



### BG-EXH-8K150C

8K UHD HDMI HDBASET LONG RANGE EXTENDER WITH BI-DIRECTIONAL IR/RS-232/CEC UP TO 490FT

Experience superior long-distance AV performance with this high-performance 8K HDBaseT extender, engineered to transmit HDMI, RS-232, and IR signals over a single twisted pair cable. With support for up to 8K@30Hz (4:4:4) and 4K@120Hz (4:4:4) video formats, this extender ensures uncompromised signal integrity and crystal-clear visuals across professional AV setups, control rooms, and home theater installations.

Built for reliability and versatility, the system seamlessly converts HDMI and control signals for efficient HDBaseT transmission, restoring them at the receiver end with zero quality loss. Offering flexible control options, robust audio support, and advanced gaming and HDR compatibility, this extender is the perfect solution for high-performance, long-distance AV distribution.



#### **FEATURES**



## 8K & 4K LONG-DISTANCE TRANSMISSION

Transmits 8K@30Hz (4:4:4) and 4K@120Hz (4:4:4) signals up to 90m (295ft), 4K@60Hz up to 120m (394ft), and 1080p up to 150m (492ft) via CAT cable for reliable, long-range performance



# HDMI 2.1 & HDCP 2.3 COMPLIANCE

Fully compliant with the latest HDMI and content protection standards, ensuring secure and consistent transmission across all compatible devices



# ULTRA-HIGH BANDWIDTH SUPPORT

Delivers up to 40Gbps FRL and 18Gbps TMDS, supporting next-generation 8K and high-frame-rate 4K video without signal loss or latency



## COMPREHENSIVE CONTROL INTEGRATION

Supports bi-directional IR, RS-232, and CEC pass-through, enabling full device control and automation through a single cable connection



## ADVANCED AUDIO & HDR SUPPORT

Handles top-tier audio formats like Dolby Atmos, DTS-HD Master Audio, and TrueHD, plus HDR formats including HDR10, HDR10+, Dolby Vision, and HLG for vivid, lifelike visuals



# POWER OVER CABLE (POC)

Simplifies installation by providing bidirectional PoC, allowing both units to be powered through one connection, reducing setup time and power supply requirements



#### **TECH SPECIFICATIONS**

#### **Technical**

HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	40Gbps FRL and 18Gbps TMDS
Video Resolution (Input & Output)	Up to 8K@30Hz (4:4:4) All available resolutions are shown as follow
IR Level	5Vp-p
IR Frequency	Wideband 20K-60KHz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8/10/12-bit
HDR Formats	HDR, HDR10, HDR10+, Dolby Vision, HLG
HDMI Audio Formats	LPCM 2.0 / 5.1 / 7.1 (32K–192KHz, 16/20/24-bit); Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos; DTS Surround, 96/24, ES, DTS Express, DTS-HD HRA, DTS HD Master, DTS:X
Transmission Distance	150m/492ft for 1080p; 120m/394ft for 4K@60Hz; 90m/295ft for 8K@30Hz over CAT6 cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap) & ±4kV (Contact)
Connections (Transmitter)	1x HDMI IN (Type A, 19-pin), 1x HDBT OUT (RJ45, 8-pin), 1x IR IN, 1x IR OUT (3.5mm stereo), 1x RS-232 (3-pin phoenix), 1x SERVICE (USB Type C)
Connections (Receiver)	1x HDBT IN (RJ45, 8-pin), 1x HDMI OUT (Type A, 19-pin), 1x IR IN, 1x IR OUT (3.5mm stereo), 1x RS-232 (3-pin phoenix), 1x SERVICE (USB Type C)

#### Mechanical

Housing	Metal enclosure
Fixedness	Black
Dimensions (LxWxH)	5.5in x 2.6in x 0.71in [140mm x 65mm x 18mm]
Weight	0.53 lbs [240g] (Transmitter/Receiver)
Power Supply	DC 24V/1A; Supports bi-directional PoCPower Consumption
Power Consumption	Transmitter: 11.28W; Receiver: 10.8W
Operation Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Operating Humidity	20%~80% (non-condensing)
Storage Humidity	10%~90% (non-condensing)

### **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.

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3-YEAR WARRANTY









#### SUPPORTED RESOLUTIONS

480i60Hz	1600x900p60/24/25/30Hz
480p60Hz	1600x1024p60/24/25/30Hz
576i50Hz	1600x1200p 50/60/65/70/75/85/24/25/30Hz
576p50Hz	1680x720p 24/25/30/50/60/100/120Hz
720x480p60Hz	1680x1050p50/60/24/25/30Hz
720x576p50Hz	1920x1080i60/50/i30Hz
720p50/60/24/25/30Hz	1152x870p75Hz
720x720p 24/25/30/50/60/100/120Hz	848x480p60Hz
1080i50/60Hz	720x400p70/85Hz
1080p 24/25/30/50/60/100/120Hz	640x400p85Hz
1920x1080p 120/100/60/50/24/25/30Hz	3840x2160p 24/25/30/50/60/100/120Hz
1920x1200p50/60Hz	3840x2160p24/25/30/50/60Hz
1920x1440p60/75Hz	4096x2160p 24/25/30/50/60/100/120Hz
1680x1050p 50/60/24/25/30Hz	4096x2160p 23.976/24/25/30/50/59.94/60Hz
1792x1344p60/75Hz	5120x2160p30/59/60Hz
1152x864p75Hz	5120x2160p75/100Hz
852x480p60Hz	7680x4320p24/25/30Hz
832x624p75Hz	1920x2160p60Hz
640x350p85Hz	2560x1080p24/25/30/50/60Hz
1280x800p60/75/85/120Hz	2560x1440p60(RB)
1280x960p60/85Hz	2560x1600p60/75/85/60(RB)
1280x1024p60/75/85/96Hz	2560x2048p60Hz
1360x768p60Hz	3440x1440p60Hz
1366x768p60/24/25/30Hz	1856x1392p60/75Hz
1400x788p60Hz	1920x1200p50/60Hz
1400x1050p60Hz	1024x768p60/70/75/85Hz
1440x900p60/75/85Hz	1024x576p60Hz
1440x960p50/60(RB)	640x480p59.94/60/67/72/75/85Hz

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