BZB2GEAR®

HDMI EXTENDER

Point to Point Extender

BG-EXH-70C

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE
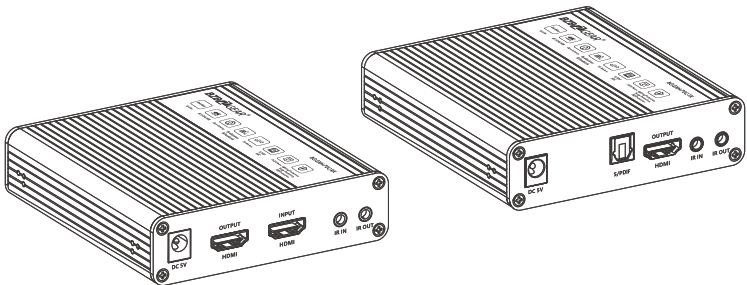
• Important Safety Notice

1. Do not mix up HDMI to RJ45 transmitter and RJ45 to HDMI receiver before installation.
2. Do not hot plug when it is working.
3. Use DC5V/2A power supply only. Make sure specification matched if using 3rd party adapters.
4. Static electricity will cause damage of the device, please do ESD protection when using the device.

• Introduction

This HDMI Extender includes a transmitter unit and a receiver unit, allows HDMI signal to be transmitted up to 70 meters at 4K resolution using a CAT6/6A/7 network cable. It is perfect for outdoor advertising, video clips, monitor system, home entertainment, and conference, etc.

• Features

1. Zero latency.
2. 4K@60Hz HDMI signal can be transmitted 70 meters through a CAT6/6A/7 network cable.
3. The receiver can extract the digital audio from the transmitter through the S/PDIF port.
4. Supports audio formats (Dolby TrueHD 7.1CH/Dolby Digital 5.1CH).
5. Supports HDR(YUV4:4:4), EDID passback.
6. Transmitter support one HDMI loop-out.
7. Support bi-directional IR passback function (20~60KHz).
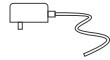8. Lightning Protection, Surge Protection, ESD Protection.

• Package Contents
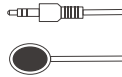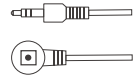
Transmitter unit x1pc
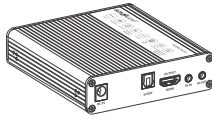
Receiver unit x1pc

DC5V/2A x2pcs

User manual x1pc

IR blaster extension cable x1pc

IR receiver extension cable x1pc

Mounting brackets x8pcs

Screw x18pcs

• Installation Requirements

1. HDMI source device (compute graphics card, DVD, PS3,)HD monitoring equipment etc.
2. HDMI display device like SDTV, HDTV, projector with HDMI port.
3. UTP/STP CAT6/CAT6A/CAT7 cable. Follow standard IEEE-568B, It is recommended to select a network cable with less loss and crosstalk.
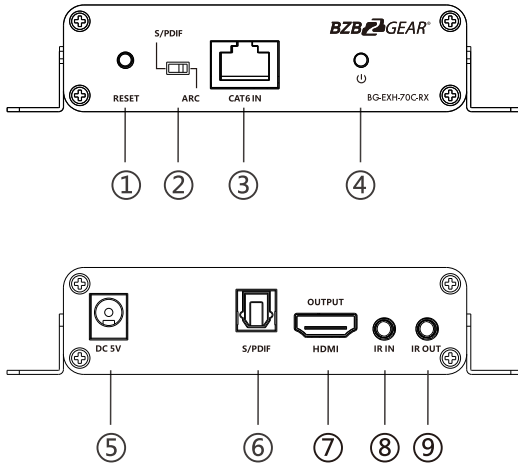
• Interfaces

1. Transmitter (TX)
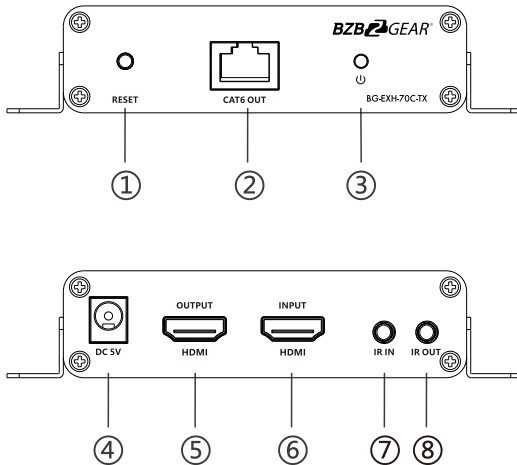
①	Reset button	Press to restart the device
②	RJ45 signal output	Connect with network cable
③	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
④	DC5V input	Connect with DC5V/2A power adapter
⑤	HDMI output	Connect with HDMI display device
⑥	HDMI input	Connect with the source device
⑦	IR in	Connect with IR receiver extension cable, please make sure the remote control used is within the effective range
⑧	IR out	Connect with IR blaster extension cable, please get closer to the source device while using

2. Receiver (RX)

| ①	Reset button	Press to restart the device
②	Audio switch	Choose to decode audio from HDMI or ARC output from fiber optic interface
③	RJ45 signal input	Connect with network cable
④	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
⑤	DC5V input	Connect with DC5V/2A power adapter
⑥	S/PDIF out	Output digital audio signal.
⑦	HDMI output	Connect with HDMI display device
⑧	IR in	Connect with IR receiver extension cable, please make sure the remote control used is within the effective range
⑨	IR out	Connect with IR blaster extension cable, please get closer to the source device while using

• Installation Procedures

1. Connection

one to one:
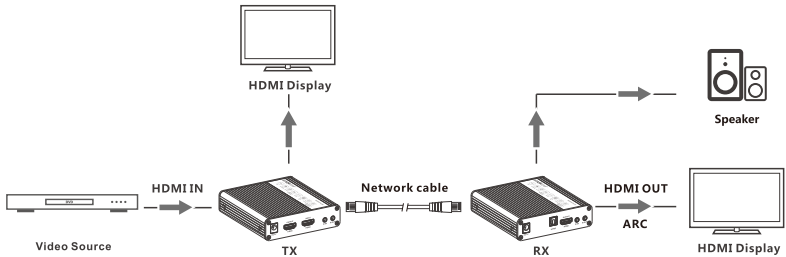
Follow the standard of IEEE-568B, It is recommended to select a network cable with less loss and crosstalk.

1-Orange/white	2-Orange	3-Green/white
4-Blue	5-Blue/white	6-Green
7-Brown/white	8-Brown	

2. Connection instruction

1) Connect the source device to the HDMI in port of the transmitter with an HDMI cable, and connect the HDMI out port of the receiver to the display device with another HDMI cable.

2) Connect the CAT out port of the transmitter and the CAT in port of the receiver via a network cable (CAT6/CAT6A/CAT7).

3) If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.

4) Plug the power supply into the device to get started.

[NOTE]: It is recommended to use a length range within 2~70m network cable. If the cable is too short, there may be no display output because the signal is too strong. If the cable is too long, the output may be with poor quality.

3. IR User Guide

1) IR blaster extension cable should plug in the IR OUT port of the transmitter and receiver, IR receiver extension cable should plug in the IR IN port of the transmitter and receiver.

2) The emitter of the IR blaster extension cable should be as close as possible to the IR receiving window of the source device.

3) Face the receiving head of the IR receiver extension cable to the user for convenient remote control.

• FAQ

Q: There is no output on screen when all connections are correct?

A: 1) Please make sure the HDMI cables supports 4K×2K if the output signal from the source device is 4K×2K resolution.

2) Please check and make sure the network cable insert to the RJ45 port well.

3) Restart the transmitter or receiver by pressing the reset button.

Q: Black screen happened on the display/monitor?

A: 1) Check if the length of the cable is within the specified range.

2) Reset the transmitter to re-built the connection.

Q: The display shows unusual color or no sound?

A: 1) Reset the transmitter or receiver to re-built the connection.

2) Check if the HDMI cables are connected well.

3) Reconnect the network cable.

• Specification

Items		Specification
Power Supply	Voltage/Current	DC5V/2A
	Power consumption	TX < 4W RX < 4W
HDMI Performance And Interface	HDMI compliance	HDMI 2.0
	HDCP compliance	HDCP 2.2
	HDMI resolution	480i@60Hz、480p@60Hz、576i@50Hz、576p@50Hz、720p@50/60Hz、1080i@50/60Hz、1080p@50/60Hz、3840x2160@24/25/30/50/60Hz 4096x2160@24/25Hz、1280x960、1280x800、1280x768、1680x1050、1360x768、1366x768、1600x900、1024x768、800x600
HDMI Performance And Interface	Supports audio formats	LPCM/DTS-HD/DTS-Audio/Dolby TrueHD 7.1CH/ Dolby Digital 5.1CH
	Input and output TMDS signal	0.7~1.2Vp-p(TMDS)
	Input and output DDC signal	5Vp-p(TTL)
	Input cable length	≤8m(AWG24)
	Output cable length	≤8m(AWG24)
Transmission Distance	CAT6/6A/7	≤70m
Protection Level	Electrostatic protection of the whole machine	1a Contact discharge level 3 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2
Operating Environment	Working temperature	-20~60℃
	Storage temperature	-30~70℃
	Humidity (no condensation)	0~90%RH
Body Properties	Dimension	106.0(L) x 99.0(W) x 26.2(H)mm
	Material	Aluminium alloy material + crystal panel
	Treatment process	Grit blast
	Color	Black
	Weight	TX: 210g RX:210g

• 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 1.888.499.9906 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.

• 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.