

# Encore

## CONTROL SYSTEM



Release Notes  
Software Version 1.7.4



Affiliate with the N.V. KEMA in The Netherlands



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**Headquarters**  
400 Providence Mine Rd  
Nevada City, CA 95959  
United States

15655 SW Greystone Ct.  
Beaverton, OR 97006  
United States

10 Presidential Way  
Suite 300  
Woburn, MA 01801  
United States

Kapittelweg 10  
4827 HG Breda  
The Netherlands

7140 Baymeadows Way  
Ste 101  
Jacksonville, FL 32256  
United States

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

Rue du Clos Courtel  
CS 31719  
35517 Cesson-Sevigné Cedex  
France

1 rue de l'Hautil  
Z.I. des Boutries BP 150  
78702 Conflans-Sainte  
Honorine Cedex  
France

Technopole Brest-Iroise  
Site de la Pointe du Diable  
CS 73808  
29238 Brest Cedex 3  
France

40 Rue de Bray  
2 Rue des Landelles  
35510 Cesson Sevigné  
France

Spinnereistrasse 5  
CH-5300 Turgi  
Switzerland

Brunnenweg 9  
D-64331 Weiterstadt  
Germany

Carl-Benz-Strasse 6-8  
67105 Schifferstadt  
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Chalfont, PA 18914  
Ph: (215)997-4519  
Fax: (215)997-3809

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# Encore

## CONTROL SYSTEM

Release Notes  
Software Version 1.7.4

# Contacting Grass Valley

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

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

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

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



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

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

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

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



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# *Encore Release Notes*

## **Introduction**

This document describes product enhancements provided by Encore software releases 1.7.4. It also describes the installation procedure used to upgrade an Encore system from version 1.6.5.4 and later to 1.7.4 (see [page 21](#)).

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

## **New Features in Encore Release 1.7.4**

- Support for JEP-100 control panels (see [page 8](#)).
- A new **Multiple Conn** flag is available for configuration of automation clients to allow multiple simultaneous connections from the same IP address. By default this flag is disabled, limiting the client to one active connection at a time from an RCL or NP client.
- Support for the ENC-CLNT control panel, which can be configured as a Client/Server pair with an ENC-UCP control panel.

## Changes in Encore Release 1.7.4

- The Control Panel Server now provides the ability to import/export named panel server configurations.
- The Control Panel Server now automatically expands the Area folder when only one Area is defined and active in the system.
- Destination Ganging is now disabled on 48B QC enabled control panels.
- New Microsoft OS security patches can prevent the RCE and Panel Server from exporting or importing configurations to or from a PC. These security patches now require user login credentials that previously were not needed for SMB access. The following instructions can be used to restore configuration import/export capabilities to your Encore system:
  - If the PC is part of a domain, add a user to the domain named Encore with a blank password. Ensure permissions are granted for the PCs using this export/import feature with Encore.
  - If the PC is not part of a domain, it may be necessary to add a local user to the PC with user name 'Encore' and a blank password. Ensure permissions are granted for the PCs using this export/import feature with Encore.

## JEP-100 Control Panel

### Introduction

The JEP-100 control panel is a locally-programmable, eight-character display, full-matrix control, multiple level break away panel. It was designed to operate with either Encore or Jupiter control systems.

The JEP-100 panel includes a fully-enclosed auto-sensing power supply with an inrush current rating of 7.9 A. The nominal power requirement is 0.4 A @ 240 VAC or 0.65 A @ 120 VAC. The panel has no power switch (the AC cord is disconnected to power down the panel).



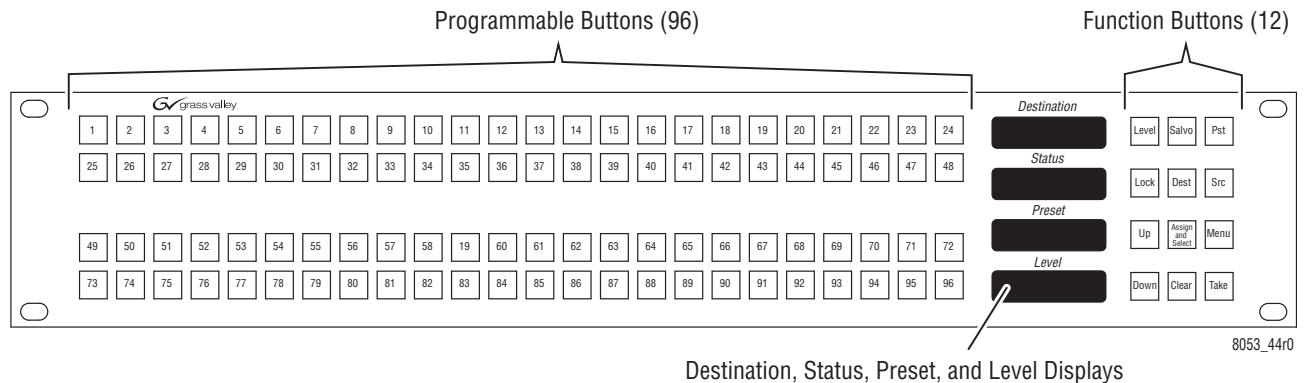
## JEP-100 Panel Features

- 2 RU rack mount,
- Four alpha-numeric displays for status reporting,
- 96 programmable buttons, typically used for source, destination, and level selection, and 12 additional programmable buttons, typically used for functions, and
- Joystick override.

## JEP-100 Panel Description

The 96 buttons on the left of the panel can be programmed for any function. Typically the majority of these buttons are used for Source selection, but they may be assigned to control Destinations, Levels, or Salvos. The four displays report the names of the current Destination, Status (current Source routed to that Destination), Preset, Level, and menu information (Figure 1).

Figure 1. JEP-100 Control Panel

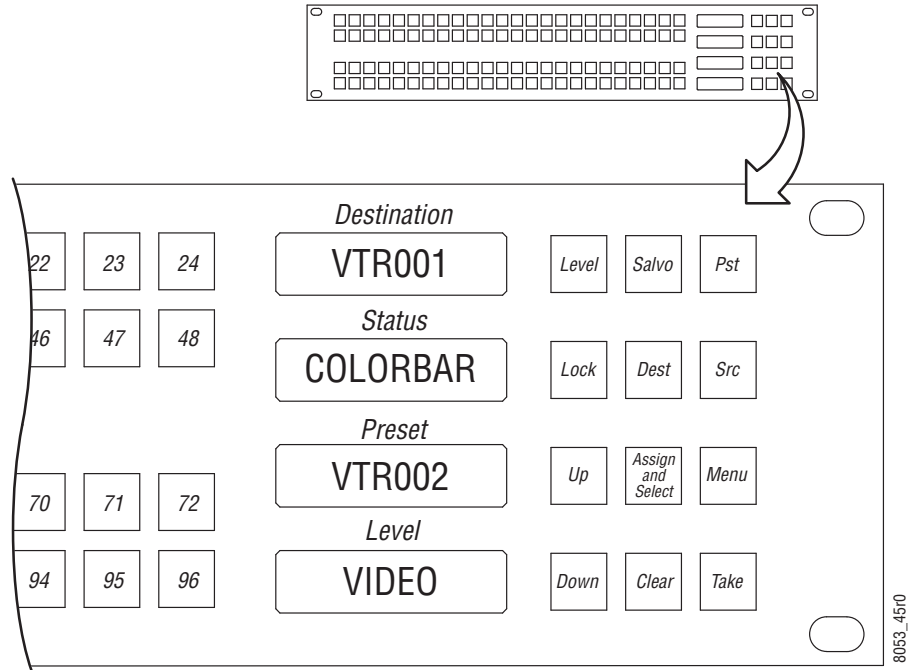


## JEP-100 Default Button Configuration

The panel ships from the factory with numbered buttons installed on the left, and buttons on the right have legends showing default panel functions. All buttons are programmable.

**Note** Button assignments of a particular control panel may be different because the defaults can be changed during configuration. See the separate *Encore Configuration Manual* for more information.

Figure 2. JEP-100 Default Button Legends



## JEP-100 Operation

### Selecting a Destination to Control

If the desired Destination button is assigned, press the button of the Destination you wish to control so it is illuminated.

If the Destination you wish to control is not assigned to a button, you can select it from a list of available Destinations.

1. Press **Dest**.
2. Use the **Up** and **Down** buttons to scroll to the desired Destination reported in the Preset window.
3. Press **Take**. The panel can now be used to control that Destination.

## Taking a Source to a Destination

### Using Assigned Buttons

1. Press the assigned button of the desired Destination. It's name will be reported in the Destination window.
2. Press the assigned button of the desired Source. It will immediately be routed to that Destination and its name will appear in the Source window.

### Using Scrolling Lists

1. Press the **Dest** button so it is illuminated.
2. Use the **Up** and **Down** buttons to scroll through the list of available Destinations, stopping when the desired one appears in the Destination window.
3. Press **Take** to select that Destination for control.
4. Press the **Src** button.
5. Use the **Up** and **Down** buttons to select the desired Source (its name will appear in the Source window).
6. Press **Take**. That Source will be routed to the selected Destination.

## Breakaway Take (JEP-100 Panel)

### Using Assigned Buttons

1. Select a Destination to control (see above).
2. Press the assigned buttons for the levels you wish to change so only those buttons are illuminated.
3. Select a Source (see above). Only the selected Level's Sources will switch.

### Using Level Mode

1. Select a Destination to control (see above).
2. Press **Level** to enter Level mode.
3. Use the **Up** and **Down** buttons to scroll through the available Levels. When the level name is shown in the Level window, press the **Take** button so that button illuminates. This selects that Level for control.

4. Confirm only the desired levels have been selected, by scrolling through Scrolling through the list of Levels. The **Take** button will go on and off as each Level is selected.
5. Press **Src** to exit Level mode and enter Source Selection mode.
6. Select the desired source, using an assigned button or by scrolling through the list of available sources (see above). Only the selected Levels will change to the new Source.

## Locking or Protecting a Destination

The JEP-100 panel can be configured for Protect, Soft Lock, or Hard Lock capabilities (see the *Encore Configuration Manual*). One form of destination lock or protect can be enabled at a time. Protect is the default setting.

To protect or lock a Destination, select the Destination for control and press the **Lock** button so it is illuminated. Other panels (without override capabilities) will not be able to change that destination.

To unlock or unprotect the Destination, press the **Lock** button again so it turns off.

## Salvos

Buttons on the JEP-100 can be assigned to execute a Salvo.

Salvos that are not assigned can also be executed by selecting them from a list.

1. Press the **Salvo** button so it is illuminated.
2. Use the **Up** and **Down** buttons to scroll through the list of available Salvos and select the one desired.
3. Press **Take** to execute the Salvo.

## Front Panel Button Assignments

Buttons can be assigned using the JEP-100 front panel controls (provided the Panel Server **Self Config Lock** flag is turned off). These configuration changes are saved to that panel's configuration stored on the Encore Panel Server.

1. Press **Assign and Select** to enter assignment mode.
2. Press the button type you wish to assign (**Dest**, **Src**, **Level**, or **Salvo**).
3. Use the **Up** and **Down** buttons to choose the desired item.
4. With the item displayed in the Preset window, press the physical button on the front panel to which you wish to assign that item.

5. Press **Assign and Select** to exit assign mode.

## Front Panel Menu Programming

Some features can be configured on the JEP-100 from the front panel (provided the Panel Server **Self Config Lock** flag is turned off):

- Destination Ganging - Allows simultaneous selection of multiple Destination for control.
- Alias Names - Displays Alias names in the windows.
- Brightness - Adjusts the intensity of the Display window text.
- ID - Reports the IP address and name of the panel.
- Sticky Levels - Retains the last selected Levels for breakaway Takes.

To access these features, press the **Menu** button, then use the **Up** and **Down** buttons to scroll through the list of options.

For features simply turned on or off, press the **Take** button to toggle the state.

**Note** The window reports the potential state, not the current state. For example, **DstGng-N** indicates Destination Ganging is ON. Pressing the Take button will change the indicator to **DstGng-Y** and turn OFF Destination Ganging.

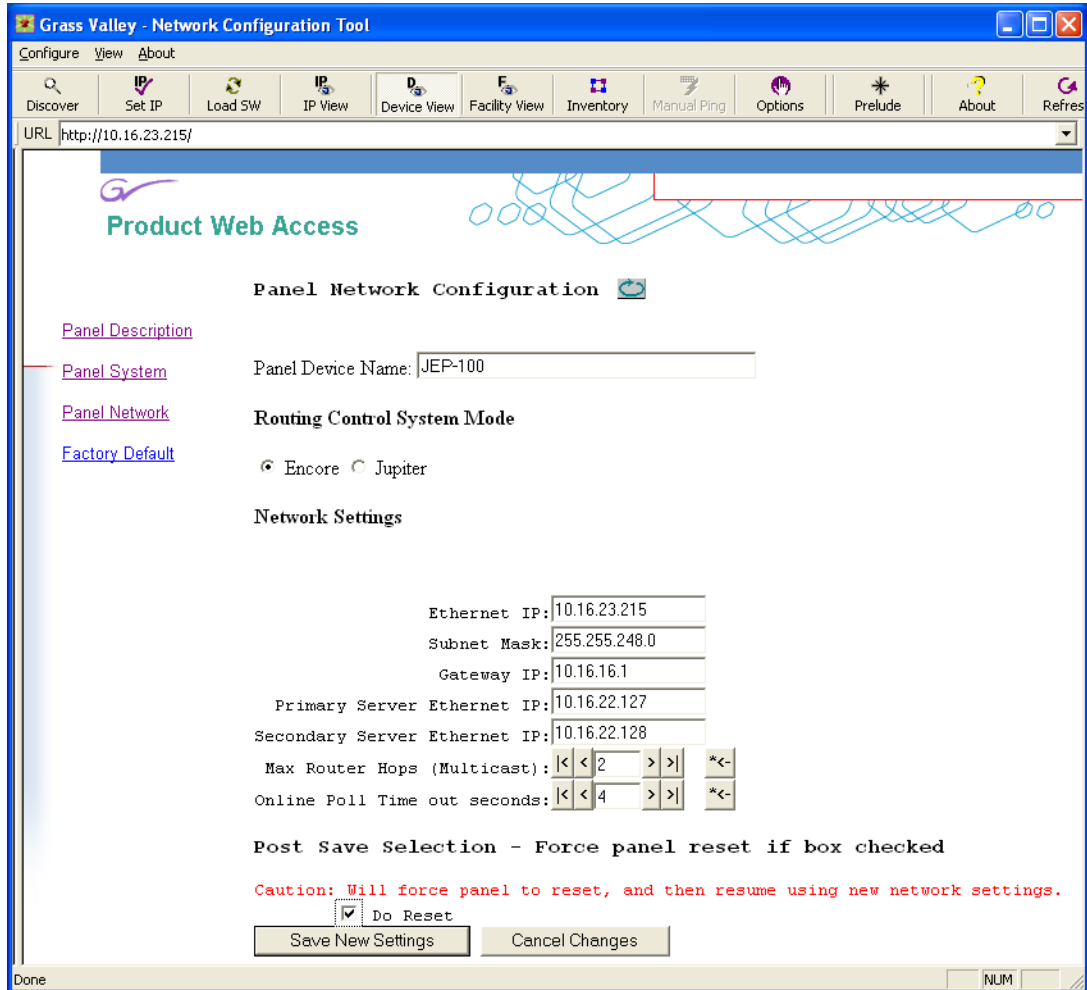
## JEP-100 Panel Configuration

### Routing Control System Mode Selection

The JEP-100 panel can be operated with either Encore or Jupiter control systems. For Encore operation, the proper software must be loaded onto the panel (older Jupiter only software cannot be used). The **Encore** Routing Control System Mode setting must also be selected on the JEP-100 Panel Network Configuration web page ([Figure 3](#)). A reset is required to change

operating mode. This can be done by checking the **Do Reset** box at the bottom of the webpage before clicking the **Save New Settings** button.

Figure 3. JEP-100 Panel Network Configuration Web Page



**Note** Additional steps may be required to convert a JEP-100 panel between Encore and Jupiter system control. Contact Grass Valley Support for specific information on panel conversion.

## Encore OUI Panel Server Configuration

Aside from the front panel features listed previously, the JEP-100 panel is configured using the Encore Panel Server application. Many configuration modifications occur in real time, so changing Panel Server settings can immediately be reflected in the operation of that panel.

The JEP-100 panel is represented with three screens. The left and right screens are shown in [Figure 4](#) and [Figure 5](#). The middle screen shows the buttons in the center of the panel.

Figure 4. JEP-100 Panel Server Left Configuration Screen

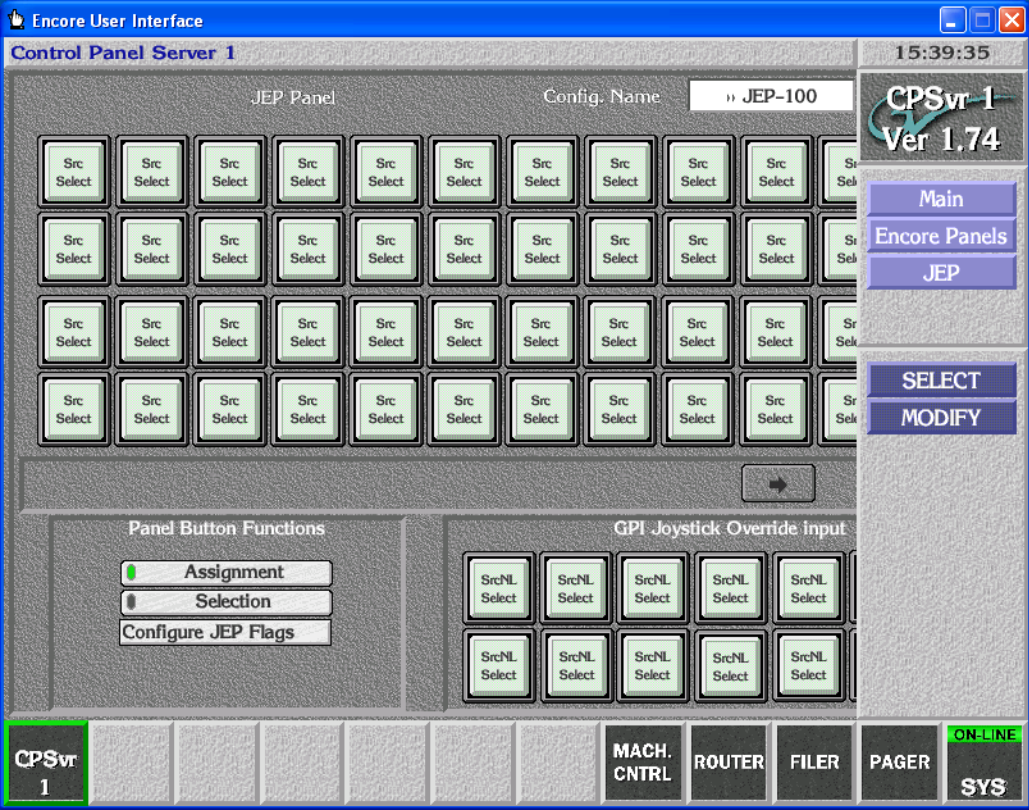
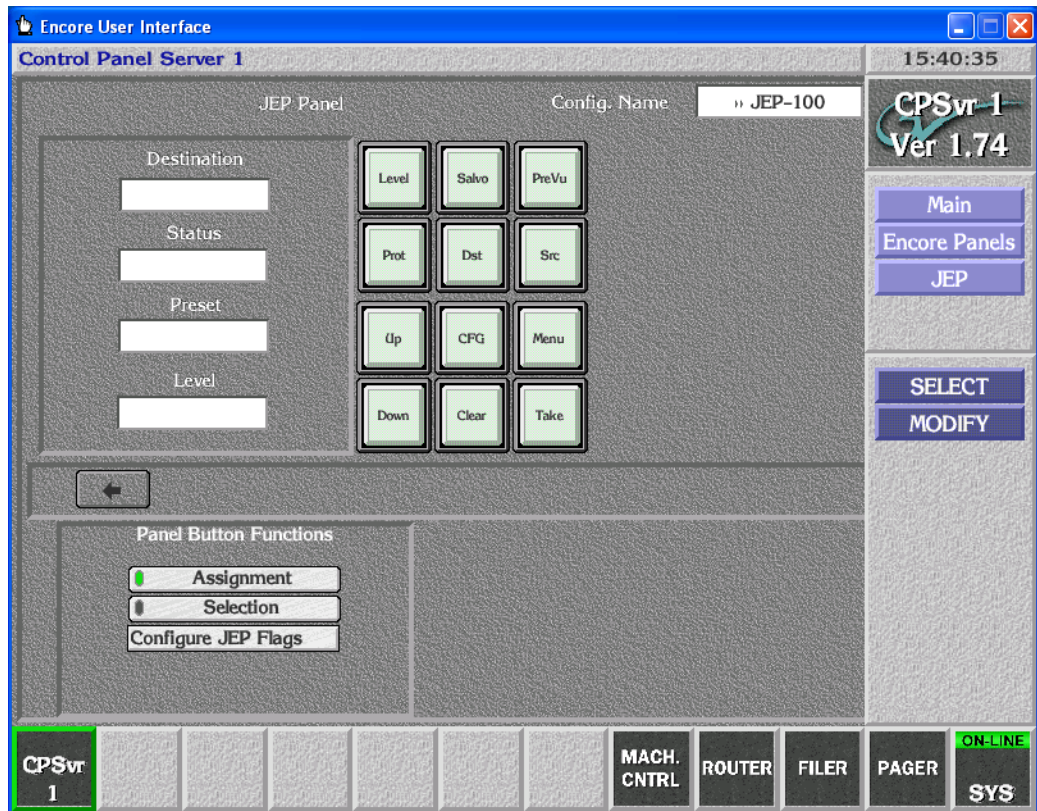


Figure 5. JEP-100 Panel Server Right Configuration Screen



The JEP-100 panel is configured using the standard Encore procedures (selecting the panel to edit, assigning button functions, selecting Sources



and Destinations, and configuration flags (Figure ). See the *Encore Configuration Manual* for specific configuration information.

Figure 6. JEP-100 Attributes and Flags Screen



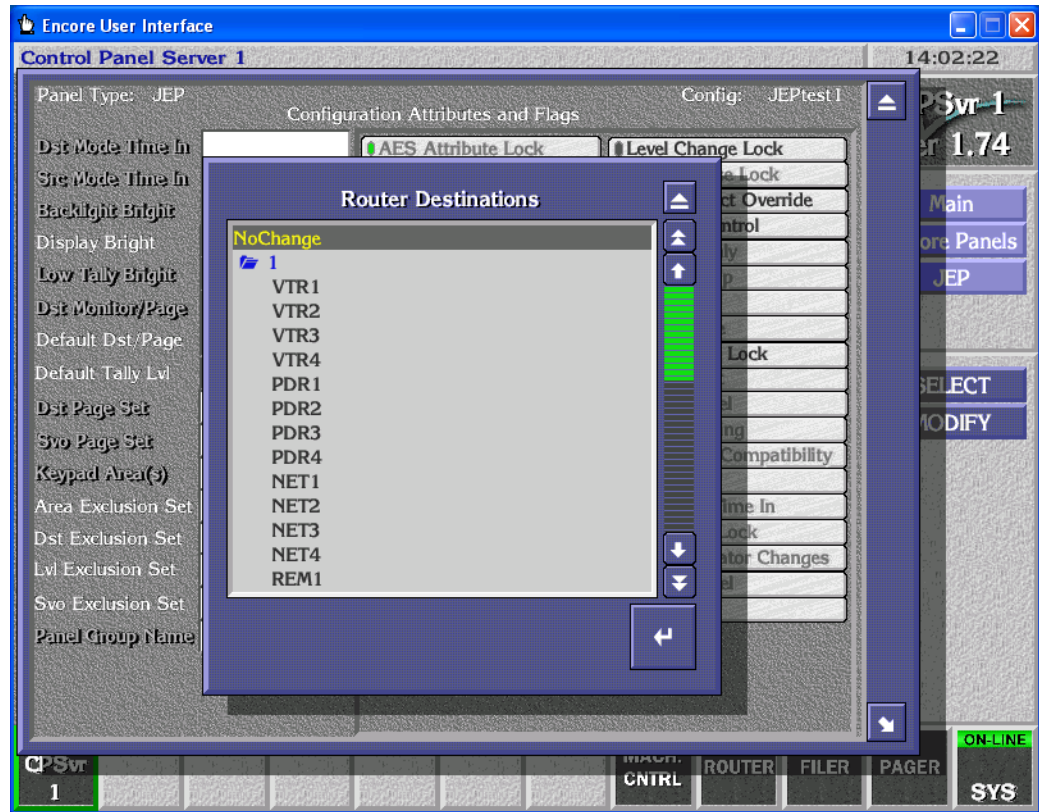
## Copy Panel Template Control

For the JEP-100 panel only, a control panel template can be created that will not change the Default Destination, and will not change selected button assignments. This is accomplished using the Control Panel Server:

1. Select a JEP-100 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.

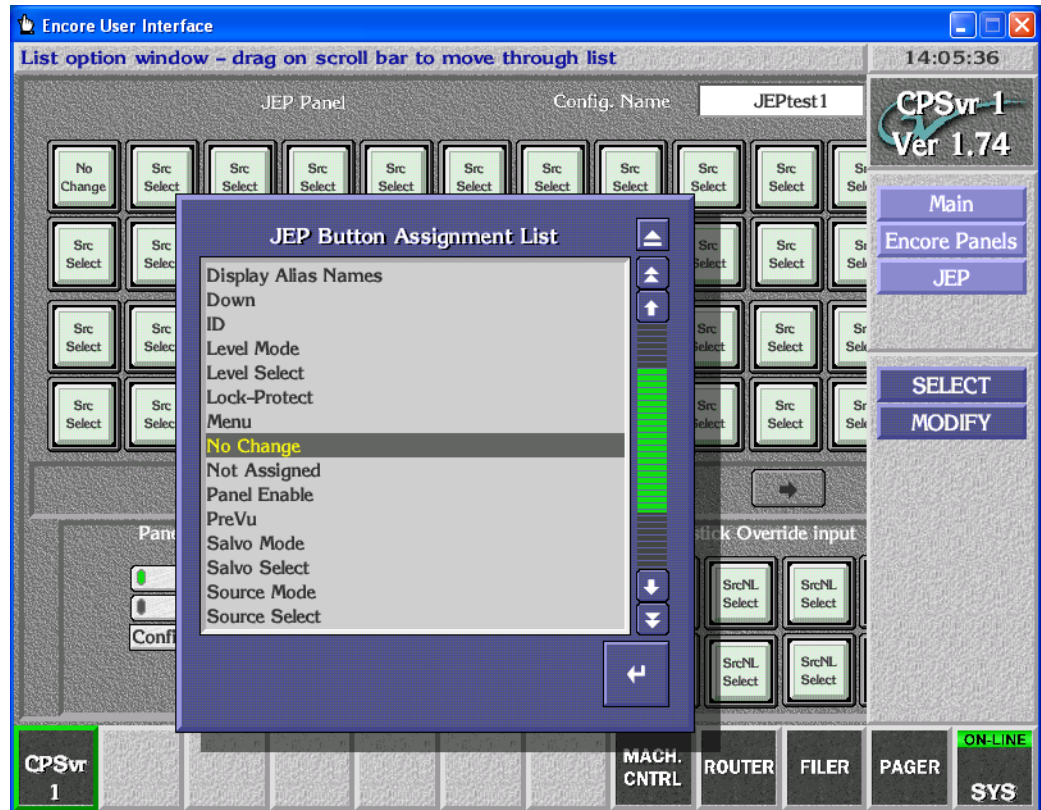
- To retain the panel's Default Destination, select **No Change** on the template's Dflt Dst/Page list (Figure 7).

Figure 7. Template No Change Default Destination



- To retain a particular button's function, with button Assignment active select **No Change** for the desired button (Figure 8).

Figure 8. Template No Change Button Assignment



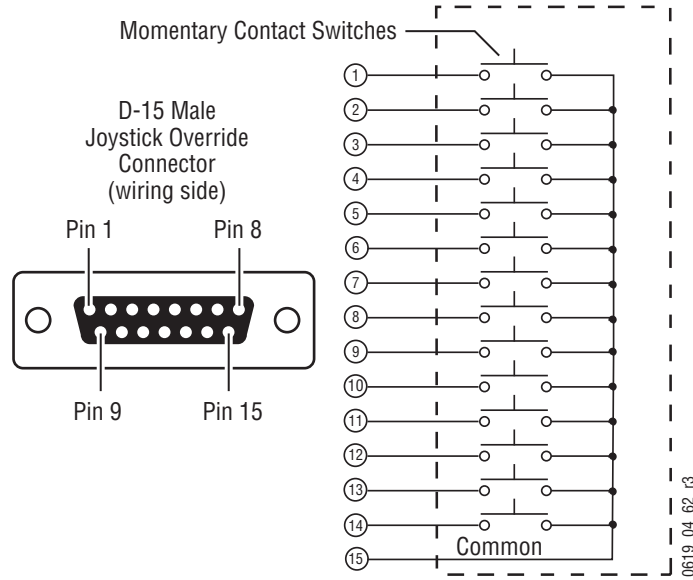
- Save this template file.
- Copying this template to a JEP-100 panel will leave the **No Change** items unchanged, but will modify the rest of that panel's configuration.

## Joystick Override

The JEP-100 panel uses a 15-pin D female connector on the rear panel to provide a total of 14 control lines (GPI ports) plus ground. Each port can be used to trigger a switching event when initiated by a contact closure on a customer-provided device. In the joystick override application, a joystick such as found on a camera control unit (CCU) can be used to select a camera for QC evaluation.

The pin-outs of the 15-pin D-connector on the JEP-100 control panels are shown in [Figure 9](#).

Figure 9. JEP-100 Joystick Override Pinouts



By default, the contacts connected to Pins 1-14 of the GPI connector are assigned to Sources 1 thru 14 in the default area (identical to the existing Encore Joystick default configurations of other control panels). Joystick override on a particular JEP-100 panel is configured with the Encore Panel Server application (see [Figure 4 on page 15](#)).

# 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 Only From Version 1.6.5.4 and later to Version 1.7.4.x Software

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

**CAUTION** If your Encore system is running software earlier than 1.6.5.4, you need to update the system to 1.6.5.4 (including NetConfig) first before updating to 1.7.3 or newer software. NetConfig may not be able to discover devices running earlier Encore software. Refer to the 1.6.5 Release Notes for earlier software installation instructions.

## 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

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 service it will already be formatted and loaded with Encore 1.7.4 software. See [Manually Updating SCB Flash Memory on page 39](#) for additional information.

## Have Sharer On-Line When Booting SCB Running CPS

Typically the CPS application runs on an SCB. The Sharer should be on-line when the SCB running the CPS is booted when migrating from software version 1.6.5.x to 1.7.4. During start up the CPS loads the DataBase file from the Sharer.

The CPS must start at least once (in case of master-mirror pairs, either the master or the mirror) before performing Save or Load operations.

## Encore Software Compatibility

The Encore 1.7.4 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 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 Service 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 1](#).

Table 1. Encore 1.7.4 Release Components

Component Type	Name	Software Version
Encore	Encore	1.7.4
	Encore Control Panels	1.7.3
	JEP-100 Control Panel	1.7.4
	Control Panel Server	1.7.4
Matrices	7500 Matrix Controller Code	1.7.3
	Concerto Matrix Controller Code	1.7.6
	Trinix	2.4.2
Accessory Applications	Net config	2.0.10
	Salvo Editor	1.2.0
	Soft Panels	3.0.0
	Encore Visual Status Display	1.1.0
	RCL Test Application	1.7.3

Table 1. Encore 1.7.4 Release Components

Component Type	Name	Software Version
Core Software	Sharer	3.63 patch 9
	System Manager	3.70 debug b7
	Router Controller	4.08 build 6
	Tie Line Manager	2.04 build 4
	OUI	4.30.24

## 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 2](#) 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 Service and Grass Valley Engineering will not support the integration of external systems running older software.

Table 2. Tested for Encore System Compatibility

External System	Software Version	Notes
Acappella	3.1.0 Matrix	Available on the v 3.1.0 CRCS Software CD.
	3.1.0 Panel	
Maestro	1.4	
Kalypso	15.0	
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)	7.6.1	
Jupiter (controlled by Encore)		

Although newer versions of external system software are expected to work with Encore systems running Encore 1.7.4 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 1.7.4 Software Update Procedure

### Ensure The Encore Database is Consistent

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. Shut down Sharer, System Manager and OUI

## 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

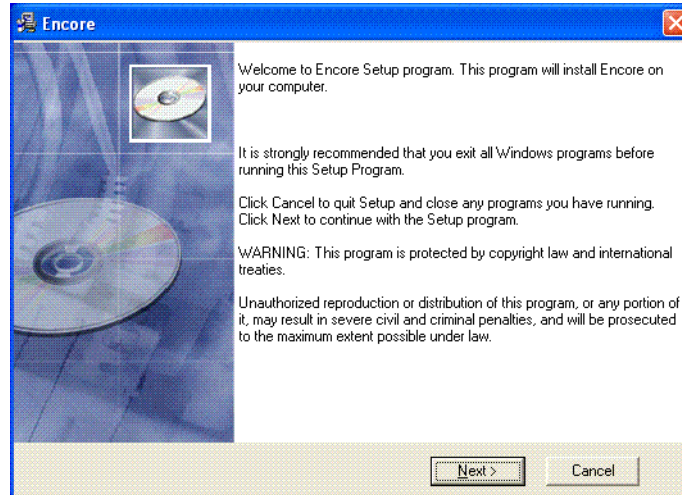
**Note** To help ensure any hidden activity is stopped (for example, Port Mapper) you can restart the computer.

6. Quit all Encore programs on the configuration PC, **including Sharer**, and disable any virus protection programs or firewalls.



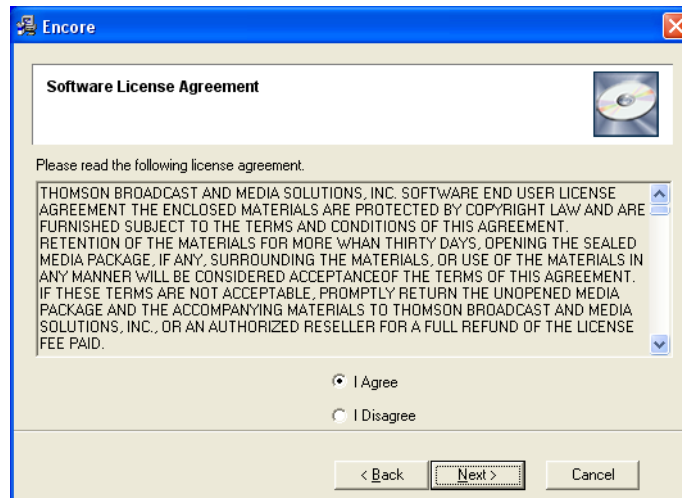
7. Insert the Encore System Software CD into the PC. If the Installation Program doesn't start up automatically, double-click **Setup.exe** on the CD. The Encore Installation Welcome screen will be displayed (Figure 10).

Figure 10. Encore Installation Welcome Screen



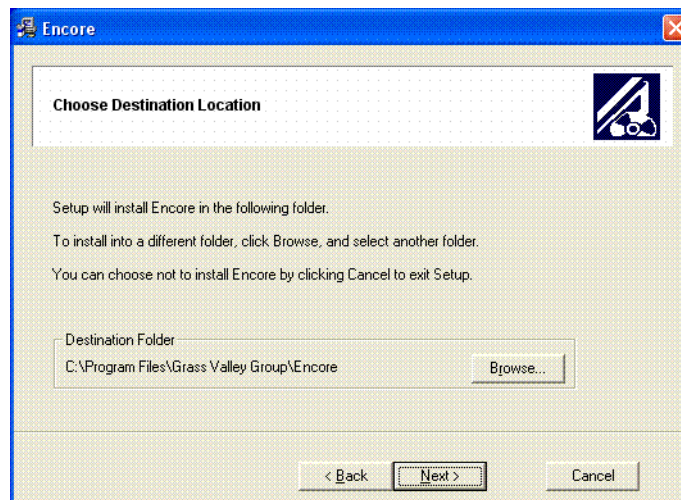
8. Click **Next >**. The Software License Agreement screen appears (Figure 11).

Figure 11. Software License Agreement



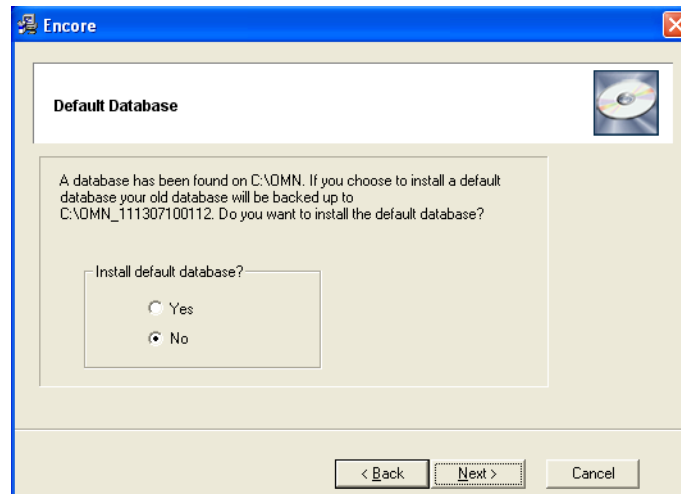
9. Click **Yes** to accept the license agreement. The Choose Destination Location screen appears (Figure 12).

Figure 12. Destination Location Screen



10. Accept the default destination and click **Next >**. Encore software will be loaded onto the Sharer PC.
11. If this is a reinstallation or upgrade a Default Database screen appears that asks if you want to install a default database (Figure 13). The default setting is **No**.

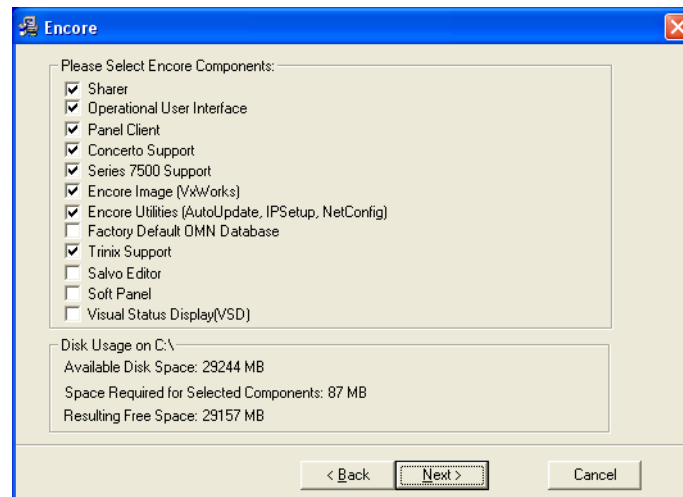
Figure 13. Default Database Screen



12. When updating an existing Encore system, do NOT select the Factory Default OMN Database to retain your existing database. Leave **No** selected and click **Next >**.

13. A Select Encore Components Screen appears (Figure 14).

Figure 14. Select Encore Components Screen

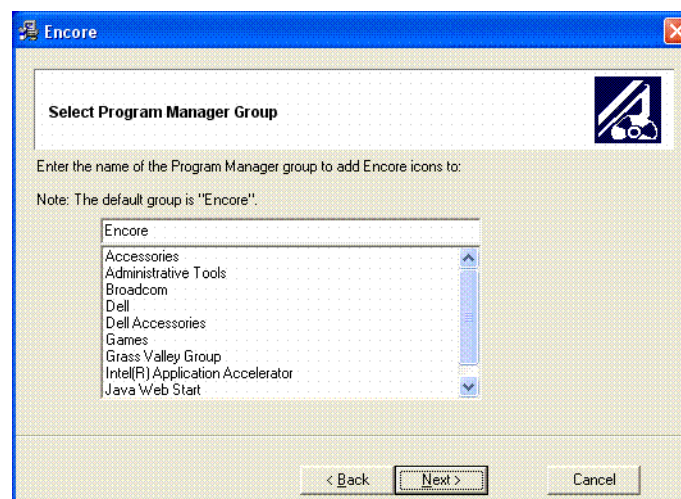


14. Because you are updating an existing Encore system, be sure the **Sharer** box is checked to ensure the Encore components will run the same software version after install. You can also select or omit any additional items as appropriate. For example, if your Encore system does not control a Concerto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

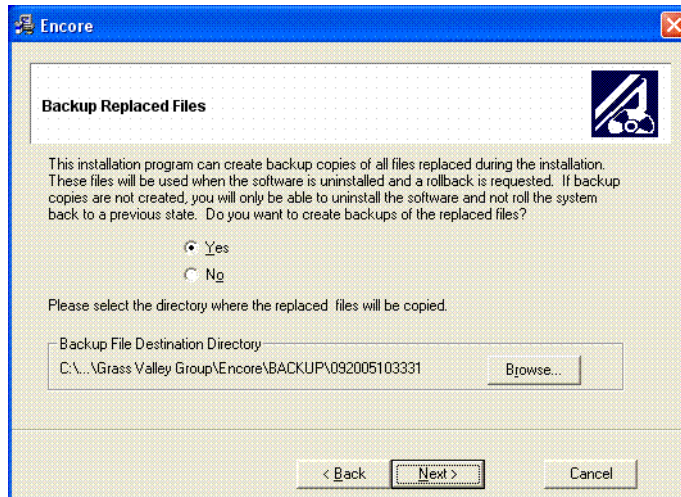
15. After selecting the correct components in Figure 14 click **Next >**. The Select Program Manager Group screen appears (Figure 15).

Figure 15. Program Manager Group Screen



16. Accept the default Encore group name and click **Next >**. The Backup Replaced Files screen appears (Figure 16).

Figure 16. Backup Replaced Files Screen.

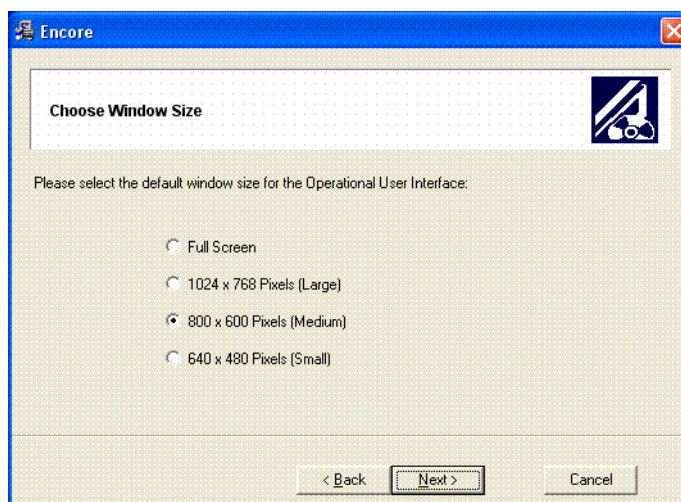


17. Select **Yes** to backup the files and click **Next >**. The backup file folder is named with the date and time. Note that Log files are not saved in this backup directory.

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

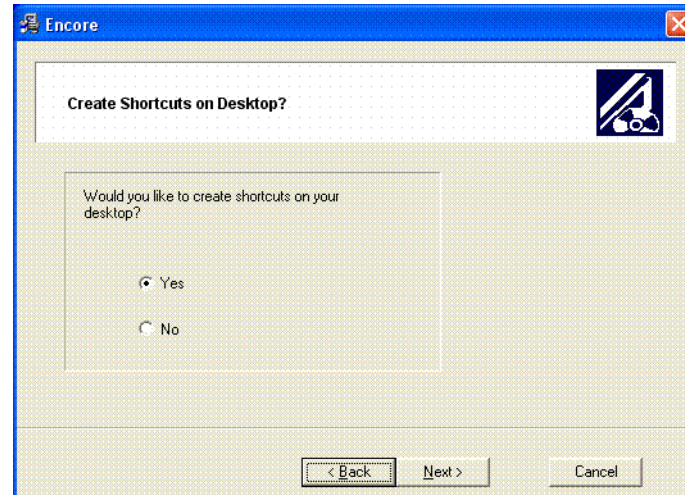
18. The Choose Window Size screen appears (Figure 17). Choose the size that best fits your PC monitor. Medium is recommended for most situations. Click **Next >** after your selection.

Figure 17. Choose Window Size Screen



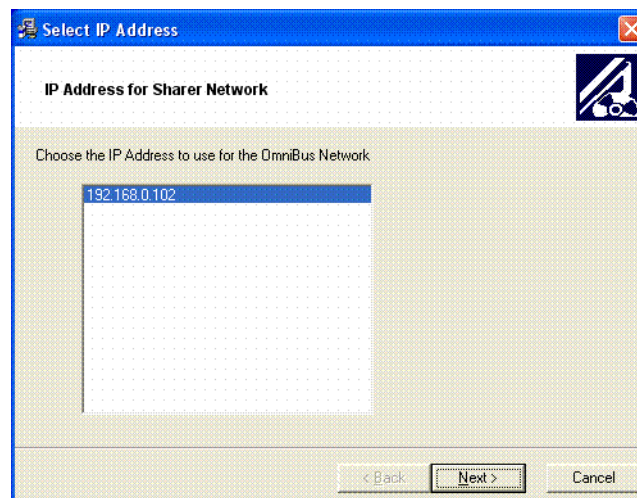
19. The Create Shortcuts on Desktop screen appears (as shown on the left of [Figure 18](#)). We recommend installing the shortcuts to make it easy to launch the Encore application. Click **Next >** after making your selections.

Figure 18. Create Shortcuts on Desktop Screen



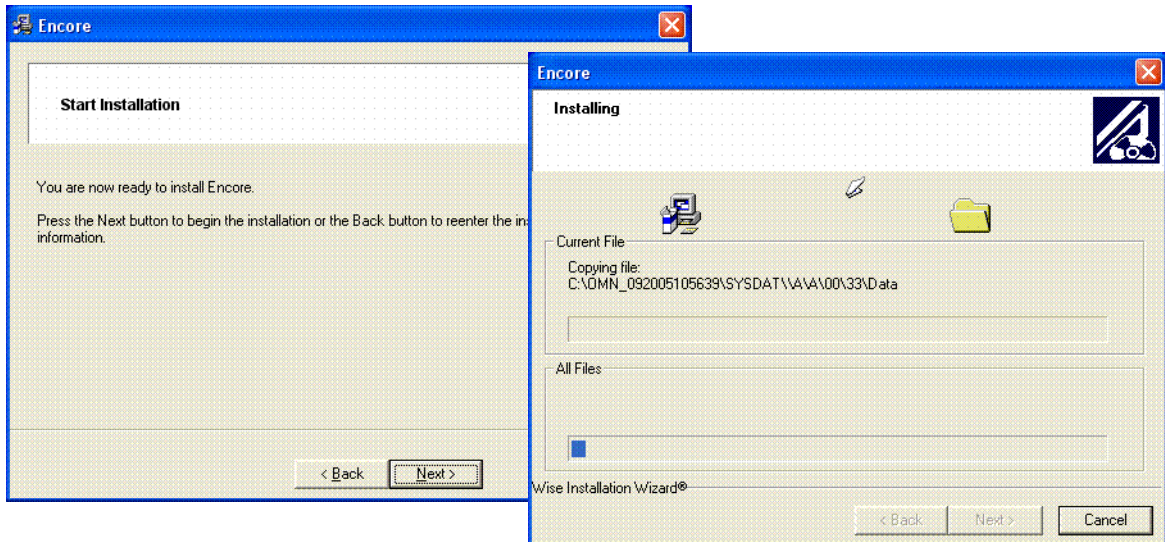
20. A screen then appears asking you to confirm the IP address of the Sharer Network ([Figure 19](#)). The IP address of the network interface cards (NIC) in use on that PC will be listed. If multiple NICs are installed you must select the one that will be used by Encore. Click **Next >** to continue.

Figure 19. IP Address for Sharer Screen



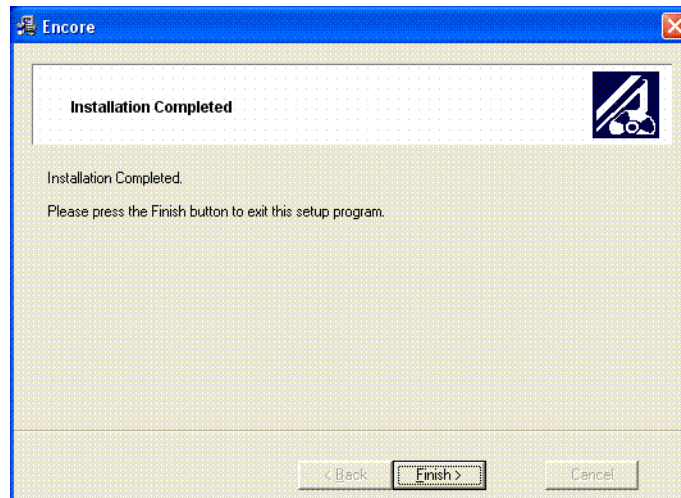
21. The Start Installation screen appears. Click **Next >** to begin copying files to the PC. The progress of the transfer is reported (Figure 20).

Figure 20. Encore Installation Screens



22. When the file transfer is done the Installation Completed screen appears (Figure 21). Click **Next >** to finish this part of the installation.

Figure 21. 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.
24. While the installation on the local PC is done, you are not finished with the software update. Other Encore system components still need to be updated.

## Restart Sharer

Figure 22. Watchdog Icon



25. Re-start the Sharer, System Manager and Encore OUI. Run the Sharer by double clicking the Watchdog icon (Figure 22).

**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 22).

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 operating system,
- to be logged in with Administrator-level privileges for the local machine, and
- have Internet Explorer version 5.5 or later installed.

### 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, and
- Install software to these devices.

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

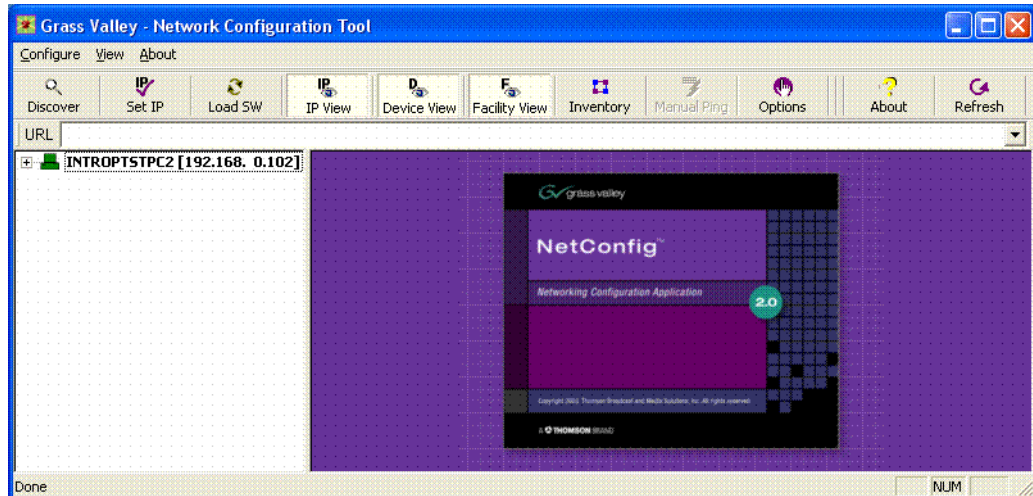
## Launch NetConfig



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 23](#)).

Figure 23. NetConfig Screen



## 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** When updating Encore 1.6.5.4 software to 1.7.4 software, any redundant SCBs must be updated separately. Software incompatibilities do not support earlier and later versions running simultaneously.

## Redundant SCB Update From v1.7 Simplified Procedure

Redundant SCBs already running v1.7 can be updated to v1.7.4 simultaneously. Follow the v1.6.5.4 procedure below, except:

- You do not have to disable Panel Server applications (skip [Step 28](#) through [Step 34](#)).
- You can select all SCBs when you install the new software.

If you are currently running v1.7 software proceed to [Step 35](#).

## Redundant SCB Update From v1.6.5.4 Procedure

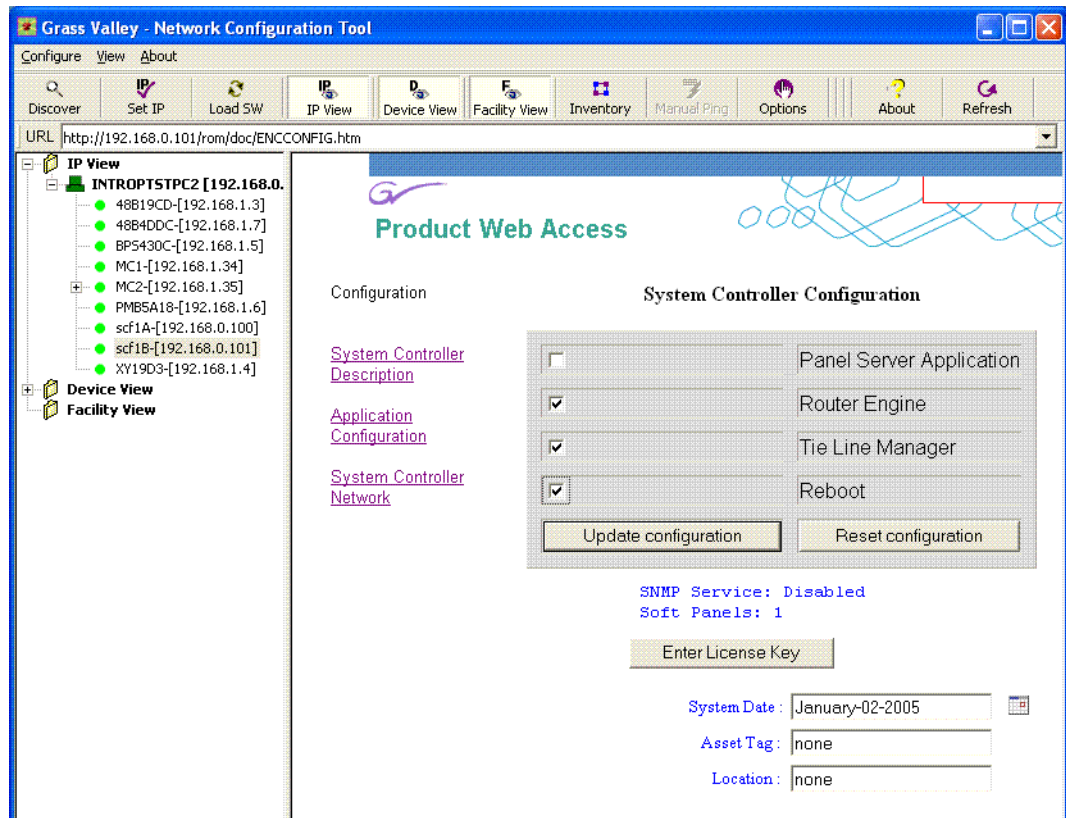
28. Click on the NetConfig Device View and open the hierarchy display of the devices on the network. They should report green operating statuses.



## Disable Mirror Panel Server Applications

29. For all Encore System Controllers running a Mirror Panel Server application, use NetConfig to access each mirrored Panel Server Application Configuration web page, uncheck the **Panel Server Application** box, check the **Reboot** box, and then click on **Update Configuration** (Figure 24).

Figure 24. Disabling Mirror Panel Server

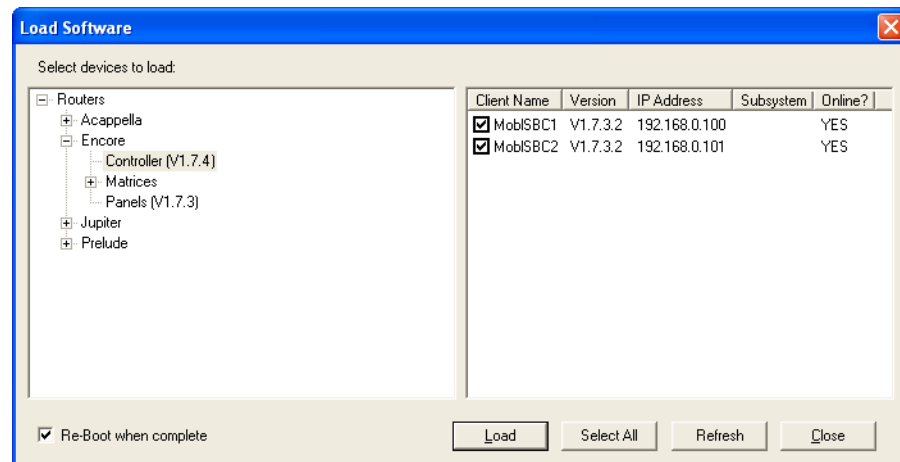


## Upgrade Mirror System Controllers

30. Using NetConfig, upgrade the Mirror system controller(s).
- When the reboot completes (green indicator in NetConfig) click on the **Load Software** tab, or select **Configure > Load Software** to open a window showing a hierarchy of the software available.
  - Click **Routers > Encore > Controller** in the software hierarchy window, then select **Encore Controller (V1.7.4)**. This is the SCB software version we are updating the SCB to.

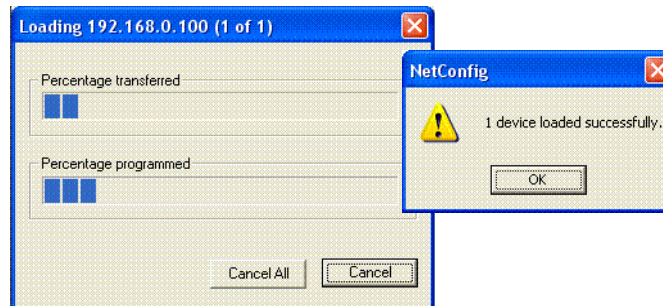
- c. Select the check box of the Mirror SCB(s) (Figure 25).

Figure 25. Encore Mirror SCB Selected for Software Update



- d. Make sure **Re-Boot when complete** is selected and then click **Load**. The software will load to the SCB and its progress will be reported. When finished, click **OK** to the loaded successfully prompt (Figure 26). The SCB will then reset and run the new software version.

Figure 26. Software Update Progress and Confirmation



31. After the software loads and the system controller reboots (which may take a couple minutes), access the Mirror system controller(s) web page and verify that the software version now displays 1.7.4.

**Note** If a Server Error message appears when you try to access the system controller webpage, click on the NetConfig **Refresh** button.

### Upgrade Master System Controllers

32. Now upgrade the Master system controller(s) by following Step 30 above but selecting the Master SCB(s).

**Note** The Encore system will be unresponsive for approximately 2-3 minutes during this process, although existing crosspoint status will be preserved.

33. After the software loads and the system controller reboots, access the Master system controller(s) web page and verify that the software version now displays 1.7.4.

**Note** If a Server Error message appears when you try to access the system controller webpage, click on the NetConfig **Refresh** button.

### Enable Mirror Panel Server(s)

**Note** If your Encore system was running 1.7 software before being updated to 1.7.4, you did not have to disable redundant Panel Servers. If Panel Servers were not disabled, you will not have to enable them.

34. For an Encore SCB running a Mirror Panel Server application, use NetConfig to access its Application Configuration web page, check the **Panel Server Application** box, check the **Reboot** box, and then click on **Update Configuration**. Do this with every Mirror Panel Server in your system.

Skip [Step 35](#) if you just updated your 1.6.5.4 SCBs to 1.7.4.

## Redundant v1.7 SCB Update Procedure Continued

If you are updating from v1.7 and skipped to this step, do the following:

35. Update all your SCBs with the new software.
  - a. Click on the NetConfig **Load Software** 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 (V1.7.4)**.
  - c. Click the **Select All** check box to select all your SCBs.
  - d. 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.

**CAUTION** It can take up to five minutes for the SCBs to complete their software update, load their configurations, and return to on-line status. Do not disturb the SCBs (reset or withdraw board, interrupt power, disconnect network cable) during this time. Flash memory corruption may result, which could require a manual SCB flash memory update to correct.

## 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 Matrix Software

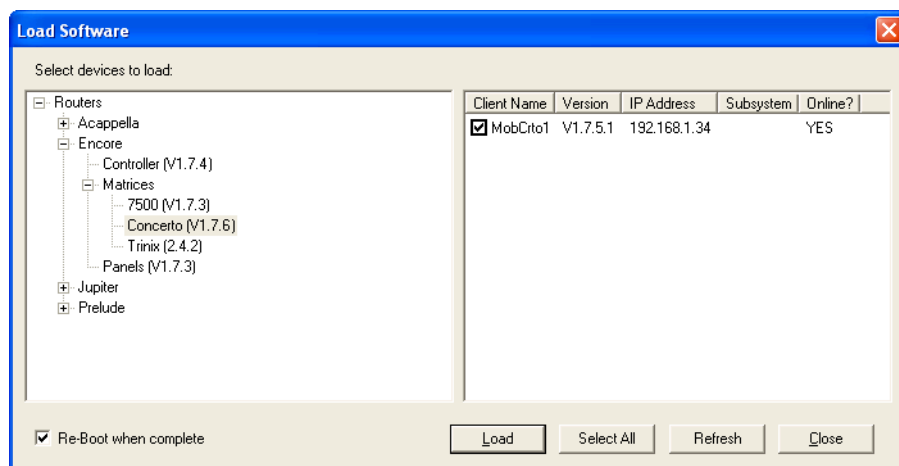
Encore systems can employ Concerto, Trinix, and SMS7000 Matrices.

### Concerto Matrix Procedure

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

36. In NetConfig, click on the **Load Software** tab, or select **Configure > Load Software** to open a window showing a hierarchy of the software available.
37. Click **Routers > Encore > Matrices** in the window, then select **Concerto**. This will display the software versions available for loading ([Figure 27](#)).

Figure 27. Concerto Matrix Software



38. Select the Concerto software to be loaded and check the boxes of the matrix controller(s) to be updated.

39. 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

**Note** Due to a compatibility issue, 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.

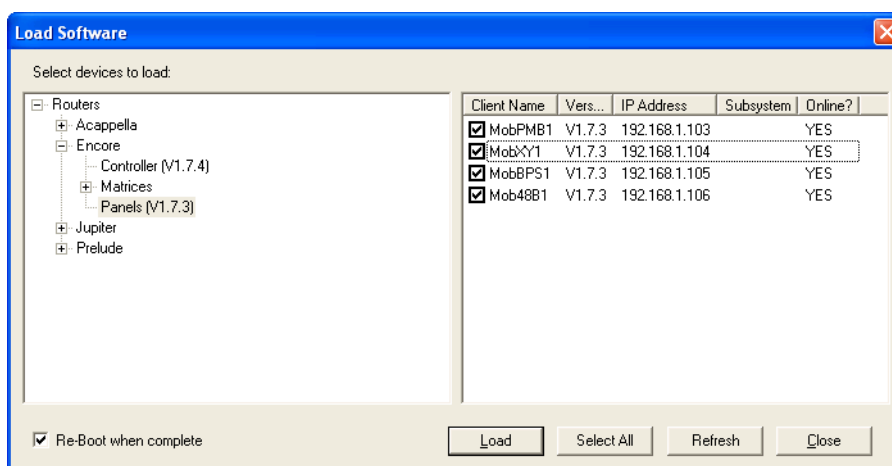
### SMS7000 Matrix Update Procedure

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

40. In NetConfig, click on the **Load Software** tab, or select **Configure > Load Software** to open a window showing a hierarchy of the software available.
41. Click **Routers > Encore > Panels** (plural name, not singular) in the window. This will display the software versions available for loading (Figure 28).

Figure 28. Control Panel Software (Panels (plural) Directory)



42. 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.

43. 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.

## Confirm Sharer Mode

44. 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**.
45. Log onto Master Router Controller and verify that the Router Controller is in **Sharer** filing Mode.
46. Log onto the Master TLM and verify that the TLM is in **Sharer** filing mode.
47. Repeat steps [Step 44](#) through [Step 46](#) with the Mirror application of each Master/Mirror pair in your system.

## 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 crosspoint switches are not occurring on the vertical interval or appear to be delayed in execution, check that your system is using a VITC timecode source. To change VITC format, go to Router Controller, Configure, click on TimeCode, then click on the name of the format and select the correct one.
- 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 Reference Count Server on all SCBs in the system are turned on, via each SCB's webpage.

This completes the entire upgrade process.

# Manually Updating SCB Flash Memory

## Flash Purchased from Grass Valley

If you purchased flash memory from Grass Valley customer service, it will already be formatted and loaded with the latest Encore software. Simply replace the existing flash memory in all your SCBs with the new ones provided.

## Flash Purchased Locally

**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 with the following procedures.

### Materials Required

You will need the following:

- PC running Windows XP service pack 2.
- Compact Flash reader/writer,
- SanDisk 512MB Compact Flash (This process has been validated only for these Compact Flash varieties, but will probably work with other types), and
- The mkdosfs.exe application (located in the Unsupported directory on the Encore Software CD).

### Format Flash for VX Works

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

1. Install the mkdosfs.exe in the C: root directory of the PC.

**CAUTION** mkdosfs.exe is a general purpose DOS format tool able to format any drive. Use extreme caution when using this tool as irreparable damage can be done to the PC's operating system and memory contents.

2. Format the Compact Flash using Windows.
  - a. Insert the Compact Flash into the Flash reader/writer.
  - b. Open Windows Explorer.
  - c. Right click on the Flash reader/writer drive.

- d. Select **Format**.
  - e. Select **FAT** for the format type (NOT Fat 32).
3. Open a command Prompt Window, go to the root directory (CD \), and run the mkdosfs.exe by typing:

```
c:\> mkdosfs -w <Drive label of Compact Flash reader>:
```

**CAUTION** Be sure to use the **-w** option and use care when selecting the drive name. Irreparable damage can be done to the PC's operating system and memory contents if the incorrect drive is selected.

### Manually Copy Files to the Formatted Flash

1. After installing the Encore software onto the PC, copy the contents of the **c:\Program Files\Grass Valley Group\Encore\File System\** folder to flash.
2. Copy all the files and folders from the **c:\Program Files\Grass Valley Group\Encore\Encore Image\** folder EXCEPT the Encore.tar file.

**Note** Be sure the copied files do not have any Read Only options set (see below).

### Install Flash into SCB

1. Make sure the Sharer is running on your network.
2. Pull the SCB from the Encore frame far enough to access the flash port and insert (or replace) the newly formatted flash memory card.
3. Reinsert the SCB into the Encore frame.

The SCB should boot successfully and will receive its configuration from the Sharer.