## 4K HDR 4 Input Matrix Switcher with 2 Scaling Outputs

EXP-MX-0402-H2



**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.











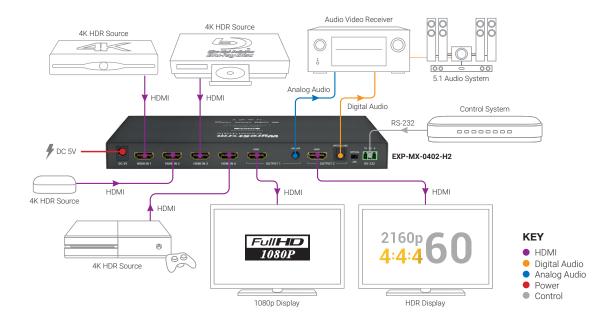
# IMPORTANT! Installation Requirements

- 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-0402-H2 Matrix
- 1x 5V 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**



#### 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
- 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
H	HD/4K Transmission									

### **Installation and Operation**

- 1. Connect HDMI sources to INPUT ports 1-4 using good guality HDMI cables.
- Connect an HDMI display device to the HDMI OUT ports of the switcher.
- 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.
- To operate the switcher, press the SWITCH buttons on the front of the unit to scroll numerically through connected sources.
- 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.



WyreS	torm 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**



## **Setup and Configuration**

## **Optical / ARC Audio Mode Settings**

The audio output of the matrix switcher can be configured to either audio de-embed or ARC audio signals from the connected display. Set the switches based on the desired audio method.

Set the audio switch to  $\boldsymbol{\mathsf{ARC}}$  to return audio signals from the Display Device to the Matrix and send audio to an external AVR etc.



Set the audio switch to **OPTICAL** to send digital audio signals from the Matrix to an external AVR etc.



## **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:

 $\bullet \ \ \text{WyreStorm recommends using a cable tester or connecting the cable to other devices to verify functionality.}$ 

# **Specifications**

Audio and Video					
Inputs	4x HDMI In: 19-pin type A				
Outputs	2x HDMI Out: 19-pin type A   1x 3.5mm Analog Stereo   1x S/PDIF Toslink				
Audio Formats	HDMI: 2ch PCM   Multichannel: LPCM and up to DTS-X and Dolby Atmos Analog: 2ch LPCM Toslink: 5.1ch surround sound				
	Resolution	HDMI			
Video Resolutions (Max)	1920x1080p @60Hz 12bit 1920x1080p @60Hz 16bit 3840x2160p @24Hz 10bit 4:2:0 HDR 3840x2160p @30Hz 8bit 4:4:4 3840x2160p @60Hz 10bit 4:2:0 HDR 4096x2160p @60Hz 8bit 4:2:0 4096x2160p @60Hz 8bit 4:4:4	15m/49ft 7m/23ft 5m/16ft 7m/23ft 5m/16ft 7m/23ft 5m/16ft			
Supported Standards	DCI   RGB   HDR   HDR10   Dolby Vision up to 30H	z   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				
Power					
Power Supply	5V DC 1A				
Max Power Consumption	5W				
Environmental					
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-con	densing			
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	22mm/0.86in				
Width	182mm/7.16in				
Depth	77mm/3.03in				
Weight	0.34kg/0.74lbs				
Regulatory					
Safety and Emission	CE   FCC   RoHS				

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