

Sierra Pro XL 16x16 RGBHV Router Family 16x16 RGBHV Routers



















16x16 RGBHV Matrix Switchers with 8 Configurations.

RGB Video Feature

- High Bandwidth 450MHz (-3dB) fully loaded.
- Very Low Crosstalk -80dB @ 1MHz, -47dB @ 100MHz, -30dB @150MHz.
- Matrix Mapping™ Universal Breakaway Switching This unique Sierra Pro XL feature provides independent switching of every level of every R, G, B, H, V, left and right audio input on the routing switcher. You can switch a single level or any combination of levels. For example, you can input a composite video signal on the R level of input one and an s-Video (Y/C) signal on the G and B levels of input one, then switch only the composite video signal on the R level, only the s- Video Y and C signals on the g and B levels, or switch all three levels together.
- Room Grouping Capability Several inputs may be grouped and operated independently of other input groups on the routing switchers. This allows one routing switcher to be used for multiple "rooms" where the control system for each room will address only the inputs and outputs assigned to that room.
- Video Follow Sync™ Switching The H and V channels of an RGBHV signal are switched in advance of the RGBvideo channels of the signal to provide clean, glitch-free switching between most non-synchronous sources.
- Qwik Adjust Knob™ Rotary Control Interface This user-intuitive knob along with the 80 character LCD display provides quick and convenient setup, adjustment and signal switching.
- Video Mute Capability. Switches to "no source" for blank display.

Sync Features

- Sync Reporting The routing switcher can capture and report the input sync rates for each input signal. Those rates can be read using Sierra Video's TyLinx Pro™ Router Control Software or the Host port protocol.
- Input Detection Reshapes and re-squares the sync to return the output to the correct TTL level.
- Selectable Termination 510 or 75Ω (each input).
- Genlock Input Looping external sync input for vertical interval switching.

Analog Audio Features

- Audio Type Balanced or un-balanced analog stereo on terminal blocks.
- Input (Level) Adjustment Capability (-8dB to +20.5dB) For each input via RS-232, front panel, and TyLinx Pro Router Control Software.
- Output (Volume) Adjustment Capability (Mute, -59.5dB to +15dB) For each input via RS-232, front panel, and TyLinx Pro Router Control Software.
- No Zipper Effect Sierra Pro XL routing switchers employ zero crossover chip technology which eliminates the annoying "zipper sound effect" associated with digital volume controls.
- Audio Mute Capability.
- Crosstalk <80dB @1kHz.

Control Features

- MediaNav™ Network-Enabled Router Control Software via 1RU Mediator Optional
- Local Front Panel Control With 80 Character LCD Readout.
- RS-232, RS-485, RS-422 & Ethernet
- Optional Remote Control Panels Via RS-485.
- Supports TCP/IP Protocol Rear panel RJ-45 connector
- WEB Browser Control
- TyLinx Pro Router Control Software.

Other Features

- Optional Control Panels Programmable, single bus and XY.
- Redundant Power Supplies On selected Models.
- UL & CE Approvals

TECHNICAL SPECIFICATIONS

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RGB Video

Bandwidth 450MHz @ -3dB

Video Gain Unity

Crosstalk -80dB @ 1MHz -47dB @ 100MHz -30dB @ 150MHz

Switching Speed Deterministic
Video Level 0.2V to 5Vpp

Impedance 75Ω

Return Loss <-30dB @5MHz

Connector Type BNC

Video Level 0.2V to 2.5Vpp

Impedance 75Ω

Return Loss <-30dB @5MHz

Connector Type BNC

Stereo Audio

Input Adjust Range +20.5dB to -8dB

Output Adjust Range +15dB to -59.5dB and fully off (MUTE)

Frequency Response 20Hz to 20kHz +/-0.5dB (typical -3dB @ 120kHz) (unity gain)

Dynamic Range 96dB (20Hz to 20kHz unweighted) (unity gain)

Crosstalk (All Inputs

Hostile)

<-80dB @ 1kHz (Unity Gain) <-60dB @ 10kHz (Unity Gain)

IM & THD (20Hz to THD: <0

20KHz)

THD: <0.025% (20Hz - 20KHz @ +4dBu) (unity gain) IM: <0.025 SMPTE-DIN @ +4dBu (unity

gain) <0.01% CCIF @ +16dBu (unity gain)

Max Source Level +24dBu

Impedance $20k\Omega$ Differential Mode $10K\Omega$ Single ended Mode

Connector Type 5-pin terminal block for balanced or unbalanced operation

Max. Source Level +24dBm balanced +18dBu unbalanced

Impedance $100k\Omega$ Differential Mode 50Ω Single ended Mode

Connector Type 5-pin terminal block for balanced or unbalanced operation

Control Features

Local Front Panel

80 Character LCD Readout.

Control CONFIGURATIONS

Model	Description

V5 Models - 3 Video & 2 Sync Channels

1616V5-XL	16x16 RGBHV (3 Video/2 Sync Channels) Matrix Switcher. 6RU.
1616V5S-XL	16x16 RGBHV (3 Video/2 Sync Channels) Matrix Switcher. Balanced Stereo Audio. 6RU.
1616V5R-XL	16x16 RGBHV (3 Video/2 Sync Channels) Matrix Switcher. Redundant Power Supply. 6RU.
1616V5SR-XL	16x16 RGBHV (3 Video/2 Sync Channels) Matrix Switcher, Balanced Stereo Audio.

Redundant Power Supply. 6RU.

V5V Models - 5 Video Channels

1616V5V-XL	16x16 RGBHV (5 Video Channels) Matrix Switcher. 6RU.
1616V5VS-XL	16x16 RGBHV (5 Video Channels) Matrix Switcher. Balanced Stereo Audio. 6RU.
1616V5VR-XL	16x16 RGBHV (5 Video Channels) Matrix Switcher. Redundant Power Supply. 6RU.
1616V5VSR-XL	16x16 RGBHV (5 Video Channels) Matrix Switcher, Balanced Stereo Audio. Redundant Power Supply. 6RU.

TECHNICAL SPECIFICATIONS

Control Features

Control Panels Supports SCP programmable control panels, XY & single bus control panels

Serial General purpose 9-pin D-sub connectors Switchable RS-232 or RS-422 2 on 32x32 models,

1 on all others 9600, 38400, 115200 baud

Serial Protocols SVS host, simple Kramer, and select others

RS-485 Mini-XLR for optional control panels

Ethernet 10/100 Base-T, full-duplex, RJ-45 connector

Ethernet Protocols ARP, ICMP, Telnet, TCP/IP, HTTP

Web Server For control

General

16x8, 16x16 & 8x16 6U 32x16, 32x32 & 16x32 9U

(Video)

32x16 & 32x32 (Audio) 3U

(Video)

32x16 & 32x32 (Audio) 19" x 17" x 5.25" W, D, H Mounts in a standard 19" rack Depth measurements do not include

front panel hardware or rear cabling

Power 90-240V AC, 50/60Hz (< 150 Watts)

Redundant Power

Supply

On selected models.

Storage Temperature -40° to 150°F

Operating Temperature 30° to 100° ambient

Humidity 10% to 90% non-condensing

Warranty 7 years