



VLSP-14CTH14

1x4 HDMI 1.4 Splitter over CAT 70m 10.2Gbps



User Manual

VER 1.1

Thank you for purchasing this product

Please read these instructions carefully for optimum performance and safety before connecting, operating, or adjusting this product. Please keep this manual for future reference.

A surge protection device recommended.

This product contains sensitive electrical components that electrical spikes may damage, surges, electric shocks, lightning strikes, etc. The use of surge protection systems is highly recommended to protect and extend the life of your equipment.

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1. Introduction

This HDMI 1x4 Splitter can distribute 1 HDMI source signal to 4 display devices. Support video resolution up to 4K2K@30Hz 4:4:4. It is designed with 1 HDMI input, 1 HDMI loop output, and 4 CAT outputs. The HDMI signal transmission distance can be extended up to 131ft / 40 meters at the resolution of 4K30Hz, or 230ft / 70 meters at 1080P@60Hz via a single CAT6 cable. The product supports one-way IR control signal pass-through and advanced EDID management.

2. Features

- ☆ HDMI 1.4 and HDCP 1.4 compliant
- ☆ Video resolution up to 4K2K@30Hz (4:4:4) 8-bit
- ☆ Support audio formats: LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio
- ☆ Extend the signal transmission distance up to 131ft / 40 meters at the resolution of 4K30Hz, or 230ft / 70 meters at 1080P@60Hz via a single CAT6 cable
- ☆ Support 1 HDMI input, 1 HDMI loop output, and 4 CAT outputs.
- ☆ Advanced EDID management
- ☆ Support one-way POC function (only from transmitter to receiver)
- ☆ Compact design for easy and flexible installation

3. Package Contents

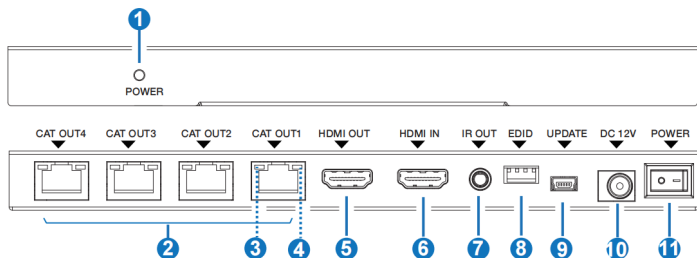
- ① 1 × HDMI 1×4 Splitter
- ② 4 × CAT Receiver
- ③ 1 × IR Blaster Cable (1.5 meters)
- ④ 4 × IR Receiver Cable (1.5 meters)
- ⑤ 2 × Mounting Ear
- ⑥ 1 × 12V/2.5A DC Locking Power Adapter
- ⑦ 8 × Machine Screw (KM3*4)
- ⑧ 1 × User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 1.4
HDCP Compliance	HDCP 1.4
Video Bandwidth	297MHz/10.2Gbps
Video Resolution	480i ~1080p50/60Hz, 4Kx2K@30Hz (4: 4: 4)
Color Depth	8-bit,10-bit,12-bit (1080p@60Hz); 8-bit (4K30Hz)
Color Space	RGB, YCbCr_4:4:4/4:2:2. YUV_4:2:0
Audio Formats	LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio
ESD Protection	Human body model—±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	Input: 1×HDMI IN [Type A, 19-pin female] Outputs: 1×HDMI OUT [Type A, 19-pin female] 4x CAT OUT [RJ45] Controls: 1× IR OUT [3.5mm Stereo Mini-jack] 1x EDID DIP switch [4-pin] 1x Update [Micro USB]
Receiver	Inputs: 1x IR IN [3.5mm Stereo Mini-jack] 1x CAT IN [RJ45, 8-pin female] Output: 1x HDMI OUT [Type A, 19-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter: 210mm (W) × 83mm (D) × 18mm (H) Receiver: 79.5mm (W) × 69mm (D) × 16.5mm (H)
Weight	Transmitter: 448g; Receiver: 130g
Power Supply	12V/2.5A DC Power (US/EU standards, CE/FCC/RoHs certificated)
Power Consumption	11W
Operation Temp.	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)

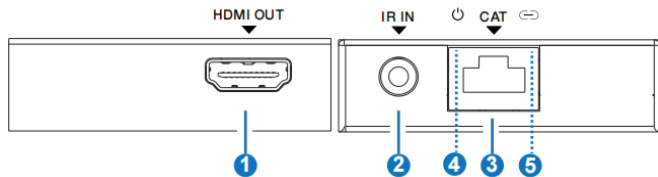
5. Operation Controls and Functions

5.1 Transmitter Panel



No.	Name	Function Description
1	POWER LED	When the Transmitter is powered on, the red power LED will be on.
2	CAT OUT (1~4)	Connect to the CAT port of the Receiver with a CAT6 cable.
3	Power LED (Green)	Transmitter supports one-way POC function. When it supplies power to the Receiver through a CAT cable, the Power LED will be on.
4	Data Signal Indicator (Yellow)	<ul style="list-style-type: none"> ▪ Illuminating: HDMI signal with HDCP. ▪ Flashing: HDMI signal without HDCP. ▪ Dark: No HDMI signal.
5	HDMI OUT	HDMI loop output port, connect to the HDMI display device such as TV or Monitor with an HDMI cable.
6	HDMI IN	HDMI input port, connect to HDMI source device such as DVD or set-top box with an HDMI cable.
7	IR OUT	Connect to IR blaster cable, the IR signal is from "IR IN" port of the Receiver.
8	EDID DIP Switch	Used to set EDID mode. Please refer to Section "6. EDID Mode" for details.
9	UPDATE	Mini USB update port. Connect to PC for firmware updating.
10	DC 12V	DC 12V Power input port.
11	POWER Switch	Press the switch to power on/off the device ("- for on, "o" for off).

5.2 Receiver Panel



No.	Name	Function Description
1	HDMI OUT	HDMI signal output port. Connect to HDMI display device such as HDTV.
2	IR IN	Connect to IR receiver cable, the IR signal will emit to the IR OUT port of the transmitter.
3	CAT	CAT input port. Connect to the CAT output port of the transmitter with a CAT6 cable.
4	Power LED (Green)	When the Receiver is powered on, the LED will be on. The device supports POC function, so the Receiver is powered by the Transmitter through a CAT cable.
5	Data Signal Indicator (Yellow)	<ul style="list-style-type: none">▪ Illuminating: HDMI signal with HDCP.▪ Flashing: HDMI signal without HDCP.▪ Dark: No HDMI signal.

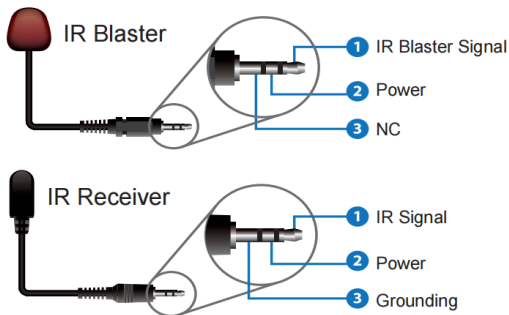
5.3 IR Pin Definition



IR Receiver



IR Blaster



Note:

When the angle between the IR receiver and the remote control is $\pm 45^\circ$, the transmission distance is 0-5 meters;

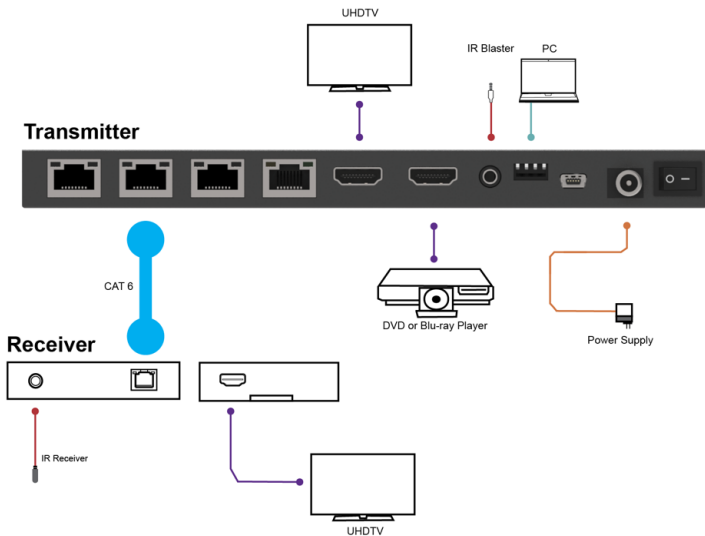
When the angle between the IR receiver and the remote control is $\pm 90^\circ$, the transmission distance is 0-8 meters.

6. EDID Mode

The defined EDID setting list of the product is shown as below:

EDID Mode	EDID Description
0000	1080P, 2CH AUDIO
0001	1080P, DOLBY/DTS5.1
0010	1080P, HD AUDIO
0011	1080i, 2CH AUDIO
0100	1080i, DOLBY/DTS5.1
0101	1080i, HD AUDIO
0110	3D,1080P, 2CH AUDIO
0111	3D,1080P, DOLBY/DTS5.1
1000	3D,1080P, HD AUDIO
1001	4K30, 2CH AUDIO
1010	4K30, DOLBY/DTS5.1
1011	4K30, HD AUDIO
1100	Copy Loop Out
1101	720p, 2CH AUDIO
1110	720p, DOLBY/DTS5.1
1111	720p, HD AUDIO

7. Application Example



HDMI™
HIGH DEFINITION MULTIMEDIA INTERFACE

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