

10x7 Multi-Input Hybrid Matrix

MX-1007-HYB



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. For other language versions of this document, check wyrestorm.com.

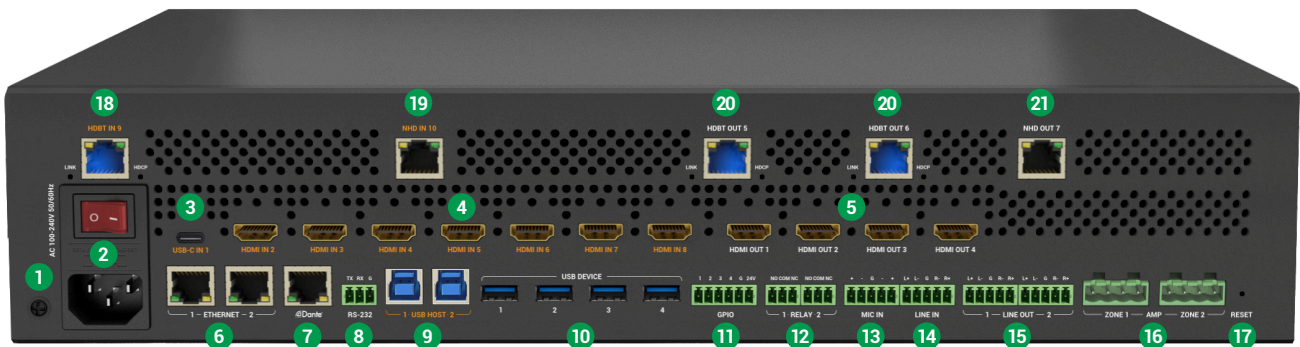


DOCUMENTATION
To access all documentation including full manuals, scan the QR code.

Key Features

- Multi-format video connections include USB-C, HDMI, HDBaseT and NetworkHD (500 Series)
- NetworkHD input and output supports spill-over applications
- Fast up to 1 second switching across all video outputs
- 480p to 2160p scaling built-in all video outputs
- USB-C input supports 4K60 video, USB3.0&USB2.0, 1G network, and PD3.0 USB host charging up to 60watts
- All HDBaseT outputs support HDBaseT 3.0 specification, which includes uncompressed A/V, RS-232, USB2.0 and PoE+ PSE transmission up to 330ft/100m
- NetworkHD output supports a 4K60 scaler, and seamless switching of A/V, USB2.0 and RS-232 control signals up to 330ft/100m, or longer via 1G network switch
- Supports USB host switching and device extension
- Switching USB hosts include 1x USB-C port, 2x local USB3.0 USB-B ports, 1x NHD input, 1x HDBT input related USB connection
- USB devices include 4x local USB3.0 USB-A ports, 1x NHD output, 2x HDBT outputs related USB connections.
- Supports 2x MIC inputs, 1x LINE input, Dante 4x4 optional and 2x 5-pin balanced audio outputs
- 4-channel 4/8ohm speaker outputs (2x channel mode = 2x 50watts with 4ohm speakers, 4x channel mode = 4x 25watts with 4ohm speakers) *For 8ohm speaker, the output power will be halved
- GPIO and Relay support for automation of screens, occupancy etc,;

Port Descriptions

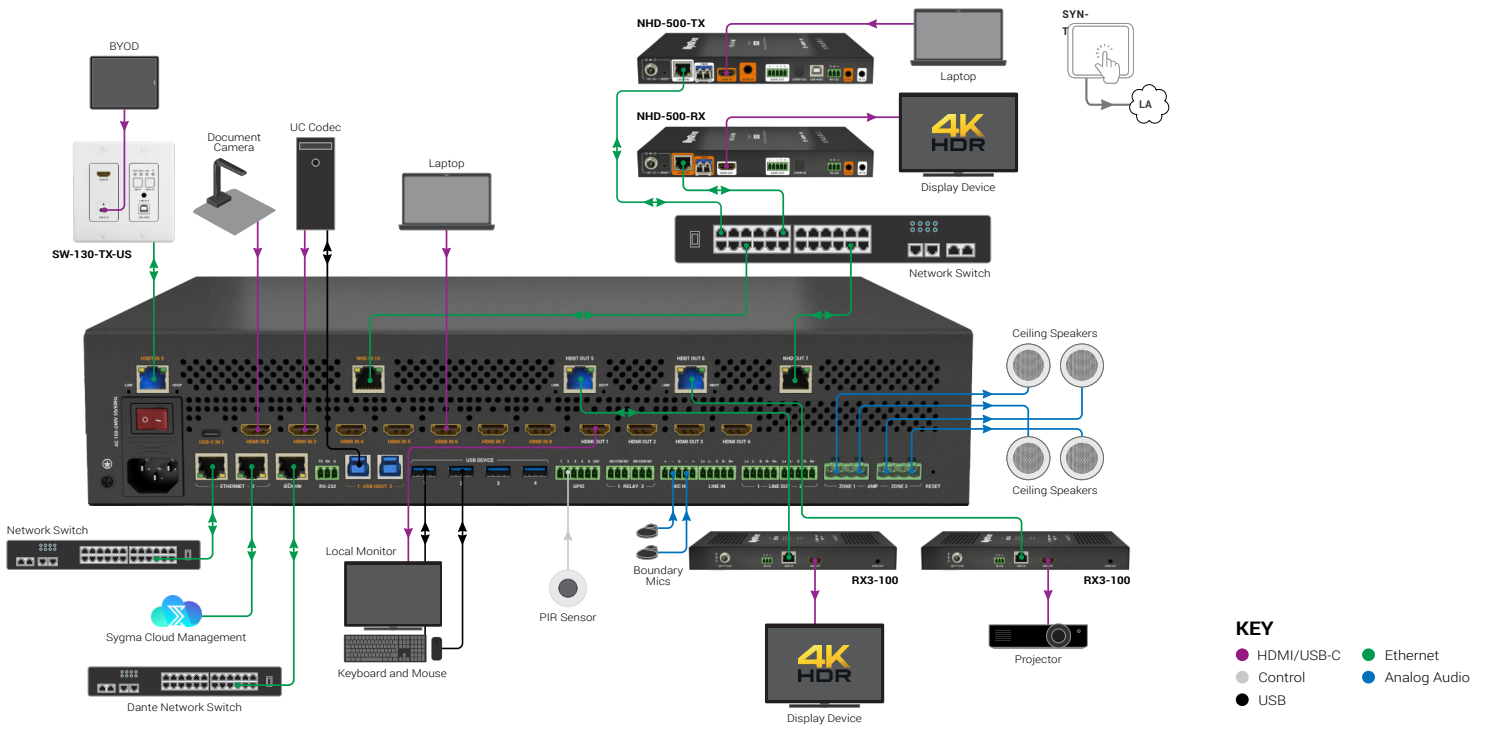


Number	Port Name	Description
1	Grounding Screw	Shields the matrix from EMI/RFI and static discharge
2	Power Socket and Fuse	AC 100-240V socket and glass tube fuse
3	USB-C Input	Supports 4K60 video, USB 3.0 host and 60watt charging
4	HDMI Inputs	HDMI 2.0, HDCP 2.3, auto switching, first-in last-out,
5	HDMI Outputs	Full scaler
6	Ethernet Ports	TCP/IP control and cloud monitoring
7	Dante Output	Dante Ultimo 4x4
8	RS-232 Control	RS-232 switcher control via control system
9	USB Host	USB 3.0 supports host switching
10	USB Device	USB 3.0 connect cameras, mice, keyboards, Flash memory. Which ever host is selected will access these ports
11	GPIO	Occupancy sensor

Number	Port Name	Description
12	Relays	x2 relay, shades, screens etc
13	Microphone Input	Phantom power, noise filtering, gain adjustment
14	Line Input	Gain adjustment, noise filtering, true differential signal
15	Line Out	Volume control
16	Amplifier Out	Full audio DSP, 4x channel (25w per), 4/8ohm
17	IP and Factory Reset	Factory defaults matrix settings
18	HDBaseT Input	Uncompressed input up to 330ft/100m
19	NetworkHD Input	NHD-500-TX
20	HDBaseT Output	Uncompressed signal up to 330ft/100m Note: Cat6a is required for 100m distance
21	NetworkHD Output	NHD-500-RX

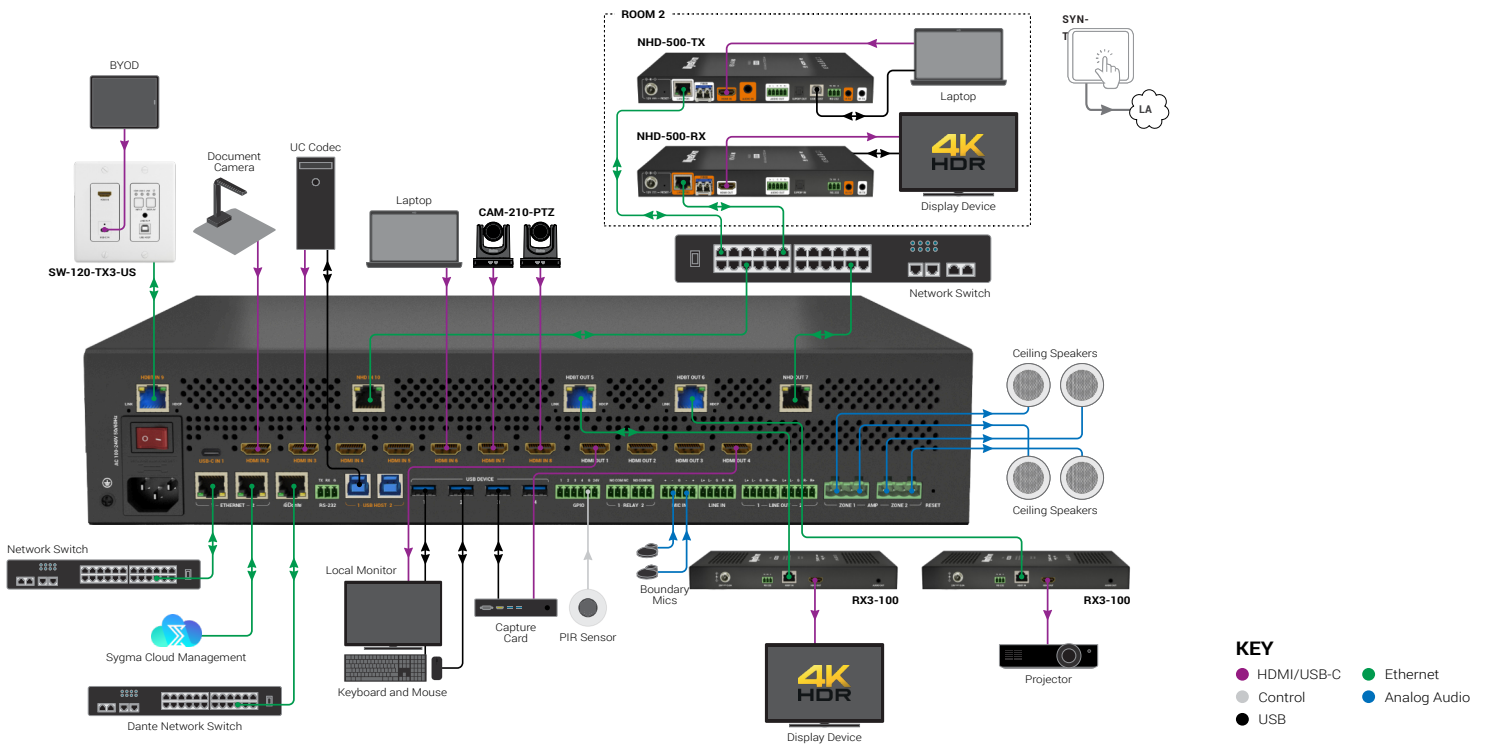
Wiring Diagram

Multi-Room Presentation/Large Lecture Hall



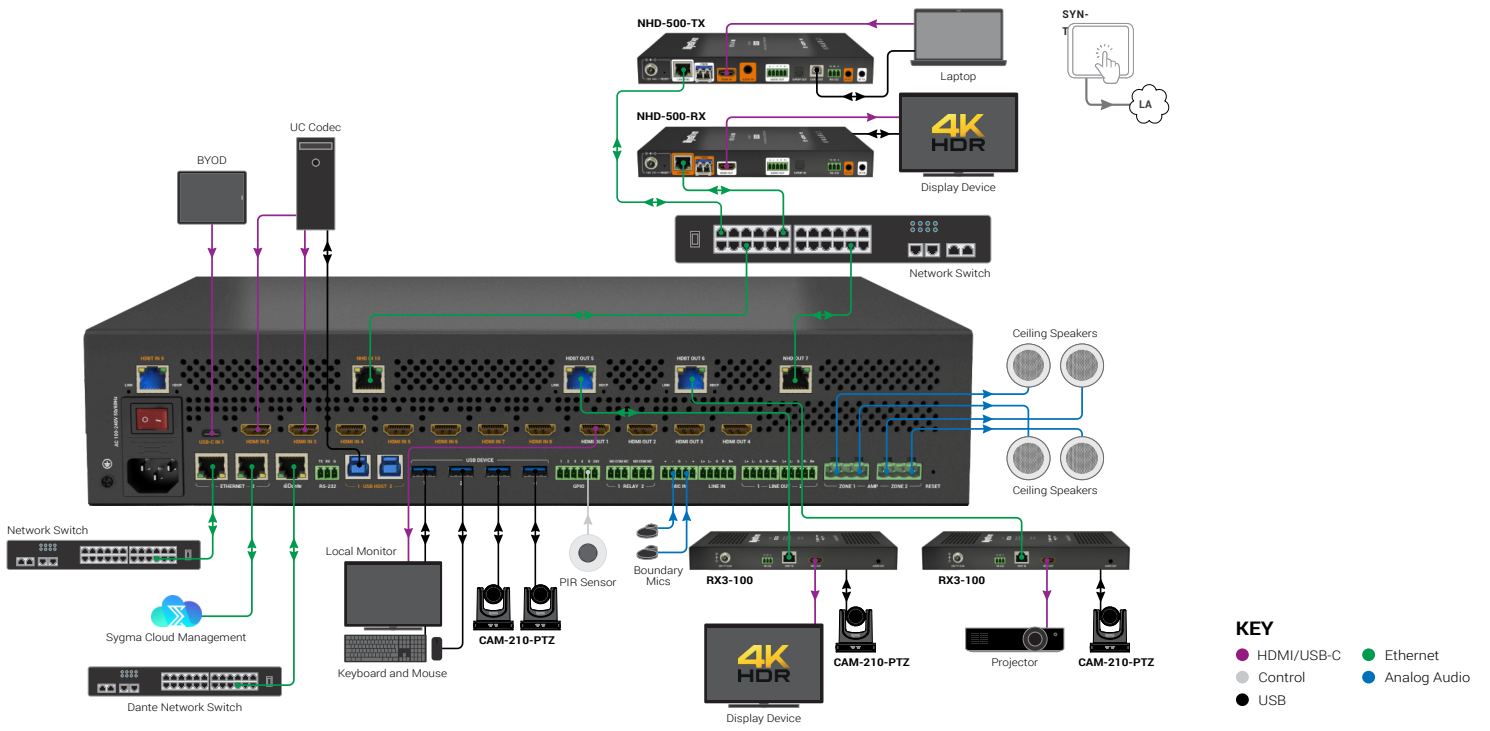
Wiring Diagram

Multi-Room (Hybrid HDBaseT/AV over IP)



Wiring Diagram

Corporate Unified Communications



Audio and Video	
Inputs	1x USB-C In with Alt-Mode 7x HDMI In: 19-pin type A 1x HDBT 3.0 In: RJ-45 Female 1x NetworkHD 500 In: RJ-45 Female 2x USB-B Host
Outputs	4x HDMI Out: 19-pin type A 2x HDBT 3.0 Out: RJ-45 Female 1x NetworkHD 500 Out: RJ-45 Female 4x USB-A Device 4x GPIO Phoenix Port 2x Relay Phoenix Port
Output Video Encoding	HDBaseT JPEG 2000
Encoding Data Rate	18Gbps
Audio Formats	PCM 2ch Analog
Video Resolution (Max)	1920x1080p @60Hz 3840x2160p @60Hz 4:2:0 3840x2160 @60Hz 4:4:4
Maximum Pixel Clock	600MHz
Communication and Control	
HDMI	HDMI 2.0 HDCP 2.3 EDID CEC
HDBaseT	HDMI 2.0 HDCP 2.3 EDID USB 2.0 CEC RS-232 1-way PoH
NetworkHD	HDMI 2.0 HDCP 2.3 EDID USB2.0 RS-232
Dante Ultimo 4x4	1x 1GbE RJ-45
RS-232	1x RS-232: 3-pin Phoenix Female Matrix Control Routable RS-232 Device Control Telnet commands supported
Ethernet	2x LAN: 8-pin RJ-45 Female Web UI Matrix Control and Ethernet
Power	
Power Supply	100~240V AC 50/60Hz
Max Power Consumption	
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	
Dimensions and Weight	
Rack Units/Wall Box	2U
Height	88mm/3.46in
Width	440mm/17.33in
Depth	362mm/14.25in
Weight	
Regulatory	
Supported Standards	DCI (4096x2160) RGB HDR HDR10 Dolby Vision HLG BT.2020

Warranty Information

WyreStorm Technologies 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](https://www.wyrestorm.com) for more details on our limited product warranty.

