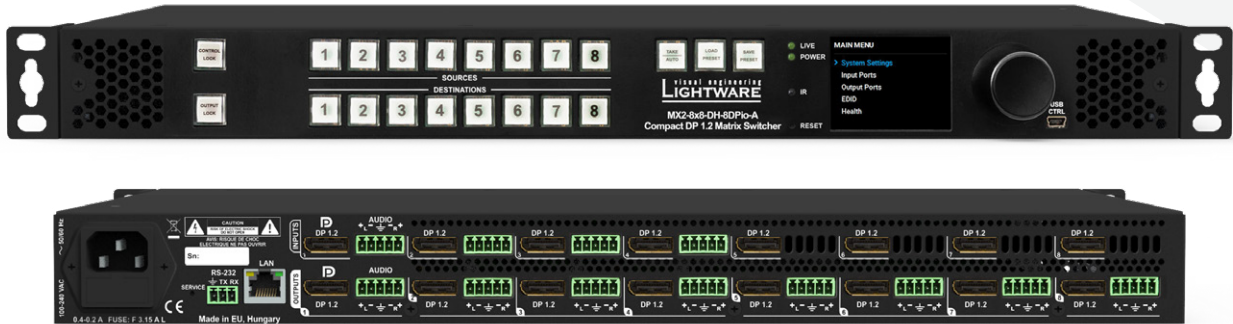# MX2-8x8-DH-8DPio-A

Full 4K DisplayPort 1.2 Matrix Switcher

MX2-8x8-DH-8DPio-A is a member of the Lightware MX2 standalone matrix switcher series, supporting uncompromised 4K UHD resolution at 60Hz with RGB 4:4:4 colorspace and with down-conversion capabilities to 4:2:2. The DisplayPort inputs on the MX2 Dpi series routers allow connecting DisplayPort 1.2 video sources directly, without the need of adapters or dongles.

This device is fully HDMI 2.0 compatible with DisplayPort input signals transformed to HDMI for signal management. Input signals that do not fit in the HDMI 2.0 bandwidth of 18GHz can be converted to 4:2:2 while maintaining bit depth, thus allowing for HDR transmission. This switcher is particularly suitable for fix-install applications and future-proof operation centers, for installations where DisplayPort 1.2 input and output ports are required.

MX2-8x8-DH-8DPio-A supports 3D, Dolby TrueHD and DTS-HD Master Audio and also HDR10, HDR10+ and Dolby Vision. Proprietary Lightware technologies like Pixel Accurate Reclocking and Advanced EDID Management are included, and the device can be controlled via the built-in website.

MX2-8x8-DH-8DPio-A allow embedding audio to, and de-embedding audio from the signal stream at dedicated analog audio I/O ports, with 5-pole Phoenix type connectors

Crosspoint switching functions are available via direct keys on the front panel.

Features

- DisplayPort 1.2 compliant
- DisplayPort input signals are converted to HDMI signals via the built-in chipset on each port
- Maximum resolution on DP input is 4K@60Hz with 4:4:4 sampling pattern and 10 bit per component
- Fully non-blocking switching architecture with zero frame delay
- 18 Gbps bandwidth video crosspoint
- Supports conversion from 4K/UHD at 60Hz 4:4:4 10bit to 4K/UHD at 60 Hz YCbCr 4:2:2 10 bit
- HDCP 2.2 and HDCP 1.4 compliant with cross conversion capabilities
- Pixel Accurate Reclocking on each input
- Advanced EDID Management
- Built-in website, RS-232, Ethernet and USB control options
- LCD, push buttons and rotary switch for front panel control
- Front to back cooling airflow
- HDR10, HDR10+ and Dolby Vision support
- Analog audio embedding from analog audio inputs and de-embedding to audio outputs

Specification

Speed	18 Gbps per port
Resolution	Up to 4096x2160@60Hz at RGB or YCbCr 4:4:4 (up to 600MHz pixel clock)
Dimensions	1RU
Mounting	Rack mountable, removable rack ears

Connectors

Power	IEC standard, 110/220V
Video inputs	8 x DisplayPort 1.2
Video outputs	8 x DisplayPort 1.2
Audio inputs	4 x Stereo, balanced, 5-pole Phoenix
Audio outputs	8 x Stereo, balanced, 5-pole Phoenix
Serial control	Stereo balanced, 3-pole Phoenix
Ethernet	RJ45
USB	Mini USB B

MX2-8x8-DH-8DPio-A

Please see the below table for the comparison of the MX2 DH matrix switcher series:

Product	Inputs			Outputs			Front panel I/O buttons	Front panel LCD menu	Redundant power supply
	HDMI	DP	Audio	HDMI	DP	Audio			
MX2-8x8-DH-8DPio-A	✖	8x	4xD	✖	8x	8xD	✔	✔	✖
MX2-24x24-DH-24DPio-A-R	✖	24x	8xD	✖	24x	24xD	✔	✔	✔ (PowerCON)
MX2-48x48-DH-48DPio-A-R	✖	48x	16xD	✖	48x	48xD	✔	✔	✔ (PowerCON)
D: next to DP									