HDMI Extender over Cat5e/Cat6 (HD BaseT)
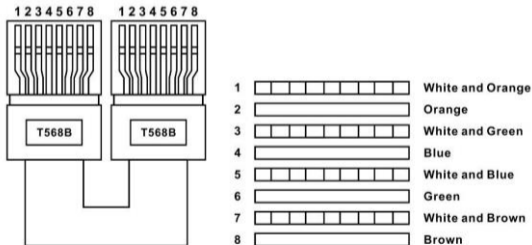
User manual

VER: 1.1

Thank you for purchasing this product. For optimum performance and safety, please read the instruction carefully before connecting, operating or adjusting this product. Please keep the manual for future reference.
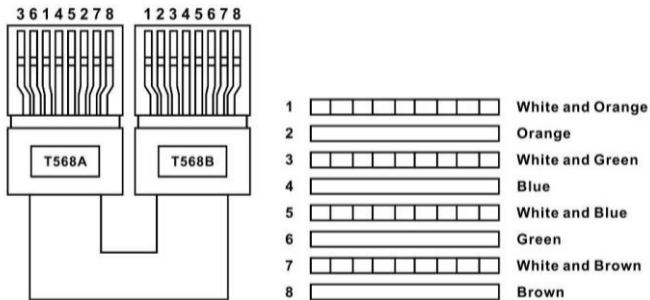
Caution

The extender using UTP cable termination follows the standard of IEEE-568B.

1		White and Orange
2		Orange
3		White and Green
4		Blue
5		White and Blue
6		Green
7		White and Brown
8		Brown

Direct interconnection method

Advanced:

The extender will in Automatic protection mode when using UTP cable termination follows the standard of IEEE-568A.

1	White and Orange
2	Orange
3	White and Green
4	Blue
5	White and Blue
6	Green
7	White and Brown
8	Brown

Cross interconnection method

I. Introduction

The cat5e/cat6 HDMI Extender is a tool which can extend your HDMI signal over 230fts/70meters to a compatible display. It is designed to convert HDMI signal to standard HD BaseT signal which can be transmitted by Internet cable. It also supports Transfer Bidirectional Infrared control signal together with the HDMI signal, so you can control the Source in the Sink side which is 230fts outside, also you can control the Sink in the Source side which is 230fts outside using the HDMI Extender.

II. Features

1. POE(Power Over Ethernet)function is supported, either TX or RX is powered by24V@1A power supply, another does not need power from the DC jack. POE Power consumption is less than 10W. ※ **See the description 1**

2. Use single UTP LAN cable (CAT-5E/6) to substitute HDMI cable to achieve long

3

distance transmission.

3. UTP cable termination follows the standard of IEEE-568B.

4. Transmission distance: ※Over CAT6 cable

   70 meters: 1080P @60Hz36bit; 3D1080P@30Hz36bit;

   40 meters: 1080P @60Hz@48bit; 1080P @120Hz@24bit;

   3D1080P@60Hz@36bit; 4K x 2K@30Hz@24bit.

5. Support display resolutions up to 4K x 2K@30Hz

6. Full HD support: 1080p@60Hz@48 bit/pixels, 1080p@120Hz@24 bit/pixels,

   3D 1080P60Hz and 4K x 2K@30Hz@24bit

7. Transfer Bidirectional Infrared control signal together with the HDMI signal.

   ※See the description 2.

III. Package

1. HDMI Extender Transmitter --- 1PC

2. HDMI Extender Receiver --- 1PC

3. Wideband IR Tx --- 2PCS

4. Wideband IR Rx --- 2PCS

5. 24V1A DC Power Supply --- 1PC

6. Operation Manual --- 1PC

7. Mounting ears--4PCS

IV. Specifications

1.	Frequency Bandwidth	297MHz[10.2Gbps]
2.	Transmitter Input/Output Ports	1x HDMI Female port/1xCAT6
		1x IR Tx/1x IR Rx

3.	Receiver Input/Output Ports	1xHDMI Female port/1xCAT6
		1x IR Tx/1x IR Rx
4.	Power Supply	DC 24V 1A
5.	ESD Protection	± 8kV (air-gap discharge)
	Human Body Model:	± 4kV (contact discharge)
6.	Dimensions (mm)	65(W) X 100 (D) X 25 (H)
7.	Weight	200g x 2
8.	Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
9.	Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
10.	Relative Humidity	20~90% RH (Non-condensing)
11.	Power Consumption (Max)	10W

V. Operation controls and Functions

Transmitter
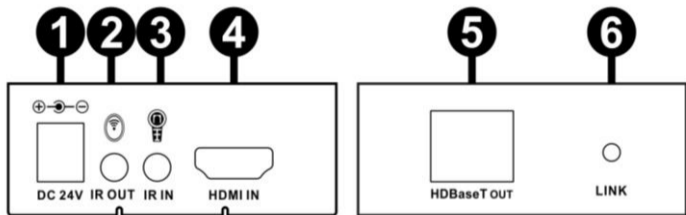
1. **DC IN:** Plug the 24V DC power supply into the unit.

2. **IR OUT:** Channel 1 IR Transmitter. Connect with Wideband IR Tx.

3. **IR IN:** Channel 2 IR Receiver. Connect with Wideband IR Rx.

4. **HDMI IN:** HDMI input port. This slot is where you connect the HDMI source.

5. **HD BaseT OUT:** Standard HD BaseT signal output port. Connect HD BaseT

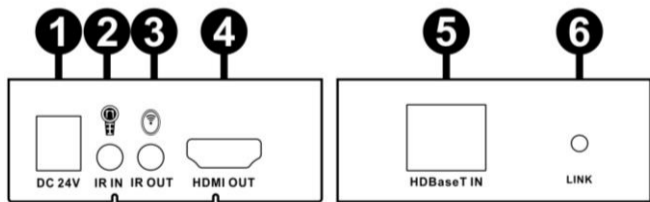receiver with a UTP cable following the standard of IEEE-568B.

6. **LINK LED:** The connection status indicating lamp.

    ※Illuminate: The Transmitter and Receiver are in good connections

    ※Flashing: The Transmitter and Receiver are in poor connections

   ※Dark: The Transmitter and Receiver are in no connections

Receiver

1. **DC IN:** Plug the 24V DC power supply into the unit.

2. **IR IN:** Channel 1 IR Receiver. Connect with Wideband IR Rx.

3. **IR OUT:** Channel 2 IR Transmitter. Connect with Wideband IR Tx.

4. **HDMI OUT:** HDMI output port. This slot is where you connect the HDTV or monitor with HDMI cable.

5. **HD BaseT IN:** Standard HD BaseT signal input port. Connect HD BaseT transmitter with a UTP cable following the standard of IEEE-568B.

6. **LINK LED:** The connection status indicating lamp.

    ※ Illuminate: The Transmitter and Receiver are in good connections

    ※ Flashing: The Transmitter and Receiver are in poor connections

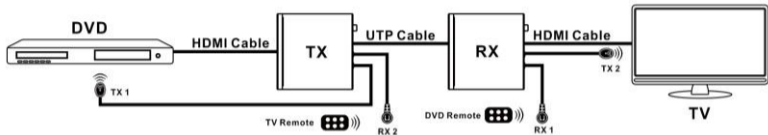   ※ Dark: The Transmitter and Receiver are in no connections

※Description 1

POE(Power Over Ethernet) Application Example
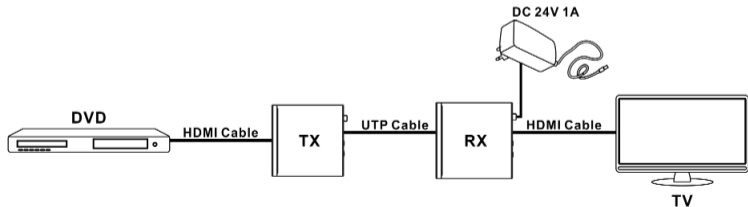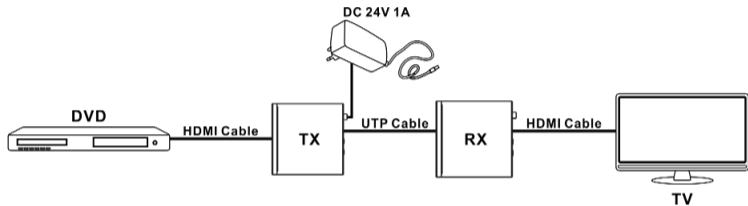
※Description 2

Bidirectional Infrared control Application Example

VI. Application Example