



# ANGUSTOS VIDEO WALL CONTROLLER



2020 | 2021

## ACVW CONTROLLER USER MANUAL



## About ANGUSTOS

Angustos was founded in 2000 and is now regarded as one of the foremost manufacturers of digital and analogue KVM solutions.

For more than 20 years our customers have been convinced by our core competencies in extending, switching and distributing standardised computer signals.

We are confirmed to established international standards. We can provide customers with complete data center solutions as well as OEM/ODM (G&D) and Raritan for more than 7 years, together with customers from fortune 500 corporations.

We can cover even from medium to small business, factory and industrial operations, military and government installations, home office and personal use.

# TABLE OF CONTENT

OVERVIEW

SYSTEM DIAGRAM

HARDWARE

SOFTWARE

ADVANCED FUNCTION

SPECIFICATION



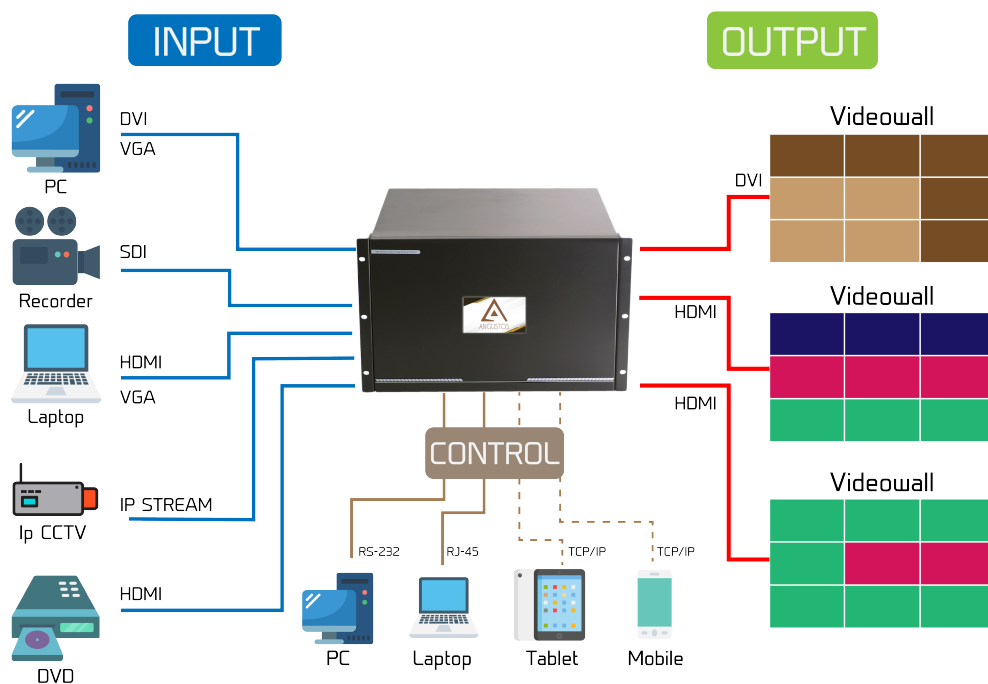
## Content

<b>CONTENT</b> .....	2
<b>1. OVERVIEW</b> .....	3
<b>2. SYSTEM DIAGRAM</b> .....	3
<b>3. HARDWARE</b> .....	3
3.1 FRONT PANEL.....	3
3.2 REAR PANEL.....	5
<b>4. SOFTWARE</b> .....	6
4.1 CONTROL PORT CONNECTION.....	7
4.2 VIDEO WALL SETTING.....	7
4.3 INPUT SOURCE SETTING AND MANAGEMENT.....	8
4.4 VIDEO WINDOW OPERATION.....	9
4.5 SCENE MODE SAVE/ RECALL AND CYCLE.....	1 1
<b>5. ADVANCED FUNCTION</b> .....	1 3
5.1. IP STREAMING SETTING.....	1 3
5.2 PREVIEW AND ECHO.....	1 4
5.3 SCREEN CONTROL.....	1 5
5.4 BACKGROUND IMAGE.....	1 6
5.5 SCROLLING TEXT.....	1 7
<b>6. SPECIFICATION</b> .....	1 7
<b>7. STUDY CASES</b> .....	1 8

## 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. It supports 4 layer video windows per display arbitrary layering, overlap, moving, stretching, zooming in/out, roaming, Picture In Picture.

## 2. System Diagram



### 3. Hardware

The front panel built-in with a touch screen (For 20U unit, please see chapter 4 Software for connection guide), which you can control the scene mode save/recall, IP gateway settings etc.. As shown below:



3U Chassis rear panel for description

In the normal state (when power on the system or the touch screen is not touched for 12 or more seconds) ,the touch screen content will shown in the picture below.

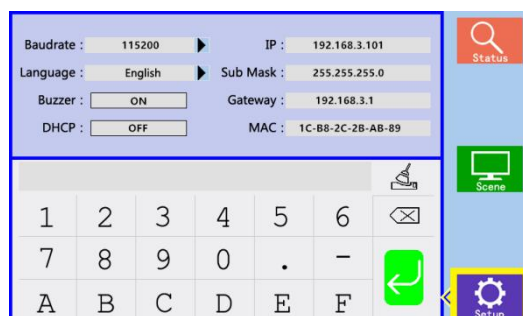


Clicking on the touch screen, the interface will show as below.



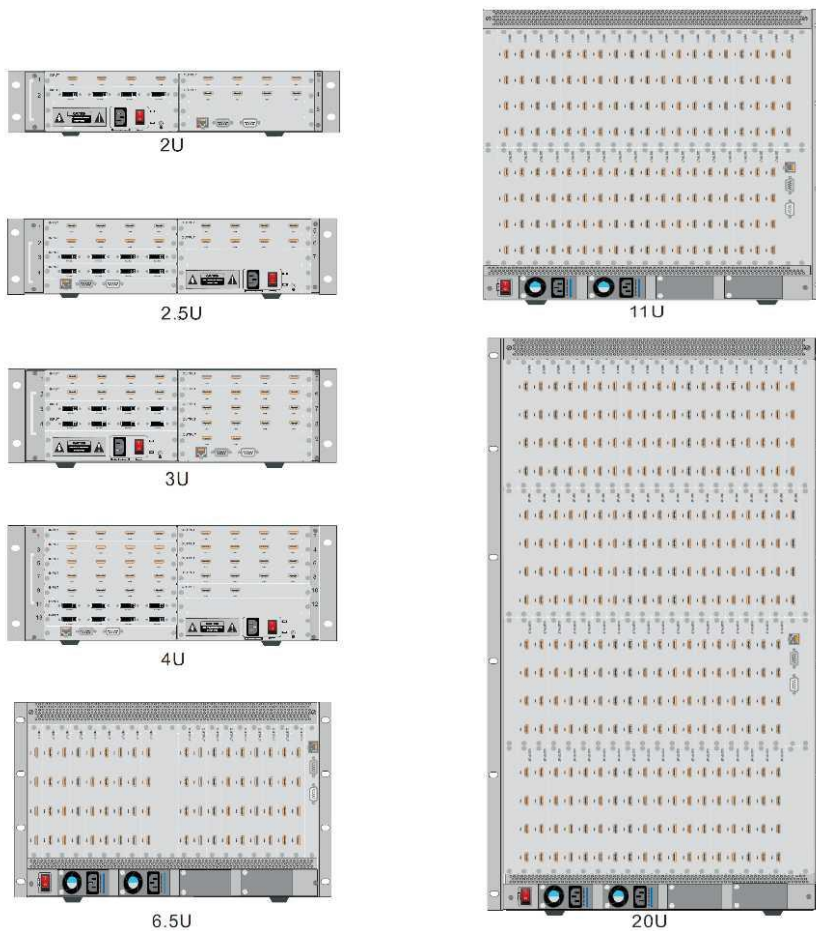
Touch the number item and recall menu to recall the saved scene mode by software.

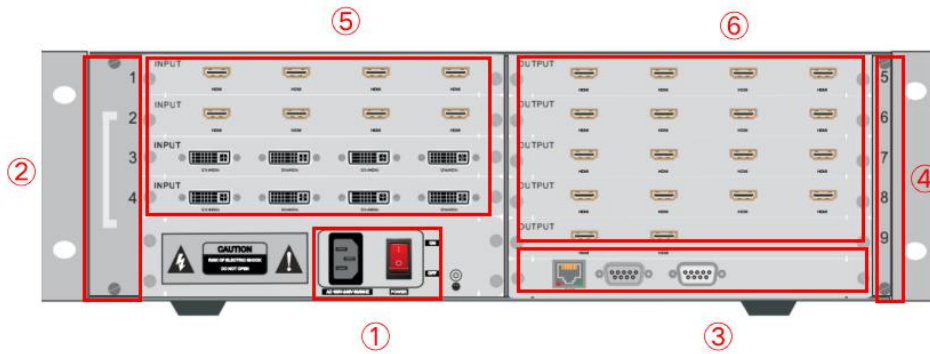
The setting interface is as following picture.



1. **[Baud rate]**: Set the baud rate. Click the [ENTER] button to enter the secondary menu, there are 4 baud rate options [1. 4800; 2. 9600; 3. 19200; 4. 115200]
2. **[Language]**: Language setting. There are two language choices Chinese and English.
3. **[ Buzzer]**: Buzzer switch. Turn on/off the buzzer sound when operating the device.
4. **[Automatic search]**: IP automatic search function. Turn on/off the automatic search function of the device control port IP address.
5. **[IP]**: IP settings. Modify the fixed IP address through following numbers and letters.
6. **[Subnet mask]**: Modify the subnet mask through following numbers and letters.
7. **[Gateway]**: Gateway settings. Modify the gateway through the following numbers and letters. The gateway needs to match the fixed IP address.
8. **[MAC address]**: Modify the MAC address through the following numbers and letters.

### 3.2 Rear Panel





3U Chassis rear panel for description

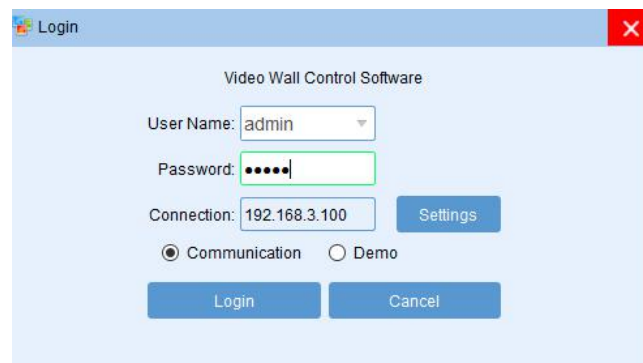
- ① **Power supply and switch:** AC220V 50HZ. Redundant power supply is optional.
- ② **Fan:** The fan starts to work when power on.
- ③ **RS232 IN and RJ45 network ports:** Serial communication input to be connected with control computer or other control equipment. Or connect the equipment to the network for remote control;
- ④ **Dust-proof net:** Prevent dust from entering the machine to protect the board.
- ⑤ **Input board:** Input signal interface to be connect ed with external signal source;
- ⑥ **Output board:** Output signal interface to be connected with video wall displays.

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

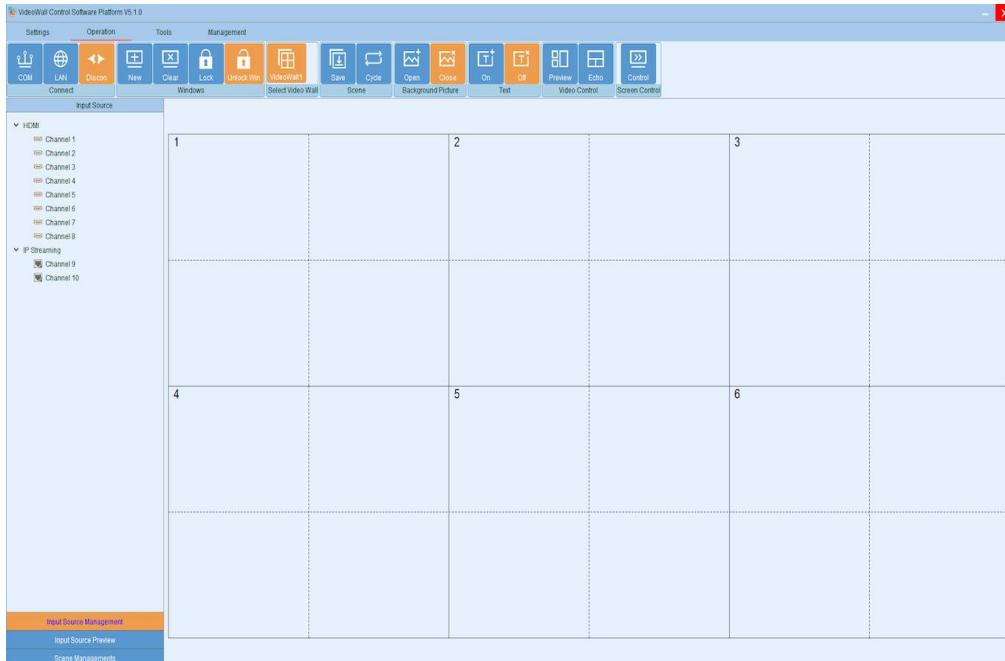
## 4. Software

Double click the application program to open the control software interface.

The user name and password both are “admin”.



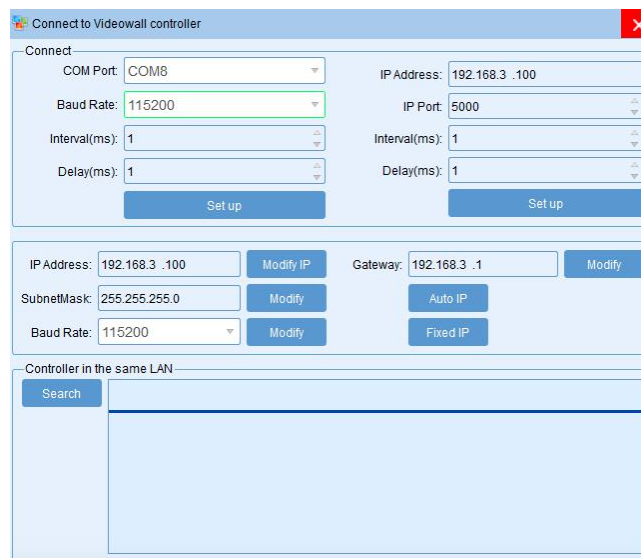




### 4.1 Control Port Connection

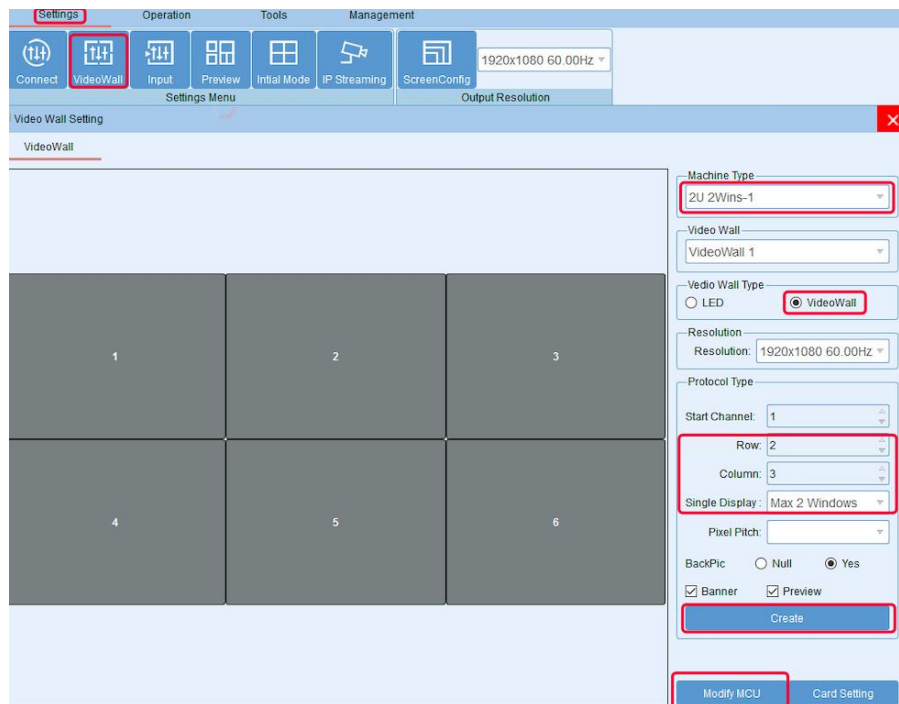
Click sub-menu **[Connect]** in **[Setting]** to pop up a dialog box as follows. The default baud rate is 115200. Select the corresponding COM port and click **[Set up]** to connect.

For the network connection control, click **[Search]** button to automatically obtain the IP address and device port. Then click **[Set up]** button to connect.



### 4.2 Video Wall Setting

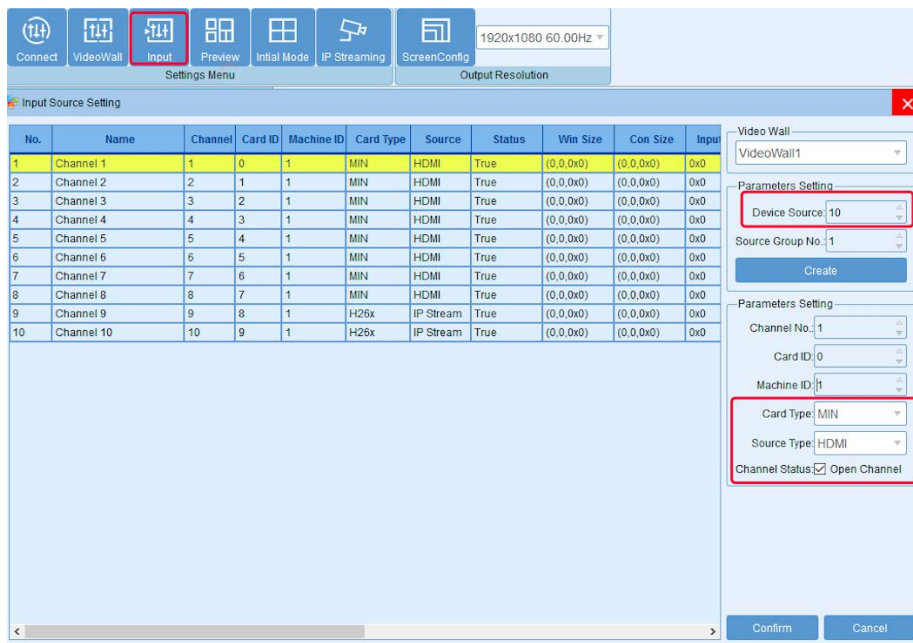
Take 8 input and 6 output 2 layer windows video wall controller setting for example. Choose the machine type 2U **2windows-1** and Video wall type **Videowall** Row **2** and Column **4**, Max **2 windows** in single display Then click the icon **[Create]** and then **[Modify MCU]** .



### 4.3 Input Source Setting and Management

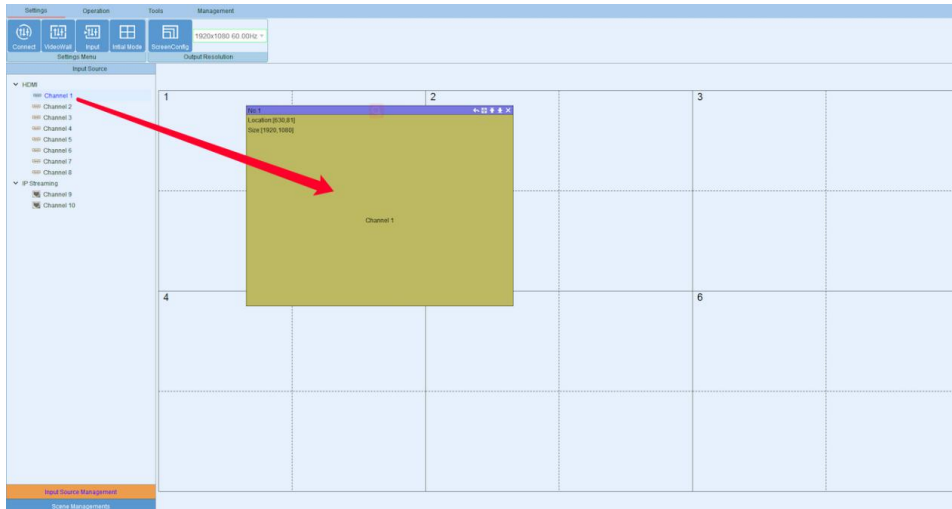
#### Input Source Setting

The user can set each card specification as the interface shown below.



#### Input Source Management

On the left side of the software interface, there is an input sources list. As shown below. Select one input signal and drag it to the right side of the display area to realize signals switching. Double-click the input signal to change its name.



### Input source setting

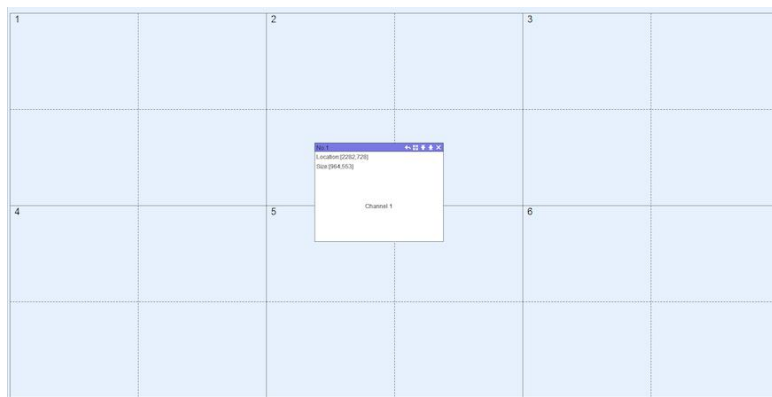
Right click the input source, it will pop up a sub-menu for input source setting. Such as text overlap in inputs and input source cropping.



## 4.4 Video Window Operation

### Open video window

Press and drag the left mouse button in the operation interface to create a rectangle window, as show in the figure below.



## Adjust video window size and position

Move the mouse pointer on the video window, then press and drag it to move the window to an appropriate position. Move the mouse pointer to the bottom right of the window, and then drag it to change the window size when it turns into a two-way arrow.

## Window menu operation



There are five menus at the top of each window. Its available for users to do windows operation. The black full line in operation area represents screen frame. The dotted line represents blocks in single screen unit.



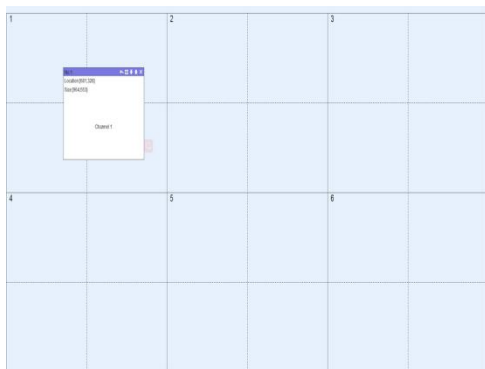
**Close:** Close the current video window



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



**Full screen display:** Click the menu to realize current operation window to be displayed in the entire video wall. Click this button again, it will return to previous size.



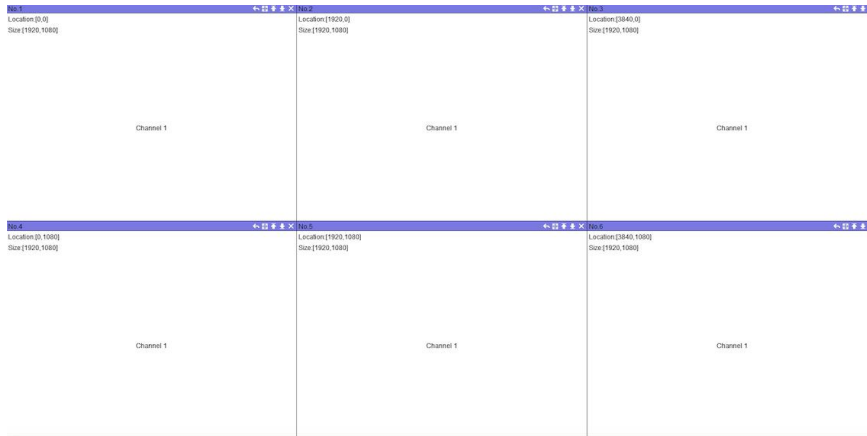
**Return:** Click the menu, the operation window will be displayed fully in the single screen of the current upper-left angle.



Click sub-menu **[Clear]** of **[Operation]** menu, all the video windows will be deleted.



Click sub-menu **[New]** of **[Operation]** menu, video windows will be displayed in single screen of the video wall, as shown in the figure below.



Click sub-menu **Lock** of **Operation** menu to lock all video windows, and all the windows cannot be moved but the user can open a new window on it.



Click sub-menu **Unlock** of **Operation** menu to unlock all the windows.



Click sub-menu **Initial mode** of **Settings** to select the window layers for single screen before you operate the **New** function.

## 4.5 Scene Mode Save/ Recall and Cycle

### Scene Mode Save



Click the sub-menu **Save** in **Operation** menu to save current video wall layout.

The scene name can be edited.



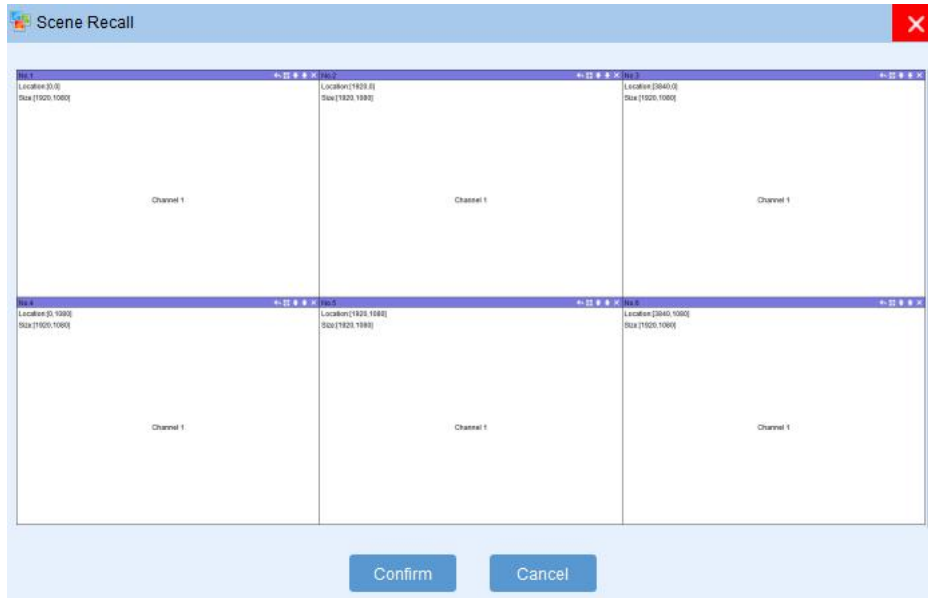
### Scene mode recall

There are **Scene Management** menu at the bottom left interface.

Click the menu **Load** to recall the mode and choose **Confirm** to take it effect.

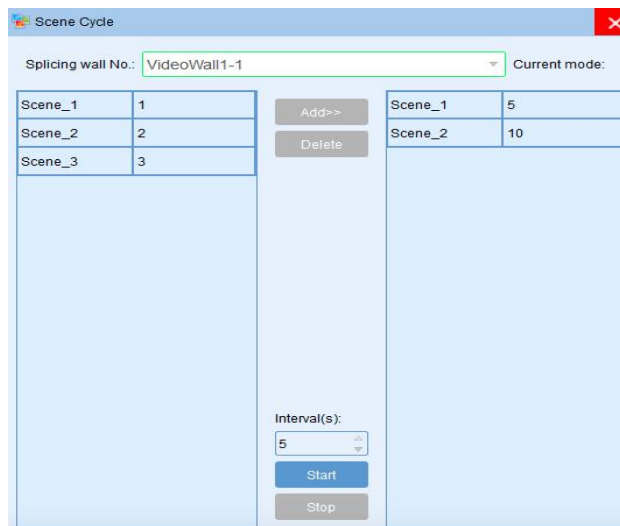
Click the menu **Delete** to delete the saved scene mode data.

Scene Management			
1	Scene_1	Load	Delete
2	Scene_2	Load	Delete
3	Scene_3	Load	Delete



### Scene mode cycle

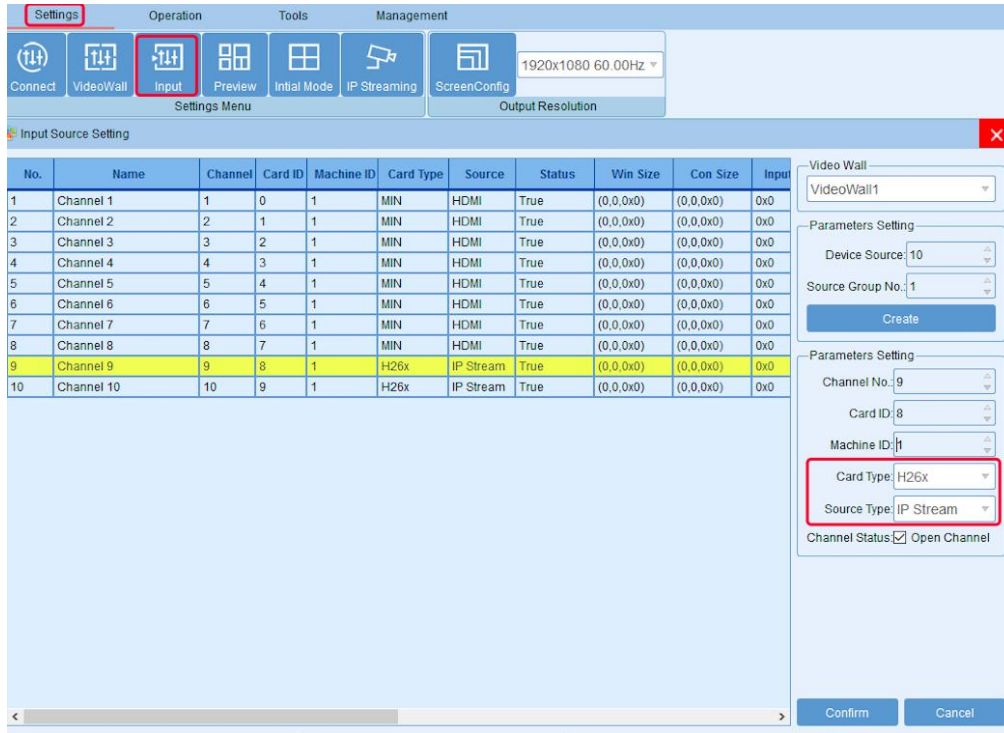
Click the sub-menu **[Cycle]** in **[Operation]** menu, then add the cycle scenes to the list and choose **[Interval]** time for each mode. Clicking the icon **“Start”** to start the cycle.



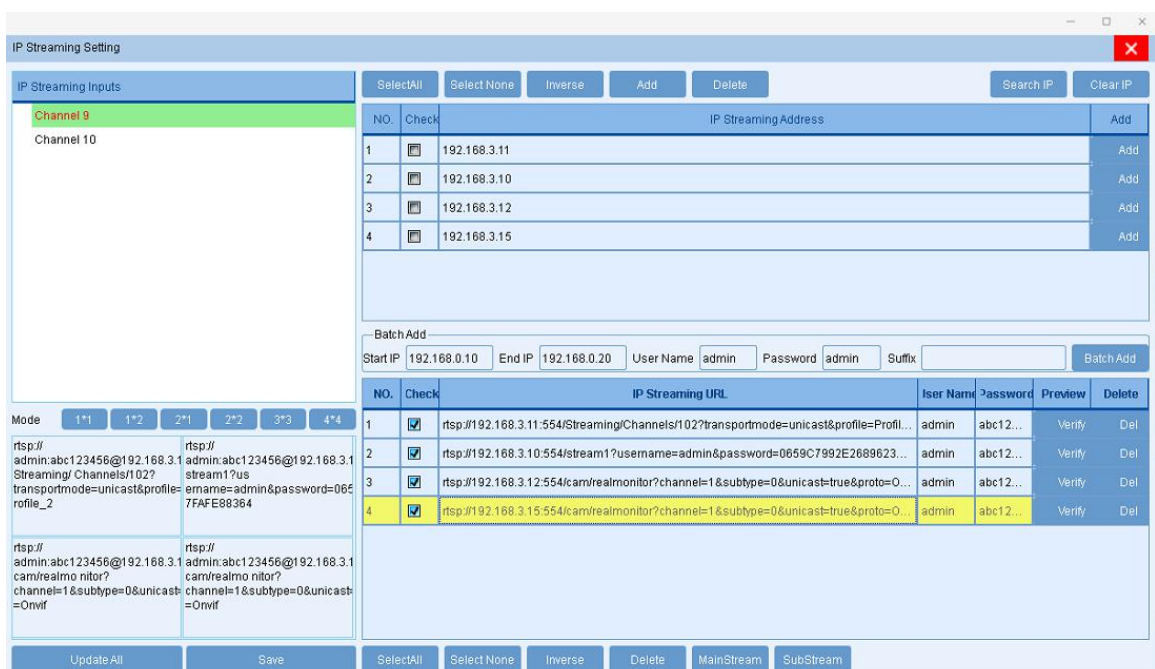
## 5. Advanced Function

### 5.1. IP Streaming Setting - Optional for Streaming card

Firstly set the IP input card type to 26X via Settings-Input-Card type and select the **【Source type】** as IP Stream. As shown in the following picture:



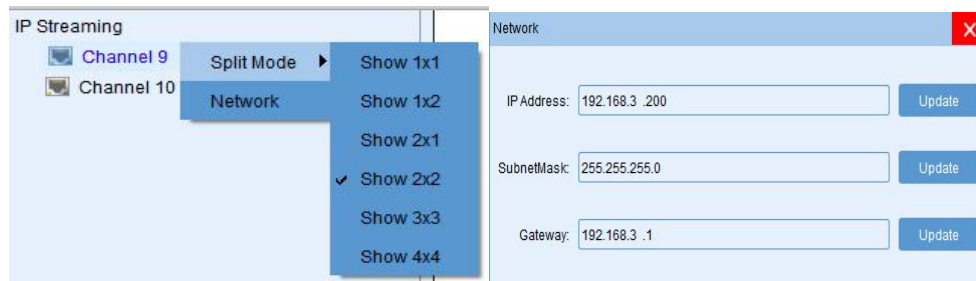
Select the sub-menu **【IP streaming】** of **【Settings】** menu, the interface as shown below.



Note: In this interface, you need to click **[Search IP]** first. The process takes about 1 minute to search the IP streaming cameras which on a same network segment with the control computer. The software will list the searched camera IP address in the blank space above. Then manually add other IP streaming cameras that need to be displayed on the video wall 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 and drag the camera signals to the window. Then click **[Save]** and **[Update all]** . Finally restart the controller.

Right clicking the IP streaming signal, it will appear the display mode and network setting. The user can change the display mode and modify IP input card address here.



## 5.2 Preview and Echo - Optional for Preview Card

Click the sub-menu **[Preview]** of **[Settings]** , the software interface as shown below.

**Search:** Search the preview board IP address.

**Clear:** Clear the selected echo board IP.

**Board ID:** Preview board ID.

**Display mode:** 1 \* 2, 2 \* 2, 3 \* 3, 4 \* 4

**Preview board type :** 2 to 4 by default

**Modify IP:** Modify the preview board IP address, gateway, etc.

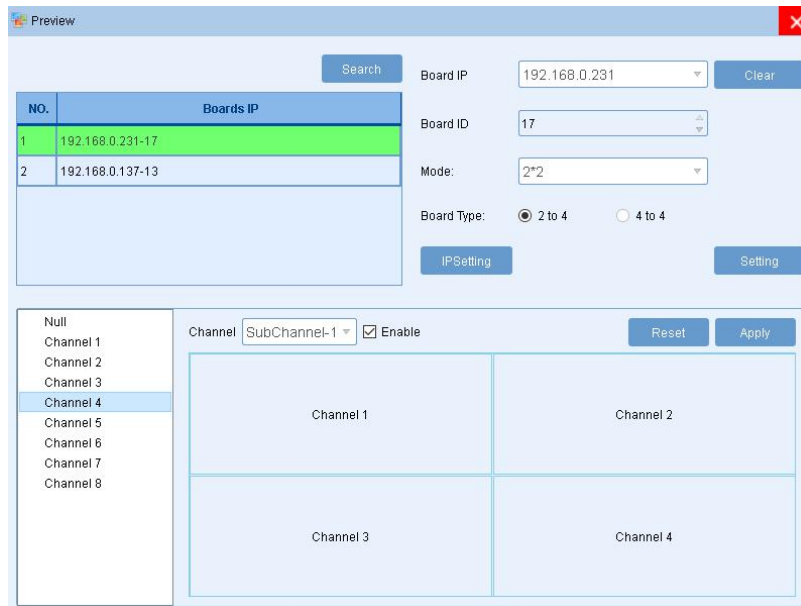
**Setting:** Set the display mode to be effective.

**Channel selection:** There are 4 sub-channels and each sub-channel corresponds to 4 display layout, that is the input signals number each sub-channel can echo.

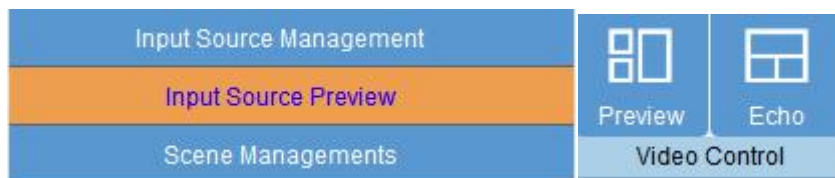
**Application:** Input signals are arranged on the channel selection in the lower right corner according to requirements.

**Reset:** Clear all preset echo channels.





After the setting, open the input source preview.



### 5.3 Screen Control - Optional for RS-232 Screen

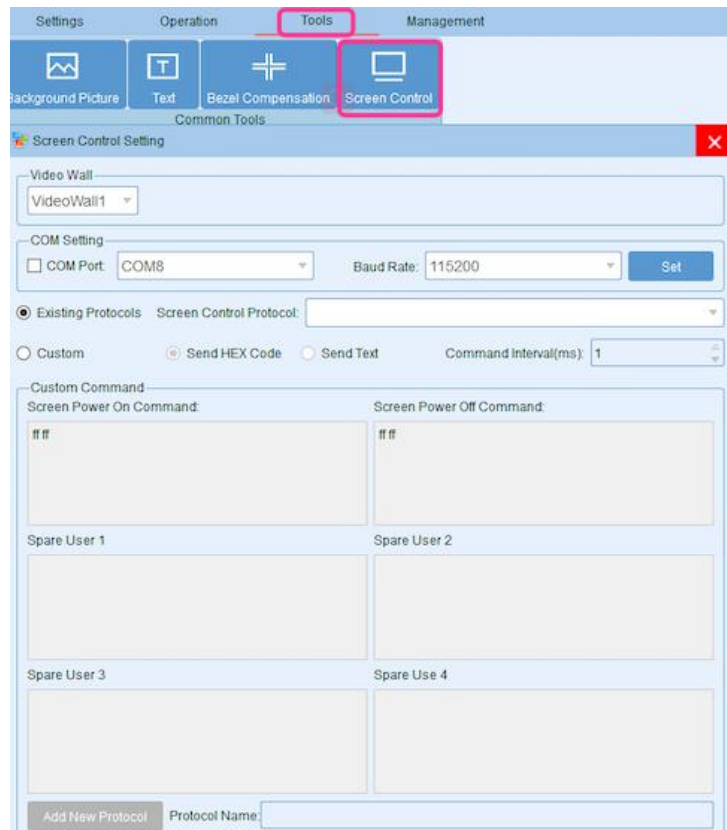


Clicking the sub-menu **Control** in menu **Operation**, it will show as below.

Select the **Load** or **Close** to power on or power off the video wall display.



## Screen control setting



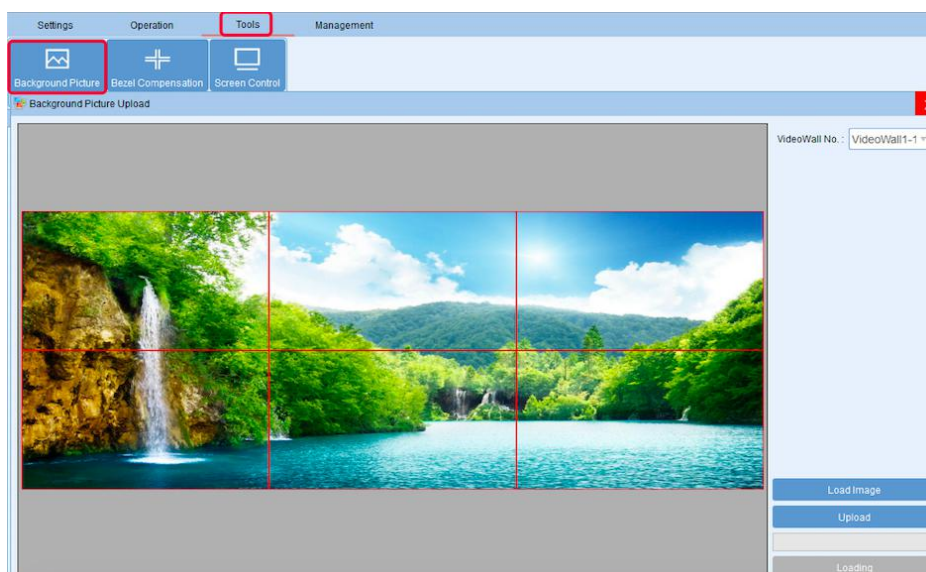
The user can load the existing screen control protocol or custom control protocols.

The custom protocol should be sent in HEX or character.

## 5.4 Background Image - Optional for Background card

**【Load】** the background picture and click **【Upload】**

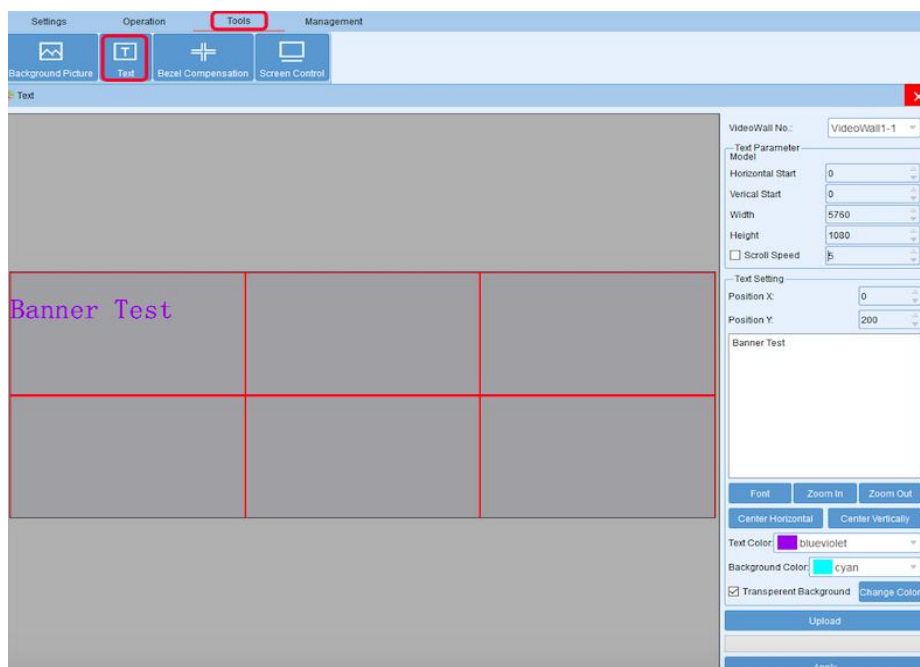
Clicking **【Loading】** after the Upload finished. Then restart the controller.



## 5.5 Scrolling Text - Optional for Background card

Set the font display position,color and background color, scrolling speed or no scrolling.

Then click Upload and Apply.Restart the device after the setting is finished.



Note: The background image and text can only controlled by LAN port.

## 6. Specification

Model	AVW SERIES	ACVW4 SERIES
Chassis Size	2U,3U, 6.5U,11U,20U	2.5U,4U,6.5U,11U,20U
Input Interface Number	8/8 16/24 36/48 76/88 152/176	16/20 32/40 36/48 76/88 152/176
Output Interface Number	12/8 18/12 36/24 72/60 144/120	9/8 18/12 36/24 72/60 144/120
Input Interface Type	DVI/HDMI/DP/VGA/YPbPr/CVBS SDI/IP/HDBaseT	DVI/HDMI/DP/VGA/YPbPr/CVBS SDI/IP/HDBaseT
Output Interface Type	HDMI/ DVI/ IP	HDMI/ DVI/ IP
Input Resolution	1920*1200@60 Hz 4092*2160@30 Hz	1920*1200@60 Hz 4092*2160@30 Hz
Output Resolution	1920*1200@60	1920*1200@60
Image Layer in Each Display	2	4
Power Supply	100~240V,50~60Hz	100~240V,50~60Hz
Working Temperature	-20°C ~ +70°C	-20°C ~ +70°C
Control Method	Front panel touch screen,RS232,IP	Front panel touch screen,RS232,IP



**ANGUSTOS INC.**

**Address :** 1309 Coffeen Avenue STE 1200  
Sheridan, WY 82801, United States

**Email:** [inquires@angustos.com](mailto:inquires@angustos.com)

**Website:** <http://www.angustos.com>