# **HDMI CAT5 Extender & Distribution Series**

# ITEM NO.: HE04 1 Input 4 Output HDMI (HDBaseT) Distribution Amplifier with IR

HE04 is based on HDBaseT technology to extend and distribute HDMI signal over CAT5 cable. The HE04 enables you to send one source to multiple displays up to 100M away. There are 3 different type receivers option, the distance could be 70meter/100meter with IR function Option.





# HE04 1 Input 4 Output HDMI (HDBaseT) Distribution Amplifier with IR

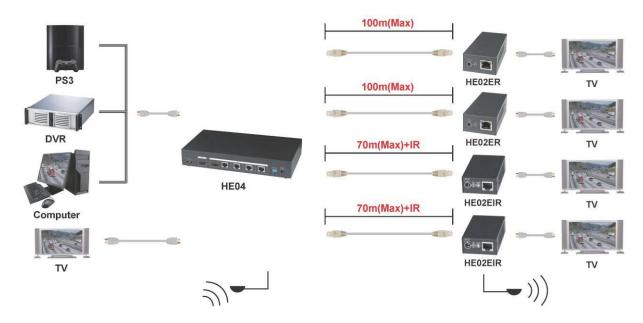
- Extends and distributes HDMI signal to 4 remote HDMI displays over CAT5e/6 cable.
- Uncompressed high definition video up to 1080p@60Hz@12bits.
- HDMI 1.4 with 3D, HDCP & DVI Compliant.
- Built in HDMI local output at transmitter unit.
- HDMI local output could be stackable to next HE04 for multiple output.
- Built in IR extender (work with receiver: HE02R)
- Work with HE02ER, HE02R receiver: distance up to 100 meters at 1080p resolution
- Work with HE02EIR receiver: distance up to 70 meters at 1080p resolution
- \*CAT5e receiver optional model: HE02R, HE02ER, HE02EIR







### **Installation view:**



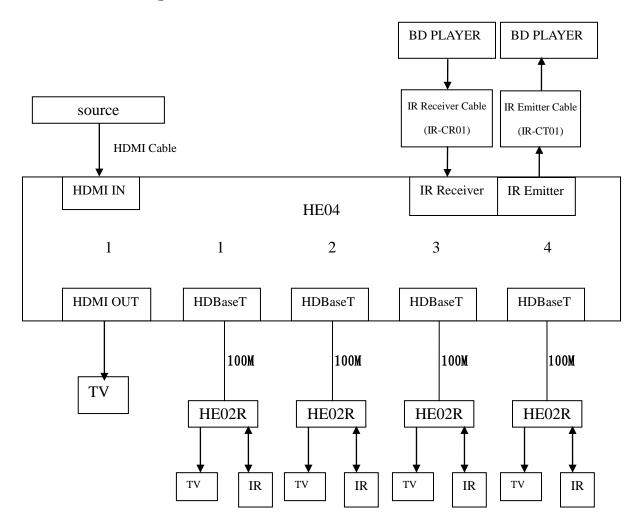
#### Cable:

Link cable recommend use high quality Cat.5e \ Cat.6 \ Cat.6a \ Cat.7 \ UTP / STP or FTP cable.

### **Transmission Distance:**

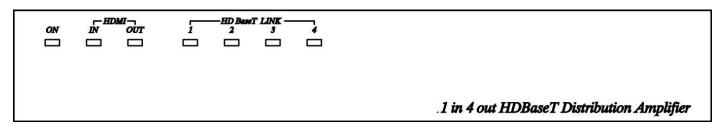
The maximum transmission distance up to 70/100meters according different receiver. Use lower resolution won't extend longer distance. If connection through the wall socket, the cable length must less 5 meters between HDMI extender and wall jack.

# **HE04 Connection Diagram:**



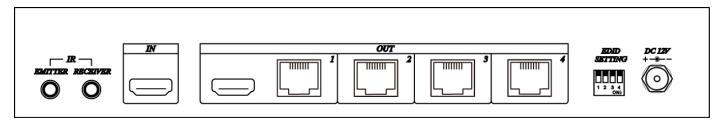
## **Panel view:**

# Front Panel LED Indication:



ON	Green LED	Power on/off
HDMI IN	Blue on Blue off	HDMI Signal Input Source no signal
HDMI OUT	Blue on Blue off	HDMI Signal Output Output unlink
HDBaseT OUT 1, 2, 3, 4	Blue on Blue off	HDBaseT data linking Unlink

#### Back Side:



EDID: (Extended display identification data)





**Default Mode:** 

EDID Dip switch 1~4 all at "up" position.

## **EDID Copy Mode:**

EDID Dip Switch 1 move down to ON, copy HDBaseT output 1 TV EDID for SOURCE reading. EDID Dip Switch 2 move down to ON, copy HDBaseT output 2 TV EDID for SOURCE reading. EDID Dip Switch 3 move down to ON, copy HDBaseT output 3 TV EDID for SOURCE reading. EDID Dip Switch 4 move down to ON, copy HDBaseT output 4 TV EDID for SOURCE reading.

## Remote IR Extender function:



#### **EMITTER:**

This function send HDBaseT four outputs receiving signal to TX, go through TX with 3.5 \psi IR Emitter cable to transmit signal to control equipment

#### **RECEIVER:**

This function receive the IR signal via the Rx port 3.5ψ IR Receiver cable, then transmit to the four HDBaseT output.

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

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

<sup>\*</sup>DIP switches over 2 pieces move to ON: copy HDMI OUT output TV EDID for SOURCE reading.

### **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. This device is not network equipment, do not connect with Network to avoid damage.
- 3. IR transmitter do not put near from receiver to avoid mutual interference.

**Specification:** 

ITEM NO.	HE04
HDMI Max. Input Resolution	1080p @ 60Hz 12bit
Video Input Interface	HDMI Type A x 1
HDBaseT Output Max. Resolution	1080p @ 60Hz 12bit
HDBaseT Max. Working Distance	100M
HDMI Outupt Max. Resolution	1080p @ 60Hz 12bit
Video Output Interface	HDMI Type A x 1 , RJ45 x 4
HDBaseT IR Carrier Frequency	30∼60KHz
HDBaseT IR Emitter/Receive angle	Tx : ±30°℃ ,Rx : ±55°℃
HDBaseT IR Emitter/Receive distance	5 meters
HDBaseT IR input/output interface	3.5mm Phone Jack x 2
HE04 IR Receiving angle	±45 ℃
HE04 IR Receiving distance	5 meters
Power Supply	DC 12V 4.2A
Power Consumption	1.5A
Temperature	Operation: 0 to 55℃, Storage: -20 TO 85℃, Humidity: up to 95%
Dimension mm	253 x 145 x 40
Weight g	860

ITEM NO.		HE02R
Resolution		Up to 1080p / 60Hz / 48 bit
Distance		100M (Max)
HDMI Connector		Type A
RS-232 Baud Rate		Up to 115200 bps / Full Duplex
RS-232 Connector		DB9 Male
IR Carrier		38Khz / ±10° / 5M / 2 Way
Power Supply		DC 5V 2AMP Regulated
Power Consumption	n	1200mA (Max)
Temperature		Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%
Dimension	mm	88 x 130 x 30
Weight	g	270

ITEM NO.		HE02ER
Resolution		Up to 1080p / 60Hz / 48 bit
Distance		100M (Max)
HDMI Connector		Type A
Power Supply		DC5V 2A Regulated
Power Consumption		1200mA (Max)
Temperature		Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%
Dimension	mm	49.2 x 92 x 25
Weight	g	135

ITEM NO.		HE02EIR
Resolution		Up to 1080p / 60Hz / 48 bit
Distance		60M by CAT5e/6, 70M by CAT6a
HDMI Connector		Type A
IR Carrier Frequency	у	30-60Khz
IR Angle		±55
IR Distance		5m
Power Supply		Regulated DC5V 2A x 2
Power Consumption		820mA (Max)
Temperature		Operation: 0 to $55^{\circ}$ C, Storage: -20 TO $85^{\circ}$ C, Humidity: up to $95\%$
Dimension	mm	49 x 92.3 x 25
Weight	g	135



Rev. A