LIGHTWARE

8 x 8 HDMI 2.0 Full 4K Matrix Switcher



The MX2-8x8-HDMI20-Audio-L is an HDMI 2.0 compatible, 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 HDMI 2.0 and 4K@60Hz video signals. This standalone product has 8 HDMI 2.0 inputs and 8 HDMI 2.0 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 an audio connector for embedding analog audio into the HDMI stream. The audio connectors next to the output ports can provide deembedded audio for amplifiers and audio systems; the output volume is adjustable.

The product has recently undergone external redesign resulting in a 100 mm longer chassis depth. There are also some changes in features and services since the original release of the device: input cable compensation is improved, allowing longer cable runs, while the power source inside the matrix is also more powerful. There is more robust reclocking applied to improve weaker 4K input signals.

The MX2-8x8-HDMI20-Audio-L matrix switcher supports both HDR and Dolby Vision in the HDMI signal at 10 or 12 bit speeds respectively, within its frame bandwidth of 18 Gbps.

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

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

Highlight Features

- 4K @ 60Hz with RGB 4:4:4 colorspace, 18 Gbps data rate
- HDMI 2.0, HDMI 1.x and DVI 1.0 compliant
- HDCP 2.2 and HDCP 1.4 compliant
- 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 subsampling**
- Built-in website
- RS-232, Ethernet and USB control options
- 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
- Volume control for all audio output ports
 * Supported HDR formats are limited by the maximum bitrate of 18 Gbps in the HDMI 2.0 standard
 - ** Specification subject to change

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)
HDR Modes:	HDR 10, HDR 12 and Dolby Vision
Dimensions:	1RU height, 9"(18cm) depth
Mounting:	Rack mountable, removable rack ears
Power consumption:	Max 75W
Dimensions	442 W x 277,5 D x 43,7 H mm
Dimensions without rack mounting ears:	482 W x 277,5 D x 43,7 H mm
Weight:	3250 g

Specifications are 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.



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.



Built-in Power Adapter

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



HDR Support

Lightware's MX2-8x8-HDMI20-Audio-L matrix switcher supports both HDR10 and Dolby Vision in the HDMI signal at 10 or 12 bit speeds respectively, within its frame Chas maximum

bandwidth of 18 Gbps maximum.

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

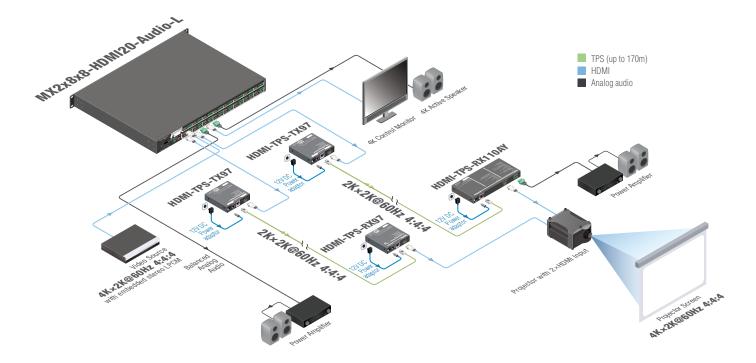
Easy setting and menu navigation are assured by the color graphic display and the comfortable jog dial control: keep dial and click while getting accurate feedback, well visible in various lighting conditions.



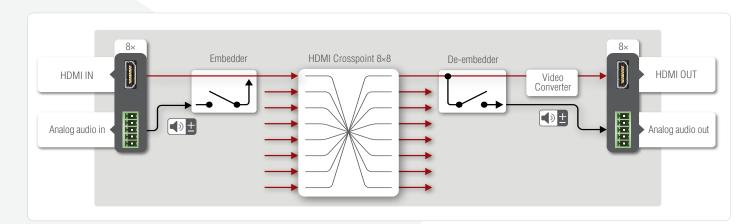
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Standalone Diagram



Port Diagram









Unique Front-to-Back Cooling Airflow Design

MX2-8x8-HDMI20-Audio-L 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 smoothnes 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.

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