



BG-8K-24A

2X4 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-24A is a professional 2x4 HDMI 2.1 distribution amplifier that switches between two HDMI sources and simultaneously distributes the selected signal to up to four displays. 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, and HDCP 2.3 for exceptional image quality across modern AV systems.

Designed for mixed-display environments, the BG-8K-24A features independent output downscaling, per-output HDR-to-SDR conversion, comprehensive audio de-embedding, advanced EDID management, and multiple control options. Whether deployed in corporate AV, digital signage, broadcast, education, or luxury residential installations, it provides the flexibility and reliability required for next-generation HDMI distribution.



FEATURES



48GBPS DISTRIBUTION

Switches between two HDMI sources and distributes the selected signal to four 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 mixed-display environments



PREMIUM HDR & HDCP

Compatible with HDR10, HDR10+, Dolby Vision, HLG, and HDCP 2.3 for outstanding image quality and protected content playback



AUDIO DE-EMBEDDING

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



ADVANCED EDID

Includes preset, pass-through, and user-defined EDID modes plus an integrated HDMI test pattern generator for simplified installation



FLEXIBLE SYSTEM 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
Supported Input	2x HDMI Type-A (19-pin female)
Supported Output	4x HDMI Type-A (19-pin female)
Audio Output	1x Optical (S/PDIF), 1x L/R analog (5-pin 3.5mm Phoenix)
Control Ports	1x RS-232 (3-pin 3.5mm Phoenix), 1x IR IN (3.5mm stereo jack), 1x USB-C (Service)
Max 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
HDR Support	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats (HDMI)	LPCM, Dolby Digital/Plus/EX, Dolby TrueHD, Dolby Atmos, DTS formats incl. DTS-HD Master Audio
Optical Audio Output	Up to LPCM / Dolby / DTS 5.1CH
Analog Audio Output	LPCM 2CH (balanced/unbalanced with gain control)
Audio Output Level	8.2 dBu (2 Vrms balanced), 2.2 dBu (1 Vrms unbalanced max)
Frequency Response	20Hz - 20kHz (+0.5 dB / -1 dB)
Audio S/N Ratio	99 dB @ 2 Vrms, 1 kHz (A-weighted)
Audio THD+N	<0.2% @ 0 dBV, 1 kHz
IR Frequency	Wideband 20kHz - 60kHz
IR Input Level	12Vp-p

Mechanical

ESD Protection	IEC 61000-4-2: ±8kV air, ±4kV contact
Power Supply	DC 12V / 1A
Power Consumption	6.24W (Max)
Housing	Metal enclosure
Dimensions	8.7in x 4.3in x 0.85in [220mm x 110mm x 21.5mm]
Weight	1.4 lbs [620g]
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)

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.

Pro Line Products
5-YEAR WARRANTY
Essential Line Products
3-YEAR WARRANTY
Cables Products
LIFETIME WARRANTY

