WyreStorm SW-130-TX-US 3-Input In-wall HDBaseT Transmitter with USB Host & CEC Trigger 2-gang US-UK Back-box User Guide

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

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.
- The height of the installation should not exceed 2 meters from the ground.
- While this product supports CEC, WyreStorm cannot guarantee compatibility with all forms of CEC communication.
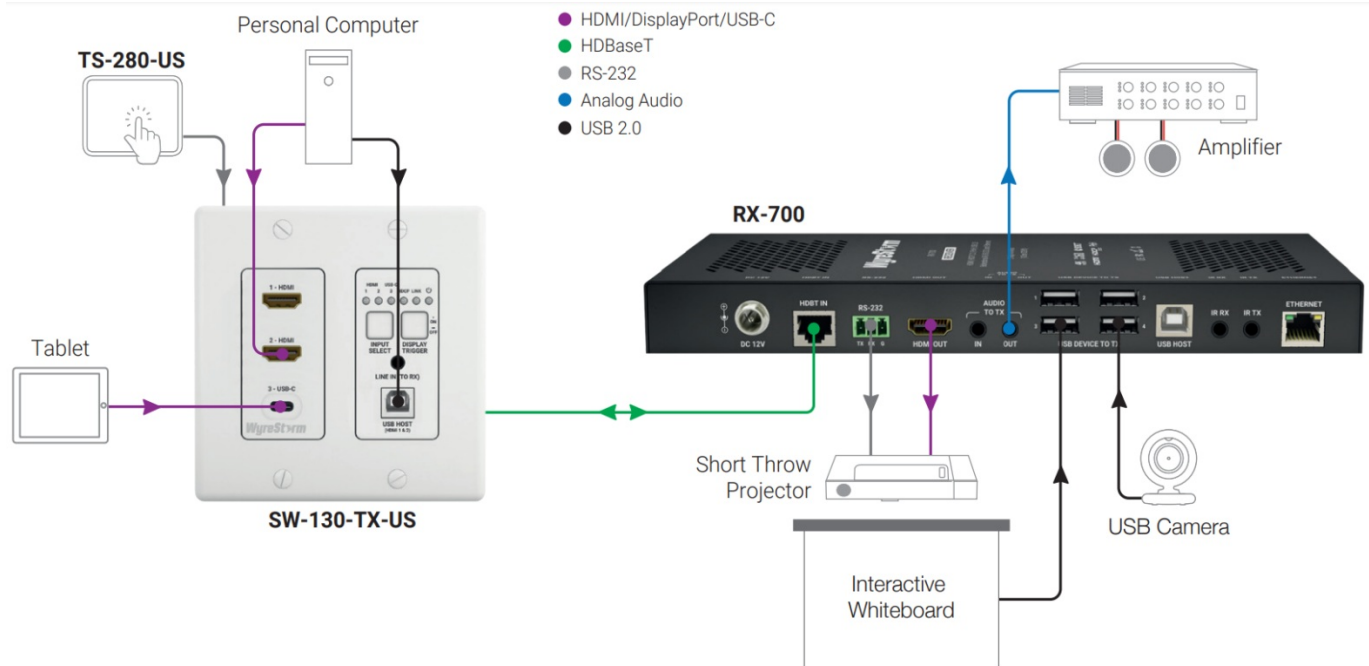
In the Box

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

Contents

Basic Wiring Diagram

KEY
- HDMI/DisplayPort/USB-C
- HDBaseT
- RS-232
- Analog Audio
- USB 2.0

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

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

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

A	HDBT Out	8-pin RJ-45 female Connect the transmitter's HDBT OUT to the receiver's HDBT IN.
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 its 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 the 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.

Audio Connections

Audio In
The audio connections use a 3.5mm (1/8in) TRS Stereo Jack.
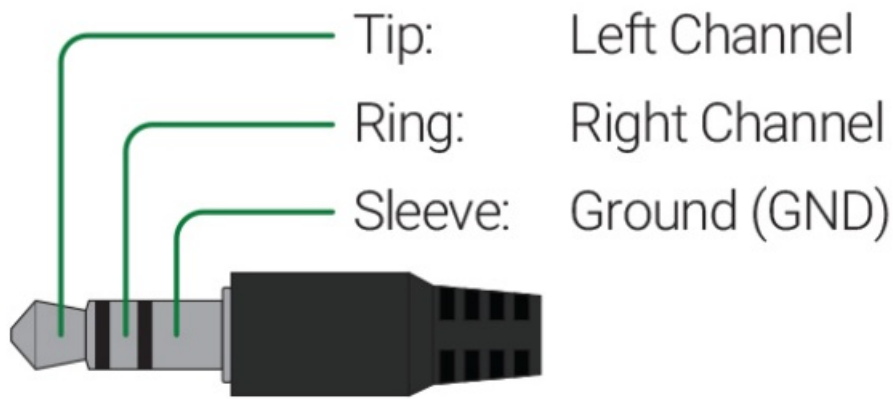
RS-232 Wiring

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 functionally to ensure that the correct connections can be made. Refer to RS-232 Mode Settings for details on setting RS-232 modes.

Troubleshooting

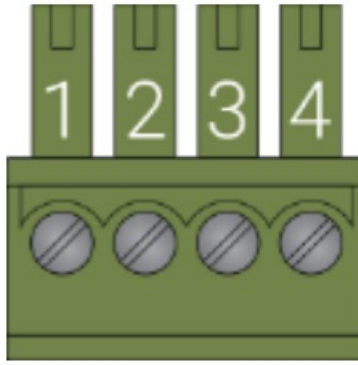**No or Poor Quality Picture (snow or noisy image)**

- 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 the 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.
- 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.

WyreStorm Connector			3rd Party Device
Pin 1	12V DC Out	No Connection	Reserved
Pin 2	TX (Transmit)	—> To —>	RX (Receive)
Pin 3	RX (Receive)	—> To —>	TX (Transmit)
Pin 4	G (Ground)	—> To —>	G (Ground)

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 the 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 for more details on our limited product warranty.

Specifications

Transmission	
Transmission Encoding	HDBaseT Class C I PAM16 Encoding
End to End Latency	10ps
Maximum Transmission Bit Rate	10.2Gbps

Video	
HDMI	v2.0b TMDS1340MHz Maximum
Inputs	2x HDMI In: 19-pin type A I 1x USB-C In: USB 3.1 c Audio/Video (4.5Gbps)
Outputs	lx HDBT out: 8-pin RJ45
Maximum Pixel Clock	HDMI & HDBaseT: 340MHz

	Video Resolution	HDMI	Cat6	Cat6a/7
	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
Video Resolutions (Max)	3840x2160p @30Hz 10bit 4:2:0 HDR	5m/16ft	70m/230ft	100m/328ft
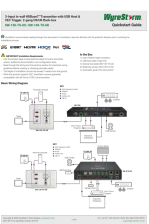
	3840x2160p @30Hz 12bit 4:2:2 HDR	5m/16ft	70m/230ft	100m/328ft
	Note: WyreStorm recommends the use of shielded category cable to minimize signal noise and interference.			
Supported Standards	DCI I RGB I HDR I HDR101 Dolby Vision up to 30Hz I HLG I 312020IBT.2100			

Audio	
Inputs	1 x Audio In: 3.5mm (1/8in) TRS Stereo 2ch audio over HDBaseT I 1-way to RX
Audio Formats	2ch PCM I Multichannel up to DTS-X and Dolby Atmos
Maximum Sampling Rate	192KHz
Maximum Audio Channels	32
Audio Return Channel (ARC)	Not Supported

Communication and Control	
USB Host (HDMI Inputs)	1x Type B host I Maximum data throughput: 190Mbps
USB 3.1c	Alt-mode Supported I A/V and USB data from RX
RS-232	1x RS-232: 4-pin Phoenix I Shared with 12v DC input Compatible with WyreStorm TS-280 touchscreen via 4-pin phoenix port (only when using PoH)
HDCP	Pass-through, 2.3 Supported
EDIT	Pass-through, from RX
Consumer Electronics Control (CEC)	One-way display trigger to RX

Auto Low Latency Mode (ALLM)	Supported	
Variable Refresh Rate (VRR)	Supported	
Power		
Power Supply	12V DC 1A (not included)	
Max Power Consumption	7.8W	
Power-over-HDBaseT (PoH)	Supported, 1-way from RX	
Local Power Supply Input	4-pin phoenix	
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	2.29 BTU/hr	
Dimensions and Weight		
	SW-130-TX-UK	SW-130-TX-US
Installation	In-wall, 2-gang	In-wall, 2-gang
Height	86mm/3.38in	105mm/4.13in
Width	146mm/5.74in	89mm/3.5in
Depth	38mm/1.55in	38mm/1.55in
Weight	0.27Kg/0.60Ibs	0.3Kg/0.661bs
Regulatory		
Safety and Emission	CE I FCC I RoHS I RCM I EAC	

Documents / Resources

WyreStorm SW-130-TX-US 3-Input In-wall HDBaseT Transmitter with USB Host & CEC Trigger 2-gang US-UK Back-box [pdf] User Guide
SW-130-TX-US, SW-130-TX-UK, 3-Input In-wall HDBaseT Transmitter with USB Host CEC Trigger 2-gang US-UK Back-box

References

- **WyreStorm - Professional Audio Visual Solution Provider**