



BG-EXT-H70P

**4K HDMI Extender over CAT6 with Loop Out/IR/EDID – Zero-Delay
Transmission up to 70m (1080p) / 40m (4K30)**

User Manual







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Statement

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

Safety Precaution

- 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.
- 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.



Introduction

The BG-EXT-H70P HDMI Extender transmits high-definition video, audio, and IR control signals over a single CAT6 cable, providing zero-delay, uncompressed long-distance transmission between the transmitter and receiver. It supports transmission distances of up to 230 ft (70 m) for 1080p resolution and 131 ft (40 m) for 4K@30Hz resolution.

The extender features an HDMI loop output for cascading to additional extenders, supporting resolutions up to 4K@30Hz. It also includes an EDID copy function, allowing users to select between local and remote EDID. Supported audio formats include PCM 7.1, Dolby True HD, and DTS HD.

This product is ideal for multimedia conference rooms, educational environments, and large-screen display applications.

Features

- Compliant with HDCP 1.4 and DVI 1.0 standards
- Supports video resolutions up to 4K@30Hz (YUV 4:4:4), as specified in HDMI 1.4
- Transmission distance over a single CAT6/5e cable:
 - Up to 230ft (70m) for 1080p and 131ft (40m) for 4K30 using CAT6
 - Up to 197ft (60m) for 1080p and 115ft (35m) for 4K30 using CAT5e
- EDID copy support from the receiver's display or the HDMI loop-out display
- Cascading supported via an additional HDMI loop-out port
- One-way PoC (Power over Cable) functionality from transmitter to receiver
- One-way IR signal transmission for remote control pass-through
- Compact, space-saving design for flexible and easy installation

Packing List

- 1 × HDMI Transmitter
- 1 × HDMI Receiver
- 1 × IR Blaster Cable (1.5 meters)
- 1 × IR Receiver Cable (1.5 meters)
- 1 × 12V/1A DC Power Adapter
- 1 × User Manual



Specifications

Technical	
HDMI Compliance	HDMI 1.4
HDCP Compliance	HDCP 1.4
Video Bandwidth	10.2Gbps
Video Resolution	Up to 4K@30Hz
Audio Support	Up to 7.1CH HD audio
Input TMDS Signal	3.3 volts
Input DDC Signal	5.0 volts/P-P
ESD Protection	IEC 61000-4-2:±8kV (Air-gap discharge),±4kV (Contact discharge)
Connection	
Transmitter	Input: 1 x IN [HDMI Type A, 19-pin female] Output: 1 x OUT [HDMI Type A, 19-pin female] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x CAT OUT [RJ45, 8-pin female]
Receiver	Input: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x CAT IN [RJ45, 8-pin female] Output: 1 x OUT [HDMI Type A, 19-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	3.1in x 2.7in x 0.65in / 79.5mm [W] x 69mm [D] x 16.5mm [H]
Weight	Transmitter: 0.29lb [132g], Receiver: 0.29lb [130g]
Power Supply	12V/1A DC

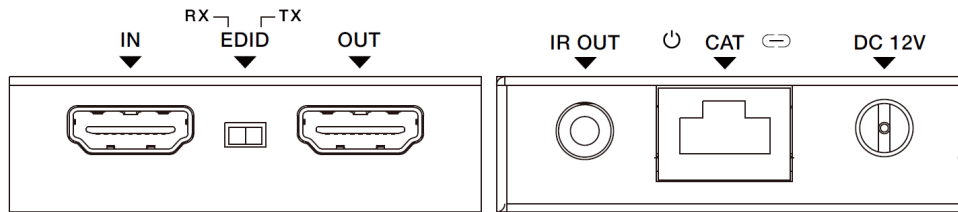


Power Consumption	Transmitter: 1.86W, Receiver: 0.87W
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Operating Humidity	20% - 80% RH (no condensation)
Storage Humidity	10% - 90% RH (no condensation)



Operation Controls and Functions

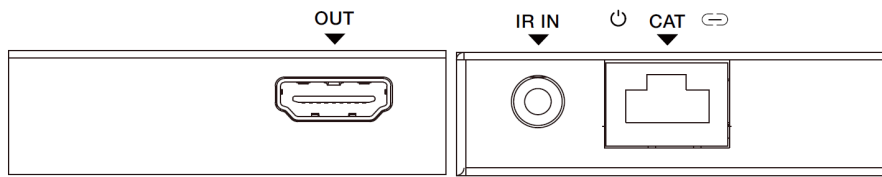
Transmitter Panel



No.	Name	Function Description
1	IN Port	HDMI input port. Connect to an HDMI source device such as a DVD player or set-top box.
2	EDID DIP Switch	Used to select the EDID source: <ul style="list-style-type: none"> • Switch right – the extender copies the HDMI loop-out display’s EDID to the source device. • Switch left – the extender copies the receiver display’s EDID to the source device.
3	OUT Port	HDMI loop-out port. Connect to an HDMI display device such as an HDTV.
4	IR OUT Port	Connect to the IR blaster cable. Transmits IR signals received from the IR IN port on the receiver.
5	Power LED	Illuminates when the transmitter is powered on.
6	CAT Port	CAT output port. Connect to the receiver’s CAT input port using a CAT5E/6 cable.



Receiver Panel

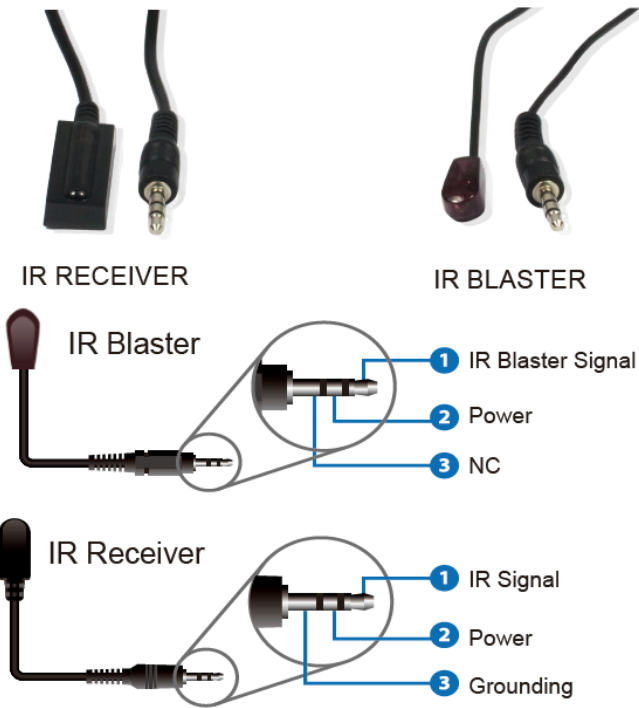


No.	Name	Function Description
1	OUT port	HDMI signal output port. Connect to an HDMI display device such as an HDTV.
2	IR IN port	Connect to an IR receiver cable. The IR signal will be transmitted to the IR OUT port on the transmitter.
3	Power LED	Illuminates when the receiver is powered on.
4	CAT port	CAT input port. Connect to the CAT output port of the transmitter using a CAT5E/6 cable.
5	Digital Signal Indicator	Indicates HDMI signal and HDCP status: <ul style="list-style-type: none"> • On: HDMI signal with HDCP • Flashing: HDMI signal without HDCP • Off: No HDMI signal



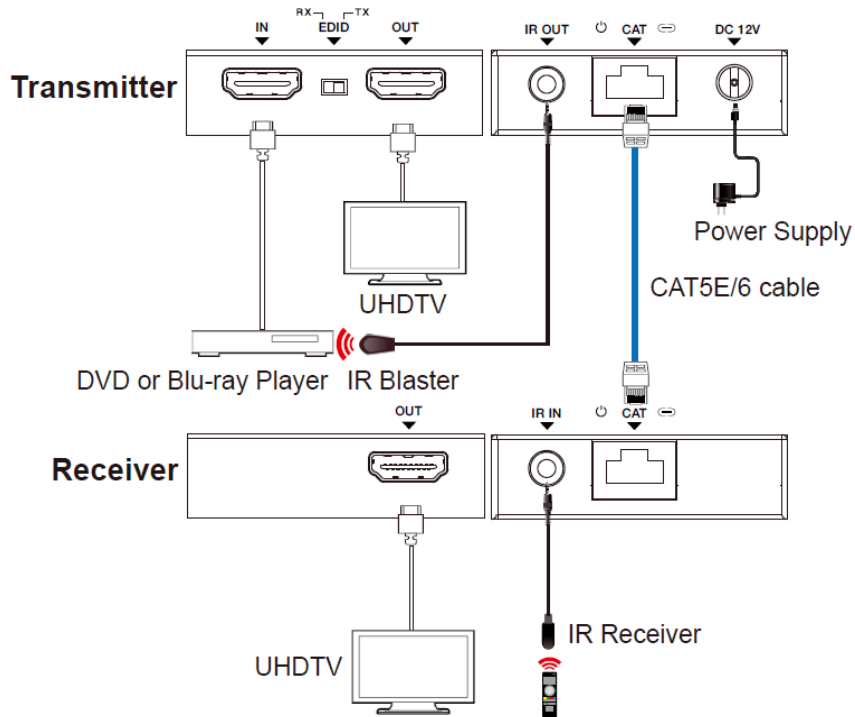
IR Pin Definition

The definitions of the IR Receiver and Blaster pins are as follows:





Connection Diagram





Troubleshooting

Problems	Causes	Solutions
No Power / All LED off	Power supply not connected, connected fully, or wrong power supply.	Check if the power supply is connected correctly and the output voltage value is within recommended specifications.
No sound or sound issues	The HDMI connection is faulty, the audio format is not supported by the displays, or the source player is set to another port for audio output	Check if the HDMI cables are connected correctly. Check if the audio format is supported by the display and that a user has not changed the supported audio format on the player's audio output. Ensure output settings from the HDMI source device as set correctly.
No picture or picture flickers	The HDMI cable may be faulty or the category cable quality is faulty.	Check if the HDMI and category cable connections are correct and undamaged. Change to another good working HDMI cable or category cable (CAT6 or better cable is recommended).



Tech Support

Have technical questions? We may have answered them already!

Please visit BZBGear's support page (bzbgear.com/support) for helpful information and tips regarding our products. Here you will find our Knowledge Base (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), 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:

Phone	Email	Live Chat
1.888.499.9906	support@bzbgear.com	bzbgear.com

Limited Product Warranty Terms

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.

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



Mission Statement

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.

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