# HDMI KVM Extender Set with USB 2.0 Extension EXP-EX-80-KVM

# WyreSt rm. Essentials 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.

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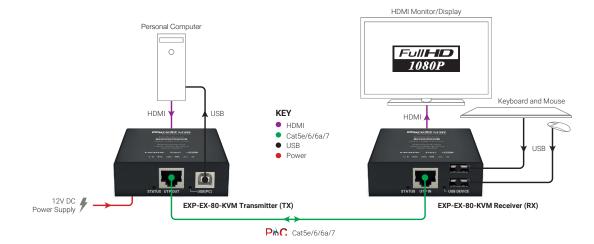
### IMPORTANT! Installation Requirements

- 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 wiring guidelines before creating or choosing premade cables.

### **Basic Wiring Diagram**

### In the Box

1x EXP-EX-80-KVM Transmitter 1x EXP-EX-80-KVM Receiver 1x 12V DC 2A Power Supply (US/UK/EU/AU) 1x USB Type B to Type A Cable 4x Mounting Brackets



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# Transmitter (Front/Rear)

### **Receiver (Front/Rear)**







A HDMI In	19-pin type A HDMI female Supports HDMI and DVI/D with adapter	A HDMI Out	19-pin type A Supports HE
B Power LED	<b>Solid:</b> The unit is powered On <b>Off:</b> The unit is powered Off	B Power LED	Solid: The ur Off: The unit
C Power In	5.5mm Screw Down Barrel Jack Connect to the included 12V DC 2A power supply to the transmitter. A power supply is not required on the other end as it will be powered using PoC.	C Power In	5.5mm Scre Connect to ti supply to the is not require powered usi
D Status LED	<b>Flashing:</b> The receiver is operating normally. <b>Off:</b> The receiver is Not operating normally.	D Status LED	Flashing: Th Off: The rece
UTP Out	8-pin RJ-45 female Connect the transmitters <b>UTP OUT</b> to receivers <b>UTP IN.</b>	E UTP In	8-pin RJ-45 f Connect the receivers <b>UT</b>
<b>F</b> USB LED	Solid: USB linked Flashing: USB data transmitting Off: No USB device connected	<b>F</b> USB LED	Solid: USB li Flashing: US Off: No USB
G USB (PC) Host	USB Type B female Connection of USB Host device	G USB Device	2x USB Type Connection of keyboards at

A	HDMI Out	IDelt      19-pin type A HDMI female        Supports HDMI and DVI/D with adapter		
B	Power LED	<b>Solid:</b> The unit is powered On <b>Off:</b> The unit is powered Off		
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D	Status LED	<b>Flashing:</b> The receiver is operating normally. <b>Off:</b> The receiver is Not operating normally.		
B	UTP In	8-pin RJ-45 female Connect the transmitters <b>UTP OUT</b> to receivers <b>UTP IN.</b>		
Ð	USB LED	LED Solid: USB linked Flashing: USB data transmitting Off: No USB device connected		
G	USB Device	2x USB Type A female Connection of USB devices such as keyboards and mice.		

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### 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
Oft	32ft	65ft	98ft	131ft	164ft	197ft	230ft	262ft	295ft	328ft
USB Storage Device Transmission			HD/HID Device Transmission							

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

### Troubleshooting

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

- Verify that power is being supplied to the transmitter and receiving device
- Verify that all HDMI and UTP connections are not loose and are functioning properly
- Verify that the UTP cable is properly terminated following EIA568B standard
  Verify that the output resolution of the source and display is supported by
- Verify that the output resolution of the source and display is supported by this extender

#### Failed USB Connection or Slow Transmission rate

 Ensure the category cable length is within the range of requirement, USB HID device is within 80m/260ft, USB storage device is within 60m/200ft.



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

### **Specifications**

	Transmitter		Receiver			
Audio and Video						
Inputs	1x HDMI In: 19-pin type A 1x USB Type B			1x UTP In: 8-pin RJ-45 Female 2x USB Type A		
Outputs	1x UTP Out: 8-pin RJ-45 Female		1x HDMI Out: 19-p	1x HDMI Out: 19-pin type A		
Output Video Encoding	UTP					
Encoding Data Rate	6.75Gbps					
End to End Latency (Max)	10µs (micro seconds)					
Audio Formats	2ch PCM   Multichannel up to DTS-X	and Dolby Atmos				
	Video Resolution	HDMI	Cat6	Cat6a/7		
Video Resolutions (Max)	1920x1080p @60Hz 12bit	15m/49ft	80m/262ft	80m/262ft		
	Note: WyreStorm recommends the use of shielded category cable to minimize signal noise and interference					
Supported Standards	DCI   RGB					
Maximum Pixel Clock	225MHz					
Communication and Control						
HDMI	HDMI 1.3b   HDCP 1.4   EDID   DVI/D supported with adapter (not included)					
UTP	HDMI 1.3b   HDCP 1.4   EDID   2-way PoC					
USB						
Power						
Power Supply						
PoC	IEEE 802.3af 48V 15.4W Max   2-way					
Max Power Consumption	3.6W (per unit)					
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	12.28 BTU/hr					
Dimensions and Weight						
Rack Units/Wall Box	<1U					
Height	23mm/0.9in					
Width	75mm/2.95276in					
Depth	98.2mm/3.87in					
Weight	0.22kg/0.48lb (each)					
Regulatory						
Safety and Emission	CE   FCC   RoHS   RCM   EAC					

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

#### 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 two (2) years from the date of purchase. Refer to the Product Warranty page on wyrestorm.com for more details on our limited product warranty.

