

# HD & IR to CAT5e/CAT6 Transmitter & Receiver - ID# 782 - 783



## Operation Manual

## Introduction

The HDMI with RS-232 over Single CAT5e/CAT6 transmitter and receiver set can send uncompressed audio/video over a single run of CAT5e/6 cable up to 100m with POE feature and the added benefit of control through the built-in RS-232 and IR ports and a bi-directional LAN connection.

## Applications

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

## Features

- HDMI 1.4 with 3D, 4k×2k support, HDCP & DVI Compliant
- Supports CEC bypass
- Simultaneous transmission of uncompressed data over a single 100 m/328 ft CAT6/CAT5e cable
- Uncompressed video 1080p, 60 Hz, 36-bit
- Audio support up to 7.1CH & Dolby TrueHD, DTS-HD
- 5Play™ convergence: HDMI, LAN, POE & Control (IR & RS232)
- Installation Friendly

### **Note:**

**1.** This system was tested with CAT-6E/23AWG cables, results may vary with cables of a different specification.

**2.** The POE function is designed to support the same family type's receiver devices, it is not designed to power other devices.

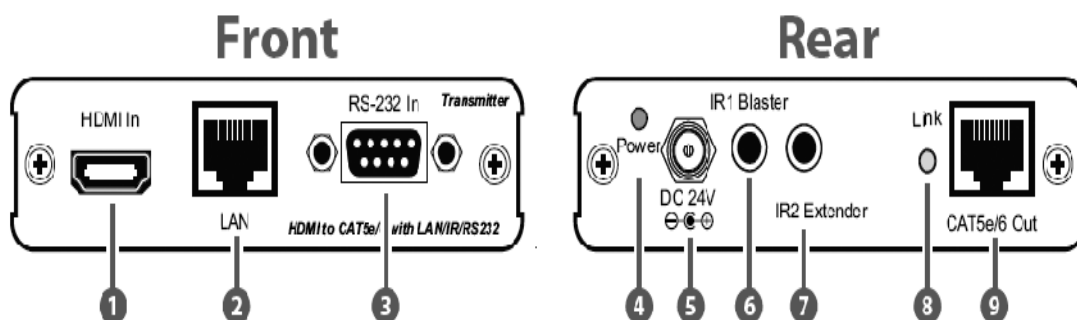
**3.** The POE function is designed to support the same family type of device (here it means receiver) only. It is not design to power other non-family type of devices.

## System Requirements

Input HDMI source equipment such as DVD/Blu-ray player and HDMI equipped output display (TV or monitor).



## Operation Controls and Functions Transmitter



### 1. HDMI In

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

### 2. LAN

Connect to an internet or network connection.

### 3. RS-232 In

Connect to a PC or laptop with D-Sub 9 pin male cable for the transmission of RS-232 commands.

### 4. Power LED

This blue LED will illuminate when the device is connected to a power supply.

### 5. DC 24V

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

### 6. IR 1 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.

### 7. IR 2 Extender

Connect to the supplied IR receiver cables for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR extender.

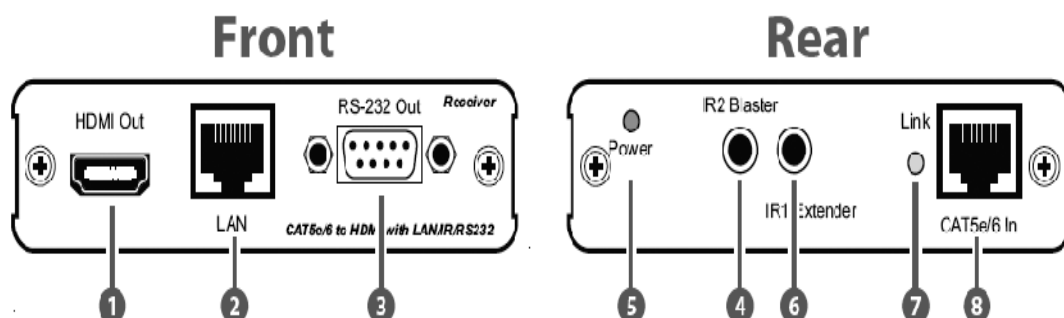
### 8. Link LED

The yellow LED will illuminate when both the input and output signals are connected.

### 9. CAT5e/6 Out

Connect to the receiver unit with a Single CAT5e/6 cable for transmission of all data signals.

## Receiver



### 1. HDMI Out

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

### 2. LAN

Connect to a PC or Laptop to the Internet or network connection.

## D-Sub 9 pin definitions

### 3. RS-232 Out

Connect to the device that is to be controlled (via D-Sub 9 pin female cable) by RS-232 commands.

### 4. Power LED

This blue LED will illuminate when the device is connected to a power supply.

### 5. IR 2 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.

### 6. IR 1 Extender

Connect to the supplied IR receiver cables for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR extender.

### 7. Link LED

The yellow LED will illuminate when both the input and output signals are connected.

### 8. CAT5e/6 In

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

| Pin | Define TxD / RxD |
|-----|------------------|
| 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              |

## Specifications

|                              |   |
|------------------------------|---|
| <b>Video Bandwidth</b>       | 300MHz/9Gbps  |
| <b>Ethernet Speed</b>        | 100Mbps   |
| <b>Transmitter</b>           |   |
| <b>Input</b>                 | 1 × HDMI, 1 × IR Extender, 1 × RS-232,<br>1 × LAN                           |
| <b>Output</b>                | 1 × CAT5e/6, 1 × IR Blaster   |
| <b>Receiver</b>              |   |
| <b>Input</b>                 | 1 × CAT5e/6, 1 × IR Extender  |
| <b>Output</b>                | 1 × HDMI, 1 × RS-232, 1 × IR Blaster,<br>1 × LAN                            |
| <b>ESD Protection</b>        | Human Body Model:<br>±8 kV (air-gap discharge)<br>±4 kV (contact discharge) |
| <b>IR Frequency</b>          | 30~50 kHz   |
| <b>Power Supply</b>          | 24 V/1.25 A DC (US/EU Standards,<br>CE/FCC/UL certified)                    |
| <b>Dimensions</b>            | 102mm (W) × 115mm (D) × 25mm (H)/Each                                       |
| <b>Weight</b>                | 252g (TX), 256g (RX)  |
| <b>Chassis Material</b>      | Aluminum  |
| <b>Silkscreen Color</b>      | Silver  |
| <b>Power Consumption</b>     | 13 W  |
| <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)   |

## Connection

