DBaseT-Lite HDMI over CAT5e/6/7 with PoE Transmitter - **ID# 15125**

Operation Manual

CONVERTERS.TV

Introduction

HDBaseT-Lite HDMI over CAT5e/6/7 with PoE Transmitter can send uncompressed video and audio over a single run of CAT5e/6/7 cable up to 60 meters (1080p) or 35 meters (4K×2K) with the added benefit of control through the built-in RS-232 and 2-way IR ports. The Power over Ethernet (PoE) function provides greater flexibility in installations.

Features

- HDMI including 3D, 4k×2k supports, HDCP and DVI compliant
- Supports HDCP repeater and CEC bypass functions
- *Supports HDBaseT Technology (Lite version) including 2-Way IR, RS-232 and Power over Ethernet (PoE)*
- Supports HD resolutions up to 1080p@60Hz/36-bit and Ultra HD (4K×2K)
- Supports transmission distance of up to 60 meters through CAT5e/6/7 cable (1080p) or 35 meters (4K×2K)
- Supports HDMI input up to 15 meters at 8-bit resolution or 10 meters at 12-bit resolution and output up to 15 meters at 8-bit resolution and 10 meters at 12-bit resolution
- RS-232 with baud rate up to 115200/sec
- Supports wide range of IR frequency from 30 to 50 kHz
- Audio support up to LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio

Applications

- Household entertainment sharing and control
- Lecture room display and control
- Showroom display and control
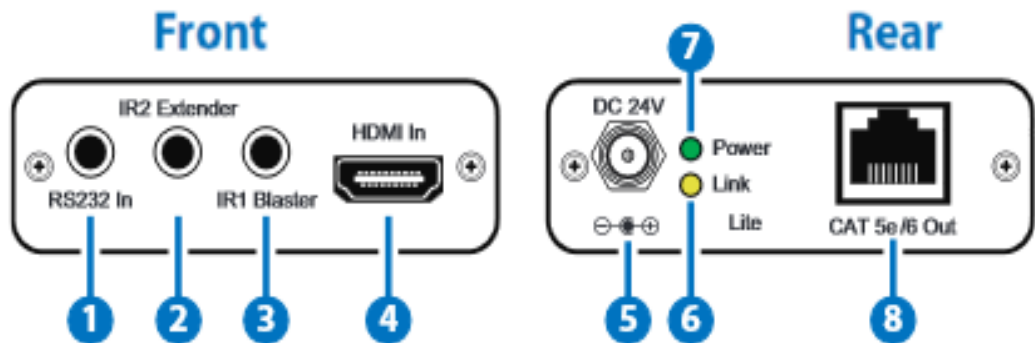- Meeting room presentation and control
- Classroom display and control

System Requirements

Input HDMI source equipment such as DVD/Blu-ray players and HDMI equipped output display (TVs or monitors).

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Operation Controls and Functions

Transmitter Front and Rear Panel

**1. RS-232 In:** Connect to a PC/laptop or RS-232 enabled device(with supplied 3.5 mm phone jack to D-Sub 9 pin adaptor) for the transmission of RS-232 commands.

2. IR2 Extender: Connect to the supplied IR extender cable for IR signal reception. Ensure that remote controller being used is within the direct line-of-sight of the IR extender.

3. IR1 Blaster: Connect to the supplied IR blaster cable for IR signal transmission. Place the IR blaster in direct line-of-sight of the equipment to be controlled.

4. HDMI In: Connect to HDMI source equipment such as a DVD or Blu-ray player.

5. DC 24V: Plug the 5 V DC power supply into the unit and connect the adaptor to an AC outlet.

6. Link: The yellow LED will illuminate when both the input and output CAT5e/6 signals are connected.

7. Power: This green LED will illuminate when the device is connected to a power supply.

8. CAT5e/6 Out: Connect to the receiver unit with a single CAT5e/6 cable for transmission of all data signals..

Receiver Front and Rear Panels
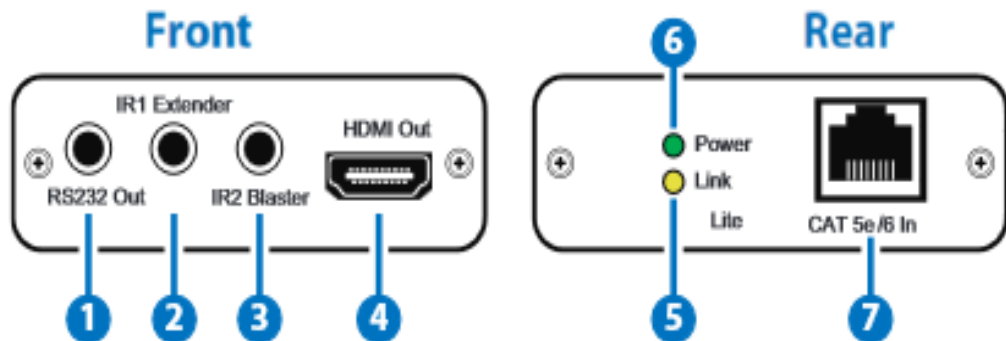
1. RS-232 Out: Connect to the device that is to be controlled (with the supplied 3.5mm phone jack to D-Sub 9-pin adaptor) by RS-232 commands.

2. IR1 Extender: Connect to the supplied IR extender cable for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR extender.

3. IR2 Blaster: Connect to the supplied IR blaster cable for IR signal transmission. Place the IR blaster in direct line of sight of the equipment to be controlled.

4. HDMI Out: Connect to a HDMI equipped TV/monitor for display of the HDMI input source signal.

5. Power: This green LED will illuminate when the device is connected to a power supply.

6. Link: The yellow LED will illuminate when both the input and output CAT5e/6 signals are connected.

7. CAT5e/6 In: Connect to the transmitter unit with a Single CAT5e/6 cable for transmission of all data signals

IR Pin Assignment

IR Blaster

1. Power 5 V
2. IR Blaster Signal
3. NC

IR Extender

1. IR Signal
2. Power 5 V
3. Ground
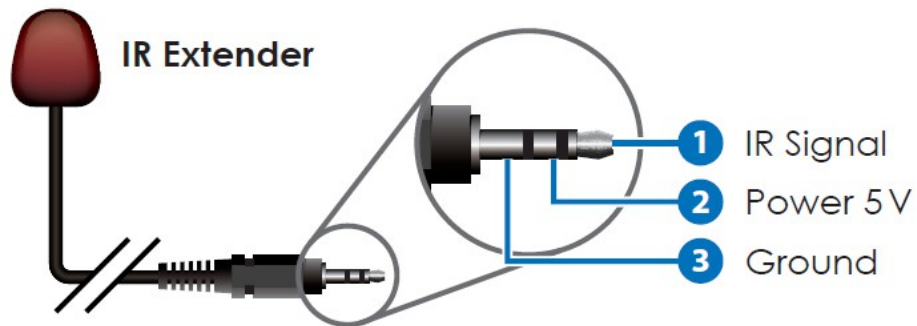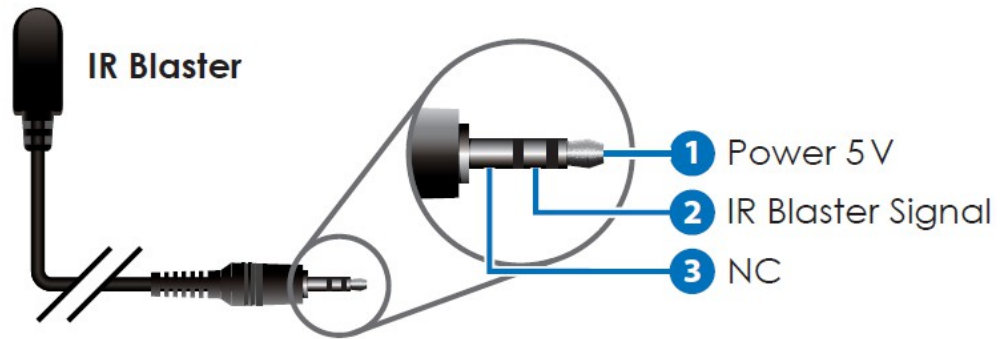
D-Sub 9-Pin Definitions

Pin	Definitions
1	N/C
2	TxD/RxD
3	RxD/TxD
4	N/C
5	GND
6	N/C
7	N/C
8	N/C
9	N/C

Connection Diagram

DVD or Blu-ray Player

RS-232 Equipped PC or Notebook

RS-232 Adaptor

HDMI

1.5m
60°
IR Blaster

7m
3m 3m
60°
IR Extender

Power Supply

TX

Single CAT5e/6 Cable

Power Supply

RX

Support Power over Ethernet (PoE) functionality

IR Blaster
60°
1.5m

RS-232 Adaptor

RS-232 Equipped Device

IR Extender
60°
3m 3m
7m

HDMI

Display

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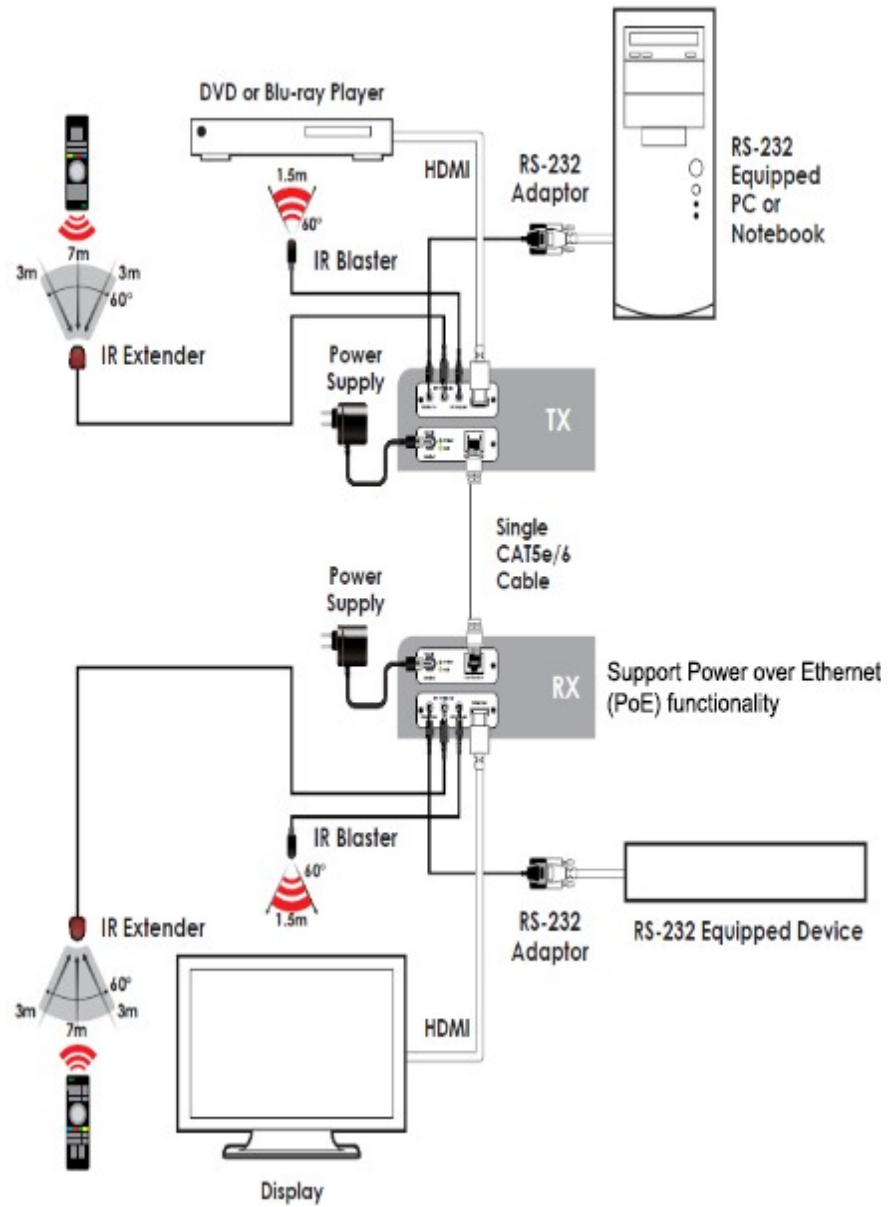
Specifications

Video Bandwidth	300 MHz/10.2 Gbps
Transmitter input port	1 × HDMI audio and video terminals , 1 × IR receiver , 1 × RS-232 terminal (D-sub 9-pin connector)
Transmitter output port	1 × CAT5e/6/7 terminal , 1 × IR emitter
Receiver input port	1 × CAT5e/6/7 terminal , 1 × IR receiver
Receiver output port	1 × HDMI audio and video terminals , 1 × IR emitter ,1 × RS-232 terminal (D-sub 9-pin connector)
CAT5e/6/7 distance	Furthest reach 60 meters
HDMI input distance	10 m / 8 m , 6 m / 12 m
HDMI output distance	10 m / 8 m , 6 m / 12 m
ESD protection	Human-body Model: ± 8 kV (air-gap discharge) ± 4 kV (contact discharge)
Power Supply	24 V/1.25 A DC (US / EU standards, CE / FCC /UL certified)
Infrared signal frequency	30 ~ 50 kHz
Size(mm)	71(W) × 79(D) × 23(H)
Weight	120 g / transmitter , 126 g / Receiver
Body Material	Aluminum
Silkscreen color	Black
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	3 W / conveyor , 6 W / Receiver