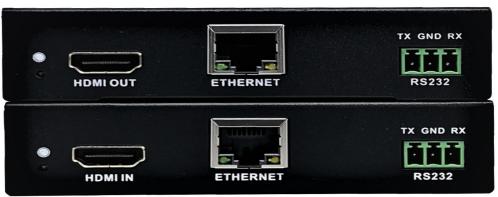


Description: HDMI Extender over Cat5e/Cat6 (HD BaseT) w/IR + RS232







Description: HDMI Extender over Cat5e/Cat6 (HD BaseT) w/IR + RS232

I. Introduction

The cat5e/cat6 HDMI Extender is a tool which can extend your HDMI signal over 328fts/100meters 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 \RS232 control signal\Internet signal together with the HDMI signal, so you can control the Source in the Sink side which is 328fts outside, also you can control the Sink in the Source side which is 328fts outside using the HDMI Extender.

II. Features

- POE(Power Over Ethernet)function support, either TX or RX powered 24V@1A,another don't need power form the DC jack. POE Power Consumption less than 10W. X See the description 1
- 2. Use single UTP LAN cable (CAT-5E/6) to substitute HDMI cable to achieve long distances transmission.
- 3. UTP cable termination follows the standard of IEEE-568A or IEEE-568B.
- 4. Transmission distance: XOver CAT6 cable
 - **100 meters**: 1080P @60Hz36bit; 3D1080P@30Hz36bit;
 - **70 meters**: 1080P @60Hz@48bit; 1080P @120Hz@24bit; 3D1080P@60Hz@36bit; 4Kx2K@30Hz@24bit.
- 5. Support display resolutions up to 4K@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.
 - **X** See the description 2.
- 8. Transfer Bidirectional RS232 control signal together with the HDMI signal.
 - **X** See the description 3.
- 9. Transfer Bidirectional Ethernet signal together with the HDMI signal.
 - **X** See the description 4.

III. Package

HDMI Extender Transmitter	1PCS
2. HDMI Extender Receiver	1PCS
3. Wideband IR Tx	2PCS



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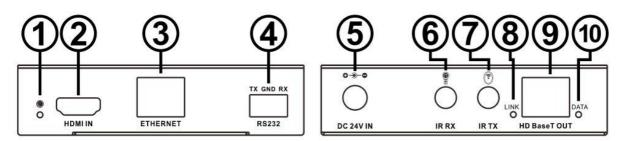
4. Wideband IR Rx	2PCS
5. 24V1A DC Power Supply	1PCS
6. Operation Manual	
7. Phoenix Contact	1PCS
8. Mounting ears	4PCS

IV. Specifications

Frequency Bandwidth:	2.97Gbps
Transmitter Input/Output Ports	1x HDMI Female port/2xCAT6
	1x IR TX/1x IR RX/1xPhoenix
Receiver Input/Output Ports	1xHDMI Female port/2xCAT6
	1x IR TX/1x IR RX/1xPhoenix
Power Supply	DC 24V 1A
ESD Protection	± 8kV (air-gap discharge)
Human Body Model:	± 4kV (contact discharge)
Dimensions (mm)	100(W) X 100 (D) X 25 (H)
Weight	320g x 2
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (Non-condensing)
Power Consumption (Max)	10W

V. Operation controls and Functions

Transmitter



1. INPUT LED: The input status indicating lamp. This red LED illuminates when the

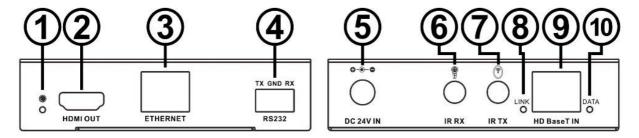


Description: HDMI Extender over Cat5e/Cat6 (HD BaseT) w/IR + RS232

HDMI signal plugs in.

- 2. HDMI IN: HDMI input port. This slot is where you connect the HDMI source.
- **3. ETHERNET:** This slot provide Internet signal from receiver or to receiver.
- **4. RS232:** Phoenix jack provide Serial port control signal from receiver or to receiver.
- **5. DC IN:** Plug the 24V DC power supply into the unit.
- 6. IR RX: Chanel 1 IR Receiver. Connect with Wideband IR Rx.
- 7. IR TX: Chanel 2 IR Transmitter. Connect with Wideband IR Tx.
- **8. LINK LED:** The connection status indicating lamp.
 - XIlluminate: The Transmitter and Receiver are in good connections
 - **XFlashing:** The Transmitter and Receiver are in poor connections
 - *Dark: The Transmitter and Receiver are in no connections
- **9. HD BaseT OUT:** Standard HD BaseT signal output port. Connect HD BaseT receiver with a UTP cable following the standard of IEEE-568A or IEEE-568B.
- **10. DATA LED:** The data status indicating lamp.
 - **XIIIuminate:** The HDMI signal with HDCP.
 - **Flashing: The HDMI signal without HDCP.
 - *Dark: No HDMI signal.

Receiver



- **1. OUTPUT LED:** The output status indicating lamp. This red LED illuminates when the TV plugs in with HDMI cable.
- 2. **HDMI OUT:** HDMI output port. This slot is where you connect the HDTV or monitor with HDMI cable.
- **3. ETHERNET:** This slot provides Internet signal from transmitter or to transmitter.
- 4. RS232: Phoenix jack provides Serial port control signal from transmitter or to



Description: HDMI Extender over Cat5e/Cat6 (HD BaseT) w/IR + RS232

transmitter.

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

6. IR RX: Chanel 2 IR Receiver. Connect with Wideband IR Rx.

7. IR TX: Chanel 1 IR Transmitter. Connect with Wideband IR Tx.

8. LINK LED: The connection status indicating lamp.

XIlluminate: The Transmitter and Receiver are in good connections

XFlashing: The Transmitter and Receiver are in poor connections

XDark: The Transmitter and Receiver are in no connections

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

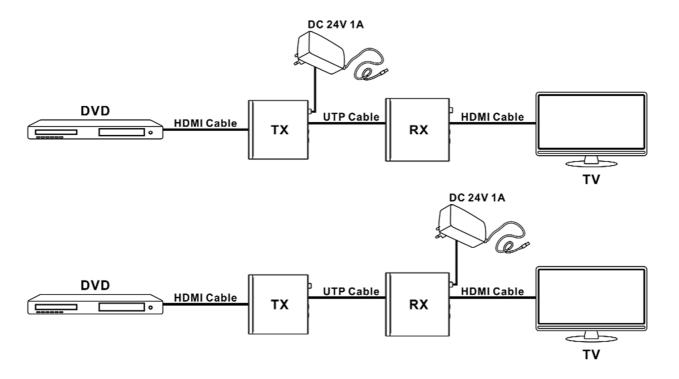
10. DATA LED: The data status indicating lamp.

XIlluminate: The HDMI signal with HDCP.

**Flashing: The HDMI signal without HDCP.

*Dark: No HDMI signal.

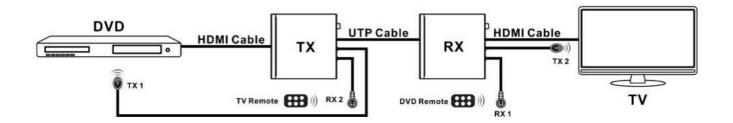
X Description 1 POE(Power Over Ethernet) Application Example



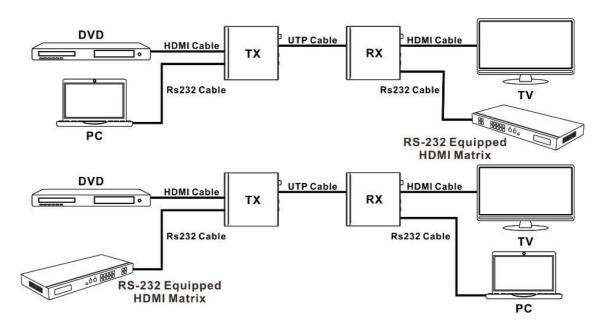


Description: HDMI Extender over Cat5e/Cat6 (HD BaseT) w/IR + RS232

*** Description 2** Bidirectional Infrared control Application Example



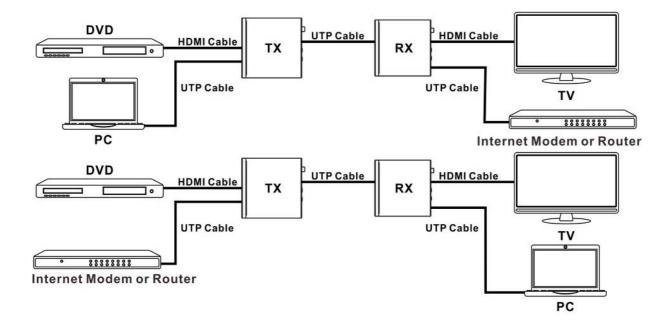
<u>X Description 3 Bidirectional RS232 control Application Example</u>





Description: HDMI Extender over Cat5e/Cat6 (HD BaseT) w/IR + RS232

<u>X Description 4 Bidirectional Ethernet signal Application Example</u>





Description: HDMI Extender over Cat5e/Cat6 (HD BaseT) w/IR + RS232

VI. Application Example

