

# PROFESSIONAL AUDIOVISUAL SOLUTIONS





#### **ABOUT THE COMPANY**

Over 15 years experience working with pro AV dealers, integrators, and installers has helped BZBGEAR begin its journey of bringing two independent yet intertwined worlds together.

Established in 2019 and headquartered in Sacramento, California, BZBGEAR is a one-stop source manufacturer for pro AV and broadcasting products. It was born from the intricate nature of the audiovisual industry and the demand for accessible live streaming and video production equipment.

Its goal is clear: bridging the gap between the AV and broadcasting divisions while simplifying design, procurement, and technical support. BZBGEAR prides itself in unparalleled customer care and tech support seven days a week. Its team is recognized for the highest degree of professional service.



www.youtube.com/c/bzbtvchannel



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www.bzbgear.com



#### INDUSTRY LEADING WARRANTY AND SUPPORT

**BZBGEAR** pro AV products and Cameras come with a threeyear warranty. An extended two-year warranty is available for our cameras upon registration for a total of 5 years.

BZBGEAR provides technical support out of Sacramento, CA via phone, email, or chat. Our team provides exceptional assistance on all our products and is knowledgeable on a multitude of brands and models when it comes to compatibility. You will always reach a specialist tuned in to your needs, providing unique solutions for your installation.

#### **Technical Support**

Monday-Friday 7:00 am - 5:00 pm Saturday-Sunday 10:00 am - 3:00 pm (by appointment only) (Pacific Standard Time)

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# AV OVER IP



# **VERSATILITY**

BZBGEAR's AVoIP (Audio/Video over IP) features a multitude of connections including HDMI, analog audio in/out, bi-directional IR, and RS-232 and delivers them over a Local Area Network (LAN). The possibilities are endless – everything from creating a virtual A/V Matrix system, a Video Wall, or even KVM extension – all while utilizing your existing network infrastructure!

#### **SIMPLICITY**

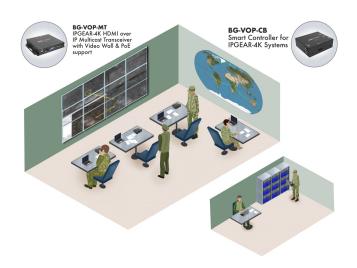
From the intuitive browser interface to the iOS App, BZBGEAR's AVoIP system is designed to be fast to install, easy to configure, and simple to operate. Our unique transceiver design allows each unit to operate as a transmitter or receiver at the flip of a switch.

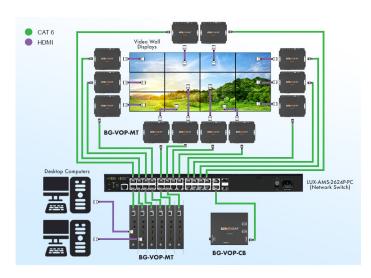
# **ULTRA HD IMAGES**

Connect input sources at resolutions up to 4K@60Hz and output beautifully clear images at resolutions up to 4K@30Hz HDR. Signals can travel up to 328 feet/100 meters between network switches. Receivers feature integrated scalers allowing legacy 1080P displays to be connected.

# **EFFICIENCY**

Upgrading to an AVoIP system can provide massive savings in labor and materials. Rather than running all new cabling and dedicating valuable shelf or closet space for legacy video switchers, leverage existing LAN connections and place transmitters and receivers where they're needed! PoE support eliminates the need for power supplies, resulting in less connections and a faster, cleaner installation.





# **BG-VOP-MT**

IPGEAR-4K HDMI over IP Multicast Transceiver with Video Wall & PoE support



# **FEATURES**

- · TAA compliant product
- · HDMI input up to 4K2K@60Hz 4:4:4
- · HDMI output up to 4K2K@30Hz RGB
- · Can be configured as a transmitter or receiver
- · Supports PoE functions
- · USB 2.0 downstream port
- · Flexible and scalable UHD video broadcasting
- · Bi-directional IR path
- · HDMI 2.0a & HDCP 2.2 compliant
- · Up to 1,023 groups multi-casting
- 180° and 270° clockwise image rotation

- · Latency: 1080p60Hz: 23ms
- · Video wall and matrix functions
- Easy dip switch matching for multi-casting group configuration
- · Wall mountable housing for robust installations
- 1 to 1, 1 to many, and multi-casting broadcasting architecture
- Full frequency IR signal from 20KHz to 60KHz
- Transmitters can theoretically multicast to an unlimited number of displays

# **BG-VOP-CB**

# Smart Controller for IPGEAR-4K Systems

- TAA compliant product
- · Cost effective solution for IoT
- · Smart control of up to 1024 transceivers
- · Auto-detection of transceiver units on the network
- Includes web interface and Mobile App support
- · Custom graphic and text overlays
- · Drag and drop matrix switching
- · Create multiple video walls with ease
- Schedule time for audio/video mapping, cycle play and mute/resume











	BG-VOP-N	мт	
Role of usage		Transceiver	
HDMI compliance	НДМІ		
HDCP compliance	Yes		
Input Video support	Up to 4K2K@60 (4:4:4 8bits)		
Output Video support		Up to 4K2K@30 (RGB)	
Latency		2 frames (33 ms) maximum	
HDMI over UTP transmission [24-bit]	l	Jltra HD (4K2K60) - 100m (328ft) [CAT.)	X]
Audio support	Surrou	ınd sound (up to 7.1ch) or stereo digita	ıl audio
Input TMDS signal		1.2 Volts [peak-to-peak]	
Input DDC signal		5 Volts [peak-to-peak, TTL]	
ESD protection	Human body mod	el — ±15kV [air-gap discharge] & ±8kV	[contact discharge]
IR pass-thru		Full-duplex bi-directional	
RS-232 support		Yes	
I/O connector	2x HE	DMI + 4x 3.5mm + 3x USB + 1x RJ45 + 1x	DIN9
HDMI source control	Controllable via IR pass-through from RX to TX and from TX to RX with IR extenders		
IR remote control	Electro-optical characteristics: t = 25° / Carrier frequency: 20-60kHz		
HDMI connector	Type A [19-pin female]		
Min DIN connector		DIN-9	
RJ45 connector		WE/SS 8P8C with 2 LED indicators	
3.5mm connector		IR blaster & IR receiver	
		Mechanical	
Housing		Metal enclosure	
Dimensions [L x W x H]	Model 7" x 5.5" x 3.2" [180 x 142 x 28mm]	Package 10.3" x 6.7" x 3" [264 x 170 x 77mm]	Carton 1'4" x 1'2" x 11.5" [430 x 358 x 291mm]
Weight	Model 23 oz [664g]		Package 2 lbs [889g]
Fixedness		Wall-mounting case with screws	
Power supply	5V 2A DC / 48V POE		
Operation temperature	32~104°F [0~40°C]		
Storage temperature	-4~140°F [-20~60°C]		
Relative humidity		20~90% RH [no condensation]	



	BG-VOP-	СВ	
Product type		Smart Controller	
Input		1x RJ-45	
Output		1x HDMI	
HDMI connector		Type A [19-pin female]	
RJ-45 connector	WE/SS 8P8C		
Housing	Metal enclosure		
Dimensions [L x W x H]	Model 3.5" x 3.0" x 1.1" [90 x 78 x 29mm]	Package 7.8137" x 5.4" x 2.9" [198 x 137 x 74mm]	Carton 16.5" x 15.8" x 11.8" [420 x 400 x 300mm]
Weight	Model 7.8 oz [222g]		Package 1.08 lbs [493g]
Mouting	Rack-mount with ears		
Power supply	5V DC		
Power consumption	3.5 Watts [max]		
Operation temperature	32~104°F / 0~40°C		
Storage temperature	-4~140°F / -20~60°C		
Relative humidity	20~90% RH [no condensation]		



### FROM BIG SCREEN TO BIGGER SCREEN

BZBGEAR's Video wall processors let you create large-scale arrange- ments for maximum impact. Large format displays can be prohibitively expensive. Combining several smaller displays with a video wall processor can create an even larger display for less.

# **CREATE BOLD & ENGAGING DISPLAYS**

Video walls create arresting, attention-grabbing showpieces. Wheth- er displaying live events at a restaurant or sports bar, advertising products and services in retail spaces, or creating impressive demonstrations at trade shows, video walls help set you apart from the competition.

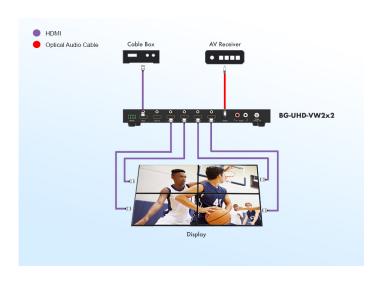
# **ULTRA HD FOR LESS**

BZBGEAR video wall processors can accept resolutions up to 4K@60Hz, allowing you to repro-duce razor-sharp images and realistic detail on a large-scale display. Did you know that com-bining four 1080p displays in a 2x2 configuration creates a 4K UHD video wall?

#### COMPREHENSIVE CONTROL

Dedicated software utilities give you access to important options like display grouping, layouts, and bezel correction. RS-232 control allows third-party systems to easily control options like power and source selection. Audio de-embedding options provide the ability to connect with external audio systems.





#### **BG-UHD-VWP-1X4**

4-Port 4K@60Hz Video Wall processor with Scaler, Audio and 1X3/1X4/2X2/4X1 Layouts



- HDMI and Display Port Inputs Up To 4K2K@60Hz 4:4:4
- Options Include Front Panel, LAN, IR, And USB Virtual Com
- Native, High-Bandwidth Digital Content Protection Supported
- · Remote Access And Control Using IntriCloud Service
- · HDMI 2.0a And DisplayPort 1.2a Inputs
- Resize, Position, and Zoom Each Individual HDMI Output
- · Sturdy metal construction
- · Great solution for digital signage

- · Five embedded default EDIDs
- Upgradable firmware for new features and technology enhancements
- · Switch between four layouts with the IR remote
- Save image parameters and layouts in the flash memory for easy recall
- Supports independent input rotation at resolutions up to 1080p60Hz
- · Ablility to adjust propagation delay on each display
- 4K2K@60Hz inputs can be divided onto four 1080p60Hz displays (2x2 only)

# **BG-UHD-VW2X2**

2X2 4K 60Hz HDMI Video Wall Controller with Audio



- · Input Up To 4K@60Hz 4:4:4
- $\cdot$  Spread a Source Across Multiple Displays
- · Additional Local Display Connectivity
- · 1 x RCA, 1 x TOSLINK
- · Choose From a Variety Of Video Wall Configurations
- Front panel, IR Remote, RS232
- · Compatible with HDCP2.2
- · Mirror mode available (2x2 only)
- · Edge shielding functions

- Sturdy metal housing
- Plug and play unit
- · Supports AUX and Spdif audio extraction
- 180° output rotation for installations with inverted displays
- · Output up to 1080p@60Hz on each display
- Configure for 1x1, 2x2, 1x2 (H), 1x3 (H), 1x4 (H), 2x1 (V), 3x1 (V), 4x1 (V) layouts





#### **BG-UHD-VW24**

4K UHD HDMI 2.0 2X2 Video Wall Processor with HDCP 2.2 and IP/RS232 Control

- · Inputs Support Up To 4K@60Hz
- Options Include TCP/IP, RS-232, HDMI CEC, and PC Software
- · HDMI 2.0 and HDCP 2.2
- · PIP Supported On Video Walls
- · 3.5mm and Balanced Analog Audio Outputs
- 180° Rotation and Dual-Mode Bezel Compensation
- · Human-body model ESD protection
- · Dual HDMI loop outs
- · Sturdy, metal case construction
- Supports CEC control through PC Tool or line commands
- · Easily upgradable firmware
- 2.0 channel, 5.1 channel, LPCM, Dolby, AC3, and DTS audio
- · Video wall resolutions up to 3840x2160@60Hz
- · Baud rate: 57600, data bit: 8, Stop bit: 1, no parity
- Loop out the HDMI A/B signal for devices connected to each output





#### **BG-UHD-VW29**

4K UHD HDMI 2.0 3X3 Video Wall Processor with HDCP 2.2 and IP/RS232 Control





- · Supports Resolutions Up To 4K@60Hz
- Options Include TCP/IP, RS-232, HDMI CEC, and PC Software
- · HDMI 2.0 and HDCP 2.2
- · PIP Supported On Video Walls
- · 3.5mm and Balanced Analog Audio Outputs
- $\cdot$  180° Rotation and Dual-Mode Bezel Compensation
- · Human-body model ESD protection
- · Dual HDMI loop outs
- · Sturdy, metal case construction
- Supports CEC control through PC Tool or line commands
- · Easily upgradable firmware
- 2.0 channel, 5.1 channel, LPCM, Dolby, AC3, and DTS audio
- · Video wall resolutions up to 3840x2160@60Hz
- Baud rate: 57600, data bit: 8, Stop bit: 1, no parity
- Loop out the HDMI A/B signal for devices connected to each output





#### BZ-MVS4X4-4K

4X4 4K UHD 18Gbps HDMI Video Wall Processor & Seamless Matrix Switcher with Scaler, IR and Audio



- Spread a Source Across Multiple Displays
- · View Any Source on Any Display
- Supports resolutions up to 4K@60Hz 4:4:4
- · Front Panel, TCP/IP, RS-232, IR remote, PC Software
- · HDMI 2.0, HDCP 2.2
- · Embedding and De-Embedding Supported
- · HDMI 2.0 and HDCP 2.2 compliant
- · Support 18 Gbps video bandwidth
- · Support video resolution up to 4K60 4:4:4

- · Color space: RGB, YCbCr 4:4:4, YCbCr 4:2:2
- Seamless matrix switching and video wall processing functions(2x2)
- · CEC management
- · Support audio matrix and IR matrix functions
- External L/R audio insert on HDMI streams
- · EDID management
- Front panel, RS232, TCP/IP (LAN 10M/100M) control

# BZ-MVS8X8-4K

8X8 4K UHD 18Gbps HDMI Video Wall Processor & Seamless Matrix Switcher with Scaler, IR and Audio



- · Seamless matrix switching
- · HDMI 2.0/HDCP 2.2 compliant
- · IR matrix routing
- · Audio De-embedding
- · External LR audio insert on HDMI stream
- · Auto/manual EDID management
- HDMI video output resolutions up to 3840x2160@60Hz
- · Control through front panel, RS232, TCP/IP

- 4K2K can be divided and displayed on 4 or 6 1080p displays (2x2, 3x2, 2x3 layouts)
- · PC tool needs no installation
- · 18Gbps bandwidth
- · Save/recall matrix scenes
- Up to 8 HDMI inputs and 8 HDMI outputs
- $\cdot$  IR matrix routing is followed with video routing
- · Unplug this device during lightning storms







	BG-UHD-VW	/P-1X4	
		Technical	
Role of usage	Video Wall Processor		
HDCP compliance		Yes	
Video bandwidth	Input – Single link	600MHz [18Gbps] Output –Single-link	225MHz [6.75Gbps]
Video support	Input – 4K2K@60 (4:2:2 8bit	s) / 4K2K@60 (4:4:4 8bits) Output – 192	20x1080@60 / 1920x1200@60
Video Format Support		HDMI / DisplayPort	
Audio support		Yes	
ESD protection	Human body mod	el — ±15kV [air-gap discharge] & ±8kV	[contact discharge]
Input	1	xHDMI + 1xDisplayPort + 1xUSB + 1xRJ4	45
Output	4x HDMI + 1xStereo		
Control	IR remote control / Ethernet / USB (virtual) / Front Panel / Cloud Control		
Input TMDS signal	1.2 Volts [peak-to-peak]		
HDMI connector	Type A [19-pin female]		
Mini-USB connector	Type A		
RJ-45 connector		WE/SS 8P8C	
Enclosure		Metal case	
Dimensions (L x W x H)	Model: 11.4"x7"x1.7" [290x180x44mm]	Package: 1'2"x9.4"x 4.4" [376x240x112mm]	Carton: 1'9"x1'7"x1'3" [590x510x405mm]
Weight	Model: 3.2lbs [1427g]		Package: 4.6lbs [2077g]
Fixedness	1U rack-mount with ears and Wall hanging holes		
Power supply	12V DC		
Power Consumption	12W		
Operation temperature	32~104°F [0~40°C]		
Storage temperature	-4~140°F [-20~60°C]		
Relative humidity	20~90% RH [no condensation]		



BG-UHD-VW2X2			
HDMI resolution	Input: Up to 4k@60Hz 4:4:4	Loop Out: Up to 4k@60Hz 4:4:4	Video Wall Output: Up to 1080p@60Hz
HDMI version		HDMI2.0, HDCP2.2	
Support video color format	30	6-bit Deep Color all channels maximu	m
Audio output	HDMI: P	CM 2CH / L\R: Stereo audio / Toslink: P	PCM 2CH
Max bandwidth per channel		600MHz	
Max baud rate per display		18Gbps (Input)	
Input/Output TMDS signal	0.5~1.5V p-p (TTL)		
Input/Output DDC signal	5V p-p (TTL)		
Input cable distance	≤16ft/5m 24 AWG HDMI high speed Cable at 1080P@ 60Hz		
Output cable distance	≤50ft/15m 24 AWG HDMI high speed Cable at 1080P@ 60Hz		
Operating Temperature range	5°F to 131°F / -15°C to 55°C		
Operating Humidity range	5% to 90% RH (No Condensation)		
Max working current	1A		
External Power Supply	DC12V/2A		



	BG-UHD-VW24	
	Technic	al
HDMI Compliance	HDMI 2.	0
HDCP Compliance	HDCP 2.2,	/1.4
RS-232	Baud rate: 57600, data bit: 8, Stop bit: 1, no parity	
	4096x2160p 24/25/30/50/60Hz	1400x1050 60Hz
	3840x2160p 24/25/30/50/60Hz	1366x768 60Hz
	1080p 24/25/30/50/60Hz	1360x768 60Hz
Input Video Formats	1080i 50/60Hz	1280x1024 60Hz
input video Formats	1920x1200 60Hz	1280x960 60Hz
	1680x1050 60Hz	1280x800 60Hz
	1600x1200 60Hz	1024x768 60Hz
	1440x900 60Hz	1280x720p 50/60Hz
Audio Format	2.0 channel, 5.1 channel, LPCM, Dolby, AC3, DTS	
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)	
	Mechanical	
Housing	Metal Enclosure	
Color	Black	
Dimensions	8.6"(W) x 5.7"mm(D) x 1.7"mm(H) [218n	nm(W) x 146mm(D) x 43mm(H)]
Weight	4.4 lbs [2l	kg]
Supply Voltage	+12V/3A	A
Power Consumption	25W (Ma	x)
Operating Temperature	32°F ~ 104°F [0°0	C ~ 40°C]
Storage Temperature	-4°F ~ 158°F [-20°	°C ~ 70°C]
Relative Humidity	10% ~ 50% RH (non-	condensing)



BG-UHD-VW29			
	General		
HDMI Version	HDMI 2.0, 18Gbps		
HDCP Compliance	HDCP 2.2 and HDCP 1.4		
RS232	57600 baud, 8 data bits, 1 stop bit, no parity		
	Video and Audio		
Input Video Formats Supported	1024x768@60, 1280x800@60, 1280x1024@60, 1280x960@60, 1360x768@60, 1366x768@60, 1440x900@60, 1400x1050@60, 1600x900@60, 1600x1050@60, 1600x900@60, 1600x1200@60, 1680x1050@60, 1920x1200@60, 480p@60, 576p@50, 720p@50, 720p@60, 1080i@50, 1080i@60, 1080p@24, 1080p@25, 1080p@30, 1080p@50, 1080p@60, 3840x2160@24, 3840x2160@25, 3840x2160@30, 3840x2160@50, 3840x2160@60, 4096x2160@24, 4096x2160@30, 4096x2160@50, 4096x2160@60		
Audio Format Supported	2.0 channel, 5.1 channel, LPCM, Dolby, AC3, DTS		
	Power Supply		
Power Consumption	70W max.		
Supply Voltage	110-220 VAC		
	Environmental and Physical		
Operating Temperature Range	+32°F to 104°F [0°C to +40°C]		
Operating Humidity Range	10 to 50% RH (non-condensing)		
Dimensions	L17.0" x W8.7" x H1.7" [L430 x W220 x H44 mm]		
Mass (Main Unit)	11lbs [5kg]		



	BZ-MVS4X4-4K
	Technical
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Up to 4K60 4:4:4
Color Space	RGB, YCbCr 4:4:4/4:2:2
HDMI Amplitude	T.M.D.S +/- 0.4Vpp
Differential Impedance	100±15ohm
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
	RS232/Ethernet Control
Baud rate and Protocol	Baud rate: 9600, data bit: 8 / Stop bit: 1, no parity checking
Ethernet	IE10.0+, HTML5
	Mechanical
Housing	Metal Enclosure
Color	Black
Dimensions	17" (W) $\times$ 8.7" (D) $\times$ 1.7" (H) [430mm (W) $\times$ 220mm (D) $\times$ 44mm (H)]
Weight	111bs [5kg]
Power Supply	AC 110 - 240V
Power Consumption	60W (Max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 158°F / -20°C ~ 70°C
Relative Humidity	10%~50% RH (non-condensing)



BZ-MVS8X8-4K		
Electrical parameters		
Interface	HDMI-A	
HDMI / DP / VGA Version	HDMI2.0, HDCP2.2	
Bandwidth	18Gbps	
	Video Resolution	
Input	800x600@60Hz, 1024x768@60Hz, 1280x768@60Hz, 1280x800@60Hz, 1280x1024@60Hz,1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1200@60Hz. 480p,576p,720p,1920x1080i,1920x1080p, 3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz, 4096x2160@24Hz/25Hz/30Hz/50Hz/60Hz	
Output	1920x1080@60Hz, 3840x2160@30Hz, 3840x2160@60Hz, 1280x720@60Hz, 1024x768@60Hz, 1360x768@60Hz, 1600x1200@60Hz, 1920x1200@60Hz	
HDMI Amplitude	T.M.D.S +/- 0.4Vpp	
Differential impedance	100±15ohm	
	RS232/Ethernet control	
Baud rate and protocol	Baud rate: 9600, data bit: 8 / stop bit: 1, no parity checking	
Ethernet	IE10.0+, HTML5	
	Power	
Max Consumption	100W, 110-240VAC	
	Matrix Mechanical dimensions	
Size(mm)	17"(L) x 11.8"(W) x 1.7"(H) [430(L) x 300(W) x 44(H) mm]	
Weight	11lbs [5kg]	
	Other	
Operating temperature	32°F ~ 104°F / 0°C ~ 40°C	
Storage temperature	-4°F ~ 158°F / -20°C ~ 70°C	
Permissible humidity	10%-50%	

# MULTIVIEWERS



# **BEYOND PICTURE IN PICTURE**

A 4K multiviewer from BZBGEAR allows you to display multiple sources simultaneously on a single screen. Think picture in picture - but better!

# **CREATE CUSTOM LAYOUTS**

With the accompanying PC software utility (certain models) you can create your own custom arrangements. Each source is fully adjustable for both size and position on screen, allowing you to dial in the perfect setup.

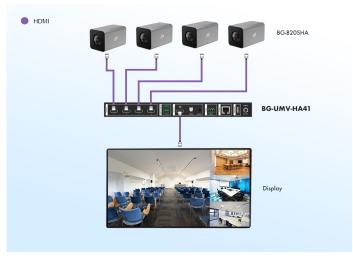
#### **ULTRA HD CLARITY**

With support for resolutions up to 4K, BZBGEAR mutiviewers produce outstanding images that pair perfectly with the highest quality displays on the market.

#### **EASY TO USE**

Multiple control options make operation a breeze. Whether it's the PC Utility, IR remote, front panel buttons, or using RS232 with a third-party control system, BZBGEAR multiviewers are a breeze to operate.





#### **BG-MKVM41R**

4X1 Full HD HDMI/USB 2.0 Seamless Quad KVM Multiviewer



- · Compliant with HDMI 1.3a, HDCP 1.2
- Supports multiplexed HDMI 4-input and 1-output
- Supports up to 1080p@60Hz High Definition resolution
- Support 4 by 1 Quad Multi-viewer and seamless switch (with same resolution)
- · Support seamless switch

- Supports the unique 4IN1 Multi-Viewer mode, which allows you to operate 4 PCs with a keyboard&mouse on the same screen without switching
- Support mouse button, keyboard hot keys, front panel button, IR control
- · Support multi output resolution

# BG-MV41A

4X1 Multiviewer with Scaler supporting multi output resolutions up to 1080p@60Hz



- · HDMI 1.3a, HDCP 1.2
- Resolutions up to 1080p@60Hz Supported
- · Use as a Switcher, Monitor, Converter, or Multiviewer
- 4x1 Quad Multiview (With Matching Resolutions)
- Output Resolutions Can Be Adjusted Via The IR Remote
- Upscale 720p Into 1080p And Downscale 1080p To 720p
- · Sturdy metal chassis
- · Quick, seamless switching
- · Easy to install and operate
- · Sturdy metal chassis
- · RS232 signal passthrough
- · Selectable audio output
- · Lock in power supply





# **BG-UMV-HA41**

4X1 4K HDMI Seamless Switcher/Scaler with Audio and Multiview



This 4K multi-view switcher is a great fit for anyone looking to seamlessly flow between presentations and videos on one display, as well as simultaneously view up to four video sources on that display via a single HDMI output. Video sources shown either in full screen or through multi-view windows can be easily swapped with the push of a button from the IR remote and several other helpful control options to monitor multiple video sources at once.

Thanks to its 4K@30 Hz resolution, every detail is captured from each video source. Two audio outputs also support audio de-embedding to extract audio from your sessions. Audio embedding options are also available via two inputs on the device.

# **FEATURES**

- · Input Up To 4K@30Hz 4:4:4 Chroma
- IR remote, RS-232, Web GUI, or Front Panel Buttons
- Quick And Easy Source Switching
- $\cdot$  3-Pin Line-In And Mix Inputs
- 3.5mm Analog And TOSLINK Digital Outputs
- Simultaneously Display Multiple Inputs On A Single Monitor
- · Based on FPGA technology

- · SNR > 90dB, 20Hz-20 kHz bandwidth
- $\cdot$  Resize the windows with 3 different options
- · Upgradeable firmware
- · Auto-scaling for each source input
- · Single window auto-switching
- · Rack mountable, all metal construction
- · Cascadable for up to 16 screens on 1 display
- 16 pre-defined layouts

- · Conference Rooms
- · Surveillance Monitoring
- Presentation Spaces

- Security
- · Guards Educators
- Live Speakers





# **BG-UHD-QVP-4X2**

4K/UHD 4X2 Seamless Multiviewer/Presentation Switcher/Scaler with USB Capture Card



Whether for digital signage, presentation spaces, conference rooms, or live broadcasting, the BG-UHD-QVP-4X2 is the video processor for the job. With four HDMI inputs and two HDMI outputs supporting 4K2K@60Hz 4:4:4 Chroma resolution, this device allows users to quickly transition between sources using transitions like dissolve, fade, and wipe with no signal interruption.

The two 4K@60Hz HDMI inputs on the BG-UHD-QVP-4X2 are HDCP 1.4/2.2 compliant. With the UVC outputs, monitoring is enabled via HDMI, USB 3.0, and 3.5mm stereo audio out. When using USB 3.0, video is output at 1080p@60Hz resolution.

#### **FEATURES**

- Input Resolutions Up To 4k@60Hz 4:4:4 Chroma
- Quick And Easy Source Switching
- IR remote, RS-232, Web GUI, or Front Panel Buttons
- Convert HDMI Sources And Output Via USB 3.0 At Up To 1080p@60Hz
- · UVC1.0 Monitor Output
- Extract Audio From Current HDMI Input
- · Resize, position, pan, zoom, and blend

- · Multiple transitions in full-screen mode
- Customizable graphics
- PIP, PBP, POP, full-screen, & quad-view
- · 4x HDMI inputs and 2x HDMI outputs
- Upgradable firmware
- · Supports uncompressed 7.1 ch HDMI audio
- Functions as video converter/switcher
- HDCP 1.4/2.2 compliant

- · Conference Rooms
- · Studios
- Meeting Halls

- · Broadcasters and Streamers
- · Houses of worship
- Schools







	BG-MKVM41R
	Signal Inputs/Output
Maximum Single Link Range	1920x1080@60
HDMI Input/Output Connector	Type A 19 pin
	Operating Frequency
Vertical Frequency Range	50/60Hz
Video Amplifier Bandwidth	2.25Gbps
	Resolutions
Input Resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@24/25/30/50/60Hz
Output Resolution	720p, 1080p
	Mechanical Data
Chassis Material	Metal
Color	Black
	Environmental
Operating Temperature	32°F to +158°F / 0°C to +70°C
Operating Humidity	10% to 85% RH (no condensation)
Storage Temperature	14°F to 176°F / -10°C to +80°C
Storage Humidity	5% to 90% RH (no condensation)
	Power Requirement
External Power Supply	12V DC@2A
Power Consumption (max)	24W
	Regulatory Approvals
Main Unit	FCC, CE
Power Supply	UL, CE, FC C, REACH, ROHS



	BG-MV41A
	Signal Inputs/Output
Maximum Single Link Range	1920x1080@60
HDMI Input/Output Connector	Type A 19 pin
	Operating Frequency
Vertical Frequency Range	50/60Hz
Video Amplifier Bandwidth	2.25Gbps
	Resolutions
Input Resolution	480i60Hz, 480p60Hz, 576i50Hz, 576p50Hz, 720p50/60Hz, 1080i50/60Hz, 1080p24/25/30/50/60Hz
Output Resolution	720p, 1080p
	Mechanical Data
Dimensions	$5.8"(W) \times 4.0"(D) \times 0.83"(H)$ [148.5mm(W) × 103mm (D) × 21.5mm(H)]
Weight	0.75lbs [342g]
Chassis Material	Metal
Color	Black
	Environmental
Operating Temperature	32°F to 158°F / 0°C to +70°C
Operating Humidity	10% to 85% RH (no condensation)
Storage Temperature	14°F to 176°F / -10°C to +80°C
Storage Humidity	5% to 90% RH (no condensation)
	Power Requirement
External Power Supply	12V DC@2A
Power Consumption (max)	10W
	Regulatory Approvals
Main Unit	FCC, CE
Power Supply	UL, CE, FC C, REACH, ROHS



	BG-UMV-HA41
	Video
Video Input	(4) HDMI IN (1~4)
Video Input Connector	(4) Type-A female HDMI
HDMI Input Resolution	Up to 4K@30Hz 4:4:4
Video Output	(1) HDMI
Video Output Connector	(1) Type-A female HDMI
HDMI Output Resolution	Up to 4K@30Hz RGB
HDMI Standard	HDMI 1.4
HDCP Version	Up to HDCP 2.2
	Audio IN
Audio In	(1) LINE IN, (1) MIX IN
Audio In Connector	(2) 3-pin terminal connectors
Frequency Response	20Hz to 20kHz, ±3dB
Max Input Level	2.0Vrms ± 0.5 dB. 2V=16 B headroom above -10dBV (316 mV) nominal consumer line level signal
L-R level deviation	< 0.3dB, 1kHz sine at 0dBFS level (or max level before clipping)
Input Impedance	> 10kohm
Audio Format	PCM 2CH
	SPDIF OUT
SPDIF Out	(1) SPDIF
Audio Out Connector	(1) Toslink
Max Output level	±0.05dBFS
Frequency Response	20Hz ~ 20kHz, ±1dB
THD+N	< 0.05%, 20Hz ~ 20kHz bandwidth, 1kHz sine at 0 dBFS level (or max level)
Signal-to-Noise Ratio	> 90dB, 20Hz-20 kHz bandwidth
Crosstalk isolation	< -70dB, 10kHz sine at 0dBFS level (or max level before clipping)
Noise	-90dB
Audio Format	PCM 2CH
	Audio OUT
Audio Out	(1) AUDIO
Audio Out Connector	(1) 3.5mm mini jack
Frequency Response	20Hz ~ 20kHz, ±1dB
Max Output Level	2.0Vrms ± 0.5dB. 2V=16dB headroom above -10dBV (316 mV) nominal consumer line level signal
THD+N	< 0.05%, 20Hz ~ 20kHz bandwidth, 1kHz sine at 0dBFS level (or max level)
Signal-to-Noise Ratio	> 80dB, 20Hz ~ 20kHz bandwidth
Crosstalk Isolation	< -80dB, 10kHz sine at 0dBFS level (or max level before clipping)
L-R Level Deviation	< 0.05dB, 1kHz sine at 0dBFS level (or max level before clipping)
Output Load Capability	1kohm and higher (supports 10x paralleled 10kohm loads)
Noise	-80dB
	Control
Control port	(1)RS232, (1)TCP/IP
Control Connector	(1) 3-pin terminal connector, (1) RJ45
	General
Operation Temperature	5°F to 131°F / -15°C to 55°C
Storage Temperature	-13°F to 158°F / -25°C ~ +70°C
Relative Humidity	10% ~ 90%
External Power Supply	Input: AC 100~240V, 50/60Hz; Output: 24V DC 1.25A
Power Consumption	13W (Max)
Dimension (W*H*D)	11.2" x 1" x 6.8" [285mm x 27mm x 172.5mm]
Net Weight	2.73lbs [1.24Kg]



	BG-UHD-QVF	P-4X2	
		Technical Specs	
Role of usage	Multiplexer / video processor		
Background picture update		Yes	
HDMI compliance		HDMI 2.0a	
HDCP compliance		1.4 / 2.2	
Video bandwidth		HDMI (600MHz [18Gbps])	
Output Video Support		Up to 4K2K@60 (4:4:4 8bits)	
Video support		Up to 1080p60	
Input Video Support	Up to 4K2K@60 (4:4:4 8bits)		
Video Format Support		HDMI 2.0	
Audio support		Bypass	
Embedded video mixer		Yes	
Input TMDS signal		1.2 Volts [peak to peak]	
Recording Mode		Software Compression	
Recording Video Format		YUY2 (USB3.0), MJPG (USB2.0/3.0)	
ESD protection	Human body mode	el — ± 15kV [air-gap discharge] & ±8kV	[contact discharge]
Input	4x HDMI	+ 1x RS 232 + 1x RJ 45(Ethernet) + 1x 3.	5mm (IR)
Output	2x HDMI + 1x USB + 2x RCA + 1x 3.5mm		
HDMI connector		Type A [19-pin female]	
USB connector		USB 3.0 Type A (SuperSpeed USB)	
RS-232 connector		DE-9 [9-pin D-sub female]	
RJ-45 connector		WE/SS 8P8C	
Software compatibility (not complete list) (Video Capture Function)		ap (Windows), Potplayer (Windows) ¸ S X), Zoom (Windows), Hangout (Win	
OS Support (Video Capture Function)		Windows 7 / 8.1 / 10, Mac and Linux OS	
		Mechanical	
Housing		Metal enclosure	
Dimensions (L x W x H)	Model 1'3" x 9.8" x 1.7" [390 x 248 x 44mm]	Package 1'7" x 12.5" x 6.1" [526 x 318 x 156mm]	Carton 1'8" x 13.2" x 1'1" [543 x 335 x 344mm]
Weight	Model 5 lbs [2.2 kg]		Package 7.8 lbs [3.5 kg]
Power supply		12V 5A DC	
Power Consumption	22 Watts [max]		
Power Consumption	12 Watt [max]		
Operation temperature	32~104°F / 0~40°C		
Storage temperature	-4~140°F / -20~60°C		
Relative humidity	20~90% RH [no condensation]		

# PRESENTATION SWITCHERS



# **CLEAN UP YOUR MEETING SPACE**

Presentation switchers provide a common connection point for all your devices and peripherals. Connect computers, peripherals, and assorted video sources to your switcher, and eliminate long runs of messy wires.

# SIMPLIFIED OPERATION

A presentation switcher gives you a single device to host all your sources, letting you quickly and easily toggle between them at the touch of a button. No more toggling TV inputs or searching for remote controls

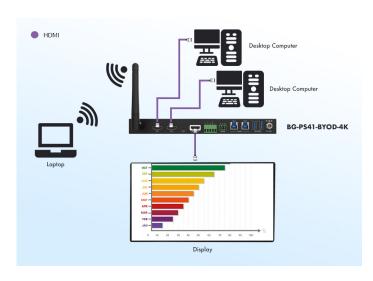
#### **ULTRA HD CLARITY**

With support for resolutions up to 4K, BZBGEAR switchers produce outstanding images that ensure your presentation looks its best.

# **NO WIRES NEEDED**

Our wireless presentation switchers feature Airplay and Miracast. This means you can connect any iOS, MacOS, or Windows device wirelessly. Collaboration has never been this easy!





#### **BG-PS21-4K**

2-Port 4K 60Hz KVM Presentation Switcher with HDMI and USB-C Inputs and HDMI out



Built for flexible digital presentations, the BG-PS21-4K is a KVM switcher that enables two devices to be connected to the same display at output resolutions of up to 4K@60Hz. Thanks to its USB-A ports, users can control two connected devices with one mouse and keyboard. These USB peripherals can be shared between the HDMI/Host connections and the USB-C connection. The device will also automatically switch inputs when a signal is detected via HDMI.

With the ability to de-embed audio and support for audio formats such as LPCM 7.1 audio, Dolby Digital® Plus, and DTS-HD® Master Audio $^{TM}$ , you'll be able to capture crystal clear audio from your presentations.

# **FEATURES**

- · Input Resolutions Up To 4K2K@60Hz
- · Easy To Install And Use
- LPCM 7.1, Dolby Atmos®, TrueHD, Digital® Plus, DTS:
   X™, And DTS-HD® Master Audio™ Pass-Through
- · Eliminates Connection Issues
- Automatically Selects Input When Change In Signal Is Detected
- High-Bandwidth Digital Content Protection Creates A Secure Source To Display Connection
- 18G 2x1 switcher with HDMI and USB-C inputs
- · Supports automatic switching

- Controllable via front panel buttons and RS232
- Supports HDMI 2.0, 4Kx2K@60Hz 4:4:4, HDR 10, Dolby Vision, HDCP 2.2
- · Provides charging on USB-C port up to 40W
- Provides USB data (USB 3.0/2.0) and 4K video transmission on USB-C port
- Smart EDID management for various applications and customized settings
- · Balanced analog audio for audio de-embedding
- Front panel buttons trigger both CEC and RS232 commands for display control

- · Conference Rooms
- · Small Businesses

- Auditoriums
- · Schools/Universities
- · Classrooms
- Hospitals





#### **BG-UHD-KVM41**

Conference Room 4-Port HDMI USB3.0 4K HDR 60Hz KVM Presentation Switcher



The BG-PSC11X2-HDBT is a 11x2 multi-format video presentation switcher and scaler. This device features 11 inputs of various video formats including HDMI, HDBaseT, VGA, component, and composite. Video sources can be scaled to various aspect ratios and resolutions from 640x480 up to 1920x1080@60Hz. The switchable digital bypass allows for HDMI output signals up to 4k@30Hz.

Users can simultaneously output video signals from both the HDMI and HDBaseT ports. The HDBaseT output is capable of transmitting signals to a remote display location up to 100m (330 feet) away utilizing a Cat6 ethernet cable.

#### **FEATURES**

- · 4X1 HDMI 2.0 Switcher with KVM
- Supports video resolution up to 4Kx2K@60Hz 4:4:4, HDR 10 and Dolby Vision
- · HDCP 2.2 compliant
- Compatible with Windows, Linux and Mac OS  $\,$
- Convenient and cost-effective USB 3.0 peripheral sharing
- · 3.5mm stereo audio output for audio De-embedding
- Controls four HDMI computers via one keyboard, one mouse and one monitor
- KVM auto-switching based on TMDS/5V detection
- Controllable by buttons, RS232 commands and BG-SC-GRHU table grommets
- · Simplifies wiring for easy installation

# **BG-SC-GRHU**

#### HDMI and USB3.0 Table Grommets for BZBGEAR BG-UHD-KVM41

The BG-SC-GRHU is a table grommet for BZBGEAR's BG-UHD-KVM41 switcher. Each grommet supports resolutions up to 4Kx2K@60Hz 4:4:4 and features an HDMI input, USB 3.0 connection, and controls for source selection and video mute.

Users can connect their devices via the HDMI or Type B USB inputs. The HDMI and Type-A USB outputs provide the direct connection to the switcher.

Each grommet additionally has a 3-pin terminal control block to connect to the GR1~GR4 ports of the BG-UHD-KVM41 switcher, providing support for workstations or conferencing setups with the need to easily switch between and control multiple computers.







#### **BG-PS41-BYOD-4K**

4-Port 4K Conference Room Wireless Presentation Switcher w/HDMI/USB-C/Soft Codec



The BG-PS41-BYOD-4K is a powerhouse, enabling users to connect several devices to one display with 4K@30Hz 4:4:4 resolution. This 4x1 presentation switcher is the perfect fit for small businesses and private conference rooms thanks to its wireless Bring Your Own Device (BYOD) features - removing the need for a dedicated device for this presentation switcher. It also has four wired inputs including two HDMI, one USB-C, and one HDMI output. Wireless connectivity provides support for both Airplay and Miracast, making it easier than ever to quickly connect multiple devices for a conference, meeting, or presentation.

# **FEATURES**

- · Outputs resolutions up to 4K@30Hz 4:4:4
- · Provides support for third-party control systems
- · Automatically selects new source devices
- Simple wireless connection via Airplay and Miracast
- · Smart EDID management
- · 2 x Type-A, 2 x Type-B, 1 x Type-C
- · 4K Outputs resolutions up to 4K@30Hz 4:4:4
- RS-232 Provides support for third-party control systems
- Auto-Switching Automatically selects new source devices
- USB 3.0 2 x Type-A, 2 x Type-B, 1 x Type-C EDID -Smart
- EDID management

- BYOD Simple wireless connection via Airplay and Miracast
- 18G 4x1 presentation switcher with wireless BYOD
- Supports HDMI 2.0b, 4Kx2K@60Hz 4:4:4, HDR 10, Dolby Vision and HDCP 2.2
- Wireless BYOD (Bring Your Own Device) capability via AirPlay and Miracast
- Provide up to 60w charging, USB data (USB 3.0/2.0) and 4K video transmission on USB-C port
- HDMI output audio can be de-embedded out via balanced analog audio port
- Front panel buttons trigger both CEC and RS232 commands for display control

- · Conference Rooms
- · Auditoriums
- Classrooms

- · IT Specialists
- Businesses
- · School Administrators





#### **BG-PSC6X2-4K**

6X2 4K Conference Room Presentation Switcher Scaler w/HDMI/VGA/USB-C/DP & Audio



# **FEATURES**

- · Supports Resolutions up to 4K@60 4:4:4.
- · 48V phantom power.
- Front panel, IR, RS-232, TCP/IP.
- · Embed or De-Embed audio signals.
- · 3xHDMI, 1xVGA w/audio, 1xUSB-C, 1xDisplayPort.
- · 2xHDMI Outputs.
- · 4K@60Hz 4:4:4, HDR10, HLG and full 3D
- · Switch & Scale 6 sources to 2 displays
- 3x HDMI input, 1x VGA w/Audio input, 1x USB-C input, 1x DisplayPort input

- · 2x HDMI mirrored outputs
- 1x MIC line level audio input (70 Db) with phantom power
- · Audio embedding and de-embedding
- · 3x HDMI inputs support CEC pass-through
- · Scaling from 640x480 to 4096x2160@60Hz
- Front-panel LCD display for status feedback
- Front-panel button, IR remote control, RS-232, TCP/IP and WebGUI for control
- · HDCP 2.2 compliant

# **BG-PSC7X2**

7X2 4K Presentation Switcher Scaler w/HDMI/VGA/Component/Composite Video & Audio



#### **FEATURES**

- Multiple Inputs 3xHDMI, 1xVGA w/audio, 1xUSB-C, 1 Display Port
- Multi Display Support 2xHDMI Outputs
- Auto-Scaling Accepts input resolutions up to 4K@60, outputs scale to 1080P
- · 4K Supports Resolutions up to 4K@60 4:4:4
- · Multiple Control Options Front panel, IR, RS-232,
- · TCP/IP
- ${\boldsymbol{\cdot}}\,$  Audio Support Embed or De-Embed audio signals





#### **BG-PSC8X2HDB**

8X2 18Gbps UHD Seamless Presentation Switcher with HDBaseT



The BG-PSC8X2HDB is an 18Gbps 8x2 seamless 4K presentation switcher. Equipped with 8 video inputs including 6 HDMI ports, 1 Display Port, and 1 VGA port, this HDMI 2.0, HDCP 2.2 and DP 1.2 compliant unit supports multi-format signal processing for seamless switching between all sources. It features automatic input scaling at resolutions up to 4K@60Hz 4:4:4.

#### **FEATURES**

- Ultra HD refers to a TV resolution of 3840 x 2160 pixels.
- Features adjustable trim and 48V Phantom Power.
- Extend signal up to 70 meters at 1080P, or 45 meters at 4K
- · Power 2 speakers via 20W stereo outputs.
- · Eliminates video compatibility issues.
- · Bi-Directional IR, RS232, and IP Control.
- · HDMI 2.0, HDCP 2.2 and DP 1.2 compliant
- · Support 18 Gbps video bandwidth
- Mirrored output with HDMI and HDBaseT output ports

- · Support seamless switching
- 8 video inputs: 6 HDMI ports, 1 DP port, 1 VGA port
- 9 audio source selections (LR1 to LR8 and embedded audio) for HDMI/DP input
- 8 Audio source selections (LR1 to LR8 ) for VGA video input
- Speaker and Microphone volume can be controlled by front panel or PC Tool
- · Additional IO function (2 outputs, 2 inputs)

#### **BG-PSC8X2-REC**

# 70-meter HDBaseT Extender for BG-PSC8X2HDB

The BG-PSC8X2-REC is an HDMI HDBaseT receiver designed to pair with BZBGEAR's BG-PSC8X2HDB presentation switcher. Supporting display resolutions up to 4Kx2K@60Hz, this device is designed to accept an HDBaseT signal which can be transmitted with a Cat5e/Cat6 cable at distances up to 70 meters at 4K@30Hz or up to 100 meters at 1080P@60Hz. Full HD support: 1080p@60Hz@48 bit/pixels, 1080p@120Hz@24 bit/ pixels, 3D 1080P60Hz and 4K x 2K@30Hz@24bit.

- · Transmit IR, RS232, and IP control signals.
- · Receivers need no power supply.
- Transmit signal up to 100 meters (328 feet).
- Slim components make a clean installation easy.
- Multiple selectable EDID modes ensure reliable connectivity.
- Use single UTP LAN cable (CAT-5E/6) to substitute HDMI cable to achieve long distances transmission







# **BG-PSC11X2-HDBT**

11X2 Presentation Scaler Switcher w/VGA/HDMI/YPbPr/CV/HDBaseT Input and Output





The BG-PSC11X2-HDBT is a 11x2 multi-format video presentation switcher and scaler. This device features 11 inputs of various video formats including HDMI, HDBaseT, VGA, component, and composite. Video sources can be scaled to various aspect ratios and resolutions from 640x480 up to 1920x1080@60Hz. The switchable digital bypass allows for HDMI output signals up to 4k@30Hz.

Users can simultaneously output video signals from both the HDMI and HDBaseT ports. The HDBaseT output is capable of transmitting signals to a remote display location up to 100m (330 feet) away utilizing a Cat6 ethernet cable.

# **FEATURES**

- $\cdot\,$  Transmit resolutions up to 4K @ 30Hz.
- 1x input, 1x output, transmits up to 100m over Cat6.
- 4x HDMI, 4x VGA, 1x Component, 1x Composite, 1x HDBaseT.
- Controllable via front panel, IR, TCP/IP or RS-232.
- · Output audio via analog or S/PDIF connections.
- Able to scale from 640x480 to 1920x1080 @ 60Hz.
- Switch & Scale 11-inputs to 2 HD/UHD displays
- 4x HDMI, 4x VGA, 1x YPbPr, 1x Composite, 1xHDBaseT Inputs
- 2 simultaneous outputs (1x HDMI, 1x HDBaseT), bypass and scaled formatted output selectableDual mode selectable (1x2 Splitter Mode and 5x1 &11x1 Dual Switcher Mode)

- · Scaling from 640x480 to 1920x1080@60Hz
- · HDTV formats up to 4K@30Hz
- HDBaseT POE Transmitter & Receiver supports distance up to 330ft /100m
- · With built in Ethernet Hub
- · HDCP 1.4 compliant
- · Audio embedder and audio extractor
- · OSD menu for volume control and resolution selection
- · Controllable via front panel, IR remote, TCP/IP or RS232
- Front-panel LCD display for status feedback
- · Easy installation with rack-mounting ears

- · Conference Rooms
- Auditoriums
- · Production Studios

- Businesses
- · Schools/Universities
- · Video Production Teams







	BG-PS41-BYOD-4K	
Video		
Video Input	(1) AirPlay/Miracast, (2) HDMI, (1) USB-C	
Video Input Connector	(1) External antenna connector, (2) Type-A female HDMI, (1) Type-C USB 3.0	
AirPlay/Miracast Input Resolution	Up to 4K@30Hz 4:4:4	
HDMI Input Resolution	Up to 4Kx2K@60Hz 4:4:4 HDR10, Dolby Vision	
USB-C Input Resolution	Up to 4K@30Hz 4:4:4	
Video Output	(1) HDMI	
Video Output Connector	(1) Type-A female HDMI	
HDMI Output Resolution	Up to 4Kx2K@60Hz 4:4:4 HDR10, Dolby Vision	
HDMI Standard	Up to HDMI 2.0b	
HDCP Version	Up to HDCP 2.2	
	Audio	
HDMI Embedded Audio Format	Supports Dolby Atmos, Dolby TrueHD, Dolby Digital Plus, Dolby Digital, DTS-X, DTS-HD Master Audio, DTS  5.1, 2 - 8Ch PCM 32-192kHz 16-24 bits; 2-8Ch PCM 32-192kHz 16-24 bits	
Balanced Analog Audio Output	(1) AUDIO OUT	
Balanced Analog Audio Output Connector	(1) 5-pin terminal block	
Frequency Response	20Hz-20KHz, ±3dB	
Max Output Level	2.0Vrms ± 0.5dB	
THD+N	< 0.05%, 20Hz – 20KHz bandwidth, 1KHz sine at 0dBFS level (or max level)	
SNR	>80dB, 20Hz - 20KHz bandwidth	
Crosstalk Isolation	<-80dB, 10KHz sine at 0dBFS level (or max level before clipping)	
L-R Level Deviation	<0.05dB, 1KHz sine at 0dBFS level (or max level before clipping)	
Output Load Capability	1K $\Omega$ and higher (Supports 10x paralleled 10K $\Omega$ loads)	
Noise Level	-80dB	
	Control	
Control	(1) 4-pin DIP switch, (1) FW, (2) HOST (PC1&PC2), (2) DEVICES, (1) RS232	
Control Connector	(1) Micro-USB, (2) Type-B USB 3.0, (2) Type-A USB 3.0, (1) 3-pin terminal block	
	Network Connectivity	
WLAN Standards	IEEE 802.11ac	
Band	2.4 and 5GHz	
Max. Wireless Coverage	≤5m, environment dependent, reduce disturbance to increase transmission distance up to 10m	
Max. Output Resolution	4K/30Hz	
Version	iOS 7 or above, MacOS, Android 4.0 or above,Windows8.1 or above.  General	
Operation Temperature	23 ~ 131°F / -5 ~ +55°C	
Storage Temperature	-13 ~ 158°F / -25 ~ +70°C	
Relative Humidity	10% ~ 90%	
External Power Supply	Input: AC 100~240V, 50/60Hz; Output: 24V DC 5A	
Power Consumption	85W (Max)	
USB-C Power Charging	60W (Max)	
Dimension (W*H*D)	9.4" x 0.98" x 5.3" [238mm x 24.5mm x 135mm]	
Net Weight	1.8lbs [825g]	



	BG-UHD-KVM41
	Video Input
Input	(4) SOURCE 1~4
Input Connector	(4) Female type-A HDMI
HDMI Input Resolution	Up to 4Kx2K@60Hz 4:4:4, HDR10, Dolby Vision
HDMI Standard	2.0
HDCP Version	2.2
	Video Output
Output	(1) DISPLAY
Output Connector	(1) Female type-A HDMI
HDMI Output Resolution	Up to 4Kx2K@60Hz 4:4:4, HDR10, Dolby Vision
HDMI Standard	2.0
HDCP Version	2.2
	Audio
Output	(1) AUDIO OUT
Output Connector	(1) 3.5mm mini stereo audio jack
Audio Format	PCM 2CH
Frequency Response	20Hz to 20KHz, ±1dB
Max Output Level	2.0Vrms ± 0.5dB. 2V = 16dB headroom above -10dBV (316 mV) nominal consumer line level signal.
THD+N	< 0.05%, 20Hz - 20KHz bandwidth, 1KHz sine at 0dBFS level (or max level).
SNR	> 80dB, 20Hz - 20KHz bandwidth.
Crosstalk Isolation	
	< -80 dB, 10 kHz sine at 0dBFS level (or max level before clipping).
L-R Level Deviation	< 0.05 dB, 1 kHz sine at 0dBFS level (or max level before clipping).
Output Load Capability	1Kohm and higher (supports 10x paralleled 10k ohm loads).
Noise Level	-80dB
	Control
Control	(1) FW, (4) PC 1~4, (3) DEVICES 1~3, (4) GR 1~4, (1) RS232
Control Connector	(1) Micro-USB, (4) Type-B USB, (3) Type-A USB, (5) 3-pin Terminal Blocks
	General
Bandwidth	18Gbps
Operation Temperature	14°F ~ +131°F / -10°C ~ +55°C
Storage Temperature	-25°F ~ +158°F / -25°C ~ +70°C
Relative Humility	10%-90%
Type-A USB Power Supply	1A
System Power Supply	Input: 100V~240V AC; Output: 12V DC 2A
System Power Consumption	14W (Max)
Dimension (W*H*D)	7.9" x 1.6" x 3.9" [200mm x 40mm x 100mm]
Net Weight	1.5lbs [685g]
	BG-SC-GRHU Table Grommet
	Video Input
Input	(1) HDMI
Input Connector	(1) Female type-A HDMI
	Video Output
Output	(1) HDMI
Output Connector	(1) Female type-A HDMI
	Control
Control Connector	(1) Type-B USB, (1) Type-A USB, (1) 3-pin Terminal Block
	General
Resolution Range	Up to 4Kx2K@60Hz 4:4:4, HDR10, Dolby Vision
Operation Temperature	14°F ~ +131°F / -10°C ~ +55°C
Storage Temperature	-25°F ~ +158°F / -25°C ~ +70°C
Relative Humility	10%-90%
Dimension (W*H*D)	3.0" x 1.2" x 3.0" [76mm x 29.6mm x 76mm]
Difficusion (vv H D)	3.0 X 1.2 X 3.0 [70HHH X 25.0HHH X 76HHH]



	BG-PS21-4K
	Video
Video Input	(1) HDMI, (1) USB-C
Video Input Connector	(1) Type-A female HDMI, (1) Type-C USB
HDMI Input Resolution	Up to 4Kx2K@60Hz 4:4:4 8bit
USB-C Input Resolution	Up to 4Kx2K@30Hz 4:4:4
Video Output	(1) HDMI
Video Output Connector	(1) Type-A female HDMI
HDMI Output Resolution	Up to 4Kx2K@60Hz 4:4:4 8bit
HDMI Version	2.0
HDCP Version	2.2
USB Version	3.0
HDR 10	Supported
CEC	Supported
HPD	Supported
	Audio
Audio Output	(1) AUDIO OUT (Stereo balanced L/R)
Audio Output Connector	(1) 5-pin terminal block
HDMI Audio Format	LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS: X™, and DTS-HD® Master Audio™ pass-through
Stereo balanced L/R audio Format	PCM
Max Output Level	$2.0 \text{Vrms} \pm 0.5 \text{dB}$ . $2 \text{V} = 16 \text{dB}$ headroom above -10 dBV (316 mV) nominal consumer line level signal
THD+N	<0.05% (-80dB), 20Hz ~ 20KHz bandwidth, 1KHz sine at 0dBFS level (or max level)
SNR	>80dB, 20Hz ~ 20KHz bandwidth
Crosstalk Isolation	>70dB, 10KHz sine at 0dBFS level (or max level before clipping)
L-R Level Deviation	< 0.3dB, 1KHz sine at 0dBFS level (or max level before clipping)
Frequency Response Deviation	<±0.5dB 20Hz ~ 20KHz
Output Load Capability	1K $\Omega$ and higher (supports 10x paralleled 10K $\Omega$ loads)
Stereo Channel Separation	>70dB@1KHz
	Control Part
Control	(1) EDID, (1) FW, (1) RS232, (1) HOST, (2) DEVICE
Control Connector	(1) 4-pin DIP switch, (1) Micro-USB, (1) 3-pin terminal block, (1) Type-B USB 3.0, (2) Type-A USB 3.0
	General
HDMI 2.0 Cable Length	4K@60Hz 4:4:4 ≤ 5m, 4K@60Hz 4:2:0 ≤ 10m, 1080P ≤ 15m
Bandwidth	18Gbps
Operation Temperature	14°F ~ 131°F [-10°C ~ +55°C]
Storage Temperature	-13°F ~ 158°F [-25°C ~ +70°C]
Relative Humility	10% ~ 90%
External Power Supply	Input: AC 100~240V, 50/60Hz, Output: 24V DC 2.71A
Power Consumption	54W (Max)
Dimension (W*H*D)	6.6" x 1.0" x 3.7" [168.0mm x 24.5mm x 95.0mm]
Net Weight	0.54lbs [245g]

# PRESENTATION SWITCHERS



BG-PSC6X2-4K	
Specifications	
Bandwidth	18Cbps
Video Input Connectors	3x HDMI Type A, 1x VGA, 1x USB-C, 1x DP
Video Output Connectors	2x HDMI Type A
Audio Input Connectors	1x 3.5mm stereo jack
Audio Output Connectors	1x 3.5mm stereo jack, 1x RCA (SPDIF)
RS-232 serial port	1x DB 9 connector
IR Input ports	1x 3.5mm stereo jack
Dimensions (W x H x D)	13.6" x 6.5" x 1.8" [345mm x 165mm x 45mm]
Shipping Weight	4.4lbs [2.0Kg]
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Power Supply	DC 24V/1A



BG-PSC7X2	
	Specifications
Bandwidth	10.2Gbps
Video Input Connectors	4x HDMI Type A, 1x VGA, 1xYPbPr,1x AV
Video Output Connectors	2x HDMI Type A
Audio Input Connectors	2x 3.5mm stereo jack, 4x RCA (2 x L/R)
Audio Output Connectors	1x 3.5mm stereo jack,1x RCA (SPDIF)
RS-232 serial port	1x DB 9 connector
IR Input ports	1x 3.5mm stereo jack
Dimensions (W x H x D)	12.7" x 5.3" x 1.7" [323mm x 135mm x 44mm]
Shipping Weight	2.65lbs [1.2Kg]
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Power Supply	DC 5V/2A

# **PRESENTATION SWITCHERS**

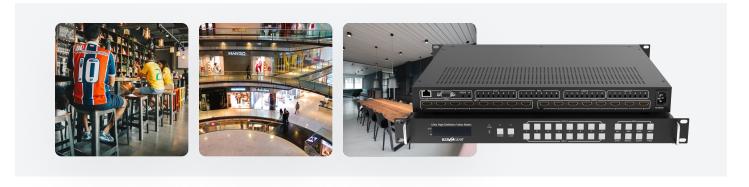


	BG-PSC8X2HDB
	Technical
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2
DP Version	DP 1.2
Video Bandwidth	18Cbps
	Video Resolution
Input Video Resolution	800x600@60Hz, 1024x768@60Hz, 1280x768@60Hz, 1280x800@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1200@60Hz. 480p, 576p, 720p, 1920x1080i, 1920x1080p, 3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz, 4096x2160@24Hz/25Hz/30Hz/50Hz/50Hz/60Hz. Note: This device does not support 4:2:0 color space
Output Video Resolution	Auto, 3840x2160@60Hz, 3840x2160@50Hz, 3840x2160@30Hz, 1920x1080@60Hz, 1920x1080@50Hz, 1280x720@60Hz, 1024x768@60Hz, 1360x768@60Hz, 1600x1200@60Hz, 1920x1200@60Hz.
EDID Option	Auto, Manual, 3840x2160@60, 3840x2160@30, 1920x1080@60, 1280x720@60, 1920x1200@60
HDMI Amplitude	T.M.D.S +/- 0.4Vpp
Differential Impedance	100±15ohm
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
	RS232/Ethernet Control
Baud rate and Protocol	Baud rate: 9600, data bit: 8 Stop bit: 1, no parity checking
Ethernet	IE10.0+, HTML5
	Mechanical
Housing	Metal Enclosure
Color	Black
Dimensions	16.9"(W) x 8.7"(D) x 1.7"(H) [430mm(W) x 220mm(D) x 44mm(H)]
Weight	7lbs [3.2Kg]
Power Supply	AC 110 - 240V
Power Consumption	60W (Max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 158°F / -20°C ~ 70°C
Relative Humidity	10%~50% RH (non-condensing)



	BG-PSC11X2-HDBT
Specifications	
Bandwidth	10.2Gbps
Video Input Connectors	4x HDMI Type A, 1x VGA, 1xYPbPr,1x AV
Video Output Connectors	1x HDMI Type A, 1x RJ45
Audio Input Connectors	11x 3.5mm stereo jack
Audio Output Connectors	1x 3.5mm stereo jack, 1x RCA (SPDIF)
RS-232 serial port	1x DB 9 connector, 1x 3 phoenix terminal
TCP/IP	1x RJ45
IR Input ports	2x 3.5mm stereo jack
IR Output ports	1x 3.5mm mono jack
Dimensions (W x H x D)	17.2" x 8.86" x 1.73" [438mm x 225mm x 44mm]
Shipping Weight	2.65lbs [1.2Kg]
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Power Supply	DC 12V/5A

# MATRIX SWITCHERS



# **BRING IT ALL TOGETHER**

Matrix switchers provide a single, centralized point of connection for all your video sources and displays. They allow you to route any source to any display, and are especially well-suited to commercial applications like sports bars and retail spaces. Large homes are also a common application, allowing the homeowner to keep all their equipment out of sight in a closet for a clean, modern look.

# SIMPLIFIED OPERATION

Keeping all your devices in a single location connected to a matrix switch can greatly ease the connection and operation of complex systems. Keep your displays on the same input while switching is handled by simple buttons on the front of the matrix switch, or with a remote control or third-party control system.

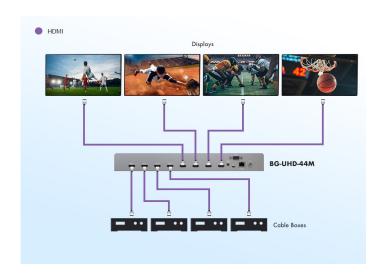
#### **ULTRA HD CLARITY**

With support for resolutions up to 4K, BZBGEAR matrix switchers deliver outstanding image quality for all your favorite sources. Distribute content in pristine detail throughout your home or place of business, while keeping all the equipment conveniently located in one space.

# **ENHANCED RELIABILITY**

Using built-in EDID management, matrix switchers can overcome many of the common problems experienced when using HDMI. EDID management eliminates flickering, distortion, and intermittent connections allowing instantaneous switching between sources.





#### **BG-UHD-42M**

4X2 HDMI 4K 60Hz 18Gbps Matrix Switcher with Audio/Downscaling Support



#### **FEATURES**

- · Supports resolutions up to 4K@60Hz 4:4:4.
- HDMI 2.0, HDCP 2.2/HDCP1.4 and DVI 1.0 compliant.
- Advanced EDID management for rapid integration of sources and displays.
- Flexible control via front panel buttons and IR remote.
- Route any of the 4 inputs to either of the 2 outputs.
- 4K Supports resolutions up to 4K@60Hz 4:4:4
- HDMI HDMI 2.0, HDCP 2.2/HDCP1.4 and DVI 1.0 compliant
- Supports 18Gbps uncompressed bandwidth on all HDMI ports
- Features 4 HDMI inputs and 2 HDMI outputs
- Supports Dolby Vision, HDR 10+, HLG, and CEC function
- Supports audio de-embedding via optical and analog outputs
- Both outputs support downscaling from 4K to 1080p
- Supports ARC

#### **BG-UHD-44M**

4X4 4K 60Hz HDRI HDMI Matrix Switcher with Auto Downscaling and RS-232/IP/Cloud



# **FEATURES**

- Supports resolutions up to 4K@60Hz 4:4:4
- $\boldsymbol{\cdot}$  Front panel buttons, IR, RS-232, IP, and GUI
- Route any of the 4 inputs to any of the 4 outputs
- Supports downscaling from 4K to 1080P
- · HDCP 2.2/HDCP1.x and DVI compliant
- 4K Supports resolutions up to 4K@60Hz 4:4:4
- HDCP 2.2- HDCP 2.2/HDCP1.x and DVI compliant
- EDID Advanced EDID management for rapid integration of sources and displays
- 4x4 Matrix Route any of the 4 inputs to any of the 4 outputs

- Auto-Scaling- Supports downscaling from 4K to 1080P
- · HDMI 2.0a, HDR Support
- · Wide Frequency Range
- · 18Gbps video bandwidth
- · Supports xvYCC, x.v.Color, & Deep Color
- Simultaneously display any source on multiple displays
- · View any source on any display
- · Firmware updateable
- · Supports Dolby Digital, DTS-HD, and Dolby TrueHD
- Rack Mountable, Fast response time





#### BZ-MVS4X4-4K

4X4 4K UHD 18Gbps HDMI Video Wall Processor & Seamless Matrix Switcher with Scaler, IR and Audio



#### **FEATURES**

- · Spread a Source Across Multiple Displays
- · View Any Source on Any Display
- · Supports resolutions up to 4K@60Hz 4:4:4
- · Front Panel, TCP/IP, RS-232, IR remote, PC Software
- · HDMI 2.0, HDCP 2.2
- Embedding and De-Embedding Supported
- · HDMI 2.0 and HDCP 2.2 compliant
- · Support 18 Gbps video bandwidth
- · Support video resolution up to 4K60 4:4:4

- · Color space: RGB, YCbCr 4:4:4, YCbCr 4:2:2
- Seamless matrix switching and video wall processing functions(2x2)
- · CEC management
- · Support audio matrix and IR matrix functions
- · External L/R audio insert on HDMI streams
- · EDID management
- Front panel, RS232, TCP/IP (LAN 10M/100M) control

# BZ-MVS8X8-4K

8X8 4K UHD 18Gbps HDMI Video Wall Processor & Seamless Matrix Switcher with Scaler, IR and Audio



#### **FEATURES**

- · Seamless matrix switching
- · HDMI 2.0/HDCP 2.2 compliant
- · IR matrix routing
- · Audio De-embedding
- · External LR audio insert on HDMI stream
- · Auto/manual EDID management
- HDMI video output resolutions up to 3840x2160@60Hz
- · Control through front panel, RS232, TCP/IP

- 4K2K can be divided and displayed on 4 or 6 1080p displays (2x2, 3x2, 2x3 layouts)
- · PC tool needs no installation
- · 18Gbps bandwidth
- Save/recall matrix scenes
- Up to 8 HDMI inputs and 8 HDMI outputs
- · IR matrix routing is followed with video routing
- · Unplug this device during lightning storms





# **BG-UM-88ANS**

8X8 4K UHD HDMI Matrix Switcher with Audio De-embedded Outputs



The BG-UM-88ANS is an 8x8 4K HDMI matrix switch, supporting resolutions up to 4K@60Hz 4:4:4 is HDCP 1.4 & 2.2 compliant. Featuring 8 HDMI 2.0b inputs and 8 HDMI 2.0b outputs, this device offers 18Gbps uncompressed bandwidth on all HDMI ports.

This matrix can quickly route any of the eight inputs to any of the eight outputs utilizing either the front panel menu, IR remote control, RS-232, or web interface. The control software, connected via RS-232 or the web interface, allows full control with the ability to adjust advanced features including mapping, network settings, and EDID management for easy integration.

Audio de-embed from any of the 8 coax audio outputs, which all provide multi-channel digital audio (up to 7.1-channel). The supported various audio formats include LPCM, Dolby TrueHD, and DTS-HD® Master Audio.

# **FEATURES**

- Compliant with HDMI 2.0b, HDCP 2.2, HDCP 1.4
- Supports resolutions up to 4K@60Hz 4:4:4 HDR
- Supports LPCM, Dolby TrueHD, and DTS-HD Master Audio
- Each HDMI output features a digital coax audio output
- Features smart EDID management for easy integration
- · Front panel, IR, RS-232, CEC, Web UI
- HDMI Compliant with HDMI 2.0b, HDCP 2.2, HDCP 1.4

- 4K Supports resolutions up to 4K@60Hz 4:4:4 HDR
- Multi-Channel Audio Supports LPCM, Dolby TrueHD, and DTS-HD Master Audio
- Audio De-Embedding Each HDMI output features a digital coax audio output
- EDID Features smart EDID management for easy integration
- Multiple Control Options Front panel, IR, RS-232, CEC, Web UI

- · Conference Rooms
- · Small Businesses

- Auditoriums
- · Schools/Universities
- · Classrooms
- Hospitals





#### **BG-UHD-1616M**

16X16 4K UHD 18Gbps HDMI Matrix with Advance EDID/Downscaling/CEC



The BG-UHD-1616M is a 4K HDMI matrix switcher which supports video and audio from up to 16 sources to up to 16 HDMI displays. With this matrix, users can switch which display uses which input, enabling a great deal of control over many displays at once.

This matrix supports HDMI 2.0b and HDCP 2.2/1.x. The BG-UHD-1616M supports resolutions as high as 4K2K@60Hz (YUV 4:4:4) on all HDMI ports, ensuring a clear picture if using high quality inputs. All video outputs are capable of downscaling 4K video to 1080p if necessary and this matrix has a maximum video bandwidth of 18Gbps. Put together, these features ensure the delivery of pristine uncompressed video transmission to up to 16 displays.

The BG-UHD-1616M supports HDMI audio pass-through up to 7.1 CH HD audio (LPCM, Dolby TrueHD, and DTS-HD Master Audio). Audio can be extracted via corresponding digital coax ports for each HDMI output. This provides additional functionality for operators looking to send audio to external devices to individual zones.

- · Supports resolutions up to 4K@60Hz 4:4:4
- View Any Source on Any Display
- · HDMI 2.0, HDCP 2.2
- · Dolby Vision, HDR10+, and HLG support
- · De-Embedding Supported
- Front panel buttons, RS232, IR, CEC, IP, and WebGUI
- · HDMI 2.0b, HDCP 2.2/1.x and DVI 1.0 compliant
- Video resolution up to 4K2K@60Hz (YUV 4:4:4) on all HDMI ports
- · Support 18Gbps video bandwidth
- Support 4K-1080P Down Scaler for each output port

- HDR, HDR10, HDR10+, Dolby Vision and HLG are supported
- HDMI audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD and DTS-HD Master Audio)
- · Audio de-embedded is supported via coax ports
- ARC, CEC and smart EDID management are supported
- 1U rack mounted design with front panel OLED display
- Control via front panel buttons, IR remote, RS-232, LAN and Web GUI





	BG-UHD-42M
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18 Gbps
Video Resolution	Up to 4K2K@50/60Hz(YCbCr 4:4:4), 4K2K@30Hz. All HDMI 3D TV format, etc.
Color Space	RGB, YCbCr4:4;4,YCbCr4:2:2, YCbCr 4:2:0
Color Depth	8-bit, 10-bit, 12-bit [1080P, 4K30Hz, 4K60Hz (YCbCr 4:2:0)] 8-bit [4K60Hz (YCbCr4:4:4)]
HDMI Audio Formats	PCM2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX,DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Optical Audio Formats	PCM2.0, Dolby Digital / Plus, DTS
L/R Audio Formats	PCM2.0CH (Note: If ARC function is turned on, the audio port will mute.)
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Input Ports	4×HDMI Type A [19-pin female]
Output Ports	2×HDMI Type A [19-pin female] 1×L/R audio out [3.5mm Stereo Mini-jack] 1×OPTICAL audio out [S/PDIF]
Housing	Metal Enclosure
Color	Black
Dimensions	9.9"(W) x 4.1"(D) x 0.79"(H) [251mm(W) x 105mm(D) x 20mm(H)]
Weight	1.97lbs [620g]
Power Supply	Input: AC100~240V 50/60Hz, Output: DC12V/1A
Power Consumption	3.8W (max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Relative Humidity	20~90% RH (non-condensing)



	BG-UHD-4	4M	
Role of usage		True 4x4 matrix	
HDMI compliance		HDMI 2.0a	
HDCP compliance		HDCP 2.2 / 1.4	
Video bandwidth		Single-link 600MHz [18Gbps]	
Video support	HDR 4	K2K@60(4:2:0 10bits) / 4K2K@60 (4:4:4	4 8bits)
Audio support	DTS-HD Master Audio, Do	lby TrueHD Dolby Digital, DTS, DVD-A	audio, LPCM, SACD, MPCM
ESD protection	Human body mode	el — ±15kV [air-gap discharge] & ±8kV	[contact discharge]
PCB stack-up	6-layer board	[impedance control — differential 100	$\Omega$ ; single 50 $\Omega$ ]
Firmware update	F	easible via Micro-USB and RS-232 por	rt
Input	4x HDMI / 1:	x RS-232 / 1x Ethernet / 1x IR socket fo	r IR receiver
Output		4x HDMI	
HDMI Input selection	Push-in button/ IR	remote control/ RS-232 control/ IP co	ntrol/ Cloud control
IR remote control	Electro-optio	cal characteristics: = 25° / Carrier frequ	uency: 38kHz
HDMI connector	Type A [19-pin female]		
RJ-45 connector	WE/SS 8P8C(Reverse Mode)		
RS-232 connector	DE-9 [9-pin D-sub female]		
USB connector	Micro USB		
3.5mm connector		IR receiver / IR blaster	
Housing		Metal enclosure	
Dimensions (L x W x H)	Model 1'1" x 4.8" x 1.7" [340 x 123 x 44mm]	Package 1'6" x 8.9" x 2.8" [494 x 225 x 70mm]	Carton 1'7" x 1'2" x 10" [510 x 380 x 252mm]
Weight	Model: 2.6 lbs [1181g]	I	Package: 4 lbs [1837g]
Fixedness	Wall-mounting case		
Power supply	5V 4A DC		
Power Consumption	12 Watt [max]		
Operation temperature	32~104°F [0~40°C]		
Storage temperature	-4~140°F [-20~60°C]		
Relative humidity	20~90% RH [no condensation]		



	BZ-MVS4X4-4K
	Technical
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Up to 4K60 4:4:4
Color Space	RGB, YCbCr 4:4:4/4:2:2
HDMI Amplitude	T.M.D.S +/- 0.4Vpp
Differential Impedance	100±15ohm
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
	RS232/Ethernet Control
Baud rate and Protocol	Baud rate: 9600, data bit: 8 / Stop bit: 1, no parity checking
Ethernet	IE10.0+, HTML5
	Mechanical
Housing	Metal Enclosure
Color	Black
Dimensions	16.9" (W) $\times$ 8.7" (D) $\times$ 1.7" (H) [430mm (W) $\times$ 220mm (D) $\times$ 44mm (H)]
Weight	11lbs [5Kg]
Power Supply	AC 110 - 240V
Power Consumption	60W (Max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 158°F / -20°C ~ 70°C
Relative Humidity	10%~50% RH (non-condensing)



BZ-MVS8X8-4K		
	Electrical parameters	
Interface	HDMI-A	
HDMI / DP / VGA Version	HDMI2.0, HDCP2.2	
Bandwidth	18Gbps	
	Video Resolution	
Input	800x600@60Hz, 1024x768@60Hz, 1280x768@60Hz, 1280x800@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1200@60Hz. 480p,576p,720p,1920x1080i,1920x1080p, 3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz, 4096x2160@24Hz/25Hz/30Hz/50Hz/60Hz	
Output	1920x1080@60Hz, 3840x2160@30Hz, 3840x2160@60Hz, 1280x720@60Hz, 1024x768@60Hz, 1360x768@60Hz, 1600x1200@60Hz, 1920x1200@60Hz	
HDMI Amplitude	T.M.D.S +/- 0.4Vpp	
Differential impedance	100±15ohm	
	RS232/Ethernet Control	
Baud rate and Protocol	Baud rate: 9600, data bit: 8 stop bit: 1, no parity checking	
Ethernet	IE10.0+, HTML5	
	Power	
Max Consumption	100W, 110-240VAC	
	Matrix Mechanical dimensions	
Size(mm)	16.9"(L) × 11.8"(W) × 11.7"(H) [430(L) × 300(W) × 44(H)]	
Weight	11lbs [5Kg]	
	Other	
Operating temperature	32 to 104°F / 0 to 40°C	
Storage temperature	-4 to 158°F / -20 to 70°C	
Permissible humidity	10%-50%	

## **MATRIX SWITCHERS**

	BG-UM-88ANS
	Technical
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@50/60Hz (YUV 4:4:4), 4K2K@30Hz, 1080p@120Hz, and 1080p 3D@60Hz
Color Depth	8-bit, 10-bit, 12-bit
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
HDMI Audio Formats	LPCM 2/5.1/7.1, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
Audio Formats	PCM2.0, 32K/44.1K/48K/88.2K/96K/192K, 16/20/24bit
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
	Connection
Inputs	8x HDMI Type A [19-pin female] 1x LAN [RJ45, Control] 1x RS-232 [9-pin D-sub, Control] 1x IR EXT [3.5mm Stereo Mini-jack]
Outputs	8x HDMI Type A [19-pin female] 8x Coaxial Audio [RCA]
	Mechanical
Housing	Metal Enclosure
Color	Black
Dimensions	19.0" (W) x 1.0" (D) x 1.8" (H) [483mm (W) x 253mm (D) x 44.5mm (H)]
Weight	7.39lbs [3.35kg]
Power Supply	Input: AC100~240V 50/60Hz, Output: DC12V/3A (US/EU standards, CE/FCC/UL certified)
Power Consumption	26.5W (max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Relative Humidity	20~90% RH (non-condensing)



BG-UHD-1616M			
		Technical	
HDMI Compliance		HDMI 2.0b	
HDCP Compliance		HDCP 2.2/1.x	
Video Bandwidth		18Gbps	
Video Resolution		Up to 4K2K@60Hz (4:4:4)	
Color Space		RGB, YCbCr 4:4:4/4:2:2/4:2:0	
Color Depth		8-bit, 10-bit, 12-bit	
HDMI Audio Formats (Pass-through)		Dolby Digital, DTS 5.1, Dolby Digital+, S-HD Master Audio, Dolby Atmos, DT	
Coax Audio Formats		LPCM 2.0, Dolby Digital / Plus, DTS 5.	1
HDR formats		HDR10, HDR10+, Dolby Vision, HLG	
ESD Protection	±8kV (A	Human-body Model: Air-gap discharge) , ±4kV (Contact dis	charge)
		Connection	
Input Ports		16xHDMI Type A [19-pin female]	
Output Ports		16xHDMI Type A [19-pin female] 16xCoax Audio (RCA)	
Control Ports	1xTCP/IP [RJ45] 1xRS-232 [D-Sub 9]		
		Mechanical	
Housing	Metal Enclosure		
Color	Black		
Dimensions	17.3" (W) x 7.9" (D) x 1.7" (H) [440mm (W) x 200mm (D) x 44mm (H)]		D) x 44mm (H)]
Weight		6.83lbs [3.1kg]	
Power Supply	Input: AC 100 - 240V 50/60Hz, Output: DC 24V/3.75A (US/EU standard, CE/FCC/ULcertified)		
Power Consumption		76.8W	
Operating Temperature	14°F ~ 113°F / -10°C ~ 45°C		
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C		
Relative Humidity	20~90% RH (non-condensing)		
Resolution / Cable length	4K60 - Feet / Meters	4K30 - Feet / Meters	1080P60 - Feet / Meters
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M
ESD Protection	±8kV (A	Human-body Model: xir-gap discharge) , ±4kV (Contact dis	charge)
	The use of "Prem	ium High Speed HDMI" cable is high	ly recommended.

## LONG-RANGE MATRIX KITS







## **BRING IT ALL TOGETHER**

Long-range matrix switchers provide a single, centralized point of connection for all your video sources and displays while also allowing the HDMI signal to be transmitted over category cable at ranges up to 100M. They allow you to route any source to any display, and are especially well-suited to commercial applications like sports bars and retail spaces. Large homes are also a common application, allowing the homeowner to keep all their equipment out of sight in a closet for a clean, modern look.

#### SIMPLIFIED OPERATION

Keeping all your devices in a single location connected to a matrix switch can greatly ease the connection and operation of complex systems. Keep your displays on the same input while switching is handled by simple buttons on the front of the matrix switch, or with a remote control or third-party control system.

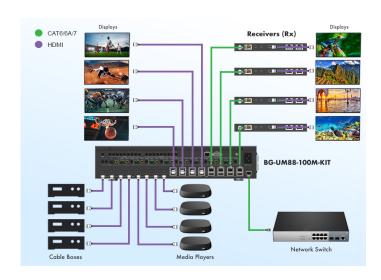
#### **ULTRA HD CLARITY**

With support for resolutions up to 4K, BZBGEAR matrix switchers deliver outstanding image quality for all your favorite sources. Distribute content in pristine detail throughout your home or place of business, while keeping all the equipment conveniently located in one space.

#### **ENHANCED RELIABILITY**

Using built-in EDID management, matrix switchers can overcome many of the common problems experienced when using HDMI. EDID management eliminates flickering, distortion, and intermittent connections allowing instantaneous switching between sources.





## **BG-UM44-100M-KIT**

4X4 HDMI and HDBaseT Matrix Switch with Bi-directional IR and ARC Function



## **BG-UM88-100M-KIT**

8X8 HDMI and HDBaseT Matrix Switch with Bi-directional IR and ARC Function



These 4K 4X4 (BG-UM44-100M-KIT) and 8X8 (BG-UM88-100M-KIT) HDMI HDBaseT matrix switches feature HDMI outputs mirrored to simultaneous HDBaseT outputs. The HDBaseT outputs can extend a 4K@60Hz 4:4:4 video signal at distances up to 328 feet (100 meters) over a single Cat5e/6/7 cable.

These products are equipped with many advanced features including a 4K to 1080P down-scaler as well as smart EDID management for easy integration. This unit also offers audio de-embedding from any of the HDMI sources via analog audio and digital coaxial audio outputs. Each extender features bi-directional IR, RS-232, and 2 LAN ports for IP control. The base unit can be operated using the front panel controls and OLED screen as well as IR, RS-232, IP control, and web interface.

- Each output features 4K to 1080P down-scaling
- Front panel buttons, RS232, IR, CEC, and TCP/IP (WebGUI)
- HDMI and HDBaseT ports transmit 18Gbps lossless uncompressed video bandwidth
- Audio Matrix Each output features de-embedded digital coax and analog outputs
- Supports ARC function on HDMI and HDBaseT outputs
- HDMI audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD, DTS-HD Master Audio)
- Dolby Vision, HDR10+, and HLG supported
- · Smart EDID management functions
- · IR matrix functionality





#### **BG-UM44-150L-KIT**

4X4 4K UHD 18Gbps HDMI and HDBaseT Matrix Switch with Bi-directional IR/Advance EDID and Downscaling



#### **BG-UM88-150L-KIT**

8X8 4K UHD HDMI Matrix Switcher with Audio De-embedded Outputs



These HDMI matrix extenders can connect four HDMI sources to eight output displays (BG-UM44-150L-KIT) and eight HDMI sources to sixteen output displays (BG-UM88-150L-KIT).

The HDBaseT output allows video signals to be extended to longer ranges than a standard HDMI cable. When using 1080p resolution, the signal can travel up to 492ft / 150m and 394ft / 120m at 4K.

The maximum resolution of this matrix is 4K@60Hz (YUV 4:4:4) on all HDMI and HDBaseT ports. Data transmission is lossless and uncompressed, having a maximum bandwidth of 18Gbps, ensuring pure signal transfer for maximum image quality. The devices utilize HDMI 2.0b. It is also HDCP 2.2 and HDCP 1.x compliant.

- · Supports resolutions up to 4K@60Hz 4:4:4
- HDR, HDR10, HDR10+, Dolby Vision, HLG are supported
- · Support IR matrix
- Audio de-embedded is supported via analog and coax ports
- HDMI audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD and DTS-HD Master Audio)
- HDMI 2.0, HDCP 2.2
- · 24V POC on all HDBaseT ports
- Support 4K->1080P Down Scaler for each output port
- Advanced EDID management and CEC control are supported
- Control via front panel buttons, IR remote, RS-232, LAN and Web GUI





## **LONG-RANGE MATRIX KITS**



	BG-UM44-10	OM-KIT	
		Technical	
HDCP Compliance		HDCP 2.2 and HDCP 1.4	
Video Bandwidth		18Gbps	
Video Resolution		Up to 4K2K@50/60Hz (4:4:4)	
Color Space		RGB, YCbCr 4:4:4/4:2:2/4:2:0	
Color Depth		12-bit (4K), 16-bit (1080P)	
HDMI Audio Formats (Pass-through)	PCM2.0/5.1/7.1CH, Dolby Digital/	Plus/EX, Dolby True HD, DTS, DTS-EX,DT Master Audio, DSD	TS-96/24, DTS High Res, DTS-HD
Coax Audio Formats		PCM 2.0, Dolby Digital / Plus, DTS,	
L/R Audio Formats		PCM2.0	
HDR formats	4:4:4, 4:2:2, 4:2:	0(10,12bit deep color) HDR10, HDR10+, De	olby Vision, HLG
Infrared		20KHz ~ 60KHz	
ESD Protection	Human-body Me	odel: ±8kV (Air-gap discharge), ±4kV (Co	ontact discharge)
		Connection (Matrix)	
Input Ports	2	4xINPUT [HDMI Type A, 19-pin female] 6xIR INPUT [3.5mm Stereo Mini-jack] xStereo Audio [3.5mm Stereo Mini-jack 1xSPDIF(OPTICAL) 1xSPDIF(COAX)	В]
Output Ports		HDMI OUTPUT [HDMI Type A, 19-pin fem 4xHDBaseT port [RJ45] 5xIR OUTPUT [3.5mm Stereo Mini-jack] 4xRS-232 [3-pin Phoenix connector] 4xSPDIF(COAX) 4xStereo Audio[3.5mm Stereo Mini-jack 1xLAN [RJ45]	
Control Ports		1xTCP/IP [RJ45] 1xRS-232 [D-Sub 9]	
		Connection (HDBaseT Receiver)	
Input Ports	1xHDB.	aseT IN [ RJ45] 1xIR IN [3.5mm Stereo Mi	ni-jack]
Output Ports	1xHDMI OUT [HDM	II Type A, 19-pin female] 1xIR OUT [3.5mr	m Stereo Mini-jack]
Control Ports	1xSERVICE [Micro	o USB, Update port] 1xRS-232 [Phoenix ja	ack] 2xLAN [RJ45]
		Mechanical	
Housing		Metal Enclosure	
Color		Black	
Dimensions		0.7" (D) x 1.8" (H) [440mm (W) x 274mm x 3.6" (D) x 0.7" [ 163mm (W)×90.3mm (E	
Weight		TX: 8.8 lbs [4.0Kg], RX: 0.86lbs [392g]	
Power Supply		AC 100 - 240V 50/60Hz	
Power Consumption		70W (Max)	
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C		
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C		
Relative Humidity	20~90% RH (non-condensing)		
Resolution / Distance	4K@60 - Feet / Meters		
CAT5e/6/7		328ft / 100M	
Resolution / Cable length	4K@60 - Feet / Meters	4K@30 - Feet / Meters	1080P@60 - Feet / Meters
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M
	The use of "Pren	nium High Speed HDMI" cable is highly	y recommended.



	BG-UM88-100M-KIT
	Technical
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@50/60Hz (4:4:4)
Color Space	RGB, YCbCr 4:4:4/4.2:2/4:2:0
Color Depth	12-bit (4K), 16-bit (1080P)
HDMI Audio Formats (Pass-through)	PCM2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Coax Audio Formats	PCM 2.0, Dolby Digital / Plus, DTS
L/R Audio Formats	PCM2.0
HDR formats	4:4:4, 4:2:2, 4:2:0(10,12bit deep color) HDR10, HDR10+, Dolby Vision, HLG
Infrared	20KHz ~ 60KHz
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
	Connection (Matrix)
Input Ports	8xINPUT [HDMI Type A, 19-pin female] 10xIR INPUT [3.5mm Stereo Mini-jack] 2xStereo Audio [3.5mm Stereo Mini-jack B] 1xSPDIF(OPTICAL) 1xSPDIF(COAX)
Output Ports	48xHDMI OUTPUT [HDMI Type A 19-pin female] 8xHDBaseT port [RJ45] 9xIR OUTPUT [3.5mm Stereo Mini-jack] 8xRS-232 [3-pin Phoenix connector] 8xSPDIF(COAX) 8xStereo Audio [3.5mm Stereo Mini-jack] 1xLAN [RJ45]
Control Ports	1xTCP/IP [RJ45] 1xRS-232 [D-Sub 9]
	Connection (HDBaseT Receiver)
Input Ports	1×HDBaseT IN [ RJ45] 1×IR IN [3.5mm Stereo Mini-jack]
Output Ports	1×HDMI OUT [HDMI Type A, 19-pin female] 1×IR OUT [3.5mm Stereo Mini-jack]
Control Ports	1×SERVICE [Micro USB, Update port] 1×RS-232 [Phoenix jack] 2×LAN [RJ45]
	Mechanical
Housing	Metal Enclosure
Color	Black
Dimensions	TX: 17.3" (W) x 14.3" (D) x 3.5" (H) [440mm (W) x 362mm (D) x 88mm (H)] RX: 6.4" (W) x 3.6" (D) x 0.7" [ 163mm (W) x 90.3mm (D) x 18mm (H)]
Weight	TX: 15.2lbs [6.9]Kg, RX: 0.86lbs [392]g
Power Supply	AC 100 - 240V 50/60Hz
Power Consumption	128W (Max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Relative Humidity	20~90% RH (non-condensing)
Resolution / Distance	4K@60 - Feet / Meters
CAT5e/6/7	328ft / 100M
Resolution / Cable length	4K@60 - Feet / Meters
HDMI IN / OUT	16ft / 5M 32ft / 10M 50ft / 15M
	The use of "Premium High Speed HDMI" cable is highly recommended.



	BG-UM44-150	DL-KIT	
		Technical	
HDMI Compliance		HDMI 2.0b	
HDCP Compliance		HDCP 2.2 and HDCP 1.x	
Video Bandwidth		18Gbps	
Video Resolution		Up to 4K2K@50/60Hz (4:4:4)	
Color Space		RGB 4:4:4, YCbCr 4:4:4/4:2:2/4:2:0	
Color Depth		2-bit (1080p@60Hz) / 8-bit (4K2K@60 , 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:	•
HDR		HDR10, HDR10+, Dolby Vision, HLG	
HDMI Audio Formats		/7.1, Dolby Digital, Dolby TrueHD, Dolb S-ES, DTS HD Master, DTS HD-HRA, D	
Coax Audio Formats	ı	PCM 2.0, Dolby Digital / Plus, DTS 2.0/5	5.1
Analog Balanced Audio Formats		PCM 2.0CH	
Vmax		2Vrms	
SNR		>90dB	
THD+N Ratio	<	0.1% (V_max) 0.001%~0.01% (V_best	t)
Crosstalk		>80dB	
Frequency Response		20Hz~20kHz ±0.5dB	
ESD Protection	±8kV (	Human-body Model: Air-gap discharge) , ±4kV (Contact dis	scharge)
		Connection	
Matrix		4 x HDMI Type A [19-pin female] Outputs:  4 x HDMI Type A [19-pin female] 4 x HDBaseT port [RJ45] x Coaxial audio [3.5mm Stereo Mini-janced analog audio [5-pin Phoenix co Controls: 5 x IR IN [3.5mm Stereo Mini-jack] 5 x IR OUT [3.5mm Stereo Mini-jack] 1 x TCP/IP [RJ45] 1 x RS-232 [D-Sub 9]	nnector]
HDBaseT Receiver	ו	Input:  1 x HDBT IN [RJ45, 8-pin female] Outputs:  1 x HDMI Type A [19-pin female] x AUDIO OUT [3.5mm Stereo Mini-jac Controls:  1 x IR IN [3.5mm Stereo Mini-jack] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x RS-232 [3-pin Phoenix connector] 1 x SERVICE [Mini-USB, Update port]	i I
		Mechanical	
Housing		Metal Enclosure	
Color Dimensions		Black 7.9" (D) x 1.8" (H) [440mm (W) x 200mr	
		() x 2.6" (D) x 0.7" [140mm (W) x 65mm	
Weight Davies Consolu	Matrix: 6.8lbs [3.1Kg], Receiver: 0.34lbs [155g]		
Power Supply	AC 100 - 240V 50/60Hz		
Power Consumption	60W (Max)		
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C		
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C		
Relative Humidity	20~90% RH (non-condensing)		
Resolution / Distance		4K@60 - Feet / Meters	
CAT5e/6/7		492ft / 150M	
Resolution / Cable length	4K@60 - Feet / Meters	4K@30 - Feet / Meters	1080P@60 - Feet / Meters
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M



	BG-UM88-150	DL-KIT	
		Technical	
HDMI Compliance		HDMI 2.0b	
HDCP Compliance		HDCP 2.2 and HDCP 1.x	
Video Bandwidth		18Gbps	
Video Resolution		Up to 4K2K@50/60Hz (4:4:4)	
Color Space		RGB 4:4:4, YCbCr 4:4:4/4:2:2/4:2:0	
Color Depth		12-bit (1080p@60Hz) / 8-bit (4K2K@60 , 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:	•
HDR		HDR10, HDR10+, Dolby Vision, HLG	
HDMI Audio Formats		/7.1, Dolby Digital, Dolby TrueHD, Dolb S-ES, DTS HD Master, DTS HD-HRA, D	
Coax Audio Formats		PCM 2.0, Dolby Digital / Plus, DTS 2.0/5	5.1
Analog Balanced Audio Formats		PCM 2.0CH	
Vmax		2Vrms	
SNR		>90dB	
THD+N Ratio	<	:0.1% (V_max) 0.001%~0.01% (V_best	t)
Crosstalk		>80dB	
Frequency Response		20Hz~20kHz ±0.5dB	
ESD Protection	±8kV (	Human-body Model: Air-gap discharge) , ±4kV (Contact dis	scharge)
		Connection	
Matrix		Outputs:  8 x HDM1 Type A [19-pin female] 4 x HDBaseT port [RJ45] x Coaxial audio [3.5mm Stereo Mini-ja anced analog audio [5-pin Phoenix co Controls: 9 x IR IN [3.5mm Stereo Mini-jack] 1 x TCP/IP [RJ45] 1 x RS-232 [D-Sub 9]	nnector]
HDBaseT Receiver	1	Input: 1 x HDBT IN [RJ45, 8-pin female] Outputs: 1 x HDMI Type A [19-pin female] x AUDIO OUT [3.5mm Stereo Mini-jac Controls: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x RS-232 [3-pin Phoenix connector] 1 x SERVICE [Mini-USB, Update port]	
		Mechanical	
Housing		Metal Enclosure	
Color Dimensions		Black 4.7" (D) x 3.5" (H) [440mm (W) x 374m	
Weight	Receiver: 5.5" (W	() x 2.6" (D) x 0.7" [140mm (W) x 65mm	
<u> </u>	Matrix: 14.4lbs [6.54Kg], Receiver: 155g		
Power Supply	AC 100 - 240V 50/60Hz		
Power Consumption	60W (Max)		
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C		
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C		
Relative Humidity	20~90% RH (non-condensing)		
Resolution / Distance		4K@60 - Feet / Meters	
CAT5e/6/7	//OCC =	492ft / 150M	10000000 5 . /
Resolution / Cable length	4K@60 - Feet / Meters	4K@30 - Feet / Meters	1080P@60 - Feet / Meters
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M

## KVM SWITCHES



## **MULTITASK LIKE A PRO**

KVM Switches are designed to allow a single user to operate multiple computers from a single workstation. KVM stands for Keyboard Video Mouse and a KVM switch allows the user to switch USB devices between multiple computers at the touch of a button.

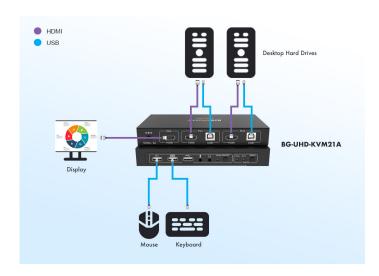
## **USB 3.0 SUPPORT**

The inclusion of USB 3.0 support in a KVM switch allows for high-bandwidth peripherals such as conferencing cameras and speakerphones to be shared across multiple computers.

## **MOUSE-ROAMING MULTI-VIEW**

With support for resolutions up to 4K, BZBGEAR matrix switchers deliver outstanding image quality for all your favorite sources. Distribute content in pristine detail throughout your home or place of business, while keeping all the equipment conveniently located in one space.





## **BG-UHD-KVM21A**

2X1 KVM Switcher with USB2.0 Ports for Peripherals and 3.5mm Jacks for Audio Support



## **BG-UHD-KVM41A**

4X1 KVM Switch with USB2.0 Ports for Peripherals and 3.5mm Jacks for Audio Support



Simplify your workstation and increase productivity with the BG-UHD-KVM21A and BG-UHD-KVM41A KVM switches from BZBGEAR. These KVM switches allow the user to control computers from a single workstation. That provides the ability to share three USB 2.0 peripherals such as a keyboard, mouse, and printer; this unit is ideal for IT departments or anywhere a job requires multiple computers.

This switch supports resolutions up to 4K@60Hz and PC's UXGA 1920×1200 resolutions and features four HDMI inputs and one HDMI output for easy viewing. Switching between devices is accomplished via the front push buttons or hotkey commands. The audio output jack allows for stereo audio de-embedding for headphones or an external audio device, while the audio input provides a connection for a microphone.

#### **FEATURES**

- Provides an additional USB 2.0 sharing port with overcurrent detection and protection
- Switch between devices via the front push buttons or hotkey commands
- Supports 4K@60Hz and PC's UXGA 1920x1200 resolutions
- · Stereo audio de-embedding via 3.5mm jack
- Supports all digital audio modes HDMI & HDCP compliant
- Video bandwidth: up to 18Gb/s
- · Metal housing for better RF shielding

- · Multi-PC workstation
- Programmers

- · Surveillance Systems
- · Security Professionals
- · Recording Studios
- · Recording Engineers





#### **BG-UHD-KVM41**

#### Conference Room 4-Port HDMI USB3.0 4K HDR 60Hz KVM Presentation Switcher

This conference room presentation switcher is a great option for users looking to efficiently manage up to 4 computers from a single workstation using one keyboard, one mouse, and one monitor.



- · 4X1 HDMI 2.0 Switcher with KVM
- Supports video resolution up to 4Kx2K@60Hz 4:4:4, HDR 10 and Dolby Vision
- · HDCP 2.2 compliant
- · Compatible with Windows, Linux and Mac OS
- · 3.5mm stereo audio output for audio De-embedding
- Convenient and cost-effective USB 3.0 peripheral sharing
- Controls four HDMI computers via one keyboard, one mouse and one monitor
- KVM auto-switching based on TMDS/5V detection
- Controllable by buttons, RS232 commands and BG-SC-GRHU table grommets
- · Simplifies wiring for easy installation

#### **BG-MKVM41R**

## 4X1 Full HD HDMI/USB 2.0 Seamless Quad KVM Multiviewer

This seamless-switching quad KVM multiviewer is a great choice for anyone looking for an easy way to control four separate devices on one screen with one set of peripherals.

- Compliant with HDMI 1.3a, HDCP 1.2
- · Supports multiplexed HDMI 4-input and 1-output
- Supports up to 1080p@60Hz High Definition resolution
- Support 4 by 1 Quad Multi-viewer and seamless switch (with same resolution)
- Support seamless switch
- Supports the unique 4IN1 Multi-Viewer mode, which allows you to operate 4 PCs with a keyboard&mouse on the same screen without switching
- Support mouse button,keyboard hot keys,front panel button, IR control
- · Support multi output resolution







# **KVM SWITCHES**



BG-UHD-KVM21A	
	Technical
Supports resolutions	Up to 4K@60Hz
Input Ports	2 HDMI, 2 USB 2.0 Host, 3 USB 2.0 Peripheral, 1 Analog Audio
Output Ports	1 HDMI, 1 Analog Audio
Control	Panel Buttons
Power Supply	AC 100 - 240V 50/60Hz
Weight	9.1oz [258g]
Dimensions	6.15"(W) x 2.7(D)" x 1(H)" - 156mm (W) x 69mm (D) x 25mm (H)
Housing	Metal Enclosure



	DO 101D 10 0 4 7 4	
BG-UHD-KVM41A		
	Technical	
Supports resolutions	Up to 4K@60Hz	
Input Ports	4 HDMI, 4 USB 2.0 Host, 3 USB 2.0 Peripheral, 1 Analog Audio	
Output Ports	1 HDMI, 1 Analog Audio	
Control	Panel Buttons	
Power Supply	AC 100 - 240V 50/60Hz	
Weight	11bs 12oz [793g]	
Dimensions	10.7"(W) x 4.5(D)" x 1.25(H)" - 272mm (W) x 114mm (D) x 32mm (H)	
Housing	Metal Enclosure	



BG-UHD-KVM41			
	Video Input		
Input	(4) SOURCE 1~4		
Input Connector	(4) Female type-A HDMI		
HDMI Input Resolution	Up to 4Kx2K@60Hz 4:4:4, HDR10, Dolby Vision		
HDMI Standard	2.0		
HDCP Version	2.2		
	Video Output		
Output	(1) DISPLAY		
Output Connector	(1) Female type-A HDMI		
HDMI Output Resolution	Up to 4Kx2K@60Hz 4:4:4, HDR10, Dolby Vision		
HDMI Standard	2.0		
HDCP Version	2.2		
	Audio		
Output	(1) AUDIO OUT		
Output Connector	(1) 3.5mm mini stereo audio jack		
Audio Format	PCM 2CH		
Frequency Response	20Hz to 20KHz, ±1dB		
Max Output Level	2.0Vrms ± 0.5dB. 2V = 16dB headroom above -10dBV (316 mV) nominal consumer line level signal		
THD+N	< 0.05%, 20Hz - 20KHz bandwidth, 1KHz sine at 0dBFS level (or max level)		
SNR	> 80dB, 20Hz - 20KHz bandwidth		
Crosstalk Isolation	< -80 dB, 10 kHz sine at 0dBFS level (or max level before clipping)		
L-R Level Deviation	< 0.05 dB, 1 kHz sine at 0dBFS level (or max level before clipping)		
Output Load Capability	1Kohm and higher (supports 10x paralleled 10k ohm loads)		
Noise Level	-80dB		
	Control		
Control	(1) FW, (4) PC 1~4, (3) DEVICES 1~3, (4) GR 1~4, (1) RS232		
Control Connector	(1) Micro-USB, (4) Type-B USB, (3) Type-A USB, (5) 3-pin Terminal Blocks		
	General		
Bandwidth	18Gbps		
Operation Temperature	14°F ~ +131°F / -10°C ~ +55°C		
Storage Temperature	-13°F ~ +158°F / -25°C ~ +70°C		
Relative Humility	10%-90%		
Type-A USB Power Supply	1A		
System Power Supply	Input: 100V~240V AC; Output: 12V DC 2A		
System Power Consumption	14W (Max)		
Dimension (W*H*D)	7.9" x 1.6" x 3.9" [200mm x 40mm x 100mm]		
Net Weight	1.5lbs [685g]		

# **KVM SWITCHES**



	BG-MKVM41R		
	Signal Inputs/Output		
Maximum Single Link Range	1920x1080@60		
HDMI Input/Output Connector	Type A 19 pin		
	Operating Frequency		
Vertical Frequency Range	50/60Hz		
Video Amplifier Bandwidth	2.25Gbps		
	Resolutions		
Input Resolution	480i60Hz, 480p60Hz, 576i50Hz, 576p50Hz, 720p50/60Hz, 1080i50/60Hz, 1080p24/25/30/50/60Hz		
Output Resolution	720p, 1080p		
	Mechanical Data		
Chassis Material	Metal		
Color	Black		
	Environmental		
Operating Temperature	32°F to 158°F / 0°C to +70°C		
Storage Temperature	14°F to 176°F / -10°C to +80°C		
Storage Humidity	5% to 90% RH (no condensation)		
	Power Requirement		
External Power Supply	12V DC@2A		
Power Consumption (max)	24W		
	Regulatory Approvals		
Main Unit	FCC, CE		
Power Supply	UL, CE, FC C, REACH, ROHS		

## HDMI EXTENDERS



## HELPING HDMI GO THE DISTANCE

HDMI is the modern standard for high-definition audio/video transmission. The convenience of a single A/V connector is, however, offset by a distance limitation. Beyond 50 feet HDMI becomes unreliable and can result in intermittent connections, reduced resolution, or sometimes no connection at all. This is where HDMI extenders step in.

## TO HDBASET OR NOT TO HDBASET?

HDBaseT is the recognized standard for HDMI transmission over category cable. With the purchase of an HDBaseT extender users receive guaranteed performance and reliability. A non-HDBaseT extender can offer significant savings but may have greater range or feature limitations by comparison.

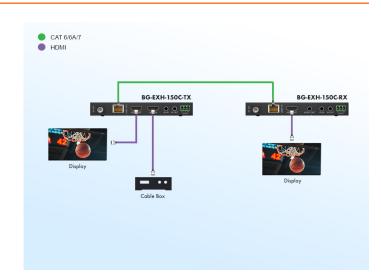
#### **EASY INSTALLATION**

HDMI Extenders can greatly reduce the labor involved in the installation process. In addition to their distance limitation, HDMI cables can be expensive, bulky, and fragile. It's not uncommon for HDMI cables to be damaged beyond repair during installation. Category cables are smaller and more durable, making them better suited for custom installation.

## **FUTURE PROOF**

HDMI Extenders over category cable are a great choice for future-proofing your system. Unlike a physical HDMI cable, when an extender requires replacement or upgrade there is no need to install more wiring. Simply unplug the extender and replace it while using the existing category cable.





#### **BG-EXH-50C**

4K 18Gbps HDMI Extender with Single Directional IR over a Single Cat5e/6 up to 165ft

- Supports video resolution up to 4k2k@60Hz 4:4:4, extends distance up to 164ft / 50 meters
- · HDMI 2.0, HDCP 2.2 / HDCP 1.4 and DVI 1.0 compliant
- · Supports 18Gbps bandwidth
- · Supports HDR function
- · Supports power over CAT5e/6/7 function
- · Supports one-way IR pass-through
- · Supports automatic copy EDID function



## **BG-EXH-70C**

4K 18Gbps HDMI Extender with Bi-directional IR and Zero Latency up to 70m/230ft

- · Supports resolutions up to 4K@60Hz
- Supports LPCM, DTS-HD, DTS Audio, Dolby Digital, and Dolby TrueHD
- Audio Extraction Digital audio can be extracted via the optical audio port
- Multiple Audio Formats Supports LPCM, DTS-HD, DTS Audio, Dolby Digital, and Dolby TrueHD
- Plug and Play Easy setup, no drivers to install



## **BG-EXH-150C**

4K/UHD HDR HDMI Extender Over Single Cat6/7 up to 165ft with IR and HDMI Loop Out



- $\cdot$  1080P to 150 meters, 4K to 120 meters
- · Supports resolutions up to 4K@60fps
- · HDR, HDR10+, Dolby Vision, HLG
- Receiver obtains power over cable from transmitter
- PoC Receiver obtains power over cable from transmitter
- HDCP 2.2 / HDCP 1.4 and DVI 1.0 compliant
- · Support 18Gbps video bandwidth

- The maximum extended transmission distance via a single Cat5e/6 cable:
  - 394ft / 120 meters for 4K2K signal
- 492ft / 150 meters for 1080P signal
- · With bi-directional IR, RS-232 and CEC pass-through
- HDR, HDR10+, Dolby Vision and HLG function supported
- · Supports power over CAT5e/6/7 function





#### **BG-EXHOC**

4K UHD 18Gbps HDMI Extender over Single Coax Cable with Bi-directional IR up to 363ft



The BG-EXHOC is a 4K HDMI signal extender that increases the range of an HDMI input signal up to 110m (363ft) over a single coaxial cable. The use of coaxial cable provides a durable, inexpensive method of transmitting uncompressed HDMI signals over long distances. The BG-EXHOC can extend HDMI signals to its maximum range with resolutions up to 4K2K@60Hz 4:4:4. The extender is also HDMI 2.0 compliant and supports HDCP 2.2/1.4 input and output. To achieve this level of quality, the unit sends the full uncompressed HDMI signal through the coaxial cable. Belden 1694A coaxial cable is recommended for maximum performance. The BG-EXHOC has a maximum data rate of 18Gbps and features automatic signal equalization.

#### **FEATURES**

- · Supports resolutions up to 4K@60Hz 4:4:4
- Extend uncompressed HDMI up to 363 feet (110m)
- HDMI 2.0, HDCP 2.2
- $\cdot$  Bi-Directional IR Passthrough
- Dolby TrueHD, DTS-HD, Dolby Digital Plus, and LPCM 7.1
- Locking BNC connector prevents accidental disconnects
- · HDMI 2.0 compliant
- · Supports up to 4K2K@60 4:4:4 8bits
- · Auto signal equalization

- Extends the transmission range up to 110m (363ft) from the HDMI sources at 4K2K@60 4:4:4 8bits
- HDCP input & output support
- Single coaxial cable
- · Uncompressed HDMI over Coaxial cable transmission
- · Audio sample rate supports 32KHz, 44.1KHz, 48KHz
- Supports full frequency IR signal from 20KHz to 60KHz
- Bi-directional IR path
- Wall mounting housing design for easy and robust installation

- · Business Conference Rooms
- · Healthcare
- Education

- · Houses of Worship
- · Plug and play unit
- Live Events







BG-EXH-50C		
Technical		
HDMI Compliance	HDMI 2.0	
HDCP Compliance	HDCP 2.2 / HDCP 1.4	
Video Bandwidth	li	8Gbps
Video Resolution	Up to 4	K60Hz 4:4:4
Color Space	RGB / YCbCr 4:4:4, Y	CbCr 4:2:2/4:2:0, YUV 4:4:4
Color Depth	8/10/12-bit (1080P60Hz, 4K30Hz, 4K60	OHz YCbCr 4:2:2/4:2:0) 8-bit (4K60Hz 4:4:4)
HDMI Audio		lby TrueHD, Dolby Digital Plus(DD+), DTS-ES, DTS HD HD-HRA, DTS-X
ESD Protection	Human body model — ±8kV (Air-ga	ap discharge) &±4kV (Contact discharge)
	Connections	
Transmitter		Micro USB, Update port] Outputs: 1x HDMI Type A [19-pin ini-jack] 1x CAT OUT [RJ45, 8-pin female]
Receiver	Inputs: 1x IR IN [3.5mm Stereo Mini-jack] 1x CAT IN [RJ45, 8-pin female] 1x SERVICE [Micro USB, Update port] Outputs: 1x HDMI Type A [19-pin female]	
	Mechanical	
Housing	Metal Enclosure	
Color		Black
Dimensions	Transmitter / Receiver: 2.4" (W) x 3.5" (D)	x 0.7" (H) [61mm (W) x 88mm (D) x 18mm (H)]
Weight	Transmitter: 0.35lbs [16	[10], Receiver: 0.34lbs [155g]
Power Supply	Input: AC 100 - 240V 5	50/60Hz Output: DC 12V/1A
Power Consumption	3.84 W	
Operating Temperature	32 - 104°F / 0 - 40°C	
	-4 - 140°F / -20 - 60°C	
Storage Temperature	-4 - 140°	F / -20 - 60°C
Storage Temperature  Relative Humidity		F / -20 - 60°C (no condensation)
Relative Humidity	20 - 90% RH	(no condensation)
Relative Humidity  Resolution / Distance	20 - 90% RH 4K@60 - Feet / Meters	(no condensation) 4K@30 / 1080P - Feet / Meters
Relative Humidity  Resolution / Distance  CAT5e	20 - 90% RH 4K@60 - Feet / Meters 164ft / 50M	(no condensation)  4K@30 / 1080P - Feet / Meters  64ft / 50M

# **HDMI EXTENDERS**



BG-EXH-70C			
Technical	Transmitter Receiver		
HDMI compliance	HDMI2.0, compatible HDMI1.4		
HDCP compliance	HDCP2.2, con	npatible HDCP1.4	
Transmission medium	CAT6/C	AT6A/CAT7	
Video bandwidth	18	Gbps	
Transmission distance	CAT6/6A/7 Tran	smission 70 meters	
Resolution support	3840x2160@24/25/30/50/60Hz, 4096x2160@24/25H	Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, Hz, 1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 10, 1024x768, 800x600	
Audio support	LPCM/DTS-HD/DTS-Audio/Dolb	y Digital 5.1CH/Dolby TrueHD 7.1CH	
HDR10 (YUV4:4:4)	Su	pport	
HDMI Loop-out	su	pport	
ARC and S/PDIF out	su	pport	
EDID through	su	pport	
Bi-directional IR passback	su	pport	
Input TMDS signal	0.7~	71.2Vp-p	
Input DDC signal	5	Vp-p	
Input	HDMI x1, DC2.1 x1, 3.5mm jack x1 (IR)	DC2.1 x1, RJ45 x1, 3.5mm jack x1 (IR)	
Output	HDMI x1, RJ45 x1, 3.5mm jack x1 (IR)	HDMI x1, RJ45 x1, 3.5mm jack x1 (IR), Optical x1	
HDMI connector	Type A 19	Pins, Female	
Network cable standard	CAT6/CAT6A/CAT7, fo	illow IEEE-5688 standard	
Mechanical	Transmitter	Receiver	
Housing	Aluminium alloy material+crystal panel		
Dimensions (LxWxH mm)	4.2"(L) × 3.9"(W) × 1.0"(H) [106.0(L) × 99.0(W) × 26.2(H)mm]		
Net weight	0.46lbs [210g]	0.46lbs [210g]	
Power supply	5V/2A	5V/2A	
Power consumption	4W	4W	
Operation temperaure	-4~140°F/-20~60°C		
Storage temperature	-22~158°F / -30~70°C		
Relative humidity	0~90% (no condensation)		



BG-EXH-150C			
Technical			
HDCP Compliance	HDCP 2.2 / HDCP 1.4		
Video Bandwidth	18Gbps		
Video Resolution	4K2K 50/60Hz 4:4:4, 4K2K 50/60Hz 4:2:2, 4K2K 50/60Hz 4:2:0, 4K2K 30Hz 4:4:4, 1080p, 1080i, 720p, 720i, 480p, 480i. All HDMI 3D TV formats. All PC resolutions including 1920 x 1200		
Color Space	RG	B / YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4	i:2:0
Color Depth	8/10/12-bit	(1080P60Hz, 4K30Hz, 4K60Hz YCbCı 8-bit (4K60Hz 4:4:4)	r 4:2:2/4:2:0)
HDMI Audio Formats		.1, Dolby Digital, Dolby TrueHD, Dolb -ES, DTS HD Master, DTS HD-HRA, D	
L/R Audio Formats		PCM 2.0	
ESD Protection	Human body mod	el: ±8kV (Air-gap discharge) & ±4kV (	(Contact discharge)
		Connection	
Transmitter	Inputs: 1x HDMI Type A [19-pin female], Outputs: 1x HDMI Type A [19-pin female], 1x HDBT OUT [RJ45, 8-pin female], Control: 1x IR IN [3.5mm Stereo Mini-jack], 1x IR OUT [3.5mm Stereo Mini-jack], 1x RS-232 [Phoenix jack], 1x SERVICE [Mini-USB, Update port]		
Receiver	Inputs: 1x HDBT IN [RJ45, 8-pin female], Outputs: 1x HDMI Type A [19-pin female], 1x AUDIO OUT [3.5mm Stereo Mini-jack], Control: 1x IR IN [3.5mm Stereo Mini-jack], 1x IR OUT [3.5mm Stereo Mini-jack], 1x RS-232 [Phoenix jack], 1x SERVICE [Mini-USB, Update port]		
	Mechanical		
Housing	Metal Enclosure		
Color	Black		
Dimensions	Transmitter / Receiver: 5.5" (W) x 2.5" (D) x 0.7" (H) [140mm (W) x 65mm (D) x 18mm (H)]		
Weight	Transmitter: 0.35lbs [160g], Receiver: 0.34lbs [155g]		
Power Supply	Input: AC 100 - 2	40V 50/60Hz, Output: DC 24V/1A (Lo	cking connector)
Power Consumption		9.36 W	
Operating Temperature	32 - 104°F / 0 - 40°C		
Storage Temperature	-4 - 140°F / -20 - 60°C		
Relative Humidity	20 - 90% RH (no condensation)		
	Resolution / Distance		
4K2K	394ft / 120M		
1080P	492ft / 150M		
Resolution / Distance	4K@60 - Feet / Meters	4K@30 - Feet / Meters	1080P@60 - Feet / Meters
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M
	The use of "Premium High Speed HDMI" cable is highly recommended.		

# **HDMI EXTENDERS**



BG-EXHOC		
	Technical	
Role of usage	Transmitter (TX) Receiver (RX)	
HDMI compliance	HDMI 2.0a	
HDCP compliance		Yes
Video bandwidth	Single	-link 594MHz (18Gbps)
Video support	up to	4K2K@60 4:4:4 8bits
Audio support		Stereo audio
HDMI over Coax transmission range	Ultra HD (4K2K	24-bit color) - up to 110m (363ft)
HDMI Equalization		Auto
Input TMDS signal	1.2 \	/olts (peak-to-peak)
Input DDC signal	5 Volt	ts (peak-to-peak, TTL)
ESD protection	Human body - ±15kV (air-g	gap discharge) & ±8kV (contact discharge)
PCB stack-up	4-layer board (impedance control - differential 100 $\Omega$ ; single 50 $\Omega$ )	
Input	1x HDMI/1x IR socket	1x BNC/1x IR socket
Output	1x BNC/1x IR socket	1x BNC/1x IR socket
IR remote control	Electro-optical characteristics: '= 25° / Carrier frequency: 20-60kHz	
HDMI connector	Type A [19-pin female]	
BNC connector	$75\Omega$ interlocking socket	
3.5mm connector	3.5mm earphone jack for	IR blaster to control HDMI source device
		Mechanical
Housing	ı	Metal enclosure
Dimensions (L x W x H)	Model 3.5" x 3.7" x 1" [90 x 96 x 25mm] 10.3" x 6.	Package         Carton           7" x 3.8" [263 x 170 x 97mm]         1'7" x 1.2' x 11.3" [512 x 364 x 288mm]
Weight	Model 4.5oz [127g]	Package 2.5lbs [1140g]
Fixedness	Interlocking power supply	
Power supply	5V DC	
Power consumption	10 Watt (max) 6 Watt (max)	
Operation temperature	32~104°F / 0~40°C	
Storage temperature	-4~140°F / -20~60°C	
Relative humidity	20~90% RH (no condensation)	

# KVM/USB EXTENDERS



## **CONTROL EXTENDED**

BZBGEAR KVM Extenders allow users to remotely control a computer from a display located in a separate location up to 70 meters away. The installation of a KVM extender allows the user to locate their computer out of sight and maximize their available work area.

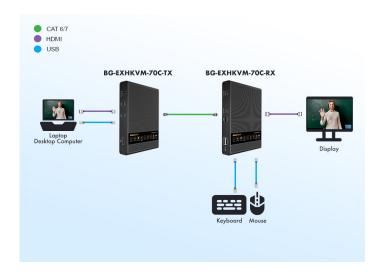
## LONG RANGE USB

BZBGEAR USB Extenders allow users to connect USB 2.0 peripherals at distances up to 100 meters/330 feet. Devices like printers, scanners, media players, and external storage drives can be placed in convenient locations, eliminating unnecessary workspace clutter.

## **INCREASED SECURITY FOR VITAL COMPONENTS**

The remote access abilities that KVM extenders provide allow for the safeguarding of critical computers. These computers can be placed in a secure location to protect from theft, damage, or unauthorized users. When combined with a switching power supply, access to the control station can be monitored.





#### **BG-USB-MR80**

4-Port USB 2.0 Extender over Single Cat.X Cable up to 260ft

- · 480Mb/s transfer speed.
- · Metal housing for extra durability
- · USB 2.0 480Mb/s transfer speed
- · 80 meters Extends USB 2.0 signal up to 264 feet
- USB Hub Share connection with up to four devices
- · RJ45 Uses a single standard category cable
- · Plug and Play No drivers needed
- · Hot Plug Add or remove devices without rebooting





## **BG-USB-LR100**

USB 2.0 Extender Over a Single Cat.X Cable up to 330ft





- · No drivers needed
- · 480Mb/s transfer speed
- · Extends USB 2.0 signal up to 328 feet
- · Share a single connection with two devices
- Power over Cable eliminates the need for a second power supply
- Supports USB 2.0 protocol, transmission rate up to 480Mbps
- Supports extend distance up to 100 meters / 328ft via CAT 5e/6 cable

- · Connects to a single category cable
- Supports one USB-B port input in transmitter
- · Supports two USB 2.0 ports output in receiver
- Supports power over Cat5e/6/7 function, it means that either transmitter or receiver is connnected powered supply by 12V/1A power adapter, the other doesn't need power supply
- Simple plug and play, no drive and setting installation required
- · Compact design for easy and flexible installation



#### **BG-EXHKVM-70C**

4K 18Gbps HDR HDMI/KVM Extender with Zero Latency up to 230ft



The BG-EXHKVM-70C is a 4K HDMI 2.0a KVM extender that can transmit an uncompressed 4K@60Hz HDMI signal with zero latency at distances up to 70 meters over a single category cable. Compatible with HDCP 2.2 and HDCP 1.4, this extender supports HDR(YUV 4:4:4) as well as EDID passthrough for seamless connectivity.

The KVM functionality allows keyboard and mouse control of a remote PC or media player from the receiver unit via the USB 2.0 ports. Extract digital audio via the S/PDIF port for external audio systems. Multiple audio formats are supported, including LPCM, DTS-HD, DTS Audio, Dolby Digital, and Dolby TrueHD.

#### **FEATURES**

- Supports resolutions up to 4K@60Hz
- Digital audio can be extracted via the optical audio port
- Remotely control a PC from the display side with a keyboard and mouse
- · Easy setup, no drivers to install
- · Connect an additional display to the transmitter
- Integrated surge protection increases reliability
- Audio Extraction Digital audio can be extracted via the optical audio port
- KVM Function Remotely control a PC from the display side with a keyboard and mouse

- · 4K Supports resolutions up to 4K@60Hz
- Plug and Play Easy setup, no drivers to install
- HDMI Loop-Out Connect an additional display to the transmitter
- Surge Protection Integrated surge protection increases reliability
- Supports HDMI 2.0a, compatible with HDCP 2.2 and HDCP 1.4
- Supports auto down-scaling to match display resolution
- Supports uncompressed 4K@60Hz 4:4:4 with HDR10 and zero latency

- · Offices
- · Business Owners

- · Classrooms
- Educators

- · Commercial Displays
- Professional A/V Integrators







BG-USB-MR80			
Technical	TX	RX	
Role of usage	Transmitter (TX)	Receiver (RX)	
USB compliance	USB 2.0 high sp	peed compliant	
Bandwidth	Up to 48	30 Mbit/s	
USB over UTP transmission	Up to 264fee	et (80 meters)	
Signal Equalization	2-pin dip swit	tch at TX & RX	
ESD protection	[1] Human body model — ±19kV [air-gap discharge]	& ±12kV [contact discharge] [2] Core chipset — ±8kV	
PCB Stack-up	4-layer board [impedance contro	ol — differential 100W; single 50W]	
Input	1x USB(Type B)	1x RJ-45	
Output	1x RJ-45	4x USB (Type A)	
USB connector	USB 2.0 Type A & B (High-Speed USB)		
RJ-45 connector	WE/SS 8P8C with	n 2 LED indicators	
Dip Switch	Signal level equalization	Signal level equalization	
	Mech	anical	
Housing	Meta	l case	
Dimensions [L x W x H]	3.8" x 2.1" x 1"[97 x 54 x 27mm]	3.8" x 2.1" x 1"[97 x 54 x 27mm]	
Weight	3.8oz[108g]	3.5oz[99g]	
Power supply	Via USB	5V 2A DC	
Power consumption	2 Watts [max]	4 Watts [max]	
Operation temperature	32~104°F [0~40°C]		
Storage temperature	-4~140°F [-20~60°C]		
Relative humidity	20~90% RH [no condensation]		



	D.C. LICH J. D.LOO		
	BG-USB-LR100		
	Technical		
USB protocol	USB 2.0		
Transmission rate	Up to 480Mbps		
Transmission distance	100M (328ft)		
ESD Protection	Human-body Model:±8kV (Air-gap discharge), ±4kV (Contact discharge)		
	Connections		
Transmitter	Input port: 1xUSB [USB-B, female], Output port: 1xCAT [RJ45, female]		
Receiver	Input port: 1xCAT [RJ45, female], Output port: 2xUSB [USB-A, female]		
	Mechanical		
Housing	Metal Enclosure		
Color	Black		
Dimensions	$Transmitter  /  Receiver; 3.2"  (W) \times 1.9"  (D) \times 0.8"  (H)  [82mm  (W) \times 49mm  (D) \times 20mm  (H)]$		
Weight	Transmitter / Receiver: 0.22lbs [100g]		
Power Supply	Input: AC100~240V 50/60Hz, Output: DC 12V/1A		
Power Consumption	Transmitter: 1.3W, Receiver: 2.3W		
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C		
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C		
Relative Humidity	20~90% RH (non-condensing)		



BG-EXHKVM-70C			
	Technical		
Role of usage	Transmitter (TX) Receiver (RX)		
HDMI compliance	HDMI2.0, co	mpatible HDMI1.4	
HDCP compliance	HDCP2.2, co	mpatible HDCP1.4	
Transmission meduim	CAT6/	CAT6A/CAT7	
Transmission distance	≤7	0 meters	
Video bandwidth	1	18Gbps	
Video support	480p@60Hz, 576i@50Hz, 576p@50Hz, 72	58, 1366x768, 1600x900, 1024x768, 800x600, 480i@60Hz, Op@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, IO/60Hz, 4096x2160@24/25Hz	
Audio formats	LPCM/DTS-HD/DTS-	-Audio/Dolby Digital 5.1CH	
HDR10(YUV4:4:4)	s	support	
HDMI Loop-out	s	support	
S/PDIF out	s	support	
EDID through	s	support	
KVM function	s	support	
Input TMDS signal	0.7~1.2Vp-p		
Input DDC signal		5Vp-p	
Input	HDMI IN x1, DC2.1 x1, USB-A x1	DC2.1 x1, RJ45 x1, USB-A x2	
Output	HDMI OUT x1, RJ45 x1	HDMI OUT x1, S/PDIF OUT x1	
HDMI connector	Type A 1	9 Pins, Female	
Network cable standard	CAT6/CAT6A/CAT7, f	follow IEEE-5688 standard	
Mechanical	Transmitter	Receiver	
Material	Aluminium alloy material+crystal panel		
Dimensions LxWxH	150.0(L) × 107.	.0(W) x 28.4(H) mm	
Net weight	260g	260g	
Power supply	5V/2A	5V/2A	
Power consumption	4W	4W	
Operation temperature	-20∼60°C		
Storage temperature	-30∼70°C		
Relative humidity	0∼90%(no condensation)		

## FIBER OPTIC EXTENDERS



## SEND VIDEO FARTHER THAN YOU THOUGHT POSSIBLE!

The distance limitations imposed by modern A/V connections pose challenges when attempting to deploy equipment across large campuses. BZBGEAR Fiber Optic extenders solve this problem, enabling SDI/HDMI signals to be transmitted at distances up to 10km (6.25 miles) over a single-mode fiber connection.

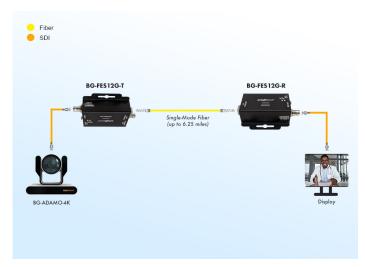
#### MORE FIBER IN YOUR DIET

When you need to supercharge your video signal fiber optic extenders are the answer. Sending A/V signals over fiber optic greatly increases transmission rates and distances.

### PERFECT FOR LARGE-SCALE DEPLOYMENT

BZBGEAR fiber optic extenders are ideally suited for use in large facilities. They are often used to send video between separate buildings on the same campus, large studios, and venues like sports arenas.





## **BG-FES12G**

12G/6G/3G/HD/SD-SDI over Single mode SFP-type Fiber Optic Extender





The BG-FES12G is an SDI over single mode SFP-type fiber optic extender. This device can extend multiple SDI formats (12G/6G/3G/HD) with embedded audio up to 10 km (6.25 miles) over a single-mode fiber optic cable with transmission speeds up to 11.88 Gbps.

Both transmitter and receiver units provide equalizing and re-clocking for consistent signal quality. The transmitter is also equipped with a convenient SDI loop-out for a local display. The locking power supply on both units ensures reliable connection.

## **FEATURES**

- Ultra HD refers to a TV resolution of 3840 x 2160 pixels
- · 12G/6G/3G/HD/SD
- Up to 11.88 Gbps
- Extend signal up to 10 km/6.25 miles
- · Single-Mode SFP
- · Ensures reliable connection

- · Multiple SDI Formats 12G/6G/3G/HD/SD
- · High-Bandwidth Up to 11.88 Gbps
- Extreme Range Extend signal up to 10 km (6.25 miles)
- · Automatic Reclocking Maintains solid signal lock
- · Fiber-Optic Connection Single-Mode SFP
- Locking Power Supply Ensures eliable connection

- Studios
- · Government Campuses
- Military Installations

- · Production Crews
- · IT Specialists
- Video Editors





## **BG-UHD-18GFE**

4K HDMI USB KVM Extender Kit Over fiber w/HDR, 2-Way IR & RS-232



The BG-UHD-18GFE is a 4K HDMI KVM extender that can transmit a 4K@60Hz HDMI signal with USB 2.0 at distances up to 6.25 miles (10km) over a single-mode fiber optic cable, with transfer speeds up to 18Gbps. This HDCP 2.2 compliant extender is equipped with bi-directional IR and RS-232 pass-through, allowing for both source and display control.

The KVM functionality allows keyboard and mouse control of a remote PC or media player at a distance from the receiver unit via the USB 2.0 ports.

With the ability to send high resolution video over long distances, this extender is ideal for sports arenas, concert venues, digital signage applications or anywhere extreme range is a requirement.

## **FEATURES**

- Supports 4K@60 HDR (4:4:4)
- Single-mode SFP connection provides pure signal over extreme distances
- · Connect 2 remote USB devices
- Supports RS-232 passthrough to extend control signals
- · Full 2-way IR passthrough
- · Extends HDMI up to 6.25 miles (10km)
- · Supports 4K2K@60 4:4:4 8bits
- Supports HDR, which is 4K2K@60 4:2:0 10bits

- · Supports HDCP2.2
- Extend HDMI signals up to 10km (6.25miles) over single mode fiber optic cables
- · Supports Keyboard & mouse signal transmission
- Supports full frequency IR signal from 20KHz to 60KHz
- · Bi-directional IR path-through
- · Link LED indicator light
- Wall mounting housing design for easy and robust installation

- · Casinos
- · Arenas
- Auditoriums

- · Hotels
- · Event Centers
- Large Businesses

- · Schools/Universities
- · Corporations
- · Arena Management





# **FIBER OPTIC EXTENDERS**



BG-FES12G		
Technical		
SDI standard	SD-SDI/ HD-SDI/ 3G-SDI/ 6G-SDI/12G-SDI	
Auto HD/SD-SDI detection	Yes	
Supported protocols	SMPTE 259M (270Mbps / 360Mpbs), DVB ASI (270Mbps), SMPTE 292M / HDTV (1.485Gbps and 1.485/1.001Gbps), SMPTE 424M / HDTV (2.97Gbps and 2.97/1.001Gbps), SMPTE 2082-1 / HDTV (5.94Gbps and 5.94/1.001Gbps), SMPTE 2082-2 / HDTV (11.88Gbps and 11.88/1.001Gbps)	
Data rates	270 / 1483 / 1485 / 2967 / 2970 / 5940 / 11880Mbps	
Video bandwidth	[11.88Gpbs & 11.88/1.001Gbps]	
Video support	[HD] 720p50/59.94/60, 1035i50/59.94/60, 1080i50/59.94/60, 1080p24/30,1080p60,1080p59.94, 4K2Kp30, 4K2Kp60, [SD] NTSC@59.94Hz, PAL@50Hz	
SDI signal type	SMPTE 2082-2, SMPTE 2082-1, SMPTE-424M, SMPTE-292M, SMPTE-259M, DVB-ASI	
Auto reclocker mode	Automatic detection: 270Mbps / 1.483Gbps / 1.485Gbps / 2.97Gbps / 2.967Gbps / 5.94Gbps / 5.934Gbps / 11880Gbps / 11868Gbps, Automatic bypass: 177Mbps / 360Mbps / 540Mbps	
Output impedance	75Ω	
Fiber Transmission	10km (6.25mi)	
Loop-out	Transmitter: 1 reclocking SDI loop-out / Receiver: N/A	
Input	Transmitter: 1x BNC [SDI] 1x Optical SFP [SDI] / Receiver: 1x Optical SFP [SDI]	
Output	Transmitter: 1x BNC [SDI] (optional loop-out) / Receiver: 1x BNC [SDI]	
BNC connector	75Ω inter-locked socket	
Audio support	Yes	
PCB Stack-up	4-layer board [impedance control — differential 100 $\Omega$ ; single 50 $\Omega$ ]	
RP-198 pathological patterns	Immune	
Optical fiber connector	SFP-type	
HDMI connector	Type A [19-pin female]	
3.5mm connector	IR receiver / IR blaster	
	Mechanical	
Housing	Metal case	
Dimensions [L x W x H]	2.9" x 2.9" x 1.0" [74 x 74 x 26mm]	
Weight	7.4 oz [211g]	
Power supply	5V 2A DC Inter-locked power supply	
Power consumption	3 Watts [max]	
Operation temperature	32~104°F [0~40°C]	
Storage temperature	-4~140°F [-20~60°C]	
Relative humidity	20~90% RH [no condensation]	

## **FIBER OPTIC EXTENDERS**



BG-UHD-18GFE			
	Tech Specs		
Role of usage	Transmitter [TX] Receiver [RX]		
HDMI compliance	HDMI 2.0a		
HDCP compliance	HDCP	2.2	
Video bandwidth	Single link 594M	MHz [18Gbps]	
Video support	HDR 4K2K@60 (4:2:0 10bits)	) / 4K2K@60 (4:4:4 8bits)	
HDMI over fiber	Yes	:	
Audio support	Surround sound [up to 7.1ch	h] or stereo digital audio	
Equalization	Auto	0	
Input TMDS signal	1.2 Volts [peak	k-to-peak]	
Input DDC signal	5 Volts [peak-to	o-peak, TTL]	
ESD protection	[1] Human body model — $\pm$ 19kV [air-gap discharge] & $\pm$ 12kV [contact discharge]		
PCB stack-up	6-layer board [impedance control — differential 100 $\Omega$ ; single 50 $\Omega$ ]		
IR pass-thru	Bi-directional		
RS-232 support	Yes		
Input	1x HDMI 1x 3.5mm	1x fiber 1x 3.5mm	
Output	1x fiber 1x 3.5mm	1x HDMI 1x 3.5mm	
In / Out	1x RS-232	1x RS-232	
HDMI source control	Controllable via IR pass-through fr	rom RX to TX with IR extenders	
HDMI connector	Туре А [19-рі	n female]	
3.5mm connector	IR receiver /	IR blaster	
Mechanical	[Tx]	[Rx]	
Housing	Metal enclosure		
Fixedness	Wall-mounting case with screws		
Power supply	12V2A		
Power consumption	Max 10W		
Operation temperature	0-50°C		
Storage temperature	-4~140°F [-20~60°C]		
Relative humidity	20~90% RH [no condensation]		

# HDMI SPLITTERS



## FROM ONE TO MANY

BZBGEAR HDMI splitters are designed to share a single HDMI source to multiple displays. They are perfectly suited for applications like sports bars or auditoriums where removing the need for multiple source devices simplifies installation and adds reliability to a system.

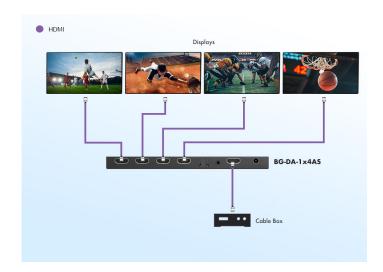
#### MORE FIBER IN YOUR DIET

The inclusion of an HDMI splitter in your system design creates a single point of connection for all of your displays, easing troubleshooting and eliminating the messy wiring and clutter that multiple source devices can create.

### ADD FLEXIBILITY TO YOUR DESIGN

BZBGEAR HDMI splitters are designed to provide added flexibility to your A/V system. Features like secondary inputs and audio de-embedding allow additional sources or external audio systems to be added without replacing your core components.





### **BG-DA-1X2AS**

1X2 4K HDMI Splitter with Down-Scaler and Audio De-Embedding

- · Supports resolutions up to 4K@60Hz 4:4:4
- HDMI audio extraction via optical and 3.5mm ports
- · HDMI 2.0b, HDCP2.2/HDCP1.4 compliant
- · Selectable 4K to 1080P downscaling feature
- · Supports all major HDMI audio formats
- · Simple for anyone to learn
- · HDMI 2.0b, HDCP2.2/HDCP1.4 compliant



### **BG-DA-1X4AS**

1X4 4K HDMI Splitter with Down-Scaler w/Digital and Analog audio Output



- · HDMI 2.0b, HDCP2.2/HDCP1.4 compliant
- Supports HDMI resolution the maximum up to 4K2K@50/60Hz (4:4:4)
- Supports digital and analog audio extract output from HDMI source
- Supports output bypass and 4K->1080P downscaler function via dial switch on panel
- EDID can be selected COPY and AUTO modes via dial switch on panel
- · Supports analog audio PCM 2.0
- Supports optical audio pass-through format about LPCM 2.0/2.1/5.1CH, Dolby 5.1, Dolby True HD, Dolby DD+, DTS 5.1, DTS-ES 6/DTS-HDMA 5.1, DTS HD-HRA 5.1

### BZB-DA-14

1X4 4K HDMI Splitter Support HDMI 2.0b, HDCP 2.2, HDR & 3D

- Supports resolutions up to 4K2K@60Hz 4:4:4
- Supports LPCM 7.1CH, Dolby TrueHD, DTS-HD
- · Eliminates connectivity issues
- · Easily installed in tight spaces
- · 18Gbps transfer rate
- · Supports up to 4 displays
- · HDMI 2.0b, HDCP 2.2 compliant
- Supports video format up to 4K2K@60Hz with 8 bit RGB/YCBCR 4:4:4/YCBCR 4:2:2
- Support 3D frame sequential video format up to 1080p@60
- Supports 3D frame sequential video format up to 4K2K@30Hz







### **BG-UHD-DA2X8**

2X8 HDMI 4K Splitter/Distribution Amplifier w/CEC Turn On/Off TV

- Supports resolutions up to 4K@ 60 Hz with 4:4:4
   Chroma sampling
- · Supports 4k to 1080p down-scaling
- · Eliminates HDMI connection issues
- · Easily adjust audio output signal
- · Easily toggle between sources
- Features RCA and Toslink outputs
- HDMI inputs support HDCP 2.2 and the outputs support HDCP1.4



### **BG-UHD-DA1X16**

1X16 4K HDMI Splitter with Downscaling and AOC Supported



- · HDMI V2.0, 4K@60Hz 4:4:4 8bit, HDR 10, Dolby Vision
- · HDCP 2.2 compliant
- Compatible with HDMI AOC cable, provides up to 5V100mA power on each output
- · Auto 4K to 1080p downscaling
- Stereo analog L/R audio output for audio deembedding from HDMI input
- · Smart EDID management and HDCP management
- · CEC and RS232 control

### **BG-UHD-DA1X24**

1X24 4K HDMI Splitter with Downscaling and AOC Supported

- HDMI V2.0, 4K@60Hz 4:4:4 8bit, HDR 10 and Dolby Vision
- · HDCP 2.2 compliant
- Compatible with HDMI AOC cable, provides up to 5V100mA power on each output
- Auto 4K to 1080p downscaling
- Stereo analog L/R audio output for audio de-embedding from HDMI input
- · Smart EDID management and HDCP management
- CEC and RS232 control









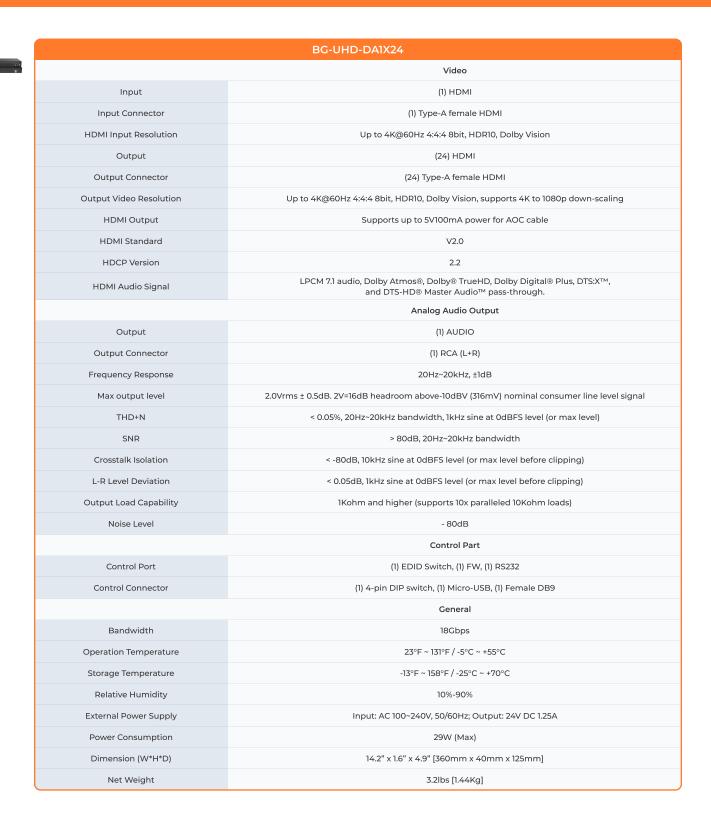
	BG-DA-1X4AS
	Technical
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18Gbps
Video Resolutions	720P50/60Hz, 1080P50/60Hz, 4K2K24Hz, 4K2K30Hz, 4K2K@50/60Hz (4:4:4)
Color Depth	4K60Hz 8-bit, 1080P 12-bit
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
L/R Audio Formats	PCM 2.0
Optical Audio Formats	LPCM [2.0/2.1]CH, Dolby 5.1, Dolby True HD,Dolby DD+, DTS 5.1, DTS-ES 6, DTS-HDMA 5.1, DTS HD-HRA
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
	Connections
Input ports	1xHDMI Type A [19-pin female]
Output ports	4xHDMI Type A [19-pin female] 1xL/R Audio out [3.5mm Stereo Mini-jack] 1xOptical out [S/PDIF]
	Mechanical
Housing	Metal Enclosure
Color	Black
Dimensions	7"(W) x 2.5"(D) x 0.6"(H) [180mm(W)x62mm(D)x14mm(H)]
Weight	0.5lbs [227g]
Power Supply	Input: AC100~240V 50/60Hz, Output: DC5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	3.5W (max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Relative Humidity	20~90% RH (non-condensing)

	BZB-DA-14	
	Technical	
Video Bandwidth	600MHz/18Gbps	
Input Ports	1xHDMI Type A [19-pin female]	
Output Ports	4xHDMI Type A [19-pin female]	
Output Resolution	480i ~1080p50/60, 4Kx2K@24/30, 4k2k@60Hz	
ESD Protection	Human Body model: ±8kV (Air-gap discharge), 4kV (Contact discharge	
Power Supply	5V/1A DC (US/EU standards,CE/FCC/UL certified)	
Dimensions	2.5" (W) x $6.4"$ (D) x $0.6"$ (H) [63mm (W) x $163$ mm (D) x $16$ mm (H)]	
Weight	0.57lbs [260g]	
Chassis Material	Metal	
Silkscreen Color	Black	
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C	
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C	
Relative Humidity	20~90% RH (non-condensing)	
Power Consumption	2W	

	BG-UHD-DA2X8
	Video Input
Input	(2) HDMI
Input Connector	(2) Female type-A HDMI
HDMI Input Resolution	Up to 4Kx2K@60Hz 4:4:4 8bit
HDMI Standard	2.0
HDCP Version	2.2
CEC	Supported
	Video Output
Output	(8) HDMI
Output Connector	(8) Female type-A HDMI
HDMI Output Resolution	Up to 4Kx2K@60Hz 4:4:4 8bit
HDMI Standard	2.0
CEC	Supported
	Audio
De-embedded Output	(1) AUDIO OUT; (1) SPDIF OUT
HDMI Audio Format	LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X, and DTS-HD® Master Audio pass-through
Stereo Analog L/R Audio Format	PCM
Toslink Digital Audio Format	PCM, Dolby Digital, DTS, DTS-HD
Frequency Response	20Hz - 20KHz, ±3dB
Max Output Level	$2.0 \text{Vrms} \pm 0.5 \text{dB}$ . $2 \text{V} = 16 \text{dB}$ headroom above - $10 \text{dBV}$ (316mV) nominal consumer line level signal $2.0 \text{Vrms} \pm 0.5 \text{dB}$ .
THD+N	<0.05% (-80 dB), 20Hz - 20KHz bandwidth, 1KHz sine at 0dBFS level (or max level)
SNR	>80dB, 20Hz ~ 20KHz bandwidth
Crosstalk Isolation	>70dB, 10KHz sine at 0dBFS level (or max level before clipping)
L-R Level Deviation	< 0.3dB, 1KHz sine at 0dBFS level (or max level before clipping)
Frequency Response Deviation	<± 0.5 dB 20Hz ~ 20KHz
Output Load Capability	1K ohm and higher (supports 10x paralleled 10k ohm loads)
Stereo Channel Separation	>70dB@1kHz
	Control
Control Part	(5) Control buttons, (1) EDID 3-pin DIP switch; (1) EDID 4-pin DIP switch, (1) Micro-USB port
	General
Bandwidth	18Gbps
Operation Temperature	14°F ~ 131°F / -10°C ~ +55°C
Storage Temperature	-13°F ~ 158°F / -25°C ~ +70°C
Relative Humility	10%-90%
Power Supply	Input: 100V~240V AC; Output: 12V DC 1A
Power Consumption	12W(Max)
Dimension (W*H*D)	12.6" x 0.8" x 3.9" [324mm x 20mm x 100mm]
Net Weight	About 2lbs [900g]



BG-UHD-DAIX16		
Video		
Input	(1) HDMI	
Input Connector	(1) Type-A female HDMI	
HDMI Input Resolution	Up to 4K@60Hz 4:4:4 8bit, HDR10, Dolby Vision	
Output	(16) HDMI	
Output Connector	(16) Type-A female HDMI	
Output Video Resolution	Up to 4K@60Hz 4:4:4 8bit, HDR10, Dolby Vision, supports 4K to 1080p down-scaling.	
HDMI Output	Supports up to 5V100mA power for AOC cable.	
HDMI Standard	V2.0	
HDCP Version	2.2	
HDMI Audio Signal	LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, and DTS-HD® Master Audio™ pass-through	
	Analog Audio Output	
Output	(1) AUDIO	
Output Connector	(1) RCA (L+R)	
Frequency Response	20Hz~20kHz, ±1dB	
Max output level	2.0Vrms $\pm$ 0.5dB. 2V=16dB headroom above-10dBV (316mV) nominal consumer line level signal	
THD+N	< 0.05%, 20Hz~20kHz bandwidth, 1kHz sine at 0dBFS level (or max level)	
SNR	> 80dB, 20Hz~20kHz bandwidth	
Crosstalk Isolation	< -80dB, 10kHz sine at 0dBFS level (or max level before clipping)	
L-R Level Deviation	< 0.05dB, 1kHz sine at 0dBFS level (or max level before clipping)	
Output Load Capability	1Kohm and higher (supports 10x paralleled 10Kohm loads)	
Noise Level	- 80dB	
	Control Part	
Control Port	(1) EDID Switch, (1) FW, (1) RS232	
Control Connector	(1) 4-pin DIP switch, (1) Micro-USB, (1) Female DB9	
	General	
Bandwidth	18Gbps	
Operation Temperature	23°F ~ 131°F / -5°C ~ +55°C	
Storage Temperature	-13°F ~ 158°F / -25°C ~ +70°C	
Relative Humidity	10%-90%	
External Power Supply	Input: AC 100~240V, 50/60Hz; Output: 24V DC 1.25A	
Power Consumption	26W (Max)	
Dimension (W*H*D)	10.5" x 1.6" x 4.9" [268mm x 40mm x 125mm]	
Net Weight	2.5lbs [1.14Kg]	



### SDI SPLITTERS



### FROM ONE TO MANY

BZBGEAR SDI splitters are designed to share a single SDI source to multiple displays. They are perfectly suited for applications like live events or houses of worship where a simple and reliable means of dividing SDI connections is required.

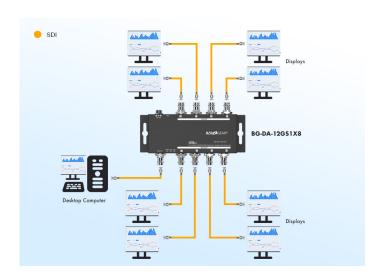
### **DIVIDE WITH CONFIDENCE**

BZBGEAR SDI splitters are designed with independently buffered and re-clocked outputs to eliminate jitter and extend SDI transmission distance. This results in lossless splitting, preserving video quality for all connected displays.

### 12G FOR THE MASSES

With support for 12G SDI, BZBGEAR SDI splitters provide connectivity for multiple displays at resolutions up to 4K@60Hz, ensuring you deliver pristine image quality to your viewers.





**BG-3GS12** 

1X2 3G-SDI Splitter



**BG-3GS14** 

1X4 3G-SDI Splitter



The BG-3GS12 and BG-3GS14 are 1x2 and 1x4 3G-SDI splitters. Supporting resolutions up to 3G (1080p@60Hz), these devices simultaneously route one SDI input to two SDI displays (BG-3GS12) or one SDI input to four SDI displays (BG-3GS14).

It supports a wide range of data rates (270Mbp to 2.97Gbps) as well as multiple deep color settings (8bit, 10bit, 12bit). These splitters can maintain an SD signal up to 200m, HD up to 120m, and 3G up to 80m.

These products are specially designed with equalizer IC in its input and drive IC in its outputs. All of the input and outputs support long coaxial cable.

### **FEATURES**

- This product is specially designed with equalizer IC in its input and drive IC in its outputs. All of the input and outputs support long coaxial cable
- · Supports multiple deep color: 8bit, 10bit, 12bit
- Supports wide range data rates: 270Mbps $\sim$ 2.97Gbps

	Su	ipports multiple deep c	olor:	
SD 480i, 576i	HD 720p	HD 1080i	HD 1080p	3G 1080p
and 625i	@24/25/30 /50/60	@50/60	@24/25/30	@50/60

Supports multi	ple color space:
RGB or YCbCr 4:4:4 sampled	YCbCr 4:2:2 or 4:2:0 sampled

- Studios
- · Government Campuses
- Military Installations

- Production Crews
- · IT Specialists
- Video Editors

### BG-DA-12GS1X2

12G-SDI / 6G-SDI / 3G-SDI 1X2 Splitter

# 99 NU 210009 828/24GEAR 85041005112

### BG-DA-12GS1X4

12G-SDI / 6G-SDI / 3G-SDI 1X4 Splitter



### BG-DA-12GS1X8

12G-SDI / 6G-SDI / 3G-SDI 1X8 Splitter



The BG-DA-12GS1X2, BG-DA-12GS1X4, BG-DA-12GS1X8 are 1X2, 1X4, 1X8 12G-SDI splitters. They can split an SD, HD, 3G, 6G, or 12G-SDI video source to SDI compliant displays simultaneously for real time monitoring. Each output is separately buffered and re-clocked to eliminate signal disruption and extend transmission distances. This splitter also provides automatic input cable equalization (Belden 1694A) up to 180m(594ft) @3G, 100m(330ft) @6G and 70m(230ft) @12G.

The LED indicators show signal lock and current video rate, and the inter-locked power supply ensures a reliable power connection.

### **FEATURES**

- · 2, 4 or 8 Outputs Increased connectivity
- Buffered and re-clocked outputs Eliminate jitter and increase transmission distance
- Automatic input cable equalization
   Up to 180 meters @3G

- Interlocked Power Supply Ensures power stays connected
- · Rugged Design Built to last for years of operation
- LED Indicators Signal lock and video rate at a glance

- Studios
- Government Campuses
- Military Installations

- · Production Crews
- IT Specialists
- Video Editors



BG-3GS12	
	Signal Inputs/Output
Input Connector	1x SDI BNC Male
Output Connector	2x SDI BNC Male
SDI Cable Distance (RG59 cable)	3G Mode - Up to 80m, HD Mode - Up to 120m, SD Mode - Up to 200m
	Mechanical
Size (L-W-H)	4.4" x 3.5" x 1.2" [112 x 90 x 29.3mm]
Weight (Net)	0.33lbs [150g]
	Environmental
Operating Temperature	32°F to +158°F / 0°C to +70°C
Operating Humidity	10% to 85% RH (no condensation)
Storage Temperature	14°F to +176°F / -10°C to +80°C
Storage Humidity	5% to 90% RH (no condensation)
	Power Requirement
External Power Supply	5V DC@ 2A
Power Consumption (max)	1W



BG-3GS14	
	Signal Inputs/Output
Input Connector	1x SDI BNC Male
Output Connector	4x SDI BNC Male
	SDI Cable Distance (RG59 cable)
3G Mode	Up to 80m
HD Mode	Up to 120m
SD Mode	Up to 200m
	Mechanical
Size (L-W-H)	6.1" x 3.4" x 9.4" [155 x 86 x 23.5mm]
Weight (Net)	0.6lbs [266g]
	Environmental
Operating Temperature	32°F to +158°F / 0°C to +70°C
Operating Humidity	10% to 85% RH (no condensation)
Storage Temperature	14°F to +176°F / -10°C to +80°C
Storage Humidity	5% to 90% RH (no condensation)
	Power Requirement
External Power Supply	5V DC@ 2A
Power Consumption (max)	1W
	Regulatory Approvals
Converter Unit	FCC, CE, UL
Power Supply	UL, CE, FCC



	BG-DA-12GS1X2
	Technical
SDI standard	SD/HD/3G/6G/12G-SDI
Multi-Rate Support	Auto detection of SD, HD, 3G, 6G or 12G Signals
SDI Compliance	SMPTE 424M, SMPTE 292M, SMPTE 344M, SMPTE 259M, DVB-ASI, ST-2081(6G), ST2082(12G)
SDI Data rates	1.485 / 2.97 / 5.94 / 11.88 Gbps
Video bandwidth	[11.88Gpbs & 11.88/1.001Gbps]
Output impedance	75Ω
Reclocking	Yes
Cable equalization	[12G] up to 70m (230ft), [6G] up to 100m (330ft), [3G] up to 180m (594ft)
Audio support	Yes
RP-198 pathological patterns	Immune
PCB stack-up	4-layer board [impedance control — differential 100 $\Omega$ ; single 75 $\Omega$ ]
Input	1x BNC [SDI]
Output	2x BNC [SDI]
BNC connector	75Ω inter-locked socket
Eye pattern characteristics[12G]	Amplitude: Within 800mV (<10%) Rise/Fall time: Less than 35ps, Timing jitter: <1.0 UI (10Hz to 1188MHz), Alignment jitter: <0.3 (100KHz to 1188MHz)
	Mechanical
Housing	Metal enclosure
Dimensions [L x W x H]	3" x 1.7" x 1.1" [77 x 42 x 28 mm]
Weight	3.1 oz [89g]
Fixedness	Wall-mounting case
Power supply	5V 2A DC
Power consumption	2.5 Watts [max]
Operation temperature	32~104°F / 0~40°C
Storage temperature	-4~140°F / -20~60°C
Relative humidity	20~90% RH [no condensation]



	BG-DA-12GS1X4
	Technical
SDI standard	SD/HD/3G/6G/12G-SDI
Multi-Rate Support	Auto detection of SD, HD, 3G, 6G or 12G Signals
SDI Compliance	SMPTE 424M, SMPTE 292M, SMPTE 344M, SMPTE 259M, DVB-ASI, ST-2081(6G), ST2082(12G)
SDI Data rates	1.485 / 2.97 / 5.94 / 11.88 Gbps
Video bandwidth	[11.88Gpbs & 11.88/1.001Gbps]
Output impedance	75Ω
Reclocking	Yes
Cable equalization	[12G] up to 70m (230ft), [6G] up to 100m (330ft), [3G] up to 180m (594ft)
Audio support	Yes
RP-198 pathological patterns	Immune
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 75Ω]
Input	1x BNC [SDI]
Output	4x BNC [SDI]
BNC connector	$75\Omega$ inter-locked socket
Eye pattern characteristics[12G]	Amplitude: Within 800mV (<10%) Rise/Fall time: Less than 35ps, Timing jitter: <1.0 UI (10Hz to 1188MHz), Alignment jitter: <0.3 (100KHz to 1188MHz)
	Mechanical
Housing	Metal enclosure
Dimensions [L x W x H]	3.6" x 1.7" x 1.1" [92 x 42 x 28 mm]
Weight	4.2 oz [119g]
Fixedness	Wall-mounting case
Power supply	5V 2A DC
Power consumption	2.5 Watts [max]
Operation temperature	32~104°F/0~40°C
Storage temperature	-4~140°F/-20~60°C
Relative humidity	20~90% RH [no condensation]

# KVM SWITCHES



	BG-DA-12GS1X8
	Technical
SDI standard	SD/HD/3G/6G/12G-SDI
Multi-Rate Support	Auto detection of SD, HD, 3G, 6G or 12G Signals
SDI Compliance	SMPTE 424M, SMPTE 292M, SMPTE 344M, SMPTE 259M, DVB-ASI, ST-2081(6G), ST2082(12G)
SDI Data rates	1.485 / 2.97 / 5.94 / 11.88 Gbps
Video bandwidth	[11.88Gpbs & 11.88/1.001Gbps]
Output impedance	75Ω
Reclocking	Yes
Cable equalization	[12G] up to 70m (230ft), [6G] up to 100m (330ft), [3G] up to 180m (594ft)
Audio support	Yes
RP-198 pathological patterns	Immune
PCB stack-up	4-layer board [impedance control — differential 100 $\Omega$ ; single 75 $\Omega$ ]
Input	1x BNC [SDI]
Output	8x BNC [SDI]
BNC connector	75Ω inter-locked socket
Eye pattern characteristics[12G]	Amplitude: Within 800mV (<10%) Rise/Fall time: Less than 35ps, Timing jitter: <1.0 UI (10Hz to 1188MHz), Alignment jitter: <0.3 (100KHz to 1188MHz)
	Mechanical
Housing	Metal enclosure
Dimensions [L x W x H]	5.2" x 2.1" x 1.1" [133 x 53 x 28 mm]
Weight	7oz [198g]
Fixedness	Wall-mounting case
Power supply	5V 2A DC
Power consumption	2.5 Watts [max]
Operation temperature	32~104°F / 0~40°C
Storage temperature	-4~140°F -20~60°C
Relative humidity	20~90% RH [no condensation]



### FROM ONE TO MANY

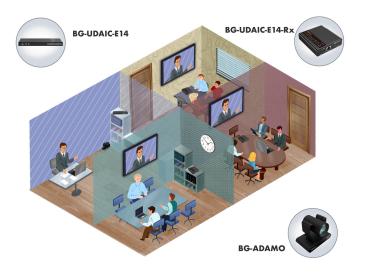
BZBGEAR HDBaseT HDMI splitters are designed to share a single HDMI source to multiple distant displays. They are perfectly suited for applications like sports bars or auditoriums where removing the need for multiple source devices simplifies installation and adds reliability to a system.

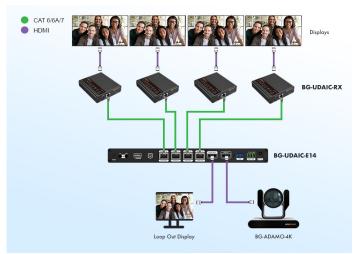
### **CENTRALIZE YOUR WIRING**

The inclusion of a long-range HDMI splitter in your system design creates a single point of connection for all your displays, easing troubleshooting and eliminating the messy wiring and clutter that multiple source devices can create.

### **GO THE DISTANCE**

BZBGEAR long-range HDMI splitters come bundled with HDMI extenders, allowing you to send video signals well beyond the 50-foot distance limitation of standard HDMI cables. HDBaseT provides a reliable long distance alternative utilizing low-cost category cabling, enabling transmission distances up to 120 meters (394 feet) at 4K resolution.





### **BG-HDA-E14**

1X4 4K UHD 18Gbps HDMI HDBaset Splitter/Distribution Amplifier over Category Cable



### **BG-HDA-E18**

1X8 4K UHD 18Gbps HDMI HDBaset Splitter/Distribution Amplifier over Category Cable



The BG-HDA-E14 and BG-HDA-E18 are respectively a 4K 1x4 and 4K 1x8 HDMI splitter kit that can split a single HDMI source signal to four or eight displays at distances up to 70 meters over CAT6 networking cable. This splitter kit is a great choice for users that need to output a single video source like a Blu-ray player, computer, game console, or streaming media player to multiple displays.

### **FEATURES**

- · Video resolution up to 4K2K@30Hz(4:4:4) 8-bit
- · Receivers require no power supply
- HDMI 1.4 and HDCP 1.4 compliant
- Connect a local display
- Dolby TrueHD, DTS-HD, Dolby Digital Plus, and LPCM 7.1
- · Bi-Directional IR Passthrough
- Supported audio formats: LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio
- · HDMI 1.4 and HDCP 1.4 compliant
- Extend the signal transmission distance up to 164 ft / 50 m at the resolution of 4K30Hz, or 230 ft / 70 m at 1080p@60Hz via a single CAT6 cable
- · Advanced EDID management
- Support one-way POC function (only from transmitter to receiver)
- · Compact design for easy and flexible installation

- · Multi-PC workstation
- Programmers

- · Surveillance Systems
- · Security Professionals
- · Recording Studios
- · Recording Engineers





### **BG-UDAIC-E14**

1X8 4K UHD 18Gbps HDMI HDBaset Splitter/Distribution Amplifier over Category Cable



### **BG-UDAIC-E18**

1X4 4K60 UHD 18Gbps HDMI Splitter/Distribution Amplifier up to 230ft over Category Cable



The BG-UDAIC-E14 and BG-UDAIC-E18 are HDMI extender and splitter kits that distribute one HDMI input to up to four (BG-UDAIC-E14) or up to eight (BG-UDAIC-E18) extender outputs.

The signal can be extended at ranges of up to 70 meters (230 feet) with CAT6 cabling.

### **FEATURES**

- Supports resolutions up to 4K@60Hz
- HDMI 2.0, HDCP 2.2
- The transmitter supports HDMI loop out
- Transmission distance up to 70 meters by using Cat6/6A/7 cables
- · Audio Return Channel support

- · Bi-Directional IR Passthrough
- Digital audio provided via TOSLINK connector on receiver
- Supports RS-232 command control
- The receiver can output the digital audio of the TV or source device from the S/PDIF port





### **BG-UDA-E14**

1X4 4K UHD 18Gbps HDMI HDBaset Splitter/Distribution Amplifier over Category Cable



### **BG-UDA-E18**

1X8 4K UHD 18Gbps HDMI HDBaset Splitter/Distribution Amplifier over Category Cable



The BG-UDA-E14 and BG-UDA-E18 are respectively a 1x4 and 1x8 4K 18Gbps HDMI 2.0 HDBaseT splitter/extender kit. Supporting resolutions up to 4K@60Hz (4:4:4), these HDCP 2.2 / HDCP 1.x compatible units can split and extend an HDMI signal at distances up to 120 meters at 4K@60Hz or 150 meters at 1080P@60Hz. The transmitter and receivers are both equipped with bi-directional IR and RS-232 pass-through, allowing for both source and display control. The transmitter uses power over cable to energize the receivers, eliminating the need for additional power supplies.

#### **FEATURES**

- Ultra HD refers to a TV resolution of 3840 x 2160 pixels
- Supports LPCM 7.1CH, Dolby TrueHD, and DTS-HD Master
- · Receivers need no power supply
- Transmit signal up to 120 meters (390 feet)
- · Slim components make a clean installation easy
- Multiple selectable EDID modes ensure reliable connectivity
- · HDMI 2.0b, HDCP 2.2 and HDCP 1.x compliant
- Support 18Gbps video bandwidth
- · Support HDR, HDR10+, HLG and Dolby vision
- Support digital and analog audio de-embedded output
- Support 1 HDMI input, 1 HDMI loop output and 8 HDBaseT outputs
- IR, RS-232 routed to HDBaseT output

- · Multi-PC workstation
- Programmers

- · Surveillance Systems
- · Security Professionals
- · Recording Studios
- · Recording Engineers







BG-HDA-E14		
	Technical	
HDMI Compliance	HDMI 1.4	
HDCP Compliance	HDCP 1.4	
Video Bandwidth	297MHz/10.2Gbps	
Video Resolution	480i ~1080p50/60Hz, 4Kx2K@30Hz (4:4:4)	
Color Depth	8-bit, 10-bit, 12-bit (1080p@60Hz); 8-bit (4K30Hz)	
Color Space	RGB, YCbCr_4:4:4/4:2:2, YUV_4:2:0	
Audio Formats	LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio	
ESD Protection	Human body model: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)	
	Connection	
Transmitter	Input: 1x HDMI IN [Type A, 19-pin female] / Outputs: 1x HDMI OUT [Type A, 19-pin female], 4x CAT OUT [R345] Controls: 1x IR OUT [3.5mm Stereo Mini-jack], 1x EDID DIP switch [4-pin], 1x Update [Micro USB]	
Receiver	Inputs: 1x IR IN [3.5mm Stereo Mini-jack], 1x CAT IN [RJ45, 8-pin female] Output: 1x HDMI OUT [Type A, 19-pin female]	
	Mechanical	
Housing	Metal Enclosure	
Color	Black	
Dimensions	Transmitter: 8.3" (W) $\times$ 3.3" (D) $\times$ 0.7" (H); Receiver: 3.1" (W) $\times$ 2.7" (D) $\times$ 0.7" (H)	
Weight	Transmitter: 1lbs [448g]; Receiver: 0.3lbs [130g]	
Power Supply	12V/2.5A DC Power (US/EU standards, CE/FCC/RoHs certificated)	
Power Consumption	пw	
Operation Temperature	32°F ~ 104°F / 0°C ~ 40°C	
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C	
Relative Humidity	20~90% RH (non-condensing)	



BG-HDA-E18	
	Technical
HDMI Compliance	HDMI 1.4
HDCP Compliance	HDCP 1.4
Video Bandwidth	297MHz/10.2Gbps
Video Resolution	480i ~1080p50/60Hz, 4Kx2K@30Hz (4:4:4)
Color Depth	8-bit, 10-bit, 12-bit (1080p@60Hz); 8-bit (4K30Hz)
Color Space	RGB, YCbCr_4:4:4/4:2:2, YUV_4:2:0
Audio Formats	LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio
ESD Protection	Human body model: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
	Connection
Transmitter	Input: 1x HDMI IN [Type A, 19-pin female] / Outputs: 1x HDMI OUT [Type A, 19-pin female], 8x CAT OUT [RJ45] Controls: 1x IR OUT [3.5mm Stereo Mini-jack], 1x EDID DIP switch [4-pin], 1x Update [Micro USB]
Receiver	Inputs: 1x IR IN [3.5mm Stereo Mini-jack], 1x CAT IN [RJ45, 8-pin female] Output: 1x HDMI OUT [Type A, 19-pin female]
	Mechanical
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter: 11.6" (W) $\times$ 3.2" (D) $\times$ 0.7" (H); Receiver: 3.1" (W) $\times$ 2.7" (D) $\times$ 0.7" (H)
Weight	Transmitter: 1.4lbs [628g]; 0.3lbs [130g]
Power Supply	12V/2.5A DC Power (US/EU standards, CE/FCC/RoHs certificated)
Power Consumption	19.2W
Operation Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Relative Humidity	20~90% RH (non-condensing)



	BG-UDAIC-E14
Transmission protocol	ipcolor
Distribution mode	1 IN 4 OUT
Transmission distance	CAT6/6A/7 ≤ 70m
HDMI signal	HDMI 2.0, HDCP 2.2
HDMI Resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25Hz
Audio formats	LPCM/DTS-HD/DTS-Audio/Dolby Digital 5.1
IR	Bi-directional IR passback (20-60 kHz)
RS-232	3 pin: TxD-RxD-GND, follows RS-232 levels
Working temperature	-4~140°F / -20~60°C
Storage temperature	-22~158°F / -30~70°C
Humidity (no condensation)	0~90% RH
Protection	ESD protection / 1a Contact discharge level 3 / 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2 / Lightning protection / Surge protection
Power supply	TX: DC 12V/2A / RX: DC 5V/2A
Power consumption	TX<13W / RX<4W
Material	Aluminum alloy material + crystal panel
Color	Black
Weight	TX: 1.4lbs [640g] / RX: 0.46lbs [210g]
Dimension	TX: $9.7"(L) \times 4.5"(W) \times 0.9"(H)$ / RX: $4.2"(L) \times 3.9"(W) \times 1.0"(H)$



	BG-UDAIC-E18
Transmission protocol	ipcolor
Distribution mode	1 IN 8 OUT
Transmission distance	CAT6/6A/7 ≤ 70m
HDMI signal	HDMI 2.0, HDCP 2.2
HDMI Resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25Hz
Audio formats	LPCM/DTS-HD/DTS-Audio/Dolby Digital 5.1
IR	Bi-directional IR passback (20-60 kHz)
RS-232	3 pin: TxD-RxD-GND, follows RS-232 levels
Working temperature	-4~140°F / -20~60°C
Storage temperature	-22~158°F / -30~70°C
Humidity (no condensation)	0~90% RH
Protection	ESD protection / 1a Contact discharge level 3 / 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2 / Lightning protection / Surge protection
Power supply	TX: DC 12V/2A / RX: DC 5V/2A
Power consumption	TX<24W / RX<4W
Material	Aluminum alloy material + crystal panel
Color	Black
Weight	TX: 1.6lbs [724g] / RX: 0.46lbs [210g]
Dimension	TX: $10.2"(L) \times 4.7"(W) \times 0.9"(H)$ mm / RX: $4.2"(L) \times 3.9"(W) \times 1.0"(H)$



	BG-UDA-E14
	Technical
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2/1.x
Video Bandwidth	594MHz/18Gbps
Video Resolution	Up to 4K2K@60Hz 4:4:4
Color Depth	8-bit, 10-bit, 12-bit(1080p@60Hz) / 8-bit (4K2K@60Hz YUV4;4;4) 8-bit, 10-bit, 12-bit(4K2K@60Hz YCbCr 4:2:2/4:2:0)
Color Space	RGB 4:4:4, YCbCr 4:4:4 / 4:2:2 / 4:2:0
HDR	Support HDR, HDR10+, HLG, Dolby vision
HDMI Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus(DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X
Coaxial Audio Formats	PCM2.0, Dolby Digital / Plus, DTS 2.0/5.1
Analog Audio Formats	PCM 2.0CH
ESD Protection	Human body model: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
	Connection
Input	1x HDMI Type A (19-pin female)
Output	1x HDMI Type A (19-pin female), 4x HDBaseT OUT [RJ45], 1x Coaxial Audio OUT [RCA] 1x L/R Audio OUT [5-pin phoenix connector]
Control	1x RS-232 (3-pin phoenix connector), 1x EDID DIP switch [5-pin], 1x IR IN [3.5mm Stereo Mini-jack] 1x IR OUT [3.5mm Stereo Mini-jack]
	Mechanical
Housing	Metal Enclosure
Silkscreen Color	Black
Dimensions	Transmitter: 8.7"(W) x 5.1"(D) x 1.6(H); Receiver: 5.5"(W) x 2.6"(D) x 0.7"(H)
Weight	Transmitter: 1.9lbs [853g]; Receiver: 0.54lbs [246g]
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 24V/2.7A (US/EU standards, CE/FCC/UL certified)
Power Consumption	35W



BG-UDA-E18	
	Technical
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2/1.x
Video Bandwidth	594MHz/18Gbps
Video Resolution	Up to 4K2K@60Hz 4:4:4
Color Depth	8-bit, 10-bit, 12-bit(1080p@60Hz); 8-bit (4K2K@60Hz YUV4:4:4); 8-bit, 10-bit, 12-bit(4K2K@60Hz YCbCr 4:2:2/4:2:0)
Color Space	RGB 4:4:4, YCbCr 4:4:4 / 4:2:2 / 4:2:0
HDR	Support HDR, HDR10+, HLG, Dolby vision
HDMI Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus(DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X
Coaxial Audio Formats	PCM2.0, Dolby Digital / Plus, DTS 2.0/5.1
Analog Audio Formats	PCM 2.0CH
ESD Protection	Human body model: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
	Connection
Input	1x HDMI Type A (19-pin female)
Output	1x HDMI Type A (19-pin female), 4x HDBaseT OUT [RJ45], 1x Coaxial Audio OUT [RCA] 1x L/R Audio OUT [5-pin phoenix connector]
Control	1x RS-232 (3-pin phoenix connector), 1x EDID DIP switch [5-pin], 1x IR IN [3.5mm Stereo Mini-jack] 1x IR OUT [3.5mm Stereo Mini-jack]
	Mechanical
Housing	Metal Enclosure
Silkscreen Color	Black
Dimensions	Transmitter: 17.3"(W) x 5.1"(D) x 1.7"(H); Receiver: 5.5"(W) x 2.6"(D) x 0.7"(H)
Weight	Transmitter: 3.57lbs [1.62kg]; Receiver: 0.54lbs [246g]
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 24V/2.7A (US/EU standards, CE/FCC/UL certified)
Power Consumption	72W

### SPECIALTY CABLES



### **HIGH QUALITY**

BZBGEAR cables are fabricated to exacting standards and thoroughly tested to ensure reliable performance at rated specifications.

### **HIGH RESOLUTION**

BZBGEAR HDMI and SDI cables offer compatibility at resolutions up to 4K@60 to deliver pristine image quality. Our SDI cables are made in-house and tested before shipping, so our customers can buy with confidence knowing they will perform as advertised.

### **EXTREME DISTANCE**

BZBGEAR Active Optical HDMI and USB cables deliver transmission range far beyond what is achievable with normal cabling. By leveraging fiber optic technology, they are able to deliver reliable, full resolution signals at distances up to 164 feet (50 meters).

These cables are the perfect solution for airports, hospitals, restaurants, hotels, and any place where a longer cable is needed.



### **BG-CAB-HA**

### HDMI 2.0 18Gbps 4K Active Optical Cable

- · 4K x 2K 60Hz/fps YUV 4:4:4 at 8bit (18Gbps) Support
- · Full 3D Support
- · Meets HDMI 2.0 testing standards
- · 3D, 4Kx2K, as well as 1080p, 720p, 480p
- HEAC support (HDMI Ethernet), ARC (Audio Return Channel), HDR (High Dynamic Range) Support
- · HDCP 2.2 certified
- · DTS-HD Master Audio and Dolby True HD signals





### **BG-CAB-H21A**

### HDMI 2.1 48Gbps 8K Ultra HD Active Optical Cable

- · HEAC, ARC and HDR Support
- · HDCP 2.2 certified
- · DTS-HD Master Audio and Dolby True HD signals
- Support 8K@120Hz, 4K@60Hz, UHD, FHD, 3D, Ethernet, Audio Return Channel, HDR 4:4:4 color format, 48 bit/px color depth. 4X clear compared with 1080p.
- Optical Fiber HDMI cable delivers over 100m with no delay.

### **BG-CAB-U3A**

### USB 3.0 AM/AF Active Optical Extension Cable

- USB 3.0 Type-A Male to USB 3.0 Type-A Female
- Extends USB 3.0 super speed devices
- Supports all USB 3.0 devices (not compatible with USB 2.0/1.1)
- · Converts USB data signal to optical signal over fiber
- · Supports USB 3.0 @ up to 5Gbps transfer speeds
- $\cdot$  Use with self-powered peripherals only
- Fully featured Optical Transceiver integrated circuit includes a receiver and a transmitter
- 850nm VCSEL transmitter and PIN photo-detector receiver
- Supports all major operating systems including Windows, Mac OS, and Linux
- Number of devices can be increased using additional hubs
- · Low power consumption.



### INTEGRATION TOOLS



### **NO MORE GUESSWORK**

AV integration tools are a critical, yet often overlooked component of a technician's toolkit. They generate a reliable test signal, allowing technicians to quickly diagnose cabling, equipment, and compatibility issues.

### SAVE TIME, SAVE MONEY

Having the means to send a reliable test signal helps technicians instantly identify faulty cabling or equipment, potentially shaving hours of costly labor otherwise wasted on trial-and-error.

### SEPARATING THE PROS FROM THE AMATEURS

Just as any reputable automotive technician requires diagnostic tools to work efficiently, AV technicians focused on delivering results should be equipped with the tools to test and confirm equipment functionality.



### **BG-AVTPG-MINI**

1080P/4K UHD HDMI 2.0 18Gbps Portable Signal Test Generator and Analyzer

- Supports video resolution outputs up to 4K2K@60
   4:4:4 8bit, HDR 10bits, 12bits, 16bits
- · Built-in 3 video patterns
- · Both HDMI input and output support up to HDMI 2.0
- Fundamental HDMI feature analysis up to 4K2K@60 4:4:4 8bit HDMI 2.0 input
- · HDCP 1.4 & 2.2 compliant
- Provides statistics analysis for cable quality or connection stability
- Battery powered for portability, it can extend operation time with full load up to 3 hours



### **BG-AVTPG-4K**

1080P/4K UHD HDMI 2.0 18Gbps Video Test Pattern Generator/Tester and Analyzer with Ethernet



- 4K2K60 4:4:4 8bit, 4K2K60 4:2:0 16bit HDR pattern generator
- · 4.3 touch panel
- · Supports mouse control
- · Supports user control device through Ethernet
- · Firmware update through USB Flash Drive
- Supports user defined pattern up to 2GB
- Embedded LINUX KERNAL system with limitless extension
- Scrambler supported for videos over 340MHz output wise
- Loop test capability to provide statistics analysis for connection stability
- · Supports HDMI loop through function
- HDCP test allow verify HDCP of HDMI source and transmit HDCP encrypted video

### **BG-AVTPG-KIT**

Full HD and UHD Video Test Pattern Generator and Analyzer Complete Installer Kit (BG-AVTPG-4K and BG-AVTPG-MINI)

The BG-AVTPG-KIT combines 2 of our best selling HDMI tester/analyzers for a comprehensive toolkit that should be a part of every professional installer's arsenal. The kit includes one BG-AVTPG-4K and one BG-AVTPG-MINI in a foam-lined protective case built to withstand years of job site abuse. The kit allows for full end-to-end testing of all HDMI-related cabling and gear, allowing installers to quickly identify and correct issues that would otherwise complicate and delay progress.

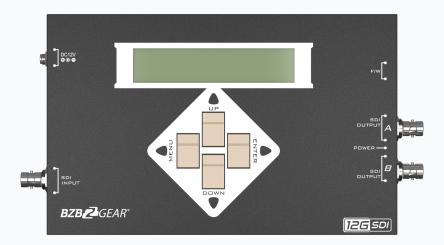






### **BG-SDITPG**

12G/6G/3G/HD/SD-SDI Video Test Pattern Generator/Tester and Analyzer



The BG-SDITPG is an advanced SDI pattern generator with multi-format (12G/6G/3G/HD/SD) and multi-pattern support. In addition to still and moving video test patterns it also has the ability to generate audio signals (SMPTE-291M).

The BG-SDITPG can support up to 8 channel AES compliant audio with 48KHz sample rate. With just four buttons and an LCD screen it is incredibly easy to operate and it's durable metal construction is built to stand up to years of field use.

### **FEATURES**

- $\cdot\,$  Ultra HD refers to a TV resolution of 3840 x 2160 pixels.
- · 12G, 6G, 3G, HD, SD.
- · 8 Channel AES Compliant @48KHZ.
- · Simultaneous 12G SDI outputs.
- 4 simple buttons access all functions.
- $\boldsymbol{\cdot}$  Prevents accidental disconnection.
- · Multi-Format 12G, 6G, 3G, HD, SD

- · Audio Generator 8 Channel AES Compliant @48KHZ
- · Dual Output Simultaneous 12G SDI outputs
- $\,\cdot\,$  Easy to Use 4 simple buttons access all functions
- Multiple Patterns Choose from multiple still and moving test patterns
- · Locking PSU Prevents accidental disconnection

- Studios
- · IT professionals

- · Event Centers
- Production Staff

- · Live Video Productions
- A/V Integrators







BG-AVTPG-MINI	
Role of usage	HDMI 2.0a Installation Gear
Video bandwidth	Single link 600MHz [18Gbps]
HDMI compliance	HDMI 2.0 and below
HDCP compliance	HDCP 2.2 and below
Video support	up to 4K60 4:4:4 8bit, 4K2K60 4:2:0 16bit (HDR)
ESD protection	Human body model — $\pm 15$ kV [air-gap discharge] & $\pm 8$ kV [contact discharge]
Video Format Support	НДМІ
Input	1x HDMI
Output	1x HDMI
Control	Push Button
HDMI connector	Type A [19-pin female]
USB Support	Firmware update / Recharge
USB connector	Micro-USB (Type B)
Enclosure	Metal case
Dimensions [L x W x H]	5.1" x 3.5" x 0.6" [130 x 89 x 14mm]
Weight	7.8oz [220g]
Power supply	Micro-USB / Battery
Power consumption	8 Watts [max]
Operation temperature	32~104°F / 0~40°C
Storage temperature	-4~140°F / -20~60°C
Relative humidity	20~90% RH [no condensation]



	BG-AVTPG-4K	
Role of usage	Generator / Analyzer	
Video bandwidth	Single link 600MHz (18Gbps)	
HDMI compliance	HDMI 2.0 and below	
HDCP compliance	HDCP 2.2 and below	
Video support	Up to 4K2K60 4:4:4 8bit, 4K2K60 4:2:0 16bit (HDR)	
Video Format Support	HDMI	
Audio support	8ch LPCM up to 192K	
Output impedance	75W	
Control	USB mouse / touch panel / Ethernet	
ESD protection	Human body model ±15kV [air-gap discharge] & ±8kV [contact discharge]	
Input	1x HDMI+ 1xUSB + 1x RJ-45(Ethernet)	
Output	1x HDMI+ 1x 3.5mm (Stereo)	
USB Support	USB 2.0	
HDMI connector	Type A (19-pin female)	
USB Connector	Type A	
RJ-45 connector	WE/SS 8P8C with 2 LED indicators	
Housing	Metal enclosure	
Dimensions [L x W x H]	4.1" x 6.6" x 1.7" [105 x 166 x 42mm]	
Weight	27oz [765g]	
Power supply	12V 5A DC / Battery	
Power Consumption	15 Watts	
Operation temperature	32~104°F/0~40°C	
Storage temperature	-4~140°F / -20~60°C	
Relative humidity	20~90% RH [no condensation]	



	BG-SDITPG	
Role of usage	Pattern generator	
SDI standards	12G/6G/3G/HD/SD-SDI	
Auto SDI rate detection	Yes	
Supported protocols	SMPTE 259M (270Mbps / 360Mpbs) SMPTE 292M / HDTV (1.485 & 1.485/1.001Gbps) SMPTE 424/425M (2.97 & 2.97/1.001Gbps) SMPTE ST-2081 (5.94&5.94/1.001Gbps) SMPTE ST-2082 (11.88&11.88/1.001Gbps)	
Video bandwidth	11.88Gpbs	
Data rates	143 / 270 / 1483 / 1485 / 2967 / 2970 / 5934 / 5940 / 11868 / 11880 Mbps	
Video support	[12G] 4K2K@50/59.94/60 [6G] 4K2K@23.97/24, 25, 30 [3G] 1080p@50/59.94/60 (4:2:2) [HD] 720p50/59.94/60, 1080p24/30, 1035i50/59.94/60, 1080i50/59.94/60 [SD] NTSC@59.94Hz, PAL@50Hz	
SDI signal type	SMPTE-292M / 259M / 424M / ST-2081 / ST-2082	
Output impedance	75W	
Cable (Belden 1694A) equalization / transmission	[12G-SDI] up to 50m (165ft) / [6G-SDI] up to 100m (330ft) / [3G-SDI] up to 200m (660ft)	
Audio support	Yes	
PCB Stack-up	6-layer board [impedance control — differential 100W; single 75W]	
Output	2x BNC [SDI]	
BNC connector	75W interlocking socket	
[HD] Eye pattern characteristics	Amplitude: Within 800mV <10%Long time jitter <1.0 UI Rise overshoot: Less than 2% Timing jitter <1.0 UI Fall overshoot: Less than 2% Alignment jitter <0.2 UI	
Housing	Metal enclosure	
Dimensions [L x W x H]	5.9" x 7.5" x 1.3" [150 x 190 x 32mm]	
Weight	1.5 lbs [660g]	
Fixedness	Interlocking power supply	
Power supply	12V 2A DC	
Power consumption	8 Watts [max]	
Operation temperature	32~104°F / 0~40°C	
Storage temperature	-4~140°F / -20~60°C	
Relative humidity	20~90% RH [no condensation]	

### WHERE TO BUY

BZBGEAR has an extensive network of Authorized Partners that will help you select, integrate, and support our products. To ensure our customers receive professional service and factory-certified products, BZBGEAR maintains a partnership with a select group of Authorized Resellers/Distributors.

BZBGEAR products are often used within a sophisticated AV system and may require configuration, professional installation, and a knowledge of control system integration. In these applications, please consider contacting an Authorized BZBGEAR Partner for your purchase and hiring an experienced AV integration company for assistance with setup.

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