GRASS VALLEY GROUP

ENCORE™ CONTROL SYSTEM

PRELIMINARY DATA SHEET

AN OPEN, SCALABLE SYSTEM FOR MULTI-FACILITY ROUTING CONTROL



KEY FEATURES

- Scalable, a la carte design for selecting just the right level of control
- Controls routing matrices ranging from 16x2 to 4096x4096
- 10/100Base interfaces for fast,fully deterministic switching
- Choice of either DHCP or manual IP address assignment eases system installation
- Supports multiple controller frames for simultaneous control processing in large or complex systems
- Supports NetCentral software for SNMP-based status monitoring and diagnostics
- LAN/WAN support enables inter-, intra-facility control
- Assortment of dedicated hardware and computer-based software control panels
- Fully compatible with Grass Valley™ Series 7000 control system
- Interfaces with many third-party routing systems
- 48 VDC power capability makes Encore system controllers easy to integrate into telecommunications and cable facilities
- Full redundancy capability

A Scalable Control System That Grows With Your Needs

The Encore™ system is an open, scaleable platform for full router and facility control. Featuring tight integration with automation systems, third-party routers, and other equipment, the Encore system makes it easy to consolidate media assets under a single, unified control system. It modular design lets broadcasters and other high-quality content creators select just the level of control they need. At its most basic level, the Encore system can configure the crosspoints of a single routing matrix—and easily expand that control up to 4096x4096. Users can also add tally and machine control via Ethernet, serial, or GPI interfaces. And a selection of hardware and PC software control panels that work across the room or across the country via IP LAN/WAN connections offers centralized or distributed management of all devices under Encore sytem control.

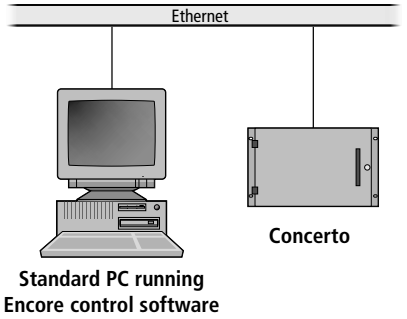
Scalable Systems Begin with Scalable Software

Encore system software can run standalone on a user-supplied PC for basic control of Grass Valley™ matrices and routers in a small facility. Even at this basic level, the Encore system offers complete configuration and robust control capabilities. It can configure matrices for multiple levels of control, set up tie-lines for transparent inter-matrix operations, and support multiple users with unique access privileges and restrictions. With software control panels, users can control sources and destinations right from their PCs.

In addition, the Encore system can control audio attribute processing on Grass Valley 7500 NB and Concerto Series digital audio matrices; users can swap two audio channels, invert either channel, sum the channels, or duplicate a channel to feed mono input to both channels.

BASIC MATRIX CONTROL

Basic matrix control can be as simple as a PC application controlling a single matrix frame over an Ethernet connection.

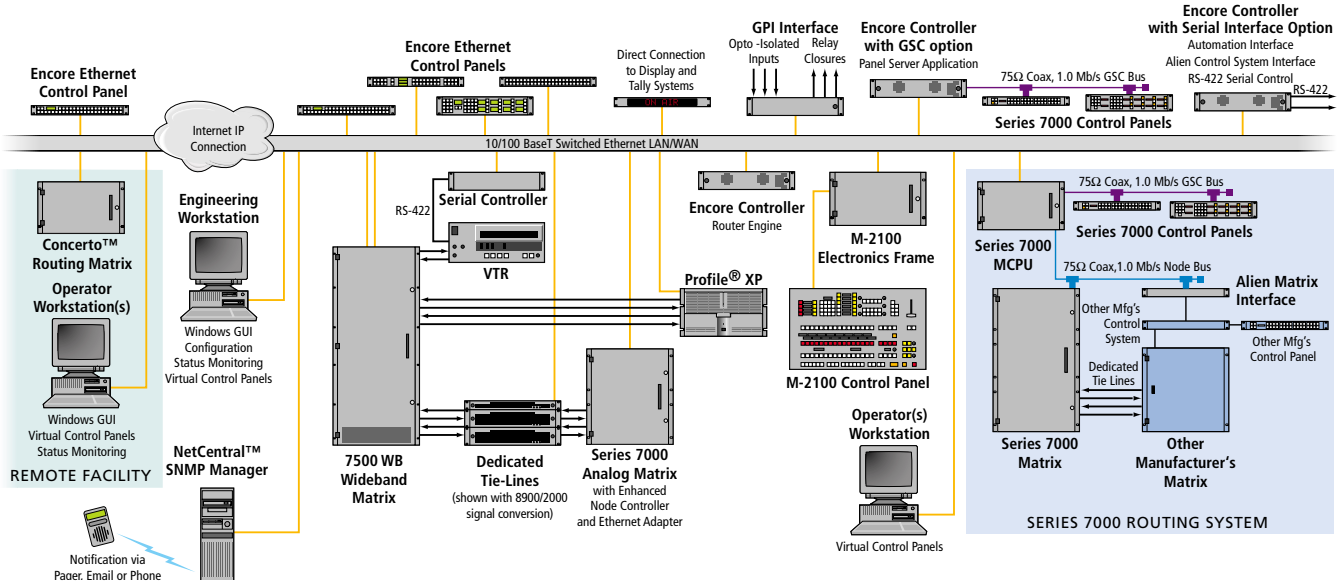


Scale Up To 4096x4096 with Encore Controllers

Using dedicated and compact 2 rack unit (RU) controllers, users can scale an Encore system to support large, multi-matrix, multi-location configurations; its dedicated processing and real-time operating system offer fast, deterministic, frame-accurate switching with fixed latency for synchronized switching of as many as 4096 destinations. Users can combine multiple Encore controllers on an Ethernet facility network to increase throughput by dividing tasks – and program the controllers to function as dedicated control panel servers, tie-line managers, or as additional system controllers to speed overall system response. The Encore system is also fully compatible with the Grass Valley Series 7000 and many third-party control systems, to fit into established workflows easily.

For mission-critical applications users can add redundant power supplies and controller modules to increase reliability. Adding redundant Encore controllers to the network provides an extra level of redundancy for mission critical applications.

Each Encore controller frame can support two groups of eight serial I/O ports for applications such as automation interfaces. In addition, each frame supports two groups of 64 Global Serial Channel (GSC) nodes are supported for integrating existing Series 7000 control panels into an Encore system.

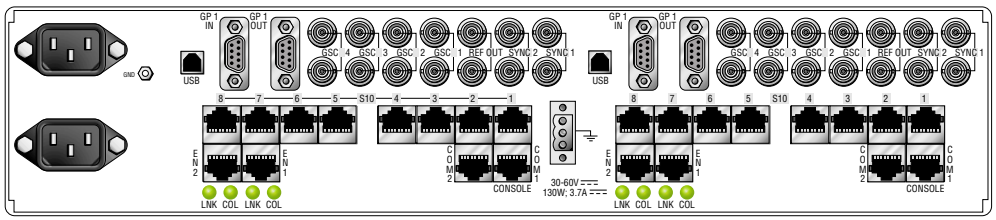


SOPHISTICATED CONTROL OF LARGE AND DIVERSE SYSTEMS

The Encore Control System adds new levels of functionality with many options for integrating Encore control into existing routing systems.

ENCORE CONTROLLER

Redundant power and control are available for mission critical applications.



Multi-Facility System Control

Because the Encore system uses standard RJ45 10/100baseT Ethernet connections, users can expand control across multiple locations using standard IP networking techniques. From providing a journalist on the Encore system's network with a PC control panel for selecting sources to complete control of remote facilities with extensive routing matrices, the Encore system uses standard Ethernet routers, switches, and WAN/LAN equipment.

Machine and Tally Control

Extensive and sophisticated machine control is available within the Encore architecture. Augmenting conventional serial control, the Encore system allows for Ethernet-based machine control for devices such as Profile® XP Media Platform systems. This control makes it possible to issue commands to applications across a network, such as those that oversee the transmission of programming and commercial spots to remote locations.

A dedicated 2 RU General Purpose Interface (GPI) with 24 individually connected, opto-isolated inputs and 24 relay contact closures is available for joystick override, source tally, under monitor display (UMD), and machine-start operations. The Encore system can also execute commands issued by automation systems, the Kalypso™ Video Production Center family, Zodiak™ video production switchers, and M-2100 master control switchers to control devices several levels away.

Global Tie-Line Management

Tie-Line management, first introduced in the Series 7000 control system, allows for the transparent routing of signals between levels. Tie-lines make all the sources on a remote routing matrix available to users on a local matrix through software-controlled interconnections. When a user requests a source that is not found on the local matrix, the request is automatically assigned to a tie-line and acquired from the remote matrix. Placing conversion equipment on tie-lines between matrices with dissimilar signal types eliminates the need for a dedicated converter for each source. The Encore system adds to this proven technology the ability to configure tie-lines globally from a central location for all matrices in the system, including those located remotely.

Logical Matrix Mapping

Logical matrix mapping maximizes crosspoint utilization by subdividing a physical crosspoint matrix into multiple logical matrices, eliminating the need for dedicated crosspoint modules for different types of signals. In addition, crosspoints can be selectively assigned to ensure that input signals are only routed to appropriate output destinations. These logical matrices can be tied to a single control level for simultaneous switching (such as audio/video, video/key, or R/G/B). Logical matrix mapping also makes it possible to group device connections, simplifying system cabling. The Encore system's matrix remapping feature minimizes system recabling associated with equipment upgrades. When changing the type or format of equipment on an input or output, the Encore remapping feature requires only a modification of the logical matrix table to reassign signals to the correct inputs or outputs.

Sophisticated SNMP Remote Monitoring

To ensure optimal uptime, Encore system users can deploy Simple Network Management Protocol (SNMP) agents to proactively check the status of devices that reside on one or more facility networks. These agents can report status information—such as an over-temperature condition that may indicate improper air flow—to an SNMP remote monitoring and diagnostics package, such as the Grass Valley Group's NetCentral™ software, to trigger an action such as the paging of a technician. When used in concert with the Grass Valley 7500 Series and Concerto Series routing matrices, the combination of the Encore system and the NetCentral software offers unprecedented signal-integrity analysis and monitoring, as well as the ability to notify technicians when signals stray from user-defined parameters..

Software Control Panels Offer Desktop Convenience

For the occasional user, or a user in a remote location, software control panels can be displayed on any PC connected to the Encore system LAN/WAN. The Encore system lets administrators set a user's level of access and control to prevent unwanted operations and to grant new levels of functionality.

Growing Selection of Control Panels

For fast, push-button control in control rooms or studios, there are a variet of Encore control panels. Using an Ethernet connection, adding or relocating panels is quick and easy.



Advanced 32 Button-Per-Source Programmable Control Panel

- Great for use in tape or disk duplication rooms and mobile applications for fast, immediate access to sources in a compact 1 RU panel
- Multiple levels to selected destination(s) with full breakaway control
- Software-enabled local configuration of source-selection buttons
- Per-button assignment of source, destination, and salvo
- Per-button assignment of audio attributes to digital audio outputs on 7500 NB and Concerto Series matrices



48 Button Programmable Control Panel

- 1 RU panel that can distribute a source to multiple, grouped destinations (machines) with the push of one button
- 48 programmable push buttons to select source, level, destination, or salvo
- Function as a stand-alone panel or as an expansion panel for the 32 button-per-source control panel (above)



Advanced Universal XY Programmable Control Panel

- 1 RU control panel for simple source and destination selection
- Can be programmed to control single or multiple destinations
- User-programmable keypad with prefix/suffix selection to preset sources for subsequent takes
- Separate displays for preset, status, and level
- 8 configurable buttons for sources, destinations, salvos, or breakaway operations



Eight Destination Paging Control Panel

- 2 RU panel for simultaneous control and display of any 8 sources and destinations
- User defined configurations with password protection
- Push button access to 48 prefixes, 48 suffixes, and 48 pages
- Scroll through pages of sources, destinations, salvos, and levels

Initial Warranty Coverage

Grass Valley Group products are built to exact standards and are backed by an excellent hardware and software warranty – one year or 15 months from date of shipment. Under warranty services you will receive these critical services:

- Technical phone support (regular business hours)
- On-line frequently asked question database
- Emergency "down" service support
- Advance exchange on product modules

Support Packages Available

We have built our support packages around critical product life cycles with a focus on helping reduce the cost of maintenance.

First Time Product Purchaser Discount

Support services that ensure your product gets off on the right foot are offered to first-time product purchasers at reduced package prices.

- Extended Support Contract
- Impak™ Training
- SmoothStart™/Mini SmoothStart

Ongoing Support for All Products

Service Packages designed to make your job easier, and excellent for non-technical staffed sites, or reduced staff facilities. Packages that provide long-term support and more on-site assistance, at reduced package prices.

- SureStep complete on-site package
- NextStep personalized phone training
- Quarterly preventative maintenance
- Remote diagnostic setup services

Other Services Available

- 1-5 year comprehensive contracts
- Advanced exchange contracts
- Customer product training
- Technical support service contracts
- On-site professional services
- Spares kits and repair services
- Software update services
- Customized service contracts
- System network consulting

*Some country and product restrictions apply

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