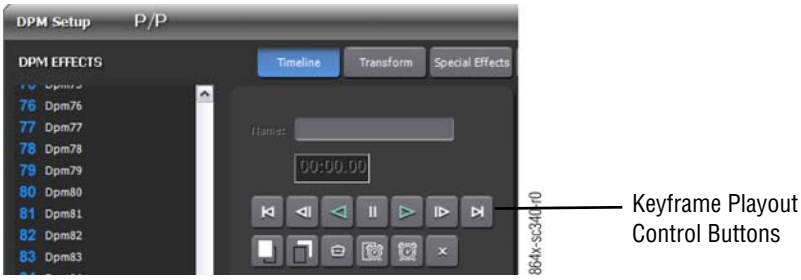
c. From the **Keyframe Editing** toolbar, click the **Delete Keyframe** button. The keyframe is removed from the timeline.

Note Only one keyframe can be deleted at a time from the DPM Timeline.

Use Keyframe Playout Controls

The keyframe playout control buttons are located in the **Keyframe Playout Controls** toolbar on the **DPM Effect Setup** dialog box. Use the playout control buttons to play keyframes on the DPM timeline: Refer to *DPM Effect Setup Dialog Box* on page 491 for control functions.

Figure 672. Keyframe Editing Control Buttons



Position Keyframes on the DPM Timeline

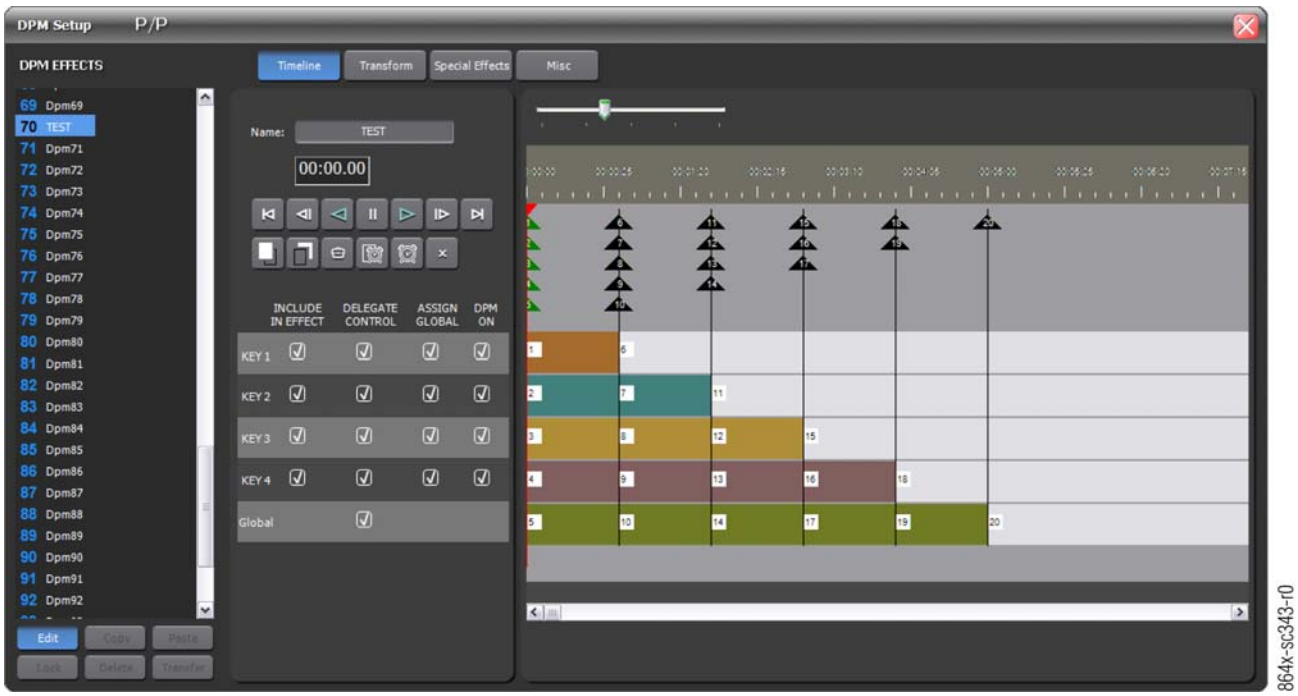
There are four DPM channels that correspond to four keyers and each channel contains its own keyframes. Also, the global channel encompasses all four keyers. Keyframes are numbered in order and the keyframe that is currently selected is highlighted green (Figure 673).

The current keyframe is determined by the timeline cursor position and the delegated channels. Keyframes assigned to channels, which are not delegated, are not affected.

General rules for positioning keyframes on a DPM timeline include:

- To position a keyframe, left-click and drag the black triangle. This enables delegate control exclusively on the key channel associated with the black triangle. Individual keyframes can be expanded and contracted on the timeline.
- To reposition an entire channel, left-click and drag any numbered white flag in a keyframe within the channel, which allows an entire key channel to be stacked and overlapped.
- To reposition the red timeline cursor, left-click and drag the red triangle.

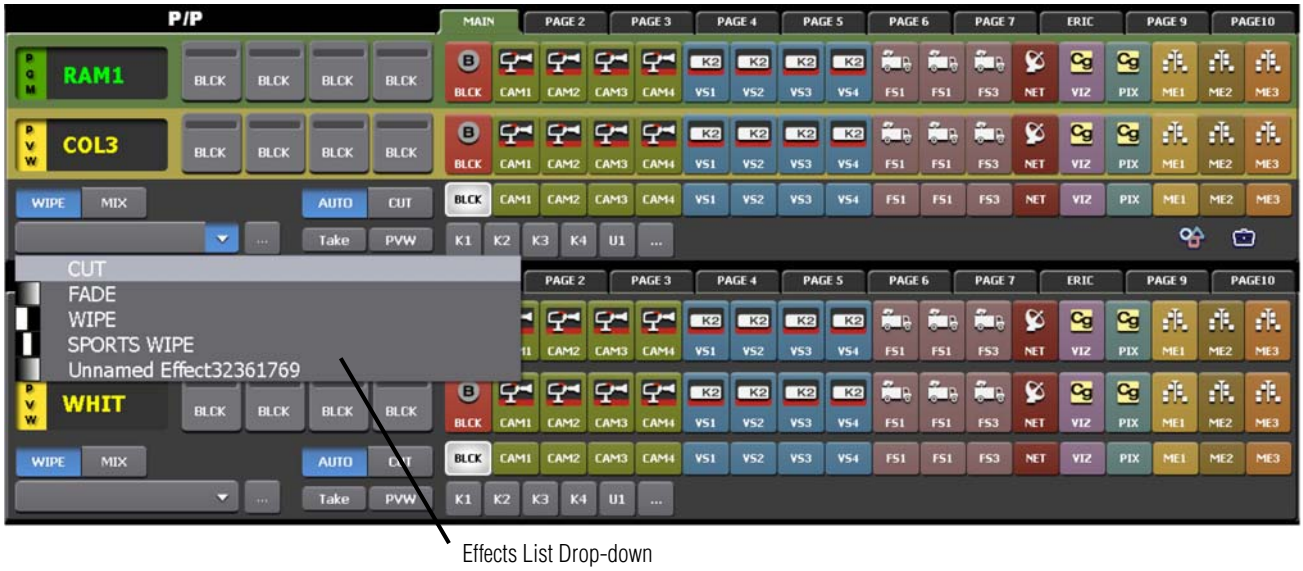
Figure 673. Keyframe Positions on the DPM Timeline



Effect Transitions

To operate the Ignite system either from the event timeline or when making a manual transition, an effect from the switcher is required. Once effects are built, they are recalled either through a TME (refer to *Build a TME* *on page 46*) or manually from the Effect List (Figure 674).

Figure 674. Transition Drop-Down Example



Note Effects created by prepping an existing effect and adding keyers to create a new effect, are executed once and deleted immediately after use. Only permanent effects will be selectable from the main GUI drop down list indefinitely.

To manually view and select an effect from the Effect List:

1. Click the **Effects List** expand arrow (Figure 674). The **Effects List** expands (Figure 674) to show all visible effects previously created (refer to *Effects Management* on page 487 and *Effects Management* on page 570).
2. From the **Effects** list, scroll to and click an Effects transition for the manual switch between the Preview and Program buses. The effect is assigned and will be used when making a transition.

To make a manual transition using the selected effect:

1. Click either **Auto** or **Cut** (Figure 674)
2. Click **Take** (Figure 674) to see the effect transition on program

Create a Chroma Key

1. Set up the Switcher:
   - Click background (weather computer) on PGM of P/P ME
   - Turn on a Keyer
   - Assign a camera that is pointing at the keywall to that keyer
2. In the effects bank (i.e., **P/P**, **M/E 1**, **M/E 2**, or **M/E 3**) where the Chroma Key is to be added, click the **Browse Effects** button (Figure 675). The **Effects List** dialog box (Figure 676) appears.

Figure 675. Browse Effects Button

Figure 676. Effects List Dialog Box – Effects Controls

Note To adjust individual keyer properties, inside the Effects setup dialog box, click the button to the right of a keyer.

3. In the **Effects List** dialog box click **Add**.
4. Click **Edit**. The **Edit** button highlights.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

5. In the **Effect Name** box, enter a wipe name using established standards and consistent techniques and practices. Refer to *Standardization on page 577*.

Note Selecting PGM indicates that there is no background transition. Selecting PVW indicates that there is a preview to program background transition when the effect is executed.

6. Click **PGM**. The **PGM** button highlights.
7. Click the Key to use (Key 1 through Key 4), for example **Key 1**.
8. In **Transition**, enter the desired transition rate (Figure 676).
9. In **Transition**, click the selected keyer **Access** button. A **Keyer Setup** dialog box (Figure 677) appears where:

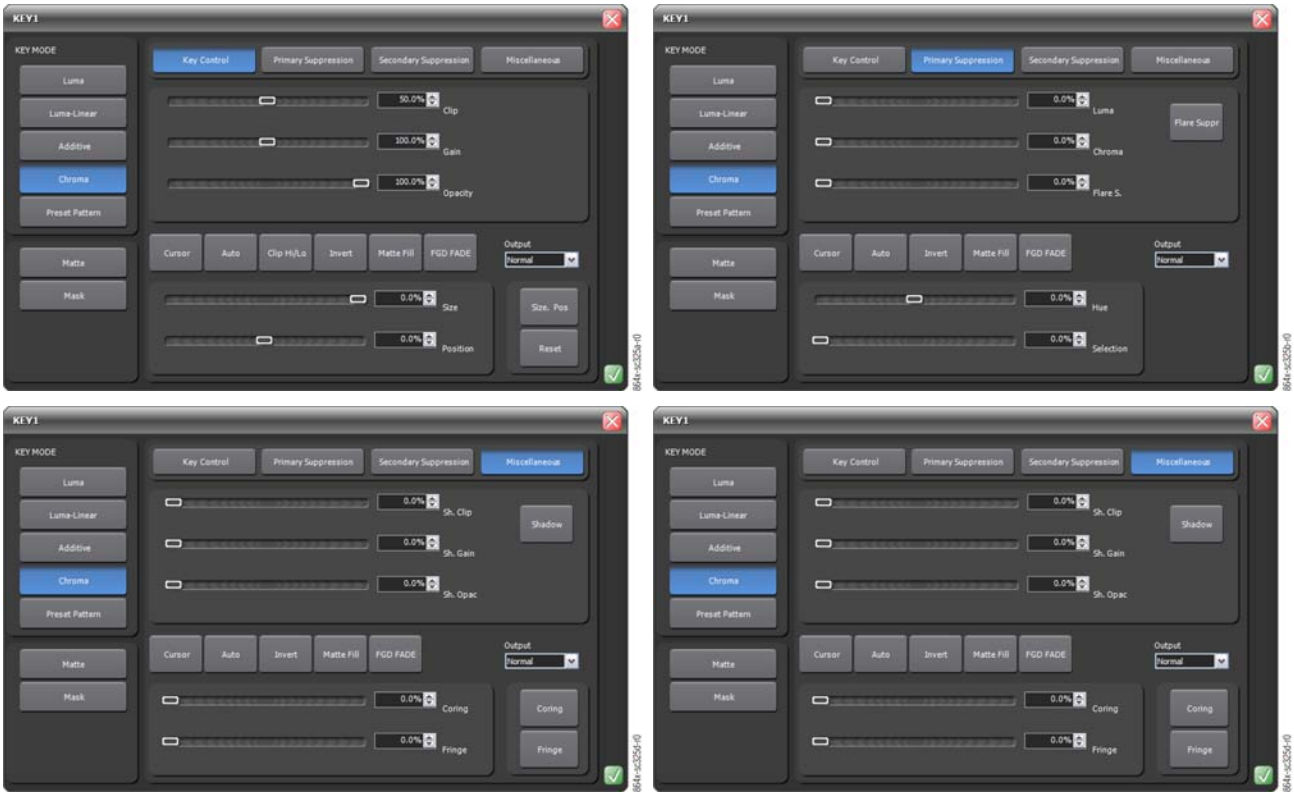
Key	Function
Luma	Uses the luminance values in a layer to determine the transparency of that layer.
Luma-Linear	The gain is approximately one, preserving the shaping of key source edges. Linear keying using anti-aliased sources produces smooth key edges
Additive	Creates a composite image from two complementary video signals that have already been shaped by multiplication with a key signal

Key	Function
Chroma	Renders a specific color in a layer transparent.
Preset Pattern	Uses a preset pattern

Note Chroma setup has four separate tabs for chroma settings (Figure 677). To adjust individual settings, click the respective tab.

10. Click **Chroma** (Figure 677). Using the faders, adjust properties as necessary.

Figure 677. Keyer Setup – Chroma Dialog Boxes



11. In the **Chroma Key Control Setup** dialog box, do the following:

- To automatically adjust the key mode parameters to the following settings, click **Auto**.
  - Clip = 50%
  - Gain = 100%
  - Opacity = 100%

Note The **Auto** button selects the current color under the cursor.

- To position the cursor or the dialog, click **Cursor**.
  - Click and drag to position the cursor.
  - Right-click and drag to position the dialog.
  - To close the dialog, click **Cursor** again.

Note The aspect ratio of the dialog changes when the current video mode is 4:3 or 16:9.

12. Use the faders inside the dialog box(es) (Figure 677) to adjust levels and create any of the four types of keys as well as a preset pattern.

Note Remember to adjust primary suppression HUE and selection.

13. Click **Save**. The **Keyer Setup** dialog box closes.

Create a Chroma Key in a Double Box

Note Build these in different M/Es; e.g., Chroma Key in M/E 1 and double boxes in P/P.

1. Create a Double Box effect. Refer to *Create a Double Box* *on page 380*.
2. Using an available mix effects bank create a chroma key. Refer to *Create a Chroma Key* on page 585.
3. Ensure that the selected Chroma Key effects bank is sourced to the P/P bus.

Use the Utility Bus in an Effect

The switcher utility bus can be routed into the border of any switcher wipe. That utility bus can contain any video source currently running into the switcher. This is helpful for using moving backgrounds or logos as part of the wipe transition.

1. Click the **Browse Effects** button (Figure 678). The **Effects List** dialog box (Figure 679) appears.

Figure 678. Browse Effects Button

Figure 679. Effects List Dialog Box – Effects Controls

2. In the **Effects List** dialog box click **Add**.

3. Click **Edit**. The **Edit** button highlights.

4. In the **Effect Name** box, enter a wipe name using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Note Selecting PGM indicates that there is no background transition. Selecting PVW indicates that there is a preview to program background transition when the effect is executed.

5. Click **PVW**. The **PVW** button highlights.

Note When doing a background transition, the duration set for PVW determines the duration for everything including the four keyer durations. If PVW is selected, ensure that all keyer durations are set the same as PVW. If PGM is selected, keyers can be brought on and off with independent durations.

Note Mix and Wipe are alternate actions of the same button. If the button shows Mix, clicking the button changes it to Wipe and vice versa.

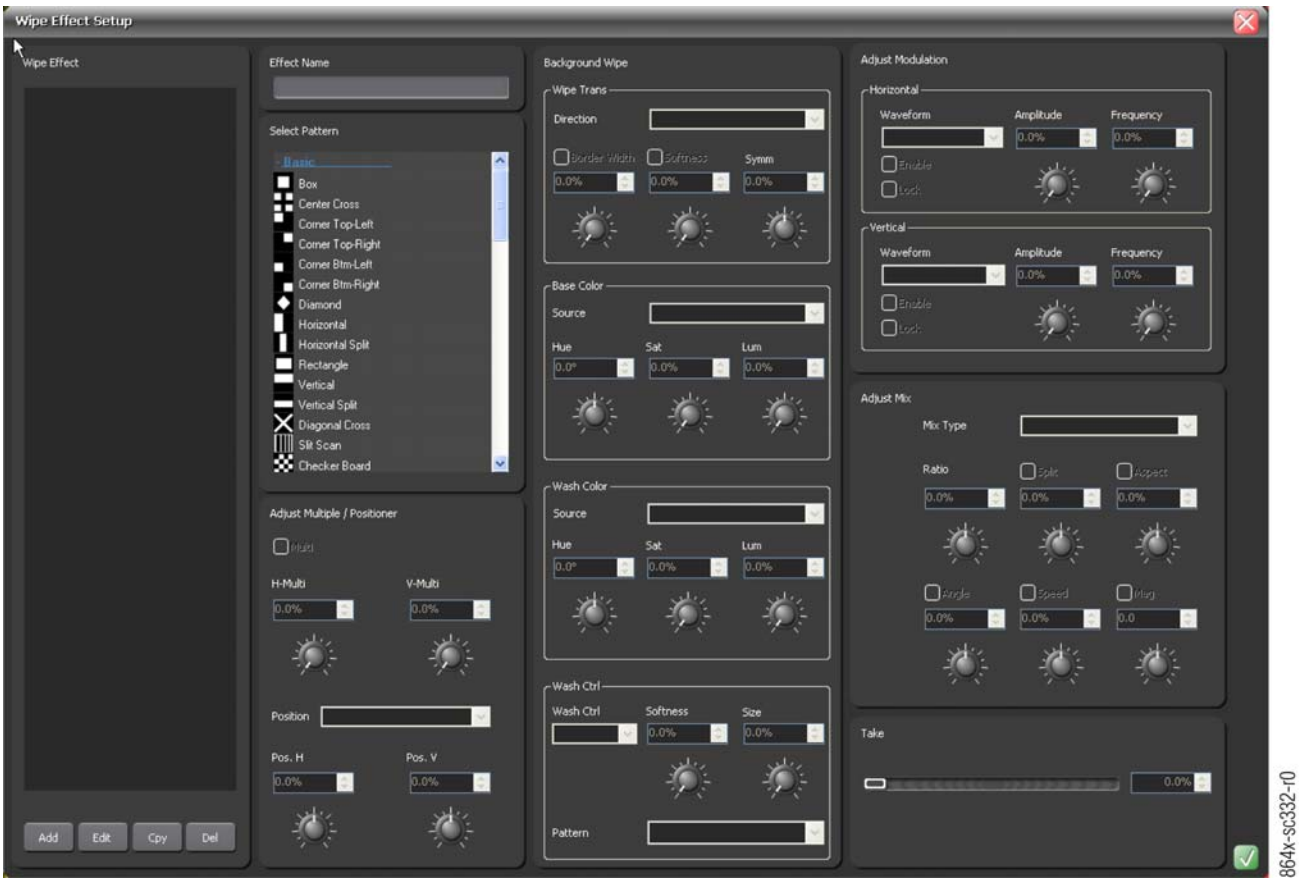
6. Check that **PVW Mix/Wipe** button is toggled to **Wipe** (Figure 680). If not, click **Mix** to toggle the button to **Wipe**.

Figure 680. Effects Definition Dialog Box – Wipe Effects List

7. In **Transition**, enter the desired transition rate.

8. Click the **Wipe Effects Access** button (Figure 680). The **Wipe Setup** dialog box (Figure 681) appears.

Figure 681. Wipe Effect Setup Dialog Box



9. Click **Add**.

10. From the **WIPE EFFECT** list, click the newly added **Unnamed Effect**.

11. Click **Edit**. The **Edit** button highlights.

12. In the **ADJUST COLOR Base Source** list, click the expand arrow and then click **Utility Bus**.

Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

13. In the **Effect Name** box, enter a wipe name using established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Section 16

Switcher Module - Konnect

Figure 682. Switcher Module User Interface Example

Overview

Note For Switcher Module [Kayak] overview and operation information, refer to *Section 15-Switcher Module - Kayak*

Note Throughout this section, the Konnect features and functions are described collectively but availability depends on the system configuration; i.e., the Kayenne or Kalypso switcher model installed with the system. For specific switcher information, refer to the switcher documentation provided with the product.

The Switcher Module – Konnect version (Figure 682 on page 593) provides Ignite interface control of both the Kayenne and the Kalypso switchers. The Ignite Konnect interface provides switcher:

- Control of source bus routing and transition states
- Recall of E-Mems and Macros
- Current state display for each M/E bank

The Switcher Module (Figure 682 on page 593) routes video device inputs (including cameras, VTRs, VRs, character generators, or the internally generated matte/pattern or black screens) to:

- Primary tab
- Secondary tab
- Both Primary and Secondary tabs.
- Preview Outputs – (Prep) outputs display the next image before it is used
- Program outputs – (Active) outputs are linked to the devices indicated by the current image
- Keyer Fill
- Keyer Cut or Hole
- Aux Outputs
- Utility Bus

Note A Kayenne/Kalypso switcher panel is still required for switcher effect building and switcher setup.

Note The number of Inputs and Outputs depends on both the Ignite system and the switcher installed.

Depending on system configuration, the Switcher Module – Konnect is available with up to five total Mix Effects (M/E) banks (refer to Figure 682 on page 593) labeled:

- **P/P** – Program/Preset
- **M/E 1** – Mix Effects One
- **M/E 2** – Mix Effects Two
- **M/E 3** – Mix Effects Three
- **M/E 4** – Mix Effects Four

Depending on system configuration:

- a Kayenne switcher has 6 key layers per M/E – only keys 1 – 4 can be assigned DPM (Digital Picture Manipulator) properties. Keys 5 and 6 are linear only.
- a Kalypso switcher has 4 key layers per M/E.

Note M/E 50 hardware is 6 linear keys only.

There are 10 customizable switcher pages and each page can have 4 to 14 buttons. When an M/E bank page is customized, the customization applies to that page across all M/E banks. The Switcher Module uses a Master Routing dialog box for quick source routing to destinations on any of the four effects banks. For descriptions of the interface, refer to Figure 683 and Table 17.

Note System configuration determines the number of M/Es, Key layers, and Utility Buses available on a specific system.

Note Only the P/P has the Source Setup and the Setup icons.

Figure 683. Switcher Module Basic User Interface

Table 17. Basic Interface Functionality

Name	Description
PRI	Primary tab – displays the primary partition (split M/E mode)
SEC	Secondary tab – displays the secondary partition (split M/E mode)
BOTH	Both tab – displays both primary and secondary partitions
A Source Row	Program Source Row/Current Source
B Source Row	Preview Source Row/Current Source
Delegate Source Row	Keyer source row/Keyers
Keyers/DPMs	Shows the current Keyer fill (refer to *Keyer* on page 604).
Sources	Shows the current PGM, PVW, and Utility Bus bus sources.
Pages/Page Tabs	Selects a Page of source buttons.
Setup Menu (drop-down)	Opens the Setup drop-down menu to access Source Setup (refer to *Source Setup Dialog Box* on page 597), Master Router Setup (refer to *Master Routing Dialog Box* on page 600), M/E Setup (refer to *M/E Setup Dialog Box* on page 602) and Split M/E Table (refer to *Split M/E Source Equivalence Table Dialog Box* on page 603)
PGM/PVW Bus source buttons	Shows the current PGM and PVW bus sources.
U1 – U2	Opens the respective Utility Bus Master Routing dialog box (refer to *Master Routing Dialog Box* on page 600).

Table 17. Basic Interface Functionality - (continued)

K1Near Fill/Cut – K12 Near Fill/Cut	Opens the respective Key Layer Master Routing dialog box (refer to *Master Routing Dialog Box* on page 600).
AUTO (Toggle button)	Depending upon either the Mix or Wipe button selection, preps the next transition to be executed when Take is clicked. Also highlights blue when a TME with either a Mix or a Wipe effect is prepped on the timeline.
CUT	Preps the next transition to execute as a Cut when Take is clicked. Also highlights blue when a cut effect is prepped.
Take	Takes the selected effect to air.
PVW	Displays the selected effect transition to PGM on the PVW (Preview) monitor.
Browse Effects	Opens the Effects Manager dialog box (refer to *Keyer* on page 604).
Effects drop-down List	Lists available programmed effects. Also enables a user to expand, view, select, and take an effect directly to air.
RUN (Toggle button)	Runs the current E-MEM without doing a Take
A-RUN	Runs the current E-MEM upon a Take
RUN (Master on P/P bank only)	Issues a master-level run command

Note Each of the 10 switcher pages can be customized. When an M/E bank page is customized, the customization applies to that page across all available M/E banks.

Note The M/E banks can be customized to meet show/user requirements via the **Master Routing** dialog box (refer to *Master Routing Dialog Box* on page 600).

Setup Drop-down Menu/Setup Menus

Figure 684. Setup Drop-down Menu/Setup Menus

The Setup drop-down menu (Figure 684) provides access to:

- Source Setup dialog box (refer to *Source Setup Dialog Box* on page 597)
- Master Router Setup dialog box (refer to *Master Routing Dialog Box* on page 600)
- M/E Setup dialog box (refer to *M/E Setup Dialog Box* on page 602)

Source Setup Dialog Box

Figure 685. Source Setup Dialog Box

Access to the **Source Setup** dialog box is from the **Setup** drop-down menu. The **Source Setup** dialog box (Figure 685 on page 597) includes:

- **Page Configuration** group box:
  - **Page Name** – name for the currently selected page
  - **# of Buttons** – number of source buttons to show (4 – 14) for the currently selected page; an entry in this box is effective immediately

Note **# of Buttons** requires clicking **Apply** to actually apply it to the manual switcher UI.

- **Page Tab Setup** group box – select and view the **Page** (tab) to configure. Page sources are added by dragging and dropping sources from the **Source Display Setup** area.
- **Source Configuration** group box (refer to *Source Configuration Group Box* on page 598)
- **Source Display Setup** group box (refer to *Source Display Setup Group Box* on page 599)
- **OK** – saves the changes and closes the dialog box

- **Cancel** – cancels all changes made since the last save operation
- **Apply** – applies the changes but does not closes the dialog box

Source Configuration Group Box

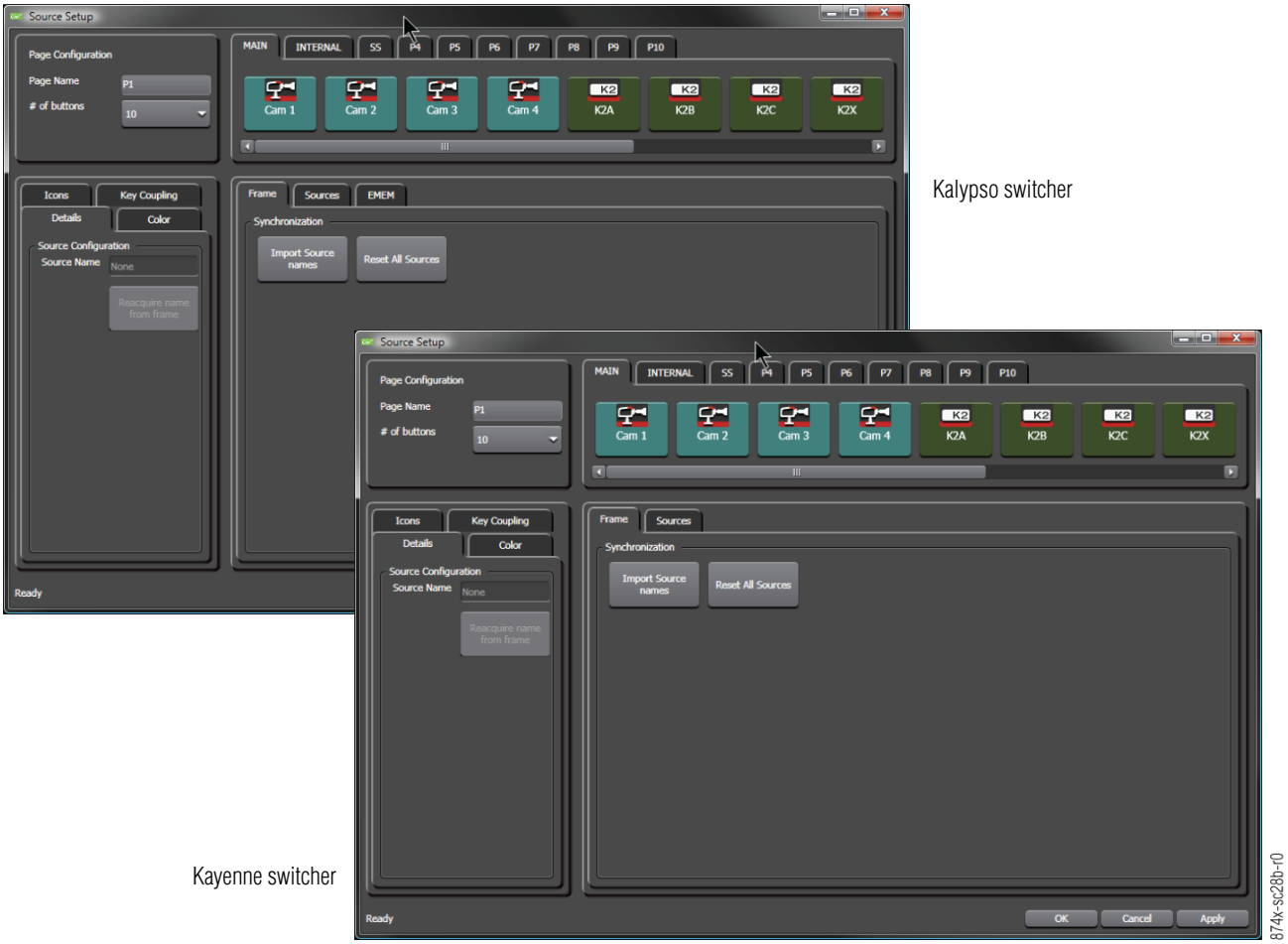
Figure 686. Source Configuration Group Box

The **Source Configuration** group box (Figure 686) comprises:

- **Details** tab – source name (limited to 5 displayed characters).
- **Color** tab – color selections for Source Display Setup.
- **Icons** tab – icon selection library.
- **Key Coupling** tab – shows available key sources that can be coupled to the currently selected source. The currently coupled key source does not appear in this list.

Source Display Setup Group Box

Figure 687. Source Display Setup Group Box



The **Source Display Setup** group box (Figure 687) comprises:

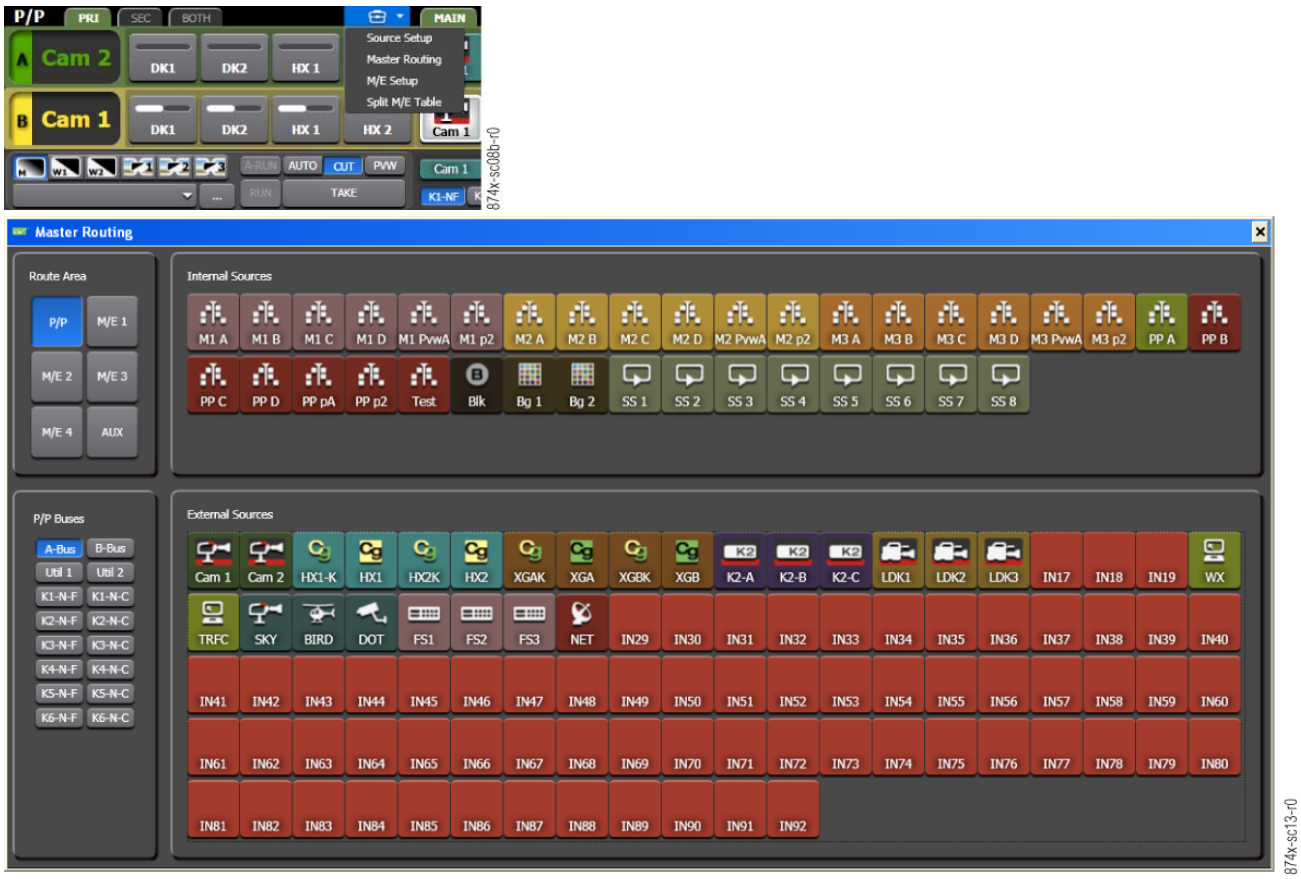
- **Frame** tab – provides frame synchronization options.
  - **Import Source names** – resets all the names of the sources with the engineering name
  - **Reset number of sources** – reset the number of sources to match the frame

Note When using a Kalypso switcher, the Source Display Setup Group also has an EMEM tab for naming EMEMs.

- **Sources** tab:
  - **Internal Sources** tab – currently available internal sources that can be configured to a Switcher Module button on the currently selected page
  - **External Sources** tab – currently available external sources that can be configured to a Switcher Module button on the currently selected page
- **EMEM** tab (Kalypso switcher only) – displays a list of EMEM names

Master Routing Dialog Box

Figure 688. Master Routing Dialog Box



The **Master Routing** dialog box (Figure 688) is the initial interface used to set up both the switcher module and the keyers. Access to the **Master Routing** dialog box is from the **Setup** drop-down menu.

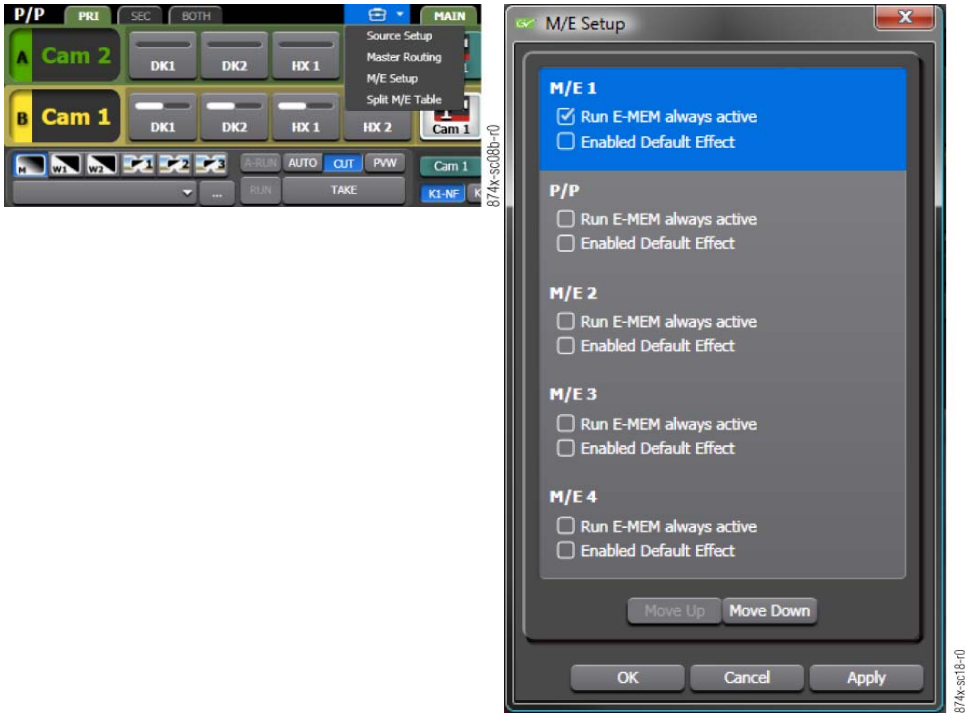
The **Master Routing** dialog box has two main areas:

- Destinations on the left –
  - **Route Area** – enables a user to choose a single **M/E** or **Aux** route area to route sources.
    - **P/P** buses– displays and enables selection of the available buses and keyers.
    - **M/E** buses – when an **M/E** route area is selected, the following M/E buses are displayed: **PGM**, **PVW**, **Utility**, and **Near Keyer**.
    - **Aux** buses – when selected, **AUX** route area is selected, the available AUX buses are displayed. (Both Kayenne and Kalypso have 46 logical AUX buses.)
- Sources on the right –
  - **Internal Sources** tab – depicts and enables selection of hard inputs in the switcher.
    - Kalypso has up to 36 internal sources.
    - Kayenne has up to 50 internal sources.
  - **External Sources** tab – depicts and enables selection of sources connected to the switcher.
    - Kalypso has up to 92 external sources.
    - Kayenne has up to 200 external sources.

The M/E button indications are interactive and reflect the status/assignments for that particular button. That is, when an M/E or bus destination is selected, that button and the source highlight, and the associated internal and external.

M/E Setup Dialog Box

Figure 689. M/E Setup Dialog Box

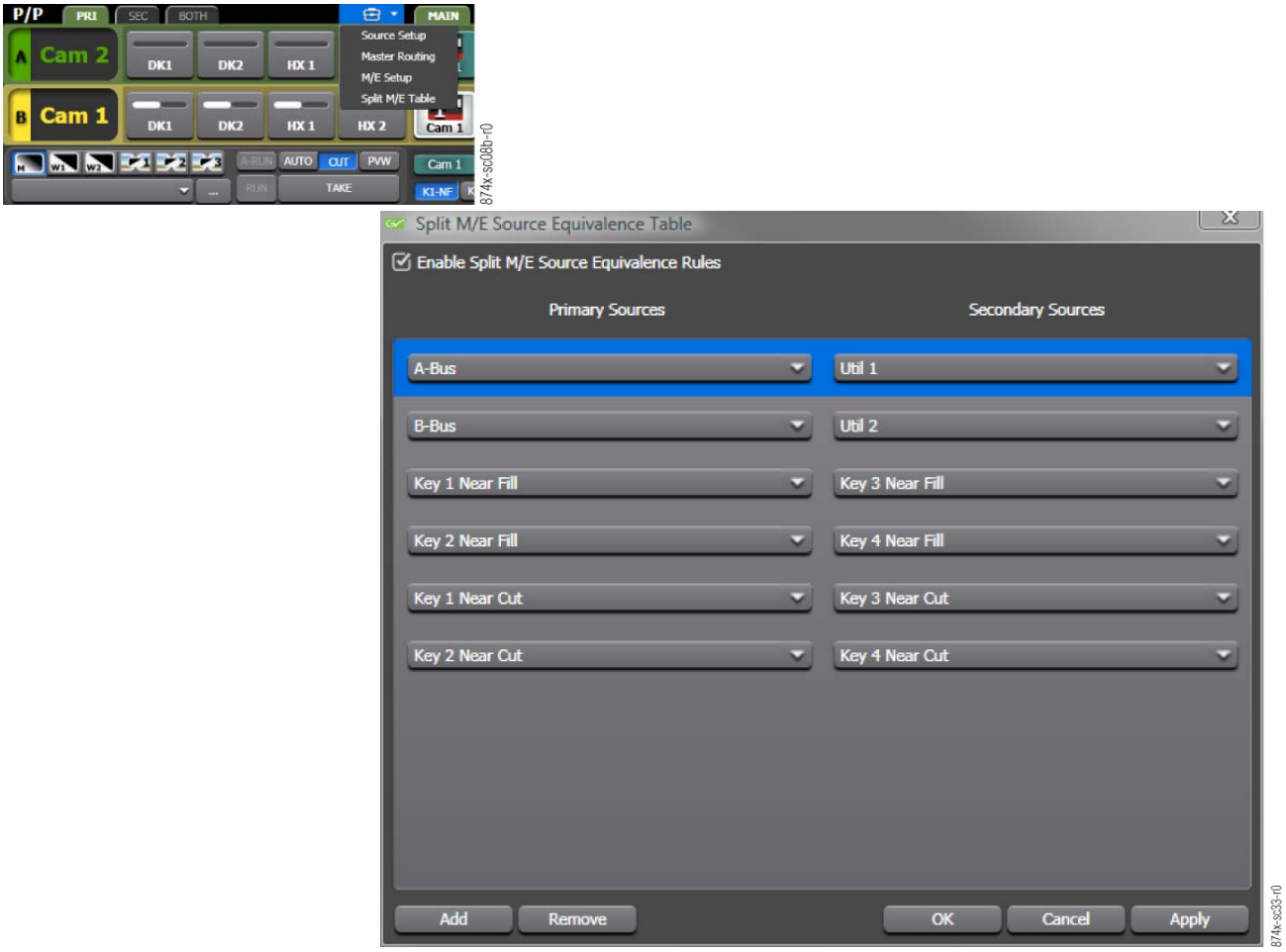


Access to the **M/E Setup** dialog box (Figure 689 on page 602) is from the **Setup** drop-down menu. The **M/E Setup** dialog box provides these options for the selected M/E:

- **Move Up** – moves the selected M/E position up on the user interface.
- **Move Down** – moves the selected M/E position down on the user interface.
- **Run E-MEM always active** check box – when selected, enable the **A-RUN** and **RUN** buttons in an M/E bank regardless of the selected effect. If not selected, these buttons are only enabled when the current effect contains an E-MEM.
- **Enable Default Effect** check box – when selected, the default effect is prepped after an effect completes on the M/E.
- **OK** – saves the changes and closes the dialog box.
- **Cancel** – cancels all changes made since the last save operation.
- **Apply** – applies the changes but does not closes the dialog box.

Split M/E Source Equivalence Table Dialog Box

Figure 690. Split M/E Source Equivalence Table Dialog Box



Access to the **Split M/E Source Equivalence Table** dialog box (Figure 690 on page 603) is from the **Setup** drop-down menu. The **M/E Setup** dialog box provides these options for the selected M/E:

- **Primary Sources** – lists bus destinations for the primary partition of a split M/E where primary = secondary
- **Secondary Sources** – lists bus destinations for the secondary partition of a split M/E where primary = secondary
- **Primary** drop-down list – lists bus selections for primary sources
- **Secondary** drop-down list – lists bus selections for secondary sources
- **Add** – adds a row where an equivalency rule can be established
- **Remove** – removes an equivalency rule row
- **OK** – saves the changes and closes the dialog box

- **Cancel** – cancels all changes made since the last save operation
- **Apply** – applies the changes but does not closes the dialog box

In order for Auto-ME to be effective with Split-M/E, the IQ Auto Channel Pool portion of Ignite Konnect needs a Split-M/E Source Equivalency Table.

The general rule or standard for Auto-ME is synonymous M/Es. However, with Ignite Konnect Split M/Es the same M/E resources are shared across partitions. In a standard Auto-M/E setup, M/E 1 and M/E 2 have common bus route destinations that persist despite the M/E that is allocated.

For example, M/E1 PVW route will become M/E2 PVW route when M/E2 is allocated from the pool. This is different for Split M/E because M/E1 PVW needs to become M/E1 Util1 when M/E1 secondary partition is allocated from the pool. This there needs to be some sort of table that spawns from the IQ Auto Channel Pool setup or an addition to the linked fields table that allows for Split M/E equivalencies to be defined.

For example, an operator needs to be able to define the following Split M/E equivalence rules:

Primary Source		Secondary Source
M/E1 A Bus	=	M/E1 U1 Bus
M/E1 B Bus	=	M/E1 U2 Bus
M/E1 Key 1	=	M/E1 Key 3
M/E1 Key 2	=	M/E1 Key 4

Keyer

Available, active key layers depend on the switcher(s) installed:

- Each Kayenne M/E bank has up to six key layers (K1 through K6) active at once
- Each Kalypso M/E bank has up to four key layers (K1 through K4) active at once

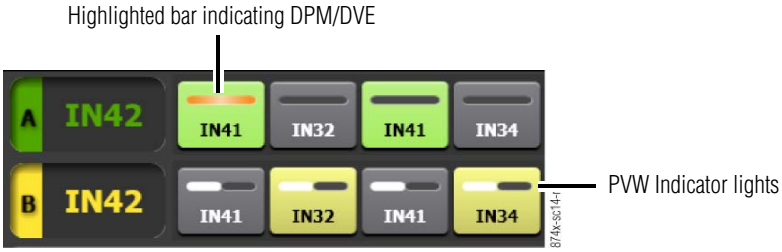
Each keyer has a corresponding switcher button on both the Program Bus and the Preview Bus. Keyers can also act as DPM/DVE channels where:

- Clicking the gray area of a PVW keyer turns on a channel of the DPM/DVE, which then fills with the source routed to that keyer. It is designated as on air by a color highlight and a small yellow DPM icon in the upper right hand corner. Highlight colors correspond to their respective bus (Figure 691 on page 605):
  - Green with a yellow bar for keys on the DPM/DVE Program bus
  - Yellow for keys on the DPM/DVE Preview bus

Note PVW keyers have indicator lights for Primary or Secondary M/E partition allocation.

- Clicking the gray area of a PGM keyer displays a context menu that toggles a channel of DPM/DVE

Figure 691. Keyers On Air



- Click the top half of keyer to toggle the keyer

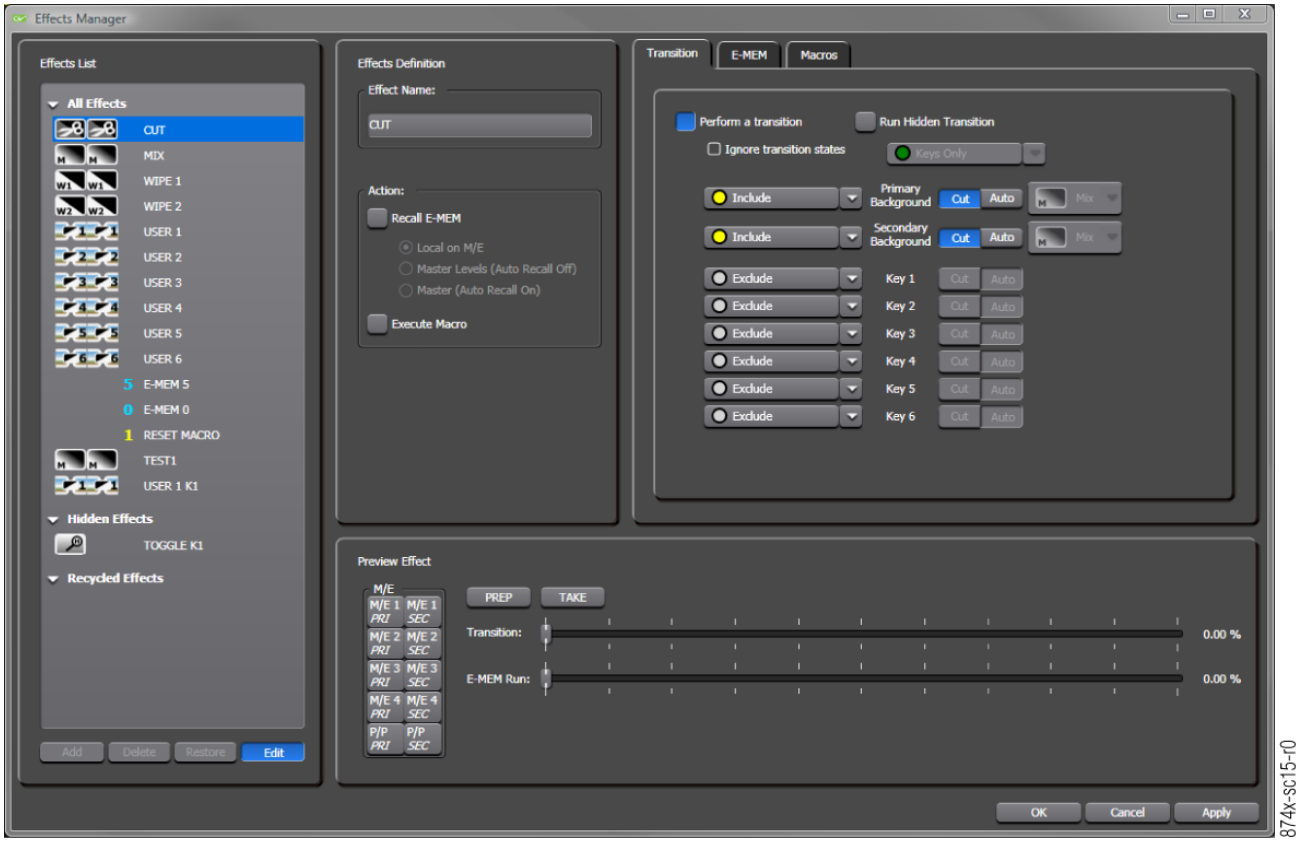
Note Right-click the top half of keyer to access the DPM context menu. Click the lower half of keyer to change source routing.

- Click the routed source font to change source routing via the Master Router

Effects Manager

Figure 692. Browse Effects Button

Figure 693. Effects Manager Dialog Box



The **Effects Manager** dialog box (Figure 693) is accessed by clicking the respective **P/P**, **M/E 1**, **M/E 2**, **M/E 3** or **M/E 4 Browse Effects** button (Figure 692 on page 605). The Effects Manager dialog box is a consolidated interface for effects management, transition, and association and comprises:

- **Effects List** group box (refer to *Effects List Group Box* on page 607)
- **Effects Definition** group box (refer to *Effects Definition Group Box* on page 609)
- **Transitions/E-MEM/Macros** group box (refer to *Transitions/E-MEM/Macros Group Box* on page 610)
- **Preview Effect** group box (refer to *Preview Effect Group Box* **on page 612**)
- **OK** – saves the current parameters and closes the dialog box
- **Cancel** – closes the dialog box without saving changes
- **Apply** – saves the current parameters but does not close the dialog box
- **Close** – closes the dialog box when not in Edit mode

Effects List Group Box

Figure 694. Effects List Group Box

The **Effects List** group box (Figure 694) is a list of user created effects. These effects are managed using a right-click and shortcut menu. The **Effects List** separated into three sub-lists:

Note Effects in each of the three sub-lists are managed easily via shortcut menu selections. The shortcut menus are accessed via right-click.

- **All Effects** – lists all effects that are visible on the Switcher module. Using shortcut menu selections, a user manages the **All Effects** sub-list. Effects deleted from the **All Effects** sub-list are recoverable from the **Recycle Bin** using a right-click and shortcut menu selection.
- **Hidden Effects** – lists effects that are marked as **Run Hidden Transition** on the **Transition** tab.

CAUTION Effects deleted from the **Recycled Effects** cannot be recovered.

- **Recycled Effects** – all effects deleted from both **All Effects** sub-list and **Hidden Effects** sub-list are automatically moved to the **Recycle Bin** sub-list and can be recovered/moved from the **Recycled Effects** sub-list using shortcut menu selections. Effects deleted from the **Recycled Effects** sub-list cannot be recovered.

Four command buttons comprise the remainder of the Effects List function. These commands are also available by using a right-click and shortcut menu.

- **Add** – create/add a new effect to the Effects List. A default name is automatically generated for the new effect but it should be renamed to conform with established standard naming conventions.

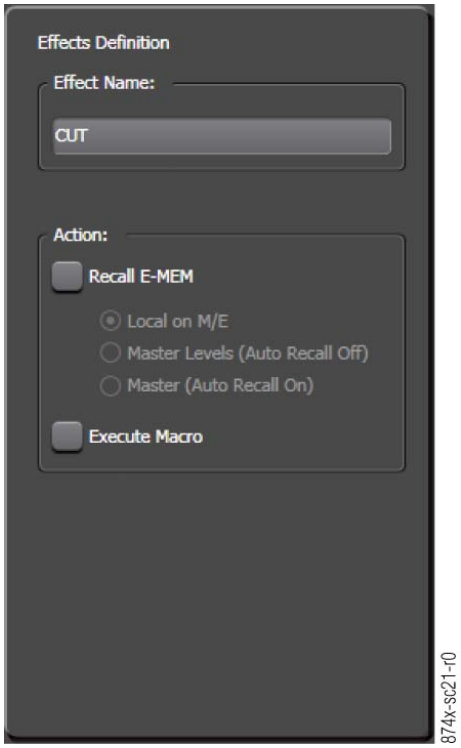
Note For all names, abbreviations, and colors, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

- **Delete** – moves the selected effect to the Recycled Effects. If the selected effect is already in the Recycled EFfects, it is deleted.
- **Restore** – moves the selected effect from the recycled area to either the **All Effects** area or the **Hidden Effects** area.
- **Edit** – enables editing of the selected effect.

Note Effects can be placed on the Ignite **Event Timeline** by right-clicking and dragging to the timeline.

Effects Definition Group Box

Figure 695. Effects Definition Group Box

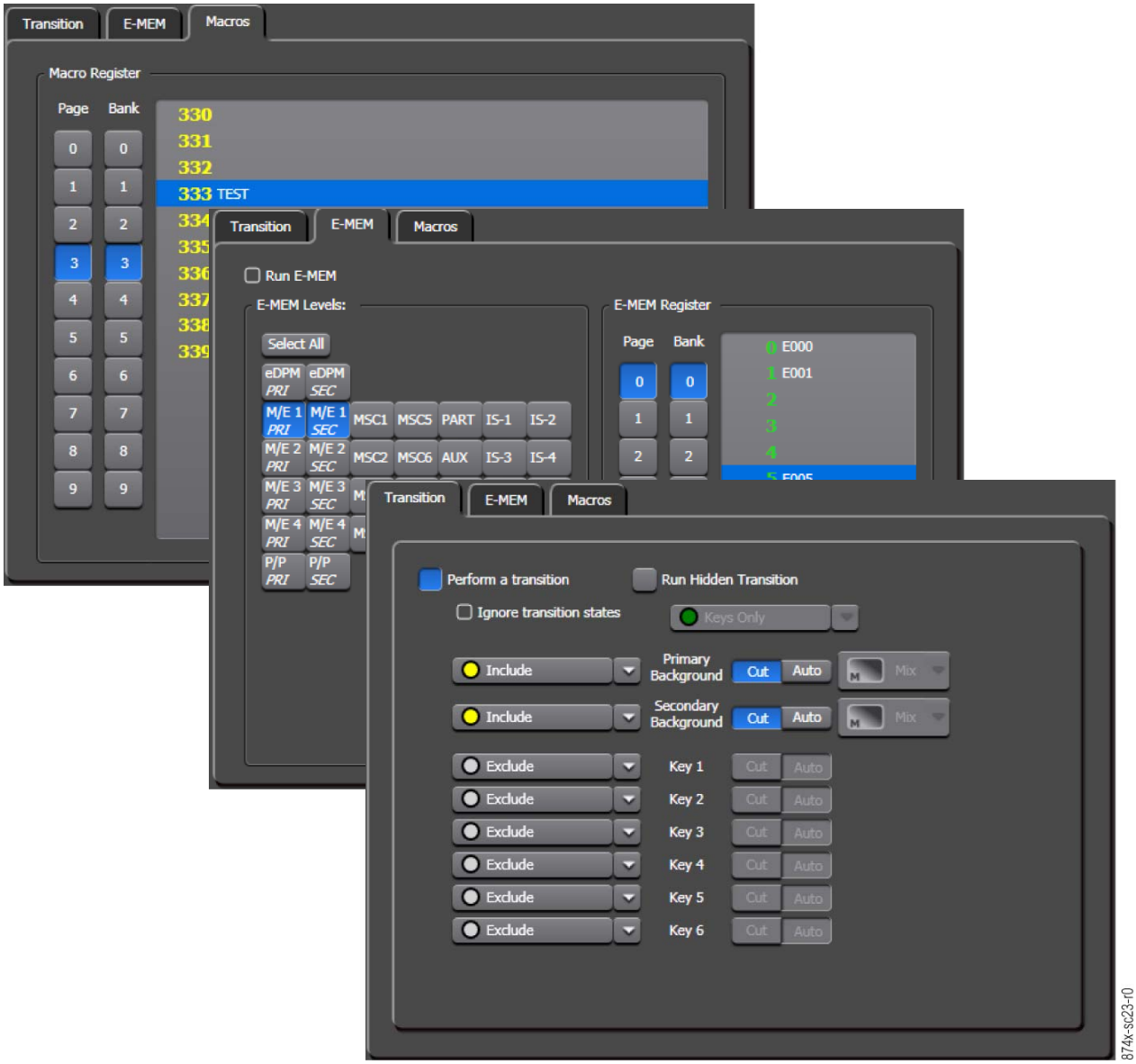


The Effects Definition group box (Figure 695) comprises:

- **EFFECT NAME** – in edit mode, the effect name can be changed by entering a different name in the **EFFECT NAME** box
- **Action**:
  - **Recall E-MEM** – when selected, recalls an E-MEM when the effect is prepped. The following are available only if **Recall E-MEM** is selected –
    - **Local on M/E** – when selected, recalls a local E-MEM on a specific ME
    - **Master Levels (Auto Recall Off)** – when selected, recalls a Master E-MEM with definable level delegation
    - **Master (Auto Recall On)** – when selected, recalls a Master E-MEM and sets the levels to Auto-recall
  - **Execute Macro** – executes a macro when the effect is executed

Transitions/E-MEM/Macros Group Box

Figure 696. Transitions/E-MEM/Macros Group Box



The **Transitions/E-MEM/Macros** group box (Figure 696) comprises:

- **Transition** tab – sets the components to include in the transition.
  - **Perform a Transition** – select to have the effect perform a transitions.
  - **Run Hidden Transition** – select to run hidden transitions.
  - **Ignore Transition States** – when selected, only allows a Cut or Auto transition command to be issued to the switcher without setting any transition states during prep.

- **Exclude** – when selected, the corresponding keyer or background is excluded from the transition.
- **Include** – when selected, the corresponding keyer or background is included in the transition.
- **Ignore** – when selected, the corresponding keyer is ignored on the transition.

Note This does not apply to background.

During prep, Ignored keyers visibility in preview monitor reflects the keyer state when it goes to air.

- Toggle Transition – when selected, the corresponding keyer is toggled on the transition.

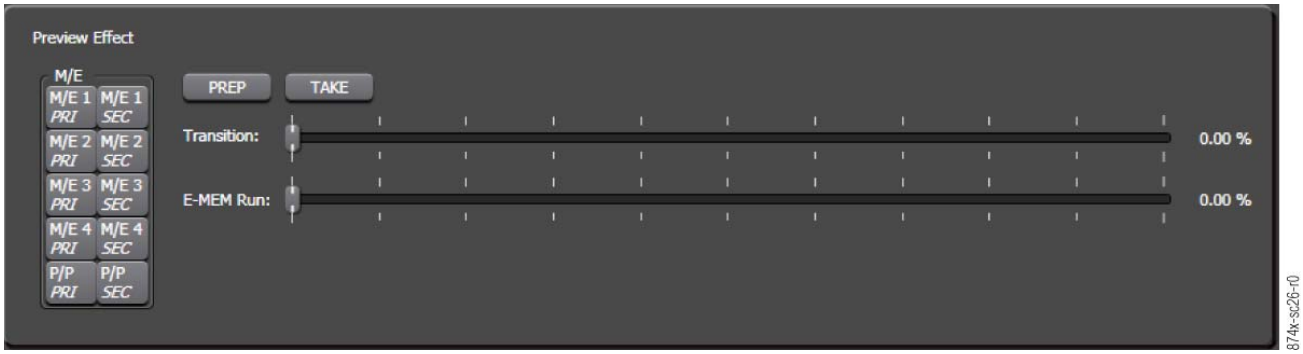
Note This does not apply to background.

- **Auto** – when selected, performs an Auto transition on the corresponding Keyer/Background.
- **Cut** – when selected, performs an Cut transition on the corresponding Keyer/Background.
- **Effect/Transition Type** combo box – choose between available **Mix**, **Wipe**, and **User Effects** on the switcher.

- **E-MEM** tab – displays a list of E-MEM registers on the switcher, and allows the user to select an E-MEM register to recall.
  - **Run E-MEM** check box –when selected, runs the E-MEM when the effect is executed.
  - **E-MEM Levels** group box – displays E-MEM recall level choices. This is only available for **Local on M/E** and **Master Levels (Auto Recall Off)** effects.
  - **E-MEM Register** group box – displays a list of E-MEM registers on the switcher and enable s a user to select an E-MEM register to recall.
    - For a Kalypso switcher, enter a name to be associated with the E-MEM register.
    - For a Kayenne switcher, E-MEM names are obtained from the switcher).
- **Macros** tab – displays a list of Macro registers on the switcher and enables the user to select an Macro register to execute.

Preview Effect Group Box

Figure 697. Preview Effects Group Box

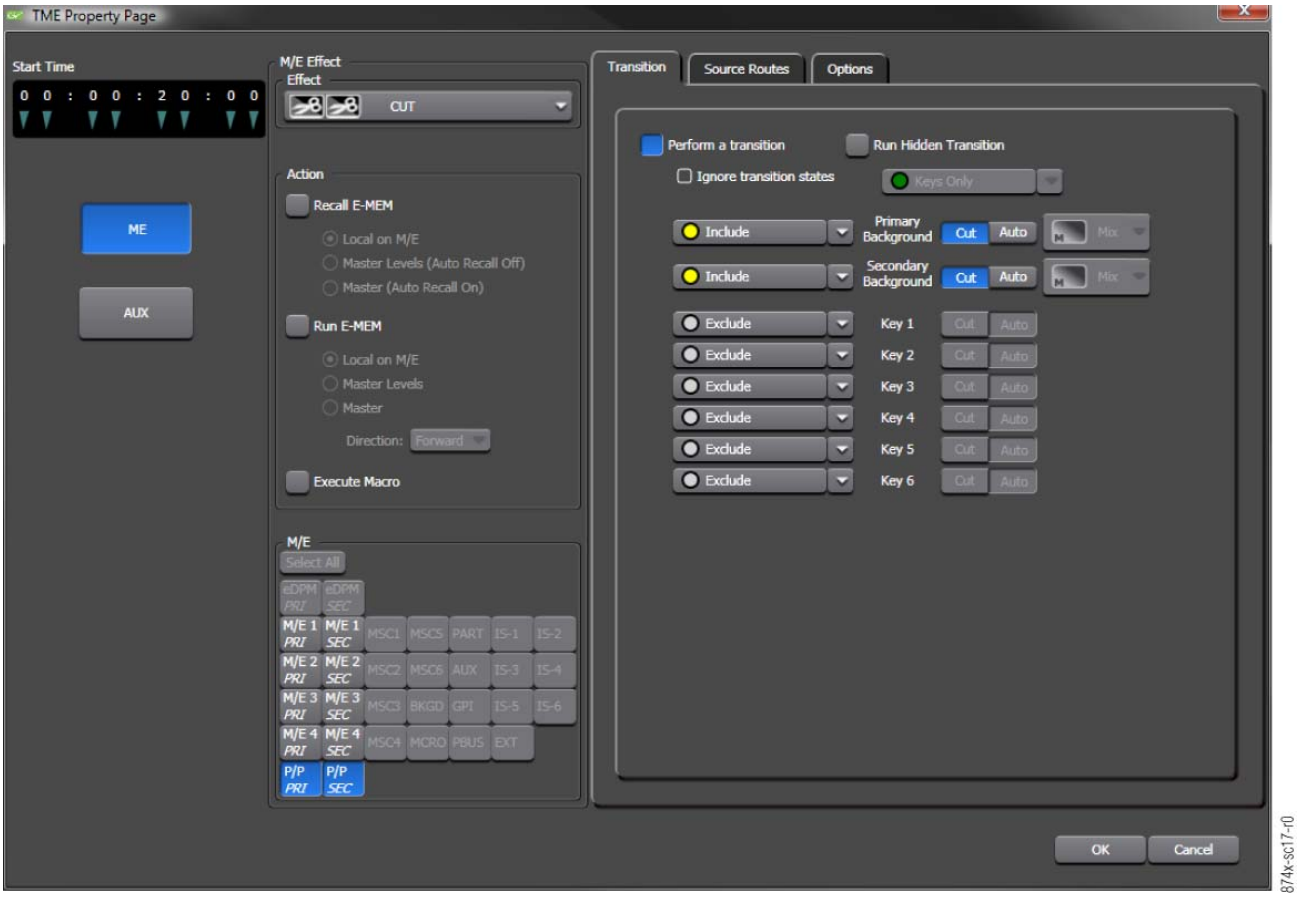


The **Preview Effect** group box (Figure 697) comprises:

- **M/E** – select the M/E on which to test the effect
- **PREP** – preps the selected effect on the selected ME
- **TAKE** – plays the selected effect on the selected ME
- **Transition** – slider mimics the transition lever arm on the panel
- **E-MEM Run** – slider mimics the E-MEM Run lever arm on the panel

TME Property Page Dialog Box

Figure 698. TME Property Page Dialog Box

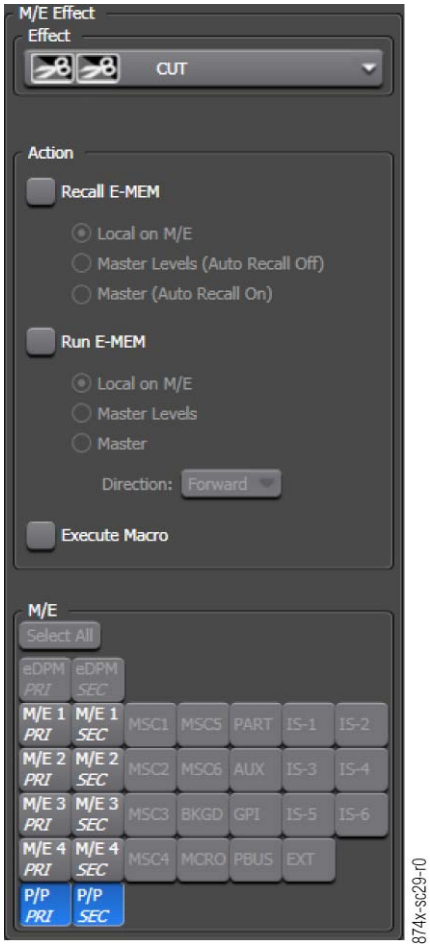


Access to the **TME Property Page** dialog box is from an icon on the Event Timeline. The **TME Property Page** dialog box (Figure 698) includes:

- **Start Time**
- **ME** – enables M/E automation
- **AUX** – enables Aux routing
- **M/E Effect** group box (refer to *M/E Effect Group Box* on page 614)
- **Transitions/Source Routes/Options** group box (refer to *Transitions/Source Routes/OptionsGroup Box* on page 616)
- **OK** – saves the current parameters and closes the dialog box
- **Cancel** – closes the dialog box without saving changes

M/E Effect Group Box

Figure 699. M/E Effect Group Box



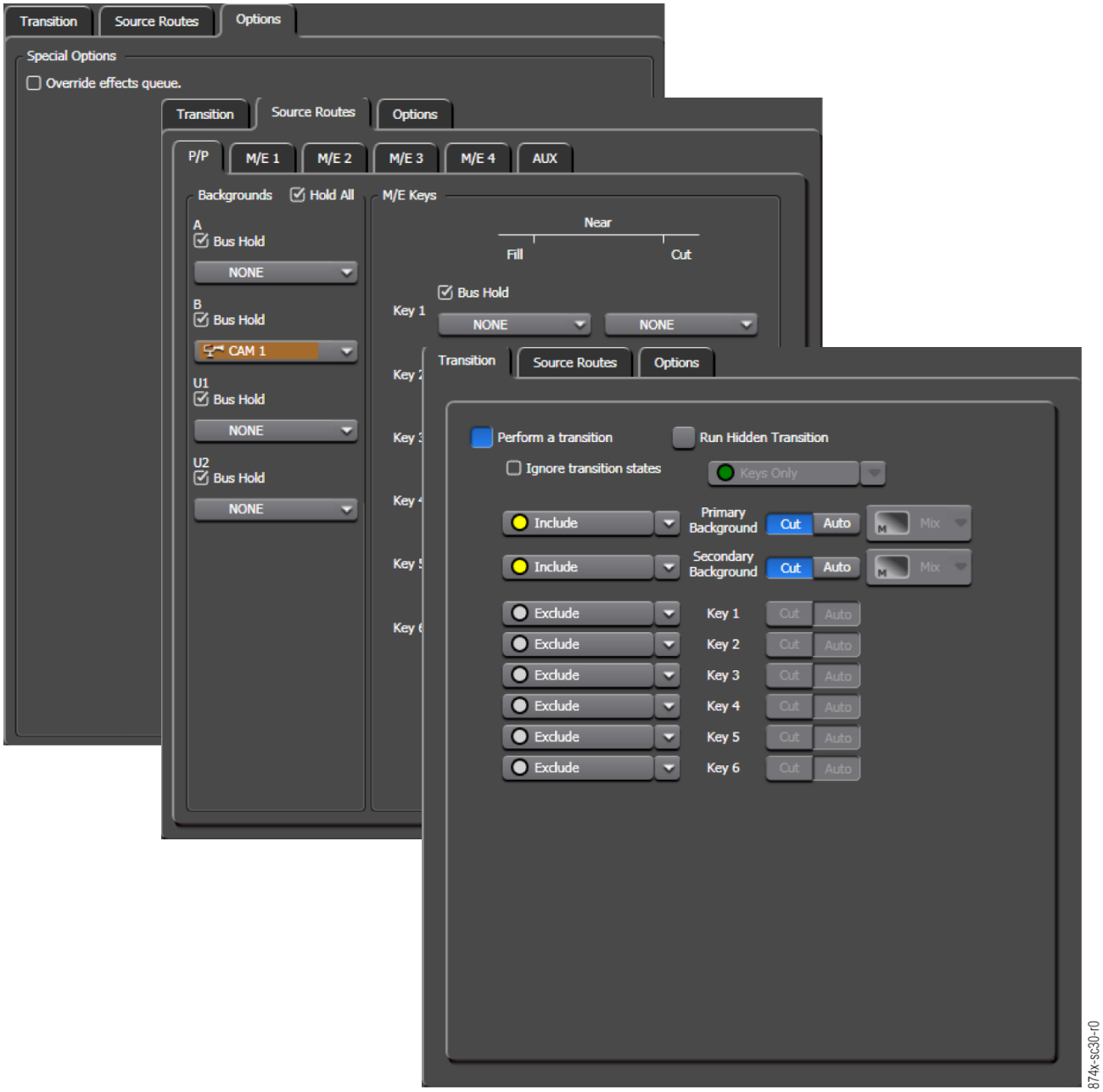
The **M/E Effect** group box (Figure on page 614) comprises:

- **Effect** drop-down list – select an effect (optional).
- **Action** group box – provides option to select and an indication that:
  - **Recall E-MEM** – when selected, recalls an E-MEM when the effect is prepped. The following are available only if **Recall E-MEM** is selected:
    - **Local on M/E** – when selected, recalls a local E-MEM on a specific ME.
    - **Master Levels (Auto Recall Off)** – when selected, recalls a Master E-MEM with definable level delegation.
    - **Master (Auto Recall On)** – when selected, recalls a Master E-MEM and sets the levels to Auto-recall.

- **Run E-MEM** – the effect runs an E-MEM.
  - **Local on M/E** – indicates E-MEM to run on an M/E.
  - **Master Levels** – indicates E-MEM to run as Master.
  - **Master** – indicates E-MEM to run as Master with Auto-recall.
  - **Direction** drop-down list – select the direction to run an E-MEM (**Forward** or **Reverse**).
- **Execute Macro** – the effect is a macro.
- **M/E** group box – select the an M/E delegate level:
  - **PRI** – primary.
  - **SEC** – secondary.

Transitions/Source Routes/OptionsGroup Box

Figure 700. Transitions/Source Routes/Options Group Box



The **Transitions/Source Routes/Options** group box (refer to *Transitions/Source Routes/OptionsGroup Box* on page 616) comprises:

- **Transition** tab – provides transition option selections
  - **Perform a transition** – when selected, transitions bus
    - **Ignore transition states** – when selected, ignores transition states

- **Run Hidden Transition** – when selected, runs the transition as a hidden effect
- **Primary Background** – primary background setup
- **Secondary Background** – secondary background setup
- **Key 1** (through x) – individual key feature set up

Note Primary Background, Secondary Background, and Key 1 through x use the same type drop-down list to set up the respective effect.

- Drop-down list:
  - **Exclude** – if selected, excludes that feature from the transition
  - **Include** – if selected, includes that feature in the transition
  - **Ignore** – if selected, ignores that feature during transition
  - **Toggle (PGM)** – if selected, toggle PGM that feature during transition
  - **Toggle (PVW)** – if selected, toggle PVW that feature during transition

Note Primary Background, Secondary Background, and Key 1 through x use the same type Cut/Auto buttons to set up the respective effect.

- **Auto** – if selected, sets as AUTO key
- **Cut** – if selected, sets as CUT key

- **Source Routes** tab – provides source route information and setup options for the selected **P/P**, **M/E**, **AUX** tab
- **Options** tab – provides Override Effects Queue function

IQ Auto Channel Pool Dialog Box

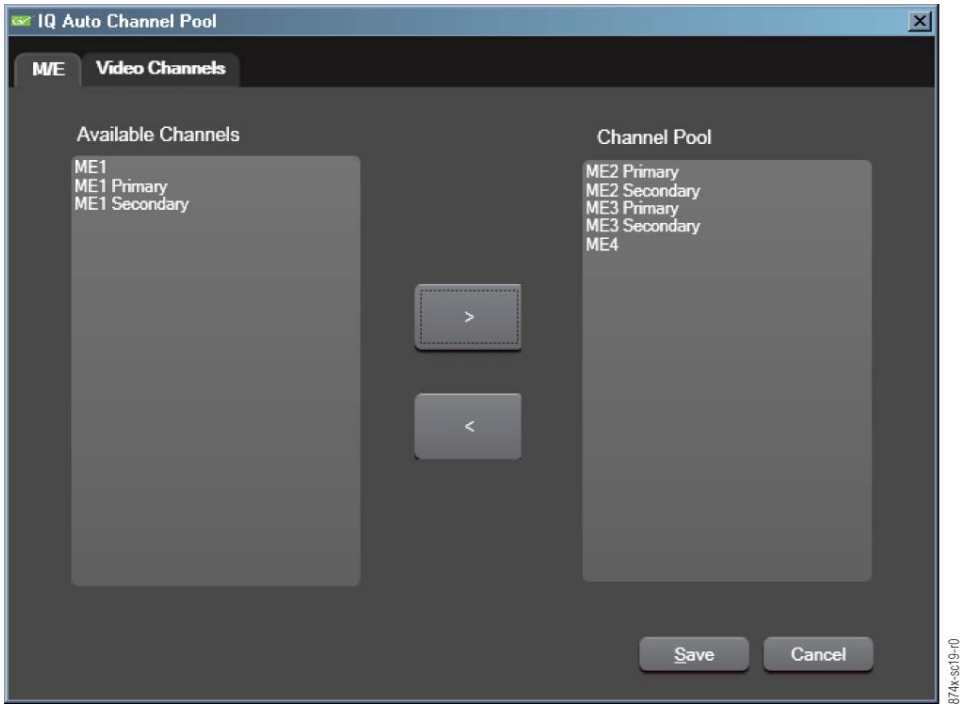
The **IQ Auto Channel Pool** dialog box (Figure 701) is used to add the M/Es and M/E Partitions necessary to the auto **Channel Pool** to enable Auto-ME functionality.

The **IQ Auto Channel Pool** dialog box contains two tabs:

- **M/E** (refer to *M/E Tab* on page 618)
- **Video Channels** (refer to *Video Channels Tab* on page 619)

M/E Tab

Figure 701. IQ Auto Pool Dialog Box – M/E Tab

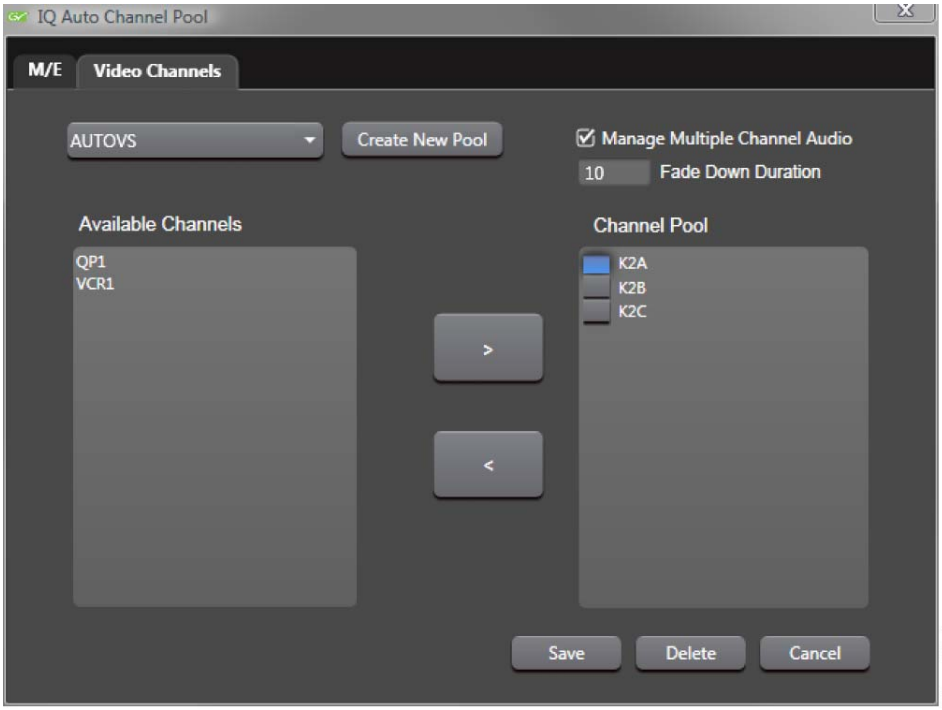


Parameters, functional areas, and control functions on the **M/E** tab (Figure 701) comprise:

- **Available Channels** – a list of M/E channels that are not assigned to a channel pool.
- **Channel Pool** – a list of channels that are currently assigned in the channel pool.
- **Assign Channel** or **Right Arrow** icon – moves and assigns available channels to a designated channel pool. The channels no longer appear in the **Available Channels** list.
- **Remove Channel** or **Left Arrow** icon – moves the designated channels pools back as available channels. The channels no longer appear under the **Channel Pool** list.
- **Save** – saves changes made to the Auto M/E pool.
- **Cancel** – cancels changes made to the Auto M/E pool and closes the **IQ Auto Channel Pool** dialog box.

Video Channels Tab

Figure 702. IQ Auto Pool Dialog Box – Video Channels Tab



Click the **Video Channels** tab (Figure 702) on the **IQ Auto Channel Pool** dialog box. All parameters, functional areas, and control functions for the **Video Channels** tab appear:

- **AUTOVS** – drop-down list that displays names of the video channel pools.
- **Create New Pool** – opens the **New Channel** dialog box to create a new video channel.
- **Manage Multiple Channel Audio** – when checked,
- **Fade Down Duration** –
- **Available Channels** – a list of video channels that are not assigned to a channel pool.
- **Channel Pool** – a list of channels that are currently assigned to a channel pool.
- **Assign Channel** or **Right Arrow** icon – moves and assigns available channels to a designated channel pool. The channels no longer appear in the **Available Channels** list.
- **Remove Channel** or **Left Arrow** icon – moves the designated channels pools back as available channels. The channels no longer appear under the **Channel Pool** list.

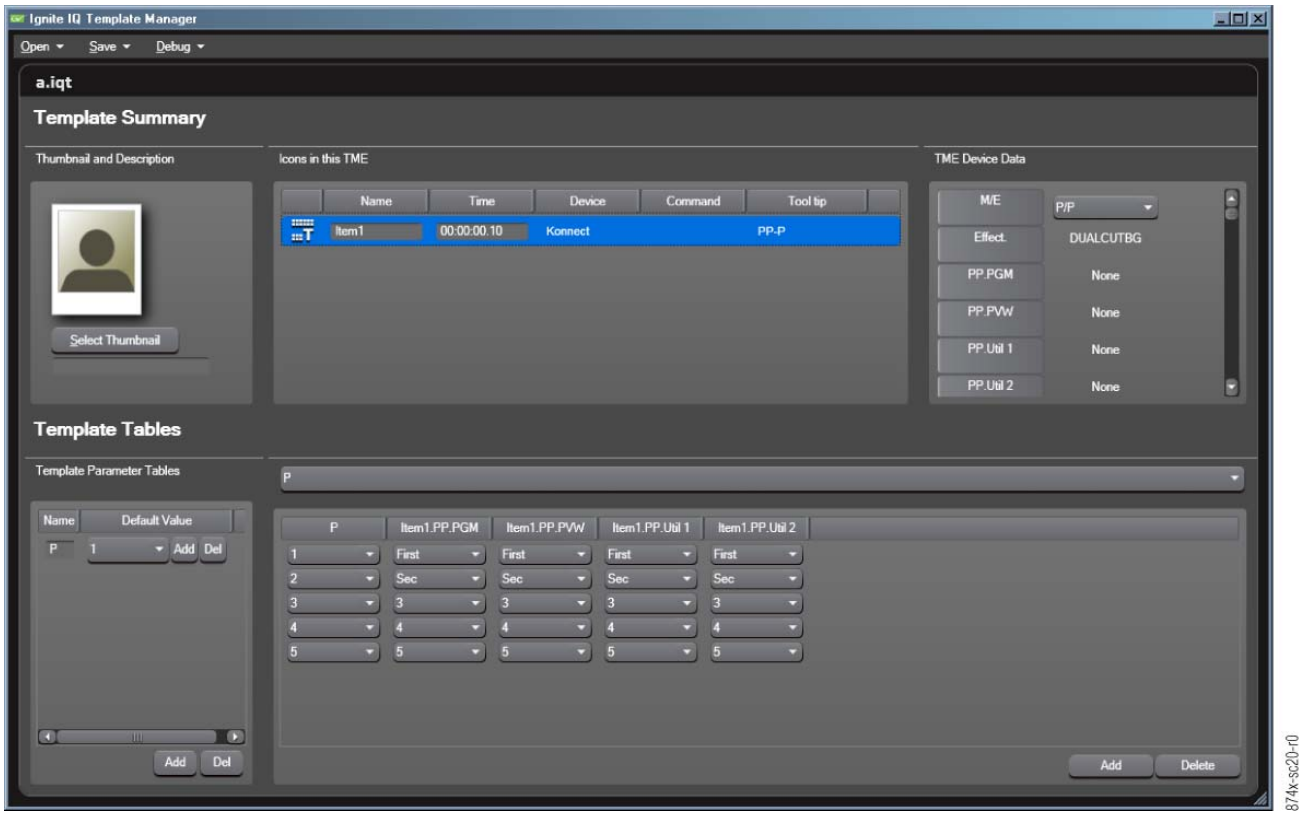
- **Save All** – save changes made to all channel pools.
- **Delete** – deletes the currently selected pool and removes it from either list: **Available Channels** or **Channel Pool** list.

Note The channels associated with the deleted channel pool are moved back and made available under the **Available Channels** area.

- **Cancel** – cancels changes made to the video channel pools and closes the **IQ Auto Channel Pool** dialog box.

IQ Template Manager Dialog Box

Figure 703. IQ Template Manager Dialog Box



874x-sc20-r0

The **IQ Template Manager** dialog box (Figure 703) is used to:

- Add template parameter variables to an IQ Template
- Enable Auto-ME channel pool
- Edit the global channel pool table

Operation

Route Services

Main User Interface

Figure 704. Route Services - Sources

Note Sources can be routed to Background, Keyer bus, and Utility bus from the main UI that appears on the right monitor.

Click the page tab (Figure 704) for the desired source.

- To route a source onto the A source or B source bus, select the source.
- To route a source to a Keyer or Utility bus:
  - **a.** Select the desired Delegate Keyer bus or Utility bus button.
  - **b.** Select the desired source in that delegate row.

Master Routing

Figure 705. Setup Menus

1. From the **Setup** drop-down menu (Figure 705), click **Master Routing**. The **Master Routing** dialog box (Figure 706 on page 622) appears.

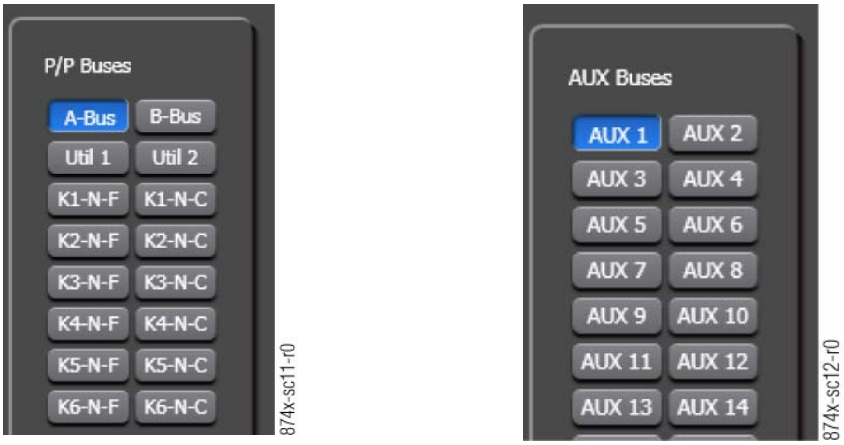
Figure 706. Master Routing Dialog Box

2. From the **Route Area**, select the specific M/E or AUX source for routing.

Figure 707. Master Routing Route Area

3. From the bus list (Figure 708 on page 623), select the desired bus to route:
   - For M/E banks choose between the background, utility, and keyer buses.
   - For Aux buses, select the desired AUX bus from the available AUX buses.

Figure 708. Master Routing Bus Lists



4. From either the **Internal Sources** or the **External Sources** area (Figure 706 on page 622), select the desired source to route.

Manage Effects

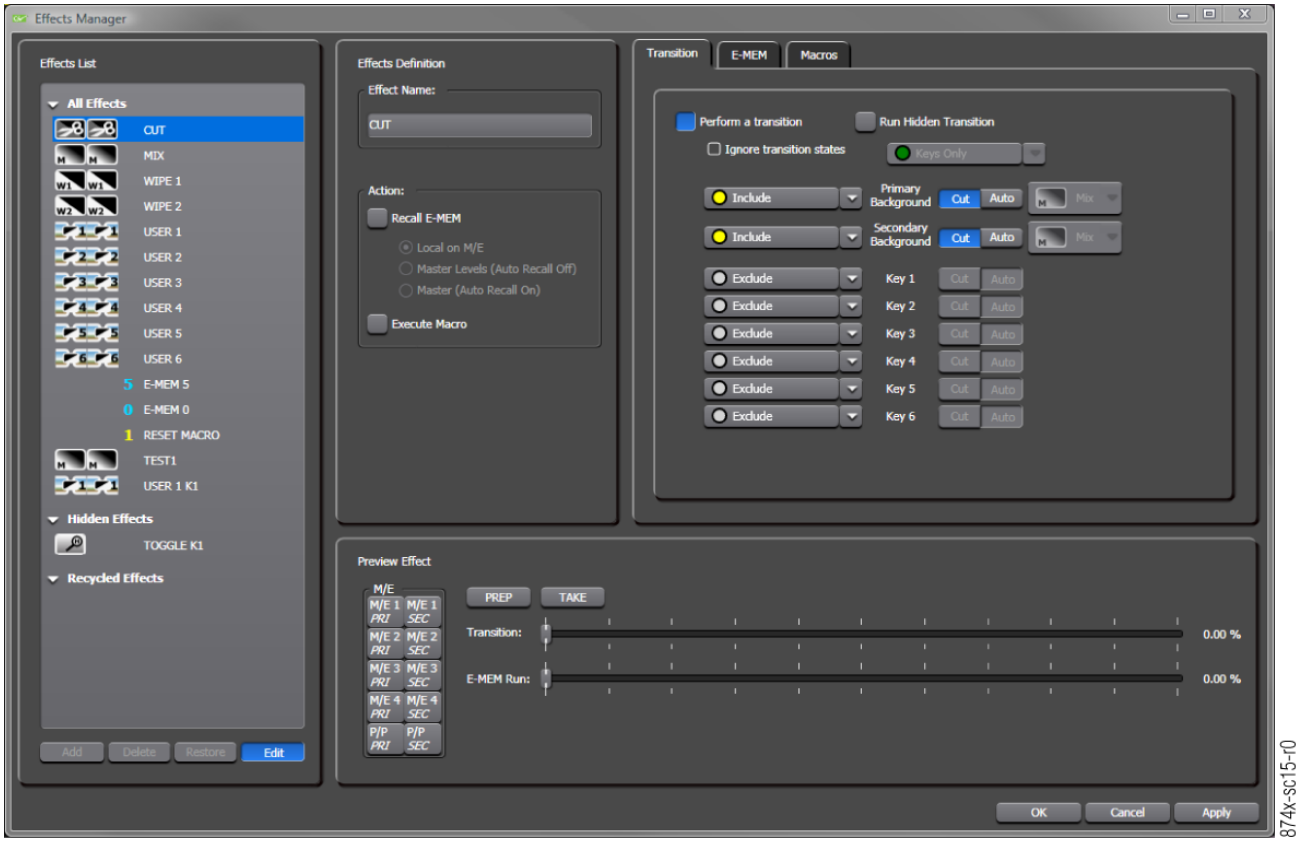
Create An Effect

Note Refer to the manufacturer's manuals for detailed information.

1. Click the respective **P/P**, **M/E 1**, **M/E 2**, **M/E 3** or **M/E 4 Browse Effects** button (Figure 709). The **Effects Manager** dialog box (Figure 710 on page 624) appears.

Figure 709. Browse Effects Button

Figure 710. Effects Manager Dialog Box



2. In the **Effects List** area, click **Add**. A new effect is created and added to the Effects List.

Note The edit button is automatically selected to allow the newly created effect to be edited.

3. Using the available **Effects Manager** dialog box functions: **Effects Definition**, **Transitions/E-MEM/Macros** tabs, and **Preview Effect** areas, define the effect.

4. Either click:
   - **OK** to save the current parameters and close the dialog box.
   - **Cancel** to close the dialog box without saving changes.
   - **Apply** to save the current parameters but not close the dialog box.

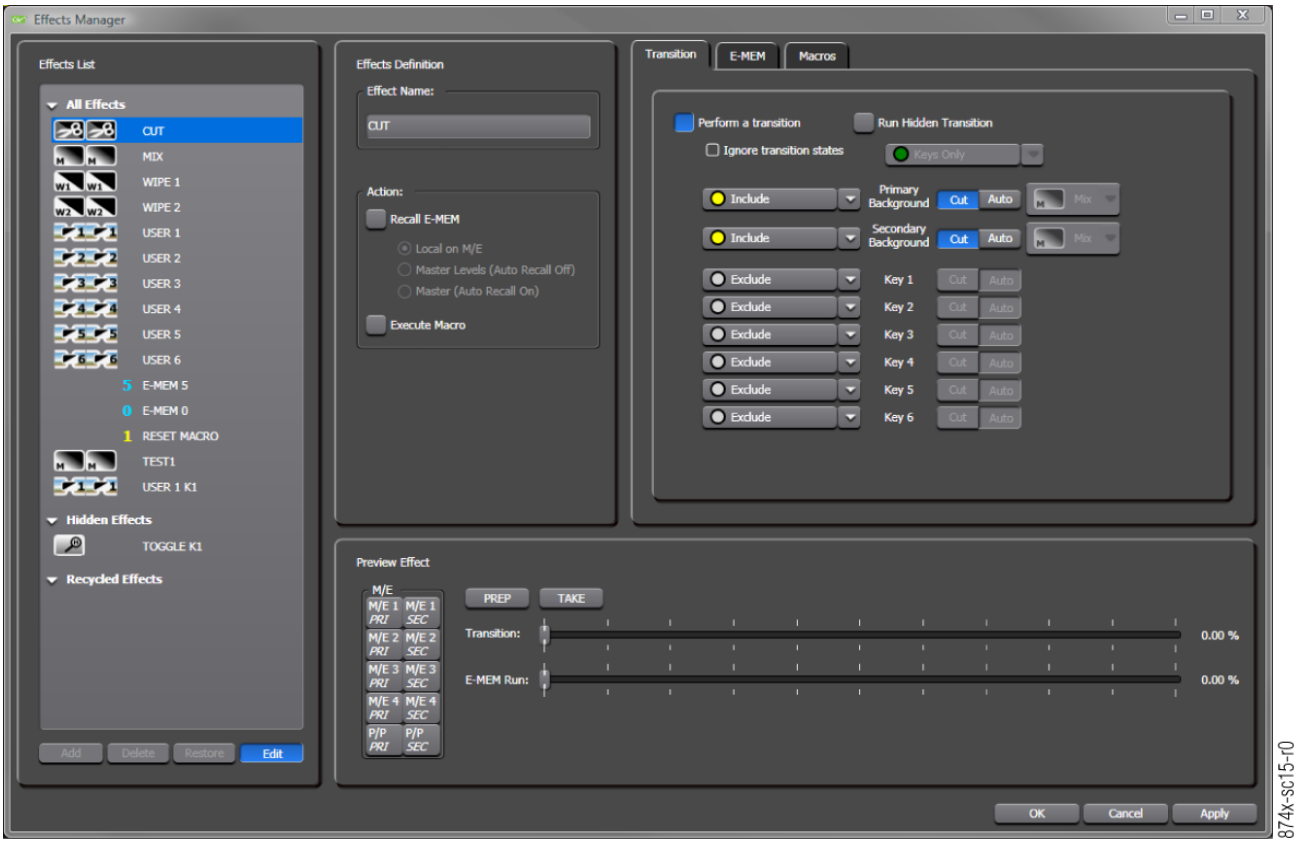
Edit An Effect

Note Refer to the manufacturer's manuals for detailed information.

1. Click the respective **P/P**, **M/E 1**, **M/E 2**, **M/E 3** or **M/E 4 Browse Effects** button (Figure 711 on page 625). The **Effects Manager** dialog box (Figure 712 on page 625) appears.

Figure 711. Browse Effects Button

Figure 712. Effects Manager Dialog Box



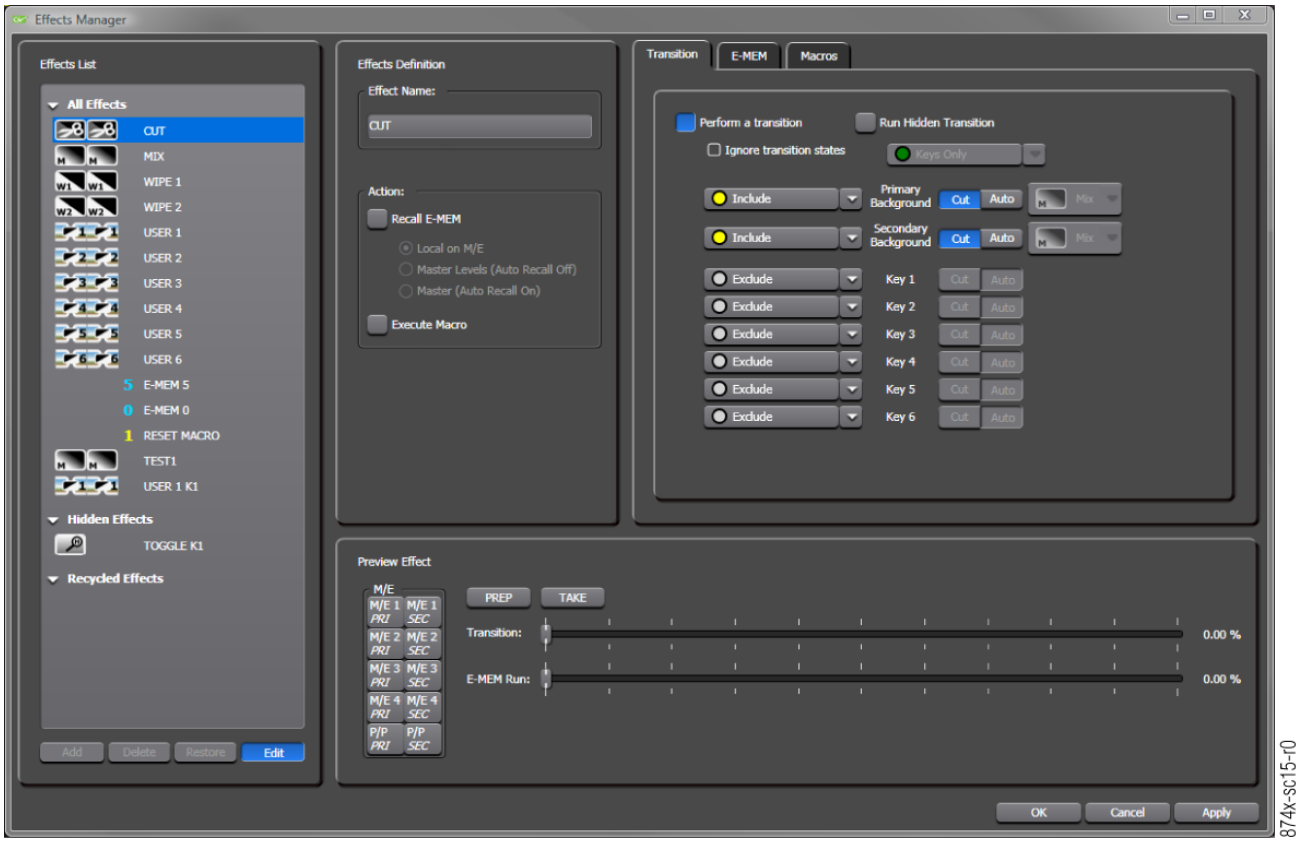
2. In the **Effects List** area, select an effect for editing.
3. In the **Effects List** area, click **Edit**.
4. Using the available **Effects Manager** dialog box functions: **Effects Definition**, **Transitions/E-MEM/Macros** tabs, and **Preview Effect** areas, define the effect.
5. Either click:
   - **OK** to save the current parameters and close the dialog box.
   - **Cancel** to close the dialog box without saving changes.
   - **Apply** to save the current parameters but not close the dialog box.

Delete An Effect

1. From the desired M/E, click **Browse Effects** (Figure 713). The Effects Manager dialog box (Figure 714) appears.

Figure 713. Browse Effects Button

Figure 714. Effects Manager Dialog Box



2. In the **Effects List** area, select an effect for deletion.
3. Either click:
   - **OK** to save the current parameters and close the dialog box.
   - **Cancel** to close the dialog box without saving changes.
   - **Apply** to save the current parameters but not close the dialog box.

Perform Transition

1. From the Effects drop-down list (Figure 715), select an effect to prep:

Note If the effect is set to recall a local E-MEM, the E-MEM is recalled on the pertinent M/E bank.

If the effect is set to recall a master E-MEM, the E-MEM is recalled on the master level.

Figure 715. Browse Effects Button

2. Click **TAKE** to execute the effect.

Recall/Run E-MEM

1. From the Effects drop-down list (Figure 716), select an effect to recall.

Figure 716. Browse Effects Button

2. Either:
   - To play the effect and run the E-MEM, click **TAKE**.
   - To run the E-MEM on the M/E bank without executing a transition click **RUN**.
   - To pause a running E-MEM, click **RUN**.

Run/Pause Master E-MEM

1. From the Effects drop-down list (Figure 717), select an effect to recall.

Figure 717. Browse Effects Button

- Click **RUN** to:
  - Run the current master E-MEM.
  - Pause master E-MEM if running.

CAUTION Be careful when use caution when using the Master Run button. The Master Run button initializes the current work buffer of the E-MEM timeline and could potentially cause a On-Air conflict.

  - Resume master E-MEM from paused state.

Execute Macro

1. From the Effects drop-down list (Figure 718), select a macro to prep:

Figure 718. Browse Effects Button

2. Click **TAKE** to execute the macro.

Section 17

General Operation Guidelines

The following guidelines are meant to assist in a high-level understanding of Ignite/Ignite Konnect system operation. Because the inter-operation of the individual Ignite/Ignite Konnect modules related to show production is specific to an installation site, a full operational understanding for using the Ignite/Ignite Konnect system is obtained only through on-site specific training.

Turnurn On/Off

Turn On

1. Ensure all associated devices are powered on and running the appropriate software.
2. Set the Ignite/Ignite Konnect CPU power switch to On.

Turn Off

1. Close the Ignite/Ignite Konnect program
2. Set the Ignite/Ignite Konnect CPU power switch to Off.

Start Ignite/Ignite Konnect Software

Start

1. Either:
   - Double-click the Ignite/Ignite Konnect desktop icon (Figure 719).
   - Right-click the Ignite/Ignite Konnect desktop icon (Figure 719) and then click **Open**.
   - Click the **Start** button, point to **All Programs**, point to **Ignite Software**, and then click **Ignite**.

Figure 719. Ignite/Ignite Konnect Desktop Icon

2. The Ignite/Ignite Konnect Live Production Control System program opens and is ready for use.

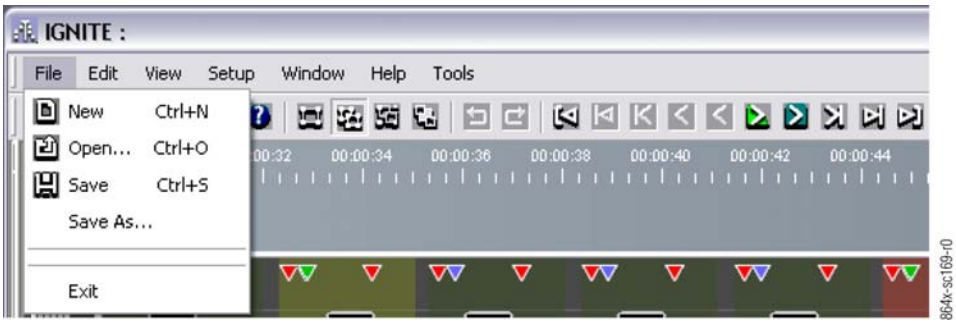
System Status

1. Start the Ignite/Ignite Konnect program.
1. On the Event Timeline module **File** menu, click **Open**. The **Open** dialog box appears. Navigate to and click the desired user macro. The selected show/user file (macro) sets up the **Event Timeline** with the presets/prebuilds specific to that show or user.
2. Click sources on the switcher, confirm that switches are taking place and that, when a button is clicked, what is expected is what happens.
3. Raise and lower audio faders to confirm that what is heard is what was expected.
4. Import a TME onto the timeline and bus-prep it. Make sure it routes everything to **Preview** as expected and then transition it. Make sure it transitions as expected.
5. The easiest way to confirm control of all external devices is to first start with CG and Still Stores. Try recalling a page via the hotkeys. This indicates CG/SS control.
6. For device controls such as video and audio servers or VTRs, either recall a clip list from servers or audio servers. In the case of VTRs, load tapes and then click **Play** to determine communication.

Set Up A New Show

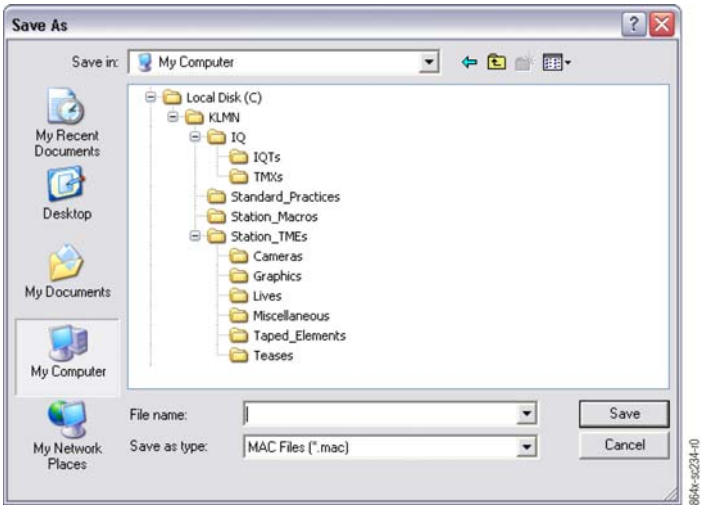
1. On the **Event Timeline** module **File** menu (Figure 720), click **New**. A blank **Event Timeline** appears.

Figure 720. File Menu New



2. Navigate to the C:\(*station call letters*)\Station_Macros subfolder (Figure 721). Refer to *Standardization* *on page 577*.

Figure 721. Saved Show Location Subfolder



Note In the next step it is strongly recommended that the macro name should be based upon established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

3. In **File Name**, type a name for the new show. Click **Save**.

Note Typically the timeline is left blank when storing a macro for show use, since it is dynamic and imported via Rundown Conversion. The selected show/user (macro) file starts the Event Timeline module with the presets/prebuilds specific to that show or user; e.g., CG/SS Hotkeys, LBNs, and any TMEs that are on the timeline. Therefore, all changes/additions/deletions, customization, hotkeys, etc. are specific to that show/user interface.

4. Begin populating the **Event Timeline** and building any new TMEs that are required.

Note Camera preset hotkeys are global and load when the Ignite/Ignite Konnect application is started.

5. On the **Event Timeline** module **File** menu, click **Save As**. The **Save As** dialog box appears.

Open An Existing Show

1. On the **File** menu, click **Open**. The **Open** dialog box appears.
2. Navigate to the C:\(*station call letters)*\Station_Macros subfolder (Figure 721) and click the desired user macro. The selected show/user file (macro) sets up the Event Timeline with the presets/prebuilds specific to that show or user.
   - To check system status, refer to *System Status* on page 630.
   - To go **LIVE** with a specific workstation, refer to *Place Workstation in LIVE Mode on page 240*.

Figure 722. Ignite/Ignite Konnect Three-Monitor Display Example

Software Version

Note The software version determines the device control and features available on any given Ignite/Ignite Konnect system.

To check the Ignite/Ignite Konnect system software version:

- On the **Help** menu, click **About**. The **About** property sheet appears. The software version information is contained in the property sheet.

Figure 723. Software Version

Quit Ignite/Ignite Konnect Software

To quit the Ignite/Ignite Konnect application either:

- Click the **Close** button
- On the **File** menu, click **Exit**

Dock/Undock Modules

Many of the Ignite/Ignite Konnect software modules can be docked/undocked to and from the default location. Refer to Figure 724.

Figure 724. Dock/Undock Buttons

To Undock a module:

1. Click the **Undock** button.

2. In a non-active area of the module, click and drag it to a new location, and then release.

Note The module remains translucent until returned to the default location.

To Dock a module at the default location:

- Click the **Dock** button. The module returns to the default location.

Building a Show

The Ignite/Ignite Konnect system is event based so directors must create individual events that execute the commands normally done by multiple people during a regular show. Instead of marking scripts and calling commands to the individuals in the control room and on the floor, directors preprogram show events on the rundown itself.

Producing a Show

Producing an Ignite/Ignite Konnect automated newscast is not much different than producing a show for standard production. There are a few things to keep in mind:

- Each story in a rundown must have a distinct name. If a segment takes place multiple times during a show it should have a specific name each time. For example, naming the a weather segment **1st Weather** and the main weather segment **Main Weather** alleviates the confusion that would occur if all weather hits during a rundown were named WX or Weather.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

- Use the automated CG commands for each story. This information is sent to the Character Generator automatically, so be careful inputting information into the automated fields. Do not include times for a CG within the CG command; it automatically appears on the sent CG. Instead, create a Cut Sheet for the director, so they can key the appropriate graphic at the appropriate time.

- Communicate any and all rundown changes. The director marks the show through the rundown. If possible, "set" the rundown one hour before the show. After that, if any changes are made to the rundown, make sure the director knows a change has been made to a specific story. This communication can be a phone call or an IM through ENPS. If a story is added after the one hour time period, do not renumber the rundown. Instead, create a new slug using a decimal point when numbering the new element. For example, if a story is added between A5 and A6, number the new story as either A5.1 A5.2, A5.3 and so on. That way the director knows that the element is new to the rundown and goes between A5 and A6.
- Be specific when entering information in the Format, Type, and Talent columns. These columns are used by the director when marking the show. Being specific with the information in these three columns removes the need for the director to search through the story itself for the story information. If anything changes in these columns, then call the show's director.
- Make sure that roll cues and production commands are included in the script. The director will no longer be looking at a marked script. Instead, the director reads the teleprompter along with the on-air talent. If a command for taking talent or rolling a tape is not included in the script, then the director will not know when to take this element.

Editing a Show

For the editors, there are a few things that are different from the current production method:

- All video encoded into the servers should be pre-mixed. Using the Ignite/Ignite Konnect live production system, there is no audio technician mixing levels and it is too much to ask a director (who is already minding the audio, video, machine control and graphics playback) to do a live mix of the edited piece. The final audio mixes, whether a locally produced SOT, a VO from CNN or a Package from FOX, should not have separated audio. The audio encoded or ingested into the server should already contain the final mix for both channel one and channel two.
- Missing video must be conveyed to the director. If a piece of video is not going to make it, notify the producer so they can relay this information to the director. Then the director will know to skip the missing event.

Note A director does not know if a piece of video is available until preparing the event to take to air.

- Last minute video can be aired. If video comes in during a newscast and cannot be encoded or ingested into the video server, it can be aired from one of the video tape decks. Communicate this to the producer so they can tell the director to make the appropriate changes.

Multiple CG Automation

1. Ignite/Ignite Konnect enables multiple CG Automation. After the CGs have been inserted into the scripts, the director can decide if any of the CGs need to be directed to a CG device that is not designated as the Automation CG Machine. After the CGs have been placed in the scripts by the producer or reporters, the director will go back and edit the CG command line, which will look like this:

   `[CG:locator\Bronx\New York City\New York]`

2. Insert the CG Device Name CG1- after [CG:

Note The CG Device Name has to be the same name used on the Switcher, for example; CG1, CG2, etc.

3. The new CG Command line will look like this:

   `[CG:CG1-locator\Bronx\New York City\New York]`

4. The Template Name points to a file in the directory specified on the **NRCS Setup** dialog (like iNEWS or ENPS) within ScriptViewer. The file is used to define the template ID used to create the CG page.

5. Within the ScriptViewer drive, under
   `C:\Program Files\Scriptviewer\NEWS\CG\`
   create the Association File to point to the template address in the CG. These files should be created in Notepad and look like this:

   `[Header]`

   - Name=One Line Lower Third (Optional)
   - Template=2000 (This is the Template Page in the CG)

6. Save and title the file with the name to type in the INEWS CG command and then rename the file without the.txt. Usually it is some cryptic name like 2ls, gfx1. Create as many of these Template Association Files as Templates used from the CG.

Modify CG Conversion Files

CG pages can be created for lower third supers and full screen font from information contained within the scripts. A template is created within the

CG device; the user must insert a production cue from within the NRCS and place information within the data fields while editing a script.

The CG command structure is:

```
[CG:TemplateName\Field1\Field2\FieldN]
```

Example:

```
[CG:locator\Bronx\New York City\New York]
```

To skip fields within a template, place a backslash with no data:

```
[CG:2ls\\Data\Data]
```

To call up a full screen CG page with no data fields, create a template association name [CG:Gfx\] that points to a CG address number where the full screen is already made.

Coding a Show

The Ignite/Ignite Konnect system supports NRCS news commands via TME Associations. The TME Associations are automation directives embedded into news items on iNEWS and ENPS news systems. Directors associate pre-tested TME files with news commands via the Ignite/Ignite Konnect user interface. Once associated to TMEs, directors embed TME Associations within the actual news items residing on the station's NRCS.

Note IDs are case sensitive; e.g.,if the ID is all lower case in the server, it must be all lower case when coding.

Using the TME Associations previously created, start coding shows in the NRCS. Coding procedures differ between column based and script based coding.

Column-based Coding

Typically, column-based coding deals with three columns for inputting TMEs directly into scripts.

- TME – Use this column to input TME codes. Refer to *Standardization* *on page 577*.
- Still Store – Use this column to input the ID code numbers used to call up Still Store and CG pages from graphic devices. The Load Script command must be the second element in the TME string.

Note For all names, abbreviations, colors, and file structures, use established standards and consistent techniques and practices. Refer to *Standardization* *on page 577*.

Note When including multiple TME properties, use commas to separate them.

Typically, the SS/CG code numbers in this column are for over the shoulder graphics and lower third name fonts and banners.

Note When including multiple SS/CGs, use commas to separate them.

Note Lower thirds that are built daily are recalled via the CG playlist, so there is no need to code them here.

- Timecode – The Timecode column is where:
  - Video and audio server clips are coded
  - Specific timecodes for VTRs are coded

Note When including multiple clips or timecodes, use commas to separate them.

Script-based Coding

Input TMEs, CG/SS numbers and Time code/Tape IDs where:

- Code [TME:nnn]
  (where nnn represents the TME name to use for that particular story. Separate multiple TMEs with commas; e.g., [TME:nnn,rrr,zzz])
- Code [SS:1234]
  (inserts Still Store number 1234 into the first TME (with a still store number) that it encounters in the script. Separate multiple CGs/SSs with commas; e.g., [SS:1234,3456,5678])
- Code [Timecode:ttt]
  (where ttt is the clip name inserted into first server load icon that is encountered in the story. Separate multiple Timecodes with commas; e.g., [Timecode:ttt,mmm,ccc])

Common Errors

- **Not a Valid TME association** – there is a miss-coded item or the TME has not been associated. Check that there are no typing mistakes in the NRCS rundown. If no typing mistakes, confirm that the TME is associated.
- **Overage of an Icon** – there is an empty icon in a TME and an SS/CG number or Clip ID to insert into it could not be found. Check that there is a number coded in the Still Store or Timecode columns.

Note There may be times when this error is intentional, for example, when relying on the ScriptViewer teleprompter to build a lower third in the playlist and intentionally leaving the Still Store column blank.

- **Underage of an Icon** – there is a number in the Still Store or Timecode columns but no TME for it. Check that there is a TME with one of these icons in it.

Failure Recovery

The failure recovery procedures/recommendations listed below, are based on standard Ignite/Ignite Konnect system installations and configurations:

Note Because some sites require/request customization, those custom sites must (with the assistance of Grass Valley Commissioning/Training personnel) develop **custom** recovery procedures appropriate for their installed Ignite/ Ignite Konnect system.

- *Before a Failure Occurs - Recommendations* on page 639

Note The following procedures assume that a failure occurred on a standard (installed/configured) Ignite/Ignite Konnect system during a **LIVE** broadcast from the primary workstation, and that full recovery must occur within the timespan of a commercial break.

- *All Systems - Network Failure* on page 640
- *Single/Non-Redundant Failure Recovery* on page 640
- *Partial Redundant (Type 1 and 2) Failure Recovery* on page 641
- *Full Redundant Failure Recovery* on page 642
  - *Failure Recovery From Primary Workstation-A* on page 643
  - *Failure Recovery From Backup Workstation-B* on page 644

Before a Failure Occurs - Recommendations

1. Familiarize yourself with the operation of the *Device Manager Module* *on page 235*.
2. Memorize and practice recovery procedures to the point that they become second-nature.
3. Before airing a live show from the primary workstation, mirror the show (start Ignite, load the show macro, and import the rundown) on the alternate/redundant system CPU.

4. Configure an unused LBN page (see *LBN (Late Breaking News) Module* *on page 365*) to mimic QUICbox TME button functions (see *QUICbox Panel* *on page 367*) and name the page QUICbox. If the QUICbox fails, use the QUICbox LBNs to insert TMEs onto the event timeline.

Note Unlike QUICbox inserted TMEs, LBN TMEs cannot be programmed to auto execute or run hidden.

To continue the show, execute (run/play) LBN inserted TMEs.

5. Don't attempt to analyze/repair a **redundant** system during a commercial break. Immediately switch to the alternate (mirrored) equipment and continue the show.
6. Periodically exercise the alternate workstation/equipment to verify proper working order.

All Systems - Network Failure

If there is a network failure, depending on site standard operating procedures, contact either the station engineer or an IT person immediately.

Note Ignite/Ignite Konnect requires the local area network (LAN) to communicate with all devices under its control. Do not contact Grass Valley Technical Service for local network outages.

When LAN (local area network) operation is restored:

1. Set Device Manager mode to **LIVE.**
2. Verify all Device Manager devices display green.
3. Reposition the timeline cursor to the next scheduled TME event.
4. Continue show.

Single/Non-Redundant Failure Recovery

Note Single/non-redundant systems rely on a software or hardware/software restart for failure recovery. If a restart does not resolve the condition or if the failure is hardware related, the system is off-air until standard trouble resolution and repair are completed.

1. Go to commercial.

2. Shut down the Ignite/Ignite Konnect application (if possible), or do one of the following in the order presented:
   a. If all Ignite/Ignite Konnect modules do not close, either:
      - On the taskbar, click the Ignite Stopper icon.
      - On the desktop, double-click the Ignite Stopper icon.
   b. Shut down the Windows operating system.
   c. Power down the CPU.
3. If necessary, power up the CPU, and when Windows is loaded, restart the Ignite/Ignite Konnect application.
4. Load the show macro.
5. Import the rundown.
6. Set Device Manager mode to **LIVE.**
7. Set Device Manager configuration to **1**.

Note With Device Manager in **LIVE** mode, configuration **1** connects the QUICbox, SHOT Director, switcher, Klotz, tally controller, cameras, and serial devices to the CPU.

8. Verify all Device Manager devices display green.
9. Reposition the timeline cursor to the next scheduled TME event.
10. Continue show.

Partial Redundant (Type 1 and 2) Failure Recovery

Note Partial redundant (Type 1) Ignite/Ignite Konnect systems include backup Ignite CPUs and an XSWITCH matrix router to switch the workstation KVM between the redundant sets of CPUs. It does not include additional component mainframes or an additional workstation.

Note Partial Redundant (Type 2) Ignite/Ignite Konnect systems include all Type 1 components plus an additional Prep workstation that includes a keyboard, monitors, and mouse (KVM) for both the Ignite/Ignite Konnect CPUs. It does not include additional component mainframes, QUICbox, SHOT Director, or ScriptViewer control station.

1. Go to commercial.

2. Set Device Manager mode to **PREP** (if possible), or do one of the following in the order presented:
   a. Shut down the Ignite/Ignite Konnect application. If all Ignite/Ignite Konnect modules do not close, either:
      - On the taskbar, click the Ignite Stopper icon.
      - On the desktop, double-click the Ignite Stopper icon.
   b. Shut down the Windows operating system.
   c. Power down CPU-A.
3. Set XSWITCH mode to **B**.

Note XSWITCH mode **B** connects the workstation KVM to both Ignite/Ignite Konnect CPU-B.

4. If the show was **not** mirrored on Ignite/Ignite Konnect CPU-B:
   a. Start Ignite.
   b. Load the show macro.
   c. Import the rundown.
5. Set Device Manager mode to **LIVE.**
6. Set Device Manager configuration to **1**.

Note With Device Manager in **LIVE** mode on Ignite/Ignite Konnect CPU-B, configuration **1** connects the QUICbox, SHOT Director, switcher, Klotz, tally controller, cameras, and serial devices to Ignite/Ignite Konnect CPU-B.

7. Verify all Device Manager devices display green.
8. Reposition the timeline cursor to the next scheduled TME event.
9. Continue show.

Full Redundant Failure Recovery

Note With full redundancy, all Ignite/Ignite Konnect components (except shared resources such as cameras, CG devices, VTRs, etc.) are doubled. This configuration provides two complete systems that, if necessary for failure recovery, are switched via the XSWITCH matrix router and Device Manager.

Two failure recovery procedures are available for full redundant Ignite/Ignite Konnect systems:

- If you prefer to stay at the primary workstation and are confident that the KVM, QUICbox, SHOT Director, and ScriptViewer are working properly, refer to *Failure Recovery From Primary Workstation-A* on page 643.

- If you suspect that the KVM, QIUCbox, SHOT Director, or ScriptViewer are **not** working properly at the primary workstation, refer to *Failure Recovery From Backup Workstation-B* on page 644.

Failure Recovery From Primary Workstation-A

Note This procedure assumes that the primary workstation KVM, QUICbox, SHOT Director, and ScriptViewer are working properly. If not, refer to *Failure Recovery From Backup Workstation-B* procedure.

1. Go to commercial.
2. Set Device Manager mode to **PREP** (if possible), or do one of the following in the order presented:
   a. Shut down the Ignite/Ignite Konnect application. If all Ignite/Ignite Konnect modules do not close, either:
      - On the taskbar, click the Ignite Stopper icon.
      - On the desktop, double-click the Ignite Stopper icon.
   b. Shut down the Windows operating system.
   c. Power down CPU-A.
3. Set XSWITCH mode to **B**.

Note XSWITCH mode **B** connects workstation-A KVM to both Ignite/Ignite Konnect CPU-B, switcher-B and Klotz-B outputs to Master Control, and serial devices to Comtrol-B (serial controller).

4. If the show was **not** mirrored on CPU-B:
   a. Start Ignite.
   b. Load the show macro.
   c. Import the rundown.
5. Set Device Manager mode to **LIVE**.
6. Set Device Manager configuration to **2**.

Note With Device Manager in **LIVE** mode on Ignite/Ignite Konnect CPU-B, configuration **2** connects QUICbox-A, SHOT Director-A, switcher-B, Klotz-B, tally controller-B, cameras, and Comtrol-B (serial controller) to Ignite/Ignite Konnect CPU-B.

7. Verify Device Manager devices display green.
8. Reposition the timeline cursor to the next scheduled TME event.
9. Continue show.

Failure Recovery From Backup Workstation-B

Note This procedure assumes that the primary workstation KVM, QUICbox, SHOT Director, or ScriptViewer are **not** working properly.

1. Go to commercial.
2. Set Device Manager mode to **PREP** if possible, or do one of the following, in the order presented:
   a. Shut down the Ignite/Ignite Konnect application. If all Ignite/Ignite Konnect modules do not close, either:
      - On the taskbar, click the Ignite Stopper icon.
      - On the desktop, double-click the Ignite Stopper icon.
   b. Shut down the Windows operating system.
   c. Power down CPU-A.
3. Set XSWITCH mode to **C**.

Note XSWITCH mode **C** connects workstation-B KVM to both Ignite/Ignite Konnect CPU-B, switcher-B and Klotz-B outputs to Master Control, and serial devices to Comtrol-B (serial controller).

4. Move to workstation-B.
5. If the show was not mirrored on CPU-B:
   a. Start Ignite.
   b. Load the show macro.
   c. Import the rundown.
6. Set Device Manager mode to **LIVE**.
7. Verify/Set Device Manager configuration to **1**.

Note With Device Manager in **LIVE** mode on Ignite/Ignite Konnect CPU-B, configuration **1** connects QUICbox-B, SHOT Director-B, switcher-B, Klotz-B, tally controller-B, cameras, and Comtrol-B (serial controller) to Ignite CPU-B.

8. Verify all Device Manager devices display green.
9. Reposition the timeline cursor to the next scheduled TME event.
10. Continue show.

Appendix A

Standardization

Folders/Directories

Note For all file structures, use standard and consistent techniques and practices.

Organize TMEs very carefully when saving them so they can be found easily and quickly. To do so, it is necessary to:

- Use standard and consistent techniques and practices.
- Create a standardized file management structure (Figure 725).

Note With a standard, it is easy to maintain control of existing files and to enable better back-up procedures.

Figure 725. Sample File Structures.

1. Create a folder at the root level of the C: drive and name it with the station identifier; e.g., Figure 725.
2. Under the station identifier folder, create sub-folders (Figure 725) for Standard-Practices, Station-Macros, Station-TMEs, and the IQ option; e.g., C:\ABCD\Station-TMEs\Graphics.

Note Ignite IQ is an option and is not available for configurations not using the IQ option.

- The IQ sub-folder
  C:\(station identifier)\IQ
  should contain all IQTs and TMXs. This IQ folder should have separate sub-folders for each type; e.g.:
  - C:\(station identifier)\IQ\IQTs
  - C:\(station identifier)\IQ\TMXs
- The Station-Macros sub-folder
  C:\(station identifier)\Station-Macros
  should contain all macros for all shows and directors.
- The Station-TMEs sub-folder
  C:\(station call letters)\Station-TMEs
  should contain all TMEs. This TME folder should have separate sub-folders for each TME type; e.g.:
  - C:\(station identifier)\TMEs\Cameras
  - C:\(station identifier)\TMEs\Graphics
  - C:\(station identifier)\TMEs\Live-Elements
  - C:\(station identifier)\TMEs\Miscellaneous
  - C:\(station identifier)\TMEs\Taped-Elements
- The Standard-Practices sub-folder
  C:\(station call letters)\Standard-Practices
  should contain all the standard naming, abbreviations, colors, and file structure techniques and practices used. This file should be kept current.

Note Typically, for ease of use and access, the Standards file(s) is a text file created and maintained with Microsoft® Notepad.

Abbreviations and Names

TME Standards

TME Abbreviations

Note For all abbreviations, use standard and consistent techniques and practices. For quick and easy reference, create and maintain a site specific list of standard abbreviations text file at
C:\(station call letters)\Standard_Practices\TME-Abbreviations.txt.

The most commonly used Ignite TME abbreviations are listed in Table 18 on page 647 and Table 19 on page 647

Note The following list is not all inclusive but rather a starting point and guideline for establishing site relative abbreviations.

Table 18. TME Abbreviation Examples

Abbreviation	Definition
C	Camera
CG	Character Generator
CK	Chroma Key
DB	Double Box
FS REM RTR	FrameSync Remote Router
FUL	Full Screen
LP	Load Prompter
M	Mic
MON	Monitor
NR	Newsroom
OTS	Over The Shoulder
RAM	RAM Recorder
SOT	Any Video with sound full
SS	Still Store
SVO	SOT VO or NATS Pause
SX	Sports
T	Talent
TB	Triple Box
TZ	Teases
V	For Video sources (tapes or servers)
VO	Anything with NAT sound
WX	Weather

Using the standard abbreviations in Table 18 on page 647 and adding a sequential number to identify each instance of that item, the site abbreviations might resemble those in Table 19 on page 647.

Note This following list is not all inclusive but rather a starting point and guideline for establishing site relative abbreviations.:

Table 19. Site Specific TME Abbreviation Examples

Site Abbreviation	Definition
C1	Camera 1
C2	Camera 2

Table 19. Site Specific TME Abbreviation Examples - (continued)

Site Abbreviation	Definition
C3	Camera 3
CG1	Character Generator Channel 1
CG2	Character Generator 2
M1	Mic 1
M2	Mic 2
M3	Mic 3
T1	Talent 1
T2	Talent 2
T3	Talent 3
V1	Video Source 1
V2	Video Source 2
T4	Talent 4
T5	Talent 5
T6	Talent 6

Note For all names, use standard and consistent techniques and practices.

TME Names

Note For all names, use standard and consistent techniques and practices. For quick and easy reference, create and maintain a site specific list of standard TME names at C:\(station call letters)\Standard_Practices\TME-Names.txt.

Typically, the most common naming conventions use the standard abbreviations and answers to the four questions below.

Table 20. Common TME Naming Convention Examples

Question	Sample Answer
What is the transition?	Dissolve
What Video is involved?	Camera 1
What Audio is included?	Talent 1
What CG/SS elements that might be needed?	CG2 keyed

For example, based upon the standard site abbreviations and the answers above, the standard naming would be **DC1T1CG2**; i.e., Dissolve, Camera One, Talent One, With Character Generator Channel 2 keyed on top.

TME Effect Names

Note For quick and easy reference, create and maintain a site specific list of standard effects naming at C:\(station call letters)\Standard_Practices\TME-EffectNames.txt.

Typically, the most common effect naming uses the standard abbreviations and answers to the three questions below:

Question	Sample Answer
What is the effect type? (Cut, Wipe, Chroma Key, Double Box, etc.)	DB
What is the M/E? bank (ME1, ME2, ME3, ME4)	ME1
What is the keyer? (Key 1, Key 2, Key 3, Key 4))	K1K2

For example, based upon the standard site abbreviations and the answers above, the standard effect name would be **DBME1K1K2**; i.e., The effect is a **Chroma Key**, on **M/E 1**, and the keyer(s) is **Key 1** and **Key 2**.

IQT Standards

IQ Template Abbreviations

Note For all IQ Template abbreviations, use standard and consistent techniques and practices. For quick and easy reference, create and maintain a site specific list of standard abbreviations text file at C:\(station call letters)\Standard_Practices\IQ-TemplateAbbreviations.txt.

The most commonly used Ignite IQ Template abbreviations are listed in Table 21 on page 649. Guidelines for these abbreviations are:

- The number of characters should be limited to 3
- Per station, all IQ templates should have the same number of characters

Note The following list is not all inclusive but rather a starting point and guideline for establishing site relative abbreviations. Based on the guidelines provided in *IQ Template Abbreviations* on page 649, station sites can add/delete as necessary to meet their individual production needs.

Table 21. IQ Template Abbreviation Examples

Abbreviation	Definition
AUX	Auxiliary
BOX	Double Box, Triple Box, Quad Box, Split Screen, etc.
CAM	Camera

Table 21. IQ Template Abbreviation Examples - (continued)

Abbreviation	Definition
CKY	Chroma Key, Weather, etc.
DIG	DigiCart®
DPM	Wipe, Page Turn, Slab, etc.
GFX	Graphics Device (CG, SS)
MDK	Minidisk
MIC	Microphone
MON	Monitor
OTS	Camera with OTS, Camera with Key Graphic
RAM	RAM Recorder
REM	Remote or FrameSync
SVR	Video Server
TAL	Talent
VTR	Video Tape Recorder/Video Cassette

IQT Parameter Names

Note For all abbreviations and names, use standard and consistent techniques and practices. For quick and easy reference, create and maintain a site specific list of standard abbreviations text file at C:\(station call letters)\Standard_Practices\IQ-ParamNameAbbreviations.txt.

The most commonly used Ignite IQ Parameter Name abbreviations are listed in Table 22 on page 650. Guidelines for these abbreviations are:

- The number of characters should be limited to 1
- Per station, all IQ parameter names should have the same number of characters

Note The following list is not all inclusive but rather a starting point and guideline for establishing site relative abbreviations. Based on these guidelines, station sites can add/delete as necessary to meet their individual production needs.

Table 22. IQ Parameter Name Abbreviations

Abbreviation	Definition
C	Camera
E	Switcher and DPM effects
G	Graphics
M	Microphone
P	Camera Presets

IQT Value Abbreviations

Note For all abbreviations, use standard and consistent techniques and practices. For quick and easy reference, create and maintain a site specific list of standard abbreviations text file at C:\(station call letters)\Standard_Practices\IQ-ValueAbbreviations.txt.

The most commonly used Ignite IQ Value abbreviations are listed in Table 23 on page 651. Per station, all IQ value abbreviations should be consistent.

Note The following list is not all inclusive but rather a starting point and guideline for establishing site relative abbreviations.

Table 23. IQ Value Abbreviations

Parameter Name	Value
C	1–16 (maximum value range)
E	C = Cut W = Wipe F = Fade CK1, CK2, CK3, CK4 = Cut Key 1–4 FK1, FK@, FK3, FK4 = Fade Key 1–4 WK1, WK@, WK3, WK4 = Wipe Key 1–4 etc.
G	1–4 (or more based on the number of graphic device channels)
M	1–99999999 (maximum value range
P	1–125 per camera

IQT Effect Names

Note For quick and easy reference, create and maintain a site specific list of standard effects naming at C:\(station call letters)\Standard_Practices\IQ-EffectNaming.txt.

Typically, the most common effect naming uses the standard abbreviations and answers to the three questions below:

Table 24.

Question	Sample Answer
What is the effect type? (Cut, Wipe, Chroma Key, Double Box, etc.)	DB
What is the M/E? bank (ME1, ME2, ME3, ME4)	ME1
What is the keyer? (Key 1, Key 2, Key 3, Key 4))	K1K2

For example, based upon the standard site abbreviations and the answers above, the standard effect name would be **DBME1K1K2**; i.e., The effect is a **Double Box**, on **M/E 1**, and the keyers are **Key 1** and **Key 2**.

Color Relationships

Note For all colors, use standard and consistent techniques and practices. For quick and easy reference, create and maintain a site specific list of standard abbreviations text file at C:\(station call letters)\Standard_Practices\Colors.txt.

The most commonly applied color relationships are:.

	SOT-VO
	Chroma Key
	SS/CG, Graphics Devices
	DPM Effects
	Teases
	Fade to Black
	Music-DigiCart, Minidisk
	Camera-C
	Aux
	VO
	Mics
	Camera-OTS
	Live-Remotes
	SOT
	Boxes
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Glossary

A

AES/EBU

The standard for digital audio as defined by the Audio Engineering Society and the European Broadcast Union. The standard specified for professional post production audio, a sample frequency of 48 kHz and a quantizing level of either 16 or 20 bits. Used by most forms of digital audio from CDs to D1—Sony 19mm cassette tape format—the first digital tape format, hence D1.

Aspect

The horizontal and vertical display dimension ratio of a picture; i.e., the width divided by the height (usually expressed as x:y). The aspect ratio of a traditional standard definition (SD) television screen is 4:3, or 1.33:1. High definition (HD) television uses an aspect of 16:9 (5 1/3 to 3), or about 1.78:1.

Auto Transition

A transition having a predefined duration generally initiated by pressing a control panel button.

Automation Section

Consists of a rundown list, event timeline, rundown converter, and LBN buttons.

B

Background Bus

A row of buttons on an M/E used to select background video signals. Typically labeled A and B, with A representing the current output and B representing the next output.

Background Transition

A transition between the background video signals selected on an M/E.

Background Video

Video that forms a background scene into which a key may be inserted.

Backing Color

The color in a chroma key scene that will be replaced with another video signal.

Bit Rate

The number of bits per second passed from one point to another.

Black

A black video signal generated within the switcher.

Box Wipe

A rectangular wipe pattern. For masking, the system provides a special box wipe pattern generator allowing independent control of the placement of each side of the box.

C

CCD (Charge-Coupled Device)

An image sensor used in digital photography.

CCFL (Cold-Cathode Fluorescent)

CCFL tubes are used for backlighting an LCD display.

CG (Character Generator)

Generates text and sometimes graphics for video titles.

Chroma

The depth or saturation of color. Chroma, hue, and luminance make up the three characteristics of television color.

Chroma Gain (chroma, color, saturation)

The gain of an amplifier as it pertains to the intensity of colors in the active picture.

Chroma Key

A video key effect in which one video signal (insert video) is inserted in place of areas of a particular color in another video signal. Blue and green are the chroma key colors most frequently used.

Clean Feed

A final output of the switcher that does not include downstream key effects or fade to black. Also refer to **Programmable Clean Feed**.

Clip

A threshold level adjustment to which the keying attribute (luminance, chrominance) is compared for generating the internal key control signal. Clip, in conjunction with gain, sets the switching point between the background and the key fill. Also refer to **Gain**.

Clip High, Clip Low

An alternative to Clip and gain keying, providing independent control of the points where the background video and the key fill video are each fully visible.

Complex Wipe Pattern Generator

A wipe pattern generator with additional capabilities (for example, matrix wipes).

Component Video

A video signal that keeps color and luminance information separate. RGB; Y, R Y, B Y; and Y, Cr, Cb are examples of component video.

Composite Video

An encoded video signal that combines color information with luminance information. NTSC, PAL, and D 2 are examples of composite video.

Compositing

Combining two or more video signals together into one output signal.

Control Signal

A signal used to perform an alteration or transition of video signals. For example, control signals are used for keying, masking, and wipe transitions.

Control Surface

The set of controls available to a single operator. These controls may reside on separate but related control panels.

Cross Fade

Refer to **Mix**.

Crosspoint

An electronic switch, usually controlled by a button on the panel, that allows video or audio to pass when the switch is closed.

Cut

An instantaneous switch from one picture to another. Switching circuitry allows cuts only during the vertical interval of the video signal to prevent disruption of the picture.

Cutaway

The act of momentarily "cutting away" (taking a shot of something else) from the main scene to hide jump cuts. This brief shot establishes continuity between two other shots, provides the necessary video pad when editing according to sound bites (portion of videotaped interview in which you see and hear the person talk), and helps to bridge jumps in time and/or location.

Cutback

The act of "cutting back" to the main scene to hide jump cuts. This brief shot establishes continuity between two other shots, provides the necessary video pad when editing according to sound bites (portion of videotaped interview in which you see and hear the person talk), and helps to bridge jumps in time and/or location.

D

DDR (Digital Data Recorder)

Refer to **DVR**.

DE

Digital Effects

Delegate

To assign panel controls to a particular operating function. Some panel controls (buttons, knobs, and joystick) can affect more than one function. The operator can choose an alternative function by delegating the panel controls to that function (typically by pressing or holding down a panel button).

Deserializer

A device that converts serial digital information to parallel.

Dissolve

Refer to **Mix**.

DPM® (Digital Picture Manipulator)

Grass Valley USA, LLC term for digital video effects equipment that performs digital effects such as: compression and transformations; e.g., change its size, shape, angle, flying a picture, turning a page, shattering an image. Also refer to **DVE**.

DPOP (Double Press Open)

Rapidly pressing a control panel button twice to open a related menu. On the system, buttons supporting DPOP are labeled with a graphical indicator.

DVE (Digital Video Effects)

Refers to video equipment that performs digital effects for production such as: compression and transformations; e.g., flying a picture, turning a page, shattering an image. (A registered trademark of Nippon Electric Company.) Also refer to **DPM**.

DVR (Digital Video Recorder)

[Also **DDR** (Digital Data Recorder), **VDR** (Video Disk Recorder)]

A video recorder/playback device that uses a hard disk drive or optical disk drive mechanism. Disk recorders offer nearly instantaneous access to recorded material.

E

Effect

A setup of panel controls specifying the sources involved and any processing applied to those sources. Effects can be learned (saved) and recalled by the E MEM effects memory system.

Effect Transition

Recalling an E MEM effect so that a transition is automatically performed at the start of the recall.

Effects Processor

The portion of a switcher that performs mixes, wipes, and cuts between background and/or effects key video signals.

E-MEM (Effects Memory)

A feature that permits control panel setups (effects) to be stored for later recall.

Engineering Setups

On the system, a collection of configuration settings that establishes an essential baseline for system operation and integrates the system into a facility.

ENPS

Electronic News Production System

Ethernet

A form of high speed data transport between devices on a network.

Event Timeline

A timeline that combines all production events in the form of TMEs that allow one person to direct a live show.

F

Fade To Black

A mix transition to black.

Field

One scan of an interlaced video image. In interlace systems, two fields are required to make a complete picture (video frame) because alternate lines are scanned. Also refer to **Frame**.

Fill Video

A video signal that fills a hole cut in background video by a key control signal.

Fixed Linear Key

A linear key that uses predetermined Clip and gain settings that are not adjustable.

Flip-Flop

A transition where the sources selected on the background buses (for example, preset and program) of an M/E are exchanged at the end of a transition. The original preset bus source becomes selected on the program bus and the original program bus source becomes selected on the preset bus.

FPGA

Field Programmable Gate Array.

Frame

One complete scan of a video image. For interlace video, alternate lines are scanned so a frame containing all the picture information consists of two fields. Also refer to **Field**.

Frame Rate

The number of frames presented per second. For interlace systems the frame rate is half the field presentation rate.

G

Gain

An amplification factor applied to a key control signal by a keyer that determines how much, if any, of the background and key fill video will be mixed together at the key edge areas. Low gain (1, or unity) generally results in a linear key.

GPI (General Purpose Input)
GPO (General Purpose Output)

A digital signal interface, used to activate a device or piece of equipment for limited remote control of a device's functions.

GUI (Graphical User Interface)

A Windows based user interface screen or series of screens allowing the user to point-and-click to select icons rather than typing commands

H

HD

High Definition

House Sync

Sync generated within a facility that is used as a reference for generating and/or timing other signals.

Hue

The location of a color on the color spectrum (i.e. red, yellow, green, blue). Chroma, hue, and luminance make up the three characteristics of television color.

I

iDPM™

Internal Digital Picture Manipulator. Also refer to **DPM**.

iNEWS

Avid Newsroom Computer System (formerly AvStar)

Interlace

A system of video scanning where the odd and even numbered lines of a picture are presented consecutively as two separate interleaved fields. The two fields required to make a complete picture are called a frame.

IP (Internet Protocol)

A data-oriented protocol used for communicating data across a packet-switched internetwork.

J

Jitter

An undesirable variation in the timing of transitions in a digital signal.

Joystick

A hardware positioner with control of multiple axes.

K

Key

An effect where a portion of a background scene is replaced by a new video. Key cut and key fill signals are involved, though in some cases the same signal may be used for both (self key).

Key Cut

In key effects, the key cut signal is used to specify where to cut a hole in the background that will be filled with the key fill video. The key cut signal determines the shape of the key effect.

Key Fill

In key effects, the video signal that fills the hole cut in the background video.

Key Frame (Keyframe)

A complete definition of an effect at a single point in time. Default key frame values can be set for a suite.

Key Invert

Reversing the polarity of a key, such that material formerly keyed out will be keyed in, and vice versa.

Key Mask

[Also **Mask**]

A key mode that allows use of a wipe pattern generator to prevent some undesirable portions of the key cut signal from cutting holes in the background video.

Key Memory

A feature where the last keying and video processing settings for a source are retained and re-imposed when that source is re-selected. Default source memory values can be set for each source on each bus.

Key Priority

The stacking order of multiple keys. The keyed signal with the highest priority appears in front of all the others. Keyed signals appear below higher priority keys and in front of lower priority keys, in a stack. A key priority transition changes the order of the keys without changing the background output.

Keyer

An electronic circuit that creates a control signal to control a video multiplier based on selective information contained in a video signal.

L

LBN (Late Breaking News) Hotkey

A quick way (hotkey) to insert a stored element onto the Event Timeline during a show. TMEs or sequences of multiple TMEs can be stored on a single LBN hotkey.

LCD

Liquid Crystal Display

Learn

To save a panel setup using E-MEM.

LED

Light-Emitting Diode

Linear Key

A key in which the keyer signal is faithfully reproduced in the final key effect. Linear keying preserves soft key edges, and generally has a gain of 1, or unity.

Look Ahead Preview

Video that shows the result of the currently setup next transition.

Looping, Loop-Through

An input that includes two connectors. One connector accepts the input signal, and the other connector is used as an output for connecting the input signal to another piece of equipment. Only the analog reference input is loop through.

Luminance

The brightness of the picture or area of the screen being considered. Chroma, hue, and luminance make up the three characteristics of television color.

The color video picture information contains two components: luminance (brightness and contrast) and chrominance (hue and saturation).

Luminance Key

A key effect in which the portions of the key cut signal that are greater in luminance than the clip level cuts the hole in the background scene. Generally used when the key cut and key fill signals originate from the same source. Luminance key clip and gain is adjustable.

Lux

A standardized model of human brightness perception, it is the SI unit of illuminance and luminous emittance, used as a measure of apparent light intensity hitting or passing through a surface.

M

M/E (Mix/Effects)

Pertaining to the video production circuitry and controls of a switcher involved in compositing video signals where a composite of two or more images can be created.

Mask

Refer to **Key Mask**.

Matte

Internally-generated color video that can be adjusted for luminance, hue, and chroma. Matte can be used to fill areas of keys and borders.

Matte Fill

Using matte video to fill the hole of a key effect.

Matte Generator

A video generator that produces matte signals.

Mix

[Also **Dissolve**, **Cross Fade**]

A transition between two video signals in which one signal fades out as the other signal fades in.

Multiplier

A control circuit in which a control signal is multiplied with one or more input video signals. The resulting video output level varies from full on to full off according to the state of the control signal.

N

NRCS

Newsroom Computer System

NTSC (National Television System Committee)

U.S. government and industry committee that defined the 525-line 60 (59.94) interlaced fields per second analog broadcast TV standard over 50 years ago. (This format is referred to as NTSC.) Of the 525 scan lines, 480 (give or take a few) contain the picture and the rest contain synchronizing information, hold the encoded closed caption text, and provide a time delay to move the electron beam back to the top of the screen. NTSC is used mainly in North America and Japan.

O

Object

An individual a functional area of a system, typically one of several having similar capabilities.

P

PAL (Phase Alternate Line)

A 625 line 50 interlaced fields per second analog broadcast standard used in many parts of the world, primarily Europe, but not the U.S.A. So named because the chroma subsignal phase is different on each successive scan line to reduce picture artifacts.

Pattern Border

A variable width border that occurs at the edges of a wipe pattern.

Pixel

A picture element. A pixel is a digital sample of the luminance and color values of a picture at a single point.

Point of Use

A location in the system where a resource is used. A resource is generally used at different locations at different times. However, with some resources it is possible to use the same resource at different locations at the same time.

Preference

Refer to **Suite Preference** and **User Preference**.

Preset Bus

[Also **B bus**]

A row of source buttons used to select the source that will be output by that M/E during the next background transition. .

Preset Pattern

A key effect in which a wipe pattern that has been preset to a desired size and location is used to cut the key hole. The characteristics of the pattern are set using pattern controls.

Preview

A video signal that is viewed before it is output by the switcher. Also refer to **Look Ahead Preview** and **Switched Preview**.

Production Switcher

Refer to **Switcher**.

Profile

Model name of a Grass Valley USA, LLC Video Disk Recorder.

Program Bus

[Also **A bus**]

A row of source buttons used to select the source for the current output of that M/E. It is the final output from a switcher that is broadcast or recorded. (.)

Programmable Clean Feed

A type of clean feed where different keys can be selected for inclusion or exclusion from the clean feed.

Q

R

RAM Recorder

A device that captures, saves, and outputs a still video image or in some cases motion video clips. On the Kayak system the RAM Recorder option can capture still images, motion video, and animation for playback. The RAM Recorder is also referred to as a Still Store.

Recall

To restore a previous panel setup that has been learned using E-MEM.

Reclocking

The process of clocking the data with a regenerated clock to remove jitter.

Register

A place to store an effect.

Resource

A capability of the system, typically consisting of a set of circuitry.

Rundown Converter

Converts a producer's rundown into a full script with graphics, cues, and prompter scripts.

Rundown List

Illustrates story, page and all events associated with that specific story. The Ignite replica of the show rundown.

S

Saturation

The degree of purity of a color. Adding white to a color reduces its degree of saturation.

SD

Standard Definition.

Self Key

A key effect in which a single video signal serves as both the key cut and key fill.

Sequence

On the system, a feature allowing a series of E MEMs to be recalled in a specific order with a single command.

Serial Digital Interface (SDI)

[Also **Serial Digital Video**]

A standard for digital video transmission over coaxial cable; i.e., passing video data bits in serial form (one bit after another), along a single wire. Standard Definition serial digital video (SMPTE 259M) operates at 270 Mbits/sec (2 x 13.5 MHz x 10 bits).

The SDI standard uses data words that are 8 or 10 bits in length. Signals are uncompressed and are self-synchronizing between the source (transmitter) and destination (receiver). A signal in SDI can contain up to four independent digital audio signals along with the video signal.

Serial Interface

An interface that allows the switcher to be controlled remotely by a computer editor or other serial controller. Data is passed serially between the editor and the switcher at selectable baud (transmission) rates.

Serializer

A device that converts parallel digital information to serial.

Snapshot

An E-MEM with only one keyframe.

S/N (Signal to Noise) Ratio

The ratio of a signal power to the noise power corrupting the signal. In less technical terms, signal-to-noise ratio compares the level of a desired signal to the level of background noise. The higher the ratio, the less obtrusive the background noise is.

Soft Border

A wipe pattern border that is mixed on the edges to give a soft effect.

Soft Edge

A pattern edge between two video signals in which the signals are mixed for a soft effect.

Source

1) An external device providing video. A source may provide only one video signal, or it may provide two signals (key fill and key cut).

2) The video signal(s) from a source, along with the source definition information associated with that source. Also refer to **Source Definition**.

Source Definition

A definition of the video signals making up a source, the device type and name of source, and the default processing and other parameters to be used for that source. The system is based on source selection, rather than choosing crosspoints.

Source Memory

A feature where the last keying and video processing settings for a source are retained and re-imposed when that source is re-selected. Default source memory values can be set for each source on each bus.

SPOP (Single Press Open)

Automatically opening a related menu when a control panel button is pressed. On the system, buttons supporting SPOP are labeled with a graphical indicator.

Stack

Refer to **Key Priority**.

Still Store

A device that captures, saves, and outputs individual video frames, either in analog or digital form, allowing extremely fast access time.

Suite

One or more control surfaces configured for use on the same project.

Suite Preference

A collection of settings used to configure a suite to create a consistent working environment for all involved.

Supers

Information from the show script that is sent to the character generator, and then output (superimposed/placing text over a video signal) to the lower third with the correct story.

Switched Preview

A special output of the system connected to a dedicated monitor. The operator can select and switch various system video signals to that output to preview them.

Switcher

A device that accepts inputs from a variety of video sources and allows the operator to select a particular source to be sent to the switcher's output(s). Also does transitions between sources and special effects (video mixing, wiping, keying, and such).

Sync

1) General term for a synchronizing signal or signal component. Digital systems generally employ an analog external timing reference signal (such as color black or tri-level sync) to synchronize different pieces of equipment. Within the digital signal itself, however, synchronizing information is carried by special digital codes inserted at the beginning and end of each active line.

2) In analog television systems, sync is the portion of the video signal that occurs during blanking and is used to synchronize the operation of cameras, monitors, and other equipment. Horizontal sync occurs within the blanking period in each horizontal scanning line, and vertical sync occurs within the vertical blanking period. A color black signal is often used for synchronizing different pieces of analog equipment.

T

Tally

A lighted indication that the associated video source is in use. Tally lights may be in front of a camera to show that it is the camera being used at that moment, or they may be used to light up the pushbuttons of video switchers.

Terminate, Termination

To complete a circuit by connecting a resistive load to it.

Timecode

Electronic guide track added to film, video or audio material to provide a time reference for editing, synchronization, etc.

TFT

Thin-film Transistor – often called “active matrix” display, this is the brightest, most viewable kind of LCD flat-panel display. It is also more expensive than “passive matrix” screens. In a TFT display, each pixel is actively controlled by one or more transistors.

TME

Refer to **Transition Macro Event**.

Transition

A change from one picture to another. Cut, mix, and wipe are transitions.

Transition Macro™ Event

A group of individual production tasks that are combined to create an automated video production event. A TME is created by dragging and dropping task icons on the timeline, defining the individual task properties, and then saving the resulting TME as an individual event macro.

TTL

Through-the-Lens – term used to describe a type of prompter. A TTL prompter mounts in front of the camera. A glass screen mounted 45° above the prompter reflects the script so that the announcer can read the text while looking at the camera behind the screen.

U

User Preference

A collection of user-available control configuration settings that enables working environment customization.

V

VDR (Video Disk Recorder)

Refer to **DVR**.

Vertical Interval

The portion of the video signal that occurs between the end of one field or frame and the beginning of the next.

Video Fill

A video signal used to fill the hole made by a key cut signal.

Video Mixer

Refer to **Switcher**.

Video Path

The path that video takes through the switcher.

Video Switcher

Refer to **Switcher**.

VTR (Video Tape Recorder)

A video recorder and playback device that records audio and video signals on magnetic tape.

W

Wash Matte

A type of matte that contains two elements rather than a single flat color. For example, a wash matte can have one color that mixes gradually across the screen to another color.

Wipe

A transition between two video signals that occurs in the shape of a selected pattern.

Wipe Pattern Generator

Circuitry that creates patterns that can be used to create wipe transitions, preset patterns, key masks, and matte washes.

Work Buffer

An active area of memory where the current effect parameters are stored, allowing the operator to use and modify the effect without changing the data stored E MEM.

X

Y

Z