

# 3-Input In-wall HDBaseT™ Transmitter with USB Host & CEC Trigger. 2-gang US/UK Back-box

SW-130-TX-US | SW-130-TX-UK



## 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.



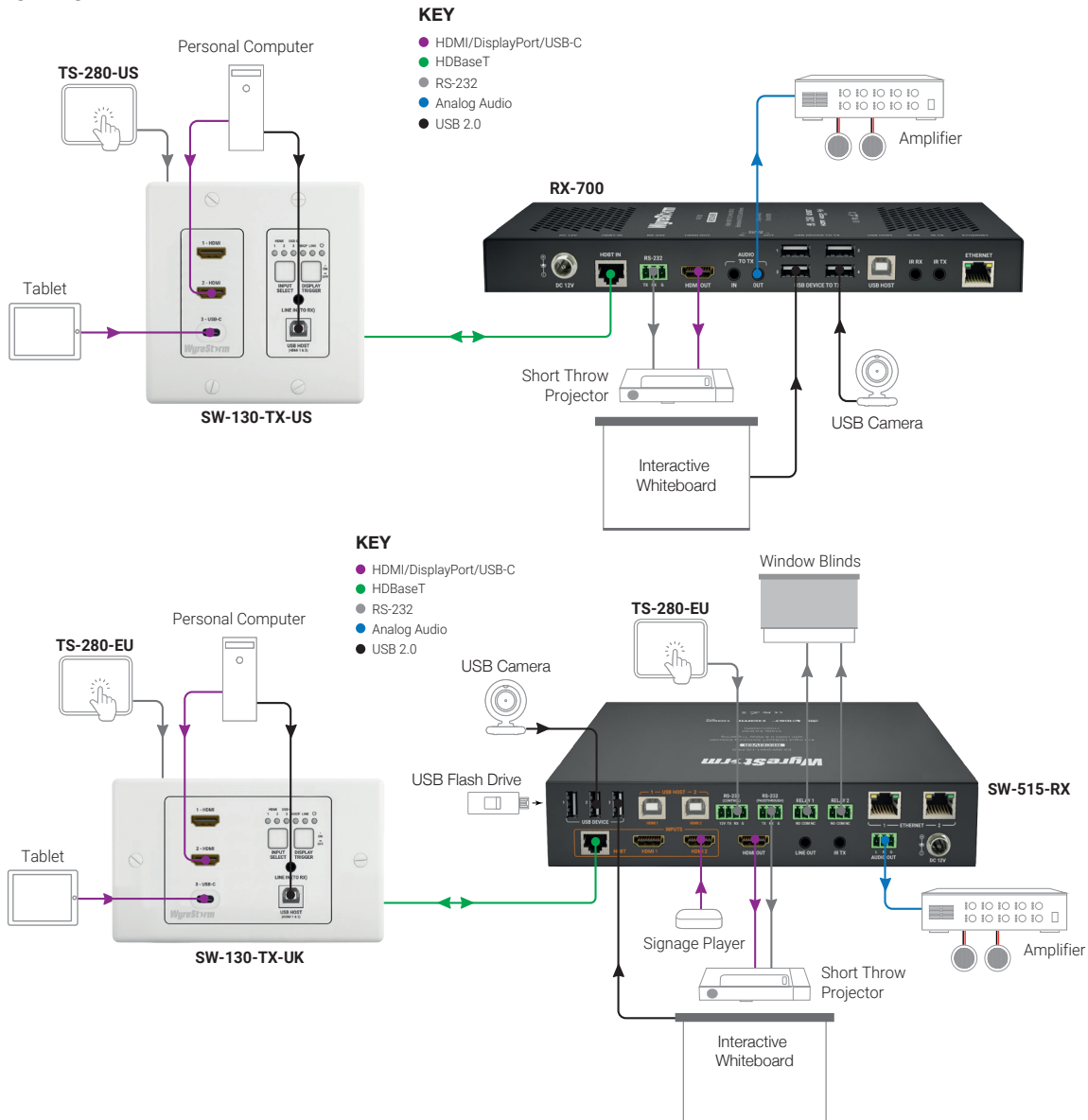
### **!** IMPORTANT! Installation Requirements

- 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 wiring guidelines before creating or choosing premade cables.
- While this product supports CEC, WyreStorm cannot guarantee compatibility with all forms of CEC communication.

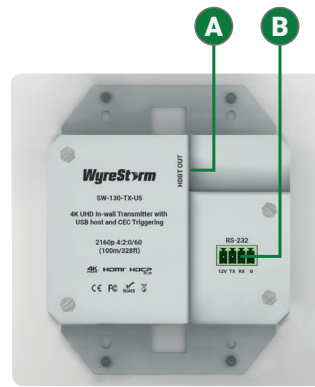
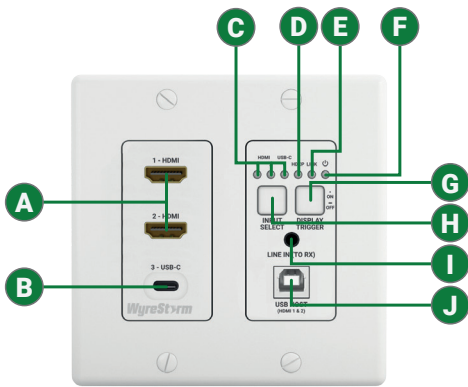
### In the Box

- 1x 4-pin Phoenix Male Connector
- 1x USB host cable (Type A-B)
- 1x Decora face plate (SW-130-TX-US)
- 4x Retaining screws (SW-130-TX-US)
- 1x Quickstart guide (This Document)

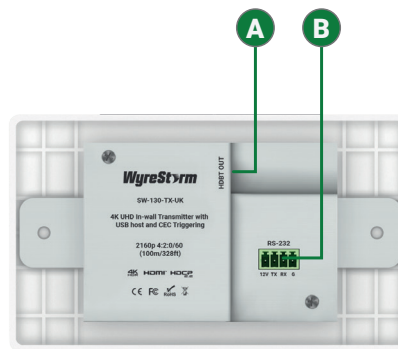
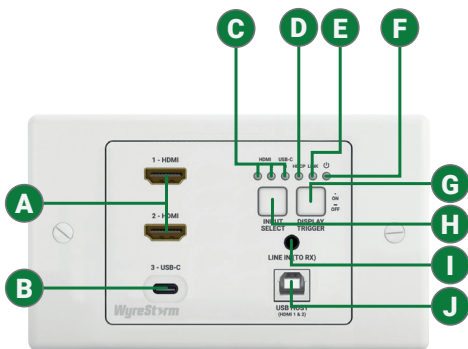
### Basic Wiring Diagram



## SW-130-TX-US (Front/Rear)



## SW-130-TX-UK (Front/Rear)



|                          |  |
|--------------------------|--|
| <b>A</b> HDMI Inputs     | 19-pin type A HDMI female<br>Supports HDMI and DVI/D with adapter  |
| <b>B</b> USB-C Input     | USB3.1C port<br>Supports alt-mode and device charging  |
| <b>C</b> Source LED      | <b>On:</b> Indicates the selected source   |
| <b>D</b> HDCP LED        | <b>On:</b> Indicates encrypted source content<br><b>Off:</b> Indicates non-encrypted source content                      |
| <b>E</b> Link LED        | <b>On:</b> Indicates link established with receiving device<br><b>Off:</b> No link with receiver or receiver powered off |
| <b>F</b> Power LED       | <b>Solid:</b> The unit is powered On<br><b>Off:</b> The unit is powered Off  |
| <b>G</b> Display Trigger | <b>Short Press:</b> Send power on trigger<br><b>Long Press:</b> Send power off trigger                                   |
| <b>H</b> Input Select    | Press to manually change input   |
| <b>I</b> Audio Line In   | 3.5mm jack: 2ch analog audio input   |
| <b>J</b> USB Host        | USB Type A female<br>Connection of USB Host device   |

|                   |  |
|-------------------|--|
| <b>A</b> HDBT Out | 8-pin RJ-45 female<br>Connect the transmitter's <b>HDBT OUT</b> to receiver's <b>HDBT IN</b> . |
| <b>B</b> RS-232   | 4-pin phoenix: Serial input for API control and 12v DC input                                   |

## 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 using pre-terminated HDMI and USB 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.

- This product contains a USB-C connection that can be used as an audio/video input. When using this connection verify that the USB-C cable used supports audio/video functionality as not all USB-C cables support this requirement.

#### 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 |

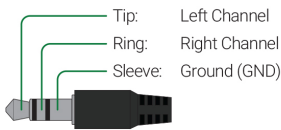
 4K/HD Transmission

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

## Audio Connections

### Audio In

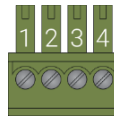
The audio connections use a 3.5mm (1/8in) TRS Stereo Jack.



### RS-232 Wiring

The SW-130-TX-Ux uses a 4-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               | 12V DC Out    | No Connection    |
| Pin 2               | TX (Transmit) | ---> To --->     |
| Pin 3               | RX (Receive)  | ---> To --->     |
| Pin 4               | G (Ground)    | ---> To --->     |

## 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, USB and HDBaseT connections are not loose and are functioning properly.
- 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 3D or 4K, verify that the HDMI cables used are 3D or 4K rated.

### No or Intermittent 3rd party Device Control

- Verify that the RS-232 cables are properly terminated following the [Wiring and Connections](#) section.

### Troubleshooting Tips:

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

**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 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

|   |  |             |                     |                |
|---|--|-------------|---------------------|----------------|
| <b>Transmission</b>   |  |             |                     |                |
| <b>Transmission Encoding</b>  | HDBaseT Class C   PAM16 Encoding   |             |                     |                |
| <b>End to End Latency</b>   | 10µs   |             |                     |                |
| <b>Maximum Transmission Bit Rate</b>  | 10.2Gbps   |             |                     |                |
| <b>Video</b>  |  |             |                     |                |
| <b>HDMI</b>   | v2.0b TMDS   340MHz Maximum  |             |                     |                |
| <b>Inputs</b>   | 2x HDMI In: 19-pin type A   1x USB-C In: USB 3.1c Audio/Video (4.5Gbps)  |             |                     |                |
| <b>Outputs</b>  | 1x HDBT out: 8-pin RJ45  |             |                     |                |
| <b>Maximum Pixel Clock</b>  | HDMI & HDBaseT: 340MHz   |             |                     |                |
| <b>Video Resolutions (Max)</b>  | <b>Video Resolution</b>  | <b>HDMI</b> | <b>Cat6</b>         | <b>Cat6a/7</b> |
|   | 1920x1200p @60Hz   | 70m/230ft   | 70m/230ft           | 100m/328ft     |
|   | 2560x1440p @60Hz   | 15m/49ft    | 100m/328ft          | 100m/328ft     |
|   | 3840x2160p @30Hz 8bit 4:4:4  | 7m/23ft     | 70m/230ft           | 100m/328ft     |
|   | 3840x2160p @30Hz 10bit 4:2:0 HDR   | 5m/16ft     | 70m/230ft           | 100m/328ft     |
|   | 3840x2160p @30Hz 12bit 4:2:2 HDR   | 5m/16ft     | 70m/230ft           | 100m/328ft     |
| <b>Note:</b> 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>Audio</b>  |  |             |                     |                |
| <b>Inputs</b>   | 1 x Audio In: 3.5mm (1/8in) TRS Stereo<br>2ch audio over HDBaseT   1-way to RX   |             |                     |                |
| <b>Audio Formats</b>  | 2ch PCM   Multichannel up to DTS-X and Dolby Atmos   |             |                     |                |
| <b>Maximum Sampling Rate</b>  | 192KHz   |             |                     |                |
| <b>Maximum Audio Channels</b>   | 32   |             |                     |                |
| <b>Audio Return Channel (ARC)</b>   | Not Supported  |             |                     |                |
| <b>Communication and Control</b>  |  |             |                     |                |
| <b>USB Host (HDMI Inputs)</b>   | 1x Type B host   Maximum data throughput: 190Mbps  |             |                     |                |
| <b>USB 3.1c</b>   | Alt-mode Supported   A/V and USB data from RX  |             |                     |                |
| <b>RS-232</b>   | 1x RS-232: 4-pin Phoenix   Shared with 12v DC input<br>Compatible with WyreStorm TS-280 touchscreen via 4-pin phoenix port (only when using PoH) |             |                     |                |
| <b>HDCP</b>   | Pass-through, 2.3 Supported  |             |                     |                |
| <b>EDID</b>   | Pass-through, from RX  |             |                     |                |
| <b>Consumer Electronics Control (CEC)</b>   | One-way display trigger to RX  |             |                     |                |
| <b>Auto Low Latency Mode (ALLM)</b>   | Supported  |             |                     |                |
| <b>Variable Refresh Rate (VRR)</b>  | Supported  |             |                     |                |
| <b>Power</b>  |  |             |                     |                |
| <b>Power Supply</b>   | 12V DC 1A (not included)   |             |                     |                |
| <b>Max Power Consumption</b>  | 7.8W   |             |                     |                |
| <b>Power-over-HDBaseT (PoH)</b>   | Supported, 1-way from RX   |             |                     |                |
| <b>Local Power Supply Input</b>   | 4-pin phoenix  |             |                     |                |
| <b>Environmental</b>  |  |             |                     |                |
| <b>Operating Temperature</b>  | 0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing   |             |                     |                |
| <b>Storage Temperature</b>  | -20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing  |             |                     |                |
| <b>Maximum BTU</b>  | 2.29 BTU/hr  |             |                     |                |
| <b>Dimensions and Weight</b>  |  |             |                     |                |
|   | <b>SW-130-TX-UK</b>  |             | <b>SW-130-TX-US</b> |                |
| <b>Installation</b>   | In-wall, 2-gang  |             | In-wall, 2-gang     |                |
| <b>Height</b>   | 86mm/3.38in  |             | 105mm/4.13in        |                |
| <b>Width</b>  | 146mm/5.74in   |             | 89mm/3.5in          |                |
| <b>Depth</b>  | 38mm/1.55in  |             | 38mm/1.55in         |                |
| <b>Weight</b>   | 0.27Kg/0.60lbs   |             | 0.3Kg/0.66lbs       |                |
| <b>Regulatory</b>   |  |             |                     |                |
| <b>Safety and Emission</b>  | CE   FCC   RoHS   RCM   EAC  |             |                     |                |