

Fully configurable matrix switchers supporting HDMI1.3 from 8x8 to up to 32x32 for multiroom, medical and home cinema applications



MX16x16HDMI-Pro, MX32x32HDMI-Pro, MX16x16DVI-HDCP-Pro and MX32x32DVI-HDCP-Pro are the highest performance modular expandable DVI1.0 and HDMI1.3 compliant routing switchers that offer up to 32 inputs and up to 32 outputs in two different frame sizes. The built-in sophisticated software and hardware features make the routers most flexible and integrated solution for AV professionals and high end home theatre applications. Each Input and Output card contains 8 channels, and any input can be switched to any or more outputs without switching delay or frame latency. Due to it's modular design, MX16x16HDMI-Pro and MX32x32HDMI-Pro can be customized in different I/O sizes. Supporting the latest 36-bit deep color HDMI1.3 technology, it can be seamlessly connected to the newest BluRay players, set top boxes, AV receivers or even Apple TV sets. Advanced HD audio transmission, sample rate conversion and S/PDIF deembedding proves the compatibility with old stuff whilst handling the finest Dolby TrueHD and DTS-HD formats as well.

Using Lightware's Pixel Accurate Reclocking technology all inputs are equalized and reclocked for up to 60 meter long HDMI copper cable, and all outputs of the matrix router are reclocked for stable, jitter free signal transmission. The unit can be controlled either by RS-232 / RS-422 port or TCP/IP LAN connection or by built-in website.

Lightware HDMI matrices can be loaded with different Input and Output cards. All cards are interoperable: any combination of input and output cards is supported. For example an HDMI or Fiber input card and a Twisted Pair input card can be mounted in the same frame, and all sources will be switched to any output regardless of the output card type.

DVI-HDCP input and output boards also support full feature DVI and HDMI1.3 signals by using screw lockable DVI connectors. Any DVI resolution up to 1920x1200 and 2048x1080 with our without HDCP encryption are handled. DVI-HDCP cards also pass all multichannel embedded audio streams like PCM, Dolby and DTS formats.

I/O sizes:

8x8; 16x8; 24x8; 32x8; 8x16; 16x16; 24x16; 32x16; 8x24; 16x24; 24x24; 32x24; 32x8; 32x16; 32x24; 32x32

MX-HDMI-IB – 8 channel HDMI input board

- Gold plated HDMI input connectors
- Embedded audio transport
- 60 meter copper cable compensation on all inputs
- Manual and Automatic cable equalization settings
- Port status display LED stack displays the status of each port: Source +5Volt, Sync detect, DVI/HDMI mode and HDCP encryption
- Pixel Accurate Reclocking
- Color range scaling 16-235 / 0-255
- Advanced signal monitoring and analysis



MX-DVI-HDCP-IB – 8 channel DVI-HDCP input board

- Gold plated DVI input connectors –
- DVI and full HDMI 1.3 compatible
- Embedded Audio transport
- 60 meter copper cable compensation on all inputs
- Manual and Automatic cable equalization settings
- Pixel Accurate Reclocking
- Color range scaling 16-235 / 0-255
- Advanced signal monitoring and analysis



MX-HDMI-OB – 8 channel HDMI output board

- Gold plated HDMI output connectors
- Embedded audio transport
- PCM Audio Sample rate conversion
- RCA output connectors for S/PDIF audio
- Pixel Accurate Reclocking
- Color range scaling 16-235 / 0-255
- Color space conversion: RGB / YUV422 / YUV444
- Color depth conversion: 24-bit / 30-bit / 36-bit
- Advanced display monitoring and analysis



MX-DVI-HDCP-OB – 8 channel DVI-HDCP output board

- Gold plated DVI output connectors –
- DVI and full HDMI 1.3 compatible
- Embedded Audio transport
- Pixel Accurate Reclocking
- Color range scaling 16-235 / 0-255
- Color space conversion: RGB / YUV422 / YUV444
- Color depth conversion: 24-bit / 30-bit / 36-bit
- PCM Audio Sample rate conversion
- Advanced display monitoring and analysis



Lightware's modular design allows the user to load any kind of input and output card depending on the actual needs.

Features

- No switching latency – zero frame delay
- Routing from 8x8 to up to 32x32 HDMI1.3 signals
- S/PDIF Audio breakout connector next to each output
- PCM Audio sample rate conversion 1 and 1 per output
- Dolby TrueHD and DTS-HD
- HDMI 1.3; HDCP and DVI1.0 compliant
- Signal presence display
- Color space conversion: RGB and YUV per output
- Color range scaling per output
- 36- bit Deep Color and xvYCC support
- 1920x1200 or 2048x1080 maximal resolutions
- Gold plated high grade PCB boards and connectors
- 60 meter copper cable compensation on all inputs
- Reclocking for all inputs and outputs
- Field-upgradeable, modular design
- Web page hosting capabilities
- Front panel buttons control
- Advanced EDID Management
- RS-232 or RS-422 and Ethernet control
- Vista Spyder and Encore compatibility

Applications

- Home theatre systems
- Multiroom video and audio control
- Professional AV systems, conference rooms
- 3D Visualizations and Network Operation Centers
- Medical imaging

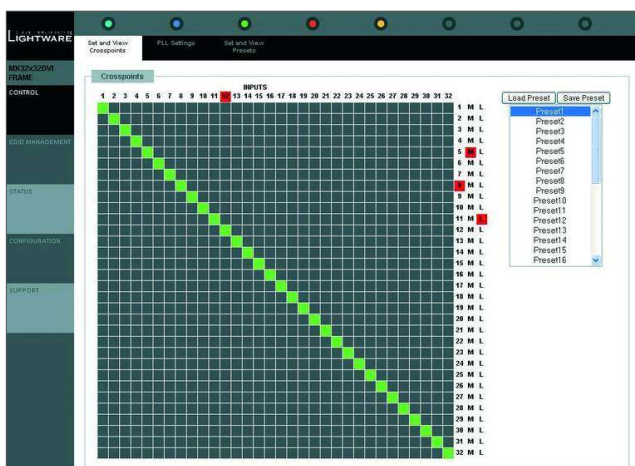
Control

Front panel buttons:	Yes
RS-232 / RS-422:	9600 Baud Rx; Tx
LAN:	Ethernet 10Base-T or 100Base-TX (Auto-Sensing)
WEB:	built-in website
Power:	100 to 240 V AC 3.0 Amps
Power consumption (MX16x16HDMI-Pro):	118W (typ) 165W (max)
Power consumption (MX32x32HDMI-Pro):	235,1W (typ) 328,4W (max)
Dimensions (MX16x16):	440 (482)W x 303D x 176,5H mm
Dimensions (MX32x32):	(FR32) 440 (482)W x 303D x 221H mm (FR32R) 440 (482)W x 401D x 309,5H mm
Net weight (MX16x16HDMI-Pro):	13320 gramms
Net weight (MX32x32HDMI-Pro):	10900 gramms
Warranty:	3 years

Specifications

Routing:	16x16 or 32x32 non-blocking - any input(s) to any output(s)
Bit rate:	2.25 Gbit/s per color
Resolution:	640x480 to 1920x1200 or 2048x1080 deep colour
EDID memory:	50 factory preset, and 50 user programmable
EDID emulation:	256 Byte Extended EDID v1.3

Built - in website for easy control and setup



Controls all functions of the router like IP configuration, routing, EDID Management, system status monitoring, etc.