4K60Hz HDMI QUAD SCREEN MULTIVIEWER

AGVS-0401K6

USER MANUAL

VER 2.0 (E.25)

CONTENTS

1. OVERVIEW

AGVS series 4K60Hz Quad screen Multiviewer is designed to display 4 channel 4K60Hz video sources on one 4K@60Hz display and the position and size of the 4 input windows can be adjusted arbitrarily. It supports custom output resolution for LED displays with non-standard resolutions. Which can be controlled by front panel buttons, IR remote control, WebUI and RS232 third party device control.

2. FEATURES

1. 4 x HDMI 2.0 input, 1x HDMI 2.0 output, all up to 4K@60Hz 4:4:4.
2. Multiple display layouts include quad-view, triple-view, dual-view and full-view.
3. 4 input windows position and size can be adjusted freely (Super Canvas™ Mode).
4. Custom output resolution for non-standard output resolution requirement.
5. Seamless switching between all inputs
6. Support EDID management and learning.
7. HDMI audio de-embedding output.
8. Controlled by front buttons, IR remote control, WebUI and RS232 3rd party control.

3. PACKAGE CONTENTS

① 1 x 4K60Hz Quadview Multiviewer (AGVS 4K60 Series)

② 1 x AC Power Cord

③ 1 x Remote control (no battery included)

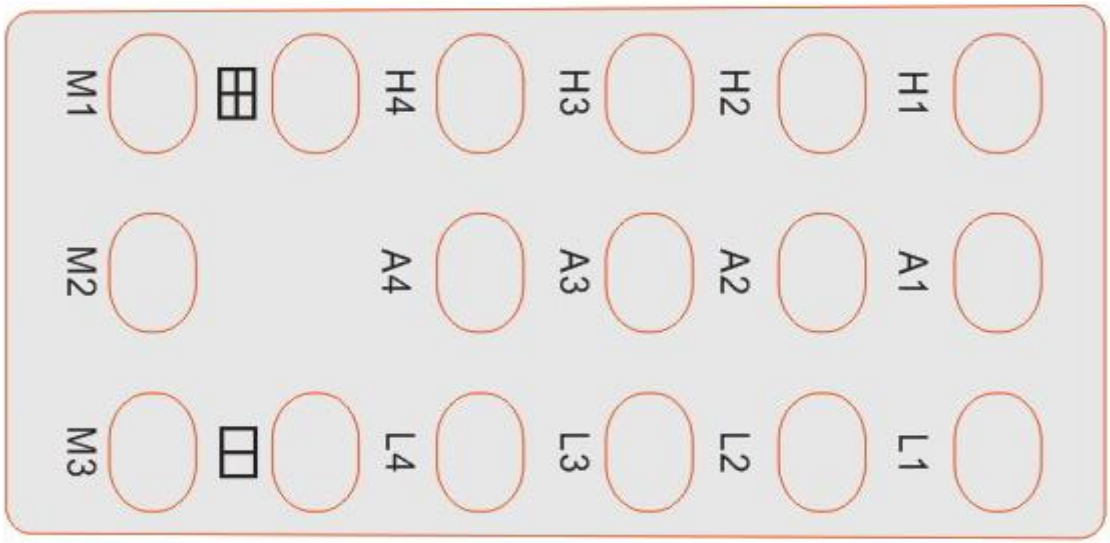
4. FRONT PANEL

Menu	Function
IR	Receive signals from the IR remote control.
1	Press the button to select input 1 on full screen.
2	Press the button to select input 2 on full screen.
3	Press the button to select input 3 on full screen.
4	Press the button to select input 4 on full screen.
⊞	Switch between the Quad-view mode and Dual-view mode.
Scenes	Recall scenes from scene 1, scene 2 and scene 3.
Audio	Switch audio from 4 HDMI inputs.
Resolution	Switch output resolution from 11 options.
Power	Power on/off switch.

5. BACK PANEL

Menu	Function
Input 1	HDMI input interface 1, resolution up to 4K60hz
Input 2	HDMI input interface 2, resolution up to 4K60hz
Input 3	HDMI input interface 3, resolution up to 4K60hz
Input 4	HDMI input interface 4, resolution up to 4K60hz
Output	HDMI output interface, resolution up to 4K60hz
Audio	HDMI audio de-embedding output via this 3.5mm analog audio jack.
RS232	Third party central control via this RS232 interface.
RJ45	WebUI control via this RJ45 interface.
DV12V	Power supply interface, DC 12V 2A

6. REMOTE CONTROL OPERATION

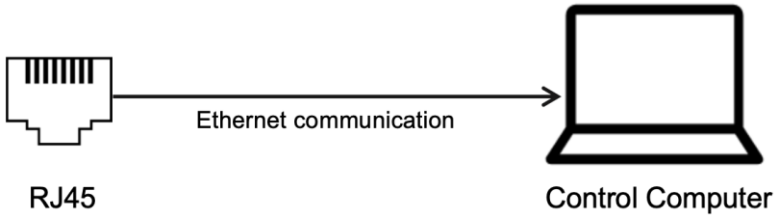


Menu	Function
H1	Select input 1 on full screen
H2	Select input 2 on full screen
H3	Select input 3 on full screen
H4	Select input 4 on full screen
A1	Select 3.5mm audio output from HDMI input 1
A2	Select 3.5mm audio output from HDMI input 2
A3	Select 3.5mm audio output from HDMI input 3
A4	Select 3.5mm audio output from HDMI input 4
L1	Press the button once to switch input 1 to window 1. Press the button twice to switch input 2 to window 1. Press the button three times to switch input 3 to window 1. Press the button four times to switch input 4 to window 1.
L2	Press the button once to switch input 2 to window 2. Press the button twice to switch input 3 to window 2. Press the button three times to switch input 4 to window 2. Press the button four times to switch input 1 to window 2.
L3	Press the button once to switch input 3 to window 3. Press the button twice to switch input 4 to window 3. Press the button three times to switch input 1 to window 3. Press the button four times to switch input 2 to window 3.
L4	Press the button once to switch input 4 to window 4. Press the button twice to switch input 1 to window 4. Press the button three times to switch input 2 to window 4. Press the button four times to switch input 3 to window 4.
	Quad-view display
	Dual-view display
M1	Recall scene 1
M2	Recall scene 2
M3	Recall scene 3

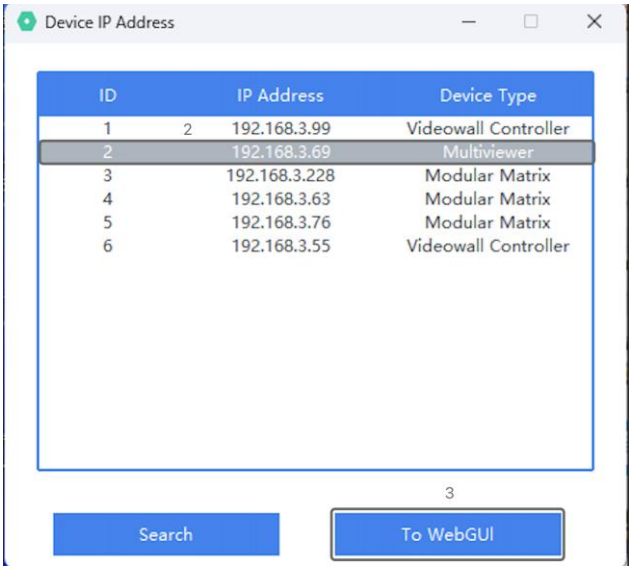
7. WEB GUI GUIDE

7.1 CONNECTION

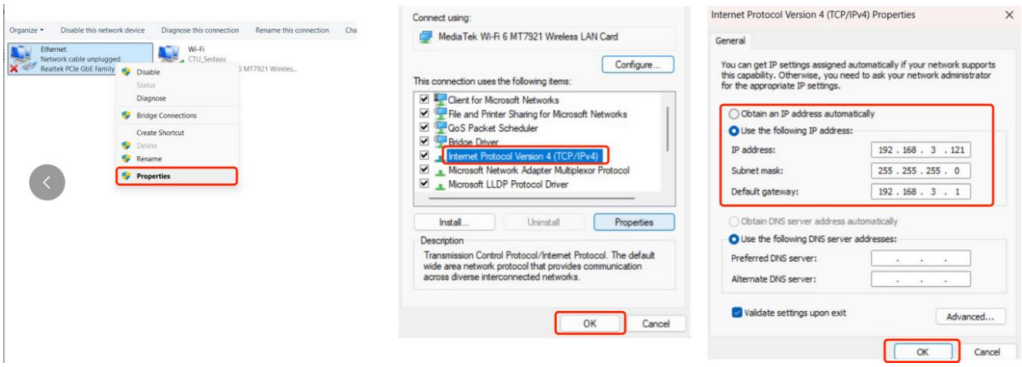
1st Step: Connect the **RJ45** Ethernet port with control computer.



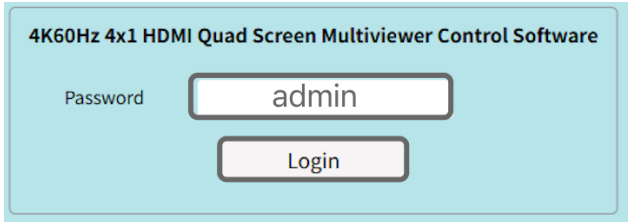
2nd Step: Obtain the Multiviewer IP address.
Click the tool **"Device IP Address.exe"** to obtain the IP address in following interface.
Note: If the user changed the device IP address, they need to click menu **'Search'** to obtain a new IP address or reopen the tool "Device IP Address.exe".



3rd Step: Manually set the control computer IP address, which needs to be in the same network segment as the Multiviewer.



4th Step: Click **"To WebGUI"** in **"Device IP Address"** to enter login interface as below. Input password **'admin'** and click **'Login'** to enter Web GUI page.

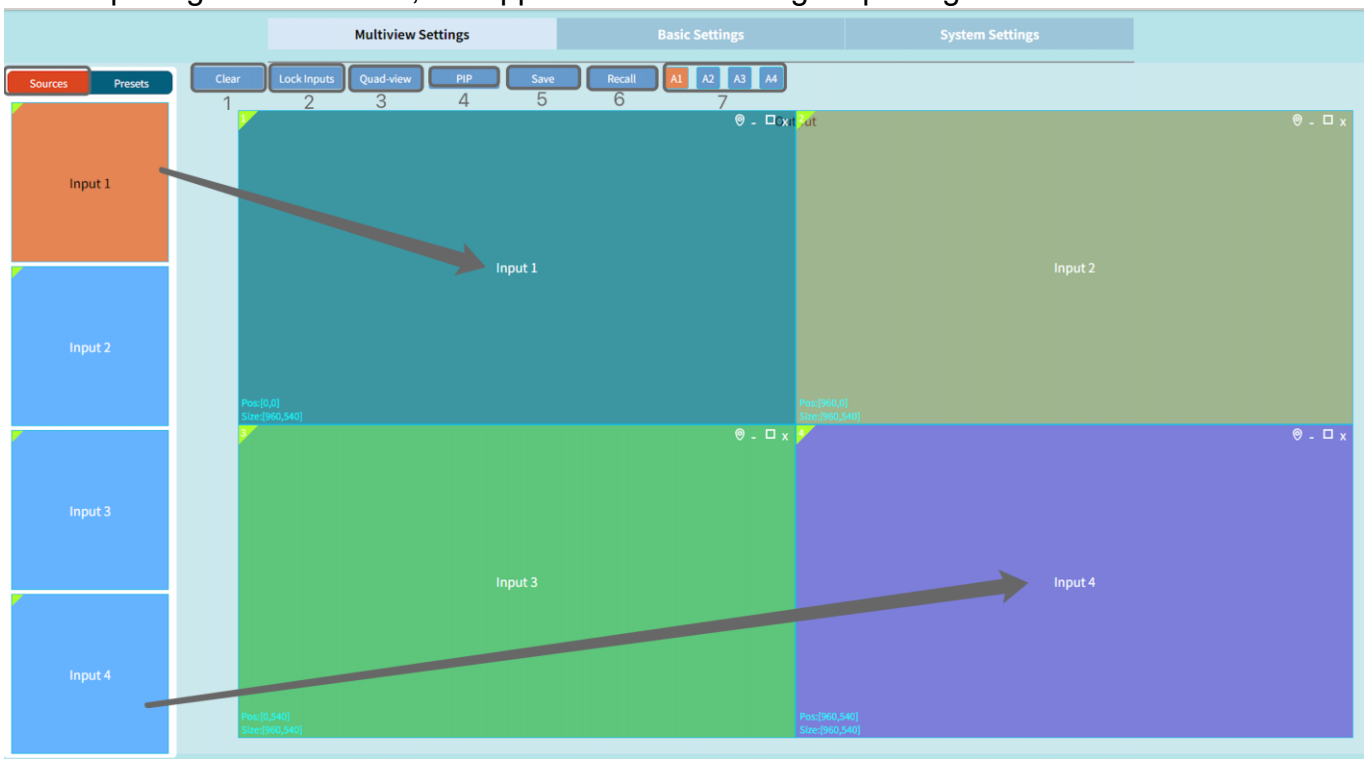


7.2 MULTI-VIEW SETTNGS

Source List

The input source channels are listed on the left-hand side of the manager. Each channel number corresponds to the input port number on the back of the unit.

If a valid input signal is detected, the upper left corner will light up the green mark.



Creating Inputs

In the figure above the highlighted square represents quad-view display on the output.

To map an input source to a window, simply drag and drop the channel icon into it.

Adjust video window position and size

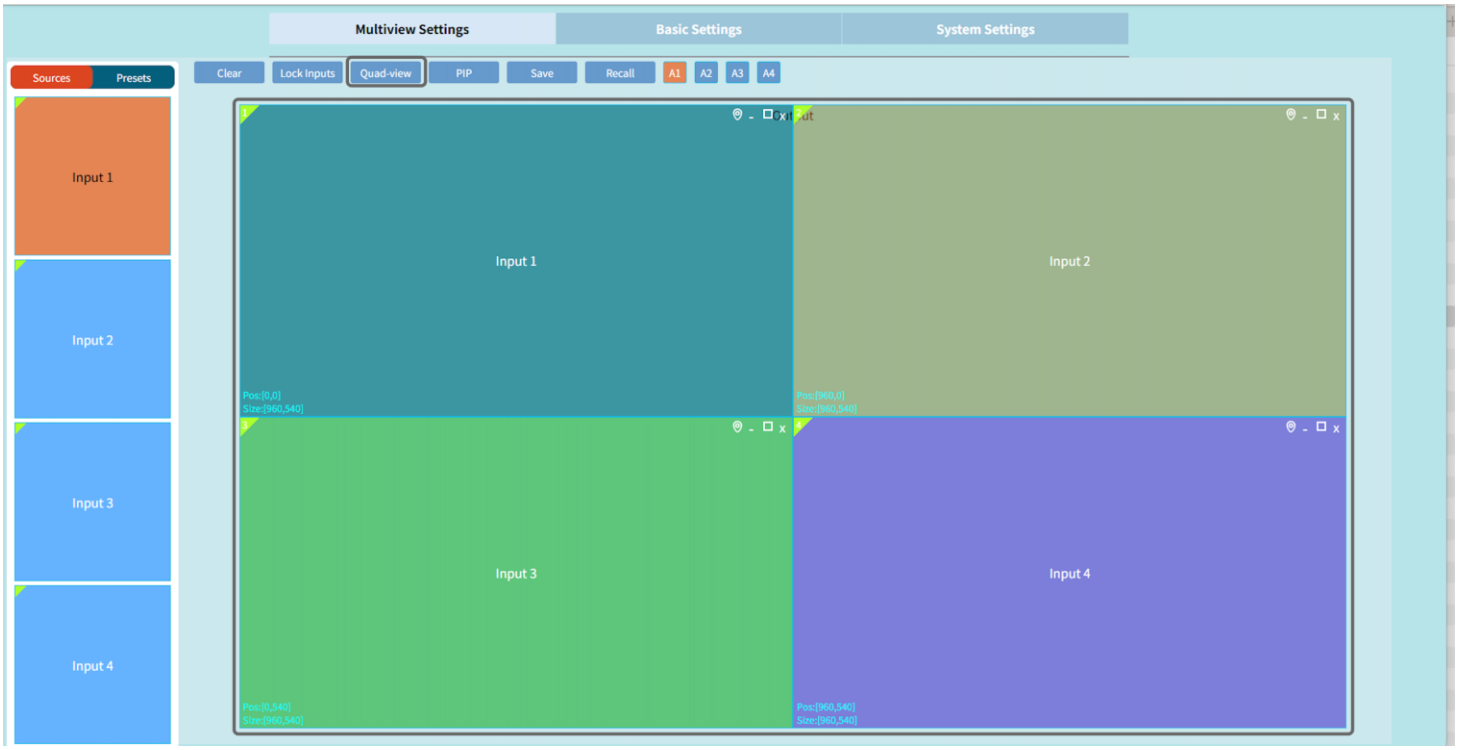
Place the mouse on the window, press and drag the window to the appropriate position and then release the window position.

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

Menu Functions

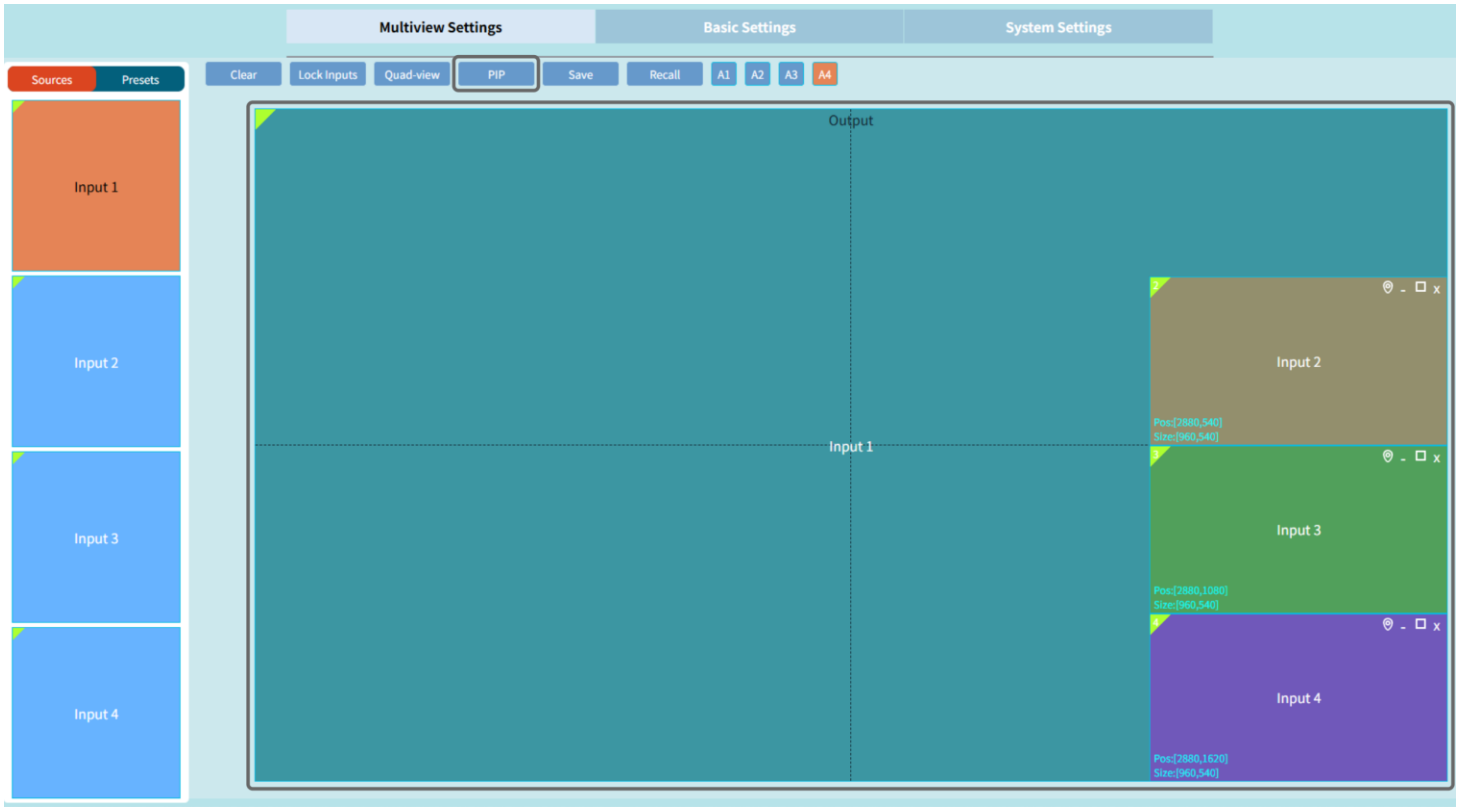
① **Clear**	Clear all input signal windows.
② **Lock Inputs**	Lock an input window and then the user can open 3 more windows on it.
③ **Quad-view**	Quickly start a quad-view display on a output
④ **PIP**	Quickly start a PIP layout as below
⑤ **Save**	Save current display layout as a preset
⑥ **Recall**	Recall the saved preset
⑦ **A1-A4**	Click '**A1/A2/A3/A4'** to select the output audio from HDMI input 1/2/3/4.

Quad-view



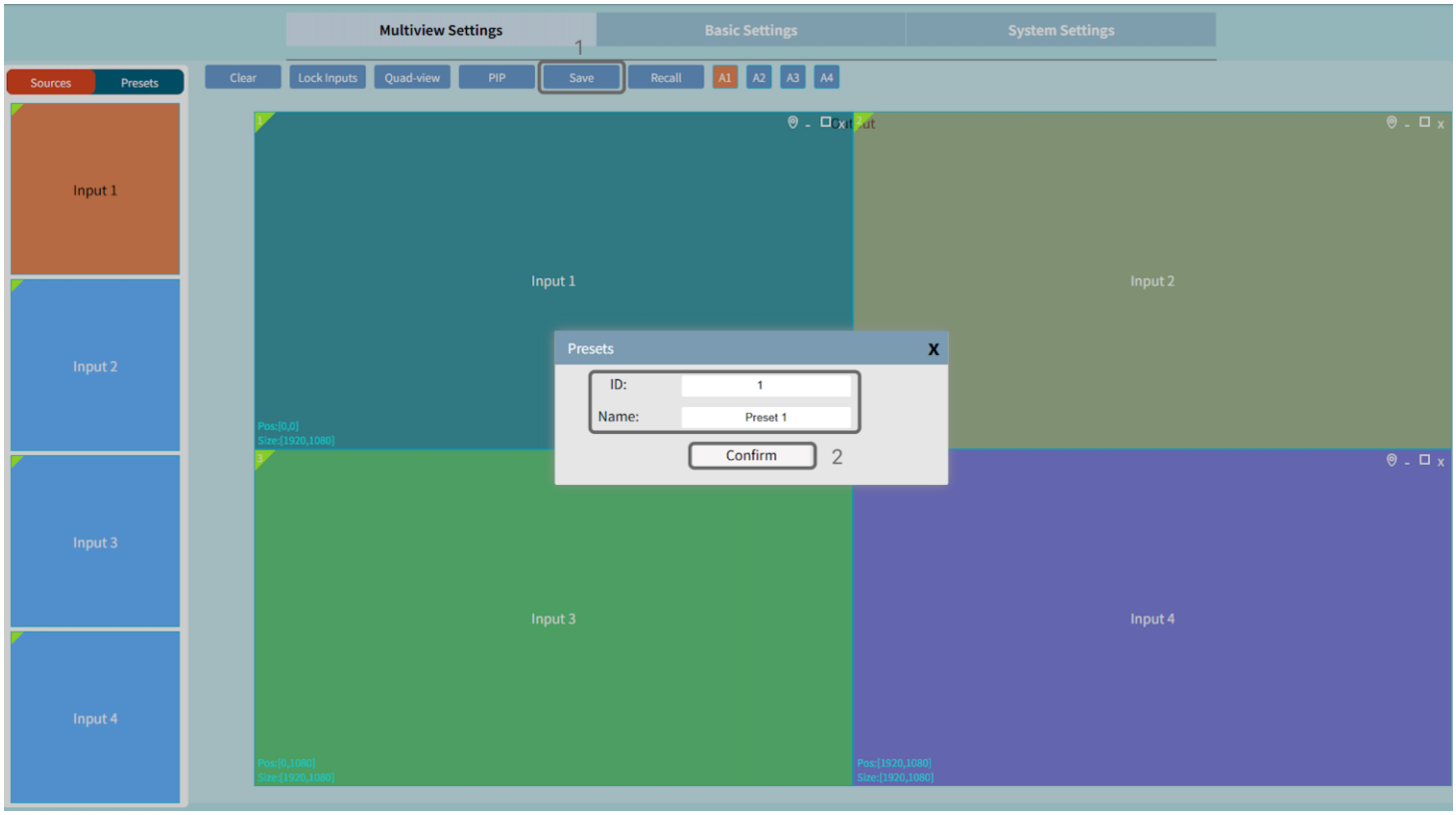
PIP

The bottom window is fixed on full screen. The user can only adjust size&position of the top 3 windows.



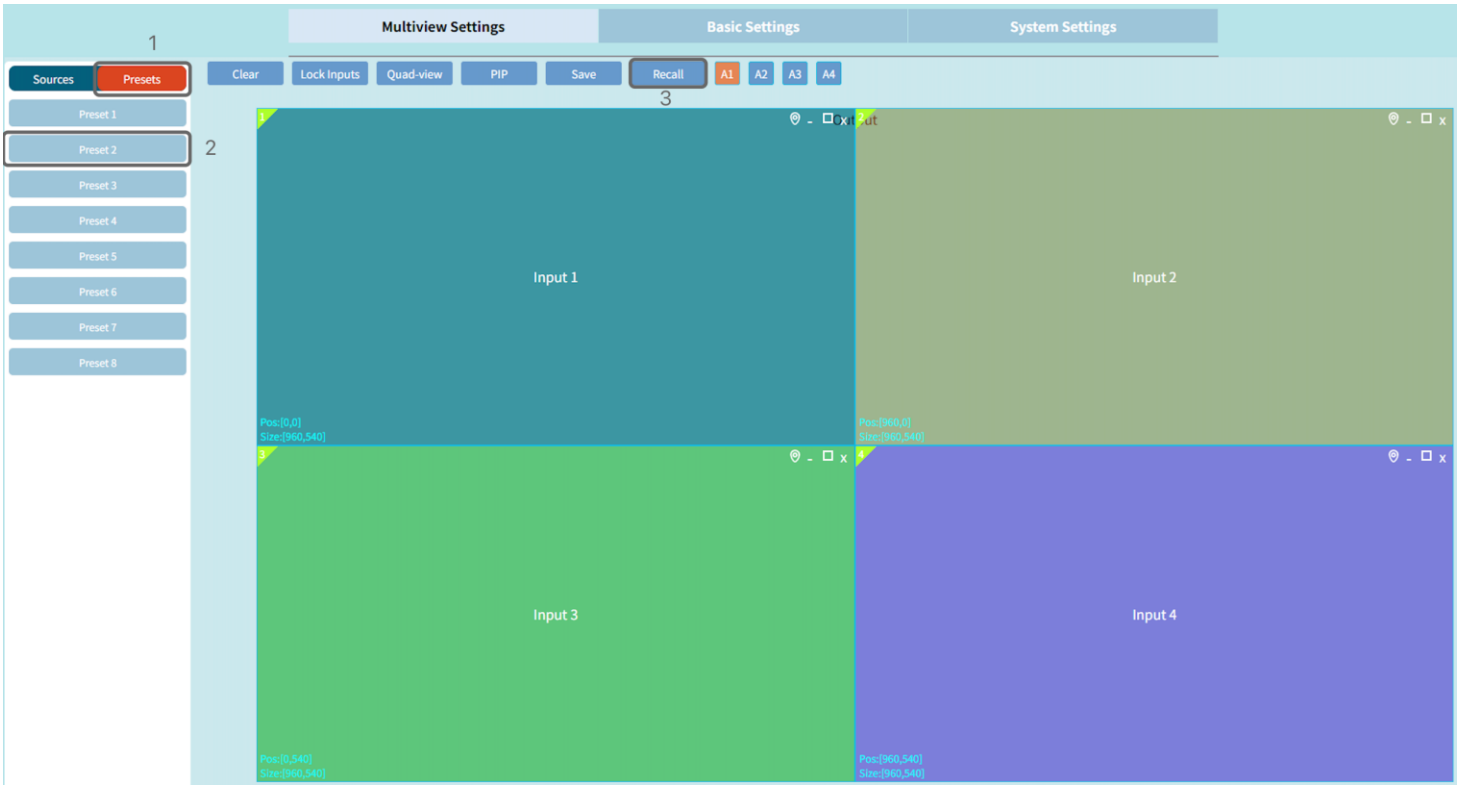
Save

Click **‘Save’** and then **‘Confirm’** in the pop up menu to save current display layout. And the user can modify the preset name. There are 8 presets in total.

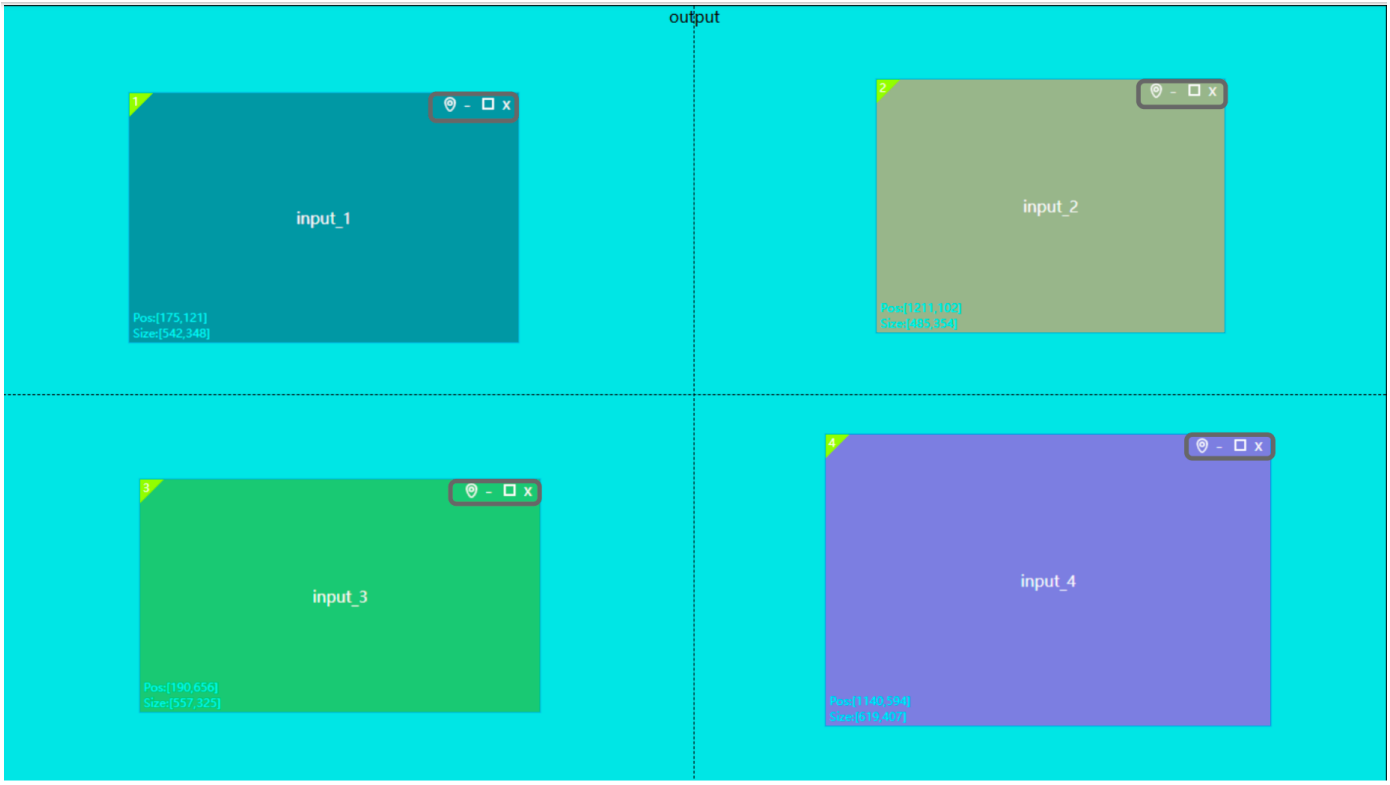


Recall

Click **‘Recall’** and select the preset you want to recall, then click **‘Recall’**



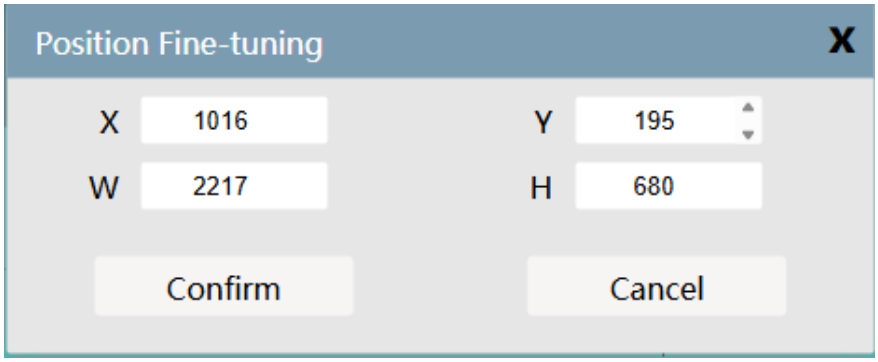
In the upper right corner of the window, there are 4 icons with the following functions.



X	Close the video window.
☐	Maximize the video window within the boundaries.
–	Minimize the video window to original size.
📍	Window fine-tuning position

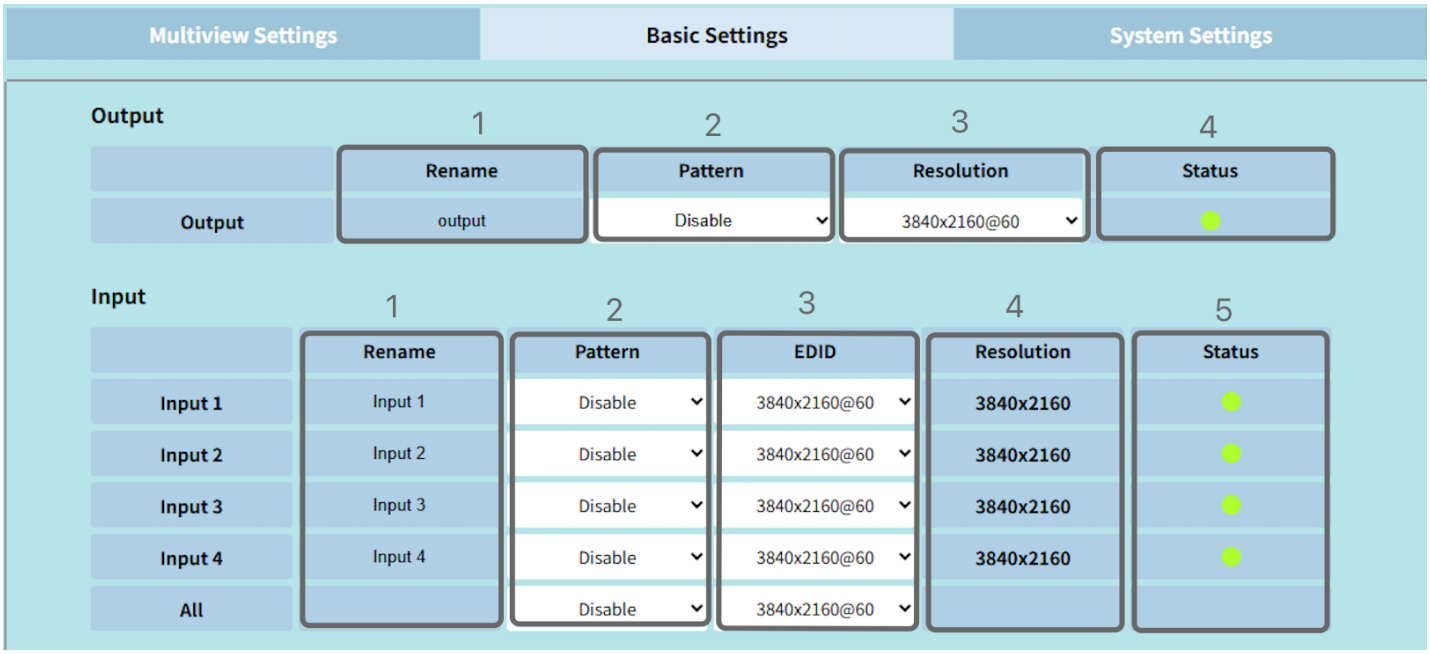
Window Position Fine-tuning

Set the video window position by input the position parameters as below.



X	Horizontal start (pixel)
Y	Vertical start (pixel)
W	Window width (pixel)
H	Window height (pixel)

7.3 INPUT/OUTPUT SETTINGS



O

utput Settings

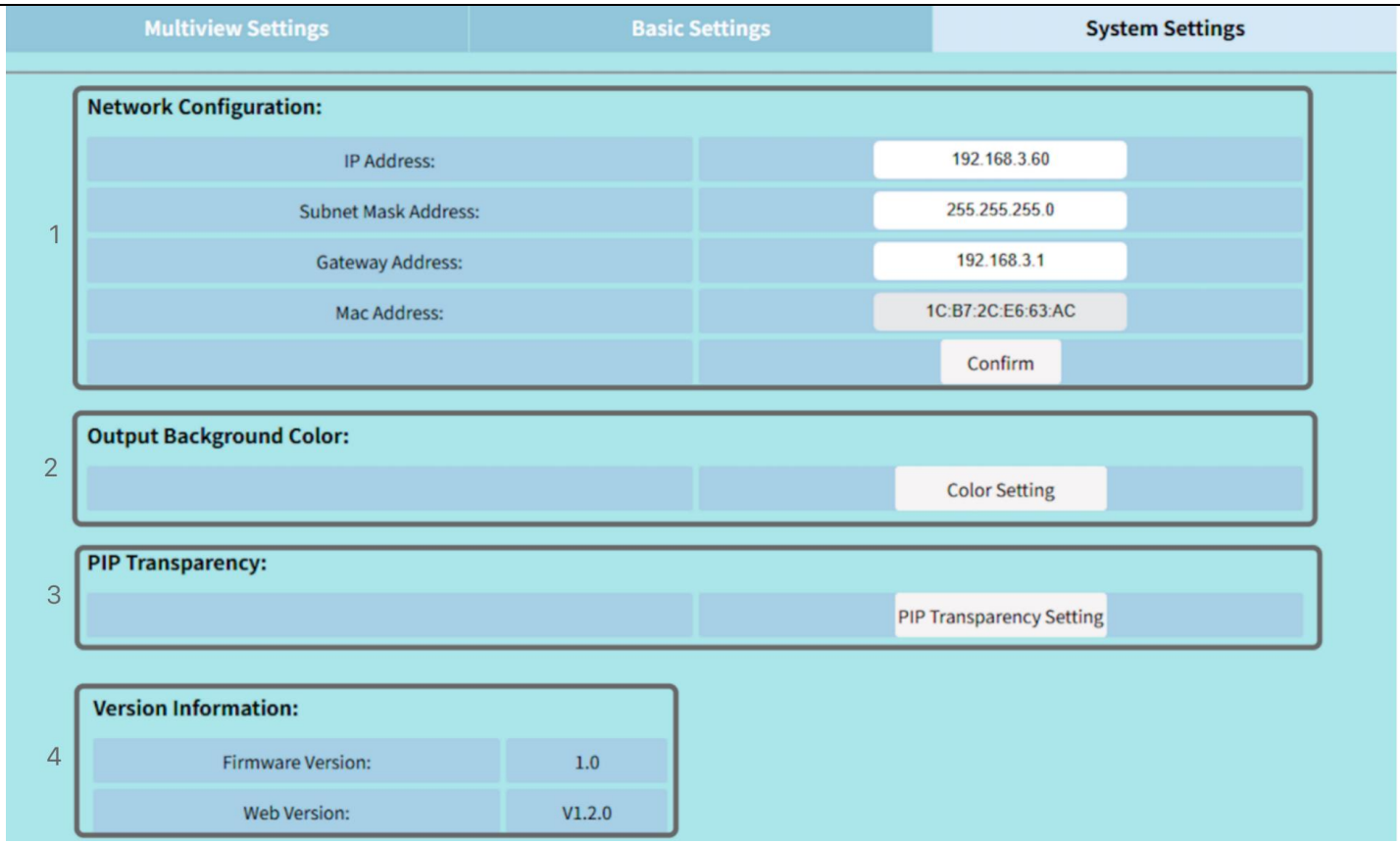
Output channel name can be modified by the setting.
Select output test images from the drop-down menu.
If a valid output signal is detected, the dot will be in green.
Select the output resolution from the drop-down menu, up to 4K60Hz. For the custom resolution settings, please refer to **8.1**

Input Settings

① **Rename**	Input channel name can be modified by the setting.
② **Patterns**	Select input test images from the drop-down menu.
③ **EDID**	EDID management and learning. Please refer to **8.2** for setting details.
④ **Resolution**	It will auto recognize the input resolution.
⑤ **Status**	If a valid input signal is detected, the dot will be in green.

7.4 SYSTEM SETTINGS

Input password **'admin' and click "Confirm"** to enter the **'System Setting'** interface as below.



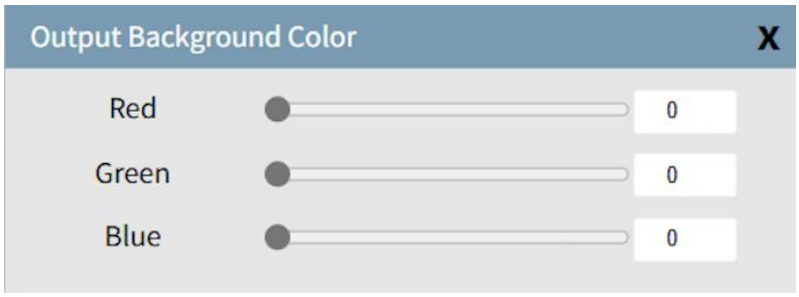
1. Network Configuration

The user can set the IP address, Subnet mask address, Gateway address and Mac address. Click '**Confirm'** to save the settings.

Note: After the IP address is changed, please reboot the device and reconnect it.

2. Output Background Color

The user can set the outputs background color. Default background is black and the user can set any RGB combination colour value.



3. PIP Transparency

Set the transparency of the PIP windows with 5 level options.

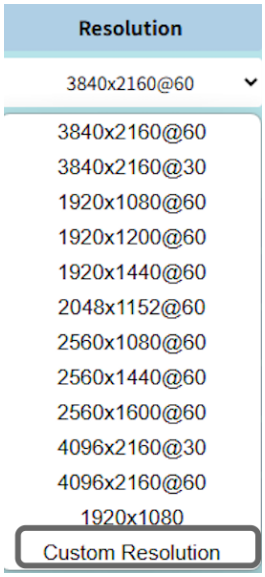
4. System Information

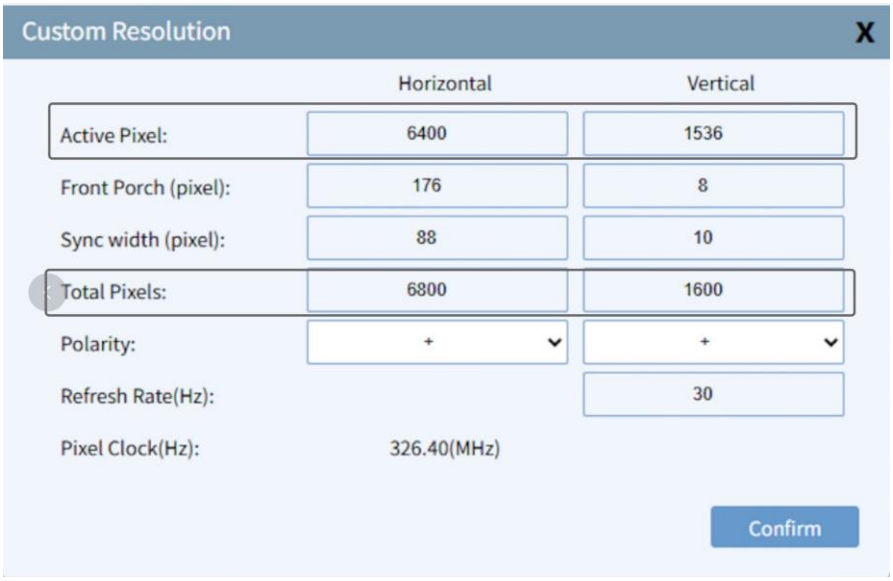
Show the Firmware version and Web Version.

8. ADVANCE FUNCTIONS

8.1 CUSTOM OUTPUT RESOLUTION

The user can custom the output resolution under 4096x2160@60, 7680*2160@30, 5760*3240@30, 7680*1080@60. Click **'Basic Setting'** and then **Output Resolution,** select **'Custom Resolution'** from the drop-down menu and custom the resolution in the interface below right.





For example, custom an output resolution 6400x1536. Fill in active pixels& total pixel.

Horizontal Active pixel	**6400**
Vertical Active pixel	**1536**
Horizontal Total Pixels	**6800**=Horizontal Active Pixels (6400) + **400**
Vertical Total Pixels	**1600**=Vertical Active Pixels (1536) + **64**

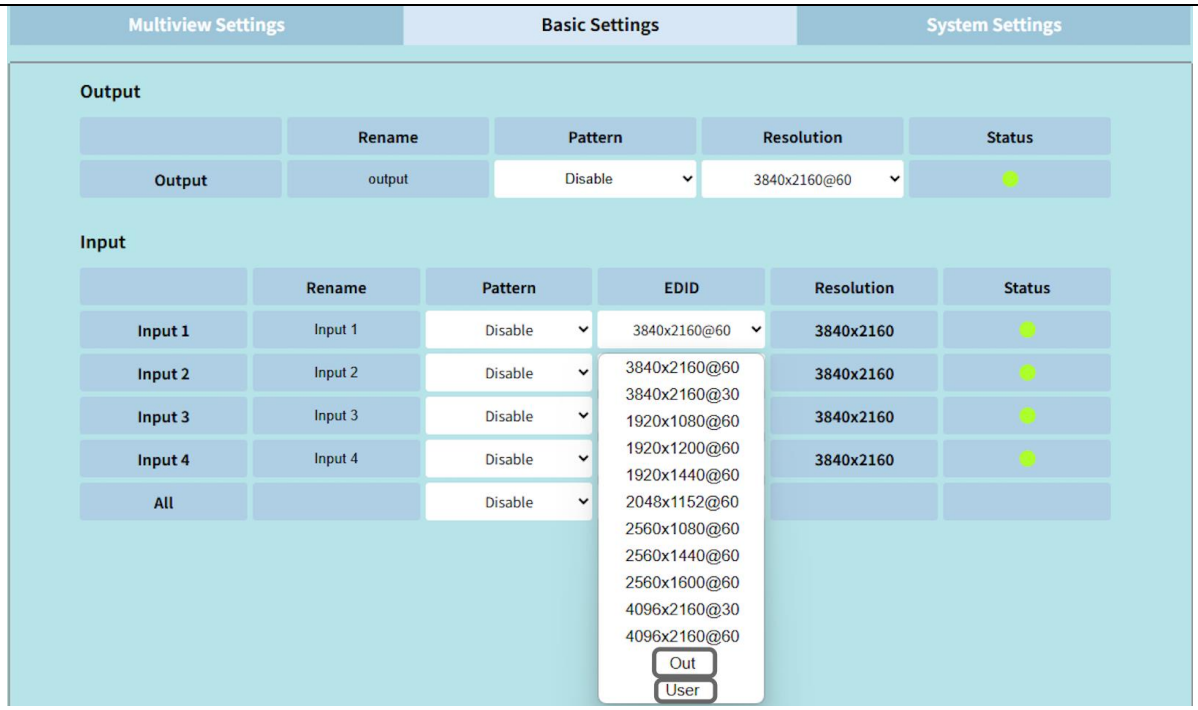
Note:
Horizontal Total Pixels ≈ Horizontal Active Pixels + any number from 400~560
Vertical Total Pixels ≈ Vertical Active Pixels + any number from 50~100
The user can modify other parameters according to the needs of the project.

Click **'Confirm'** to save the customized resolution. Then the user can select this customized resolution in the output resolution drop-down box.

8.2 EDID SETTINGS

The user can select the EDID in the drop-down menu of the corresponding input. It also support EDID learning and customization.

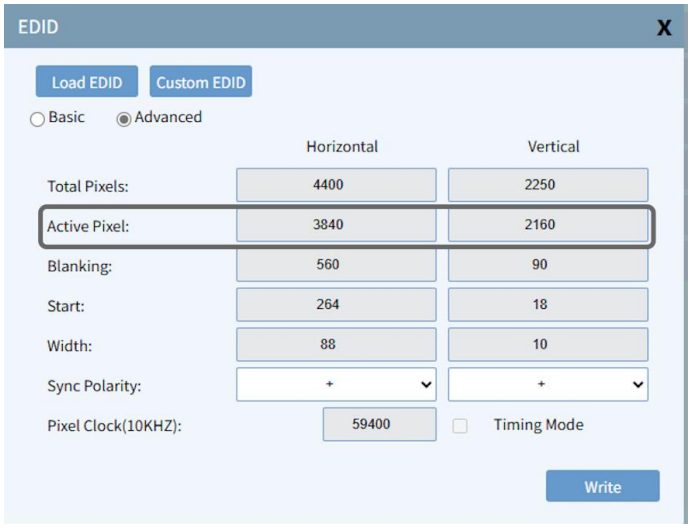
Out (Learn EDID from the output display)
Selecting **'Out'** in the EDID drop-down menu to complete the EDID learning. For example, by clicking **'Out'** in the EDID drop-down menu of input 1, then input 1 learns the resolution of the output display.



User (Custom an EDID)

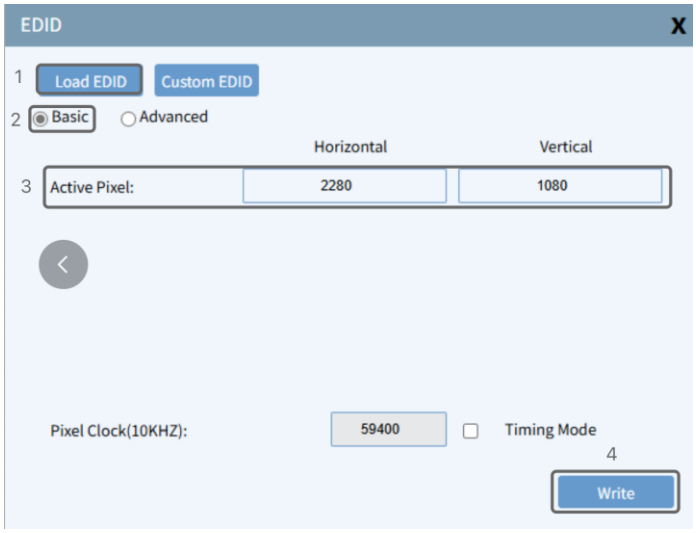
Selecting **'User'** in the EDID drop-down menu, the following setting interface will pop up.

The default EDID is 3840 x2160, so the horizontal & vertical active pixels are 3840 & 2160 by default.



①If the user need to custom a non-standard EDID less than 3840x2160@60Hz.

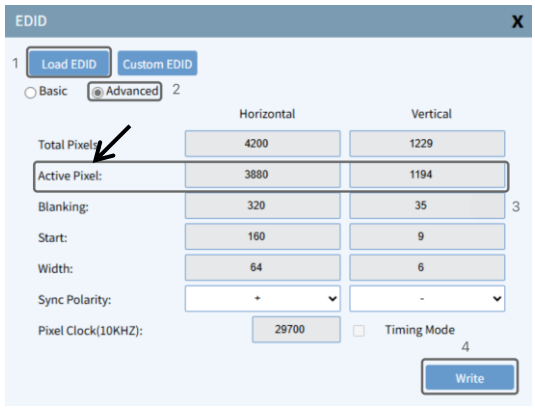
Click **'Load EDID'-'Basic'**, and fill in the horizontal and vertical active pixels in the pop-up interface as below. Finally click '**Write'** to finish the setting.



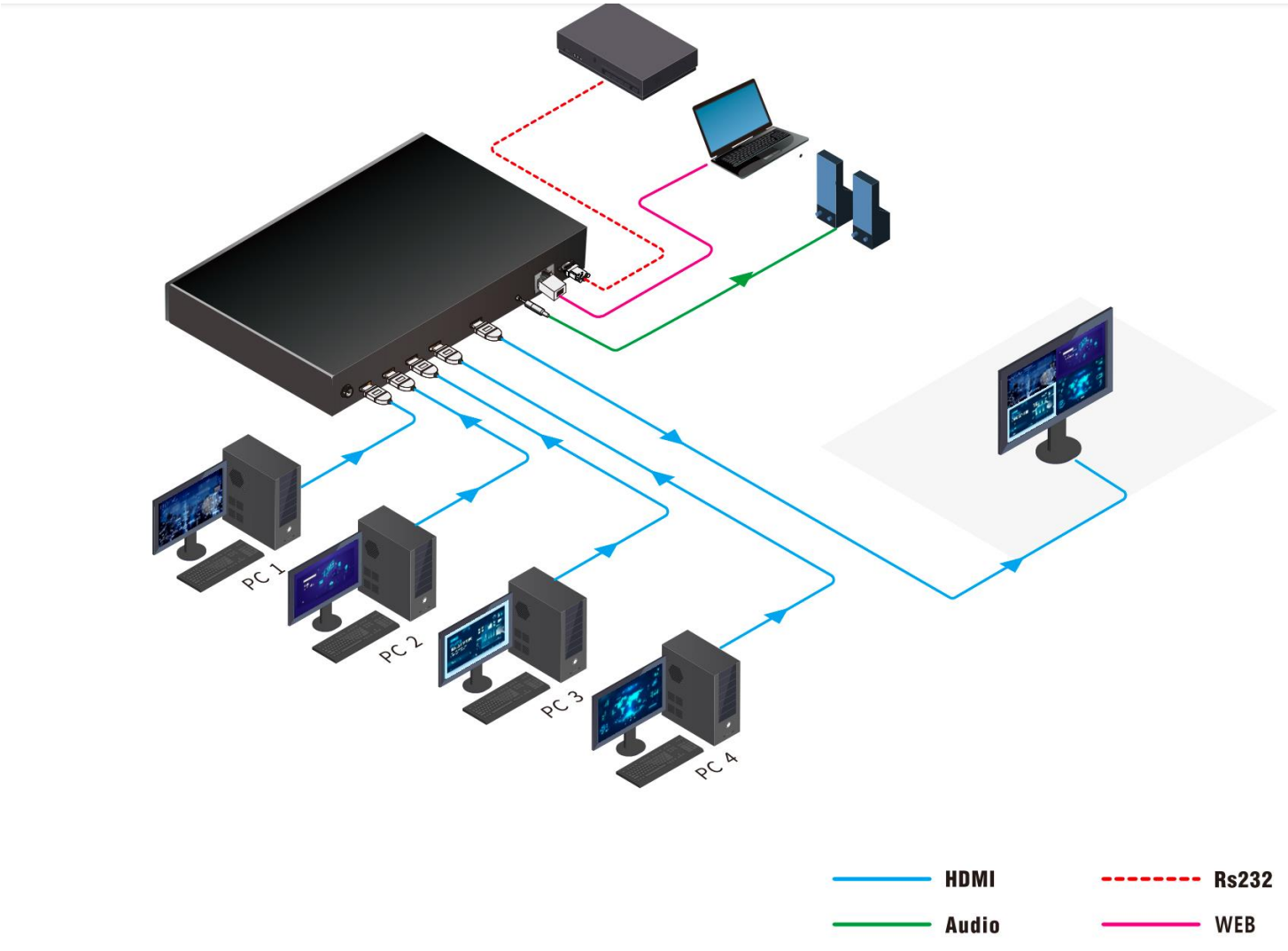
② If the user need to custom an EDID with horizontal pixel more than 3840, the user can load external EDID as shown below.

For example, custom an EDID **3880X1194.**

Click **'Load EDID - 'Advanced'**, then select a **'3880X1194.bin'** file from your computer and open it. Finally click '**Write'** to finish the setting.



9. SYSTEM DIAGRAM



10. SPECIFICATION

4K60Hz 4x1 HDMI QUAD SCREEN MULTIVIEWER AGVS-4K60 Series		
I/0	Inputs	4 x HDMI
	Outputs	1 x HDMI
	Audio Output	1 x 3.5mm
	Input resolution	4096x2160@60Hz, 4:4:4, backwards compatible
	Output resolution	3840X2160@60Hz, 3840X2160@30Hz, 1920X1200@60Hz, 1920X1080@60Hz, 1920X1440@60Hz, 2048X1152@60Hz, 2560X1080@60Hz, 2560X1440@60Hz, 2560X1600@60Hz, DCI 3840X2160@30Hz, DCI 3840X2160@60Hz. Custom output resolution under 4096x2160@60Hz, 7680*2160@30, 5760*3240@30, 7680*1080@60.
Others	Display mode	Quad-view, Triple-view, Dual-view, Full-view mode
Control Method	Front Panel Buttons	**1/2/3/4**: Short press the number button 1/2/3/4 to select input **⊞:** Quad-view mode or Dual-view mode **Scenes:** Select preset scenes from M1, M2 and M3. **Audio:** Press the button to select audio from 4 HDMI inputs **Resolution**: Press the button to select output resolution. **ON/OFF:** Power on/off switch.
	IR	1 x IR remote control
	Web	Browser WebUI control
	RS232	Command for third party control system
Power	Power	DC 12V 2A
	Power consumption	22W
Environment	Operating Temperature	-20°C ~ 60°C
	Operating Humidity	10~90% RH
Physical	Dimensions	280x127x35 mm (LxWxH)
	Weight	1Kg