

# HDMI (HDBaseT) CAT5 Extender Series

## ITEM NO.: HE02EI HDMI & IR CAT5 Extender over Single CAT5 Cable

HE02EI HDMI (HDBaseT) CAT5 Extender is using only one cost effective CAT5e/6 cable to extend your HDTV display up to 60 meters at 1080p, 70 meters by CAT6a cable. With IR function to delivers significant value to the entire home and commercial entertainment system.



### 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.
- Built in IR control, IR signal could be selectable at either TX/RX side.
- Max. Data Rate- 10.2Gbps.
- HDMI 1.4 and HDCP compliance.
- Transmission range up to 60M by CAT5e/6, 70M by CAT6a cable at 1080p@60Hz@24bit.
- Audio support up to LPCM7.1, Dolby TrueHD, DTS-HD MA.

### Installation view:



### IR Switch Setting:

1. When use BD/DVD remote controller (DVD at remote side) , HE02EIR IR switch move to RX and connect with Receiver cable; HE02EIT IR switch move to TX and connect with Emitter cable.
2. When use TV remote controller (TV at remote side), HE02EIT IR switch move to RX and connect with Receiver cable; HE02EIR IR switch move to TX and connect with Emitter cable.

### 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 Ethernet, RS-232, IR, and CEC of signal transmission.

**LED Indication:**

**Power** GREEN on (power)  
**Link** BLUE on (linking)  
 Flash (low-power mode)

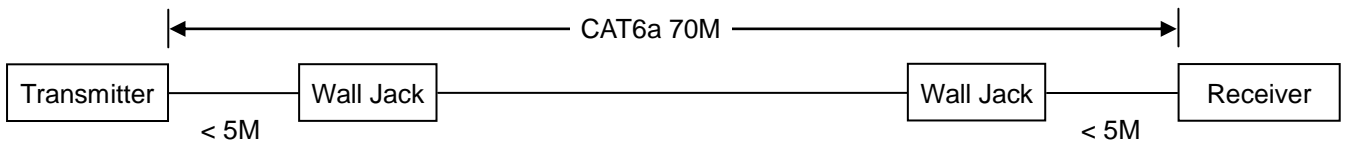
**Cable:**

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	60 M	≤ 225MHz	≤ 5.3Gbps (Full HD Video)	1080p 60Hz 36 bit
CAT.6a / CAT.7	70 M			
CAT.5e / CAT.6	35 M	> 225MHz	> 5.3Gbps (Ultra HD Video)	1080p 60Hz 48 bit 1080p 60Hz 3D · 4K x 2K 30Hz
CAT.6a / CAT.7	40 M			

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



10/100Mbps network connection using general CAT5e cable and working distance up to 60M.

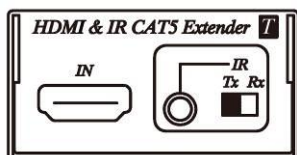
**RJ45 Define:**

**Video Link (TIA/EIA-568-B)**

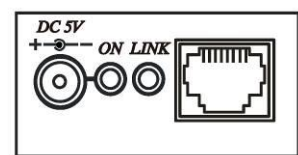
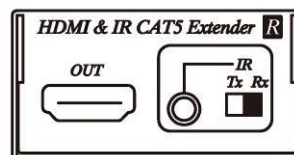
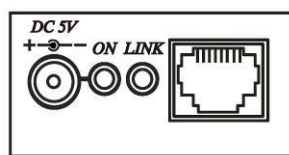
- 1. Orange-white DATA0 +
- 2. Orange DATA0 -
- 3. Green-white DATA1 +
- 4. Blue DATA2 +
- 5. Blue-white DATA2 -
- 6. Green DATA1 -
- 7. Brown-white DATA3 +
- 8. Brown DATA3 -

**Panel view:**

HE02EIT



HE02EIR



## 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.

## HE02EI Package Include:

HE02EIT HDM Transmitter x 1 pcs  
HE02EIR HDMI Receiver x 1 pcs  
IR Emitter Cable x 1 pcs  
IR Receiver Cable x 1 pcs  
Mounting Screw pack x 2 bags  
Power Adapter x 2 pcs

## Specification:

ITEM NO.	HE02EIT	HE02EIR	
HDMI Video Support	Up to 1080p@60Hz@48bits,3D,4K x 2K		
HDMI Audio Support	LPCM 7.1 192KHz, Dolby Trued, DTS-HD MA		
Distance	60M by CAT5e/6, 70M by CAT6a		
Input / Output Interface	HDMI Type A x 1		
HDBaseT Connector	RJ45 x 1		
IR Carrier Frequency	30-60Khz		
IR Angle	± 15°	± 55°	
IR Distance	5m / Bi-directional		
Power Supply	DC 5V 2A	DC 5V 2A	
Power Consumption	Max 3W, Low Power 0.8W	Max 6W,Low Power 1W	
Temperature	Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%		
Dimensions	mm	49 x 92.3 x 25	49 x 92.3 x 25
Weight	g	125	135



Rev. C