HDMI Extender over Cat5e/Cat6 (HD BaseT)

HBT70S

User manual

VER: 1.2

I. Introduction

The cat5e/cat6 HDMI Extender is a tool which can extend your HDMI signal over 70meters to a compatible display. It is designed to convert HDMI signal to standard HD BaseT signal which can be transmitted by LAN 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 70 mts outside, also you can control the Sink in the Source side which is 230fts outside by using the HDMI Extender.

II. Features

POC (Power Over Cable) function is supported, either TX or RX is powered by 24V@1A power supply, the another does not need power supply from the DC jack. POC Power consumption is less than 10W. **※ See the description 1**

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

UTP termination follows the standard of direct interconnection method.

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.

Support display resolutions up to 4K x 2K@30Hz
Full HD support: 1080p@60Hz@48 bit/pixels, 1080p@120Hz@24 bit/pixels,
3D 1080P60Hz and 4K x 2K@30Hz@24bit
Transfer Bidirectional Infrared control signal together with the HDMI signal.
※ See the description 2.
Transfer Bidirectional RS232 control signal together with the HDMI signal.
※ See the description 3.

III. Package

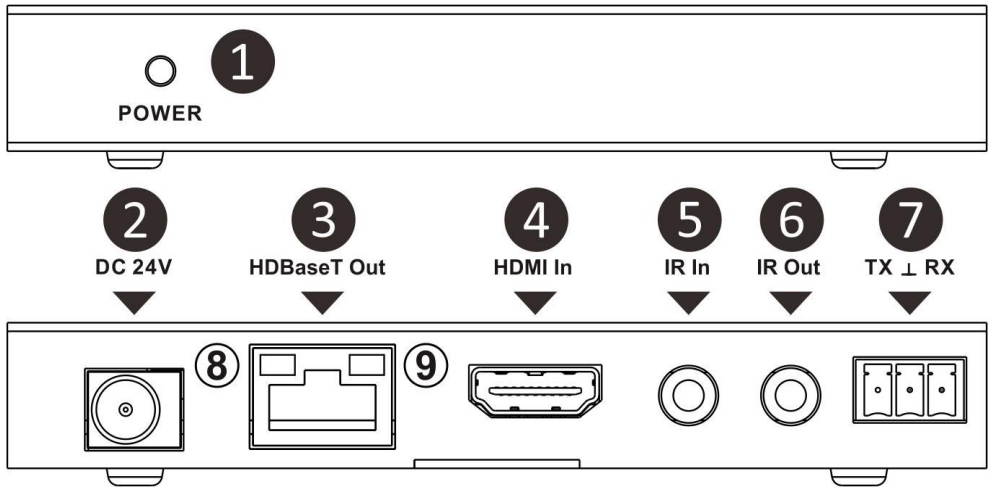
HDMI Extender Transmitter ---------- 1PC
HDMI Extender Receiver ---------- 1PC
Wideband IR Tx ---------- 2PCS
Wideband IR Rx ---------- 2PCS
24V1A DC Power Supply ---------- 1PC
Operation Manual ---------- 1PC
Mounting ears----------4PCS

IV. Specifications

Frequency Bandwidth	297MHz[10.2Gbps]
Transmitter Input/Output	1x HDMI Female port/1xCAT6 1x IR Tx/1x IR Rx/1xPhoenix
Receiver Input/Output Ports	1xHDMI Female port/1xCAT6 1x IR Tx/1x IR Rx/1xPhoenix
Power Supply	DC 24V 1A
ESD Protection	Human Body Model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
Dimensions (mm)	65(W) X 115 (D) X 17 (H)
Weight	200g x 2
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Power Consumption (Max)	20W

V. Operation controls and Functions

Transmitter



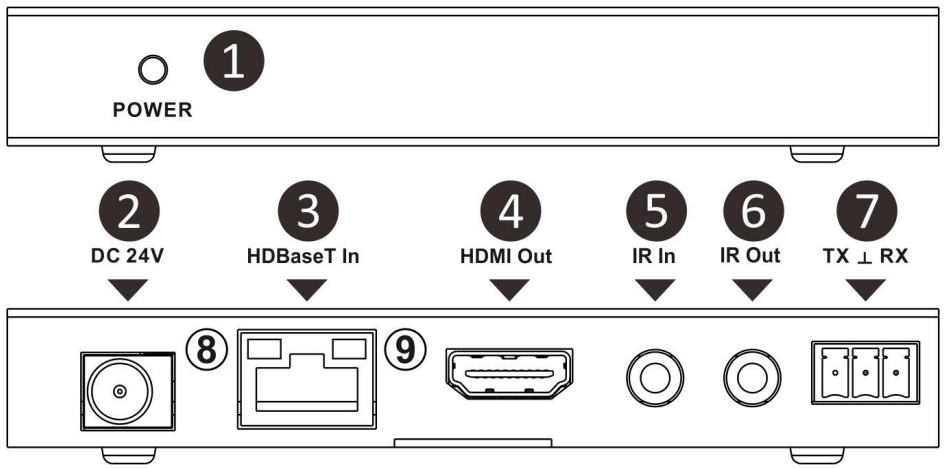
POWER: This LED illuminates when the device is connected with power supply.
DC 24V: Plug the 24V DC power supply into the unit.
HD BaseT OUT: Standard HD BaseT signal output port. Connect HD BaseT receiver with a UTP cable following the standard of direct interconnection method.
HDMI IN: HDMI input port. This slot is where you connect the HDMI source.
IR IN: Channel 2 IR Receiver. Connect with Wideband IR Rx.
IR OUT: Channel 1 IR Transmitter. Connect with Wideband IR Tx.
RS232: Phoenix jack provide Serial port control signal from receiver or to receiver.
Connection Signal Indicator Lamp

※Illuminate: The Transmitter and Receiver are in good connections status.
※Flashing: The Transmitter and Receiver are in poor connections status.
※Dark: The Transmitter and Receiver are not connected.

Data Signal Indicator Lamp

※Illuminate: The HDMI signal with HDCP.
※Flashing: The HDMI signal without HDCP.
※Dark: No HDMI signal.

Receiver



POWER: This LED illuminates when the device is connected with power supply
DC 24V: Plug the 24V DC power supply into the unit.
HD BaseT IN: Standard HD BaseT signal input port. Connect HD BaseT transmitter with a UTP cable following the standard of direct interconnection method.

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

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

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

RS232: Phoenix jack provide Serial port control signal from receiver or to receiver.

Connection Signal Indicator Lamp

※Illuminate: The Transmitter and Receiver are in good connections status.

※Flashing: The Transmitter and Receiver are in poor connections status.

※Dark: The Transmitter and Receiver are not connected.

Data Signal Indicator Lamp

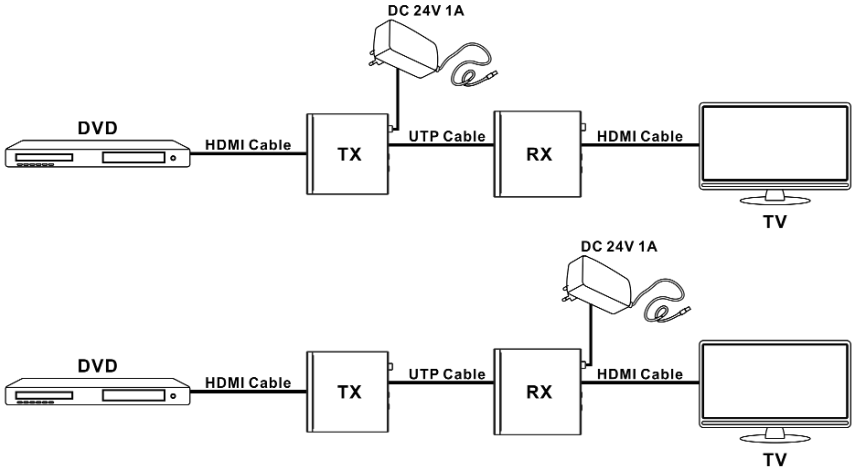
※Illuminate: The HDMI signal with HDCP.

※Flashing: The HDMI signal without HDCP.

※Dark: No HDMI signal.

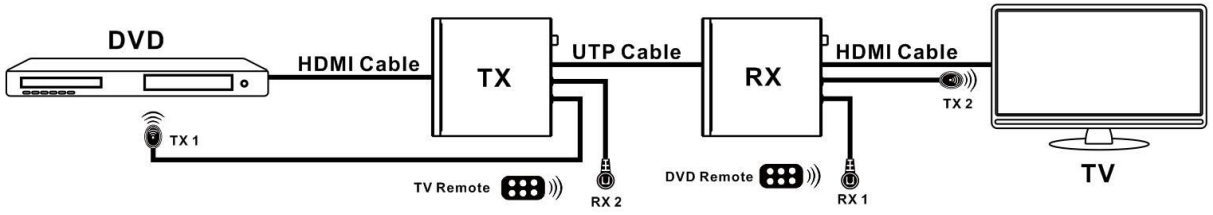
※ Description 1

POE(Power Over Ethernet) Application Example



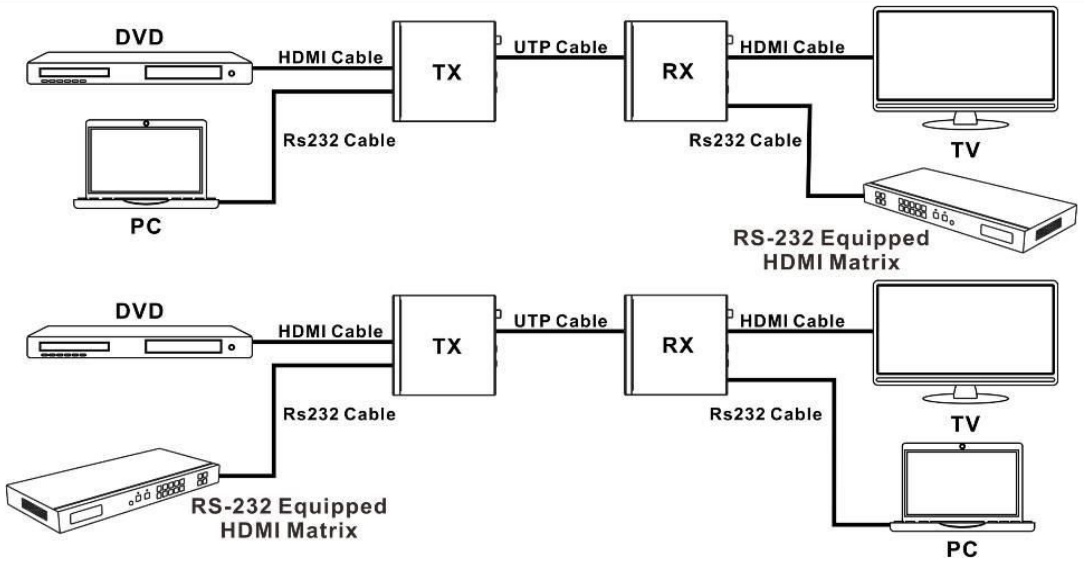
※ Description 2

Bidirectional Infrared control Application Example



※ Description 3

Bidirectional RS232 control Application Example



VI. Application Example