

# BG-DA-1X8C50M

# HDMI Splitter 1x8 Over CAT5E/CAT6 50m



# 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 service life of your equipment.

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## 1. Introduction

The Splitter is a product for splitting and extending your HDMI signal over long distances to a compatible display. It is designed to convert the HDMI signal and transmit by Internet cable. The splitter supports resolutions up to 1080p@60Hz, and supports smart EDID management.

## 2. Features

- ♦ Compliant with HDMI1.3, HDCP 1.2 and DVI 1.0.
- ♦ Full HD support: 1080p@60Hz@24 bit/pixels.
- ♦ Supports LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio.
- ♦ Operates for TMDS clock frequencies up to 148.5MHz.
- ♦ Support Power over cable function.
- ♦ Use single UTP LAN cable (CAT5E/6) to substitute HDMI cable to achieve long distances transmission.
- ♦ UTP cable termination follows the standard of IEEE-568B.
- ♦ Supports EDID control via EDID selector.

## 3. Package Contents

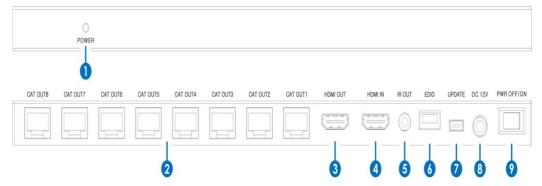
$\diamond$	HDMI Splitter	1PCS
<b></b>	Receiver	8PCS
<b></b>	12V2.5A DC Power Supply adapter	1PCS
<b></b>	Wideband IR Tx cable	1PCS
<b></b>	Wideband IR Rx cable	8PCS
<b></b>	Operation Manual	1PCS
<b></b>	Mounting ears	2pcs

# 4. Specifications

Technical				
Maximum Pixel Clock	165 MHz			
Supports video resolutions	1080p@60Hz			
up to				
ESD Protection	Human body model — ±8kV (air-gap discharge) &			
	±4kV (contact discharge)			
Power Supply	DC 12V 2.5A			
HDMI Splitter				
Input Ports	1x HDMI, 1xMini USB			
Output Ports	1xHDMI, 8xRJ45, 1xIR out			
Receiver				
Input Ports	1xRJ45, 1x IR in			
Output Ports	1x HDMI			
Mechanical				
Dimensions (mm)	295(W) X 83 (D) X 17 (H)			
Weight	HDMI Splitter: 720g			
	Receiver: 8 x 131g			
Operating Temperature	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)			
Power Consumption (Max)	15W			

# 5. Operation Controls and Functions

## 5.1 Splitter



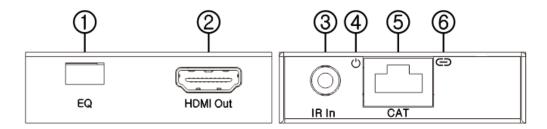
- POWER LED: This red LED will illuminate when the device is connected with power supply.
- CAT OUT1-OUT8: Eight RJ45 ports provide signal output.

- 3 HDMI OUT: Local HDMI loop output port.
- HDMI IN: HDMI Input port. Connect source with HDMI cable.
- 6 IR OUT: Connect the IR Blaster cable included in the package for IR signal transmission. Pace the IR blaster in direct line-of-sight of the equipment to be controlled.
- 6 EDID: Select output signal format via EDID Selector.

#### ※See the description 1

- UPDATE: System software update.
- DC12V: Plug the 12V2.5A DC power supply into the unit.
- POWER OFF/ON: Power ON\OFF Switch.

#### 5.2 Receiver



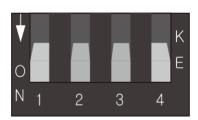
- (1) EQ switcher: HDMI Receiver equalizer switcher.
- See the description 2
- ② **HDMI out**: This slot is to connect the HDMI input port of your display such as an HDTV.
- ③ IR In: Connect to the IR Receiver for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR receiver.
- Power LED: This LED will illuminate when the device is connected with power supply.
- **CAT**: Connect the CAT input of the receiver with the CAT output of the transmitter with CAT5E/6 cable.
- **6** Lock LED: This LED will illuminate when the HDMI signal from the transmitter is stable.

## ※See the description 1

#### **EDID Control**

Under normal circumstances, a source device (digital and analog) will require information about a connected device/display to assess what resolutions and features are available. The source can then cater its output to send only resolutions and features that are compatible with the attached device/display. This information is called EDID (Extended Display Information Data) and a source device can only accept and read one EDID from a connected device/display. Likewise, the source could only output one resolution to connected device/display.

The EDID switch allows for EDID learning or to pre-set an EDID to encourage a "handshake" between the display and source.



#### Manual EDID Learning Mode

When you switch to any number of "0-8", the Transmitter will set a fixed EDID to the source. The detail EDID description, please refer to the EDID table.

#### **Auto EDID Learning Mode**

When you switch to "9", the Transmitter will copy the HDMI LOOP OUT port display EDID to source.

Attention: Please confirm the extender is work normally, when you want to modify the new EDID to source, toggle the EDID switcher to the corresponding number first, then plug the Transmitter power again. The extender will send the new EDID to source.

#### **EDID TABLE:**

EDID Description
1080p, 2CH AUDIO
1080p, DOLBY/DTS 5.1
1080p, HD AUDIO
1080i, 2CH AUDIO
1080i, DOLBY/DTS 5.1
1080i, HD AUDIO
3D,1080p, 2CH AUDIO
3D, 1080p,DOLBY/DTS 5.1
3D,1080p, HD AUDIO
Copy EDID from the Transmitter HDMI loop out
1080p, 2CH AUDIO
1080p, 2CH AUDIO
1080i, 2CH AUDIO

## ※See the description 2

### RX Equalizer distance adjust

If you find flickering or blinking image on the display, adjust the EQ switch to improve the cable skew. MAX stands for the strongest HDMI signal level for the longest possible transmission length while MIN stands for the weakest HDMI signal level for short transmission length. Adjust the signal level from

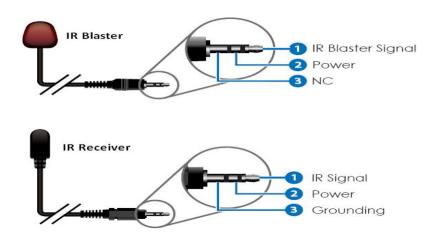
MIN to MAX until ideal video quality displayed.

Recommended EQ setting			
Position	Cable Length		
	under 15m (49.5ft)		
2 3	15-30m (49.5 ft - 99ft)		
4 5	30-40m (99ft - 132ft)		
6 7	40-50m( 132ft – 164ft)		

#### Wideband IR (30KHz---60KHz) introduction



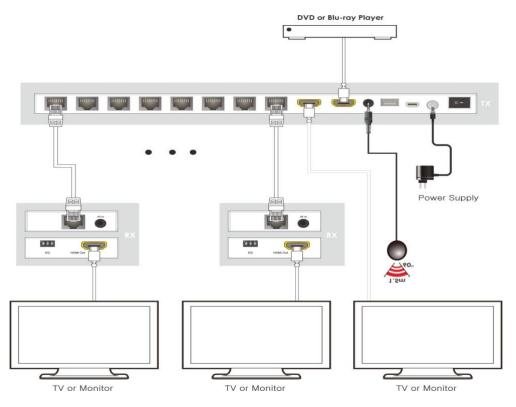
## IR Cable Pin Assignment



Control local device (Blu-ray player or DVD player, etc.) from remote: The IR Receiver is connected to the receiver IR in port. The CAT output connector on the HDMI Splitter is connected via CAT6 cable to an HDMI receiver. The IR Transmitter is connected to the HDMI Splitter IR OUT port.

IR remote can be used to control local source device from remote.

# 6. Connection Diagram



- 1.Connect a source such as a Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc. to the HDMI input on the Transmitting unit.
- 2. Connect a display such as an' HDTV or HD Projector to the HDMI output on the Receiving unit.
- 3. Connect a single Cat5e/6 up to 164ft/50m to the output of the Transmitting unit, and the other end to the input of the Receiving unit.
- 4. Connect the DC 12V Locking power supply to the power receptacle on the splitter.
- 5. Connect the power supply to an available electrical outlet.

# 7. Warranty

BZBGEAR wants to assure you peace of mind. We're so confident in the quality of our products that along with the manufacturer's one-year limited warranty, we are offering free second-year warranty coverage upon registration\*.

Taking advantage of this program is simple, just follow the steps below:

- 1. Register your product within 90 days of purchase by visiting 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 questions, please call 1.888.660.2962 or email support@bzbgear.com.

For complete warranty information, please visit BZBGEAR.com/warranty or scan the QR code below.



\*Terms and conditions apply. Registration is required.

## 8. Mission Statement

BZBGEAR manifests from the competitive nature of the audiovisual 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 the solution for small to medium-sized applications requiring the latest professional products in AV.

We live in a DIY era where resources are abundant on the internet. With that in mind, our team offers system design consultation and expert tech support seven days a week for the products in our BZBGEAR catalog. You'll notice comparably lower prices with BZBGEAR solutions, but the quality of the products is on par with the top brands in the industry. The unparalleled support from our team 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 the solutions to allow you to focus on your project and not your budget.