

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



**Operation Manual**

## 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

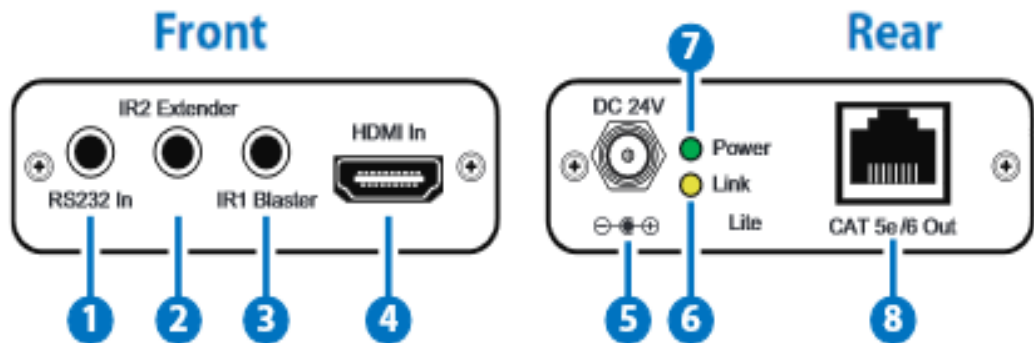
- Household entertainment sharing and control
- Lecture room display and control
- Showroom display and control
- Meeting room presentation and control
- Classroom display and control

## System Requirements

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

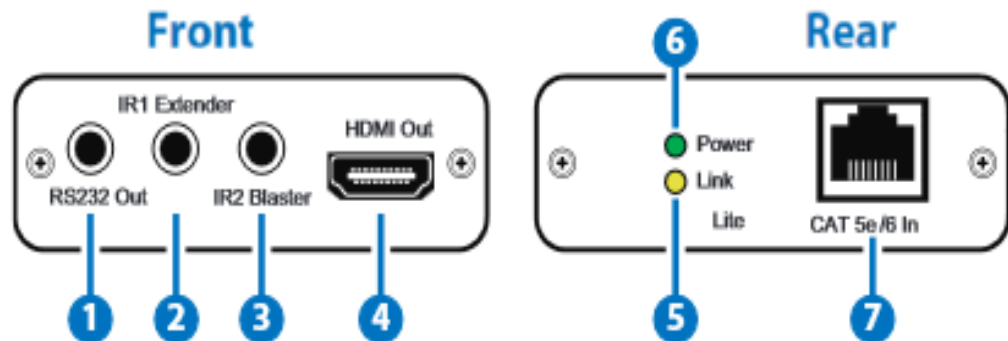
## Operation Controls and Functions

### Transmitter Front and Rear Panel



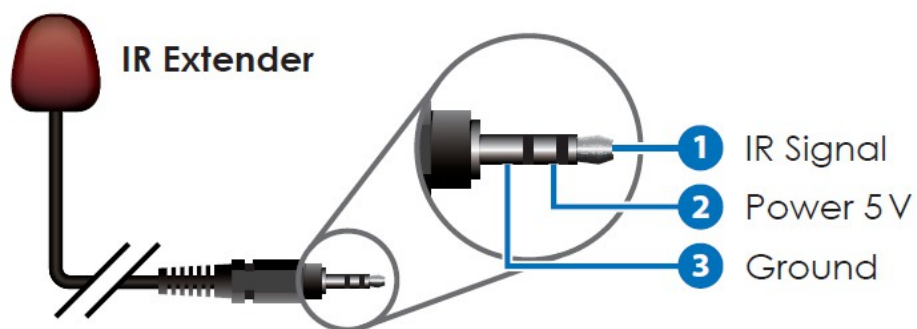
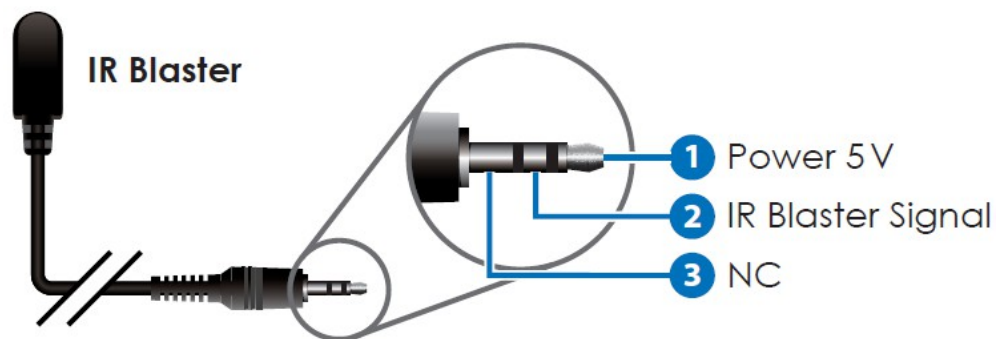
- 1. RS-232 In:** Connect to a PC/laptop or RS-232 enabled device(with supplied 3.5 mm phone jack to D-Sub 9 pin adaptor) for the transmission of RS-232 commands.
- 2. IR2 Extender:** Connect to the supplied IR extender cable for IR signal reception. Ensure that remote controller being used is within 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

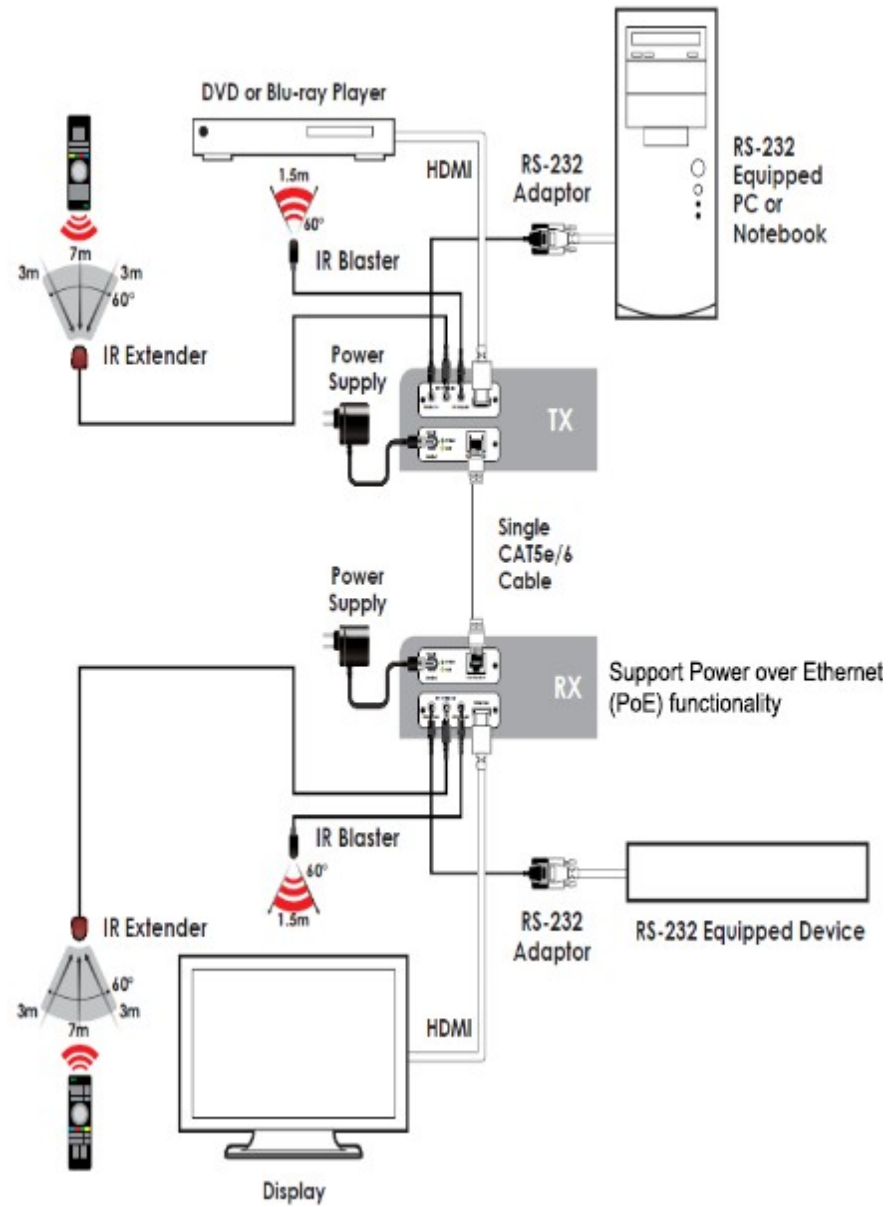
## IR Pin Assignment



### 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



## Specifications

|                                  |                                                                                                           |
|----------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Video Bandwidth</b>           | 300 MHz/10.2 Gbps                                                                                         |
| <b>Transmitter input port</b>    | 1 × HDMI audio and video terminals ,<br>1 × IR receiver , 1 × RS-232 terminal<br>(D-sub 9-pin connector ) |
| <b>Transmitter output port</b>   | 1 × CAT5e/6/7 terminal , 1 × IR<br>emitter                                                                |
| <b>Receiver input port</b>       | 1 × CAT5e/6/7 terminal , 1 × IR<br>receiver                                                               |
| <b>Receiver output port</b>      | 1 × HDMI audio and video terminals ,<br>1 × IR emitter , 1 × RS-232 terminal<br>(D-sub 9-pin connector )  |
| <b>CAT5e/6/7 distance</b>        | Furthest reach 60 meters                                                                                  |
| <b>HDMI input distance</b>       | 10 m / 8 m , 6 m / 12 m                                                                                   |
| <b>HDMI output distance</b>      | 10 m / 8 m , 6 m / 12 m                                                                                   |
| <b>ESD protection</b>            | Human-body Model:<br>± 8 kV (air-gap discharge)<br>± 4 kV (contact discharge)                             |
| <b>Power Supply</b>              | 24 V/1.25 A DC (US / EU standards,<br>CE / FCC /UL certified)                                             |
| <b>Infrared signal frequency</b> | 30 ~ 50 kHz                                                                                               |
| <b>Size(mm)</b>                  | 71(W) × 79(D) × 23(H)                                                                                     |
| <b>Weight</b>                    | 120 g / transmitter , 126 g / Receiver                                                                    |
| <b>Body Material</b>             | Aluminum                                                                                                  |
| <b>Silkscreen color</b>          | Black                                                                                                     |
| <b>Operating Temperature</b>     | 0 ° C ~ 40 ° C/32 ° F ~ 104 ° F                                                                           |
| <b>Storage Temperature</b>       | -20 ° C ~ 60 ° C /-4 ° F ~ 140 ° F                                                                        |
| <b>Relative Humidity</b>         | 20 ~ 90% RH (non-condensing)                                                                              |
| <b>Power Consumption</b>         | 3 W / conveyor , 6 W / Receiver                                                                           |