HDMI (HDBaseT) CAT5 Extender Series

ITEM NO.: HE02EIP   HDMI CAT5 Extender with IR/PoH

HE02EIP HDMI (HDBaseT) CAT5 Extender is provides full 3D (all formats) & resolutions up to 4Kx2K (4 times the 1080p) with multi-channel audio over a single low cost CAT5e/6 cable. Fully compliant with HDCP, EDID and CEC control.   Built-in bi-directional simultaneous IR transmission to allow extend the remote control either source or/display side.   With supports PoH (Power over HDBaseT) feature which eliminating excess or unwanted power drain and also provides power to the receiver at the remote location.

Features:
- Extends HDMI and IR signal over one CAT5/5e/6 cable.
- Uncompressed high definition video up to 1080p@60Hz@48bits and 3D and 4K*2K capable.
- Bi-directional IR, support 30-60kHz.
- Max. Data Rate- 10.2Gbps.
- HDMI 1.4 and HDCP compliance.
- Transmission range up to 70M by CAT5e/6 at 1080p@60Hz@24bit.
- Audio support up to LPCM7.1, Dolby TrueHD, DTS-HD MA.
- Support PoH (Power over HDBaseT), no external power required at receiver.
- External power supply included for the Transmitter.

Installation view:

LED Indication:

Power:
Green   On/Off

HDMI:
Blue ON: With HDMI signal
        Flash: HDMI signal without HDCP
        OFF: No HDMI signal

HDBaseT:

1

Blue   ON:HDBaseT link
        Flash: Low power mode
        OFF: HDBaseT unlink

IR receive/emit LED:
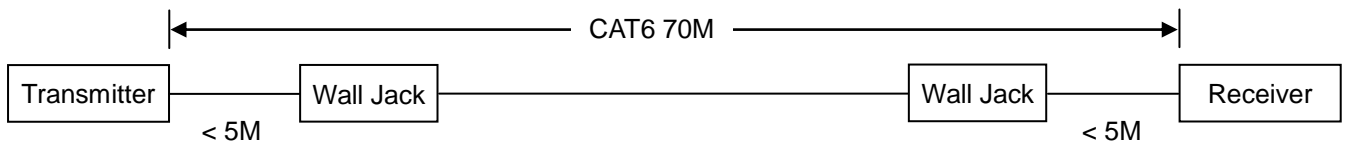Blue   Flash: IR signal transmission
        OFF: No IR signal

Cable:

Link cable recommend use high quality Cat.5e、Cat.6、Cat.6a、Cat.7 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.
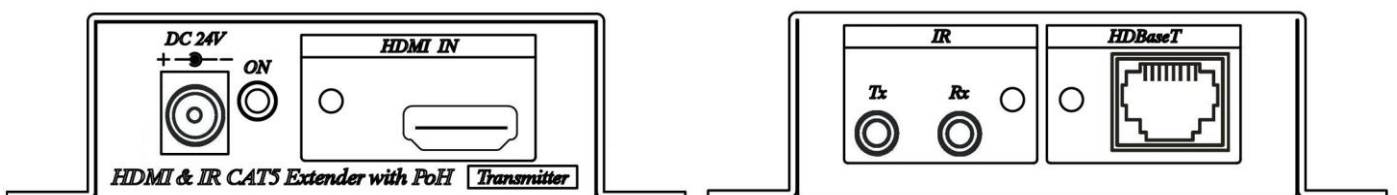
HDBaseT Distance chart by different cable:

Cable Type	Range	Pixel Clock Rate	Video Data Rate	Supported Video
CAT.5e / CAT.6	70 M	≦ 225MHz	≦ 5.3Gbps (Full HD Video)	1080p 60Hz 36 bit
CAT.5e / CAT.6	35 M	> 225MHz	> 5.3Gbps (Ultra HD Video)	1080p 60Hz 48 bit
CAT.6a / CAT.7	40 M			1080p 60Hz 3D，4K x 2K 24Hz

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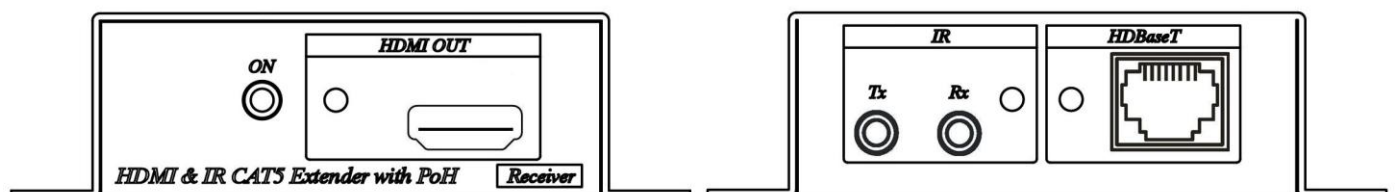

Panel view:

HE02EIPT

HE02EIPR

Low-power Mode:

When there is no HDMI video signal input or TV is not connected or power off, this product will enter a low-power mode to save power consumption; under a low power mode still provides IR and CEC of signal transmission.

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 -**

Caution:

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. The cable must pull in straight to avoid any crosstalk interference and the transmission stability.
3. This device HDBaseT port is not general Ethernet signal; do not connect with Network devices to avoid damage.
4. IR transmitter do not put near from receiver to avoid mutual interference.
5. The receiver unit working temperature is higher which is in normal condition.

HE02EIP Package Include:

HE02EIPT HDM Transmitter x 1 pcs
HE02EIPR HDMI Receiver x 1 pcs
IR Emitter Cable x 2 pcs
IR Receiver Cable x 2 pcs
Mounting Screw pack x 1 bags
DC24V Power Adapter x 1 pcs

Specification:

ITEM NO.	HE02EIPT	HE02EIPR
Input / Output Interface	HDMI Type A x 1	
HDMI Video Support	Up to 1080p@60Hz@48bits,3D, 4096x2160@24Hz	
HDMI Audio Support	LPCM 7.1 192KHz, Dolby Trued, DTS-HD MA	
Distance	60M by CAT5e/6, 70M by CAT6	
HDBaseT Connector	RJ45 x 1	
LED Indication	Green x 1, Blue x 3	
IR Carrier Frequency	30-60Khz	
IR Angle	± 15°	± 55°
IR Distance	5m / Bi-directional	
Power Supply	DC 24V 1.25A	x
Power Consumption	Max 11.4W, Low Power 1.8W	
Temperature	Operation: 0 to 55℃, Storage: -20 TO 85℃, Humidity: up to 95%	
Dimensions mm	67 x 95 x 27 (mm)	
Weight g	155	165

RoHS CE FC

Rev. A