BZB GEAR®
Solutions to Amplify Your World™

BG-IPGEAR-4K
(BG-VOP-MT and BG-VOP-CB)

4K@30Hz UHD HDMI 2.0 AV over IP Multicast System

with Video Wall & PoE Support

User Manual

TABLE OF CONTENTS

Statement	4
Safety Precaution	4
Introduction	5
Features	6
Connection Diagram	6
BG-VOP-CB Packing List	7
BG- VOP-CB Specifications	7
BG-VOP-CB Panel Descriptions	7
BG-VOP-MT Packing List	8
BG-VOP-MT Specifications	8
BG-VOP-MT Panel Descriptions	9
IR Passthrough	10
System Requirements	11
System Setup	11
Web Control	15
Mapping	16
Groups	18
Video Wall Setup	20
On Screen Display (OSD)	24
Schedule (OSD)	25
Setup	26
History	29
Account	30
BZBGEAR Switcher Control Application	31
Troubleshooting	39
Tech Support	40
Warranty	40
Mission Statement	40
Copyright	40

Statement

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

Safety Precaution

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

The BZBGEAR **IPGEAR-4K** AV over IP (AVoIP) system is composed of three components. The first is the BG-VOP-CB which is the controller for the system. Next, at least two BG-VOP-MT transceivers are needed which function as either transmitter or receiver.

The **BG-VOP-CB** Smart Controller for the IPGEAR-4K system provides central management and real-time monitoring of the BG-VOP-MT AV over IP transceivers. This highly expandable system can manage up to 1024 transceivers. The intuitive web-based interface allows users to quickly change sources using drag and drop commands. The interface also provides quick and easy creation and management of video walls, custom on screen displays (OSD) including text and graphics, and alerts for system events to keep administrators up to date.

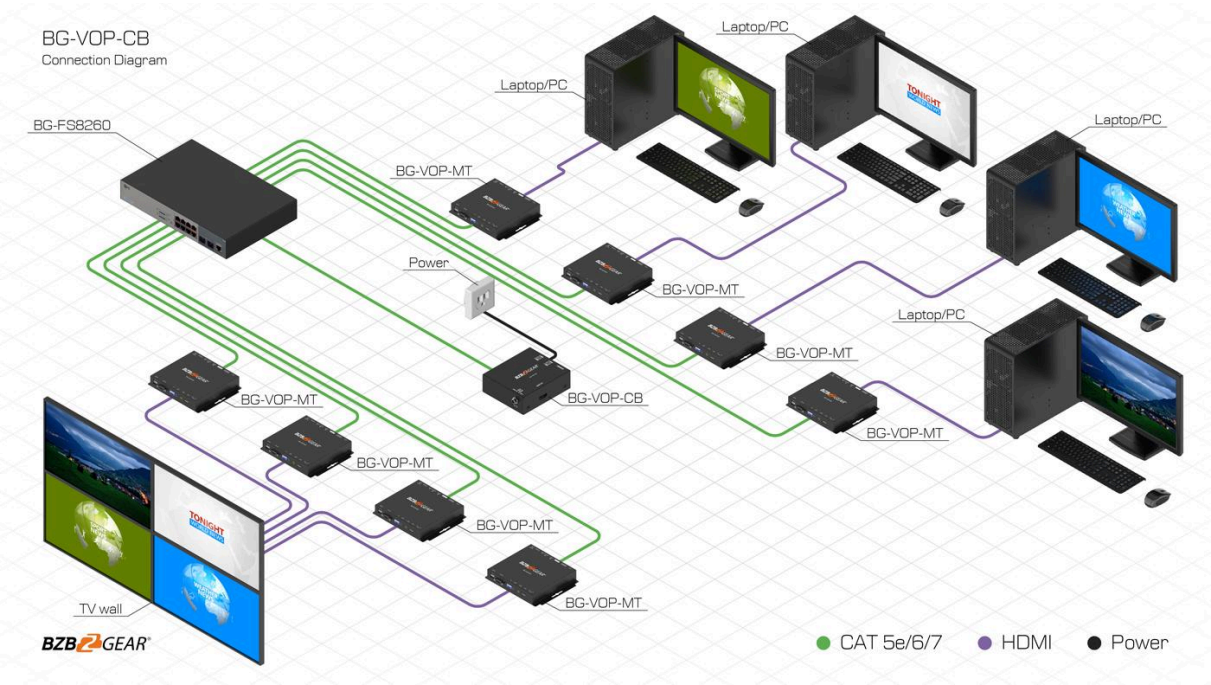
The **BG-VOP-MT** is a HDMI 2.0 over IP multicast transceiver with video wall & PoE support. It can boost audio/video transmission distances up to 120m (396ft) in UHD 4K2K. With cost-effective ethernet cables, users can easily extend UHD sources such as DVD players, Blu-ray Disc players, gaming consoles, PCs, and any other HDMI source to any HDMI display. In addition, BG-VOP-MT is HDCP compliant, and supports PoE, IR, and RS-232 pass-through.

By transmitting the A/V signal over the local area network the BG-VOP-MT makes it easy to add a source or display to your system anywhere there is an active ethernet connection. To provide more flexibility for installations, the BG-VOP-MT can work as either a transmitter or a receiver with the flip of a switch. When combined with broadcasting management software and a Gigabit Ethernet network switch (supporting IGMP), the BG-VOP-MT is a complete UHD video broadcasting solution for digital signage. The transceivers can function in Point-to-Point, Point-to-Many, or Multicast scenarios. Multicasting requires a Managed Gigabit Ethernet Switch with 802.1Q VLAN functionality to allow multiple video sources.

Features

- Central Control for the IPGEAR-4K AV over IP system
- Monitors all system devices from one central system
- Optimized for 1 Gigabit networks
- Offers control via the web interface or mobile app (iOS)
- Auto-discovery of transmitters and receivers for easy installation
- One-to-one, one-to-many, & multicasting broadcasting architecture
- Transmitters can be multicast up to 25 displays in video wall applications (5x5) or unlimited displays in one-to-many multicast applications
- Drag & Drop matrix switching for simple operation
- Quickly and easily create and manage video walls
- Automatically assigns IP addresses to transceivers
- HDMI input up to 4K2K@60 4:4:4 8 bits
- HDMI output up to 4K2K@30 RGB
- High Dynamic Range (HDR)*
- HDMI 2.0a compliant
- HDCP 2.2 compliant
- PoE functionality
- Bi-directional IR

Connection Diagram



BG-VOP-CB Packing List

- 1x BG-VOP-CB
- 1x 5v DC power supply
- 1x Rack-mounting ear set
- 1x User Manual

BG- VOP-CB Specifications

Technical	
Usage	IPGEAR-4K System Controller
Inputs	1 x 5VDC, 1 x RJ45, 4 x USB 2.0
Output	1 x HDMI
HDMI Connector	Type A (19-pin female)
RJ-45 Connector	WE/SS 8P8C
Mechanical	
Housing	Metal Enclosure (Black)
Dimensions (L x W x H)	90 x 78 x 29mm (Device), 198 x 137 x 74mm (Box)
Weight	222g (Device), 493g (Box)
Mounting Options	Mounting Ears (included)
Power Supply	5V DC
Power Consumption	3.5 Watts max
Operating Temperature	0 - 40°C (32 – 104°F)
Storage Temperature	-20 – 60°C (-4 – 140°F)
Humidity	20 – 90% (Dry)

BG-VOP-CB Panel Descriptions

1. **Activity LED -** Indicates internal storage activity
2. **Power LED -** Indicates live power connection
3. **+5V DC -** Power Connection
4. **HDMI Output -** System Monitor
5. **LAN -** Ethernet control port
6. **USB -** Reserved for factory use

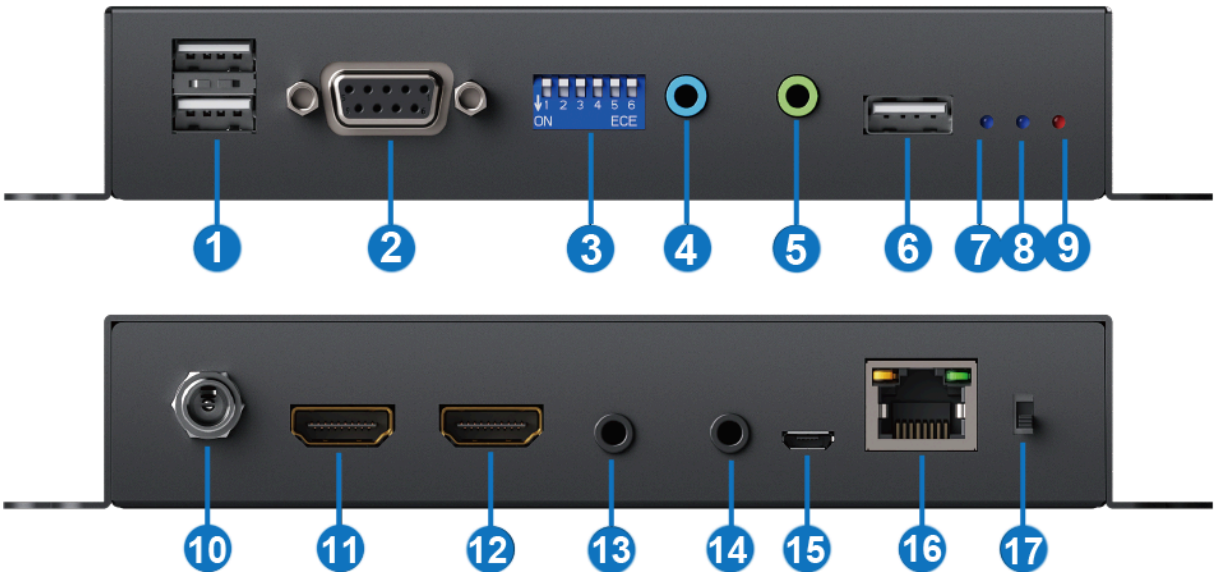
BG-VOP-MT Packing List

- 1x BG-VOP-MT
- 1x IR blaster cable
- 1x IR receiver cable
- 1x User Manual

BG-VOP-MT Specifications

Technical	
HDMI compliance	HDMI 2.0a
HDCP compliance	HDCP 2.2
Input Video Resolution	Up to 4K2K@30 (4:4:4 8 bits)
Output Video support	Up to 4K2K@30 (RGB)
Latency	2 frames (33 ms) maximum
HDMI over UTP Transmission [24-bit]	Ultra HD (4K2K60)-120m (396ft) [CAT.X]
Audio Support	Surround sound (up to 7.1ch) or stereo digital
Input TMDS signal	1.2 Volts [peak-to-peak]
Input DDC signal	5 Volts [peak-to-peak, TTL]
ESD protection	Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge]
IR pass-thru	Full-duplex bi-directional
RS-232 support	Yes
Interface Connections	2x HDMI + 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: τ = 25° / Carrier frequency: 20-60kHz
HDMI connector	Type A [19-pin female]
DB connector	DB-9
RJ45 connector	WE/SS 8P8C with 2 LED indicators
3.5mm connectors	IR blaster (blue), IR receiver (green), Audio in/out (2x black)
Mechanical	
Housing	Metal enclosure
Dimensions [L x W x H]	Model 180 x 142 x 28mm [7" x 5.5" x 3.2"] 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 664g [23 oz] Package 889g [2 lbs]
Surface Mounts	Optional Wall-mounting brackets with screws included
Power Supply	5V 2A DC / 48V POE
Power Consumption	7.5 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]

BG-VOP-MT Panel Descriptions



1. **USB** (USB 2.0 downstream port): Connect to USB flash drive or other USB devices (when device is configured as RX)
2. **RS-232**: Connect to PC with a DB-9 cable
3. **Dip Switch**: Video channel selection
4. **IR Blaster**: Infrared 3.5mm socket for extension cable of IR blaster
5. **IR Receiver**: Infrared 3.5mm socket for extension cable of IR receiver
6. **USB**: Connect to upstream USB host (device configured as TX)
7. **Link LED indicator**:

   [Blinking] When unit is connected to a category cable

   [Solid] When transmitting unit is connected to a HDMI source and linked to the RX unit
8. **System LED indicator**:

   [Blinking] When the unit is connected to a power supply unit

   [Solid] Device is working normally
9. **Info LED indicator**: When the user clicks the LED button in the software, the LED light will blink 30 seconds.
10. **+5V DC**: Connect to 5V DC power supply
11. **HDMI IN**: Connect to a HDMI source.
12. **HDMI OUT**: Connect to a HDMI display.
13. **Analog audio line in**: Connect to upstream audio output (device configured as TX)
14. **Analog audio line out**: Connect to downstream headphone output (device configured as RX)
15. **Micro-USB**: for F/W updates
16. **RJ-45**: Gigabit Ethernet port
17. **Dip Switch**: configures as a transmitter or receiver

    [⍰] configure as a transmitter

    [⍰] configure as a receiver

IR Passthrough

[IR Extenders]

IR Blaster

IR Receiver

[IR Sockets]

IR BLASTER: Plug in the IR blaster to emit all IR command signals received from the IR receiver from the other end to control the devices corresponding to the IR signals.

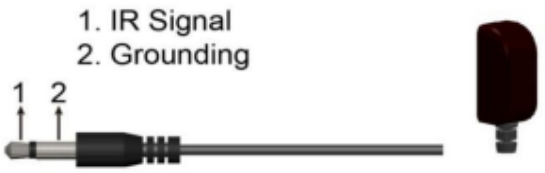
IR RECEIVER: Plug in the IR receiver to receive all IR command signals from the IR remote controls of the corresponding devices.

CAUTION!

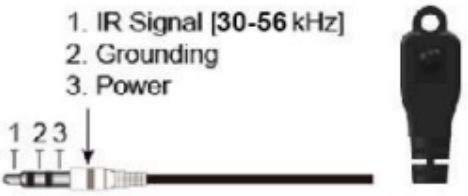
Incorrect placement of IR Blaster and Receiver may result in the failure of the IR extenders. Please check carefully before plugging in the IR extender to the respective IR sockets. Warranty will not cover the damage.

[Definition of IR Earphone Jack]

IR Blaster



IR Receiver



NOTE: Users can buy any IR extension cables on the market that are compatible with the IR sockets and extender for replacement use shown in the diagram above. IR cables longer than 2m (6ft) may not work.

System Requirements

For the BZBGEAR AVoIP system to function as intended the following items are needed:

- x2 BG-VOP-MT transceivers
- x1 BG-VOP-CB smart controller
- Managed network switch

To ensure complete and reliable functionality any switch selected for an AVoIP system must meet the requirements below and support the following features:

- Layer 2 or Layer 3 Managed Switch
- 1 Gigabit Throughput minimum, 10 Gigabit recommended for larger deployments
- Multicast forwarding or filtering
- IGMP Snooping
- IGMP Querier
- Must support Jumbo Frames (8000 bytes or larger). This may be listed as MTU (Maximum Transmission Unit) or Jumbo Packets

When using multiple switches these additional features are required:

- Dynamic Multicast Router Port
- Forward Unknown Multicast to Router Port

Note: It is recommended that all listed features are applied to every network switch that contains the same LAN/VLAN as the AVoIP system. When using PoE (Power over Ethernet) to power the transceivers allow for a PoE budget of 7.5 watts per unit. For example, if using 10 units make sure the switch has a total PoE budget of at least 75 watts.

For information on how to configure one of BZBGEAR's recommended and tested AVoIP network switches, please visit our webpage for this product.

System Setup

The following instructions assume your network can support the IPGEAR-4K AVoIP system and is already configured properly.

1. The transceivers can function either as a transmitter or receiver by toggling the switch on the unit to the desired position. There must be at least one transmitter and one receiver in the system.

[Up] configure as a transmitter
[Down] configure as a receiver

2. Once the units are assigned as transmitter or receiver the ID of the unit will need to be set using the dipswitch panel.

- Transmitter needs to have an individual ID so they do not conflict in the control system. Please see the dipswitch setting chart for proper configuration for large scale deployments.
- Receivers can be set to receive signal from any transmitter or a specific one. To receive signal from any transmitter, leave all dip switches in the 0 position (up). To receive signal from a specific transmitter, toggle the dip switches on the receiver to match the positions on the desired transmitter.

TX/RX Group ID Dip Switch Settings

1. For IDs 1~63, please refer the table below to set up (Hardware control)
2. For IDs 64~1023, please adjust the DIP switch to ID 0, and the real ID can be decided by the external software (Software control).

ID	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6
0	↑	↑	↑	↑	↑	↑
1	↓	↑	↑	↑	↑	↑
2	↑	↓	↑	↑	↑	↑
3	↓	↓	↑	↑	↑	↑
4	↑	↑	↓	↑	↑	↑
5	↓	↑	↓	↑	↑	↑
6	↑	↓	↓	↑	↑	↑
7	↓	↓	↓	↑	↑	↑
8	↑	↑	↑	↓	↑	↑
9	↓	↑	↑	↓	↑	↑
10	↑	↓	↑	↓	↑	↑
11	↓	↓	↑	↓	↑	↑

ID	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6
32	↑	↑	↑	↑	↑	↓
33	↓	↑	↑	↑	↑	↓
34	↑	↓	↑	↑	↑	↓
35	↓	↓	↑	↑	↑	↓
36	↑	↑	↓	↑	↑	↓
37	↓	↑	↓	↑	↑	↓
38	↑	↓	↓	↑	↑	↓
39	↓	↓	↓	↑	↑	↓
40	↑	↑	↑	↓	↑	↓
41	↓	↑	↑	↓	↑	↓
42	↑	↓	↑	↓	↑	↓
43	↓	↓	↑	↓	↑	↓

ID	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6
12	↑	↑	↓	↓	↑	↑
13	↓	↑	↓	↓	↑	↑
14	↑	↓	↓	↓	↑	↑
15	↓	↓	↓	↓	↑	↑
16	↑	↑	↑	↑	↓	↑
17	↓	↑	↑	↑	↓	↑
18	↑	↓	↑	↑	↓	↑
19	↓	↓	↑	↑	↓	↑
20	↑	↑	↓	↑	↓	↑
21	↓	↑	↓	↑	↓	↑
22	↑	↓	↓	↑	↓	↑
23	↓	↓	↓	↑	↓	↑
24	↑	↑	↑	↓	↓	↑
25	↓	↑	↑	↓	↓	↑
26	↑	↓	↑	↓	↓	↑
27	↓	↓	↑	↓	↓	↑
28	↑	↑	↓	↓	↓	↑
29	↓	↑	↓	↓	↓	↑
30	↑	↓	↓	↓	↓	↑
31	↓	↓	↓	↓	↓	↑

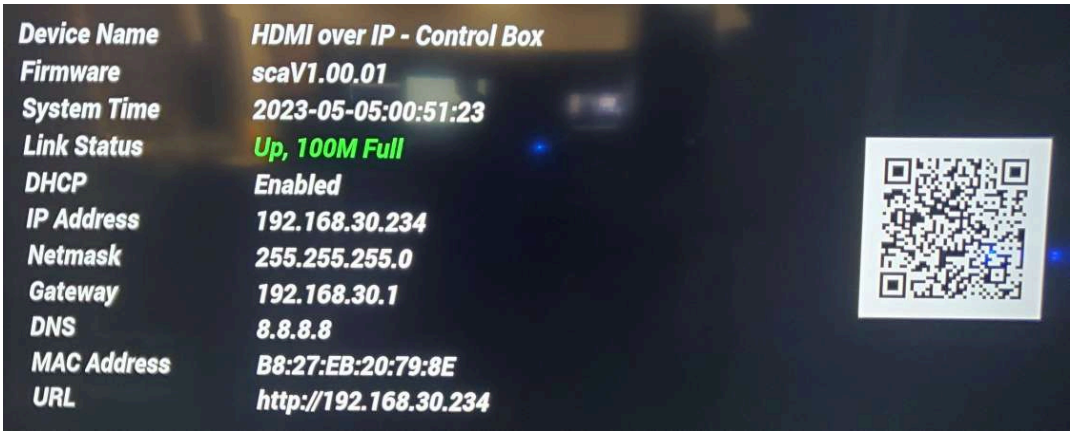
ID	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6
44	↑	↑	↓	↓	↑	↓
45	↓	↑	↓	↓	↑	↓
46	↑	↓	↓	↓	↑	↓
47	↓	↓	↓	↓	↑	↓
48	↑	↑	↑	↑	↓	↓
49	↓	↑	↑	↑	↓	↓
50	↑	↓	↑	↑	↓	↓
51	↓	↓	↑	↑	↓	↓
52	↑	↑	↓	↑	↓	↓
53	↓	↑	↓	↑	↓	↓
54	↑	↓	↓	↑	↓	↓
55	↓	↓	↓	↑	↓	↓
56	↑	↑	↑	↓	↓	↓
57	↓	↑	↑	↓	↓	↓
58	↑	↓	↑	↓	↓	↓
59	↓	↓	↑	↓	↓	↓
60	↑	↑	↓	↓	↓	↓
61	↓	↑	↓	↓	↓	↓
62	↑	↓	↓	↓	↓	↓
63	↓	↓	↓	↓	↓	↓

3. Once the dipswitches are set, plug the transceivers into the PoE network switch to power them on.
    a. Connect sources to transmitters and displays to receivers using HDMI cables.
    b. When powered and connected to a display the receivers will display the following:

4. Next, plug an ethernet and HDMI cable into the BG-VOP-CB smart controller followed by power last. NOTE: power for the controller must be connected last or it will not be able to see that the HDMI port is active.

5. The BG-VOP-CB Smart Controller is preconfigured to be set to DHCP and will automatically grab an IP address from the network. If a DHCP server is not available, the unit will assign itself its own IP. Both controller and transceivers must be on the same network/VLAN to communicate properly.

6. Once the controller powers on you will see the following on the connected display:

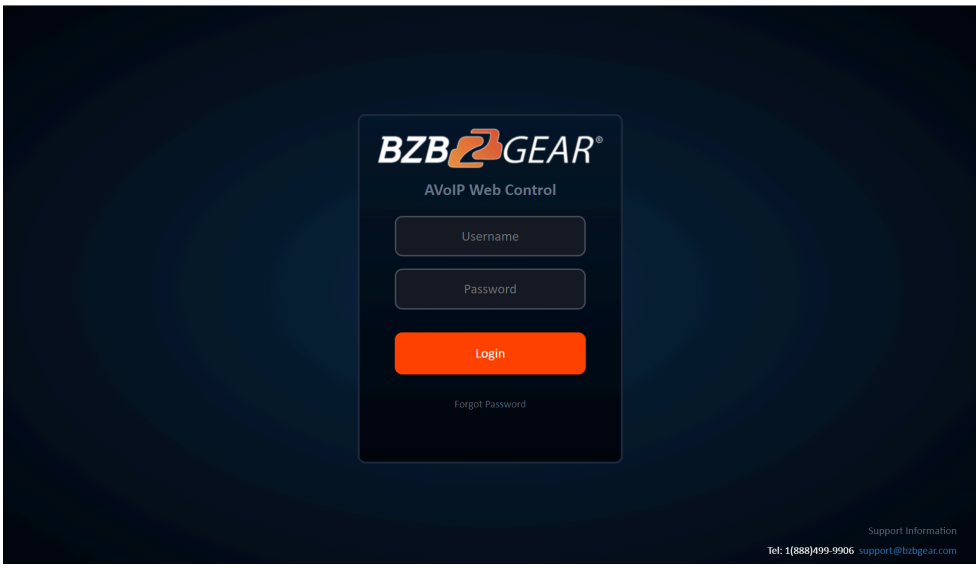


NOTE: If you do not see an image, power cycle the controller with all other cables connected and wait for the unit to reboot.

7. To access the web interface on your computer, ensure it is on the same network as the controller. Once connected, open your web browser and navigate to the displayed IP address, URL, or by scanning the QR code.

Web Control

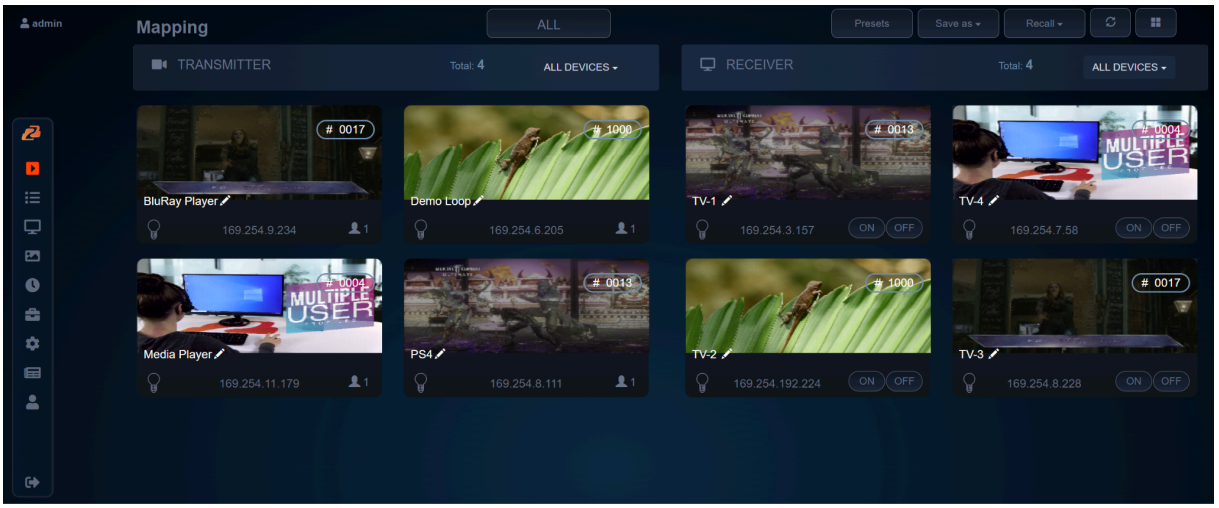
1. Type in the URL shown by the BG-VOP-CB into your preferred web browser or scan the QR code using a mobile device connected to the same network as the controller.
2. The login page will be displayed if the system and network were configured correctly as shown below.



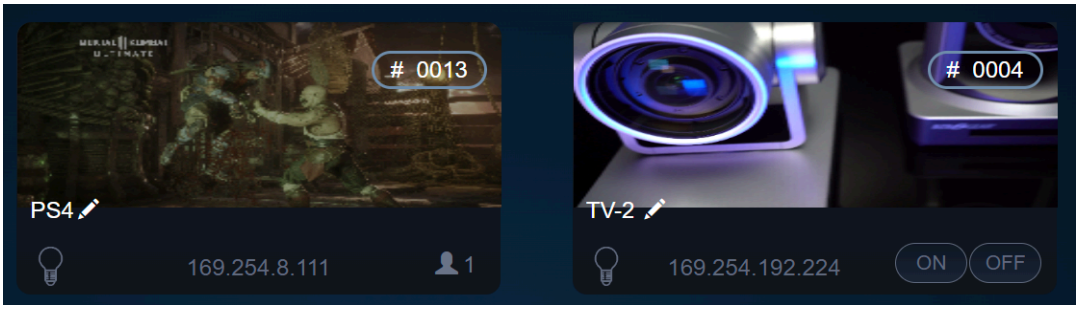
3. Enter the default credentials to login to the system.
   a. Default account: **admin**
   b. Default password: **admin**

Mapping

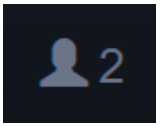
1. Upon logging in you will be taken to the systems Mapping page.



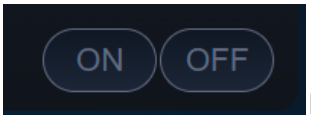
2. On this screen users can pair transmitters and receivers together, view and manage presets, as well as view grouped units.
3. The image previews on the Mapping page display useful information such as the group/pair ID in the top right, editable device name in the bottom left, and device IP address.

a. 

b. The lightbulb symbol will illuminate red when clicked which will cause the corresponding units red LED indicator light to blink for a short period of time to assist with identification.

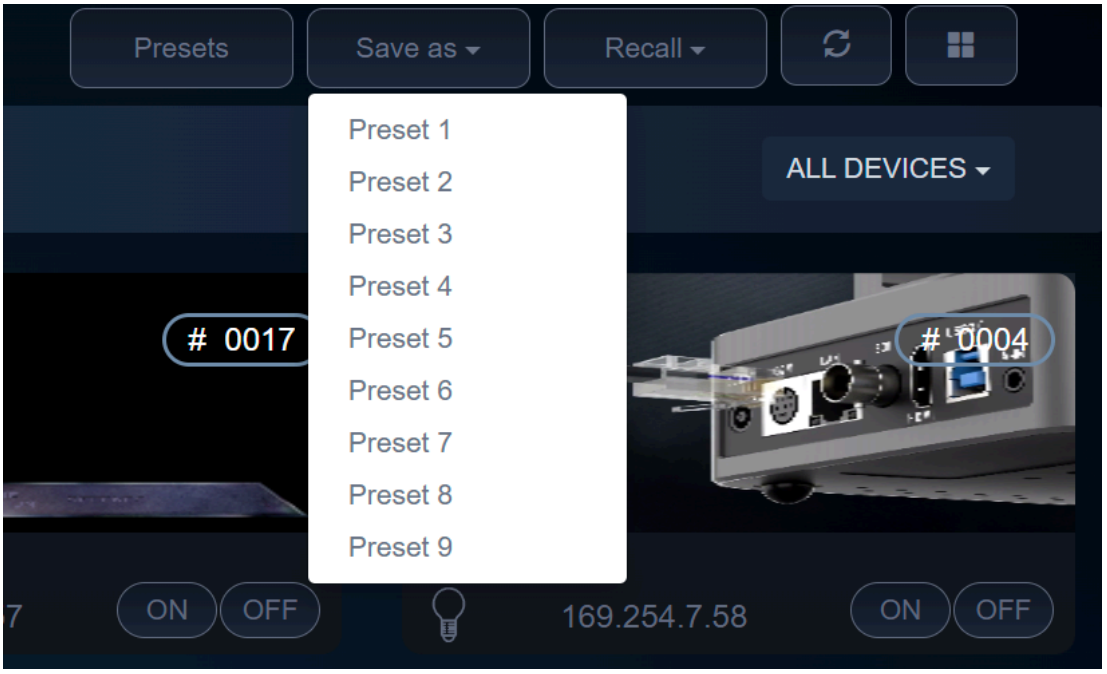
c. On transmitting units, the paired symbol 

shows the number of receivers that the transmitter is currently broadcasting too.

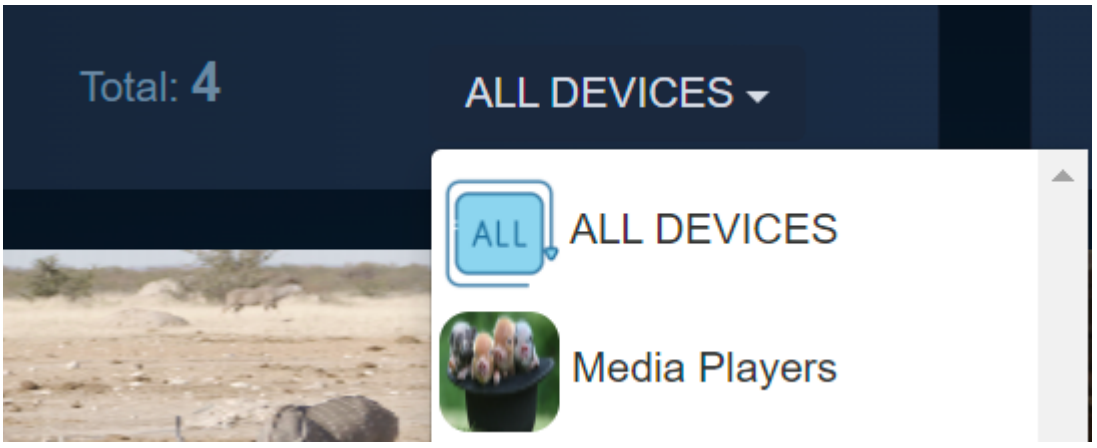
d. On receiver units the ON/OFF 

buttons send CEC commands to compatible displays to turn them on or off.

4. To set a configuration as a preset click “Save as” dropdown and select the desired preset location. To recall a preset click the “Recall” drop down and select a preset that has been previously saved.



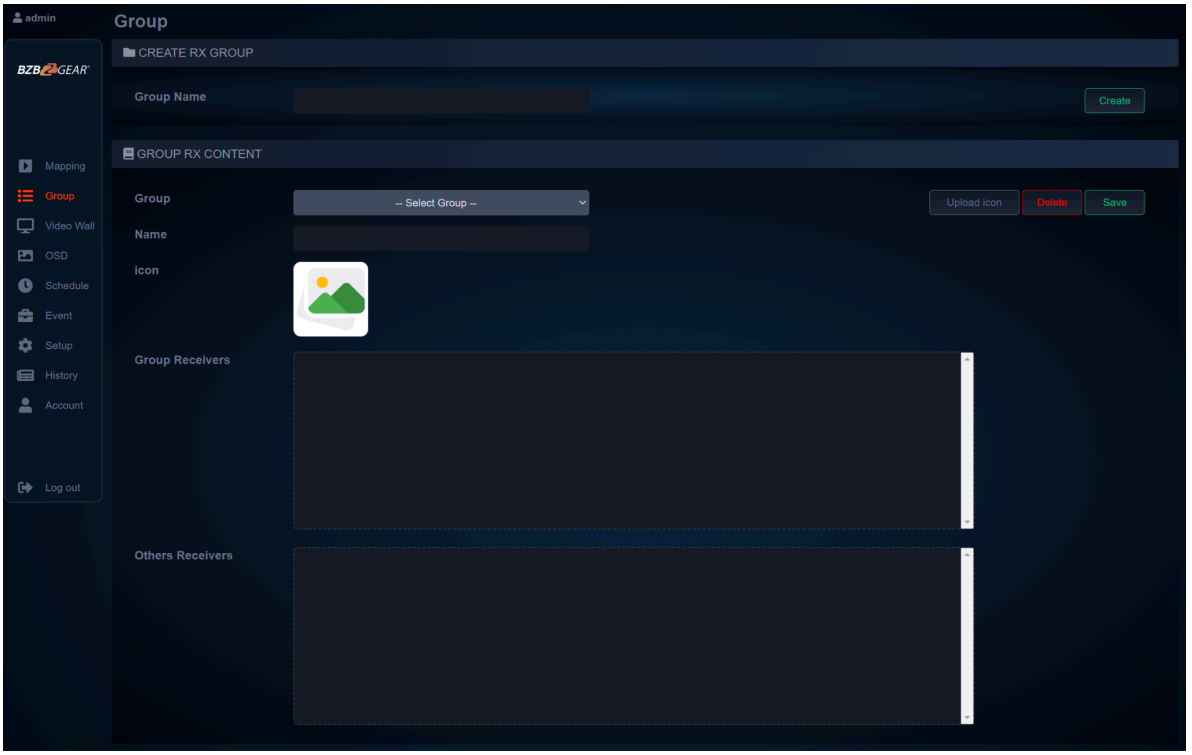
5. To select a set of grouped transmitters or receivers, click the drop down at the top of each respective section.



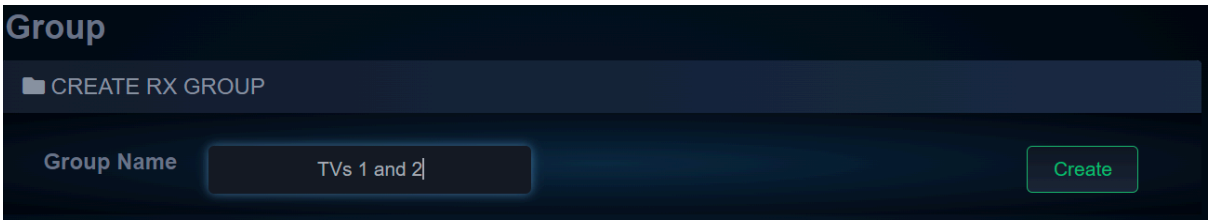
   a. Selecting a group of transmitters or receivers will make the system display only units in that group for easier identification and management.

Groups

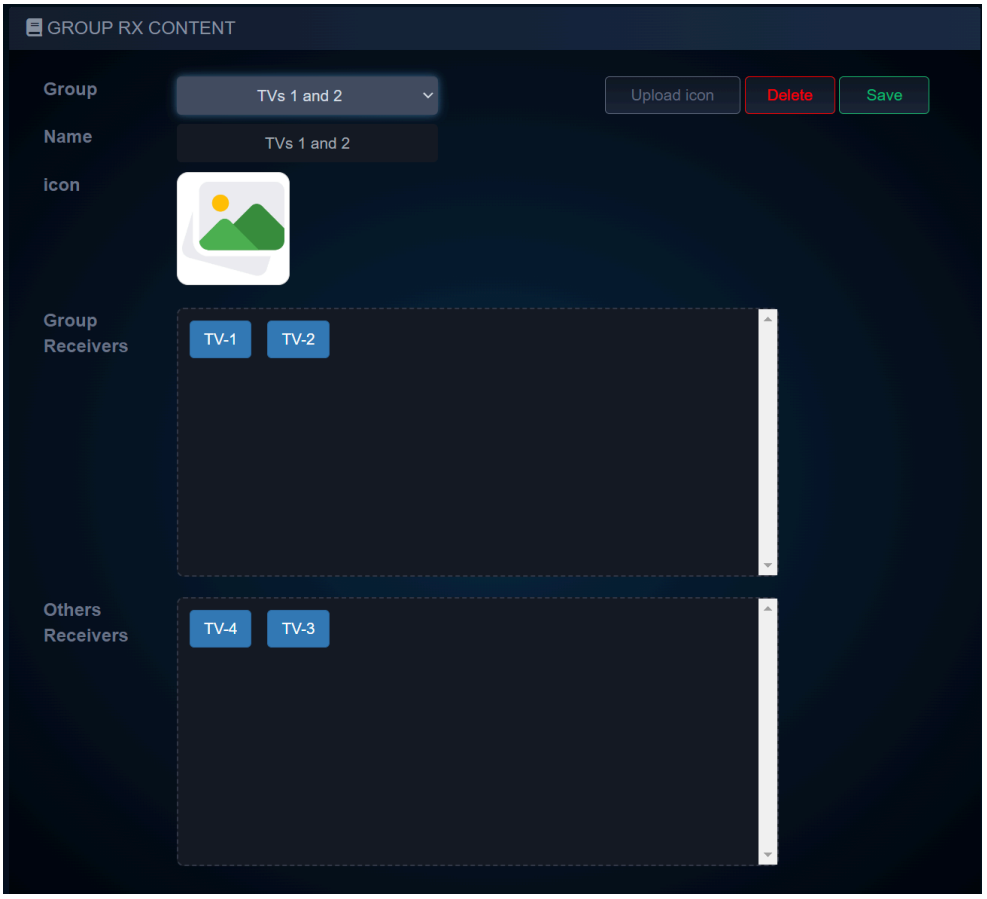
Transmitters or receivers can be grouped together for easier identification and system management. To create or manage device groups select the “Group” tab from the menu on the left hand side of the web interface.



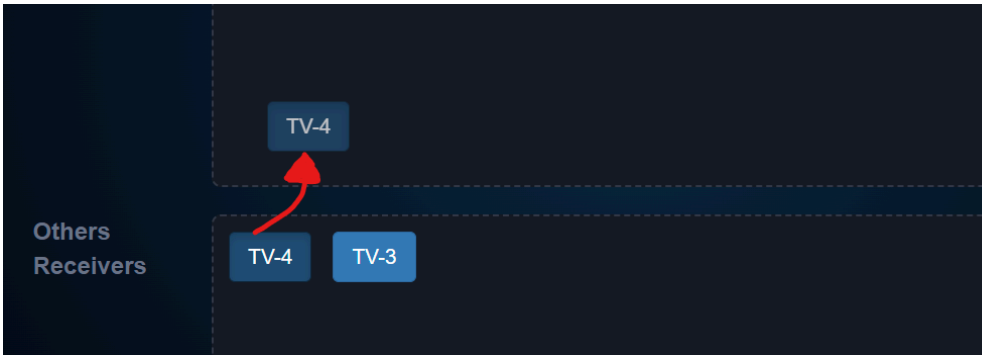
1. To create a receiver or transmitter group, type in a “Group Name” and click “Create.”



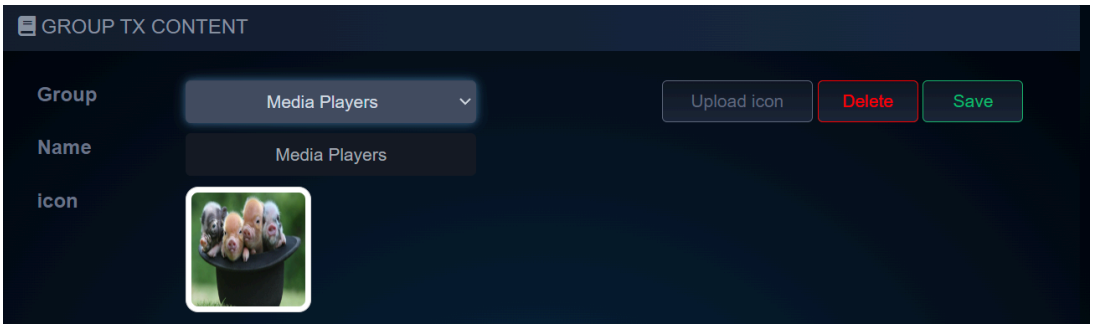
2. Once the group is created, move to the next section on the screen and select the group name you just created from the “Group” dropdown menu.

a. 

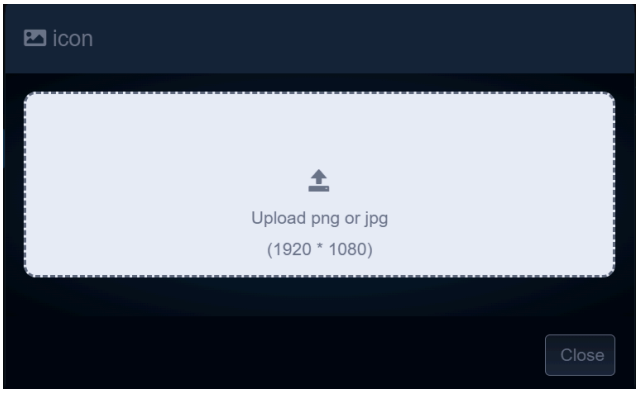
b. Click and drag devices from the bottom “Others” box to the “Group” box above.



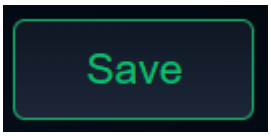
3. Users can also choose to upload an icon for the group to assist with identification.



a. Click the “Upload icon” button to choose an image to upload for the group. **Note:** Group images must be .png or .jpg file formats and no larger than 1920x1080.

b. 

4. When you are done editing the group, click the “Save” button to save the group.

a. 

5. The grouped device can now be filtered on the Mapping page using their respective drop down menus.

Video Wall Setup

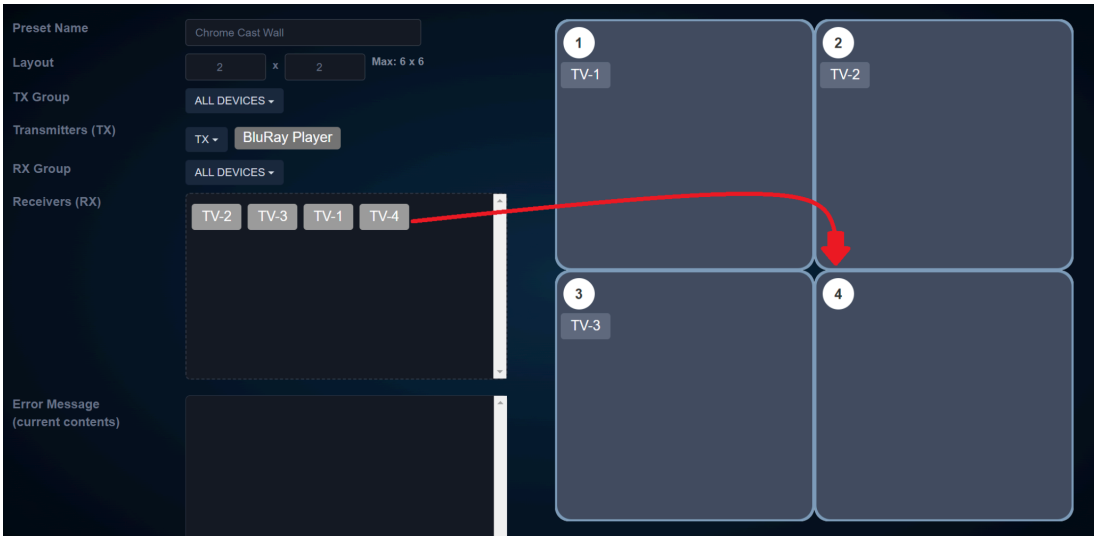
The BG-IPGEAR-4K system is capable of forming multiple video walls simultaneously (maximum size 6x6 or 36 displays). To create a video wall select the “Video Wall” tab from the left hand menu.

1. To create or edit a video wall select a Preset from the dropdown menu

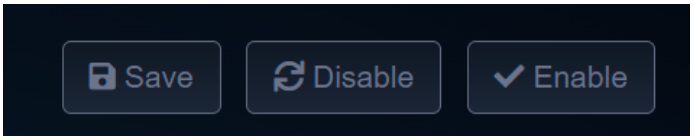
2. Users can edit the video wall "Preset Name" by typing in a desired name in the text field.

3. To edit the size of the video wall adjust the number of rows and columns up to a maximum of 6x6.
    a. If you have previously created device groups use the "TX Group" and "RX Group" dropdowns to filter your selection
4. Select a Transmitter from the "TX" dropdown that will act as the source device for the video wall.

5. Click and drag receivers to their respective spot on the video wall to coordinate with the display position.



6. Once your receivers are placed in their position on the wall click “Save” to save the video wall layout. Press “Enable” to start the video wall feed and “Disable” to stop the video wall.

a. 

Bezel Adjustments

1. To adjust the bezel alignment of a display on the video wall users can use the quick options by clicking the display name shown under the position number or Advanced Options which requires measuring the display but can be more accurate..

a.

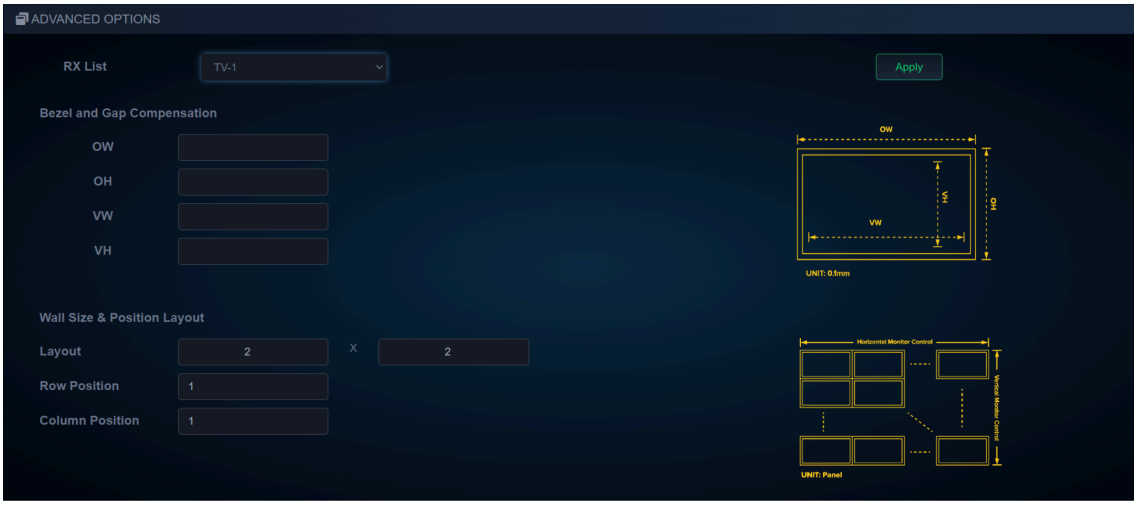
b.

c. Use the sliders to adjust the bezel alignment of the selected screen.
   i. **For vertical edges** positive values shift the image up and negative values shift the image down.
   ii. **For horizontal edges** positive values shift the image to the right and negative values shift the image to the left.

d. Click “Apply” to finalize the bezel adjustment changes for the selected screen.

e. Repeat these steps for each screen in the video wall as necessary.

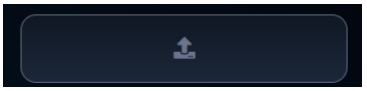
The “**Advance Options**” section allows for even greater control of bezel adjustment.



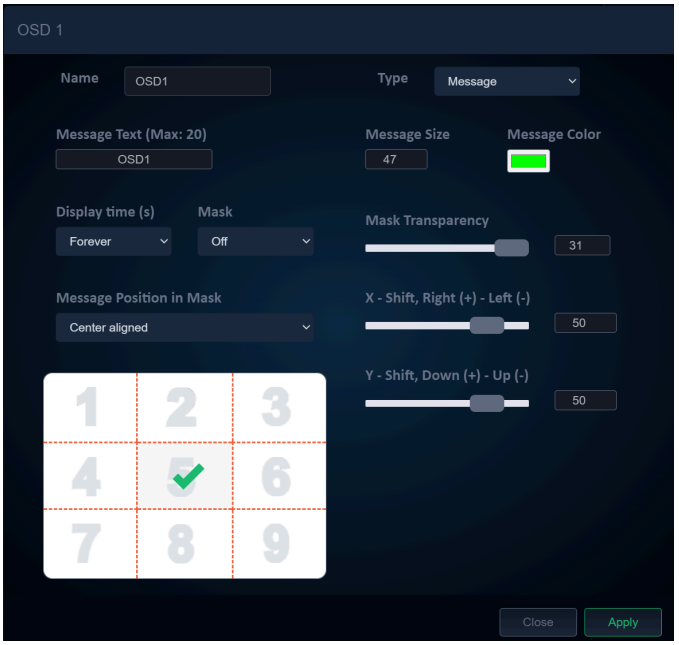
2. Select a Receiver from the “RX List” and use the diagram to the right to assist with taking measurements of the display. All measurements are in millimeters (mm).
3. Define the layout of the wall and the display placement on the wall by entering its row and column. (The top left display in the video wall (TV 1) will be at Row Position 0, Column Position 0.)
4. **OW** and **OH** represent Outside Width and Outside Height. These measurements should be obtained by measuring from the outside edges of the display frame (bezel).
5. **VW** and **VH** represent Video Width and Video Height. These measurements should be obtained by measuring from the edges of the image area of the display (usually the inside edge of the bezel).
6. Click “Apply” to finalize changes for the display.

On Screen Display (OSD)

The OSD menu allows users to brand video streams with a image or text overlay.

1. Users can upload their own.jpg or .png with a 1920*1080 resolution by clicking the upload button in the top right. 

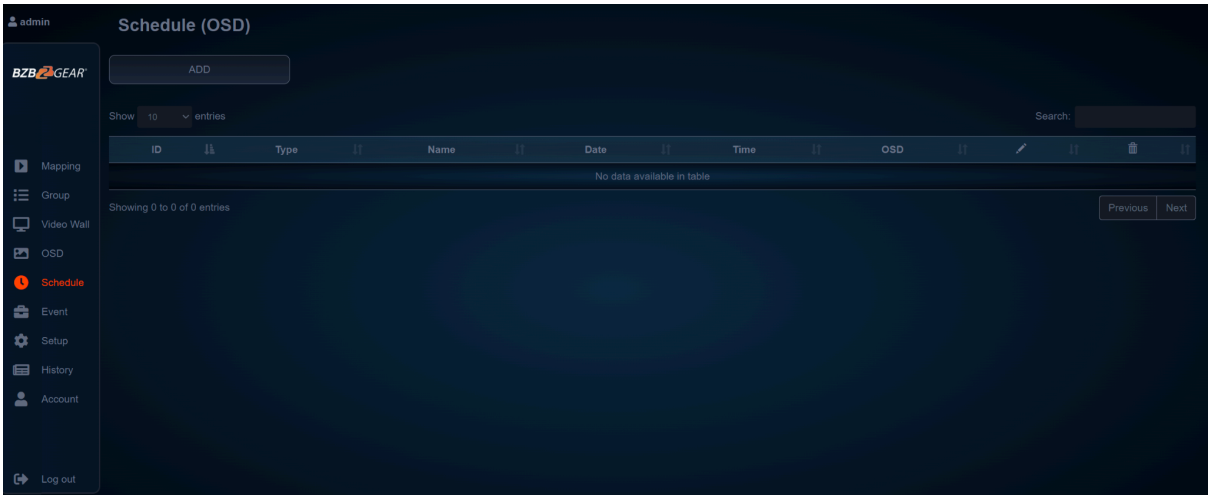
2. By clicking the settings icon (3 dots) beneath one of the OSD windows users can adjust the message text, image selection, transparency, position, color, and size.

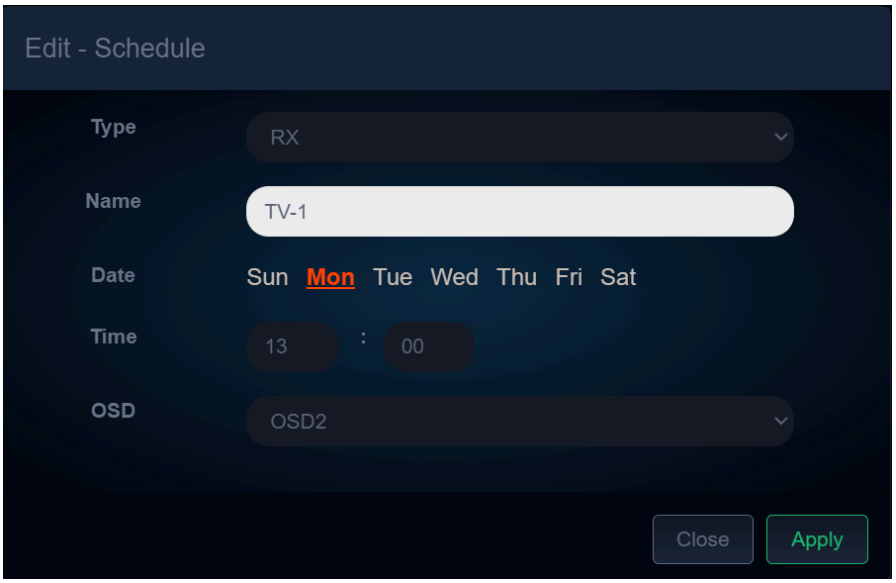


3. Click and drag the desired image/text from the OSD panel to the receiver of your choice on the right. Use the red/green toggle on the bottom of each receiver to either display or hide the OSD image on the unit.

Schedule (OSD)

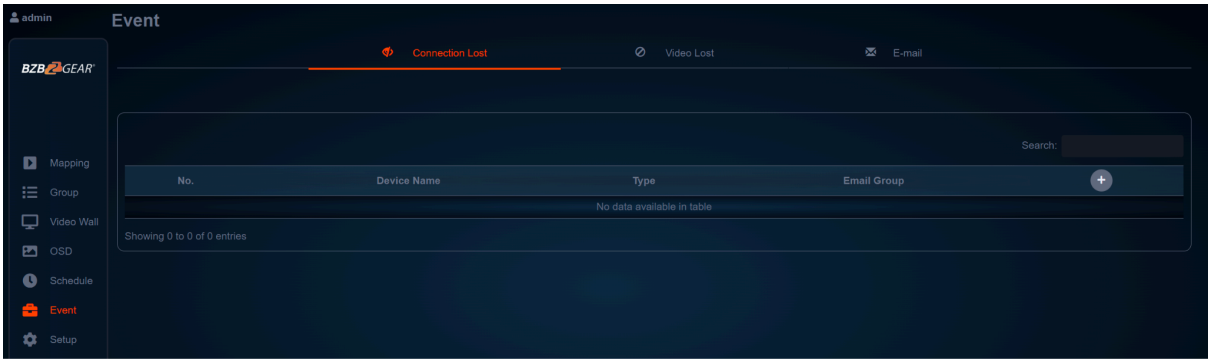
The Schedule (OSD) tab allows users to set a day and time for a message to automatically appear on a screen.





Event

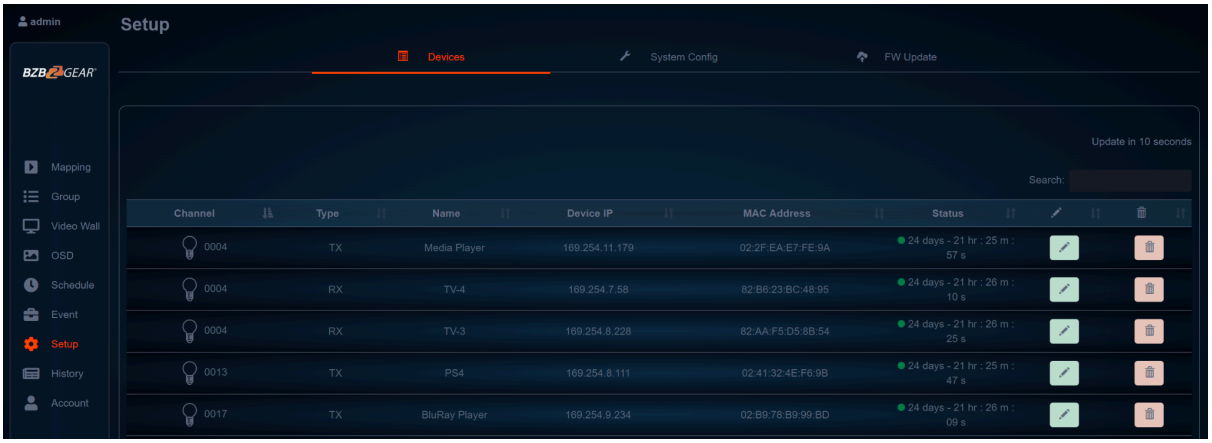
Using the event feature, users can set the system to automatically send notifications in the event of video loss or a system device going offline, helping administrators efficiently manage the system.



Setup

After connected BG-IPGEAR-4K transmitters and receivers are discovered by the control unit, the devices will be visible on the Setup tab under the Devices page. This page refreshes every 10 seconds automatically.

The Status page includes the device's Group ID, Name, IP Address, MAC Address, and uptime.



By clicking the green pencil icon users can edit settings of a particular transmitter or receiver.

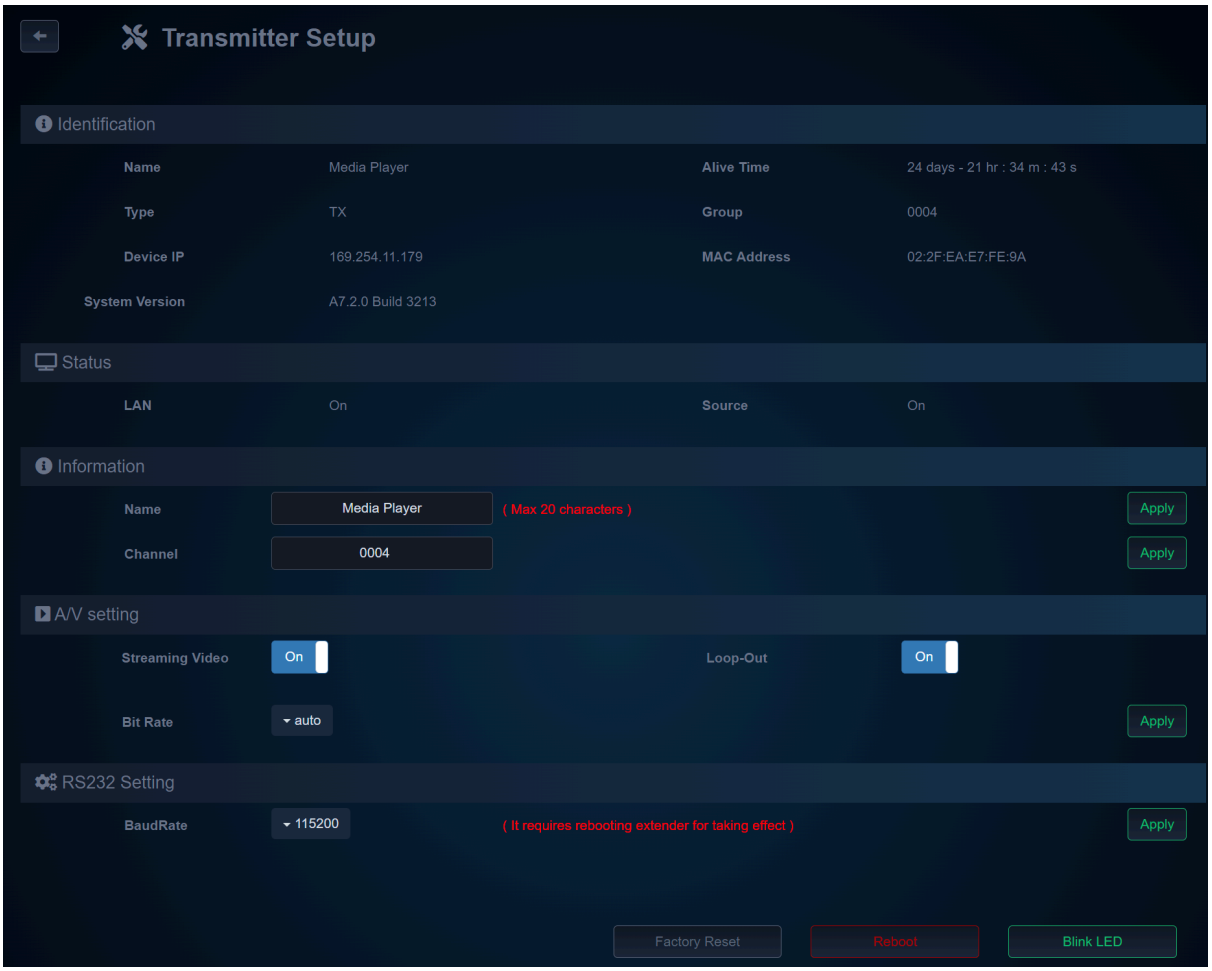
Receiver Setup

From the Receiver Setup screen users can view device information and edit its settings.

- **Name** - Edits the device's name.
- **Streaming Video** - Mutes the receiver's video output.
- **Scaling** - Scales the output resolution to match a connected display.
- **Rotate** - Rotates the output image for video walls and digital signage applications.
- **RS232 Baud Rate** - Sets the baud rate for RS232 signal extension

Transmitter Setup

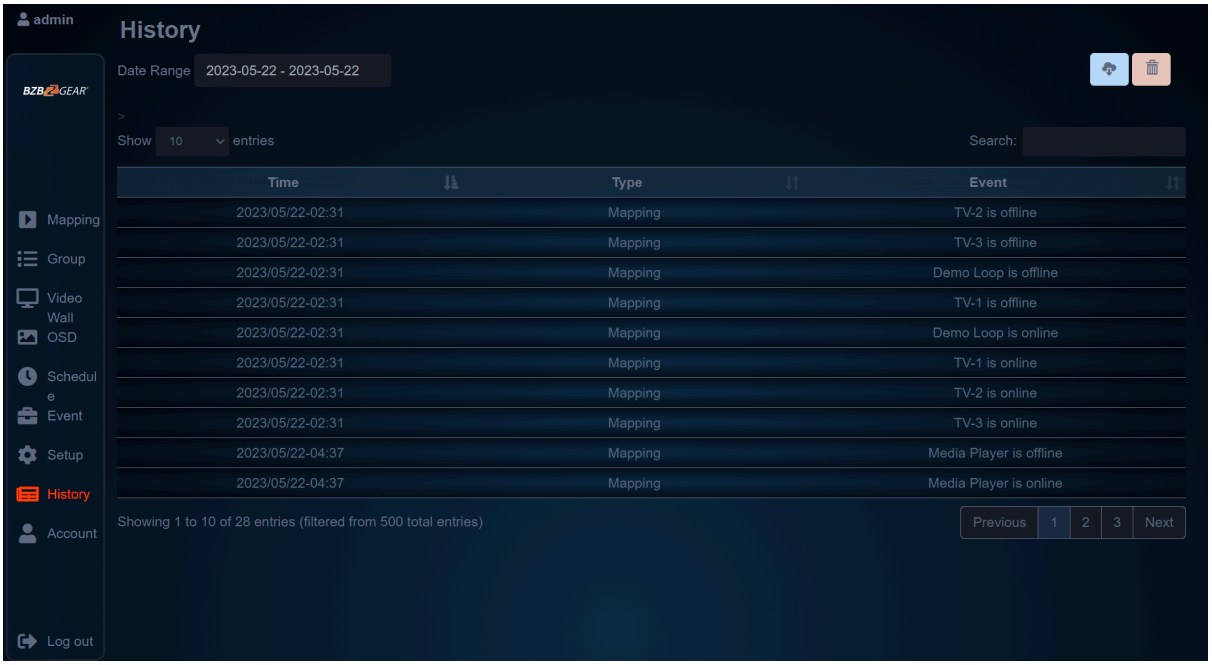
From the Transmitter Setup screen users can view device information and edit its settings.



- **Name** – Edits the device's name.
- **Group ID** – Edits the device's Group ID. It is recommended that users allow the system to automatically assign the Group ID.
- **Streaming Video** – Mutes the transmitter's video output stream.
- **Loop-Out** – Enable/Disable the HDMI Loop-Out port.
- **Bit Rate** – Limits the transmitter's output data rate. It is recommended that users leave this setting on Auto. Compressing the output signal can result in video artifacts if done incorrectly. The system should be installed with sufficient bandwidth available for the signal to be transmitted without additional compression.
- **RS232 Baud Rate** – Sets the baud rate for RS232 signal extension

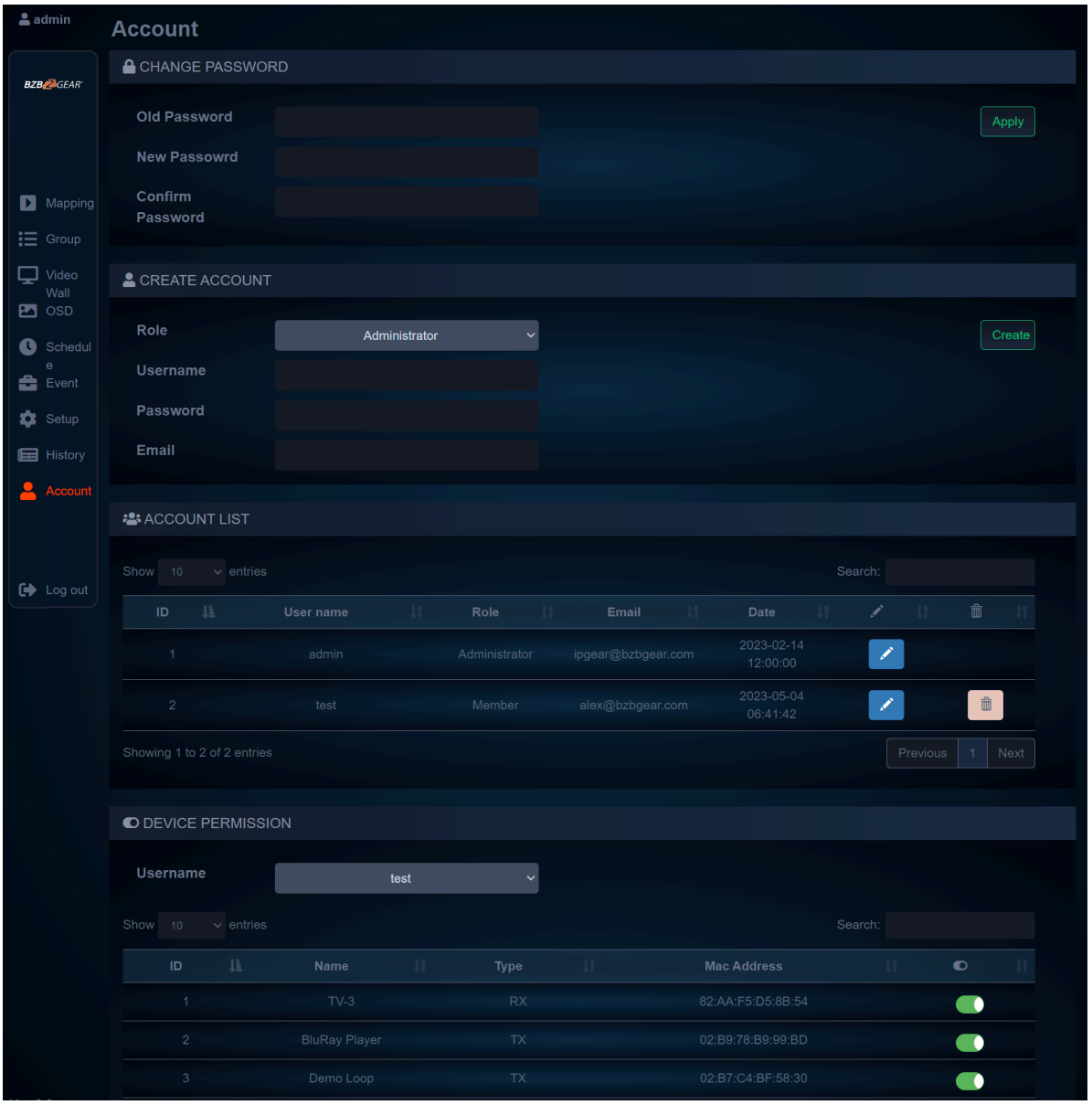
History

The History tab displays a list of recent system events for a specified date range (up to 500 entries). The event history can be cleared by clicking the red trash icon or exported by hitting the blue download button in the top right.



Account

The Account page allows Admin users to change passwords, create other admin or standard user accounts, and set device permissions.



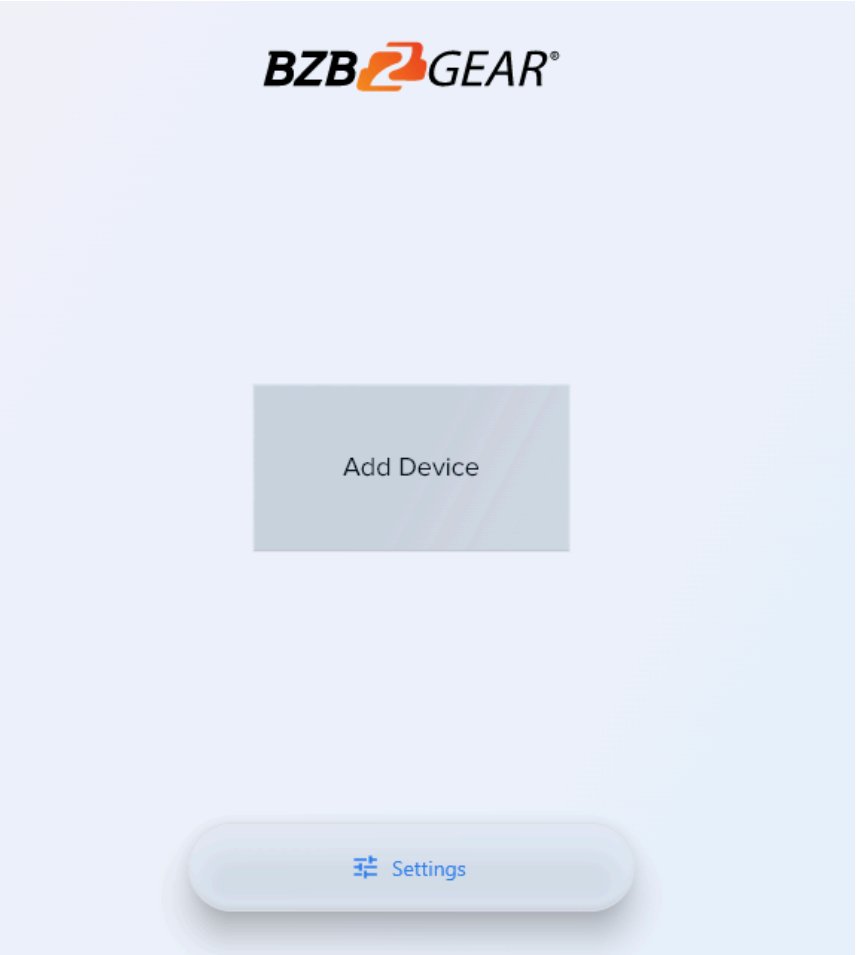
Standard users do not have access to control or edit video walls or OSD messages. They can also be restricted to access/manage certain transmitters or receivers visible to the system by using the toggle switches in the Device Permissions section.

BZBGEAR Switcher Control Application

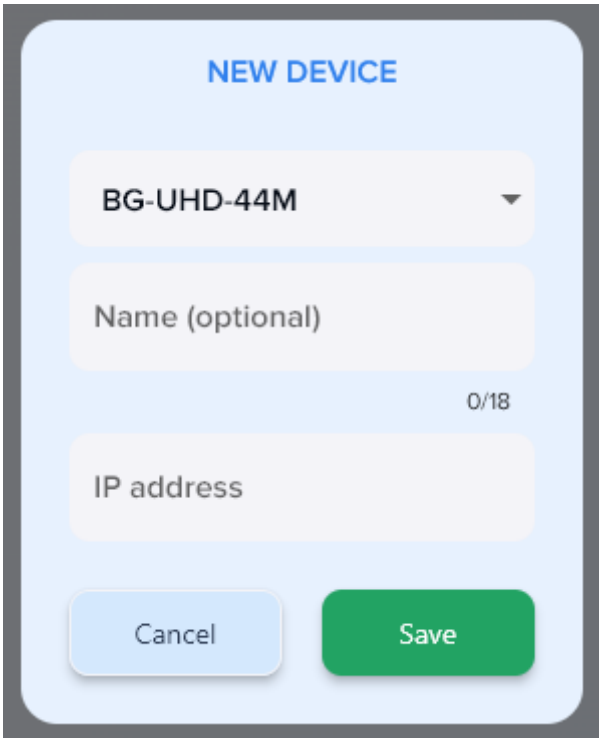
A switcher control application developed by BZBGEAR specifically for our products is available to control the IPGEAR-4K system. It is available for iOS, MAC, PC, and can be found on the controller product page on our website or via the Windows or Apple app stores.

Adding a Device to the Switcher Control Application

After installing the app on your device and opening it, you will be navigated to the “Add Device” screen. Click the “Add Device” button to begin adding a device.



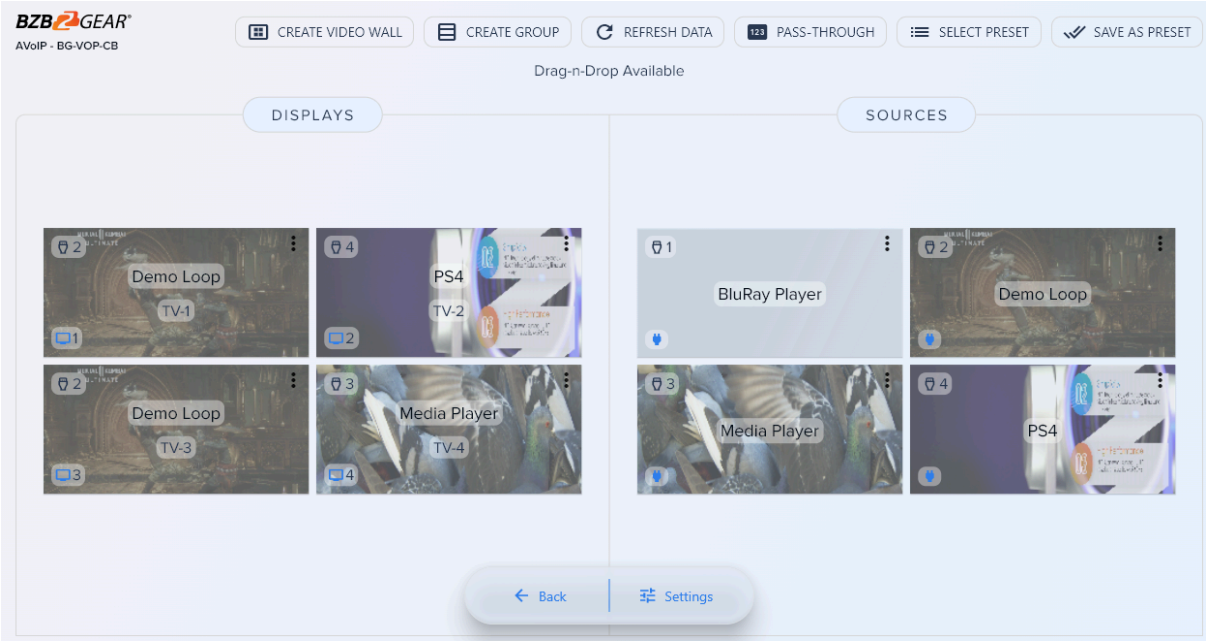
From the “New Device” popup, select your device you wish to control from the model selection drop down. Type in a name for easy identification (optional). Next, type in the IP address of the device you wish to control. For the IPGEAR system the IP address can be found on the splash screen of the controller when it is connected to a display via HDMI.



Click “Save” and you will be navigated automatically back to the “Add Device” screen where your system should now be viewable and selectable if added correctly.

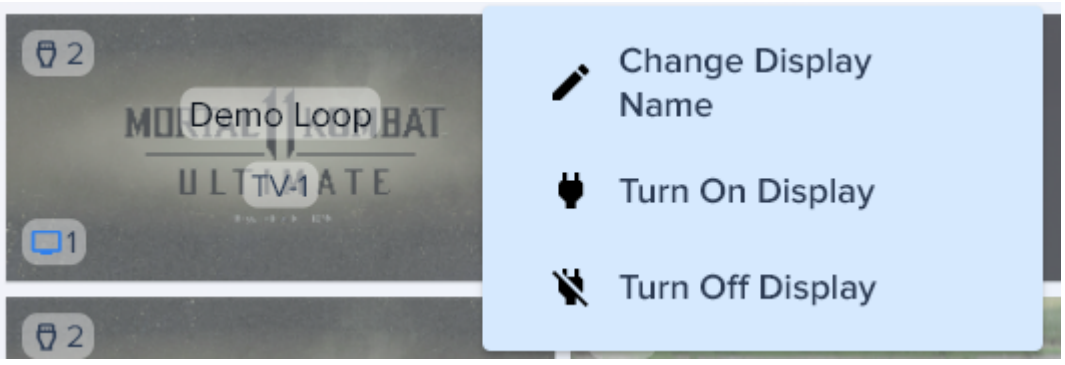
Mapping on the Switcher Control Application

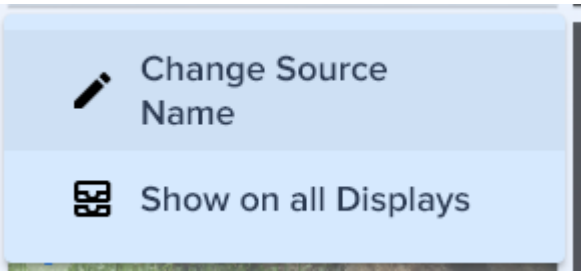
The control app for the IPGEAR system was designed to function much like the web interface for ease of use.



On the main mapping page users can click and drag displays or sources to one another to pair devices together.

Clicking on the in the upper right corner of a display will allow users to change the display name or, if available on the display, send CEC commands to turn the display On or Off.





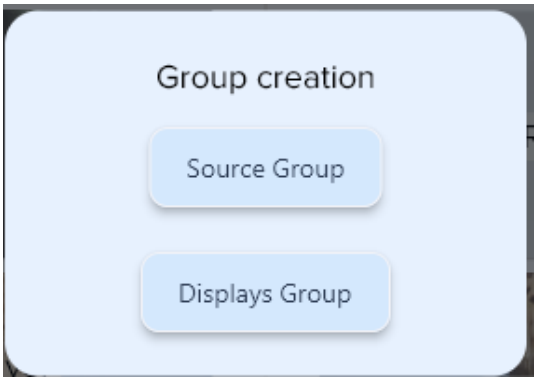
Clicking on the 3 dots on a source device allows users to change the source name or to send the selected source signal to all displays.

Creating a Device Group using the Switcher Controller App

For simpler management of larger systems displays and sources can be grouped together for easier identification.

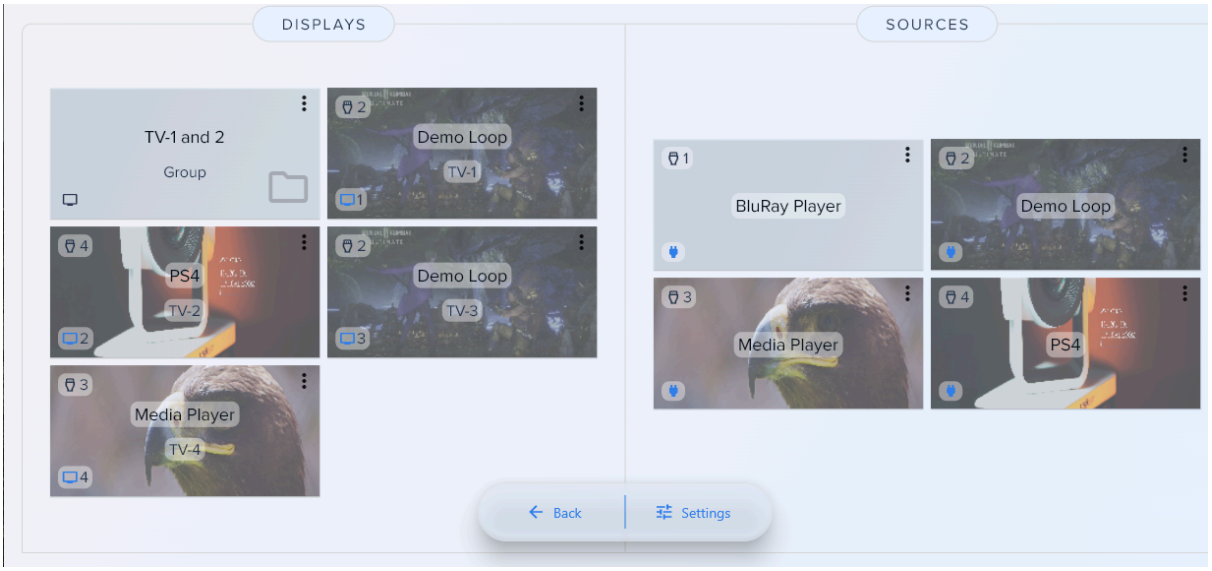
1) From the options on the top of the Mapping page select the "Create Group" button to begin creating a group.

2) Next select whether your group is going to be for source or display devices.

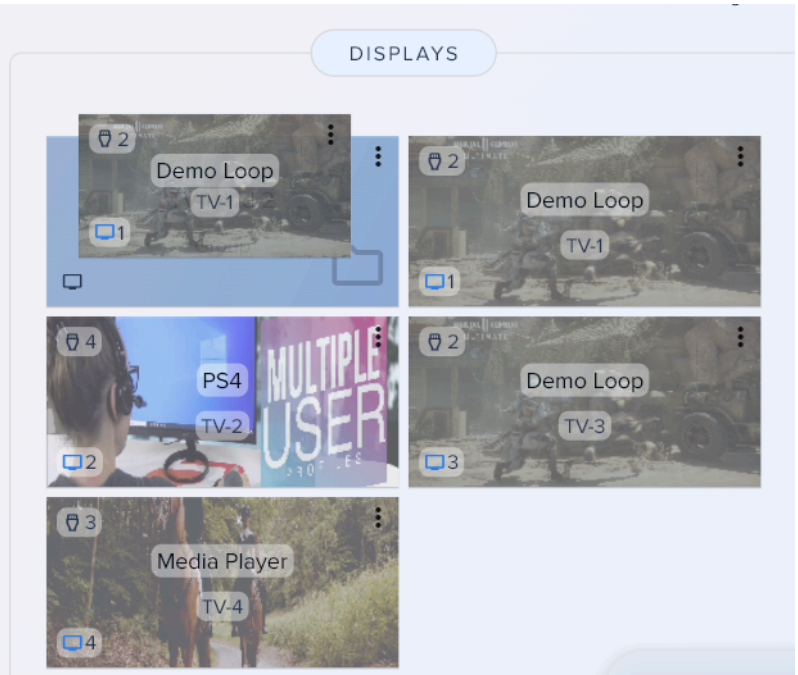


3) Type in a name for your group. (Note group names can only be 18 characters long.

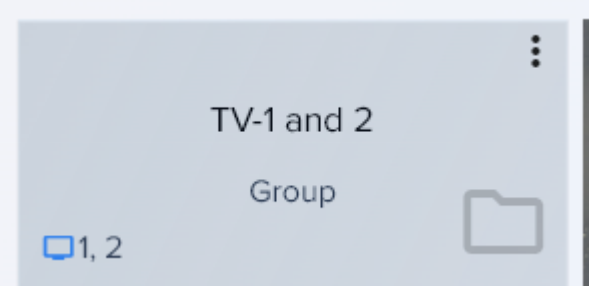
4) Once created your group will appear under its relevant section.

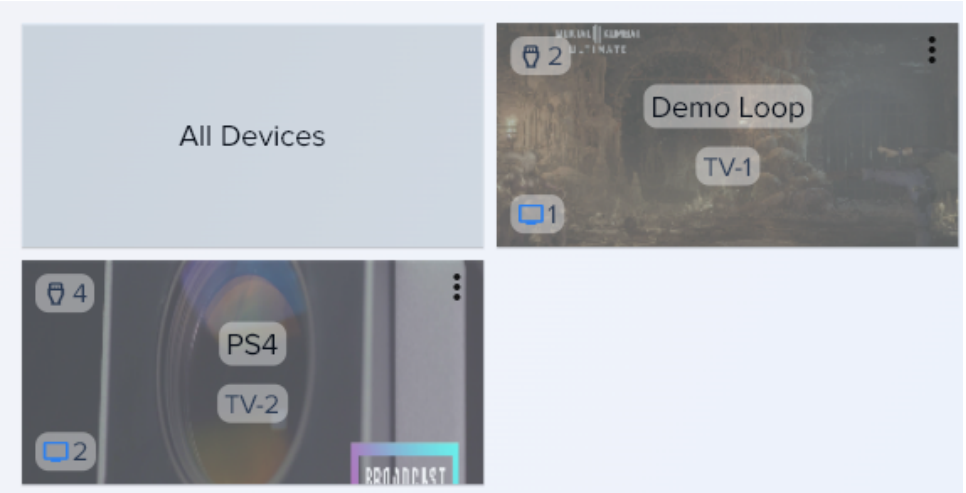


5) Click and drag the displays or sources to the group and they will be moved from the available list into the group folder.



6) Click on the group to view and manage the devices inside. Click “All Devices” to return to the main mapping page to view all groups and/or ungrouped devices.



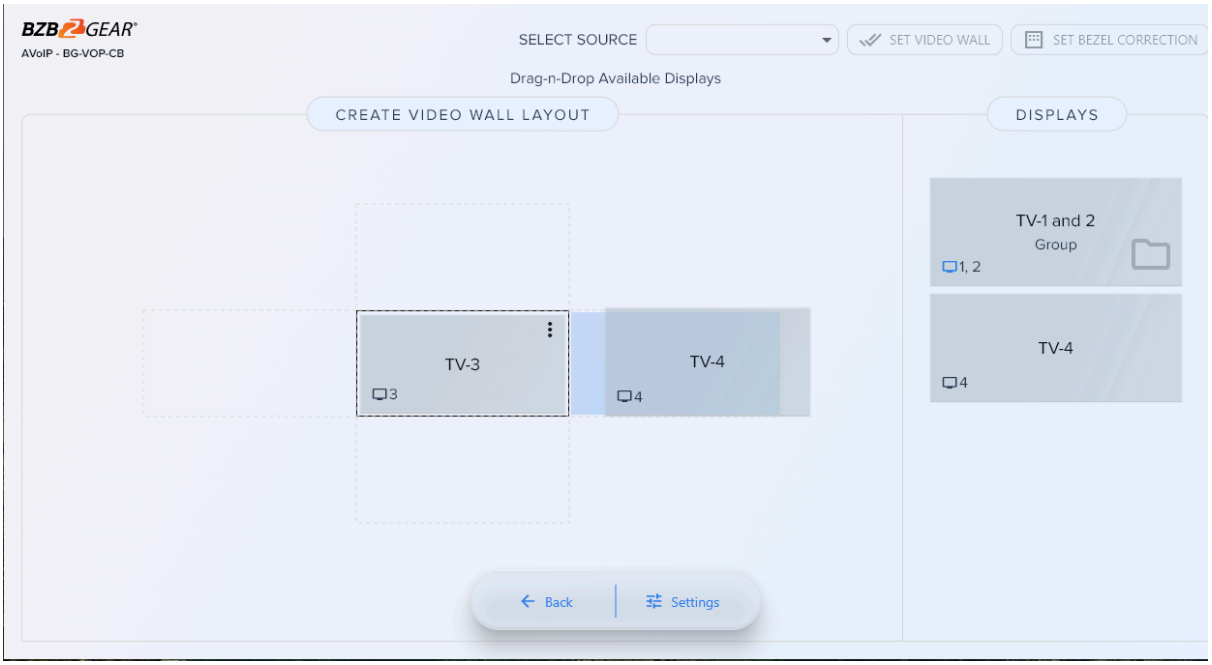


Note: Groups cannot be dragged. However, dragging a source to a “Display Group” will change all display devices in that group to the selected source.

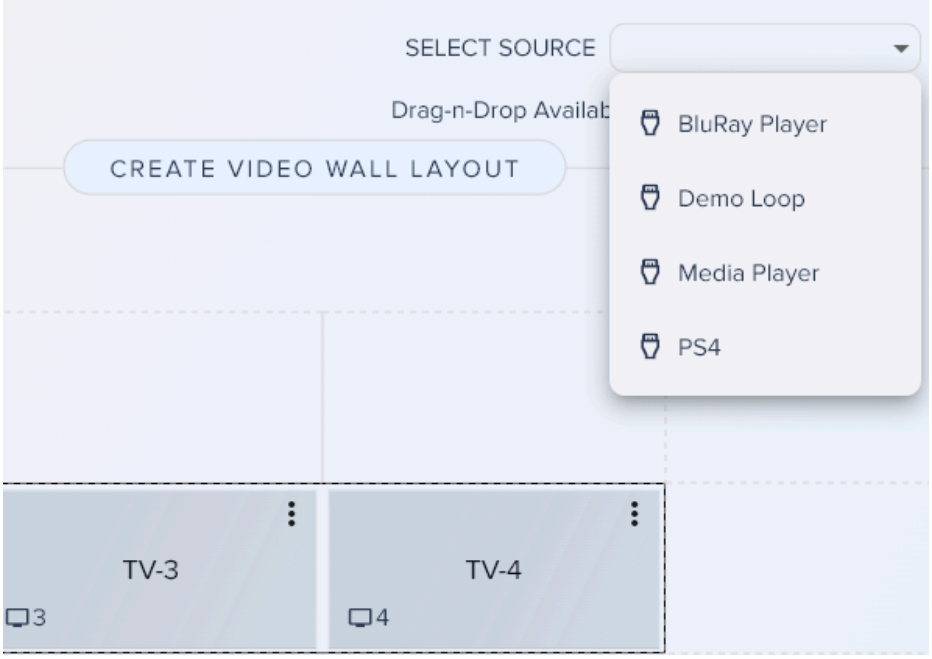
Creating a Video Wall using the Switcher Controller App

1) To create a video wall using the Switcher Control app click the “Create Video Wall” button at the top of the application.

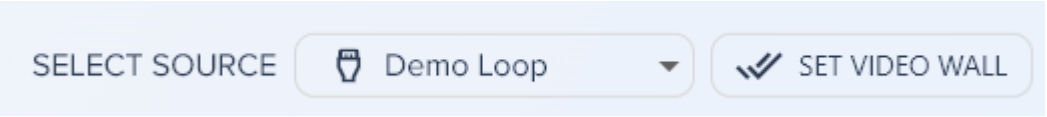
2) On the Video Wall page click and drag displays to their respective position in the video wall. **Note:** If a display group has been created it will also be shown here for easier identification. Simply click the group to expand it and show grouped displays.



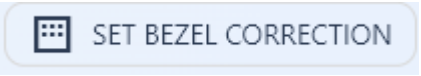
3) Once your displays are positioned correctly on the template, click the “Select Source” drop down at the top of the application to pick a source for the video wall.



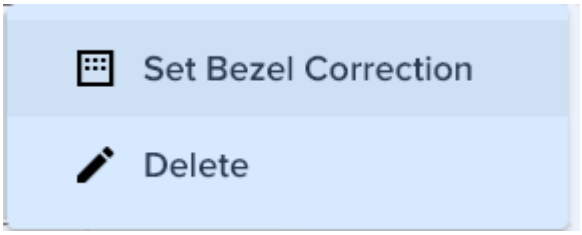
4) Once a source is selected click the “Set Video Wall” button to create the video wall.



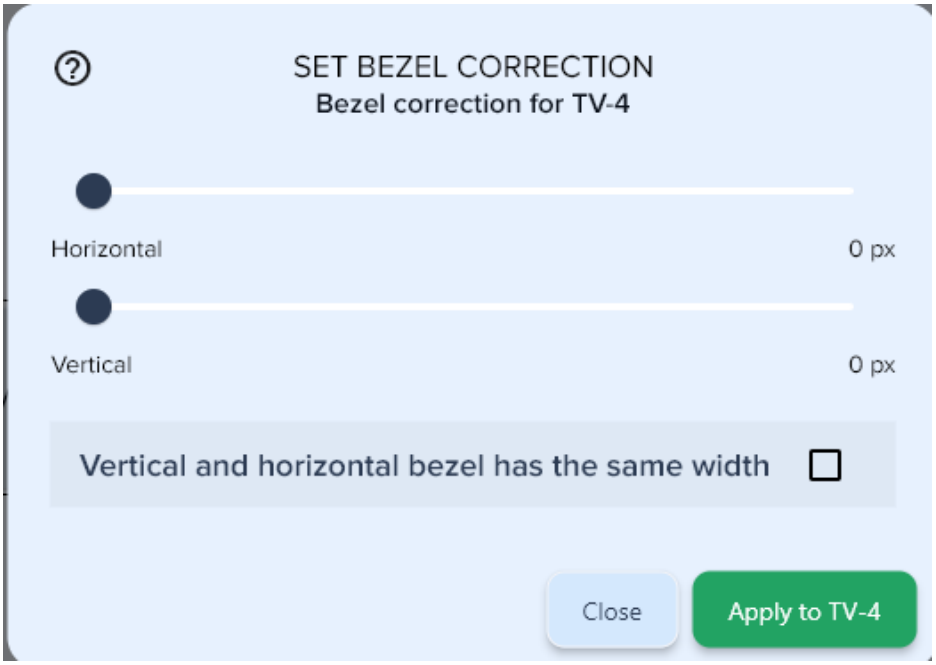
5) Use the “Set Bezel Correction” button at the top to adjust the image on the video wall to compensate for the border on all displays simultaneously.



6) To adjust each display individually, select the in the upper right corner of the display in the video wall and select “Set Bezel Correction” from the pop up menu.

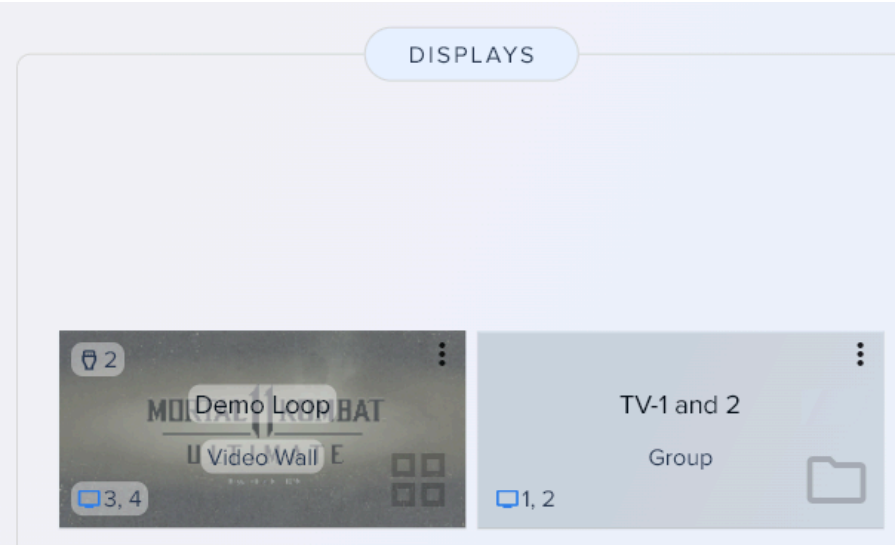


7) Move the sliders to adjust the image to compensate for the TV bezel/frame.



8) Return to the main mapping page by clicking the “Back” button at the bottom.

The video wall can now be viewed under the display section of the mapping page. To change the source of the video wall simply drag a source device to the Video Wall.

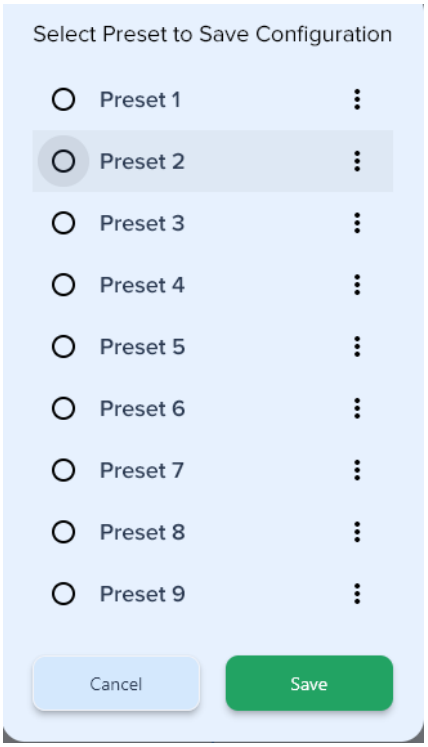


Switcher Control Application Presets

To save a mapping configuration as a preset select the “Save as Preset” button in the top right corner.

Select the preset position you wish to save. Click the ⋮ to rename the preset if desired.

To recall a saved preset click the “Select Preset” SELECT PRESET button and then select your desired preset from the menu.



Troubleshooting

1) **No image/splash screen from control box:**
    a) Ensure HDMI and ethernet cables are plugged in and power cycle the control box.

2) **Transceiver(s) are not populating in the control software/web interface.**
    a) Power cycle the transceivers by unplugging their ethernet cable and ensure the control box is plugged into the same network/VLAN as the transceivers.
    b) Factory reset the transceiver by logging into the unit via its IP address displayed on screen while in receiver mode.

3) **Image will not display from the receiver unit.**
    a) Ensure the receiver is paired with a transmitter unit.
    b) Ensure HDMI is plugged into the output port on the transceiver.
    c) Ensure resolution is set on the receiver unit in settings to match the display it is connected to (4K2K will not display on a 1080p TV).
    d) Check if the dipswitch for transmitter/receiver mode is set correctly.

4) **Image previews on the mapping page are not updating correctly.**
    a) Clear your browser cache and restart your browser.

5) **Transmitter will not pair with another device or a receiver will only pair to one transmitter.**
    a) Ensure transmitters are set to a unique ID using the dipswitch panel.
    b) Ensure the receiver dipswitch panel is set to 0 for all switches.

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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