

BG-EXHD-70UCWP-W

**18Gbps HDBaseT 230ft Wall Plate Kit with MDP/HDMI Wall Plate
Transmitter & HDBaseT to HDMI receiver**

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.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shocks, lightning strikes, etc. Use of surge protection systems is highly recommended to protect and extend the life of your equipment.



Introduction

Introducing the BG-EXHD-70UCWP-W 18Gbps HDBaseT 230ft Wall Plate Kit, complete with an MDP/HDMI Wall Plate Transmitter and an HDBaseT to HDMI Receiver. Designed for seamless integration into your AV setup, this kit offers advanced connectivity and transmission capabilities while maintaining a sleek aesthetic with its Decora-style wall plate design.

The wall plate serves as both a 2x1 switcher and an HDBaseT transmitter, accommodating HDMI and DisplayPort (DP) inputs. Supporting video resolutions of up to 4K2K@50/60Hz 4:4:4, ensures stunning clarity and detail in your visuals. Additionally, bidirectional RS-232 pass-through allows for convenient control signal transmission up to 131ft / 40m.

Features

- Compliant with HDMI 2.0b, HDCP 2.2, and DisplayPort 1.2a standards.
- Supports a video bandwidth of 18Gbps.
- Capable of displaying video resolutions up to 4K2K@50/60Hz 4:4:4.
- The HDBaseT output extends the video transmission distance up to 230ft / 70m for 1080P@60 or 131ft / 40m for 4K@60 using a single CAT6/6a/7 cable.
- Supports 3D, HDR10, and Dolby Vision.
- HDMI audio formats supported include LPCM, Dolby Digital/Plus/EX, Dolby TrueHD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, and DSD.
- Offers support for both HDMI and MDP input.
- Features a US one-gang enclosure tailored for Decora-style wall plate openings.
- Input signal selection is configurable in automatic mode or manual mode.
- Supports POE function (only from Receiver to Transmitter).

Packing List

- 1× 18Gbps HDBaseT 70M with MDP/HDMI Wall Plate Transmitter
- 1× HDBaseT to HDMI Receiver
- 1× User Manual



Specifications

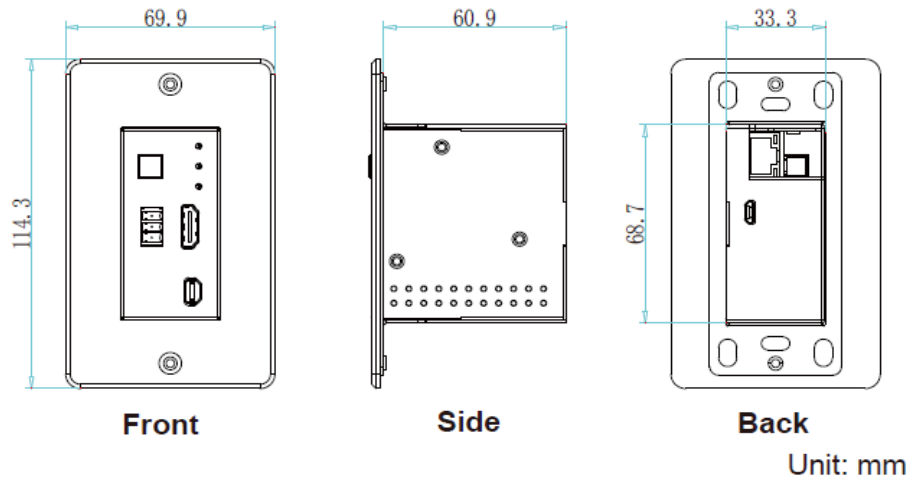
| Technical | |
|-----------------------|--|
| HDMI Compliance | HDMI 2.0b |
| HDCP Compliance | HDCP 2.2 |
| DP Compliance | Display Port 1.2a |
| Video Bandwidth | DP: 5.4 Gbps |
| | HDMI: 18 Gbps |
| Video Resolution | 480i~1080p50/60Hz, 4Kx2K@24/30Hz, 4K2K@60Hz |
| Color Space | RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0 |
| Color Depth | 8/10/12-bit (1080P@60Hz) 8-bit (4K@60Hz) |
| HDR | Support |
| HDMI Audio Formats | LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD |
| Transmission Distance | Max distance (1080P) : 230ft / 70m over CAT6/6a/7 Max distance (4K): 131ft / 40m over CAT6/6a/7 |
| ESD Protection | Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge) |
| Connection | |
| Transmitter | Inputs: 1 x HDMI Type A [19-pin female] 1 x miniDP [20-pin female] Output: 1 x HDBaseT Out [RJ45, 8-pin female] Controls: 1x RS-232 [3-pin phoenix connector] 1x FW [Micro USB, Update port] |
| Receiver | Inputs: 1x HDMI IN [Type A, 19-pin female] 1x HDBaseT IN [RJ45, 8-pin female] Outputs: 1x HDMI OUT [Type A, 19-pin female] 1x AUDIO OUT [Phoenix jack] Controls: 1x RS-232 [3-pin phoenix connector] 1x FW [Micro USB, Update port] |



| Mechanical | |
|------------------------|---|
| Housing | Metal Enclosure |
| Color | White |
| Dimensions (W x D x H) | Wall plate: 1.31in x 2.6in x 2.7in [33.3mm x 65.7mm x 68.7mm] Faceplate: 2.8in x 0.12in x 4.5in [69.9mm x 3mm x 114.3mm] Receiver: 7.9in x 4.0in x 0.87in [200mm x 102.8mm x 22mm] |
| Weight | Wall plate: 0.42 lbs [189g], Receiver: 1.1 lbs [517g] |
| Power Supply | POE (only from Receiver to Transmitter) |
| Power Consumption | Wall plate: 8W (Max), Receiver: 6W (Max) |
| Operating Temperature | 32 - 104°F / 0 - 40°C |
| Storage Temperature | -4 - 140°F / -20 - 60°C |
| Relative Humidity | 20 - 90% RH (no condensation) |



Product Dimensions

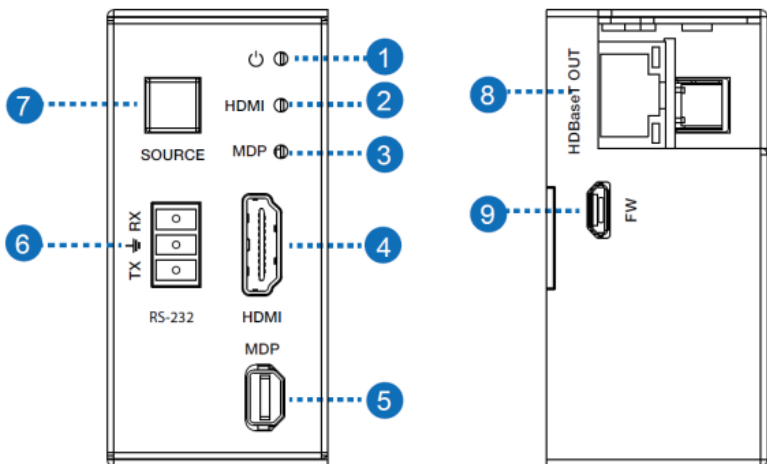




Operation Controls and Functions

Front and Rear Panel

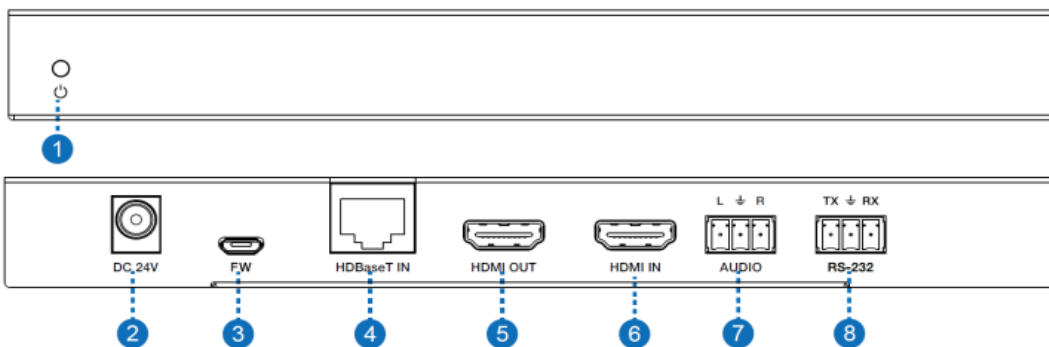
Transmitter Panel



| No. | Name | Function Description |
|-----|---------------|--|
| 1 | Power LED | The power LED indicator will illuminate in green when the product is powered on, and red when the product is on standby. |
| 2 | HDMI LED | When the HDMI input port is active and the HDMI signal is detected, the green LED will be on. |
| 3 | MDP LED | When the MDP input port is active and DP signal is detected, the green LED will be on. |
| 4 | HDMI port | HDMI input port, connect to HDMI source device. |
| 5 | MDP port | DP signal input port. |
| 6 | RS-232 port | Connect to PC or control system for bidirectional RS-232 control signal passthrough. |
| 7 | SOURCE button | Used to switch HDMI / MDP input signal. |
| 8 | HDBaseT OUT | Connect to the HDBaseT IN port of Receiver with a CAT6/6a/7 cable. |
| 9 | FW port | Firmware update port. |



Receiver Panel



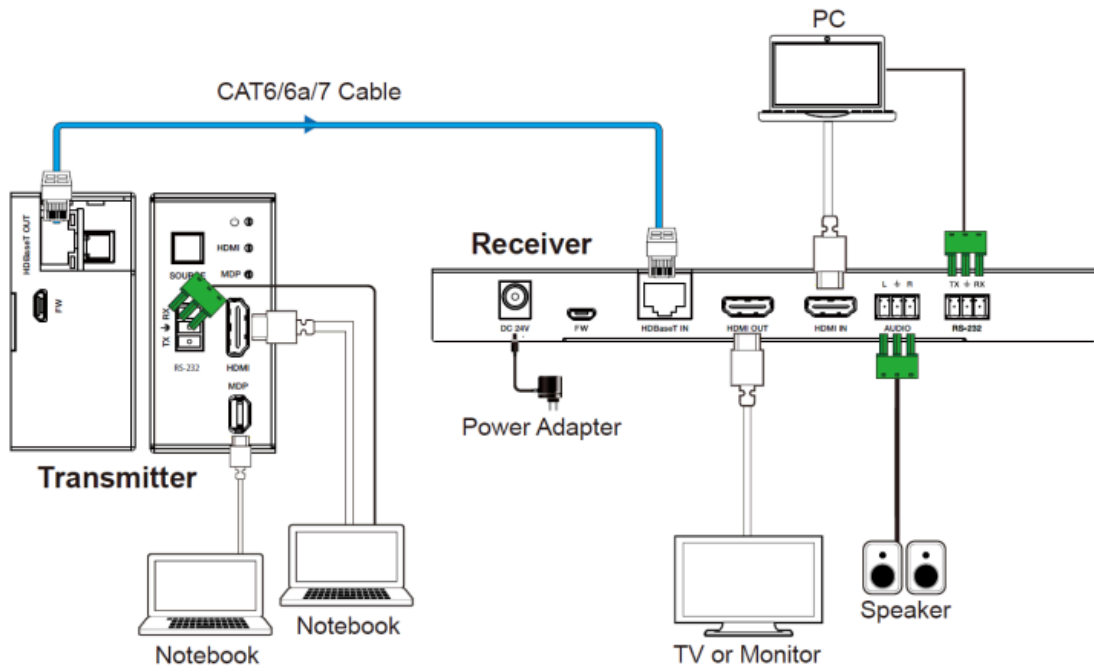
| No. | Name | Function Description |
|-----|-------------|---|
| 1 | Power LED | When the product is powered on, the red LED indicator will be on. |
| 2 | DC 24V | DC 24V power supply port. |
| 3 | FW | Firmware update port. |
| 4 | HDBaseT IN | Connect to the HDBaseT OUT port of Transmitter with a CAT6/6a/7 cable. |
| 5 | HDMI OUT | HDMI output port, connect to HDMI display device. |
| 6 | HDMI IN | HDMI input port, connect to HDMI source device. |
| 7 | AUDIO OUT | Analog audio output port. |
| 8 | RS-232 port | Connect to PC or control system for bidirectional RS-232 control signal pass-through. |

Note:

This transmitter supports automatic/manual mode for source signal input. In manual switching mode, press the SOURCE button to select HDMI/DP input source. In automatic switching mode, the last connected or the currently connected source signal will be selected automatically; When both HDMI and MDP ports are connected to active signal, HDMI signal input is preferred; When both HDMI and MDP ports are not connected to active signal, it will switch to the source signal of the Receiver.



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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