

HDMI Matrix Switcher

User Manual

Model : HM44

4 X 4 HDMI Multiviewer/Seamless Matrix Switcher Support
Video wall



Introduction

HM44 is a 4 x 4 HDMI whose resolution up to 1080p. Additionally, the seamless switching function ensures no frame loss during picture transitions and supports 2 x 2 video wall function for you to freely and smoothly switch channel.

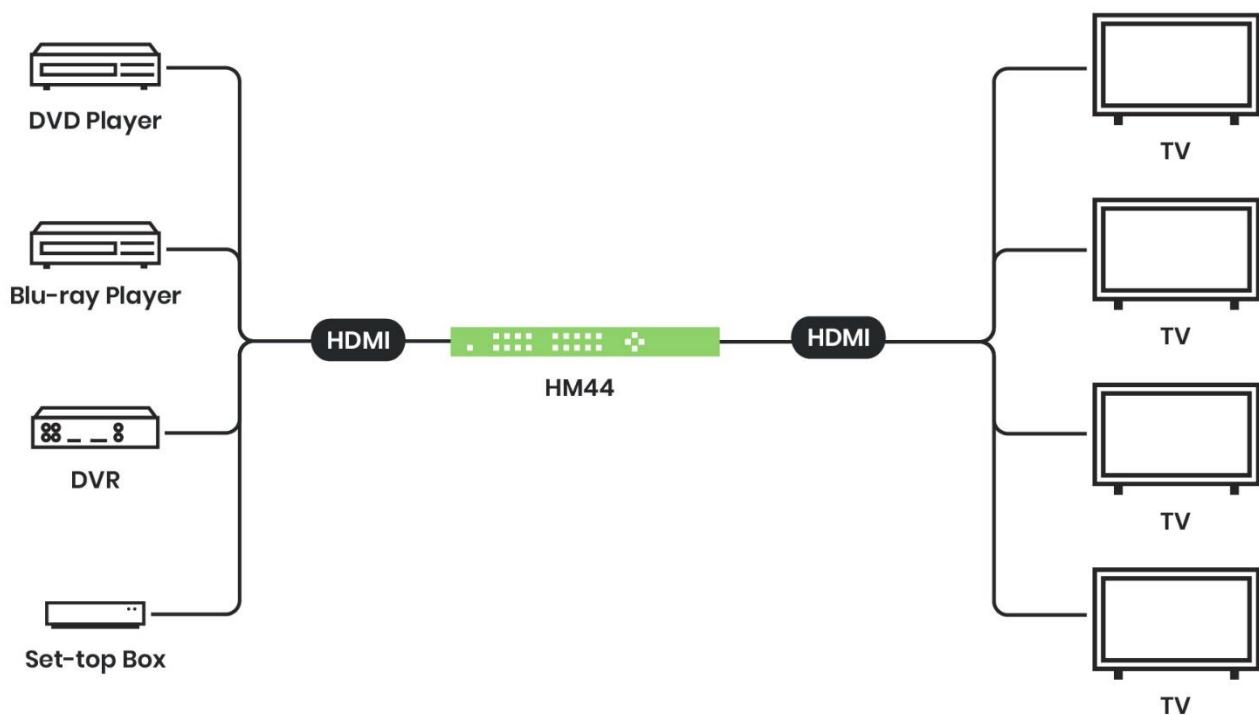
It is an ideal solution for small to large commercial venues that require multiple contents to be routed and need instant video switching.

Features

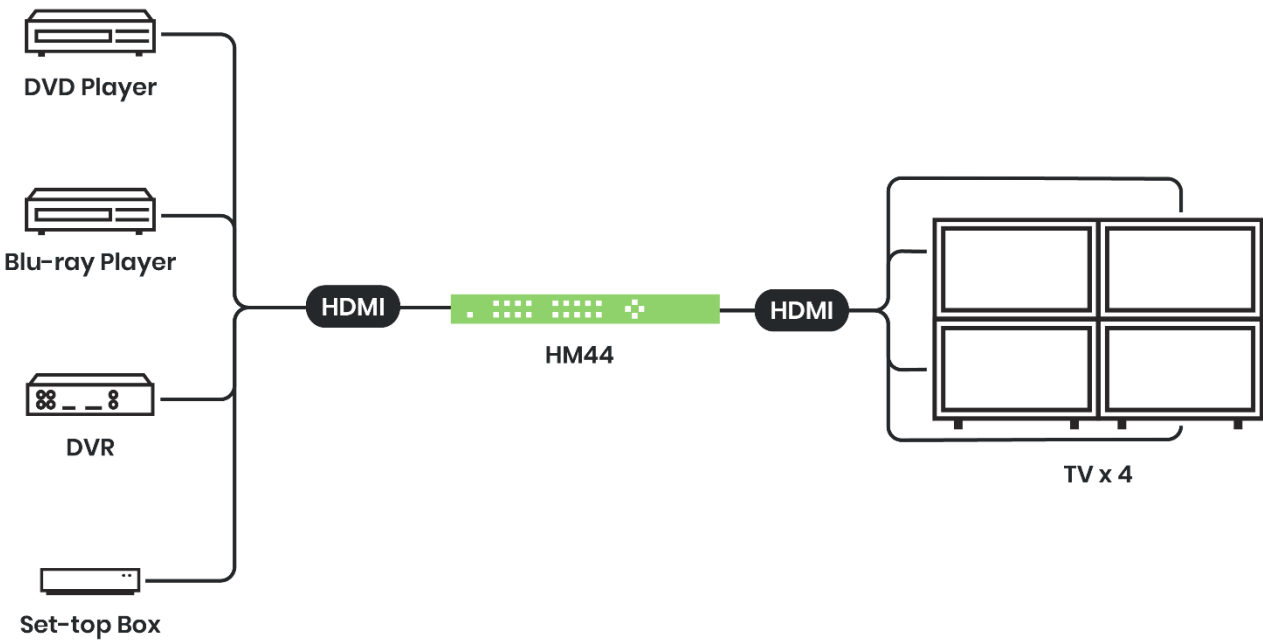
- Resolution up to 1080p@60Hz and 1920 x 1200 (WUXGA)
- Supports 2 x 2 Video-Wall with 4 selectable input sources.
- Supports seamless switching.
- Supports video scaler. Support PiP (Picture in Picture) function, allowing you to watch videos in a floating window.
- Supports OSD menu setting. Firmware upgradable through web server or RS232 port.
- Managed via panel buttons, IR remote, RS232, Web GUI and mobile APP.

Installation View

Multiview Mode

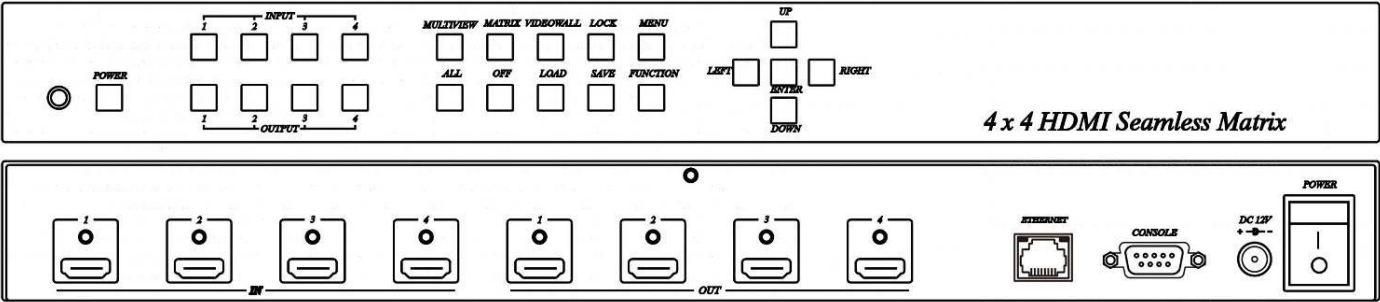


Video Wall Mode

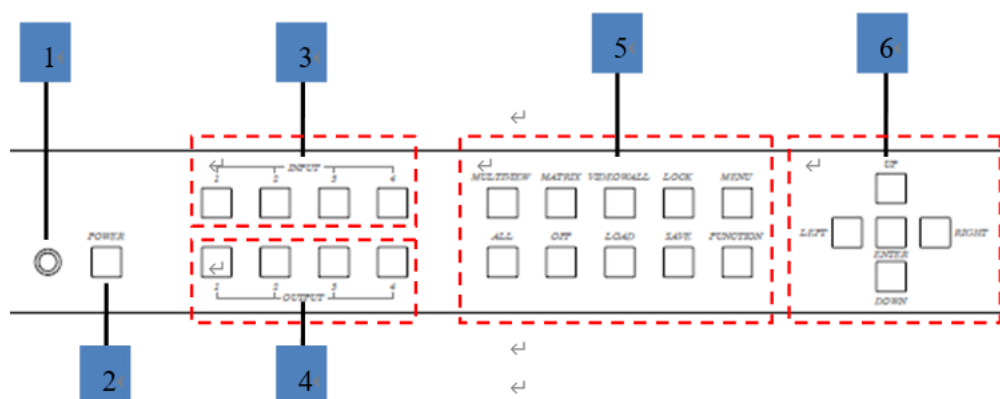


Panel view

HM44



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	Enter OSD menu Back to upper level of menu
	ALL	Select all output (not available for videowall mode)
	OFF	Turn off the selected output (not available for videowall mode)
	LOAD	Load layout/source in Multiview and Matrix mode from scene 1~8 Load screen position in VIDEOWALL mode from scene 1~4
	SAVE	Save current layout/source in Multiview and Matrix mode to scene 1~8 Save screen position in VIDEOWALL mode to scene 2~4
	FUNCTION	Switch different PIP/POP layout in Multiview Mode Bezel correction (adjust screen position) in VIDEOWALL MODE Not available in MATRIX MODE
6	UP	Move menu function up in OSD Move screen position up in videowall mode.
	DOWN	Move menu function down in OSD Move screen position down in videowall mode.
	LEFT	Move menu function left in OSD Move screen position left in videowall mode.
	RIGHT	Move menu function right in OSD Move screen position right in videowall mode.
	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.

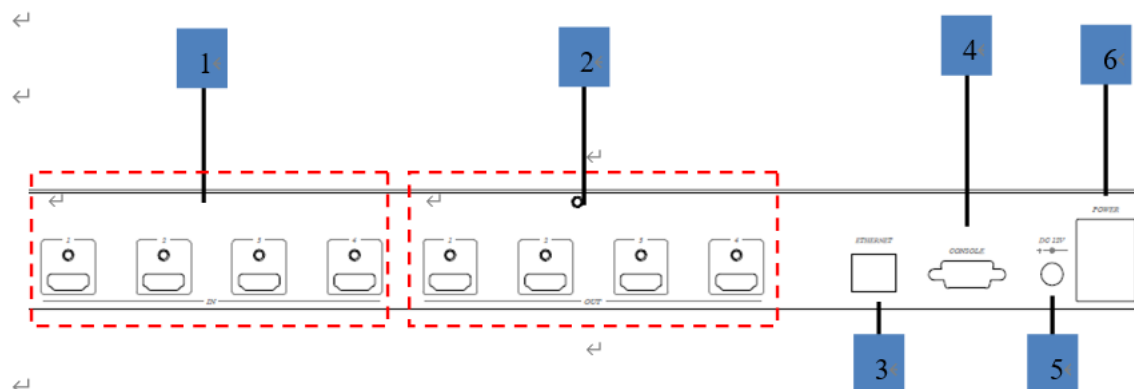
Save scene

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	Enter OSD menu Back to upper level of menu
	Quick output/input selection	Press to select output 1 Switch to input 1 if output have been selected
	Quick output/input selection	Press to select output 2 Switch to input 2 if output have been selected
	Quick output/input selection	Press to select output 3 Switch to input 3 if output have been selected
	Quick output/input selection	Press to select output 4 Switch to input 4 if output have been selected
	Reserved	

6	Reserved	
7	Multiview	Switch to Multiview Mode
8	Matrix	Switch to Matrix mode
9	Videowall	Switch to Videowall mode
0	Turn off video	Turn off video if output have been selected
A	Reserved	
B	Reserved	
*	Reserved	
#	Reserved	

OSD MENU

MAIN	SUB MENU	DESCRIPTION	
SETUP	OUTPUT RESULTION	480P	1366x768
		576P	1440x900
		720P50	1600x1200
		720P60	1680x1050
		1080P24	1920x1200
		1080P50	BACK
		1080P60, Default	EXIT
		1024x768	
		1280x800	
		1280x1024	
	PICTURE SETTING	OUT SELECT	OUT1~OUT4, Default OUT1
		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, Default 20
		INFO TIMEOUT	0~100, Default 5
		INFO POSITION	RIGHT TOP
			LEFT TOP, Default
			RIGHT BUTTON
			LEFT BUTTON
		INFO DISPLAY	ON, OFF, Default ON
		BACK	
		EXIT	

EDID	INPUT1 EDID	1080P 2CH, Default		
		1080P MLT		
		OUTPUT 1		
		OUTPUT 2		
		OUTPUT 3		
		OUTPUT 4		
		INPUT2 EDID	1080P 2CH, Default	
			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	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
				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

				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	
		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	
			OFF, Default	
		BACK		
		EXIT		
	MEDIA TYPE	MEDIA TYPE	10M	
			100M	
			AUTO, Default	
		BACK		
		EXIT		

	MAC FILTER	MAC FILTER	ON	
			OFF, Default	
		BACK		
		EXIT		
	BACK			
EXIT				
SYSTEM	DEVICE ID	DEVICE ID	0~99, Default 0	
		BACK		
		EXIT		
	REMOTE ID	REMOTE ID	0~9, Default 0	
		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

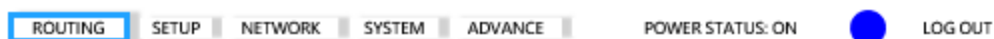
WebGUI Operating

Login



- USERNAME : admin
- PASSWORD : 123

Main Page



- 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

<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> OFF	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> OFF	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> OFF	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> OFF
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AUDIO SETTING

OUT1 AUDIO

OUT2 AUDIO

OUT3 AUDIO

OUT4 AUDIO

WINDOW LAYOUT

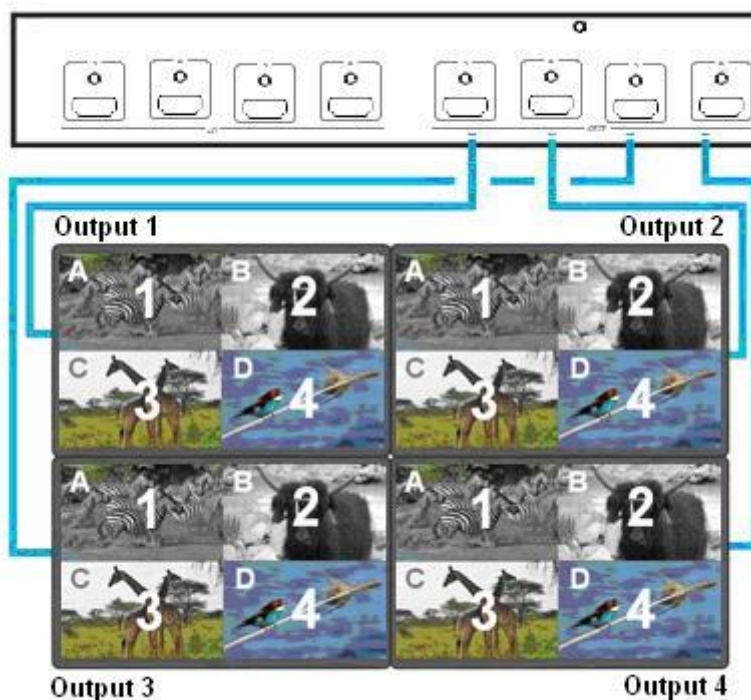
REFRESH
APPLY

MULTIVIEW SCENCE

SCENCE#1

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

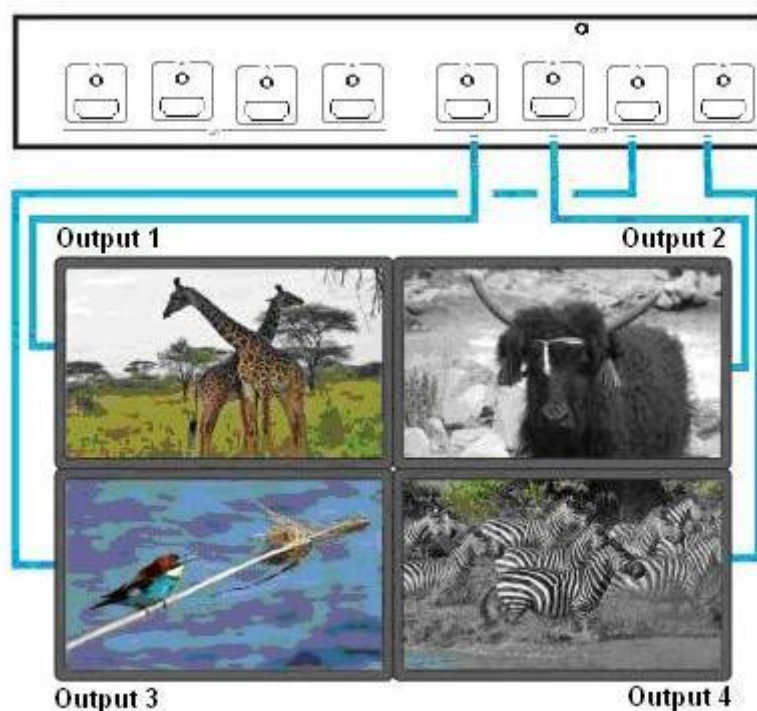
REFLASH | APPLY

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



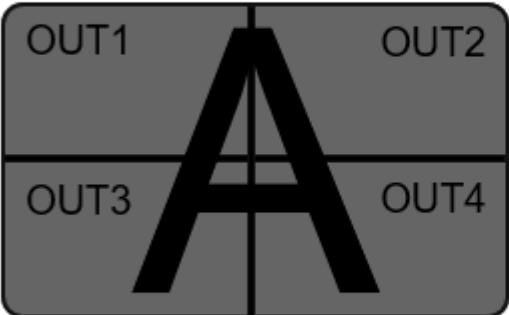
Videowall

4x4 SEAMLESS MATRIX/MULTIVIEW/VIDEO WALL

ROUTING
SETUP
NETWORK
SYSTEM
ADVANCE
POWER STATUS: ON
LOG OUT

MULTIVIEW
MATRIX
VIDEO WALL

VIDEO SETTING



AUDIO SETTING

OUT1 AUDIO FOLLOW

OUT2 AUDIO FOLLOW

OUT3 AUDIO FOLLOW

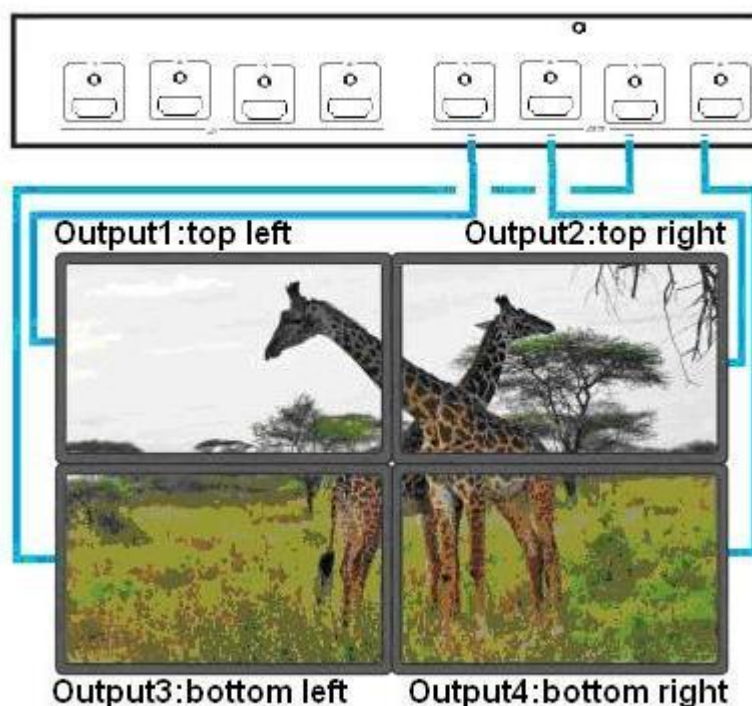
OUT4 AUDIO FOLLOW

VIDEO SOURCE SELECT IN1

VIDEOWALL SCENCE SCENCE#1

REFRESH
APPLY

- VIDEO SETTING : Display video wall 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

REFLASH 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

- 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 CONSOLE port to the COM port of the host by Female to Male 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)

Operation Instruction Format

Command + Δ (Space) + Parameter + Enter(0D or 0A in Hex)

[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
MVADOOUT12	n	Output 2 audio source from input n in multiview
MVADOOUT13	n	Output 3 audio source from input n in multiview
MVADOOUT14	n	Output 4 audio source from input n in multiview
MVADOOUTIAL	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
LOADSM		
SAVESM		
LOADMV		
SAVEMV		
LOADVDWALL		
SAVEVDWALL		
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]
<u>n</u>	0=OFF, 1=INPUT1, 2=INPUT2, 3=INPUT3, 4=INPUT4
<u>y</u>	00=OFF, 01=ON
<u>z</u>	00=10Mbps, 01=100Mbps 02=Auto
[x.x.x.x]	Ethernet parameter, 0~255, EX:192.168.0.1 or 255.255.255.0

Example

SMADOOOUT1Δ 03	Set output 1 switch to input 3 in MATRIX mode
MVADOOOUT3Δ 04	Set output 3 switch to input 4 in MULTIVIEW mode
VDWALLADOOOUT3Δ 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

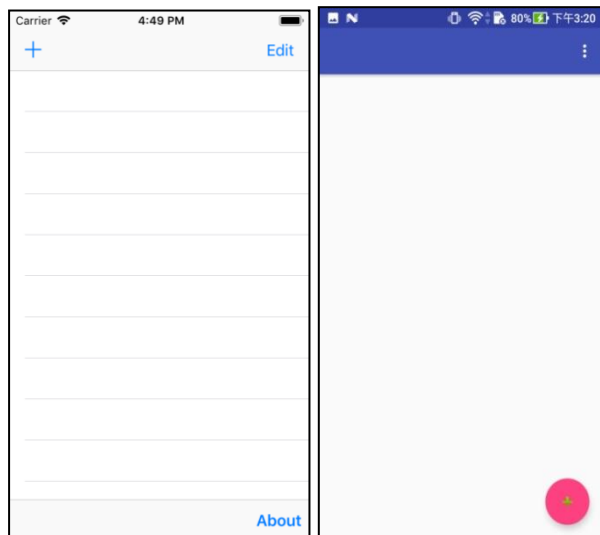
Default subnet mask is 255.255.255.0

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

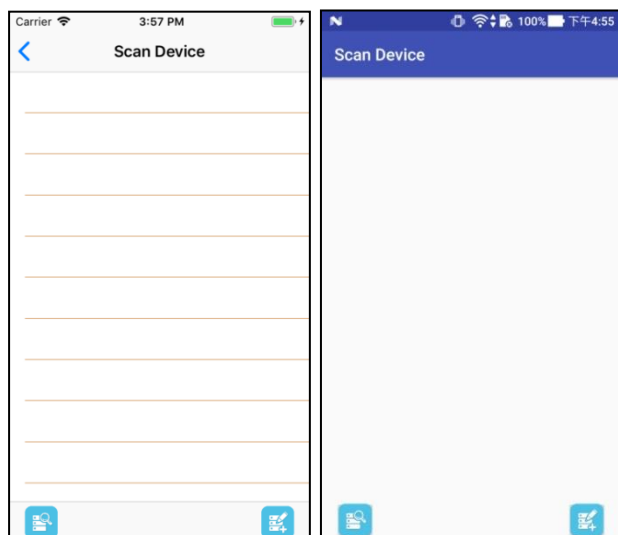
Main Page



When first time enter the APP will see the main page

Touch 「+」 icon to add matrix

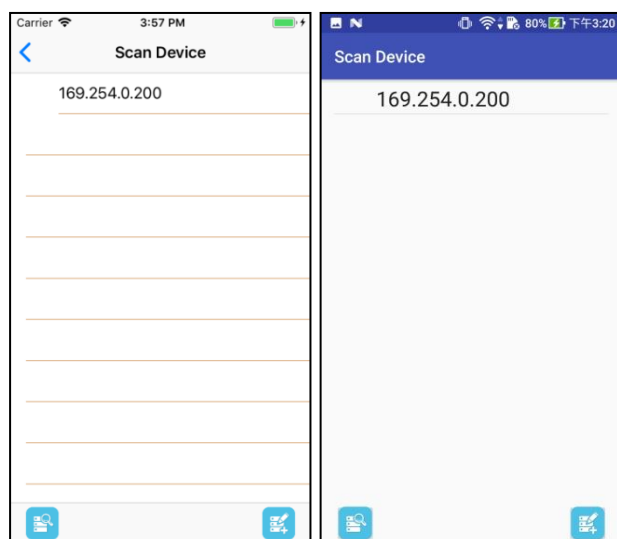
Scan Device



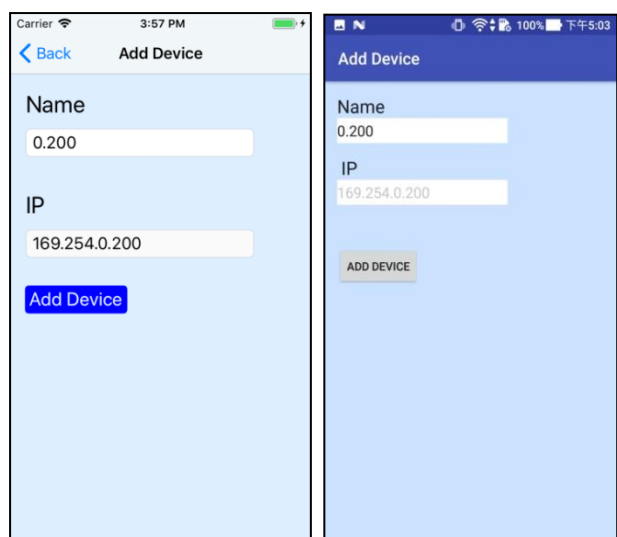
Touch bottom left  icon to start scan

Touch bottom right  icon to input the IP address manually

Add Device

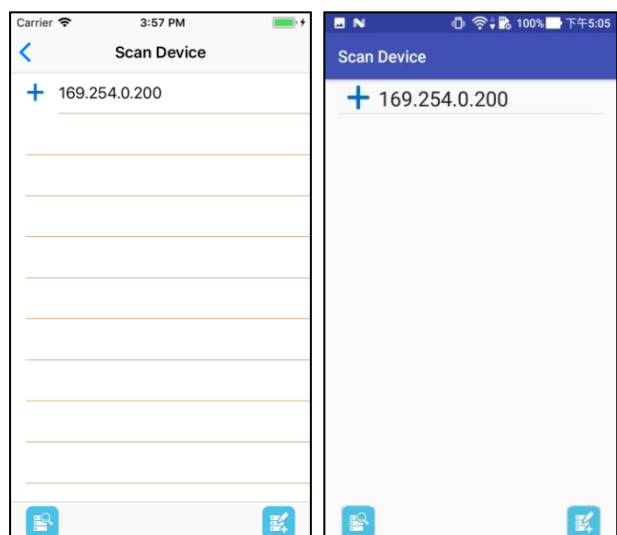


After scanning it will show all matrixes in the list
Touch the IP in list to enter 「Add Device」 page

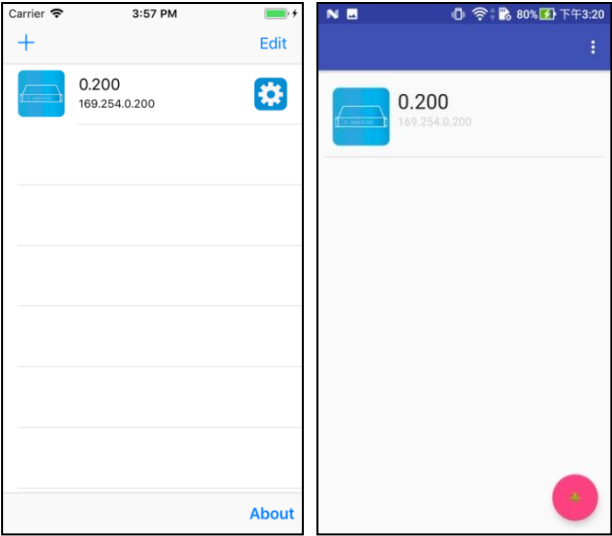


Enter the name of matrix then touch 「Add Device」 to finish setting

Notice: Name should be unique, not allow duplicate

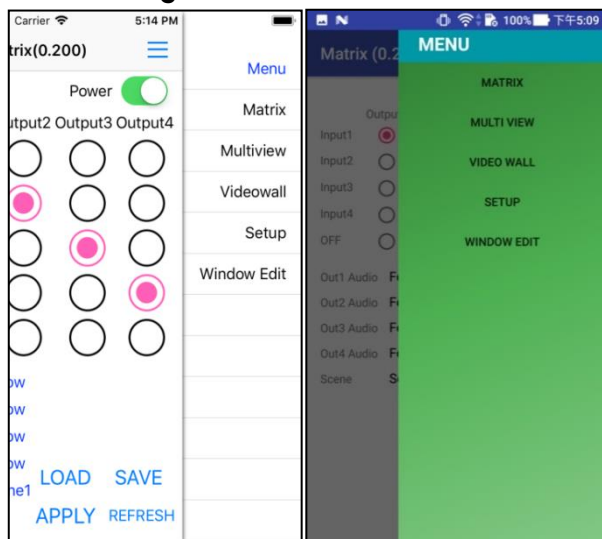


It will show 「+」 icon in front of the IP address when finished



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

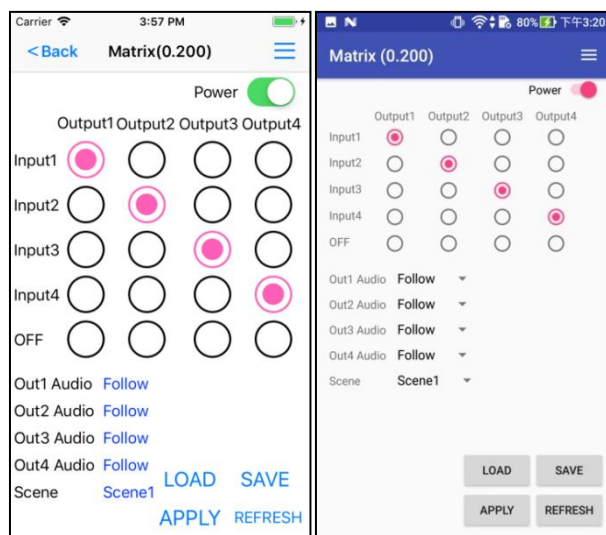
Mode Change



Touch top right 「≡」 icon to show menu

Touch mode or function name to switch

Matrix



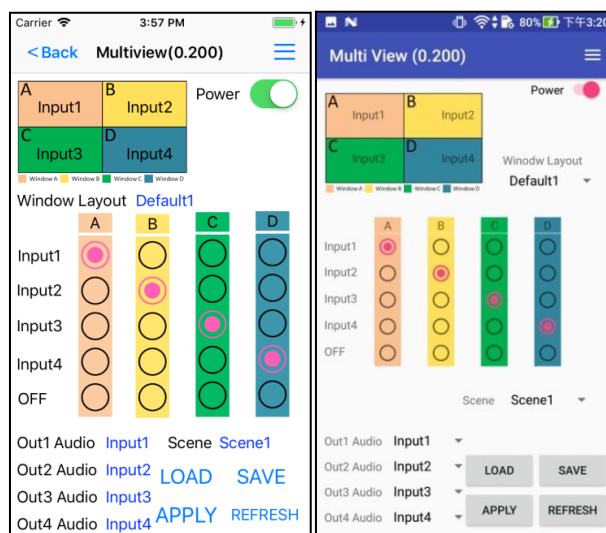
Set input for each output then touch 「APPLY」

Touch 「LOAD」 to load scene

Touch 「SAVE」 to save current setting to scene

Touch 「REFRESH」 to update status

Multiview



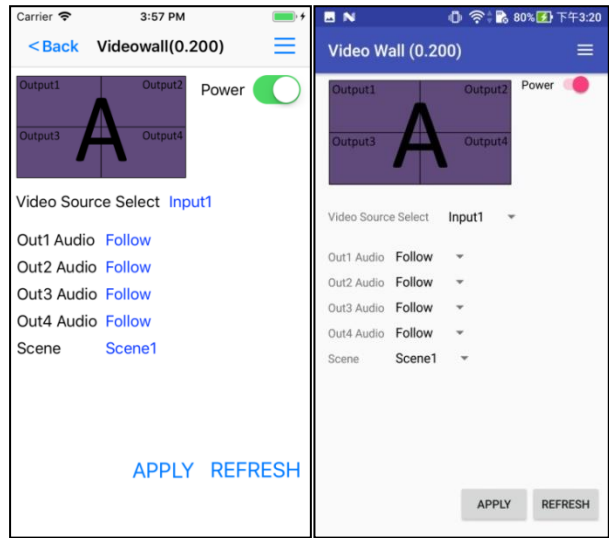
Set input for each window then touch 「APPLY」

Touch 「LOAD」 to load scene

Touch 「SAVE」 to save current setting to scene

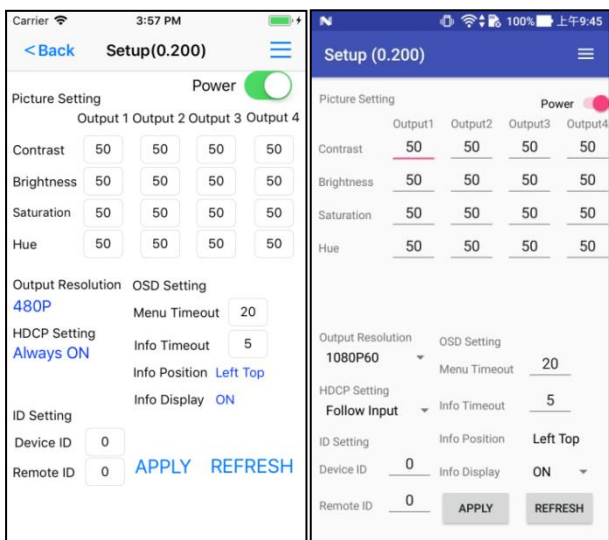
Touch 「REFRESH」 to update status

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

<Back

Winoww Edit(0.200)

	WindowA	WindowB	WindowC	WindowD
Width	640	320	480	240
Height	480	240	360	120
X.Pos	100	800	100	900
Y.Pos	10	10	510	490
Priority	1	2	3	4
Border	YES	YES	YES	YES
Color	Blue	Purple	Grey	White

Power

User1

LOAD

SAVE

PREVIEW

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

	WindowA	WindowB	WindowC	WindowD
Width	640	320	480	240
Height	480	240	360	120
X.Pos	100	800	100	900
Y.Pos	10	10	510	490
Priority	1	2	3	4
Boreder	YES	YES	YES	YES
Color	Blue	Purple	Grey	White

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

Device Name Modification


The image displays two side-by-side screenshots of a mobile application named "My Car".

Left Screenshot (Add Car Screen):

- Header:** "Carrier" with a signal icon, "3:57 PM", and a battery icon.
- Top Bar:** A blue bar containing a "+" icon on the left and an "Edit" link on the right.
- Content:** A list of cars. The first car is a blue icon, "0.200", and "169.254.0.200". Below it are five empty rows for adding more cars.
- Bottom Bar:** An "About" link.

Right Screenshot (Edit Car Screen):

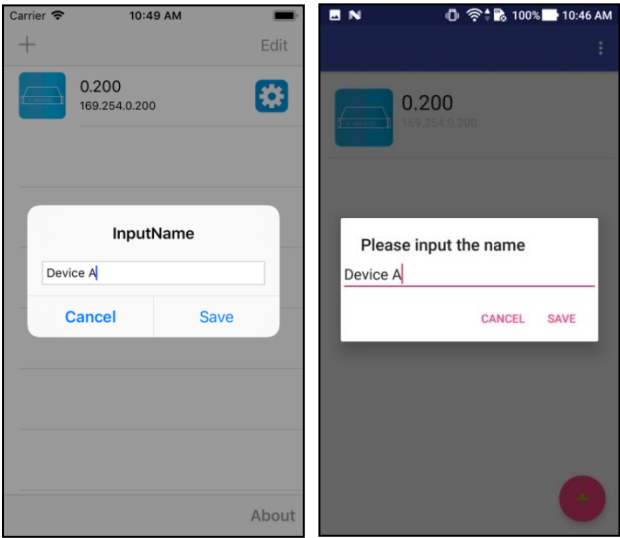
- Header:** "N" with a signal icon, "80%", and "下午3:20".
- Top Bar:** A blue bar containing a car icon on the left and a three-dot menu icon on the right.
- Content:** A single car entry with a blue icon, "0.200", and "169.254.0.200". Below it is a large empty space.
- Bottom Bar:** A pink circular button with a white "Save" icon.

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”

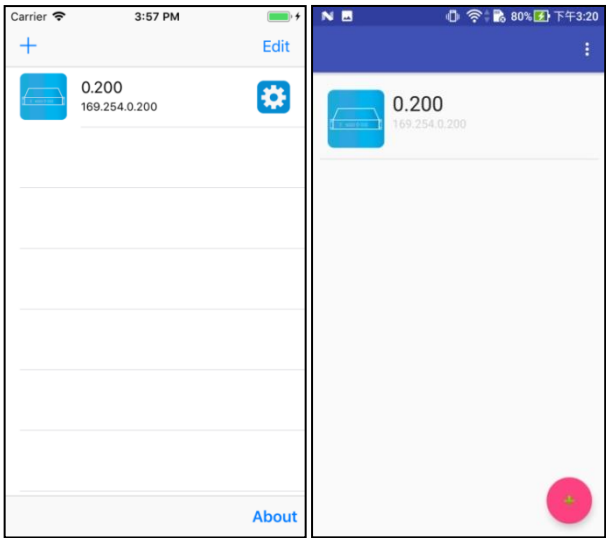
The image is a screenshot of a mobile application interface. At the top, there is a dark blue header bar with various status icons on the left (signal, Wi-Fi, battery) and the time '10:45 AM' on the right. Below the header, the app's main content area has a dark background. On the left, there is a blue square icon containing a white car silhouette. To its right, the text '0.200' is displayed in a large, white, sans-serif font. Below this, in a smaller white font, is the text '169,254 0.200'. A white modal dialog box is centered on the screen, containing the text 'Please select the item you want to perform' in bold. Below this text are two options: 'modification' and 'delete', each preceded by a small white square icon. At the bottom right of the screen, there is a red circular button with a white car icon.

then touch 「modification」 for Android



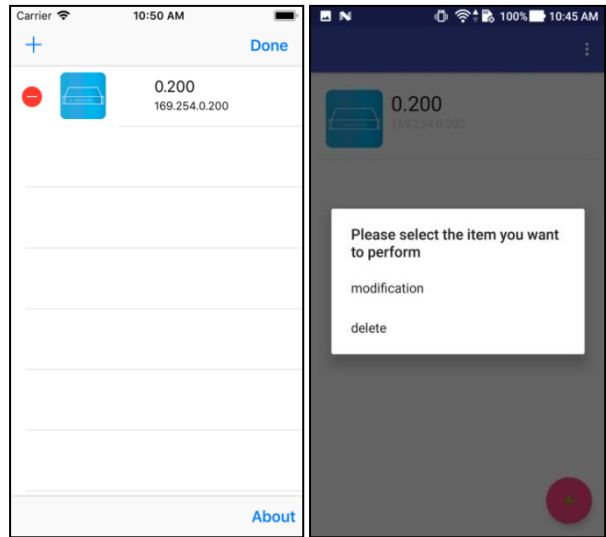
Enter the name then touch 「Save」

Delete Device



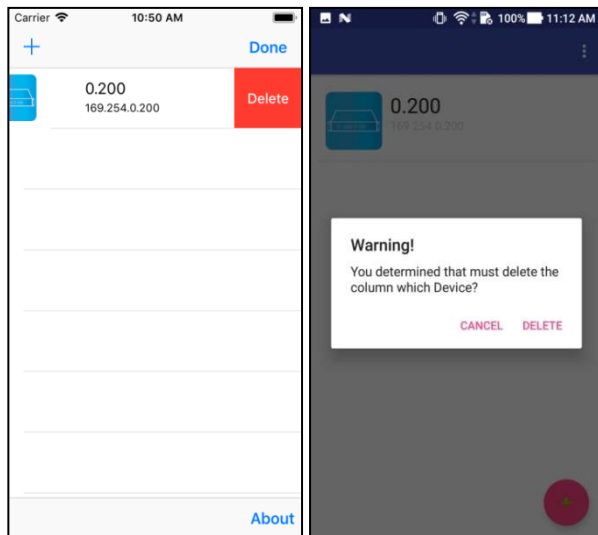
For iOS please touch top right 「Edit」

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
Support	
Compliance	HDMI1.3, HDCP 1.4, DVI 1.0
Max. HDMI Resolution	1080p@60Hz
Audio Format	LPCM 7.1@192KHz, Dolby TrueHD, DTS-HD MA
RS232 Baud Rate	9600bps
IR Support	45°, 5M
Ports & Interfaces	
Video Input	4 x HDMI Type A
Video Output	4 x HDMI Type A
Ethernet Interface	1 x RJ45
RS232 Interface (Console)	1 x DB9 Female
Power	
Power Supply	DC 12V 4.16A
Power Consumption	2A (Max)
Ambient Temperature	
Operation	0 to 55°C
Storage	-20 to 85°C
Humidity	up to 95%
Physical Characteristics	
Dimensions	483 x 177 x 44mm
Weight	2300g