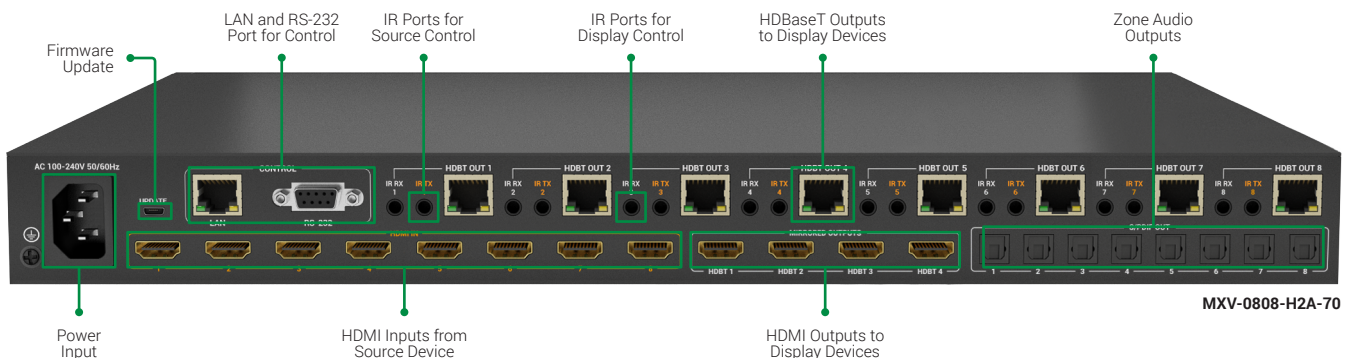


4K HDR 4:4:4 60Hz HDBaseT™ Matrix Switchers with Toslink Zone Audio De-Embed Outputs

MXV Full Product Range



Specification Sheet



WyreStorm - Powerful. Reliable. Simple.

Introduction

The latest in market leading matrix solutions, WyreStorm's MXV range brings the familiar power of the H2-series to a compact 1U chassis. Offering transmission of HDMI content up to 4K/60 4:4:4 & HDR to 35m/115ft (70m/328ft with MXV-70 models), pairing powerful HDBaseT & WyreStorm's variable light compression technology's, the MXV range utilizes HDBaseT zone outputs with PoH. Do even more with your audio, with the MXV range offering audio breakout from either source or output via Toslink optical, CEC triggering for all connected screens and A/V mute function enhances the offering for the modern home or commercial installation. The 6x6 and 8x8 models feature HDMI mirrored outputs that can be paired with WyreStorm's HAOC hybrid optical HDMI cables or any extender for transmission of HDBaseT or OM3 fibre.

Key Features

- 4K HDR HDBaseT™ Matrix Switch, supporting:
 - Content up to 4K/60 4:4:4 & RGB 8-bit
 - The latest HDR standards, including 60Hz HDR-10 & HLG and Dolby Vision at 30Hz
 - HDCP 2.2 encryption technology ensuring compatibility with the latest 4K UHD content and sources
 - HD Multichannel audio up to DTS:X and Dolby Atmos to all outputs
- Proprietary compression algorithm enables 60Hz 4K UHD content (4:4:4 or HDR) to be sent over HDBaseT up to 70m/328ft
- 4 HDMI outputs mirroring HDBaseT Outputs 1-4 for connecting additional slave screens, projectors or AVR's
- HDMI Inputs and HDMI outputs support bandwidths of up to 18Gbps
- Compatible with DVI-I and DP++ v1.3 signals from compatible devices
- Assignable audio outputs allow audio to be independently de-embedded from sources or outputs via Toslink optical.
- Automatic (signal sensing) or manual (API operated) CEC power triggering of all connected screens or projectors (CEC compatibility required)
- The ability to send custom CEC commands when standard CEC commands aren't compatible (MXV-0808-H2A/70 v3 only)
- A/V Mute function gives complete distribution control to a user allowing the signal to any zone to be independently switched off
- SmartEDID feature also dynamically detects display/source capabilities and automatically outputs the highest possible resolution
- Additional EDID management through DIP switches for global setting or via WebUI for independent management of EDID per source
- Assign a different EDID to each connected source device
- Embedded WyreStorm WebUI enables simple source switching and installer set-up & configuration
- WebUI includes full EDID management to read, copy, store or import EDID from connected devices
- API triggered standby mode places the unit into a low power state allowing for lower power consumption during downtime
- Flexible control options – front panel buttons, infrared remote control, local IR, RS-232, Telnet or WebUI. RS-232 routing over HDBaseT allows discrete control of all connected display devices (MXV-0808-H2A/70 v3 only)
- 3.5mm jack input for receiving local IR commands out of line-of-sight
- Simple switching matrix remote control included, which can also be learned into a universal remote handset to allow the control of multiple devices from one handset
- 2-way IR for far-end device control from control system or source control from a zone
- Option for end-user WebUI switching interface
- Compact 1U chassis with adjustable depth rack mounting brackets included
- US, UK, EU & AU Power cables included
- Can be combined with WyreStorm EXP-CON-DAC-D digital audio converter to downmix Dolby Digital 5.1 content to mix stereo and surround sound zones
- Capable of transmitting content to 50m/164ft using WyreStorm HAOC range of hybrid optical HDMI cables

In the Box

1x MXV Matrix Switcher
1x AC Power Cord with US/UK/EU/AU pins
1x IR Remote (CR2025 Battery not Included)
4/6/8x IR Emitters
4/6/8x IR Receivers
2x Matrix Mounting Brackets with screws
1x Quickstart Guide

Additional In the Box (KIT)

2x Standard HDBaseT Receivers
2x Scaling HDBaseT Receivers
1x IR Receiver for Matrix IR Ext.
8x Receiver Mounting Brackets with screws (2 per RX)

MX-0404-HDBT-H2A-KIT Specifications

Audio and Video				
Inputs	4x HDMI In: 19-pin type A			
Outputs	4x Audio Out: RCA Female Stereo (L/R) 4x S/PDIF Out: RCA Female 4x HDBT Out: 8-pin RJ-45 (RXV-35-SCL) 2ch 3.5mm (1/8in) TRS Stereo S/PDIF audio			
Output Video Encoding	HDBaseT			
Encoding Data Rate	9.2Gbps			
End to End Latency (Max)	10μs (micro seconds)			
Audio Formats	Analog: 2ch Analog S/PDIF: 2ch LPCM Dolby Digital and DTS up to 5.1ch HDMI: 2ch LPCM Multichannel up to Dolby Atmos and DTS-X			
Video Resolution (Max)	Video Resolution	HDMI	Cat6	Cat6a/7
	1920x1080p @60Hz 12bit	15m/49ft	60m/197ft	70m/230ft
	1920x1080p @60Hz 16bit	7m/23ft	35m/115ft	40m/131ft
	3840x2160p @24Hz 10bit 4:2:0 HDR	15m/49ft	60m/197ft	70m/230ft
	3840x2160p @30Hz 8bit 4:4:4	7m/23ft	35m/115ft	40m/131ft
	3840x2160p @60Hz 8bit 4:2:0	7m/23ft	35m/115ft	40m/131ft
	Note: WyreStorm recommends the use of shielded category cable to minimize signal noise and interference			
Maximum Pixel Clock	HDMI: 600MHz HDBaseT: 297MHz			
Supported Standards	DCI (4096x2160) RGB HDR HDR10 Dolby Vision up to 30Hz HLG BT.2020 BT.2100			
Communication and Control				
HDMI	HDMI 2.0 HDCP 2.2 EDID Input supports DVI/D and DisplayPort Dual-Mode (DP++) v1.3 with adapter (not included)			
HDBaseT	HDMI 2.0 HDCP 2.2 EDID CEC 1-way PoH Bidirectional IR Custom CEC power triggering via API (v3 models only)			
Consumer Electronics Control (CEC)	Custom (v3 models only) and Standard CEC power triggering via API Requires CEC compatibility			
IR	1x IR Ext 3.5mm (1/8in) TRS Stereo 4x IR TX 3.5mm (1/8in) TS Mono 4x IR RX 3.5mm (1/8in) Stereo Bidirectional over HDBaseT			
RS-232	1x RS-232: 9-pin DB9 Female Matrix Control Routable RS-232 Device Control (v3 models only) Telnet commands supported			
Ethernet	1x LAN: 8-pin RJ-45 Female Web UI Matrix Control			
Power				
Power Supply	100~240V AC 50/60Hz			
Max Power Consumption	54W			
Environmental				
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing			
Storage Temperature	-20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing			
Maximum BTU	290 BTU/hr			
Dimensions and Weight				
Rack Units/Wall Box	1U			
Height	43.5mm/1.72in			
Width	440mm/17.33in			
Depth	300mm/11.82in			
Weight	5.34kg/11.75lbs			
Regulatory				
Safety and Emission	CE FCC RoHS EAC RCM			

Specifications

	MXV-0808-H2L	MXV-0408-H2A	MXV-0606-H2A/70	MXV-0808-H2A/70
Audio and Video				
Inputs	8x HDMI In: 19-pin type A	4x HDMI In: 19-pin type A	6x HDMI In: 19-pin type A	8x HDMI In: 19-pin type A
Outputs	8x HDBT Out: 8-pin RJ-45 2x HDMI Out: 19-pin type A	6x HDBT Out: 8-pin RJ-45 8x S/PDIF Out: TOSLINK 2x HDMI Out: 19-pin type A	6x HDBT Out: 8-pin RJ-45 6x S/PDIF Out: TOSLINK 4x HDMI Out: 19-pin type A	8x HDBT Out: 8-pin RJ-45 8x S/PDIF Out: TOSLINK 4x HDMI Out: 19-pin type A
Output Video Encoding	HDBaseT			
Encoding Data Rate	9.2Gbps			
End to End Latency (Max)	10µs (micro seconds)			
Audio Formats	Analog: 2ch Analog (Not Applicable for MXV-0808-H2L) S/PDIF: 2ch LPCM Dolby Digital and DTS up to 5.1ch (Not Applicable for MXV-0808-H2L) HDMI: 2ch LPCM Multichannel up to Dolby Atmos and DTS-X			
Video Resolution (Max)	Video Resolution	HDMI	Cat6	Cat6a/7
	1920x1080p @120Hz 12bit	7m/23ft	35m/115ft	70m/230ft
	3840x2160p @30Hz 8bit 4:4:4	7m/23ft	35m/115ft	70m/230ft
	3840x2160p @60Hz 10bit 4:2:0 HDR	3m/10ft	35m/115ft	70m/230ft
	4096x2160p @60Hz 8bit 4:4:4	7m/23ft	35m/115ft	70m/230ft
	Note: WyreStorm recommends the use of shielded category cable to minimize signal noise and interference. Cat6a/7 cabling can support an additional 5m transmission distance of 4K content.			
Supported Standards	DCI RGB HDR HDR10 Dolby Vision up to 30Hz HLG BT.2020 BT.2100			
Maximum Pixel Clock	HDMI: 600MHz HDBaseT: 297MHz			
Communication and Control				
HDMI	HDMI 2.0 HDCP 2.2 EDID Input supports DVI/D and DisplayPort Dual-Mode (DP++) v1.3 with adapter (not included)			
HDBaseT	HDMI 2.0 HDCP 2.2 EDID CEC 1-way PoH Bidirectional IR Custom CEC power triggering via API			
Consumer Electronics Control (CEC)	Custom CEC power triggering via API Requires CEC compatibility			
IR	8x IR RX: 3.5mm (1/8in) TRS Stereo 8x IR TX: 3.5mm (1/8in) TS Mono	6x IR RX: 3.5mm (1/8in) TRS Stereo 4x IR TX: 3.5mm (1/8in) TS Mono Bidirectional over HDBaseT	6x IR RX: 3.5mm (1/8in) TRS Stereo 6x IR TX: 3.5mm (1/8in) TS Mono	8x IR RX: 3.5mm (1/8in) TRS Stereo 8x IR TX: 3.5mm (1/8in) TS Mono Routable RS-232 Device Control (v3 models only)
RS-232	1x RS-232: 9-pin DB9 Female Matrix Control Routable RS-232 Device Control Telnet commands supported			
Ethernet	1x LAN: 8-pin RJ-45 Female Web UI Matrix Control			
Power				
Power Supply	100~240V AC 50/60Hz			
Max Power Consumption	160W	124W	137W	169W
Environmental				
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing			
Storage Temperature	-20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing			
Maximum BTU	577 BTU/hr	424 BTU/hr	467.5 BTU/hr	577 BTU/hr
Dimensions and Weight (Max)				
Rack Units/Wall Box	1U			
Height	43.5mm/1.72in			
Width	440mm/17.33in			
Depth	300mm/11.82in			
Weight	5.02kg/11.07lbs	5.34kg/11.75lbs		
Regulatory				
Safety and Emission	CE FCC RoHS EAC RCM			