2.8" Serial Control Color Touchscreen

TS-280-US | TS-280-EU

WyreStorm

Quickstart Guide

WyreStorm recommends reading through this document in its entirety to become familiar with the product's features before beginning the installation process.
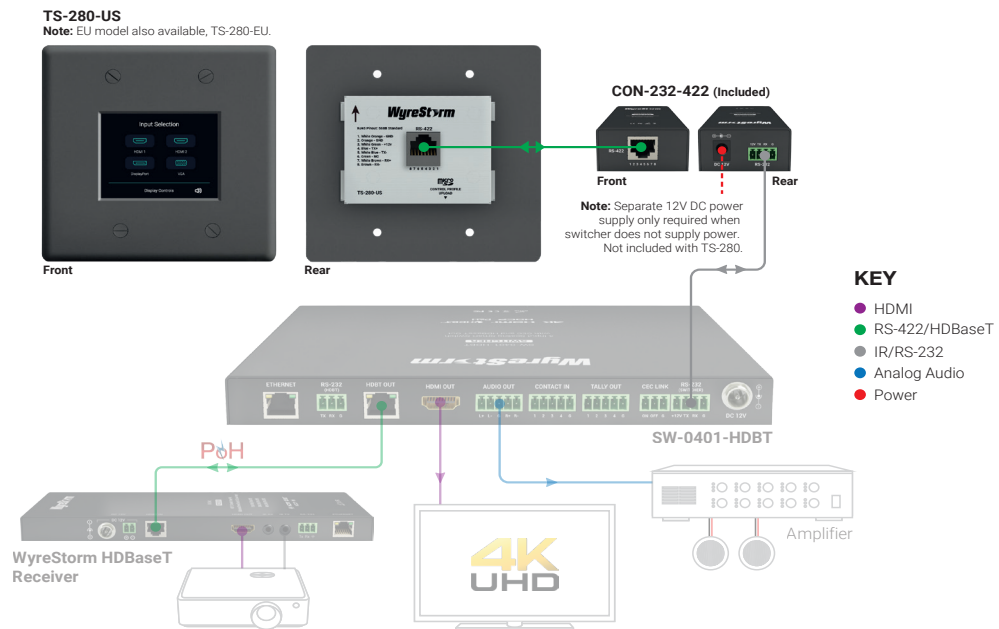
⚠️ **IMPORTANT! Installation Requirements**

- 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.

In the Box

1x TS-280-EU or TS-280-US
1x 4-pin Phoenix Terminal Block
1x CON-232-422 Touchscreen Interface Module
2x Mounting Brackets for interface module
1x MicroSD Card
1x MicroSD USB Adaptor
1x Quickstart Guide (this document)

Basic Wiring Diagram

TS-280-US
Note: EU model also available, TS-280-EU.

Front   **Rear**

CON-232-422 (Included)

Front   **Rear**

Note: Separate 12V DC power supply only required when switcher does not supply power. Not included with TS-280.

KEY
- ● HDMI
- ● RS-422/HDBaseT
- ● IR/RS-232
- ● Analog Audio
- ● Power

SW-0401-HDBT

PoH

WyreStorm HDBaseT Receiver

4K UHD

Amplifier

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 any wires to ensure proper operation and to avoid damaging the 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.

Touchscreen Interface Module RS-232 Wiring

The touchscreen uses a separate component that connects to a WyreStorm switcher for RS-232 communication. This signal is converted to RS-422 for the touchscreen itself. Connection on the CON-232-422 is a 4-pin phoenix which not only contains the pins for communication, it also contains a pin for power from some of the currently available switchers. This can be used to power the converter from the switcher eliminating the need for a separate PSU. In the case of 3-pin connections on switchers, a separate PSU will be required.

Switchers with 4-pin RS-232 Connection

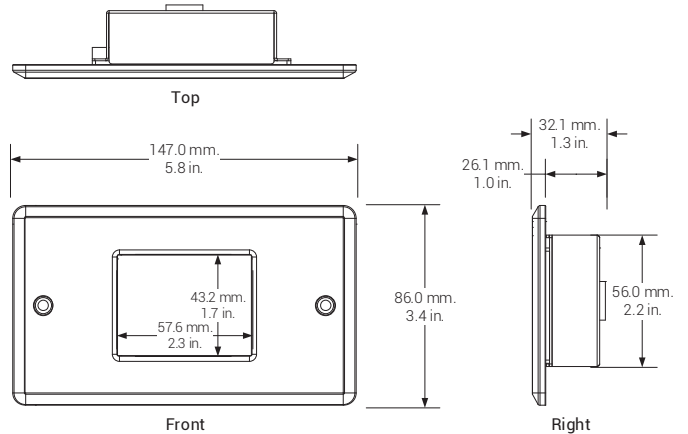| Touchscreen Interface			Switcher with 4-pin	
Pin 1	12V DC In	---> To --->	Pin 1	12V DC Out
Pin 2	TX (Transmit)	---> To --->	Pin 3	RX (Receive)
Pin 3	RX (Receive)	---> To --->	Pin 2	TX (Transmit)
Pin 4	G (Ground)	---> To --->	Pin 4	G (Ground)

Switchers with 3-pin RS-232 Connection

Touchscreen Interface			Switcher with 3-pin	
Pin 1	12V DC In	---> To --->	No Connection	
Pin 2	TX (Transmit)	---> To --->	Pin 2	RX (Receive)
Pin 3	RX (Receive)	---> To --->	Pin 1	TX (Transmit)
Pin 4	G (Ground)	---> To --->	Pin 3	G (Ground)

Product Dimensions

TS-280-US Dimensions

Top

117.0 mm.
4.6 in.

43.2 mm.
1.7 in.

57.6 mm.
2.3 in.

114.0 mm.
4.5 in.

Front

32.1 mm.
1.3 in.

26.1 mm.
1.0 in.

56.0 mm.
2.2 in.

Right

TS-280-EU Dimensions

Top

147.0 mm.
5.8 in.

43.2 mm.
1.7 in.

57.6 mm.
2.3 in.

86.0 mm.
3.4 in.

Front

32.1 mm.
1.3 in.

26.1 mm.
1.0 in.

56.0 mm.
2.2 in.

Right
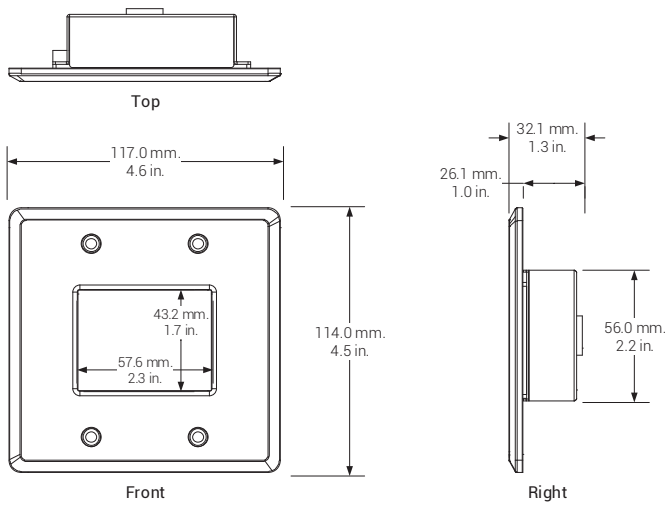
Setup and Configuration

1. In any browser Go to wyrestorm.com and navigate to the TS-280 product page
2. Scroll down and click on **User Interfaces** under Downloads.
3. Select the appropriate UI file for the product being installed and download the file.
4. Once downloaded, unzip the contents to ensure they are available for the next steps.
5. Insert the microSD card into the USB reader and connect to a PC or Mac.
6. Select the appropriate xxxx.tft file based on the actions required for the installation and copy to the MicroSD card drive.
7. Once the file has downloaded, eject the MicroSD card from the PC/Mac and remove from the reader.
8. Insert the MicroSD card into the card slot located on the rear of the touchscreen.
9. Connect the CON-232-422 to the switcher or a PSU. If connecting to a switcher, power on the switcher.
10. Connect the touchscreen to the CON-232-422. Once connected the download will begin.
11. The screen will show the progress and indicate when it is complete. Once completed and verified, disconnect the screen from the CON-232-422 and/or the PSU from the CON-232-422 and ensure the MicroSD card is removed.
12. The touchscreen is now ready to be installed and used with the switcher.

Troubleshooting

Touchscreen not Powering On
- Verify that power is being supplied to the CON-232-422 either via power from the switcher on the RS-232 connection or a separate 12V DC PSU (not included).
- Verify that the category cable between the CON-232-422 is properly terminated following EIA568B standard.
- Verify that the cable between the switcher and the CON-232-422 is properly terminated following the Wiring and Connections section.

File Fails to Upload
- Ensure the .tft file is loaded to the root folder of the MicroSD card.
- Other folders may be stored to the MicroSD card but only the .tft UI file can exist in the root folder.

Touchscreen not Controlling Switcher
- Verify that the category cable between the CON-232-422 is properly terminated following EIA568B standard.
- Verify that the cable between the switcher and the CON-232-422 is properly terminated following the Wiring and Connections section.
- Verify that the appropriate UI file for the switcher was downloaded and installed on the touchscreen.

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

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Specifications

	Touchscreen		Touchscreen Interface Module
Audio and Video			
Switcher Control	1x RS-422: 8-pin RJ-45 Female		1x RS-232: 4-pin Phoenix
Max Communication Distance	100m/328ft Interface to Touchscreen		15.24m/50ft Switcher to Interface
Power			
Power Supply	12VDC from Touchscreen Interface Module		12V DC from switcher or separate PSU (not included)
Max Power Consumption	0.84W		0.36W
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	Transmitter: 24 BTU/hr | Receiver: 58 BTU/hr		
Dimensions and Weight			
	TS-280-US	**TS-280-EU**	
Rack Units/Wall Box	2 Gang	2 Gang	<1U
Height With | Without Feet	114mm/4.49in	86mm/3.39in	25mm/0.99in
Width With | Without Brackets	117mm/4.61in	147mm/5.79in	80.2mm/3.16in
Depth With | Without Handles	32.1mm/1.27in	32.1mm/1.27in	50mm/1.97in
Weight	0.30kg/0.66lbs	0.28kg/0.62lbs	0.14kg/0.30lbs
Regulatory			
Safety and Emission	CE | FCC | RoHS		

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 for more details on our limited product warranty.