18 Gbps Matrix Switchers

with **HDMI**, **DisplayPort** or **Mixed I/O** Configurations

The MX2 matrix switcher series includes more than 20 models, including variants witht **mixed HDMI** and **DisplayPort I/O ports**. The MX2 series is a **fully HDMI 2.0 compatible matrix** router line, with a maximum resolution of **4K UHD @ 60 Hz in 4:4:4** format, while also supporting **HDR, Dolby Vision, 3D, Dolby TrueHD and DTS-HD Master Audio**. The devices are **HDCP 2.2** and **HDCP 1.4** compliant with cross conversion capabilities, while device control can be achieved **via Ethernet**, **RS-232** and **USB** ports. The rich feature set of the routers also include **proprietary Lightware services and technologies**.

HDMI 2.0 ǀ **DisplayPort 1.2**

4K UHD @ **60** Hz in **4:4:4**

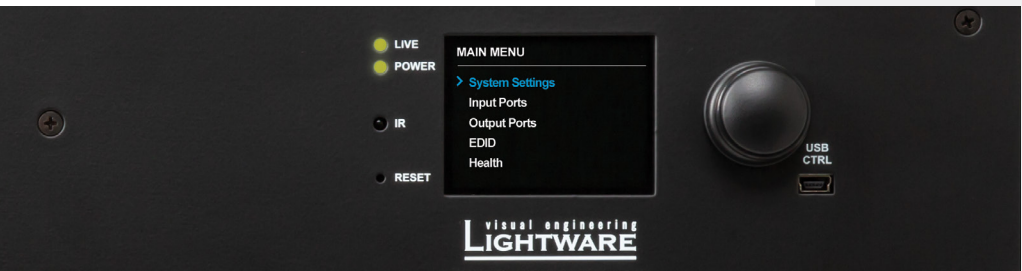**HDR** ǀ **Dolby Vision** ǀ **3D**

HDCP 2.2 ǀ **HDCP 1.4**

Ethernet ǀ **RS-232** ǀ **USB**

MX2 Variants
with **Various Add-ons** and **Enhancements**

MX2 matrix switchers are available in a great selection of **crosspoint sizes**, with or without analog **audio add-ons**, and most are also available with **redundant power sources**, paired with **rugged power connectors and reinforced control ports**. All models feature a **front panel, color LCD screen** with great visibility, and a **jog-dial, multi-function button**, enabling the users to manage every device feature and service directly.
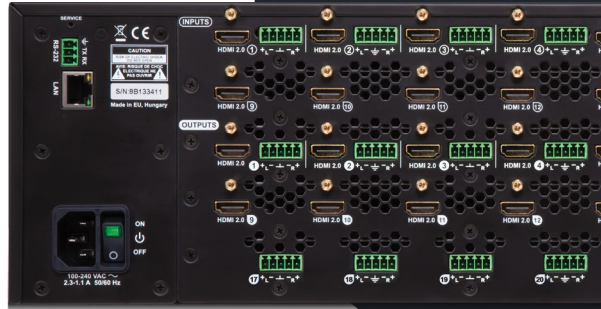

Models with
Direct Crosspoint Switch Buttons

The base models come with a full set of **front panel crosspoint buttons**, for easy direct switching in a dynamically changing environment.

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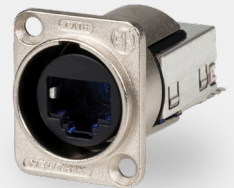
Models with Analog Audio I/O Ports

The models with the analog **audio input and output ports have 5-pole Phoenix connectors for audio embedding and de-embedding**. Although some of the models with the analog audio add-on lack the front panel direct crosspoint switch keys, all crosspoint changing functions are still available by using the jog-dial button next to the LCD display, the open API or the webbased control software.

R-Type Variants
Redundant – Robust – Rental

Neutrik Ethercon
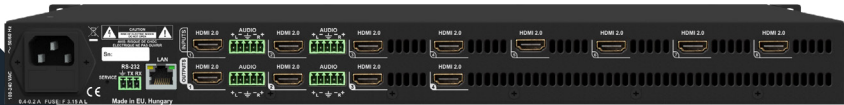

Neutrik Powercon True1

D-Sub RS-232

Compact MX2 Variants

The MX2-8x8-HDMI20-Audio-L was a breakthrough pioneer product being the **world's first uncompromised HDMI 2.0 compatible matrix router** at the time of its release.

By popular market demand, further product variants have been developed to better serve various target application requirements, in 8x8, 8x4 and 4x4 crosspoint sizes. The features of these compact, one RU high models also include direct crosspoint switch buttons on their front panel and audio embedding and de-embedding.

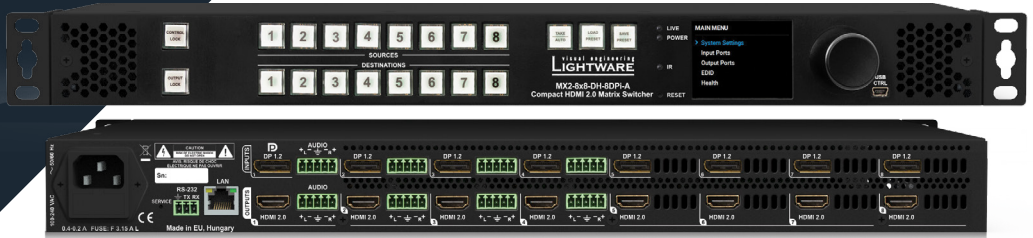MX2-4x4-HDMI20-CA

MX2-8x4-HDMI20-CA

MX2-8x8-HDMI20-CA

MX2-8x8-HDMI20-L

MX2-8x8-HDMI20-Audio-L
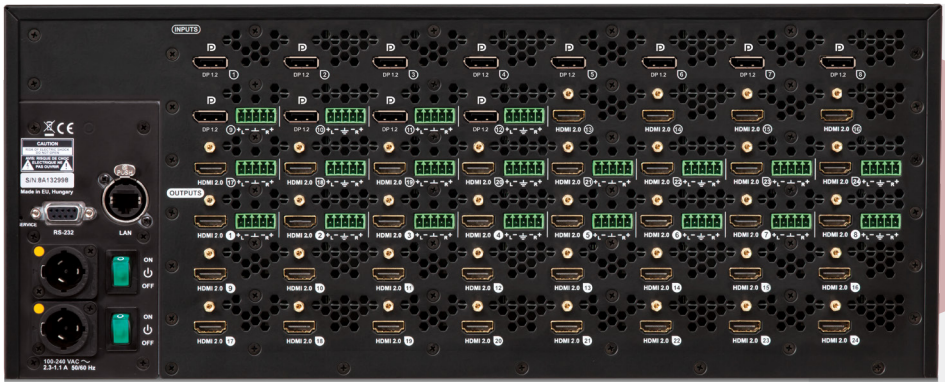
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DH Series Routers

with **DisplayPort** and **Mixed HDMI** & **DisplayPort** I/O Ports

MX2-8x8-DH-8DPi-A

Mixed I/O port Lightware MX2 standalone matrix switcher series support uncompromised 4K UHD resolution at 60Hz with RGB 4:4:4 colorspace and allow the connection of DisplayPort 1.2 video sources directly, without the need of adapters or dongles. These signals are transformed to HDMI for signal management, and which do not fit in the HDMI 2.0 bandwidth of 18 GHz are converted to 4:2:2.
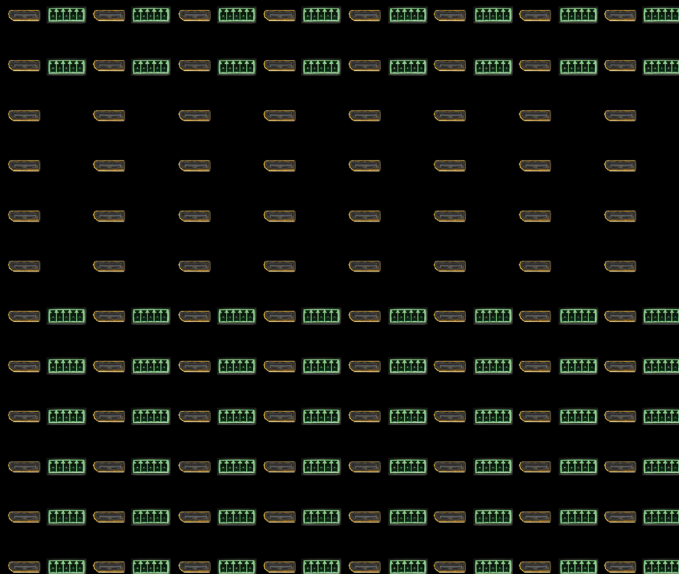

MX2-24x24-DH-12DPi-A-R

All DisplayPort signals are converted to HDMI 2.0 inside the MX2 series matrix routers, but we have developed features to best provide true DisplayPort support for our customers. One of these features is the **Restart Link Training:** this function allows users to **virtually unplug and re-plug the cables** without actually doing so, in case of missing or bad quality signals. For signals which are not encrypted, DisplayPort **HDCP Management can be turned off**, and HDCP 2.2 or 1.4 compatibility can be set. As the maximum speed of the MX2 backplane is 18 Gbps complying with the HDMI 2.0 standard, some DisplayPort signals may exceed this limit. Therefore, only Single Stream video signals are supported, and 3840x2160 4:4:4 RGB 10 Bit video format is converted to 4:2:2 @10 Bit video formats internally, maintaining the signal's bit depth but allowing HDR transfer.

MX2-48×48-DH-48DPio-A-R

4   8   ×   4   8

MX2
SERIES

visual engineering
LIGHTWARE

lightware.com

MX2 Family
Comparison Chart

Product	Inputs			Outputs			Front panel I/O buttons	Front panel LCD menu	Redundant power supply
	HDMI	DP	Audio	HDMI	DP	Audio			
MX2-4x4-HDMI20-CA	4x	✘	✘	4x	✘	2x	✘	✔	✘
MX2-8x4-HDMI20-CA	8x	✘	2x	4x	✘	2x	✘	✔	✘
MX2-8x8-HDMI20-CA	8x	✘	2x	8x	✘	2x	✘	✔	✘
MX2-8x8-HDMI20-L	8x	✘	✘	8x	✘	✘	✔	✔	✘
MX2-8x8-HDMI20-Audio-L	8x	✘	8x	8x	✘	8x	✔	✔	✘
MX2-16x16-HDMI20	16x	✘	✘	16x	✘	✘	✔	✔	✘
MX2-24x24-HDMI20	24x	✘	✘	24x	✘	✘	✔	✔	✘
MX2-16x16-HDMI20-Audio	16x	✘	4x	16x	✘	4xH+4xA	✘	✔	✘
MX2-24x24-HDMI20-Audio	24x	✘	8x	24x	✘	8x	✘	✔	✘
MX2-16x16-HDMI20-R	16x	✘	✘	16x	✘	✘	✔	✔	✔ (PowerCON)
MX2-24x24-HDMI20-R	24x	✘	✘	24x	✘	✘	✔	✔	✔ (PowerCON)
MX2-16x16-HDMI20-Audio-R	16x	✘	4x	16x	✘	4xH+4xA	✘	✔	✔ (PowerCON)
MX2-24x24-HDMI20-Audio-R	24x	✘	8x	24x	✘	8x	✘	✔	✔ (PowerCON)
CS MX2-32x32-HDMI20-A-R	32x	✘	16xH	32x	✘	8xH+8xA	✔	✔	✔ (PowerCON)
CS MX2-48x48-HDMI20-A-R	48x	✘	16xH	48x	✘	16xH	✔	✔	✔ (PowerCON)
MX2-8x8-DH-4DPi-A	4x	4x	✘	8x	✘	2x	✔	✔	✘
MX2-8x8-DH-8DPi-A	✘	8x	4xD	8x	✘	4xH	✔	✔	✘
MX2-16x16-DH-8DPi-A-R	8x	8x	8xH	16x	✘	4xH+4xA	✔	✔	✔ (PowerCON)
MX2-24x24-DH-12DPi-A-R	12x	12x	8xH+4xD	24x	✘	8xH	✔	✔	✔ (PowerCON)
MX2-24x24-DH-12DPi-R	12x	12x	✘	24x	✘	✘	✔	✔	✔ (PowerCON)
CS MX2-32x32-DH-16DPi-A-R	16x	16x	8xH+4xD	32	✘	8xH+8xA	✔	✔	✔ (PowerCON)
CS MX2-48x48-DH-24DPio-A-R	24x	24x	8xH+8xD	24x	24x	8xH+24xD	✔	✔	✔ (PowerCON)
CS MX2-8x8-DH-8DPio-A	✘	8x	4xD	✘	8x	8xD	✔	✔	✘
CS MX2-24x24-DH-24DPio-A-R	✘	24x	8xD	✘	24x	24xD	✔	✔	✔ (PowerCON)
CS MX2-48x48-DH-48DPio-A-R	✘	48x	16xD	✘	48x	48xD	✔	✔	✔ (PowerCON)

CS   Coming Soon | H: next to HDMI | D: next to DP | A: independent audio out

Built-in, Proprietary
Lightware Services and
Technology

As always, we deliver these matrix switchers also with **proprietary services and technologies built-in** at no extra costs, helping installation and operation.

Analytics and Diagnostics

Cable diagnostics and a built-in video frame detector provide feedback about the exact **pixel count and clock frequency**.

Open API

Open-source API technology at the core makes these Lightware products **easy to integrate into third party systems**.

Convenient Adjustments and Updates

Device configuration can be adjusted via the **built-in website**, and firmware update is available through Ethernet.

Technology You Can Trust

LIGHTWARE
visual engineering

The new, truly HDMI 2.0 compatible MX2 series matrix routers will help you **save on costs, rack space and installation time, offering Lightware quality and long-time reliability out of the box**. With a **three-year manufacturer's warranty** and probably the best support services in the AV industry MX2 switchers are the excellent choice for AV professionals.

Inquire about the availability of our new MX2 series matrix switchers today.

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