

# BG-HDA-E14

**1X4 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 Precautions

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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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The BG-HDA-E14 is an HDMI 1x4 splitter that can distribute 1 HDMI source signal to 4 display devices. This unit supports video resolutions up to 4K2K@30Hz 4:4:4 and 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 164 ft (50m) at a resolution of 4K30Hz, or 230 ft (70m) at 1080P@60Hz via a single CAT6 cable. The unit also supports one-way IR control signal pass-through and advanced EDID management.

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

## Packing List

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- |                                      |   |
|--------------------------------------|---|
| • 1 x HDMI 1x4 Splitter              | • 1 x 12V/2.5A DC Locking Power Adapter |
| • 4 x CAT Receiver                   | • 8 x Machine Screw (KM3*4)             |
| • 1 x IR Blaster Cable (1.5 meters)  | • 1x User Manual                        |
| • 4 x IR Receiver Cable (1.5 meters) | • 1x Quick Start Guide                  |
| • 2 x Mounting Ear                   |   |



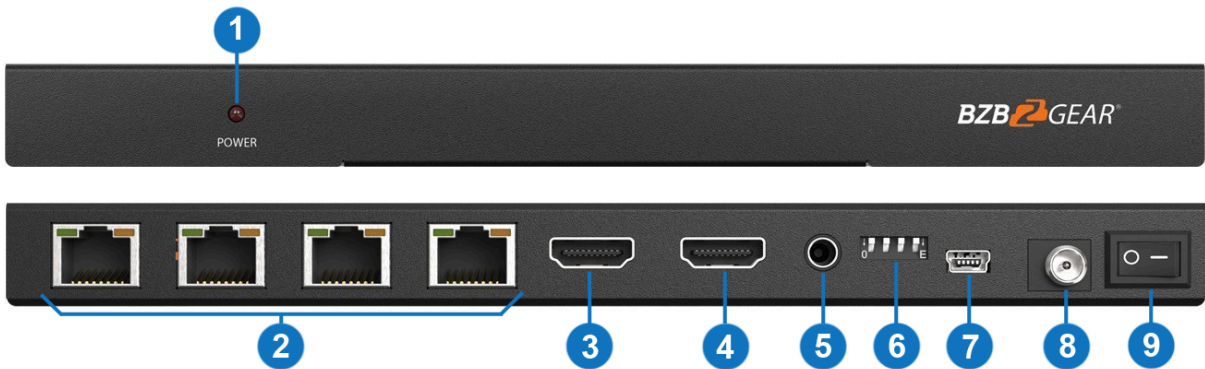
## Technical Specifications

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
ESD Protection	Human body model: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	<b>Input:</b> 1x HDMI IN [Type A, 19-pin female] <b>Outputs:</b> 1x HDMI OUT [Type A, 19-pin female] 4x CAT OUT [RJ45] <b>Controls:</b> 1x IR OUT [3.5mm Stereo Mini-jack] 1x EDID DIP switch [4-pin] 1x Update [Micro USB]
Receiver	<b>Inputs:</b> 1x IR IN [3.5mm Stereo Mini-jack] 1x CAT IN [RJ45, 8-pin female] <b>Output:</b> 1x HDMI OUT [Type A, 19-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter: 8.3" (W) x 3.3" (D) x 0.7" (H) [210mm (W) x 83mm (D) x 18mm (H)] Receiver: 3.1" (W) x 2.7" (D) x 0.7" (H) [79.5mm (W) x 69mm (D) x 16.5mm (H)]
Weight	Transmitter: 1lbs [448g]; Receiver: 0.3lbs [130g]
Power Supply	12V/2.5A DC Power (US/EU standards, CE/FCC/RoHs certificated)
Power Consumption	11W
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	POWER LED	When the transmitter is powered on, the red power LED will be illuminated.
2	CAT OUT (1~4)	Connect to the CAT port of the receiver with a CAT6 cable.
3	HDMI OUT	HDMI loop output port, connect to an HDMI display device such as a TV or Monitor with an HDMI cable.
4	HDMI IN	HDMI input port, connect to HDMI source device such as Blu-ray player or set-top box with an HDMI cable.
5	IR OUT	Connect to the IR blaster cable. The IR signal is from the "IR IN" port of the Receiver.
6	EDID DIP Switch	Set the EDID mode. Please refer to the "EDID Mode" section of this manual for details.
7	UPDATE	Mini USB update port. Connect to PC for firmware updating.
8	DC 12V	DC 12V power input port.
9	POWER Switch	Press the switch to power on/off the device ("-" for on, "o" for off).

## Receiver Panel

No.	Name	Function Description
1	IR IN	Connect to the IR receiver cable, the IR signal will emit to the IR OUT port of the transmitter.
2	CAT	CAT input port. Connect to the CAT output port of the transmitter with a CAT6 cable.
3	HDMI OUT	HDMI signal output port. Connect to an HDMI display device such as a TV.



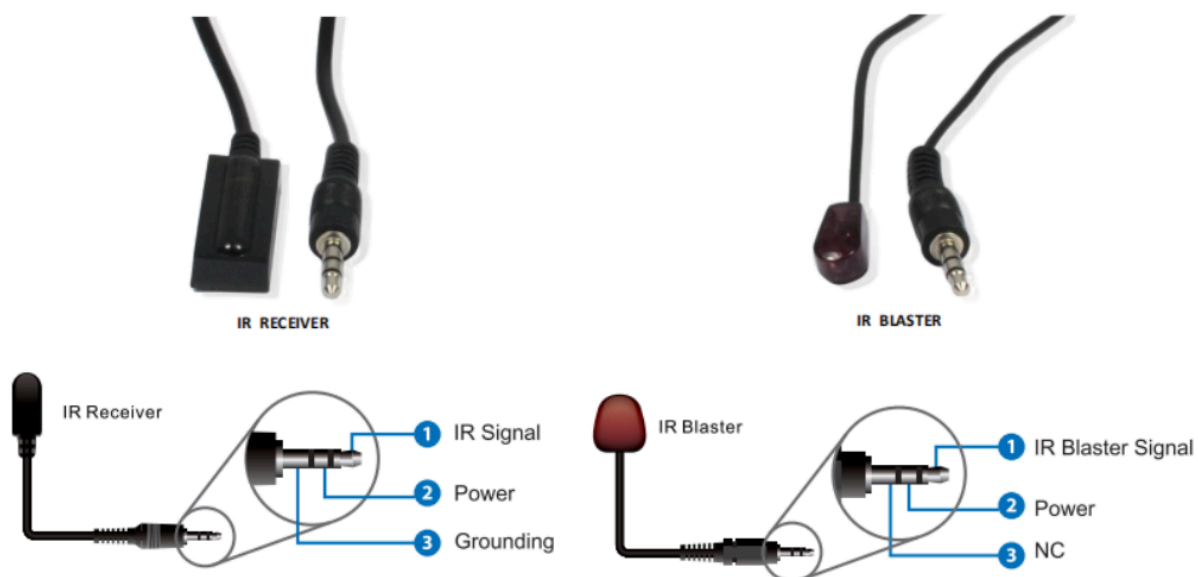
- Solid: HDMI signal with HDCP.
- Flashing: HDMI signal without HDCP.
- Dark: No HDMI signal.

- Solid: In good connection status.
- Flashing: In poor connection status.
- Dark: 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 Mode

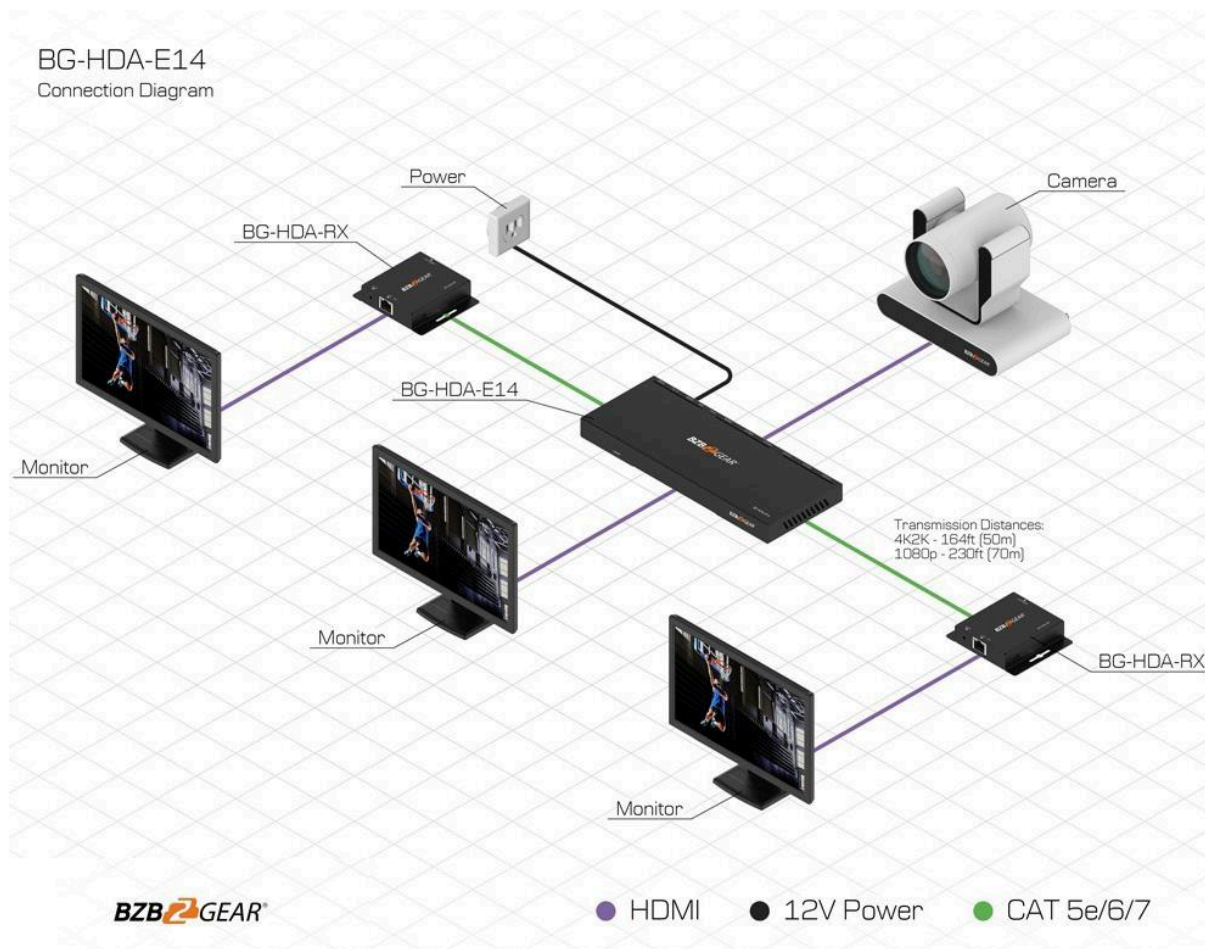
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EDID settings shown below:

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



## Application Example





## 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	<a href="mailto:support@bzbgear.com">support@bzbgear.com</a>	<a href="https://bzbgear.com">bzbgear.com</a>

## 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](mailto: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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