

# X-0401

## X-Series 4x1 Video And Audio Router



The X-0401 supporting 3G/HD/SD SDI signals, a four-input routing switcher provides a convenient, low-cost way to route high definition and standard definition serial digital signals. The X-0401 routers are used for 3Gb/s, 1.5Gb/s, 270Mb/s, 360Mb/s, 540Mb/s and DVB-ASI serial digital signals. When the unit is ordered with the Quad 4x1 AES router option the AES output busses can be used in an "audio follow video" mode, or can be broken away from the video bus. This router features the ability for redundancy protection with a bypass relay and optional dual power supplies.

The router electronics are housed in a 1RU rack mount frame and is controlled from the built-in front panel controls. Each model can also be purchased with an optional rack mount remote control panel that replaces the built-in

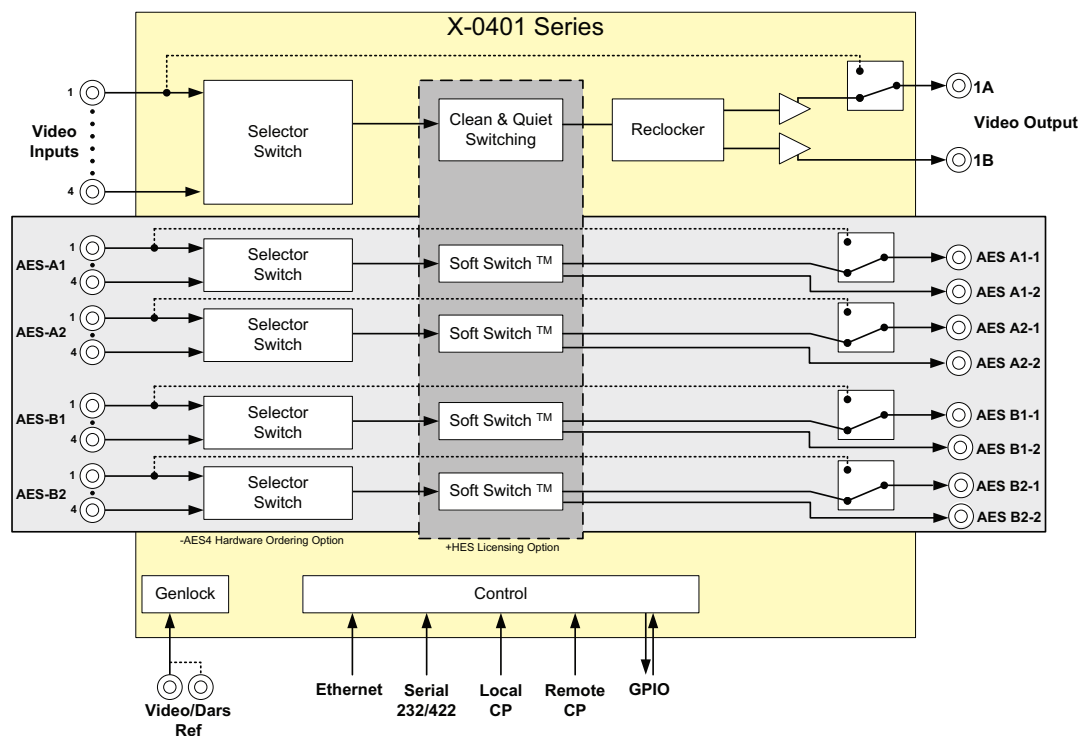
control panel, or can be used as a second control panel. All units can also be controlled by Quartz over Ethernet, contact closures on the GPI control port or through the RS-232 or RS-422 serial remote control port using industry standard switcher protocols.

### Embedded SoftSwitch™ Features (HES)

Routers equipped with Embedded SoftSwitch™ have all the features of the SoftSwitch™ versions as well as the following additional features. The embedded audio on the Video 1 buss uses Evertz patented SoftSwitch™ technology to eliminate audible pops when switches are performed (for SD, HD or 3G video). Embedded SoftSwitch™ is performed on all four audio groups.

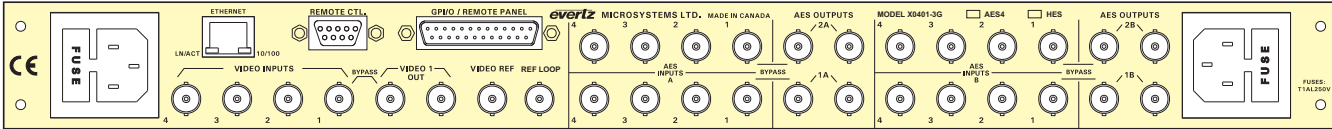
### ► Features & Benefits

- Supports SMPTE ST 424M (3Gb/s), SMPTE ST 292-1 (1.5Gb/s), SMPTE ST 259 (270, 360 or 540Mb/s) and DVB-ASI video signals
- Switch point is fully controllable from the front panel
- Video input presence detection displayable on the front panel
- Front panel or remote control panel version available, second control panel can be ordered for any version
- Programmable source input names available on the front panel
- Bypass verification test using main menu
- Programmable tally output bus
- GVG TEN-XL protocol and Quartz protocol supported
- SoftSwitch™ model provides clean video and popless AES switching
- Video and audio input relay bypass for power failure bypass protection
- Optional dual power configuration
- Remote control via SNMP



The Complete Solution Provider





► Specifications

<p><b>Video Input</b> Standard: SMPTE ST 424-1 (3Gb/s), SMPTE ST 292-1 (1.5Gb/s), SMPTE ST 259 (270Mb/s, 360Mb/s, 540Mb/s) and DVB-ASI Number of Inputs: 4 Connector: BNC per IEC 61169-8 Annex A Equalization: Automatic up to 165m@3G, 215m@HD, 275m@SD and with, bypass output 110m@3G, 175@HD, 200m@SD Input Timing: +HES option only Input Range: Measured with respect to the Genlock reference; ±1/2 line when Coarse phase = 1, Fine phase = 0</p> <p><b>Video Output</b> Standard: Same as input Number of Outputs: 2 per buss, 1 buss; Input 1 bypass protected Connector: BNC per IEC 61169-8 Annex A Signal Level: 800mV nominal DC Offset: 0V ±0.5V Output Timing: +HES option only Output Phase: Measured with respect to the Genlock reference; adjustable line buffer is used for clean and quiet switching</p>	<p><b>AES Audio Input (AES4 Versions)</b> Standard: SMPTE ST 276 single-ended AES Number of Inputs: 4 per bus, 4 busses Connector: BNC per IEC 61169-8 Annex A Signal Level: 1V p-p ±10%</p> <p><b>AES Audio Output (AES4 Versions)</b> Standard: SMPTE ST 276 single-ended AES Number of Outputs: 2 per buss, 4 busses; Input 1 bypass protected with +HBP option Connector: BNC per IEC 61169-8 Annex A Signal Level: 1V p-p Reference: From Video Reference; on SoftSwitch™ model, menu selectable to Video or DARS</p> <p><b>Video Reference</b> Type: Menu selectable; NTSC or PAL Colour Black 1V p-p Composite Bi-level Sync (525i/59.94 or 625i/50) 300mV, HD Tri-level Sync Connectors: 2x BNC per IEC 61169-8 Annex A Termination: High impedance loop through</p> <p><b>GPI Control Port</b> Number of Inputs: 8 opto-isolated, programmable functions</p>	<p>Number of Outputs: 4 sets of relay contacts, normally closed, programmable functions Relay Max Current: 1A at 30V DC</p> <p><b>Remote Control Panel Port</b> Standard: RS-422, 9600 baud rate Connector: 6 pins on GPIO 25-pin female "D" Remote Control Panel Protocol:</p> <p><b>Serial Remote Control</b> Standard: RS-232 or RS-422 Connector: 9-pin female "D" Protocol: GVG Ten-XL Protocol, master or slave</p> <p><b>Ethernet</b> Connector: RJ-45 Protocol: Quartz protocol, SNMP</p> <p><b>Electrical</b> Power: Auto ranging 100-240V AC, 50/60Hz, 40W Fuse: 250V, 1A time delay</p> <p><b>Physical</b> Dimensions: 19" W x 1.75" H x 7.75" D (483mm W x 45mm H x 196mm D) Weight: 8lbs. (3.5kg)</p>
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► Ordering Information

X-0401-HX	4x1 HD/SD SDI video bypass protected router
X-0401-HX-HES	4x1 HD/SD SDI video bypass protected router with clean/SoftSwitch™ capability
X-0401-HX-AES4	4x1 HD/SD SDI video bypass protected router with 4 levels of AES
X-0401-HX-AES4-HES	4x1 3G/HD/SD SDI video bypass protected router with 4 levels of AES and clean/SoftSwitch™ capability
X-0401-3G	4x1 3G/HD/SD SDI video bypass protected router
X-0401-3G-HES	4x1 3G/HD/SD SDI video bypass protected router with clean/SoftSwitch™ capability
X-0401-3G-AES4	4x1 3G/HD/SD SDI video bypass protected router with 4 levels of AES
X-0401-3G-AES4-HES	4x1 3G/HD/SD SDI video bypass protected router with 4 levels of AES and clean/SoftSwitch™ capability

<b>Ordering Options:</b>	
+2PS	Redundant power supply
+BCP	Blank front panel (removes local front control panel)
<b>Accessories:</b>	
X-0401H-PANEL	Additional Remote Control Panel (works in addition to or in replacement of the local front control panel)

