USB-C Single Gang In-Wall HDBaseT Transmitter

TX-35-IWC-KVM

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.

4K HDR **HDMI** **HDCP 2.2**

⚠️ **IMPORTANT! Installation**

- Read through the Wiring and Connections section for important wiring guidelines before creating or choosing premade cables.
- Visit the product pages to download the latest firmware, document version, additional documentation, and configuration tools.
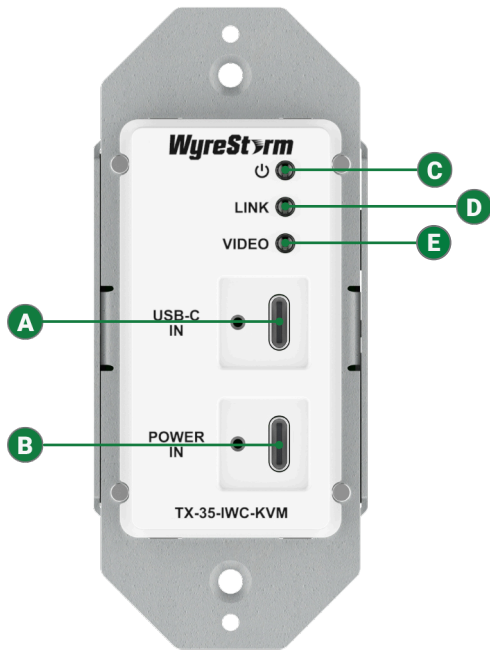
In the Box

1x TX-35-IWC-KVM
1x 2 pin Phoenix Male Connector
1x 3-pin Phoenix Male Connector
1 x Wall Plate Decora Panel (1-Gang US) with Screws
1x 2m USB 3.2 Type-C to Type-C Cable
1x Quickstart Guide (This Document)

Basic Wiring Diagram

INT: +44 (0) 1793 230 343 | US: 844.280.WYRE (9973)
support@wyrestorm.com
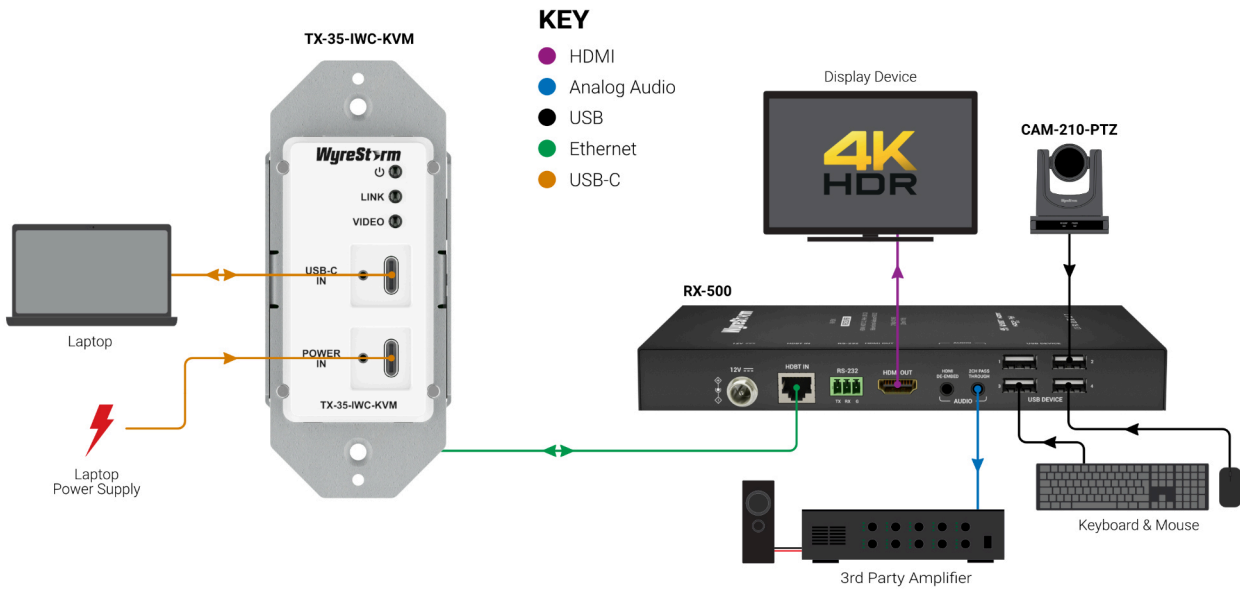
TX-35-IWC-KVM (Front)

TX-35-IWC-KVM (Rear)

A	**USB-C Input**	USB 3.0 type-C port. Connect to a USB-C source such as laptop. All peripherals on the connected receiver will be connected to the laptop the USB-C port connected. Supports the following three functions: • Supports transmitting video, audio, and USB 2.0 signals. • Supports PD 2.0. The port can charge the connected laptop (up to 100W) when the corresponding Charging port is connected to the external power source. The following cable is recommended: USB type-C to type-C cable (USB 3.2 Gen 2 or above).
B	**USB-C Power In**	Connect to an external power source (up to 100W) when charging the connected laptop through USB-C IN port.
C	**Power LED**	**On:** The unit is powered On **Off:** The unit is powered Off
D	**Link LED**	**On:** HDBT link is normal. **Blinking/Off:** No HDBT link or link error.
E	**Video LED**	**On:** Input signal is active. **Off:** No signal input.
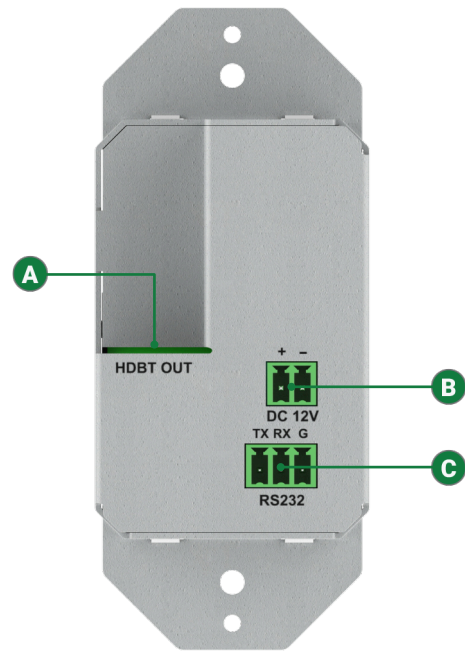
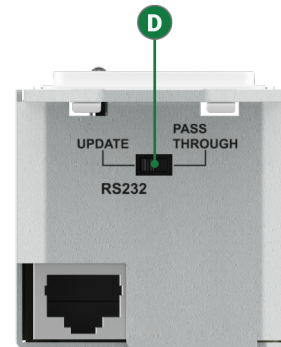|		
A	**HDBT Output**	Connect to an HDBT receiver such as RX-500.
B	**Power Input**	12V reserved power supply. Connect to a DC 12V power adapter. With one-way PoH function supported, the transmitter can be powered by the receiver with PSE module such as RX-500.
C	**RS-232**	Connect to a RS232 enabled device for RS232 pass-through or firmware upgrade.

TX-35-IWC-KVM (Top)

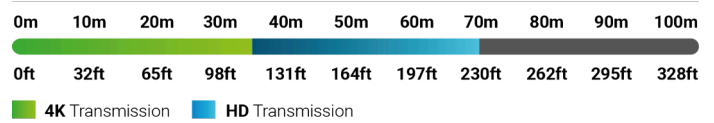|		
D	**RS232 DIP Switch**	Set the function of **RS-232** port. • **PASS-THROUGH:** RS-232 port is used to commands pass-through via HDBT. • **UPDATE:** The RS232 port is used to upgrade Valens firmware of transmitter and receiver.

Wiring and Connections

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

⚠️ IMPORTANT! Wiring Guidelines

- The use of patch panels, wall plates, cable transmitters, 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.

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** Transmission 🟦 **HD** Transmission

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

Communication Connections

RS-232 Wiring

The TX-35-IWC-KVM 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.
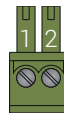
3-Pin Phoenix
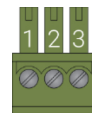
WyreStorm Connector			3rd Party Device
Pin 1	TX (Transmit)	---> To --->	RX (Receive)
Pin 2	RX (Receive)	---> To --->	TX (Transmit)
Pin 3	G (Ground)	---> To --->	G (Ground)

Power Wiring

The TX-35-IWC-KVM uses a 2-pin Terminal Connector if not powereed by PoH from receiver (12v 3a PSU not included)

WyreStorm Connector	
Pin 1	PWR + (Positive)
Pin 2	PWR - (Negative)

Troubleshooting

No or Poor Quality Picture (snow or noisy image)

- Verify that the HDMI inputs and HDMI output connections are not loose and are functioning property.
- Verify that the output resolution of the source and display is supported by this transmitter.
- If transmitting 4K, verify that the HDMI cables used are 4K rated.

No or Intermittent 3rd party Device Control

Verify that the RS-232 cables are properly terminated.

💡 Troubleshooting Tips:

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

Specifications

Audio and Video	
Inputs	1 x USB Type C Input 1 x USB Type C Power Input (for device charging, will not power TX)
Outputs	1x HDBT Out: RJ45 Female
Audio Formats	Supports multi-channel audio formats, including PCM 2.0/5.1/7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:X
Video Resolutions (Max)	Video Resolutions VESA: 800x600[8], 1024x768[8], 1024x768[8], 1280x768[8], 1280x800[8], 1280x960[8], 1280x1024[8], 1360x768[8], 1366x768[8], 1400x1050[8], 1440x900[8], 1600x900[8], 1600x1200[8,] 1680x1050[8], 1920x1200[8] SMPTE: 1280x720P[1,2,3,4,5,6,7,8], 1920x1080I[6,8], 1920x1080P[1,2,3,4,5,6,7,8], 3840x2160[2,3,5,6,8], 4096x2160[2,3,5,6,8] 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = at 60 Hz NOTE: 4096x2160/3840x2160@50Hz/60Hz is based on chroma sub-sampling 4:2:0 8-bit only Cat5e or higher: 3840x2160p @30Hz 8bit (100m/328ft)
Maximum Data Rate	5Gbps (Per lane)
USB Bandwidth over HDBaseT	150Mbps
Communication and Control	
RS-232	1x 3-pin Phoenix (Passthrough RS-232 + Update Port)
Power	
Power Supply	12V DC 3A (Sold Separately)
PoH	Transmitter can be powered by the receiver with PSE module such as RX-500.
Environmental	
Operating Temperature	0°C to +45°C (32°F to +113°F), 10% to 90%, non-condensing
Storage Temperature	-20°C to +70°C (-4°F to +158°F), 10% to 90%, non-condensing
Dimensions and Weight	
Rack Units/Wall Box	1-Gang US Style
Height	105.6mm/4.16in
Width	45mm/1.77in
Depth	45.3mm/1.78in
Weight	0.21kg/0.46lb
Regulatory	
Safety and Emission	CE	FCC	RoHS	RCM	EAC	UKCA

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 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.