

HDBaseT-Lite 1x7 over HDMI and CAT5e/6/7 Splitter - # 15116



Operation Manual

Introduction

The HDMI over HDMI and CAT5e/6/7 Splitter can split and distribute a single HDMI input and 2-way IR control up to seven CAT5e/6/7 outputs and includes a simultaneous HDMI bypass output. It supports resolutions up to 1080p Full HD, 4Kx2K timing, 3D and multi-channel digital audio formats (such as LPCM 7.1CH, Dol-by TrueHD, Dolby Digital Plus and DTS-HD). The HDMI bypass output can be connected to an HDMI display or cascaded to another splitter. The CAT5e/6/7 outputs can be connected to CAT5e/6/7 to HDMI Receivers to extend the operating distance up to 60 meters with Power Over Cable feature.

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 with 3D & 4Kx2K supported, HDCP and DVI compliant
- Simultaneous HDMI and CAT5e/6/7 outputs
- Supports one HDTV and seven CAT5e/6/7 outputs
- 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@24/25/30Hz & 50/60 YUV_420 and 4096x2160@24Hz & 50/60 YUV_420).
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission (32-192kHz sample rate)
- Supports distances up to 60 meters through CAT5e/6/7 cables
- Supports selection of Standard or TV EDID settings
- Supports Power over Cable (PoC) feature
- Supports USB service port
- Supports Bidirectional IR control
- The 3D signal display follow by display TV's EDID

Note:

1. *This system was tested with CAT6/23AWG cables, results may vary with cables of a different specification.*
2. *Displaying HDMI 4Kx2K resolution require the standard 4Kx2K HDMI cable and display in order for proper image displaying.*
3. *The PoC function is designed for powering compatible Receiver units only non-PoC Receivers will need their own power supply. Receivers of another brand may not be compatible*

System

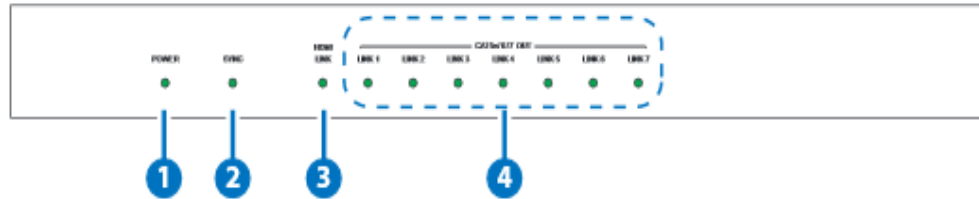
Requirements

- 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



Operation Controls and Functions

Front Panel



1. POWER LED:

Once the power supply is connected the LED will illuminate.

2. SYNC:

This LED will illuminate when the HDMI input port connected to an active source.

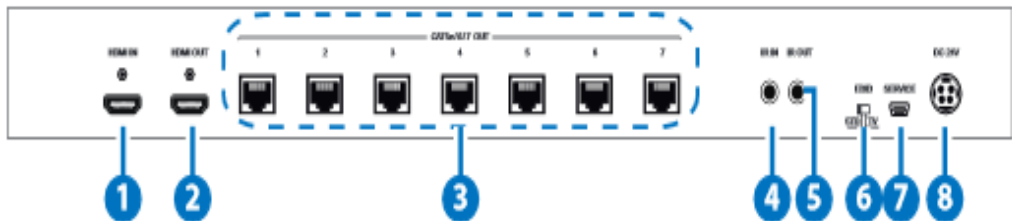
3. HDMI LINK:

This LED will illuminate when HDMI output is connected to TV or display monitor.

4. LINK 1~7:

The link LED will illuminate when both the input source and output display signals are connected through CAT cable.

Rear Panel



1. HDMI IN:

Connect with source equipment such as DVD/Blu-ray or PS3 player.

2. HDMI OUT:

Connect to HDMI display for instant image display or cascade with another family type Transmitter.

3. CAT5e/6/7 OUT 1~7:

Connect these ports to CAT5e/6/7 to HDMI Receivers with CAT5e/6/7 cable to extend the signal up to 60m.

4. 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 the direct line-of-sight of the IR Extender.

5. IR OUT:

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

6. EDID STD/TV:

The default factory setting is on STD, leave as it is when the display is properly. When in TV mode 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 switching 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.

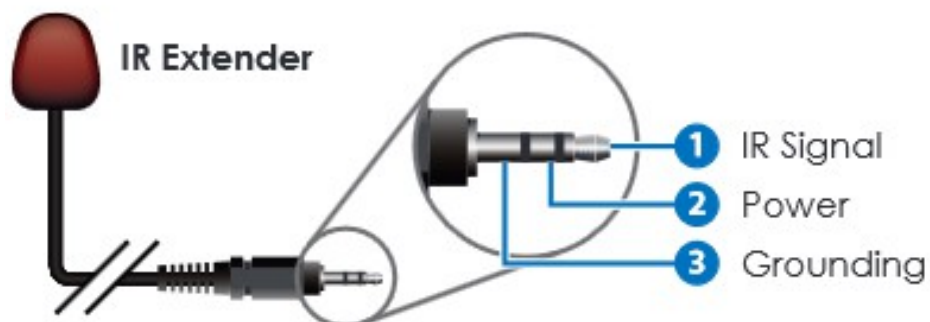
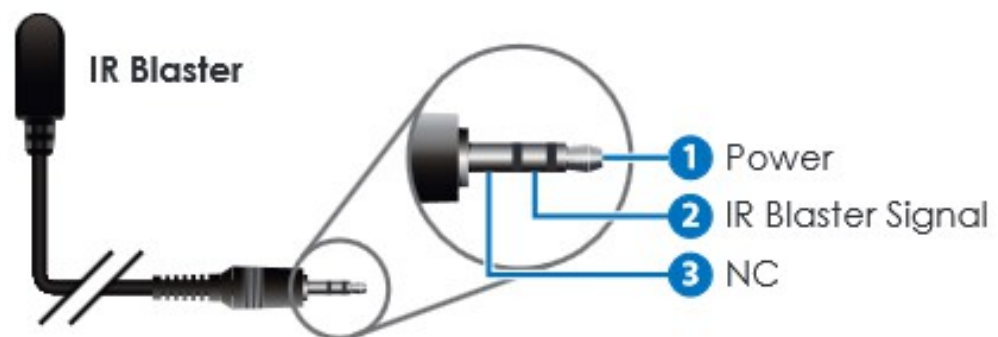
7. **SERVICE:**

This slot is reserved for factory service only.

8. **DC 24V:**

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

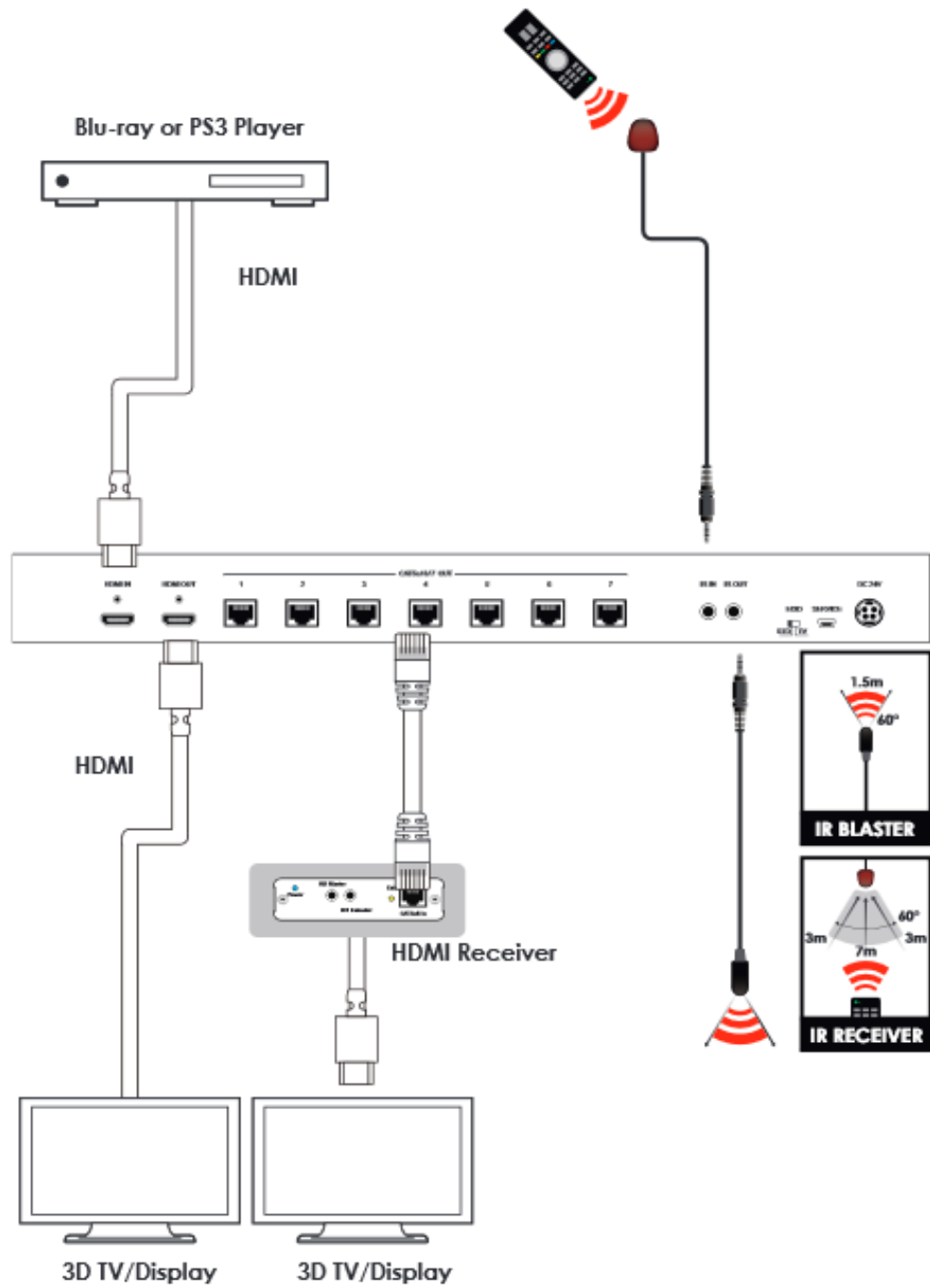
IR Cable Pin Assignment



Specifications

Video Bandwidth	340Mbps/10.2Gbps
Input ports	1 x HDMI, 1 x IR IN, 1 x USB (Service only)
Output ports	1 x HDMI, 1 x IR OUT, 7 x CAT5e/6/7
Resolution	Up to 4Kx2K (3840x2160@24/25/30Hz & 50/60 YUV 420/4096x2160@24Hz & 50/60 YUV 420)
HDMI Input & Output Cable Distance	Up to 10m@1080p 8/12-bit
CAT5e/6/7 Output Cable Distance	Up to 60m
IR Frequency	30~50kHz
Power Supply	24V / 2.7A DC (US/EU standards, CE/FCC/ UL certified)
Dimensions	432mm(W) x 174 mm(D) x 44 mm(H)/ Jacks Excluded 432mm(W) x 179 mm(D) x 49 mm(H)/ Jacks Included
Weight	2126 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	62.7W

Connection Diagram



CAT5e/6/7 Cable Specification

Cable Type	Range	Pixel clock rate	Video Data Rate	Supported Video
CAT5e/6/7	60 m	≤ 225 MHz	≤ 5.3 Gbps (HD Video)	Up to 1080p, 60 Hz, 36 bits, 3D (data rates lower than 5.3 Gbps or below 225MHz TMDs clock)
	40 m	> 225 MHz	> 5.3 Gbps (Ultra HD Video)	4K2K, 30Hz video formats
CAT6/7	60 m	> 225 MHz	> 5.3 Gbps (Ultra HD Video)	4K2K, 30Hz video formats