# 4K60 8x8 Seamless Scaling **HDMI Matrix with USB-C Support**

MX-0808-SCL





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

- Read through the Wiring and Connections section for important wiring guidelines before creating or choosing pre-made cables.
- Visit the product page to download the latest firmware, document version, additional documentation, and configuration tools. Install the latest firmware to ensure that all features described in this document are available during and after installation.

#### In the Box

1 x Matrix Switcher

1x AC Power Cord (US/UK/EU/AU)

1x 2m USB 3.1 Type-C Cable

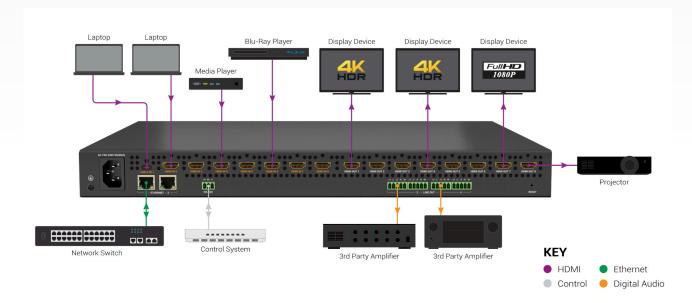
1x 3.5mm 3-Pin Phoenix Male Connector

4x 3.5mm 5-Pin Phoenix Male Connector

2x 1U Rack Mounting Brackets with screws

1x Quick Start Guide

# **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 its entirety before running or terminating any wires to ensure proper operation and to avoid damaging the equipment.

### **HDMI/HDBaseT Wiring**

# ▲ 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 HDMI and Ethernet transmission limiting performance. Steps should be taken to minimize or remove these factors completely during installation for best results.
- WyreStorm recommends using high quality HDMI cables such as WyreStorm Express to ensure the highest content performance available.
- The type of category cable and length used can restrict the available video resolution. While Cat5e can be used, WyreStorm recommends using Cat6 or higher to ensure the highest content performance available. See Video Resolutions in the Specifications table before determining cable type and length.

Cat6 Cable Performance Guide

0m	10m	20m	30m	40m	50m	60m	70m	80m	90m	100m
0ft	32ft	65ft	98ft	131ft	164ft	197ft	230ft	262ft	295ft	328ft
4	<b>K</b> Transm	nission	■ HD	Transmis	ssion					

WyreStorm recommends the use of shielded cable to minimize signal noise and interference



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)

#### **RS-232 Wiring**

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.

#### **Audio Wiring**



	WyreS	torm Connector		3rd Party Device
L	Pin 1	Left Positve (L+)	> To>	Left Positive (L+)
J	Pin 2	Left Negative (L-)	> To>	Left Negative (L-)
	Pin 3	Ground (G)	> To>	Ground (G)
	Pin 4	Right Positive (R+)	> To>	Right Positive (R+)
	Pin 5	Right Negative (R-)	> To>	Right Negative (R-)

# Accessing the Web UI

This matrix uses an Auto IP method to generate the initial IP address based on the network connections. By default the IP address is set to DHCP and will pull the IP address from a connected DHCP server. Should the network not contain a DHCP server the IP address will be generated based on the units mac address.

#### The above operation will occur unless the IP Address setting in the web UI is set to static.

- 1. Connect the matrix to the same network as a PC
- 2. Using a 3rd party network scanner, scan the network for the IP address of the matrix
- 3. Open a web browser and enter the IP Address of the matrix
- 4. Enter the password for the matrix. Default Password: admin

#### **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 source and HDBaseT connections are not loose and are functioning properly.
- Verify that the HDBaseT cable is properly terminated per the HDMI/ HDBaseT Wiring section.
- · Verify that the matrix, receiving device, and display support the output resolution of the source. Refer to Video Resolutions in the Specifications table for the max distance based on resolution.
- If transmitting 4K, verify that the HDMI cables used are 4K rated.

#### No or Intermittent 3rd party Device Control

Verify that the IR cable(s) is properly terminated. See IR TX/RX Wiring. Verify that the IR emitter is located near the IR receiver on the device.



# Troubleshooting Tips:

WyreStorm recommends using a cable tester or connecting the cable to other devices to verify functionality.

### **Warranty Information**

WyreStorm Technologies ProAV Corporation warrants that its products to be free from defects in material and workmanship under normal use for a period of five (5) years from the date of purchase. Refer to the Product Warranty page on wyrestorm.com for more details on our limited product warranty.



# **Specifications**

Audio and Video				
Inputs	1x USB-C Input 7x HDMI In: 19-pin type A			
Outputs	8x HDMI Out: 19-pin type A 4x 4-Pin Audio Terminal Port			
Video Encoding	Uncompressed			
Encoding Data Rate	18Gbps			
Audio Formats	2ch PCM   Multichannel: LPCM and Up to DTS-X and Dolby Atmos			
Video Resolutions (Max)	1920x1080p @60Hz 16bit 7m/23ft 3840x2160p @60Hz 10bit 4:2:2 HDR10/10+ 5m/16ft 3840x2160p @60Hz 12bit 4:2:0 Dolby Vision 5m/16ft 3840x2160p @50Hz 10bit 4:2:2 HLG 5m/16ft 4096x2160p @60Hz 8bit 4:4:4 5m/16ft			
Supported Standards	DCI   RGB   HDR10   HDR10+   Dolby Vision   HLG   BT.2021			
Maximum Pixel Clock	600MHz			
Communication and Control	Communication and Control			
HDMI	HDMI 2.0   HDCP 2.2/2.3   EDID   CEC			
RS-232	1x 3-pin Phoenix			
LAN	1x 8-pin RJ-45 for API control (Telnet, TLS, HTTP/HTTPS for webUI)			
Reset	Via API, WebUI or Pin-Hole reset button			
Power				
Power Supply	AC Power Supply 100V-240V			
Max Power Consumption	128W (AV 68W, USB-C charging 60W)			
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			
Dimensions and Weight				
Rack Units/Wall Box	10			
Height	43.5mm/1.71in			
Width	440mm/17.32in			
Depth	330mm/12.99in			
Weight	4.5kg/9.92lbs			
Regulatory				
Safety and Emission	CE   FCC   RoHS   RCM   EAC   UKCA			