



The **Maxview Matrix** line of high-bandwidth video-audio matrices offers a variety of matrix options, as well as unique features not available from other manufacturers. With nine models available ranging from 4x4 to 16x16, a Maxview switcher is available to meet your specific needs.

The Maxview Matrix is capable of switching RGB, RGsB, RGBS, RGBHV, Component, Y/C, and Composite video signals. Stereo audio is switched with each video channel. Audio signals may be either balanced or unbalanced.

Each channel's audio signal path contains the highest quality, studio grade components, including a built-in compressor / noise gate for automatic leveling and noise control applications. This automatic level control feature allows for constant audio output levels, regardless of what signal source is connected to the switcher. Compression levels and noise gate thresholds are user adjustable for each channel. Compression can be adjusted up to a 15:1 ratio for severely weak input signals.

Video signals are switched through state-of-the-art integrated circuits designed to minimize transmission effects found in many large scale video switching systems. Maxview matrices have a video bandwidth exceeding 225 MHz (-3dB). This excellent response allows switching of video signals with resolutions over 1600x1280 (72Hz). All video and audio signals are buffered to prevent crosstalk between switching channels. Each video output buffer contains a high-power driver capable of driving 75 Ohm back-terminated loads with no loss or degradation. High-current audio output buffers drive 600 Ohm lines directly.

Maxview matrices come with a unique switching feature that provides a smooth transition when switching from one input to the next. With this "smooth-switch" capability, sync signals are switched before RGB signals, giving the destination display device time to sync to its new signal source before displaying the image. This switching delay time is user adjustable through special key presses, or through serial commands.

Switching is accommodated via user-friendly front panel switches, or through RS-232/RS-422 serial commands. The front panel switches are large and allow placement of integrated labels for your specific environment. Using one button for each input and output channel avoids the need to memorize special keypad codes. Front panel LED indicators show current links for each channel, as well as selection of video-only or video+audio switching and other matrix options.

All Maxview Matrices come in rugged steel/aluminum chassis and include universal 100-240 Volt power supplies. Industry standard BNC and Phoenix type connectors are used for video and audio signals respectively.

Quality and flexibility make the Maxview Matrix series ideal for the most demanding and critical switching applications.

Features

- Greater Than 225 MHz (-3dB) Bandwidth for High-resolution RGB Video Routing.
- Matrix Sizes up to 16x16 for Flexibility.
- Stereo Audio Inputs and Outputs (Balanced or Unbalanced) on Each Channel.
- Audio Compressor / Noise Gate on Each Channel for Automatic Level Control and Noise Elimination.
- Audio-With-Video or Audio Breakaway Switching for Routing Flexibility.
- "Smooth-Switch" Video Switching for Pleasant Transitions.
- User-friendly Control from Front Panel Switches or Serial Commands.
- Link Presets for Simple Re-configuration.

Detailed Specifications

Video Inputs

Connectors: BNC
 Signal Types: Analog RGB / TTL Sync
 RGB, RGBs, RGBHV, RGsB, RsGsBs,
 Component, S-Video, Composite, HDTV
 Bandwidth: 225 MHz (-3dB) channels loaded
 0 to 25 MHz 0.1dB gain flatness
 Levels: $\pm 0.5V$ to $\pm 3.0V$ peak-to-peak
 Impedance: 75 Ohms
 Crosstalk: -65dB @ 5 MHz
 Return Loss: -30dB @ 5 MHz:
 Max DC Offset: 1.5V
 Switch Speed: 250nS maximum

Video Outputs

Connectors: BNC
 Signal Types: Follows Inputs
 Levels: $\pm 0.5V$ to $\pm 3.0V$ peak-to-peak
 Impedance: 75 Ohms
 Return Loss: -30dB @ 5 MHz:
 Max DC Offset: $\pm 5mV$

Control

Front Panel Tactile Switches
 RS-232/RS-422 - 9 Pin Serial Connector
 Serial Protocol: 9600 Baud, 8 bit

General Items

Standard 19" EIAA Rack Enclosure, 3U to 6U Tall
 Universal 100VAC to 240VAC 50/60 Hz Power Supply
 Power Consumption: 33 Watts
 Power Supply Approvals: UL, CE
 Operating Temperature: 0 to +50 Degrees Celcius
 Operating Humidity: Under 90% - non-condensing
 Shipping weight: 7.9 kg
 MTBF: 30,000 hours

Audio Inputs

Connectors: Phoenix Type 5 Pin (L & R +, -, GND)
 Signal Types: Stereo Balanced or Unbalanced
 Line Level
 Freq Response: 20 Hz to 30 kHz $\pm 0.05dB$
 S/N Ratio: >90dB
 THD + Noise: 0.001% over full frequency spectrum
 with no compression
 Impedance: 10K Ohms
 CMRR: 100dB @ 60 Hz
 Crosstalk: 80dB Channel to Channel
 Max Input Level: +22dBu
 Compression: 1:1 to 15:1, user Adjustable range
 Noise Gate: User adjustable threshold

Audio Outputs

Connectors: Phoenix Type 5 Pin (L & R +, -, GND)
 Signal Types: Stereo Balanced or Unbalanced
 Line Level
 Impedance: 50 Ohms Unbal. / 100 Ohms Bal.
 Gain: +4dB
 Drive: Up to +25dBu at specified THD

Configurations

MATRIX 4x4: 4 sources to any of 4 outputs
 MATRIX 4x8: 4 sources to any of 8 outputs
 MATRIX 4x16: 4 sources to any of 16 outputs
 MATRIX 8x4: 8 sources to any of 4 outputs
 MATRIX 8x8: 8 sources to any of 8 outputs
 MATRIX 8x16: 8 sources to any of 16 outputs
 MATRIX 16x4: 16 sources to any of 4 outputs
 MATRIX 16x8: 16 sources to any of 8 outputs
 MATRIX 16x16: 16 sources to any of 16 outputs

Application Diagram

The Maxview line of high bandwidth video matrices offer a variety of matrix options. Each matrix switcher allows a variable number of high resolution monitors and projectors to be connected to one of many video sources.

These matrices switch Red, Green, Blue, HSYNC, VSYNC and Stereo Audio.

All units are rack mountable and come standard with easy-to-use front panel switching controls.

