

# MX2-24x24-HDMI20-Audio-R

## Full 4K HDMI 2.0 Matrix Switcher



MX2-24x24-HDMI20-Audio-R 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 4:2:0. These routers are fully HDMI 2.0 compatible. The switchers have outstanding port density making them particularly suitable for installations where a large number of HDMI 2.0 compliant input and output ports are required.

This standalone product supports 3D, Dolby TrueHD and DTS-HD Master Audio and also HDR 10 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.

### Highlight features

- 4K@60Hz with RGB 4:4:4 color space, 18 Gbps bandwidth
- HDMI 2.0, HDMI1.x and DVI 1.0 compliant
- Supports conversion from 4K UHD at 60Hz 4:4:4 to 4K UHD at 60 Hz YCbCr 4:2:2
- HDCP 2.2 and HDCP 1.4 compliant with cross conversion capabilities
- Fully non-blocking switching architecture with zero frame delay
- 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
- HDR and Dolby Vision support
- Analog audio embedding and de-embedding and digital-to-analog conversion of stereo LPCM
- Redundant power supply with rugged AC mains connector and control ports

MX2-24x24-HDMI20-Audio-R is an audio enhanced variant, allowing embedding audio to, and de-embedding audio from the HDMI stream at 16x dedicated analog audio I/O ports. In lack of the direct selection buttons on the front panel, all crosspoint switching functions are available via the rotary jog dial button and the color display on the front panel.

This matrix switcher is an R-type version with dual redundant and reinforced AC mains connectors, rugged RS-232 and Ethernet ports, designed for high operation stress environments.

### Specification

|            |   |
|------------|---|
| Speed      | 18 Gbps per port  |
| Resolution | Up to 4096x2160@60Hz at RGB or YCbCr 4:4:4 (up to 600MHz pixel clock) |
| Height     | 3RU   |
| Mounting   | Rack mountable, removable rack ears                                   |

### Connectors

|                |                                     |
|----------------|-------------------------------------|
| Power          | 2x Neutrik Powercon True1, 110/220V |
| Video inputs   | 16 x HDMI 2.0                       |
| Video outputs  | 16 x HDMI 2.0                       |
| Audio inputs   | 8 x 5-pole Phoenix                  |
| Audio outputs  | 8 x 5-pole Phoenix                  |
| Serial control | D-sub 9-pole                        |
| Ethernet       | Ethercon                            |
| USB            | Mini USB B                          |

# MX2-24x24-HDMI20-Audio-R

Please see the below table for the comparison of the HDMI 2.0 MX2 matrix switcher series:

| Product                  | Inputs |    |       | Outputs |    |         | Front panel I/O buttons | Front panel LCD menu | Redundant power supply |
|--------------------------|--------|----|-------|---------|----|---------|-------------------------|----------------------|------------------------|
|                          | HDMI   | DP | Audio | HDMI    | DP | Audio   |                         |                      |                        |
| MX2-16x16-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)           |
| MX2-16x8-HDMI20-Audio-R  | 16x    | ×  | 4x    | 8x      | ×  | 4xH+4xA | ×                       | ✓                    | ✓ (PowerCON)           |
| MX2-16x16-HDMI20-Audio-R | 16x    | ×  | 4x    | 16x     | ×  | 4xH+4xA | ×                       | ✓                    | ✓ (PowerCON)           |
| MX2-24x24-HDMI20-Audio-R | 24x    | ×  | 8x    | 24x     | ×  | 8x      | ×                       | ✓                    | ✓ (PowerCON)           |
| MX2-32x32-HDMI20-A-R     | 32x    | ×  | 16xH  | 32x     | ×  | 8xH+8xA | ✓                       | ✓                    | ✓ (PowerCON)           |
| MX2-48x48-HDMI20-A-R     | 48x    | ×  | 16xH  | 48x     | ×  | 16xH    | ✓                       | ✓                    | ✓ (PowerCON)           |

H: next to HDMI

|

A: independent audio out