 WyreStorm recommends reading through this document in its entirety to become familiar with the product's features prior to starting the installation process.



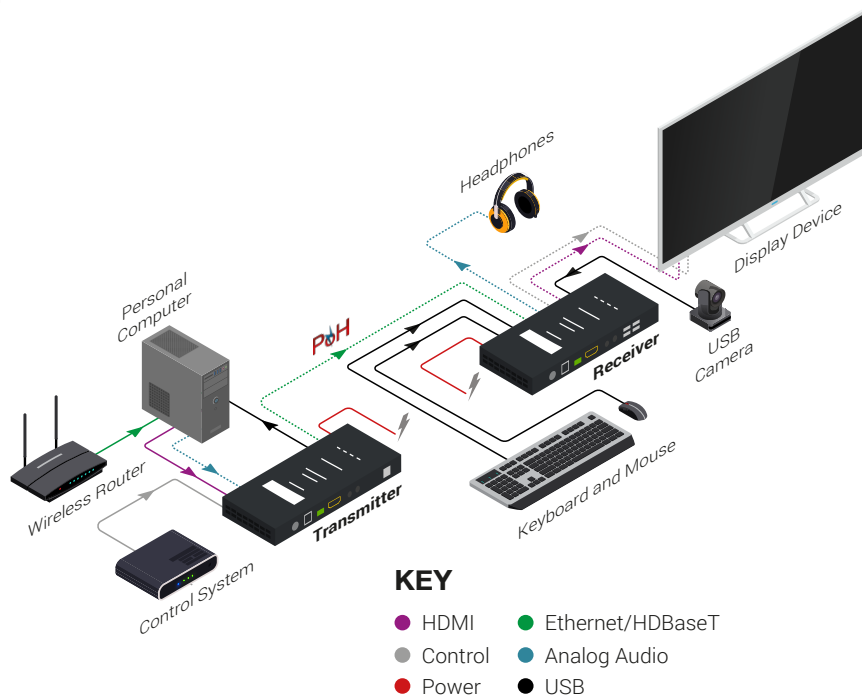
 **IMPORTANT! Installation Requirements**

- Visit the product page to download the latest firmware, document versions, additional documentation, and configuration tools.
- Read through the [Wiring and Connections](#) section for important wiring guidelines before creating or choosing premade cables.
- While this product supports CEC, WyreStorm cannot guarantee compatibility with all forms of CEC communication.

**In the Box**

- 1x EX-100-H2 Transmitter
- 1x EX-100-H2 Receiver
- 1x 12V DC 2A Power Supply (US/UK/EU/AU)
- 4x Mounting Brackets with screws
- 2x 3-pin Terminal Blocks
- 1x QuickStart Guide (this document)

**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 results.
- WyreStorm recommends the use of shielded category cable to minimize signal noise and interference.
- 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.

### Cat6 Cable Performance Guide

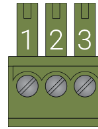
0m	10m	20m	30m	40m	50m	60m	70m	80m	90m	100m
0ft	32ft	65ft	98ft	131ft	164ft	197ft	230ft	262ft	295ft	328ft

 **4K/HD** Transmission

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

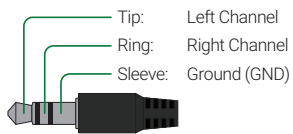
## RS-232 Wiring

The EX-100-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 functionality 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



## Troubleshooting

### No or Poor Quality Picture (snow or noisy image)

- Verify that power is being supplied to the transmitter and receiver.
- Verify that the HDBaseT cable is properly terminated following EIA568B standard.
- Verify that the output resolution of the source and display is supported by this extender.
- If transmitting 4K, verify that the HDMI cables used are 4K rated.
- Verify that all source and HDBaseT connections are not loose and are functioning properly

### No or Intermittent 3rd party Device Control

- Verify that the IR and RS-232 cables are properly terminated following the [Wiring and Connections](#) section.
- Verify that RS-232 modes are properly selected for the desired operation. Refer to [RS-232 Mode Settings](#) for details.

### Troubleshooting Tips:

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

### Warranty Information

WyreStorm Technologies LLC 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](http://wyrestorm.com) for more details on our limited product warranty.



## Specifications

Audio and Video				
	Transmitter	Receiver		
<b>Inputs</b>	1x HDMI In: 19-pin type A 1x Audio In: 3.5mm (1/8in) TRS Stereo	1x HDBT In: 8-pin RJ-45 Female 1x Audio In: 3.5mm (1/8in) TRS Stereo		
<b>Outputs</b>	1x HDBT Out: 8-pin RJ-45 Female 1x Audio Out: 3.5mm (1/8in) TRS Stereo	1x HDMI Out: 19-pin type A 1x Audio Out: 3.5mm (1/8in) TRS Stereo		
<b>Output Video Encoding</b>	HDBaseT Class C			
<b>Encoding Data Rate</b>	10.2Gbps			
<b>End to End Latency</b>	10µs (micro seconds)			
<b>Audio Formats</b>	2ch Analog/PCM   Multichannel: LPCM up to DTS-X and Dolby Atmos			
<b>Video Resolutions (Max)</b>	<b>Video Resolution</b>	<b>HDMI</b>	<b>Cat6</b>	<b>Cat6a/7</b>
	1920x1080p @60Hz 12bit	7m/23ft	70m/230ft	100m/328ft
	3840x2160p @30Hz 8bit 4:4:4	15m/49ft	70m/230ft	100m/328ft
	3840x2160p @30Hz 12bit 4:2:2 HDR	5m/16ft	70m/230ft	100m/328ft
	3840x2160p @60Hz 8bit 4:2:0	7m/23ft	70m/230ft	100m/328ft
	Note: WyreStorm recommends the use of shielded category cable to minimize signal noise and interference.			
<b>Supported Standards</b>	DCI   RGB   HDR   HDR10   Dolby Vision up to 30Hz   HLG   BT.2020   BT.2100			
<b>Maximum Pixel Clock</b>	340MHz			
Communication and Control				
<b>HDMI</b>	HDMI   HDCP 2.2   EDID   CEC Pass-through   DVI/D supported with adapter (not included)			
<b>HDBaseT</b>	HDMI   HDCP 2.2   EDID   Line Audio   1-way PoH (TX powers RX)   Bidirectional RS-232   CEC			
<b>RS-232</b>	1x RS-232: 3-pin Phoenix (Transmitter and Receiver)			
<b>USB</b>	1x Type B (host)   4x Type A (device) (Transmitter and Receiver) USB direction must be set using switch on both transmitter and receiver USB hub compatible   Maximum: 7 devices, 23 endpoints Maximum uplink speed: 190Mbps			
Power				
<b>Power Supply</b>	12V DC 2A			
<b>Max Power Consumption</b>	12W			
Environmental				
<b>Operating Temperature</b>	32°F ~ 113°F (0°C ~ 45°C)   10% ~ 90%, non-condensing			
<b>Storage Temperature</b>	-4°F to ~ 158°F (-20°C ~ +70°C)   10% ~ 90%, non-condensing			
<b>Maximum BTU</b>	41 BTU/hr			
Dimensions and Weight				
<b>Rack Units   Wall Box</b>	<1U			
<b>Height</b>	21mm/0.83in			
<b>Width</b>	250mm/9.84in			
<b>Depth</b>	90.2mm/3.55in			
<b>Weight</b>	0.9kg/1.98lbs			
Regulatory				
<b>Safety and Emission</b>	CE   FCC   RCM   EAC   RoHS			

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