ANGUSTOS

ANGUSTOS
VIDEO WALL CONTROLLER

ACVW - AVW - ACV2 - ACVM CONTROLLER

USER MANUAL

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CONTENT

1. OVERVIEW

ANGUSTOS video wall controller is a high performance video processing equipment based on hardware architecture. Which avoids common problems of crash, blue screen, viruses.

Supports 4 layer *up to 8 Layer video windows per display arbitrary layering, overlap, moving, stretching,zooming in/out, roaming, Picture In Picture.

2. FEATURES

1. 2 windows/ 4 windows/ 8 windows* on each display
2. IP signals decoding function
3. 4K60Hz input signal acquisition
4. Multiple video wall management (up to 4 video walls)
5. Signal preview and monitoring
6. High resolution background image
7. Scrolling text function
8. Text overlay on the input source

3. PACKAGE CONTENTS

① 1 x Modualr videowall controller

② 1 x AC Power Cord

③ 1 x USB TO RS232 Cable

4. HARDWARE

4.1 Front Panel

3U chassis front panel for description

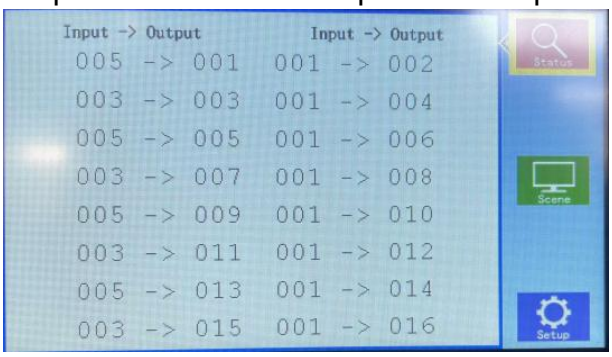
The operation of the touch screen is shown below.

When the user power on the system or the touch screen is not be touched for 12 or more seconds, the screen then displays the following image(It supports customized logo or any other picture before leaving the factory) . Clicking on the touch screen, and the following interface pops up.

- ACVW4-8872
- AVW20-152144
- ACVM - ACV2 (Legacy : AIO) Series
- does not support front touch screen features

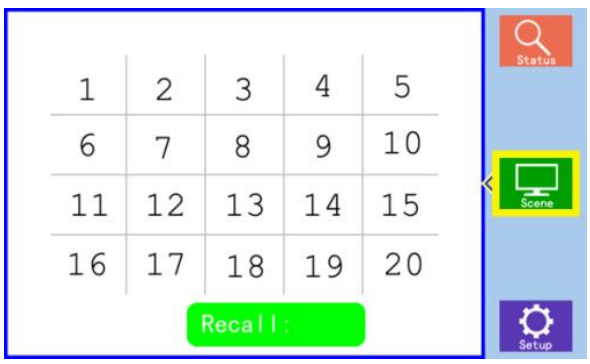
Status

The user can see the correspondence between inputs and outputs.



Scene(recall the scene)

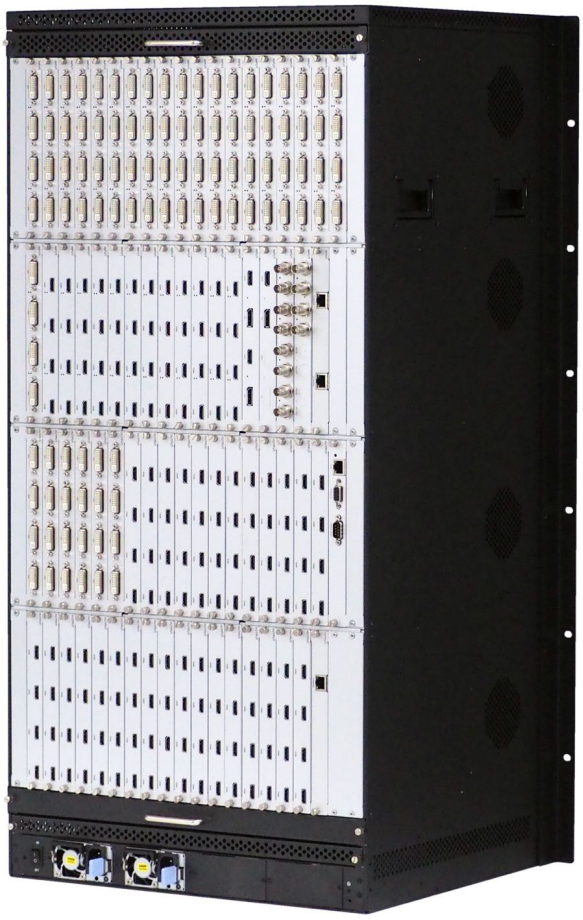
Touch the number and then '**Recall**' menu to recall the saved scene.
e.g. Click the number **'3'** and then **'Recall'** to recall the scene 3.



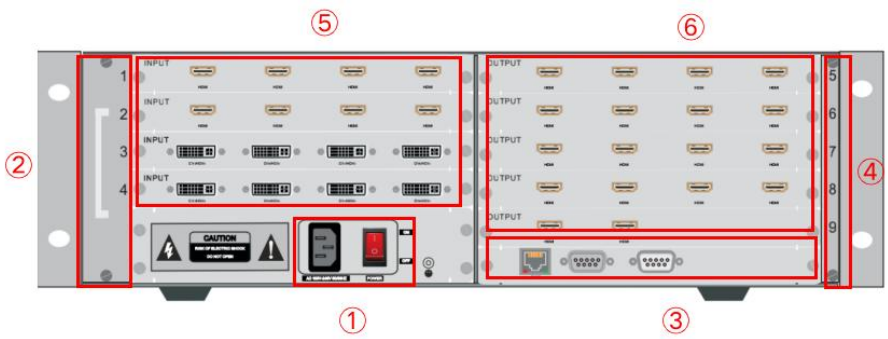
Setup

[Baud rate]: There are 4 baud rate options, 4800, 9600,19200 and115200.
[Language]: There are two language options, Chinese and English.
[Buzzer]: Turn on or turn off the buzzer sound when operating the device.
[DHCP]: Turn on/turn off the IP automatic search of the device control port.
[IP]: Modify the fixed IP through following numbers and letters.
[Subnet mask]: Modify the subnet mask through following numbers and letters menu.
[Gateway]: Modify the gateway through the following numbers and letters.
[MAC address]: Modify MAC address through following numbers and letters.

4.2 Rear Panel



ACVM Series Back - Different Layout but the function is the same.



3U chassis rear panel for description

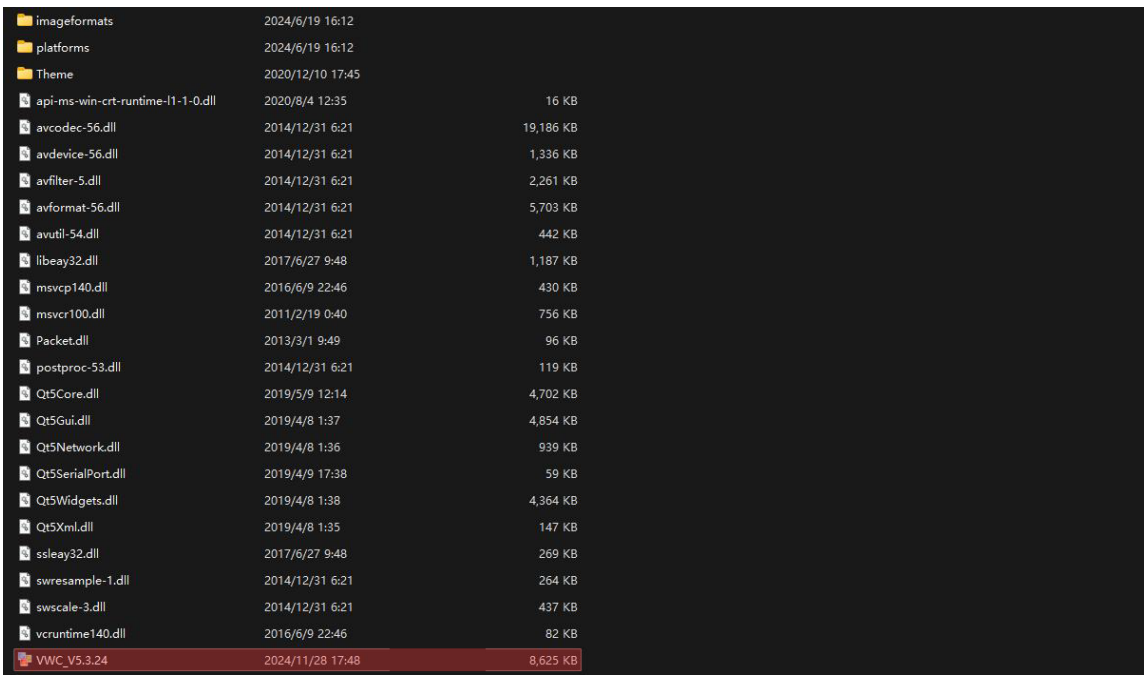
①	Power supply and switch	AC100~240V 50/60Hz Redundant power supply is optional for all size chassis.
②	Fan	The fan starts to work when power on the system.
③	RS232 IN	Serial control port
	RJ45	Ethernet control port
④	Dust-proof net	Prevent dust from entering the machine.
⑤	Input board:	Input interfaces to be connected with external signals.
⑥	Output board	Output interfaces to be connected with video wall displays.

Notes: Product images and description only for reference purpose, please see the subject product.

5. SOFTWARE

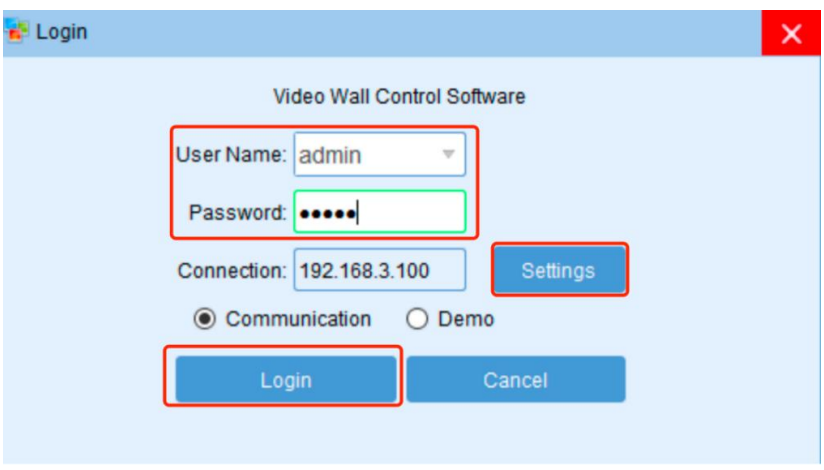
5.1 Software Installation

The control software is a installation-free version, the user can copy the folder to control computer and double-click the program .exe file to run the software.



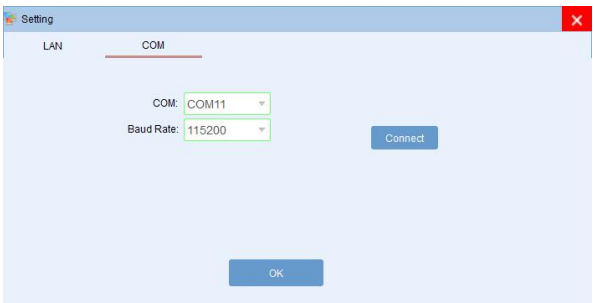
5.2 Software Operation

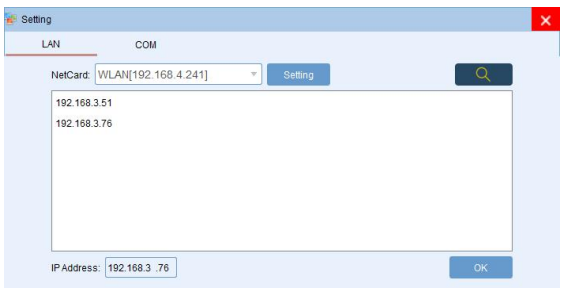
5.2.1 Login



1. Run the control software programme **“VWC_V5.3.24”**.
2. Log in using the default account settings. Username: **‘admin’**, password: **‘admin’.**
3. Click the button **‘Settings’** to set the connection.

To connect to the unit over **'LAN'**, and enter the unit's IP address in the IP Address bar, or select the magnifying glass search icon which will automatically detect the IP address. Then select **'OK'.**
To connect to the unit over RS232, select **'COM'**. Enter the correct **COM port** and **Baud Rate**, and then press **'Connect'** and then **'OK'.**



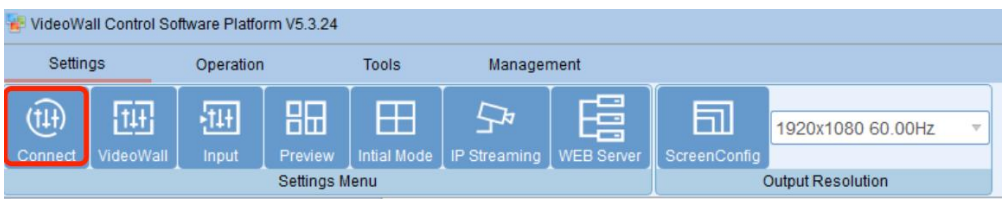


4. Click the 'Login' button enter the control software main interface.

5.2.2 Connection settings

To configure the connection settings

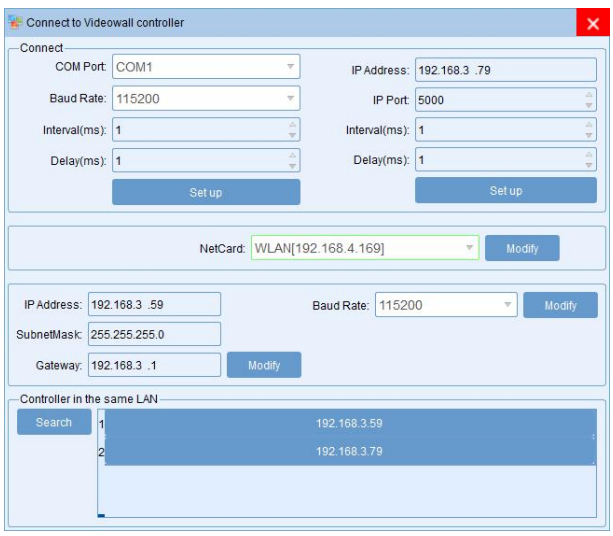
1. Click the **'Connect'** icon in the top navigation bar.



2. Choose to connect by network or serial port, enter relevant information, then click **'Set up'**.
3. Restart the software manager.

Setting IP Address Statically

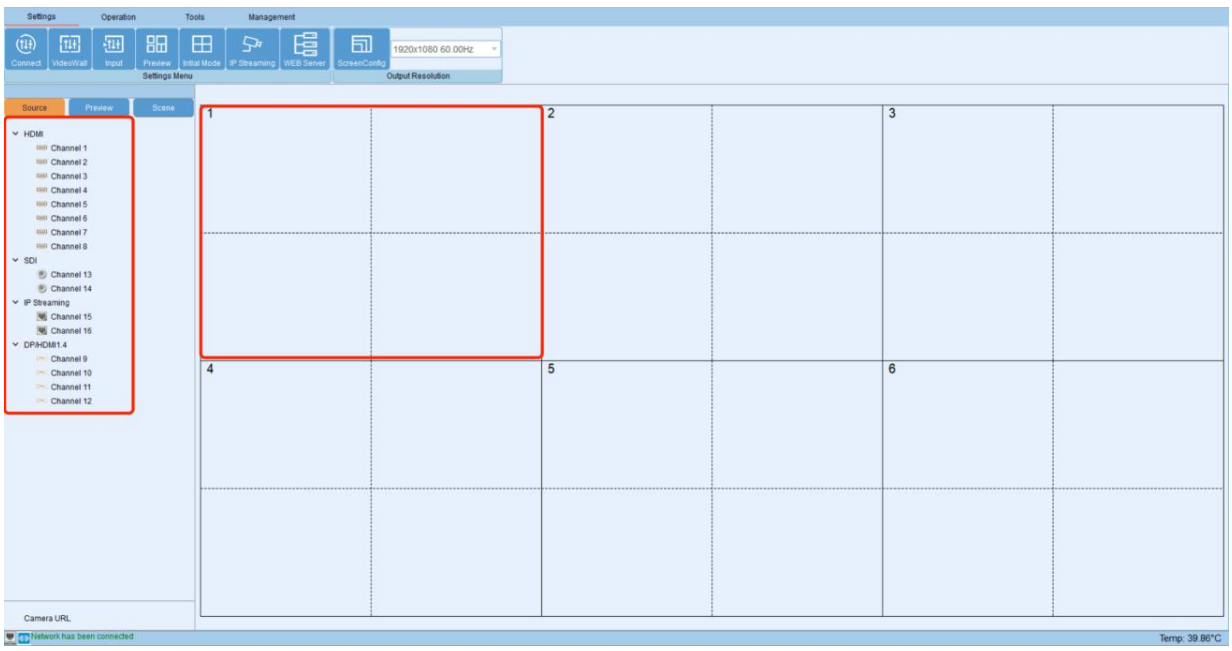
The IP address of the unit can be set statically from the connection settings window as shown in figure below. Simply enter the desired IP address and then press **'Modify'.**



5.2.3 Input Source Setting and Management

Input source Pane

The input source channels are listed on the left-hand side of the manager.The input channels can be managed from the input source management pane. Each channel number corresponds to the input port number on the back of the unit.



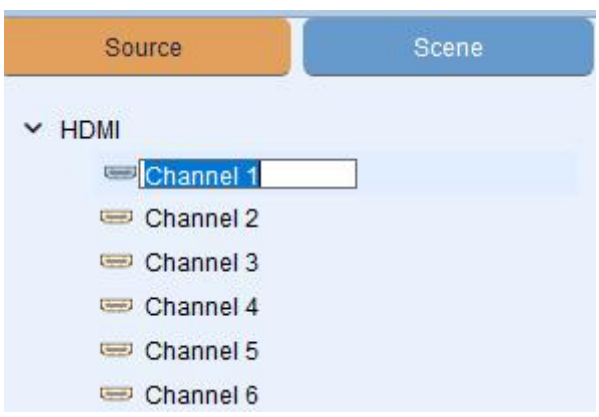
Creating Inputs

The software manager represents output screens as a grid. In the figure above the highlighted square represents screen 1 on a grid of 4 screens.

To map an input source to an output screen, simply drag and drop the channel icon into the square representing the desired output screen.

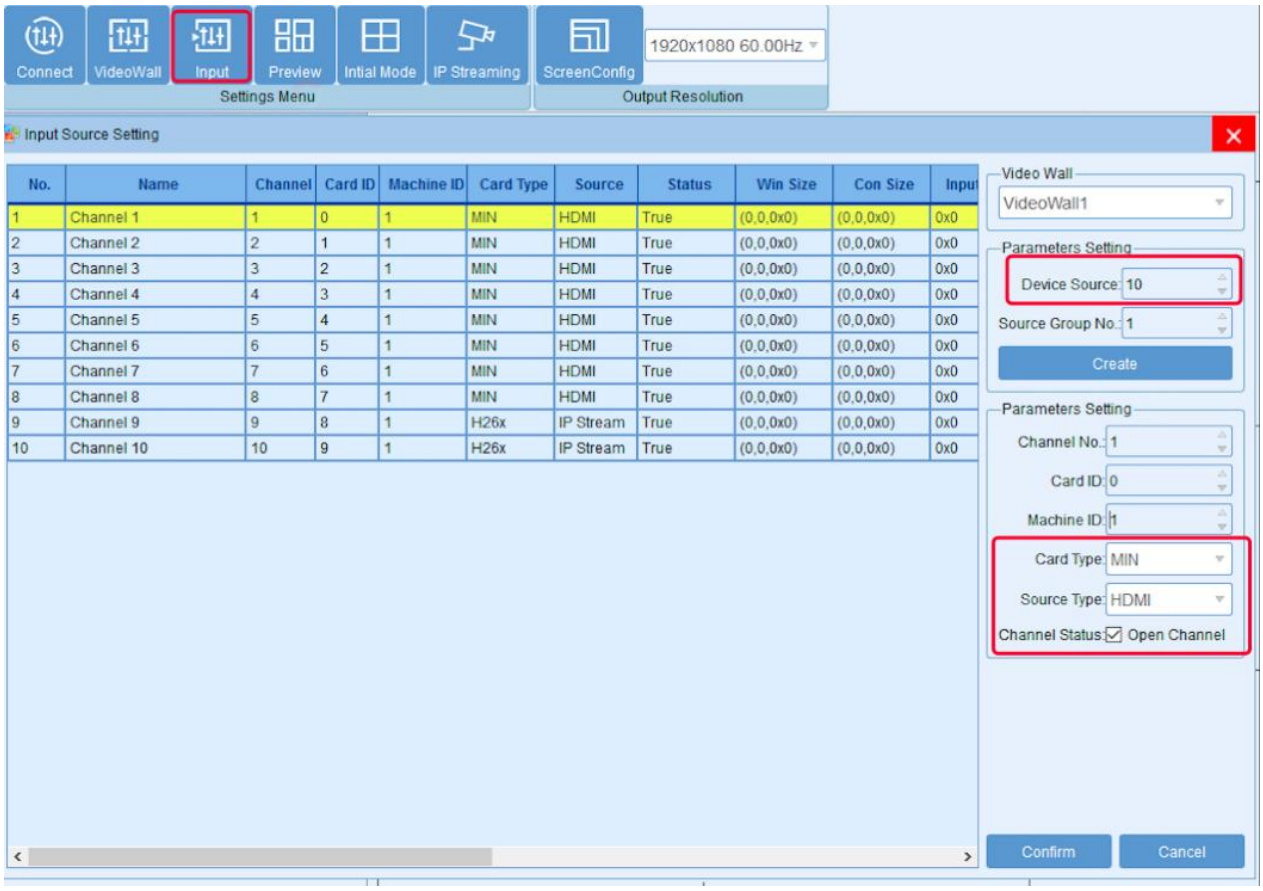
Changing Channel Names

To change the name of a given channel, double left-click the desired input source channel and enter the name of your choice.



Input Source Setting

The user can set each card specification as shown below.



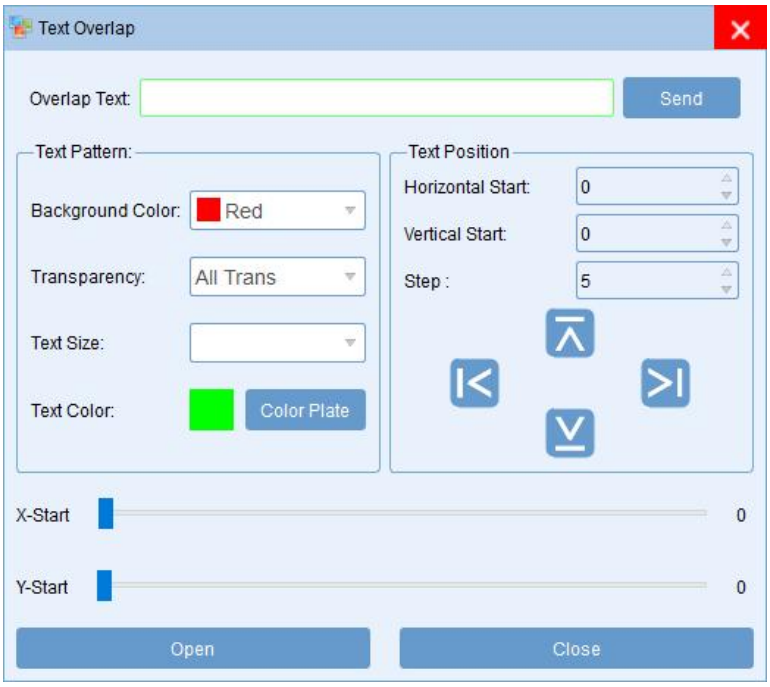
Text overlap and source crop setting(optional functions)

Text overlap

To create a text overlap, right click the desired channel and click '**Text Overlap**' In this example, channel 1 has been selected.The user can create customized text or labels which can be displayed with specified input sources.

From the '**Text overlap**' menu, the user can specify the overlap text, the background color of the text, and the X-start and Y-start coordinates for the text.

To display the overlap text click '**Send**' or '**Open**'. To remove the overlap text, click "**Close**".



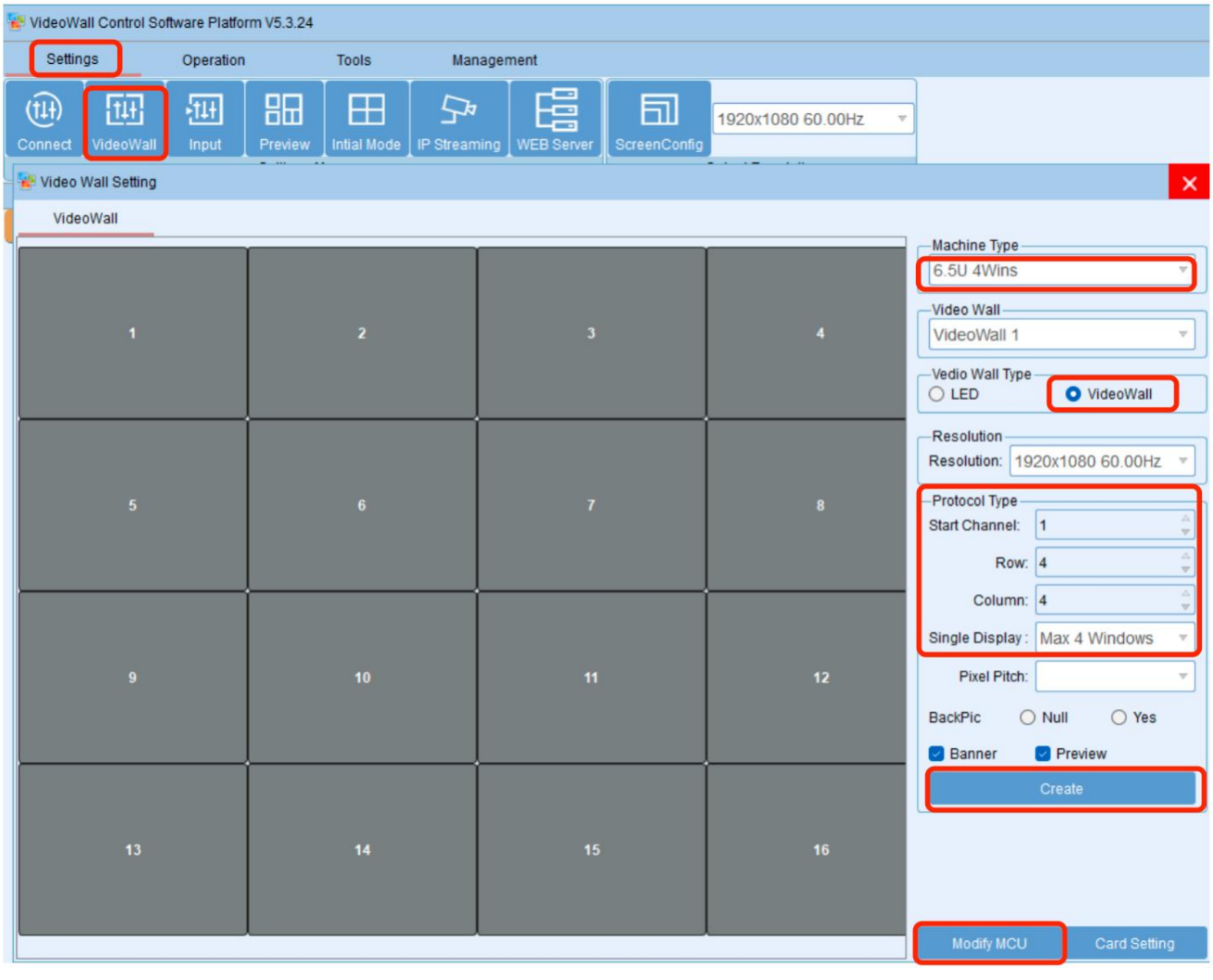
Source Crop

To crop the source image for a specific channel, right click the channel's icon and select **'Source Crop'.** In this example, channel 1 has been selected. Here, you can change the start and end XY coordinates for the source image. When finished, click **'Confirm'**.

5.2.4 Video Wall Setting

From the settings window, it is possible to change the resolution and refresh rate pairs, alter the start channel and window layer numbers, and customize the number of rows and columns in the output section grid. After altering settings, click **'Create'** and then **'Modify MCU'** to save and apply the new settings.

Take a 16 inputs and 16 outputs 4 layer windows unit for example.
Choose the machine type '**6.5U 4windows'** and Video wall type '**Videowall'**
Row **4** and Column **4**, Max **4 windows** in single display. Then click the **'Create'** and '**Modify MCU'** .



5.2.5 Video Window Operation

Open a video window

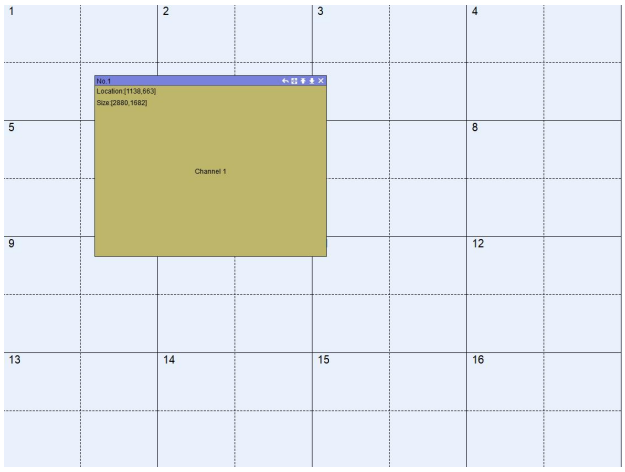
Press the left mouse button to pull out a rectangle, then release the left button to bring up a rectangular window in the control interface.

Adjust video window position

Place the mouse on the window, press and drag the window to the appropriate position and then release to change the window position.

Adjust video window size

Place the mouse in the lower right corner of the window and drag when the mouse changes to a two-way arrow to change the window size.



Window menu operation description

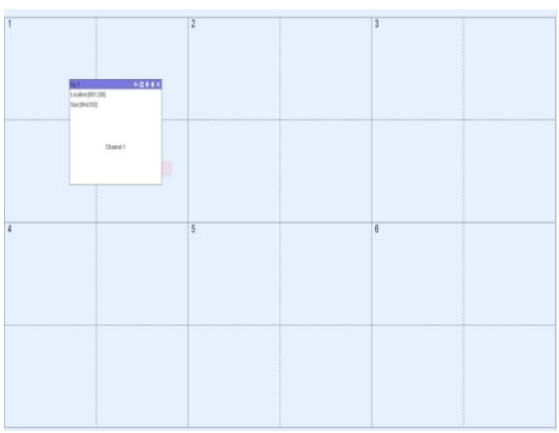
 There are five menus at the top of each window.

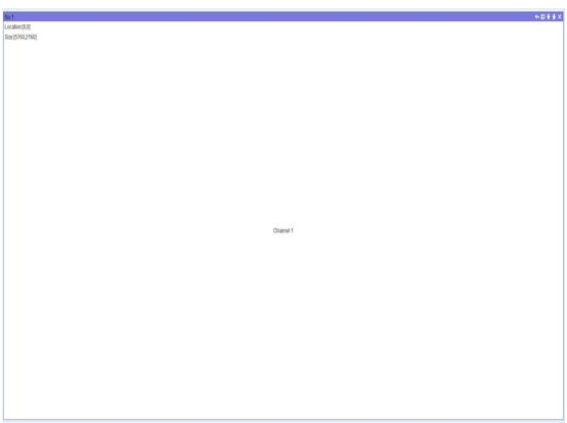
 **Close:** Close the current video window.

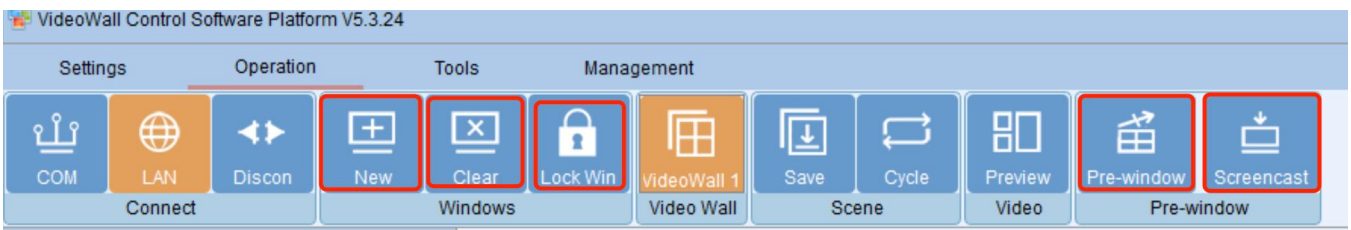
 **Top and Bottom:** Change window level to the bottom or to the top.

 **Return:** After selecting the menu, the current window will be fully displayed on the 1st screen of the row and column in which it is currently located.

 **Full screen display:** Click this menu to make current operation window to be displayed on full video wall. Click this menu again, it will return to previous size.

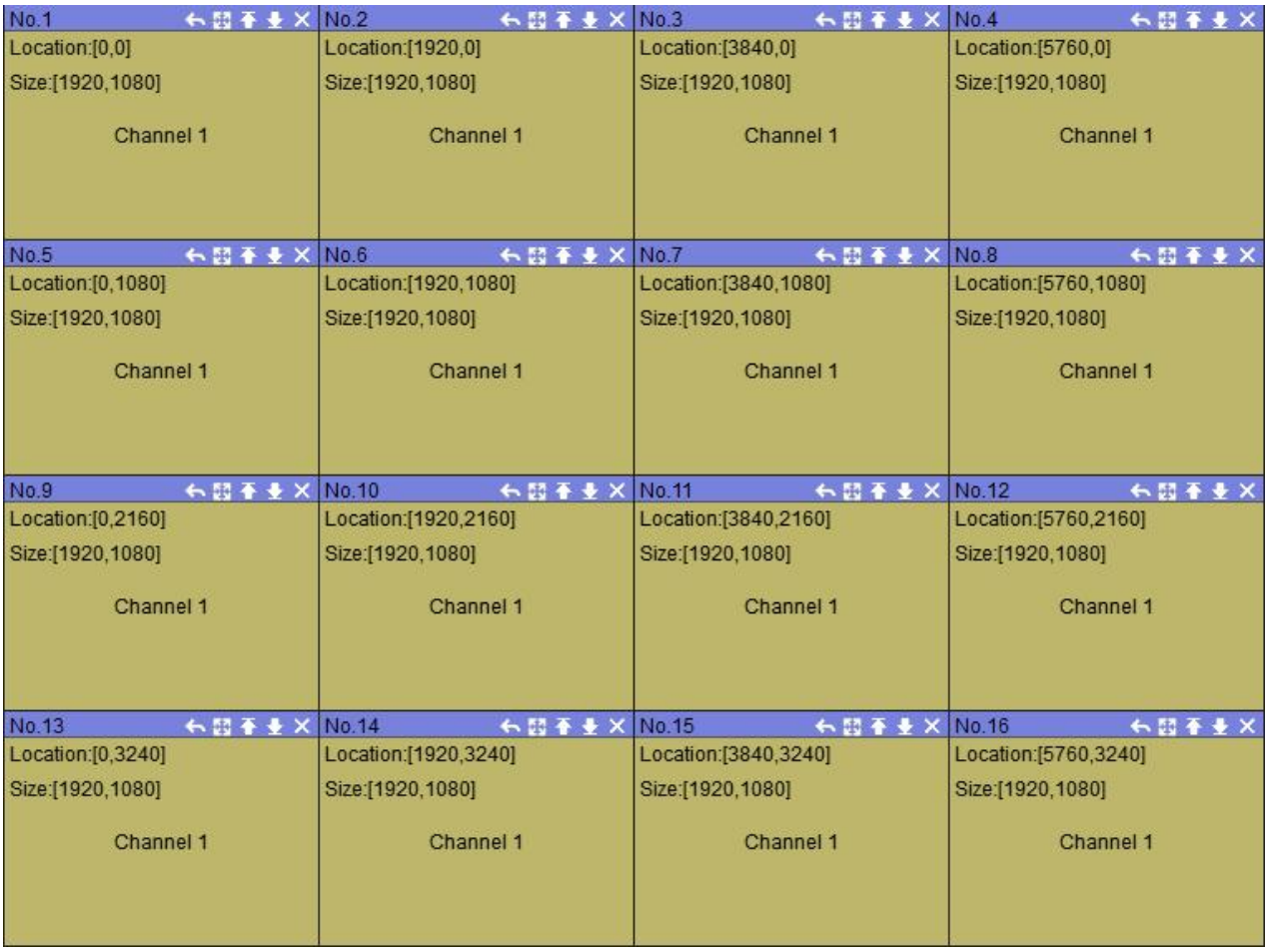






- Click **'Operation' - 'Clear'**, all the video windows will be deleted.
- Click **'Operation'** - **'New'**, all video windows will be displayed in single screen, as shown below.
- Click **'Operation'** - **'Lock'** to lock all video windows, and all the windows cannot be moved but the user can open a new window on it.

- Click **'Operation'** - **'Pre-window'** to set the window position, size, etc. in advance. It will not affect the signal arrangement being displayed.
- Click **'Operation'- 'Screen cast'** to switch the **'Pre-window'** setting to video wall.

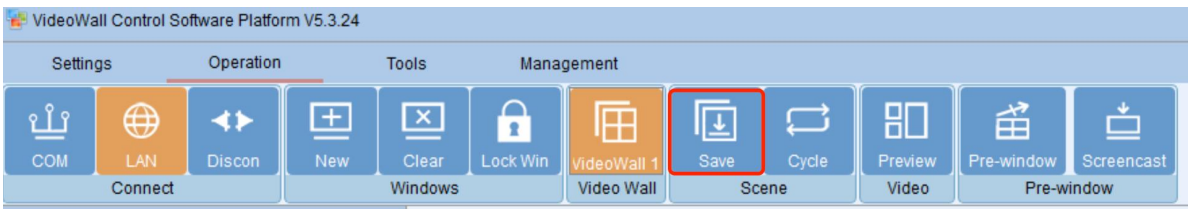


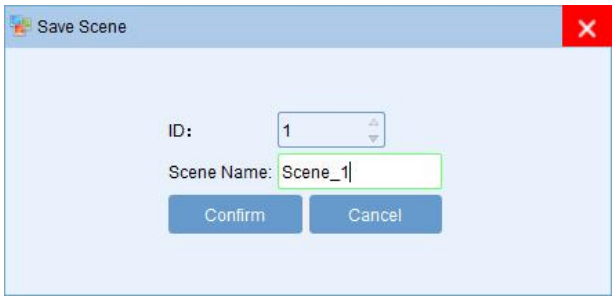
5.2.6 Preset Scene Save, Recall and Cycle

Preset Scene Save

It allows users to create customized display layouts and then recall the scenes.

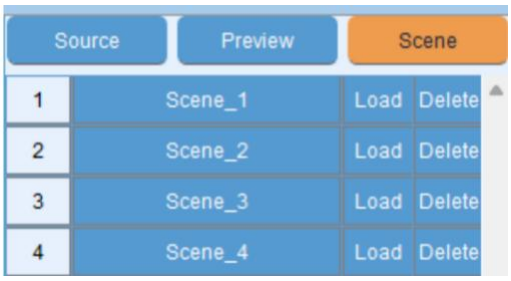
After creating the desired layout, select **'Operation' - 'Save'**. This will create a scene and the scene name can be edited.

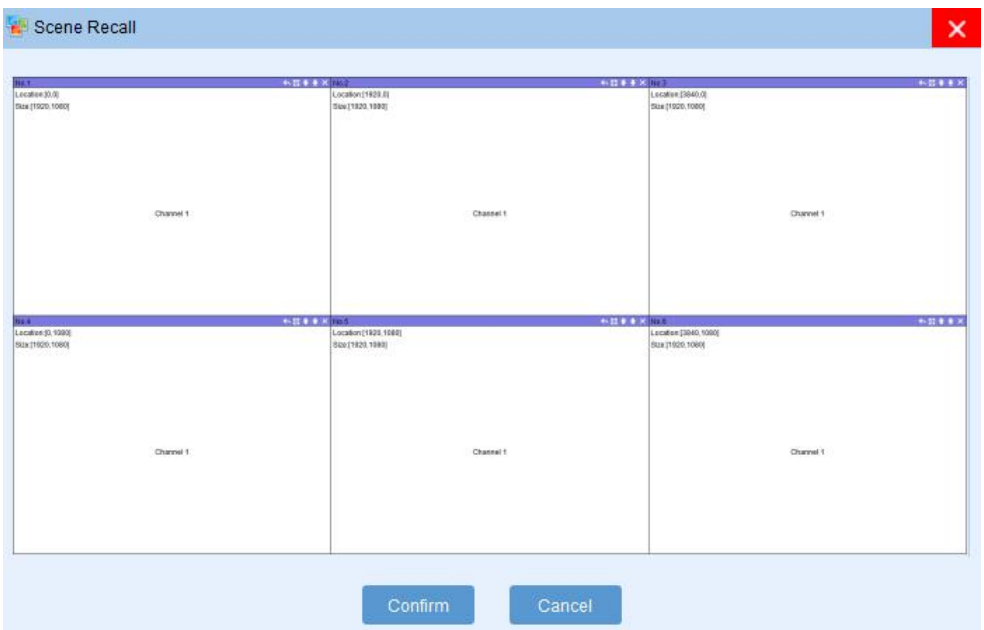




Preset Scene Recall

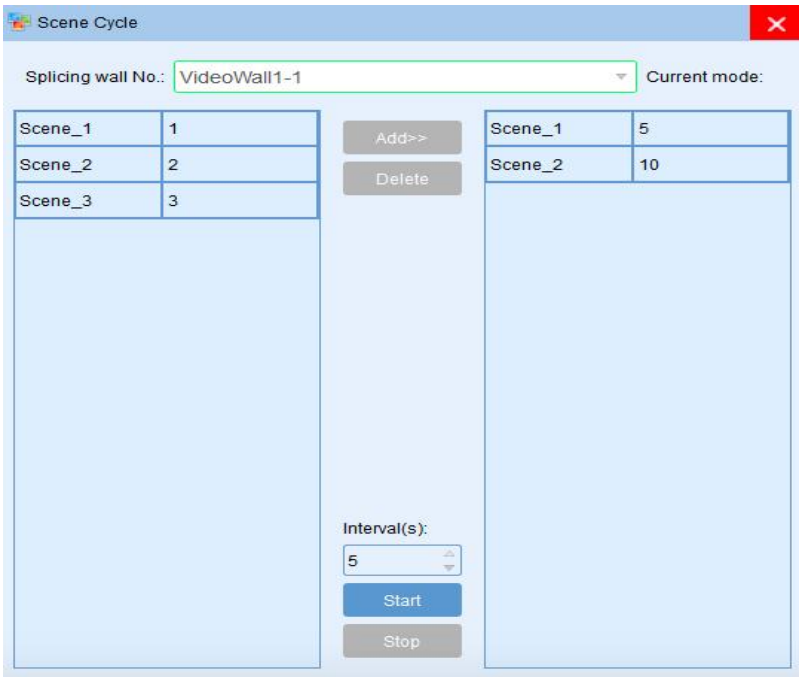
After selecting **'Scene'**, click the **'Load'** and then **'Confirm'** to recall the scene.
Click the **'Delete'** to delete the saved scenes.





Preset Scene Cycle

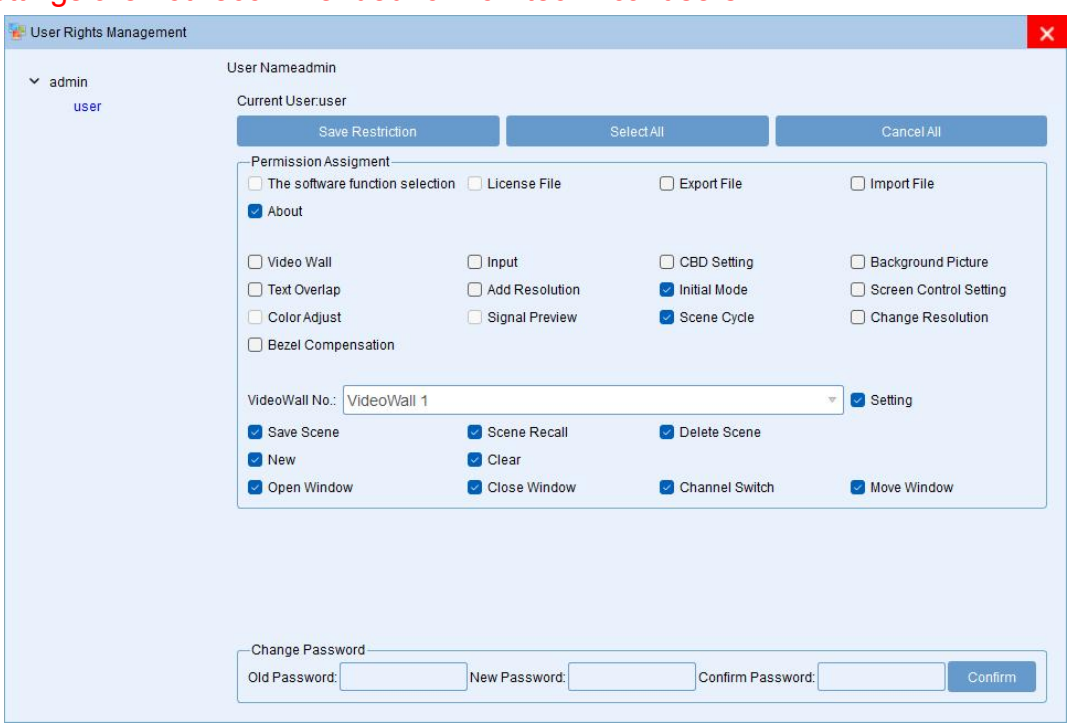
In the navigation bar, select **'Cycle'.** Then select the appropriate layouts, choose the time interval in seconds over which the layouts will play, and then click **'Add'**.
Then, click **'Start'** to begin scene playback.



5.2.7 Users Permissions

From this interface, user permissions and passwords can be easily changed.

Notes: The settings are not recommended for non-technical users.

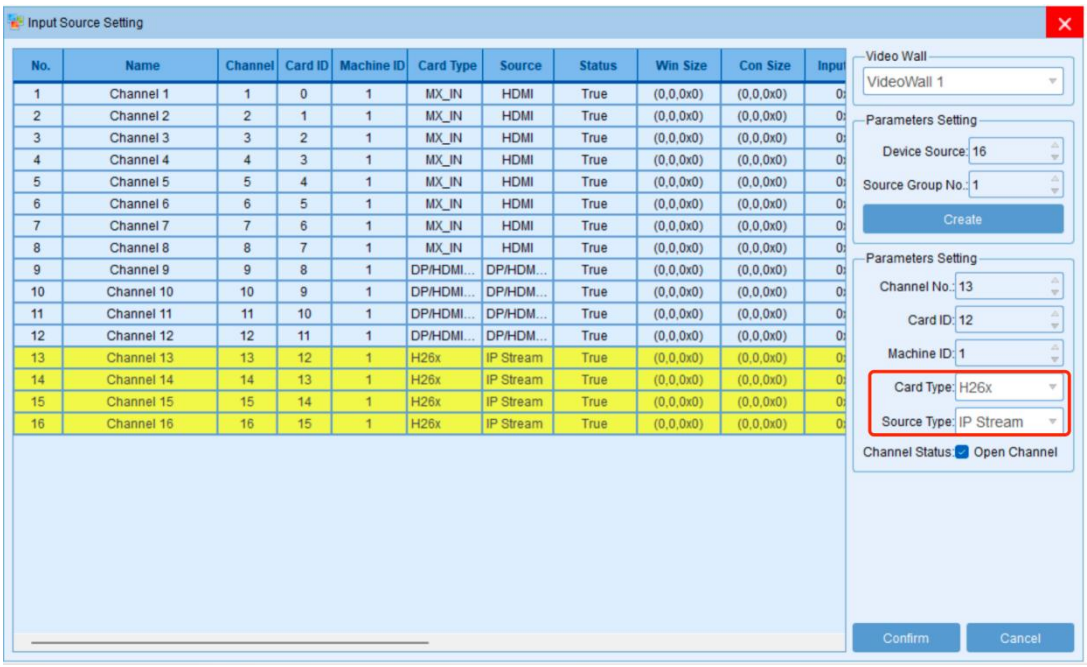


6. Advanced Functions

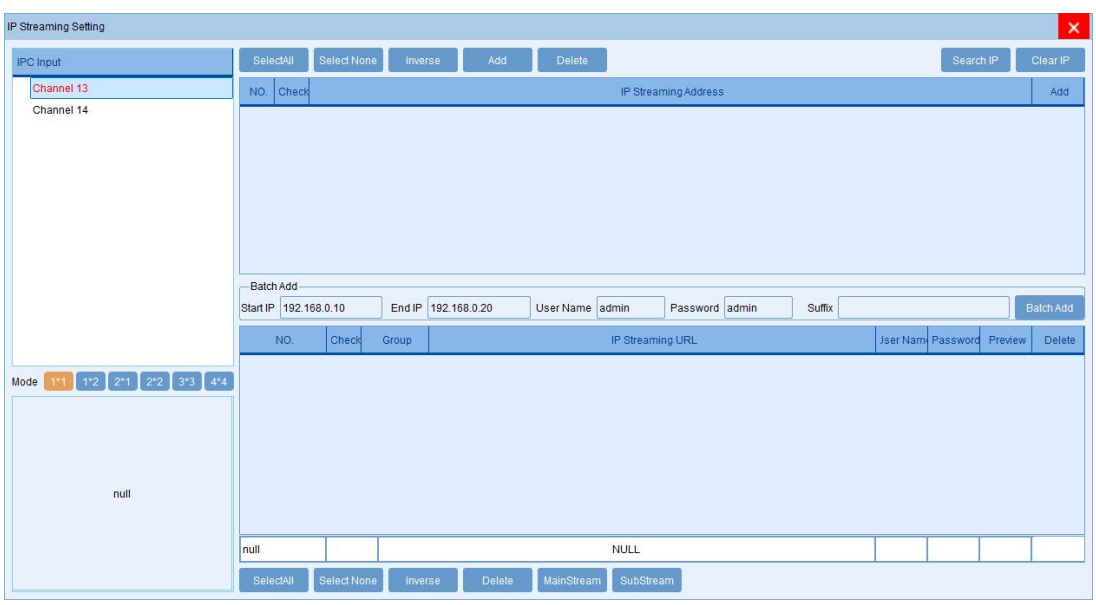
6.1 IP Streaming Setting

Click **'Settings'** - **'Input' in the in** the navigation bar and the following window pops up. Set the card type to **H26X** and select the **'IP Stream'** as source type.

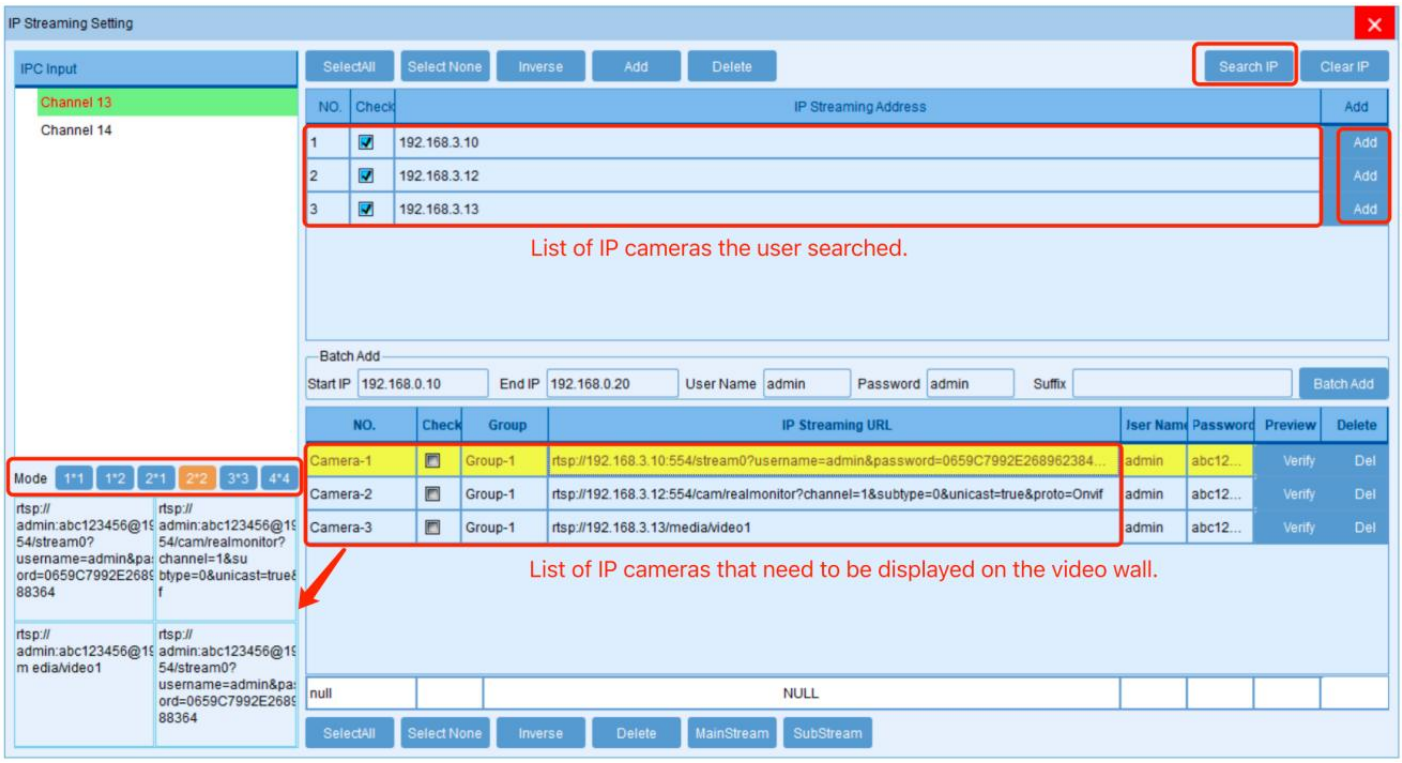
Notes: These settings are done by us before the machine leaves the factory. It is not recommended for non-technical users.



Click **'Settings'** - **'IP Streaming'** and the following window pops up.



Click **'Search IP'**. The process takes about 1 minute to search the IP streaming cameras which on a same network segment with control computer.
The software will list the searched camera IP address in the blank space above.
Then manually add IP streaming cameras that need to be displayed to the blank space below.
All the camera IP address are different but the administrator account and password can be repeated.

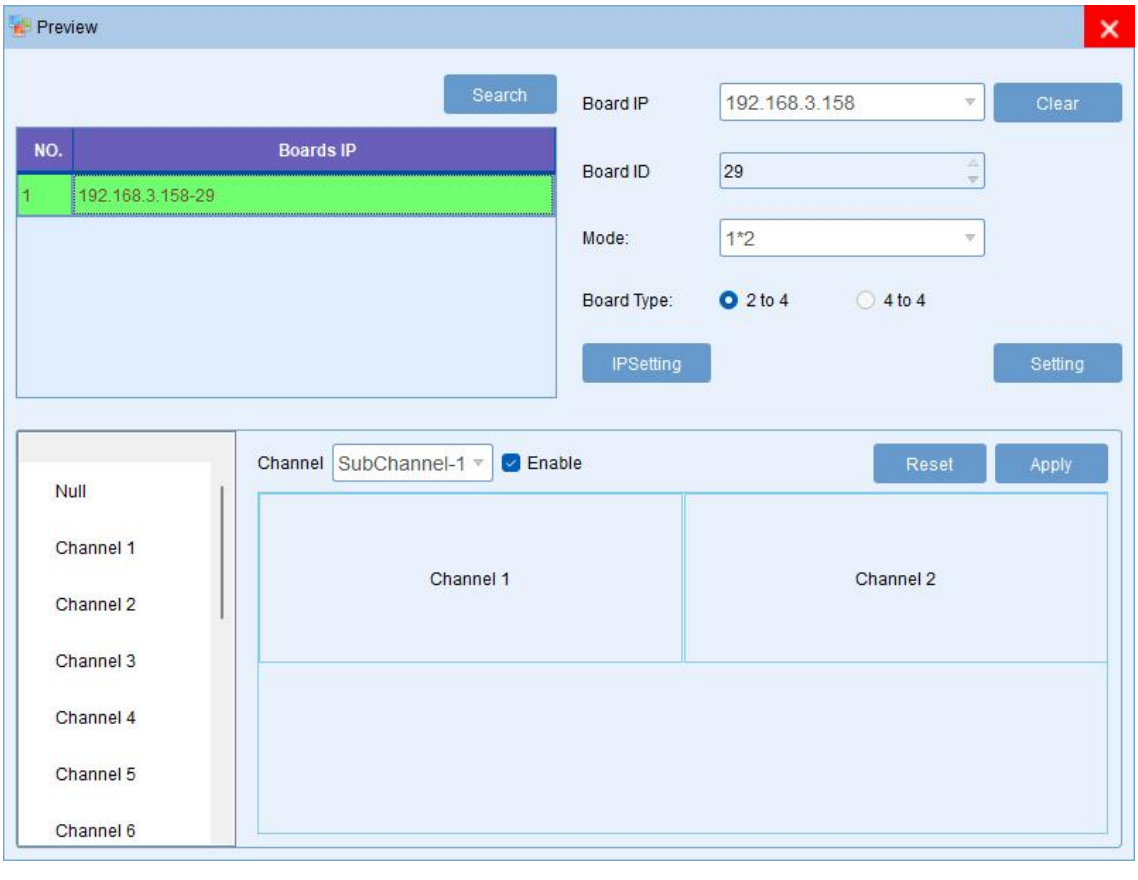


Select the display **'Mode'**(there are 6 options from 1*1 to 4*4) and then drag the camera signals to the layout windows at the bottom of the left. Then the user can use the IP streaming function.

Right clicking the IP streaming signal, it will pop up the sub-menu **'Split mode'** and **'Network'**.
Split mode: The user can select the IP streaming display layout mode.
Network: The user can modify IP input card address here.

6.2 Preview and Echo

Click ‘Settings’ -‘Preview’ in the navigation bar and following window pops up.



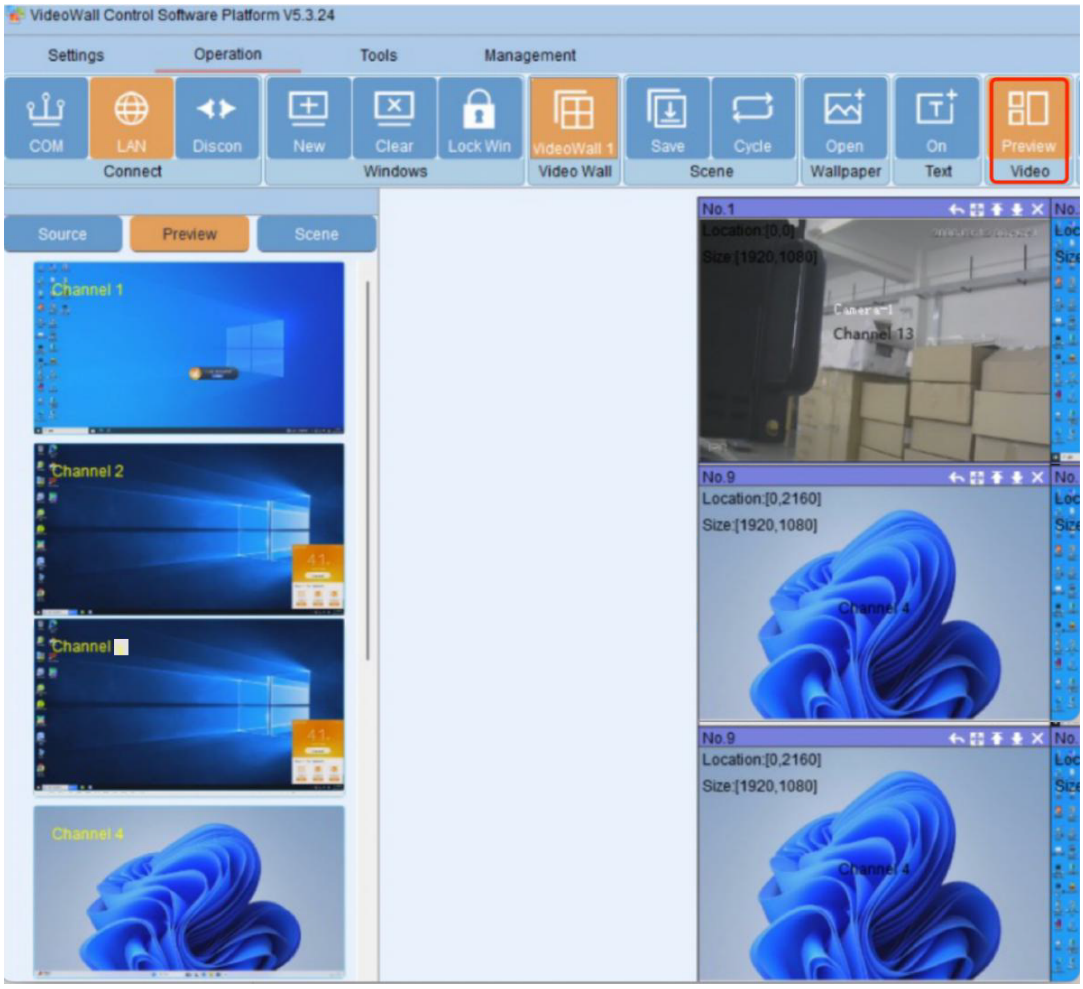
Search: Search the preview board IP address.
Clear: Clear the selected IP.
Board ID: Preview card ID.
Display mode: 1 * 2, 2 * 2, 3 * 3, 4 * 4. The 1*2 display mode is the smoothest, while the 4*4 display mode has a slight lagging effect as the processing unit need more bandwidth.

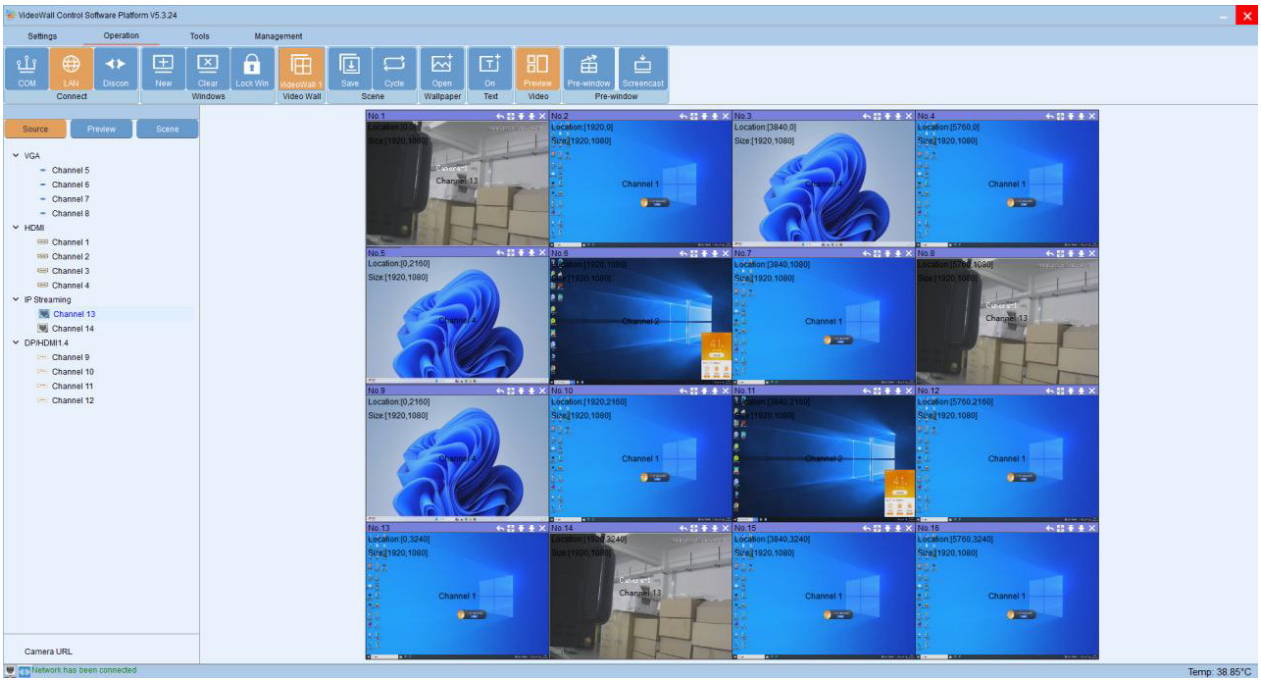
Consult technician before setting up !

Preview board type: 2 to 4 by default
IP Setting: Modify the preview board IP address, gateway, etc.
Setting: Set the display mode to be active.
Channel: There are 4 sub-channels and each sub-channel has 4 display mode options.
Apply: Drag the input signals to a sub-channel windows layout. Then click **‘Apply’** to save the layout.
Reset: Clear all preset channels.

Preview card ID setting(the preview card will occupy an output slot)
Each 2-window output card occupies 2 IDs. For a 2-window unit with 8 outputs (2 pcs output cards), the preview card is in the 3rd output slot, and the ID is 5.
Each 4-window output card occupies 4 IDs. For a 4-window unit with 30 outputs (8 pcs output cards), the preview card is in the 9th output slot, and the ID is 33.

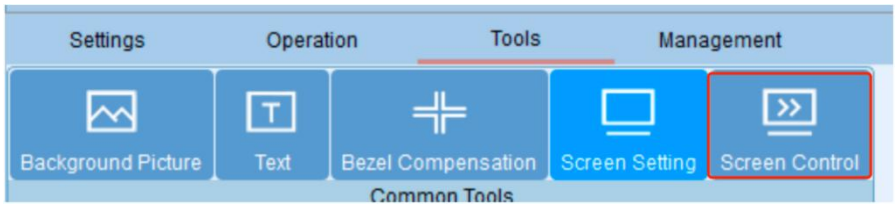
After the setting, click '**Preview**' in navigation bar to use the preview function.

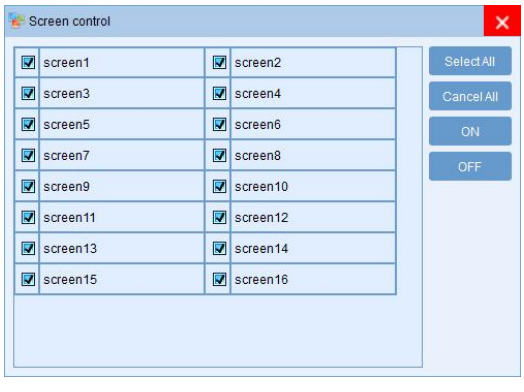




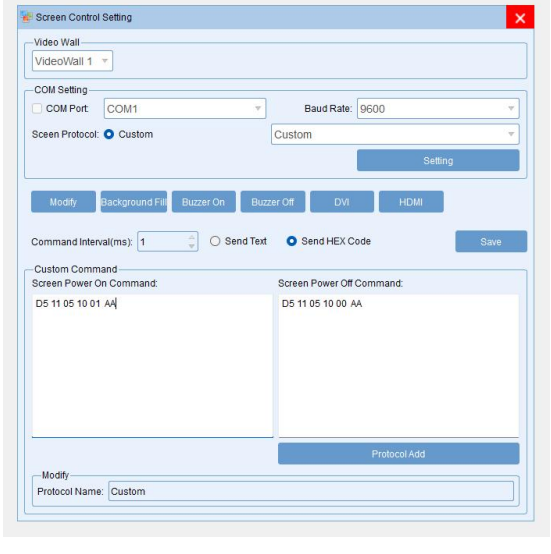
6.3 Screen Control

Click **'Tools' - 'Screen Control'** and the following window pops up.





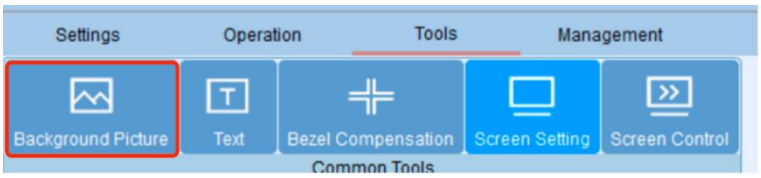
Click **'Tools' - 'Screen Setting'** and the following window pops up.
After selecting, clicking **'ON'** or **'OFF'** to power on or off the screen.



Screen control setting - *Only for Display with RS-232 (COM) supported
Modify: Adding the existing screen power-on/off protocols for the display, or a custom command. The custom protocol should be in HEX or character.
Background Fill: Set the output image colour when the layer is cleared.
Buzzer On/Off: Turn on or off the buzzer sound of the device.
DVI / HDMI: Select the output image format.

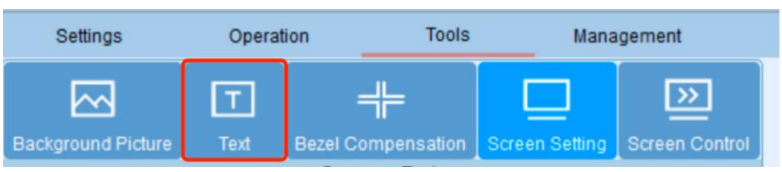
6.4 Background Image

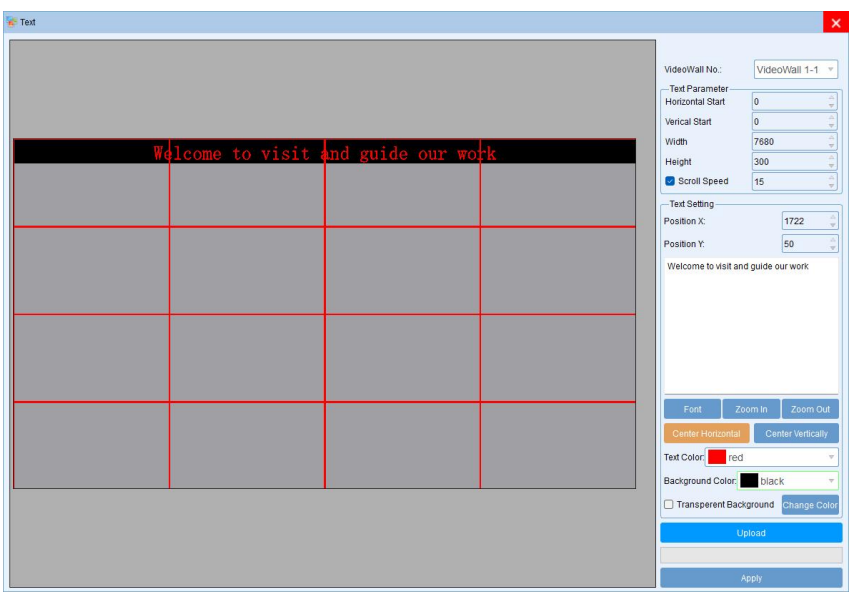
Select the videowall group number. Then load the HD image and click **'Upload'**. When the upload is finished, click **'Loading'** and finally reboot the device.



6.5 Scrolling Text

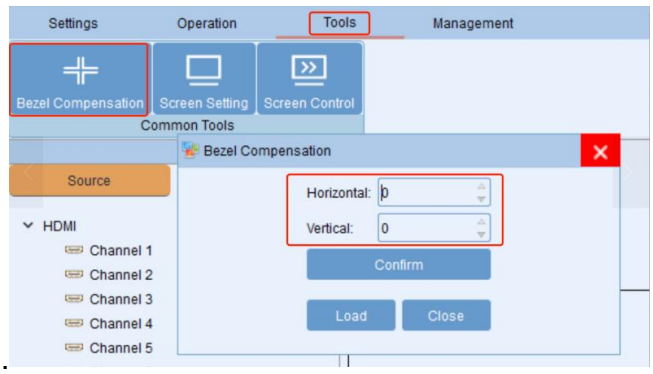
Select the videowall group number and set the font position&colour&background colour (or transparent). Fill in the characters need to be scrolled, then set the scrolling speed or no scrolling. Finally **'Upload'** to the device. When the upload is finished, click **'Apply'** and then reboot the device.



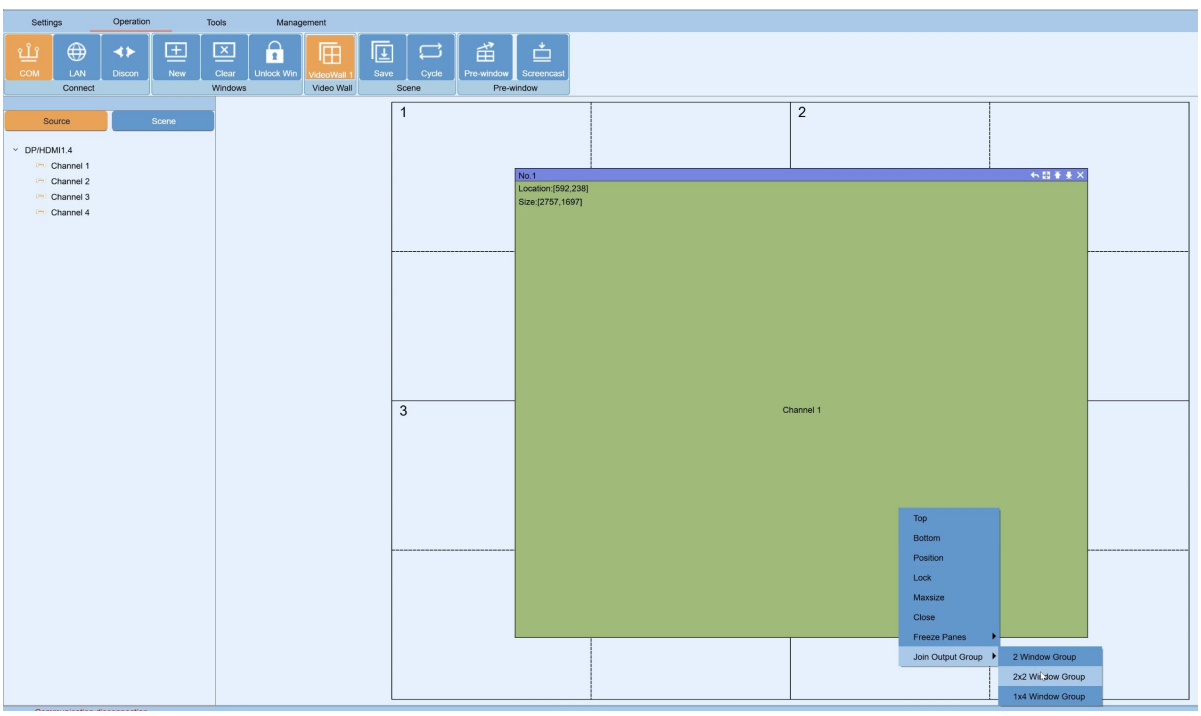


6.6 Bezel Compensation

Click **'Tools' - 'Bezel Compensation'** in the navigation bar and the following window pops up.This function can be used for monitors with large margin. The user can enter the pixel points to be masked horizontally and vertically



6.7 4K Input Source Setting



There are 2 kind of 4K input cards, 1 port on a card(4K60hz) or 2 ports on a card(4K30hz).

For 1 port card, drag a window on any output (4 /8 windows model) and drag a window on 2 or more outputs((2 windows model)). Then right click on the window and select the popup menu **'2*2 window group'** or **'1*4 window group'**. Finally drag the 4K input signal to this window to display.

For 2 ports card, drag a window on 2 rows * 1 column or larger area (vertically larger than 1 output area), then right-click and select the popup menu **'2 window group'**. Finally, drag the 4K input signal to the output window.

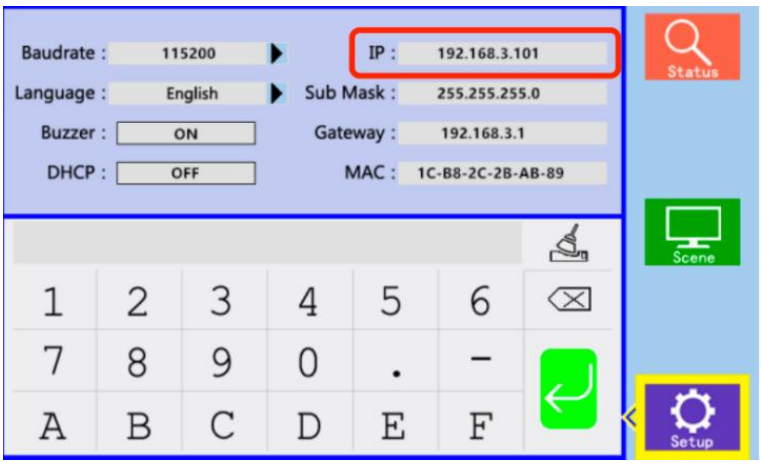
7. WEB GUI CONTROL - *OPTIONAL

7.1 CONNECTION

1. Through the network cable, connect the **RJ45** and **Web** ports to the router.

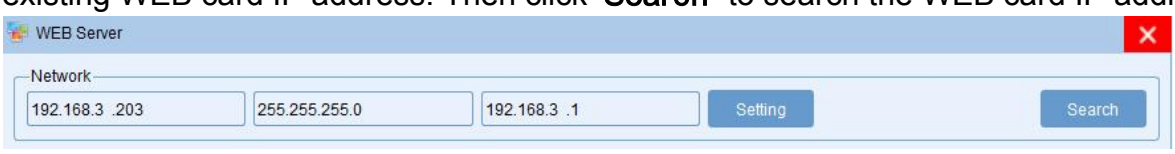
2. Check the IP address of the Web card.

Step 1: Click the front touch screen **'Setup'** menu to view the controller IP address.

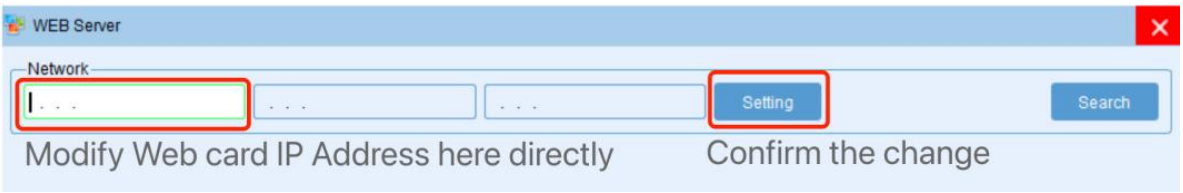


Step 2: Open PC software and connect it with the controller by LAN with the controller IP address. After successful connection, clicking the menu **Web Serve**, the following menu will pop up.

Clear the existing WEB card IP address. Then click '**Search**' to search the WEB card IP address.

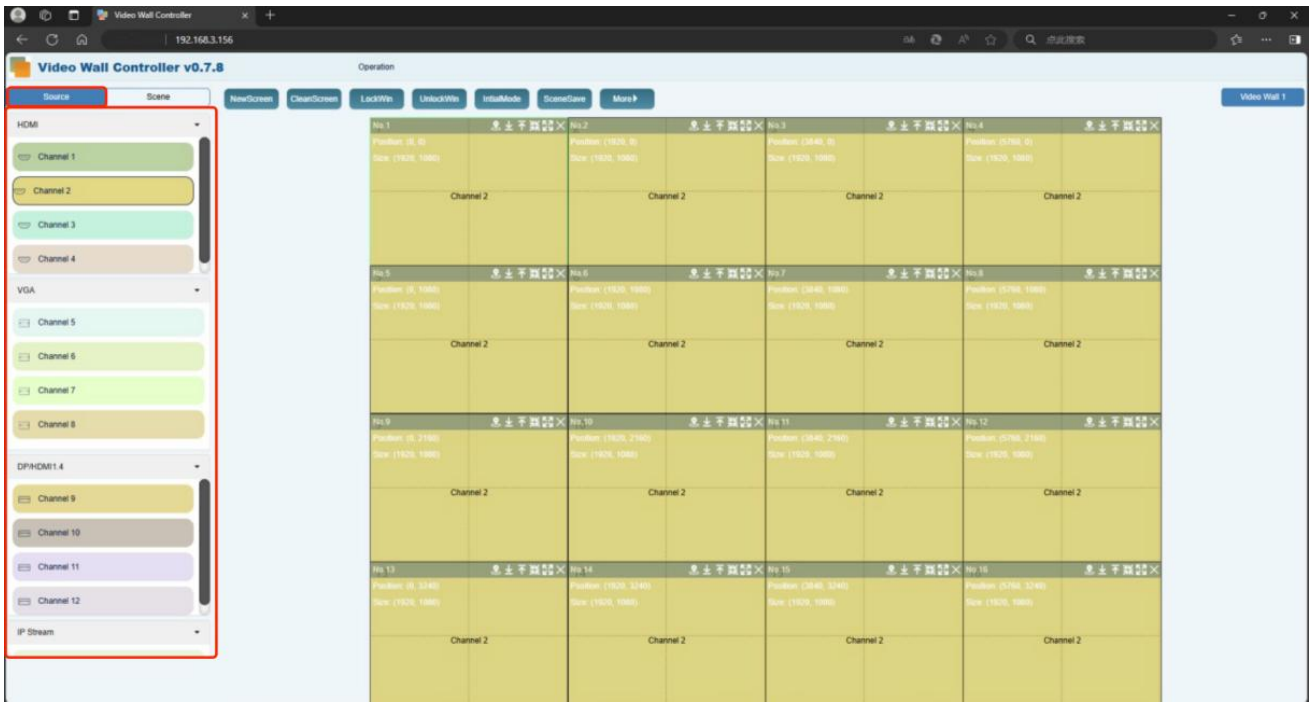


If the user can't find the IP address of the WEB card, the user can modify the IP address of the WEB card directly through the setting as below.

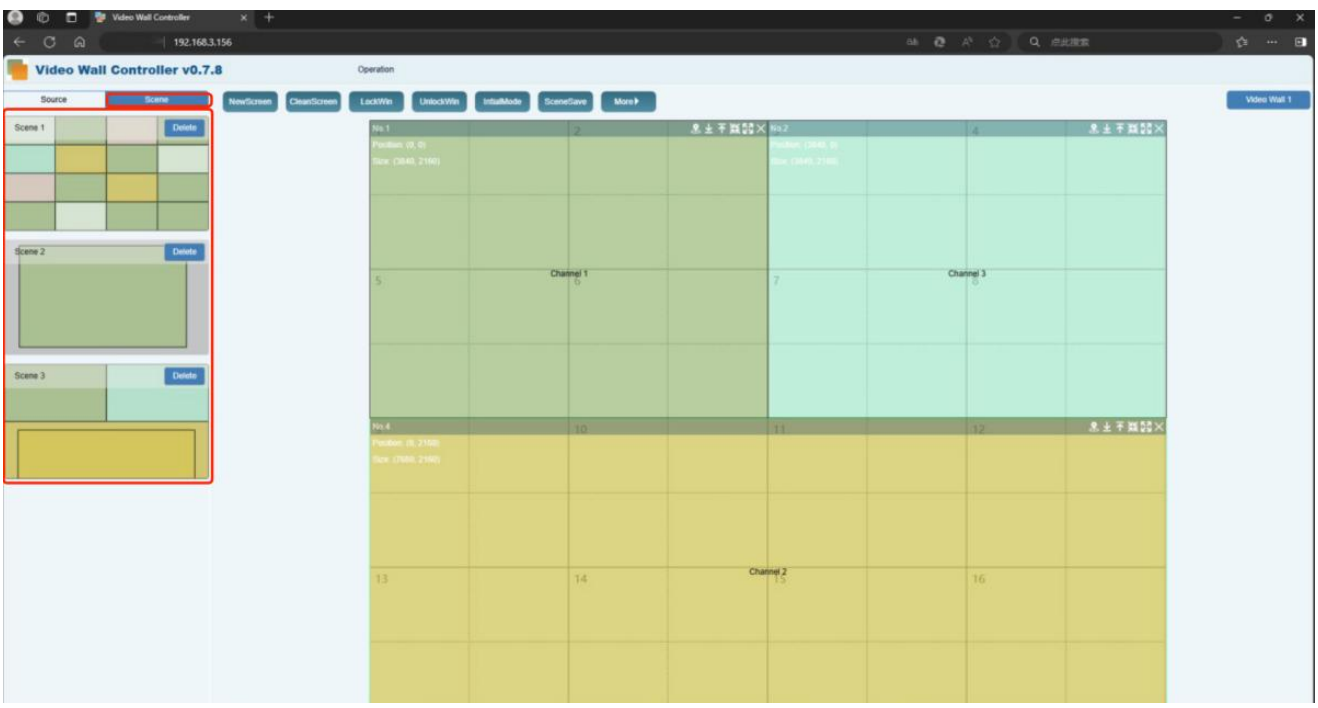


7.2 OPERATION

Source: Signal sources list



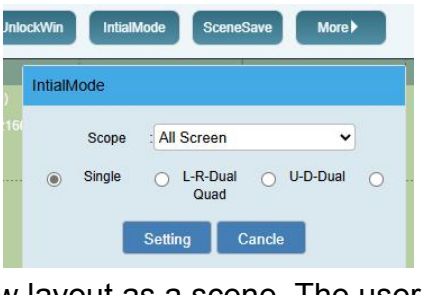
Scene: Preset scenes list



NewScreen: Quickly initialise all outputs with a single screen display.
CleanScreen: Quickly clear all window layers and display the bottom background colour (The default is blue and can be customised)
LockWin: Lock the currently opened window layer.

UnlockWin: Unlock all window layers.

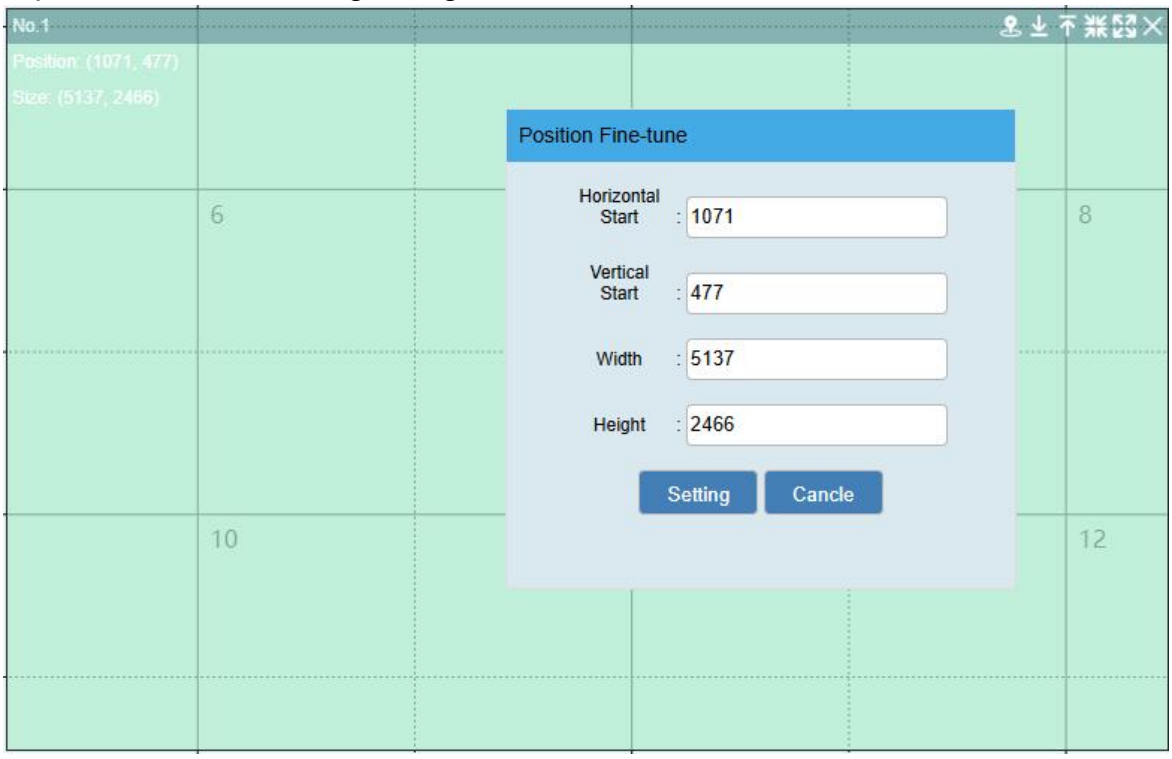
IntiaMode: Select the window layers in each display, including 1X1(**Single**-1 layer), 1X2(**L-R Dual**-2 layers by left and right), 2X1(**U-D Dual**-2 layers by up and down), 2X2(**Quad**-4 layers).



SceneSave: Save the current window layout as a scene. The user can modify the scene name.

More: Click **'More' in** navigation bar and the sub-menu '**SceneCycle'** pops up.

Position Fine-tune(Precise coordinates)**:** The user can click this icon on the window to fill in the coordinate position in the following dialogue box.



:

Set window to bottom

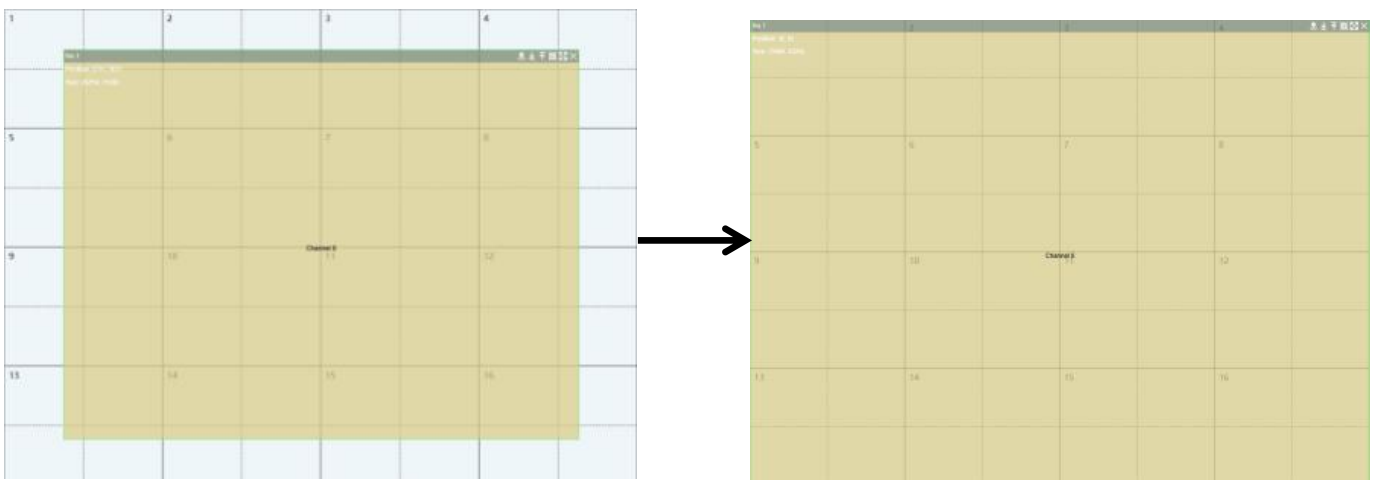
Set window to top

Restore the window

The window will fill the entire screen where the dotted grid is located.

Close the window

A window in full video wall displays: Open a window near to full display, and then double-click this window to achieve full display as follows:



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