

BG-Air4Kast

4K60 UHD HDMI 2.0 Wireless Extender Kit up to 164ft (50m)

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-Air4Kast is an advanced 4K@60Hz HDMI wireless extender solution consisting of a transmitter and a receiver. It leverages ipcolor STREAM technology for high-definition and low-latency video transmission. Operating on the 5G wireless frequency band, it delivers stability, anti-interference capabilities, and increased performance. The BG-Air4Kast supports wireless transmission up to 164ft (50m), offering a solution for wirelessly transmitting video in applications such as video conferences, home entertainment, and multimedia education.

Note: Transmission distances may vary as interference from solid structures and other wireless signals may affect performance.

Features

- Ipcolor STREAM technology allows for high definition and low-latency transmission.
- Up to 3840x2160@60Hz resolution, backward compatible.
- 4K Wireless transmission up to 164ft (50m) / 1080p60 230ft (70m) line of sight.
- HDMI loop out on transmitter for local monitoring.
- SSID pairing and channel switching to avoid interference in case multiple sets of BG-Air4Kast are in the same area.
- IR passback (Receiver to Transmitter) to control source devices.
- 5G wireless for strong anti-interference.
- Firmware upgradeable via Micro USB port.

Package Contents

- | | |
|----------------------------------|-----------------------------------|
| ● 1 x BG-Air4Kast TX | ● 1 x User Manual |
| ● 1 x BG-Air4Kast RX | ● 4 x Mounting Ears |
| ● 4 x Antenna | ● 2 x 5V2A Power Adapters |
| ● 1 x IR Blaster Extension cable | ● 1 x IR Receiver Extension Cable |
| | ● 12 x Screws |



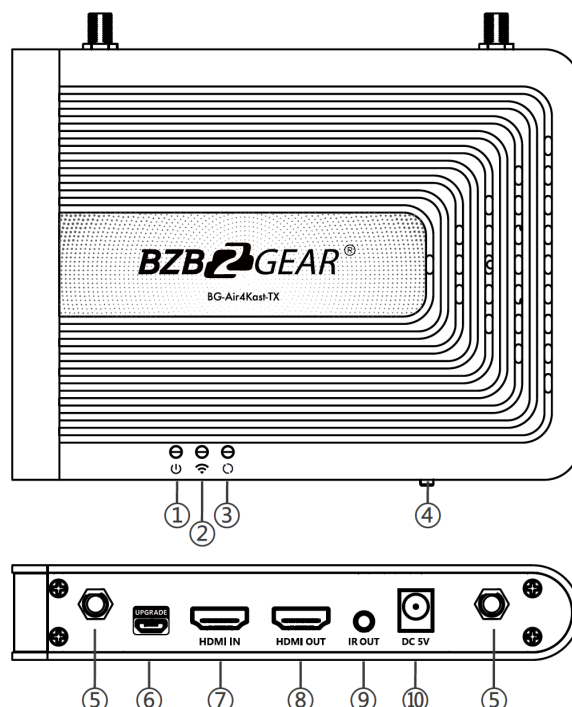
Specifications

Technical Specifications	
Power Supply	DC 5V/2A (TX ≤ 6W, RX ≤ 4W)
HDMI Version	HDMI 2.0
HDCP Version	HDCP 1.4 / HDCP 2.2
Maximum Transfer Rate	18Gbps
Supported Resolutions	3840x2160@24/30/50/60Hz, 1080P@50/60Hz, 720P@50/60Hz, 1920x1200, 2560x1440, 2560x1600
Audio Format	PCM
WiFi Frequency Bands	5.18~5.24 GHz
Transmission Distances	4K60 ~ 164ft (50m) / 1080p60 230ft (70m) line of sight
Latency	130~180ms
Connection Type	One-to-one
SSID Pairing	Supported
ESD Protection	1a Contact discharge level 3 1b Air discharge level 3 Standard: IEC61000-4-2
Infrared Frequency	20~60kHz
Receiving Range	≤ 5m
Working Temperature	-20~60°C
Storage Temperature	-30~70°C
Humidity	0~90% RH (no condensation)
Dimensions (L x W x H)	154mm x 116mm x 25mm
Color	Black
Material	Iron
Weight	TX: 1Lb / RX: 1Lb



Panel Descriptions

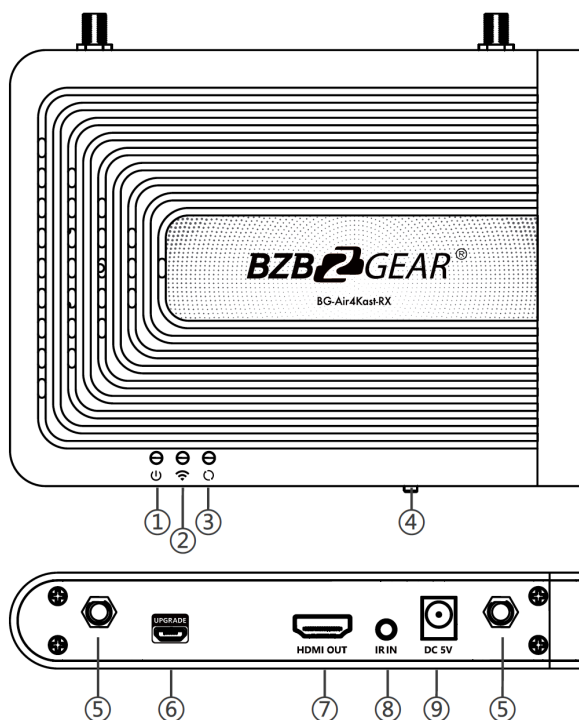
Transmitter (TX)



1.	Power Indicator	The LED will illuminate blue when the device is powered on.
2.	WiFi Indicator	Slow Flash: Waiting for connection Solid: Connection established Rapid Flash: SSID Pairing Mode
3.	Signal Indicator	Off: No HDMI signal detected Solid: HDMI signal is transmitting Rapid Flash: Restore Factory Settings in progress
4.	Channel Switch Button	Press to switch broadcasting channels Press and hold for 5s for SSID Pairing mode Press and hold for 10s to restore factory settings
5.	Antenna Connectors	Connect the included antennas
6.	Micro USB Port	Used for firmware upgrades
7.	HDMI Input	Connect to a source device using an HDMI cable
8.	HDMI Output	Connect to a display using an HDMI cable
9.	IR Out	Connect the included IR Blaster extension cable
10.	Power Input	Connect the included 5V/2A power supply



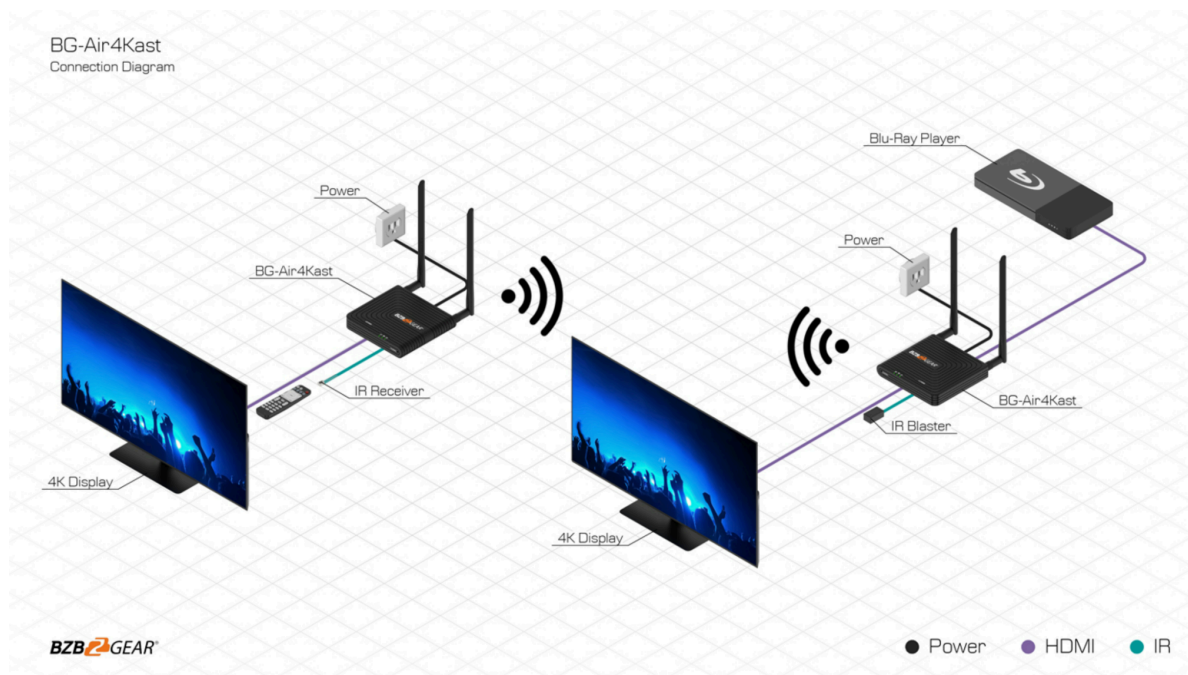
Receiver (RX)



1.	Power Indicator	The LED will illuminate blue when the device is powered on.
2.	WiFi Indicator	Slow Flash: Waiting for connection Solid: Connection established Rapid Flash: SSID Pairing Mode
3.	Signal Indicator	Off: No HDMI signal detected Solid: HDMI signal is transmitting Rapid Flash: Restore Factory Settings in progress
4.	Channel Switch Button	Press to switch broadcasting channels Press and hold for 5s for SSID Pairing mode Press and hold for 10s to restore factory settings
5.	Antenna Connectors	Connect the included antennas
6.	Micro USB Port	Used for firmware upgrades
7.	HDMI Out	Connect to a display using an HDMI cable
8.	IR In	Connect the included IR Receiver extension cable
9.	Power Input	Connect the included 5V/2A power supply



Connection Diagram



Connection Instructions

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. If using the IR passback function, connect the IR blaster extension cable into the IR OUT port of the transmitter, and connect the IR receiver extension cable into the IR IN port of the receiver.
 - a: The emitter of the IR blaster extension cable should be as close as possible to the IR receiving window of the source device.
 - b: Point the remote control at the receiving head of the IR receiver extension cable to operate.
3. Plug the included power supplies into the devices to turn them on.
4. If multiple sets of BG-Air4Kast are being used at the same time and in the same area, in order to prevent interference switch each set of transmitters and receivers to a different channel after they have been manually paired using the SSID function.



SSID Pairing Instructions

1. Enter SSID pairing mode by holding the transmitter and receiver's channel switch buttons for five seconds. Both WiFi connection indicators will rapidly flash yellow.
2. When the SSID pairing is successful, the WiFi indicators on the transmitter and receiver will change from quick flashing to a slow flashing or steady on.

Channel Number	Frequency
Channel 1	5.180 GHz
Channel 2	5.200 GHz
Channel 3	5.220 GHz
Channel 4	5.240 GHz

Troubleshooting

1. Why are the receiver and transmitter not connected and showing "Search ipcolor Tx" on the display?
 - a. Move the Transmitter and Receiver closer.
 - b. Power cycle the transmitter and receiver.
 - c. Re-pair the transmitter and receiver.
2. Why is the WiFi indicator solid but the display is showing "Please check the TX input signal"?
 - a. Ensure the TX has an HDMI input and that the resolution is within the specified range
 - b. Try conning the signal source directly to the display device or change the signal source and HDMI cables and then try again.
3. Why is the display stuttering or the image is unstable?
 - a. Place the transmitter and receiver closer and minimize the number of obstructions between the transmitter and receiver.
 - b. Switch to a different channel to avoid interference from other wireless signals and devices.
 - c. Power cycle the transmitter and receiver.



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

1.888.499.9906

Email

support@bzbgear.com

Live Chat

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.

Copyright

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FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.