BZB2GEAR®

BG-UHD-SCVEA

HDMI/DP/VGA/CVBS/YPbPr to HDMI Scaler Converter

User Manual

Full HD 1080   x.v.Color   7.1 CH AUDIO

Safety and Notice

The **BG-UHD-SCVEA** **HDMI/DP/VGA/CVBS/YPbPr to HDMI Scaler Converter** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the **BG-UHD-SCVEA** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

● Follow all instructions and warnings marked on this unit.

● Do not attempt to service this unit yourself, except where explained in this manual.

● Provide proper ventilation and air circulation and do not use near water.

● Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.

● Use only the power adapter and power cords and connection cables designed for this unit.

● Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

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INTRODUCTION

The **BG-UHD-SCVEA** **HDMI/DP/VGA/CVBS/YPbPr to HDMI Scaler Converter** provides a professional way to scale and convert multiple format (HDMI/DP/VGA/CVBS/YPbPr) to HDMI compliant format. This device supports video conversion and scaling from analog & digital to HDMI. With BG-UHD-SCVEA, the bothersome video format issues will not become a bottleneck in your applications and the handy audio support can make the input video and audio become HDMI ready.

FEATURES

- Supports Input HDMI1.4 /DP1.1/ VGA/CVBS/YPbPr
- IR remote control
- Button control
- Remote control via Micro-USB
- OSD control interface
- Input maximum pixel rate : 165MHz
- Output resolution up to 4K/30 444
- Supports multiple VESA resolutions
- Deinterlacer supported
- Supports video enhancement features
- Over / under scanning adjustable
- Video H/V mirror supported
- Active video area adjustment supported
- Stable and independent output signal quality.
- USB firmware upgradable for expanding compatibility
- Wall-mount housing design for easy installation

PACKAGE CONTENTS

- 1x BG-UHD-SCVEA
- 1x 12V/2A power supply unit
- 1x IR Remote control
- 1x User Manual
- 1x Installation software CD

SPECIFICATIONS

| Model Name		BG-UHD-SCVEA
Technical		
Role of usage		HDMI/DP/VGA/CVBS/YPbPr to HDMI Converter
HDMI standards		HDMI 1.4
Input Video Maximum Pixel Rate		165MHz
Output Video bandwidth		10.2Gbps
Output Video support		up to 4K2K@30 4:4:4
Audio support		PCM 2 (32KHz–192KHz Fs sample rate)
ESD protection		[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±2kV
PCB stack-up		4-layer board [impedance control — differential 100Ω; single 50Ω]
Firmware update		Feasible via USB Port
CEC Channel		N/A
Input		1x HDMI + 1x VGA + 1x DP +1x RCA + 1x YPbPr + 1x stereo(for VGA)
Output		1x HDMI
HDMI connector		Type A [19-pin female]
USB connector		Micro B
Mechanical		**BG-UHD-SCVEA**
Housing		Metal enclosure
Dimensions [L x D x H]	Model	144 x 113 x 30mm[5.6" x 4.4" x 1"]
	Package	264 x 170 x 77mm[10.3" x 6.7" x 3"]
	Carton	430 x 358 x 291mm[1'4" x 1'2" x 11.5"]
Weight	Model	264g[9.3 oz]
	Package	724g[1.6 lbs]
Fixedness		Wall-mounting case with screws
Power supply		12V 2A DC
Power consumption		6 Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

Front Panel
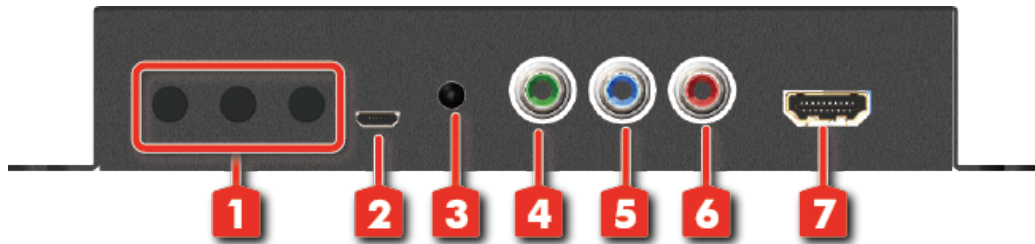
1. **PUSH BUTTON**
   [LEFT]: Down Button

   [MID]: Up Botton

   [RIGHT]: Menu/Enter Button

2. **Micro USB:** Micro-USB port for control port

3. **IR SENSOR:** IR sensor for receiving the IR commands from IR remote

4. **COMPONENT – Y INPUT**

5. **COMPONENT – Pb INPUT**

6. **COMPONENT – Pr INPUT**

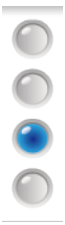7. **HDMI OUTPUT:** Connect to a HDMI display

Rear Panel
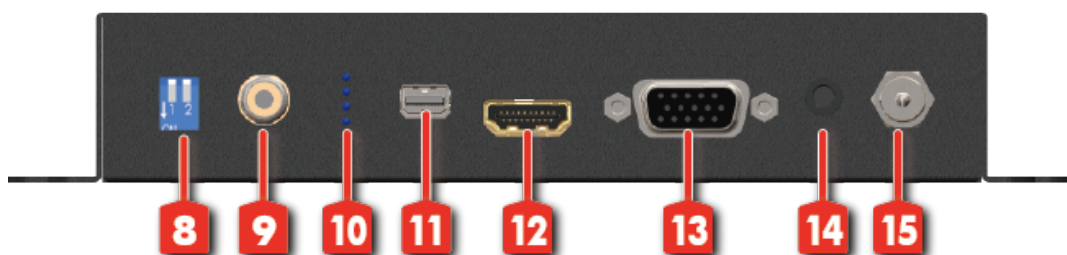
8. **DIP SWITCH:** For firmware update

   PIN 1: F/W update

   PIN 2: Reserved

9. **CVBS INPUT**

10. **LED INDICATOR:** Please refer to "Notes"

11. **DP INPUT: C**onnect to a DP source

12. HDMI INPUT: Connect to a HDMI source

13. VGA INPUT: Connect to a VGA source

14. STEREO AUDIO INPUT (for VGA): connect to analog stereo audio source

15. +12V DC: Interlocking power jack for 12V DC power supply unit

*Notes: LED INDICATOR

Power Indicator LED	Signal Indicator LED				
Power	DisplayPort	VGA	HDMI	YPbPr	CVBS
○ ○ ○ ●	● ○ ○ ○	○ ● ○ ○	○ ○ ● ○	● ● ○ ○	○ ● ● ○

CONNECTION DIAGRAM

HDMI   VGA
AUDIO   USB
YPbPr

YPbPr

HDMI CABLE

Blu-ray Player

Monitor

FRONT

REAR

YPbPr CABLE

Blu-ray Player

AUDIO CABLE

USB CABLE

VGA CABLE

PC

Laptop

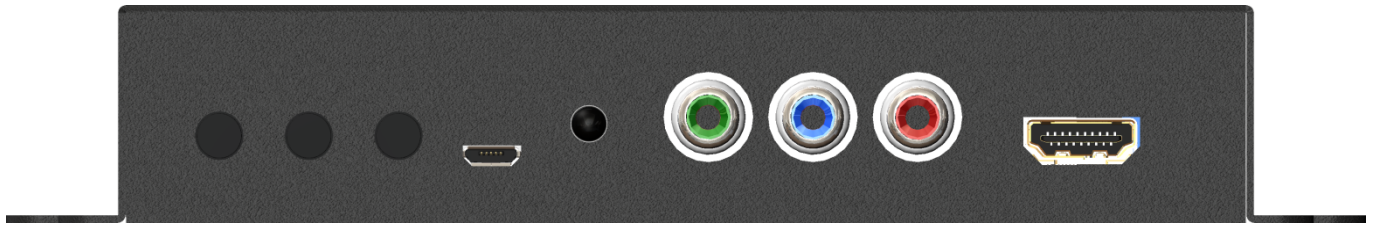Blu-ray Player
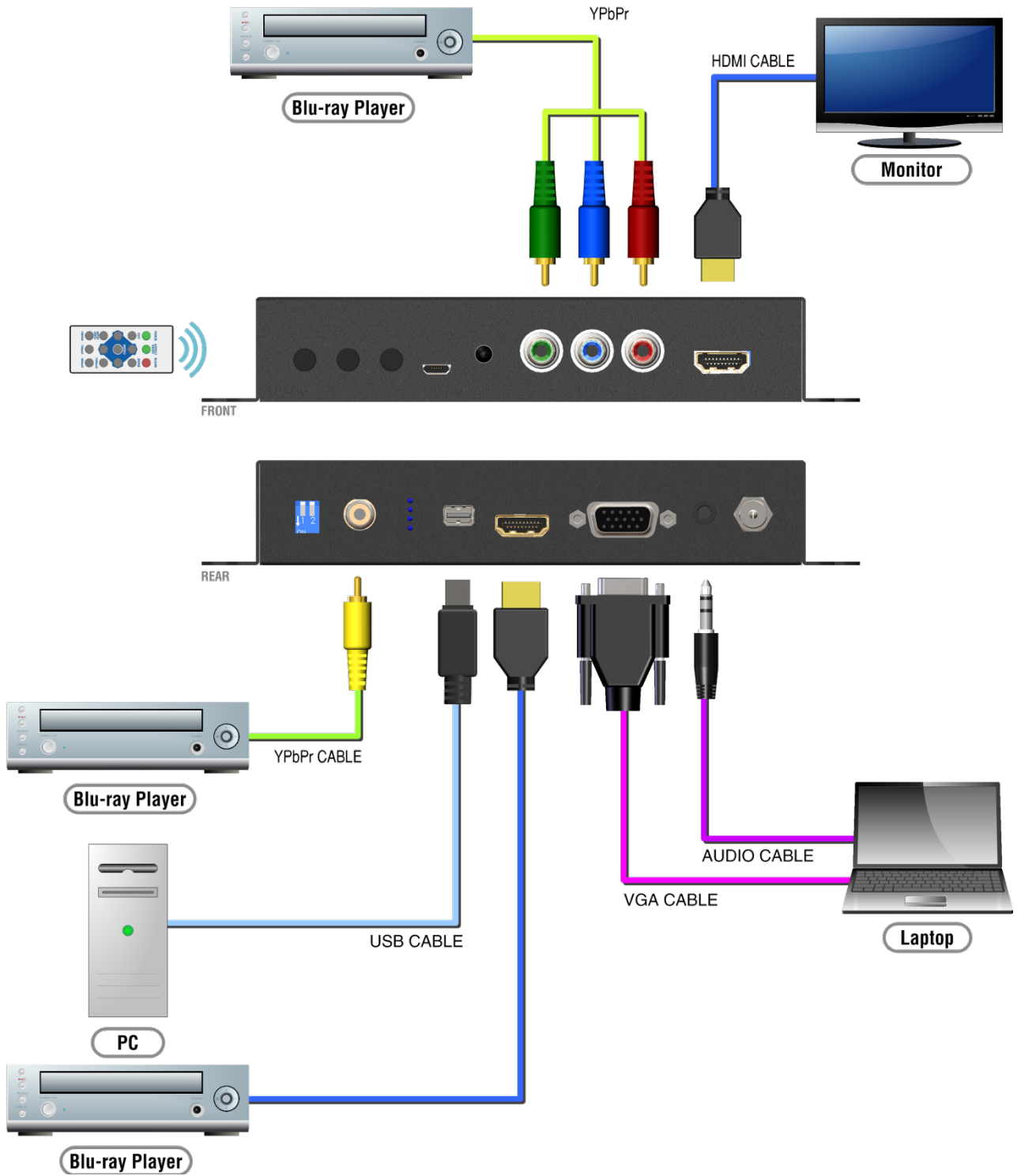
1.Output Setup	Output Format	
	Test Pattern	Disable, White, Cross, Hatch, Color, Gray, Windows, H-Ramp, W-HRamp, W-VRamp, Diagonal
	Audio Mute	Off, On
	Input Type	HDMI, VGA, DP, YPbPr, CVBS
	Return	
2.Image	Contrast	0~255 of Contrast Level
	Brightness	0~255 of Brightness Level
	Saturation	0~255 of Saturation Level
	Hue	0~255 of Hue Level
	Gamma Adjust	Off, 1.1, 1.3, 0.7, 0.9
	Color Tone	Off, Green, Skin
	Edge Enhance	Off, Max, Mid, Min
	Sharpness	0~64 of Sharpness Level
	Return	
3.Adjustment	Under/Over Scan	-50%~50% of Scan Level
	Aspect Ratio	Stretch, 16:9, 4:3
	H-Mirror	Off, On
	V-Mirror	Off, On
	H-Shift	-100~100 of H-Shift Level
	V-Shift	-50~50 of V-Shift Level
	Return	
4. System	Input Format	
	F/W Version	
	Factory Reset	
	Return	
5. Exit		

Method A: Push-in Button

Method B: IR Remote Control

Button	Function
FREEZE	Freeze video
ASPECT RATIO	Aspect ratio change
BLANK	Blank video
EXIT	Exit OSD
ENTER	Enter key
UP	Up key
LEFT	Left key
RIGHT	Right key
DOWN	Down key
MENU	Menu on
INPUT INFO	Source resolution information
1080p60	Select 1080p60 output resolution
1080i60	Select 1080i60 output resolution
720p60	Select 720p60 output resolution
480p60	Select 480p60 output resolution
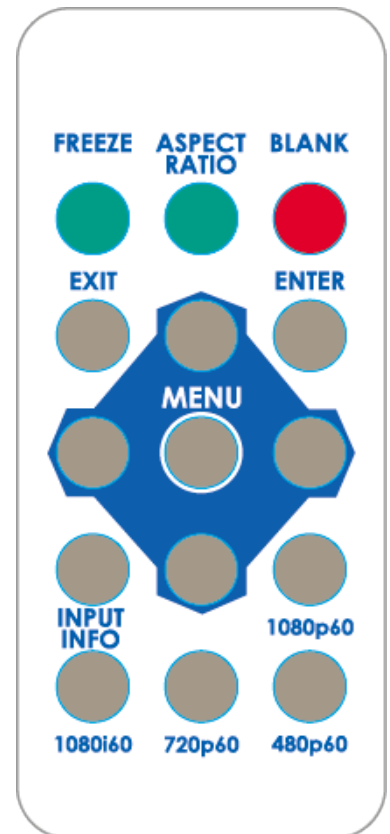
Method C: IR Remote Control through Micro-USB port
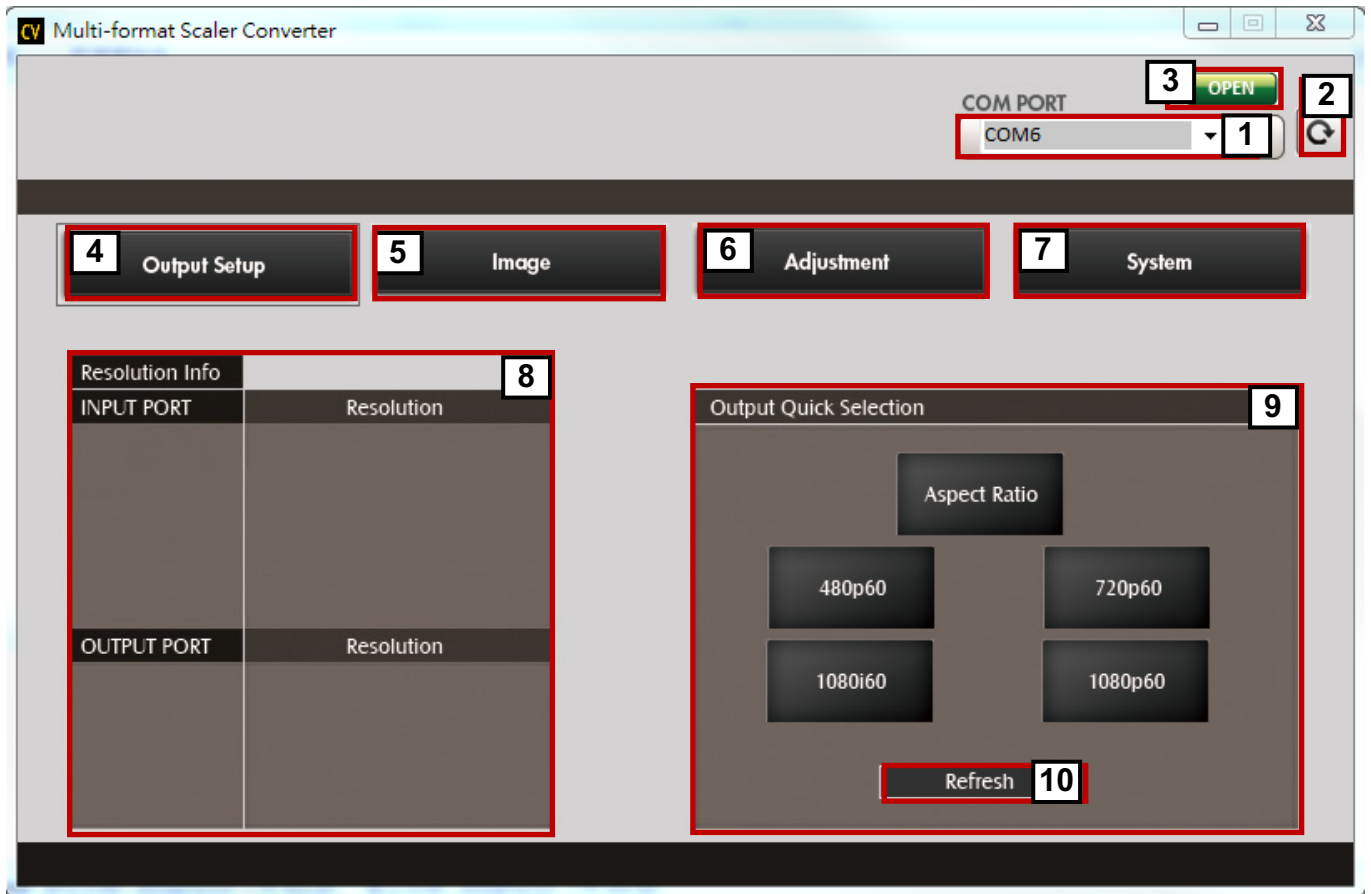
1	COM Port Selection
2	COM Port Detection Button
3	Connect/Disconnect Button
4	Output Setup Button
5	Image Button
6	Adjustment Button
7	System Button
8	Input / Output Resolution Info
9	Output Quick Selection Button
10	Refresh Input / Output Resolution Info Button

1. COM Port Selection

Please select the application COM PORT
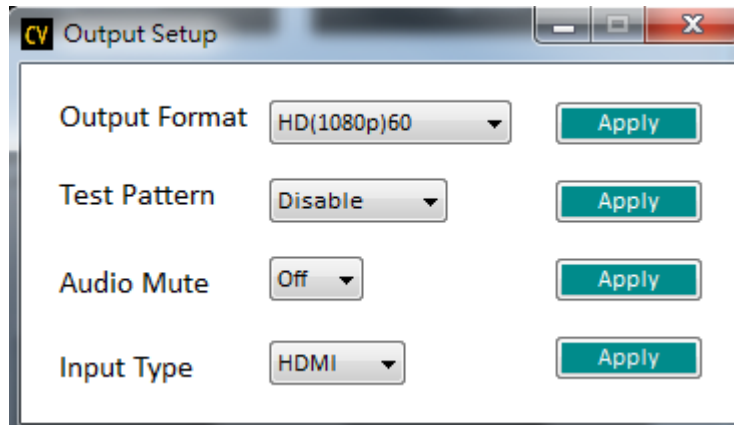
2. COM Port Detection Button

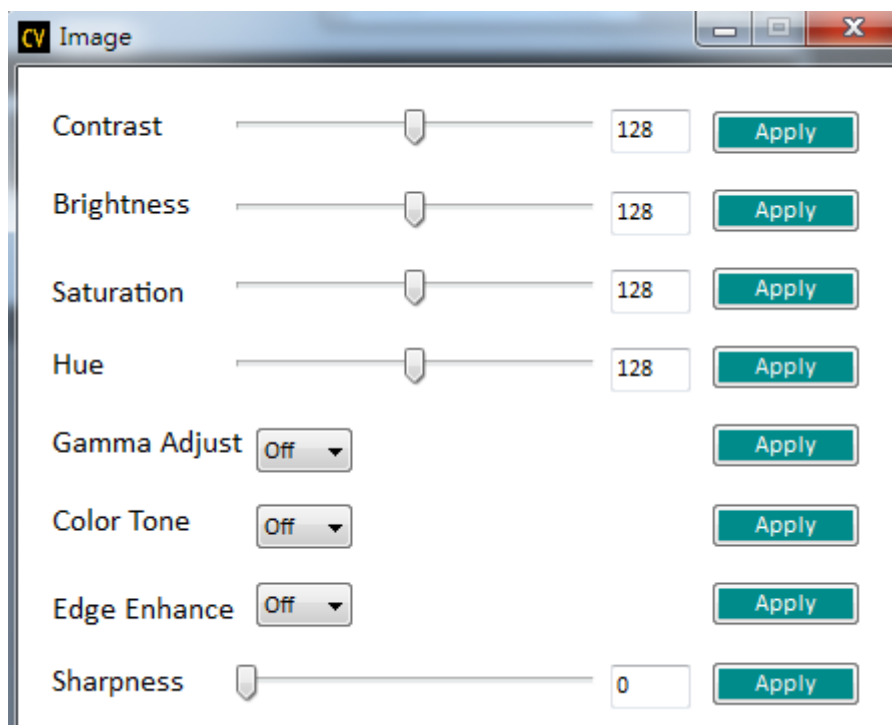Click this button   ⟳   to detect the COM PORT

3. Connect/Disconnect Button

1) Click this button **OPEN** to connect
2) Click this button **CLOSE** to disconnect

4. Output Setup Button

CV Output Setup		— ☐ ✕
Output Format	HD(1080p)60 ▼	Apply
Test Pattern	Disable ▼	Apply
Audio Mute	Off ▼	Apply
Input Type	HDMI ▼	Apply

5. Image Button

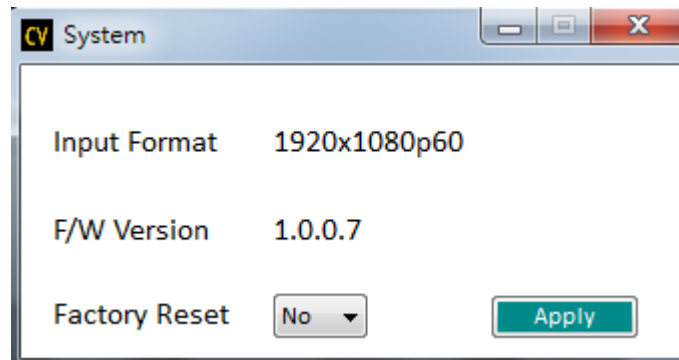| CV Image			— ☐ ✕
Contrast	——○——	128	Apply
Brightness	——○——	128	Apply
Saturation	——○——	128	Apply
Hue	——○——	128	Apply
Gamma Adjust	Off ▼		Apply
Color Tone	Off ▼		Apply
Edge Enhance	Off ▼		Apply
Sharpness	○———	0	Apply

6. Adjustment Button

7. System Button

1) Input Format:
   To view the current input resolution

2) F/W Version Information

3) Factory Reset Button

8. I/O Port and Resolution Info
To display the information about the I/O Port and the applied Resolution

9. Output Quick Selection Button
Common functions for quick setting

10. Refresh Button
To refresh the status of the converter

LIMITED WARRANTY

The SELLER warrants the **BG-UHD-SCVEA** HDMI/DP/VGA/CVBS/YPbPr to HDMI Scaler Converter to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1-year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surges.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30-day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the BG-UHD-SCVEA features and specifications is subject to change without further notice.**

SECOND YEAR ASSURANCE

BZBGEAR wants to assure you peace of mind. We're so confident in the quality of our products that along with the manufacturer's one-year limited warranty, we are offering free second-year warranty coverage upon registration*.

Taking advantage of this program is simple, just follow the steps below:

1. Register your product within 90 days of purchase by visiting BZBGEAR.com/warranty.

2. Complete the registration form. Provide all necessary proof of purchase details, including serial number and a copy of your sales receipt.

For questions, please call 1.888.660.2962 or email support@bzbgear.com.

For complete warranty information, please visit BZBGEAR.com/warranty or scan the QR code below.

*Terms and conditions apply. Registration is required.

MISSION STATEMENT

BZBGEAR manifests from the competitive nature of the audiovisual industry to innovate while keeping the customer in mind. AV solutions can cost a pretty penny, and new technology only adds to it. We believe everyone deserves to see, hear, and feel the advancements made in today's AV world without having to break the bank. BZBGEAR is the solution for small to medium-sized applications requiring the latest professional products in AV.

We live in a DIY era where resources are abundant on the internet. With that in mind, our team offers system design consultation and expert tech support seven days a week for the products in our BZBGEAR catalog. You'll notice comparably lower prices with BZBGEAR solutions, but the quality of the products is on par with the top brands in the industry. The unparalleled support from our team is our way of showing we care for every one of our customers. Whether you're an integrator, home theater enthusiast, or a do-it-yourselfer, BZBGEAR offers the solutions to allow you to focus on your project and not your budget.