

Encore

CONTROL SYSTEM



Release Notes

Software Version 1.8.0



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Encore Release Notes

Introduction

This document describes product enhancements provided by Encore software release 1.8.0. It also describes the installation procedure used to upgrade an Encore system to 1.8.0 (see [page 80](#)).

New Features in Encore Release 1.8.0

Control Panel Enhancements

- Support for the following SMS7000 GSC Control Panels: PXY Panel Group (PXS, PXD, PXYE), MB4, and SCP (see [page 18](#))
- Chop Feature (see [page 23](#))
- Source Categories (see [page 28](#))
- Shift Button Enhancements (see [page 34](#))
- Tie Line Used Identification (see [page 36](#))
- Keypad Button Configuration (see [page 37](#))
- Destination Ganging Enhancements (see [page 39](#))
- Control Panel Partitioning (see [page 42](#))
- Dynamic Page Set Creation from Control Panel (see [page 47](#))
- Park Button (see [page 48](#))
- Control Panel Keypad Legend Generation (see [page 49](#))
- Protect via Control Panel GPI (see [page 51](#))

- The ENC-PMB, and SMS-EDP, -MB8, and -MB4 Control Panes can now be configured to act as the master panel with up to 127 ENC-48B or Kalypso KSD expansion panels. Panel grouping and button configuration is accomplished using standard Encore Panel Server OUI procedures. See the separate *Encore Configuration Manual* for specific information.
- A **Preset Source** button type is now available on Control Panels that support preset operations. Pressing this button presets that Source on that panel, for a subsequent Take. This button type is configured using the Panel Server in the normal manner (button Assignment followed by a button Selection and saving the configuration).
- A **Display Last Salvo** flag has been added to all Control Panel configuration Attributes and Flags screens (except the Client, MCO, and COS panels). When this flag is On, the Salvo select button of the last Salvo executed by that panel will remain illuminated.
- A **Level Display Toggle** flag is available on the Panel Server (see [Figure 9 on page 24](#)) for the Encore XY and UCP panels, and for the SMS UCP panel. When this flag is On, the panel will report the active Destination in the Level display when the panel is in Source mode, Auto Tally is enabled, and no Source name, prefix, or suffix has been preset.
- JEP-100 Control Panel displays have been enhanced to show Source statuses on user defined Levels.

Control Panel Changes

- When in Salvo mode on any Control Panel that supports the keypad lookup function, it is now possible to enter and/or search for Salvo names using that panel's Prefix and Suffix buttons. Salvo mode has also been enhanced to support the Alpha sort option. Salvo names are sorted alphabetically if the **Alpha Sort Name** flag is enabled for the panel. That flag's label in the Panel Server OUI was previously "Alpha Sort RCE Names".
- The existing **Lock/Protect Override** flag for Control Panels now also applies to Salvos executed by that panel. Previously only direct Takes would override locked or protected Destinations. Also, a **Protect Override** flag has been added to the RCL Server to permit RCL Clients to override locked or protected Destinations.

CAUTION It is no longer safe to issue Salvos from Control Panels with **Lock/Protect Override** active if you do not want protected Destinations to change. If you relied on this omission in earlier Encore versions, you should reconfigure your Encore system Control Panels with the override flag OFF to prevent unintended Salvo initiated changes to protected Destinations.

Panel Server Enhancements

- Partial Template Configuration (see [page 53](#))

- Multi-select Operations in Panel Server GUI (see [page 56](#))
- Keypad Set Usage Identification (see [page 56](#))
- Panel Server Page Set Auto Create (see [page 59](#))
- The Encore Control Panel Server now has an **ID** button available for assignment on Control Panels equipped with alphanumeric displays. If the panel is configured without a **Dest/ID** button (fixed Destinations), the new **ID** button can be assigned instead. Pressing this button initiates the Control Panel ID sequence (IP address, etc.). The advantage of this button type over the **Dest/ID** button is the new **ID** button can be used in any mode (Source/ Salvo), helpful when a panel is configured with fixed destinations.
- An **AllSvos** Salvo Set is now available that makes all Salvos available on a panel (hardware, Soft Panels, or RCL Clients). Newly created Salvos are automatically added to this list, so a panel with this setting will always be able to execute any system Salvo.
- A **None** selection is available at the top of the scrolling list used to define button Selections. This lets you to define a button's Assignment, but not yet define the actual Selection. Panels able to be locally configured can use this feature to ensure Selections are defined only on the panel.
- An Encore system Control Panel now displays an error message if it fails to sign on to the Panel Server. These messages include:
 - DUP_NAME - Duplicate name
 - MAX_PNLS - Panel exceeds the maximum number
 - UNKN_PNL - Unknown panel type
 - SERV_ERR - Internal Server Error. The Panel Server failed to register the panel.
 - OUI_EDIT - Same panel name is being edited in OUI
 - PNL_NAME – Panel name length more than 8 characters
 - NO_LICNS – None or insufficient licenses (Soft Panel only)

Note Legacy GSC panels will need to have their software updated before they will be able to display these messages. See *GSC Control Panel Software Update Procedure* [on page 96](#)

Panel Server Changes

- The time required to log onto the Panel Server OUI has been reduced.
- The left and right arrow keyboard keys can now be used in addition to the arrow buttons on the OUI to move between multiple page panel displays.
- The console now reports “Adding panel - <PanelName>” when a new panel has been added to the Panel Server.

- The Panel Server OUI hover help (text displayed at the top of the screen when the cursor is held over an item) has been enhanced with more descriptive information. For example, each button's number and its Assignment and Selection are reported.

RCL Server Enhancements

- Source Categories (see [page 28](#)).
- Salvo Exclusion Sets for NP/RCL clients (see [page 61](#))
- Auto Select Protocol Option (see [page 62](#))
- Ack Flag Options (see [page 63](#))

Router Controller Engine (RCE) Enhancements

- A **Multi New** feature has been added to the RCE, allowing the automatic creation of multiple Sources and Destinations. This feature is similar to **Copy & Inc** (new Source and Destination values automatically increment), except the number of items to be created is specified and then created with one button press.
- RCE users can now have their ability to change an RCE configuration be restricted to just editing Source and Destination names. Using System Manager, if a User privilege level of 1-9 is assigned, only the Route and Names RCE menus will appear for that user.
- Encore now supports Stagetec Nexus audio routing matrices.

Router Controller Engine (RCE) Changes

- For improved Encore system stability, a 10 second delay is now imposed after RCE **Resync Comms** to allow time for the process to complete.
- The RCE **Commit Changes** and **Re-Sync Comms** buttons now are colored red when changes to the system have been made that make it appropriate to use these functions.
- The Encore RCE Options screen has an **Unavailable Levels** setting that includes **Park Levels** and **No TLM Error** options (this feature was actually released with Encore v1.7.4.1 software). Refer to the *Encore Configuration Manual* for specific information.

Tie Line Manager (TLM) Enhancements

- TLM Configuration Load and Save by Name (see [page 65](#)).
- TLM allocation logic has been enhanced to use the best path (of all possible paths) when Tie Lines of type Rooms (vs. Sharing) are used along with other types of Tie Line.

- Tieline configurations can now be exported in .csv format as a report only (i.e. there is no configuration import function). The report contains the following:
 - Tie Line Information - Name, Starting Area, Ending Area, Type (floating, reserved, fixed, assignable), Owner if reserved (room or destination).
 - Rooms Information - Room Name, Area, List of Destinations in Room
- A **Clear** button has been added to the Tie Status screen that clears the values in the Requests, Successes and Failures fields.
- When the Failures list is displayed on the Tie Status screen it now reports the dates as well as the times of the failures.
- The **Tie Line Source Monitor** type is now available that can be assigned to Sources and Destinations to permit the viewing of the immediate Source routed to a Tie Line.

Tie Line Manager Changes

- TLM redundancy internal system communications has been improved for increased reliability.
- Redundancy mode names have been changed on TLM to match other Encore system components (**Mirror Master, Mirror Slave, Disabled**).
- TLM console logging now reports time values using the same format as other Encore system components.

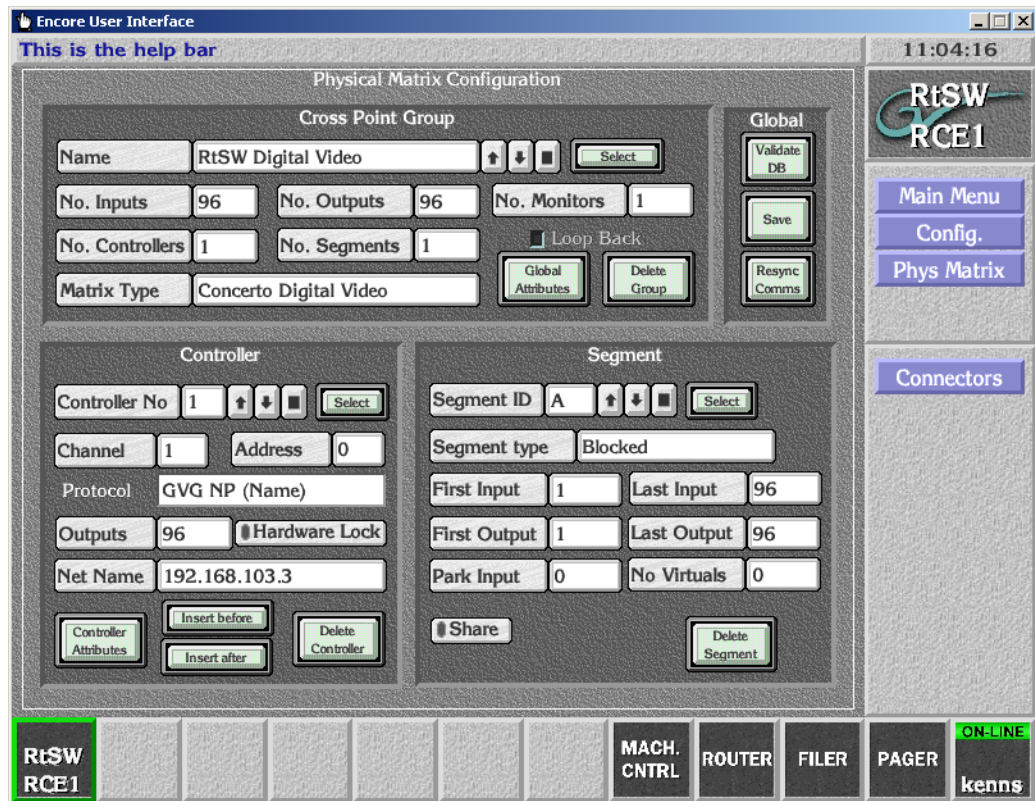
More than 200 Multi-Hop Tie Lines Precaution

If the number of multi-hop tie lines in the system is 200 or more, it is recommended that the **Partner Timeout** value be set to 1000 milliseconds. This prevents the Tie Line status map from going out of sync due to the latency involved in multi-hop operations. In all other cases, the default value of 500 milliseconds is acceptable. The **Partner Timeout** field is on the TLM System screen.

Tie Line Manager Precaution (Native Protocol Only)

Matrices using the **GVG NP (Name or Index)** or **Dummy Matrix** protocol should disable the **Hardware Lock** flag available on the Encore OUI RCE Physical Matrix screen ([Figure 1](#)). This helps prevent possible tie-line connection failures.

Figure 1. RCE Native Protocol, Hardware Lock Off



General Encore System Enhancements

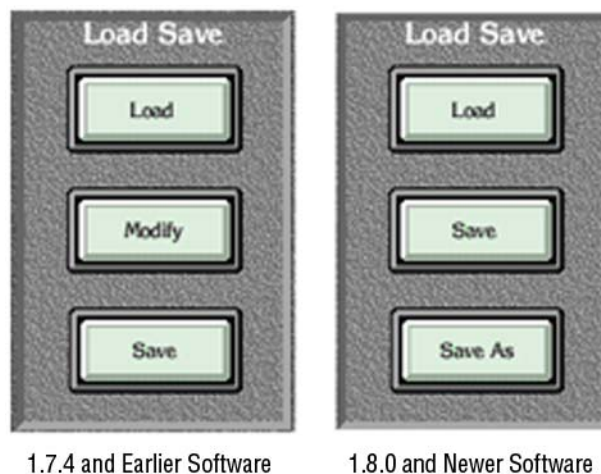
- Dynamic Audio Attribute Control (see [page 66](#))
- Date, Time, and Frame Count SCB Webpage (see [page 70](#))
- New SNMP Console Commands for SCB (see [page 72](#))
- Encore SCBs now use an ENCONFIG.ini (see [page 73](#))
- A Software Watchdog is now available on Encore SCBs. This utility program monitors SCB tasks and can reboot the SCB should any task become suspended. Diagnostic information is printed on the console before a reboot. This feature is enabled or disabled using the new ENCONFIG.ini file.
- The Encore system now supports file names containing up to 99 characters.
- The RCL and Native Protocols now support Destination Status subscription by index, for the Encore RCL Server, Encore NP matrix driver, Acappella, and Concerto. The Native Protocol also now supports Destination Status subscription by name.
- Simple event logging (by subscription) has been added to the NP and RCL Router protocols.

- A CPL Matrix Controller can now be configured to send an SNMP trap when an input or output signal is lost on the matrix. A clear trap can be sent when the signal is restored. The SNMP Matrix Controller web page can be used to selectively enable or disable the sending of traps on an input-by-input and an output-by-output basis.
- The Encore SCB System Controller Description web page now reports how long that SCB has been operating in a System Status Up Time field (in days, minutes, and seconds since the last reboot or reload).
- An SCB's NetConfig Relay Agent can now be disabled, which can be useful if an external Ethernet router is used for connectivity between the Facility and Panel/Matrix LANs. This option is set in the common INI options file (ENCONFIG.ini) of the SCB. To change the setting, add or edit a **NoNCRely=Enable** text entry to the file to disable the relay agent.

General Encore System Changes

- Encore system alpha sorting of names has been improved, removing the need to include leading zeros for numbers. For example, now VTR 1 will always sort before VTR 10 when alpha sort is selected. This improved algorithm was previously implemented for Control Panel lists, and has now been applied to all Encore OUI lists when alpha sort is selected.
- For clarity and consistency, Encore OUI file save buttons have been relabeled. The previous version **Modify** button is now labeled **Save**, and the previous **Save** button now labeled **Save As** (Figure 2).

Figure 2. New Save and Save As Button Labels



- In pop-up menus and other Encore OUI screens, the most recent item will now automatically be selected. For example, if a new Control Panel template is created, using Save As, that new template file will be highlighted after the save.

- The SBC console display (telnet session or serial) now includes the name of the SCB on the prompt line. If the SCB's name is changed, a reboot is required to have the new name appear on the prompt.
- The Encore system now prohibits the accidental entry of duplicate Master and Mirror IP addresses for redundant Panel Servers, RCEs, and TLMs.
- Destination Monitor Refresh messages are now only sent when the CPL matrix comes on line and when the monitored Destination changes. Previously refresh messages were sent once per second.

Note If a crosspoint board that has a currently monitored Destination is removed from its frame, that Destination monitor will not be restored when the crosspoint board is put back in. You will need to perform a monitor Take after the board is reinserted.

- User name and password fields have been added to the Control Panel Server and Router Controller OUI screens to allow importing or exporting configurations to or from a remote PC. User credentials may be required to access a shared "hd0" folder on the SCB. If the PC is logged in as a domain user, the credentials are <domain name\user name> for the pop-up window. If the PC is not logged in as a domain user, the entry can just be the user name. If no Username or Password has been configured for the network, blanks can be entered for access. The Guest account must be enabled for SMB to work. To enable the Guest User setting:
 - a. Right click on **My Computer** and select **Manage**.
 - b. Select **Local Users and Groups** and select the **Users** folder.
 - c. Select **Guest** and uncheck the **Account is disabled** check box.
 - d. Click the **Apply** button to apply the settings.
- Windows 7 operation, using Administrator login, has been qualified for this release's versions of the Encore OUI, System Manager, Sharer/ Watchdog, Visual Status Display, Salvo Editor, Soft Panels, and Net-Config.

Soft Panels 3.1.0

- Soft Panels Enhancements (see [page 75](#))

Encore Visual Status Display 2.0.0

- Visual Status Display (VSD) Enhancements (see [page 75](#))

Salvo Editor 2.0.0

- Monitor Takes support (check the **Include destination monitors** box when selecting Destinations).

- Dynamic Audio Attributes support.

See the separate *Salvo Editor Instruction Manual* for more information.

NetConfig 2.0.12

- NetConfig can now be used to identify Trinix Matrices. Right-clicking on a Trinix Matrix Controller name opens a pop-up that includes Identify Device. Clicking on that item will make that Broadlinx board's LEDs blink "I D". The default blink duration is 20 seconds. This duration is adjustable in the NetConfig Options menu (Device Identification).
- The Server 1 and Server 2 (primary and secondary SCB) IP addresses of Matrices and Control Panels can now be entered and edited using the Set IP screen of NetConfig. Server addresses are not used by the SCBs themselves. Any server values entered and applied to SCBs will be replaced with zeros.
- The first three IP address octets and the complete Server 1 and Server 2 addresses for multiple devices can be set to the same value simultaneously using NetConfig. In the Set IP screen, shift-click to select multiple devices, click **Enter**, type in the values to be shared by all the devices, and click **Apply Changes**. Because IP addresses must be unique, values cannot be entered for the fourth octet (zero indicated while editing, replaced with the original fourth octet value when applied).
- The NetConfig Inventory view now displays the EN2 IP address, subnet mask, and gateway of Encore SCBs running v1.8.0 and higher software.

Concerto Matrix Enhancements

- The Concerto Port Matrix now supports one-to-many control, useful for dubbing operations (i.e. multiple record machines controlled by a single transport Control Panel). See [page 76](#)
- Native Protocol (by Name) Support has been added to the Concerto matrix, which allows it to be directly controlled from a Maestro Master Control switcher.

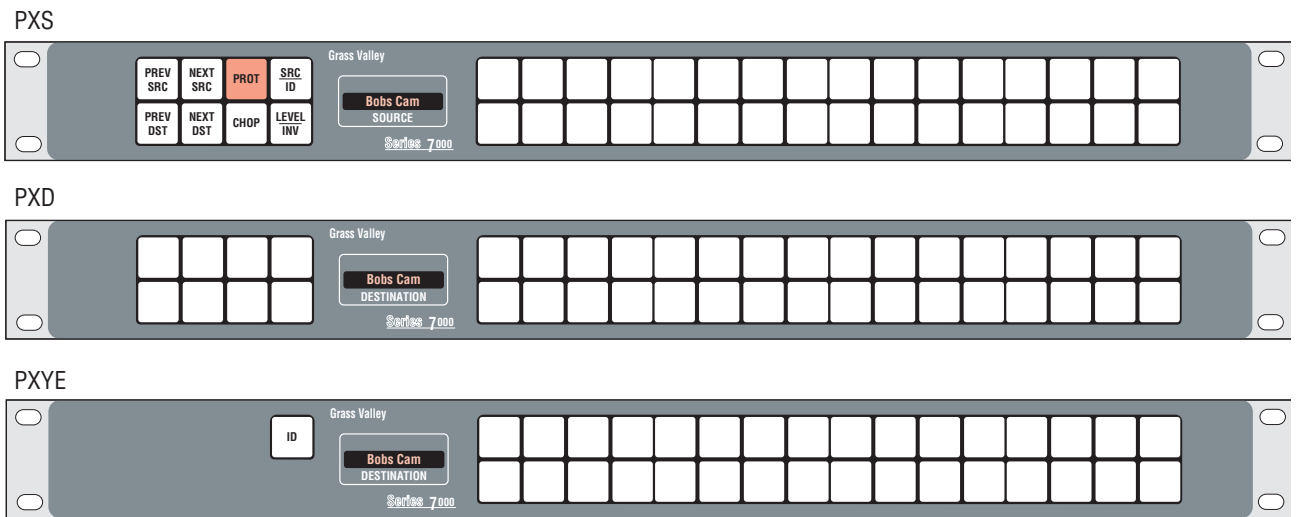
Additional SMS7000 GSC Control Panel Support

PXY Panel Set

The PXY Panel Set consists of:

- PXS Master panel (typically configured with sources)
- PXD Expansion panel (typically configured with destinations)
- PXYE panel for Source, Salvo, or Destination Expansion

Figure 3. PXY Control Panel Group



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PXY Panel Set Features

- The PXS can function alone or can work with one or more PXYE panels and/or a single PXD panel. PXD and PXYE panels will not function without a PXS panel.
- All Control Panel buttons are programmable.

PXY Panel Set Configuration

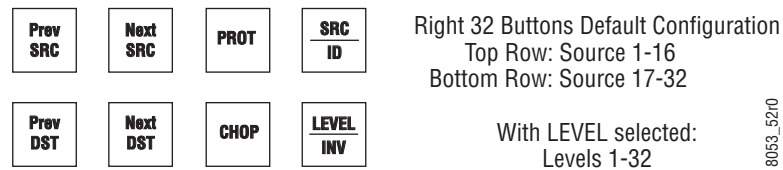
To configure a PXY Panel set, the PXS panel is identified as a Master panel, and each PXD/PXYE panel is configured as a member of that Master panel's group. See the separate *Encore Installation & Service Manual* for specific panel group configuration instructions.

PXY Group Default Button Assignments

Note Button assignments of a particular control panel may be different because the defaults can be changed during configuration.

PXS Default Button Assignments

Figure 4. PXS Panel, Default Button Configuration



PXD Default Button Assignments

The Left eight buttons by default are configured as **Level Select 1 - 8**. The remaining buttons by default are configured as **Destination 1-32**.

PXYE Default Button Assignments

The isolated button on the left by default is configured as an **ID** button. The remaining buttons by default are configured as **Destination 1-32**.

Taking a Source to a Destination (PXS Panel)

1. Press and hold the **Prev DST** or **Next DST** button until the name of the desired Destination is shown on the display.
2. Release the button to select that Destination for control.
3. Select the Source:
 - Press a Source button on the right. That Source will immediately switch to the selected Destination.

- or -

 - a. Press and hold the **Prev SRC** or **Next SRC** button until the name of the desired Source appears on the display.
 - b. Release the button to Take that Source to the selected Destination.

Taking a Source to a Destination (PXY Panel Group)

Typically additional Destinations are configured on the PXD panel. Pressing a Destination button on the PXD panel in the group selects that Destination for control.

Typically additional Sources are configured on the PXYE panel. Pressing one of those buttons will Take that Source to the selected Destination.

Breakaway Take (PXS Panel)

Breakaway Takes are performed the same as on a P32 Control Panel.

1. Press the **LEVEL/INV** button to enter Level mode. In this mode the buttons on the right no longer select Sources. The buttons now correspond to the Levels available and will be illuminated when they have been selected.
2. Press the selection buttons to toggle the desired Levels On or Off.

Note Pressing the **LEVEL/INV** button when it is illuminated will swap the Level selections (On Levels go Off, and Off Levels go On).

3. Press the **SRC/ID** button to enter Source mode.
4. Press the desired Source button, or scroll through the available Sources. The new Source is taken only to the selected Levels of that Destination.

Protect (PXS Panel)

Toggle the **PROT** button to turn Protect On (illuminated) or Off for that Destination.

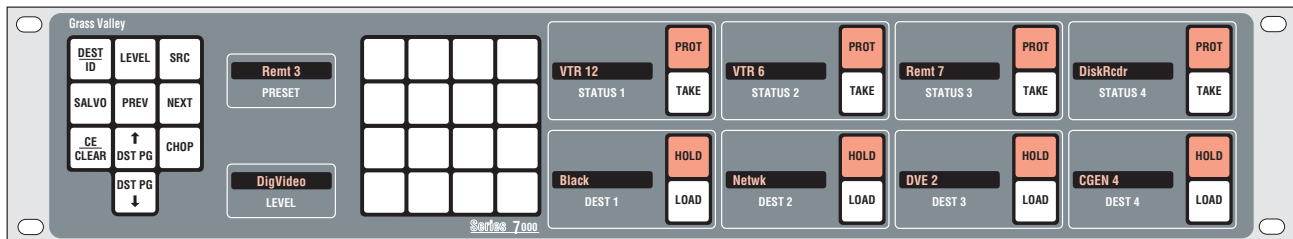
MB4 Panel

MB4 Panel Description

The Multibus 4 Control Panel (MB4) controls four assigned output busses (Destinations). Status information and destination names are simultaneously displayed, eliminating much mode switching. Destinations are typically front-panel selectable so the MB4 can switch any Source to any Destination, depending on configuration.

A 16-button configurable keypad provides prefix/suffix access to frequently used sources and destinations. You can also scroll through complete name lists using the **PREV** and **NEXT** buttons. Destination Page Mode is also available for scrolling through Destination Pages applied to that panel.

Figure 5. MB4 - Programmable Multibus 4 Control Panel



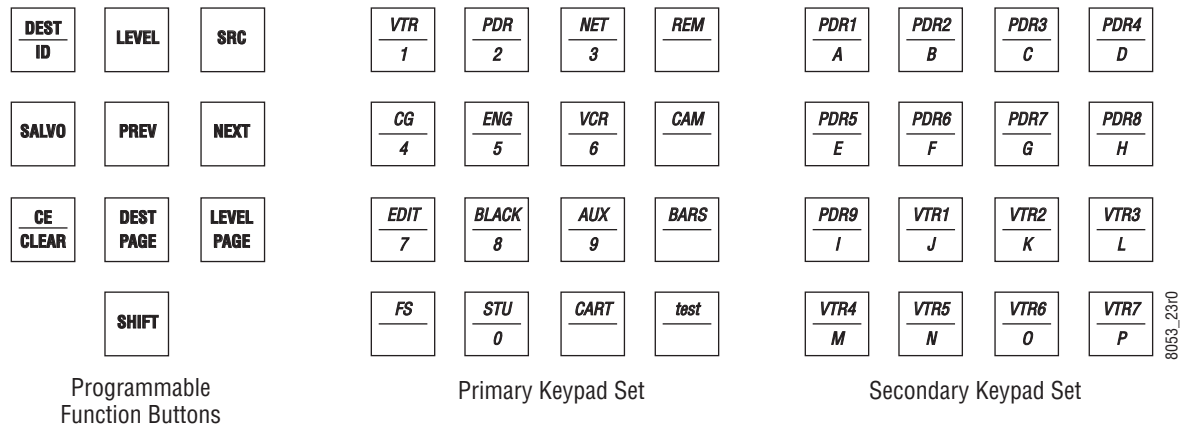
8053_47r0

Default Button Configuration (MB4 Panel)

The default button configuration for the MB4 panel is shown in [Figure 6](#).

Note Button assignments of a particular control panel may be different because the defaults can be changed during configuration.

Figure 6. MB4 Panel, Default Button Configuration and Keypad Sets



MB4 Panel Operation

The MB4 Control Panel operates similar to the MB8 Control Panel, except four Destinations are accessible at a time, status is available for both Destinations and Sources, and the addition of **Hold** and **Load** buttons for each Destination.

Hold Button

Press the **Hold** button so it is illuminated to keep that Destination assigned to that display area. Selecting new pages of Destinations will not change panel control of held destinations.

Load Button

Pressing the **Load** button loads the currently preset Destination to that Control Panel display, provided a **Hold** is not active.

The Dest Page down button is not available. Destinations are chosen via paging using the upper Dest button, or via keypad, using the **Prev/Next** buttons, or with assigned Destination buttons.

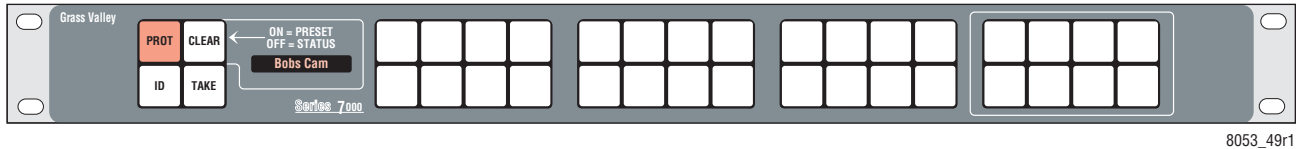
For more information, refer to the MB8 Control Panel description in the separate *Encore Control Panel Operation Manual*.

SCP - Simple Control Panel

SCP Panel Description

The Simple Control Panel (SCP) is a hybrid mode panel that supports both keypad access of Sources and button-per-item access of Sources, Destinations, Salvos or Levels in any combination. The panel may control a single Destination, multiple Destinations, and from one to all system Levels (defined by the user during system configuration). The SCP also offers Protect and other functions.

Figure 7. SCP - Simple Control Panel

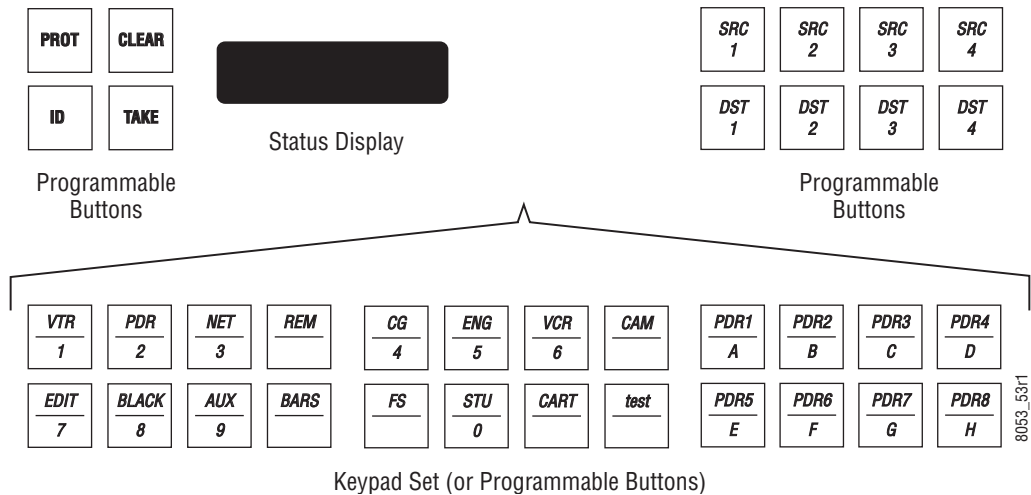


Default Button Configuration (SCP Panel)

The default button configuration for the SCP panel is shown in [Figure 6](#).

Note Button assignments of a particular control panel may be different because the defaults can be changed during configuration.

Figure 8. SCP Panel, Default Button Configuration and Keypad Sets



SCP Panel Operation

The SCP operates similar to other SMS7000 model Control Panels, with the following differences:

- The Keypad Set consists of the Primary set (left 16 buttons) and half of the Secondary set (right 8 buttons). Shift functionality is not supported.
- Only Source selections can be preset using the keypad, for subsequent activation with the **Take** button.
- Destination and Salvo selections are always immediately executed.
- Shift Latching is not supported.

Chop Feature

Introduction

The Chop feature allows two sources to be switched rapidly on a Destination. The switching occurs between the current Source taken to that Destination and a new Source selected for the Chop. This feature is useful for signal timing, camera matching etc.

The following matrices support the Encore Chop feature:

- Concerto (video only)
- Trinix (video only)
- Acappella (video only)
- 7500WB

Chop is performed on a Level by Level basis, which means Breakaway Chop is available. Encore Level formats that support Chop for the above matrices are:

- Any (*)
- Composite (V)
- Component (C)
- Dig Video (D)
- SDi+Audio (E)
- Key (K)

Note Audio, Timecode, Data, and Other Levels do not support Chop.

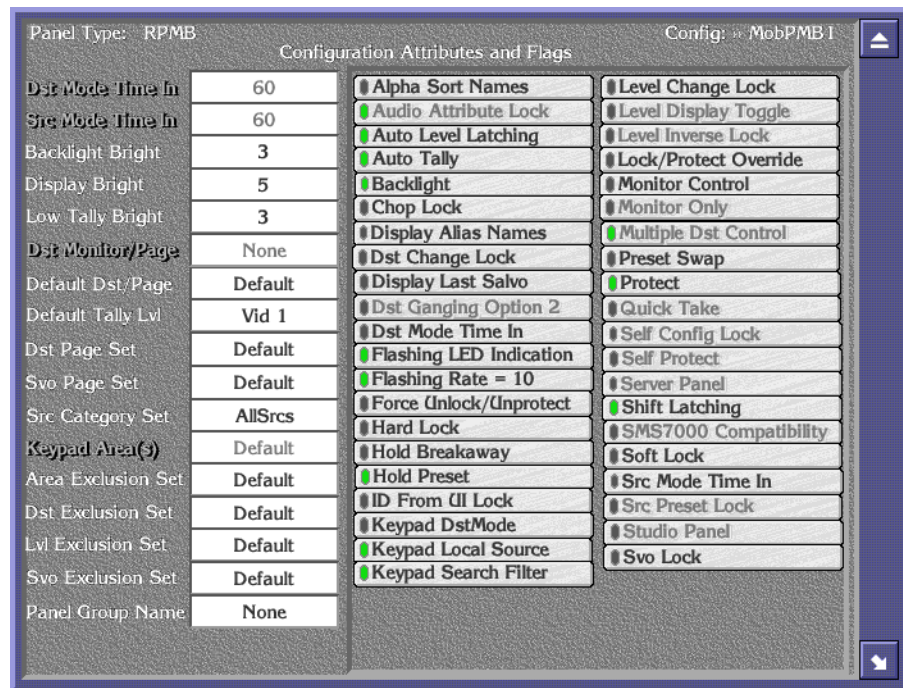
All Encore system Control Panels support Chop except the CLNT/SVR and MCO/COS custom panels. Chop can also be performed using the Encore OUI Router Controller menu.

Configuration

Control Panel Chop Configuration

Encore system Control Panels need to be configured with Chop functionality, using the Encore Control Panel Server. Chop is activated on a Control Panel by making sure the **Chop Lock** flag is OFF (indicator is gray) in the Configuration Attributes and Flags menu (Figure 9) and saving that configuration.

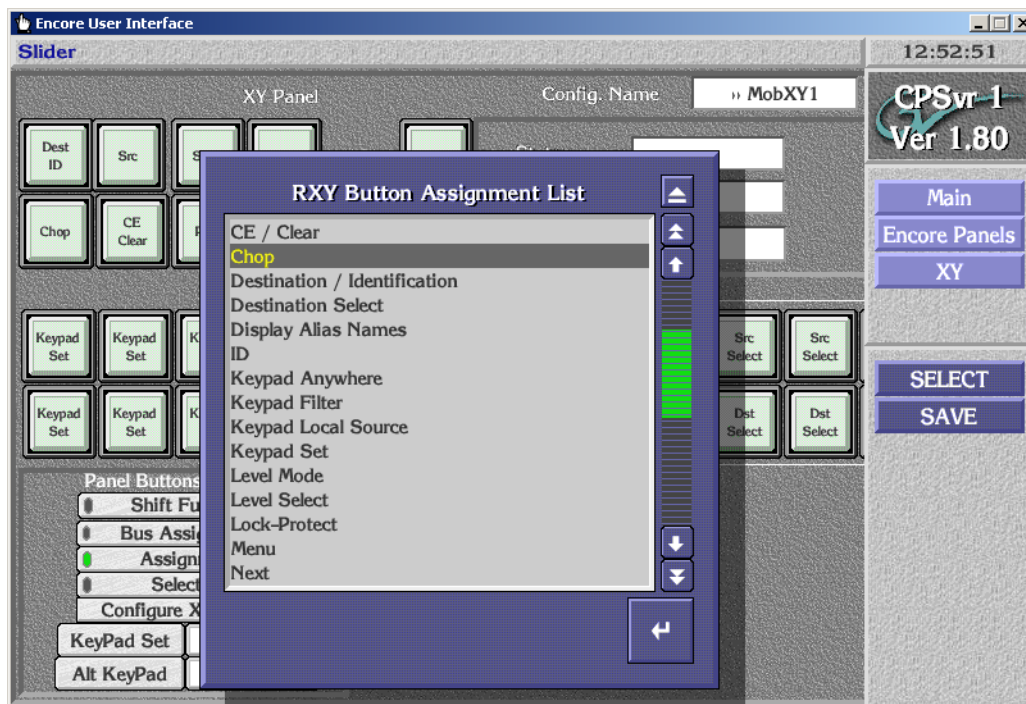
Figure 9. Encore Panel Server Configuration Attributes and Flags Screen



Note If a **Src Mode Time In** interval elapses on a Control Panel that has initiated a Chop, that Chop operation will stop.

If the Control Panel does not have a **Chop** button configured by default, that function will need to be assigned to panel button, using the standard Encore Panel Server OUI panel configuration procedure (Figure 10).

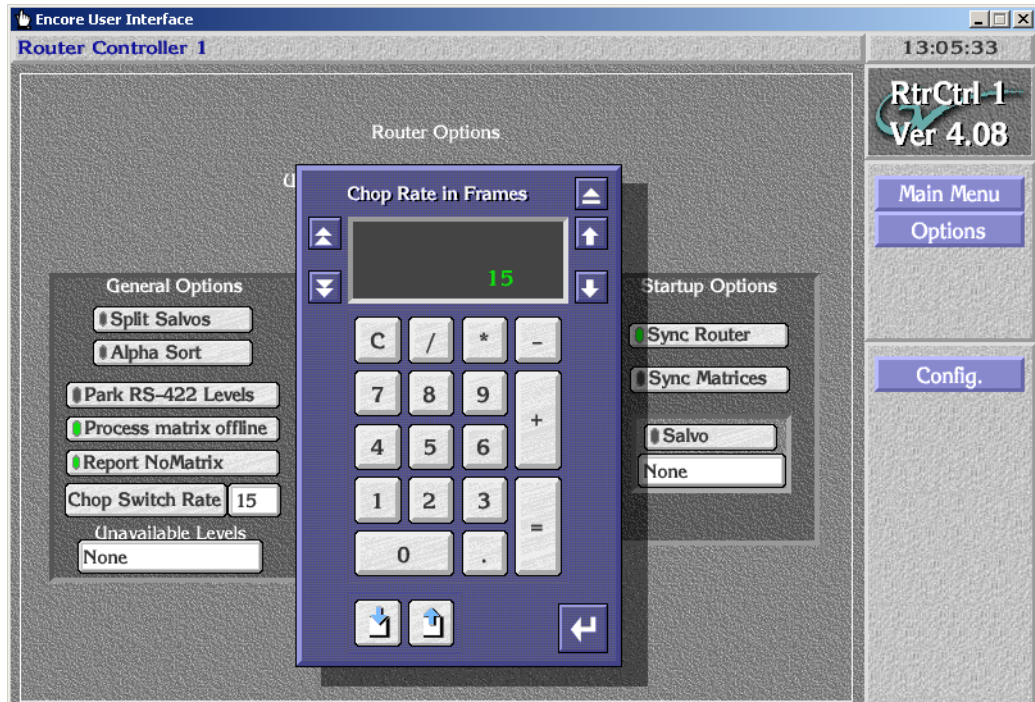
Figure 10. Chop Button Assignment on Control Panels



Chop Rate Configuration

The rate at which the Sources will be switched during Chop is specified using the Encore Router Controller Application, by going to the Options menu and clicking on **Chop Switch Rate** (Figure 11). The valid range is 15 - 100 frames.

Figure 11. Chop Switch Rate Setting Using Router Controller Application



Operation

Control Panel Chop

1. Select the Destination for control that you wish to Chop. It cannot be Protected.
2. Press the **Chop** button so it illuminates.
3. Select an alternate Source from the same Area. That new Source and the original Source will be switched to that Destination at the specified switch rate, and CHOPPING will be reported on panels equipped with displays. On panels with dedicated Source buttons the button of the original Source will be high tally and the button of the chopping Source will blink (if the **Flashing LED Indication** flag is applied to the panel).

Note When Chop is active, selecting a different Source for that Destination on that Control Panel will Chop between that new Source and the original Source.

4. Press the illuminated **Chop** button to stop the Chop function. The original Source will be restored.

Take commands issued to a currently chopping Destination from any Panel stops the Chop function, and Takes that new Source to that Destination.

Chop Protect

A chopping Destination can be protected. Once protected, a chopping Destination must be unprotected before the Chop can be stopped.

Router Controller Application Chop

Chop can also be accomplished using the Router Controller Application Route screen.

1. Select a Destination to control.
2. Select and Execute an original Source for that Destination.
3. Click on the **Chop** button so it is illuminated.
4. Select and Execute another Source for that Destination. Chop between those two Sources will be activated and **Chopping** is reported on the screen (Figure 12).

Figure 12. Chop using the Route screen



5. Click on the illuminated **Chop** button to turn chopping off.

Chop Limitations

The Chop feature Control Panel button tally correctly identifies the sources only on the local panel that initiated the Chop. The button for the original source will be high tally and the alternate chopping Source will blink (if the **Flashing LED Indication** flag is on that panel). A different Control Panel assigned to that Destination will report **Chopping** on its menu (if present) but will not blink the alternate Source's button.

Changes made to Chop activity are not propagated across the Encore system. An unprotected chopping Destination can be altered to Chop to another source by a different Control Panel. If this occurs, the buttons on the panel that initiated the changed chopping Source will tally correctly, but the original panel will continue to blink the previous chopping Source (it will not change its tally status to reflect the new Source).

Source Categories

Introduction

The Source Categories feature makes it possible to limit a Control Panel's access to only specific Sources. This is accomplished by defining Source Category Sets, and then assigning Source Category Mode and/or Source Category Selection Buttons on a panel. Once a Control Panel is configured in this way, Sources not included in these Categories will not be available on that panel.

The Source Category feature is available on all panel types that support Source mode except CLNT, MCO, and COS.

The Source Category Mode variation of this feature, used with Source Category Sets, is available on the Encore PMB, XY, and UCP, the SMS UCP, EDP, PXY, MB8, and MB4, and the JEP-100 panels (both hardware and Soft Panels).

The Source Category feature is also available on the RCL Server.

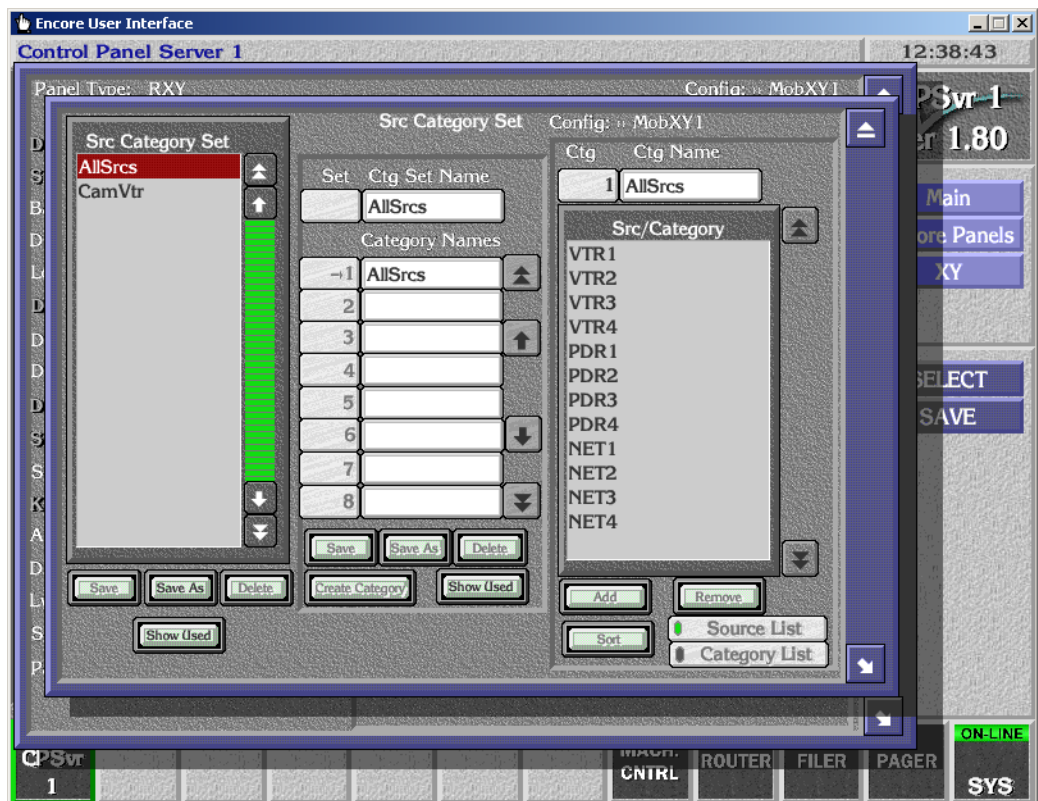
Configuration

Creating Source Category Sets

Source Category Sets are created using methods similar to those used for Destination and Salvo Pages and Sets.

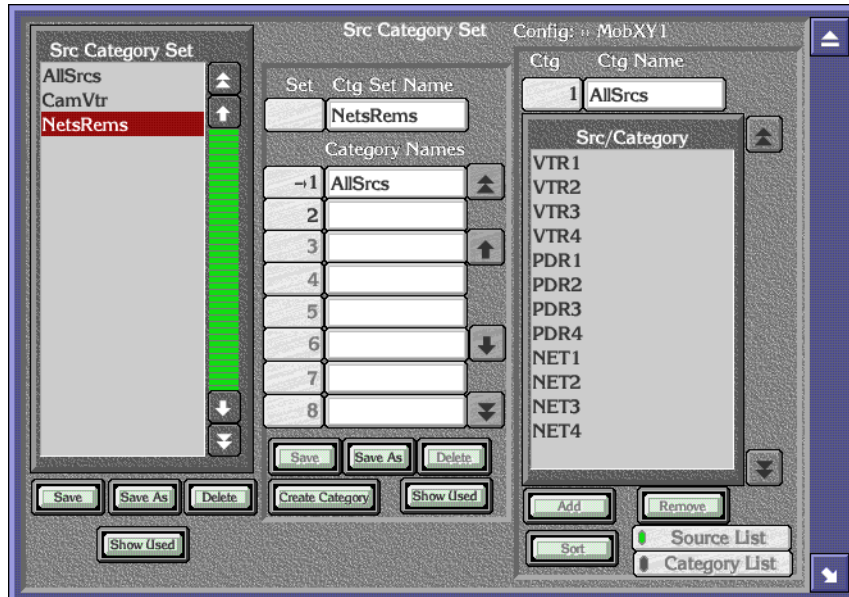
1. Using the Panel Server OUI, load a Control Panel configuration, go to the Configuration Attributes and Flags screen and click on **Src Category Set**. A screen will appear, which by default has an **AllSrcs** Category Set, containing an **AllSrcs** Category, neither of which can be edited (Figure 13).

Figure 13. Source Category Set, AllSrcs



2. Click on left **Save As** button and enter the name of a new Source Category Set. This set can be edited (Figure 14).

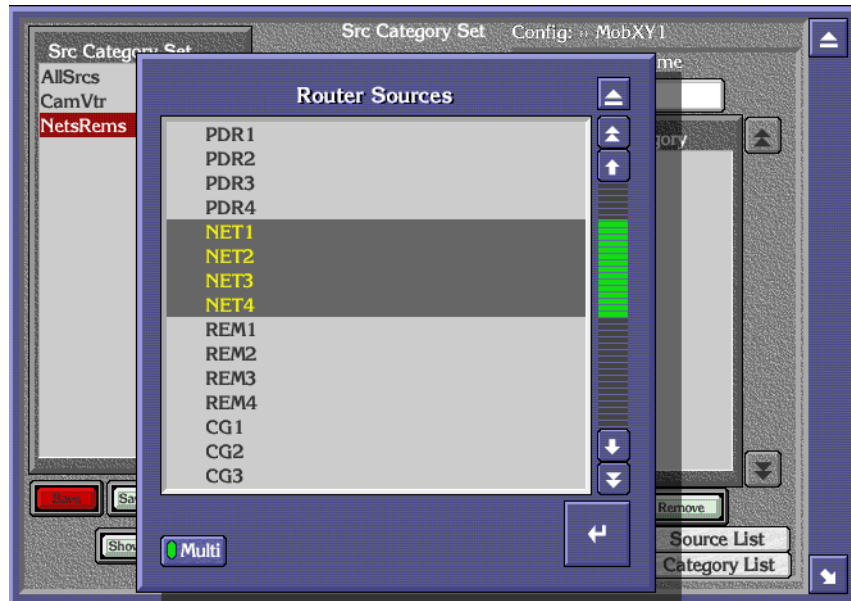
Figure 14. New Source Category Set



3. Click on **Create Category** and enter the name of a new category. (The default **AllSrcs** Category cannot be edited.)
4. Click on the first Category Names field and choose the new category you just created.

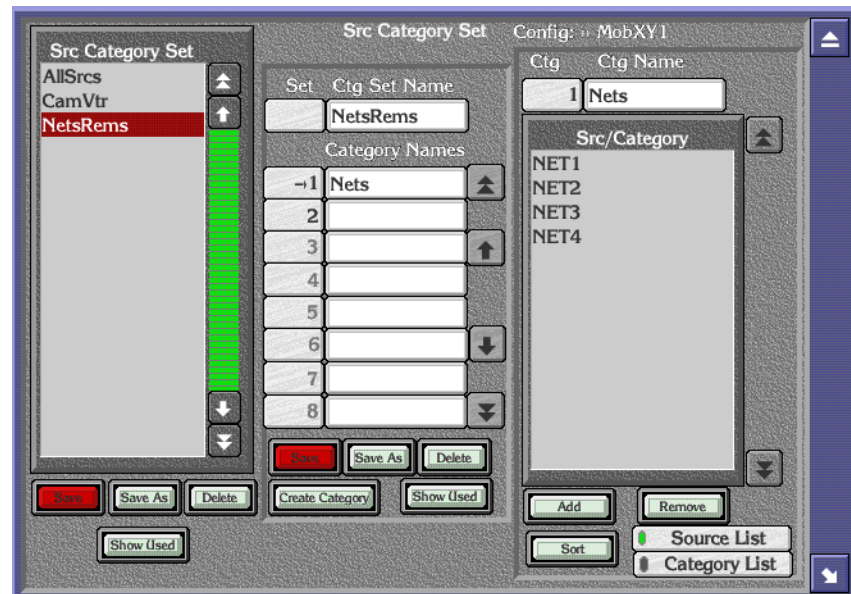
- Click on the right **Add** button, and select the Sources you wish to include in that Category (Figure 15).

Figure 15. Selecting Sources for a Source Category



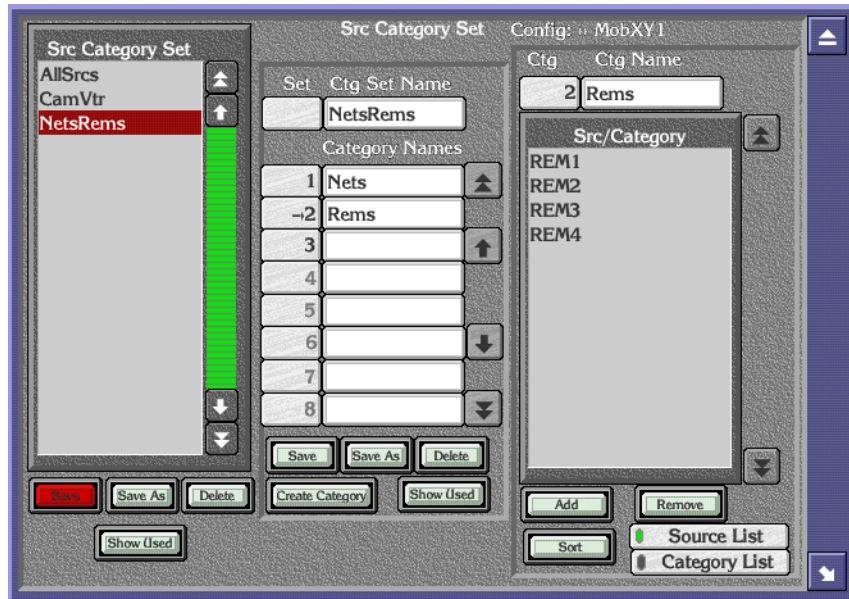
- These Sources will then be added. Click the middle red **Save** button to save this set (Figure 16).

Figure 16. New Source Category Set with Sources Defined



- Repeat the steps above for all the Categories you wish to include in that Set (Figure 17).

Figure 17. Additional Source Category Added to Set



- When done, click on the left red **Save** button to save that Source Category Set containing the Categories you just defined. When saved the button will no longer be colored red.
- This Category Set will be automatically applied to the Control Panel configuration you are editing. These Categories and Sets are also globally available for use by other panels in the Encore system.

Sources can be added or removed from individual Categories, using the **Add** and **Remove** buttons. When the **Source List** button is selected, Sources can be chosen to be added. When the **Category List** button is selected, Sources of another existing Category can be added to that Category. Category Sets can also be edited by defining new Categories.

CAUTION Source Categories and Source Category Sets are global. Any edits or deletions will affect the operation of all Control Panels currently using those Categories or Sets.

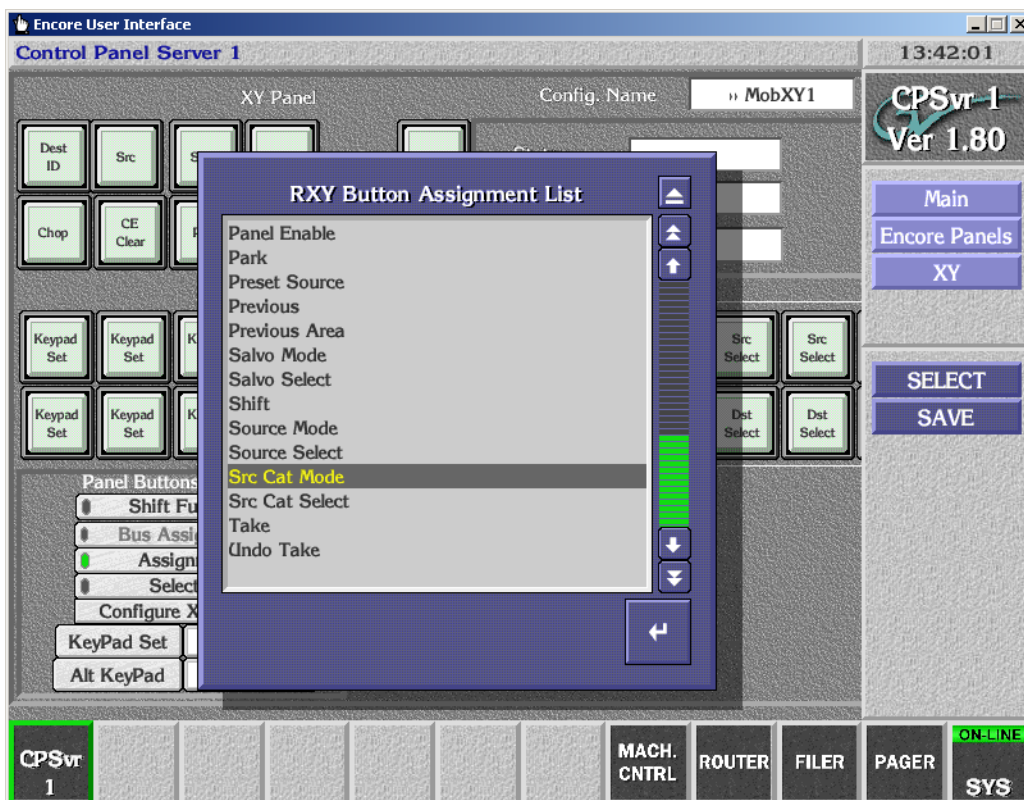
The two **Show Used** buttons can be used to identify which Control Panels and/or RCL Clients are currently using particular Source Category Sets (left button), and identify which Category Set is using a particular Source Category (middle button).

The **Sort** button can be used to put the Sources in that Category into alphanumeric order.

Source Category Control Panel Buttons

Two Source Category buttons are available. The **Src Cat Mode** button permits scrolling through available Source Categories of a Set, and the **Src Cat Select** button is configured to access the Sources in a specific Source Category.

Figure 18. Source Category Button Assignment



Source Category buttons are configured on a Control Panel using standard techniques. Use the Panel Server OUI to select a Control Panel configuration, use Assignment Mode to assign the button type, and for **Src Cat Select** buttons go to Selection Mode and select which Source Category each button will access.

Operation

Source Category Mode Button

1. Press the **Src Cat Mode** button to display a list of Source Categories.
2. Use the **Prev/Next** buttons (or **Up/Down** buttons on the JEP-100) to scroll through the available Source Categories.
3. Return to Source Mode on that panel.

4. The selected Category limits that panel's operation to only those Sources. Buttons on that panel are configured for Sources outside that Category will not be operational (no tally).

Source Category Select Buttons

1. Press the **Src Cat** button for the desired Source Category. The panel is immediately limited to Sources in that Category. Buttons on that panel are configured for Sources outside that Category will not be operational (no tally).
2. The **Prev/Next** buttons (or **Up/Down** buttons on the JEP-100) can be used to scroll through only the Sources included in that Category.

Shift Button Enhancements

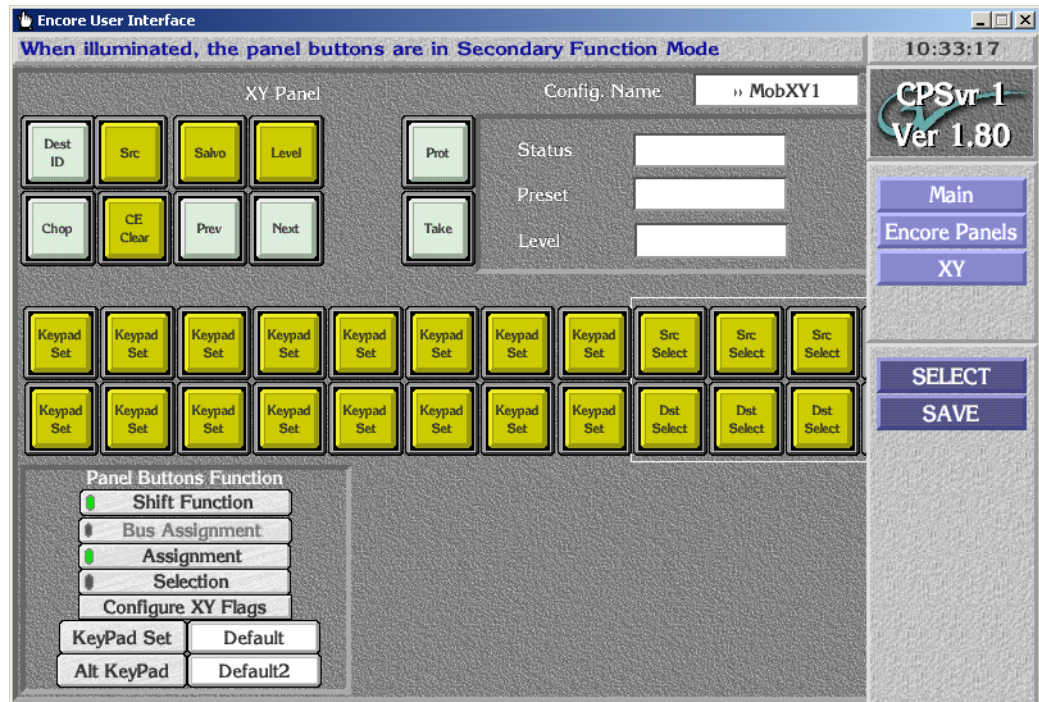
Introduction

Shifted button functionality is available on all Encore system Control Panels except ENC-CLNT, SMS-CLNT, SMS-COS, SMS-MCO, and SMS-SVR. This feature allows a doubling of the number of functions available on a panel. For example, a BPS32 panel can be configured to access 64 Sources.

Configuration

Shifted buttons are configured using the Panel Server OUI. Clicking on **Shift Function** colors yellow the buttons able to be configured with shifted functionality (Figure 19). Both a shifted button's Assignment and Selection can be changed, using standard configuration methods.

Figure 19. Shift Function Panel Configuration Screen



You also will need to add a **Shift** button to the Control Panel Configuration in order to access shifted button functions. Once configured, this button goes high tally when the panel is in the shifted operating mode.

The **Shift Latching** flag is also available on the Attributes and Flags screen. When ON, Shifted functions are retained after button presses. When OFF, the panel returns to the non-shifted state after any button press.

Operation

1. Press the **Shift** button on the panel so it is illuminated.
2. Press any button configured with a Shifted function. That function will immediately be performed.

Joystick Override and Shifted Functions

Shifted functions are not applied to Joystick Override inputs.

Destination Ganging and Shifted Functions

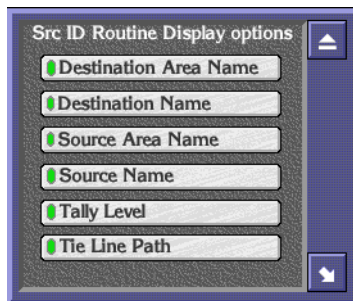
For all 48B, BPS, and derivative Control Panels, if a **Shift** button is defined on the panel, normal Destination Ganging (i.e. press and hold the first Destination and then press additional Destinations to form the gang) is disabled. Instead the Mode 2 Destination Ganging functionality will be used. In this mode, pressing Destination buttons toggles them on and off to add or remove them from a gang. See *Destination Ganging Enhancements on page 39* for more information.

Tie Line Used Identification

Control Panels with alphanumeric displays can report Tie Line information. If the panel is in Source mode, pressing the panel's **Src** mode button when the current path uses Tie Line(s) will display the Tie Line name(s) in the Control Panel status window. If the path uses multiple Tie Lines, the Tie Line names are displayed sequentially starting with the most downstream Tie Line.

The information displayed can be configured for each Control Panel. In the Panel Server OUI for the panel, enter Selection mode and click on the **Src** mode button. A pop-up menu appears (Figure 20). Include **Tie Line Path** to have that information displayed.

Figure 20. Pop-up Menu for Selecting Information to be Displayed

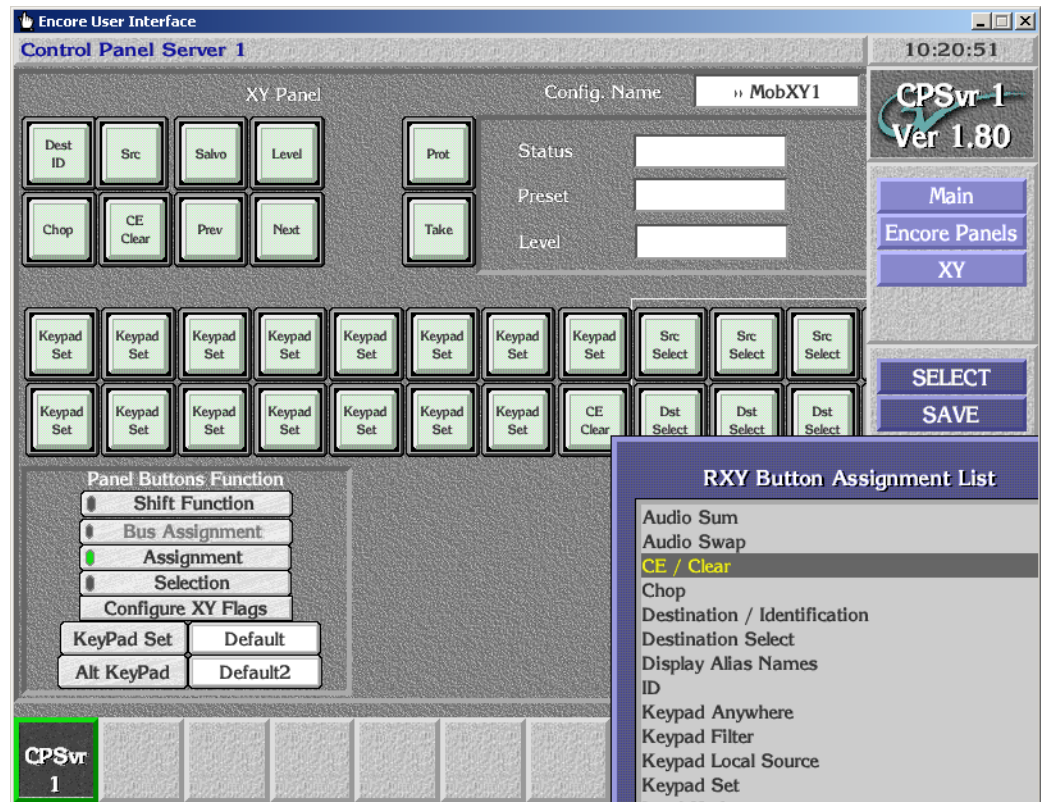


Keypad Button Configuration

Reassigning Keypad Set Button Functions

Keypad set buttons can now be assigned other functions, using the standard Panel Server OUI Control Panel configuration procedures. For example, you can assign a **CE/Clear** button as part of the set, making it easy to clear incorrect entries using an adjacent button (Figure 21).

Figure 21. Keypad Set Button Re-Assignment

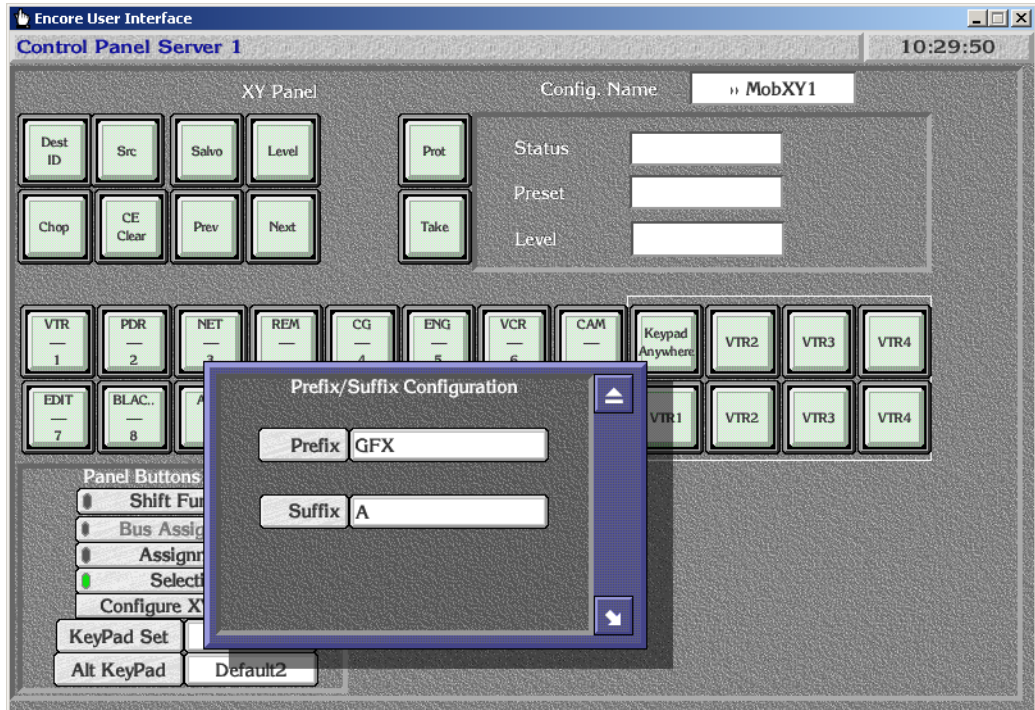


Shifted Keypad set buttons can also be re-assigned to different functions. In the example above, it would be logical to also make that buttons's shifted function be **CE/Clear**.

Keypad Anywhere Button

A new **Keypad Anywhere** function can be assigned to any configurable button on a Control Panel that supports keypad entry. This button enters a user defined keypad Prefix and Suffix. The button is configured using the standard Panel Server OUI Control Panel configuration procedure. You use Assignment mode to define the button function, and use Selection mode to define the Prefix and Suffix (Figure 22).

Figure 22. Keypad Anywhere Prefix, Suffix Configuration



Unlike a Keypad Set button, an alternate Prefix/Suffix for a Keypad Anywhere button type does not exist. However, the shifted state of that button can be configured with an alternative Prefix/Suffix.

One possible use of this feature is to create an entirely new keypad, using the Keypad Anywhere buttons defined with a different Prefix and Suffix set. This alternative keypad set can be uniquely defined for that Control Panel, or it can be defined in a panel template for use on multiple panels.

Destination Ganging Enhancements

Background

Destination Ganging was previously available for Encore 48B and JEP-100 Control Panels, as briefly described below.

- On 48B panels, holding down one Destination button and pressing and releasing others would Gang those Destinations, allowing Takes of the same Source to multiple Destinations with one button press. Selecting a Destination without holding down a button cancelled the Gang. This method can be considered Dest Ganging Option 1.
- On the JEP-100 Control panel, a front panel configuration setting could be used to activate Destination Ganging, at which time Destination buttons could be toggled on and off to add or remove them from a Gang. This can be considered Dest Ganging Option 2.

Destination Ganging for v1.8.0 Software

With Encore v1.8.0 software, Destination Ganging functionality is added to the Encore BPS, SMS P32, P48, & PXS, and KMD & KSD Control Panels. Ganging Option 1 and Option 2 are both available on all these Control Panels, and on the Encore 48B panel. Option 2 Ganging becomes available on the Soft Panel equivalents for these panels, and continues to be available on the JEP-100 Control Panel.

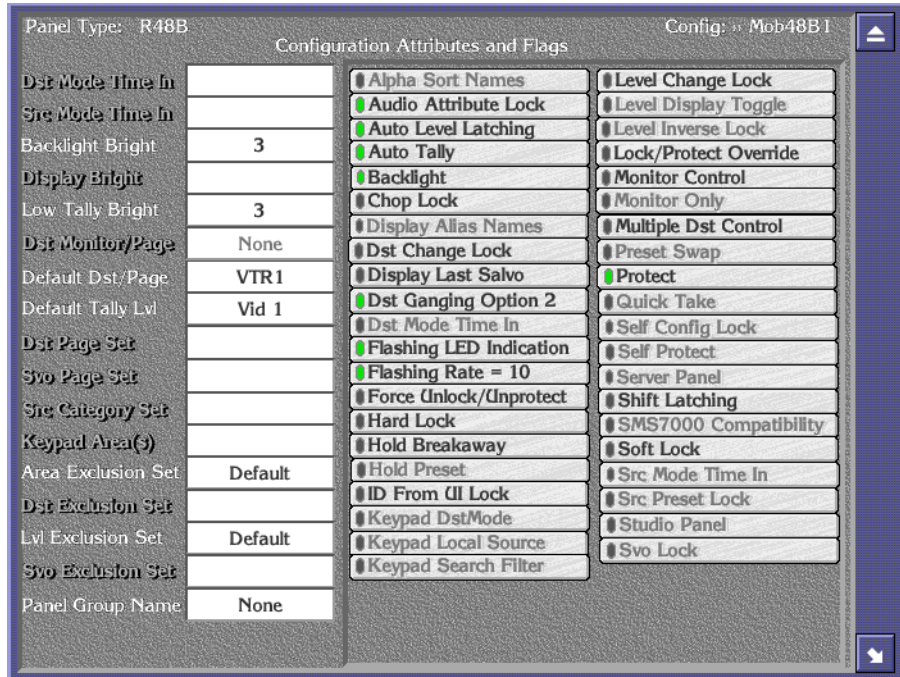
If a hardware panel is configured with a **Shift** button, Ganging Option 1 is automatically disabled and only Ganging Option 2 will be supported. Because both the Shift and Ganging Option 1 features employ a button hold-down technique, they cannot both be active at the same time.

The Control Panel Partitioning feature is incompatible with any form of Destination Ganging. When the **Multiple Dst Control** flag is on, which activates Control Panel Partitioning, Destination Ganging functionality is unavailable.

Configuration

Control panels that support both Destination Ganging options are configured with the **Dest Ganging Option 2** flag (Figure 23).

Figure 23. Dest Ganging Option 2 Enabled



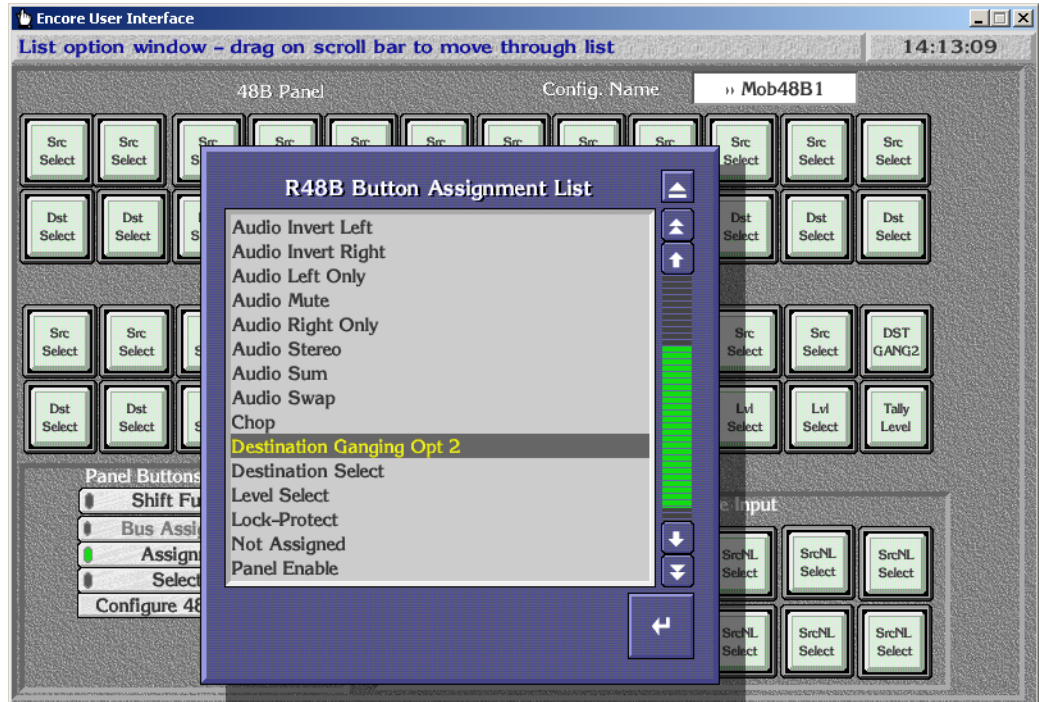
When **Dest Ganging Option 2** is On (green), Ganging Option 2 is active (toggle Destinations in the Gang on and off). When Off, the original Ganging Option 1 is active (hold down a button to add Destinations to the Gang).

This flag is grayed out on panels that do not support Destination Ganging.

This flag is also grayed out when the Panel Partitioning feature **Multiple Dst Control** flag is on, as these features are incompatible.

A Control Panel can also be configured using the Encore Panel Server with a Destination Ganging Opt 2 button, which permits toggling between the modes (Figure 24). When this button on the panel is illuminated, Ganging Option 2 is active.

Figure 24. Dest Ganging Option 2 Control Panel Button Assignment



Operation

Ganging Option 1

1. Press and hold down a Destination button on the Control Panel.
2. Press and release other Destination buttons. They will illuminate, indicating they are included in the Gang. These buttons will blink if the Ganged Destinations currently route different Sources, and will be high tally if they all currently route the same Source.
3. Choose a Source. That source will be Taken to all the Destinations in the Gang.

Ganging Option 2

1. Toggle on the Destination buttons you wish to have in the Gang. Touching a Ganged Destination button removes it from the Gang.

2. Choose a Source. That source will be Taken to all the Destinations in the Gang.

Breakaway Takes and Ganging

Destination Ganging operations are applied to the currently enabled Levels, so breakaway Ganged Takes are supported.

Protect and Ganging

- If a Protect or Lock is active on the primary ganged Destination, attempts to create a Destination Gang will be ignored.
- If a Protect or Lock is active on an additional Destination, that destination will not be added to the Gang.
- Protect or Lock conditions can also be applied (or removed) to all the destinations in a Gang.

Control Panel Partitioning

Introduction

The Control Panel Partitioning feature allows an Encore 48B or KSD panel to control more than one Destination at a time. This is accomplished by partitioning the panel into up to eight partitions (Destination buses), each dedicated to a different Destination.

Configuration

The **Multiple Dest Control** flag is available for 48B and KSD Control Panels ([Figure 9 on page 24](#)). When On, the panel can be partitioned. The Bus Assignment mode button becomes available, and multiple Default Destinations can be defined.

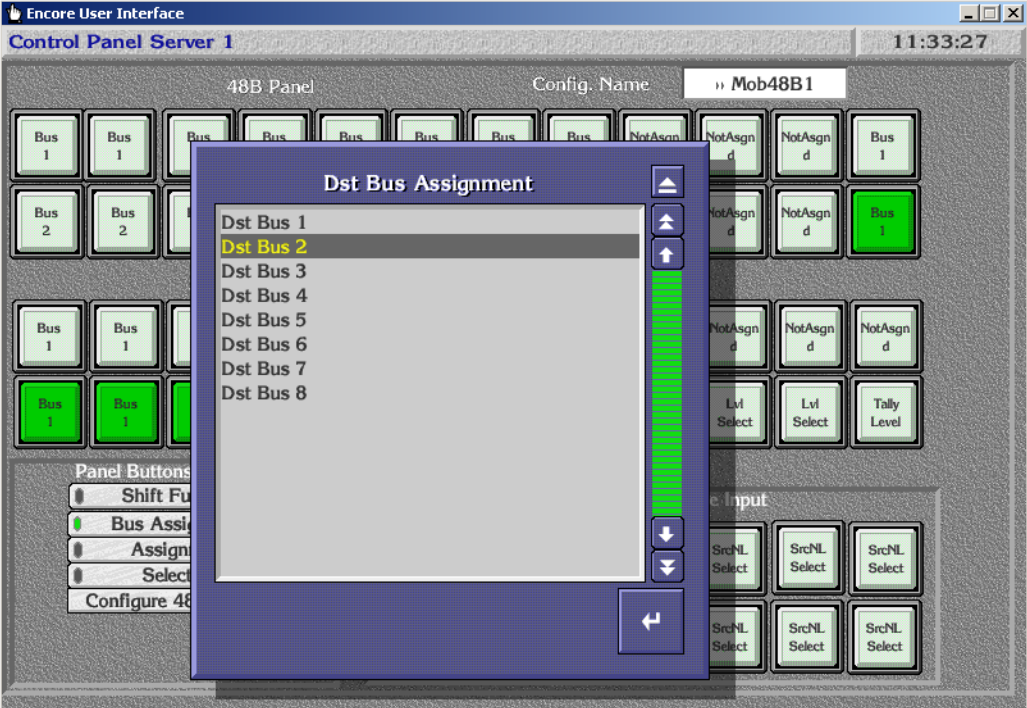
For Encore PMB, and SMS MB8 and MB4 panels this flag is locked On, since these panels already support multiple Destination control.

If a Control Panel is partitioned with its **Monitor Only** flag set, only the Destination controlled by the first bus can be monitored.

Bus Assignment Mode

Clicking on the **Bus Assignment** button enables Bus Assignment mode. In this mode, clicking on a button or range of selected buttons brings up a menu of bus partitions ([Figure 25](#)).

Figure 25. Bus Assignment Modes



Button Assignment and Selection

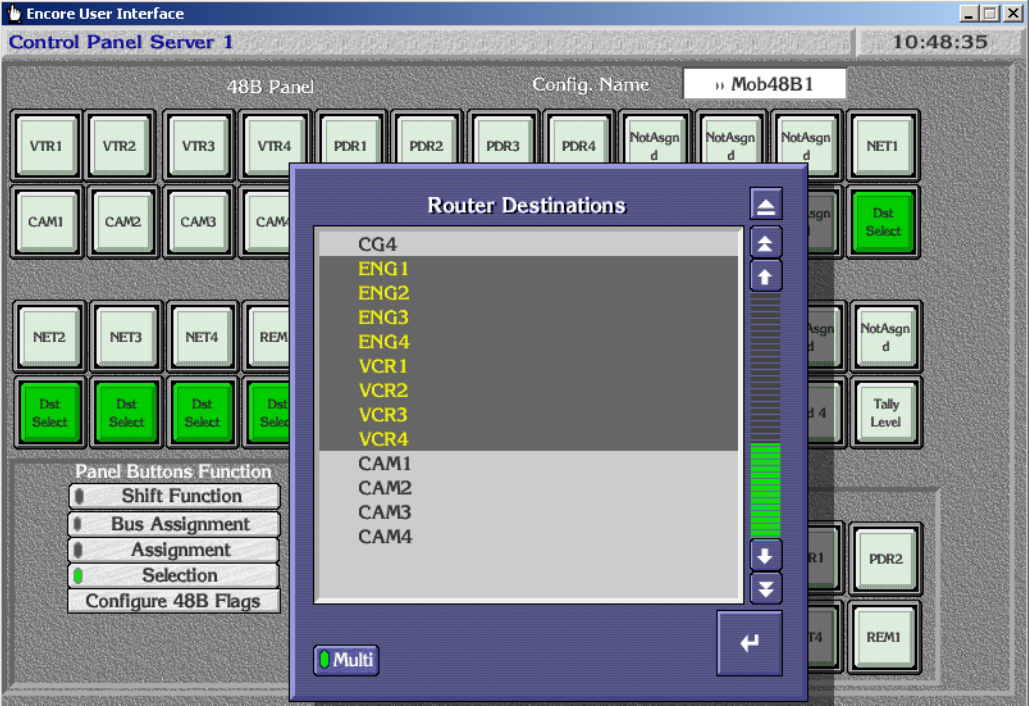
Once divided into partitions, button functions are assigned in the normal manner. In the example below, a 48B panel is being configured with Source and Destination buttons for one partition in the top row, and Source And Destination buttons for another partition in the bottom row. The **Level Select** buttons on the bottom row apply to both partitions (Figure 26).

Figure 26. Partitioned 48B Control Panel



With partitions and button assignments defined, button selections are made in the normal manner. Typically selection buttons for different Destinations will be created in each partition. (Figure 27).

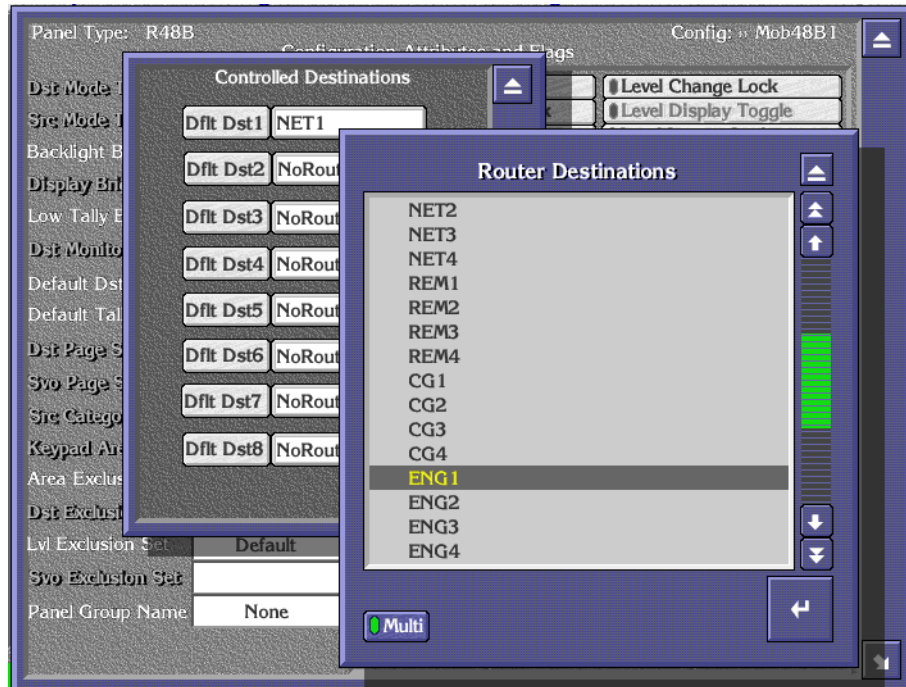
Figure 27. Selections on a Partitioned 48B Control Panel



Default Destinations

When multiple partitions exist on a Control Panel, each partition probably needs its own default Destination. Clicking on the **Default Dst/Page** field opens a Controlled Destinations menu, in which clicking on each Destination partition field allows selection of the default Destination for that partition (Figure 28).

Figure 28. Default Destinations on a Partitioned 48B Control Panel



Operation

A partitioned Control Panel operates the same as standard panel, except the different areas of the panel control each partitioned bus of Destinations. Button status applies to each partition, so multiple Source buttons may be illuminated at the same time, reflecting each partition's Destination statuses.

Level Presets, Auto Tally, and Level Latching apply to the whole panel, not on a bus by bus basis.

The following limitations apply to partitioned Control panels:

- Joystick operations only apply to the first partition bus.
- Destination Ganging, Monitor Control, and Monitor Only functions are not supported.
- Undo operations are supported, but will undo the last Take done by the panel irrespective of which partition bus owns the Destination.

Dynamic Page Set Creation from Control Panel

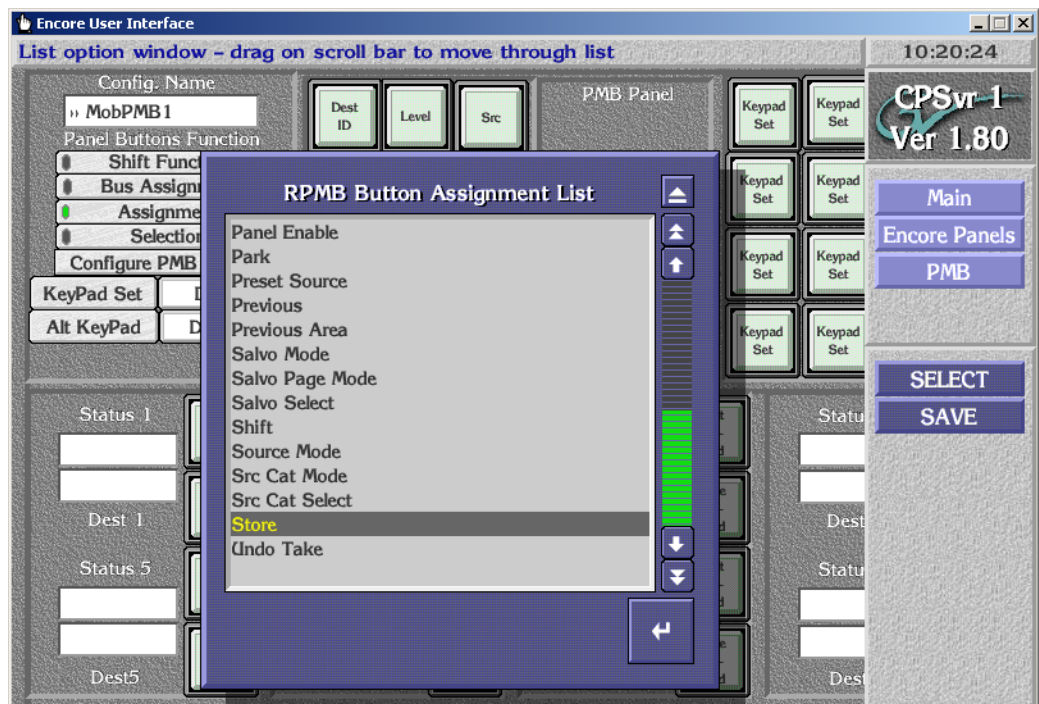
Introduction

Encore system Encore PMB and SMS EDP, MB8, and MB4 Control Panels now support Dynamic Destination Page Creation. This feature allows the user to create a new Destination Page Set using the Control Panel front panel buttons.

Configuration

The Encore Panel Server OUI now has a **Store** button available for assignment on Control Panels that support the Dynamic Destination Page Set feature (Figure 29).

Figure 29. Store Button Assignment



Operation

1. Place the Control Panel in Destination Mode (by pressing the **Dest** button), preset a Destination you wish to use in the new Page Set (by scrolling, and assign it to a Status and Destination display on the right. The **Store** button will illuminate.

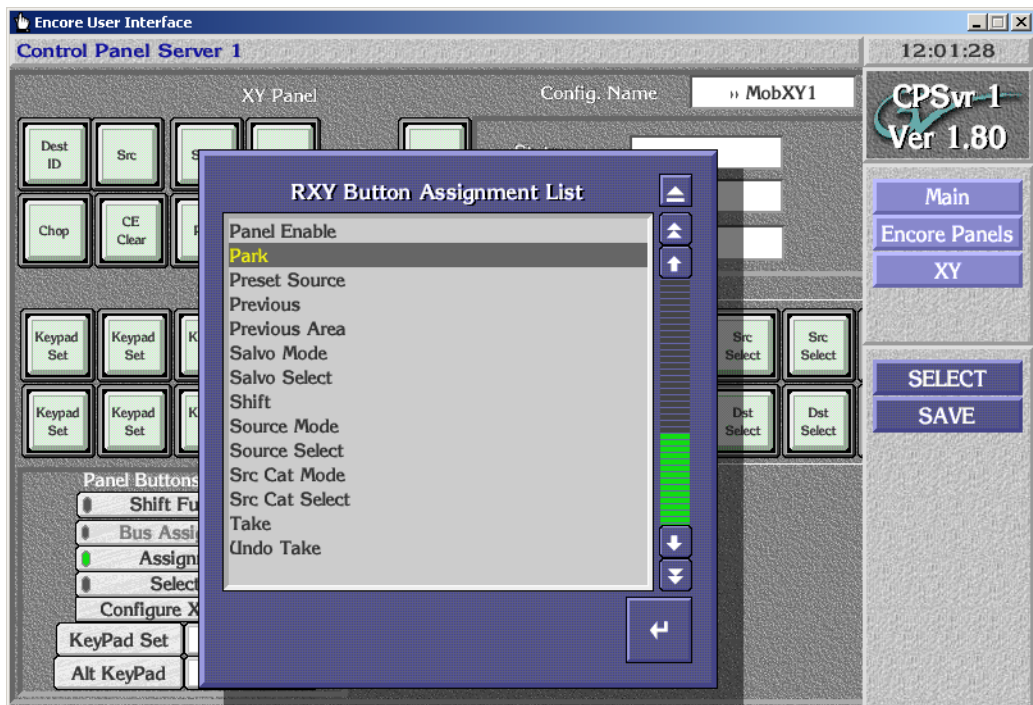
2. Repeat [Step 1](#) above for all the Destinations you wish to change in that Page Set.
3. Press the **Store** button. A new Destination Page named DynPG(n) will be created and a new Page Set named PgSet(n) is also created that includes that new Destination Page. The new Destination Page and Page Set are also available for use on any other Control Panel supporting this feature, by configuring that panel with the Panel Server OUI.

Note The **Store Operator Changes** flag has been removed from all Configuration Attributes and Flags screens. On Encore systems **Store** used to be a fixed function button that needed to be disabled. That button location is now configurable, and can be used for Dynamic Page Set Creation.

Park Button

A Control Panel **Park** button is now available for configuration with the Encore Panel Server ([Figure 30](#)).

Figure 30. Park Button Assignment



When a Control Panel **Park** button is pressed, the Park input (if defined in the RCE, Physical Matrix screen Segment window) will be taken on every active Level of the active Destination. When all Levels of the active Destination are parked successfully the p[anel displays **Parked** as the current Destination status. If no Park input is defined on one or more levels, the RCE

reports an error and those Levels are left connected to its current Source. If any Level other than the Tally level fails to park, the control panel displays **Parked*** as the current Destination status.

Hardware Control Panel Keycap Legend Generation

Control Panel keycaps suitable for Encore and Acappella hardware panels can now be printed. A Microsoft Word template file is available that can be populated with keycap legends using the Soft Panels application. The resulting keycap file can be printed onto a clear sheet, cut to size, and inserted into the hardware panel buttons.

The cut lines in the provided template work only for Encore and Acappella panels. Buttons on other model panels (SMS7000, JEP-100, Kalypso) are sized differently. Templates for other model panels are not available, but with careful work you may be able to reformat another model's generated keycap file using Microsoft Word to fit into that panel's button size.

Keycap Legend Generation

1. If necessary, use the Encore Panel Server to create a configuration for the hardware Control Panel that includes the desired dedicated Sources, Destinations, and button functions.
2. Rename the Default template for that panel type to create a copy, using a descriptive name (e.g., XYLgnd) to create a working legend template.
3. Copy the hardware Control Panel configuration from [Step 1](#) above to the legend template.
4. Launch the Encore Soft Panels application and choose that model of Soft Panel. Identify the name of that Soft Panel instance (for example, XY09BA).
5. From the Panel Server, copy the legend template you created to that Soft Panel instance.
6. Ensure the Soft Panels **Dynamic Keycap** box is checked.
7. Right click on the Soft Panel GUI (or click the **Menu** button on the console), and then select **Export Keycap Configuration**.
8. A navigation window opens, allowing you to name the file, and choose a location to save the file, or create a new folder for the file. The default save location is C:\Program Files\Grass Valley Group\Soft Panels.
9. Enter a name for the keycap legend file, navigate to the save location, and click **Save**.

The file (a .doc MS Word document) can now be opened and used to print keycap legends.

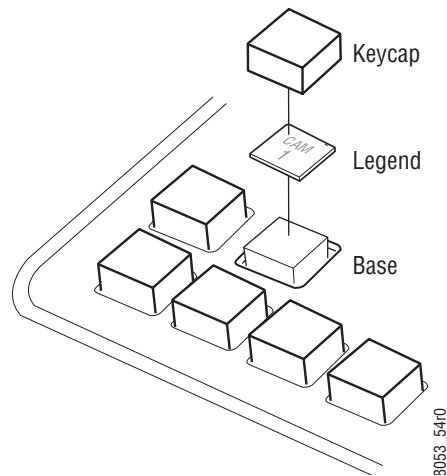
Keycap Legend Preparation

1. Access the .doc file from the saved location and without changing the document's formatting print it without any scaling onto a clear sheet.
2. Using the guide lines, carefully cut the keycap legends from the sheet. A sharp knife and straight-edge works well for this operation.

Keycap Legend Replacement

1. Using your fingers or rubber-mouthed pliers, carefully pull a keycap out of the Control Panel ([Figure 31](#)).

Figure 31. Control Panel Keycap



2. If the keycap has an existing legend, remove it from the base or carefully extract it from the inside of the keycap without scratching it.
3. Insert the new legend into the keycap in the proper orientation.
4. Press the keycap back onto its base in the panel.
5. Repeat the above steps for all the keycaps to be updated with new legends on that panel.

Protect via Control Panel GPI

Introduction

Protects or Locks can now be initiated using GPI inputs on Control Panels equipped with GPI functionality (Encore BPS-GPI & 48B-GPI, SMS P32 & P48, KSD & KMD, and JEP-100). These GPI inputs are labeled Joystick Override, which is a common use of this capability.

The type of GPI initiated Protect is determined by the Control Panel's configuration flags (i.e. Soft Lock, Hard Lock, Protect).

Four new button types, assignable to the GPI Joystick Override Inputs, are available:

Lock-Protect - A Protect is applied to the Control Panel's active Destination on a 0-to-1 transition of the GPI input. The Protect latches On. A subsequent 0-to-1 transition of that GPI turns off the Protect (i.e. toggle function).

Lock-Protect (non-latching) - A Protect is applied as above, but remains active until a 1-to-0 transition occurs on the GPI input (i.e. 1=Protected, 0=Unprotected).

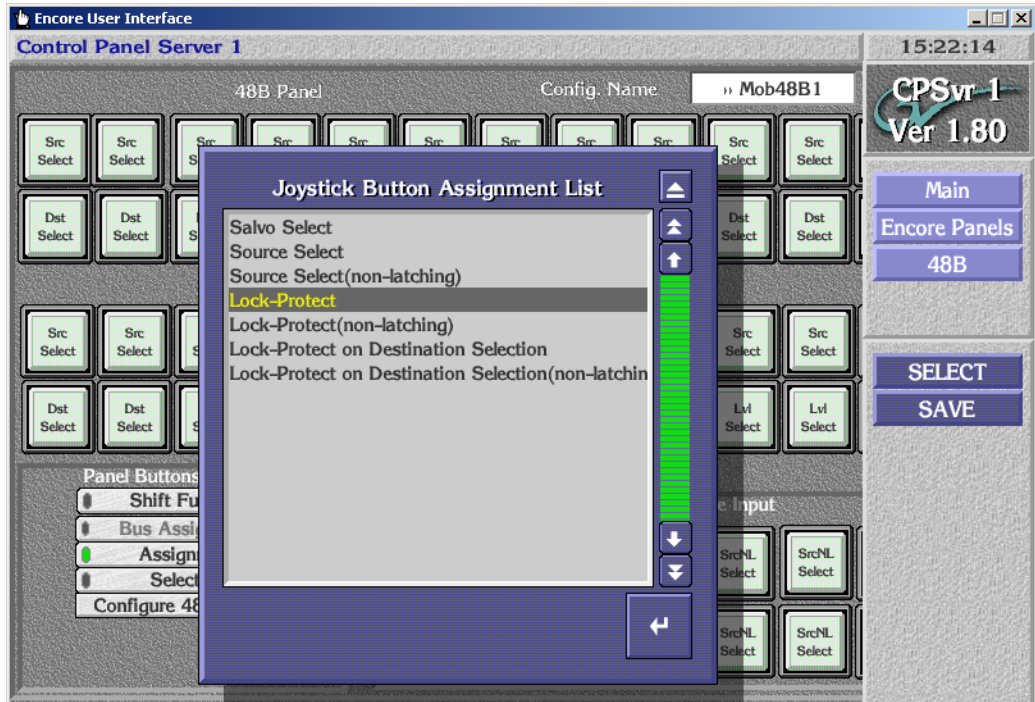
Lock-Protect on Destination Selection - A Protect is applied to a specific configured Destination on a 0-to-1 transition of the GPI input, and the Protect latches On. A subsequent 0-to-1 transition of that GPI turns off the Protect (i.e. toggle function).

Lock-Protect on Destination Selection (non-latching) - A Protect is applied to a specific configured Destination as above, but remains active until a 1-to-0 transition occurs on the GPI input (i.e.1=Protected, 0=Unprotected).

Configuration

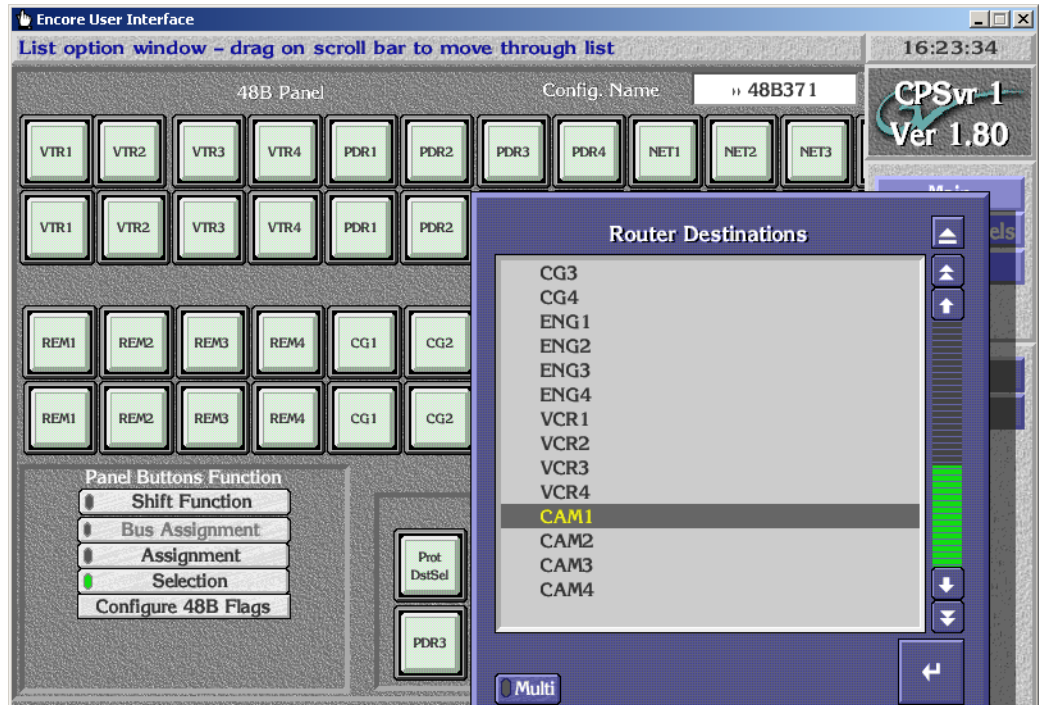
The GPI Protect functions are configured with the Panel Server by clicking on the GPI Joystick Override buttons while in Assignment mode (Figure 32).

Figure 32. Protect Using Control Panel GPI



If a Destination Selection Protect function was assigned, the specific Destination to be Protected is then chosen for that button using Selection mode (Figure 33).

Figure 33. Protect Using Control Panel GPI



Once configured, the legends for these functions are displayed on the Panel Server OUI screen as indicated in Table 1.

Table 1. GPI Protect Button Legends

GPI Protect Function	Keycap Display Assignment Mode	Keycap Display Selection Mode
Lock-Protect	Prot	Prot
Lock-Protect (non-latching)	Prot NL	Prot NL
Lock-Protect on Destination Selection	Prot DstSel	<Destination Name>
Lock-Protect on Destination Selection (non-latching)	Prot NL DstSel	<Destination Name>

Partial Template Configuration

Background

Encore Release 1.7.4 introduced support of the JEP-100 Control Panel, which included the ability to retain portions of an existing JEP-100 config-

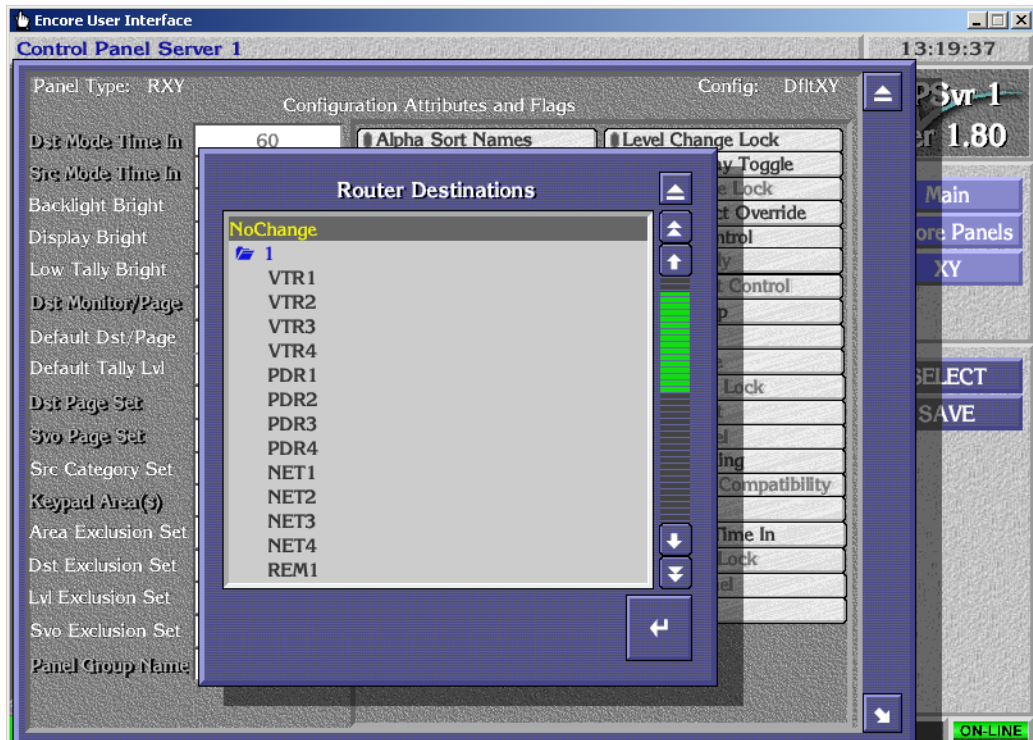
uration when a template is applied to that panel. This is accomplished in the template file by specifying particular items that are not to be changed. In Encore v1.8.0 this partial template configuration feature has been added to all Encore system Control Panels (except SMS CNT and MCO panels).

An example use of this feature is sending a new source button template to multiple BPS panels. Setting the default Destination to not change eliminates the need to manually reconfigure the controlled Destination of each BPS panel.

Configuration

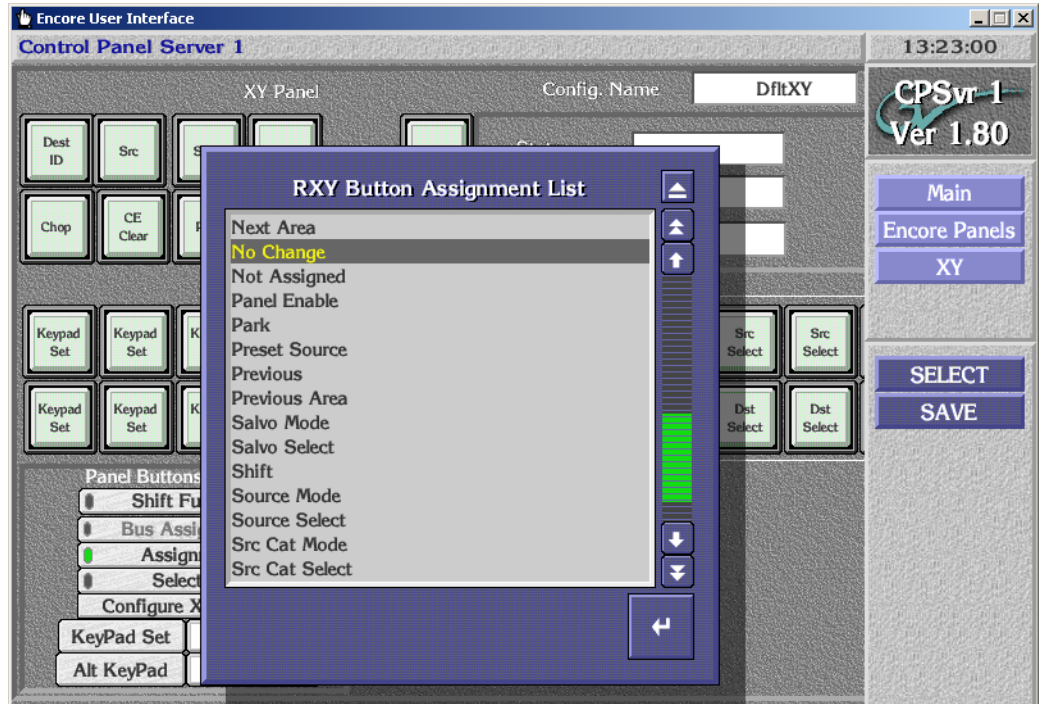
1. Select a Control Panel template file for editing. Note that the default template cannot be edited. You can create an editable default template by saving a copy with a new file name.
2. To retain the panel's default Destination, select **No Change** on the template's **Dflt Dst/Page** list (Figure 34). Once set, the **Destination Exclusion Set** and **Destination Page Set** parameters (if present) will also be grayed out, since they are related to the default Destination.

Figure 34. Template No Change Default Destination



- To retain a particular button's function, with button Assignment active select **No Change** for the desired button (Figure 35).

Figure 35. Template No Change Button Assignment

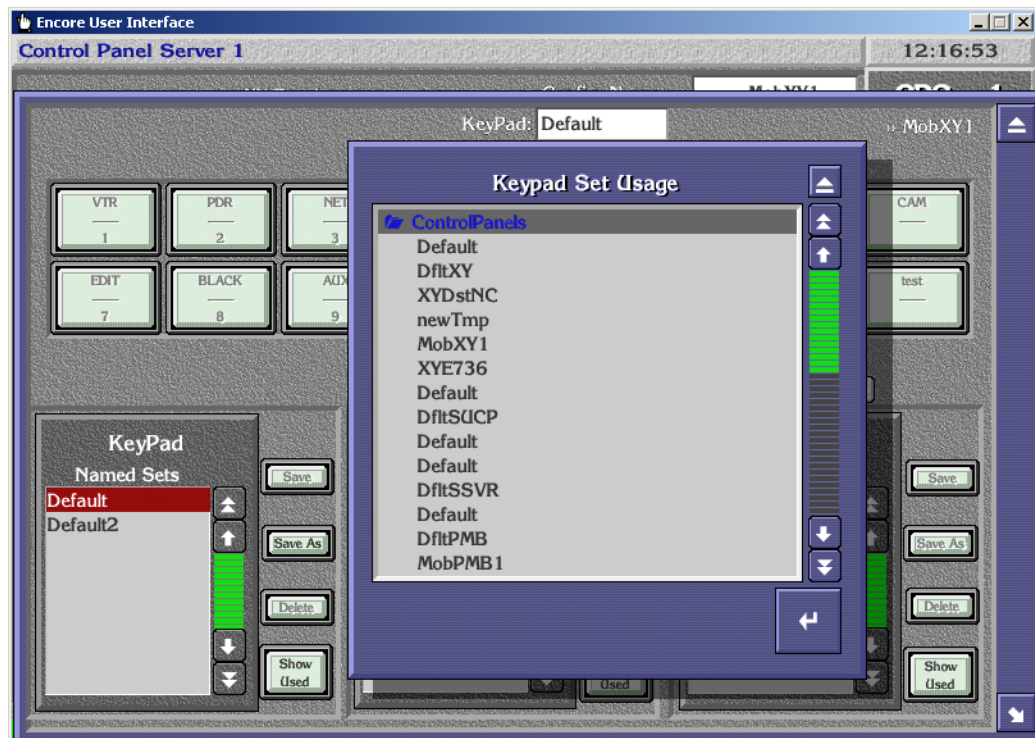


- This template can now be copied to multiple Control Panels of that type with different defeat Destinations. Those Destinations will be retained, along with the button functions that were set to **No Change**.

Keypad Set Usage Identification

A listing of the Control Panels using specific keypad sets is now available. This is useful when editing keypad sets in large facilities with many panels. The popup list appears by clicking on the Show Used button for either the Keypad Set, Keypad Prefix, or Keypad Suffix (Figure 36).

Figure 36. Keypad Set Usage List



Multi-Select Operations in Panel Server

Multiple selections can now be made in several Panel Server screens, to speed data entry operations.

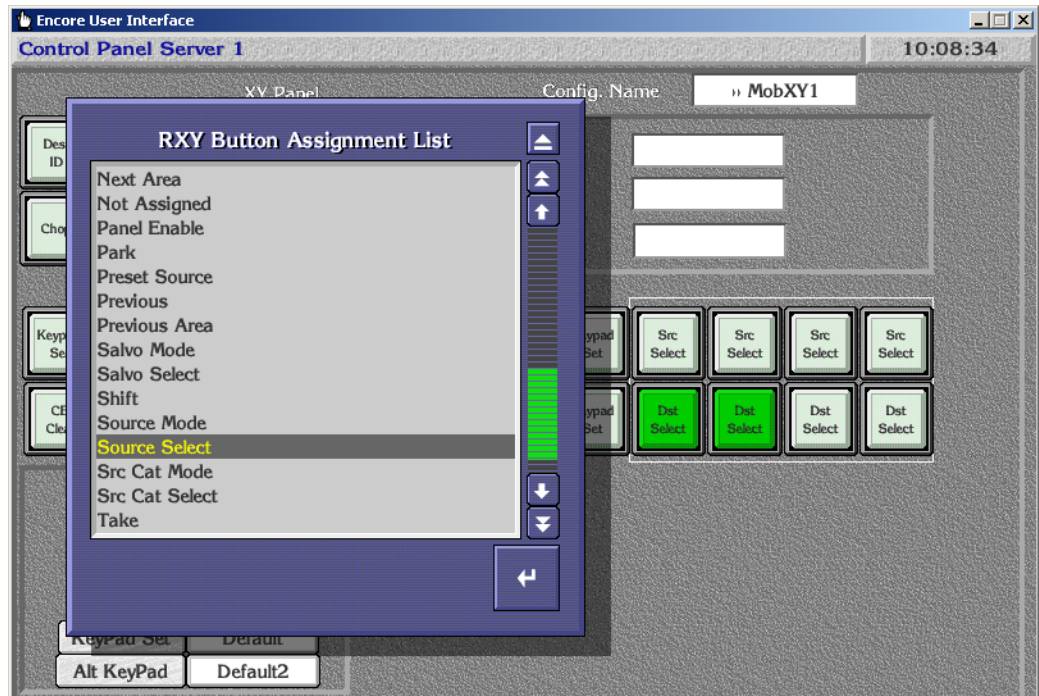
Control Panel Multi-Button Selection

Multiple buttons on Panel Server Control Panel screens can now be selected.

- Shift-clicking on a button turns it green, and shift-clicking another button selects that range of buttons for configuration.
- Ctrl-clicking on a button toggles the green color on and off, allowing the addition or removal of individual, non-contiguous buttons for configuration.

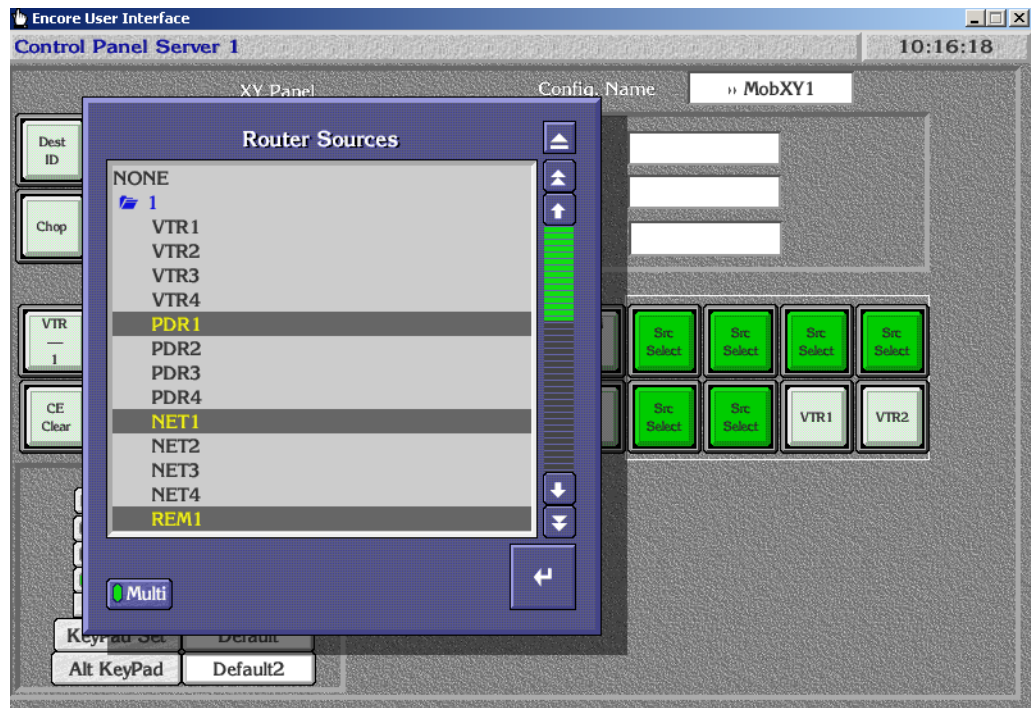
Once multiple buttons are selected, clicking on a green button opens the normal selection lists, either Assignment or Selection ([Figure 37](#)).

Figure 37. Control Panel Multiple Buttons, Assignment Mode



- When in Assignment mode, the selected button function will be applied to all the green colored buttons.
- When in Selection Mode, the selected item, or range of items in the order they were selected, will be applied to the green buttons. Non-contiguous selections are supported ([Figure 38](#)).

Figure 38. Control Panel Multiple Buttons, Selection Mode



Attributes and Flags Multi Selection

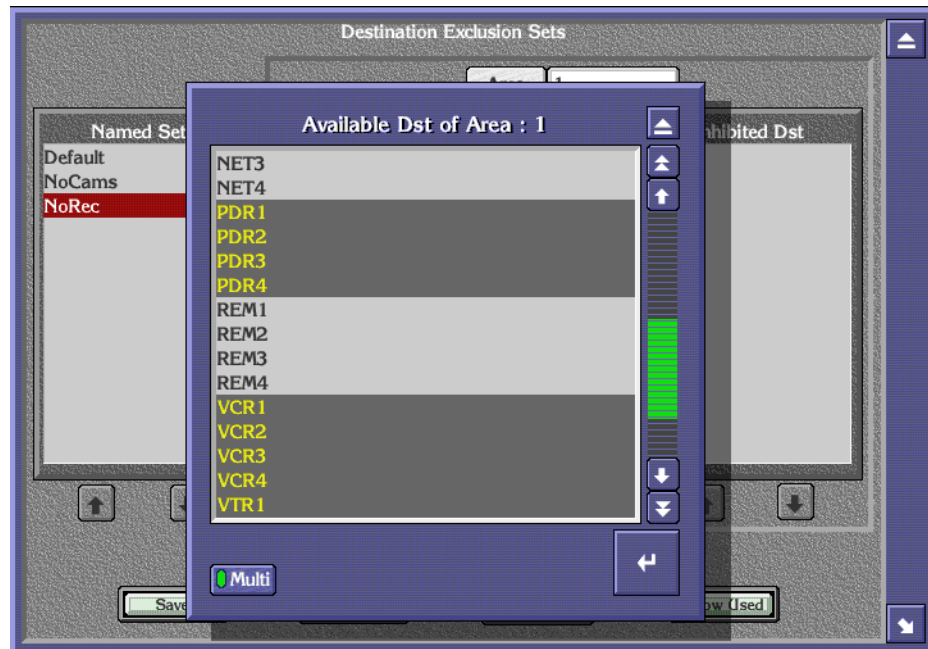
It is now possible to select multiple items when configuring Control Panel attributes, similar to the multi-selection of Destination Page Set items introduced in Encore release 1.7.3.

Multi-selection is now available on:

- Destination Exclusion Set edit screen ([Figure 39](#))
- Salvo Exclusion Set edit screen
- Source Category Set edit screen

On these screens, when **Add** or **Remove** is clicked, a list of available items appears with a **Multi** button available, allowing multiple selections. Clicking on individual items toggles its selection on and off. Shift-clicking selects a range of items.

Figure 39. Destination Exclusion Multiple Selections



Panel Server Page Set Auto Create

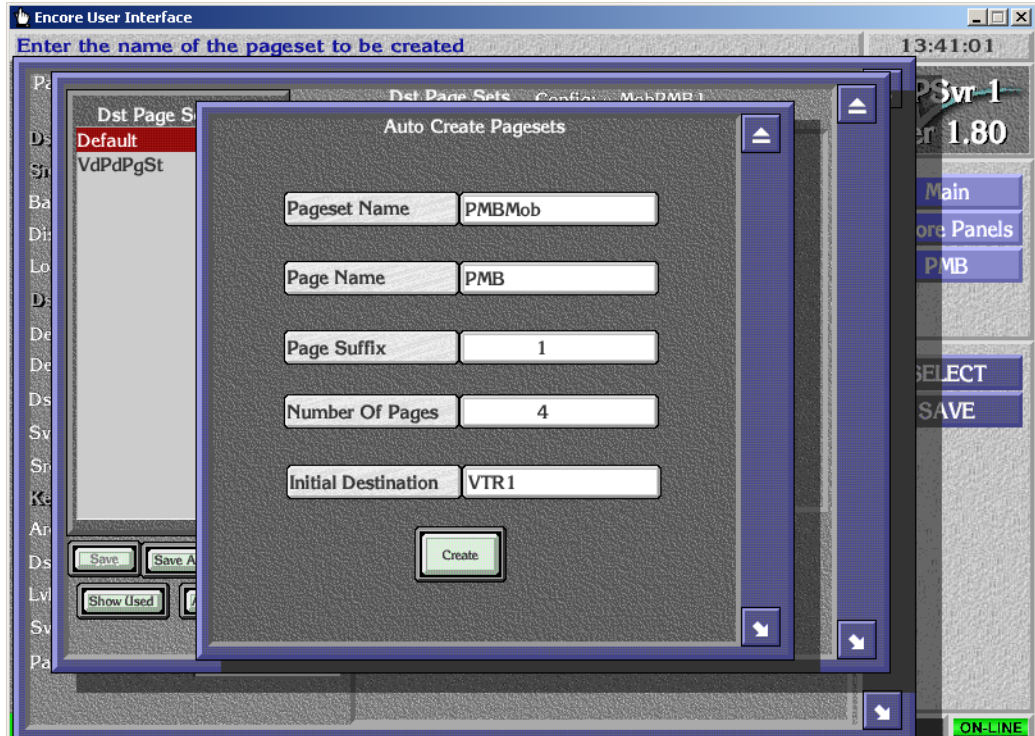
Destination Page Sets and Salvo Page Sets can now be automatically created for Encore PMB, SMS MB4 and MB8 Control Panels.

Note Control Panel page set configurations are applied as soon as they are selected on the OUI Panel Server. Changes to an existing page set, however, must be Saved before the changes take effect.

1. Using the Encore OUI Panel Server, select the Control Panel (PMB, MB4, or MB8) that you wish to configure, click on **Configure Flags**, and then click on either **Dst Page Set** or **Svo Page Set**. (This example shows auto creation of a Destination Page Set).
2. Click on the **Auto Create** button near the bottom of the screen. A pop-up menu appears.

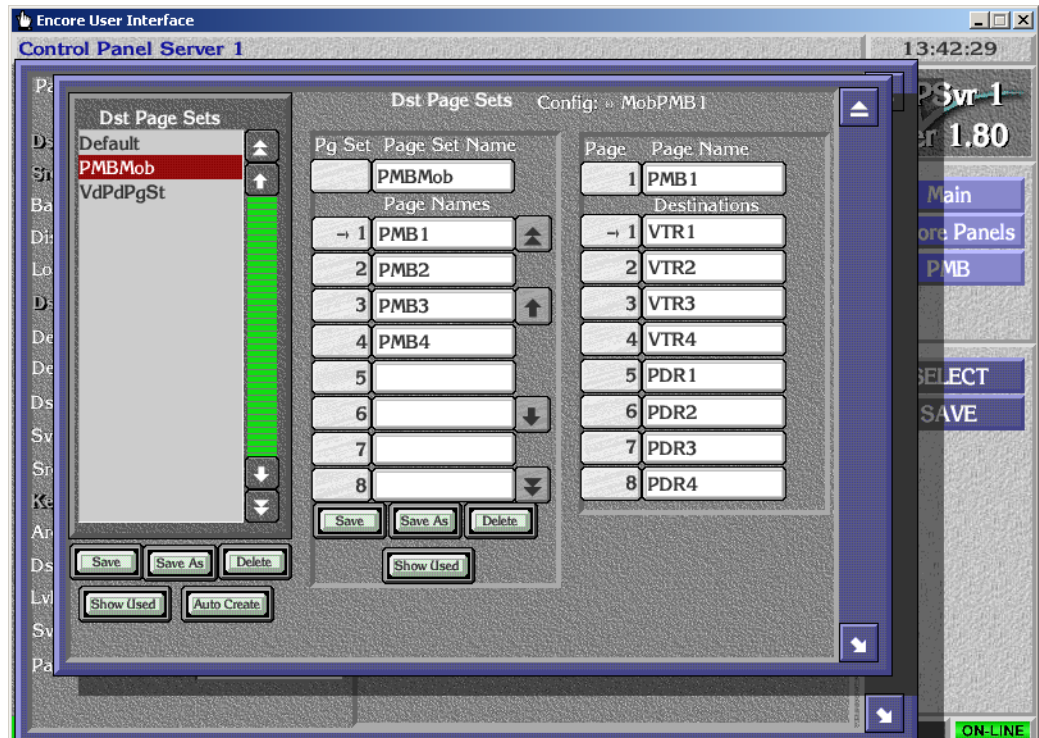
3. Enter a name for the page set, the base name of the first page, a suffix for the pages to be created, the number of pages in the set, and the initial destination for the first page of the set (Figure 40).

Figure 40. Page Set Auto Create, Specifications



- Click **Create**. The page set will be created (Figure 41).

Figure 41. Page Set Auto Create, Result



Existing Page Sets also can be automatically appended to, by retaining the original name of the Page Set after clicking on **Auto Create**. New pages will be added after the last page of the original page set.

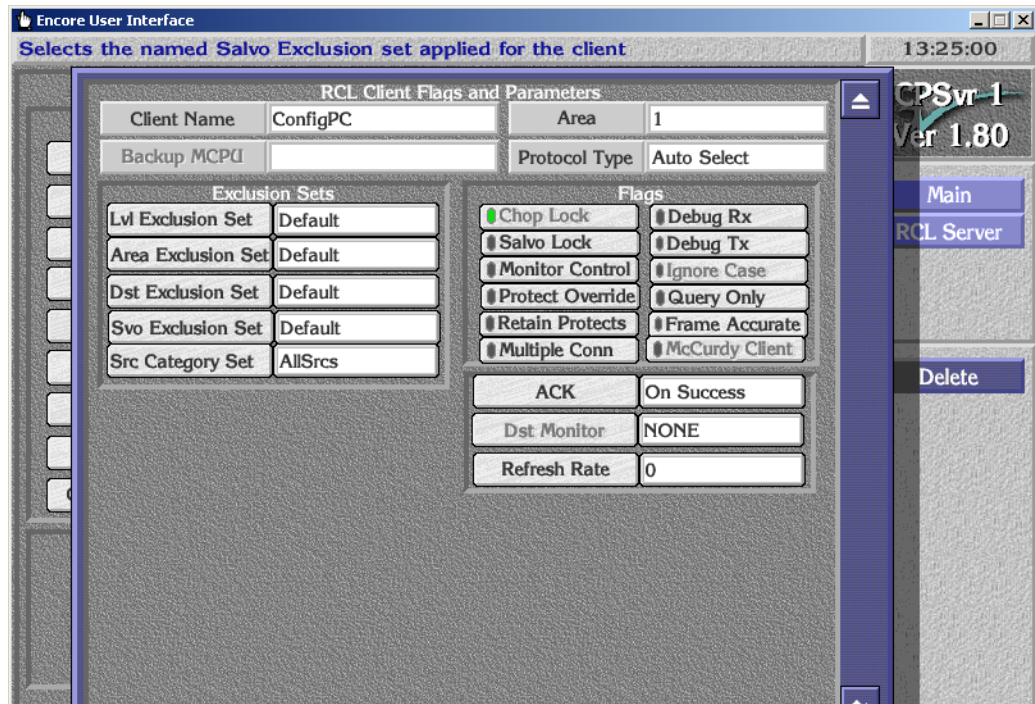
RCL Server Enhancements

Salvo Exclusion Sets for NP/RCL Clients

Salvo Exclusion Sets are now available for use by NP/RCL Clients. To access this setting, go to the Encore Panel Server, RCL Server, select a Client,

and then click on Flags and Parameters (Figure 42). Click **Svo Exclusion Set** to bring up a list of available sets for use by that Client.

Figure 42. RCL Server Flags and Parameters Screen

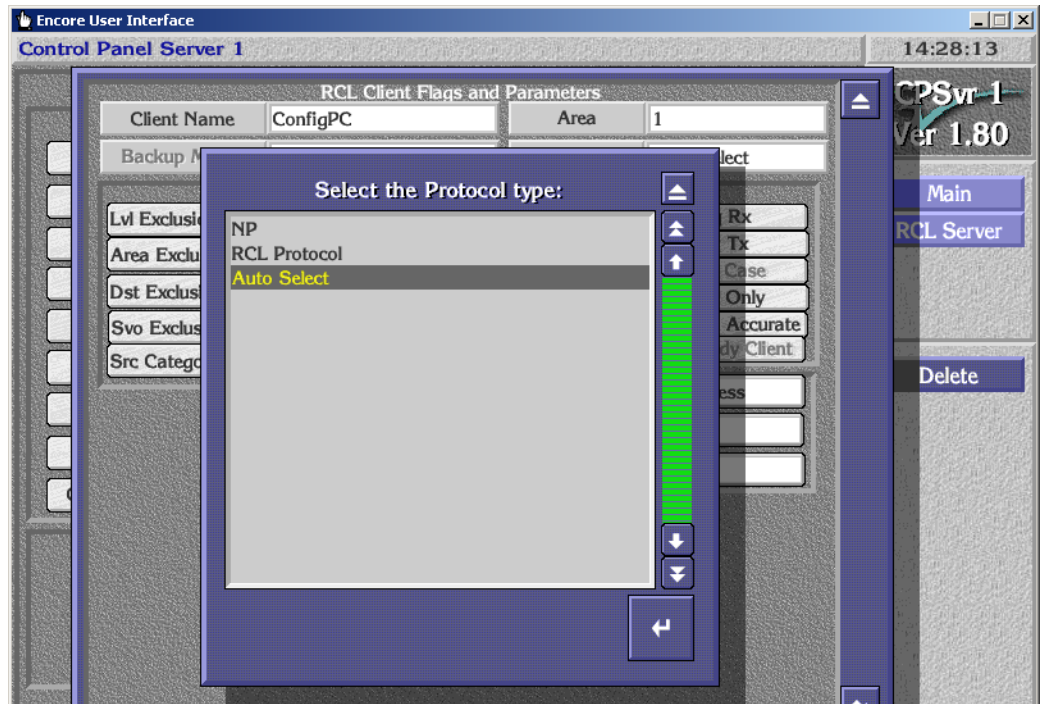


Auto Select Protocol Option

NP/RCL Clients can now be set to automatically select the Protocol Type, or to use either NP or RCL, as with earlier software. When **Auto Select** is chosen, the Client will be recognized by the Server regardless of which protocol it uses. With this setting, it also becomes possible for two Clients, each using a different Protocol, to run using the same IP address.

Clicking on the Protocol Type field (Figure 42) opens a list displaying these options (Figure 43).

Figure 43. RCL Server Auto Select Protocol Setting

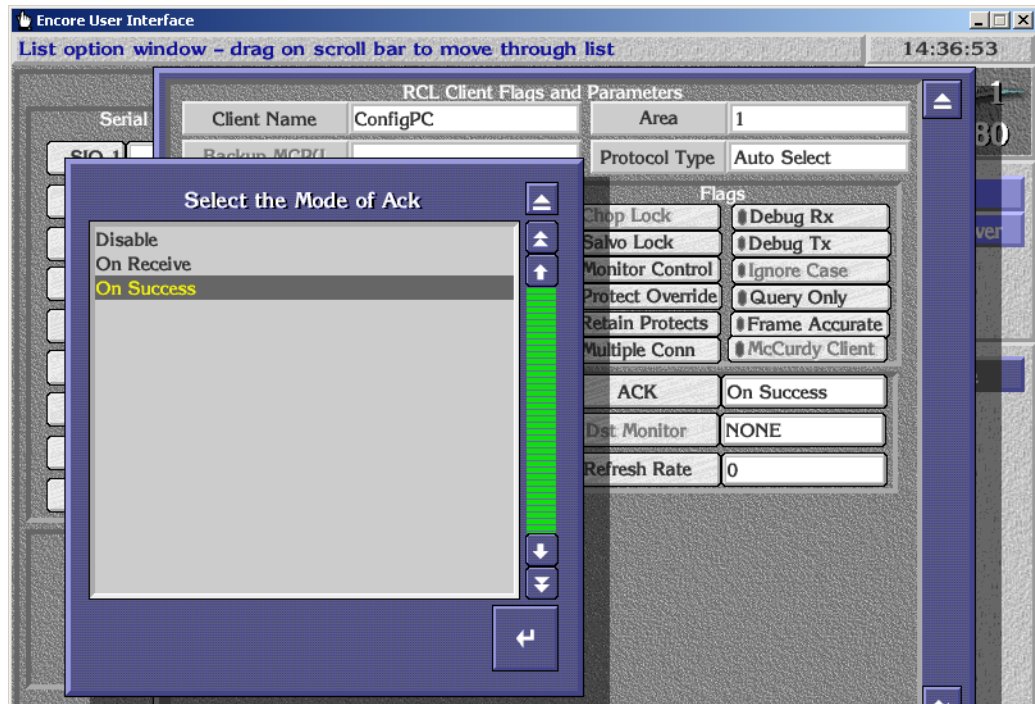


Ack Flag Options for RCL Server Clients

More options are now available for system acknowledgements (Acks). It is now possible to acknowledge a routing client's Take request even if no status change occurs because the requested Source is already connected to that Destination.

Clicking on the **Ack** field opens a list of available options (Figure 44).

Figure 44. RCL Server Ack Options



- **Disable** - No Ack will be given (same as the previous Disable setting).
- **On Receive** - Ack is sent when the received command is a valid request with respect to the command format and the values the command contains.
- **On Success** (RCL Only) - Ack is sent when the command succeeds.

The previous **Disable ACKs** flag has been removed, replaced with these new option settings.

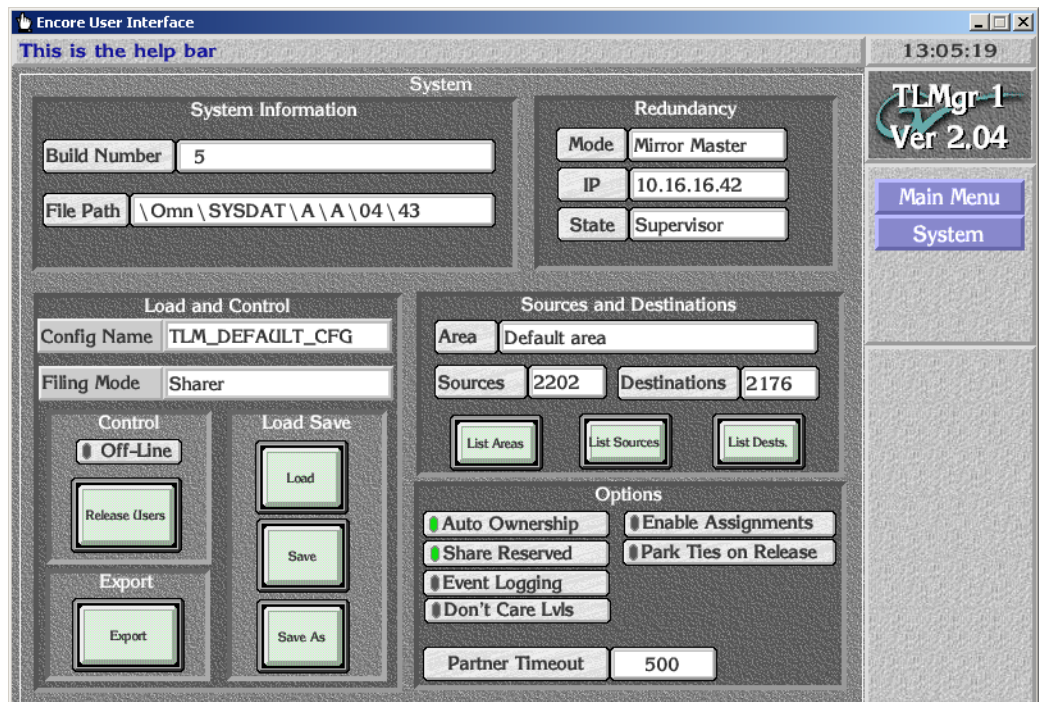
Source Categories for RCL Server Clients

NC/RCL Clients also support the Source Category Set feature (see *Source Categories on page 28*). For example, Client Take operations can be restricted only to Sources in a specific Category Set. In addition, if an RCL Client makes a query to return all Source names, the response will only include Sources in that Category Set.

TLM Configuration Load and Save by Name

Tie Line Manager now supports loading and saving named configurations, in the same way as the Encore Panel Server and RCE, using **Load**, **Save**, and **Save As** buttons located on the TLM System screen (Figure 45). When changes have been made, the **Save** button is colored red, and a prompt appears asking to update the Mirror TLM (if present). TLM **Save** buttons have been relocated from the menu bar to the individual TLM System, Tie Config, Src Blocks, and Rooms OUI screens.

Figure 45. TLM System Screen



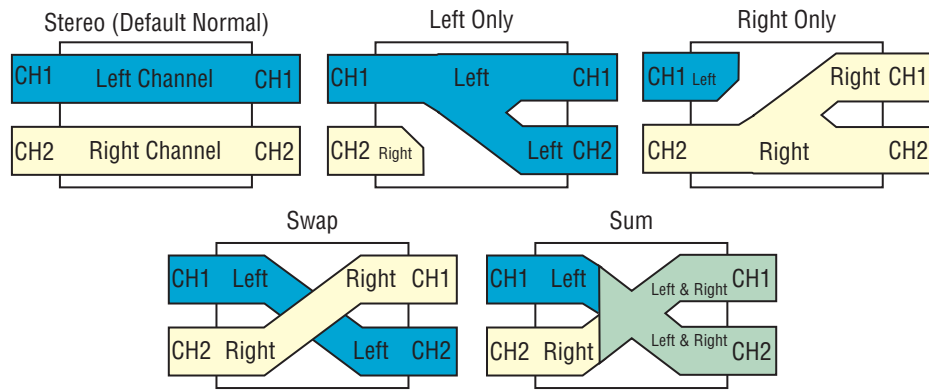
Dynamic Audio Attribute Control

Introduction

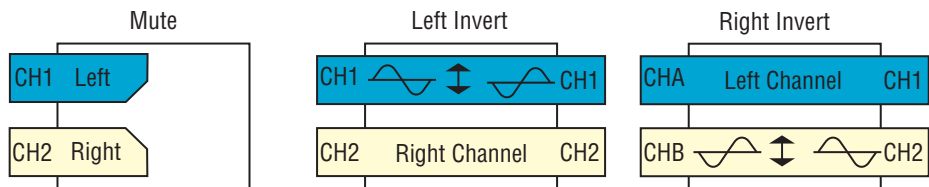
Audio attributes on Concerto audio routers can now be dynamically controlled using Encore system Control Panels, or from an RCL Client (for example, an automation system). The audio attributes are: Stereo (Normal), Left Only, Right Only, Swap, Sum, Invert Left, Invert Right, and Mute. Five attributes are mutually exclusive and three are independent (Figure 46).

Figure 46. Dynamic Audio Attributes

Mutually Exclusive Attributes (5)



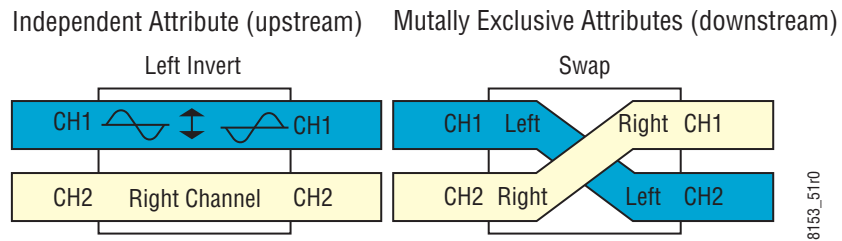
Independent Attributes (3)



8153 50r

Any one of the five mutually exclusive attributes can be enabled at a time. One or more of the three independent attributes can be activated in combination with any other attributes. For example, you can Swap the channels and also invert the Left channel. Incoming (upstream) signals are inverted, so in this example the Left channel is inverted and that inverted signal is passed to the right channel (Figure 47).

Figure 47. Applying Multiple Dynamic Audio Attributes



Applying Mute silences both channels. If a Mute is applied in conjunction with any other attributes and the Mute is then released, the audio attributes previously set remain in force and are restored when Mute ends.

Dynamic audio attributes control are supported by the following matrices:

- Concerto (Analog and AES/EBU Digital Audio).

Note On Concerto Analog Audio matrices, matrix outputs must be wired as left-right channel pairs.

Multiple bus panels (PMB, EDP, MB8, MB4) do not support dynamic audio attribute control.

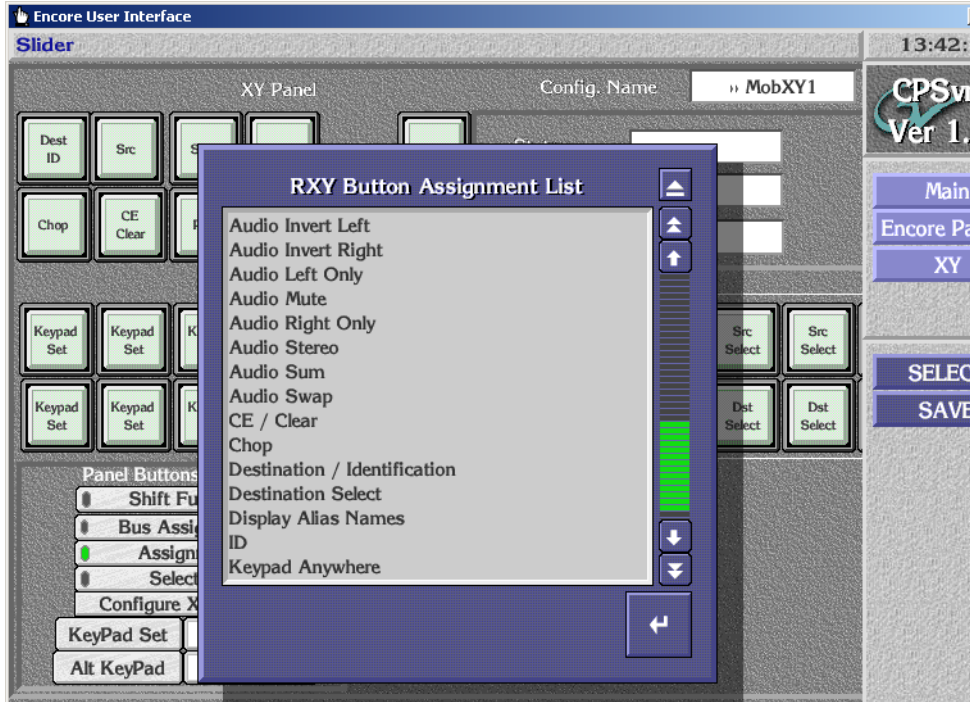
Configuration

Control Panels are configured for dynamic audio control by assigning these functions to buttons, using the standard Encore configuration procedures.

1. Using the Encore OUI, launch the Panel Server, select the Control Panel Type, and click on the Assignment button.

2. Touch the desired button to bring up a list of available Audio functions (Figure 48).

Figure 48. Assignable Audio Attributes



3. Select the Audio Attribute you wish to assign to that button.
4. Dynamic Audio control is now activated on a Control Panel by turning the **Audio Attribute Lock** flag OFF (gray indicator) in the Configuration Attributes and Flags menu (Figure 9 on page 24), and saving that configuration.

Operation

Once audio functions have been assigned to Control Panel buttons, they will behave as follows:

- Multiple destination Control Panels must be in Source mode to access the dynamic audio features.
- Pressing an unilluminated **Audio Left Only**, **Audio Right Only**, **Audio Swap**, or **Audio Sum** button lights that button, activates that audio attribute, and deactivates any of the other attributes in this group (they are mutually exclusive). Pressing one of these buttons when it is illuminated deactivates that attribute and restores the normal Stereo audio attribute.

- If an **Audio Stereo** button is configured on the Control Panel, it illuminates when no other mutually exclusive attribute is enabled. Pressing this button when it is not illuminated selects normal Stereo operation, disabling any other mutually exclusive audio attribute.
- The independent audio attributes buttons (**Audio Invert Left, Audio Invert Right, Audio Mute**) are enabled and disabled individually by pressing those buttons. These buttons illuminate when that attribute is active and go off when inactive.
- Salvos can be created to control dynamic audio attributes (on a salvo element by salvo element basis).

Date, Time, and Frame Count SCB Webpage

Encore System Controller Boards (SCBs) now have a **Date, Time and Frame Count Configuration** webpage (Figure 49). This webpage supports Simple Network Time Protocol (SNTP), permits manually setting the SCB's date, and allows activation of the SCB's Frame Count Server. These settings control synchronization of the SCB with other devices on the network. For example, both SCBs in a redundant pair need to use the same time reference to ensure proper data sharing during system operation. The recommended practice is to use both VITC and SNTP on all the SCBs, which will ensure consistent times and dates for the entire Encore system.

Figure 49. SCB Date and Time Webpage

System Controller Date, Time and Frame Count Configuration

[System Controller Description](#)
[Application Configuration](#)
[System Controller Network](#)
[Date, Time and Frame Count Configuration](#)

Current Time

14:40:51 14-January-2010

Time Source: **VITC**
Date Source: **SNTP**

SNTP Configuration

Use SNTP:

SNTP Server IP:

Use Daylight Savings Time: UTC Offset:

System Parameters

System Date:

To enact changes to system date, a reboot is needed.

Frame Count Server

Broadcast frame count: Disable Enable

Note The Frame Count Server feature, introduced with Encore Release 1.7.3, was formerly located on the SCB's **Application Configuration** webpage and was previously labeled **Reference Count Server**.

Current Time

The **Current Time** line reports the current time and date being used by that SCB. The reference source being used for each is shown by the **Time Source** and **Date Source** fields. Possible Time sources are VITC, SNTP, and Frame Count Server. Possible Date sources are SNTP and a manually set System Date.

The various synchronization methods available operate in conjunction with Vertical Interval Time Code (VITC) as follows:

When VITC is present, it will always be used for the time source. When SNTP is active, it will always be used for the date source, and if VITC is not present SNTP will also be used for the time source. If SNTP is not active, the date will need to be set manually on each SCB. If neither VITC or SNTP is being used, the Frame Count Serve is available to synchronize Encore system devices on the network. When the Frame Count Server is used, elapsed time since reset, not time of day, will be displayed for the Current Time, and the System Date will need to be set manually on each SCB.

Note All SCBs on the network should use the same time reference, especially if they are configured as redundant pairs.

SNTP Configuration

A Simple Network Time Protocol (SNTP) Client has been added to the Encore SCB. This Client can work with an SNPT Server to synchronize time over the network. The SNTP Server typically runs on a Windows PC configured on the Encore network. The SNTP server is provided as part of standard windows installation and provides Coordinate Universal Time (UTC). The end user is responsible for adjusting UTC to match local time. For example, California requires a UTC offset of -08:00.

The **Daylight Savings Time** checkbox advances SNTP time by one hour, and is available for use with SNTP servers that do not automatically correct for this time change.

After making any SNTP changes, click on the **Save** button to enact the changes.

System Parameters

When SNTP is not active, the **System Date** can be set manually by clicking on the calendar icon and choosing a year, month, and day. The SCB must be reset to enact the change. You can do this with the **Reboot** button on the webpage.

Frame Count Server

Operation of the Frame Count Server feature, available for use when VITC or SNTP is not being used, is described in the separate *Encore Configuration Manual*.

Note When using SNTP or VITC disable the Frame Count Server.

Logging Time and Date

The date and time data obtained from VITC/SNTP is used to log console messages by all the applications running on the SCB. Other applications which depend on VITC (like timed takes in CPS) are not affected by the SNTP implementation. The time source used for logging has the following priority: VITC, then SNTP, then Frame Count Server, and last System Up-Time. [Table 2](#) shows in detail how time and date is applied to logging.

Table 2. Time and Date Sources for Logging

VITC Status	Frame Count Status	SNTP Status	Date Source for Logging	Time Source for Logging
Present	Not Considered	Present	SNTP	VITC
Present	Not Considered	Not Present	System Date*	VITC
Not Present	Enabled	Present	SNTP	SNTP
Not Present	Enabled	Invalid SNTP Server	System Date*	Frame Count Server - SNTP Server Not Found
Not Present	Enabled	Not Present	System Date*	Frame Count Server
Not Present	Disabled	Present	SNTP	SNTP
Not Present	Disabled	Not Present	System Date*	System Up Time
Not Present	Disabled	Invalid SNTP Server	System Date*	System Up Time - SNTP Server Not Found

New SNMP Console Commands for SCB

The Encore SCB now has five new console commands available that list SNMP diagnostic information (see [Table 3](#)). This logging option is controlled by an On/Off console command.

Table 3. SCB SNMP Logging Information

Command	Information
snmpShow	a. SNMP License Status
	b. SNMP Software Status
	c. Trap Target IP Address.
snmpCurrentTrapListShow	(Lists the current error trap that has sent from the system.)
snmpTrapDebugOn	(Enables the trap details print on console.)

Table 3. SCB SNMP Logging Information

Command	Information
snmpTrapDebugOff	(Disables the trap details print on console.)
snmpStatusShow	(Reports the health of SNMP software along with other information such as how many SNMP packets are sent out from the system)

ENCONFIG.ini

Encore SCBs now employ an ENCORE.ini file to set certain system parameters. This file consolidates parameters that were previously located in several different system locations. This file is located in the root directory of each SCB, is read on bootup, and can be viewed and edited using a standard ascii text editor.

CAUTION Modifying the ENCORE.INI file incorrectly can adversely affect Encore system operation. Changes to the ENCORE.ini file should only be made by qualified personnel who fully understand the ramifications of any alterations made.

An example of ENCORE.ini text information, is shown below:

```
;The configuration entries used by Control Panel Server
needs to be added under this section.
[CPS]
```

```
;PBlock is used to control the Panel display updates by
redundant Control Panel Servers. To block display up-
dates from subordinate write 'Enable', else write 'Dis-
able'.
PBlock=Enable
```

```
;RBlock is used to control the Router operations by re-
dundant Control Panel Servers. To block operations from
subordinate write 'Enable', else write 'Disable'.
RBlock=Enable
```

```
;MxMemory is used to configure the Maximum backlog of
system memory that can be consumed by a serial client,
in Mega Bytes. Default is 10MB, can be configured be-
tween 2 to 50, 0 shall use the Default, and -1 shall
Disable.
MxMemory=0
```

```
;NPBlock is used to control the Router operations by re-
dundant serial client. To block operations from subor-
dinate write 'Enable', else write 'Disable'.
NPBlock=Disable
```

;NetDelay is used to configure the periodicity of the Network connectivity detection for connected NP/RCL clients, in seconds. Default is 5 seconds, can be configured between 3 to 255, 0 shall use the Default, and -1 shall Disable.

NetDelay=0

;FDelay is used to configure the number of frames delay to be added to each route request, can be any natural number, used by Engineering only. Configure 0 to use the default, which is 6 frames.

FDelay=0

;The configuration entries used by Router Controller Engine needs to be added under this section.

[RCE]

;NPMatrix is used to configure the periodicity of the Status query to a Remote NP system, in seconds. Default is 5 seconds, can be configured between 1 to 5, 0 shall use the Default.

NPMatrix=0

;The configuration entries used by System Controller Board needs to be added under this section.

[SCB]

;NoNCRelay is used to control the relay of network traffic from EN1 to EN2 by NetConfig Relay Agent. To block relay to EN2 of the system, write 'Enable', else write 'Disable'.

NoNCRelay=Disable

;WatchdogTime is used to configure the reboot wait time of the Task Watchdog, before which it can log the diagnostics. Default is 45 seconds, can be configured between 1 to 300, 0 shall use the Default.

WatchdogTime=0

;WatchdogAction is used to control the Action of the Task Watchdog when any key task is suspended. Default is 'Disable', can be configured as 'Reboot' or 'Shutdown'.

WatchdogAction=Disable

Soft Panels Enhancements

The Soft Panels application has been enhanced with the following changes:

- Encore system support for the SMS PXS, PXD, PXYE, and SCP panels, and the JEP-100 panel.
- Support for all Control Panel features introduced with v1.8.0 software.
- Control Panel Keycap Legend Generation (see [page 49](#)).

Refer to the separate *Soft Panels Instruction Manual* for specific information.

Visual Status Display (VSD) Enhancements

The VSD application has been enhanced with the following changes:

- Event Stacker, which allows programming and executing time-scheduled tasks (Takes, Protects, Unprotects, Salvos, Assignments, Deassignments, and Monitor Takes) (Encore systems only).
- Destination Monitor View, which reports the current Destination being monitored (Encore systems only).
- Display of names, or alias names, or both.
- Sorting by names is now supported.
- New Destination, Source and Tie Line names can be inserted anywhere in already created view screens.
- Cut, Copy and Paste operations are supported where appropriate.
- Multiple columns of Destinations can be displayed (useful in systems with many Destinations and few Levels).
- An optional Comments column is available for each view type.
- Chop feature status reporting is supported.
- Display font type and size can be configured.
- The VSD can retain its last connection state.
- An Events Log is available, to observe the connected Panel Server's operations.
- Dynamic Audio Attribute feature status reporting is supported (Encore systems only).

See the separate *Visual Status Display Instruction Manual* for specific information.

Concerto Port Matrix One-to-Many Control

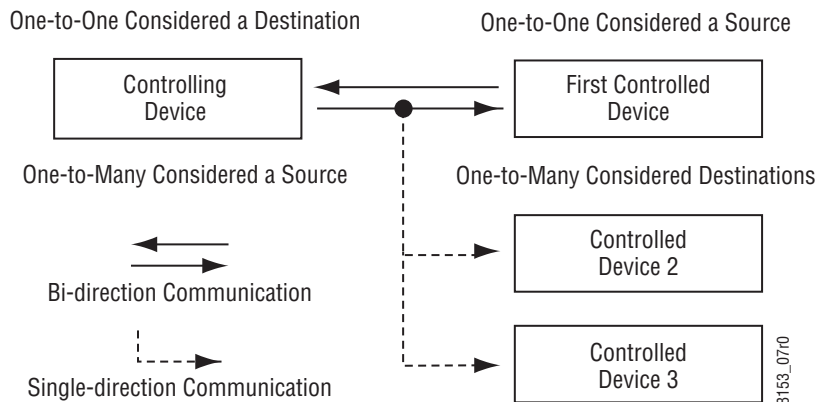
Background

Previous Concerto Port Matrix software supported one-to-one bi-directional control for RS-422 serial data routing. To facilitate dubbing operations, where video may need to be recorded to multiple devices simultaneously, the Encore 1.8.0 release supports one-to-many data routing.

The previous Concerto one-to-one control mechanism used the convention of having the controlling device (for example, a record VTR) be considered a Destination. Transport commands originating from the controlling device were directed to a Source over a bi-directional link. This supported the principal that choosing a different Source for that Destination could also automatically route the control data path from the controller to that new Source. However, this mechanism doesn't allow multi-drop connections, since each Destination can have only one Source.

The new one-to-many implementation still employs the above strategy for a first bi-directional control connection. But it also supports additional, one directional control paths, as illustrated in [Figure 50](#). These additional paths allow sending control signals to multiple locations, and essentially reverses the Destination/Source control convention to match traditional routing concepts, where a Source can be sent to multiple Destinations.

Figure 50. Single and Multi Device Control



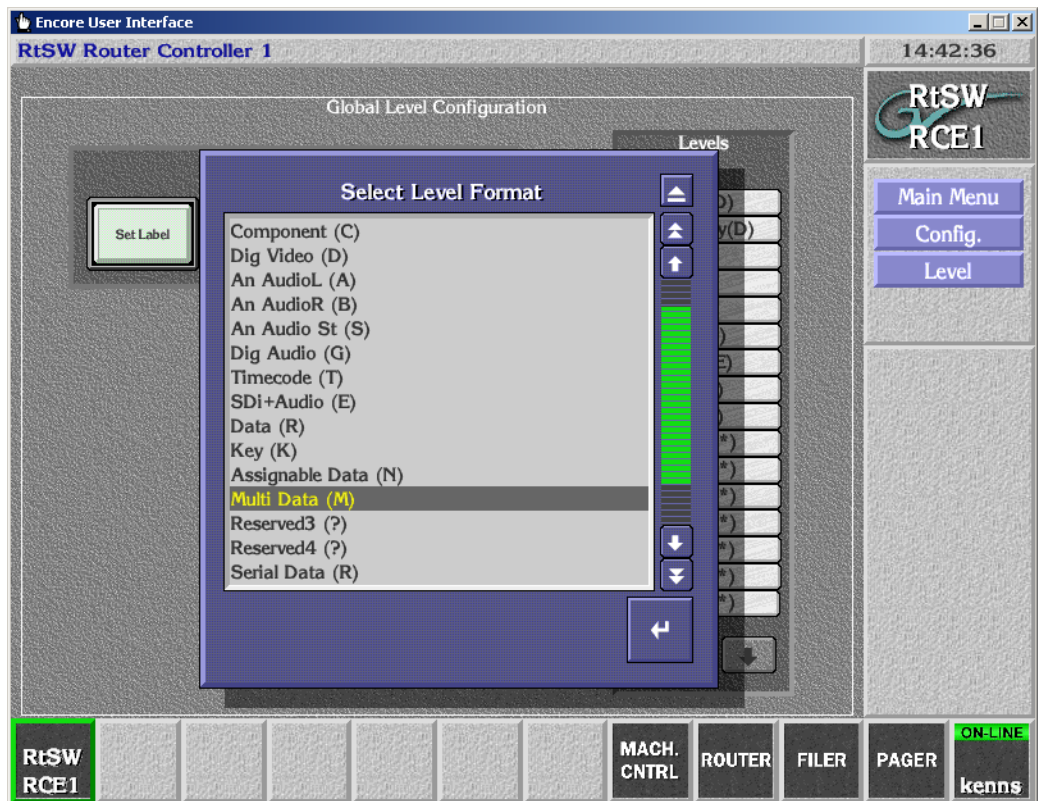
Note This mechanism allows the existing two direction control and status communication between the controlling and first controlled device, but only commands will be issued to the additional controlled devices. Should these additional devices experience transport errors, no notification will be sent back to the controlling device.

Configuration

Some configuration is required to use Concerto one-to-many data routing. Exactly what configuration settings are used depends on the specific requirements of your facility. It is not possible to explain every possible data routing configuration here. However, some parameter settings are required to activate one-to-many port routing for any configuration.

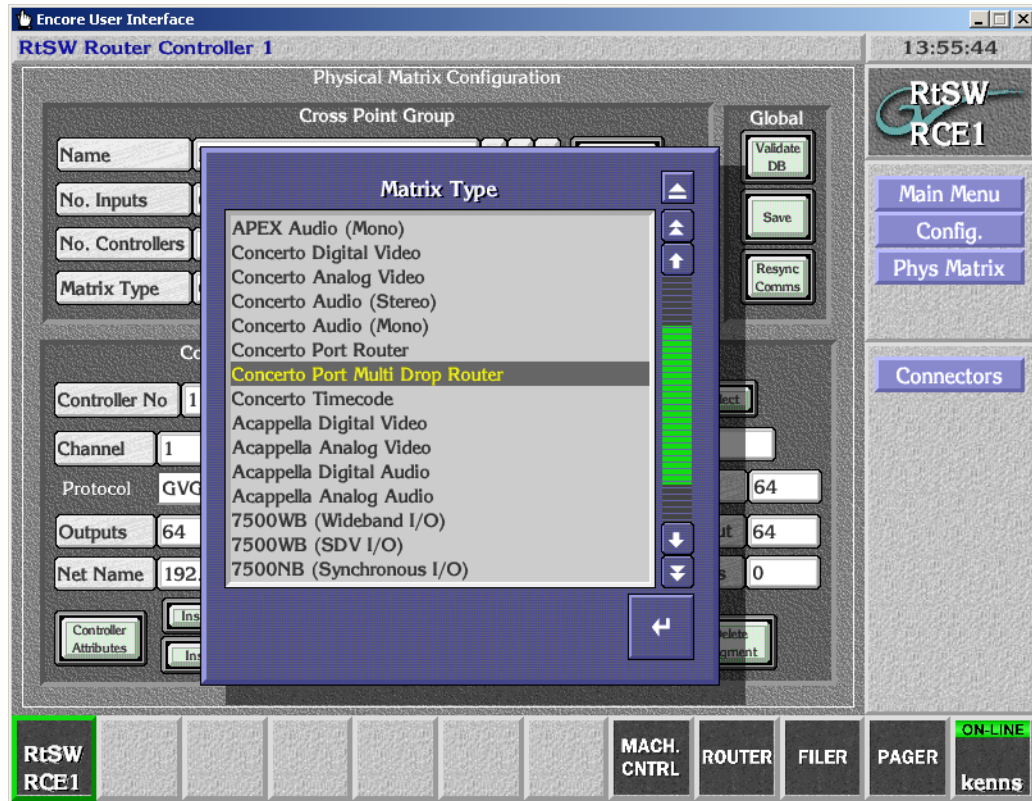
1. Using the Encore Router Controller, go to **Config, Levels** and define a Level as **Multi Data (M)** format (Figure 51).

Figure 51. Multi Data Level



2. Go to **Config, Physical Matrix**, choose the Crosspoint Group being used for the Concerto Port Router, then click on **Matrix Type**, and choose **Concerto Port Multi Drop Router** (Figure 52).

Figure 52. Matrix Type for Multi Drop Concerto Port Router



3. If you are not already using one-to-one Concerto Port routing, you will also need to define the rest of the Port Router configuration parameters on this menu.
4. You will also need to go to **Config, Source**, and **Config, Destination** and define Sources and Destination of the port routed devices to use connectors on that Multi Data level. Both the Source and Destination for each device need to be defined to use the same connector since bi-directional communications is used for the first controlled device.

Note If you wish to have device control follow video routing, define these data Sources and Destinations as an additional Level for the device's video Sources and Destinations.

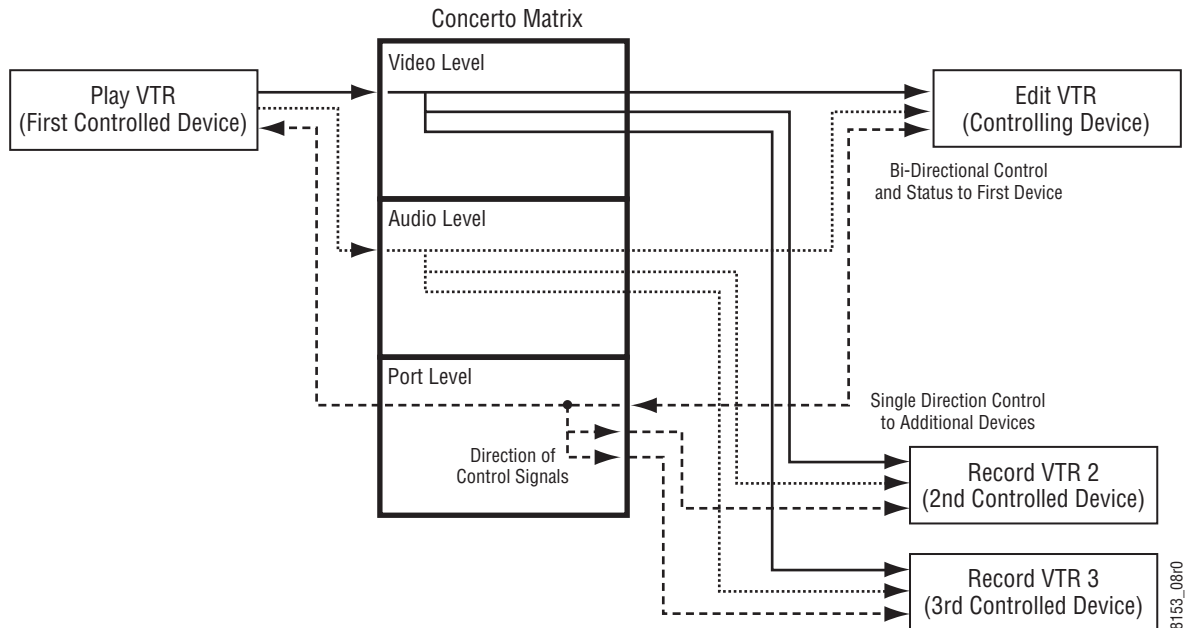
5. Finally, you will need a Control Panel able to do multi destination routing (an Encore 48B, for example) configured with access to the various devices' Sources and Destinations.

Refer to the separate *Concerto Configuration Manual* for more detailed configuration information.

Multi-Dub Operation

In this example we will create three dubs simultaneously. We assume that all the dubbing devices' Sources and Destinations have multiple levels defined for video, audio and data (Figure 53).

Figure 53. Multi-Dub Diagram



1. Perform an all Level take from the Play VTR to the Record VTR. This routes video and audio, and also establishes a port communications path between the Play and Record VTRs.
2. Test the connection to ensure the Play VTR is controlled by the Record VTR and the incoming video and audio signals are present.
3. Perform a multi Destination all Level Take, using the Edit VTR as the first Destination. On a 48B Control Panel (in **Dest Ganging Option 1** mode) this is accomplished by holding down the Edit VTR Destination button and then pressing the Destination buttons for the 2nd and 3rd Record VTRs. All three Destination buttons will illuminate.
4. Cue the Play VTR using the Edit VTR and perform the edit. The preroll and record commands will also be issued to the other Record VTRs.

Software Update

CAUTION During the software update your Encore system will be taken off-line for a short time while components reset. Existing matrix crosspoints will remain selected, but source to destination changes will not be possible while some system components are off-line.

Introduction

Note Read these instructions carefully and follow all the steps exactly to help ensure your update goes smoothly.

If you have any questions regarding software update, contact Grass Valley Customer Support.

Update Only Existing Encore Systems

This procedure is for updating an existing Encore system that has been previously installed, completely configured, and is operating correctly. New Encore systems ship from the factory with the latest version of software already installed, so these systems do not need their software updated. However, new Encore systems will need to be properly configured to operate at your facility.

Update From Version 1.7.4.1 and later to Version 1.8.0 Software

This update procedure is for Encore systems running the recent version(s) of software indicated above.

CAUTION Redundant Encore SCBs running the Panel Server application must be updated to 1.8.0 simultaneously. Running different versions of Panel Server software at the same time on redundant systems can make one SCB fail to complete its reboot. This precaution does not apply to SCBs not running Panel Server software, or to non-redundant SCBs.

Note Encore systems running 1.7.4.2 and later can updated to 1.8.0 and, if backed down to 1.7.4.2, Control Panel Server database values will be retained. Encore systems running 1.6.5.4 through 1.7.4.1, if upgraded to 1.8.0 and backed down to those versions, will revert the Control Panel database to default values. Encore 1.7.4.2 modified the database structure for faster performance.

CAUTION If your Encore system is running software earlier than 1.6.5.4, contact Grass Valley Customer Support for software update assistance. NetConfig may not be able to discover devices running earlier Encore software.

Update With the Encore Sharer PC

Use the Encore Sharer PC for the software update. This PC should already be configured to operate on the Encore network and you will be able to easily access all the Encore system components.

SCB Flash Memory Available Space Requirement

CAUTION Encore SCBs only support flash memory up to 512MB. Do not attempt to use higher capacity flash because corrupted data may result.

To accommodate the update process, 15MB of available SCB flash memory is required. Available flash memory space can be ascertained by mapping the SCB drive and opening the properties window for that device.

Note If you purchased flash memory from Grass Valley Customer Support it will already be formatted and loaded with Encore 1.7.3 software. See *Manually Updating SCB Flash Memory* on page 99 for additional information.

Have Sharer On-Line When Booting SCB Running CPS

Typically the Control Panel Server (CPS) application runs on an SCB. The Sharer should be on-line when the SCB running the CPS is booted when migrating to v1.8.0 software. During start up the CPS loads the DataBase file from the Sharer.

Encore Software Compatibility

The Encore 1.8.0 release has several components with different software versions. Some software has been modified for this release and will have new version numbers, and some components may retain their existing version because they were not modified.

CAUTION The latest software versions provided with this release must be run on all system devices for proper Encore system operation. Grass Valley tests only these versions for compatibility. Though some older versions for some components may work, some will be incompatible and cause problems, possibly serious. Grass Valley Customer Support and Grass Valley Engineering will only support customers with the latest versions of software installed.

This Encore release package contains the software listed in [Table 4](#).

Table 4. Encore 1.8.0 Release Components

Component Type	Name	Software Version
Encore	Encore	1.8.0
	Encore Control Panels	1.8.0
	JEP-100 Control Panel	1.8.0
	Control Panel Server	1.8.0
Matrices	7500 Matrix Controller Code	1.7.3
	Concerto Matrix Controller Code	1.7.7
	Trinix/BroadLinx	3.1.0
Accessory Applications	Net config	2.0.12
	Salvo Editor	2.0.0
	Soft Panels	3.1.0
	Encore Visual Status Display	2.0.0
	RCL Test Application	1.8.0
Core Software	Sharer	3.63 patch 16
	System Manager	3.70 debug b9
	Router Controller	4.08 build 6
	Tie Line Manager	2.04 build 4

External System Compatibility

An Encore system can interface with many different external devices. As above, only the versions of software for these external systems available at the time of release are tested for compatibility.

CAUTION Software versions listed in [Table 5](#) must be installed on your external systems to help ensure proper Encore system operation. Any hardware components required for these software versions must also be installed, especially any involved with system communications. Grass Valley Customer Support and Grass Valley Engineering will not support the integration of external systems running older software.

Table 5. Tested for Encore System Compatibility

External System	Software Version	Notes
Acappella	3.2.3 Matrix	Available on the v 3.2.3 CRCS Software CD.
	3.1.0 Panel	
Maestro	2.0	
Kalypso	15.1	
Kayenne	1.5.8	
Newton	2.0.1	
SMS 7000 (Encore bridge for control of Trinitix/Apex)	8.3.3	Apex license required.
SMS 7000 (peer to peer control)	8.3.3	
Jupiter (control of Encore)	7.8.1	
Jupiter (controlled by Encore)		

Although newer versions of external system software are expected to work with Encore systems running Encore 1.8.0 software, this cannot be guaranteed. Developers generally extend careful efforts to maintain compatibility, but software versions not available at the time of an Encore release obviously cannot be tested.

Version 1.8.0 Software Update Procedure

Ensure The Encore Database is Consistent

Note On Encore 1.8.0 software the **Modify** button label has been relabeled **Save**. The button location on the screen is unchanged (see [Figure 2 on page 15](#)).

1. Using the Encore OUI, log onto Master Panel Server(s), go to the Panel Server screen and use **Modify** to save the database to the Sharer (and the mirror, if present).

2. Log onto the Master Router Controller(s), go to the Configure screen and use MODIFY to save the database to the Sharer (and the mirror, if present).
3. Log onto the Master TLM, go to the System screen and save the database to the Sharer (and mirror, if present).
4. Exit the Encore OUI, close Watchdog, and then shut down Sharer and System Manager.

Manually Backup the Encore Database

Because a valid Encore database is essential for system operation, a backup copy should always be available on removable media (CD ROM or floppy disk, USB stick, etc.). The Encore database consists of a series of files located in the OMN folder. Manually backing up this information before you start the software update will provide added security should a power outage or hardware failure occur.

5. Copy the entire OMN folder on the C: drive root directory of the Sharer PC onto removable media, rename the copied folder if desired, and store it in a safe location.

Note If you rename the OMN folder to identify its version or date, before it can be used again by Encore the folder will need to be renamed back to its original OMN name and placed in the C: drive root directory of the Sharer PC.

During the software update process you are given the opportunity to create a backup file. We recommend you do this in addition to the manual backup.

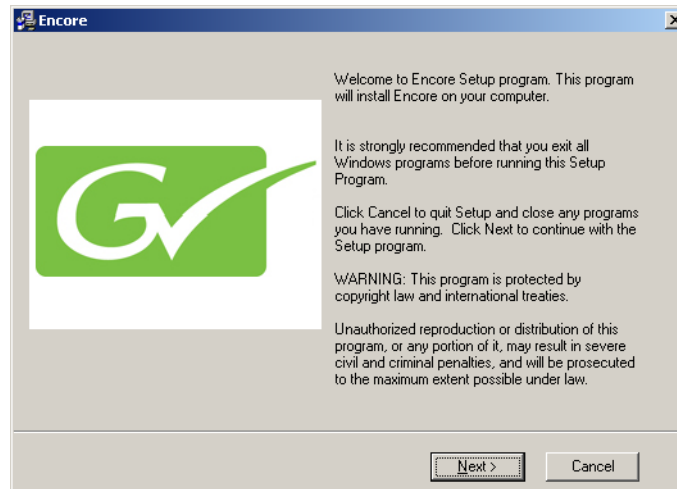
Install Software Components On The Sharer PC

Note To help ensure any hidden activity is stopped (for example, Port Mapper) you can restart the computer.

6. If necessary quit all Encore programs on the configuration PC, including Sharer, and disable any virus protection programs or firewalls.

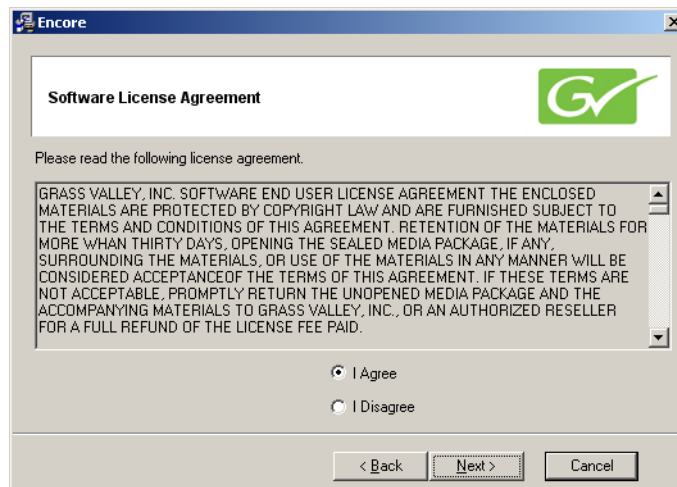
7. Insert the Encore System Software CD into the PC (or access the volume from removable media or a mapped drive). If the Installation Program doesn't start up automatically, double-click **Setup.exe**. The Encore Installation Welcome screen will be displayed (Figure 54).

Figure 54. Encore Installation Welcome Screen



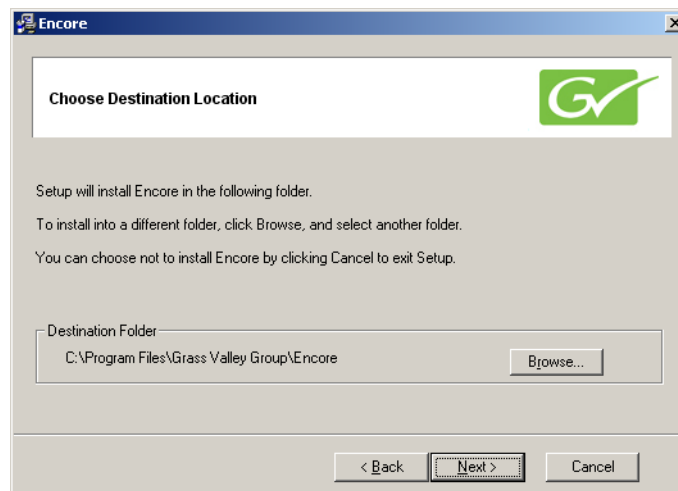
8. Click **Next >**. The Software License Agreement screen appears (Figure 55).

Figure 55. Software License Agreement



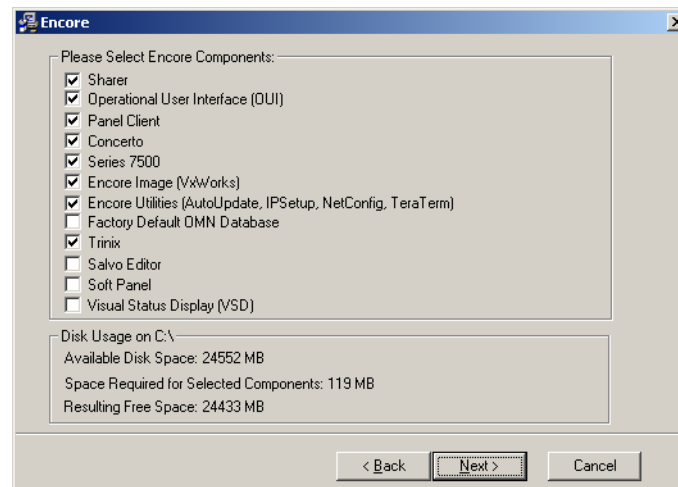
9. Click **I Agree** to accept the license agreement. The Choose Destination Location screen appears (Figure 56).

Figure 56. Destination Location Screen



10. Accept the default destination and click **Next >**. Encore software will be loaded onto the Sharer PC.
11. A Select Encore Components Screen appears (Figure 57).

Figure 57. Select Encore Components Screen

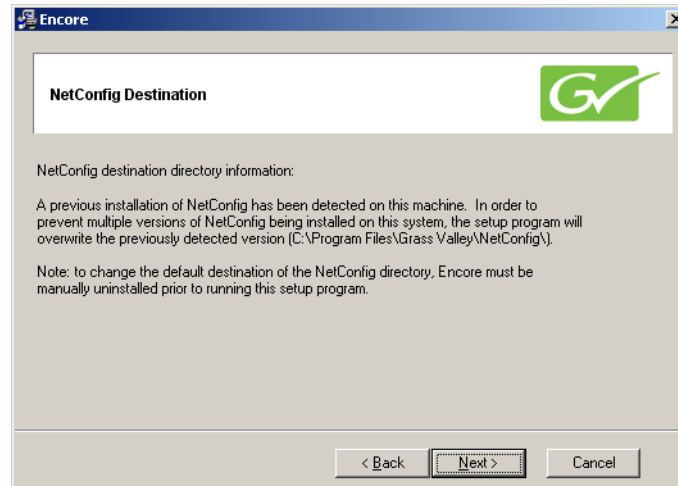


12. Because you are updating an existing Encore system, be sure the **Sharer** box is checked to ensure the Encore components will run the same software version after install. You can also select or omit any additional items as appropriate. For example, if your Encore system does not control a Concerto or SMS7000 matrix you can uncheck that box.

CAUTION Do NOT select the **Factory Default OMN Database** if you are updating an existing Encore system. If the factory default is installed your existing Encore database will be overwritten, which may make it necessary to completely reconfigure your system.

13. After selecting the correct components in [Figure 57](#) click **Next >**. If you selected Encore Utilities and NetConfig has previously been installed on this PC, the NetConfig Destination screen appears ([Figure 58](#)).

Figure 58. NetConfig Destination Screen

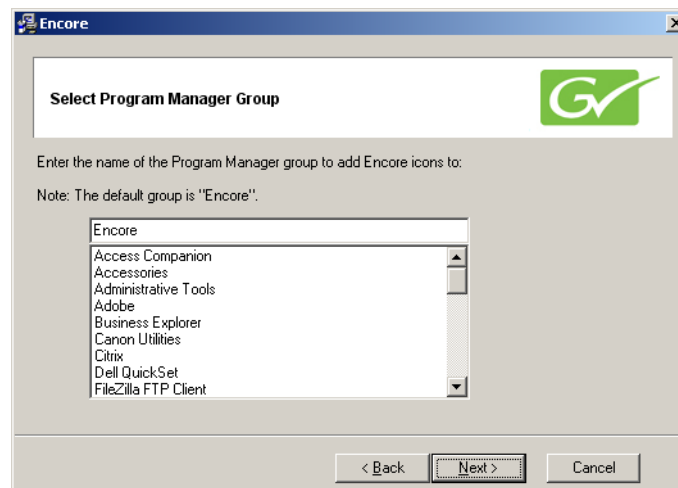


14. Click **Next >** to overwrite the existing NetConfig version. This prevents the installation of different versions of NetConfig.

Note If a newer version of NetConfig exists on the PC, a prompt is displayed indicating installation of an older version of NetConfig is not allowed.

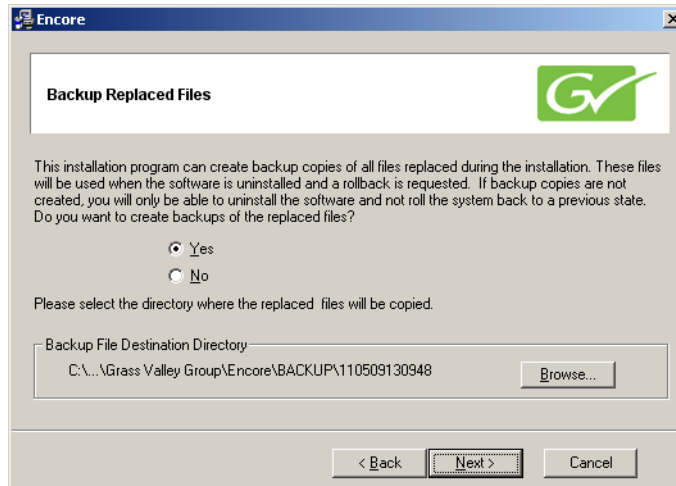
15. The Select Program Manager Group screen then appears ([Figure 59](#)).

Figure 59. Program Manager Group Screen



16. Accept the default Encore group name and click **Next >**. If you are updating existing Encore software the Backup Replaced Files screen appears (Figure 60).

Figure 60. Backup Replaced Files Screen.

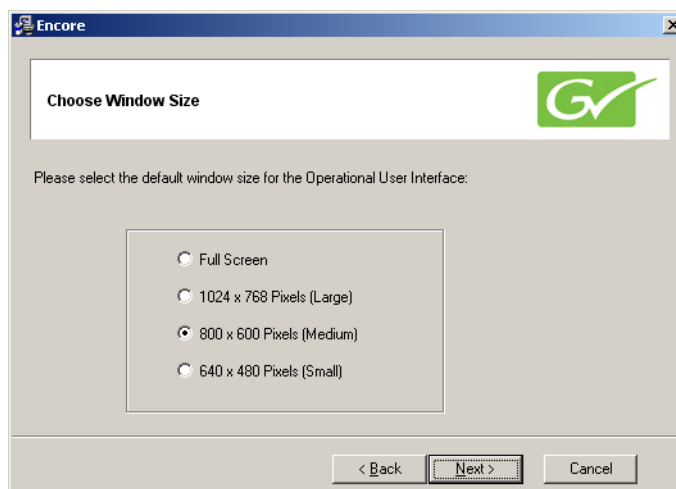


17. Select **Yes** to backup the files and click **Next >**. The backup file folder is named with the date and time. Note that Log files are not saved in this backup directory.

If you choose **No** you will be unable to rollback the system to its previous state.

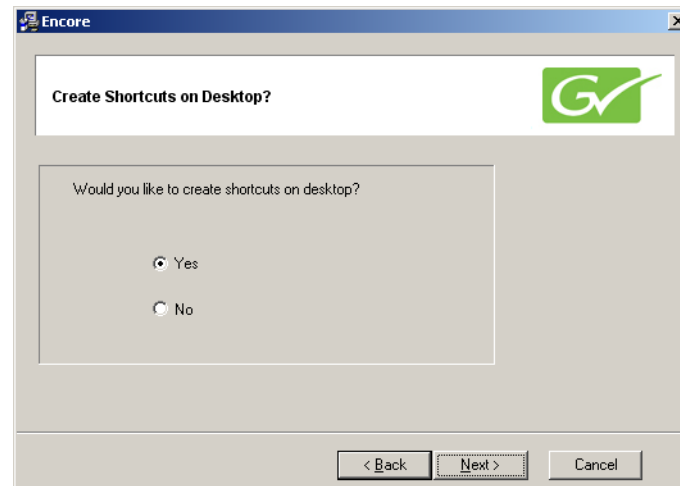
18. The Choose Window Size screen appears (Figure 61). Choose the size that best fits your PC monitor. Medium is recommended for most situations. Click **Next >** after your selection.

Figure 61. Choose Window Size Screen



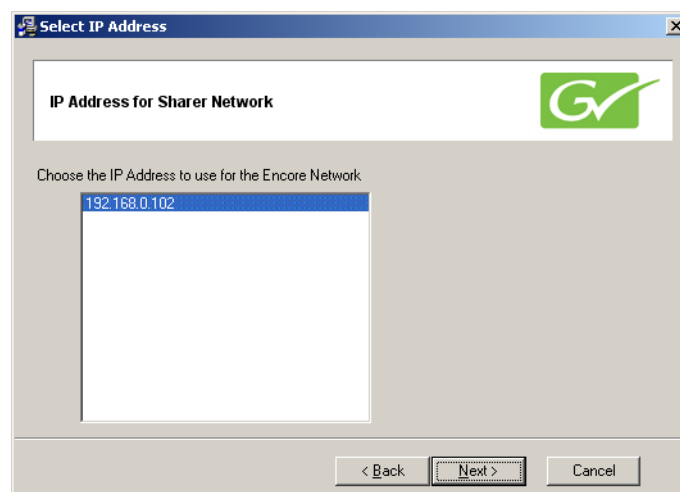
19. The Create Shortcuts on Desktop screen appears (as shown on the left of [Figure 62](#)). We recommend installing the shortcuts to make it easy to launch the Encore application. Click **Next >** after making your selections.

Figure 62. Create Shortcuts on Desktop Screen



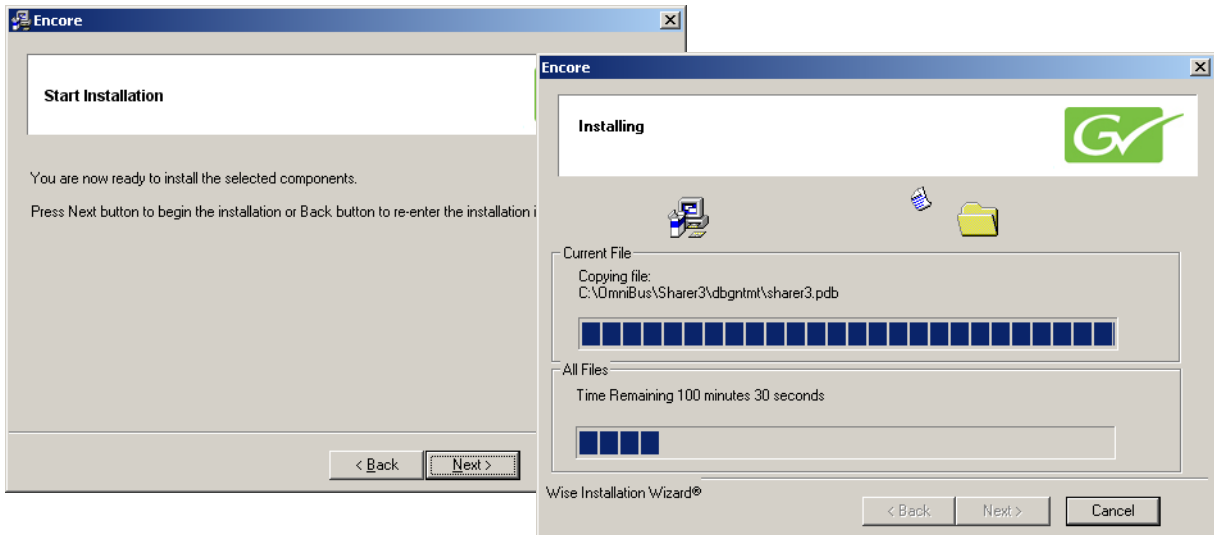
20. A screen then appears asking you to confirm the IP address of the Sharer Network ([Figure 63](#)). The IP address of the network interface cards (NIC) in use on that PC will be listed. If multiple NICs are installed you must select the one that will be used by Encore. Click **Next >** to continue.

Figure 63. IP Address for Sharer Screen



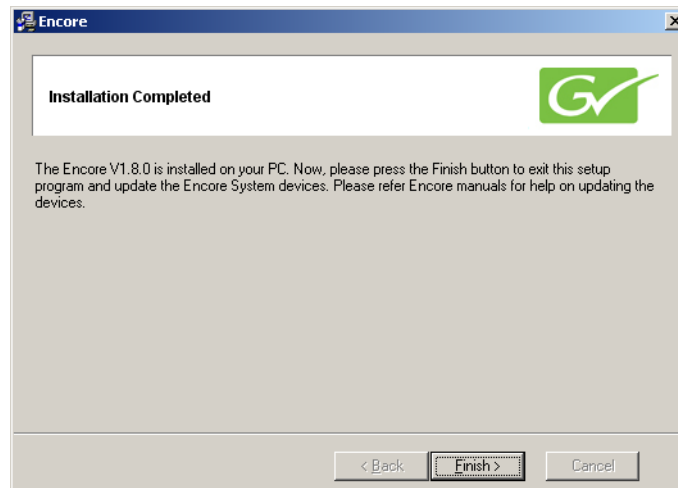
21. The Start Installation screen appears. Click **Next >** to begin copying files to the PC. The progress of the transfer is reported (Figure 64).

Figure 64. Encore Installation Screens



22. When the file transfer is done the Installation Completed screen appears (Figure 65). Click **Next >** to finish this part of the installation.

Figure 65. Encore Installation Screens



23. If you checked boxes for other components, a series of additional installation screens will be displayed until all the selected software components have been installed onto the PC.

Note If this is a first-time install of Encore software you will be prompted to reset your PC to complete the installation.

24. While the installation on the local PC is completed, you are not finished with the software update. Other Encore system components still need to be updated.

Restart Sharer

Figure 66. Watchdog Icon



25. Re-start the Sharer, System Manager and Encore OUI. Run the Sharer by double clicking the Watchdog icon (Figure 66).

CAUTION The Sharer must be running when you reboot SCBs the first time after they have been updated with new Panel Server software (see [page 81](#)).

You will next use the NetConfig application to transfer the software you just installed onto the PC to the actual Encore system components.

About NetConfig

NetConfig (Networking Configuration Application) is a multipurpose software utility for managing NetConfig-enabled Grass Valley devices. The latest version of NetConfig is included on the Encore Software CD, and is installed on a PC by choosing the **Encore Utilities** checkbox.

You will use the NetConfig utility program to update the software on your existing Encore system components.

Requirements

The NetConfig program requires:

- Windows 2000 SP4 (and above), or Windows XP SP2 (and above), and Windows 7 operating systems,
- to be logged in with Administrator-level privileges for the local machine, and
- have Internet Explorer version 5.5 or later installed.

Note Windows 7 requires Administrator login to run Encore and related applications.

Features

Once installed on a PC configured on an Encore network, NetConfig can be used to:

- Discover devices on the network, report duplicate IP addresses, and remotely configure these devices to resolve conflicts,

- Report rudimentary health checks of these devices,
- Display web pages served by these devices on the network,
- Identify devices (blink control panel buttons or frame LEDs), and
- Install software to these devices.

For more information, see the separate *NetConfig Instruction Manual*.

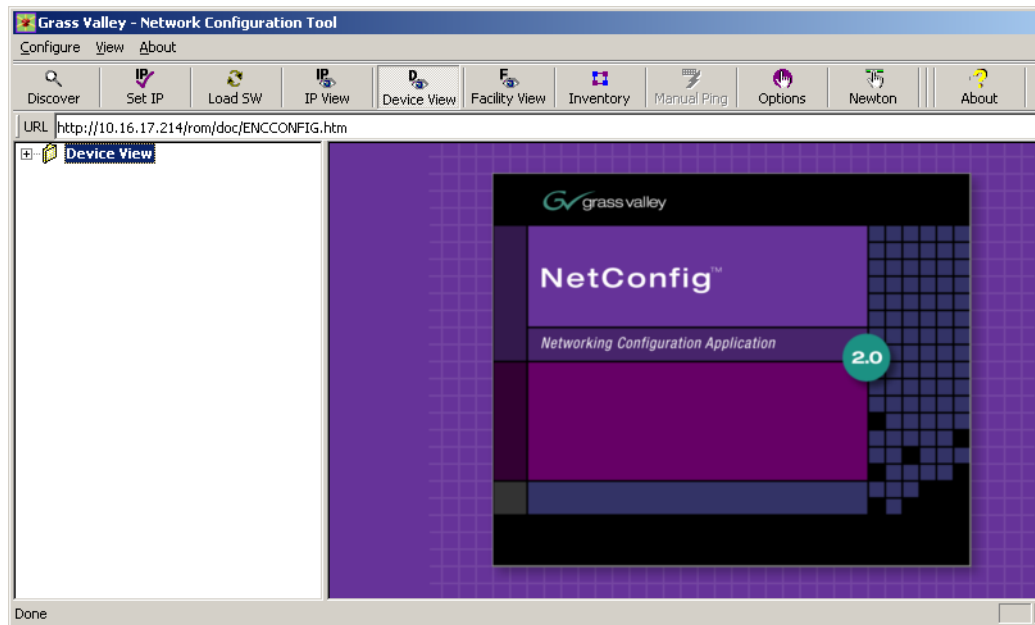
Launch NetConfig



During software installation a shortcut to NetConfig (as shown on the left) is automatically installed on the PC desktop.

26. Double click on the **NetConfig** shortcut icon to launch the application.
27. The NetConfig screen will appear ([Figure 67](#)).

Figure 67. NetConfig Screen



Route Table (Multi-Area Systems Only)

If your system has multiple Areas and routes have not been established to cross networks, you may need to execute route commands to allow Net-Config access to other Areas. You can create and run a .bat file at least once to create the routes. Placing this .bat file in a startup directory on the PC will help ensure it will run.

An example of the commands for this .bat file for a default Encore system with two Areas with the second SCB set to 192.168.2.0 is:

```
route add 192.168.1.0 mask 255.255.255.0 192.168.0.100
route add 192.168.2.0 mask 255.255.255.0 192.168.0.101
```

The first entry in each row is the IP address of that network (in this example the “0” is a placeholder), the second entry is the subnet mask, and the third entry is the EN1 IP address of the SCB in that network.

If you need help, contact your network system administrator or Grass Valley Customer Support for assistance.

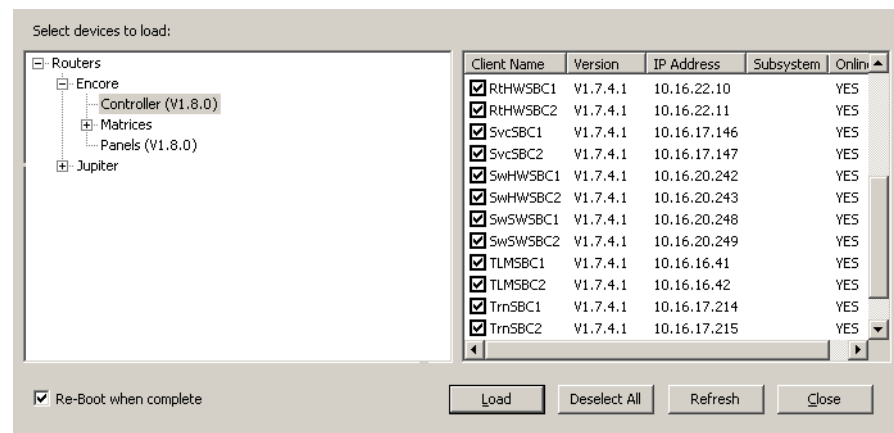
Update Encore SCB Software

CAUTION In previous Encore releases SCB software was updated by mapping their drives and copying files directly to their flash. This technique should not be used with Encore 1.7 and later software.

CAUTION Redundant Encore SCBs running the Panel Server application must be updated to 1.8.0 simultaneously. Running different versions of Panel Server software at the same time on redundant systems can make one SCB fail to complete its reboot. This precaution does not apply to SCBs not running Panel Server software, or to non-redundant SCBs.

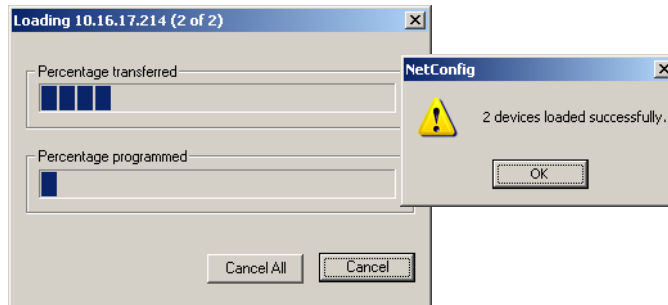
28. Update all your SCBs with the new software.
 - a. Click on the NetConfig **Load SW** tab to open a window showing a hierarchy of the software available.
 - b. Click **Routers > Encore > Controller** in the software hierarchy window, then select **Encore Controller (V1.8.0)**.
29. Click the **Select All** check box to select all your SCBs (figure)

Figure 68. All Encore SCBs Selected for Software Update



- a. Make sure **Re-Boot when complete** is selected and click **Load**. The software will load to all the SCBs in turn and report its progress. When finished, click **OK**. Each SCB will reset and run the new software version.

Figure 69. Multiple Software Update Progress and Confirmation



CAUTION The SCBs must remain undisturbed for at least 5 minutes while the loaded software is extracted and the unit reboots. While the SCBs may appear inactive (no blinking green lights) but they are actually performing vital tasks that must complete. Resetting an SCB during this time will corrupt the flash, requiring a manual flash update to recover.

Redundant Tie Line Manager Update to 1.8.0

When redundant Tie Line Managers exist, if both the Master and Mirror Tie Line Manager SCBs are upgraded to 1.8.0 at the same time (the suggested practice), first configure the Master Tie Line Manager, save that configuration on the Master, and then configure the Mirror Tie Line Manager. This prevents possible problems with the Mirror Tie Line Manager failing to complete its configuration.

Update Matrix Software

Encore systems can employ Concerto, Trinix, and SMS7000 Matrices.

Note Allow any SCBs updated with new software to completely reset before attempting to update Matrix software. This can take a about 5 minutes.

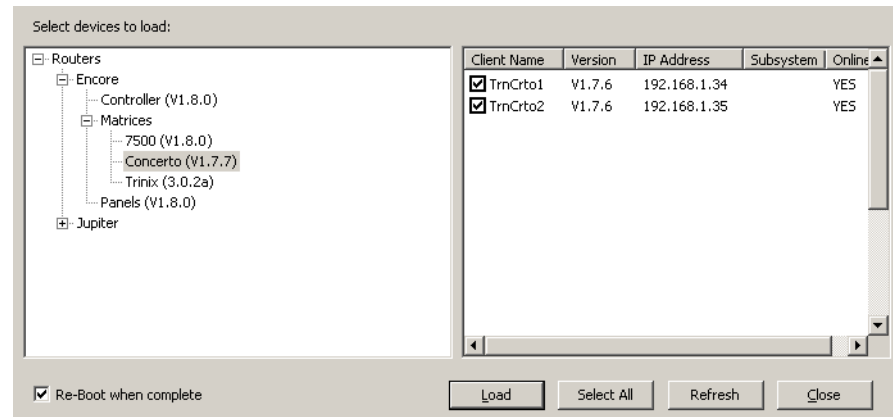
Concerto Matrix Procedure

If your system includes a Concerto matrix, the Matrix Application software is also updated using NetConfig.

30. In NetConfig, click on the **Load Software** tab, or select **Configure > Load Software** to open a window showing a hierarchy of the software available.

31. Click **Routers > Encore > Matrices** in the window, then select **Concerto**. This will display the software versions available for loading (Figure 70).

Figure 70. Concerto Matrix Software



32. Select the Concerto software to be loaded and check the boxes of the matrix controller(s) to be updated.
33. Select **Re-Boot when complete** and **Load**. The software will be loaded to the target(s) in turn with the progress reported. When finished, click **OK** to the loaded successfully prompt. The devices will then reset and run the new software version.

Trinix Matrix Update Procedure

CAUTION Trinix Broadlinx Controllers cannot be upgraded using NetConfig. The upgrade must be carried out manually by either replacing the Broadlinx compact flash with one containing the new version or by using a compact flash reader/writer to upgrade the existing compact flash.

SMS7000 Matrix Update Procedure

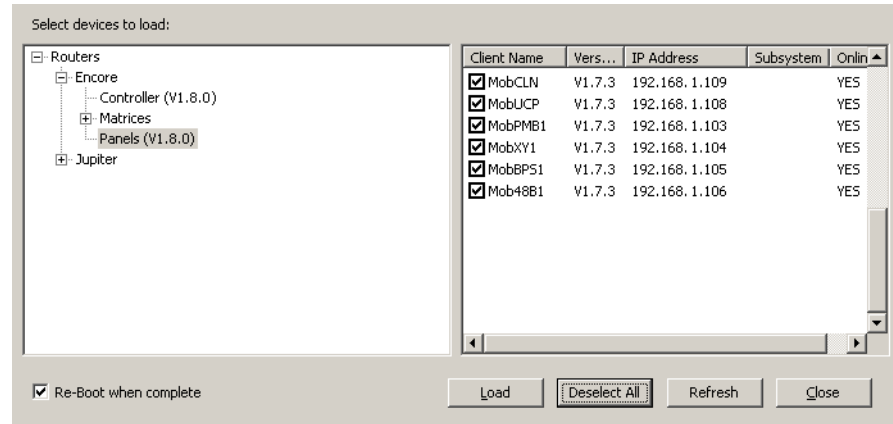
SMS7000/7500 systems can be updated using NetConfig only if the system is already running V1.6 5 or later software. Systems running older software will need to be updated using the older procedure (Xitami).

Update Control Panel Software

34. In NetConfig, click on the **Load Software** tab, or select **Configure > Load Software** to open a window showing a hierarchy of the software available.

35. Click **Routers > Encore > Panels** in the window. This will display the software versions available for loading (Figure 71).

Figure 71. Control Panels Software Directory)



36. Select the control panel software to be loaded and check the boxes for the panel(s) to be updated.

Note If you are upgrading a multi-area system (i.e., a multi-network system), and a panel is reported as offline, uncheck that panel and complete the installation for the online panels. Then, check the gateway setting for the configuration PC. The gateway setting must point to the SCB that will be used to reach the control panels being updated. In the case of redundant SCBs, you may need to try both before the panels will update. It may be helpful to check the IP View to see which panels are visible (green light) to the SCB selected as the gateway.

37. Make sure **Re-Boot when complete** is selected and then click **Load**. The software will be loaded to the target(s) in turn with the progress reported. When finished, click **OK** to the loaded successfully prompt. The devices will then reset and run the new software version.

GSC Control Panel Software Update Procedure

GSC control panels (like the newly supported PXS, PXD, PXYE, MB4, and SCP) used in SMS7000 systems must have their software updated before these panels can be used in an Encore Control System. GSC panel enhancements (like sign on error reporting) also require a software update. A button tally problem with BPS32 panels will also be corrected a this software update.

1. Ensure the System Controller Board (SCB) has the GSC mezzanine installed.
2. Verify the control panels are connected to the encore frame on the side the SCB with GSC mezzanine is installed.

3. Ensure the SCB has been updated with Encore 1.7 or later software using NetConfig.
4. Using a console interface (serial or telnet interface into the SCB) type either 'ls' or 'll' to display the list of files on the flash card. Verify that the gscPanel.mot file is located on the flash.

CAUTION Do not type 'ls-l' on the console interface, as it will stop the SCB from functioning.

5. Next type in the following command, followed by the return key, which will reprogram all GSC control panels connected to the SCB:

```
lcpProgram
```

6. Once the panels are programmed they will automatically reboot and sign onto the Encore system. At this point the GSC control panels should connect and be given the default configuration defined for each panel type within the Panel Server.
7. Configure these control panels using the standard method described for Encore control panels. Remember all configuration changes are live changes and do not require a panel reboot, but to make the changes persistent the user must select **Save** (or **Modify** for v1.7.x and earlier software) to save the configuration changes.

CAUTION When renaming a GSC control panel from the Encore OUI, exit and re-enter the OUI edit select screen before editing the renamed GSC panel. This allows the OUI to update active panel configuration chevrons appropriately. Make sure there are active chevrons (>>) for the GSC panel to be edited after re-entering the OUI screen.

Confirm Sharer Mode

8. Use the Encore OUI to log on to the Master Panel Server and verify that the Panel Server is in **Sharer** filing mode and that, for redundant Panel Servers, the Sync Status is **In Sync**.
9. Log onto Master Router Controller and verify that the Router Controller is in **Sharer** filing Mode.
10. Log onto the Master TLM and verify that the TLM is in **Sharer** filing mode.
11. Repeat steps [Step 8](#) through [Step 10](#) with the Mirror application of each Master/Mirror pair in your system.

This completes the upgrade process.

Restore Full System Operation

After the software update, some items may need to be addressed to restore the Encore system with its previous functionality and activate new features.

- If after an update of a system with redundant SCBs the panels report NO ROUTER, use the Encore OUI to access the Router Controller application, go to Configure and click on Commit Changes. This updates the panels with their configurations.
- If you are running redundant SCBs and crosspoints switches are not occurring in sync, check that either VITC timecode is present, or if VITC is not present, that the Frame Count Server on all SCBs in the system are turned on, via each SCB's webpage.

Configure New Features

With the new software installed, you can now use the new Encore control system functionality, which can require modifying existing configurations and adjusting new parameters. Refer to the documentation for each new feature for specific instructions.

Backup New OMN Configuration

After you have your Encore system configured with the new software, copy the entire OMN folder on the C: drive root directory of the Sharer PC onto removable media, rename the copied folder if desired, and store it in a safe location. This folder can be used as a backup, by renaming the folder back to OMN, placing it in the root directory of the Sharer PC, and then rebooting the SCBs.

Backing Down from Encore v1.8.0 to Earlier Software

New System Manager

To properly downgrade from Encore v1.8.x to v1.7.4.3 or earlier software you will need to uninstall Encore v1.8.x, using the Windows Add or Remove Programs before installing the earlier Encore software.

Encore v1.8.x has a new System Manager (v3.70 Build 9) which will not be removed if an older version of Encore is installed on top of Encore V1.8.x. This newer System Manager is not compatible with earlier Encore software.

TLM Rooms Configuration

To properly downgrade an Encore system that uses Tie Line Manager Rooms from 1.8.x to 1.7.4.3, delete all the TLM Configurations created (if

any) with 1.8.x and also delete the category TLM_CONFIG from the System Manager. The new category created for 1.8.x to support TLM configuration save/load is not supported by earlier software versions. This incompatibility can result in the loss of previously created rooms configurations.

Mismatched Redundant Panel Server SCB Software Recovery

If redundant SCBs run incompatible versions of Panel Server software, one SCB will fail to complete its reboot, but may remain accessible via Net-Config. To recover from this situation:

1. Use NetConfig to go to the Application Configuration web page of the SCB running newer software that is not rebooting.
2. Uncheck the **Panel Server Application** box and the click on **Update Configuration**.
3. Install the newer Encore software on the other SCB, remembering to wait 5 minutes for the file extraction and reboot to complete.
4. When both SCBs are running the same version of 1.8.0 software, go back to the Application Configuration web page of the SCB, re-enable the **Panel Server Application** box, and reboot that SCB.

This should restore your Encore system to full operation. However, if this procedure does not work (for example, you may be unable to access the webpage of the SCB), you can manually update the flash memory of the inoperable SCB.

Manually Updating SCB Flash Memory

SCB flash memory can be purchased from Grass Valley Customer Support. These flash cards are pre-formatted and installed with the latest Encore software.

CAUTION Encore SCBs only support flash memory up to 512MB. Do not attempt to use higher capacity flash because corrupted data may result.

If you are using separately purchased compact flash memory, or if the SCB flash becomes corrupted, you can reformat it and load files manually.

Note Flash memory formatted only by the Windows OS cannot be used in an Encore SCB because the VX Works operating system code is used.

A special flash memory formatting procedure using a Grass Valley supplied application is required. These procedures are described in detail in the separate *Encore Installation & Service Manual*.

Contact Grass Valley Customer Support if you require further assistance.