BZB GEAR®

Solutions to Amplify Your World™

BG-PS21-4K

2-Port 4K 18Gbps UHD KVM Presentation Switcher with HDMI/USB-C Inputs and HDMI Output

User Manual

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Statement

Please read these instructions carefully before connecting, operating, or configuring this product. Please save this manual for future reference.

Safety Precaution

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.

- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.

- To prevent damaging this product, avoid heavy pressure, strong vibration, or immersion during transportation, storage, and installation.

- Do not dismantle the housing or modify the module.

- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.

- Do not put any heavy items on the extension cable in case of extrusion.

- Install the device in a place with fine ventilation to avoid damage caused by overheat.

- Do not twist or pull by force ends of the optical cable. It can cause malfunction.

- The housing of this product is made of organic materials. Do not expose to any liquid, gas, or solids which may corrode the shell.

- Unplug this device during lightning storms.

- Do not use liquid or aerosol cleaners to clean this unit. Clean only with a soft dry microfiber cloth.

- Always unplug the power to the device before cleaning.

- If an object or liquid falls or spills on to the housing, unplug the module immediately.

- To prevent the risk of electric shock, do not open the case. Installation and maintenance should only be carried out by qualified technicians.

- Do not use the product beyond the specified temperature, humidity, or power supply specifications.

- This product does not contain parts that can be maintained or repaired by users. Damage caused by dismantling the product without authorization from BZBGEAR is not covered under the warranty policy.

- Installation and use of this product must strictly comply with local electrical safety standards.

- Product specifications may be subject to technical upgrades without further notice.

- Unplug the power cord when left unused for a long period of time.

- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

Introduction

The BG-PS21-4K is designed to switch an HDMI input or USB-C input to one HDMI output. It supports video resolutions up to 4K2K@60Hz 4:4:4 8bit, 1080p, and 3D. In addition, there are smart built-in EDID settings that can be selected by using the 4-pin DIP switch on the front panel.

The switcher supports stereo and multichannel audio on the HDMI inputs. This unit is also capable of embedding audio into the HDMI output stream. The audio is simultaneously de-embedded to a balanced analog audio output. It also supports device extension by providing one type-B USB port for a host connection, and two type-A USB ports for HID devices such as camera, microphone, keyboard etc.

The switcher features multiple methods of control. When in the AUTO mode, the switcher will automatically switch to the first detected source device. When the active source is removed, the switcher will switch to the lowest numbered input. The switcher can also be manually controlled through the front panel buttons and RS232 commands. CEC allows the display device to be controlled by the front panel buttons and RS232 CEC commands if supported.

Features

- 18G 2x1 switcher with HDMI and USB-C inputs.
- Automatic switching.
- Controllable via front panel buttons and RS232.
- HDMI 2.0, 4Kx2K@60Hz 4:4:4, HDR 10, Dolby Vision, HDCP 2.2.
- Provides charging on the USB-C port up to 40W.
- Provides USB data (USB 3.0/2.0) and 4K video transmission on USB-C port.
- Balanced analog audio for audio de-embedding.
- Peripheral units (e.g. microphone and camera) can be connected by type-A USB (USB 3.0/2.0) ports and automatically switched along with HDMI and USB-C input as USB DEVICES for corresponding HOST.
- Smart EDID management capable for various applications and customized settings.
- Front panel buttons trigger both CEC and RS232 commands for display control. (ON, OFF, MUTE, VOL+, VOL -).

Packing List

- 1x BG-PS21-4K 2x1 Presentation Switcher
- 2x Mounting Ears with 4 Screws
- 4x Plastic Cushions
- 1x 5-pin Terminal Block
- 1x RS232 Cable (3-pin terminal block to DB9)
- 1x Power Cord
- 1x Power Adapter (24V DC, 2.71A)
- 1x User Manual
- 1x Quick Start Guide

Technical Specifications

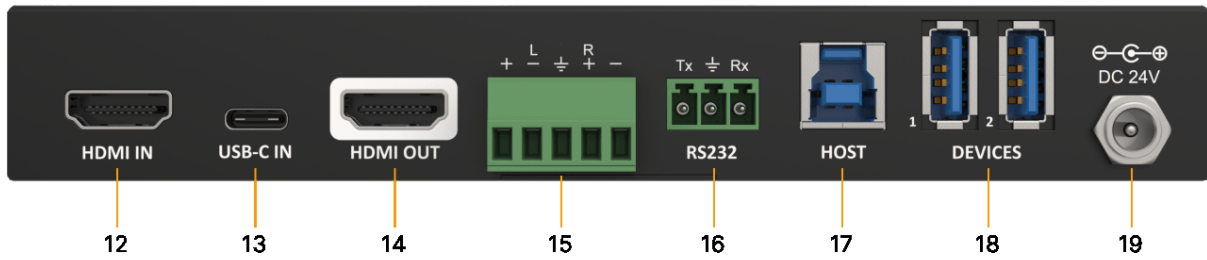| Video	
Video Input	(1) HDMI, (1) USB-C
Video Input Connector	(1) Type-A female HDMI, (1) Type-C USB
HDMI Input Resolution	Up to 4Kx2K@60Hz 4:4:4 8bit
USB-C Input Resolution	Up to 4Kx2K@30Hz 4:4:4
Video Output	(1) HDMI
Video Output Connector	(1) Type-A female HDMI
HDMI Output Resolution	Up to 4Kx2K@60Hz 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	2.0Vrms ± 0.5dB. 2V = 16dB headroom above -10dBV (316mV) 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	1KΩ and higher (supports 10x paralleled 10KΩ 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 Humidity	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]

Operation Controls and Functions

Front Panel
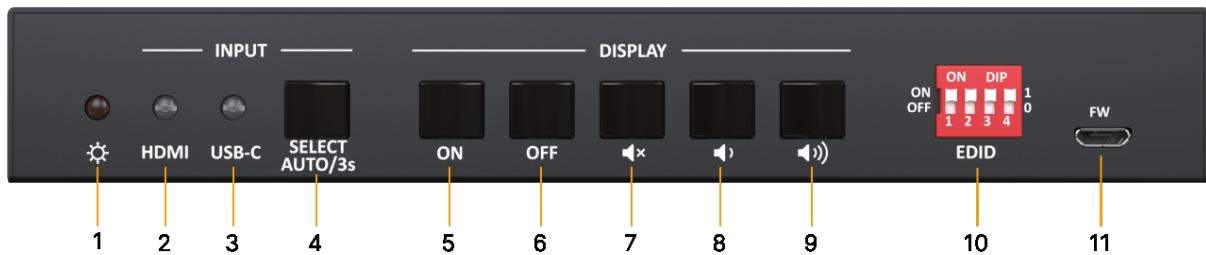
1. **Power LED**: LED will illuminate red when the device is connected to the power supply.

2. **HDMI Input LED**: This LED will illuminate green when the HDMI input is selected in AUTO mode, or will illuminate orange when the HDMI input is selected in MANUAL mode.

3. **USB-C Input LED**: This LED will illuminate green when the USB-C input is selected in AUTO mode, or will illuminate orange when the USB-C input is selected in MANUAL mode.

4. **SELECT AUTO/3s Button**: Press this button to select the next input source, or hold this button for at least 3 seconds to enable auto switching mode. Note that the factory default switching mode is AUTO.

5. **DISPLAY On Button**: Press ON to turn on the display.

6. **DISPLAY Off Button**: Press OFF to turn off the display.

7. **Audio Off Button**: Press this button to mute/unmute the display audio.

8. **Volume Down Button**: Press this button to decrease the volume gradually, or hold it to decrease the volume constantly.

9. **Volume Up Button**: Press this button to increase the volume gradually, or hold it to increase the volume constantly.

10. **EDID**: 4-pin DIP switch for EDID setting.

11. **FW**: Micro-USB port for firmware upgrade.

Rear Panel

12. HDMI IN: HDMI port to connect HDMI input source.

13. USB-C IN: USB Type-C input that provides 40 watts of charging for connected sources.

14. HDMI OUT: HDMI port to connect to an HDMI output video display.

15. AUDIO OUT: Connect to this 5-pin terminal block to output balanced audio to external audio devices.

16. RS-232: Connect supported devices to this 3-pin terminal block for RS-232 control.

17. HOST: Connect to this USB 3.0 Type-B port for host connection.

18. DEVICES: These two type-A USB 3.0 ports are to connect peripheral devices such as a webcam or a speakerphone.

19. DC 24V: Connect the 24V power supply adapter here to power the unit.

Panel Drawing
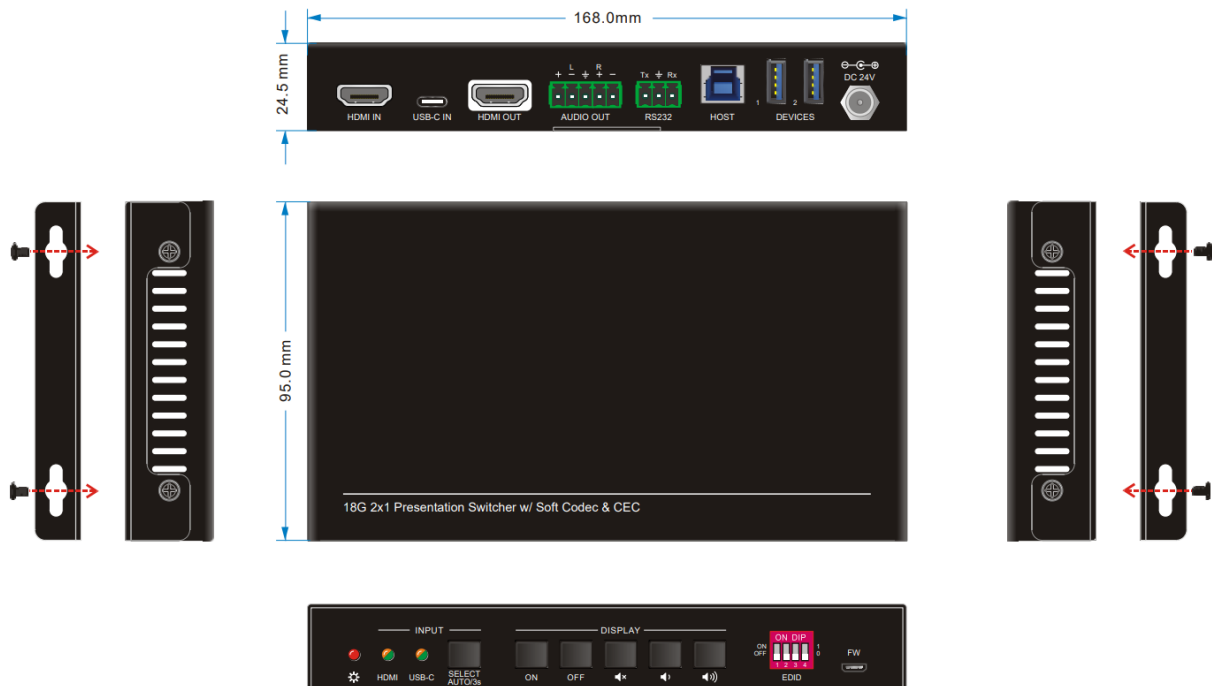
Button Control

Manual-Switching

When the switcher is in manual switching mode, press the **SELECT AUTO/3s** button repeatedly to cycle through the two video inputs, and the corresponding source LED illuminates orange immediately.

Auto-Switching

Press and hold the **SELECT AUTO/3s** button for at least three seconds to enable automatic switching. The current input source will not be changed, and its source LED will turn green.

When in the AUTO mode, the switcher will switch according to the following rules:

- Press and hold the **SELECT AUTO/3s** button for at least three seconds again and exit AUTO mode, but the input source will not be changed, and the corresponding source LED will turn orange.

- New input: Upon detecting a new input, the switcher will automatically select the new input.

- Pressing the **SELECT AUTO/3s** button also can forcibly change the input source.

- Reboot: Once power is restored to the switcher, it will automatically reconnect the input before powered off.

- Source removed: When an active source is removed, the switcher will switch to the other active input.

Display Control

Manual Control: Press the below DISPLAY buttons on the front panel to simultaneously send RS232 and CEC commands to control the display device.

- **ON**: Display On.

- **OFF**: Display Off.

- 🔇: Mute/unmute display audio.

- 🔉: Volume down display audio.

- 🔊: Volume up display audio.

Auto Control: When detecting a video input signal (5V or TMDS), automatically send CEC and RS232 commands to turn on the display device. When not detecting any video signal

within the setting time (default 10mins), automatically send RS232 and CEC commands to turn off the display device.

The RS232 command can be set by sending commands, please refer to the **Third-party Device Control** for more details

EDID Setting

The Extended Display Identification Data (EDID) is used for the source device to match its video resolution with the connected display. By default, the source device obtains its EDID from the first connected display. Meanwhile, since the displays with different capabilities are connected to the switcher, the 4-pin DIP switch on the front panel can be used to set the EDID to a built-in fixed value. Use the following table to determine the setting for the 4-pin DIP switch for specific video resolution and audio capabilities.

The switch represents "**0**" when in the lower (**OFF**) position, and it represents "**1**" while putting the switch in the upper (**ON**) position.

Switch Status	Video Resolution	Audio Format
0000 (Default)	EDID Pass-through	
0001	1280x720@60Hz RGB 4:4:4	Stereo
0010	1920x1080@60Hz	DVI
0011	1920x1080@60Hz 2D	PCM 2.0
0100	1920x1080@60Hz RGB 4:4:4	Stereo
0101	1920x1080@60Hz RGB 4:4:4	High Definition
0110	1920x1200@60Hz RGB 4:4:4	Stereo
0111	3840x2160@60Hz RGB 4:2:0 HDR	Stereo
1000	3840x2160@60Hz RGB 4:2:0 HDR	High Definition
1001	3840x2160@60Hz RGB 4:4:4	Stereo
1010	3840x2160@60Hz RGB 4:4:4	High Definition
Switch Status	**EDID**	**Note**
1011	User-defined EDID 1	User-defined EDID (Please refer to the **User-defined EDID**)
1100	User-defined EDID 2	
1101	User-defined EDID 3	
1110	User-defined EDID 4	
1111	User-defined EDID 5	

Note: The EDID DIP switch is only used for setting the EDID of the HDMI source device. The USB-C source device will automatically gain the EDID of the display device.

RS232 Control

Connect the RS232 port to a control device (e.g. PC) with a RS232 cable. The switcher can be controlled by sending RS232 commands.

RS232 Command

Communication protocol: RS232 Communication Protocol

Baud rate: 9600   **Data bit**: 8   **Stop bit**: 1   **Parity bit**: none

Note:

- All commands need to be ended with "<CR><LF>".

- In the commands, "["and "]" are symbols for easy reading and do not need to be typed in actual operation.

- Type the command carefully, it is case-sensitive.

Device Control

Command	Description	Command & Feedback Example
#GET_FIRMWARE_VERSION	Get the firmware version.	@V1.0.0
#FACTORY_RESET	Restore to factory defaults.	@FACTORY_RESET
#REBOOT	System reboot.	@REBOOT
#HELP	Get the command details.	Example: #HELP SET_AV

		Feedback:
		@SELECT VIDEO AND AUDIO INPUT PORT
		#SET_AV PARAM1
		PARAM1=H,C
		H - HDMI
		C - TYPE-C

Source Switching

Command	Description	Command & Feedback Example
#SET_AV H	Switch to HDMI input.	@AV H
#SET_AV C	Switch to USB-C input.	@AV C
#GET_AV	Get the current input source.	@AV H
		@AV C
#SET_AUTO_SWITCH 1	Enable auto switching mode.	@AUTO_SWITCH 1
#SET_AUTO_SWITCH 0	Disable auto switching mode.	@AUTO_SWITCH 0

User-defined EDID

There are five EDID values that can be customized by sending the below command.

Command: #UPLOAD_USER_EDID [PARAM]

Function & Operation:

[PARAM]=1~5, represents the EDID, its DIP switch status shows as below:

[PARAM]	DIP Switch Status
1	1011
2	1100
3	1101
4	1110
5	1111

Operation:

Step 1: Prepare the EDID file (.bin).

Step 2: Set the 4-pin DIP switch status, for example: "1011".

Step 3: Send the command "**#UPLOAD_USER_EDID 1.**", and the feedback is "**@USER_EDID 1 READY PLEASE SEND EDID DATA IN 10S**".

Step 4: Send the EDID file (.bin). If successfully uploaded, the feedback is: "**OK**".

Switcher Baud Rate Setting

Command	Description	Command & Feedback Example
#SET_RS232_BAUD 0	Set the RS232 baud rate to 115200.	@RS232_BAUD 0
#SET_RS232_BAUD 1	Set the RS232 baud rate to 57600.	@RS232_BAUD 1
#SET_RS232_BAUD 2	Set the RS232 baud rate to 38400.	@RS232_BAUD 2
#SET_RS232_BAUD 3	Set the RS232 baud rate to 19200.	@RS232_BAUD 3
#SET_RS232_BAUD 4	Set the RS232 baud rate to 9600.	@RS232_BAUD 4
#SET_RS232_BAUD 5	Set the RS232 baud rate to 4800.	@RS232_BAUD 5
#SET_RS232_BAUD 6	Set the RS232 baud rate to 2400.	@RS232_BAUD 6
#GET_RS232_BAUD	Get the RS232 baud rate.	@RS232_BAUD 0
		@RS232_BAUD 1
		@RS232_BAUD 2
		@RS232_BAUD 3
		@RS232_BAUD 4
		@RS232_BAUD 5
		@RS232_BAUD 6

CEC/RS232 Function Setting

The ending mark of command is "<CR><LF>".

Command	Function	Command & Feedback Example
#SET_SYNCACT_CEC 1	Enable the function of automatically sending CEC commands. When detecting a video input signal or not detecting any video signal, the switcher will automatically send the corresponding CEC command to control the display device.	@SYNCACT_CEC 1
#SET_SYNCACT_CEC 0	Disable the function of automatically sending CEC commands.	@SYNCACT_CEC 0
#GET_SYNCACT_CEC	Get the function setting status of automatically sending CEC commands.	@SYNCACT_CEC 1
#SET_SYNCACT_RS232 1	Enable the function of automatically sending RS232 commands. When detecting a video input signal or not detecting any video signal, the switcher will automatically send the corresponding RS232 command to control the display device.	@SYNCACT_RS232 1
#SET_SYNCACT_RS232 0	Disable the function of automatically sending RS232 commands.	@SYNCACT_RS232 0
#GET_SYNCACT_RS232	Get the function setting status of automatically sending RS232 commands.	@SYNCACT_RS232 1
#SET_DTIME [PARAM1]: [PARAM2]	When not detecting video input signal, set the auto power-off time of display device to [PARAM1]: [PARAM2]. The default time is 10 minutes. [PARAM1]=0~30 minutes. [PARAM2]=0~1800 seconds.	#SET_DTIME 1:30 @DTIME 1:30
#GET_DTIME	Get the auto power-off time of display device	@DTIME 30:0

Display Control

Command	Description	Command & Feedback Example
#SET_AUDIO_MUTE	Mute/unmute the display audio through CEC and RS232 channels.	@AUDIO_MUTE_UNMUTE
#SET_VOL +	Increase the display audio through CEC and RS232 channels.	@VOL -
#SET_VOL -	Decrease the display audio through CEC and RS232 channels.	@VOL +
#SET_DISPLAY 1	Power on display device (Simultaneously sending CEC and RS232 commands to display device).	@DISPLAY 0
#SET_DISPLAY 0	Power off display device (Simultaneously sending CEC and RS232 commands to display device).	@DISPLAY 1

Third-party Device Control

Connect a third-party device (e.g. projector) to the RS232 port of switcher, the third-party device can be controlled simultaneously by the below RS232 commands while press the front panel button (ON, OFF, MUTE, VOLUME + or VOLUME -).

Note: The below commands don't need ending mark

Command	Description	Command & Feedback Example
#SET_ON_[PARAM1]_[PARAM2]:XXXX	Set the ASCII RS232 command XXXX to be sent to control the third-party device when the DISPLAY ON button is pressed. • [**PARAM1**] = 00~06 (Baud Rate) 00 - 115200 01 - 57600 02 - 38400 03 - 19200 04 - 9600 05 - 4800 06 - 2400 • [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any ASCII code (up to 48 bytes).	#SET_ON_05_30:1234567 @BAUDRATE: 4800 @DELAY TIME: 30 s @DISPLAY ON TO SEND:1234567
#SET_H_ON_[PARAM1]_[PARAM2]:XX XX	Set the HEX RS232 command XX XX to be sent to control the third-party device when the DISPLAY ON button is pressed. • [**PARAM1**] = 00~06 (Baud Rate) 00 - 115200 01 - 57600 02 - 38400 03 - 19200 04 - 9600 05 - 4800 06 - 2400 • [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any HEX code (0-9, A-F; up to 20 bytes. It must have a blank between 2 different XX).	#SET_H_ON_05_30:31 32 33 34 35 @BAUDRATE: 4800 @DELAY TIME: 30 s @DISPLAY ON HEX TO SEND:31 32 33 34 35
#SET_OF_[PARAM1]_[PARAM2]:XXXX	Set the ASCII RS232 command XXXX to be sent to control the third-party device when the DISPLAY OFF button is pressed. • [**PARAM1**] = 00~06 (Baud Rate) 00 - 115200 01 - 57600 02 - 38400 03 - 19200 04 - 9600 05 - 4800 06 - 2400 • [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any ASCII code (up to 48 bytes).	#SET_OF_05_30:ABCDEFG @BAUDRATE: 4800 @DELAY TIME: 30 s @DISPLAY OFF TO SEND:ABCDEFG
#SET_H_OF_[PARAM1]_[PARAM2]:XX XX	Set the HEX RS232 command XX XX to be sent to control the third-party device when the DISPLAY OFF button is pressed. • [**PARAM1**] = 00~06 (Baud Rate) 00 - 115200 01 - 57600 02 - 38400	#SET_H_OF_05_30:41 42 43 44 45 @BAUDRATE: 4800 @DELAY TIME: 30 s @DISPLAY OFF HEX TO SEND:41 42 43 44 45

Command	Description	Command & Feedback Example
	03 - 19200 04 - 9600 05 - 4800 06 - 2400 ● [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any HEX code (0-9, A-F; up to 20 bytes. It must have a blank between 2 different XX).	
#SET_AM_[PARAM1]_[PARAM2]:XXXX	Set the ASCII RS232 command XXXX to be sent to control the third-party device when the VOLUME MUTE button is pressed. ● [**PARAM1**] = 00~06 (Baud Rate) 00 - 115200 01 - 57600 02 - 38400 03 - 19200 04 - 9600 05 - 4800 06 - 2400 ● [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any ASCII code (up to 48 bytes).	#SET_AM_05_30:ABCDEFG @BAUDRATE: 4800 @DELAY TIME: 30 s @VOLUME MUTE TO SEND:ABCDEFG
#SET_AU_[PARAM1]_[PARAM2]:XXXX	Set the ASCII RS232 command XXXX to be sent to control the third-party device when the VOLUME UP button is pressed. ● [**PARAM1**] = 00~06 (Baud Rate) 00 - 115200 01 - 57600 02 - 38400 03 - 19200 04 - 9600 05 - 4800 06 - 2400 ● [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any ASCII code (up to 48 bytes).	#SET_AU_05_30:ABCDEFG @BAUDRATE: 4800 @DELAY TIME: 30 s @VOLUME + TO SEND:ABCDEFG
#SET_H_AU_[PARAM1]_[PARAM2]:XX XX	Set the HEX RS232 command XX XX to be sent to control the third-party device when the VOLUME UP button is pressed. ● [**PARAM1**] = 00~06 (Baud Rate) 00 - 115200 01 - 57600 02 - 38400 03 - 19200 04 - 9600 05 - 4800 06 - 2400 ● [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any HEX code (0-9, A-F; up to 20 bytes. It must have a blank between 2 different XX).	#SET_H_AU_05_30:31 32 33 34 35 @BAUDRATE: 4800 @DELAY TIME: 30 s @VOLUME + HEX TO SEND:41 42 43 44 45
#SET_AD_[PARAM1]_[PARAM2]:XXXX	Set the ASCII RS232 command XXXX to be sent to control the third-party device when the VOLUME DOWN button is pressed. ● [**PARAM1**] = 00~06 (Baud Rate) 00 - 115200 01 - 57600 02 - 38400 03 - 19200 04 - 9600 05 - 4800 06 - 2400 ● [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any ASCII code (up to 48 bytes).	#SET_AD_05_30:ABCDEFG @BAUDRATE: 4800 @DELAY TIME: 30 s @VOLUME - TO SEND:ABCDEFG

| Command	Description	Command & Feedback Example
#SET_H_AD_[PARAM1]_ [PARAM2]:XX XX	Set the HEX RS232 command XX XX to be sent to control the third-party device when the VOLUME DOWN button is pressed. ● [**PARAM1**] = 00~06 (Baud Rate) 07 - 115200 08 - 57600 09 - 38400 10 - 19200 11 - 9600 12 - 4800 13 - 2400 ● [**PARAM2**] = 00~99. The delay time of sending command. **XXXX**: Any HEX code (0-9, A-F; up to 20 bytes. It must have a blank between 2 different XX).	#SET_H_AD_05_30:41 42 43 44 45 @BAUDRATE: 4800 @DELAY TIME: 30 s @VOLUME - HEX TO SEND:41 42 43 44 45

Troubleshooting & Maintenance

Problems	Potential Causes	Solutions
Output image with snowflake	Bad quality of the connecting cable.	Try another high quality cable.
	Fail or loose connection.	Make sure the connection is good
No output image when switching	No signal at the input / output end.	Check with oscilloscope or multimeter if there is any signal at the input/ output end.
	Fail or loose connection.	Make sure the connection is good.
	The switcher is broken.	Send it to authorized dealer for repairing.
POWER indicator doesn't work or no respond to any operation	Fail connection of power cord.	Make sure the power cord connection is good.
Static becomes stronger when connecting the video connectors	Bad grounding.	Check the grounding and make sure it is connected well.
Cannot control the device by control device (e.g. a PC) through RS232 port	Wrong RS232 communication parameters.	Type in correct RS232 communication parameters.
	Broken RS232 port.	Send it to authorized dealer for checking.

Application Example

BG-PS21-4K
Connection Diagram

Projector

BG-AMP2X20

BG-PS214K

Speaker

PC

Laptop/PC

● RS-232   ● HDMI   ● USB 2.0   ● USB-C   ● Audio
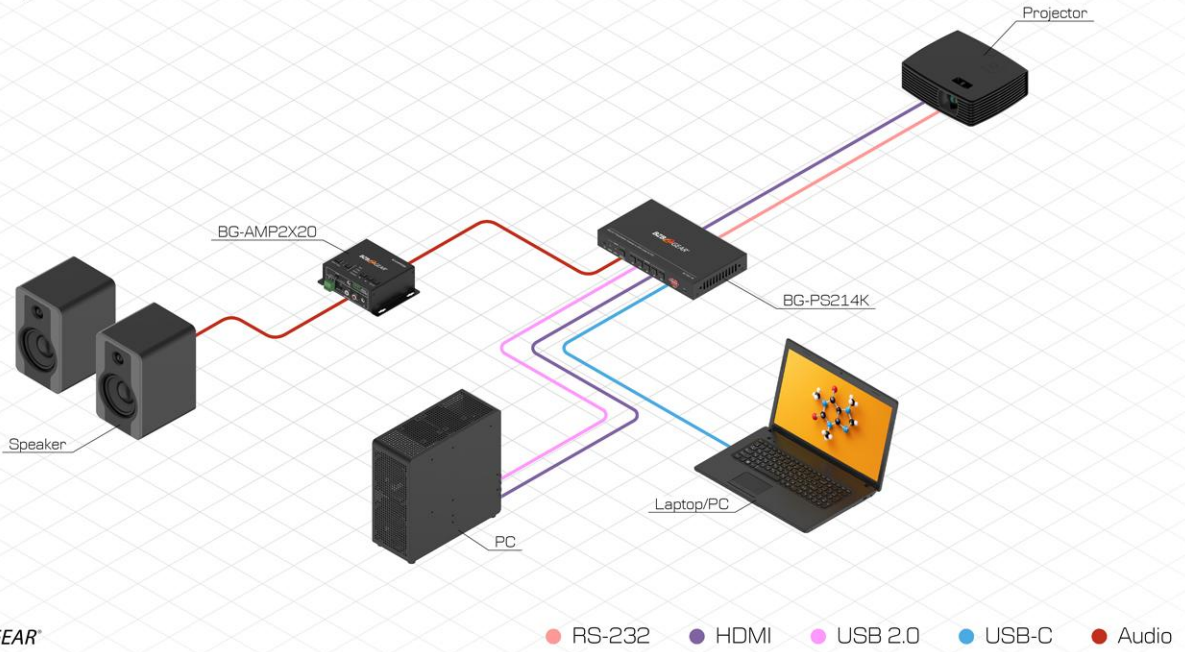
Tech Support

Have technical questions? We may have answered them already!

Please visit BZBGEAR's support page (bzbgear.com/support) for helpful information and tips regarding our products. Here you will find our Knowledge Base (bzbgear.com/knowledge-base) with detailed tutorials, quick start guides, and step-by-step troubleshooting instructions. Or explore our YouTube channel, BZB TV (youtube.com/c/BZBTVchannel), for help setting up, configuring, and other helpful how-to videos about our gear.

Need more in-depth support? Connect with one of our technical specialists directly:

Phone	**Email**	**Live Chat**
1.888.499.9906	support@bzbgear.com	bzbgear.com

Warranty

BZBGEAR Pro AV products and cameras come with a three-year warranty. An extended two-year warranty is available for our cameras upon registration for a total of five years.

For complete warranty information, please visit bzbgear.com/warranty.

For questions, please call 1.888.499.9906 or email support@bzbgear.com.

Mission Statement

BZBGEAR is a breakthrough manufacturer of high-quality, innovative audiovisual equipment ranging from AVoIP, professional broadcasting, conferencing, home theater, to live streaming solutions. We pride ourselves on unparalleled customer support and services. Our team offers system design consultation, and highly reviewed technical support for all the products in our catalog. BZBGEAR delivers quality products designed with users in mind.

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