

SC-3

SYSTEM CONTROLLER



SC-3 is the powerful control system at the heart of a Utah Router Control System. In addition to controlling the UTAH Series or AVS Series routing switchers, SC-3 can also provide interface capability to many third party control and switching systems. Because of its modular design and advanced software, SC-3 can easily adapt to any application, whether it be simple stand alone applications or the most sophisticated control systems.

Matrix switching is executed using the advanced SCP Series control panels, a wide selection of CSP Series control panels or a combination of both. Numerous control ports provide a wide array of computer, remote, custom or networked control capabilities.

SC-3 FEATURES

- **Compatibility with all Utah routing systems and control panels - Protects your earlier investments.**
- **Increased Matrix Size Capacity - Allows for future growth (512 x 512 x 16 levels).**
- **Third Party Control - Allows the SC-3 to control routing switchers from other manufacturers.**
- **Graphical User Interface (GUI) application for configuring and operating the system.**
- **Dual Sync Inputs - Supports NTSC and PAL vertical blanking interval switching.**
- **Tie Line Management Feature – Simplifies multi-format routing.**
- **Redundant Control and Power Supplies in the Same Frame - Preserves valuable rack space.**



The SC-3 router control system from Utah Scientific takes routing control to new levels of operational ease and flexibility. SC-3 provides enhanced control for the UTAH Series routers and also allows you to control your current 3rd party switcher while you upgrade to the UTAH Series routing system. This means your past investment is protected while the UTAH Series routing system gives you all the benefits of new technology and an upgrade path from analog to digital.

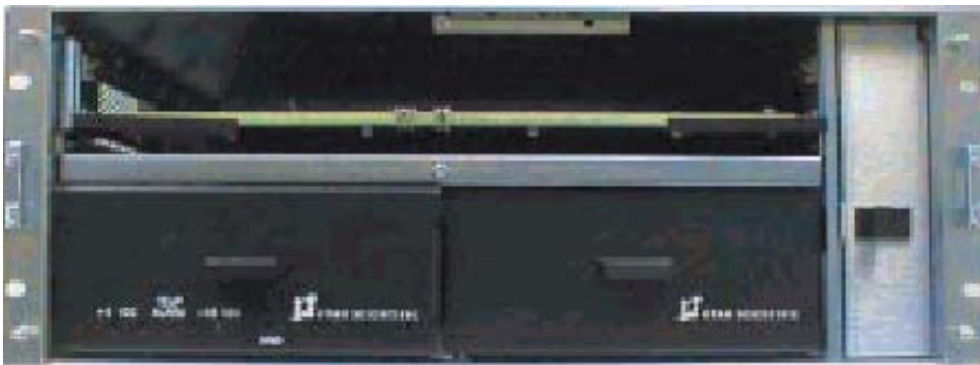
The SC-3 has both the control and power necessary to reliably manage the increasingly complex world of analog, digital and HDTV signal distribution. SC-3 enables users to centrally control and monitor all multi-format routers and master control switchers from the same control point.

Four Partyline ports provide a control LAN which allows use of the wide selection of CSP Series control panels. The Partyline ports are also ready for the MC-500 Series of master control switchers. New or existing systems can use a combination of the CSP control panels connected to the Partyline LAN and the SCP Series control panels connected to the U-Net LAN.

The Ethernet port allows network connections using standard Ethernet LAN technology. The Ethernet interface can be used for making system configuration changes or for remote routing switcher control. A 10-baseT connection allows the use of standard Ethernet devices for interfacing to the SC-3. This interface along with a published control protocol provides the user with almost limitless control application capability.

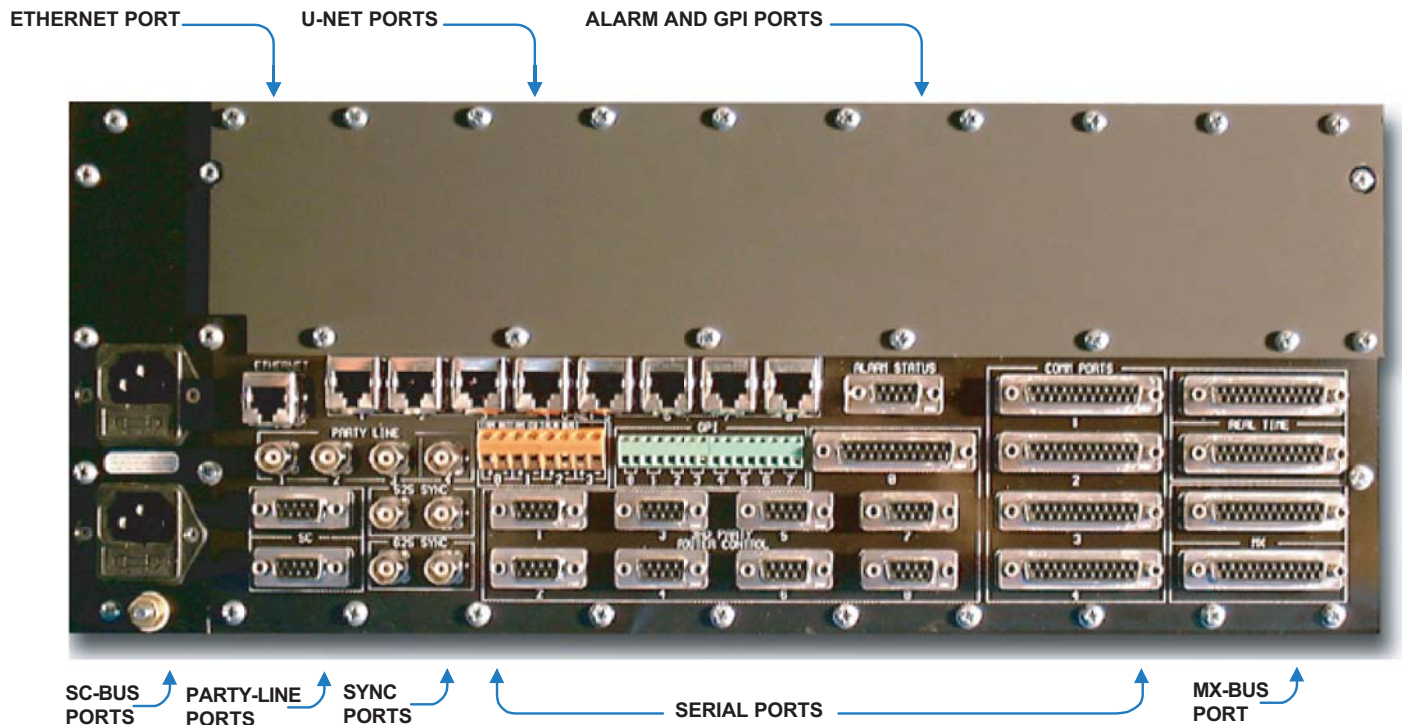
525/625 inputs are used to generate a SMPTE RP168 compliant switch command that switches the crosspoints during the vertical blanking interval. The SC-3 and associated MX Bus can execute both NTSC and PAL vertical blanking interval switching in the same UTAH-Series matrices.

RS 232/422 serial control ports allow remote computer control and/or automation software control of the SC-3 control system. In addition, these serial control ports can be used to control third party routing switchers and control devices.



The SC Bus supplies the switching control of the AVS Series of routing switchers allowing customers to enhance and expand their routing switcher systems by combin-

SC-3 Product Information Sheet

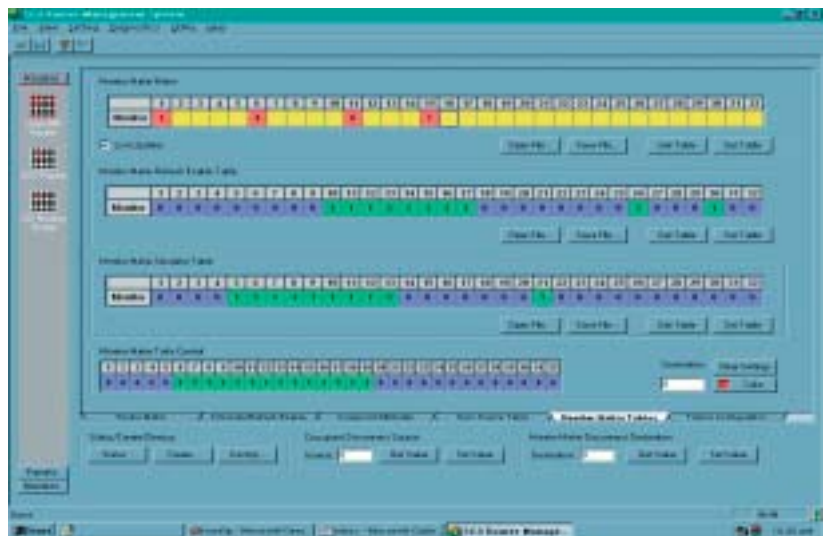


ing the UTAH Series routing switchers with their existing AVS Series routing switchers. The SC Bus is configurable and limited to one vertical interval switch rate, either 525 or 625.

The MX Bus is a high speed control link that connects the SC-3 to the UTAH Series routing switchers. The MX Bus has sufficient speed to switch up to 128 outputs in 1 vertical interval.

U-Net control panel ports provide high speed connections between the state of the art SCP Series of control panels and the SC-3 controller. Industry standard RJ45 connectors allow quick and easy wiring of the control panels.

SC-3's Router Management System (RMS) software is a graphical user interface (gui) that gives the user the capability of configuring SC-3's remote control ports, virtual router mapping, system tie-lines and control panel mnemonics. Using a Windows NT PC connected through Ethernet (TCP-IP), RMS communicates with the SC-3, allowing the user access to all router setup and crosspoint information.



This also gives the user the capability of storing critical controller information on hard disk as a backup. SC-3's Router Management System (RMS) The Windows based RMS application allows you to configure router, panel and system control information.

SC-3 Technical Specifications

Video Reference

525 line NTSC Looping input

Max. signal level 2.0 V p-p

Min. signal level 0.67 V p-p

Input return loss at 3.58 MHz better than 40 dB

625 line PAL Looping input

Input return loss at 4.43 MHz better than 40 dB

Switching point

All video and audio switches will occur in accordance with SMPTE RP168

Control Panel control

8 x U-Net communications ports

4 x Partyline communications ports

(3 configurable, 1 non-configurable)

Router control

2 x MX Bus ports

2 x SC Bus ports

3rd Party control

8 x RS-422 control of 3rd party routers and serial control

4 x configurable RS-232 / RS-422 / RS-485

GPI

1 x input for remote selection of active controller

1 x input for remote reset of active controller

4 x general purpose floating input contact closures

4 x input / output configurable general purpose closures

Power

Power consumption 75 W maximum

Voltage 100 - 120 VAC \pm 10%

220 - 240 VAC \pm 10%

Frequency 50/60 Hz

Power factor correction EN60555-2

Dual redundant automatic switch-over

Dual isolated AC power inputs

DC supply input (option)

Voltage -48VDC nominal,

(-36 VDC minimum to -72 VDC maximum)

Redundancy Dual DC inputs

Alarms

Connector type 3 terminal barrier strip

Primary Alarm ANSI/SMPTE 269M fault reporting

DC power fail, fan fail, overtemperature

Connector type 9-pin D connector (4 pairs and ground)

Individual contact closure for the following alarms:

Fan failure

Overtemperature

Power supply over/under voltage (A supply)

Power supply over/under voltage (B supply)

CPU failure (A controller)

CPU failure (B controller)

Physical

Width EIA RS-310 - D 92 19" rack mount standard

Height 4 RU (7.0")

Depth 18"

Weight 35 lbs.

Mounting Front mount rack ears

Optional center mount rack adapter

System connectors All connectors rear panel mounted

Cooling Forced air - brushless DC fans

Operational temperature range 10 - 40°C

Operational humidity range 0 - 90% (non-condensing)

Regulatory

EMC EN50 081-1 (EN50 022 Class A)

Susceptibility EN50 082-1 (IEC 801-2, IEC 801-3, IEC 801-4)

Safety EN60 950, UL 1950, CSA-22.2 No.234

RMS Workstation Configuration (PC not included in purchase price)

Hardware 100 MHz Pentium processor

32 MB RAM

1.2 GB hard disk drive

6x CD ROM drive

1 x 3.5 inch HD floppy disk drive

Ethernet adapter

17" 1024 x 768 color monitor

1024 x 768 resolution (256 color) video card

Software Windows™ NT 4.0 or later

Specifications are subject to change without notice.



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