

# BG-HDA-E18

1X8 1080P/4K30 HDMI Splitter/Distribution Amplifier up to 230ft

## User Manual







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## Statement

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Please read these instructions carefully before connecting, operating, or configuring this product. Please save this manual for future reference.

## Safety Precaution

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- To prevent damaging this product, avoid heavy pressure, strong vibration, or immersion during transportation, storage, and installation.
- The housing of this product is made of organic materials. Do not expose to any liquid, gas, or solids which may corrode the shell.
- Do not expose the product to rain or moisture.
- Unplug this device during lightning storms
- Clean only with a soft dry microfiber cloth.
- To prevent the risk of electric shock, do not open the case. Installation and maintenance should only be carried out by qualified technicians.
- Do not use the product beyond the specified temperature, humidity, or power supply specifications.
- This product does not contain parts that can be maintained or repaired by users. Damage caused by dismantling the product without authorization from BZBGear is not covered under the warranty policy.
- Installation and use of this product must strictly comply with local electrical safety standards.
- Only use accessories specified by the manufacture
- Product specifications may be subject to technical upgrades without further notice



## Introduction

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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.

## Features

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- HDMI 1.4 and HDCP 1.4 compliant
- Video resolutions 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 164ft (50m) at a resolution of 4K30Hz or 230ft (70m) at 1080P@60Hz via a single CAT6 cable
- 1 HDMI input, 1 HDMI loop output, and 8 CAT outputs.
- Advanced EDID management
- 12V PoC functionality (from transmitter to receiver only)
- Compact design for easy and flexible installation

## Packing List

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- 1 x HDMI 1x8 Splitter
- 8 x CAT Receiver
- 1 x IR Blaster Cable (1.5 meters)
- 8 x IR Receiver Cable (1.5 meters)
- 2 x Mounting Ear
- 1 x 12V/2.5A DC Locking Power Adapter
- 8 x Machine Screw (KM3\*4)
- 1x User Manual
- 1x Quick Start Guide



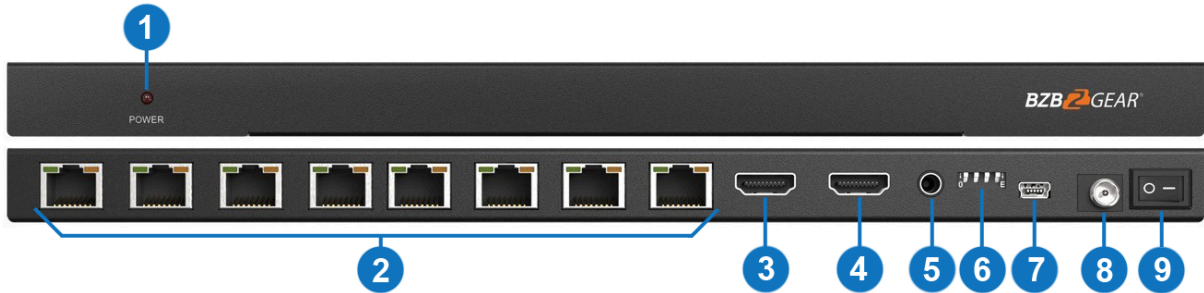
## Technical Specifications

| Technical             |  |
|-----------------------|--|
| HDMI Compliance       | HDMI 1.4   |
| HDCP Compliance       | HDCP 1.4   |
| Video Bandwidth       | 297MHz/10.2Gbps  |
| Video Resolution      | 480i ~1080p@50/60Hz, 4Kx2K@30Hz (4:4:4)  |
| Color Depth           | 8-bit, 10-bit, 12-bit (1080p@60Hz); 8-bit (4K@30Hz)  |
| 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, 4K@30 - 50M  |
| ESD Protection        | Human body model: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)  |
| Connection            |  |
| Transmitter           | Input:<br>1x HDMI IN [Type A, 19-pin female]<br>Outputs:<br>1x HDMI OUT [Type A, 19-pin female]<br>8x CAT OUT [RJ45]<br>Controls:<br>1x IR OUT [3.5mm Stereo Mini-jack]<br>1x EDID DIP switch [4-pin]<br>1x Update [Micro USB] |
| Receiver              | Inputs:<br>1x IR IN [3.5mm Stereo Mini-jack]<br>1x CAT IN [RJ45, 8-pin female]<br>Output:<br>1x HDMI OUT [Type A, 19-pin female]   |
| Mechanical            |  |
| Housing               | Metal Enclosure  |
| Color                 | Black  |
| Dimensions            | Transmitter: 11.6" (W) x 3.2" (D) x 0.7" (H)<br>[295mm (W) x 82mm (D) x 18mm (H)]<br>Receiver: 3.1" (W) x 2.7" (D) x 0.7" (H)<br>[79.5mm (W) x 69mm (D) x 16.5mm (H)]  |
| Weight                | Transmitter: 1.4lbs [628g];<br>Receiver: 0.3lbs [130g]   |
| Power Supply          | 12V/2.5A DC Power<br>(US/EU standards, CE/FCC/RoHs certificated)   |
| Power Consumption     | 19.2W  |
| Operation Temperature | 32°F ~ 104°F / 0°C ~ 40°C  |
| Storage Temperature   | -4°F ~ 140°F / -20°C ~ 60°C  |
| Relative Humidity     | 20~90% RH (non-condensing)   |



# Operation Controls and Functions

## Transmitter Panel



| No. | Name                   | Function Description  |
|-----|------------------------|---|
| 1   | <b>POWER LED</b>       | When the transmitter is powered on, the red power LED will be illuminated.                                  |
| 2   | <b>CAT OUT (1~8)</b>   | Connect to the CAT port of the receiver with a CAT6 cable.  |
| 3   | <b>HDMI OUT</b>        | HDMI loop output port, connect to the HDMI display device such as TV or Monitor with an HDMI cable.         |
| 4   | <b>HDMI IN</b>         | HDMI input port, connect to an HDMI source device such as Blu-ray player or set-top box with an HDMI cable. |
| 5   | <b>IR OUT</b>          | Connect to an IR blaster cable, the IR signal is from the "IR IN" port of the Receiver.                     |
| 6   | <b>EDID DIP Switch</b> | Used to set EDID mode. Please refer to Section "EDID Mode" for details.                                     |
| 7   | <b>UPDATE</b>          | Mini USB update port. Connect to PC for firmware updating.  |
| 8   | <b>DC 12V</b>          | DC 12V power input port.  |
| 9   | <b>POWER Switch</b>    | Press the switch to power on/off the device ("-" for on, "o" for off).                                      |

## Receiver Panel

| No. | Name            | Function Description   |
|-----|-----------------|--|
| 1   | <b>IR IN</b>    | Connect to the IR receiver cable, the IR signal will emit to the IR OUT port of the transmitter. |
| 2   | <b>CAT</b>      | CAT input port. Connect to the CAT output port of the transmitter with a CAT6 cable.             |
| 3   | <b>HDMI OUT</b> | HDMI signal output port. Connect to HDMI display devices such as HDTV.                           |



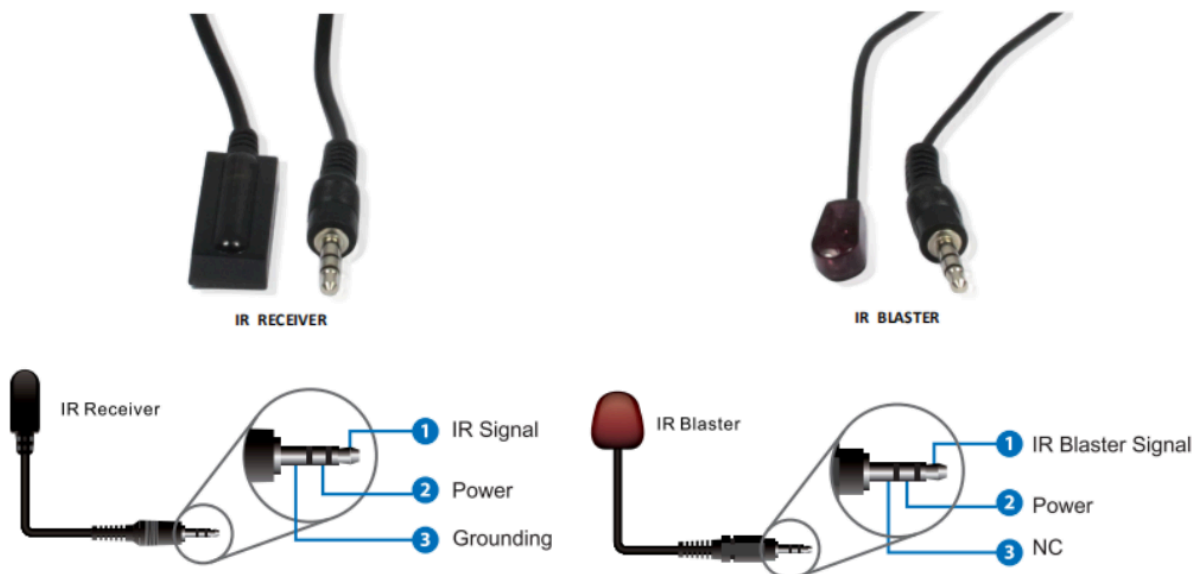
- Solid: HDMI signal with HDCP.
- Flashing: HDMI signal without HDCP.
- Dark: No HDMI signal.

- Solid: are in good connection status.
- Flashing: are in poor connection status.
- Dark: are not connected



## IR Cable Pin Assignment

IR Receiver and Blaster pin's definition as below:



**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.

## EDID Modes

EDID settings are as follows:

| 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         |





## Tech Support

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Have technical questions? We may have answered them already!

Please visit BZBGear's support page ([bzbgear.com/support](https://bzbgear.com/support)) for helpful information and tips regarding our products. Here you will find our Knowledge Base ([bzbgear.com/knowledge-base](https://bzbgear.com/knowledge-base)) with detailed tutorials, quick start guides, and step-by-step troubleshooting instructions. Or explore our YouTube channel, BZB TV ([youtube.com/c/BZBTVchannel](https://youtube.com/c/BZBTVchannel)), for help setting up, configuring, and other helpful how-to videos about our gear.

Need more in-depth support? Connect with one of our technical specialists directly:

| <u>Phone</u>   | <u>Email</u>        | <u>Live Chat</u> |
|----------------|---------------------|------------------|
| 1.888.499.9906 | support@bzbgear.com | bzbgear.com      |

## Limited Product Warranty Terms

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Pro Line: 5-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Essential Line: 3-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Cables: Lifetime Limited Product Warranty.

For complete warranty information, please visit [bzbgear.com/warranty](https://bzbgear.com/warranty).

For questions, please call 1.888.499.9906 or email support@bzbgear.com.

## Mission Statement

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BZBGear is a breakthrough manufacturer of high-quality, innovative audiovisual equipment ranging from AVoIP, professional broadcasting, conferencing, home theater, to live streaming solutions. We pride ourselves on unparalleled customer support and services. Our team offers system design consultation, and highly reviewed technical support for all the products in our catalog. BZBGear delivers quality products designed with users in mind.

## Copyright

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