HDBaseT 1x4 HDMI over CAT 5e/6/7 Transmitter Splitter - ID# 15115

Operation Manual

Introduction

The HDMI over HDMI and CAT5e/6/7 Transmitter can support resolutions up to 1080p Full HD, 4Kx2K timing, 3D and multi-channel digital audio formats to one HDTV and three CAT5e/6/7 outputs. The HDMI can be connected to HDMI display for instant nearby display and the CAT5e/6/7 can be connected to CAT5e/6/7 to HDMI Receivers for distance up to 100 meters. Further, a total of 100Mbps Ethernet transmission rate allows all connected device to share the Ethernet service and the PoE function free the power shortage issue from the Receiver end.

Features

- HDMI with 3D & 4Kx2K supported, HDCP and DVI compliant
- The HDMI and CAT5e/6/7 outputs are playing the same source simultaneously
- Supports data rate from 250Mbps up to 3Gbps
- Supports wide range of PC resolutions from VGA to WUXGA and HDTV resolutions up to 4Kx2K (3840x2160@30Hz and 4096x2160@24Hz)
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission (32-192kHz sample rate)
- Supports distances up to 100 meters through CAT5e/6/7 cables
- Supports Ethernet transmission rate up to 100Mbps
- Can select Standard or TV EDID
- Supports USB service port
- The 3D signal display follow by display TV's EDID
- Supports PoE with capable Receiver units
- Supports Bi-directional IR control

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.
3. Displaying HDMI 4Kx2K resolution require the standard 4Kx2K HDMI cable and display in order for proper image displaying

Applications

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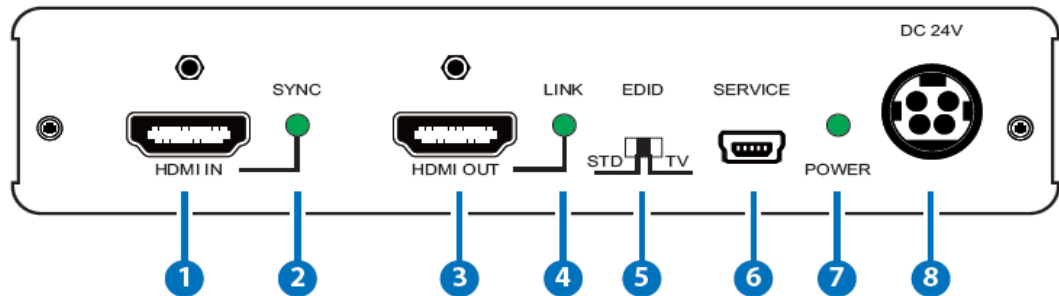- Classroom display and control

System Requirements

- Source equipment with HDMI output connector
- Display TV/Monitor with HDMI input connector
- HDMI over CAT5e/6/7 Receivers with industry CAT5e/6/7 cables

CONVERTERS.TV

Front Panel

1. HDMI IN:
Connect with source equipment such as DVD/Blu-ray or PS3 player.
2.SYNC:
This LED will illuminate when the HDMI input port connected to the source.
3. HDMI OUT:
Connect to HDMI display for instant image display or cascade with another family type Transmitter.
4. HDMI LINK:
This LED will illuminate when HDMI output is connected to TV or display monitor.
5. EDID STD/TV:
The default factory setting is on TV, leave as it is when the display is properly. The unit will detect the 1st CAT5e/6/7 output's EDID when it obtain a 4Kx2K EDID and send out the signal accordingly to other output ports. If the 1st CAT5e/6/7 output is without a 4Kx2K's EDID the unit will detect all output's EDID and send out the signal that all outputs can accept.
This device obtain the last memory function therefore, the device will use the last output port 1's EDID when output port 1 is not connected to a display after power cycling or switch in between the EDID setting.
Switch to STD to use build-in EDID if the display has problem. STD EDID's video at 1080p@60Hz and audio at LPCM 2CH.
6. SERVICE:
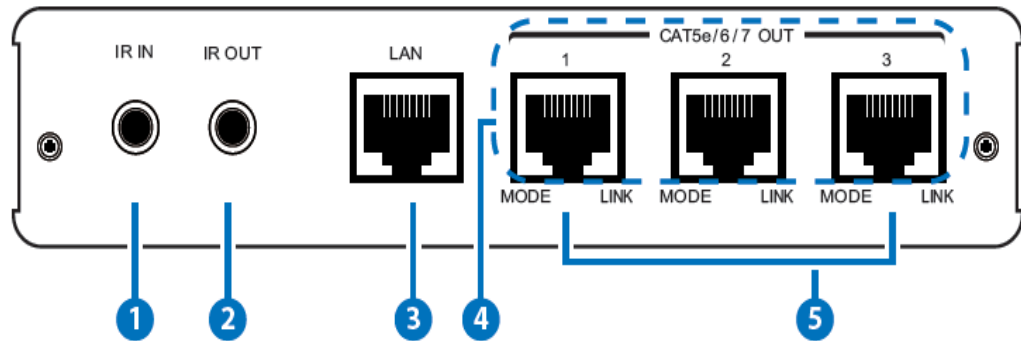This slot is reserved for factory service only.
7. POWER LED:
Once the power supply is connected the LED will illuminate
8. DC 24V:
Plug the 24V DC power supply into the unit and connect the adaptor to an AC outlet.

Back Panel

1. IR IN:
Connect with IR Extender to receive IR signal from Transmitter side and blast out at Receiver side. Ensure that remote controller being used is within he direct line-of-sight of the IR Extender.

2. IR OUT:
Connect with IR Blaster to blast out the IR signal received from the Receiver side. Place the IR Baster in direct line-of-sight of the equipment to be controlled.

3.LAN:
Connect to intra-net or internet service system for a total sharing rate of 100Mbps within the link of Transmitter.
Warning: *DO NOT connect this slot with any of the CAT5e/6/7 port, doing so may trigger a power shot down and ruin the device.*
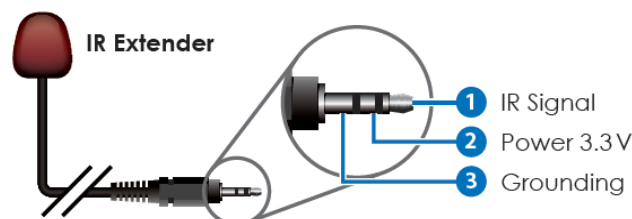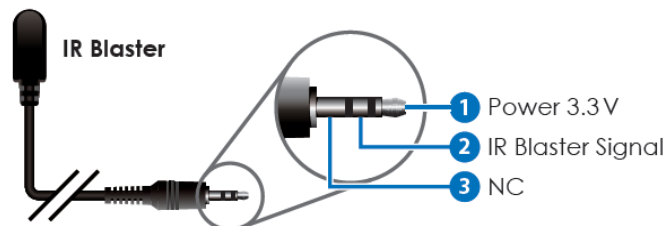
4. CAT5e/6/7 OUT 1~3:
Connect these ports to CAT5e/6/7 to HDMI Receivers (with or without PoE function) with CAT5e/6/7 cable to extend the signal up to 100m.
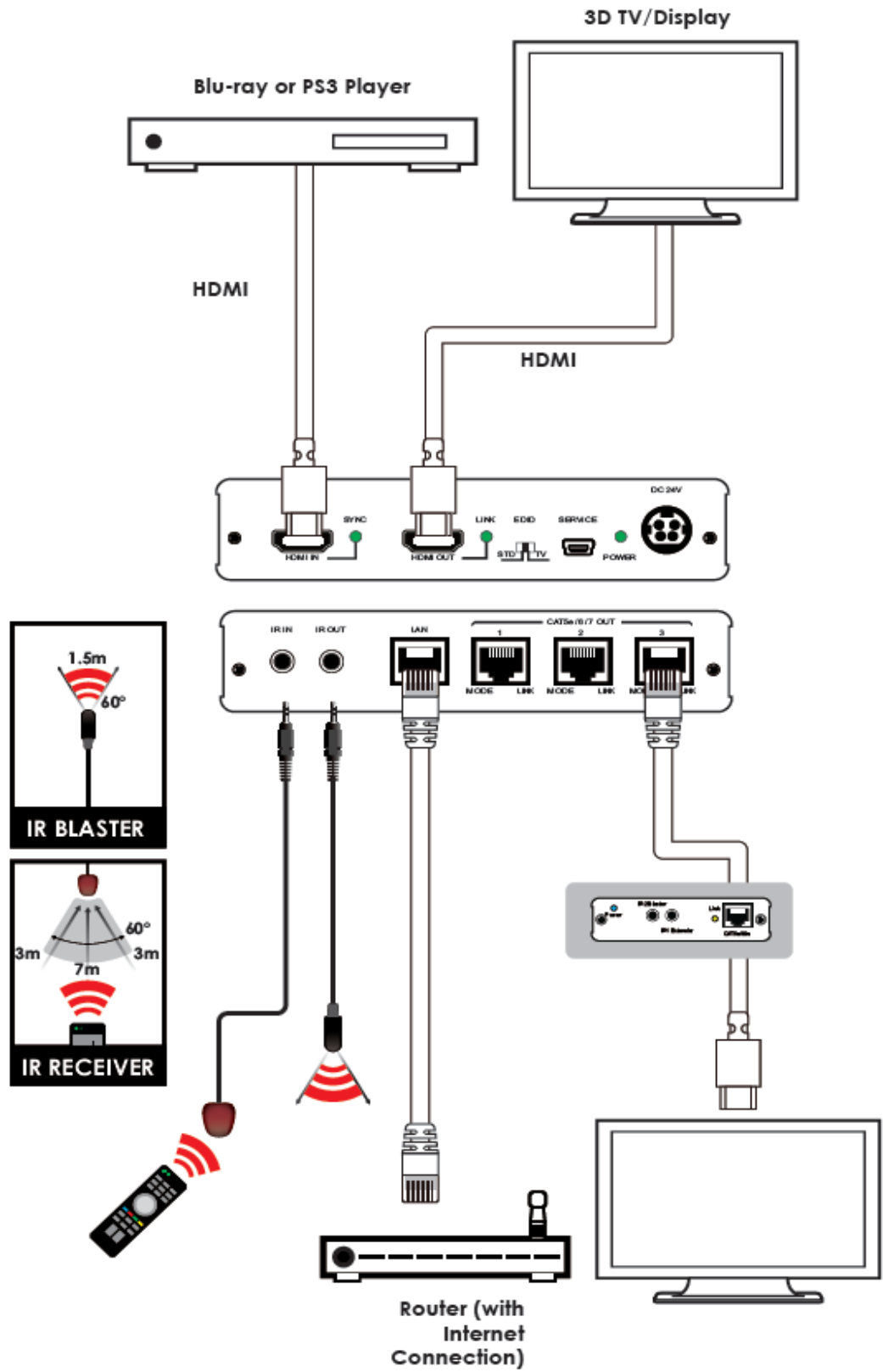
5.MODE & LINK 1~3:
The Mode LED will illuminate when the device is connected with power. The link LED will illuminate when CAT5e/6/7 output(s) has been connected to the Receiver(s) and the Receiver(s) has connected with display that shows image on screen.

IR Pin Assignment

Connection Diagram

Blu-ray or PS3 Player

3D TV/Display

HDMI

HDMI

IR BLASTER

1.5m
60°

IR RECEIVER

60°
3m   3m
7m

Router (with
Internet
Connection)

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, 60 Hz, 36 bits, 3D (data rates lower than 5.3 Gbps or below 225 MHz TMDS clock).
	70m	>225 MHz	> 5.3 Gbps (Ultra HD Video)	4K2K, 30Hz video formats

Specifications

Video Bandwidth	300Mbps/10.2Gbps
Input ports	1 x HDMI, 1 x IR IN, 1 x LAN*, 1 x USB (Service only)
Output ports	1 x HDMI, 3 x CAT5e/6/7 1 x IR OUT,
Resolution	Up to 4Kx2K (3840x2160@30Hz/4096x2160@24Hz)
HDMI Input Cable Distance	N/A
CAT5e/6/7 Output Cable Distance	Up to 100m
IR Frequency	30~50kHz
Power Supply	24V / 2.7A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	145 mm(W) x 199 mm(D) x 30 mm(H)
Weight	590 g
Chassis Material	Metal
Silkscreen Color	Black
ESD Protection	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
Operating Temperature	0°C ~ 40°C
Storage Temperature	-20˚C ~ 60˚C / -4 ˚F ~ 140 ˚F
Relative Humidity	20 ~ 90% RH (non-condensing)
Power Consumption	36W