



MP-UHD89MV-VW 8x9 Seamless 4K Ultra HD Matrix and Video Wall Processor User Manual

M1.4



The meaning of symbols

■ Safety instructions

For your safe and correct use of equipments, we use a lot of symbols on the equipments and in the manuals, demonstrating the risk of body hurt or possible damage to property for the user or others. Indications and their meanings are as follow. Please make sure to correctly understand these instructions before reading the manual.

	This is A level product, which may cause radio interference in the living environment. In this case, users may need to take the feasible measures to get around the interference.
	Remind users that the dangerous voltage without insulation occurring within the equipment may cause people suffer from shock.
	CE certification means that the product has reached the directive safety requirements defined by the European Union. Users can be assured about the use of it.
	SGS certification means that the product has reached the quality inspection standards proposed by the world's largest SGS.
	This product passed the ISO9001 international quality certification (certification body: TUV Rheinland, Germany).
	Warning: in order to avoid electrical shock, do not open the machine cover, nor is the useless part allowed to be placed in the box. Please contact the qualified service personnel.

■ General information instructions

	It lists the factors leading to the unsuccessful operation or set and the relevant information to pay attention.
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Important note



Warning

In order to ensure the reliable performance of the equipment and the safety of the user, please observe the following matters during the process of installation, use and maintenance:

The matters needing attention of installation

- ◆ Please do not use this product in the following places: the place of dust, soot and electric conductivity dust, corrosive gas, combustible gas; the place exposed to high temperature, condensation, wind and rain; the occasion of vibration and impact . Electric shock, fire, wrong operation can lead to damage and deterioration to the product, either;
- ◆ In processing the screw holes and wiring, make sure that metal scraps and wire head will not fall into the shaft of controller, as it could cause a fire, fault, or incorrect operation;
- ◆ When the installation work is over, it should be assured there is nothing on the ventilated face, including packaging items like dust paper. Otherwise this may cause a fire, fault, incorrect operation for the cooling is not free;
- ◆ Should avoid wiring and inserting cable plug in charged state, otherwise it is easy to cause the shock, or electrical damage;
- ◆ The installation and wiring should be strong and reliable, contact undesirable may lead to false action;
- ◆ For a serious interference in applications, should choose shield cable as the high frequency signal input or output cable, so as to improve the anti-jamming ability of the system.

Attention in the wiring

- ◆ Only after cutting down all external power source, can install, wiring operation begin, or it may cause electric shock or equipment damage;
- ◆ This product grounds by the grounding wires .To avoid electric shocks, grounding wires and the earth must be linked together. Before the connection of input or output terminal, please make sure this product is correctly grounded;
- ◆ Immediately remove all other things after the wiring installation. Please cover the terminals of the products cover before electrification so as to avoid cause electric shock.

Matters needing attention during operation and maintenance

- ◆ Please do not touch terminals in a current state, or it may cause a shock, incorrect operation;
- ◆ Please do cleaning and terminal tighten work after turning off the power supply. These operations can lead to electric shock in a current state;
- ◆ Please do the connection or dismantle work of the communication signal cable , the expansion module cable or control unit cable after turning off the power supply, or it may cause damage to the equipment, incorrect operation;
- ◆ Please do not dismantle the equipment, avoid damaging the internal electrical component;
- ◆ Should be sure to read the manual, fully confirm the safety, only after that can do program changes, commissioning, start and stop operation.

Matters needing attention in discarding product

- ◆ Electrolytic explosion: the burning of electrolytic capacitor on circuit boards may lead to explosion;
- ◆ Please collect and process according to the classification, do not put into life garbage;
- ◆ Please process it as industrial waste, or according to the local environmental protection regulations.

Preface

This manual mainly describes the use, performance parameters and troubleshooting of Milestone Pro MP-UHD89MV-VW 8x9 seamless 4K Ultra HD matrix and video wall processor. .

If the technical parameters and system usage in this manual are changed, the manufacturer will update the version of the manual. Please use the latest user manual.

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Version	Update	Date
1.0		2023.12.13
1.1	Update web control image and modify details	2024.1.4
1.2	Update more features	2024.6.28
1.3	Add plan and multiviewer feature	2024.12.30
1.4	Logo Changed	2025.8.4

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1. Overview



MP-UHD89MV-VW is a professional seamless UHD video matrix switching and splicing wall processor with HDMI 8 in 9 out. It provides ultra-high data transfer rates, and perfectly supports synchronous seamless switching of HDMI signals, resolutions up to 4K@60, 4:4:4, creative video wall layouts through an intuitive Web GUI, and FPGA-based pure hardware architecture can be extensive. Used for stage performances, digital classrooms, video conference rooms, etc.

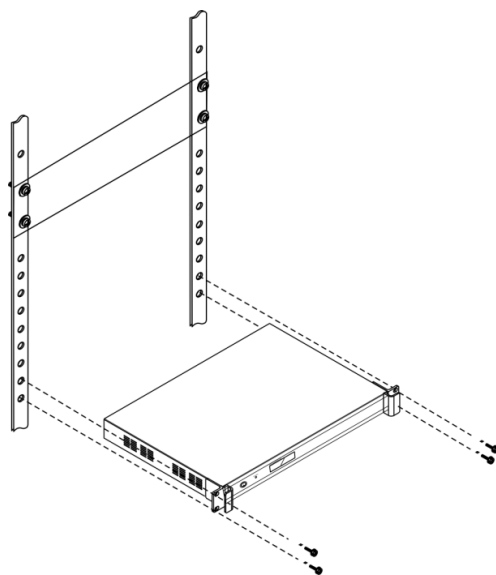
1.1 Features

- 1) **8x9 HDMI Matrix** - From input to output, the entire signal path has a complete 18G signal processing. Capable of processing HDR signals with a resolution of up to 4K60 4:4:4 and a total bandwidth of 18Gbps.
- 2) **Video wall** - Create creative video wall layouts with an intuitive Web GUI that makes it easy to configure multiple monitors to display video as one large screen.
- 3) **4K Scaler** -4K scaling technology that converts various input resolutions to the monitor's native resolution, providing viewers with the best picture and video quality.
- 4) **Seamless switching** - FPGA-based pure hardware architecture delivers peak data rates up to 4K@60 and perfectly supports simultaneous switching of HDMI signals.
- 5) **Input volume control** - One provides volume control for the audio input, so when we change the volume, each output of that input changes.
- 6) **Support DDC transmission**
- 7) **HDMI-DVI interface format correction** - Automatically reformats the HDMI source signal for output to a connected DVI display.
- 8) **Automatic input cable equalization** - When using long cables, low-quality cables, or source devices with poor HDMI signal output, actively adjust the input HDMI signal to compensate for signal loss. When used with the HDMI 2.0 cable, the 4K/60 signal can be equalized to 35 feet (10.7 m).
- 9) **Automatic output relock** - a remodel and restore the timing of the HDMI signal at each output, enabling transmission over a long HDMI cable.
Support +5 VDC, 250 mA power supply for HDMI output of external peripherals.
- 10) **Output Mute control** - Provides the ability to mute one or all outputs at any time. For example, this allows in display content on the local monitor before moving on to the main presentation monitor.
- 11) **Ethernet Monitoring** - can be actively monitored, managed, or controlled over a LAN, WAN,

or Internet using standard TCP/IP protocols.

- 12) **Input marker** - a marker is added to each input signal to distinguish between different inputs.
- 13) **Captions** - You can add scrolling captions or welcome signs to the wall.
- 14) **Input test images** - An input can automatically generate test images for engineering debugging and test purposes.
- 15) **Output test image** - Output test image to test whether the output port and display device are properly connected.
- 16) **Splice synchronization** - Supports frame synchronization to ensure perfect synchronization of various output units.
- 17) **Audio Code** - Analog audio can be embedded in or removed from an HDMI signal.
- 18) **Silent Fan Operation** - Fan with silent operation and intelligent control
- 19) **Built-in EDID Options** - Multiple built-in EDID options for input
- 20) **DHCP Support** - Supports DHCP, configurable via software or front panel
- 21) **Automatic Resolution Selection** - Output reads monitor EDID and automatically selects the best resolution.
- 22) **Output Modes** - Multiple output modes: Full (No Cropped), Full (Cropped) or Equal Ratio (with Black).
- 23) **Screen Freeze and Unfreeze** - Added features for screen freeze and unfreeze
- 24) **One-Click Audio Mute** - One-click audio mute for input
- 25) **No Signal Configuration** - Configurable output for no signal input: no signal or black screen
- 26) **Monitor Connection Status** - Software displays status of whether the output is connected to a monitor.
- 27) Configurable HDCP version for input.
- 28) **Multiviewer Feature:** last output port support multiviewer

1.2 Installation



1.3 Diagram



2. Hardware description

Product parameters:

Model	MP-UHD89MV-VW
Input type	8xHDMI, 8xIR, 8x analog audio
Output type	9xHDMI, 9x IR, 9x analog audio
Protocol	HDMI 2.0, HDCP 2.2
Resolution,	Up to 4096 x 2160@60Hz (4:4:4)
HDMI port	Type A, 19 pin, female
Serial interface	RS-232 IN, DB9, Female
Input cable length	10m
output cable length	10m
Impedance	100±15ohm
RJ45 control protocol	TCP/IP
Ethernet rate	10M/100M
Storage environment	Temperature: -20°C~+70°C, humidity: 10%~90%
Work environment	Temperature: -20°C~+70°C, humidity: 10%~90%
Power	AC 110~240V
Power consumption	100W
Chassis specification	1U
Dimensions (length x depth x height).	430*350*43.5mm
Weight	3.5kg
MTBF	30,000h
Warranty	One year warranty and lifetime maintenance

3. Description of the front and rear panels

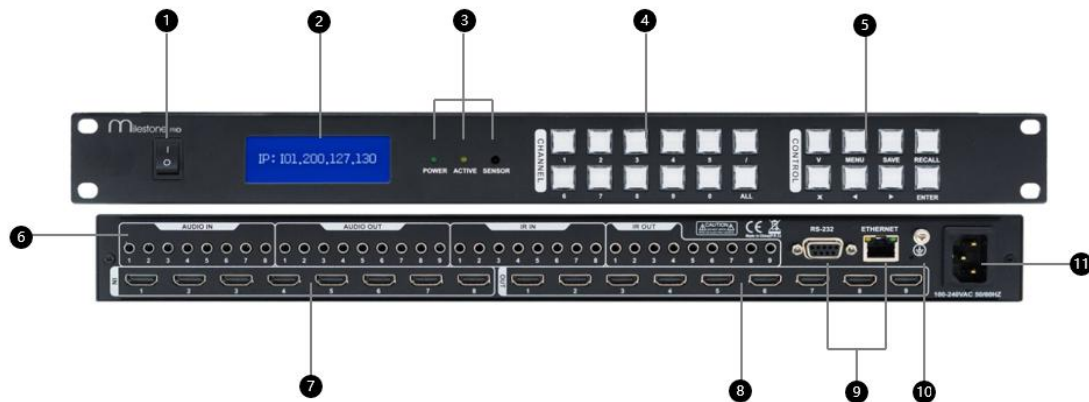


Figure 1 MP-UHD89MV-VW front panel and rear panel

The front and rear panels of the MP-UHD89MV-VW seamless UHD Matrix switcher include:

1. **Power switch** - Power on or off the matrix switcher.
2. **Display** - Current matrix status and command input and result display.
3. **Signal indicator** -POWER: power indicator; ACTIVE: indicates the status indicator for receiving commands. SENSOR: infrared receiving status indicator.
4. **0 to 9 Number of channels** - Number of Input channels and number of output channels the/and button is used to select the isolation symbol of multiple channels at the same time. The ALL button is used to select all output channels.
5. **Control Command buttons** - Change IP, V switch command, SAVE save scene, RECALL call scene, and left and right menu selection buttons.
6. **AUDIO IN** - 8 3.5mm audio input; **AUDIO OUT**-9 3.5mm audio output; **IR IN**-8 infrared input interface; **IR OUT**-9 infrared output port.
7. **HDMI IN** - Signal input source, provides eight HDMI input ports for connecting to the corresponding input source device.
8. **HDMI OUT** - signal output source, providing 9 HDMI output ports for connecting the corresponding output device.
9. **RS-232** - Provides one independent RS-232 port (DB9 base), which can be used to connect to a PC or central control device for centralized system control. **ETHERNET** RJ45 Network port - An Ethernet port used to connect the local area network (LAN) to the Internet. If the green indicator is on, the connection is normal. If the orange indicator is blinking, data is being received or sent.
10. **Ground pole**
11. **Power input port** - System power supply, support AC100~240V 50/60Hz input.

4. Network protocol

Protocol: TCP, IP: 192.168.1.188, port: 80

Protocol table:

Order	Function description	Parameter description	Return information
{param=version}	Version query	NO	{“type” : ”UHD0809”, “MCU”: ”Ver1.2/Ver1.1/Ver1.3”, “FPGA”: ”Ver1.2/Ver1.1/Ver1.3/Ver1.2” }
{param=status}	Switch the status.	Mode: Y 0: Single screen mode, 1: One row and two columns 2: Two row and one columns 3: Two row and two columns 4: Two row and three columns 5: Three row and two columns 6: Three row and three columns	{“video1”:X1, “video2”:X2, “video3”:X3, “video4”:X4, “video9”:X9,”mode”:Y} {“audio1”:X1, “audio2”:X2, “audio3”:X3, “audio4”:X4, “audio9”:X9} {“IR1”:X1, “IR2”:X2, “IR3”:X3, “IR4”:X4, “IR9”:X9}
{param=resolution}	Resolution information.	No	{“in1”:1920x1080x60Hz, “in8”:3840x2160x60Hz, “out1”:1920x1080x60Hz, “out9”:3840x2160x60Hz }//noinput or corresponding
{param=inputinfo}	Input signal status	No	{“input-1”:true/false, “input-2”:true/false, “input-3”:true/false, “input-4”: true/false, “input-5”: true/false, “input-8”: true/false }
{param=netInfo}	Settings->Query	No	{“ip”:”X”, ”gateway”:”Y” }

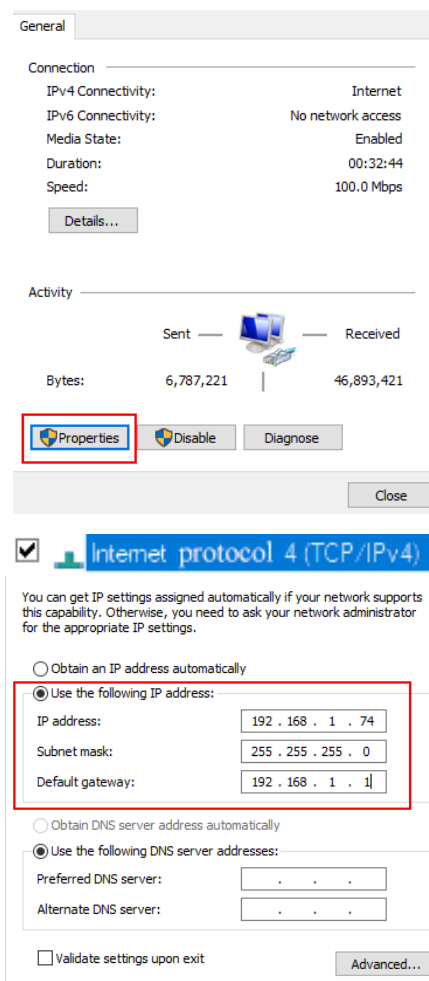
	network parameters		,"subnet": "A", "mac": "B" }
{param=&ip,ip=%d.%d.%d.%d,gateway=%d.%d.%d.%d,subnet=%d.%d.%d.%d,mac=%x:%x:%x:%x:%x:%x:%x:%x},	Settings->Set network parameters	No	No
{param=XVIDEOY}	Video source switching	X: input, Y: output	No
{param=XAUDIOY}	Audio switching	X: input audio (1-8)	No
{param=XIRY}	Infrared switch	X: input infrared (1-8)	No
{param=modeX}	Splicing settings	X: Splicing rows and columns (0--6)	No
{param=Default}	Reset	No	No
{param=In_Pattern[x]/[y]}	Input test pattern settings	X: Channel y: Test graphics mode (0--11)	No
{param=Out_Pattern[x]/[y]}	Output test pattern settings	X: Channel y: Test graphics mode (0--11)	No
{param=BellOn}	Buzzer setting	BellOn/BellOff	No
{param=Save[x]}	Save plan	X: Plan serial number (0--9)	No
{param=Recall[x]}	Plan call	X: Plan serial number (0--9)	No
{param=Clear[x]}	Plan cleared	X: Plan serial number (0--9)	No
{param=Get_Volume}	Get input volume	x: Volume 0--100	{ "Volume1": X1, "Volume2": X2, "Volume3": X3,, ... "Volume8": X8 }
{param=Volume[x]/[y]}	Input volume adjustment	x: Input channel y:	No

}		Volume 0--100	
{param=MuteOn[x]}	Output mute on	x: Output channel	No
{param=MuteOff[x]}	Output mute off	x: Output channel	No
{param: Port[x]/[y]}	Set output resolution	x: Output channel y:1920x1080x60Hz!/3840x2160x60Hz! Resolution list reference UHD_HDMI	No
{param : Analog_sel[x]/[y]}	Set output audio selection	x: Output channel y: 0: number 1: Simulation	No
{param: All[x]}	Switches the specified input to all outputs	x: Input channel	No

5. PC software introduction

5.1 Connection

1. The router is connected to the CAT5 network cable for TCP/IP communication.
The default IP address of the matrix is 192.168.1.188. The IP addresses assigned by routers must be on the same network segment.
2. To use the PC side control, open the "Network and Internet" Settings," Change Adapter Options "set the following IP.

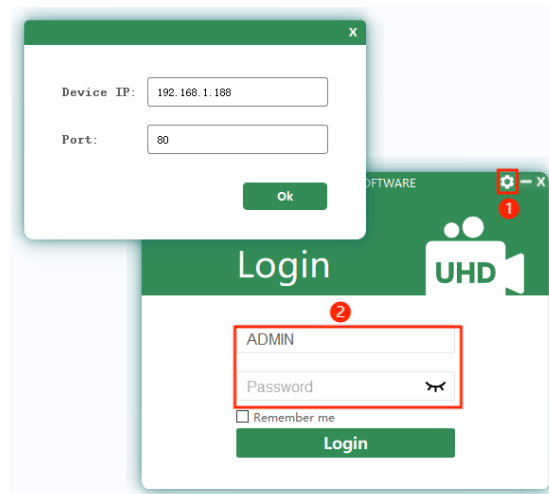


5.2 Login

Double-click to open the software "UHDControl"

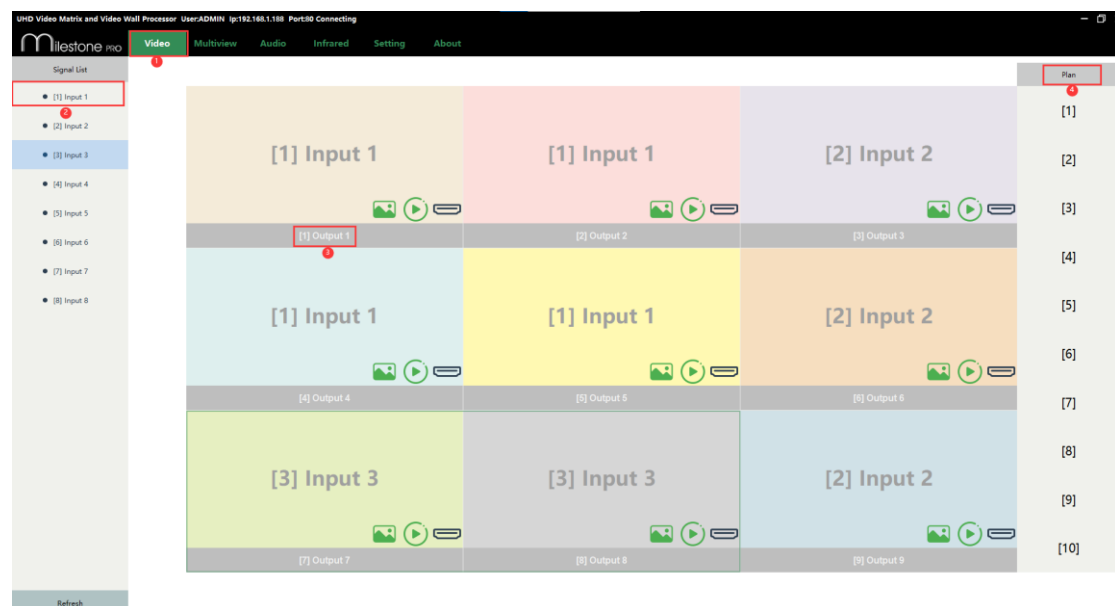


Check whether the device IP address and port number are correct, and then enter the password of the default account.



IP address: 192.168.1.188, port number: 804. Login and password is ADMIN and admin123

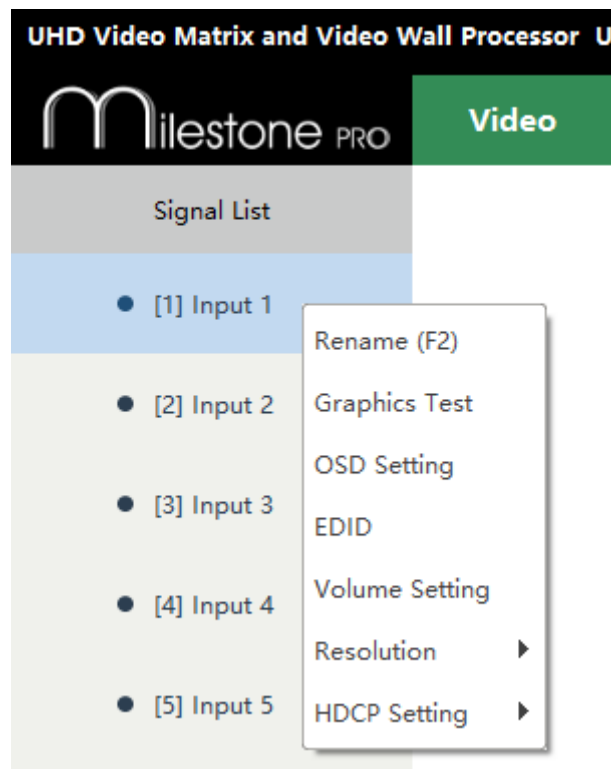
5.3 Switching and splicing page



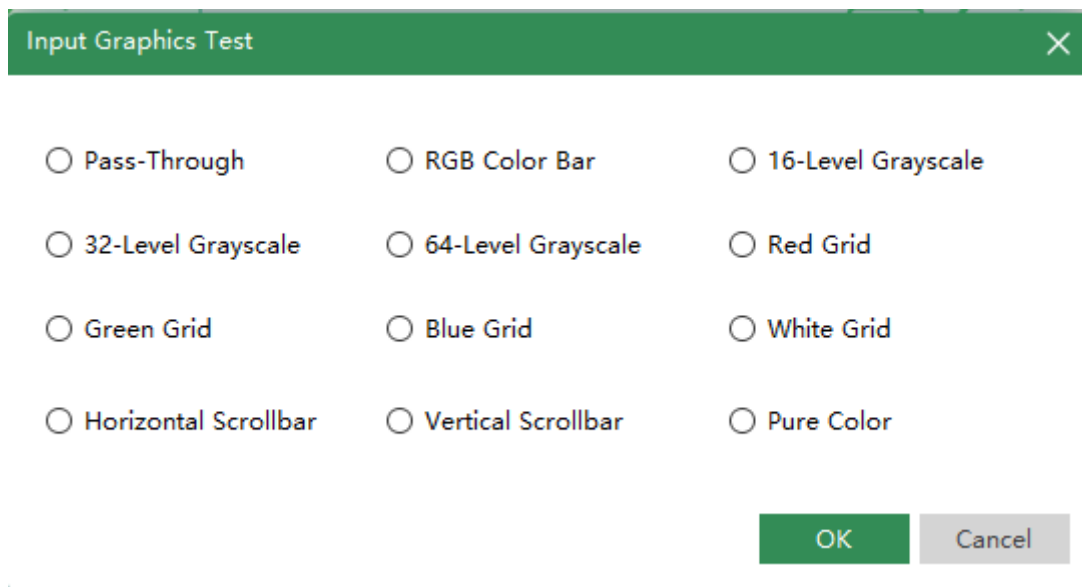
- ① Video: Click here to switch to the switch and splice page.
- ② Signal input list: green when there is signal input, black when there is no signal input.
- ③ Switch and splice output ports Area: 1-9 output ports.
- ④ Plan: Poll Plan

1. Input

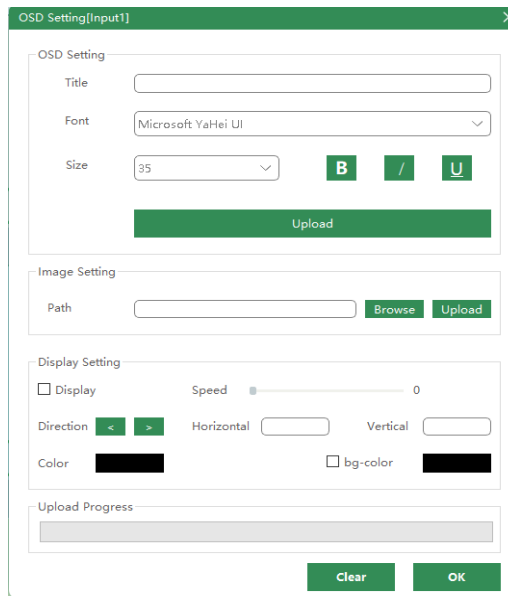
Signal list right click function as shown below:



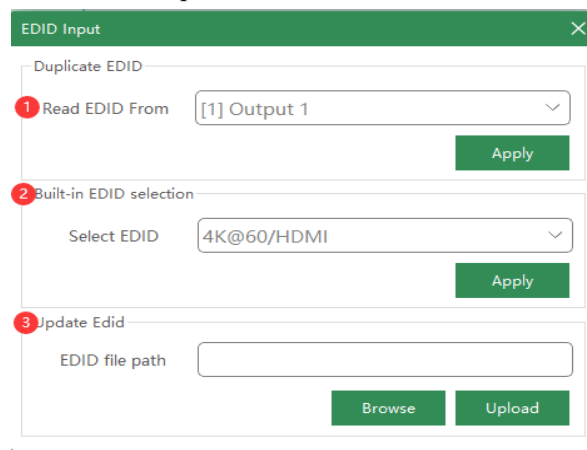
- ① Rename(F2): Can change the input signal name.
- ② Graphic testing: Input can automatically generate test images for engineering debugging and testing.



- ③ OSD setting: A marker can be added to each input signal to distinguish between different inputs.



- ④ EDID: Click on "EDID" and open an "EDID" control window.



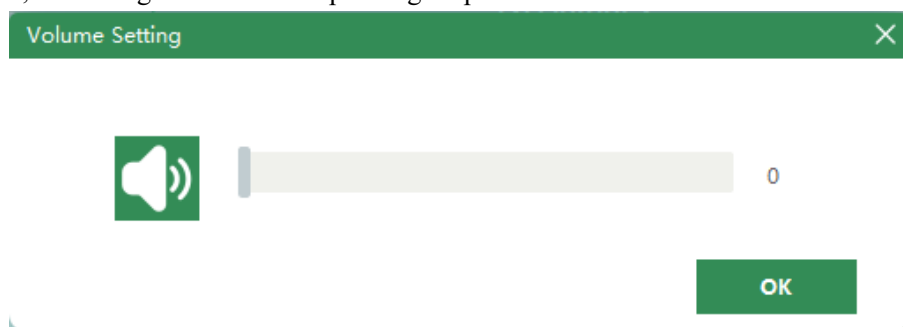
Select an input in the signal list and click "EDID"

"Read Edid From" Output Port 1 or 2...

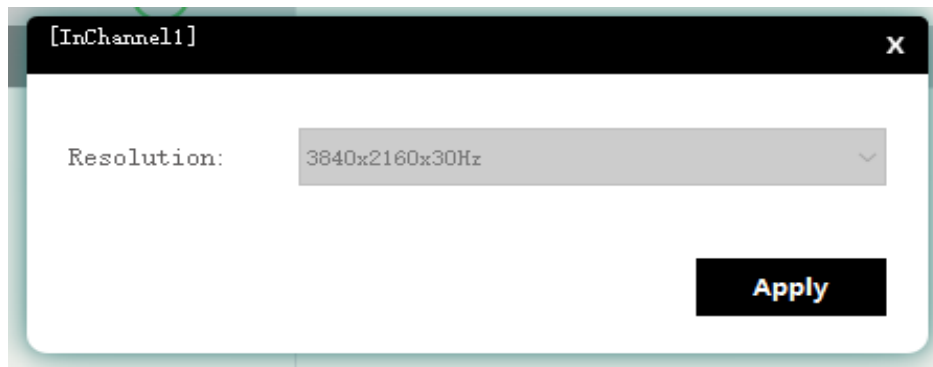
"Built-in EDID selection"-select different resolution and best recommended resolution

"Update EDID" Click "Browse", select the EDID file to be updated to open, and click "Upload".

- ⑤ Volume adjustment: Provides volume control for the audio input, so when we change the volume, it is changed on the corresponding output.



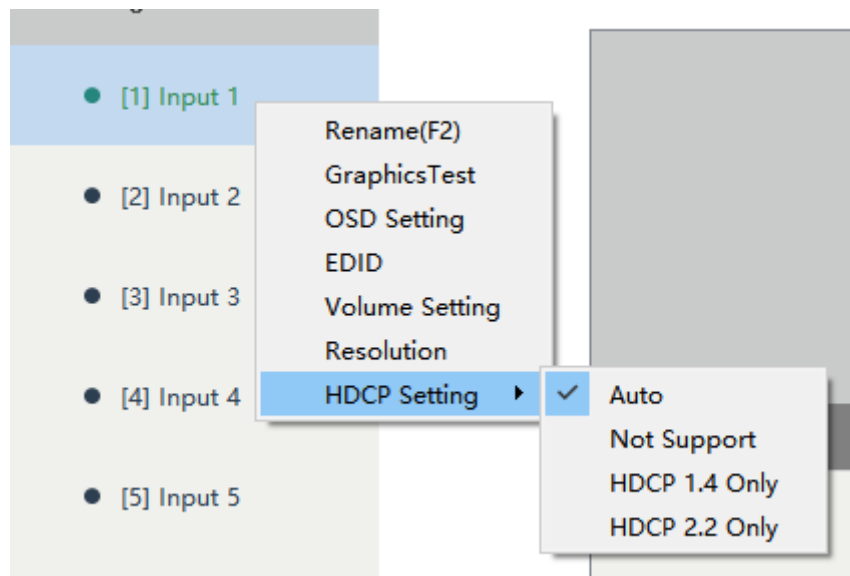
- ⑥ Resolution: View the input resolution.



⑦

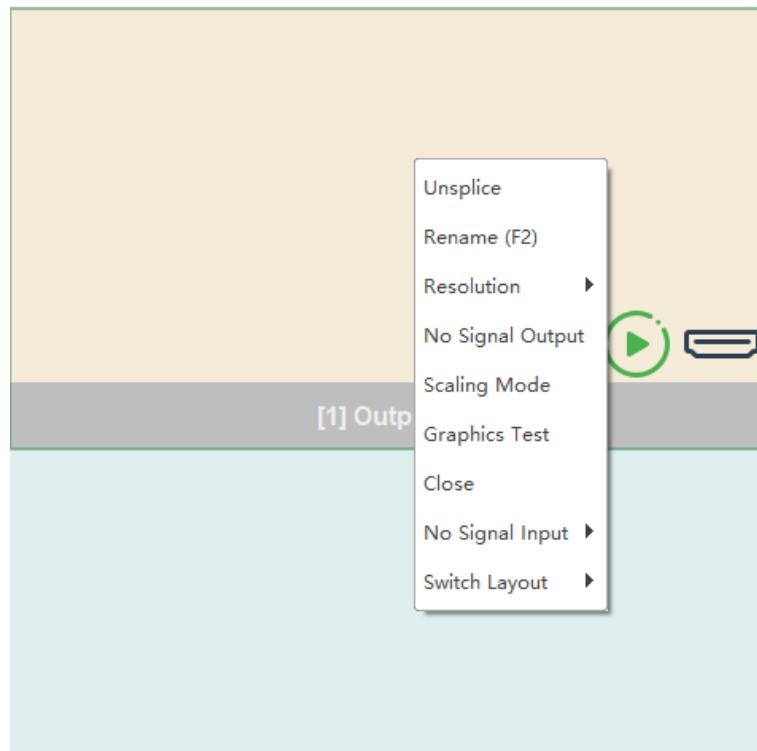
HDCP Setting

“Auto” “Not Support” “HDCP1.4 Only” “HDCP 2.2 Only”

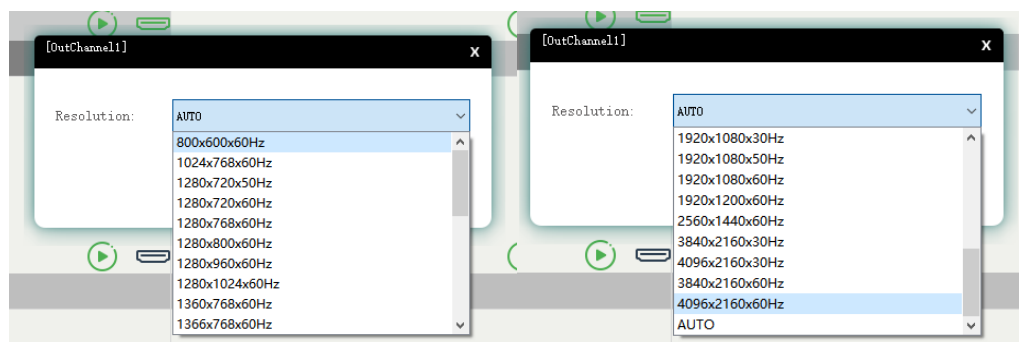


2. Output

The right click function of the output port is shown as follows:



- ① **Unsplice/Splice:** Splice the current selected screens, or Unsplice the splicing screens
- ② **Rename (F2):** You can change the output port name.
- ③ **Resolution:** Output resolution to view or change.

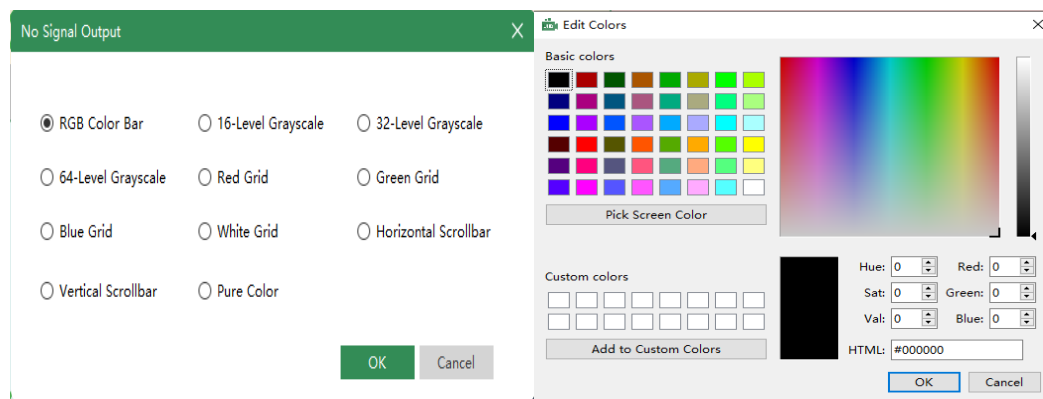


Support resolution:

- 1) 800x600x60Hz
- 2) 1024x768x60Hz
- 3) 1280x720x50Hz
- 4) 1280x720x60Hz
- 5) 1280x768x60Hz
- 6) 1280x800x60Hz
- 7) 1280x960x60Hz
- 8) 1280x1024x60Hz
- 9) 1360x768x60Hz
- 10) 1366x768x60Hz
- 11) 1440x900x60Hz
- 12) 1600x900x60Hz

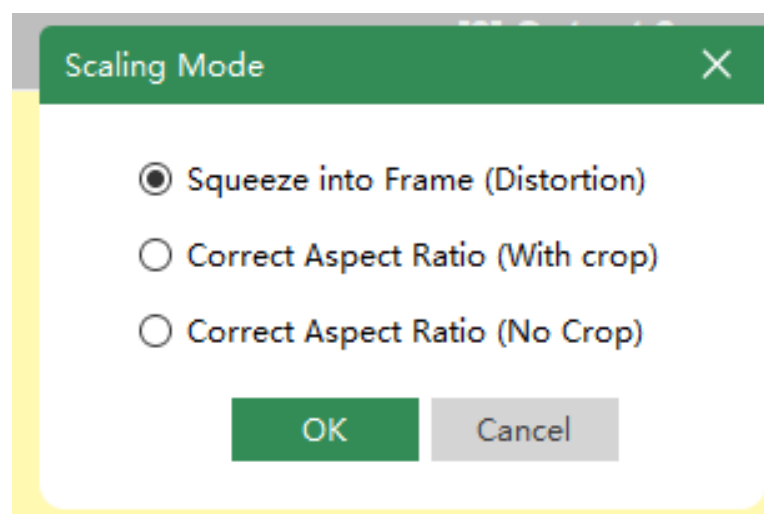
- 13) 1600x1200x60Hz
- 14) 1920x540x50Hz
- 15) 1920x540x50Hz
- 16) 1920x540x60Hz
- 17) 1920x1080x30Hz
- 18) 1920x1080x50Hz
- 19) 1920x1080x60Hz
- 20) 1920x1200x60Hz
- 21) 3840x2160x30Hz
- 22) 4096x2160x30Hz
- 23) 3840x2160x60Hz
- 24) 4096x2160x60Hz

④ **No Signal Input-** Select display image and color.

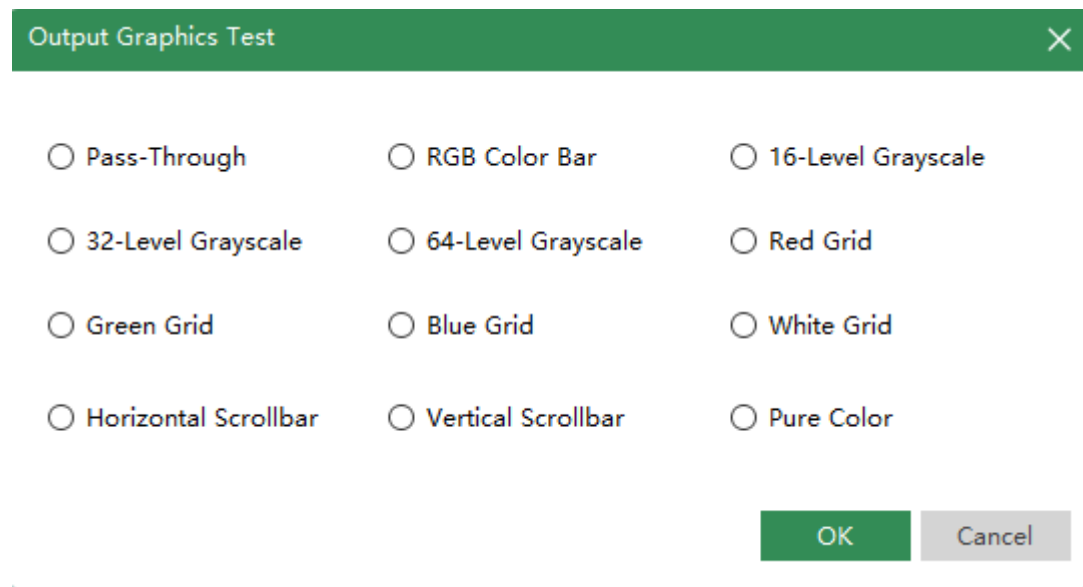


⑤ **Scaling Mode**

Choose “Squeeze into Frame (Distortion)”, “Correct Aspect Ratio(with crop)” or “Correct Aspect Ratio(No Crop)”



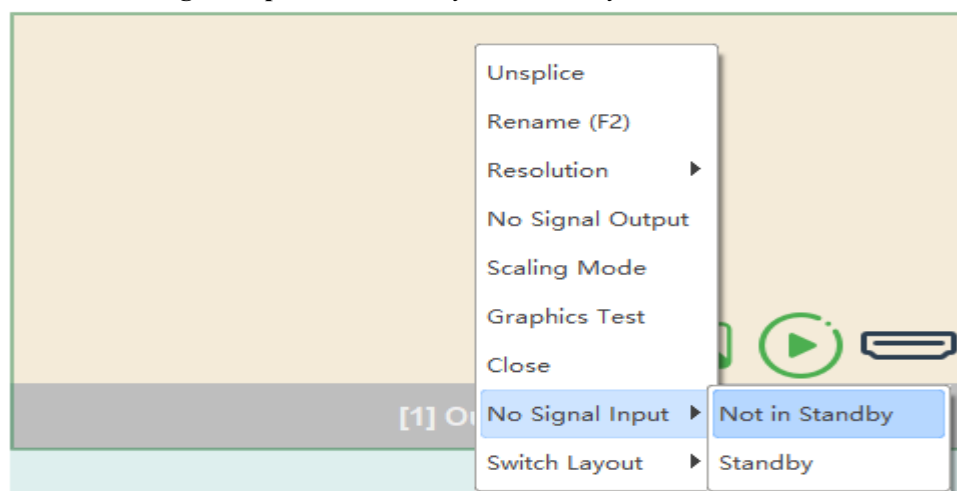
- ⑥ **Graphics Test:** Output test images to test whether the output port and display device are properly connected.



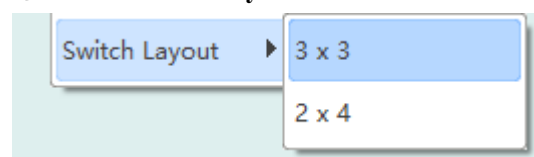
- ⑦ **Close:** can quickly close the input signal of the output port.



- ⑧ **No Signal Input:** “No Standby” or “Standby”

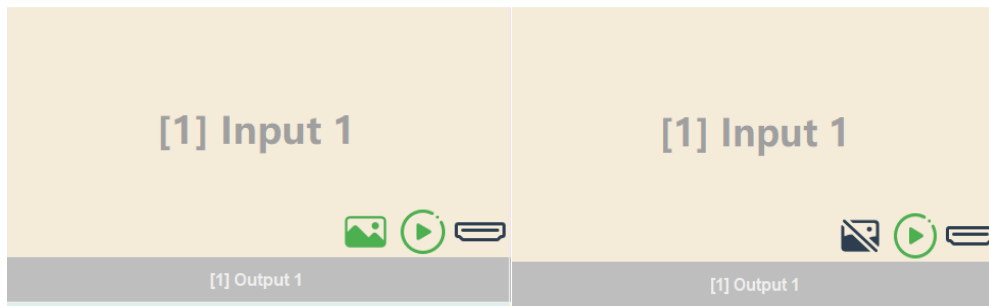


- ⑨ **Switch Layout:** “3*3” or “2*4”

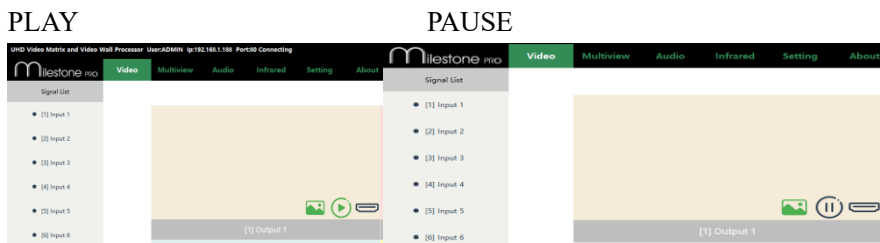


- ⑩ **Shortcut features:**

- **Directly display or turn off the signal**

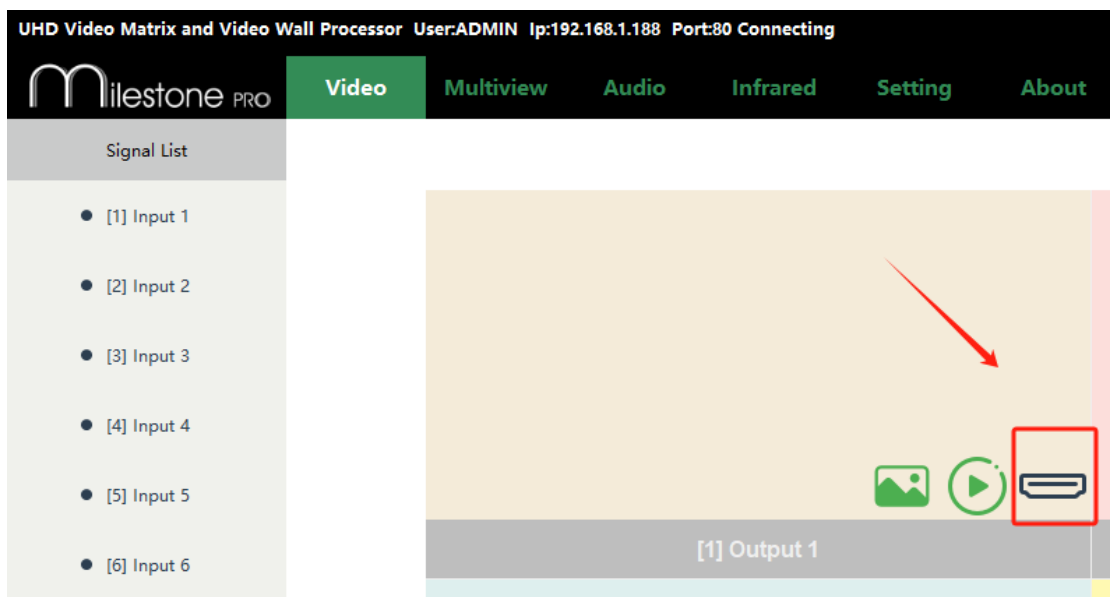


- **Video Play and Pause Button**



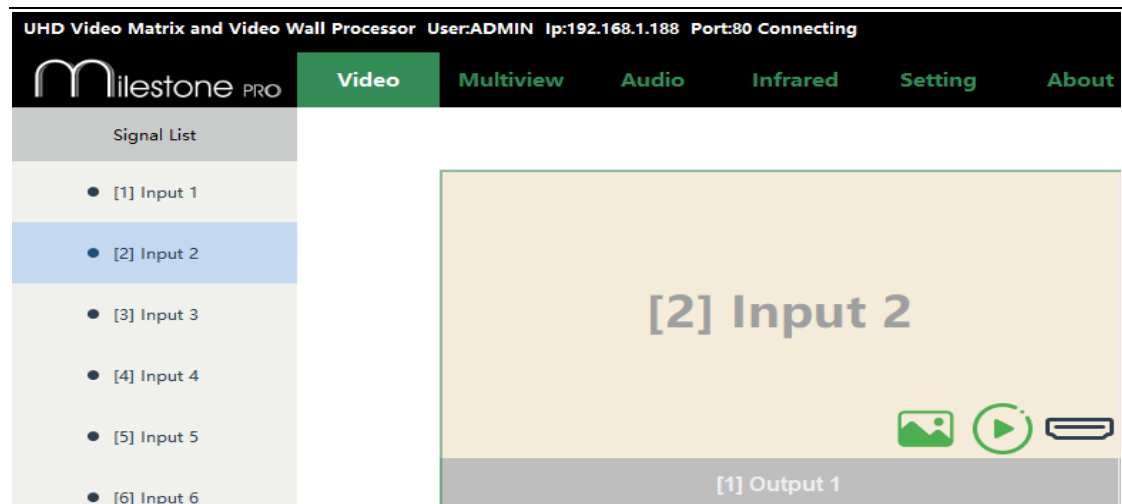
- **Signal Connection**

- ① The HDMI icon is green, indicating that the signal is connected successfully.
- ② The HDMI icon is black, indicating that the signal is unconnected, please check the cable connection.

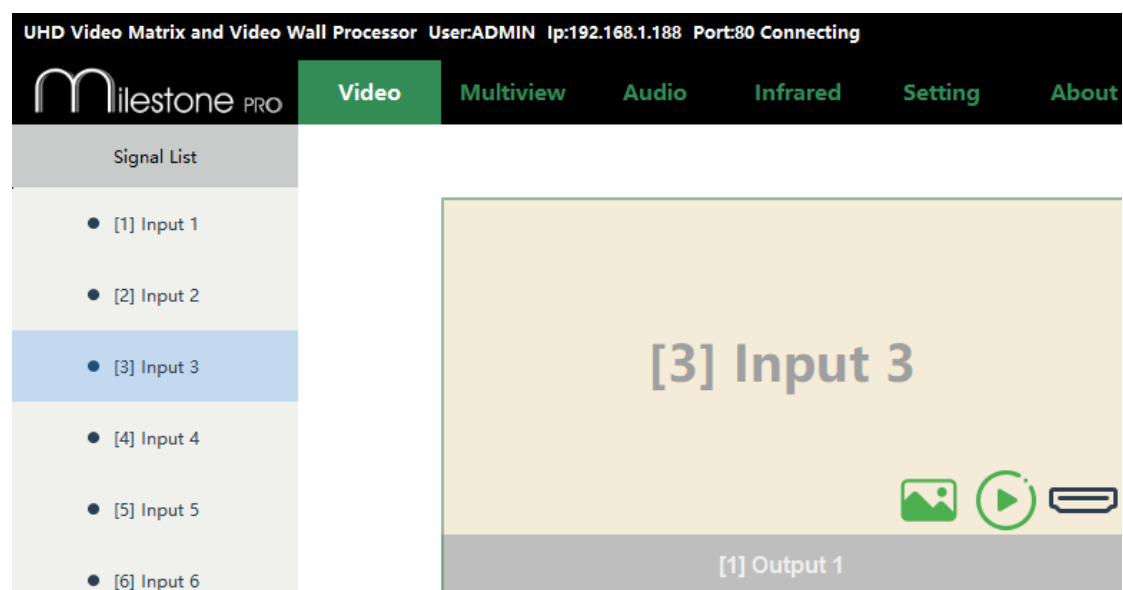


3. Quick Switch

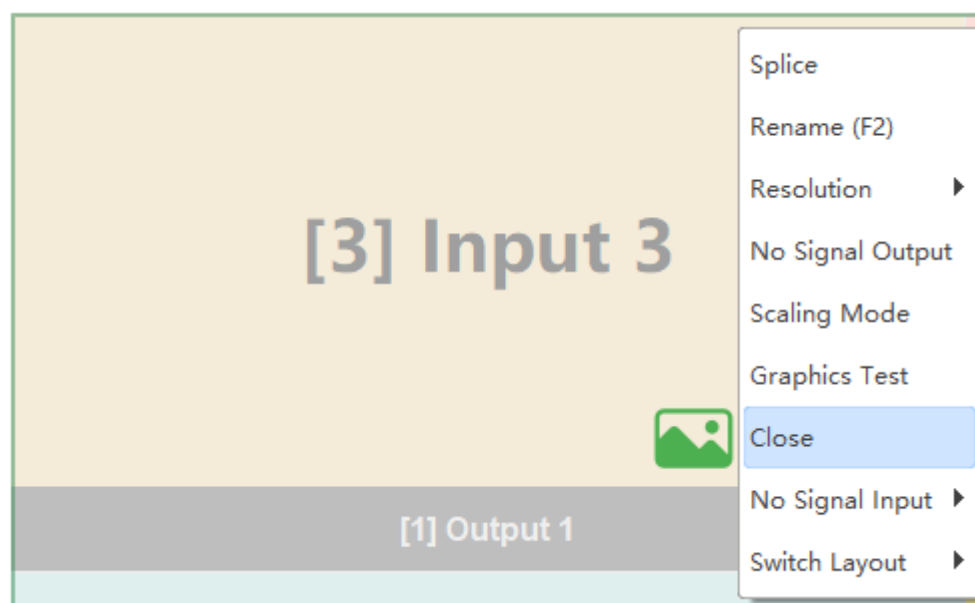
- ① Drag the input signal from signal list to the output port side accordingly.



② Change the signal directly by drag other input signal to the output port.



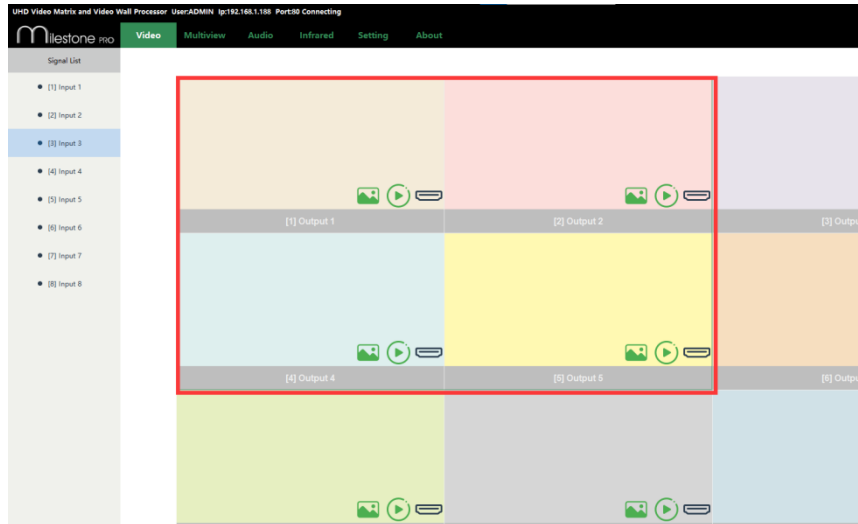
③ Close the signal by right click of the output port,click to “close”



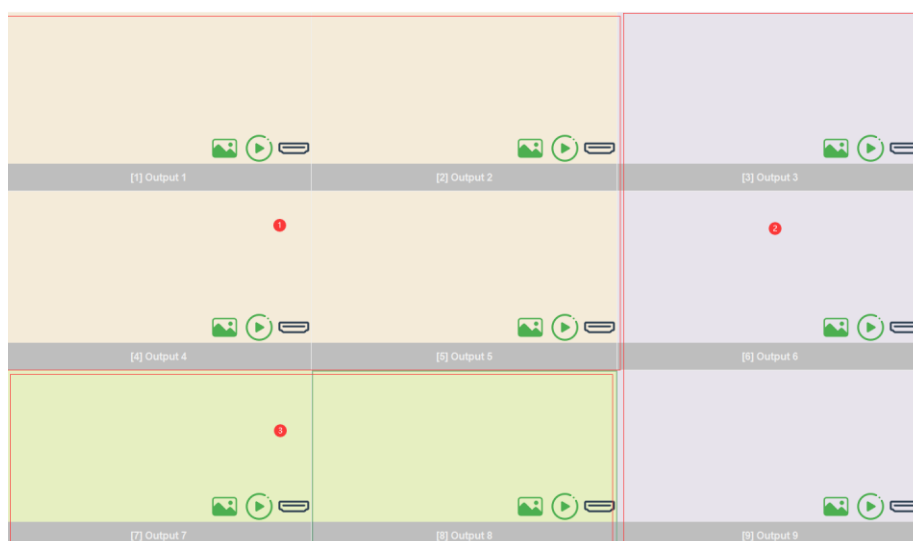
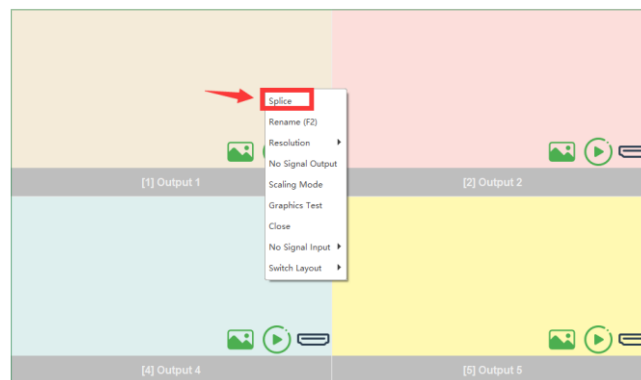
4. Fast splicing control

Can do the free signal layer splicing of all the screens by choose the screens.

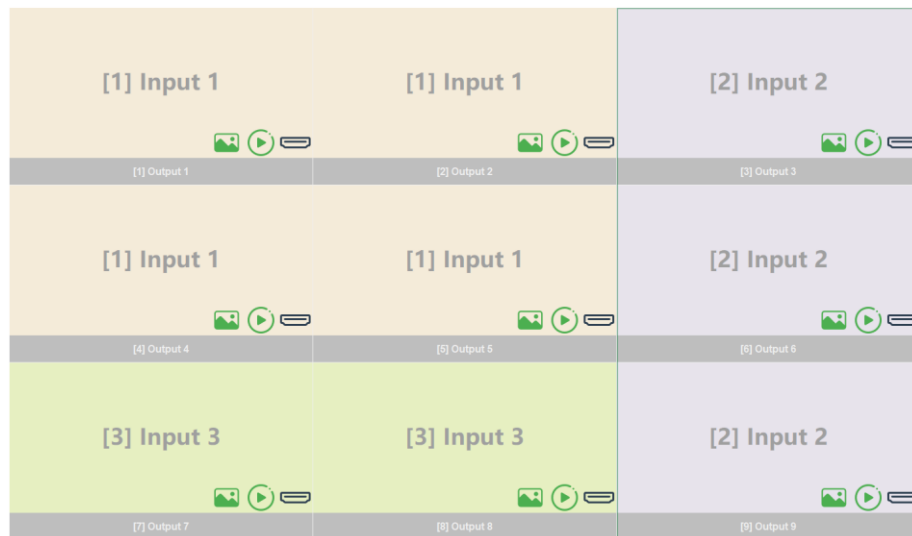
- ① Signal List: Input signals, right-click for signal functions (see above for details).
- ② Splice Wall: Displays the current mode and signals for the splice wall; signals can be dragged to splice.
- ③ How to do the splicing:
 - Choose the outputs that you want to do the splicing



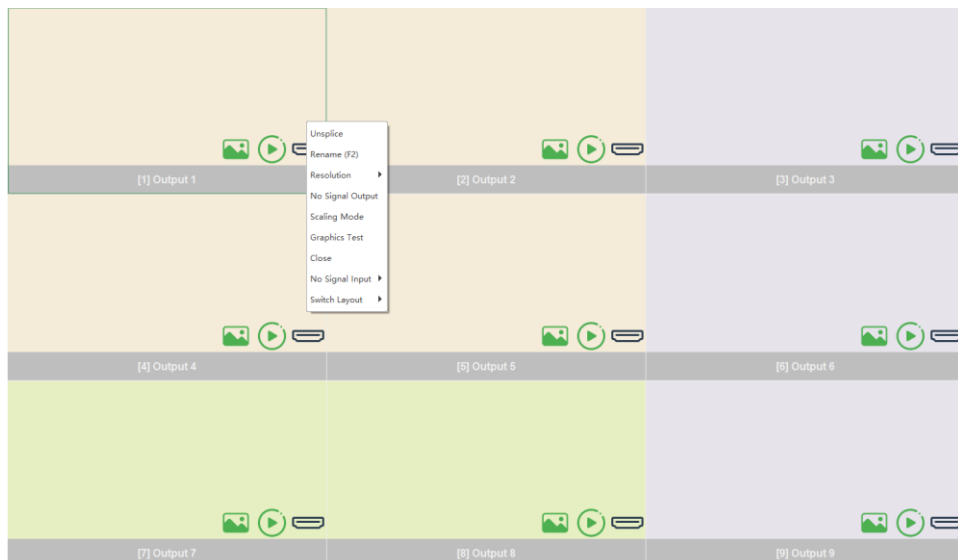
- Click the splice button to get into splice mode.



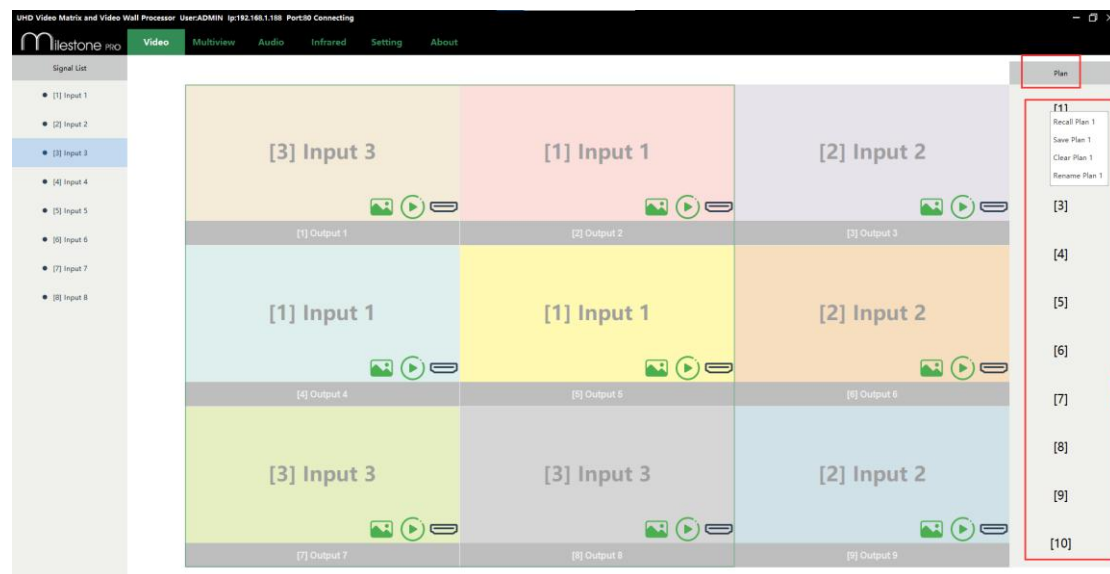
- Drag the input signal to screens accordingly.



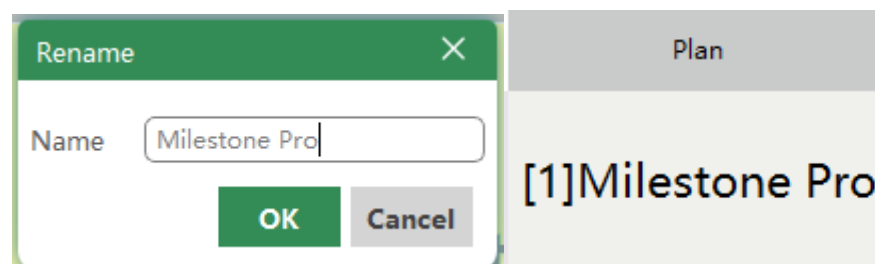
- Unsplice



5. Plan

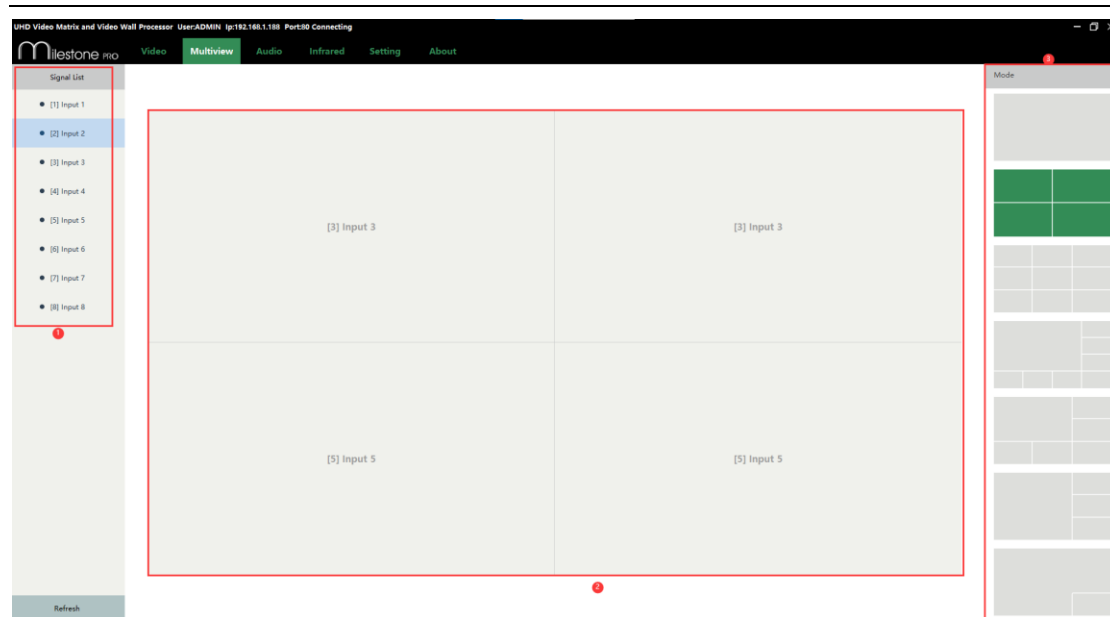


- ① Recall Plan
- ② Save Plan
- ③ Clear Plan
- ④ Rename Plan

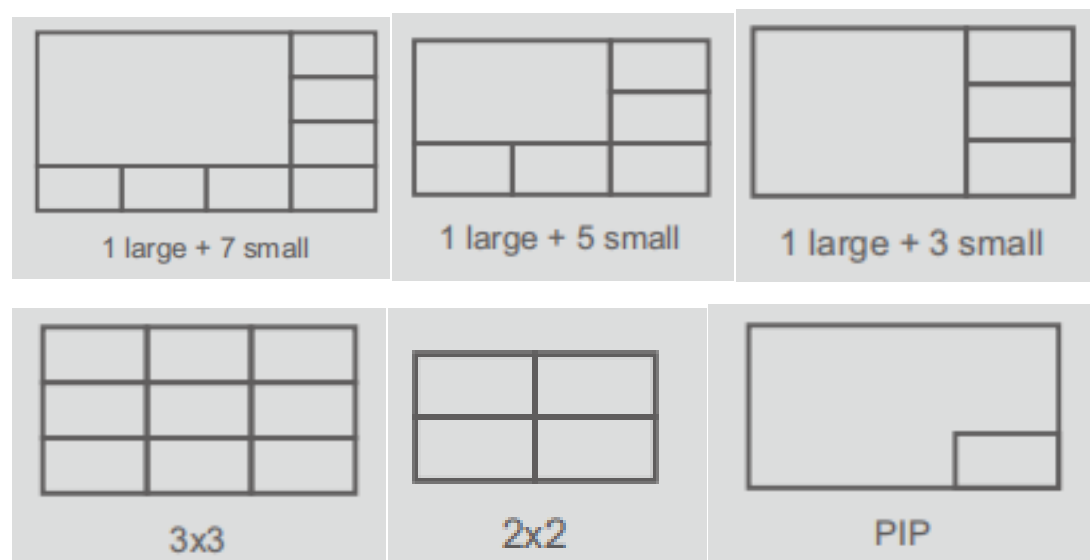


5.4 Fast Multiviewer Control

The multiviewer mode can be set in the last output port (9 output port) and there are 6 splicing modes.

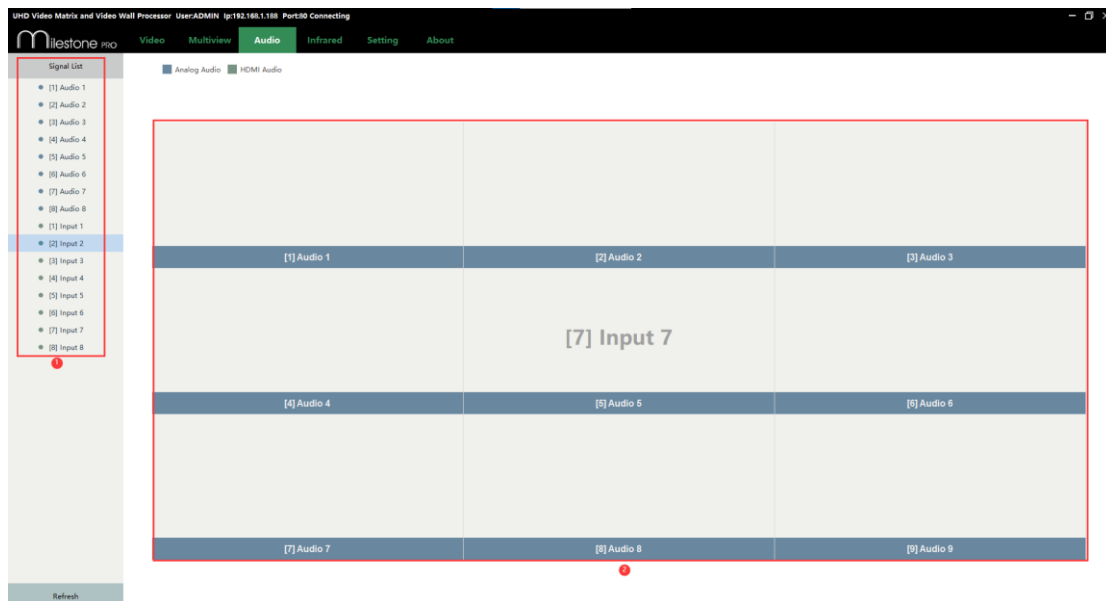


- ① Signal List: Input signals, right-click for signal functions (see 5.3 for details).
- ② Multiviewer Display: Displays the current mode and signals for the multiviewer display; signals can be dragged to display.
- ③ Mode: Multiviewer mode, supports up to 6 multiviewer modes.



In single-screen, the other 8 output ports can form a 3*3 video wall with the following modes available.

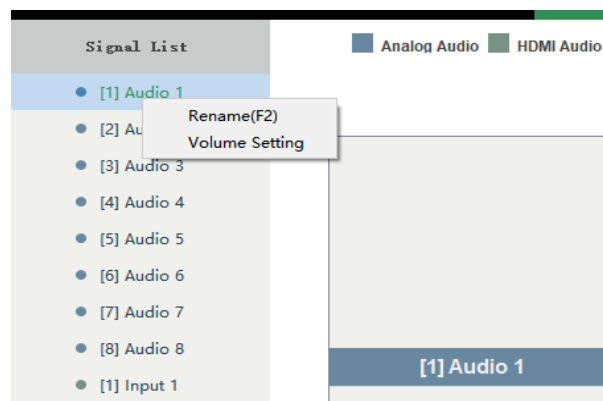
5.5 Audio Switching Matrix



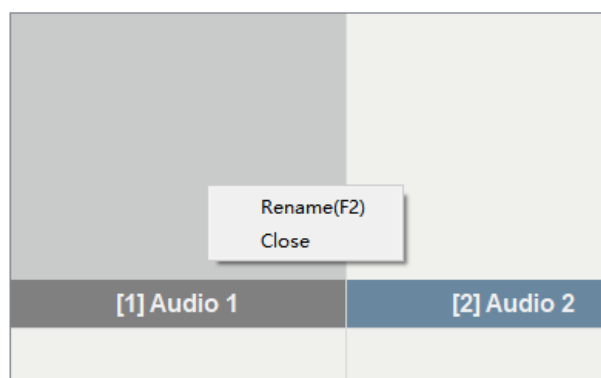
- ① Audio Input List:  Analog audio 3.5mm input,  digital audio input.
- ② Audio Output Ports:  Analog audio 3.5mm output ports,  digital audio output ports.

Supports audio matrix, allowing for flexible switching between analog and digital audio.

Right-click functions in the audio input list include renaming and volume adjustment.

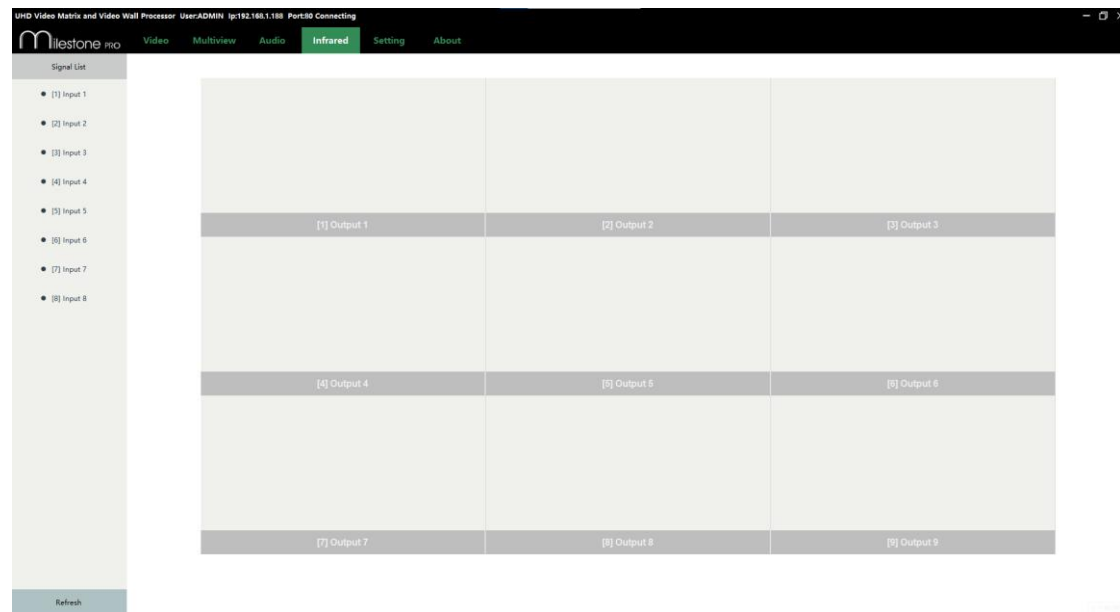


Right-click functions for audio output ports include renaming and clearing.

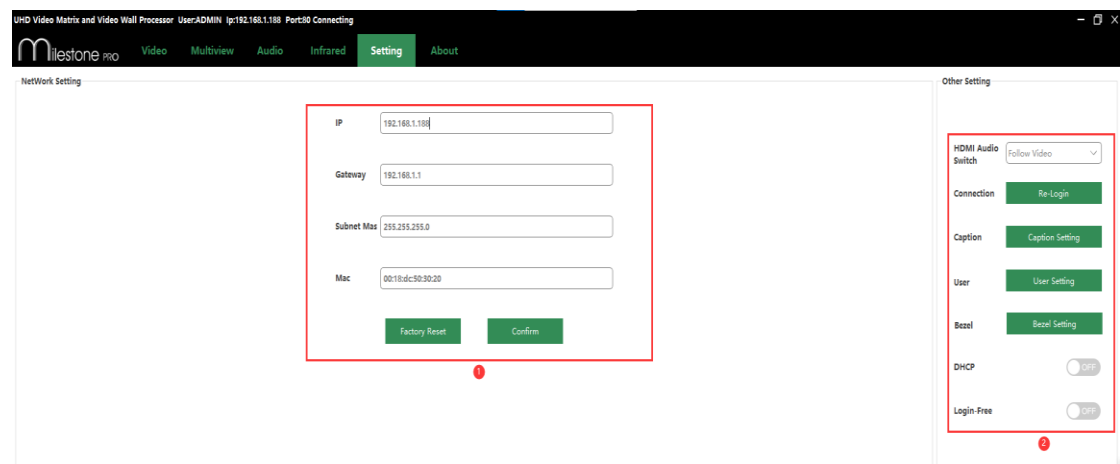


5.6 Infrared Switching Matrix

Allows for freely switching infrared channel control.

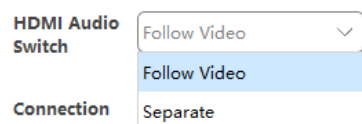


5.7 Setting

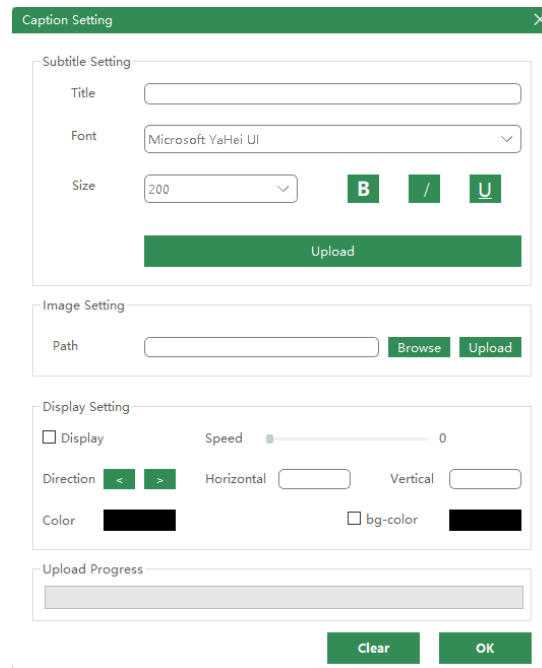


- ① Network Settings: View connected device network IPs, change network settings, restore factory settings, etc.
- ② Other Settings: HDMI audio switch, connection,, caption, user, bezel setting, DHCP switch, and login-free.

● HDMI Audio Switch:



● Caption Settings:



The 'Caption Setting' dialog box is divided into four sections:

- Subtitle Setting:** Includes a 'Title' text field, a 'Font' dropdown menu (currently showing 'Microsoft YaHei UI'), a 'Size' dropdown menu (currently showing '200'), and three buttons: 'B' (Bold), 'I' (Italic), and 'U' (Underline). An 'Upload' button is located below these options.
- Image Setting:** Includes a 'Path' text field, a 'Browse' button, and an 'Upload' button.
- Display Setting:** Includes a 'Display' checkbox, a 'Speed' slider (set to 0), a 'Direction' section with left and right arrow buttons, and two dropdown menus for 'Horizontal' and 'Vertical' positions. There are also color selection boxes for 'Color' and 'bg-color'.
- Upload Progress:** A progress bar at the bottom of the dialog.

At the bottom right of the dialog are 'Clear' and 'OK' buttons.

1. Subtitle Settings:

Title: Enter the content you want to display as subtitles.

Font: Set the font style for subtitles.

Font Size: Adjust the font size of subtitles.

B (Bold): Make subtitles bold.

I (Italic): Italicize the subtitle font.

U (Underline): Underline the subtitle font.

Upload Characters: Upload the configured characters to the current splice wall. Note: Set the characters before uploading. For example, if bold is not set before uploading, clicking bold after uploading will have no effect. So, configure before uploading, or else you'll need to upload new subtitles.

2. Image Settings:

Image Path: Upload an image to the splice wall for display as background picture. Note: Keep the image size reasonable to avoid display issues. Supports various image formats such as .bmp, png, jpg, jpeg, tga, tiff, and others.

3. Display Settings:

Display Switch: Set the switch for subtitles on the current splice wall.

Speed: Control the speed of subtitle movement (0 means stationary, 10 is the highest speed).

Direction: Set the direction of subtitle movement on the splice wall.

Horizontal: Set the horizontal position of subtitles on the splice wall. Note: If the subtitle speed is not 0, the horizontal position will be ineffective.

Vertical: Set the vertical position of subtitles on the splice wall.

Color: Choose a color to change the font color of subtitles on the current splice wall.

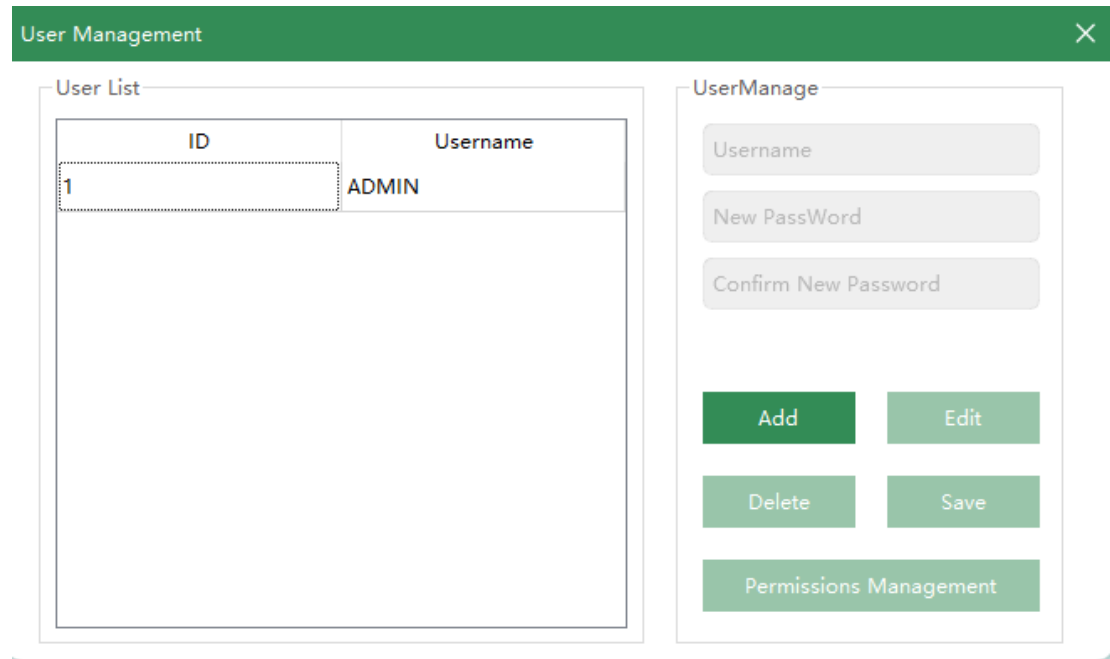
Font Background Color: Choose a color to change the background color of subtitles on the current

splice wall. There is a switch next to the color selection to control the visibility of the background color.

- **User Management:**

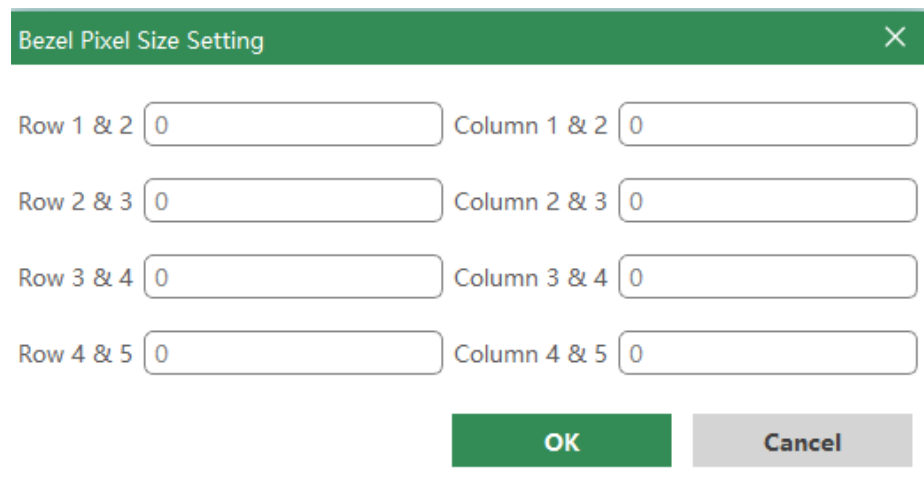
For example, to add a user named "root" with the password "123456":

Click on "Add," enter the username and password, re-enter the password, and click "Save." You can use this username and password for the next login.



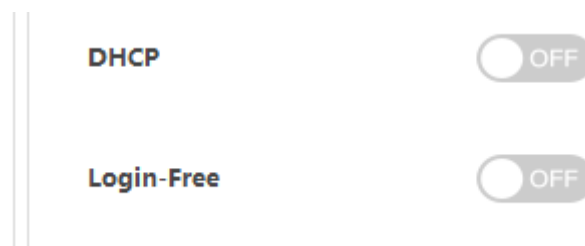
The User Management dialog box is divided into two main sections. On the left, the 'User List' section contains a table with two columns: 'ID' and 'Username'. The first row shows '1' in the ID column and 'ADMIN' in the Username column. On the right, the 'UserManage' section contains three input fields for 'Username', 'New PassWord', and 'Confirm New Password'. Below these fields are four buttons: 'Add', 'Edit', 'Delete', and 'Save'. At the bottom of the 'UserManage' section is a button labeled 'Permissions Management'.

- **Bezel Pixel Size Setting:**



The Bezel Pixel Size Setting dialog box features a grid of input fields. The first column contains four rows labeled 'Row 1 & 2', 'Row 2 & 3', 'Row 3 & 4', and 'Row 4 & 5'. The second column contains four rows labeled 'Column 1 & 2', 'Column 2 & 3', 'Column 3 & 4', and 'Column 4 & 5'. Each label is followed by an input field containing the value '0'. At the bottom right of the dialog are two buttons: 'OK' and 'Cancel'.

- **DHCP & Login-Free**



This section contains two settings, each with a label and a toggle switch. The first setting is 'DHCP' with a toggle switch set to 'OFF'. The second setting is 'Login-Free' with a toggle switch set to 'OFF'.

5.8 About

Viewing the hardware and software versions of connected devices.





Device Type:	MP-UHD89MV
Device Version:	MCU : Ver5.3/1.6/1.6 FPGA: 1.5/3.0/3.0/4.3/1.4
Software Version:	V2.1.0(241212)
Release:	r1

6. Web control

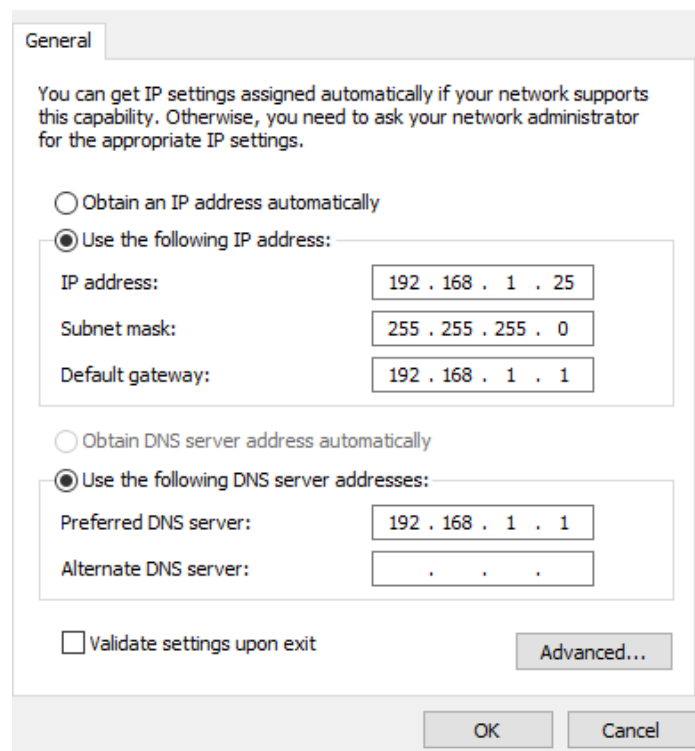
6.1 Connection

1. Can be connected to the router via CTA5 Ethernet cable for TCP/IP communication.



The matrix's default IP address is 192.168.1.188. Please configure the connected router to be in the same network segment.

2. If controlling from the PC, please set the following IP.



General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address:

IP address:

Subnet mask:

Default gateway:

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses:

Preferred DNS server:

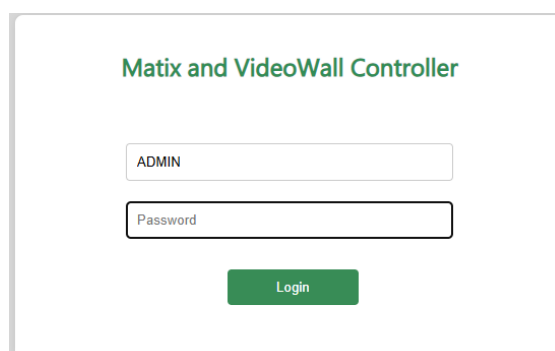
Alternate DNS server:

☐ Validate settings upon exit

[Advanced...](#)

[OK](#) [Cancel](#)

3. Open the mobile or PC browser and enter the matrix IP: 192.168.1.188 to directly access the control interface.
4. Password:admin123



Matix and VideoWall Controller

[Login](#)

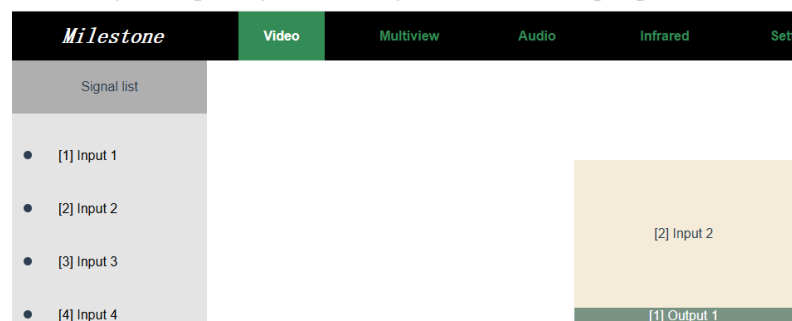
6.2 Switching and Splicing Control



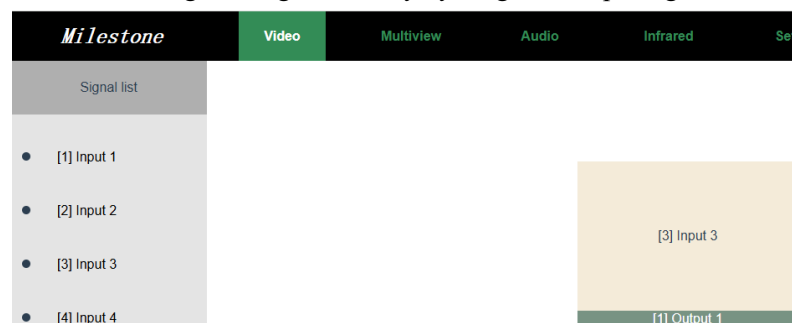
- ① Video: Click to quickly switch to the switching and splicing control interface.
- ② Input Signal List: Check for input signals here. A green status indicates signal input, while default black signifies no signal input. Right-click functions in the signal list include graphic testing, logo settings, EDID, volume adjustment, and resolution settings.
- ③ Matrix Output Ports: Matrix output ports 1-9.
- ④ Plan

1. Quick Switch

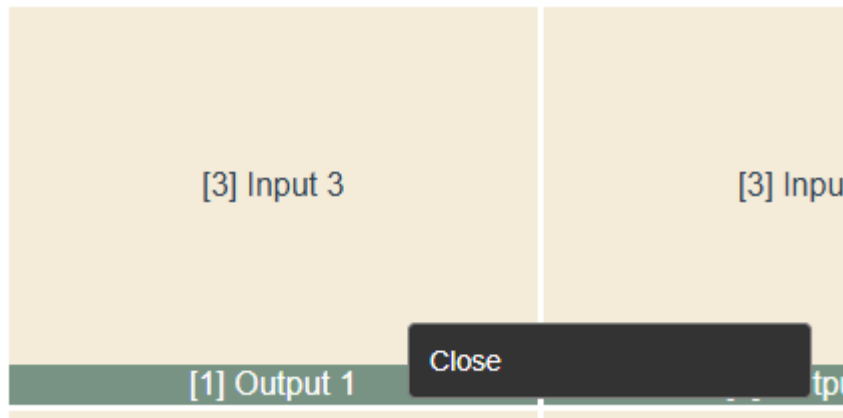
- ① Drag the input signal from signal list to the output port side accordingly.



- ② Change the signal directly by drag other input signal to the output port.



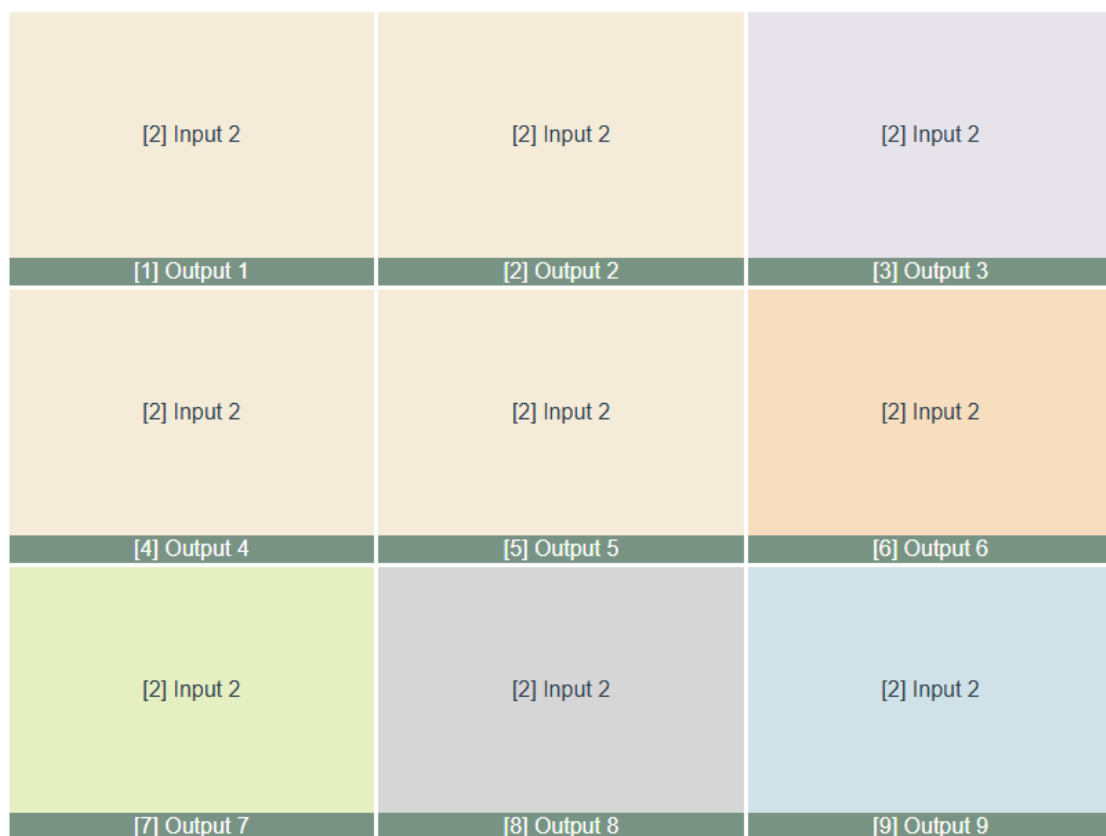
- ③ Close the signal by right click of the output port, click to “close”



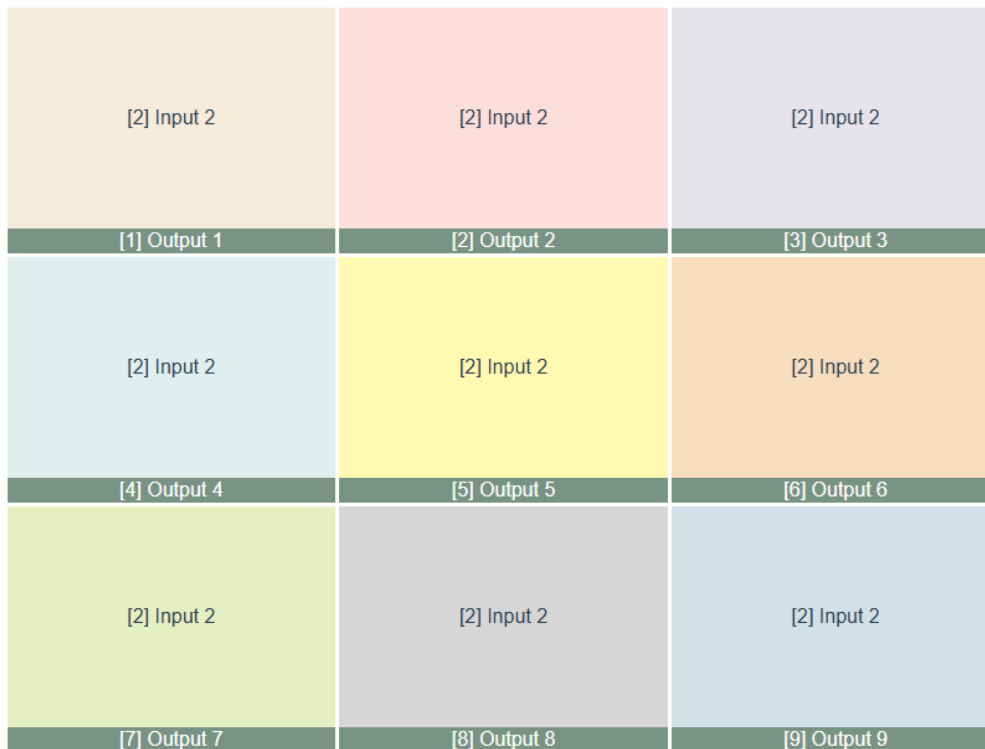
2. Fast splicing control

Can do the free single layer splicing of all the screens by choose the screens.

- ④ Signal List: Input signals, right-click for signal functions (see above for details).
- ⑤ Splice Wall: Displays the current mode and signals for the splice wall; signals can be dragged to splice.
- ⑥ How to do the splicing:
 - Choose the outputs that you want to do the splicing, it will do the splicing directly



- Double click the splicing video wall, it will unsplice directly



3. Plan

Milestone
Video
Multiview
Audio
Infrared
Setting
About

Signal list

- [1] Input 1
- [2] Input 2
- [3] Input 3
- [4] Input 4
- [5] Input 5
- [6] Input 6
- [7] Input 7
- [8] Input 8

Refresh

[2] Input 2	[2] Input 2	[2] Input 2
[1] Output 1	[2] Output 2	[3] Output 3
[2] Input 2	[2] Input 2	[2] Input 2
[4] Output 4	[5] Output 5	[6] Output 6
[2] Input 2	[2] Input 2	[2] Input 2
[7] Output 7	[8] Output 8	[9] Output 9

Plan

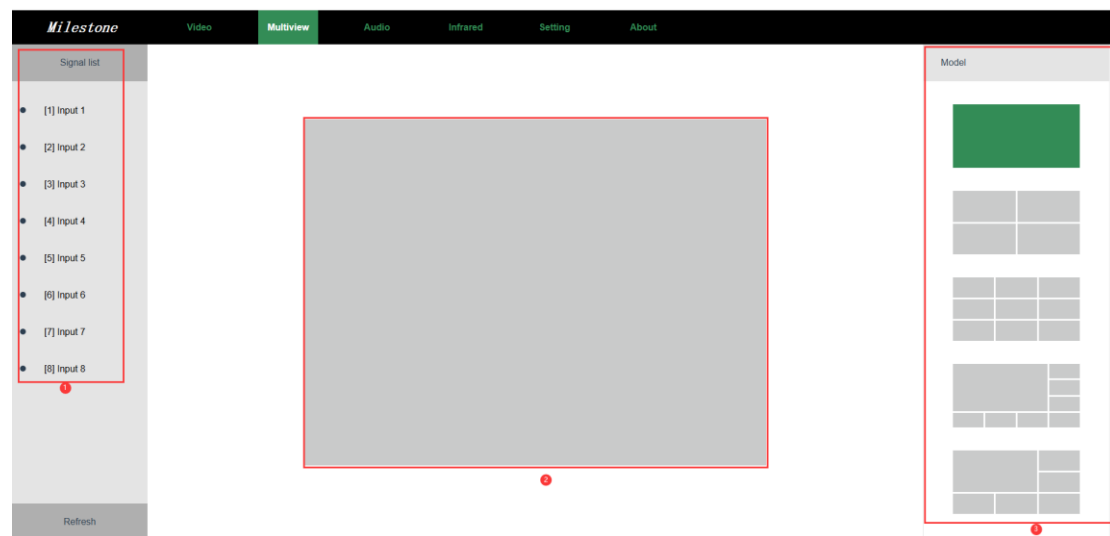
- Recall Plan 2
- Save Plan 2
- Clear Plan 2
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

- ① Recall Plan
- ② Save Plan
- ③ Clear Plan

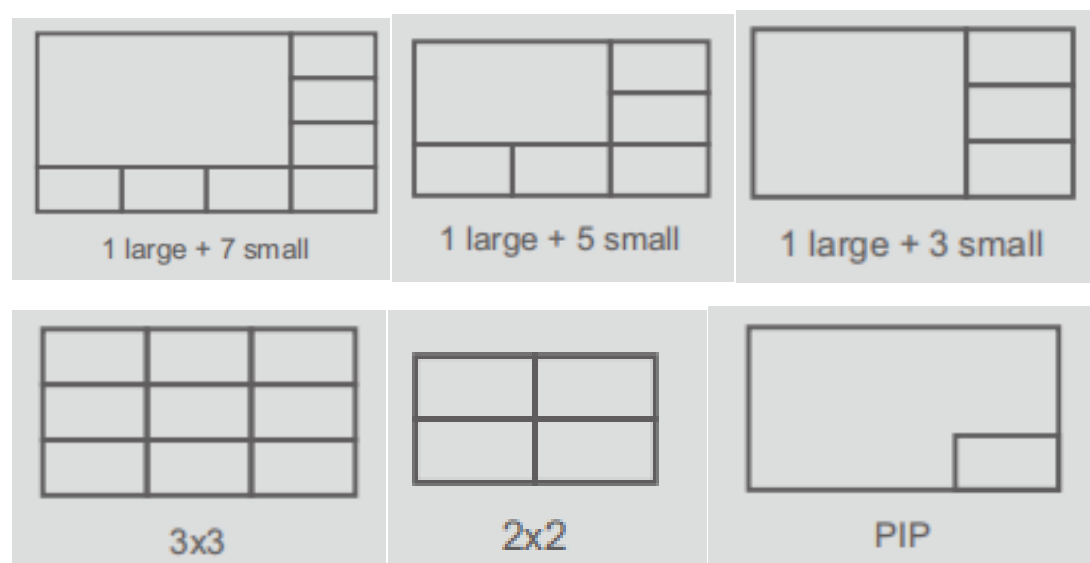
6.3 Fast Multiviewer Control

The multiviewer mode can be set in the last output port (9 output port) and there are 6 splicing

modes.



- ① Signal List: Input signals, right-click for signal functions (see 5.3 for details).
- ② Multiviewer Display: Displays the current mode and signals for the multiviewer display; signals can be dragged to display.
- ③ Mode: Multiviewer mode, supports up to 6 multiviewer modes.



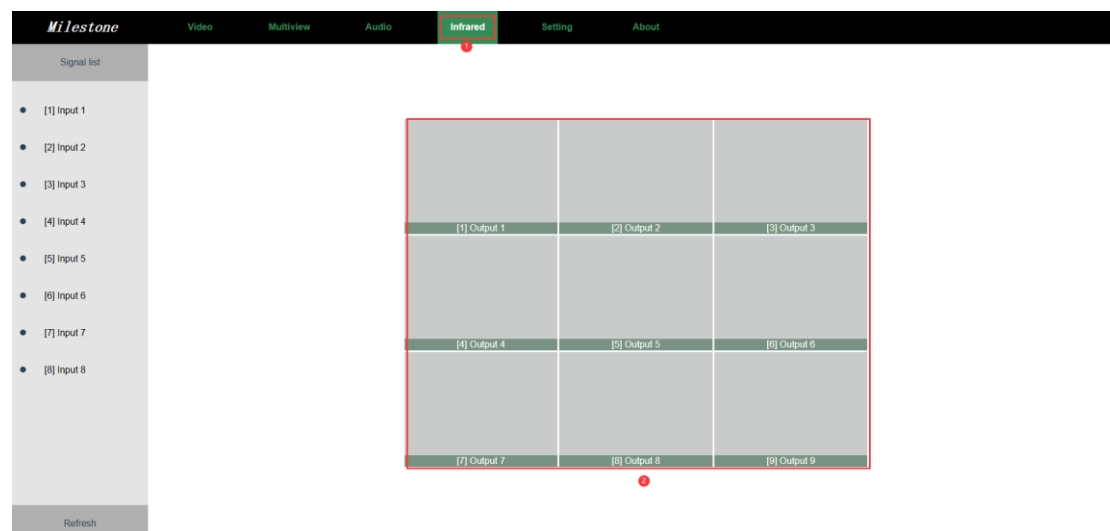
In single-screen, the other 8 output ports can form a 3*3 video wall with the following modes available.

6.4 Audio switching matrix



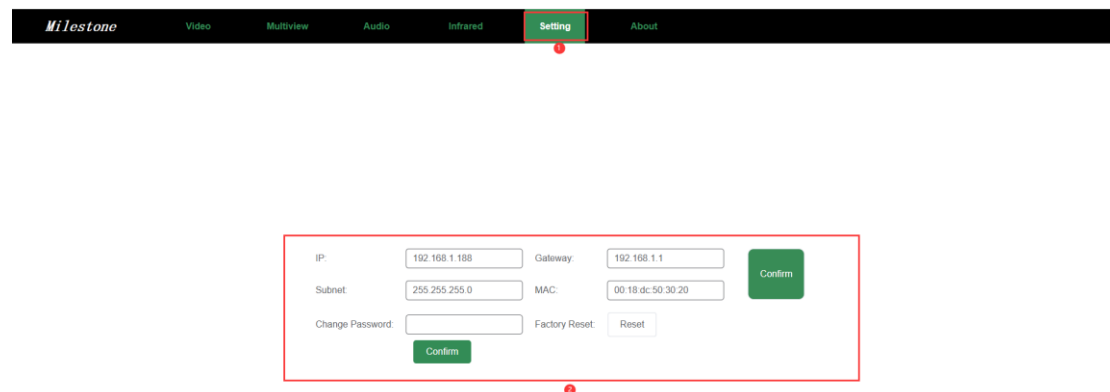
- ① Audio: Quick switch to audio control.
Audio Input List:  Analog Audio 3.5mm Input,  Digital Audio Input
- ② Audio Output Ports:  Analog Audio 3.5mm Output Port,  Digital Audio Output Port.
Display the audio signal of the current audio output port, and drag the signal to switch.

6.5 Infrared switching matrix



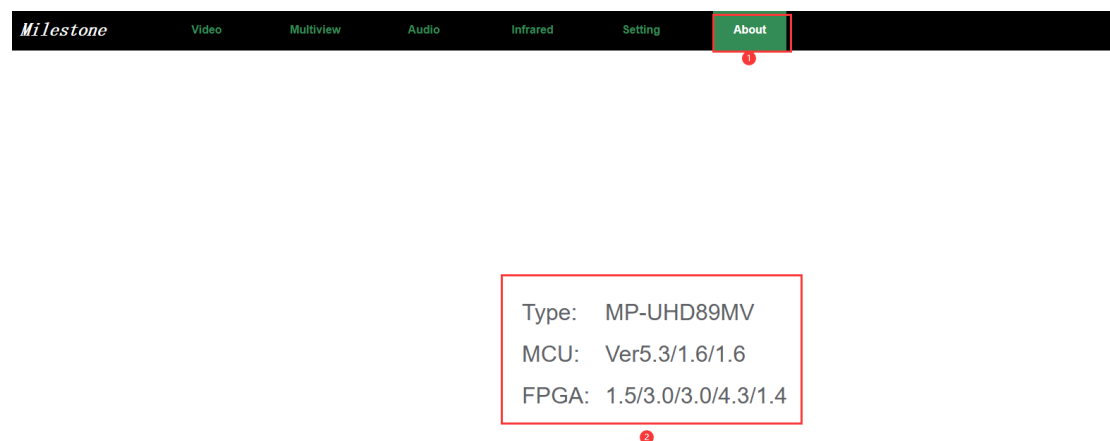
- ① Infrared: Quickly switch to infrared control.
- ② Infrared Input Ports: Display the signal list for Infrared Input Ports 1-8.
- ③ Infrared Output Ports: Show and drag to switch signals for the current Infrared output port.

6.6 Setting



- ① Setting: Quickly switch to the settings menu.
- ② Matrix Network Settings: Displays the current network IP address of the connected matrix. Allows modification of the network IP address and factory reset.

6.7 Version



- ① About: Quickly switch to the version viewing interface.
- ② Hardware and Software Versions: Displays the current matrix's hardware and software versions.

7. Front Panel Button Operations Guide

7.1 Matrix switching

Example 1: To switch the matrix from "Input 1" to "Output 2", follow these button operations:

Press sequentially.	Display Screen Printing	Comments
---------------------	-------------------------	----------

1	1	Select "Input 1"
V/M	1V	Press once for the matrix switch symbol "V."
2	1V2	Select "Output 2"
ENTER	Switch OK !	Switching complete

Example 2: To switch the matrix from "Input 1" to both "Output 2" and "Output 3," follow these button operations:

Press sequentially	Display Screen Printing	Comments
1	1	Select "Input 1"
V/M	1V	Press once for the matrix switch symbol "V."
2	1V2	Select "Output 2"
,	1V2,	Delimiter
3	1V2,3	Select "Input 3"
ENTER	Switch OK !	Switching complete

Example 3: To switch the matrix from "Input 1" to "All Outputs," follow these button operations:

Press sequentially	Display Screen Printing	Comments
1	1	Select "Input 1"
All	1All	Switching complete

7.2 Save Switching and State Invocation

1. Save the current matrix switching state, with a maximum of 10 states, corresponding to keys 0-9.

To save the current matrix switching state, the key operation is:

Press sequentially	Display Screen Printing	Comments
SAVE	Save Switch Plan	
2	Save Switch Switch OK !	Saved to "State 2" successfully

2. Call the matrix switching state

Invoke the saved matrix state, the key operation is:

Press sequentially	Display Screen Printing	Comments
RECALL	Recall Switch Plan	
2	Recall Switch Switch OK !	State 2" successfully invoked

3. Save the current concatenation mode switching state.

Save the current matrix switching state; the key operation is:

Press sequentially	Display Screen Printing	Comments
SAVE	Save Switch Plan	Press once to save the seamless output card state.
SAVE	Save PJ	Pressing again saves the Splicing mode state.

	Wall: Plan:	
1	Save PJ Wall: 1 Plan:	Select " Splicing wall 1
1	Switch OK ! Wall: 1 Plan:1	Select to save it in "Plan 1."

4. Invoke the concatenation mode switching state.

Invoke the saved matrix state; the key operation is:

Press sequentially	Display Screen Printing	Comments
RECALL	Recall Switch Plan	Press once to invoke the seamless output card state.
RECALL	Recall PJ Wall: Plan:	Pressing again invokes the Splicing mode state.
1	Recall PJ Wall:1 Plan:	Select the invoked " Splicing Wall 1.
1	Switch OK ! Wall: 1 Plan:1	Select the invoked "Plan 1.

7.3 Inquiry and Settings

Inquire Network Parameters

Press sequentially	Display Screen Printing	Comments
MENU	IP SETTING 192.168.001.188	Display IP Address
MENU	GATEWAY SET 192.168.001.001	Display Gateway
MENU	Subnet Mask SET 255.255.255.000	Display Subnet Mask
MENU	PORT SETTING 80	Display Port Number

Modify Network Parameters

Example of Changing IP Address, modifying the original IP address from 192.168.001.188 to 192.168.001.180, the button operations are as follows:

Press sequentially.	Display Screen Printing	Comments
IP	IP SETTING 192.168.001.188	Display IP Address
◀		Enter modification; the cursor for editing will appear
◀ or ▶		Move the cursor to the desired modification position.

0		Input the desired modification value
ENTER	Set Succeed!	Setting Successful

Modify the port number, gateway, and subnet mask using the same steps as before. Press "IP" to enter the relevant interface, then navigate and modify as needed.

NOTE: Modifying network parameters requires a restart for the changes to take effect.

8. Common Faults and Solutions

Symptoms of Malfunctions	Solutions
Matrix Unable to Switch	● Check command accuracy
	● If there's no response, verify the device wiring.
	● Ensure the device is receiving proper power.
Matrix Output Without Image	● Verify the proper functioning of the device's respective ports and firmware version through command transmission or PC web inspection.
	● Check for input signals entering the matrix. Use matrix output or PC web switching to observe; 'No Input' will be displayed when there's no signal input.
	● The matrix generates a black signal automatically when there's no input source. Confirm if the display detects this signal.
	● If everything is normal but no signal is detected, check if the display device works by connecting a signal directly. Ensure the display supports the matrix's current output resolution; if not, adjust the matrix's output resolution. Alternatively, test the matrix by connecting it directly to a display.