# **VZ-PRO-ST SERIES**

# **VIDEO WALL WEB CONTROLLER SOFTWARE**

**USER MANUAL** 





Please read this manual thoroughly before use, and keep it handy for future reference.



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# SAFETY INSTRUCTION

### **Important Safety Instruction**

- 1. Read all warnings and manuals before operation.
- 2. Follow all instructions to ensure longevity of product.
- 3. Do not place the VZ-PRO Controller near water.
- 4. Clean only with non-static electronic dry cloth.
- 5. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 6. Do not install near any heat sources such as radiators, heat registers, stoves, or other heat generating devices.
- 7. Do not override the safety purpose of the polarized or grounding-type plug.
- 8. A polarized plug has two blades with one wider than the other.
- 9. A grounding type plug has two blades and a third grounding prong.
- 10. The wide blade and the third prong are provided for your safety.
- 11. If the provided plug does not fit into your outlet, consult with electrician for replacement of the outlet.
- 12. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where it connects to the monitor.
- 13. Only use attachment/accessories specified by the manufacturer.
- 14. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the monitor. When a cart is used, use caution when moving the cart & monitor in combination to avoid injuries.
- 15. Unplug the VZ-PRO Controller during lightning storms or when unused for long periods of time.
- 16. Refer all servicing to qualified service personnel. Servicing is required when the VZ-PRO Controller has been damaged in any way.

The monitor shall not be exposed to dripping or splashing and objects containing liquids, such as vases shall not be placed near the monitor.

The VZ-PRO Controller should be installed with enough distance (e.g. 10cm) from the wall for sufficient ventilation.



# SAFETY INSTRUCTION

# **Important Safety Instruction**

#### Mark Indication and Substance



CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK,
DO NOT REMOVE COVER (OR BACK). NO USER
SERVICEABLE PARTS INSIDE. REFER SERVICING TO
QUALIFIED SERVICE PERSONNEL



This symbol is intended to alert the user to the presence of uninsulated & dangerous voltage within the monitor's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the monitor.

### **Marning**

- Do not use damaged or loose cables and plug.
- Do not pull the plug out by the wire nor touch the plug with wet hands.
- Use only a properly grounded plug and receptacle.
- Do not connect too many extension cords or plugs to one outlet.
- Do not excessively bend the plug and wire.
- Do not disconnect the power cord while it's still plugged into the monitor.
- Do not place any heavy objects on the power cord. Damage to the cord may cause shock or fire.
- Never open the monitor. There are no user-serviceable parts inside and opening will void warranty.
- Removing covers may expose you to dangerous shock hazards or other risks.
- Keep any heating devices away from the power cable and VZ-PRO Controller.
- Do not place the VZ-PRO controller near water.
- Do not insert objects of any kind into the monitor's open slots, as they may touch dangerous voltage points.
- Please follow the laws and regulations of your municipality to dispose the VZ-PRO Controller properly.
- Do not use the monitor in high temperature, humid, dusty or oily areas.
- Do not install the monitor where it will be exposed to continual vibration.
- Keep the plastic packaging out of children's reach.
- If any damage is detected upon first opening the box, contact agency from which you bought the VZ-PRO Controller directly.
- If the VZ-PRO Controller does not operate normally in particular, if there is any unusual sound or smell coming from the VZ-PRO Controller unplug it immediately and contact an authorized dealer or the service center.



# SAFETY INSTRUCTION

# **Important Safety Instruction**

# **A** Caution

- If the connector between the plug and the pin is dusty or dirty, clean it properly using a dry cloth.
- Make sure to unplug the power cord before cleaning the VZ-PRO Controller.
- Do not drop the VZ-PRO Controller when moving it.
- Place the VZ-PRO Controller in a location with low humidity and minimum dust.
- Do not place the monitor on an unstable or small surface area.
- Disconnect the plug from the outlet during storms or lightning or if it has not been used for a long time.
- Do not try to move the VZ-PRO Controller by pulling on the power cord.
- Do not cover the vents on the VZ-PRO controller.
- When moving the VZ-PRO Controller, turn off and unplug the power cord. Make sure that all cables, including HDMI cable and cables connected to other devices, are disconnected before moving it.
- Place the VZ-PRO Controller out of children's reach, as they could damage it by hanging onto it.

### **A** Caution - Equipment Grounding Requirements

- · Make sure that the power supply and chassis of the spliced processor (here in after, referred to as the equipment) are well grounded.
- Make sure the power supply and housing of the large screen connected to the device are well grounded.
- Port damage due to the Non-grounded or improper grounded equipment, the videowall monitor (or large screen) and videowall controller will not be covered by warranty.

# Available Temperature & Humidity

Operating Temperature: 32°F ~ 122°F / 0°C ~ 50°C

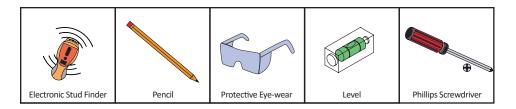
• Operating Humidity: 5 ~ 95% RH



# **INSTALLATION & REQUIREMENTS**

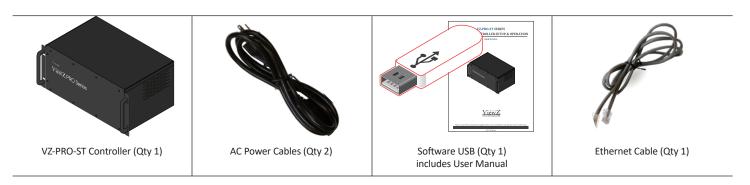
# **Installation Tools**

The following tools may be required depending on your installation.



### **Assembly Components - provided**

Your ViewZ PRO series is shipped with all proper installation hardware and components. If there are parts missing and/or damaged, please stop the installation and contact ViewZ USA at (888)-998-4399.



# **Videowall Control Computer H/W Requirement**

- 1. Videowall control computer should be located on the same network of VZ-PRO-ST
- 2. Processor: Intel i3 8th Gen. or Higher

RAM: DDR4 16G or Higher HDD: SSD 128/256GB or Higher

Network: General TCP/IP network with Gigabit LAN

3. OS Specification

OS: Windows 10 or later





#### Caution

The media contents (images & videos) will not be saved into VZ-PRO-ST Controller.



# **BASIC FEATURES**

### **VZ-PRO Architecture**

- The multi-screen splicing processor adpots the system architecture of FPGA+ and the web control card which can be processed via the browser of mobile phone, tablets, computer and other devices.
- The VZ-PRO Controller adopts a modular design, which can be flexibly matched with a variety of input and output cards, which can be upgraded, expanded, and maintained;



# **Video Interface Signals**

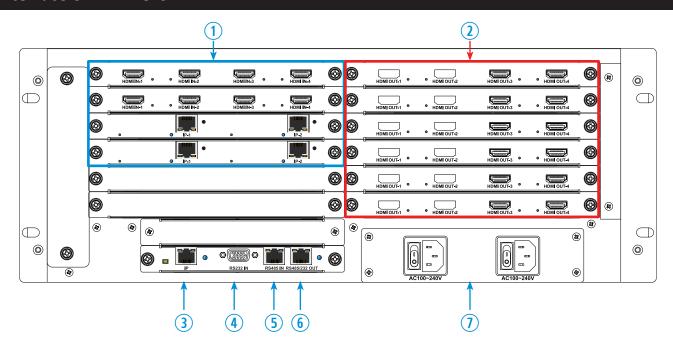
1. The standard VZ-PRO Controller comes with HDMI input & HDMI output cards to accept upto 1080p resolution.

4K HDMI input, DVI, SDI and IP decoder cards are also available as option. Please contact us to get more information.



# **BASIC FEATURES**

# **Interface of VZ-PRO-ST**



- 1. HDMI, IP IN External Input Sources
- 2. HDMI OUT Output for Videowall Monitors
- 3. ETHERNET 10/100 (RJ 45) Web Control
- 4. RS232 (RJ-45) IN Serial Control / IR Receiver
- 5. ETHERNET 10/100 (RJ 45) DIMS\_Client SW Access
- 6. RS232 (RJ-45) OUT
- 7. AC 100 240V IN x2



### **Web-based Control Software Connection**

User can control VZ-PRO-ST via built-in web-based control software. There are 2 ways to access web-based control software;

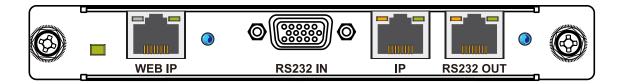
- 1. User's computer and VZ-PRO-ST are connected to the same switch or the computer
- 2. Directly connected to the IP interface (Web IP) of the main control card between user's computer & VZ-PRO-ST



#### Note

- If user's computer directly connected to VZ-PRO-ST, user have to configure the IP address of computer.
- Taking 4U as an example, the connection method of 7.5U,10U and 15U chassis is similar or same;

### **Web-based Control Software Interface**



- 1. WEB IP IP network interface, this port will be used to connect to switch/routers, or connect directly to a computer. The default IP address of the VZ-PRO-ST web-based control software is <a href="mailto:192.168.0.182">192.168.0.182</a> and user can directly login & access the web browser (User Name/Password: admin/admin).
- 2. RS 232 IN RS232 port, connect to the computer serial port. The default serial port of patch processor (RS232) has a baud rate of 115200bps.
- 3. IP IP network port, connect to switch/router, or directly connect to a computer which has the **DIMS\_Client software.** The videowall controller's default IP address: **192.168.0.101**, ports: 5000, 5100, 5200 & 5300;
- RS 232 OUT Optional, RS232 loop out, control large screen
   The video wall controller default serial port (RS232), special rate: 115200bps;

The splicing processor default serial port (RS232), special rate: 115200bps; RJ45 line sequence of RS232 OUT



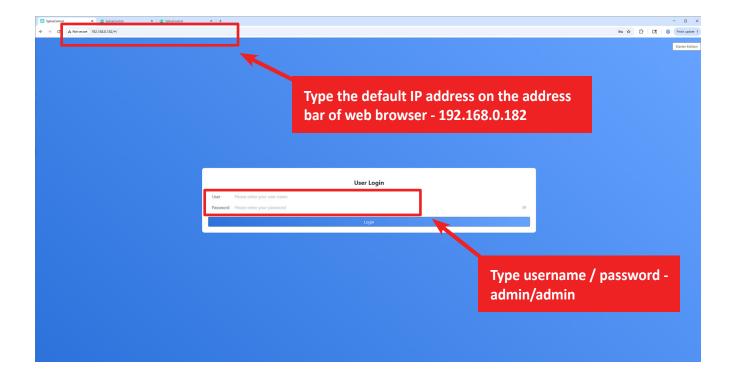


# **Login to Web-based Control Software**

### 1. Description

ViewZ provides the built-in web-based control software for VZ-PRO-ST series. User can access this web-based control software via web browser (such as Chrome & Mozilla) and use the default IP address (192.168.0.182) & user name / password (admin/admin) to login to VZ-PRO-ST web-based control software.

When user login to web pages, user cam control or adjust the configuration of VZ-PRO-ST, such as videowall layout, registration of IPC devices or video sources, resolution management and etc.





# **Description of Web-based Control Software**

### 2. Area Description

- On Web-Based control software window, user needs to figure it out about the functional area.
- The software has 4 main areas Input Source List, Menu, Virtual Videowall and Scene Mode/Custom Control



- ① INPUT SOURCE LIST ② MENU ③ VIRTUAL VIDEOWALL ④ SCREEN MODE ⑤ CUSTOM CONTROL
- The web-based videowall controller software is composed by 4 parts Main Tool Bar, Virtual Screen Layout, Input Source List and Screen Switch / Custom Control.
- 1. Input Source List (left area) show all input source based on the inserted input card, such as HDMI, DVI, IPC & SDI.
- 2. Menu (top area) has Splice & Setting menu. The Splice let user adjust the videowall layout and the Setting let user control VZ-PRO-ST; source input card, videowall screen number (structure), IPC card setup, protocol, resolution and more.
- **3. Virtual Videowall** (center area) let user assign the input source (select the input source from **Input Source List**, then drag & drop an input source to one of videowall screen) to each videowall screen and make the layout.
- **4. Screen Mode** has the saved screen layout and click one of scenes to load the saved layout.
- **5. Custom Control** has quick buttons, such as Power On/Off of ViewZ videowall monitors and input source switching

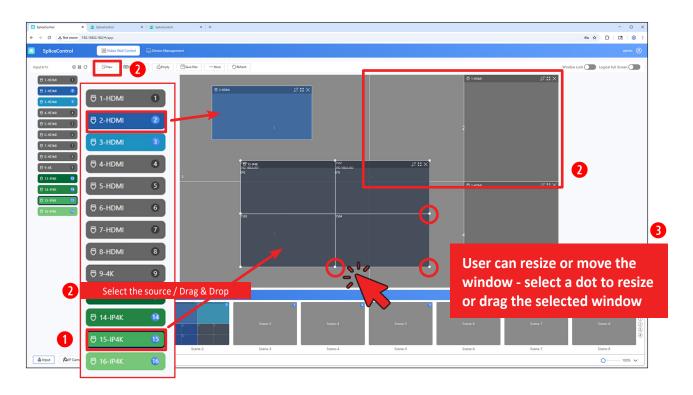


### **VIDEO WALL CONTROL**

### 2.1. Basic Operation

User can simplely insert the input source by drag & drop;

- 1. Select an input source from the Input Source List
- Drag & drop an input source onto virtual videowall area
   Or select a section of display area and click <u>New</u> button on the main tool bar, then a selected input source will be
   inserted on the selected display area. If user did not select a display area, system will insert the input source on
   empty area of virtual videowall
- 3. If user wants to resize an input source window, user simply needs to select a window and drag & drop a dot to resize the window





#### Note

• If user wants to change an input source on an input source window of virtual videowall, user just drag & drop the new input source onto the desired input source window. Or select an input source window on virtual videowall area and double click the desired input source (from the input source list), then the selected input source window (on virtual videowall) will be changed as new input source.

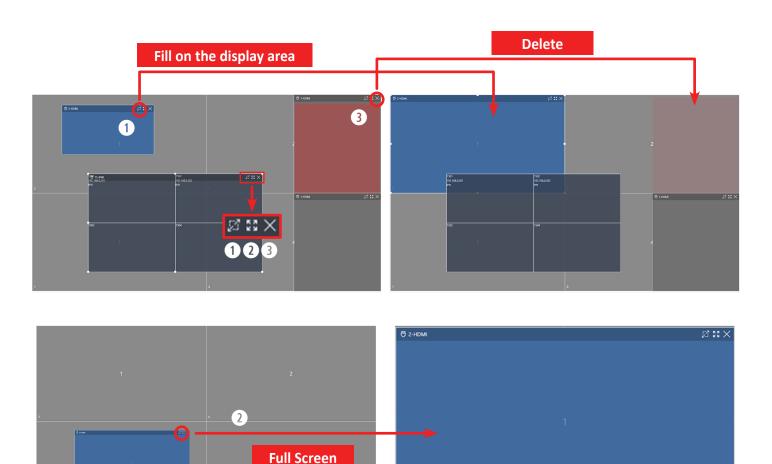


# **VIDEO WALL CONTROL**

# 2.1. Basic Operation

On the window of input source;

- 1. Click display area
- 2. Click button to make the selected input source window as a full screen
- 3. Click button to close the selected input source window
  Or select an input source window and drag out the selected window from virtual videowall area
  Or select an input source window and click **Empty** button on main tool bar





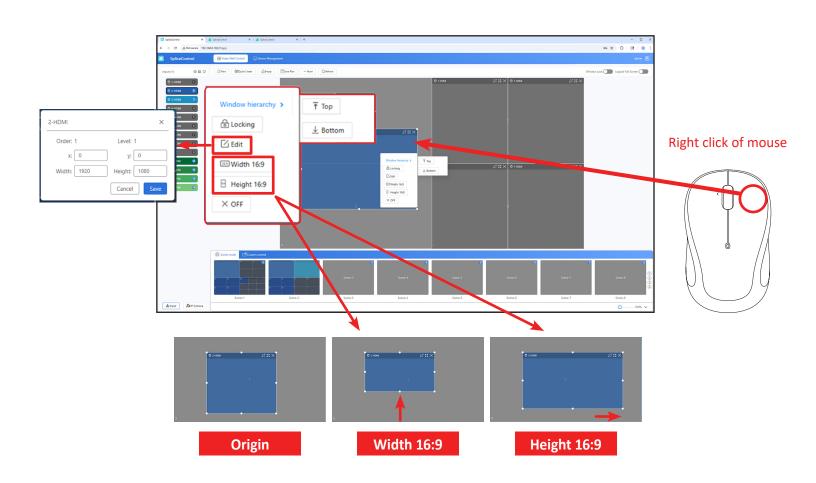
# **VIDEO WALL CONTROL**

### 2.1. Basic Operation

When user right click on the selected input window, user can easily control the selected input window and the popup window's feature of IPC & other input source is different.

#### HDMI, DP, DVI and other inputs

- Window Hierarchy: set the higher or lower hierarychy of selected input source window
- · Locking: lock the selected input window
- Edit: adjust the position and resolution of selected input window
- Width 16:9: automatic resizing the display of selected input window under horizontal fix
- Height 16:9: automatic resizing the display of selected input window under vertical fix
- Off: delete the selected input source



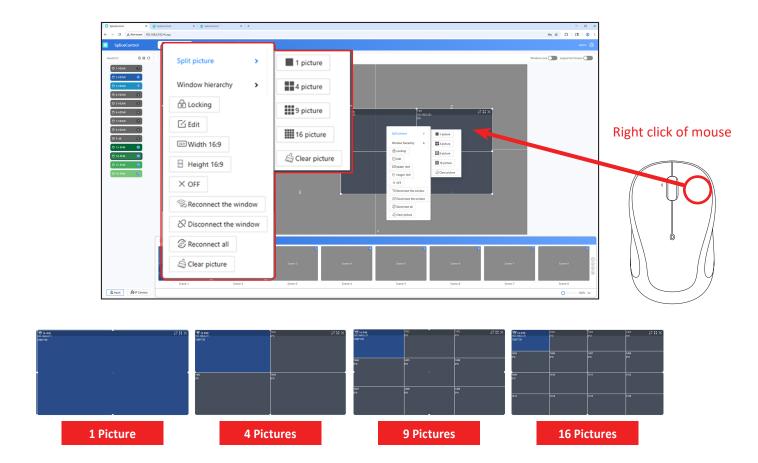


# **VIDEO WALL CONTROL**

### 2.1. Basic Operation

#### **IPC** inputs

- Split Picture: split the selected input window as 1/4/9/16 screen and clear screen
- Window Hierarchy: set the higher or lower hierarychy of selected input window
- Locking: lock the selected input window
- Edit: adjust the position and resolution of selected input window
- Width 16:9: automatic resizing the display of selected input window under horizontal fix
- Height 16:9: automatic resizing the display of selected input window under vertical fix
- Off: delete the selected input window
- Reconnect/Disconnect the window: connect/disconnect the network of selected IPC window
- Reconnect All: reconnect all IPC window to the network
- Clear Picture: turn off the input source only

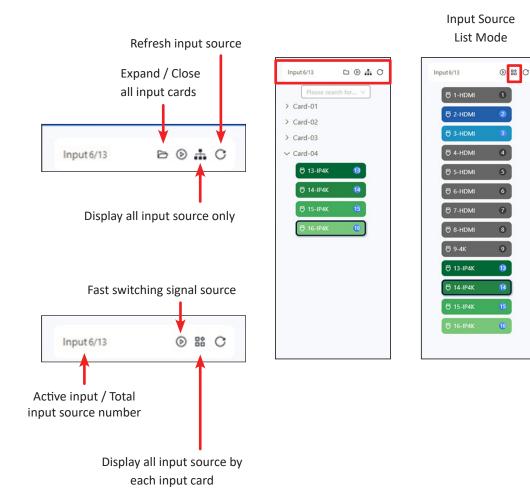




### **VIDEO WALL CONTROL**

### 2.2. Input Source List

- On the left sidebar, user can see this <a href="Input6/13">Input6/13</a>. And this means 13 is a total number of available input sources and 6 is the number of active input source
- Select a window on the virtual videowall and click (2) icon to play all active input source sequentially
- On the left sidebar, user can see Card-01, 02 ... 01-02.. means the ordered number of input card. The active input source will have different color based source type and if an input source has no signal, that input source will have the gray color.
- On the left sidebar, click this button 🚠 to see input sources only.
- On the left sidebar, click this button 🔡 to see input sources based on the tree structure.



Input Source
Tree Structure Mode

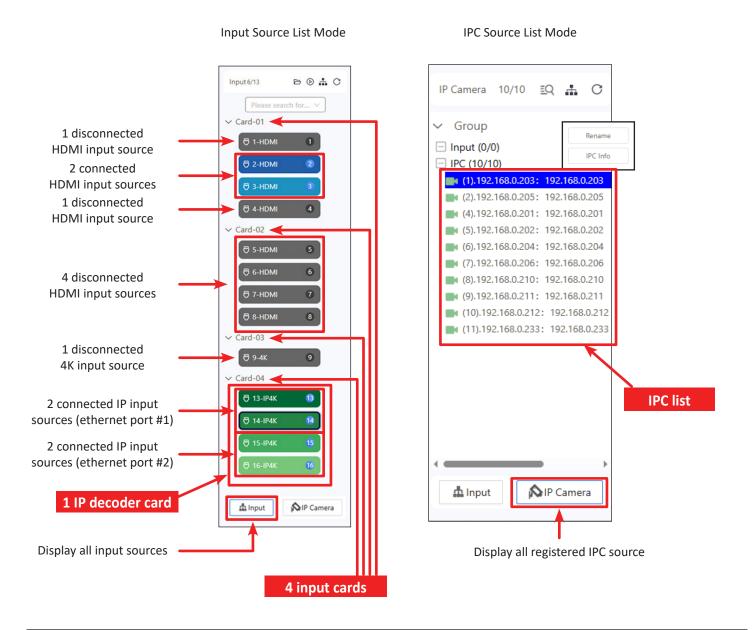




### **VIDEO WALL CONTROL**

### 2.2. Input Source List

- User can drag & drop each input source to a virtual videowall monitor.
- User can select an input source and draw a box (selected input source will be applied) on virtual videowall layout
- 1 IP decoder card will have 4 input sources and consecutive input source (ex. #1 & #2) can use & put 16 (1080p IPC) onto the videowall layout (refer to page 39)



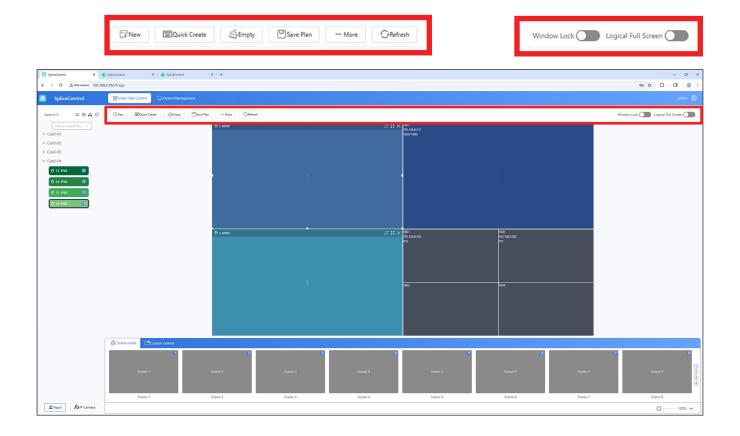


### **VIDEO WALL CONTROL**

#### 2.3. Main Tool Bar

On Web-Based software window, user can create, save & clear the layout

- New a new input source window will be inserted on virtual videowall, with the selected input source
- Quick Create assign the preset display layouts or draw the display layout
- Empty clear the current input source windows on the virtual videowall
- Save Plan save the current videowall layout (with input sources) as a scene
- More turn on/off the actual videowall through RS232 communication
- **Refresh** when user drag & drop an input source to a virtual videowall area and want to see that input source on actual videowall, user needs to click **Refresh** button to synchronize it to the front-end display
- Window Lock lock the current input source windows and then, user can move or close it seamlessly to switch input source or layout
- Logical Full Screen When user turn on this button and try to put an input source onto the virtual videowall layout, the selected input source will automatically fill up the selected display area. If user wants to zoom in or out on the videowall, turn off Logical Full Screen button.



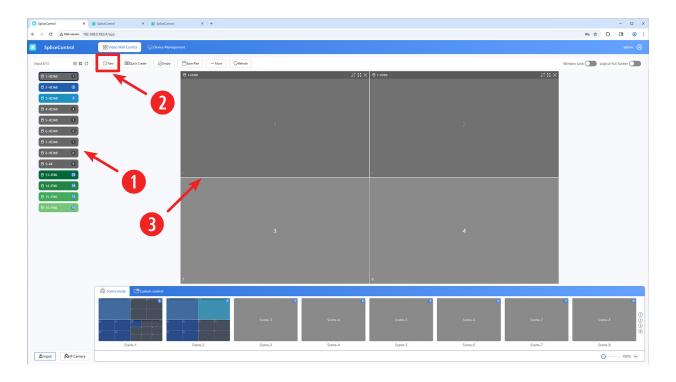


# **VIDEO WALL CONTROL**

#### 2.3.1. Main Tool Bar - New

When user assign the input source to the virtual videowall, user can drag & drop, or click **New** button.

- 1. Select an input source
- 2. Click **New** button
- 3. Selected input source will be automatically assigned to an empty videowall display.





#### **Note**

- If user did not select an input source and click **New** button, the first input source (on the source list) will be automatically selected and used.
- When an input source is assigned into the selected display of videowall, user will see the input source name on the top of selected window.

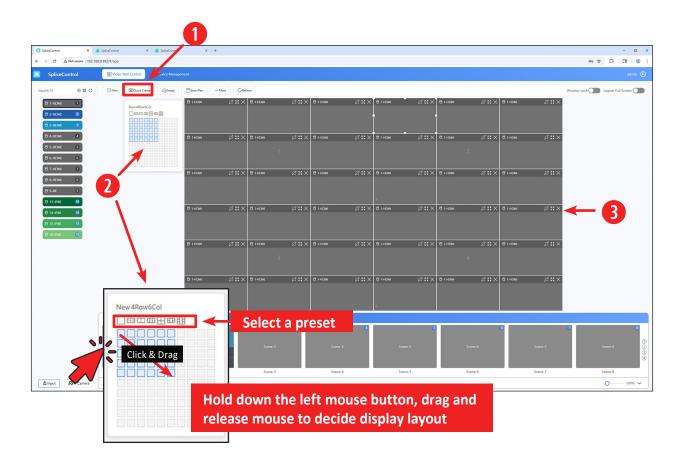


# **VIDEO WALL CONTROL**

### 2.3.2. Main Tool Bar - Quick Create

User can create custom display layout or use presets for virtual vidowall layout.

- 1. Click **Quick Create** button
- 2. Select a default preset or draw a display layout
- 3. When user choose & click a display layout, user will see the virtual display layout on the main screen.



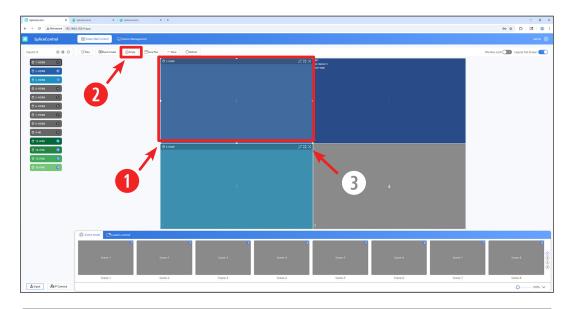


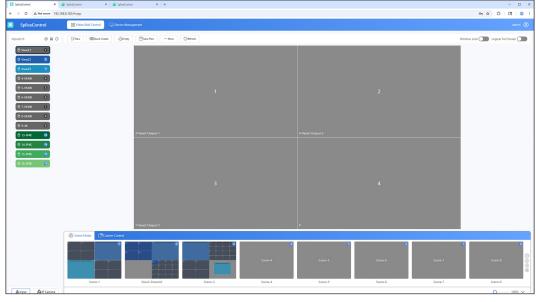
# **VIDEO WALL CONTROL**

### 2.3.3. Main Tool Bar - Empty

User can remove the selected input source window or the entire windows on the virtual videowall.

- 1. Select an input source on the virtual videowall display, or simply click **Empty** button to delete the selected input source window or all input source windows
- 2. Also, user can select an input source window and click X button to remove the selected input source window





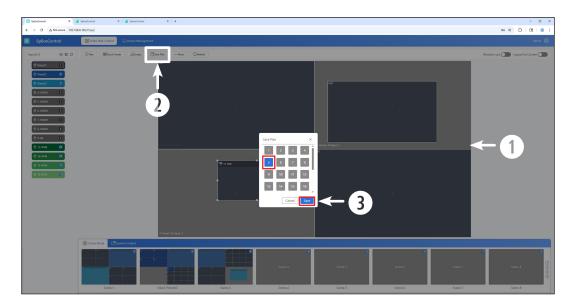


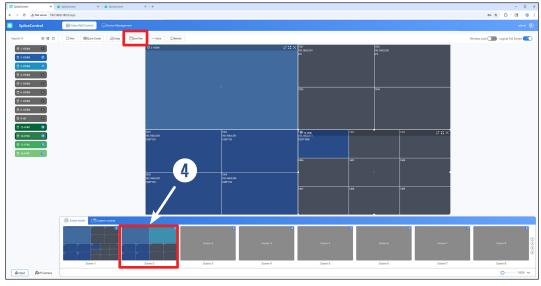
# **VIDEO WALL CONTROL**

#### 2.3.4. Main Tool Bar - Save Plan

User can create and save the designed display layout. After saving, user can easily switch the display layout.

- 1. Create a display layout and assign input sources to the designed videowall display layout
- 2. Click Save Plan button and then user will see the Save popup window
- 3. Select a scene number and click Save Plan button to confirm it
- 4. After saving, user will see a saved scene on the <u>Scene Mode</u> (at the bottom) and double click to load the saved scene







# **VIDEO WALL CONTROL**

### 2.3.4. Main Tool Bar - Save Plan

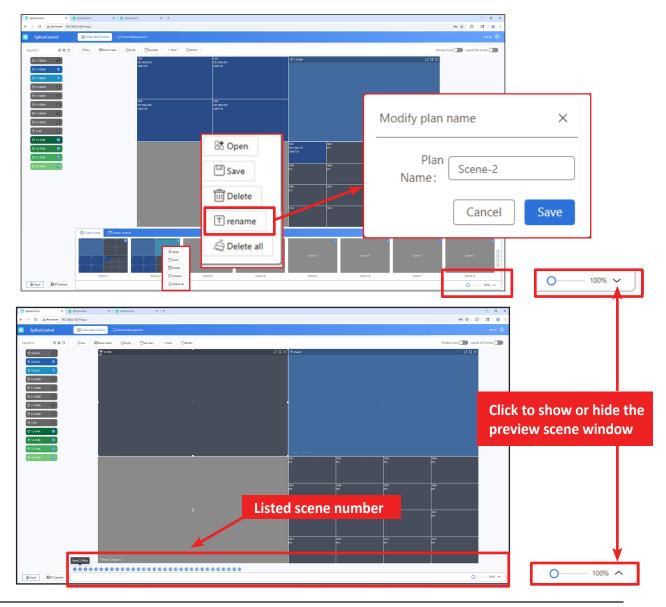
The saved scene can be edited, deleted and renamed. Right click one of the saved scenes and then select an option on the popup window.

Also, user can show or hide preview scenes by clicking vicon at right bottom corner.



#### Note

• When user loads one of saved scenes, user should click **Refresh** button to apply its update.



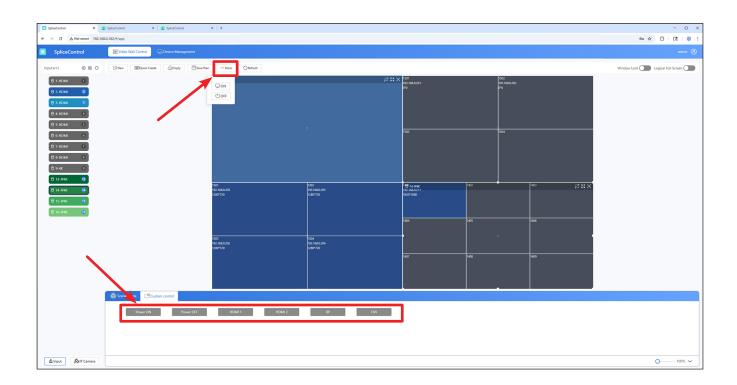


# **VIDEO WALL CONTROL**

#### 2.3.5. Main Tool Bar - More

User can simply command the actual videowall monitors

- 1. Click More button to turn on & off the actual videowall monitors through RS232 serial connection
- 2. User can also command more action on the Custom Control (on the bottom tab) Turn On & Off, source switching among HDMI 1, HDMI 2, DP & DVI



#### **Caution**

VZ-PRO-ST's web-based control software supports RS232 serial communication with ViewZ UNBS, ENB/EHB &
SNB/SHB series monitors. That is, the web-based control software of VZ-PRO-ST has the built-in info of RS232
cooperated with ViewZ videowall montor series.

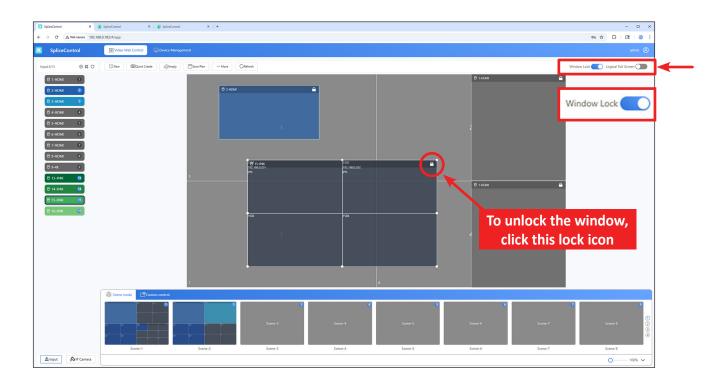


# **VIDEO WALL CONTROL**

### 2.3.6. Main Tool Bar - Lock / Full

When user needs to put a new input source or fix the current layout with input sources, turn on Window Lock button. Then, user can edit the current input windows & layout.

Also, when user turns on <u>Logical Full Screen</u> button and put a new input source on the virtual videowall area, the new input source window will be arbitrarily filled on a single, dual or full display area.





#### Note

• When user turns on window lock button, all existing windows will be locked. But, user still can put the new input window and unlock one of locked windows.

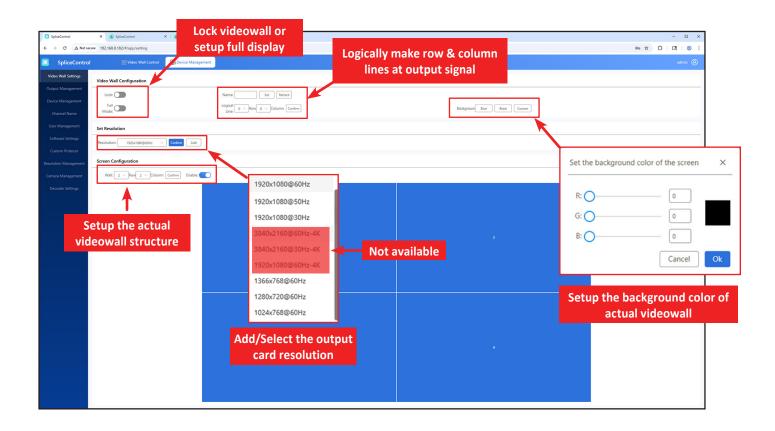


### **DEVICE MANAGEMENT**

### 3. Video Wall Settings

In the Video Wall Settings section, user can lock the current input sources, setup the full screen, make the videowall name, make logical lines on a monitor, set the background color of actual videowall monitors, select/add the oupput resolution and make the actual videowall structure.

- Lock: the current input sources (on virtual videowall) cannot change anything until unlock
- Full screen mode: the new input source will fit as a full screen on 1 to 4 virtual videowall areas
- Name: the name of videowall
- Logical Split Screen: draw Row & Column logical lines on every videowall monitors
- Screen Background Color: setup the background color of actual videowall monitors
- Set Resolution: setup the output resolution of each VZ-PRO-ST's output card
- Screen Config: setup the row & column numbers based on the actual videowall structure



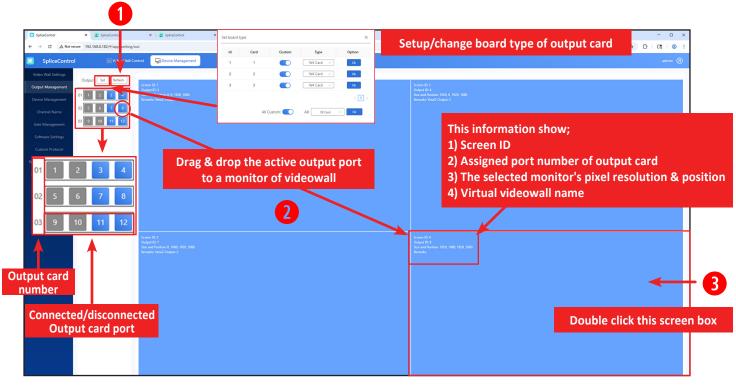


### **DEVICE MANAGEMENT**

#### 4. Output Management

User can setup or assign the output card to actual videowall monitors.

- 1. Click Refresh button or select a monitor box & drag out of virtual tvideowall area
- 2. Drag & drop an output channel (blue box) to a virtual videowall monitor
- 3. Double-click a virtual videowall monitor (just assigned) on the virtual videowall
- 4. Look at the actual videowall monitors and see which screen has a black background with a white cross line
- 5. This procedure let user update/confirm a position of virtual videowall monitor corresponding to a position of actual videowall monitor





#### Note

- On the output channel, the left column number | 01 | 02 | means how many output cards installed at VZ-PRO-ST. And each output card show | 1 | 2 | 3 | 4 | 4 boxes and it means each output card would have 4 output ports.
- On the output card 1 ~ 3, only 2 output ports are used and other 2 ports are not used.
- The active port (connected to monitors) is the blue colored box and the deactive port (no connection or not exist) is the gray colored box.
- When the output card is changed, user might need to check the board type at the **Set Board Type** window. Basically, the info of **Set Board Type** window will be automatically updated.

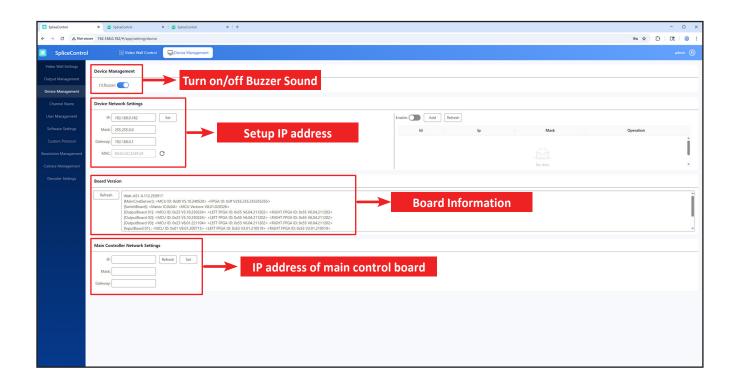


### **DEVICE MANAGEMENT**

### 5. Device Management

On Device Management, user can setup a buzzer sound, IP address, screen protocol and board version.

- **Buzzer**: when user turns on the buzzer button, user will hear a beep sound when user operates any function on web-based software.
- Device Network Settings: setup IP address of VZ-PRO-ST's web-based control software
- **Board Version**: show the current board version
- Main Control Network Settings: setup the IP address of VZ-PRO-ST's main control board

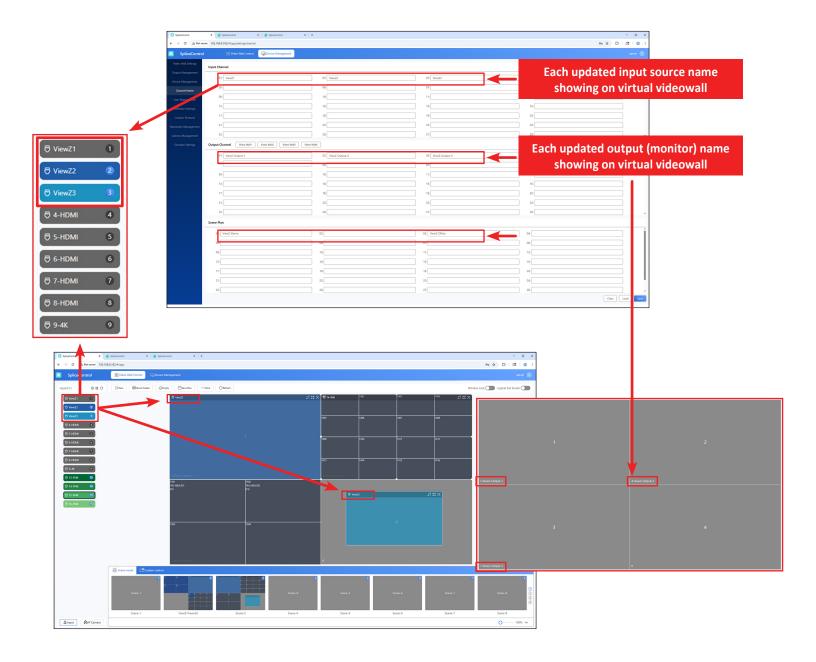




# **DEVICE MANAGEMENT**

### 6. Channel Name

User can assign the custom name of input source, output (connected monitor) and scene (plan).

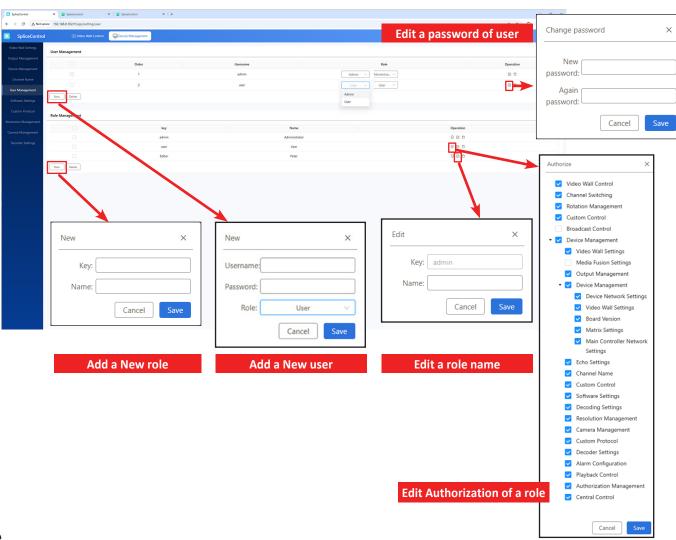




### **DEVICE MANAGEMENT**

### 7. User Management

User can manage user & role accounts in this section. It means user can give or take away the authorization of each user & role accounts.





#### Note

 User can choose which features will be accessed or not - Splice and Setting (Splice settings, Out settings, Device management (Device net settings, Spliace settings, Board version, Matrix setting, Main control board network settings), Channel naming, Custom protocol, Resolution management, Decoder Settings, Factory settings, Parameter configuration)

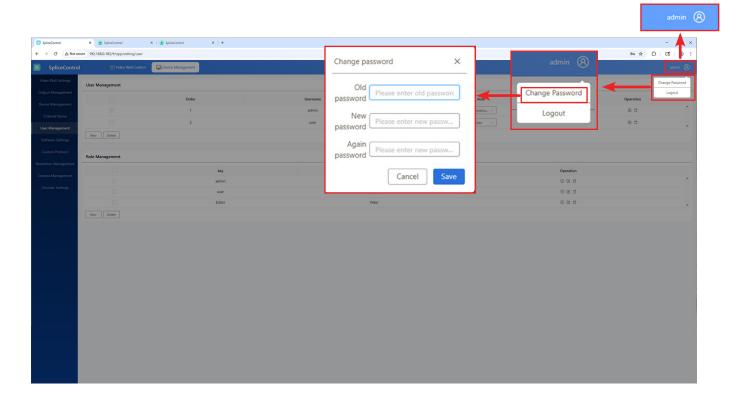


# **DEVICE MANAGEMENT**

### 7. User Management - Administrator

Administrator simply change the password and logout.

- 1. Click button at thr right top corner.
- 2. User can select Change password or Logout
- 3. Click **Change password** button and then, user will see a **Change password** window to change administrator password.





#### Note

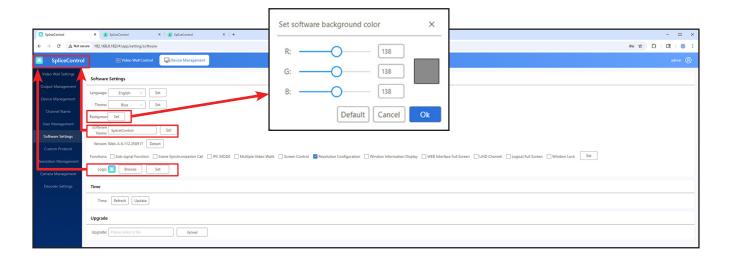
• ViewZ recommends user (admin) to appropriate password for admnistrator account.



### **DEVICE MANAGEMENT**

### 8. Software settings

User can change the language, theme color, background color, software title, version, logo of web-based software, system time and upgrade the system firmware.





#### **Note**

- Language: change the language of web-based software
- Theme: change the theme color
- Background Color: change the background color
- **Software Name**: change the title of web-based software
- **Version**: check the version of VZ-PRO-ST firmware information
- Functions: turn on/off features of web-based control software, such as Sub-signal Function,
   Scene Synchronization Call, IPC Mode, Multiple Video Walls, Screen Control, Resolution Configuration,
   Window Information Display, Window Information Display, WEB Interface Full Screen, UHD Channel,
   Logical Full Screen & Window Lock
- Logo: change the logo image
- Time: change the system time
- Upgrade: upload/upgrade the web-based control software firmware

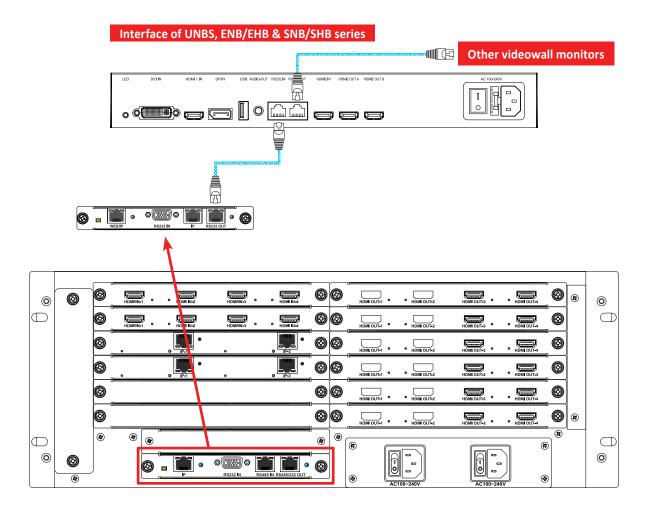


### **DEVICE MANAGEMENT**

#### 9. Custom Protocol

User can add/edit/delete the custom control function for videowall monitors. VZ-PRO-ST has built-in RS232 protocol presets for ViewZ's UNBS, ENB/EHB & SNB/SHB series monitors.

- Connect RJ-45 (RS232) serial cable (included in ViewZ videowall monitor accessory or refer to videowall monitor's user manual) between ViewZ videowwall monitors and VZ-PRO-ST
- This setup will apply to the **Custom Control** at **Splice** (refer to page 23)





### **DEVICE MANAGEMENT**

#### 9. Custom Protocol

As shown in the figure below, user can add/edit/delete custom protocols. When user click edit (pre-registered protocol) or add (new protocol) button, the Add Screen Button window will popup and user can edit / add the custom protocol.

• On the Add Screen Button window;

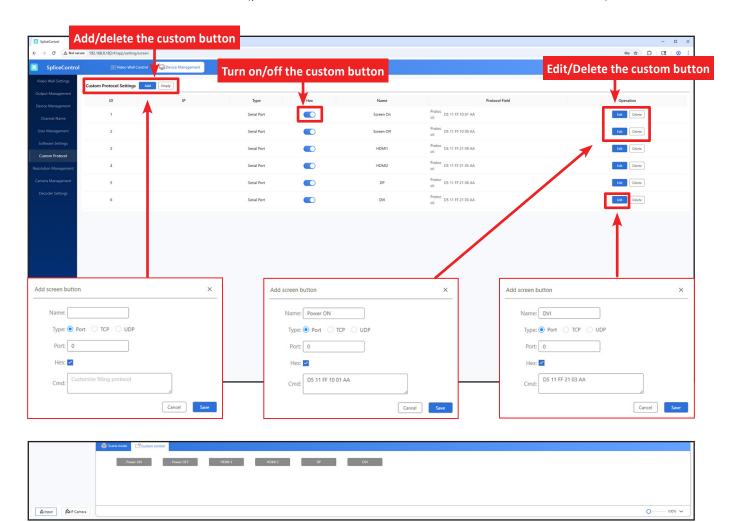
Name: the name of custom command

Type: choose which type of command button - Port (DVI, DP, HDMI and etc), TCP (IP decoding card) and UDP

**Port**: the number of port

Hex: check up for using RS232 serial communication

Cmd: hexadecimal or ASCII values (please refer to RS232 COMMAND of VZ-UNBS-UserManual)



**Custom Control buttons at Splice window** 

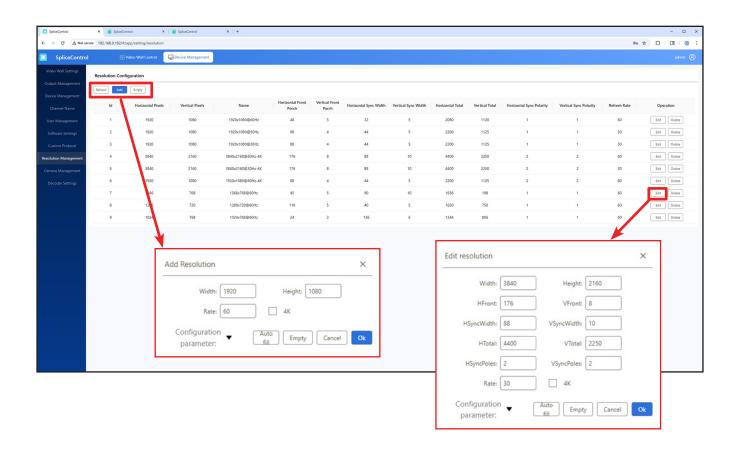


# **DEVICE MANAGEMENT**

# 10. Resolution Management

User can manage the output resolution. When user click Add or Edit button, user will see the popup window;

- Width / Height: type the pixel resolution of video output
- Rate: type the frame rate of video output
- **4K**: if video output has a 4K signal, please check this box.



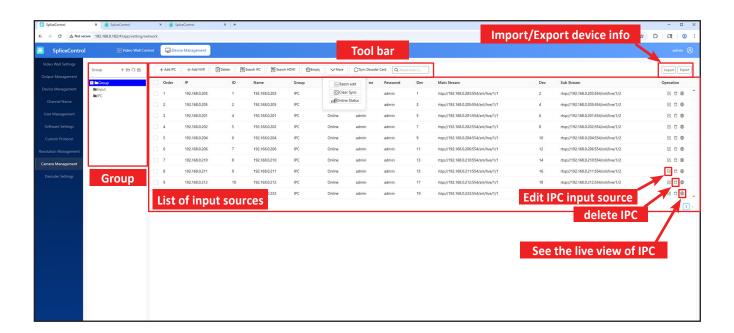


### **DEVICE MANAGEMENT**

#### 10. Camera Management

In the Camera Management, user can manage IP camera and other IP input source.

- **Group**: list input sources under IPC and other
- Add IPC: manually add IPC devices via the connection of IP decoding card
- Add NVR: manually add NVR via the connection of IP decoding card
- **Delete**: delete the selected input source
- Search IPC: search IPC devices
- Search HDMI: search HDMI input sources
- Empty: empty the selected input source
- More/Batch Edit: edit multiple IPC input sources
- More/Clear Sync: reset the IPC device connection
- More/Online Status: check the IPC device connection
- Sync Decorder Card: synchronizing process between IPC devices and IP decoding card of VZ-PRO-ST
- Import/Export: import & export the registered input source information
- Edit/Delete/View: user can edit, delete & view the registered IPC





#### Note

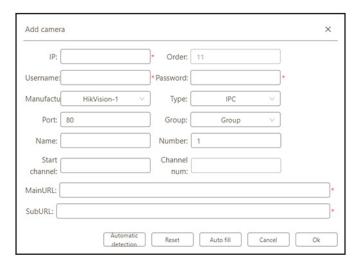
• When user install IP decoder card to VZ-PRO-ST, user should change or confirm IP addresses of IP decoder via each IP addressed web browser (refer to page 44).

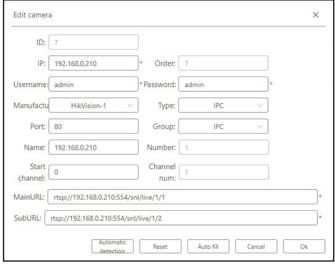


### **DEVICE MANAGEMENT**

### 10. Camera Management

- Add IPC & NVR: user can manually add IPC & NVR
- Edit: edit the registered IPC or NVR device





#### Add IPC or NVR input sources

**Edit IPC or NVR input sources** 

- Search IPC: software will automatically search IPC devices under the network
- Search HDMI: software will automatically search HDMI input sources





#### Note

After adding IPC devices, please click 'Synchronous decoding card' button to share & use IP devices.

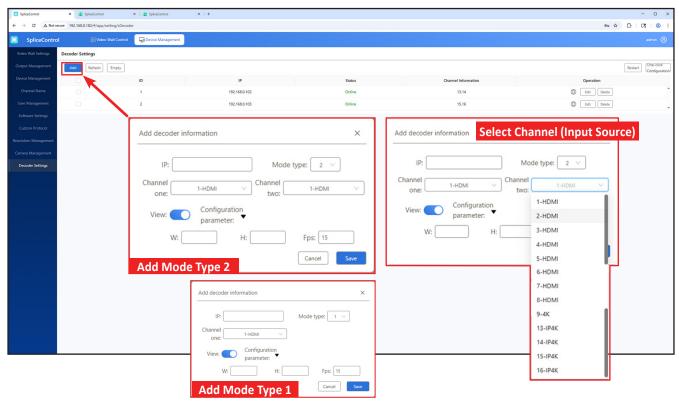


### **DEVICE MANAGEMENT**

### 11. Decoder Settings

When user install an IP decoder card into VZ-PRO-ST, user needs to setup the IP decoder before using IPC input.

- 1. Connect 2 ethernet connection of IP decoder card to a network (which IPC devices included)
- 2. Connect each IP addresses via web browser and update/confirm IP addresses of each ethernet ports based on user's condition. ViewZ would setup these IP addresses, but user can change IP addresses based on this manual.
- 3. After setup/confirm IP addresses on webpages of IP decoder, user should setup the IP decoder's IP addresses & resolution to the web-based control software (192.168.0.182)
- 4. For example, if ViewZ setup the IP addresses of IP decoder as 192.168.0.102 & 192.168.0.103, goto Settings/ Decoder Settings, click Add button at the left top corner. On Add decorder information window, type IP address (192.168.0.102) & select Mode type 2. Then, select Channel 1 as IP4K 13 and Channel 2 as IP4K 14 - user should select continuous IP4K channel. Type the width pixel, height pixel & frame number of streaming IP devices.
- 5. Do the same procedure for 192.168.0.103



#### Caution

- When user install IP decorder card, user might or not change IP address of IP decoder card ports. If user choose IP addresses, use these IP addresses for the above registration.
- Adding IPC devices is available after the registration of IP decoder card.

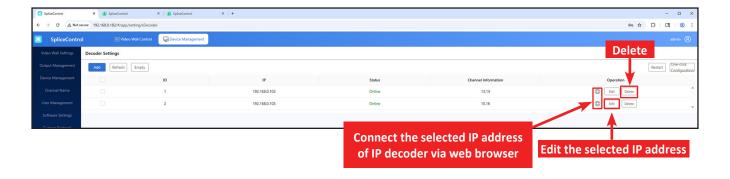


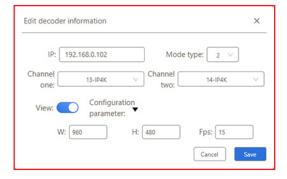
### **DEVICE MANAGEMENT**

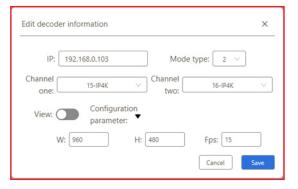
### 11. Decoder Settings

#### On Decoder Settings;

- Add: add IP address of IP decoder
- Refresh: reboot the IP decoder card
- Empty: select the registered IP address and delete the registered IP address
- One Click Configuration: automatic setup of registered IP decoder
- Web Connection: click buton to connect the selected ethernet port via web browser
- Edit: edit the information of selected IP address
- Delete: delete the selected IP address









#### **Note**

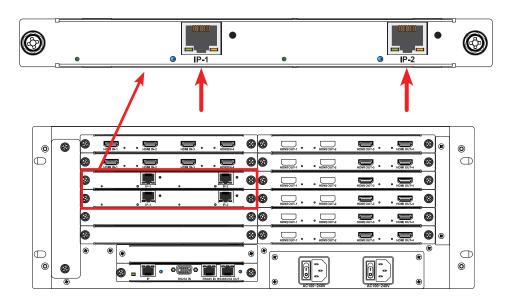
This information of registered IP address is cooperated with camera management.



## **IP DECODER**

### 1. Description

- ViewZ IP decoder card (dual network port, 2 IP addresses) is the optional card and it supports
   4ch of 4K | 16ch of 1080P | 32ch of 720P | 64ch of D1 video decoding
- Supports H.264 and H.265 video decoding formats
- Support 4K, 1080p, 720p & D1 and other standard video decoding
- Each IP decoding board supports 4 IP channels, each of which supports 1/4/9/16 picture segmentation.
- Supports up to 64 cameras decoding and displaying simultaneously





#### **Note**

- The IP decoding card is configured and operated via web browser
- The local computer & the decoder card are connected to a local area network
- The default IP address of the decoder card can be edited by customer.
- If user operates the factory reset, the default IP address is 192.168.0.200 and all data of selected IP decoder card will be cleared



#### **Caution**

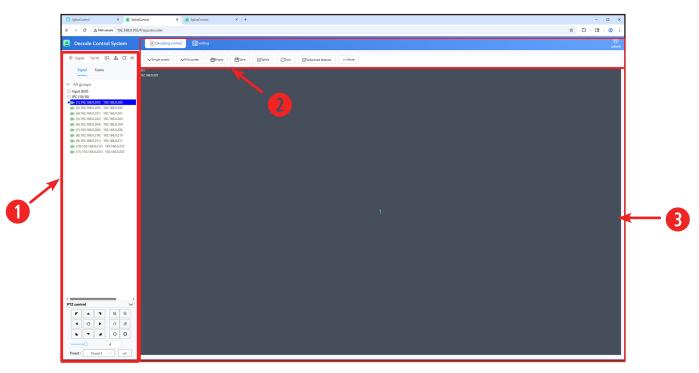
 If user operates the factory reset, the default IP address is 192.168.0.200 and all data of selected IP decoder card will be cleared



## **IP DECODER - Decoding Control**

### 2. Decoding Control - Description

On Web-Based control software window of IP decoder, user needs to figure it out about the functional area.



① INPUT SOURCE LIST ② MAIN MENU ③ VIRTUAL VIDEOWALL

The web-based IP decoder control software is composed by 3 parts - Main Menu, Virtual Videowall Layout and Input Source List.

- 1. Input Source List (left area) show all IP input sources
- **2. Main Menu** (top area) has **Decoding Control** & **Setting** menu. The **Decoding Control** let user adjust the videowall layout and the **Setting** let user control IP decoder card such as Decoding Settings, Out Settings, Camera Management, Device Management, User Management and Software Settings.
- **3.** Virtual Videowall (center area) let user assign the input source (select the input source from **Input Source List**, then drag & drop an input source to one of videowall screen) to each videowall screen or full screen and make the layout.



#### **Note**

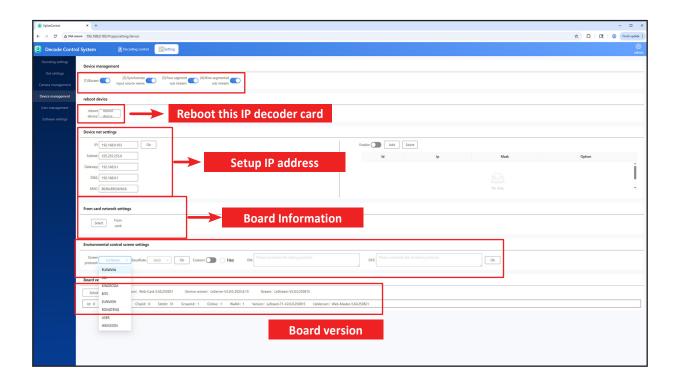
• ViewZ does not recoomend edit the basic layout, becuase this edited layout will apply to the main control layout.



### **IP DECODER - SETTING**

### 3. Update IP Address

Goto **Setting / Device Management / Device Net Settings** and update/confirm the IP address value based on the condition of user.





#### **Note**

- Device Management/Buzzer btn: turn on/off the buzzer sound when action happened
- Device Management/Synchronize Input Source Name <a href="btn">btn</a>: input source name can be updated by user & applied on virtual videowall
- Device Management/ 4 Segment Sub Stream <a href="https://doi.org/bt/bt/91/2">btn</a>: user can setup 4 segments in a single screen area
- Device Management/ 9 Segmented Sub Stream <a href="https://doi.org/build-nih.gov/build-
- Reboot Device btn: reboot the IP decoder card
- Device Net Settings/IP, Subnet, Gateway, DNS & MAC: type the IP, Subnet, Gateway, DNS & MAC address
- From Card Network Settings: import a network setting value
- Environmental Control Screen Settings: setup/change the videowall screen protocol
- Board Vertsion: show the IP decoder board version



## **IP DECODER - SETTING**

## 4. Decoding Settings

On **Decoding Settings**, user can setup the virtual videowall resolution & structure - splicing control row & column. The default splicing specification is 1x1, and the default resolution is 3840x1080@30Hz. User does not need to change anything in this section.



## 5. Out Settings

On **Out Settings**, it shows the selected IP decoder output.

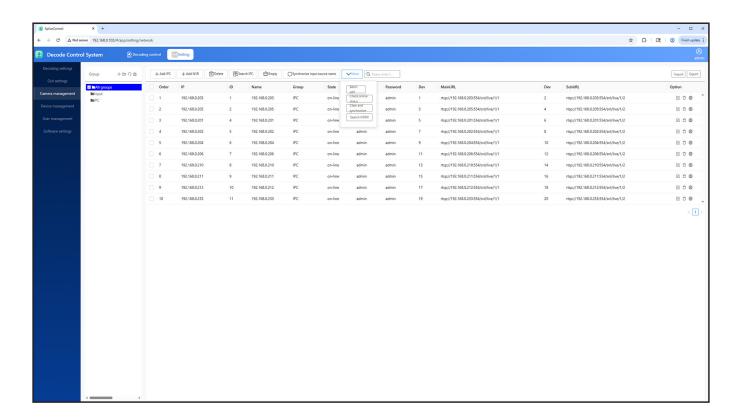




## **IP DECODER - SETTING**

### 6. Camera Management

In the Camera Management, user can manage IP devices. And the below list of IPC device is coming from main web-based control software.





#### Caution

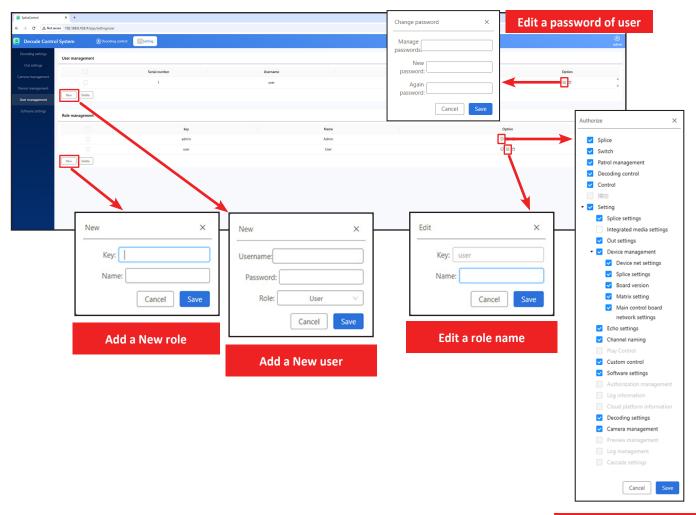
- User should add IPC devices on the web-based control software webpage (refer to page 35).
- If user add IPC devices via a IP decoder software webpage (1 IP decoder card has 2 IP decoder software webpages), this data cannot synchronize with another IP decoder webpage and the web-based control software (main control webpage).



## **IP DECODER - SETTING**

### 7. User Management

User can manage user & role accounts in this section. It means user can give or take away the authorization of each user & role accounts.



Edit Authorization of a role



#### **Note**

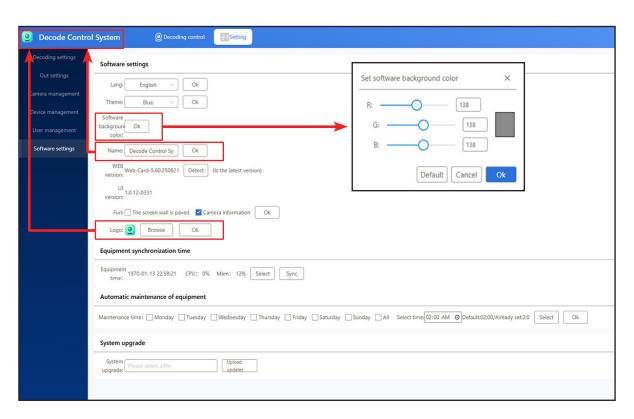
• If user want to change the login info of IP decoder, please change it here.



### **IP DECODER - SETTING**

### 8. Software Settings

User can change the language, theme color, background color, software title, version, logo of web-based software, system time and upgrade the system firmware.





#### **Note**

- Language: change the language of web-based software
- Theme: change the theme color
- Software Background color: change the background color
- Name: change the title of web-based software
- Web Version: check the version of IP decoder firmware
- **UI Version**: check UI version
- Fun: show or not camera information & paved screen wall
- Logo: change the logo image
- Equipment Synchronization Time: check the CPU. Memory usage and setup the IP decoder time
- Automatic Maintenance of Equipment: user can setup the automatic turn-off &booting time
- System upgrade: upload/upgrade the system firmware



## TROUBLESHOOTING GUIDE

Check the following before calling for service.

If the same problems continue after checking, contact the reseller you purchased the controller from.

At start	Use this troubleshooting guide to help fix issues you have. If symptom persists, follow the instructions below. After following the instructions below, please contact your reseller or call us at 1-888-99-VIEWZ.
The source layer creation fails in a simple scenario, and nothing is displayed on the screen	Click the reset button (on the back of controller) or check the input souce
Power light is off	Check if the power cable is plugged in firmly
Big screen black	Check if the corresponding video connection of the device is reliable
Board stuck abnormally	Power off and restart, if you can't solve the problem, please contact your supplier
Video input source detection is invalid	Check the video input card is securely installed or the video input format is supported
Unable to start	Please reset the power and check it.  If the controller is still not recovered, please contact your supplier.
Videowall Control SW cannot connect VZ-PRO Controller	<ul> <li>Please check the network address, both VZ-PRO Controller and Local Videowall Control PC, is located in the same network.</li> <li>Ex. both devices should have like 192.168.0.XXX &amp; 192.168.0.XX</li> <li>Please check the cable connection.</li> </ul>
How to obtain the decoded card IP?	<ul> <li>Through the Onvif search tool, you can search for the decoded card IP address.</li> <li>Long press the 10-second factory reset button to restore the factory settings of the decoder card, and the default IP address of IP decorder card is 192.168.0.200</li> </ul>
How to know which decoding card IP corresponds to which splicing processing channel?	The decoding window can be opened to perform the segmentation operation, and which segmentation is valid corresponds to which channel
The IP decoder card in the decoder setup is always offline ?	<ul> <li>Check whether the network of WEB splicing is connected with the network of the decoder card (the computer pings the IP address of WEB and the IP address of the decoder card respectively)</li> <li>Whether the decoder card and WEB splicing start normally, and can be logged in and accessed normally with the browser;</li> </ul>



## TROUBLESHOOTING GUIDE

Check the following before calling for service.

If the same problems continue after checking, contact the reseller you purchased the controller from.

At start	Use this troubleshooting guide to help fix issues you have. If symptom persists, follow the instructions below. After following the instructions below, please contact your reseller or call us at 1-888-99-VIEWZ.
The decoder card is not responding to the screen split	<ul> <li>Check whether the decoding is online and whether the browser can be logged in and accessed normally;</li> <li>Check whether the binding is successful and whether the channel corresponds to the IP address;</li> <li>For example, the network port 192.168.0.102 corresponds to channel 5 and 6, and the network port 192.168.0.103 corresponds to channel 7 and 8</li> <li>1. Check whether the decoding card splicing specification and resolution are configured correctly, and whether the configuration is 1x1 splicing and 3840x1080@30Hz resolution</li> <li>2. Check the output management of the decoder card to see if it is configured successfully. You can clear the output mapping and configure it automatically.</li> </ul>
Dragging the IPC signal has no response and no picture display	<ul> <li>After the decoding window can be modified normally after segmentation</li> <li>Check whether IPC is added successfully, enter the WEB splicing and decoding card respectively, and check whether there is data in camera management</li> <li>If the data is inconsistent or no data is available, click the WEB Stitching synchronization decoder card.</li> </ul>
The software cannot run after installation	<ul> <li>The client computer lacks the relevant software to run support components (Microsoft.NET.exe); some problematic files are blocked or deleted by anti-virus software;</li> <li>Enter the installation directory of this software and install in the Tool folder. Net40. Temporarily close the anti-virus software or computer manager, or add the program to the exception of computer manager.</li> </ul>
Unable to search or connect devices	<ul> <li>Network or serial port is down; IP address conflicts with other devices on the LAN; Network card not selected to be on the same LAN as the device</li> <li>Use the command prompt to ping the device's IP address to check if the network is connected; change the IP address and reconnect; reselect the computer's network card</li> </ul>



## TROUBLESHOOTING GUIDE

Check the following before calling for service.

If the same problems continue after checking, contact the reseller you purchased the controller from.

At start	Use this troubleshooting guide to help fix issues you have. If symptom persists, follow the instructions below. After following the instructions below, please contact your reseller or call us at 1-888-99-VIEWZ.
The reason why the output screen is not displayed	<ul> <li>No signal input; output line damaged or beyond transmission distance; output mapping not properly configured</li> <li>Check the input signal to confirm that the input signal channel is normal, check whether the LED indicator light of the port is on; confirm that OUT is connected to the output device and IN is connected to the input device;</li> </ul>
The reason for the color shift in the picture	<ul> <li>The interface is not properly connected, loose contact; signal cable damage; display device color adjustment is not correct; use software color correction is not correct</li> <li>After the connection of the interface, please tighten the bolt to prevent loosening caused by pulling;</li> <li>Adjust the color balance of the display device according to the instruction manual of the display device;</li> </ul>
The screen appears to wobble or have spots	<ul> <li>The cable is too long to cause serious signal loss; the input signal equipment is unstable or the wire is damaged</li> <li>It is recommended to use a signal extender to ensure the minimum line loss; debug the input signal function definition and use high quality wire</li> </ul>
The picture is not fully displayed on the display device	<ul> <li>Your display device has performed back-end signal removal; you have adjusted the image position too much through the control software</li> <li>According to the instructions of the display device, call the default setting in the software; through the control software, readjust the position of the image to get the effect you need</li> </ul>
The picture is out of alignment	<ul> <li>The screen is in a spliced state, and the output mapping does not match the physical connection line</li> <li>Set the screen to single-screen mode; check the output mapping settings</li> </ul>



### **Caution**

• Before contacting us, please find out the product name/model and serial number.



# **NOTE**

User Manual



# **NOTE**



## WARRANTY

### ViewZ USA LIMITED 3 YEAR WARRANTY

#### What and Who is Covered by this Limited Warranty and for How Long

ViewZ USA warrants this product to be free from defects in material and workmanship for 3 years to the original owner of this product. The limited warranty is valid only for the original purchaser of the product.

#### What ViewZ USA Will Do

At the sole discretion of ViewZ USA, ViewZ USA will repair or replace any product or product part that is defective. If ViewZ USA chooses to replace a defective product or part, a replacement product or part will be shipped to you at no charge, but you must pay any labor costs.

#### What is Not Covered; Limitations

ViewZ USA disclaims any liability for damage to mounts, adapters, displays, projectors, other property, or personal injury resulting, in whole or in part, from improper installation, modification, use or misuse of its products.

ViewZ USA disclaims all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose. ViewZ USA is not responsible for incidental or consequential damages, including but not limited to, inability to use its products or labor costs for removing and replacing defective products or parts. Some states do not allow the exclusion or limitation of incidental or consequential damage, so the above limitation or exclusion many not apply to you.

#### **What Customers Must Do for Limited Warranty Service**

If you discover a problem that you think may be covered by the warranty you MUST REPORT it in writing to the address below within thirty (30) days. Proof of purchase (an original sales receipt) from the original consumer purchaser must accompany all warranty claims. Warranty claims must also include a description of the problem, the purchaser's name, address, and telephone number. General inquiries can be addressed to ViewZ USA Customer Service at 1-888-998-4399. Warranty claims will not be accepted over the phone or by fax.

ViewZ USA Attn: Warranty Claim 1030 N ARMANDO ST., ANAHEIM, CA 92806

#### **How State Law Applies**

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### Disclaimer

ViewZ USA intends to make this manual accurate and complete. However, ViewZ USA makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this monitor. The information contained in this document is subject to change without notice or obligation of any kind. ViewZ USA makes no representation of warranty, expressed or implied, regarding the information contained herein. ViewZ USA assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

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