HDBaseT HDMI over CAT5e/6/7 Wallplate Receiver w/ 24vPoC & LAN Serving - # 15532

Operation Manual

CONVERTERS.TV

Introduction

The HDMI over Single CAT5e/6/7 Wall-plate Receiver is designed to receive uncompressed video, audio and IR control data from a compatible transmitter over a single run of CAT5e/6/7 cable at a distance of up to 100 meters. It has the added benefit of control through the built-in RS-232 and IR ports and a bi-directional LAN serving connection. Additionally, it can be powered by a compatible transmitter unit via the Power over Cable (PoC) functionality allowing for greater flexibility in installations.

Applications

- Extend an HDMI signal to a remote location
- Household entertainment sharing and control
- Showroom display and control
- Classroom display and control

Features

- HDMI with 3D, 4K2K support, HDCP and DVI compliant
- Simultaneous tranmisson of uncompressed data over a single 100m CAT5e/6/7 cable (70m for 4K2K signals)
- Uncompressed video support up to 1080p@60 Hz/36-bit
- High definition audio support up to LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio
- HDBaseT™ 5PlayT™ convergence: uncompressed high definition Video and Audio, LAN serving, Power over Cable (PoC) and RS-232/IR control
- Supports HDCP repeater and CEC bypass functions
- Easy to install wall plate design

Note:

1. This system was tested with CAT6/23AWG and CAT5e/24AWG cables, results may vary with cables of a different specification.

2. The PoC function requires a compatible Transmitter unit. Transmitters from other brands may not be compatible.

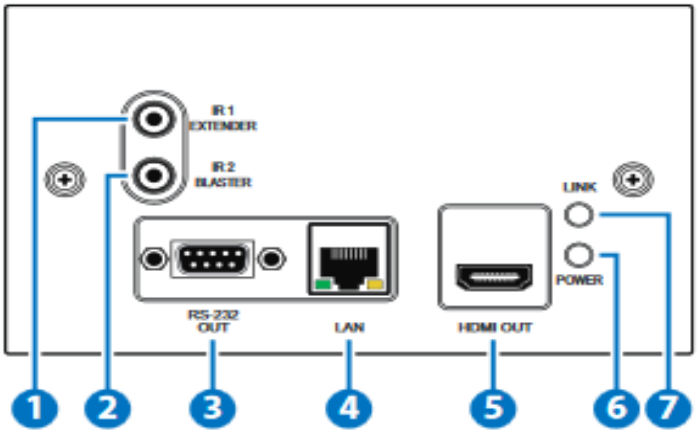
3. For playback of 4K2K HDMI source signals, a 4K2K capable display and High Speed HDMI cables are required.

System Requirements

- HDMI equipped source device (connected with HDMI cables) or DVI equipped source (connected with DVI to HDMI cables)
- HDMI equipped display (TV or monitor) or AN HDMI equipped AV receiver, connected with HDMI cables
- Industry standard CAT5e/6/7 cables
- Compatible PoC HDBaseT™ Receivers

Operation Controls and Functions

Front Panel



1. IR 1 EXTENDER:

Connect an IR Extender cable for IR signal reception. Signals received will be transmitted from any IR blaster connected to the transmitter unit. Ensure that the remote being used is within the direct line-of-sight of the IR Extender

2. IR 2 BLASTER:

Connect an IR Blaster cable for IR signal transmission.
IR signals received by an IR extender connected to the transmitter unit will be transmitted by this blaster. Place the IR Blaster in direct line-of-sight of the equipment to be controlled

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. LAN:

Connect to an active network for LAN serving. When the transmitter or any compatible LAN equipped receivers are connected to a network, this allows the network access (including internet access if available) to be shared between the receiver and all connected receivers. Connect any Ethernet equipped device e.g. a Smart TV or games console to the LAN port of a receiver for that device to share the network/internet access.

5. HDMI OUT:

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

6. POWER LED:

This LED will illuminate when the device is connected to a power supply or powered by another unit via PoC.

7. LINK LED:

This LED will illuminate when both the source connected to the transmitter and the display connected to the receiver are connected.

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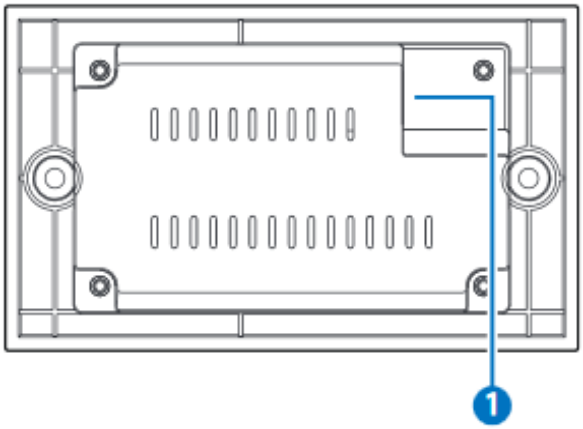
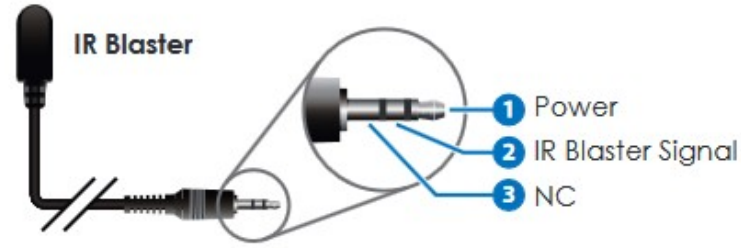
Rear Panel

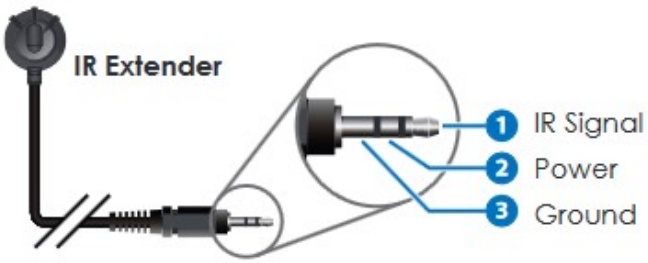


1. CAT5e/6/7 IN:

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

IR Cable Pin Assignment





D-Sub 9-Pin Assignment

Pin	Assignment
1	N/C
2	Tx/Rx
3	Rx/Tx
4	N/C
5	GND
6	N/C
7	N/C
8	N/C
9	N/C

CAT5e/6/7 Cable Specification

Cable Type	Range	Pixel Clock Rate	Video Data Rate	Supported Video
CAT5e/6/7	100m	≤225 MHz	≤5.3 Gbps (HD Video)	Up to 1080p, 60Hz, 36-bit 3D (Data rates lower than 5.3Gbps or below 225 MHz TMDS clock)
	70m	>225 MHz	>5.3 Gbps (Ultra HD Video)	4K2K, 30Hz video formats

Specifications

Video Bandwidth	300 MHz/10.2 Gbps
Input Ports	1×CAT5e/6/7,1×LAN, 1×IR Extender
Output Ports	1×HDMI,1×RS-232, 1×IR Blaster
Power Supply	24 V/6.25 A DC (US/EU standards, CE/FCC/ UL certified)
ESD Protection	Human Body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
IR Frequency	20~60 kHz (under optimal conditions)
Dimensions	145.7 mm (W)×85.7 mm (D)×39.5 mm (H)
Weight	160g
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0 ºC~40 ºC/32 ºF~104 ºF
Storage temperature	−20 ºC~60 ºC/−4 ºF~140 ºF
Relative Humidity	20~90% RH (no condensation)
Power Consumption	12 W (PoC), 9 W (Main)

Connection Diagram