

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

- 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 recommends using pre-terminated HDMI, USB and Ethernet 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

A 5-pin Phoenix connector is used for balanced stereo audio output.

5-Pin Phoenix Terminal

WyreStorm Connector	3rd Party Device
Pin 1 Left Positive (L+)	---> To ---> Left Positive (L+)
Pin 2 Left Negative (L-)	---> To ---> Left Negative (L-)
Pin 3 Ground (G)	---> To ---> Ground (G)
Pin 4 Right Negative (R-)	---> To ---> Right Negative (R-)
Pin 5 Right Positive (R+)	---> To ---> Right Positive (R+)

Communication Connections

RS-232 Wiring

The SW-620-TX-W 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 functionality to ensure that the correct connections can be made.

Setup and Configuration

Access the SW-620-TX-W's settings through its Web User Interface by entering the unit's IP address into your preferred web browser. By default, the unit is configured to use DHCP for network connection.

To obtain the IP address of your SW-620-TX-W:

1. Connect an external display to the HDMI output
2. A guide screen will appear on the display, where you can find the current IP address of the unit.

RS-232 and IP Settings

Baud Rate:	115200
Data Bits:	8bits
Parity:	None
Stop Bits:	1bit
Flow Control:	None
Default IP Address:	DHCP
Default IP Port:	23

Mute Connections

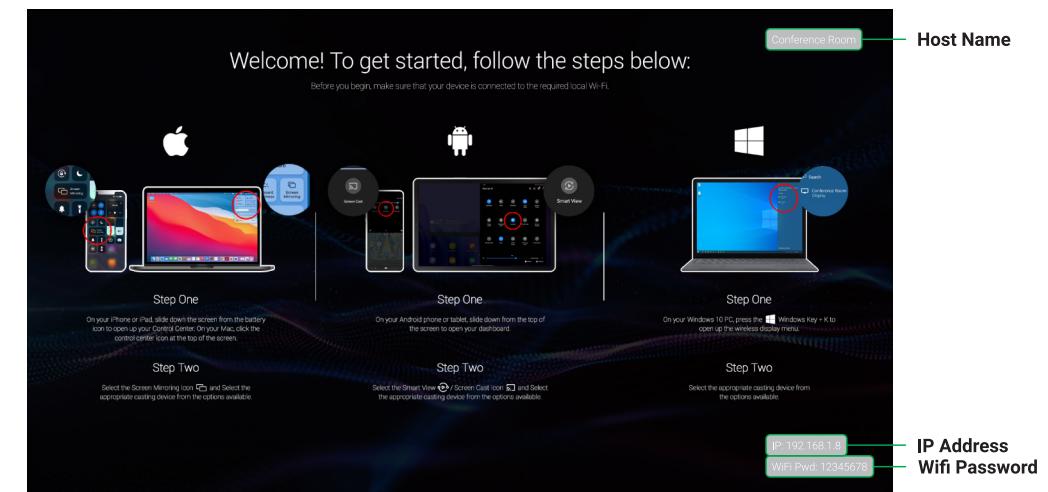
Designed to be connected to button. Once these two pins are connected the audio will be muted on HDMI out and analog out.

4-Pin Phoenix Terminal

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

Guide Screen

- The switcher uses a Guide Screen to convey the basic connection instructions for user access.
- Guide Screen info and background can be personalized in Web UI to allow custom connection instructions and background image.
- This Guide Screen image can be changed through Web UI. By default, if the device is outputting Guide Screen picture for 60 seconds, a 60-second OSD countdown will appear on the Guide Screen. When the countdown reaches zero, the device will enter standby status, this can be changed via web UI.



Features

- Provides a USB-C and HDMI input, plus two HDMI outputs.
- USB-C Input supports dual-video input (MST), charging up to 100W, Ethernet connection, and USB 3.0 transmission.
- Supports two HDMI outputs in single view, or one HDMI Multiview output.
- Supports input resolutions up to 4K@30Hz 4:4:4 and output resolutions up to 4K@60Hz 4:4:4 (HDMI OUT 1 only).
- Fast seamless switching for both single and Multiview mode.
- Built-in Wi-Fi modules for wireless connectivity with devices over Airplay Mirroring, Miracast, APO-DG2, APO-DG2-PRO.
- Supports wireless conference (using Dongle for connecting between the host PC and USB peripherals wirelessly).
- Built-in USB 3.0 switcher allows USB switching among 1 USB host and Wireless dongles (APO-DG2, APO-DG2-PRO).
- 2 Ethernet ports for networking flexibility/security and Ethernet passthrough to USB-C and USB-B hosts.
- Detailed and friendly OSD information.



Manufacturer: WyreStorm Technologies ProAV Corporation
Address: 27 Wood Road, Suite 100, Round Lake, NY 12151
Model: SW-620-TX-W



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
FCC ID:2BAXS-SW620TXW

WiFi Operation Frequency:
2.4G: 2412MHz~2462MHz
5G: 5180MHz~5240MHz
5.8G: 5745MHz~5805MHz

Maximum Power:
14.89 dBm (E.I.R.P.)
16.38 dBm (E.I.R.P.)
10.81 dBm (E.I.R.P.)

Troubleshooting

No or Poor Quality Picture (snow or noisy image)

- Verify that the USB-C & HDMI inputs and HDMI output connections are not loose and are functioning properly.
- Make sure you are using full featured USB Type-C cables made by WyreStorm or other reliable brands.
- Verify that the output resolution of the source and display is supported by this switcher.
- Configure EDID Settings to a lower resolution.
- If transmitting 4K, verify that the HDMI & USB-C cables used are 4K rated.

No or Intermittent 3rd party Device Control

Verify that RS-232 cable is properly terminated. If you are using IP control make sure switcher and your control system are on the same IP range.

Wireless Casting Issues

- Make sure your BYOD is connected to the "SW-620-TX-W-XXXX" soft AP SSID ("XXXX" are the last 4 characters of devices MAC address).
- Make sure you entered correct access code which can be obtained through OSD

Troubleshooting Tips:

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

Specifications

Audio and Video		
Inputs	1x HDMI: 19-pin type A, up to 4K@30Hz 4:4:4 8bit 1x USB-C, Video input with MST, up to 2x 4K@30Hz Wireless Video from APO-DG2, APO-DG2-PRO (1080@60Hz, 2160@30Hz), Airplay or Miracast source (1080@60Hz)	
Outputs	2x HDMI: 19-pin type A, Output 1 – 4K@60Hz 4:4:4 8bit, Output 2 – 4K@30Hz 4:4:4 8bit, 1x Analog Audio Output (5-pin Phoenix Male Connector)	
Output Video Encoding	HDMI	
Audio Formats	2ch PCM	
Supported Standards	DCI RGB	
Maximum Pixel Clock	300MHz (600MHz on HDMI OUT1)	
Communication and Control		
HDMI	HDMI CEC HDCP 2.3 EDID	
RS-232	1x 4-pin Phoenix (API control) Provides 12v power	
USB	3 x USB 3.0 Type A device ports 5v 1000mA per port 1 x USB 3.0 Type B host port (assignable) 1 x USB 3.0 Type-C port	
LAN	2x 8-pin RJ-45 for API control (Telnet, TLS, HTTP/HTTPS for webUI)	
	4x Wi-Fi Antennas IEEE 802.11 a/b/g/n/ac Dual-band 2.4 & 5GHz WEP, TKIP, AES, WPA, WPA2 Max E.I.R.P.:16.38 dBm (43.45mW)	
Wireless	WiFi Operation Frequency: 2.4G: 2412MHz~2462MHz 5G: 5180MHz~5240MHz 5.8G: 5745MHz~5805MHz	Maximum Power: 14.89 dBm (E.I.R.P.) 16.38 dBm (E.I.R.P.) 10.81 dBm (E.I.R.P.)
Power		
Power Supply	20V 10A	
Max Power Consumption	132W	
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	450 BTU/hr	
Dimensions and Weight		
Rack Units/Wall Box	<1U	
Height	25mm/0.98in	
Width	215mm/8.46in	
Depth	160mm/6.30in	
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.



4K Presentation Switcher with 2-Inputs, advanced USB-C integration, 100W USB-C Power Delivery, Multi-Stream Transport, Multiview & Wireless Casting

SW-620-TX-W

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.



IMPORTANT! Installation Requirements

- Read through the [Wiring and Connections](#) section for important wiring guidelines before creating or choosing premade cables.
- While these products support CEC for the HDMI outputs, WyreStorm cannot guarantee compatibility with all forms of CEC communication.
- Visit the product pages to download the latest firmware, document version, additional documentation, and configuration tools.

In the Box

- 1x SW-620-TX-W
- 1x Power adapter 20V/10A DC
- 4x AC cables, US, EU, UK, AU specifications respectively
- 1x 2-Pin Phoenix connector for MUTE port
- 1x 4-Pin Phoenix connector for RS232
- 1x 5-Pin Phoenix connector for analog audio output
- 4x Wi-Fi antennas
- 4x Mount brackets with screws
- 1x Quickstart Guide (This Document)

Basic Wiring Diagram

