

# BG-UHD-VW2X2

**2X2 4K 18Gbps UHD HDMI Video Wall Processor/Controller with  
Audio Extraction**

## User Manual







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## Statement

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

## Safety Precaution

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- To prevent damaging this product, avoid heavy pressure, strong vibration, or immersion during transportation, storage, and installation.
- To avoid damage from drops, make sure this unit is placed on a stable and solid surface.
- Only connect the unit with the included power supply.
- Disconnect power cord by connector only - Do not pull on the cable.
- Do not place or drop heavy/sharp-edged objects on the power cord. A damaged cord can cause fire or electrical shock hazards. Regularly check power cord for excessive wear or damage to avoid possible fire / electrical hazards.
- Ensure the unit is properly always grounded to prevent electrical shock hazard.
- Turn off the unit if a malfunction occurs. Disconnect everything before moving the unit.
- The housing of this product is made of organic materials. Do not expose to any liquid, gas, or solids which may corrode the shell.
- Do not expose the product to rain or moisture.
- Unplug this device during lightning storms
- Clean only with a soft dry microfiber cloth.
- 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.
- Only use accessories specified by the manufacture
- Product specifications may be subject to technical upgrades without further notice.



## Introduction

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The BG-UHD-VW2X2 is a 4-port HDMI video wall processor with 4K@60 4:4:4 input support. Featuring 4 1080p HDMI video wall outputs, this unit can function as a dedicated 2x2 video wall at 4K resolution or it can be used at 1080p with the other various screen layouts. Layouts include 1x1, 1x2, 1x3, 1x4, 2x1, 2x2, 3x1, and 4x1. The BG-UHD-VW2X2 features one RCA and one TOSLINK output for audio extraction. It can be controlled by the included IR Remote, front panel buttons, or via RS232 commands.

## Features

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- HDCP 2.2 Compliant
- Input resolutions up to 4K@60Hz 4:4:4
- Multiple layout modes
- Edge Shielding (2x2 only)
- Mirror function
- AUX and TOSLINK audio outputs
- Controllable via front-panel buttons, IR remote, and RS232 control
- HDMI Local loop out
- Metal housing
- Plug and play

## Packing List

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- |                      |  |
|----------------------|--|
| • 1x BG-UHD-VW2X2    | • 1x Phoenix plugs for RS232 cable termination |
| • 1x DC Power Supply | • 1x User Manual                               |
| • 1x Remote control  | • 1x Quick Start Guide                         |
| • 1x User Manual     |  |

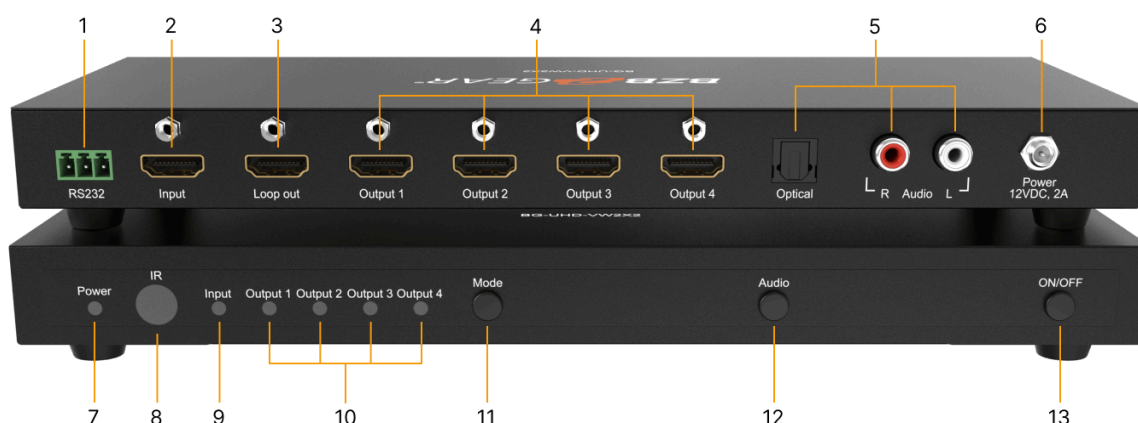


## Specifications

DMI 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	HDMI 2.0, HDCP 2.2
Support video color format	36-bit Deep Color all channels maximum
Audio output	HDMI: PCM 2CH L\R: Stereo audio Toslink: 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

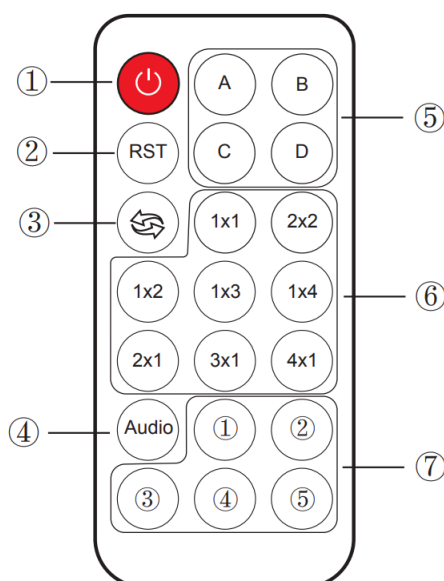


## Operation Controls and Functions



NO.	Name	Function Description
1	RS232	RS232 control Port.
2	HDMI Input	Connect to the HDMI output of your source equipment such as a media player or PC.
3	HDMI Loopout	Connect to a local monitor to display the full signal of the source device.
4	HDMI Output 1-4	Connect to the display devices to show the split signal of the source device.
5	AUX and TOSLINK audio output	Connect to an audio system or amplifier.
6	Power	Connect to the 12V DC.
7	Power LED indicator	Power On/Off indicator.
8	IR	Remote control sensor.
9	Input LED Indicator	HDMI input LED indicator.
10	Output 1 - Output 4	HDMI output LED indicators.
11	Mode switch	Press the "Mode" button to switch the Layout mode.
12	Audio switch	Press the "Audio" button to switch the audio output from L\R or Optical.
13	ON/OFF	Power ON/OFF button.

## IR Remote



- ON\OFF:** Power ON\OFF.
- RST:** Restore Factory Defaults.
- Rotate:** Change the Output port order.
- Audio:** Switch the audio output from L\R or Optical.
- Mirror mode:** Enable\Disable Mirror mode (Rotation 180°). Note: Used in 2x2 mode only.
- Layout mode:** Switch between different layout modes.
- Edge Shielding level:** Switch between different Edge Shielding levels (higher the level, the more pixels are shielded from the edge). Note: Used in 2x2 mode only.

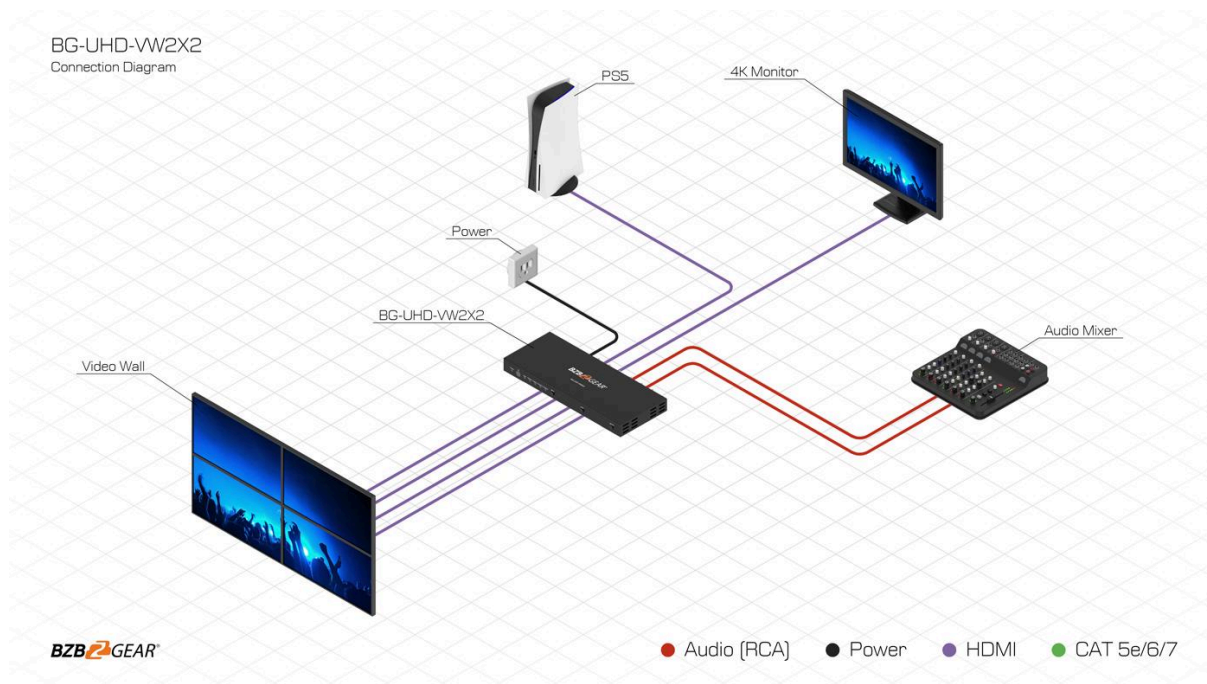


## Output Modes

1x1	<div>A</div> <div>A</div> <div>A</div> <div>A</div>
1x2(H)	<div>A1</div> <div>A2</div> <div>A1</div> <div>A2</div>
1x3(H)	<div>A1</div> <div>A2</div> <div>A3</div> <div>A</div>
1x4(H)	<div>A1</div> <div>A2</div> <div>A3</div> <div>A4</div>
2x1(V)	<div>A1</div> <div>A2</div> <div>A1</div> <div>A2</div>
3x1(V)	<div>A1</div> <div>A2</div> <div>A3</div> <div>A</div>
4x1(V)	<div>A1</div> <div>A2</div> <div>A3</div> <div>A4</div>
2x2	<div>A1</div> <div>A2</div> <div>A3</div> <div>A4</div>



## Application Example





## Tech Support

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Have technical questions? We may have answered them already!

Please visit BZBGear's support page ([bzbgear.com/support](https://bzbgear.com/support)) for helpful information and tips regarding our products. Here you will find our Knowledge Base ([bzbgear.com/knowledge-base](https://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](https://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:

<u>Phone</u>	<u>Email</u>	<u>Live Chat</u>
1.888.499.9906	support@bzbgear.com	bzbgear.com

## Limited Product Warranty Terms

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Pro Line: 5-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Essential Line: 3-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Cables: Lifetime Limited Product Warranty.

For complete warranty information, please visit [bzbgear.com/warranty](https://bzbgear.com/warranty).

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

## Mission Statement

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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.

## Copyright

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