



BG-8K-28A

2X8 8K UHD HDMI 2.1 48GBPS SPLITTER WITH
AUTO DOWNSCALING/HDR-TO-SDR CONVERSION/
AUDIO DE-EMBEDDING/RS-232 (8K60/4K120 AND
VRR/ALLM/QMS/QFT/SBTM SUPPORT)

The BG-8K-28A is a professional 2x8 HDMI 2.1 splitter designed to distribute ultra-high-resolution video from two HDMI sources to as many as eight displays simultaneously. Supporting the full 48Gbps HDMI 2.1 bandwidth, it delivers resolutions up to 8K@60Hz and 4K@120Hz, while maintaining compatibility with HDR10, HDR10+, Dolby Vision, HLG, VRR, ALLM, and HDCP 2.3 for exceptional image quality across modern AV systems.

Engineered for professional installations, the BG-8K-28A combines intelligent input switching, independent output downscaling, HDR-to-SDR conversion, comprehensive audio de-embedding, advanced EDID management, and multiple control options. Whether deployed in digital signage, corporate AV, education, hospitality, or entertainment venues, it provides a flexible, future-ready solution for large-scale HDMI distribution.



FEATURES



48GBPS HDMI 2.1 DISTRIBUTION

Switches between two HDMI sources and distributes the selected signal to eight simultaneous HDMI outputs with support for 8K@60Hz and 4K@120Hz



INDEPENDENT OUTPUT PROCESSING

Each HDMI output supports independent 8K-to-4K/1080p downscaling and HDR-to-SDR conversion for seamless mixed-display installations



ADVANCED HDR & GAMING SUPPORT

Compatible with HDR10, HDR10+, Dolby Vision, HLG, VRR, ALLM, and HDCP 2.3 for premium image quality and next-generation source compatibility



PROFESSIONAL AUDIO DE- EMBEDDING

Extracts HDMI audio to optical (S/PDIF) and balanced or unbalanced analog outputs with adjustable analog gain



COMPREHENSIVE EDID & SIGNAL MANAGEMENT

Features advanced EDID modes, integrated signal conditioning, and a built-in HDMI test pattern generator for reliable installation and operation



FLEXIBLE PROFESSIONAL CONTROL

Supports front-panel controls, IR remote, RS-232, and USB-C API commands for seamless integration into professional AV control systems



TECH SPECIFICATIONS

Technical

HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	48Gbps
Video Resolution	Up to 8K@60Hz (4:2:0, 12-bit), 8K@30Hz (4:4:4, 12-bit), 4K@120Hz (4:4:4, 12-bit)
Color Depth	8/10/12-bit
Color Space	RGB, YCbCr 4:4:4 / 4:2:2 / 4:2:0
HDR Support	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats (HDMI I/O)	LPCM, Dolby Digital/Plus/EX, Dolby TrueHD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS-HD Master Audio, DSD
Optical Audio Output	Up to LPCM / Dolby / DTS 5.1CH
Analog Audio Output	LPCM 2CH
Output Impedance	300 Ohm
Max Output Level	8.2dBu (2Vrms) balanced / 2.2dBu (1Vrms) unbalanced
Frequency Response	20Hz-20kHz (+0.5dB / -1dB)
Audio Sync Delay	0-2.2ms
Signal-to-Noise Ratio	99dB @ 2Vrms, 1kHz, A-weighted
THD+N	<0.2% @ 0dBV, 1kHz
IR Level	12Vp-p
IR Frequency	20-60kHz (wideband)
ESD Protection	±8kV air discharge, ±4kV contact discharge (IEC 61000-4-2)

CONNECTION

Input Ports	2x HDMI Type-A (19-pin female)
Output Ports	8x HDMI Type-A (19-pin female)
Optical Output	1x S/PDIF Optical
Analog Audio Output	1x L/R (5-pin 3.5mm Phoenix connector)
RS-232 Control	1x 3-pin 3.5mm Phoenix connector
IR Control	1x 3.5mm stereo mini-jack (IR IN)
Service Port	1x USB Type-C (firmware upgrade)

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

Cables Products
LIFETIME WARRANTY



TECH SPECIFICATIONS

Mechanical

Housing	Metal enclosure
Color	Black
Dimensions (W x D x H)	13in x 3.9in x 0.85in [320mm x 100mm x 21.5mm]
Weight	1.8 lbs [810g]
Power Supply	DC 12V / 2.5A
Power Consumption	9.6W (Max)
Operating Temperature	32°F to 104°F / 0°C to 40°C
Storage Temperature	-4°F to 140°F / -20°C to 60°C
Operating Humidity	20%–80% RH (non-condensing)
Storage Humidity	10%–90% RH (non-condensing)



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