



## BG-HDA-E18

HDMI 1×8 Splitter over  
CAT6 (70m)



Contact

1.888.499.9906 | [support@bzbgear.com](mailto:support@bzbgear.com) | [bzbgear.com](http://bzbgear.com)

User Manual

# Thank you for purchasing this product

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

## Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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## 1. Introduction

This HDMI 1x8 Splitter can distribute 1 HDMI source signal to any 8 display devices. Supports video resolutions up to 4K2K@30Hz 4:4:4. It is designed with 1 HDMI input, 1 HDMI loop output and 8 CAT outputs. The HDMI signal transmission distance can be extended up to 164 ft / 50 m at the resolution of 4K30Hz, or 230 ft / 70 m at 1080P@60Hz via a single CAT6 cable. The product supports one-way IR control signal pass-through and advanced EDID management. It also supports one-way POC function.

## 2. Features

- ☆ HDMI 1.4 and HDCP 1.4 compliant
- ☆ Video resolution up to 4K2K@30Hz(4:4:4) 8-bit
- ☆ Supported audio formats: LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio
- ☆ Extend the signal transmission distance up to 164 ft / 50 m at the resolution of 4K30Hz, or 230 ft / 70 m at 1080P@60Hz via a single CAT6 cable
- ☆ Support 1 HDMI input, 1 HDMI loop output and 8 CAT outputs.
- ☆ Advanced EDID management
- ☆ Support 12V POC function (only from transmitter to receiver)
- ☆ Compact design for easy and flexible installation

## 3. Package Contents

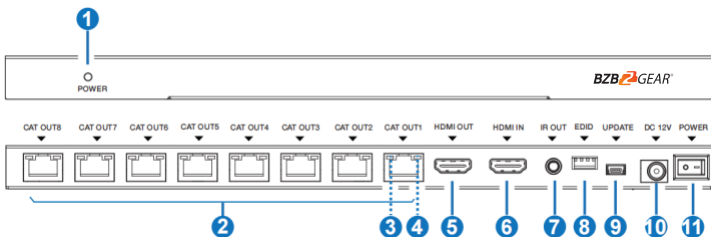
- ① 1 × HDMI 1x8 Splitter
- ② 8 × CAT Receiver
- ③ 1 × IR Blaster Cable (1.5 meters)
- ④ 8 × IR Receiver Cable (1.5 meters)
- ⑤ 2 × Mounting Ear
- ⑥ 1 × 12V/2.5A DC Locking Power Adapter
- ⑦ 8 × Machine Screw (KM3\*4)
- ⑧ 1 × User Manual

## 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
Transmission Distance	1080P@60--70M, 4K30 --50M
ESD Protection	Human body model—±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	Input: 1xHDMI IN [Type A, 19-pin female] Outputs: 1xHDMI OUT [Type A, 19-pin female] 8x CAT OUT [RJ45] Controls: 1x 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: 295mm (W) × 82mm (D) × 18mm (H) Receiver: 79.5mm (W) × 69mm (D) × 16.5mm (H)
Weight	Transmitter: 628g; Receiver: 130g
Power Supply	12V/2.5A DC Power (US/EU standards, CE/FCC/RoHs certificated)
Power Consumption	19.2W
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)

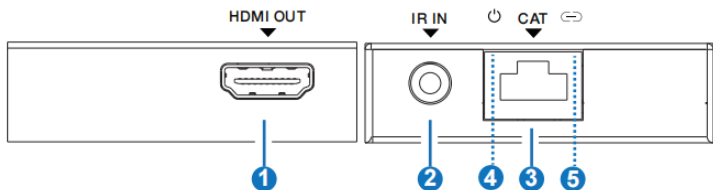
# 5. Operation Controls and Functions

## 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 (1~8)	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"> <li>▪ Illuminating: HDMI signal with HDCP.</li> <li>▪ Flashing: HDMI signal without HDCP.</li> <li>▪ Dark: No HDMI signal.</li> </ul>
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"><li>▪ Illuminating: HDMI signal with HDCP.</li><li>▪ Flashing: HDMI signal without HDCP.</li><li>▪ Dark: No HDMI signal.</li></ul>

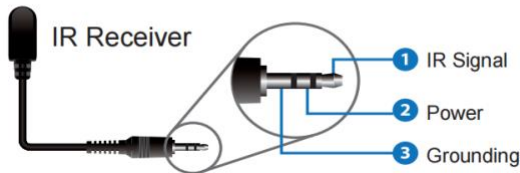
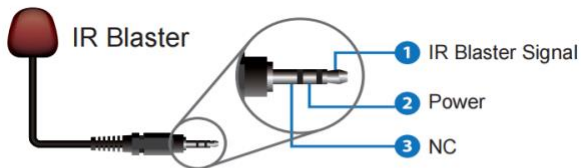
### 5.3 IR Pin Definition



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.

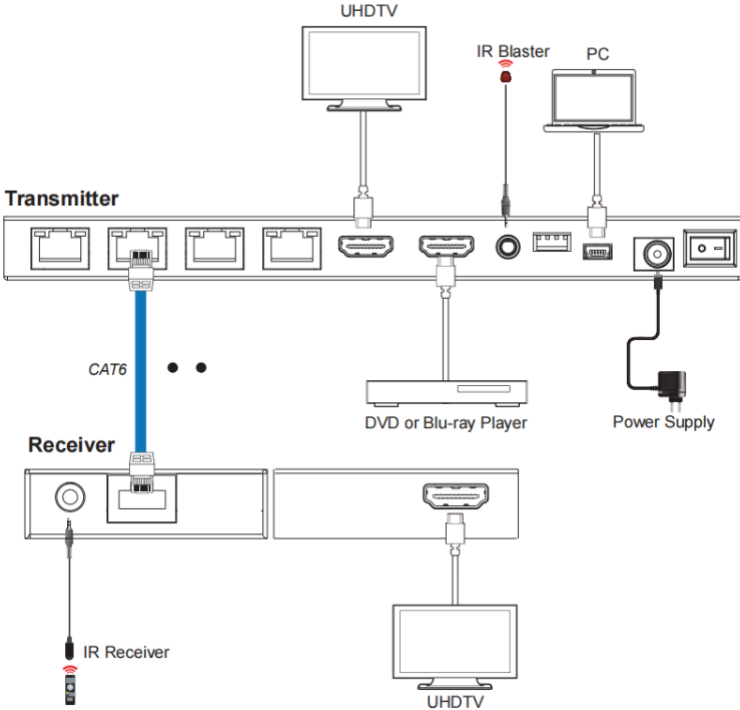
## 6. EDID Mode

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

<b>EDID Mode</b>	<b>EDID Description</b>
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



## 8. Tech Support

Before contacting tech support, we may have answered your question already! Visit our BZBGear support page ([bzbgear.com/support](http://bzbgear.com/support)) for valuable information on our products.

Here you will find our Knowledge Base ([bzbgear.com/knowledge-base](http://bzbgear.com/knowledge-base)) consisting of tutorials, quick start guides, and step-by-step troubleshooting instructions. Also visit our YouTube channel BZB TV ([youtube.com/c/BZBTVchannel](http://youtube.com/c/BZBTVchannel)) for help setting up, connecting, and other how-to videos regarding our products.

If you still need answers, please call 1.888.499.9906, email [support@bzbgear.com](mailto:support@bzbgear.com), or chat at [bzbgear.com](http://bzbgear.com).

## 9. Warranty

BZBGear Pro AV products and Cameras come with a three-year warranty. An extended two-year warranty is available for our Cameras upon registration for a total of five years.

For an extended two-year warranty on our Cameras, follow these steps:

1. Register your Camera within 90 days of purchase by visiting [bzbgear.com/warranty](http://bzbgear.com/warranty).
2. Complete the registration form. Provide all necessary proof of purchase details, including serial number and a copy of your sales receipt.

For complete warranty information, please visit [bzbgear.com/warranty](http://bzbgear.com/warranty) or scan the QR code below.



## 10. Mission Statement

BZBGear manifests from the competitive nature of the audiovisual and live streaming industry to innovate while keeping the customer in mind. AV solutions can cost a pretty penny, and new technology only adds to it. We believe everyone deserves to see, hear, and feel the advancements made in today's AV world without having to break the bank. BZBGear is your answer for applications requiring the latest pro AV and live streaming solutions.

You'll notice comparably lower prices with BZBGear while the performance and quality are on par with the top brands in the industry. Our team offers system design consultation and expert tech support seven days a week for all BZBGear products. Our unparalleled support is our way of showing we care for every one of our customers. Whether you're an integrator, home theater enthusiast, or a do-it-yourselfer, BZBGear offers solutions allowing you to focus on your project and not your budget.

