



BG-EXH-8KC6

8K UHD HDMI 2.1 EXTENDER - 8K30/4K120HZ WITH IR/EARC/ARC/POC/RS-232/ETHERNET/USB 2.0 AND AUDIO EMBEDDING/DE-EMBEDDING UP TO 330FT

The BG-EXH-8KC6 is an 8K HDMI and USB over HDBaseT Extender designed to extend the range of uncompressed HD/UHD video and audio signals, including eARC/ARC, RS-232, bi-directional IR, 1GbE Ethernet, and USB 2.0 signals, up to 295ft (90m) using a single CAT6A/7 cable.

This extender supports video resolutions up to 8K@30Hz 4:4:4 10-bit, 4K@120Hz 4:4:4 10-bit, and 4K@60Hz 4:4:4. Additionally, it incorporates eARC/ARC functionality, allowing the transmission of audio signals from the receiver HDMI output pass-through to the transmitter's HDMI input or audio de-embedding to the transmitter's output port.

The device also facilitates USB 2.0 signal transmission with configurable Host/Device settings per device and bi-directional Power over Cable (POC) functionality. For home or commercial applications requiring long-distance signal transmission, the BG-EXH-8KC6 stands out as the ideal 8K signal solution.



FEATURES



COMPLIANT

HDMI 2.1, HDCP 2.3, and HDBaseT 3.0 compliant



8K@30HZ AND 4K@120HZ

Video resolution is up to 8K@30Hz 4:4:4 10-bit, 4K@120Hz 4:4:4 10-bit



8K EXCLUSIVE FEATURES

Variable Refresh Rate (VRR), Fast as Possible V-active (FVA), Auto Low Latency Mode (ALLM) support



SMOOTH IMAGE PROCESSING

HDR, HDR10, HDR10+, Dolby Vision and HLG pass-through



HDMI AUDIO FORMATS

Dolby Atmos, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio



ADVANCED EDID

Management through EDID DIP switches



TECH SPECIFICATIONS

Technical

HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	Up to 40Gbps FRL and 18Gbps TMDS
Video Resolution	Up to 8K@30 4:4:4 10-bit, 4K@120Hz 4:4:4 10-bit
USB Bandwidth	Up to 350Mbps
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Color Space	RGB 4:4:4, YCbCr 4:4:4 / 4:2:2, YCbCr 4:2:0
Color Depth	8/10/12-bit
Audio Formats	HDMI: PCM 2.0, LPCM 5.1, LPCM 7.1, (32K/44.1K/48K/88.2K/96K/176.4K/192K) (16/20/24); Dolby Digital, Dolby Digital plus, Dolby TrueHD, Dolby Atmos; DTS Surround, 96/24, ES, DTS Express, DTS-HD HRA, DTS HD Master, DTS:X Analog: PCM 2.0 48K
IR Level	5Vp-p/12Vp-p
IR Bandwidth	20K - 60KHz
Transmission Distance	MAX: CAT6 = 197ft (60m) / CAT6A/7 = 295ft (90m)
ESD Protection	Human body model: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Connections

Transmitter	Input: 1 x HDMI IN [Type A, 19-pin female] 1 x AUDIO IN [3.5mm Stereo Mini-jack] Output: 1 x HDMI OUT [Type A, 19-pin female] 1 x HDBT OUT [RJ45, 8-pin female] 1 x AUDIO OUT [3.5mm Stereo Mini-jack] Control: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x RS-232 [3 pin-3.81mm Phoenix jack] 1 x USB HOST [USB Type B] 3 x USB DEVICE [USB Type A] 1 x ETHERNET [RJ45]
Receiver	Input: 1 x HDMI IN [Type A, 19-pin female] 1 x HDBT IN [RJ45, 8-pin female] 1 x AUDIO IN [3.5mm Stereo Mini-jack] Output: 1 x HDMI OUT [Type A, 19-pin female] 1 x AUDIO OUT [3.5mm Stereo Mini-jack] Control: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x RS-232 [3 pin-3.81mm Phoenix jack] 1 x USB HOST [USB Type B] 3 x USB DEVICE [USB Type A] 1 x ETHERNET [RJ45]

Mechanical

Housing	Front Panel - Aluminium / Enclosure - Metal Composite
Color	Black
Dimensions (WxDxH)	7.9in x 3.9in x 1.2in [200mm x 100mm x 30mm]
Weight	1.25 lbs (20oz) [1.1kg]
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 24V/2.7A (US/EU standard, CE/FCC/UL certified)
Power Consumption	Total power consumption: 20.4w (POC) TX/RX Full Load: 9.36w/9.84w; TX/RX No Load: 2.46w/3.36w
Operating Temperature	32° - 104°F / 0° - 40°C
Storage Temperature	-4° - 140°F / -20° - 60°C
Relative Humidity	20 - 90% RH (no condensation)

Resolution	8K30	4K60	4K24	1080P60
Cable Length	9.8ft / 3m	16ft / 5m	32ft / 10m	66ft / 20m

NOTE: The use of "Premium High Speed" HDMI 2.1 cables is highly recommended.

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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5-YEAR WARRANTY

Essential Line Products
3-YEAR WARRANTY

Cables Products
LIFETIME WARRANTY