HDBaseT HDMI over CAT5e/6 Transmitter/Receiver w/dual PoE - # 15335/15336

Operation Manual

Introduction

The HDMI with RS-232 over Single CAT5e/6 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

System Requirements

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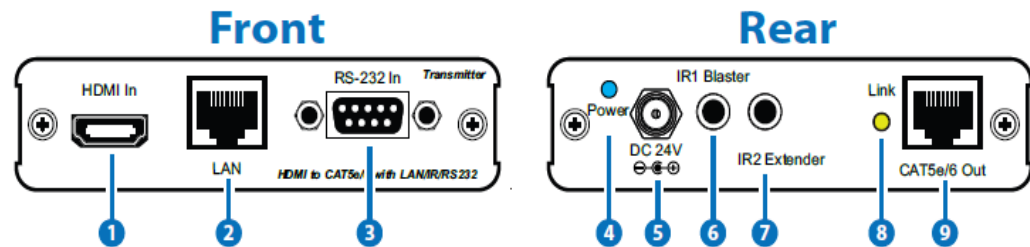
Features

- HDMI 1.4 with 3D, 4k×2k support, HDCP & DVI Compliant
- Supports CEC bypass
- Simultaneous transmission of uncompressed data over a single 100m/328ft CAT5e/6 cable
- Uncompressed video 1080p, 60Hz, 36-bit
- Audio support up to 7.1CH & Dolby TrueHD, DTS-HD
- 5Play™ convergence: HDMI, LAN, Bidirectionlal PoE & Control (IR & RS-232)
- Installation Friendly

Note:
1. This system was tested with CAT6/23AWG cables, results may vary with cables of a different specification.
2. The PoE function is designed for powering compatible receiver units only—non-PoE receivers will need their own power supply. Receivers of another brand may not be compatible
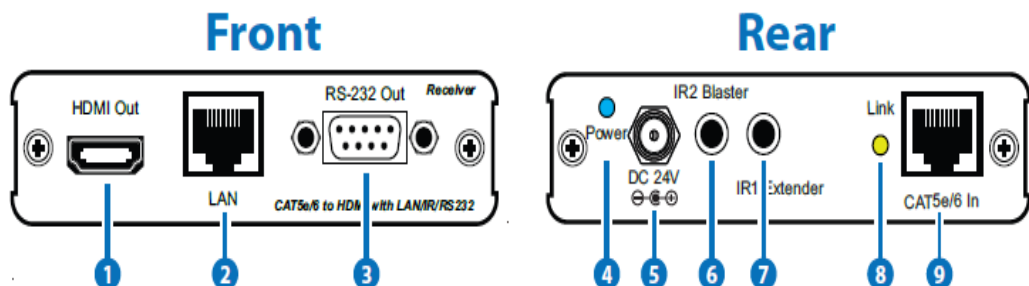
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Operation Controls and Functions

Transmitter

Front — HDMI In / LAN / RS-232 In / Transmitter / HDMI to CAT5e/ with LAN/IR/RS232

Rear — Power / IR1 Blaster / DC 24V / IR2 Extender / Link / CAT5e/6 Out

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. Only one side of power needs to be

connected to activate both transmitter and receiver.

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.

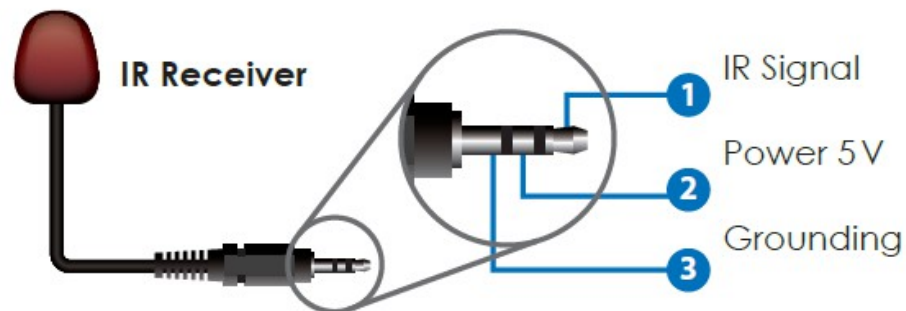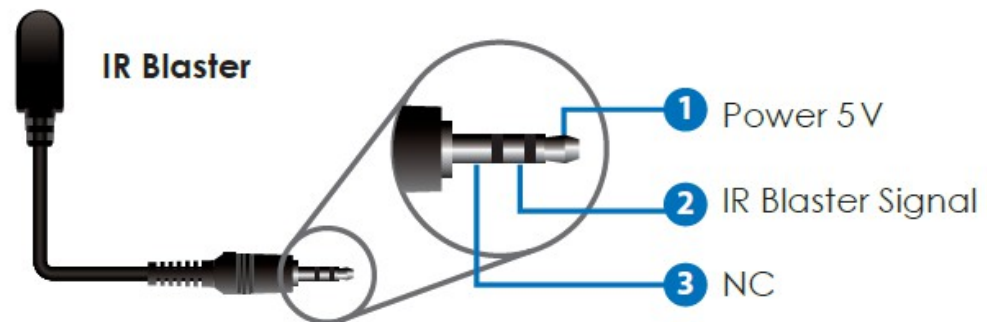**9. CAT5e/6 Out:** Connect to the reciever unit with a Single CAT5e/6 cable for tranmission of all data signals.

Receiver

Front — HDMI Out / LAN / RS-232 Out / Receiver / CAT5e/6 to HDMI with LAN/IR/RS232

Rear — Power / IR2 Blaster / DC 24V / IR1 Extender / Link / CAT5e/6 In

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.

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

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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. Only one side of power needs to be connected to activate both transmitter and receiver.

6. 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.

7. 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.

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

9. CAT5e/6 In: Connect to the transmitter unit with a Single CAT5e/6 cable for tranmission of all data signals.
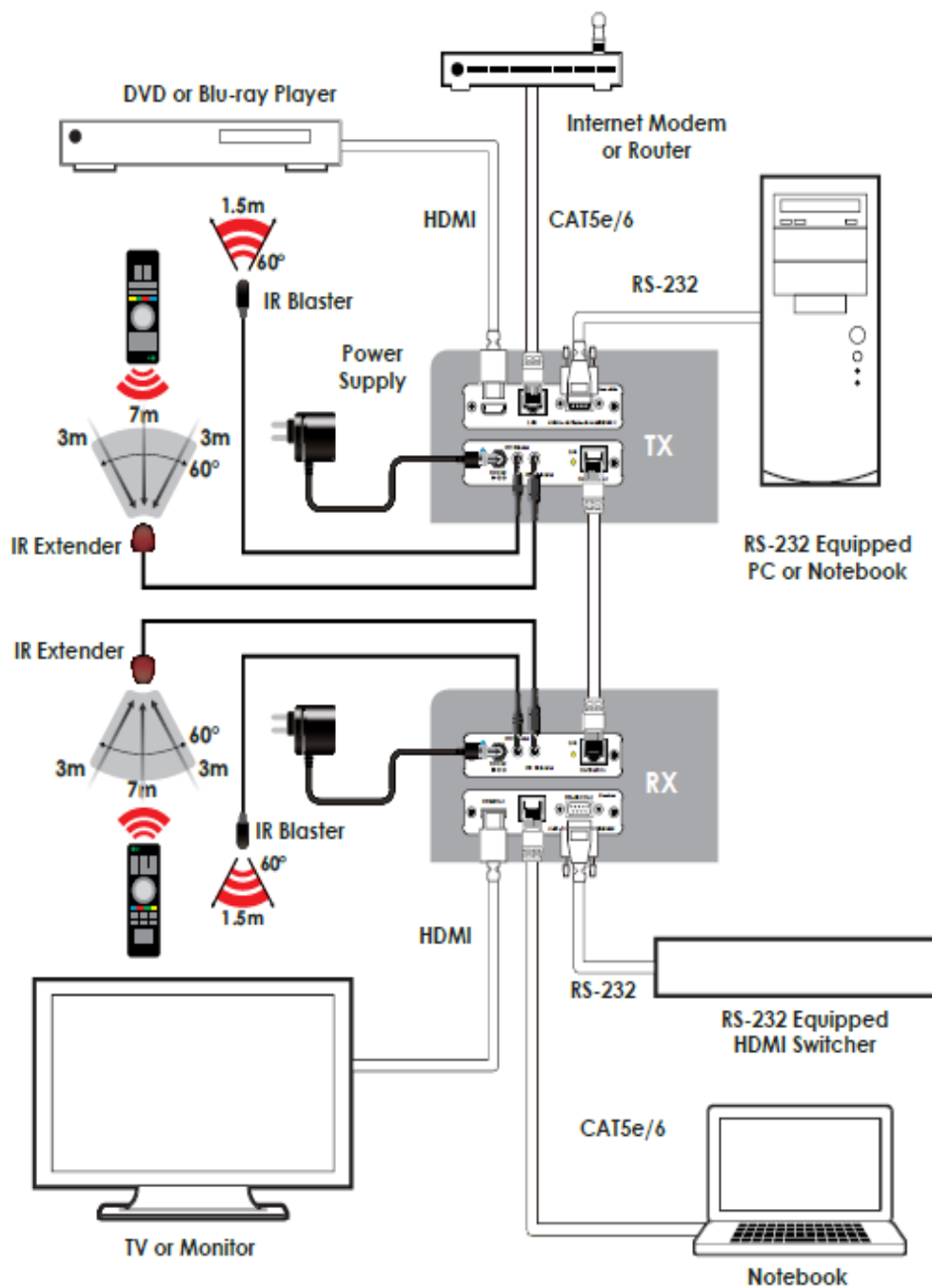
IR Cable Pin Assignment

IR Blaster

1 Power 5 V

2 IR Blaster Signal

3 NC

IR Receiver

1 IR Signal

2 Power 5 V

3 Grounding

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D-Sub 9 Pin Definitions

Video CV-SV 4x1 Switch	
PIN	**DEFINITION**
1	NC
2	TxD/RxD
3	RxD/TxD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

Specifications

Video Bandwidth	300MHz / 9Gbps
Ethernet Speed	100 Mbps
Transmitter	
Input	1×HDMI, 1×IR Extender,1×RS-232, 1×LAN
Output	1×CAT5e/6, 1×IR Blaster
Receiver	
Input	1×CAT5e/6, 1×IR Extender
Output	1×HDMI, 1×RS-232, 1× IR Blaster, 1× LAN
HDMI In/Out Cable Distance	Up to 10 Meters
CAT6 In/Out Cable Distance	Up to 100 Meters
HDMI In/Out Supports Resolution	480i~1080p@50/60, 1080p@24, VGA~WUXGA
IR Frequency	30~50 kHz
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)
Dimensions	102 mm (W)×113 mm (D)×25 mm (H)/each
Weight	252 g (TX), 256 g (RX)
Chassis Material	Aluminum
Silkscreen Color	Silver
Power Consumption	13 W
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)

**Connection
Diagram**

DVD or Blu-ray Player

Internet Modem
or Router

1.5m
60°
IR Blaster

HDMI   CAT5e/6

RS-232

7m
3m   3m
60°

Power
Supply

TX

RS-232 Equipped
PC or Notebook

IR Extender

IR Extender

60°
3m   3m
7m

RX

IR Blaster
60°
1.5m

HDMI

RS-232

RS-232 Equipped
HDMI Switcher

CAT5e/6

TV or Monitor

Notebook

Note: *Only one side of power needs to be connected to activate both transmitter and
receiver.*

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