4K HDR 4 Input Matrix Switcher with 4 Scaling Outputs

EXP-MX-0404-H2

WyreStorm.

Quickstart Guide

💡 WyreStorm recommends reading through this document in its entirety to become familiar with the product's features prior to starting the installation process.
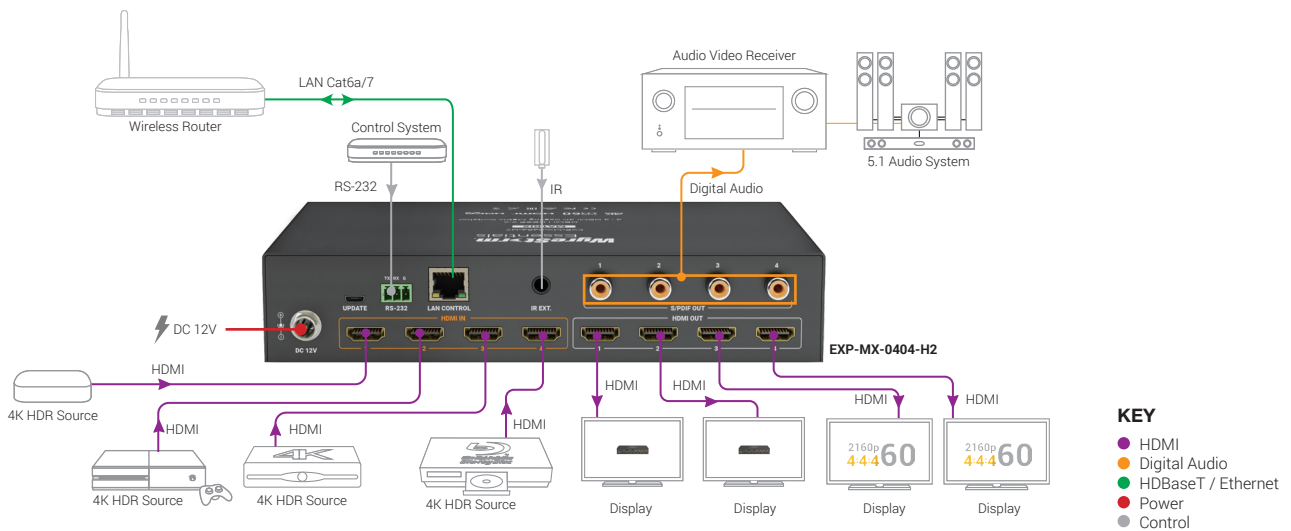
HDCP 2.2   **4K HDR**   **2160p 4:4:4 60**   **CEC**   🔇   🎵   **RS232**

⚠️ **IMPORTANT! Installation Requirements**
- Visit the product page to download the latest firmware, document version, additional documentation, and configuration tools.
- Read through the Wiring and Connections section for important guidelines before creating or choosing premade cables.

In The Box
1x EXP-MX-0404-H2 Matrix
1x 12V DC 1A power supply
1x 3.5mm 3-pin Terminal Block
1x Remote Control Handset (CR2025 Battery not Included)
2x Mounting Brackets

Basic Wiring Diagram

KEY
- 🟣 HDMI
- 🟠 Digital Audio
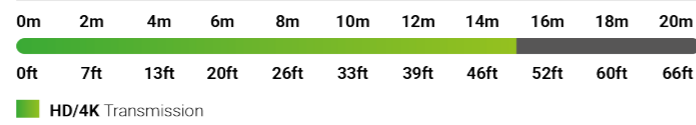- 🟢 HDBaseT / Ethernet
- 🔴 Power
- ⚫ Control

Wiring and Connections

WyreStorm recommends that all wiring for the installation is run and terminated prior to making connections to the switcher. Read through this section in it's entirety before running or terminating the wires to ensure proper operation and to avoid damaging equipment.

⚠ **IMPORTANT! Wiring Guidelines**
- The use of patch panels, wall plates, cable extenders, kinks in cables, and electrical or environmental interference will have an adverse effect on signal transmission which may limit performance. Steps should be taken to minimize or remove these factors completely during installation for best results.
- WyreStorm recommends using pre-terminated HDMI cables due to the complexity of these connector types. Using pre-terminated cables will ensure that these connections are accurate and will not interfere with the performance of the product.
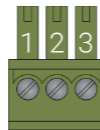
HDMI Cable Performance Guide

0m	2m	4m	6m	8m	10m	12m	14m	16m	18m	20m
0ft	7ft	13ft	20ft	26ft	33ft	39ft	46ft	52ft	60ft	66ft

🟩 **HD/4K** Transmission

Installation and Operation

1. Connect HDMI sources to INPUT ports 1-4 using good quality HDMI cables.
2. Connect an HDMI display device to the HDMI OUT ports of the switcher.
3. Turn the power on using the included remote handset, ensuring LED power indicators are fully lit on the front of the switcher. If not, check to make sure the HDMI cables are firmly connected.
4. To operate the switcher, press the SWITCH buttons on the front of the unit to scroll numerically through connected sources.
5. Alternatively, use the remote control handset to scroll forwards and backwards through the inputs or push buttons 1-4 corresponding to the connected sources. Furthermore, a RS-232 connection from a control system can be used to control the device.
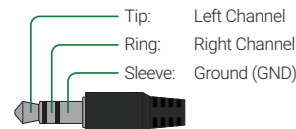
RS-232 Wiring

The EXP-MX-0402-H2 uses a 3-pin RS-232 with no hardware flow control. Most control systems and computers are DTE where pin 2 is RX, this can vary from device to device. Refer to the documentation for the connected device for pin functionally to ensure that the correct connections can be made.
Refer to RS-232 Mode Settings for details on setting RS-232 modes.

WyreStorm Connector			3rd Party Device
Pin 1	TX (Transmit)	---> To --->	RX (Receive)
Pin 2	RX (Receive)	---> To --->	TX (Transmit)
Pin 3	G (Ground)	---> To --->	G (Ground)

Audio Connections

Tip:	Left Channel
Ring:	Right Channel
Sleeve:	Ground (GND)

Setup and Configuration

Troubleshooting

No or Poor Quality Picture (snow or noisy image)
- Verify that power is being supplied to all devices in the system and that they are powered on.
- Verify that all HDMI connections are not loose and are functioning properly.
- If transmitting 3D or 4K, verify that the HDMI cables used are 3D or 4K rated.

💡 **Troubleshooting Tips:**
- WyreStorm recommends using a cable tester or connecting the cable to other devices to verify functionality.

Specifications

Audio and Video

Inputs	4x HDMI In: 19-pin type A
Outputs	4x HDMI Out: 19-pin type A	1x IR Extension	4x S/PDIF Coaxial
Audio Formats	HDMI: 2ch PCM	Multichannel: LPCM and up to DTS-X and Dolby Atmos Coaxial: 5.1ch surround sound

Video Resolutions (Max)	Resolution	HDMI
	1920x1080p @60Hz 12bit	15m/49ft
	1920x1080p @60Hz 16bit	7m/23ft
	3840x2160p @24Hz 10bit 4:2:0 HDR	5m/16ft
	3840x2160p @30Hz 8bit 4:4:4	7m/23ft
	3840x2160p @60Hz 10bit 4:2:0 HDR	5m/16ft
	4096x2160p @60Hz 8bit 4:2:0	7m/23ft
	4096x2160p @60Hz 8bit 4:4:4	5m/16ft

Supported Standards	DCI	RGB	HDR	HDR10	Dolby Vision up to 30Hz	HLG	BT.2020	BT.2100
Maximum Pixel Clock	600MHz

Communication and Control

HDMI	HDCP 2.2	DVI-D supported with adapter (not included)
IR	1x Front Panel Sensor
RS-232	1x 3-Pin Terminal Block
Ethernet	1x LAN: 8-pin RJ-45 Female	10/100 Mbps auto-negotiating	IP Control

Power

Power Supply	5V DC 2A
Max Power Consumption	10W

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	17.06 BTU/hr

Dimensions and Weight

Rack Units/Wall Box	<1U
Height	42mm/1.65in
Width	215mm/8.46in
Depth	120.2mm/4.73in
Weight	0.88kg/1.94lbs

Regulatory

Safety and Emission	CE	FCC	RoHS	EAC

Note: WyreStorm reserves the right to change product specification, appearance or dimensions of this product at any time without prior notice.