

## 4x4 Seamless Multiviewer/Matrix/Videowall

### ITEM NO.: HM44

HM44 4x4 HDMI Seamless Matrix is the perfect solution for displaying content from up to four sources on four HDTV displays. Each of the sources can be individually scaled. Seamless switching ensures no frame loss during picture transitions. Eight preset buttons allow the user to store and recall custom-configured routing presets. Build in OSD menu simplifies system configuration. The HM44 HDMI Seamless Matrix is a great solution for small and large commercial venues that require content from four sources displayed on four displays instantly and without any loss of picture.

### HM44 4x4 Seamless Multiviewer/Matrix/Videowall

- Input and Output resolutions up to 1080p Full HD and 1920x1200 (WUXGA)
- Support LPCM7.1 @ 192KHz, Dolby True HD, DTS-HD MA
- HDMI1.3, DVI1.0, and HDCP 1.4 compliant
- Video-Wall mode supports 2 x 2 Video-Wall with 4 selectable input sources
- Support 4 input and 4 multiview windows seamless switching
- Multiview mode support scales and sizes each picture.
- Multiview mode support PIP, POP and set PIP priority
- Support panel button, IR remote, RS232, Web GUI and APP control
- Support OSD menu setting
- Field-upgradable firmware for both web server and RS232.

### Application View:

#### MULTIVIEW MODE



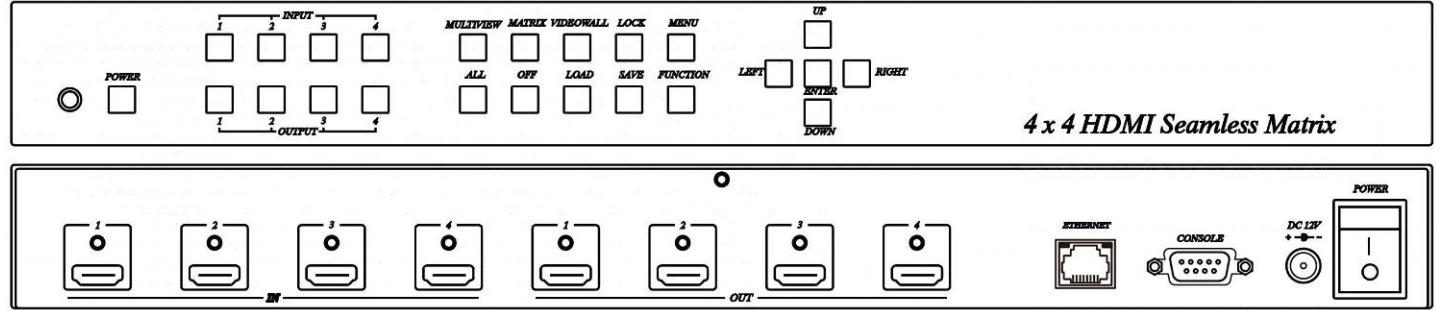
MATRIX MODE



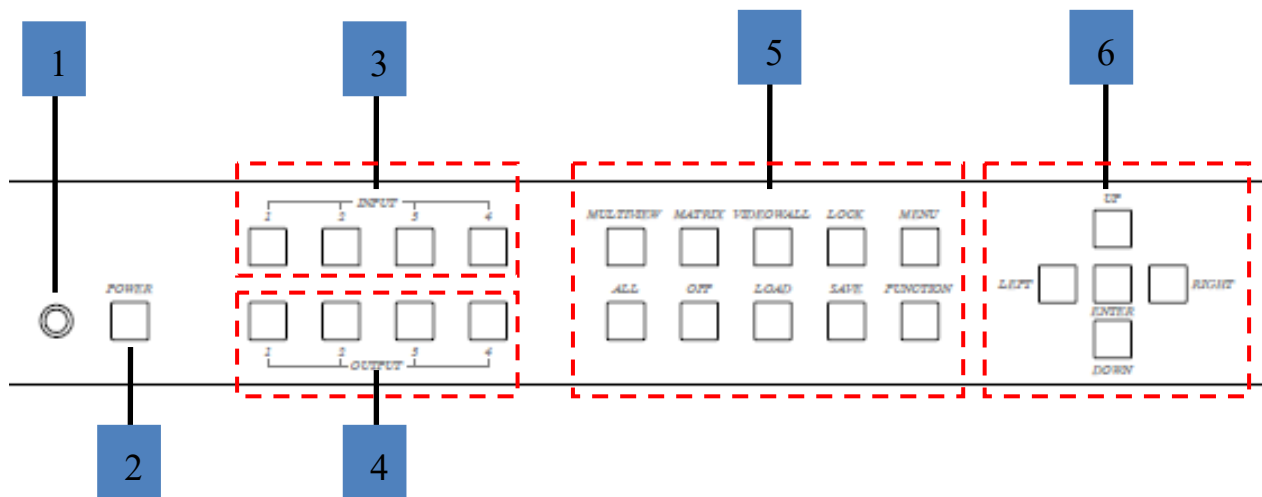
VIDEO WALL MODE



Panel View :



## Front Panel Function:



## Panel Button Function:

No.	Function Name	Description
1	IR	Receiving IR remote signal
2	POWER	Power on / standby
3	INPUT 1~4	Press these buttons to select the desired input
4	OUTPUT 1~4	Press these buttons to select the desired output (not available for videowall mode)
5	MULTIVIEW	Enter Multiview mode (All output display same screen)
	MATRIX	Enter Matrix mode
	VIDEOWALL	Enter videowall mode
	LOCK	Use this button to lock / unlock panel button and prevent accidental changes.
	MENU	<ul style="list-style-type: none"> <li>● Enter OSD menu</li> <li>● Back to upper level of menu</li> </ul>
	ALL	Select all output (not available for videowall mode )
	OFF	Turn off the selected output (not available for videowall mode )
	LOAD	<ul style="list-style-type: none"> <li>● Load layout/source in Multiview and Matrix mode from scene 1~8</li> <li>● Load screen position in VIDEOWALL mode from scene 1~4</li> </ul>
	SAVE	<ul style="list-style-type: none"> <li>● Save current layout/source in Multiview and Matrix mode to scene 1~8</li> <li>● Save screen position in VIDEOWALL mode to scene 2~4</li> </ul>
	FUNCTION	<ul style="list-style-type: none"> <li>● Switch different PIP/POP layout in Multiview Mode</li> <li>● Bezel correction (adjust screen position) in VIDEOWALL MODE</li> <li>● Not available in MATRIX MODE</li> </ul>
6	UP	<ul style="list-style-type: none"> <li>● Move menu function up in OSD</li> <li>● Move screen position up in videowall mode.</li> </ul>
	DOWN	<ul style="list-style-type: none"> <li>● Move menu function down in OSD</li> <li>● Move screen position down in videowall mode.</li> </ul>
	LEFT	<ul style="list-style-type: none"> <li>● Move menu function left in OSD</li> <li>● Move screen position left in videowall mode.</li> </ul>
	RIGHT	<ul style="list-style-type: none"> <li>● Move menu function right in OSD</li> <li>● Move screen position right in videowall mode.</li> </ul>
	ENTER	Execution selected function

## Operating:

### Multiview mode:

#### Output/input selection:

1. Press OUTPUT 1~4 buttons to select the desired output windows (A~D), button LED will light on. You could select multiple outputs at the same time.
2. Press INPUT 1~4 buttons to switch to desired input
3. Press ENTER to quit the input selection.

#### Window layout selection:

1. Press FUNCTION button to enter layout selection.
2. Press INPUT /OUTPUT 1~4 to select desired layout, total 8 sets.
3. Press ENTER to quit the layout selection.

#### Save scene:

1. Press SAVE button.
2. Press INPUT /OUTPUT 1~4 to save current windows layout and source of windows.
3. Press ENTER to confirm.

#### Load scene:

1. Press LOAD button.
2. Press INPUT /OUTPUT 1~4 to load saved layout/source.
3. Press ENTER to confirm.

### Matrix mode:

#### Output/input selection:

1. Press OUTPUT 1~4 buttons to select the desired output monitor, button LED will light on. You could select multiple OUTPUT at the same time.
2. Press INPUT 1~4 buttons to switch to desired input
3. Press ENTER to quit the input selection.

#### Save scene:

1. Press SAVE button.
2. Press INPUT /OUTPUT 1~4 to save current source of output.
3. Press ENTER to confirm.

#### Load scene:

1. Press LOAD button.
2. Press INPUT /OUTPUT 1~4 to load saved output/source, total 8 sets.
3. Press ENTER to confirm.

### Videowall mode:

#### Input selection:

1. Press INPUT 1~4 buttons to switch to desired input

#### Bezel correction:

1. Press FUNCTION button.
2. Press OUTPUT 1~4 to select the monitor to adjust screen position, shift depends on output resolution.
3. Press INPUT 1~4 to select the monitor to adjust screen position, shift depends on input resolution.
4. Press UP, DOWN, LEFT or RIGHT button to shift the screen.
5. Press ENTER to quit the position adjustment.

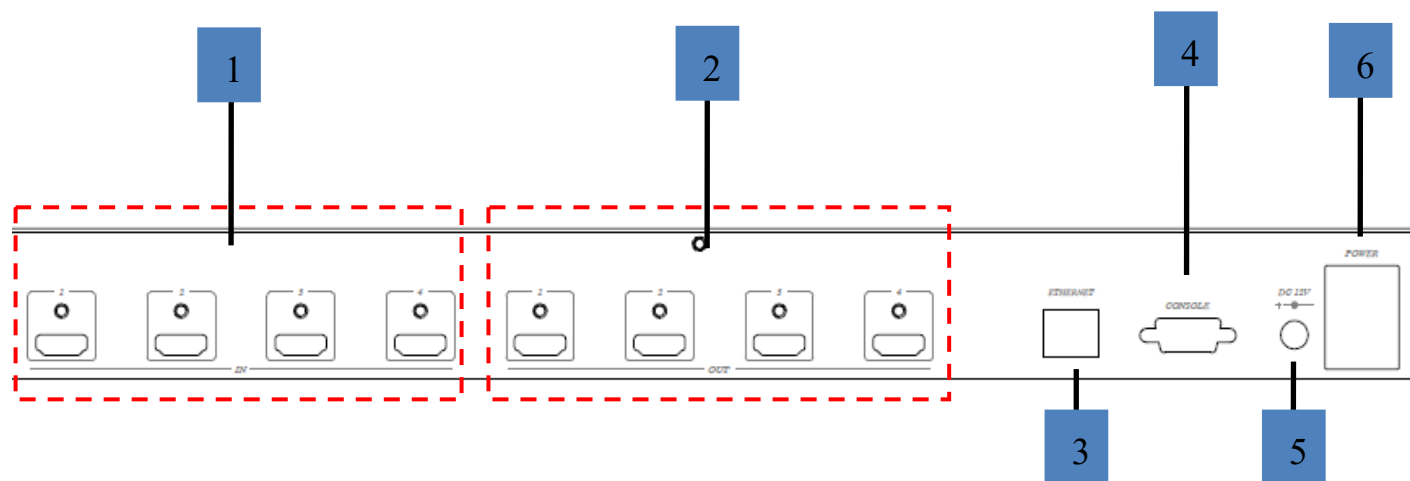
#### Save scene:

1. Press SAVE button.
2. Press INPUT 2~4 to save current position of each screen.
3. Press ENTER to confirm.

#### Load scene:

1. Press LOAD button.
2. Press INPUT 1~4 to load saved position of each screen(1 is factory default), total 4 sets.
3. Press ENTER to confirm.

Rear Panel Function:





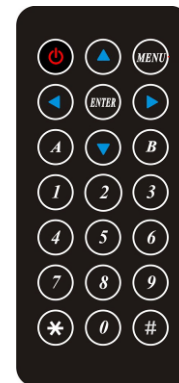
Panel Connector Function:

No.	Name	Description
1	INPUT 1~4	HDMI Input 1~4
2	OUTPUT 1~4	HDMI Output 1~4
3	ETHERNET	Yellow LED: Link Green LED: Data transmit/receive WebGUI control / Web firmware update
4	RS232	RS232 control / firmware update
5	DC12V	External power supply
6	I/O	I: Power on O: Power off






















## IR Remote Control (IR01) :

Initial at first time use the remote control or after change battery of remote control, the IR remote control and the equipment IR Remote ID must be using same. The default IR Remote ID is 0.

To setting the Remote ID, Press and hold power button, then press button 0 to complete the setting. + (for example)



### Remote Control Button Function:

Symbol	Function Name	Description
	POWER	Power on / standby
	UP	Move menu function up in OSD
	DOWN	Move menu function down in OSD
	LEFT	Move menu function left in OSD
	RIGHT	Move menu function right in OSD
	ENTER	Execution selected function
	MENU	<ul style="list-style-type: none"> <li>● Enter OSD menu</li> <li>● Back to upper level of menu</li> </ul>
	Quick output/input selection	<ul style="list-style-type: none"> <li>● Press to select output 1</li> <li>● Switch to input 1 if output have been selected</li> </ul>
	Quick output/input selection	<ul style="list-style-type: none"> <li>● Press to select output 2</li> <li>● Switch to input 2 if output have been selected</li> </ul>
	Quick output/input selection	<ul style="list-style-type: none"> <li>● Press to select output 3</li> <li>● Switch to input 3 if output have been selected</li> </ul>
	Quick output/input selection	<ul style="list-style-type: none"> <li>● Press to select output 4</li> <li>● Switch to input 4 if output have been selected</li> </ul>
	Reserved	
	Reserved	
	Multiview	Switch to Multiview Mode
	Matrix	Switch to Matrix mode
	Videowall	Switch to Videowall mode
	Turn off video	Turn off video if output have been selected
	Reserved	
	Reserved	
	Reserved	
	Reserved	

## OSD MENU :

MAIN	SUB MENU	DESCRIPTION	
SETUP	OUTPUT RESULTION	480P	1366x768
		576P	1440x900
		720P50	1600x1200
		720P60	1680x1050
		1080P24	1920x1200
		1080P50	BACK
		<b>1080P60, Default</b>	EXIT
		1024x768	
		1280x800	
		1280x1024	
	PICTURE SETTING	OUT SELECT	OUT1~OUT4, <b>Default OUT1</b>
		CONTRAST	0~100, Default 50
		BRIGHTNESS	0~100, Default 50
		SATURATION	0~100, Default 50
		HUE	0~100, Default 50
		RESET	
		BACK	
		EXIT	
	OSD SETTING	MENU TIMEOUT	0~100, <b>Default 20</b>
		INFO TIMEOUT	0~100, <b>Default 5</b>
		INFO POSITION	RIGHT TOP
			<b>LEFT TOP , Default</b>
			RIGHT BUTTON
			LEFT BUTTON
		INFO DISPLAY	ON, OFF, <b>Default ON</b>
		BACK	
		EXIT	
	EDID	INPUT1 EDID	<b>1080P 2CH, Default</b>
			1080P MLT
			OUTPUT 1
			OUTPUT 2
			OUTPUT 3
			OUTPUT 4
		INPUT2 EDID	<b>1080P 2CH, Default</b>
			1080P MLT
			OUTPUT 1
			OUTPUT 2
			OUTPUT 3
			OUTPUT 4

		INPUT3 EDID	1080P 2CH, Default	
			1080P MLT	
			OUTPUT 1	
			OUTPUT 2	
			OUTPUT 3	
			OUTPUT 4	
		INPUT4 EDID	1080P 2CH, Default	
			1080P MLT	
			OUTPUT 1	
			OUTPUT 2	
			OUTPUT 3	
			OUTPUT 4	
		INPUT ALL	1080P 2CH, Default	
			1080P MLT	
			OUTPUT 1	
			OUTPUT 2	
			OUTPUT 3	
			OUTPUT 4	
		BACK		
		EXIT		
		HDCP	HDCP	FOLLOW INPUT, Default
	ALWAYS ON			
	BACK			
	EXIT			
	AUDIO	MULTIVIEW MODE	OUTPUT1 AUDIO	IN 1, Default
				IN 2
				IN 3
				IN 4
				OFF
			OUTPUT 2 AUDIO	IN 1
IN 2, Default				
IN 3				
IN 4				
OFF				
OUTPUT 3 AUDIO			IN 1	
			IN 2	
			IN 3, Default	
			IN 4	
			OFF	
OUTPUT 4 AUDIO			IN 1	
			IN 2	



				IN 3			
				IN 4, Default			
				OFF			
BACK							
EXIT							
		MATRIX MODE	OUTPUT1 AUDIO	IN 1			
				IN 2			
				IN 3			
				IN 4			
				FOLLOW, Default			
				OFF			
				OUTPUT 2 AUDIO	IN 1		
			IN 2				
			IN 3				
			IN 4				
			FOLLOW, Default				
			OFF				
			OUTPUT 3 AUDIO		IN 1		
				IN 2			
				IN 3			
				IN 4			
				FOLLOW, Default			
				OFF			
				OUTPUT 4 AUDIO	IN 1		
			IN 2				
			IN 3				
			IN 4				
			FOLLOW, Default				
			OFF				
			BACK				
			EXIT				
					VIDEO WALL	OUTPUT 1 AUDIO	IN 1
							IN 2
							IN 3
							IN 4
FOLLOW, Default							
OFF							
OUTPUT 2 AUDIO	IN 1						
	IN 2						
	IN 3						
	IN 4						

				<b>FOLLOW, Default</b>	
				OFF	
				OUTPUT 3 AUDIO	IN 1
					IN 2
					IN 3
					IN 4
					<b>FOLLOW, Default</b>
					OFF
				OUTPUT 4 AUDIO	IN 1
					IN 2
					IN 3
					IN 4
					<b>FOLLOW, Default</b>
					OFF
				BACK	
EXIT					
BACK					
EXIT					
BACK					
EXIT					
NETWORK	IP ADDRESS	BYTE 1	192		
		BYTE 2	168		
		BYTE 3	0		
		BYTE 4	200		
		BACK			
		EXIT			
		SUBNET MASK	BYTE 1	255	
	BYTE 2		255		
	BYTE 3		255		
	BYTE 4		0		
	BACK				
	EXIT				
	GATEWAY IP		BYTE 1	192	
		BYTE 2	168		
		BYTE 3	0		
		BYTE 4	1		
		BACK			
		EXIT			
		DHCP CLIENT	DHCP CLIENT	ON	
			<b>OFF, Default</b>		
	BACK				

		EXIT	
	MEDIA TYPE	MEDIA TYPE	10M
			100M
			<b>AUTO, Default</b>
		BACK	
	EXIT		
	MAC FILTER	MAC FILTER	ON
			<b>OFF, Default</b>
		BACK	
		EXIT	
BACK			
EXIT			
SYSTEM	DEVICE ID	DEVICE ID	0~99, <b>Default 0</b>
		BACK	
		EXIT	
	REMOTE ID	REMOTE ID	0~9, <b>Default 0</b>
		BACK	
		EXIT	
	FACTORY DEFAULT	FACTORY DEFAULT	
	REBOOT	REBOOT	
	INFORMATION	FIRMARE V1.00	
		WEB      V1.0	
	BACK		
	EXIT		
EXIT			

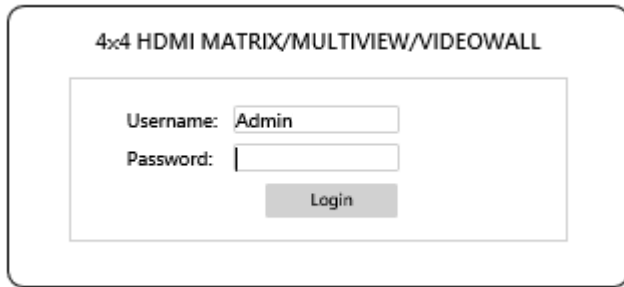
## WebGUI Control:

### Initial IP Configuration

1. Setup host IP Address same as your PC with same subnet. **(Default 192.168.0.200)**  
To change IP Address please enter OSD menu by panel button or IR remote control.
2. Enter IP Address in your web browser and you could link to the web page of host.
3. Browser support: Internet Explorer 9, Chrome 42.0.2311.135 m, Firefox 31.0 and higher

WebGUI Operating:

### LOGIN:



4x4 HDMI MATRIX/MULTIVIEW/VIDEOWALL

Username:

Password:

- USERNAME : **admin**
- PASSWORD : **123**

### MAIN PAGE:

**ROUTING** | SETUP | NETWORK | SYSTEM | ADVANCE | POWER STATUS: ON  LOG OUT

- ROUTING : Include MULTIVIEW, MATRIX, VIDEOWALL three mode
- SETUP : OUTPUT RESOLUTION, HDCP SETTING, ID SETTING, PICTURE SETTING, OSD SETTING
- NETWORK : IP ADDRESS, SUBNET MASK GATEWAY, DHCP CLIENT, MEDIA TYPE, MAC FILTER
- SYSTEM : change password
- ADVANCE : Adjust user define layout of MULTIVIEW mode

# Multiview

4x4 HDMI MATRIX/MULTIVIEW/VIDEOWALL

ROUTING
SETUP
NETWORK
SYSTEM
ADVANCE
POWER STATUS: ON
LOG OUT

MULTIVIEW
MATRIX
VIDEOWALL

### VIDEO SETTING

Current State

A 1	B 2
C 3	D 4

■ Window A
■ Window B
■ Window C
■ Window D

A	B	C	D
<input checked="" type="radio"/> 1	<input type="radio"/> 1	<input type="radio"/> 1	<input type="radio"/> 1
<input type="radio"/> 2	<input checked="" type="radio"/> 2	<input type="radio"/> 2	<input type="radio"/> 2
<input type="radio"/> 3	<input type="radio"/> 3	<input checked="" type="radio"/> 3	<input type="radio"/> 3
<input type="radio"/> 4	<input type="radio"/> 4	<input type="radio"/> 4	<input checked="" type="radio"/> 4
<input type="radio"/> OFF	<input type="radio"/> OFF	<input type="radio"/> OFF	<input type="radio"/> OFF

### AUDIO SETTING

OUT1 AUDIO

OUT2 AUDIO

OUT3 AUDIO

OUT4 AUDIO

WINDOW LAYOUT

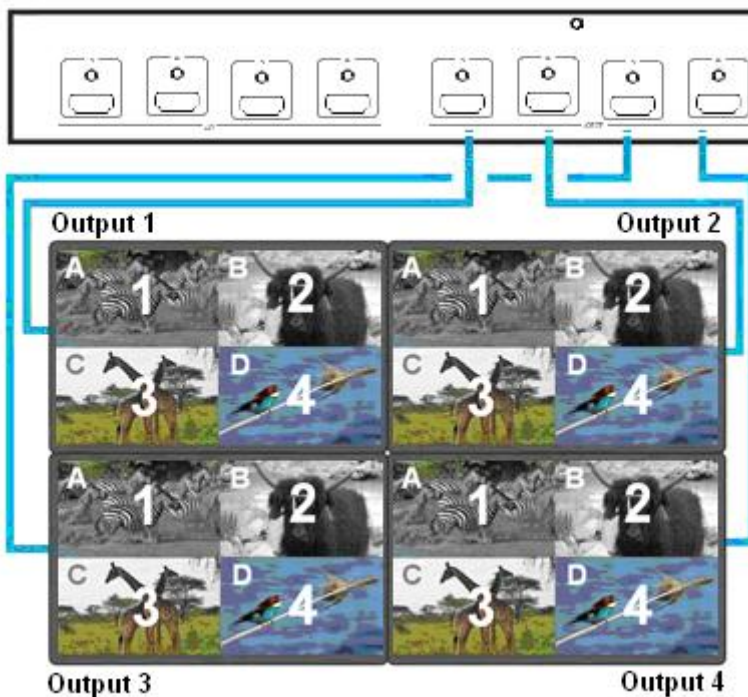
REFRESH APPLY

### MULTIVIEW SCENCE

LOAD

SAVE

- VIDEO SETTING : Select video source of window A~D to input 1~4 or off
- AUDIO SETTING : Select audio source of output 1~4 from input 1~4 or off
- WINDOW LAYOUT : Select windows layout from default 1~4 or user define 1~4
- MULTIVIEW SCENCE : Select SCENCE 1~8 to load or save
- REFRESH : Refresh the information of host
- APPLY : Apply changes



# Matrix

4x4 SEAMLESS MATRIX/MULTIVIEW/VIDEOWALL

ROUTING
SETUP
NETWORK
SYSTEM
ADVANCE
POWER STATUS: ON
LOG OUT

MULTIVIEW
MATRIX
VIDEOWALL

### VIDEO SETTING

	Output1	Output2	Output3	Output4
Input1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Input4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### AUDIO SETTING

OUT1 AUDIO

OUT2 AUDIO

OUT3 AUDIO

OUT4 AUDIO

REFRESH
APPLY

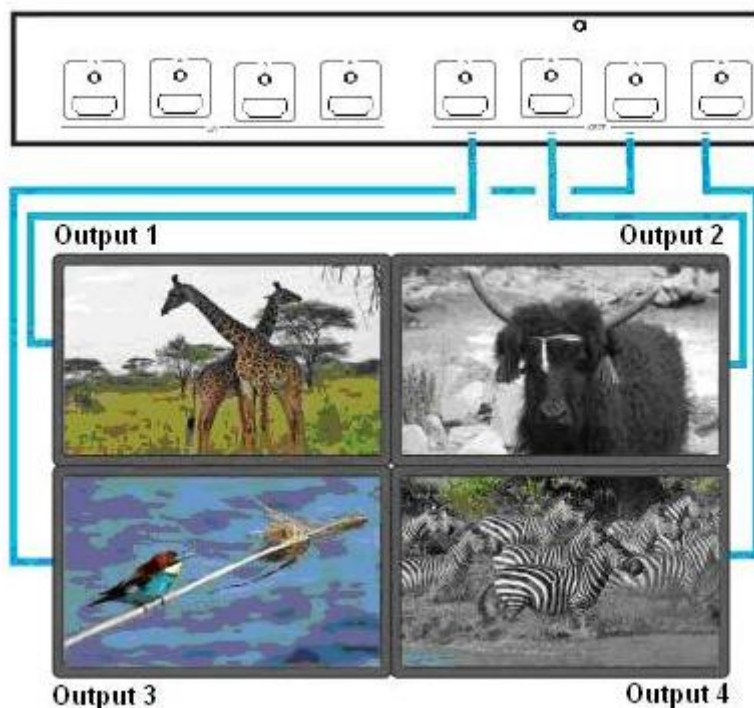
### MATRIX SCENCE

SCENCE#1

LOAD

SAVE

- VIDEO SETTING : Select video source of output 1~4 to input 1~4, off or follow.
- AUDIO SETTING : Select audio source of output 1~4 from input 1~4, off or follow
- MATRIX SCENCE : Select SCENCE 1~8 to load or save
- REFRESH : Refresh the information of host
- APPLY : Apply changes

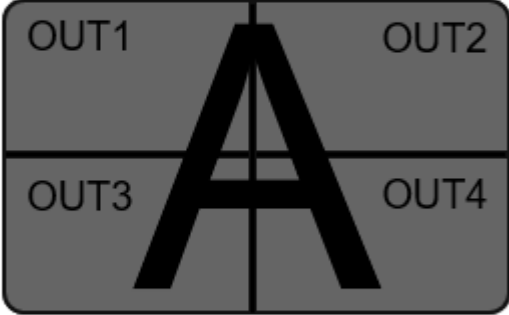


# VIDEOWALL

4x4 SEAMLESS MATRIX/MULTIVIEW/VIDEOWALL

ROUTING
SETUP
NETWORK
SYSTEM
ADVANCE
POWER STATUS: ON
LOG OUT

MULTIVIEW
MATRIX
VIDEOWALL

VIDEO SETTING


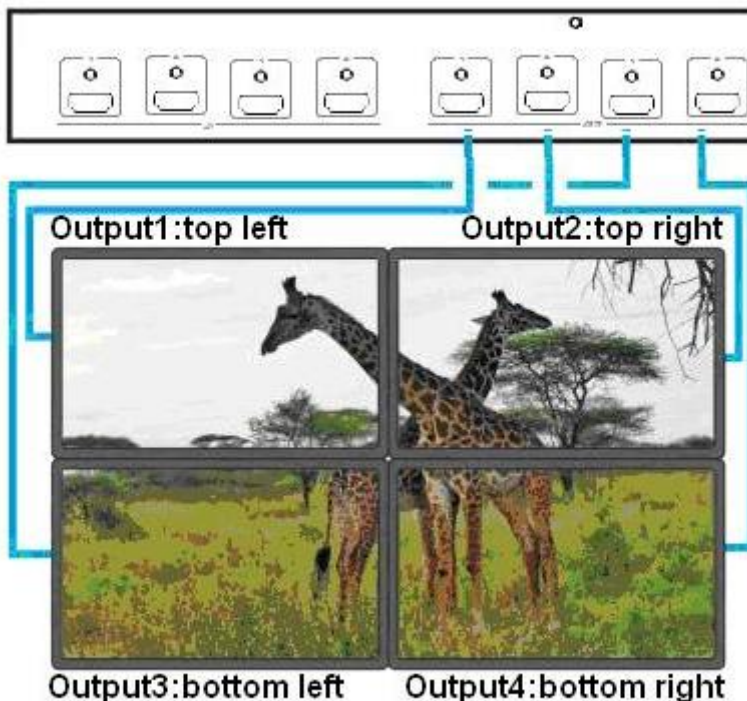
AUDIO SETTING

OUT1 AUDIO FOLLOW
OUT2 AUDIO FOLLOW
OUT3 AUDIO FOLLOW
OUT4 AUDIO FOLLOW

VIDEO SOURCE SELECT IN1
VIDEOWALL SCENCE SCENCE#1

REFLASH
APPLY

- VIDEO SETTING : Display videowall block of output 1~4
  - AUDIO SETTING : Select audio source of output 1~4 from input 1~4,off or follow
  - Video SCENCE : Select SCENCE 1~4 to load
  - REFRESH : Refresh the information of host
  - APPLY : Apply changes
- \*SCENCE 1 is factory default



# SETUP

4x4 HDMI MATRIX/MULTIVIEW/VIDEOWALL

ROUTING
**SETUP**
NETWORK
SYSTEM
ADVANCE
POWER STATUS: ON
LOG OUT

OUTPUT RESOLUTION  
1080P60

HDCP SETTING  
FOLLOW INP

ID SETTING  
DEVICE ID 0  
REMOTE ID 0

PICTURE SETTING

	OUT1	OUT2	OUT3	OUT4
CONTRAST	50	50	50	50
BRIGHTNESS	50	50	50	50
SATURATION	50	50	50	50
HUE	50	50	50	50

OSD SETTING  
MENU TIMEOUT 20  
INFO TIMEOUT 5  
INFO POSITION LEFT T  
INFO DISPLAY ON

REFRESH
APPLY

- OUTPUT RESOLUTION : Support 480P, 576P, 720P50, 720P60, 1080P24, 1080P50, 1080P60, **Default 1080P60**, 1024x768, 1280x800, 1280x1024, 1366x768, 1440x900, 1600x1200, 1680x1050, 1920x1200
- HDCP SETTING : Set HDCP always on or follow input.
- ID SETTING : Set DEVICE ID, **Default 0**, REMOTE ID, **Default 0**
- PICTURE SETTING : Set CONTRAST, BRIGHTNESS, SATURATION, HUE of output 1~4, **Default 50**
- OSD SETTING : Set MENU TIMEOUT, **Default 20s**, INFO TIMEOUT, **Default 5s**, INFO POSITION, **Default LEFT TOP**, INFO DISPLAY, **Default ON**
- REFRESH : Refresh the information of host
- APPLY : Apply changes



# NETWORK

4x4 HDMI MATRIX/MULTIVIEW/VIDEOWALL


ROUTING
SETUP
**NETWORK**
SYSTEM
ADVANCE
POWER STATUS: ON
LOG OUT

IP ADDRESS	192. 168. 0. 232	
SUBNET MASK	255. 255. 255. 0	
GATEWAY IP	192. 168. 0. 1	
DHCP CLIENT	OFF	REFLASH
MEDIA TYPE	AUTO	APPLY
MAC FILTER	OFF	
MAC ADDRESS 1	0. 0. 0. 0. 0. 0	
MAC ADDRESS 2	0. 0. 0. 0. 0. 0	
MAC ADDRESS 3	0. 0. 0. 0. 0. 0	
MAC ADDRESS 4	0. 0. 0. 0. 0. 0	
MAC ADDRESS 5	0. 0. 0. 0. 0. 0	
MAC ADDRESS 6	0. 0. 0. 0. 0. 0	
MAC ADDRESS 7	0. 0. 0. 0. 0. 0	
MAC ADDRESS 8	0. 0. 0. 0. 0. 0	
MAC ADDRESS 9	0. 0. 0. 0. 0. 0	
MAC ADDRESS 10	0. 0. 0. 0. 0. 0	

- IP ADDRESS : Set IP address, **Default 192.168.0.200**
- SUBNET MASK : Set Subnet mask, **Default 255.255.255.0**
- GATEWAY : Set gateway address, **Default 192.168.0.1**
- DHCP CLIENT :  
ON:Get IP Address, Subnet Mask, Gateway from existing DHCP server  
OFF:Set IP Address, Subnet Mask, Gateway by WebGUI or OSD menu manually, **Default OFF**
- MEDIA TYPE : Set link speed of Ethernet port to 10 / 100 / Auto detect, **Default AUTO**
- MAC FILTER: Add up to 10 registered MAC Address, only the MAC address which is in the list can be able to connect host by Ethernet, **Default OFF.**
- REFRESH : Refresh the information of host
- APPLY : Apply changes

## SYSTEM

4x4 SEAMLESS MATRIX/MULTIVIEW/VIDEOWALL

ROUTING | SETUP | NETWORK | **SYSTEM** | ADVANCE | POWER STATUS: ON  LOG OUT

PASSWORD

NEW PASSWORD


CONFIRM PASSWORD

APPLY

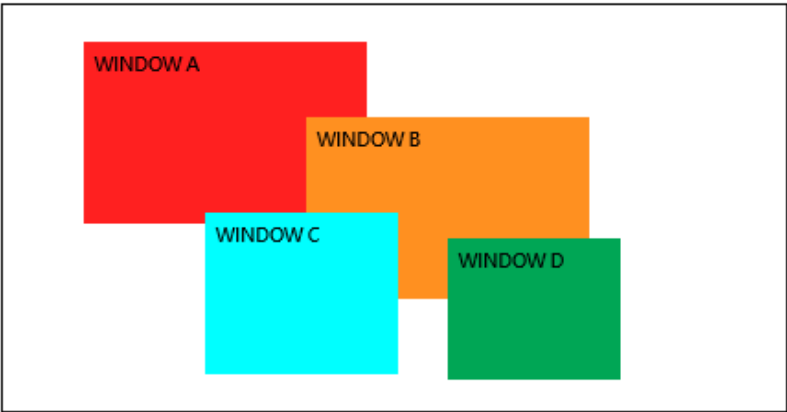
- PASSWORD : Enter old password, **Default 123**
- NEW PASSWORD : Enter new password
- CONFIRM PASSWORD : Enter new password again to confirm
- APPLY : Apply changes

## ADVANCE

4x4 HDMI MATRIX/MULTIVIEW/VIDEOWALL

ROUTING | SETUP | NETWORK | SYSTEM | **ADVANCE** | POWER STATUS: ON  LOG OUT

Window Edit



	WINDOW A	WINDOW B	WINDOW C	WINDOW D
WIDTH	<input type="text" value="640"/>	<input type="text" value="640"/>	<input type="text" value="640"/>	<input type="text" value="640"/>
HEIGHT	<input type="text" value="480"/>	<input type="text" value="480"/>	<input type="text" value="480"/>	<input type="text" value="480"/>
X.POS	<input type="text" value="100"/>	<input type="text" value="800"/>	<input type="text" value="100"/>	<input type="text" value="900"/>
Y.POS	<input type="text" value="10"/>	<input type="text" value="10"/>	<input type="text" value="510"/>	<input type="text" value="490"/>
PRIORITY	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="3"/>	<input type="text" value="4"/>
BORDER	<input type="text" value="YES"/>	<input type="text" value="YES"/>	<input type="text" value="YES"/>	<input type="text" value="YES"/>
COLOR	<input type="text" value="BLUE"/>	<input type="text" value="PURPLE"/>	<input type="text" value="GREY"/>	<input type="text" value="WHITE"/>

WINDOW LAYOUT

- WIDTH, HEIGHT: Set size of the windows.
- X.POS,Y.POS: Set top left position of window by x, y coordinate.
- PRIORITY: Set the priority of windows, 1 is top and 4 is bottom.
- BORDER: Select YES to show border of window, select NO to disable.
- COLOR: Set color of border.
- WINDOW LAYOUT : Select windows layout from user define 1~4 to load or save
- LOAD: Select windows layout from user define 1~4 to modify
- SAVE: Save windows layout to user define 1~4 after change the value

## RS232 remote control command:

Connect the RS232 CONSOLE port to the COM port of the host by an F/M RS232 straight cable (pin 2 to pin 2; pin 3 to pin 3, pin 5 to pin 5)

Communication format is 9600, 8, N, 1 (9600 bps, 8 data bits, no parity check, 1 stop bit)

CONSOLE



### Operation Instruction format:

Command +  $\Delta$ (Space) + Parameter + Enter

[Command]

[Description]

-----		-----
POWER	y	Power on/standby
SMOUT1	n	Output 1 from input n in seamless matrix
SMOUT2	n	Output 2 from input n in seamless matrix
SMOUT3	n	Output 3 from input n in seamless matrix
SMOUT4	n	Output 4 from input n in seamless matrix
SMOUTALL	n	All output from input n in seamless matrix
SMADOOUT1	n	Output 1 audio source from input n in seamless matrix
SMADOOUT2	n	Output 2 audio source from input n in seamless matrix
SMADOOUT3	n	Output 3 audio source from input n in seamless matrix
SMADOOUT4	n	Output 4 audio source from input n in seamless matrix
SMADOOUTALL	n	All output audio source from input n in seamless matrix
MVWINA	n	Window A from input n in multiview
MVWINB	n	Window B from input n in multiview
MVWINC	n	Window C from input n in multiview
MVWIND	n	Window D from input n in multiview
MVWINALL	n	Set all windows from input n in multiview
MVADOOUT1	n	Output 1 audio source from input n in multiview
MVADOOUT2	n	Output 2 audio source from input n in multiview
MVADOOUT3	n	Output 3 audio source from input n in multiview
MVADOOUT4	n	Output 4 audio source from input n in multiview
MVADOOUTALL	n	All output audio source from input n in multiview
VDWALLRX	n	Input port n in video wall
VDWALLADOOUT1	n	Output 1 audio source from input n in video wall
VDWALLADOOUT2	n	Output 2 audio source from input n in video wall
VDWALLADOOUT3	n	Output 3 audio source from input n in video wall
VDWALLADOOUT4	n	Output 4 audio source from input n in video wall
VDWALLADOOUTALL	n	All output audio source from input n in video wall
DHCP	y	DHCP Client on/off
IP_ADDRESS	[x.x.x.x]	Set IP address
SUBNET_MASK	[x.x.x.x]	Set subnet mask
GATEWAY	[x.x.x.x]	Set gateway
MEDIA_TYPE	z	Set Ethernet link speed
MAC_FILTER	y	MAC filter on/off
VERSION		Display firmware version
HELP		Show all commands
[SYMBOL]		[PARAMETER]
-----		
N		0   1   2   3   4 n=0(OFF) n=1(INPUT1) n=2(INPUT2) n=3(INPUT3) n=4(INPUT4)
y		00=OFF, 01=ON
z		00=10M, 01=100M 02=AUTO
[x.x.x.x]		Ethernet parameter EX.192.168.0.1

### Example:

SMADOOUT1 $\Delta$ 03

Set output 1 switch to input 3 in MATRIX mode

MVADOOUT3 $\Delta$ 04

Set output 3 switch to input 4 in MULTIVIEW mode

VDWALLADOOUT3 $\Delta$ 02

Set audio output from input 2 in VIDEOWALL mode

Commands are **case insensitive**.

The host will reply **OK** once string is correct, **NG** in case of incorrect string

## APP control:

APP name:

Android: 4x4 Multiviewer/Video Wall/Seamless Matrix Control

iOS: 4x4 Multiviewer Control



## System Requirement

iOS version 10.3 or later

Size: 3.8M

Android version 5.0 or later

Size: 2.8M

## App Store Download Link

<https://itunes.apple.com/us/app/4x4-multiviewer-control/id1420804403?l=zh&ls=1&mt=8>

## Google Play Download Link

<https://play.google.com/store/apps/details?id=com.sct.hm44test>

## App Store Download QR code



## Google Play Download QR code



## System Setting

Connect mobile phone to Wi-Fi and set the IP/ subnet mask same with matrix network segment

Default IP address is 192.168.0.200

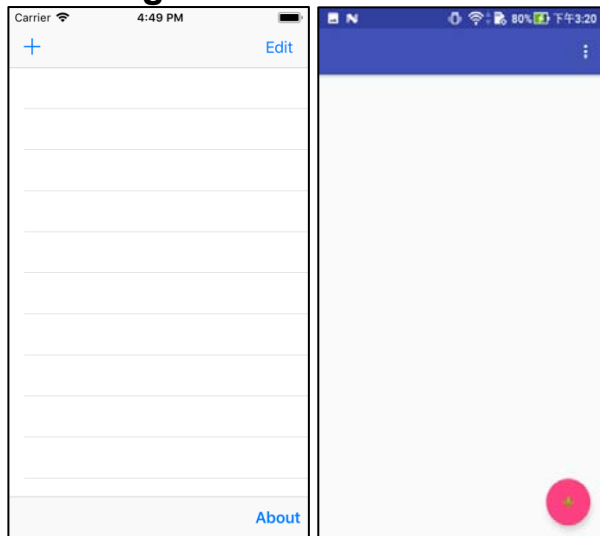
Default subnet mask is 255.255.255.0

You could also set to DHCP mode, please refer user manual

There are two ways to get the IP address of matrix:

1. Use APP function: Scan Device to get the IP address.
2. Use panel button or IR remote control by press [MENU], select to [NETWORK] function and press [ENTER] to enter [IP ADDRESS] function than press [ENTER], it will show IP Address in the LCD panel of matrix

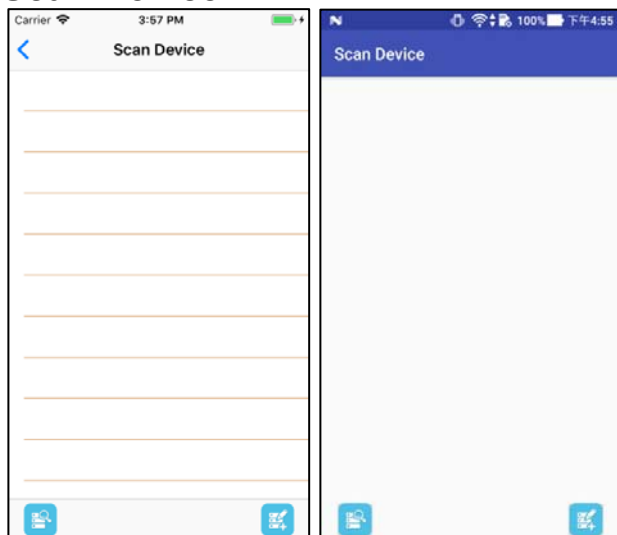
## Main Page:



When first time enter the APP will see the main page

Touch 「+」 icon to add matrix

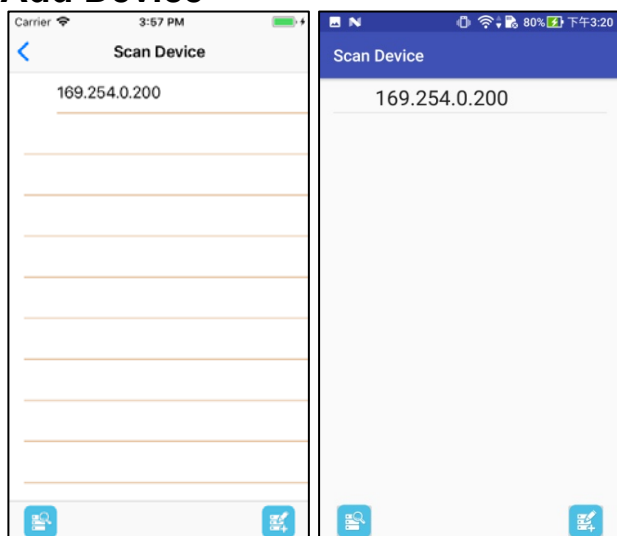
## Scan Device



Touch bottom left  icon to start scan

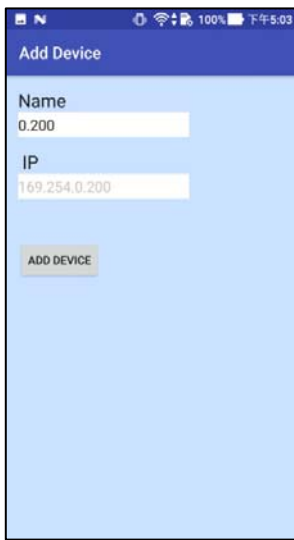
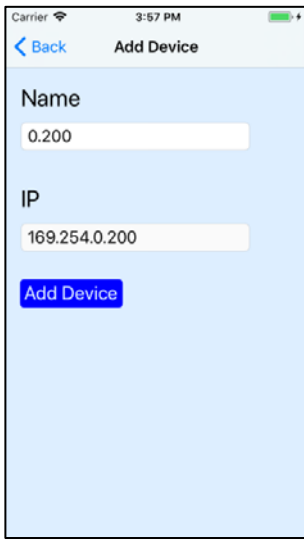
Touch bottom right  icon to input the IP address manually

## Add Device

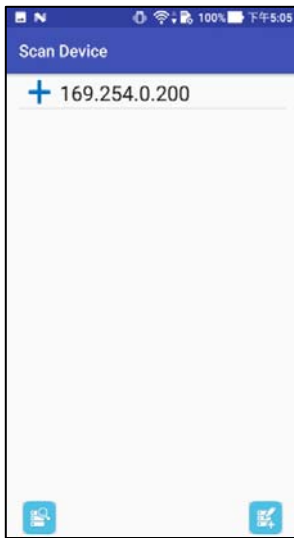
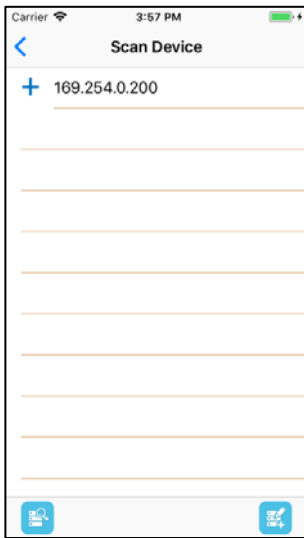


After scanning it will show all matrixes in the list

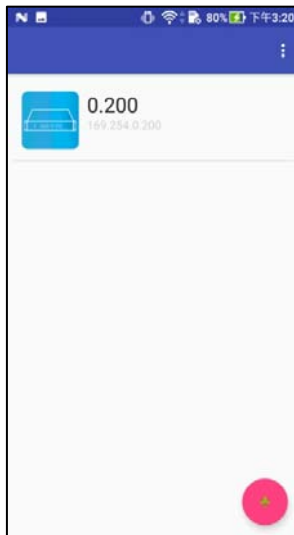
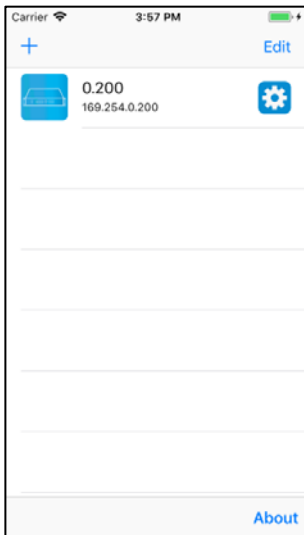
Touch the IP in list to enter 「Add Device」 page



Enter the name of matrix then touch 「 Add Device 」 to finish setting  
**Notice : Name should be unique, not allow duplicate**

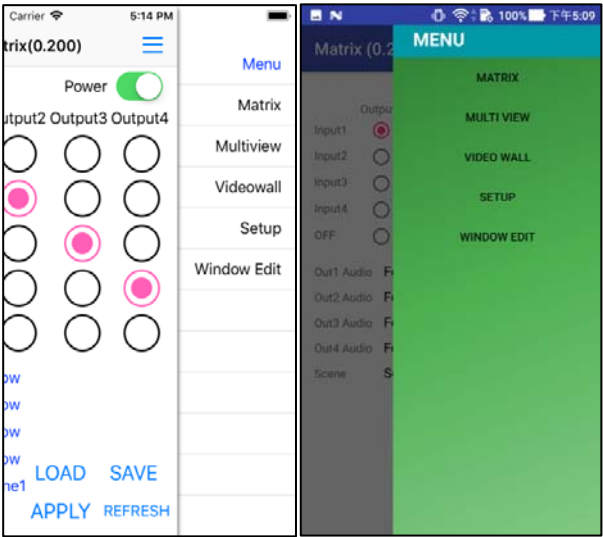


It will show 「 + 」 icon in front of the IP address when finished



Return to main screen you will see the matrix which just add

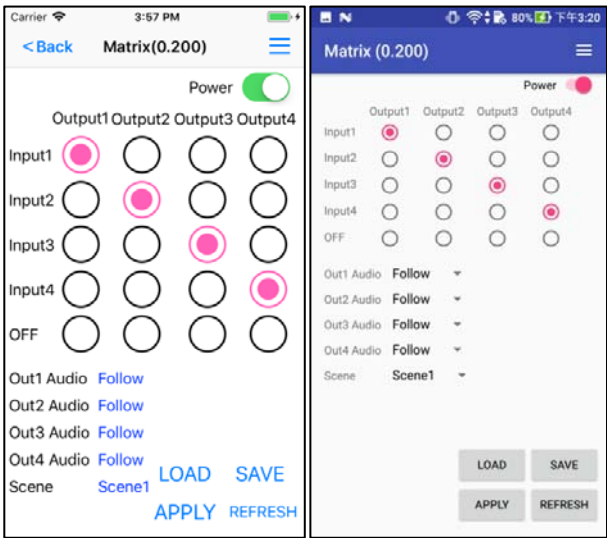
Mode Change:



Touch top right 「≡」 icon to show menu

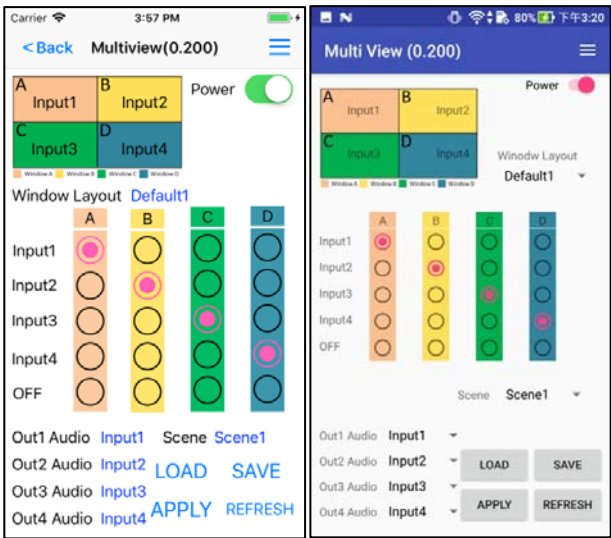
Touch mode or function name to switch

Matrix



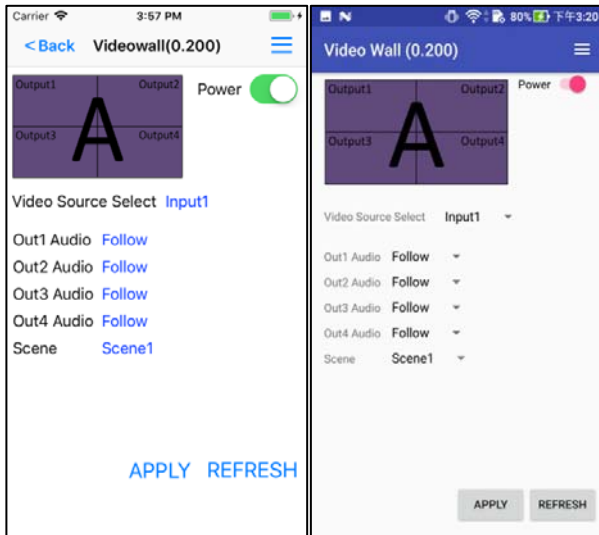
Set input for each output then touch 「APPLY」  
Touch 「LOAD」 to load scene  
Touch 「SAVE」 to save current setting to scene  
Touch 「REFRESH」 to update status

Multiview



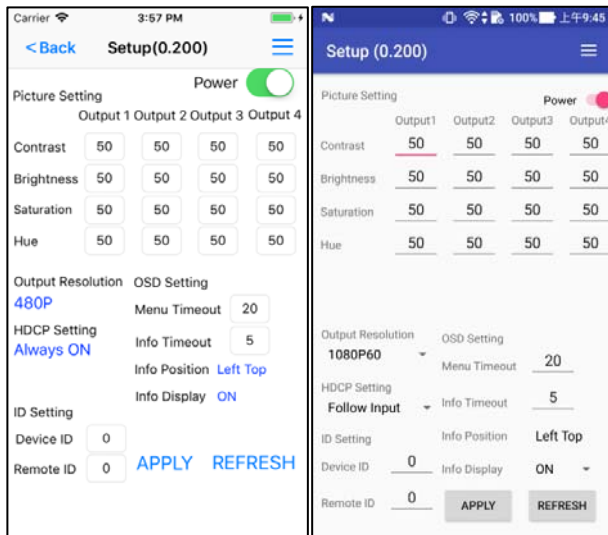
Set input for each window then touch 「APPLY」  
Touch 「LOAD」 to load scene  
Touch 「SAVE」 to save current setting to scene  
Touch 「REFRESH」 to update status

## Videowall



Set input for video wall and audio source for each output then touch 「APPLY」  
Touch 「REFRESH」 to update status

## Setup

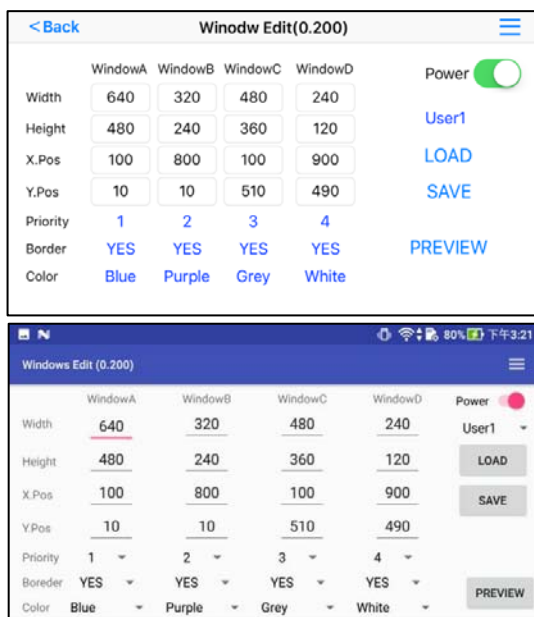


Set Contrast, Brightness, Saturation, Hue for each output

Set Output Resolution, HDCP, ID and OSD for matrix then touch 「APPLY」

Touch 「REFRESH」 to update status

## Window Edit



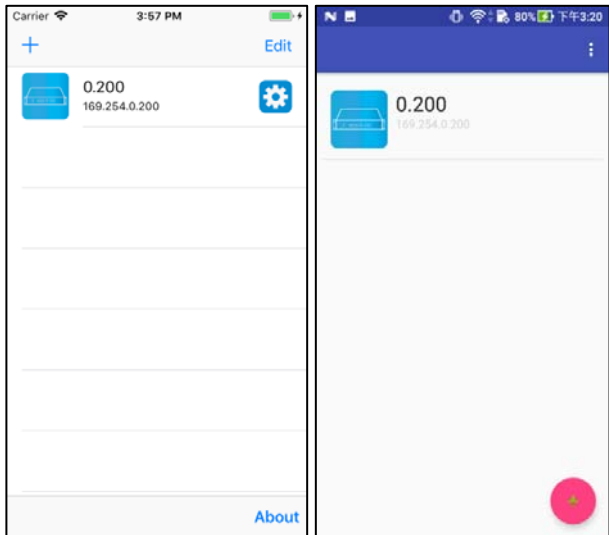
Set Width, Height, X.Position, Y.Position, Priority(of windows), Border(Enable/Disable), Color(of boarder) for each windows then touch 「PREVIEW」


Touch 「LOAD」 to load previous user define setting

Touch 「SAVE」 to save current status to user define setting



Device Name Modification:

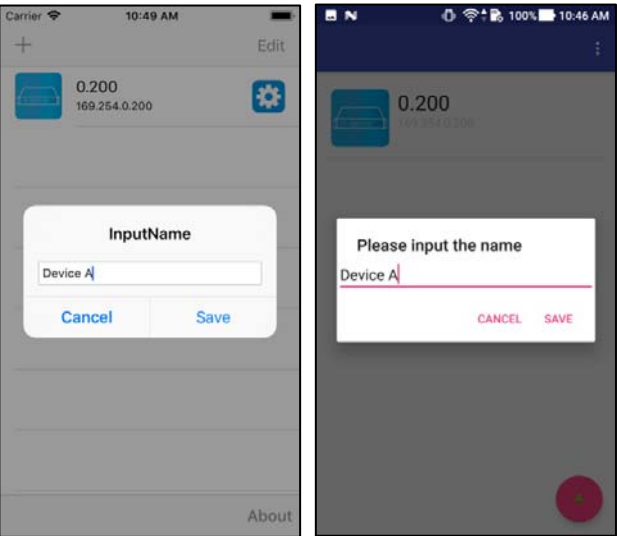


For iOS please touch top right  icon

For Android please press the device in the list to pop up message “Please select the item you want to perform”

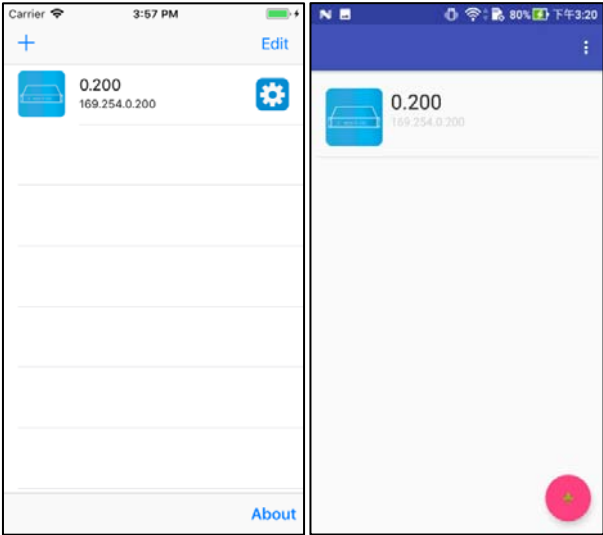


then touch 「modification」 for Android



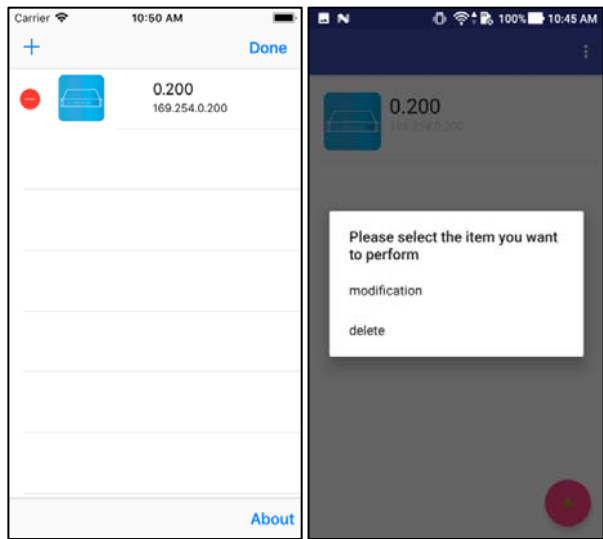
Enter the name then touch 「Save」


# Delete Device



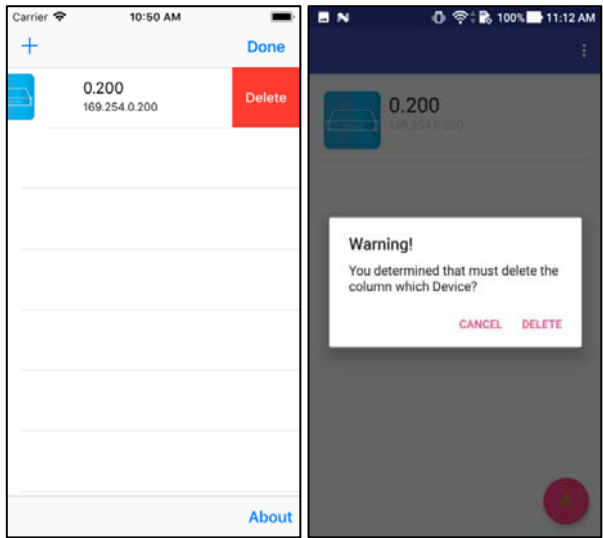
For iOS please touch top right 「Edit」

For Android please press the device in the list to pop up message “Please select the item you want to perform”



Touch  icon for iOS

Touch 「delete」 for android



Touch 「Delete」 to confirm

**Specification:**

ITEM NO.	HM44
Resolution	480i/p, 576i/p, 720p, 1080i/p@60Hz
HDMI Input	HDMI Type A x 4
HDMI Output	HDMI Type A x 4
Ethernet Connector	RJ45 x 1
RS232 Connector	DB9 Male x 1 (Console)
IR Carrier	± 45 degree
Power Supply	DC 12V 4.16A
Power Consumption	2A (Max)
Temperature	Operation: 0 to 55°C, Storage: -20 to 85°C, Humidity: up to 95%
Dimensions mm	483 x 177 x 44
Weight g	2300

**RoHS**   

Rev. A V1.50 180802