



Highlight Features

- 4k@60Hz with RGB 4:4:4 colorspace, 18 Gbit/sec bandwidth
- HDMI 2.0, HDMI 1.x and DVI 1.0 compliant
- HDCP 2.2 and HDCP 1.4 compliant with cross conversion capabilities
- Fully non-blocking switching architecture with zero frame delay
- Splitting of 4K UHD at 60Hz to two output ports with left half and right half of the original video
- 4:4:4 to 4:2:0 downconversion
- Built-in website
- RS-232, Ethernet and USB control options
- Pixel Accurate Reclocking on each input
- HDR and Dolby Vision support*
- Advanced EDID Management
- Compact and silent design
- LCD and push buttons for front panel control
- Front to back cooling airflow

*Supported HDR formats are limited by the maximum bitrate of 18 Gbps in the HDMI 2.0 standard

The MX2-8x8-HDMI20-Audio is the first Lightware HDMI2.0 standalone matrix switcher that supports uncompromised 4K UHD resolution at 60Hz 4:4:4. Thanks to its compact size and silent design, it is particularly suitable for offices and meeting rooms, for 4K live events, and for futureproof operation centers. It is also a perfect choice for home theater enthusiasts who demand the highest quality along with HDMI2.0 and 4K@60Hz video signals. This standalone product has 8 HDMI2.0 inputs and 8 HDMI2.0 outputs transmitting up to 4K at 60Hz in 4:4:4 format, while supporting 3D, Dolby TrueHD and DTS-HD Master Audio. Each input port has audio connectors for embedding analog audio into the HDMI stream. Likewise, the audio connectors next to the output ports can provide de-embedded audio* for amplifiers and audio systems.

* Please note that only stereo LPCM can be de-embedded from the HDMI signal.

Specifications

Routing:	8 input 8 output, non-blocking architecture
Speed:	18 Gbps per port
Resolution:	Up to 4096x2160@60Hz at RGB 4:4:4 (up to 600MHz pixel clock)
Dimensions:	1RU height, 9"(18cm) depth
Mounting:	Rack mountable, removable rack ears
Power consumption:	Max 75W
Dimensions	442 W x 177,5 D x 43,7 H mm
Dimensions without rack mounting ears:	482 W x 177,5 D x 43,7 H mm
Weight:	3250 g

Connectors

Power:	IEC standard, 110/220V
Video inputs:	19-pole HDMI 2.0
Video outputs:	19-pole HDMI 2.0
Audio inputs / outputs:	Stereo balanced, 5-pole Phoenix
Serial control:	3-pole Phoenix
Ethernet:	RJ45
USB:	mini USB

Specifications subject to change without notice



Audio Embedding and De-embedding

Each input port has audio connectors for embedding analog audio into the HDMI stream. Likewise, the audio connectors next to the output ports can provide de-embedded audio for amplifiers and audio systems.



Advanced EDID Management

This proprietary Lightware technology can store more than 100 user EDID files and has a large set of factory preloaded EDID versions. HDMI EDIDs with various audio channels and codecs are also supported, including the latest 4K projector requirements. With the supplied Lightware Device Controller application including Advanced EDID Editor users can create their own EDID file or modify existing EDID data read from any projector or monitor. It supports .bin, .dat and .edid file formats, allowing system engineers to generate EDID files for 3rd party AV products.



Pixel Accurate Reclocking

This proprietary Lightware technology provides exceptional signal regeneration capability: the signals are cleared from noise, skew and jitter caused by long cable runs. Automatic skew compensation eliminates intra-pair and inter-pair skew caused by imperfect wire twists and lengths HDMI cables. Pixel Accurate Reclocking decodes the pixel information from the video content and drives them over the dual PLL circuitry. The regenerated pixel information is re-encoded as an HDMI signal ensuring that the output is stable with sharp digital transitions and accurate timings.



Built-in Power Adapter

The device powers directly from mains via standard C14 type inlet.



HDMI 2.0 to 2x HDMI 1.4 Splitting

The device supports vertical splitting of an HDMI 2.0 4K@60Hz 4:4:4 input signal to left and right halves allowing for the transmission of a 18 Gbps HDMI 2.0 signal over two HDMI 1.4 compliant links. The two halves can then be recombined at the signal destination.

Small and Silent

Compact size and silent operation make the unit an excellent choice for smart office and similar applications.

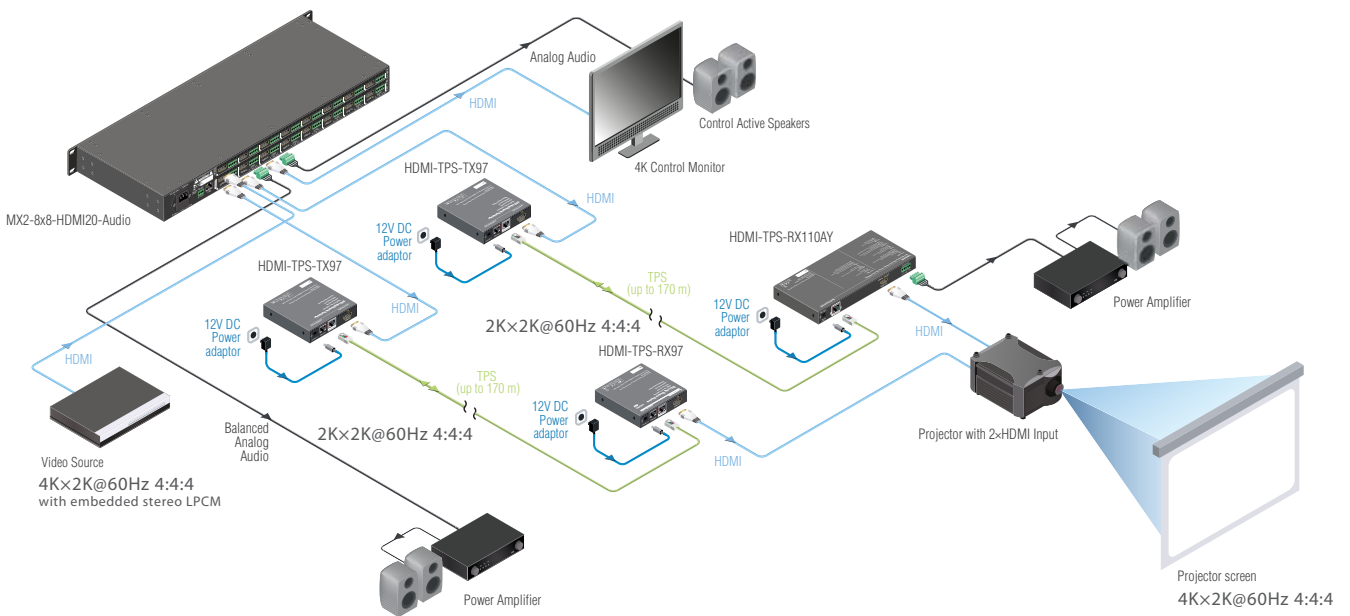
Graphic Display and Rotary Jog Dial Control Knob



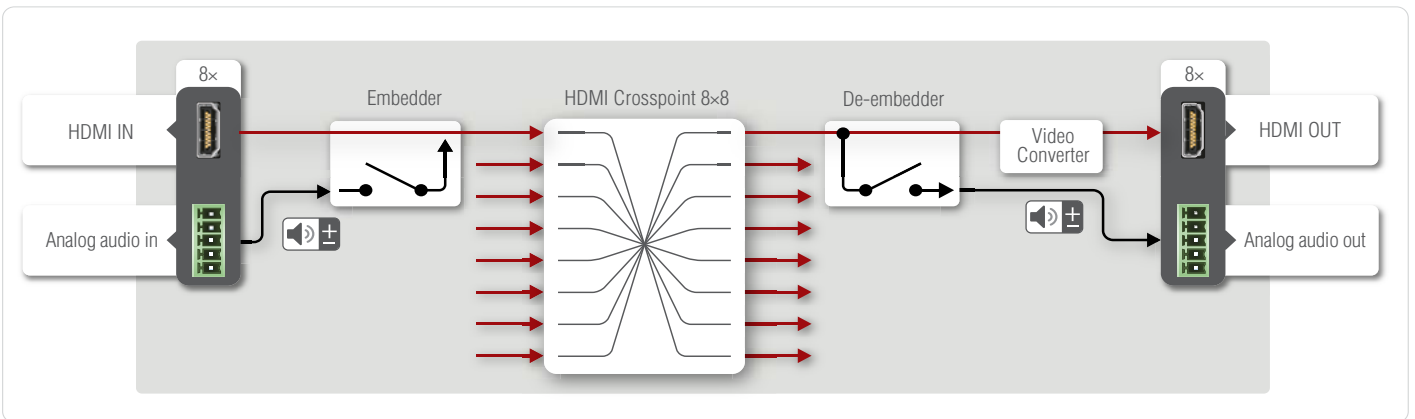
Easy setting and menu navigation are assured by the color graphic display and the comfortable jog dial control: keep dial and click while getting accurate feedback, well visible in various lighting conditions.



Standalone Diagram



Port Diagram





Unique Front-to-Back Cooling Airflow Design

MX2-8x8-HDMI20-Audio includes a groundbreaking new cooling design with front-to-back airflow. Inside the chassis the airflow travels along guiding panes assuring that the most warm areas receive ample amount of cooling air volume. The smoothness of the airflow cooling greatly enhances its efficiency, which was achieved by optimizing the geometry of the air guiding flaps and redesigning construction parts within the housing.

Frontside Air Inlets

