

18Gbps 4K HDR HDBaseT Extender with HDCP 2.2 and 2-way PoH

EX-35-H2 v2

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

- This product was released in 2 different versions which contain different chassis designs and feature sets.
- See Identifying Product Versions for details.
- 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 EX-35-H2 Transmitter
- 1x EX-35-H2 Receiver
- 1x 18V DC 1A Power Supply (US/UK/EU)
- 2x 3-pin Screw Down Phoenix Connectors
- 1x IR Emitter
- 1x IR Receiver
- 4x Mounting Brackets (2x for TX | 2x for RX)
- 1x Quickstart Guide (this document)

Identifying Product Versions

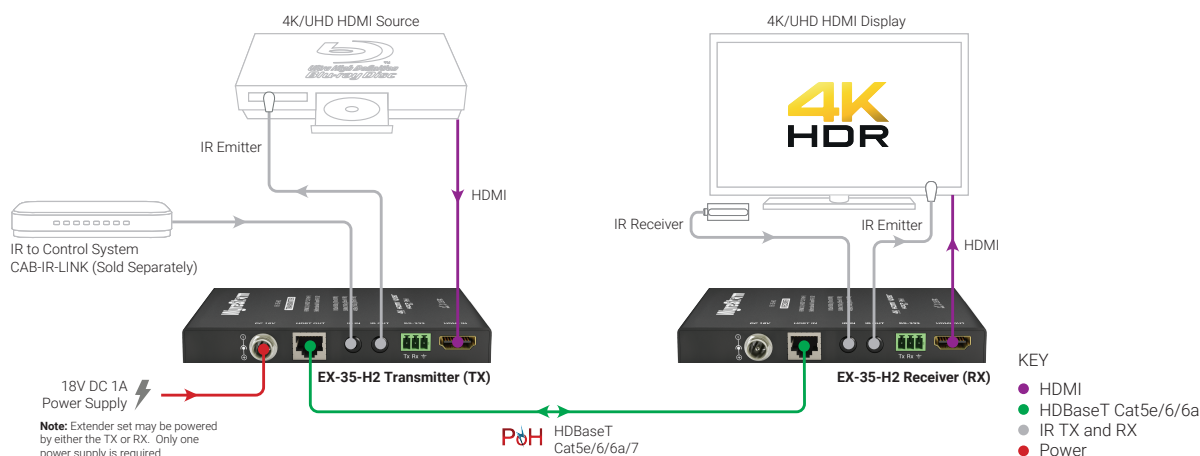
This product was released in 2 different versions which contain different chassis designs and feature sets. The differences are identified throughout this document in order to make installation and use easier.

Versions can be identified by a v# after the model number on the product chassis model number sticker. Note that version 1 of this product may not contain a v1 after the product while all version 2s will contain a v2 after the model number.

Operational Differences

Feature	Version 1	Version 2
RS-232 Mode Switch	Yes	No – Changes made this switch unnecessary
3840x2160p @60Hz 10bit 4:2:0 HDR	Not Supported on Category Cable (HDBaseT)	Supported on Category Cable (HDBaseT)
4096x2160p @60Hz 8bit 4:4:4		

Basic Wiring Diagram



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.



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.
- WyreStorm recommends using pre-terminated HDMI 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.

IR TX/RX Guidelines

- Using WyreStorm infrared emitters and receivers is the best way to ensure that most IR coding formats are transmitted and received by the system. Other 3rd party emitters and receivers can be used; however, these devices must operate in the same manner as the WyreStorm devices.
- Due to differences in IR across 3rd party control systems their IR ports should never be connected directly to a NetworkHD system as an incompatibility may exist. WyreStorm offers a cable that compensates for voltage differences as well adjusts for differences in the pins used within the port. Refer to the CAB-IR-LINK product page for more information.

Cat6 Cable Performance Guide



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

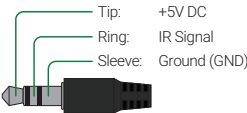
IR TX Port Pinout

Connection for IR TX (transmit) uses a 3.5mm (1/8in) mono plug.



IR RX Port Pinout

Connection for IR RX (receive) uses a 3.5mm (1/8in) stereo jack that outputs +5V DC to power the included IR receiver.



RS-232 Wiring

The EX-35-H2 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.

	WyreStorm Connector		3rd Party Device
Pin 1	TX (Transmit)	---> To --->	RX (Receive)
Pin 2	RX (Receive)	---> To --->	TX (Transmit)
Pin 3	G (Ground)	---> To --->	G (Ground)

RS-232 Mode Settings

The RS-232 connector is used to transmit RS-232 over HDBaseT to the remote location and for firmware updates. Ensure that the RS-232 Mode switch in the proper position for the operation being performed. This connection is only available on version 1 of this product.

Set the mode switch to Normal to transmit RS-232 signals from the TX to the RX for controlling devices in the remote location.

Set the mode switch to the Update position to install a firmware update in either the TX or RX.

Power Supply Wiring

The EX-35-H2 can supply power from the transmitter to the receiver using PoH on the same category cable that transmits audio and video. The included power must be connected to the transmitter in order to power the receiver. Should distance of the category cable or other factors prevent PoH from being used, connect an 18V DC 1A power supply to both devices. Additional power supplies may be purchased from WyreStorm.

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 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 IR and 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.