

BG-4KBHS-PRO

HDMI 2.0 & 12G/6G/3G/HD-SDI CROSS CONVERTER AND SCALER WITH 3.5" LCD DISPLAY/AUDIO EMBEDDER/DE-EMBEDDER

The BG-4KBHS-PRO is a professional-grade HDMI 2.0 and 12G/6G/3G/HD-SDI cross-converter and scaler built for high-performance signal conversion, monitoring, and analysis. Designed for broadcast, production, and professional AV applications, it supports up to 12G-SDI 4K60 and HDMI 2.0 4K60 video formats for seamless interoperability across a wide range of devices. Featuring an integrated 3.5" LCD display and intuitive push-button controls, it enables real-time signal monitoring and effortless on-screen configuration of video, audio, and output parameters.

Beyond simple conversion, the BG-4KBHS-PRO is a comprehensive diagnostic and calibration tool. Its advanced waveform and audio metering functions, combined with built-in test patterns and flexible scaling capabilities, make it an indispensable device for field engineers, content creators, and AV technicians who demand precision and reliability in every workflow.



FEATURES



DUAL-FORMAT CONVERSION

Supports simultaneous HDMI ↔ SDI cross-conversion with passthrough options



4K60 ULTRA HD SUPPORT

Handles HDMI 2.0 and 12G-SDI signals up to 4K2K @ 60Hz for superior clarity



INTEGRATED LCD DISPLAY

3.5" screen provides real-time video preview and on-screen control interface



ADVANCED VIDEO ANALYSIS

Features YCbCr waveform, RGB monitoring, and audio level meters with OSD overlay



BUILT-IN TEST PATTERNS

Enables quick calibration and signal verification in professional environments



AUDIO EMBEDDING & EXTRACTION

S/PDIF I/O allows precise audio signal routing between HDMI and SDI



TECH SPECIFICATIONS

Technical

Role of Usage	HDMI 2.0 and 12G-SDI Bi-directional Scaler Converter with 3.5" LCD Monitor
SDI Standards	12G / 6G / 3G / HD-SDI
HDMI Standards	HDMI 2.0
Video Bandwidth	SDI: 11.88 Gbps, 11.88/1.001 Gbps HDMI: Up to 18 Gbps
Video Support	12G-SDI: 4K2K @50/59.94/60Hz 6G-SDI: 4K2K @23.98/24, 25, 29.97, 30Hz 3G-SDI: 1080p @50/59.94/60Hz (4:4:4) HD-SDI: 720p @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @24/30Hz SD-SDI: NTSC @59.94Hz, PAL @50Hz HDMI: Up to 4K2K @60Hz
Audio Support	PCM (48 kHz, up to 8 channels)
ESD Protection	Human body model: ±15kV (air-gap discharge), ±8kV (contact discharge) Core chipset: ±2kV
PCB Stack-up	8-layer board (Impedance control: differential 100Ω; single 50Ω)
Firmware Update	Via USB port

Connection

Input	1x HDMI 1x BNC (SDI) 1x TOSLINK
Output	2x HDMI 3x BNC (SDI out/loop-out) 1x TOSLINK
BNC Connector	75Ω inter-locked socket
HDMI Connector	Type A (19-pin female)
USB Connector	Micro USB

Mechanical

Housing	Metal Enclosure
Power Supply	+12V DC
Operating Temperature	32 ~ 104°F / 0 ~ 40°C
Storage Temperature	-4 ~ 140°F / -20 ~ 60°C
Relative Humidity	20 ~ 90% RH (no condensation)

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

