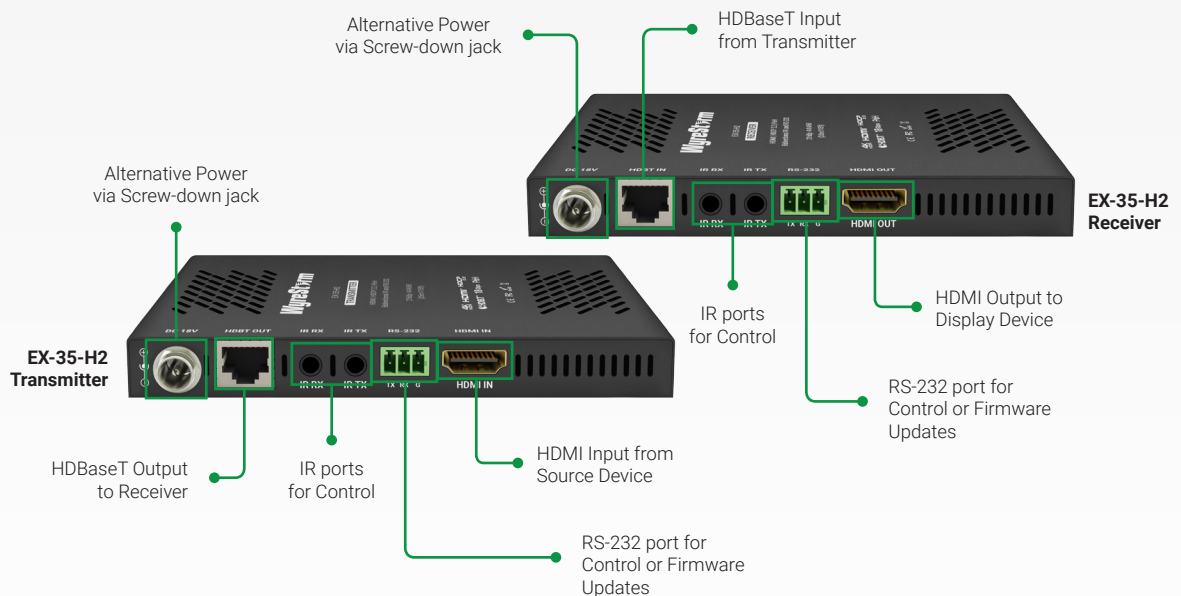# HDBaseT 4K UHD Extender Set with 2-way PoH and Bidirectional IR & RS-232

EX-35-H2

WyreStorm

Specification Sheet

Alternative Power via Screw-down jack

HDBaseT Input from Transmitter

Alternative Power via Screw-down jack

EX-35-H2 Receiver

EX-35-H2 Transmitter

IR ports for Control

HDMI Output to Display Device

HDBaseT Output to Receiver

IR ports for Control

HDMI Input from Source Device

RS-232 port for Control or Firmware Updates

RS-232 port for Control or Firmware Updates

WyreStorm - Because the Technology Matters.

Introduction

For extension of 4K UltraHD and HDR transmissions over medium distances in residential or commercial applications, the EX-35-H2 features the Class B HDBaseT™ platform with full HDR support to distribute 4K UHD HDR, audio, bidirectional IR/RS-232 and two-way PoH to remotely power either transmitter or receiver up to 35m/115ft or 1080p up to 70m/230ft.

Key Features

- 4K UltraHD extender set capable of transmitting AV content over medium distances using single cable Cat6 cable
- HDBaseT™ Class B transmission of 4K HDR up to 35m/115ft and 1080p @60Hz 36bit up to 70m/230ft
- Full UHD 4K transmission supporting HDMI 2.0 video standards
- Supports all high definition resolutions including 4K UHD @30hz 4:4:4 24bit | 4K HDR @24Hz 4:2:0 10bit (BT.2020) - see specifications for details
- Revised chipset increases compatibility with new 4K UHD source devices
- Transmits discreet wide-band bidirectional IR/RS-232 control signals together with HDMI over a single Cat5e/6 cable
- Low profile chassis of 15mm for easier, more convenient installations behind screens at display zones.
- 2-way PoH (Power over HDBaseT™) enables either transmitter or receiver to be remotely powered by the other locally powered so mains power

connectivity is not required at both source and display location
- 2Supports 2ch PCM and 7.1 multichannel audio up to DTS-X and Dolby Atmos
- HDCP 2.2 compliant
- 3D compatible
- Switchable RS-232 function mode on transmitter and receiver for firmware update
- Threaded bushings allow use of both standard and locking DC power plugs
- Visual LED indication for power, display connection signal status, HDBaseT™ link, and HDCPpresence in signal.
- Cable termination follows IEEE-568B standards
- Automatically adjusts feedback, equalization and amplification of signal for easy installation
- Energy efficient universal power supply included

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

2x Wide-band IR Emitters
2x Wide-band IR Receivers (30-50KHz)
4x Mounting Brackets (1pr for TX and 1pr for RX)
1x Quickstart Guide

Specifications

Audio and Video

	Transmitter	Receiver
Inputs	1x HDMI 19-pin type A	1x HDBaseT 8-pin RJ-45 female
Outputs	1x HDBaseT 8-pin RJ-45 female	1x HDMI 19-pin type A
Audio Formats	2ch PCM	Up to DTS-X and Dolby Atmos	

Video Resolutions (Max)	Resoluton	HDMI	Cat6	Cat6a/7
	1920x1080p @60Hz 12bit	15m/49ft	70m/230ft	70m/230ft
	1920x1080p @60Hz 16bit	7m/23ft	35m/115ft	70m/230ft
	3840x2160p @30Hz 4:4:4 8bit	7m/23ft	35m/115ft	70m/230ft
	3840x2160p @24Hz 4:2:0 HDR 10bit	3m/9.8ft	35m/115ft	70m/230ft
	4096x2160p @60Hz 8bit 4:2:0	7m/23ft	35m/115ft	70m/230ft
	4096x2160p @60Hz 8bit 4:4:4	7m/23ft	N/A	N/A

Color Depth	1080p: 12bit	4K UHD: 8bit	HDR @24p: 10bit per channel BT.2020
Maximum Pixel Clock	297MHz

Communication and Control

HDMI	HDMI	HDCP 2.2	EDID	DVI/D supported with adapter (not included)
HDBaseT	HDMI	HDCP 2.2	EDID	2-way PoH	Bidirectional IR and RS-232
IR	1x IR TX 3.5mm (1/8in) Mono	Bidirectional over HDBaseT	1x IR RX 3.5mm (1/8in) Stereo	Bidirectional over HDBaseT
RS-232	1x 3-pin Screw Down Phoenix Connector	Bidirectional over HDBaseT

Power

Power Supply	Input: 100~240V AC 50/60Hz	Output: 18V DC 1A
Max Power Consumption	8.88W
PoH	48V 15.4W

Environmental

Operating Temperature	32°F ~ 113°F (0°C ~ 45°C)	10% ~ 90%, non-condensing
Storage Temperature	-4°F to ~ 158°F (-20°C ~ +70°C)	10% ~ 90%, non-condensing
Maximum BTU	30.30 BTU/hr

Dimensions and Weight

Rack Units	<1U
Height	17mm/0.67in
Width	140mm/5.51in
Depth	90.2mm/3.55in
Weight	0.36kg/0.79lbs

Regulatory

Safety and Emission	CE

Right Product for the Right Application.

4K/UHD HDMI Source

4K/UHD HDMI Display

IR Emitter

HDMI

IR to Control System
CAB-IR-LINK (Sold Separately)

IR Receiver

IR Emitter

HDMI

18V DC 1A
Power Supply

Note: Extender set may be powered by either the TX or RX. Only one power supply is required.

EX-35-H2 Transmitter (TX)

EX-35-H2 Receiver (RX)

PoH   HDBaseT
Cat5e/6/6a/7

KEY
- HDMI
- HDBaseT Cat5e/6/6a
- IR TX and RX
- Power