

MSV0502

5 X 2 VGA AND STEREO AUDIO MATRIX SWITCHER

FEATURES

- 450 MHz Video Bandwidth
- 15-Pin HD Connectors for Video Inputs and Outputs
- Compatible with RGBHV / RGBS / RGsB / Component Video Signals
- Ergonomic Front Panel Design Featuring Soft-Touch Buttons and Integrated Labeling System
- Robust RS-232 / RS-422 / RS-485 Serial Control Capability
- IR Remote Control Capability
- INLINE Control Software with IP Server Software Included
- Audio Inputs and Outputs Compatible with Balanced or Unbalanced Stereo Audio Signals
- Master Volume Control and Mute for Each Output
- Individual Audio Input Trim Levels
- 32 Configuration Memories
- Auxiliary Power Outputs (Optional) —
Four 12VDC Power Outputs Provide up to 4 Amps Total Power to Power Interfaces, Line Drivers or Other Equipment
- Installs in 1U Rack Space Using Included Rack-Ears



The MSV0502 is a compact 5-Input, 2-Output matrix switcher for VGA and stereo audio signals. Since the MSV0502 connects directly to preterminated VGA cables, the unit offers a quick, simple system solution for a variety of presentation system applications including permanent installations as well as rental / staging systems.

Superb Video Performance

Offering video bandwidth in excess of 450 MHz, the MSV0502 matrix provides ample performance for high resolution video signals at virtually any resolution and refresh rate.

15-Pin HD Input / Output Connectors

Designed with 15-Pin HD female connectors for video inputs and outputs, the MSV0502 provides quick connection to standard VGA extension cables. Available in a variety of lengths from 6' to 250', the IN8000 Series High Resolution VGA cables are recommended for best results. For all input cable runs of 25 feet or more, the DAV101 and DAV101CM VGA line drivers are suggested to provide cable equalization and sync buffering.

Advanced Audio Switching Capability

The MSV0502-2, MSV0502-3 and MSV0502-4 models offer very high quality signal routing for stereo audio signals. These matrices feature 5-pin captive screw connectors for audio inputs / outputs and are compatible with balanced or unbalanced line level audio signals. By wiring the inputs and outputs appropriately, unbalanced input signals can be output as balanced audio and vice versa. Unique gain trim levels can be adjusted and stored for each input, helping standardize signal levels among various types of audio sources. Each output offers variable audio output level and mute capability that can be controlled locally using the front panel Volume and Mute buttons, or remotely via serial commands or using the optional CTL120-2 IR remote control. Left / Right Balance can also be adjusted as required using serial commands.

Audio-Follow-Video Switching

The default operation mode for the MSV0502 is audio-follow-video switching, where audio and video signals switch together. For special applications requiring audio breakaway switching, users can switch the video and audio signals separately through the serial control port using the powerful control software (included) or a third-party control system.

Configuration Memories

Featuring 32 Configuration Memories, the MSV0502 can store frequently used configurations and then quickly recall them using just two button presses. 7 memory settings are available from the front panel and all 32 configuration memories are available via serial commands. The memories store all input / output patches as well as the current audio level for each output. The configuration memories make it easy to set up complex switching arrangements ahead of time and then recall them quickly and reliably at the appropriate times during a show or presentation.

Ergonomic Front Panel Design

The MSV0502 features large soft-touch rubber buttons for input / output selection with ample room to accommodate input and output labels.

Integrated Labeling System

The matrix faceplate includes attachment posts to hold optional engravable nameplates to clearly identify the input sources and output destinations. INLINE offers custom-engraving services for an additional fee.

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Blank Button

The Blank button disconnects the video and audio input sources from the output. Blank only affects the currently selected output (the other output remains unchanged).

Auxiliary Power Ports

The MSV0502-3 model includes four 12VDC power ports that provide up to 4 amps total current. The auxiliary power ports offer an elegant way to provide power for VGA line drivers, audio buffer modules, installation interfaces or other A/V equipment that use external 9VDC or 12VDC power transformers.

Robust Remote Control Capability

All matrix functions can be controlled remotely using serial commands. The control port is compatible with RS-232, RS-422 and RS-485 protocols and offers fast communication speeds with advanced control signal buffering for enhanced reliability. The MSV0502 uses the new INLINE serial control protocol, which provides fast, easy programming and powerful control options like individual unit addresses.

Powerful Control Software

The INLINE Control Software included with the MSV0502 offers an intuitive graphical interface for effortless control of all matrix switcher functions using a PC. IP Server Software is also included, providing comprehensive control of the MSV0502 over a LAN, WAN or the Internet. For IP control applications, the INLINE Control Software is installed on a local computer (Client) while the IP Server Software is installed on a remote computer (Server) located near the MSV0502. A serial control cable is then connected between the server computer's serial port and the MSV0502 serial port. For more information on the Inline Control Software, see page 112.

IR Remote Control

Input / Output selection, volume and mute can be controlled remotely via infrared commands using the optional CTL120-2 infrared remote control or a third-party control system with infrared emitters.



CTL120-2 REMOTE CONTROL

SPECIFICATIONS

VIDEO	SYNC	AUDIO	CONTROL	GENERAL
<p>Gain: Unity (1.0 V/V)</p> <p>Bandwidth: 450 MHz @ -3dB with .7V p-p input signal, fully loaded</p> <p>0 - 10 MHz: < +0.1 dB to -0.1 dB</p> <p>0 - 130 MHz: < +4.5 db to -0.1dB</p> <p>VIDEO INPUT</p> <p>Number / Connectors: (5) 15-Pin HD Female</p> <p>Signal Type / Format: Analog Video – RGBHV / RGBS / RGSB / R-Y B-Y Y</p> <p>Nominal Input Level: 0.7V (black level to peak white level)</p> <p>Maximum Input Level: 1.8 Vp (including any DC Offset)</p> <p>Impedance: 75Ω</p> <p>VIDEO OUTPUT</p> <p>Number / Connectors / Signal Type: (2) 15-Pin HD Female for RGBHV / RGBS / RGSB / R-y B-Y Y</p>	<p>Input / Output Sync Formats: RGBHV / RGBS / RGSB / RSGsBs</p> <p>Input Level: VIH: +2.0V / VIH / +5.5V VIL: -0.5V / VIL / +0.8V</p> <p>Output Level (Unterminated): VIH: +4.0V / VIH / +5.5V VIL: 0.0V / VIL / +0.5V</p> <p>Input Impedance: 510Ω</p> <p>Output Impedance: 75Ω</p> <p>Polarity: Positive or negative (same as input polarities)</p>	<p>Frequency Response: 10 Hz to 175 KHz - 3dB 20 Hz to 20 KHz ± 0.05dB</p> <p>THD+Noise: .02% (1.0Vp-p @ 1 KHz)</p> <p>S/N Ratio: 87.0 dB</p> <p>Output Gain Adjustment: +9.5 dB to -54.5 dB</p> <p>Crosstalk: >-85 dB (1.0Vp-p @ 1 KHz)</p> <p>Stereo Separation: >-85 dB (1.0Vp-p @ 1 KHz)</p> <p>AUDIO INPUT</p> <p>Number / Connectors / Signal Type: (5) 5-Pin Captive Screw Terminal for Balanced / Unbalanced Stereo Audio</p> <p>Impedance: 20 KΩ</p> <p>Maximum Input Level: +16 dBu</p> <p>Input Gain Adjustment: 0dB to -55dB</p> <p>AUDIO OUTPUT</p> <p>Number / Connectors / Signal Type: (2) 5-Pin Captive Screw Terminal for Balanced / Unbalanced Stereo Audio</p> <p>Impedance: 50Ω Unbalanced / 100Ω Balanced</p> <p>Maximum Output Level: +22dBu (High Z) / +16dBm (600 Ω)</p>	<p>Connector: 5-Pin Captive Screw Terminal</p> <p>Serial Protocol: RS-232 / RS-422 / RS-485</p> <p>Baud Rate: 1,200 to 38,400 bps</p>	<p>Power Supply: 90-260VAC; 47-63 Hz</p> <p>Shipping Weight: 9.3 lbs. / 4.3 kg</p> <p>Product Weight: 5.6 lbs. / 2.6 kg</p> <p>Dimensions: 1.78" x 17" x 11.35" / 4.5cm x 43.2cm x 28.8cm</p> <p>MTBF: 35,000 Hours</p> <p>Storage Temperature / Humidity: -40° to 158° (-40° to 70° C) / 10% to 90% non-condensing</p> <p>Ambient Operating Temperature / Humidity: 32° to 113° (0° to 45° C) / 10% to 90% non-condensing</p> <p>Regulatory Approvals: UL1950, CAN/CSA-22.2 No.950, Third Edition CE: EN55022 (1987), EN50081-1 (1991), EN50082-1 (1992 and 1994), EN60950-92</p> <p>INCLUDED ACCESSORIES</p> <p>IN9123B Rack Mounting Ears IN9339 INLINE Adjustment Tool ICS100 INLINE Control Software</p>

ORDER INFORMATION

- MSV0502-1** 5x2 VGA Matrix Switcher: VGA (15-Pin HD Female) Only
- MSV0502-2** 5x2 VGA Matrix Switcher: VGA (15-Pin HD Female) and Balanced / Unbalanced Stereo Audio
- MSV0502-3** 5x2 VGA Matrix Switcher: VGA (15-Pin HD Female) and Balanced / Unbalanced Stereo Audio with (4) Aux DC Power Outputs

- MSV0502-4** 5x2 Matrix Switcher: Balanced / Unbalanced Stereo Audio Only
 - CTL120-2** Infrared Remote Control
- Switcher & Matrix Accessories**

