



# HDMI Matrix Switcher Series

February 4th., 2016 Firm. Version 1.25

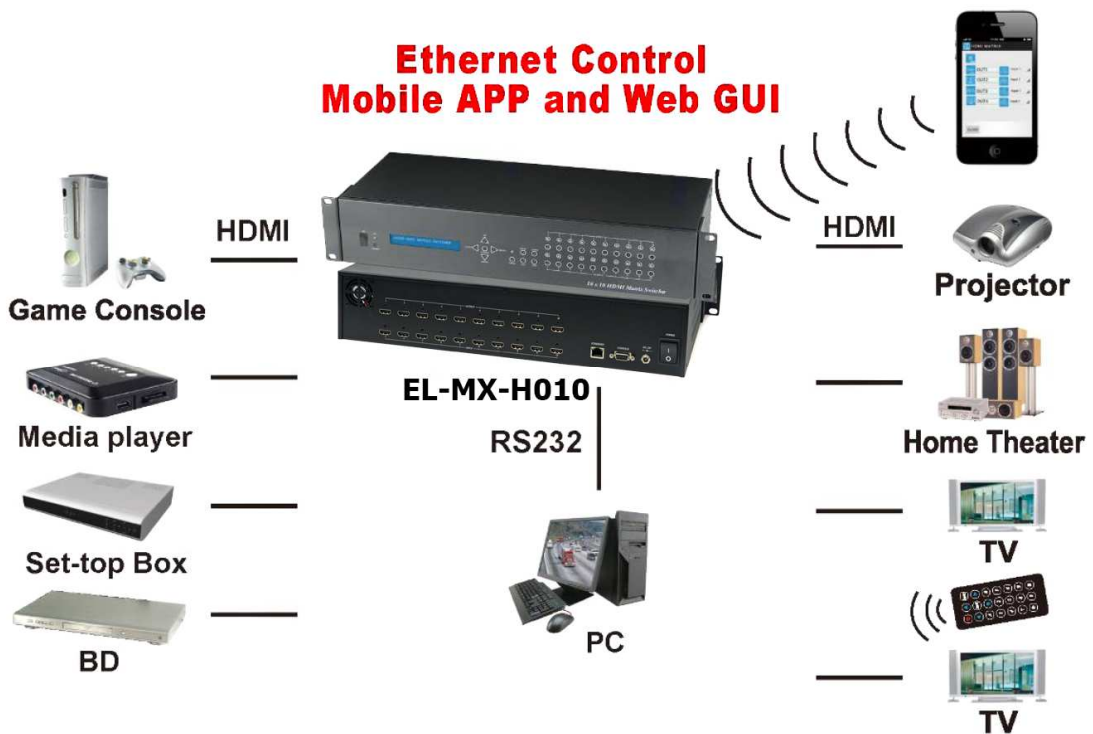
## ITEM NO.: EL-MX-H010 10 x 10 HDMI Matrix Switcher

**EL-MX-H010 10x10 HDMI Matrix Switch** allows you to route 10 HD sources to 10 HD displays. This matrix is a complete HD routing solution for whole home HDTV systems. It provides **3D support, 4K2K** and is 2U Rack mountable for professional installations. In addition, the EL-MX-H010 can be controlled by GUI Ethernet, Android and iOS App Control, IR remote control, RS-232, Telnet and by the front panel keypad.

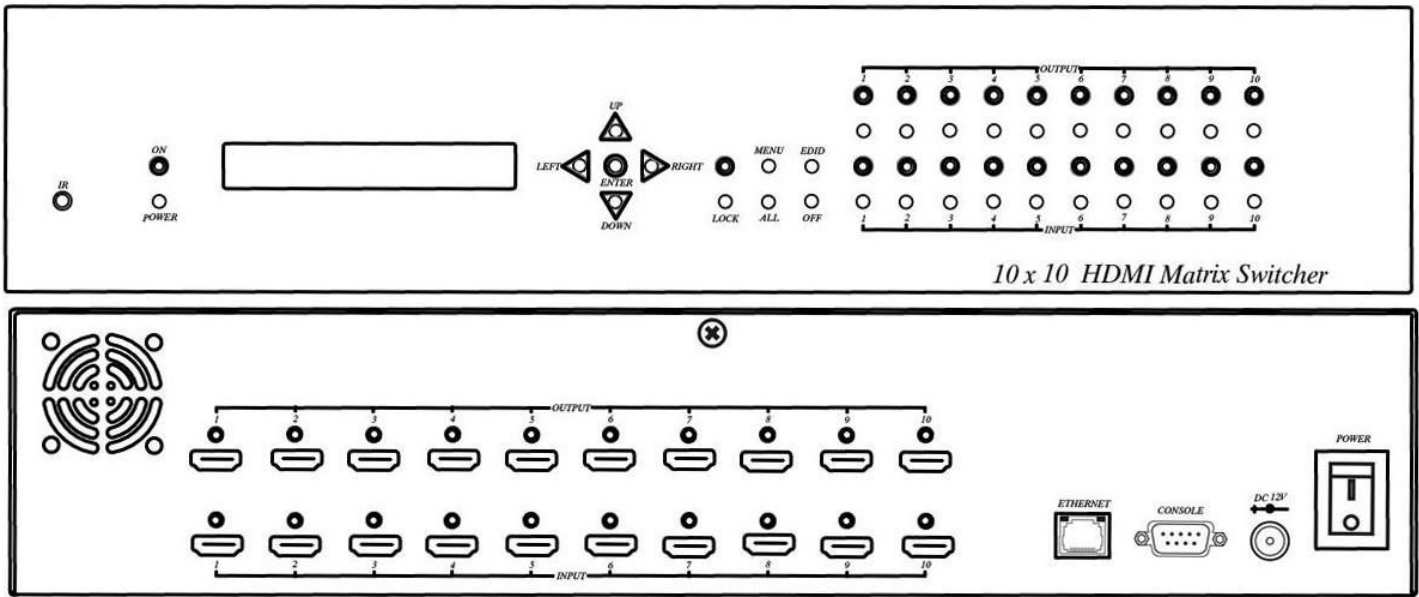


### Features:

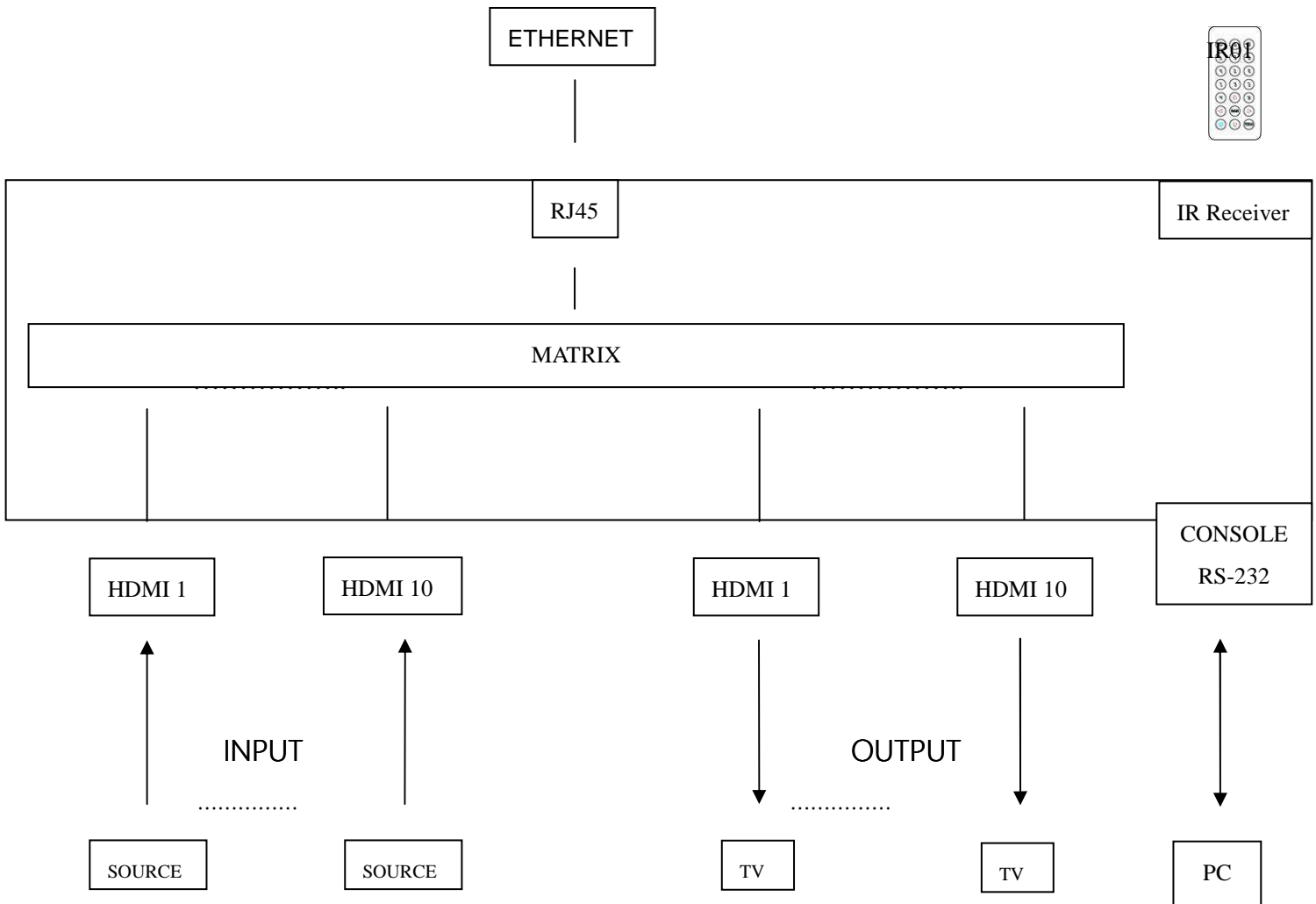
- Connect up to 10 HDMI source to 10 HDMI display monitors.
- HDMI 1.4 with 3D, HDCP & DVI Compliant.
- High definition video up to 4K2K24/25/30Hz@8bits, 1080p@60Hz@12bits.
- Audio supports up to LPCM 7.1, 192KHz, Dolby TrueHD, DTS-HD
- Easy to use front panel control of switching or using the included remote control.
- Built in Ethernet Control and Android/iOS APP Control.
- Built in RS232 console port to select input/output.
- Input/Output status could be displayed at front panel LCM and LED strings.



## 1.0 EL-MX-H010 Panel View:



## 2.0 EL-MX-H010 Connection View:



### 3.0 Keypad and LEDS

#### 3.1 Back Panel Switch and LED Indication:

POWER	Light on Light off	Power on Power off
RJ45	Yellow Green	Ethernet linked Ethernet data transmission

#### 3.2 Front Panel LED Indication:

ON	BLUE RED OFF	Power on Standby Power Off
INPUT 1~10	BLUE OFF	Signal indication No signal
OUTPUT 1~10	BLUE OFF	HDMI output indications Output unlink

**Standby mode: The IR Remote only could control POWER on/off.**

#### Front Button Function:

Power	Power on/standby
UP	Up
DOWN	Down
LEFT	Left
RIGHT	Right
ENTER	Select confirm key
MENU	Back to main menu/channel setting
EDID	Copy EDID
LOCK	Button lock. Press for 3 seconds
ALL	Set selected input channel to all output When press ALL the second line of leds will show IN flashing; select the input 1~10 then press ENTER.
OFF	Turn off selected output, can be 1~10 or ALL When press OFF the second line of leds will show IN flashing, select the output 1~10 or ALL then press ENTER
OUTPUT 1~10	Fast select output
INPUT 1~10	Fast switch input to the output previously selected

### 3.3 Panel button Function:

#### **OUTPUT 1÷10 and INPUT 1÷10**

Press OUTPUT 1÷10 to select output port. Then the relative input at IN line of LCM will blink. Press INPUT 1÷10 to select input port to be routed on the output previously selected.

#### **ALL :**

Press ALL button, the IN line of LCM will blink, press INPUT 1÷10 to select the input port to be routed on all output port.

#### **OFF :**

Press OFF button, the IN line of LCM will blink, press ALL or OUTPUT 1÷10 to select which port to be turned off

#### **EDID :**

Press EDID button, it will show "From OUTPUT" at second line of LCM and the channel number will blink. Press OUTPUT 1÷10 to select from which destination copy the EDID.

#### **LOCK :**

Press LOCK till LOCK LED lights on. Then the front panel buttons and IR remote control of the MATRIX will be locked.

Press LOCK till the LOCK LED goes off to unlock the front panel buttons and the IR remote control.

\*When the sub-menu setting are set-up, press the ENTER key to confirm the setting. If no press ENTER key, the setting is not operative.

### 3.4 LCM Panel Function:

#### **Power on Main Screen**

When the power is on, on the main screen appears

<b>10X10 HDMI MATRIX</b>
--------------------------

#### **Channel Setting on Main Screen**

The Matrix will jump to channel setting screen after 10 seconds, press the MENU key to enter the main menu

<b>OUT</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>IN</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

## Main MENU Option:

- \*1 - SWITCH
- 2 - SCENE
- 3 - ETHERNET
- 4 - EDID
- 5 - REMOTE ID
- 6 - VERSION

## Operation:

- Press UP or DOWN keys to scroll the menu. Press ENTER key to enter into subpage.
- In MENU you could use key 1÷ 6 of IR remote control to select the functions.
- When setting is completed, press the MENU button to return to the main page

## 4.0 LCM Main MENU Function Operations:

### 4.1 SWITCH : (Default: 1 2 3 4 5 6 7 8 9 10)

This function is used to switch the input/output port. Enter the SWITCH menu. Press the ENTER key, then the LCM second line INPUT will flash. Press LEFT or RIGHT button to select the output to be modified. Then press Up or Down button to select the input port. After that, press ENTER to confirm setting.

**It also works with INPUT/OUTPUT button of panel or IR remote**

<b>OUT</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>IN</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

---

### 4.2 SCENE:

SCENE function permits to save and recall 10 status machine for specific application

<b>LOAD</b>
<b>SAVE</b>

#### LOAD

Reload one of the saved scene. Press UP or DOWN to select the number of scene and then press ENTER.

At main screen you could use IR01 remote button **A** for quick load function, button **1~0** to select port number to load.

<b>LOAD 1</b>
<b>1 2 3 4 5 6 7 8 9 10</b>

## SAVE

Save current channel setting. Press UP or DOWN to select the number of scene and then press ENTER to save. At main screen you could use IR01 remote button **B** for quick save function, button **1~0** to select port number to save.

<b>SAVE 1</b> <b>1 2 3 4 5 6 7 8 9 10</b>
--

## 4.3 Ethernet

- \* IP Address
- Subnet Mask
- Gateway
- DHCP Client
- Media Type
- MAC Filter

### IP Address: (Default: 192.168.0.10)

<b>IP Address</b> <b>192.168. 0.10</b>
---

This function setup MATRIX host intranet "IP Address". Press ENTER and the left-most number of second row will flash. Press the UP or DOWN buttons to change the numbers. Press RIGHT to move to the adjacent location and so on till the fourth group on numbers. At the end, press ENTER.

### Subnet Mask: (Default 255.255.255.0)

<b>Subnet Mask</b> <b>255.255.255.0</b>
--

This function setup MATRIX host intranet "Subnet Mask". Press ENTER and the left-most number of second row will flash. Press the UP or DOWN buttons to change the numbers. Press RIGHT to move to the adjacent location and so on till the fourth group on numbers. At the end, press ENTER.

### Gateway: (Default 192.168.0.1)

<b>Gateway</b> <b>192.168. 0. 1</b>
--

This function setup MATRIX host intranet "Gateway". Press ENTER and the left-most number of second row will flash. Press the UP or DOWN buttons to change the numbers. Press RIGHT to move to the adjacent location and so on till the fourth group on numbers. At the end, press ENTER.

## Warning

Setting IP Address, Subnet Mask and Gateway can be done as well by RS232 as described at chapter 6.3

**At the first setting**, it's recommended to use the software 151124\_EL-MX-H010\_Browser\_for\_LAN\_Modules-01 as described in the chapter 7

### DHCP Client: (Default Disable)

**DHCP Client  
Disable**

When DHCP Clients setup at "Enable", the MATRIX host will automatically get IP Address, Subnet Mask, Gateway, if setup at "Disable", the MATRIX Host IP Address need go through "ETHERNET" menu to set IP Address, Subnet Mask, Gateway, to press the ENTER, the second row will flash, then press the UP or DOWN to select DISABLE, ENABLE, then press ENTER to complete the setting.

### Media Type: (Default AUTO)

**Media Type  
AUTO**

This function setup MATRIX host intranet "Media Type". Press enter, the second row will flash. Then press the UP or DOWN button to select AUTO, 10Mfull, 100Mhalf, 100Mfull. Press enter to complete the setting.

### MAC Filter : (Default Disable)

**MAC FILTER  
DISABLE**

MAC Filter can be setup with registered MAC Address in order to connect the MATRIX host Web GUI, MAC Address required by the Web page to fill in. This function enables or disables the MAC filtering. Press ENTER, the second row will flash, then press the UP or DOWN to select DISABLE or ENABLE, then press ENTER to complete the setting.

#### 4.4 EDID: (Default: 1080P LPCM-2CH)

Because the player output display resolution will be based on TV EDID, this Matrix provides four default EDID modes: "BUILD-IN MODE", "COPY MODE", "I. EDID MODE" and "PC EDID MODE".

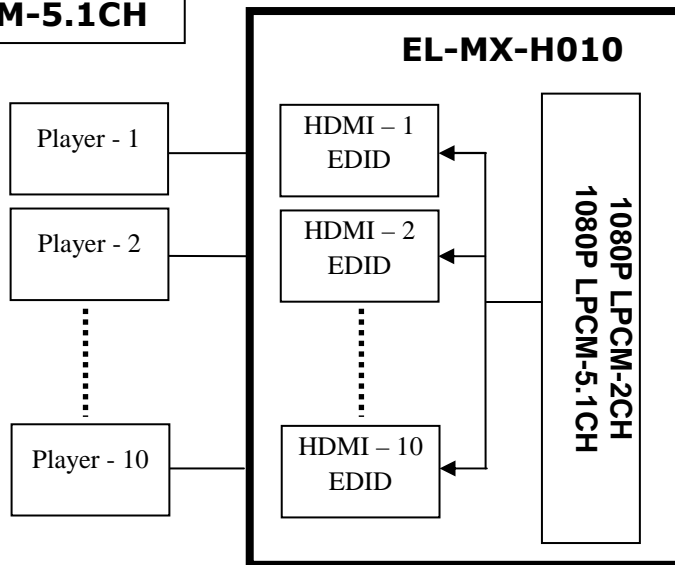
**For 4K2K resolution you have to copy the EDID from your 4K2K monitor (see below).**

\* BUILD-IN MODE  
COPY MODE  
I. EDID MODE  
PC EDID MODE

##### 4.4.1 BUILD-IN MODE :

This mode supports video resolution 480p, 720p, 1080i / p at 24/50/60Hz, support 1080P LPCM two-channel audio and 5.1 channel. After enter BUILD-IN MODE menu, press UP or DOWN key to select 1080P LPCM-2CH or 1080P LPCM-5.1CH, then press ENTER to confirm setting.

1080P LPCM-2CH  
1080P LPCM-5.1CH





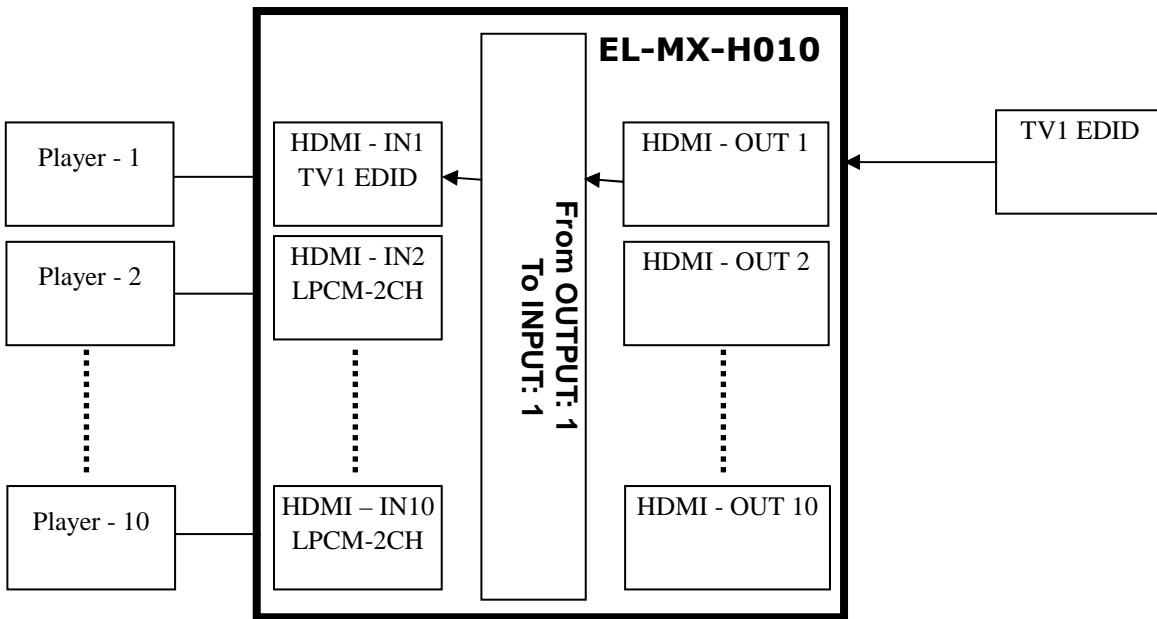
#### 4.4.2 COPY MODE :

To fully support the TV resolution and audio mode, the matrix provides "COPY MODE" to copy TV EDID for input source reference. When use the copy mode, is recommended to copy the lowest resolution TV EDID.

After entering COPY MODE menu, press UP or DOWN button to select the OUTPUT (1 to 10) and press ENTER. Then press UP or DOWN button to select the INPUT (1 to 10 or ALL) and press ENTER to confirm. **Only connected output will be shown in OUTPUT list.**

**COPY MODE**  
**From OUTPUT: 1**

**COPY MODE**  
**To INPUT: 1**



#### Warning:

If the user wants to exploit the **4K2K** capability of the matrix, it's necessary to copy the EDID of the 4K2K monitor. For this operation, the monitor 4K2K must be connected to one of the 10 outputs and must be switched on. Then the routine **COPY MODE** described above must be performed.

Alternatively, the user can send the command by RS232 **EDID\_COPYΔ[n]** where n is the output where is connected the 4K2K monitor, namely 01 to 10 and Δ is the "space character"

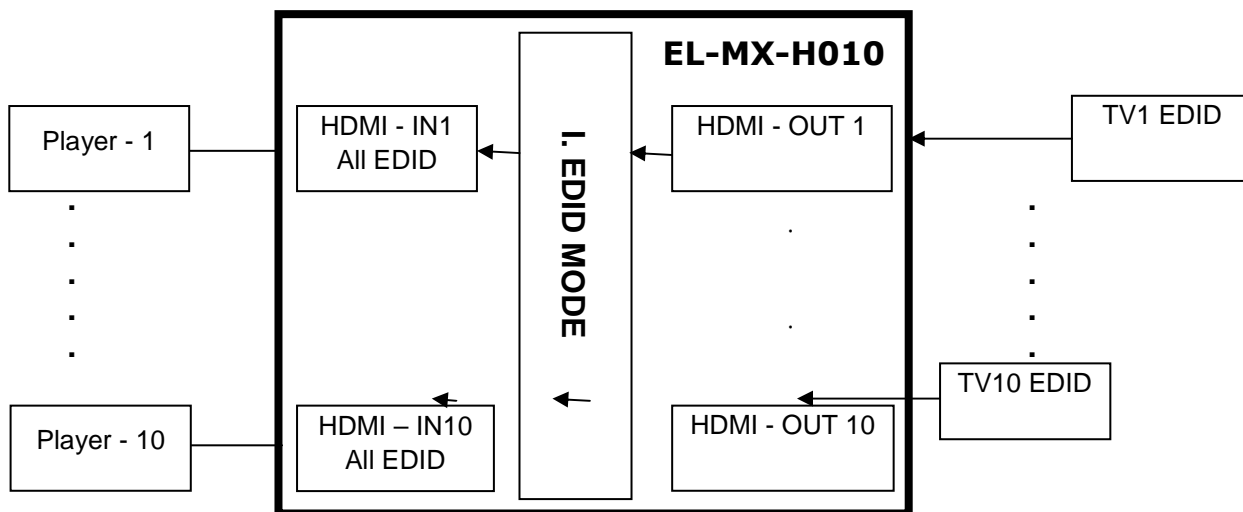
In that way, any 4K2K source will be enabled to provide 4K2K resolution **on any outputs where it will be routed.**

#### Warning:

The 4K2K content will be displayed only by the compatible destinations

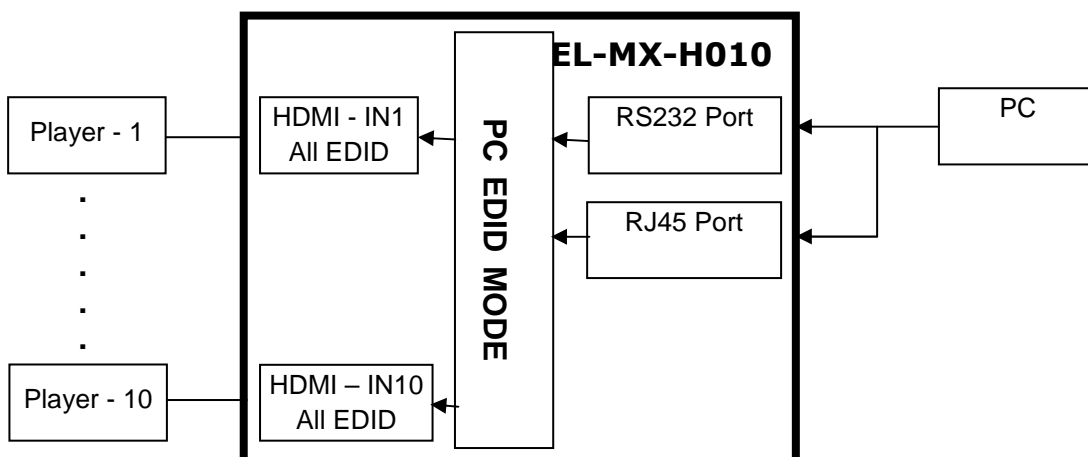
### 4.4.3 I. EDID MODE

In this mode, the MATRIX checks all the connected monitors and copies the EDID of the monitor that presents the **lowest resolution**. This EDID is then transmitted to all sources. E.g., if there is a monitor 1080p and a monitor 720p, the matrix transmits to the sources the EDID of the 720p monitor.



### 4.4.4 PC EDID MODE

In this mode you could upload EDID file (.dat or .bin format) from RS232 or RJ45 port to the MATRIX. Please refer to file "HS04M-HE04M-EL-MX-H010 EDID Loader Instruction V1.2.0" that you can download for our web site. Software "160201 EDID Loader setup V1.2.0.exe" is provided in the same web page.



#### 4.5 REMOTE ID : (Default IR ID: 4)

This function permits to match the matrix with the Remote Control IR01. So, a conflict with other IR remote control is avoided.

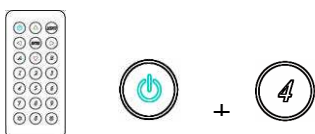
After entering MATRIX IR ID menu, press ENTER. The LCM LINE 1 number will flash. Then Press UP or DOWN button to select the number, and then press ENTER to confirm.

As aftermath, the remote control IR01 must also be set with the same ID

**Remote IR ID setting mode:** Press and hold the POWER button, then press the number button which can be set from 0 to 9. (See 5.1)

These settings on IR01 remote control have to be done the first time that you use the IR01 or when you change the batteries. (See 5.0)

**MATRIX IR ID 4**

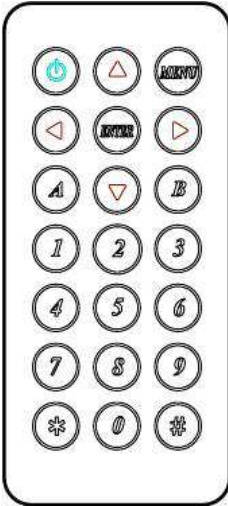


#### 4.6 VERSION:

Display Matrix firmware version

FIRMWARE  
VERSION 1.XX

## 5.0 Remote Control Function (IR01):



5.1 To command the matrix locally, setup the remote control IR01 ID with the same code of the Matrix (see 4.2). The default code is 4. (Power+4)

5.2 Warning: These settings have to be done the first time you use the IR01 or when you change the batteries.

- IR ID setup : press and hold POWER button , then press Number key

### Remote control button define:

#### Symbol



Power



LEFT



RIGHT



UP



DOWN



ENTER



MENU



Quick key1



Quick key2



Quick key3

#### Function

ON/Standby (same as Matrix)

Left (same as Matrix)

Right (same as Matrix)

Up (same as Matrix)

Down (same as Matrix)

Confirm (same as Matrix)

Menu (same as Matrix)



Quick key4



Quick key5



Quick key6



Quick key7



Quick key8



Quick key9



Quick key10



EDID (same as Matrix)



OFF (same as Matrix)

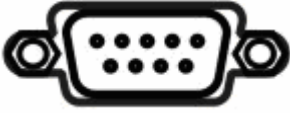
For example: to connect output port 1 to input port 4, press the quick key 1 (OUTPUT 1) and then press the quick key 4 (INPUT 4).

**Warning:**

When the matrix is in stand-by mode, the IR Remote Control can only power-on the matrix.

## 6.0 RS232 Computer Local Control Function : (CONSOLE )

CONSOLE



### 6.1 For RS232

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).

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

### 6.2 For Ethernet TCP/IP (Winsock)

**Default IP address:** 192.168.0.10, but user **must type his own IP address** (see 4.3);  
**Port:47011**

ETHERNET



### 6.3 Operation Instruction format:

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

[Command]	[Description]
POWER $\Delta$ [y]	Power on/off
TX[n] $\Delta$ [n]	Set RXn to TXn
RX[n] $\Delta$ [m,m,m,m...]	Set RXn to multiple TXm,m,m,m...
MATRIX_ID $\Delta$ [p]	Set Matrix IR ID
EDID_COPY $\Delta$ [n]	Copy EDID from TX n
SAVE $\Delta$ [n]	Save setting to #n
LOAD $\Delta$ [n]	Load setting from #n
KEY $\Delta$ [y]	Panel button& IR remote control Lock/Unlock
DHCP $\Delta$ [y]	DHCP client on/off
IP_ADDRESS $\Delta$ [x.x.x.x]	Set Matrix IP address
SUBNET_MASK $\Delta$ [x.x.x.x]	Set Matrix subnet mask
GATEWAY $\Delta$ [x.x.x.x]	Set Matrix gateway

MEDIA_TYPE <sup>Δ</sup> [z]	Network speed select
MAC_FILTER <sup>Δ</sup> [y]	Mac filter on/off
STATUS	Show connection status

VERSION	Show firmware version
---------	-----------------------

HELP	Help
------	------

[Symbol]	[Parameter]
----------	-------------

-----

m	01~10, ff=ALL
n	00=off, 01~10=1~10
p	00~09=0~9
x	0~255
y	00=off, 01=on
z	00=auto, 01=10M, 02=100M

Example:

-To route input 4 to output 1, send the following string:

TX01<sup>Δ</sup>04Enter

-To route input 2 to all output, send the following string:

RX02<sup>Δ</sup>ffEnter

-To route input 2 to output 1,2,4, send the following string:

RX02<sup>Δ</sup>01,02,04Enter

-To put in standby the matrix, send the following string:

POWER<sup>Δ</sup>00Enter

Commands are **case insensitive**.

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

## 7.0 Ethernet Control Function:

### Initial IP Configuration

1. Setup MATRIX IP Address same as your PC domains. (Default 192.168.0.200)  
MATRIX IP Address method, please refer to Chapter 4.3 and 6.3

Alternatively, to set up the IP address, SubNet Mask and Gateway you can use the "151124\_EL-MX-H010\_Browser\_for\_LAN\_Modules-01" application.

The application can be downloaded from our web site [www.elprovideolabs.com](http://www.elprovideolabs.com) at the page that shows the matrix EL-MX-H010-2

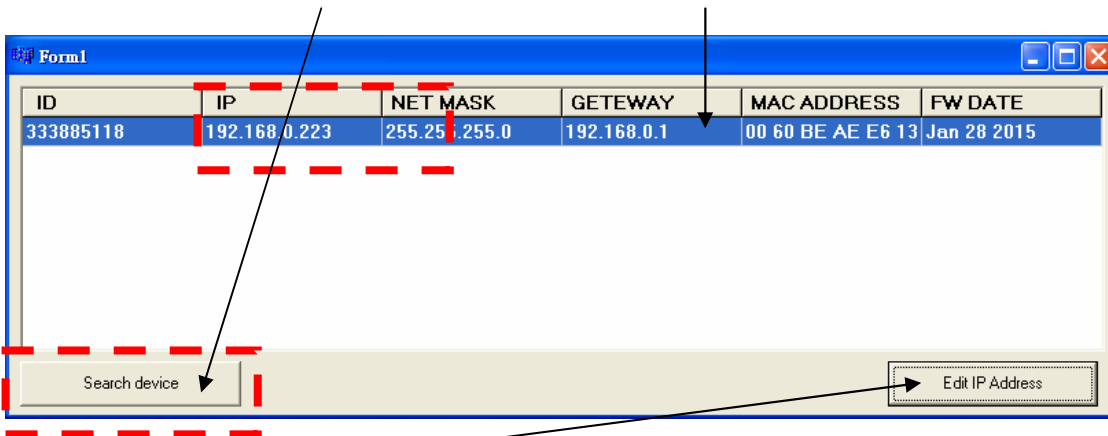
-Download and install on your PC the Application "151124 EL-MX-H010\_Browser for LAN Modules"

-Connect your PC and the EL-MX-H010-2 Ethernet port on your existing network

-Switch on EL-MX-H010 and run "151124 EL-MX-H010\_Browser for LAN Modules"



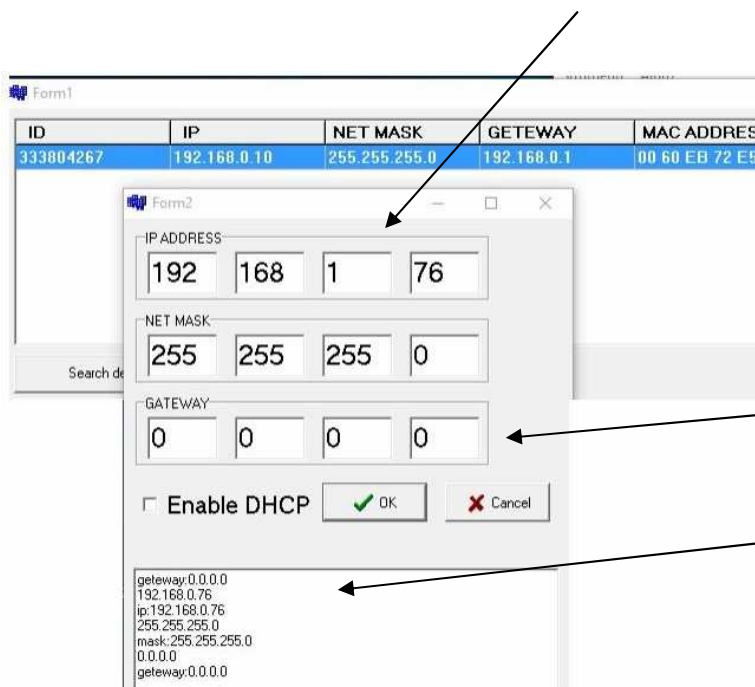
-Then click "Search device", you will get IP address of EL-MX-H010-2 module



ID	IP	NET MASK	GETEWAY	MAC ADDRESS	FW DATE
333885118	192.168.0.223	255.255.255.0	192.168.0.1	00 60 BE AE E6 13	Jan 28 2015

Buttons: Search device, Edit IP Address

-Click on Edit IP Address. A mask appears.



Form2

IP ADDRESS: 192 168 1 76

NET MASK: 255 255 255 0

GATEWAY: 0 0 0 0

Enable DHCP

OK Cancel

gateway:0.0.0.0  
192.168.0.76  
ip:192.168.0.76  
255.255.255.0  
mask:255.255.255.0  
0.0.0.0  
gateway:0.0.0.0

-Type IP Address, Net Mask and Gateway

-Click on OK.

The new parameters are stored in the web module



## SWITCH SETTING:

**MATRIX**

**SWITCH SETTING**

MATRIX-01

Power	Output	Input	
Power Off ▼	Output 1	Input 1 ▼ OFF	<b>Reload</b> <b>Advanced</b>  <input type="button" value="Apply"/>
	Output 2	Input 1	
	Output 3	Input 2	
	Output 4	Input 3	
	Output 5	Input 4	
	Output 6	Input 5	
		Input 6	
		Input 7	
		Input 8	
		Input 9	
		Input 10	
		Input 0	
	Output 7	Input 7 ▼	
	Output 8	Input 8 ▼	
	Output 9	Input 9 ▼	
	Output 10	Input 10 ▼	
	All port	NA ▼	

Version V1.24

- **Power** : Control MATRIX power on and standby.
- **Output** : Display output 1~10. Output name can be changed by the Aliases page.
- **Input** : Display input 1~10. This field is a drop down menu, that includes Input 1 ~ 10 and OFF. Input name can be changed by the Aliases page.
- **Reload** : Get updated MATRIX status and configuration
- **Advanced** : Enter into the "Advanced" page.
- **Apply** : Complete the setting
- **All Port** : Set all output from input 1~10 or off at once.

## Advanced:

**MATRIX**

**Advanced**

IP address	192.168.0.217
Subnet mask	255.255.255.0
Gateway IP	192.168.0.9
Media Type	Auto detect ▼
DHCP Client	Enable ▼
Auto Reset (No data input)	2 (1 ~ 255 Minute)
Device Name	MATRIX-01

MAC address  OnLine

Scene MAC Filter Aliases Back Apply

- **IP address** : Change **IP address**
- **Subnet mask** : Change **Subnet mask**
- **Gateway IP** : Change **Gateway IP**
- **Media Type** : Change **10 / 100 / Auto detect**
  
- **DHCP Client** : When setup at **Enable**, the MATRIX host will automatic IP Address, Subnet Mask and Gateway. If setup at **Disable**, the IP Address, Subnet Mask and Gateway must be set from Advanced page or as described by chapter 4.3.
  
- **Auto Reset** : The terminal connection permits up to 4 users on line at same time. This function automatically disconnects the link without data exchange in order to avoid that other users cannot work. When the **Auto Reset** time is over, the link is disconnected. (1 ~ 255 Minute is the time range that can be setup. 0 means no time setup, namely always connected)
  
- **Memory** : Click to enter **Memory** setup page
- **MAC Filter** : Click to enter **MAC Filter** setup page
- **Aliases** : Click to enter **Aliases** setup page
- **Device Name** : Can change device name
- **Back** : Back to **SWITCH SETTING** page
- **Online** : Shows the users connected. The maximum is 4 users on line.

## Aliases:

**MATRIX**

### Aliases

Output		Input	
Output 1	<input type="text" value="Output 1"/>	Input 1	<input type="text" value="Input 1"/>
Output 2	<input type="text" value="Output 2"/>	Input 2	<input type="text" value="Input 2"/>
Output 3	<input type="text" value="Output 3"/>	Input 3	<input type="text" value="Input 3"/>
Output 4	<input type="text" value="Output 4"/>	Input 4	<input type="text" value="Input 4"/>
Output 5	<input type="text" value="Output 5"/>	Input 5	<input type="text" value="Input 5"/>
Output 6	<input type="text" value="Output 6"/>	Input 6	<input type="text" value="Input 6"/>
Output 7	<input type="text" value="Output 7"/>	Input 7	<input type="text" value="Input 7"/>
Output 8	<input type="text" value="Output 8"/>	Input 8	<input type="text" value="Input 8"/>
Output 9	<input type="text" value="Output 9"/>	Input 9	<input type="text" value="Input 9"/>
Output 10	<input type="text" value="Output 10"/>	Input 10	<input type="text" value="Input 10"/>

- **Aliases** page can change input/output name. Enter Apply to finish the setting after change. The new name will update and correspond to SWITCH SETTING page Output / Input.
- Press **Back** jump back to **advanced** page.
- 

## MAC Filter:

**MATRIX**

### MAC Filter

MAC Filter	Enable <input type="button" value="v"/>
MAC address 1	<input type="text" value="11-22-33-44-55-66"/>
MAC address 2	<input type="text" value="00-00-00-00-00-00"/>
MAC address 3	<input type="text" value="00-00-00-00-00-00"/>
MAC address 4	<input type="text" value="00-00-00-00-00-00"/>
MAC address 5	<input type="text" value="00-00-00-00-00-00"/>
MAC address 6	<input type="text" value="00-00-00-00-00-00"/>
MAC address 7	<input type="text" value="00-00-00-00-00-00"/>
MAC address 8	<input type="text" value="00-00-00-00-00-00"/>
MAC address 9	<input type="text" value="00-00-00-00-00-00"/>
MAC address 10	<input type="text" value="00-00-00-00-00-00"/>

- **MAC Filter** can be setup as authorized MAC Address (max 10) to link the MATRIX host
- After fill the 10 MAC Address, select **Enable** and press **Apply** to complete the setting.
- Click on **Back** to jump to **Advanced** page.

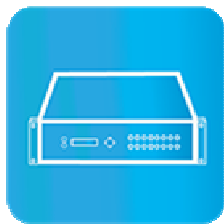
## Scene:

MATRIX											
Scene											
Save	Load	1	2	3	4	5	6	7	8	9	10
Save1	Load1	01_02_03_04_05_06_07_08_09_10									
Save2	Load2	01_02_03_04_05_06_07_08_09_10									
Save3	Load3	01_02_03_04_05_06_07_08_09_10									
Save4	Load4	01_02_03_04_05_06_07_08_09_10									
Save5	Load5	01_02_03_04_05_06_07_08_09_10									
Save6	Load6	01_02_03_04_05_06_07_08_09_10									
Save7	Load7	01_02_03_04_05_06_07_08_09_10									
Save8	Load8	01_02_03_04_05_06_07_08_09_10									
Save9	Load9	01_02_03_04_05_06_07_08_09_10									
Save10	Load10	01_02_03_04_05_06_07_08_09_10									
Back											

- **Save** : Save 10 set of channel settings, automatically back to main screen after save
- **Load** : Reload (Recall) 1 of the channel settings
- **Back** : Back to **Advanced** page

## 8. Android APP Function:

APP name: Matrix Controller



### System Requirement

Android 4.0 and up

Size: 1.2M

Language: English, Traditional Chinese, Simplified Chinese

### Google Play Download Link

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

### 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 of 10 by 10 matrix is 192.168.0.10

Default IP address of 4 by 4 matrix is 192.168.0.200

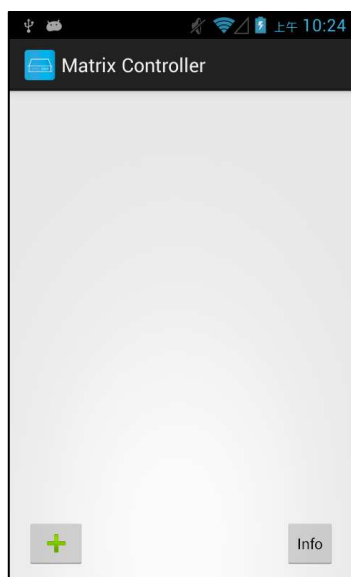
Default subnet mask is 255.255.255.0

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 [ETHERNET] 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:

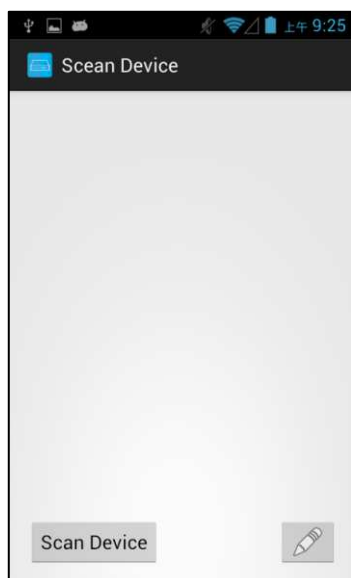


When first time enter the APP will see the main page

Bottom left 「+」 to add matrix

Bottom right 「Info」 to show information

## Scan Device



Touch 「+」 button at main screen to enter 「Scan Device」 page

Touch bottom left 「Scan Device」 to start scan

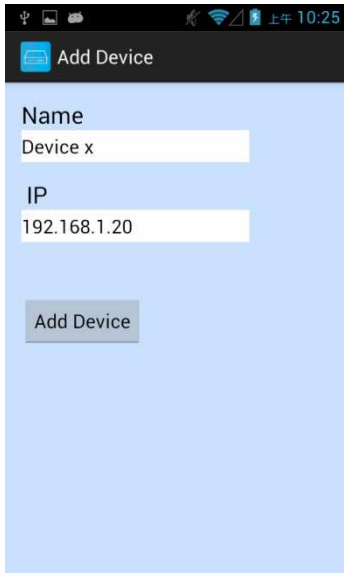
Touch bottom right pen icon to input the IP address manually

## Add Matrix

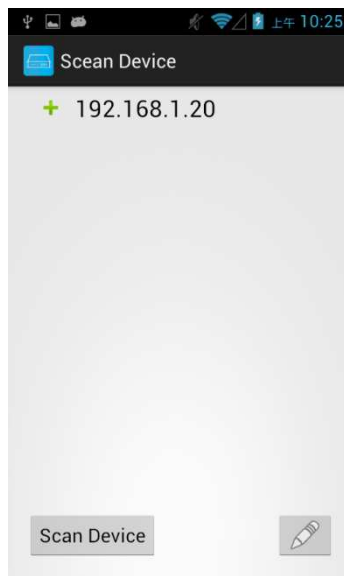


After scanning it will show all matrixes in the list

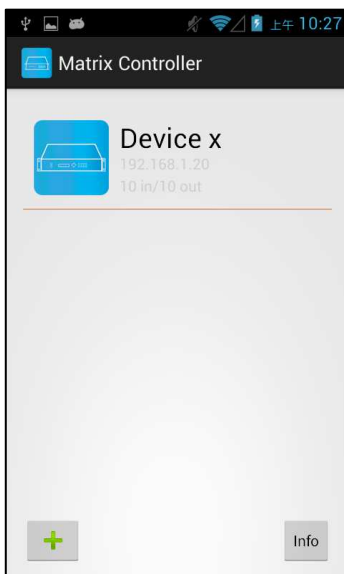
Touch the IP in list to enter 「Add Device」 page



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

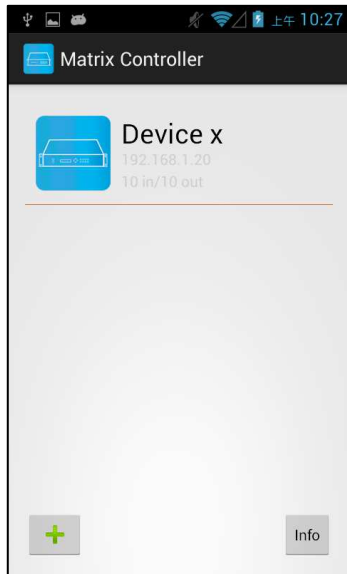


It will show 「 + 」 icon in front of the IP address when finished

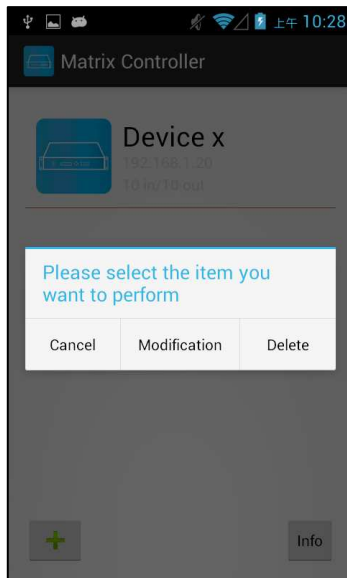


Return to main screen you will see the matrix which just add

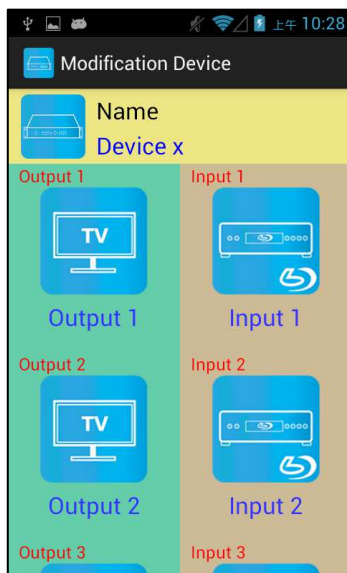
## Modify Device



Press the matrix name to show pop-up dialog



Touch 「Modification」 to enter modification page.

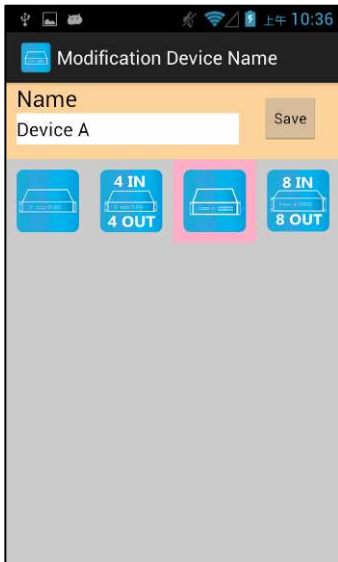


Yellow block shows matrix name and icon

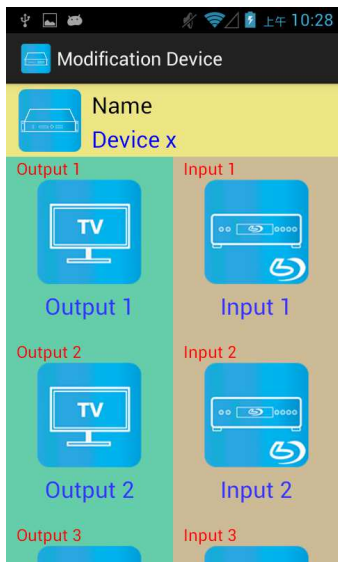
Green block shows name and icon of output devices

Brown block shows name and icon of input devices





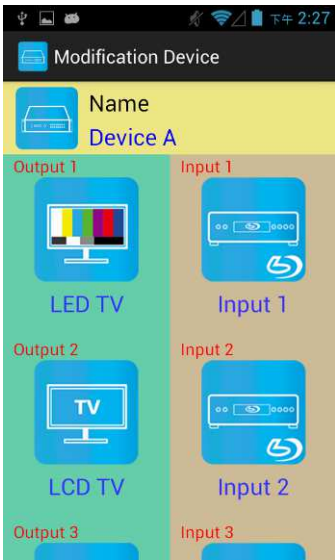
Touch yellow block to modify matrix name and icon  
 Input the name and select the icon you prefer then touch 「 Save 」 to finish



Return to Modification page you will see the matrix have been changed



Touch green block to modify output name and icon  
 Input the name and select the icon you prefer then touch 「 Save 」 to finish



Return to Modification page you will see the output have been changed

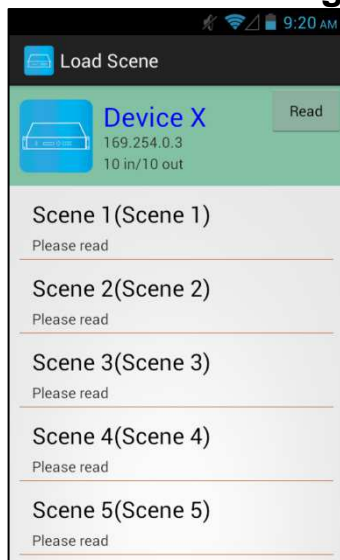


Touch brown block to modify input name and icon  
 Input the name and select the icon you prefer then touch 「 Save 」 to finish



Return to Modification page you will see the input have been changed

## Channel Switching mode (load scene, input selection, output selection)



Click device name in list to enter load scene page



Slide right from load scene page to enter input selection mode (as before)



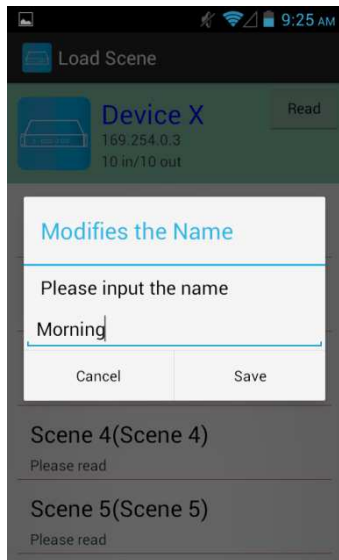
Slide left from load scene page to enter output selection mode (support multiple selection)

## Load scene

### Modify scene name



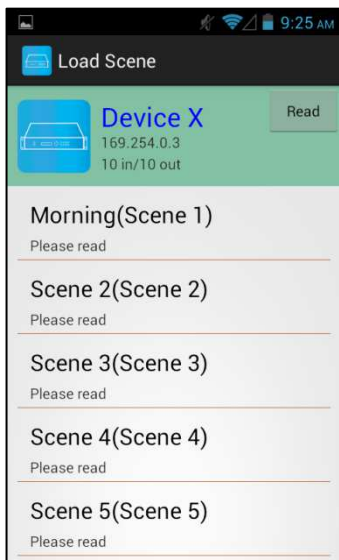
Press scene column to show pop-up dialog to modify scene name



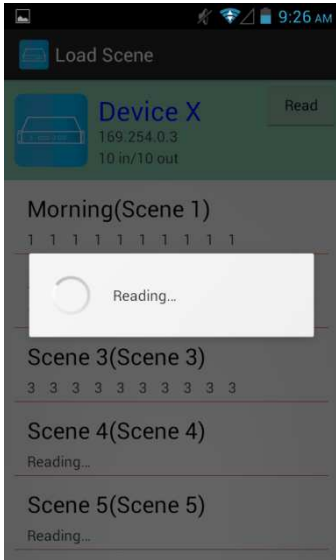
After modification touch 「 Save 」 to save scene name  
It will return to Load Scene page automatically.

**Notice : Name should be unique, not allow duplicate or empty**

## Read scene status



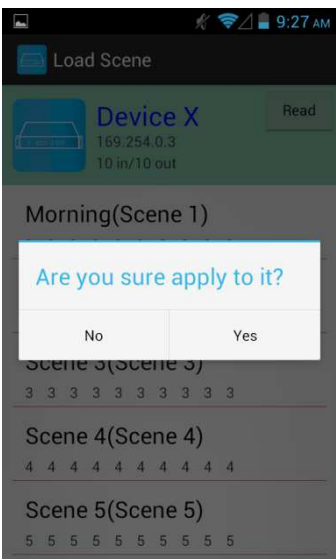
Touch top right 「 Read 」 to renew the scene status



It will show pop-up message 「Reading...」  
After reading it will refresh scene status



Touch the column name to show pop-up dialog



Touch 「Yes」 to apply scene

# Input Selection Mode



Top right 「 Refresh 」 to renew the status of matrix

Below 「 Refresh 」 button to power on/off the matrix

The block under device are Output 1~ Output 10  
(4 by 4 matrix only shows Output 1~Output 4)

Left side shows output device name

Right sideshows current input device name

Bottom left 「 Save Scene 」 to save the scenes



Touch output block to enter Channel Selection page

Touch input device to switch or ON/OFF icon to power on/off



It will return to Input Selection page after switching and you will see the input have been changed

## Output Selection Mode



Top right 「Refresh」 to renew the status of matrix

Below 「Refresh」 button to power on/off the matrix

The blocks under device are Input 1~ Input 10

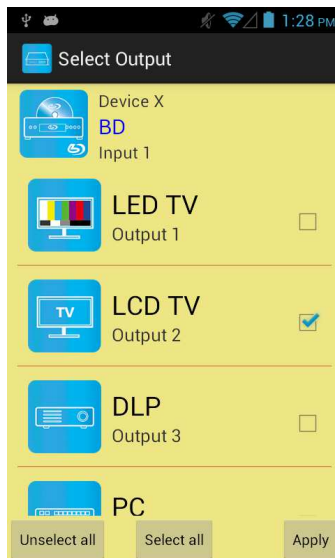
(4 by 4 matrix only shows Input 1~Input 4)

Left side shows input device name

Right side shows current output numbers of devices

Bottom left 「Save Scene」 to save the scenes

Bottom right 「Video off」 to turn off video output



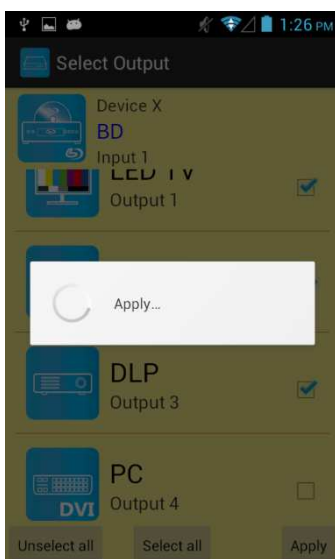
Touch input block or 「Video off」 to enter Output Selection page

It will show connected output of current input

Bottom left 「Unselect all」 to clear all output box

Bottom center 「Select all」 to check all output box

Bottom right 「Apply」 to apply output setting



After touch 「Apply」 it will show pop-up message 「Apply...」

It will return to Input Selection page after switching and you will see the numbers of output have been changed

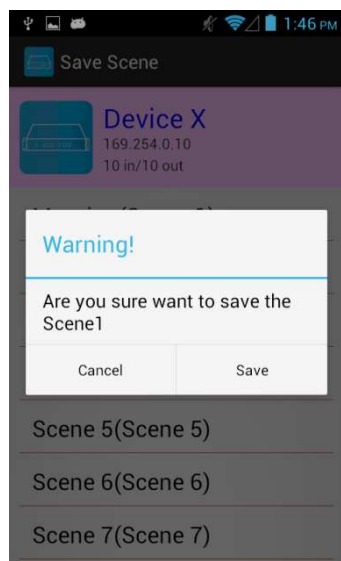
## Save Scene



In Input or Output Selection page touch bottom left 「 Save Scene 」 to enter Save Scene page



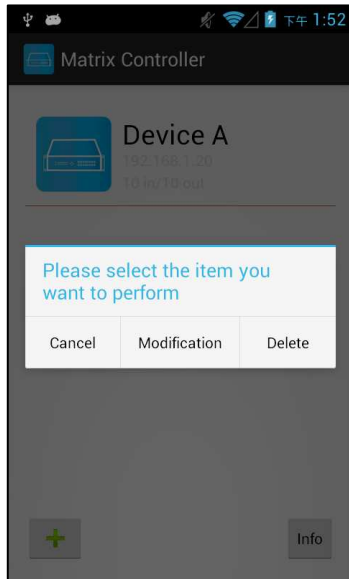
Touch the Scene column to show pop-up dialog



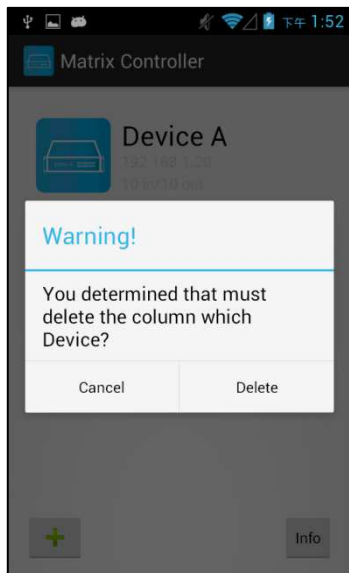
Touch 「 Save 」 to save current channels setting for all output  
It will return to Save Scene page automatically.



## Delete Matrix



Press the block of matrix in Controller page to show pop-up dialog then touch 「Delete」



Touch 「Delete」 to delete the matrix

## 9. iOS APP Function:

APP name: Matrix Controller



### System Requirement

iOS 7.1 and up

Size: 2.3M

Language: English, Traditional Chinese, Simplified Chinese

### iTunes Download Link

<https://itunes.apple.com/us/app/matrix-control/id904487754?l=zh&ls=1&mt=8>

### iTunes 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 of 10 by 10 matrix is 192.168.0.10

Default IP address of 4 by 4 matrix 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 [ETHERNET] 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

Bottom left 「+」 to add matrix

Bottom right 「Info」 to show information

## Scan Device

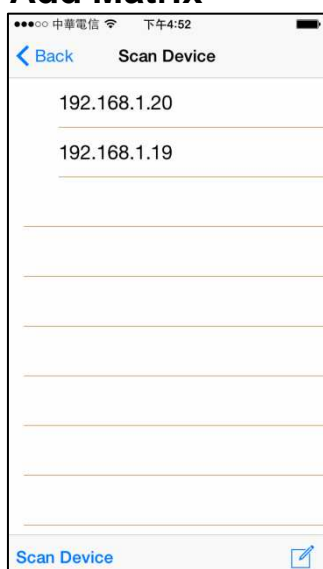


Touch 「+」 button at main screen to enter 「Scan Device」 page

Touch bottom left 「Scan Device」 to start scan

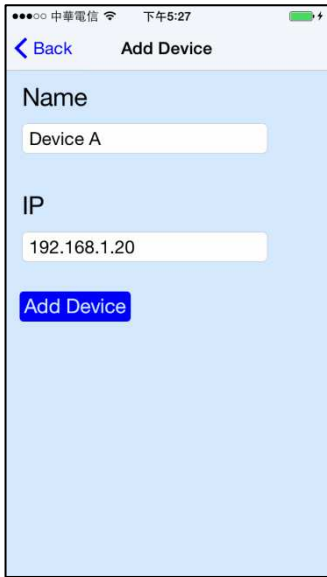
Touch bottom right pen icon to input the IP address manually

## Add Matrix

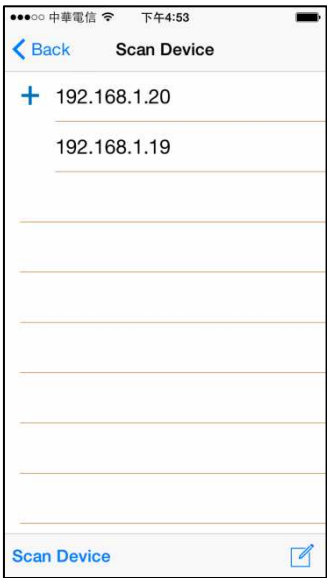


After scanning it will show all matrixes in the list

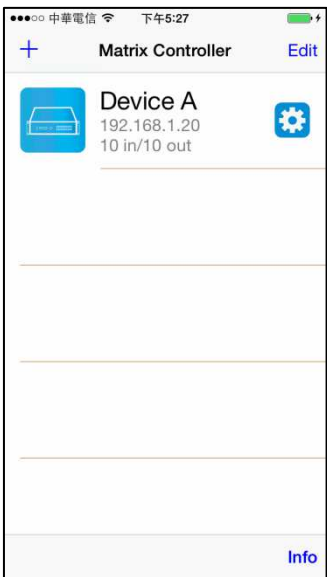
Touch the IP in list to enter 「Add Device」 page



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

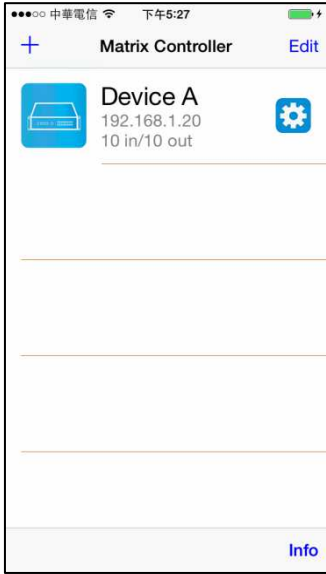


It will show 「 + 」 icon in front of the IP address when finished

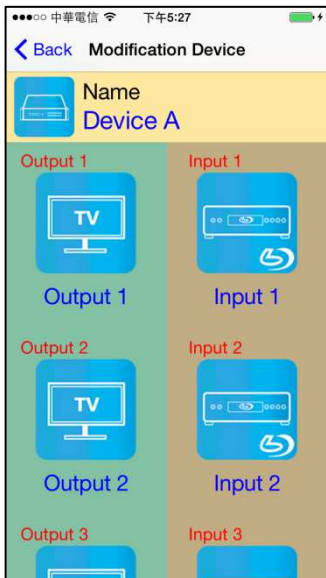


Return to main screen you will see the matrix which just add

# Modify Device

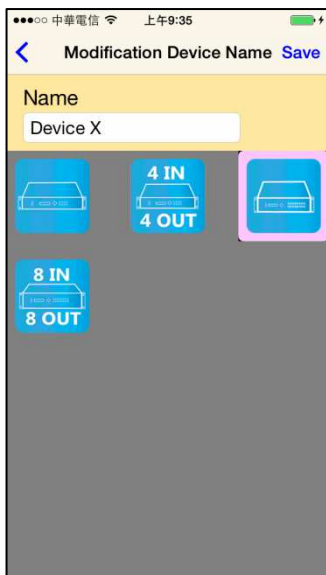


Touch the gear icon to enter Modification page

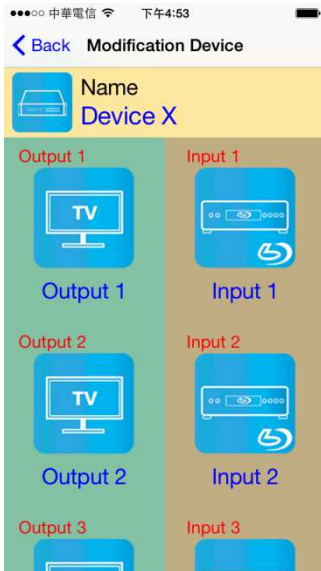


Yellow block shows matrix name and icon

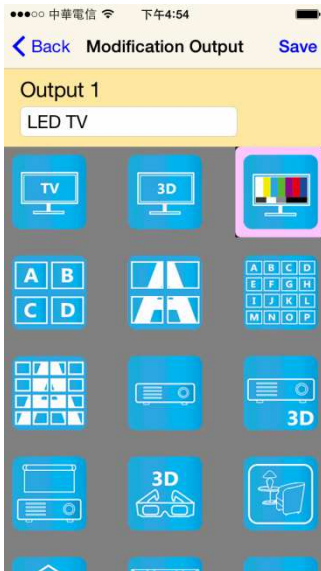
Green block shows name and icon of output devices  
Brown block shows name and icon of input devices



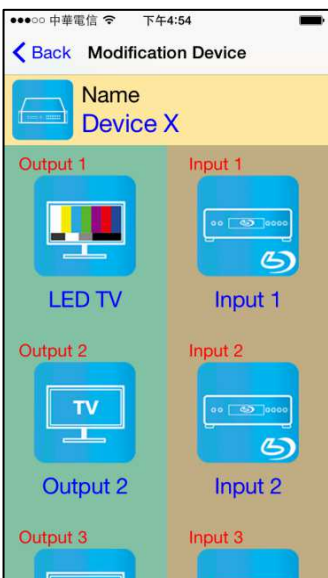
Touch yellow block to modify matrix name and icon  
Input the name and select the icon you prefer then touch 「 Save 」 to finish



Return to Modification page you will see the matrix have been changed



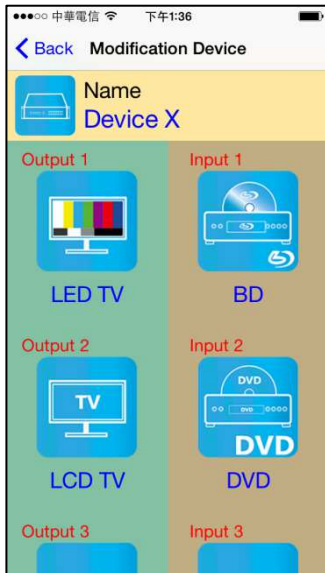
Touch green block to modify output name and icon  
Input the name and select the icon you prefer then touch 「 Save 」 to finish



Return to Modification page you will see the output have been changed

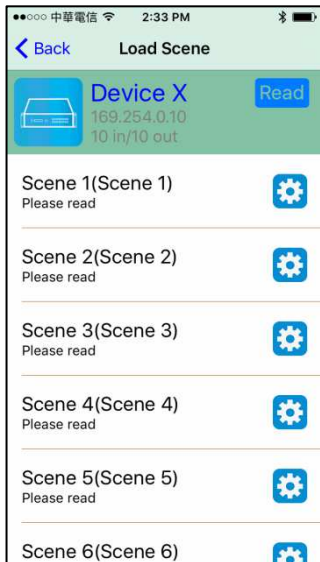


Touch brown block to modify input name and icon  
Input the name and select the icon you prefer then touch 「 Save 」 to finish



Return to Modification page you will see the input have been changed

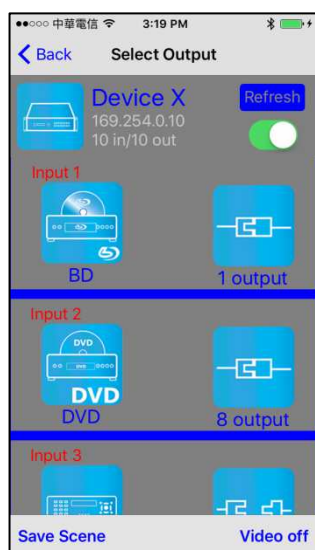
## Channel Switching mode (load scene, input selection, output selection)



Click device name in list to enter load scene page



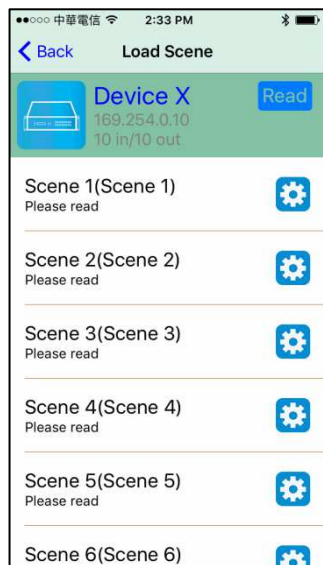
Slide right from load scene page to enter input selection mode (as before)



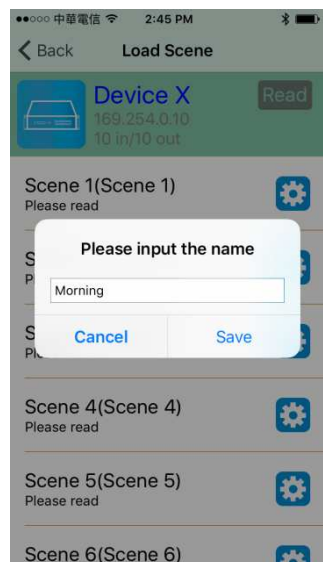
Slide left from load scene page to enter output selection mode (support multiple selection)



## Load scene Modify scene name



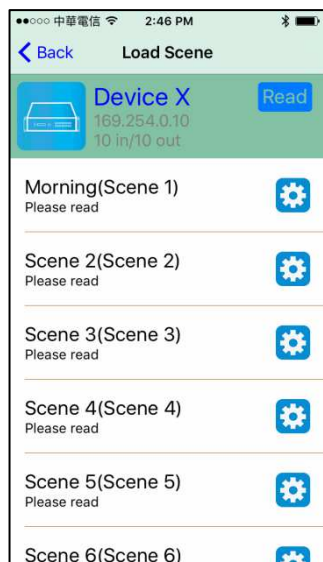
Touch the gear icon to enter modify scene name



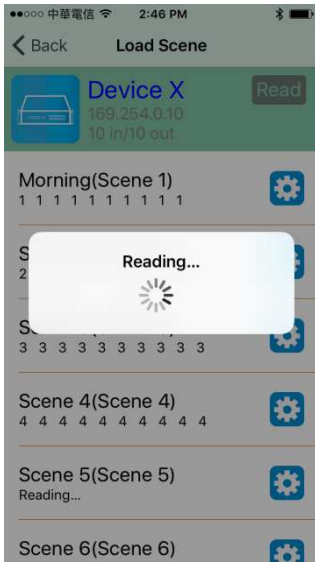
After modification touch 「 Save 」 to save scene name  
It will return to Load Scene page automatically.

**Notice : Name should be unique, not allow duplicate or empty**

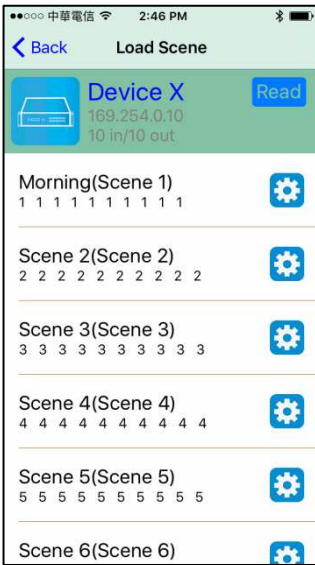
## Read scene status



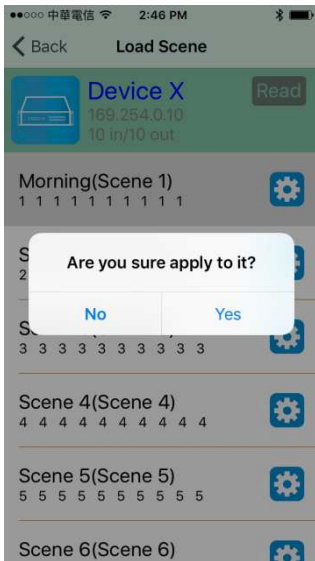
Touch top right 「 Read 」 to renew the scene status



It will show pop-up message 「Reading...」  
After reading it will refresh scene status



Touch the column name to show pop-up dialog



Touch 「Yes」 to apply scene

## Input Selection Mode



Top right 「 Refresh 」 to renew the status of matrix

Below 「 Refresh 」 button to power on/off the matrix

The block under device are Output 1~ Output 10

(4 by 4 matrix only shows Output 1~Output 4)

Left side shows output device name

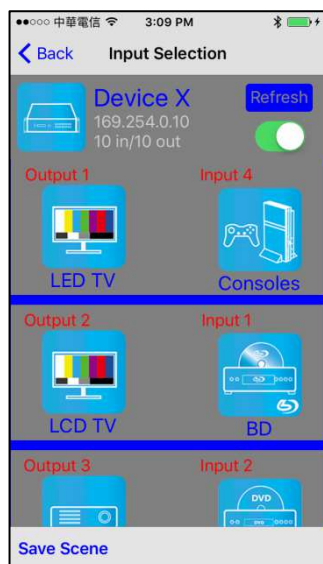
Right side shows current input device name

Bottom left 「 Save Scene 」 to save the scenes



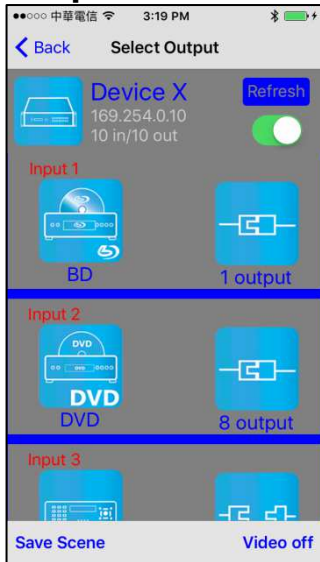
Touch output block to enter Channel Selection page

Touch input device to switch or ON/OFF icon to power on/off



It will return to Input Selection page after switching and you will see the input have been changed

## Output Selection Mode



Top right 「Refresh」 to renew the status of matrix  
Below 「Refresh」 button to power on/off the matrix

The blocks under device are Input 1~ Input 10  
(4 by 4 matrix only shows Input 1~Input 4)  
Left side shows input device name  
Right side shows current output numbers of devices

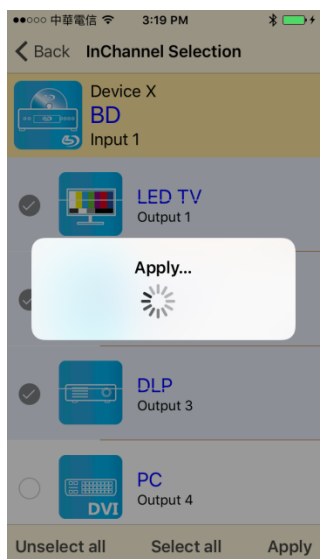
Bottom left 「Save Scene」 to save the scenes  
Bottom right 「Video off」 to turn off video output



Touch input block or 「Video off」 to enter Output Selection page

It will show connected output of current input

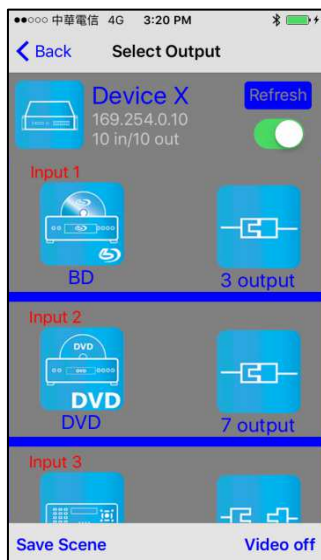
Bottom left 「Unselect all」 to clear all output box  
Bottom center 「Select all」 to check all output box  
Bottom right 「Apply」 to apply output setting



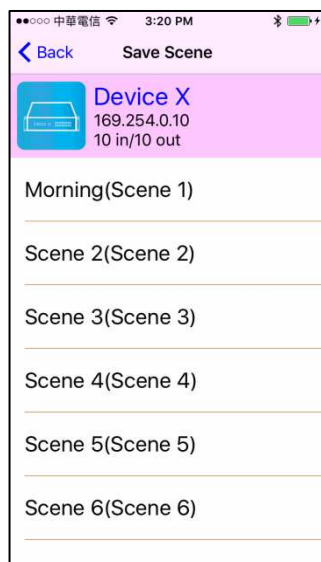
After touch 「Apply」 it will show pop-up message 「Apply...」

It will return to Input Selection page after switching and you will see the numbers of output have been changed

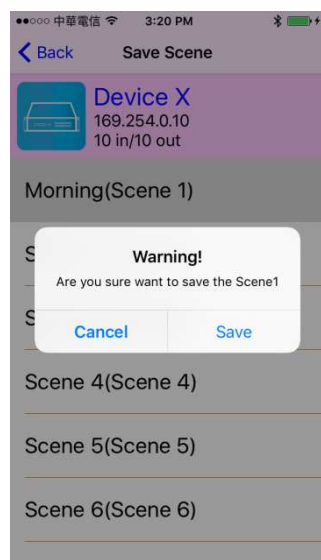
## Save Scene



In Input or Output Selection page touch bottom left 「Save Scene」 to enter Save Scene page

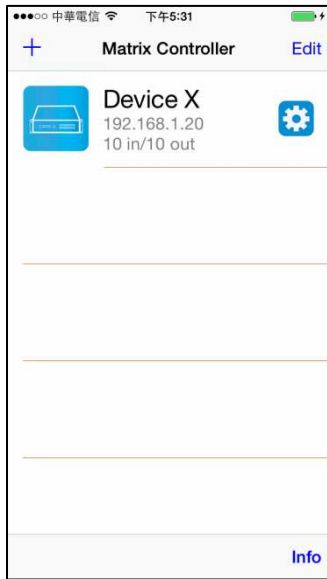


Touch the Scene column to show pop-up dialog

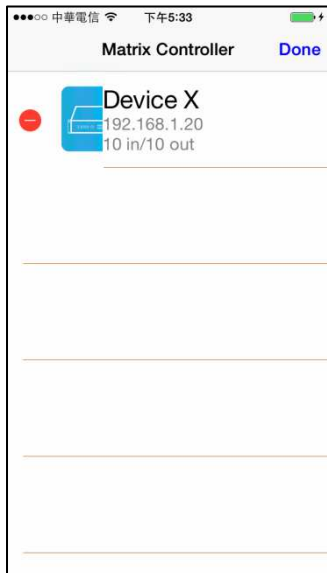


Touch 「Save」 to save current channels setting for all output  
It will return to Save Scene page automatically.

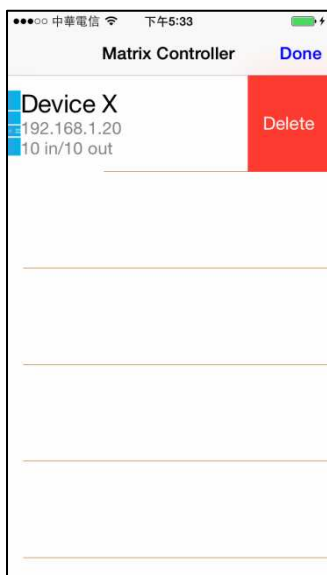
## Delete Matrix



Touch top right 「Edit」 button to enter delete mode



Touch 「-」 button in the left of matrix



Touch 「Delete」 to delete the matrix

Touch top right 「Done」 to exit

## Specification:

ITEM NO	EL-MX-H010
HDMI Resolution	4096x2160p 24/25/30Hz 8bit RGB444, 1080p 60Hz 12bit, 3D
Video Input Interface	HDMI Type A x 10
Video Output Interface	HDMI Type A x 10
RS-232 Input/Output Interface	DB9 x 1(CONSOLE)
IR Receive Angle	± 45 degree
IR Receive Distance	5M
Power Adapter	DC 12V 6.7A
Power Consumption	5A
Temperature	Operation: 0 to 55°C, Storage: -20 to 85°C, Humidity: up to 95%
Dimension mm	483 x 197 x 88
Weight g	3900



Rev.A V1.25



Elpro Video Labs srl Str. della Pronda 45B 10142 Torino - Italy Tel. +39 011 770 1583  
[www.elprovideolabs.com](http://www.elprovideolabs.com) [info@elprovideolabs.com](mailto:info@elprovideolabs.com)