



HDMI over HDBaseT Extender

User Manual

Model : HE02EIXP

4K 60Hz 4:4:4 HDMI & IR/R232/POH CAT5e Extender 70M



Introduction

HE02EIXP is a 4K HDMI over HDBaseT™ extender that can use an Ethernet cable to send uncompressed HDMI and bi-directional IR signals with resolution up to 4K@60Hz 4:4:4 and transmission distance up to 70M. The extender also supports PoH (Power over HDBaseT), designed to provide power from one side (TX/ RX) to another.

Features

- Resolution up to 4K@60Hz 4:4:4.
- Signal extension up to 70M over CAT5e/6 cable.
- Supports PoH (Power over HDBaseT™), power from either TX or RX.
- Supports bi-directional IR, RS232 transmission.
- Support CEC pass through, EDID management.

Installation view



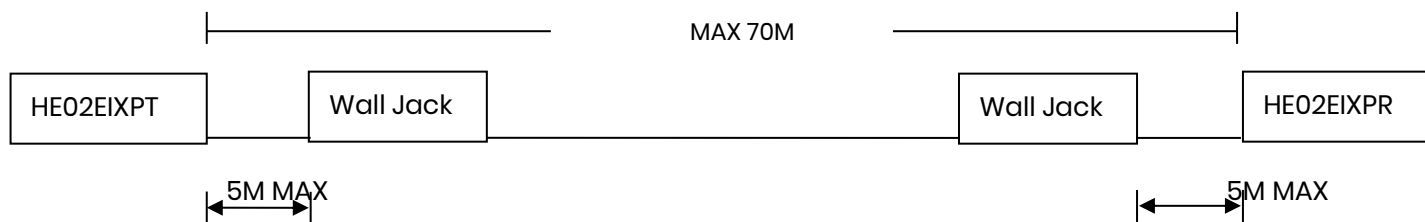
Cable

Link cable recommend use high quality CAT5e, CAT6, CAT6a, CAT7 UTP / STP or FTP cable. Poor quality cable or network connection or improper construction will cause unstable connection, video or sound disruptions, picture noise appears.

HDBaseT Distance Chart by Different Cable

Cable Type	Range	Supported Video
CAT5e / CAT6	60m	Up to 1080p 60Hz 12bit
CAT6e / CAT7	70m	
CAT5e / CAT6	35m	Up to 4096x2160@60Hz 4:4:4
CAT6a / CAT7	40m	

If connection through the wall socket, the cable length must less 5 meters between HDMI extender and wall jack, as below drawing



RJ45 Define

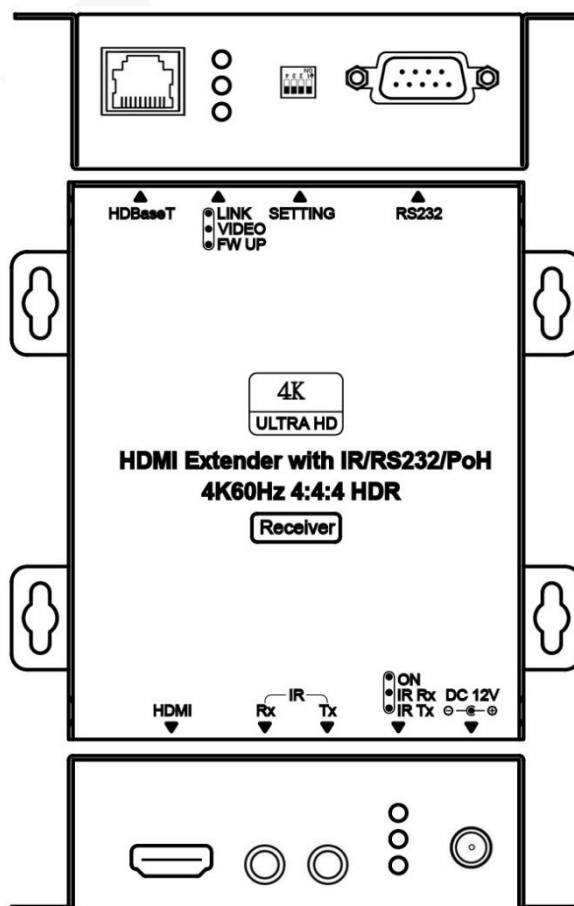
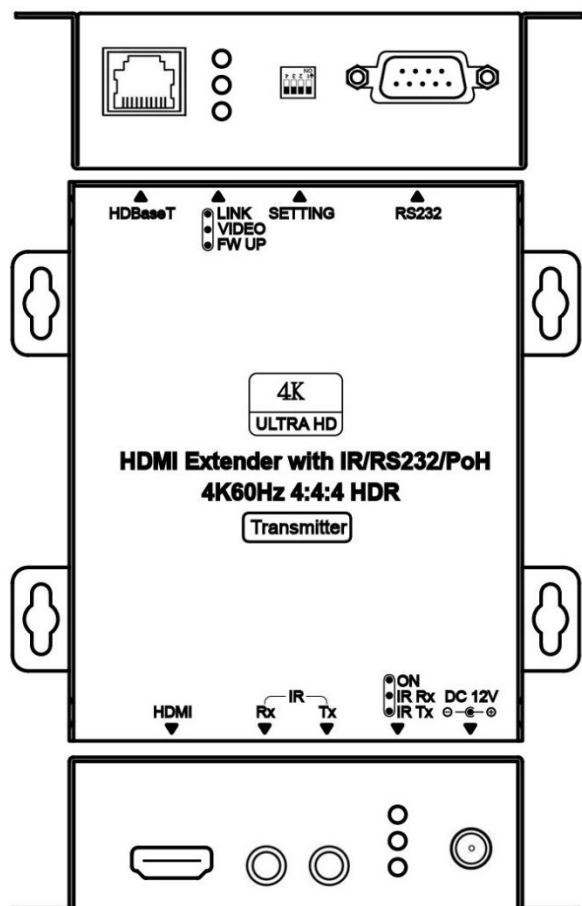
Video Link (TIA/EIA-568-B)

- | | |
|-----------------|---------|
| 1. Orange-white | DATA0 + |
| 2. Orange | DATA0 - |
| 3. Green-white | DATA1 + |
| 4. Blue | DATA2 + |
| 5. Blue-white | DATA2 - |
| 6. Green | DATA1 - |
| 7. Brown-white | DATA3 + |
| 8. Brown | DATA3 - |

Panel view

HE02EIXPT

HE02EIXPR



Color	Status	HE02EIXPT	HE02EIXPR
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GREEN	LINK	ON: HDBaseT Linking
BLUE	N/A	Reversed
RED	FW UP	ON: Firmware Update

Color	Status	HE02EIXT	HE02EIXR
GREEN	ON	ON: Power normal	
BLUE	IR RX	ON: Receiving IR signal	
RED	IR TX	ON: Sending IR signal	

Firmware updated Switch



1. Reserved
2. FW1 updated
3. FW2 updated
4. FW3 updated

RS232 Define

DB9 FEMALE

RS232	
Footprint	Define
Pin 2	TX
Pin 3	RX
Pin 5	GND

DB9 MALE

RS232	
Footprint	Define
Pin 2	RX
Pin 3	TX
Pin 5	GND

Package Include

HE02EIXPT	x 1
HE02EIXPR	x 1
DC12V 1.5A Adapter	x 1
IR Receiver Cable	x 1
IR Emitter Cable	x 1
Mounting Screw pack	x 2

Trouble Shooting

1. The wiring must away from any equipment with electromagnetic wave, i.e.: mobile phone, microwave, radio equipment, fluorescent lamp, high voltage power lines.

2 Under HDMI 2.0 mode, must use Premium certified HDMI cable.

3. Under HDCP 2.2 mode: any one monitor HDCP authorization failed will cause no video status, other connecting monitors will be also failed. Then monitor testing must be one by one to find which monitor HDCP failed.

4. This device HDBaseT port is not general Ethernet signal; do not connect with Network devices to avoid damage.

5. IR transmitter do not put near from receiver to avoid mutual interference.

Specification

ITEM NO.	HE02EIXPT	HE02EIXPR
Support		
Compliance	HDMI 2.0, HDCP 2.2, 1.4, DVI	
Max. Video Resolution	4K@60Hz 4:4:4	
Max. Transmission Distance	70M at 1080p@60Hz, 40M at 4K@60Hz 4:4:4	
Video Bandwidth	18 Gbps	
Audio Format	LPCM 7.1 192KHz, Dolby Trued, DTS-HD MA	
IR Support	30-60Khz, $\pm 15^\circ$, 5M, Bi-directional	30-60Khz, $\pm 55^\circ$, 5M, Bi-directional
RS232 Baud Rate	115200 bps/ Full Duplex	
Ports & Interfaces		
Video Input	1 x HDMI Type A	1 x HDBaseT
Video Output	1 x HDBaseT	1 x HDMI Type A
RS232 Interface	1 x DB9 Female	1 x DB9 Male
IR Interface	1 x 3.5mm Phone Jack	1 x 3.5mm Phone Jack
Power		
Power Supply	DC 24V 1.5A	DC 24V 1.5A
Power Consumption	5.4W	7.32W
Ambient Temperature		
Operation	0 to 55°C	
Storage	-20 to 85°C	
Humidity	up to 90%	
Physical Characteristics		
Dimensions	109.6 x 109.5 x 30mm	109.6 x 109.5 x 30mm
Weight	260g	275g