MX-FR9R

Part No: 9111 0019

9x9 digital crosspoint router frame with redundant power supplies, built-in control panel and CPU2

The MX series **modular matrix routers** are the highest performance, expandable **DVI and HDMI compliant switchers**, available in **five different frame sizes**. The built-in **sophisticated software and hardware features** make these routers the most flexible integrated solution for AV professionals and high-end home theatre applications. These frames and their I/O board product line incorporate **proprietary features**, broad signal compatibility, precise switching, control, troubleshooting and signal measurement. The MX router frames start from 9x9 I/O size the largest available MX frame size is 80x80. The Hybrid Modular Design of MX modular routers allow AV professionals to select I/O sizes, video signal types and transport media options according to their application requirements and **fully customize their system**.

Incorporated Proprietary Lightware Technologies

- No signal latency – Zero frame Delay
- Advanced EDID Management
- HDCP compatibility:
  - red screen alert
  - HDCP key counter
  - HDCP key caching
  - HDCP enabling/disabling function
- Instantaneous Switching
- Frame Detector and Input Signal Analysis
- Built-in cable compensation
- Pixel Accurate Reclocking

Features

- Active fan cooling
- Directly mountable in 19" rack
- EtherCON ruggedized LAN connector
- Built-in universal power supply
- Vista Spyder and Barco Encore compatibility
- Combine non-HDCP and HDCP capable I/O boards in the same frame
- Compatible with all MX-... and MXD-... I/O boards
- Multiple TCP/IP connections
- Advanced EDID Management
- Save and reload full crosspoint configurations as preset
- Front panel LCD menu and buttons for crosspoint control
- Intuitive control software for device configuration
- Device control via Ethernet (TCP/IP), RS-232 and USB
- Fully non-blocking switching architecture
- Built-in website for device configuration
- No video compression
- Bi-directional RS-232 extension (pass-through)
- Firmware upgrade through Ethernet
- Supports all embedded audio formats (including PCM, Dolby Digital and DTS high bitrate audio)
- No signal latency, zero frame delay

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Specifications for all frames:

Video data rate:	12.8 Gbps
EDID memory:	100 factory preset and 50 user programmable
EDID emulation:	256-Byte Extended EDID v1.3
Front panel buttons:	Yes
Front panel LCD:	Yes, 4 x 20 characters
RS-232:	Selectable (9600, 38400, 57600, 115200) Baud RX, TX (default: 57600)
LAN:	Ethernet 10Base-T or 100Base-TX (Auto-sensing)
WEB:	Built-in website
Temperature:	0°C to +50°C operational, -40°C to +70°C storage
Humidity:	10 to 90% non-condensing
Altitude:	2000 m operational
EMI/EMC compliance:	Yes, EN 55022 Class B
RoHS compliance:	Yes
Warranty:	3 years

Available MX Frames Sizes and Specifications:

	MX-FR80R	MX-FR65R	MX-FR33R	MX-FR33L	MX-FR17	MX-FR17R	MX-FR9	MX-FR9R
Equipped with MX-CPU2 processor board	✓	✓	✓	✓	✓	✓	✓	✓
I/O board slots	10 in, 10 out	8 in, 8 out	4 in, 4 out	4 in, 4 out	2 in, 2 out	2 in, 2 out	1 in, 1 out	1 in, 1 out
Additional I/O ports accessible on MX-CPU2	✓	✓	✓	✓	✓	✓	✓	✓
Custom I/O sizes (Crosspoint size)	from 9x9 to 80x80	from 9x9 to 65x65	from 9x9 to 33x33	from 9x9 to 33x33	from 9x9 to 17x17	from 9x9 to 17x17	9x9	9x9
Dual-Link DVI compatible (Dual-Link crosspoint size)	from 4x4 to 40x40	from 4x4 to 32x32	from 4x4 to 16x16	from 4x4 to 16x16	from 4x4 to 8x8	from 4x4 to 8x8	4x4	4x4
Rack height	15U	15U	7U	6U	4U	4U	4U	4U
Redundant high reliability power supplies	✓	✓	✓	✗	✗	✓	✗	✓
Number of power supplies	3	2	2	1	1	2	1	2
Power supply hot swappable	✓	✓	✓	✗	✗	✗	✗	✗
Power consumption[1]	114 W	114 W	27 W	26 W	19 W	19 W	19 W	19 W
Heat dissipation (BTU)[1]	389	389	92	89	65	65	65	65
Cooling (forced convection) 120 mm fans	10	10	4	2	2	2	2	2
Dimensions with rack mounting ears:	482 W x 665 H x 392 D mm	482 W x 665 H x 392 D mm	482 W x 309,5 H x 400 D mm	482 W x 265,5 H x 300 D mm	482 W x 176,5 H x 300 D mm	482 W x 176,5 H x 300 D mm	482 W x 176,5 H x 300 D mm	482 W x 176,5 H x 300 D mm
Dimensions without rack mounting ears:	440 W x 665 H x 392 D mm	440 W x 665 H x 392 D mm	440 W x 309,5 H x 400 D mm	440 W x 265,5 H x 300 D mm	440 W x 176,5 H x 300 D mm	440 W x 176,5 H x 300 D mm	440 W x 176,5 H x 300 D mm	440 W x 176,5 H x 300 D mm
Net weight[2]	25 kg	25 kg	12 kg	12 kg	9,8 kg	10,8 kg	9,8 kg	10,8 kg

[1] with CPU2 board and without I/O boards   [2] with CPU2 board, power supplies and without I/O boards