



ARCHITECTURAL AND ENGINEERING SPECIFICATION

PRODUCT: MX2-8X8-HDMI20-L

FUNCTIONAL OVERVIEW

The MX2-8x8-HDMI20-L standalone HDMI 2.0 matrix switcher providing 8x8 signal routing with support for uncompromised 4K UHD at 60Hz 4:4:4, advanced EDID management, HDCP management, pixel accurate reclocking, and signal analysis (Frame Detector). Local configuration and monitoring are available via the front-panel color LCD and jog dial. Remote configuration and control are available via the built-in web interface and Lightware Device Controller software, and by ASCII-based control via Ethernet, RS-232, and USB.

VIDEO INPUT AND OUTPUT

- Matrix size / routing: 8 inputs x 8 outputs (video crosspoint switching)
- Input connectors (model port set):
 - 8x HDMI inputs (HDMI input ports 1–8)
- Output connectors (model port set):
 - 8x HDMI outputs (HDMI output ports 1–8)
- HDMI input (electrical / format):
 - Connector type: 19-pole HDMI type A receptacle
 - AV standard: DVI 1.0, HDMI 2.0
 - HDCP compliance: HDCP 2.3
 - Color space: RGB, YCbCr
 - Video delay: 0 frame
 - Reclocking: Pixel Accurate Reclocking
 - 3D support: Yes
- HDMI output (electrical / format):
 - Connector type: 19-pole HDMI type A receptacle
 - AV standard: DVI 1.0, HDMI 2.0
 - HDCP compliance: HDCP 2.3
 - Color space: RGB, YCbCr
 - Video delay: 0 frame
 - Reclocking: Pixel Accurate Reclocking
 - 3D support: Yes

- Max. HDMI cable length (with premium certified cable):
 - 1920x1080@60Hz 4:4:4 – 40 m
 - 3840x2160@30Hz 4:4:4 – 15 m
 - 3840x2160@60Hz 4:4:4 – 5 m
- Supported resolutions:
 - Up to 3840x2160@60Hz (4:4:4) / 3840x2160@60Hz (4:2:0)
 - Up to 4096x2048@60Hz (4:4:4) / 4096x2048@60Hz (4:2:0)
 - Ultrawidesupport up to 5120x2160@30Hz (4:4:4, 12-bit) and 5120x2160@60Hz (4:2:0)

AUDIO CAPABILITIES

- Embedded audio (HDMI):
 - Audio formats: all formats in line with HDMI 2.0 standard; Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, Dolby Vision; DTS, DTS-HD Master Audio 7.1, WMA Pro

POWERING

- Supported power source: 100–240V AC, 50/60 Hz
- AC power connector (non-redundant models): standard IEC connector (IEC C14 receptacle)
- 1 RU-high models: powered on immediately when AC power is connected (no front-panel power switch)
- AC fuse: F 3.15A

CONTROL

- Front panel control via color LCD menu and jog dial control knob
- Front panel buttons: sources/destinations selection, Take/Autotake switching, output lock, control lock, preset operations, reset
- Ethernet/LAN control via RJ45 connector
- RS-232 control: 3-pole Phoenix connector
- USB control via USB mini-B receptacle
- Built-in website (web browser control)
- Lightware Device Controller (LDC) via LAN or USB



- TCP/IP control protocols supported:
 - LW2 protocol via TCP port 10001
 - LW3 protocol via TCP port 6107

GENERAL

- Dimensions (same size category as compact 1RU models): 442 (482 with rack ears) W x 43.7 H x 277.4 D mm
- Rack mounting: rack-mountable; rack ears supplied
- Mounting options: standard rack installation; under-desk mounting available for 1U-high models (requires two additional rear rack ears, not supplied)
- Electrical safety / LVD-related compliance: EN 62368-1:2014 Second Edition
- Other compliance: CE, UKCA, UL; EMC EN 55032:2015+A1:2020 (emission), EN 55035:2017+A11:2020 (immunity); RoHS EN 63000:2018
- Warranty: 3 years
- Cooling: cooling fans; airflow from front to rear
- Supplied accessories:
 - Safety and Warranty Info
 - Quick Start Guide
 - IEC power cable
 - Phoenix Combicon 3-pole connector

DOCUMENT REVISION HISTORY

Document	Release Date	Changes	Checked by
v1	2026-07-31	Initial version	Tamas Forgacs