

User Manual

FIX1818E

4K30 HDMI1.4, 18x18 fixed HDMI Matrix Switcher



Version:V20.001

Safety Reminder

To protect the device and operating personnel from electrostatic discharge, you need to check and ensure that the device is grounding well before the device is powered on. Please observe the following when you install, use, maintain this equipment.



Make sure the device ground connection.

Disposal Instruction (US)

For better protection of our earth, please don't throw this electronic device into municipal trash bin when discarding.

To minimize pollution and ensure utmost protection of the global environment, please recycle the product. For more information about the collection and recycling of Waste Electrical and Electronic Equipment (WEEE), please contact your local dealers.

Safety Instructions

1. Please read these safety instructions carefully.
2. Please keep this User Manual for later reference.
3. Please disconnect this equipment from connector before cleaning. Don't use liquid or sprayed detergent for cleaning. Use moisture sheet or cloth for cleaning.
4. Make sure the equipment is connected to the power source with the correct voltage, frequency, and ampere.
5. All cautions and warnings on the equipment should be noted.
6. Never pour any liquid into opening, this could cause fire or electrical shock.
7. Never open the equipment. For safety reason, the equipment should only be opened by qualified service personnel.
8. If one of the following situations arises, get the equipment checked by a service personnel :
 - a. Liquid has penetrated into the equipment.
 - b. The equipment has been exposed to moisture.
 - c. The equipment has not work well or you can not get it work according to user's manual.
 - d. The equipment has dropped and damaged.
 - e. If the equipment has obvious sign of breakage.
9. Ambient operation temperature: 0 ~ 45 degrees.
10. Risk of overheating! Don't put operating/installing equipment inside too closed space, be sure the installation space at least 1 to 2 inches or 2 to 5 cm of space for ventilation. To ensure that other objects do not cover the equipment.

Notice: Peripheral devices

Only peripherals (input/output devices, terminals, player, etc.) certified to comply with Class B limits may be attached to this equipment. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this equipment.

Contents

1. Product Introduction	4
2. Product Features	4
3. Technical Datasheet	5
4. Panel diagram	5
5. Packing Datials	5
6. Product Operation and Instruction	7
<i>6.1 Front Panel Switching Operation</i>	<i>7</i>
6.1.1 Switch	7
6.1.2 Scene	7
6.1.3 Set Up	8
6.1.4 View	8
<i>6.2 WEB Control</i>	<i>8</i>
6.2.1 Login	8
6.2.2 Switch	8
6.2.3 Scene	9
6.2.4 Caption	7
6.2.5 Manager Control	10
6.2.6 Set Up	8
6.2.7 Upgrade	9
<i>6.3 APP Control</i>	<i>8</i>
<i>6.4 COM Control Commands</i>	<i>11</i>
7. Trouble Shooting and Attention	12
8. After Sales	12
<i>8.1 Warranty</i>	<i>12</i>
<i>8.2 limitation and Exception</i>	<i>12</i>

1. Introduction

This is a 4K2K30 18x18 HDMI Matrix Switch supports both HDMI 1.4 & HDCP 1.4 compliant. It can support up to 18 HDMI inputs with the EDID key and 18 HDMI outputs, it's a perfect matrix switcher to use with the 4x4 splicing video wall (this matrix switch couldn't support the Video Wall), it can control via mobile phone, iPad and WEB bi-directional control. The 9x9 HDMI Matrix Switch supports advanced digital audio formats such as Dolby True HD and DTS-HD Master Audio. Each source is accessible at all times from any display by using the included iPad App, the RS-232 port or using the front-panel push buttons. The matrix does not have IR nor a remote control but can be controlled with its iOS and Android App. It also has optional Control4 & Elan Drivers.

2. Features

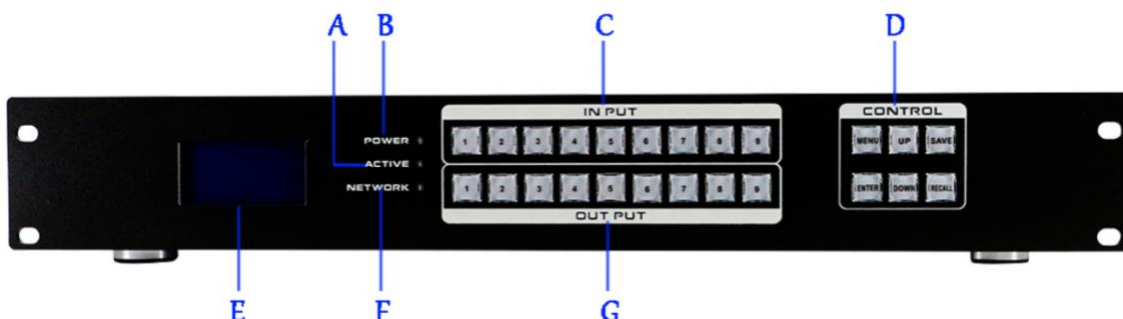
- Resolution up to 4K2K30Hz 3D@60Hz
- Supports 18 HDMI inputs with EDID key buttons, and 18 HDMI outputs
- Support IOS/Android APP, RS232 and WEB GUI control and management
- Two-key control method enabling easier and more effective controlling
- All front buttons with background light, easier for switching status recognition
- Opening Web control codes enabling secondary development
- Spiral power connectors guaranteed stable power supplying

3. Specifications

Model	FIX1818E
Description	18x18 HDMI matrix switcher
Input	18xHDMI, 1xRS232, 1xRJ45, 1xAC
Output	18xHDMI
Resolution	480i, 576i, 480p, 576p, 720p, 1080i, 1080p@24/30/50/60Hz, 1080P3D@60Hz, 4K@30Hz
Protocol Standard	HDMI1.4, HDCP, EDID learning key
Control	Dual RS232(In/ out), LAN(WEB GUI), front buttons, APP
Dimension	482x279x89(mm) / 18.97*10.98*3.50(inch)
Weight	4.9kg/10.80lbs
Power	AC:110V-240V 50/60Hz DC:12V5A
Consumption	≤ 55W
Work	0°C ~50°C
Storage	-20°C ~55°C

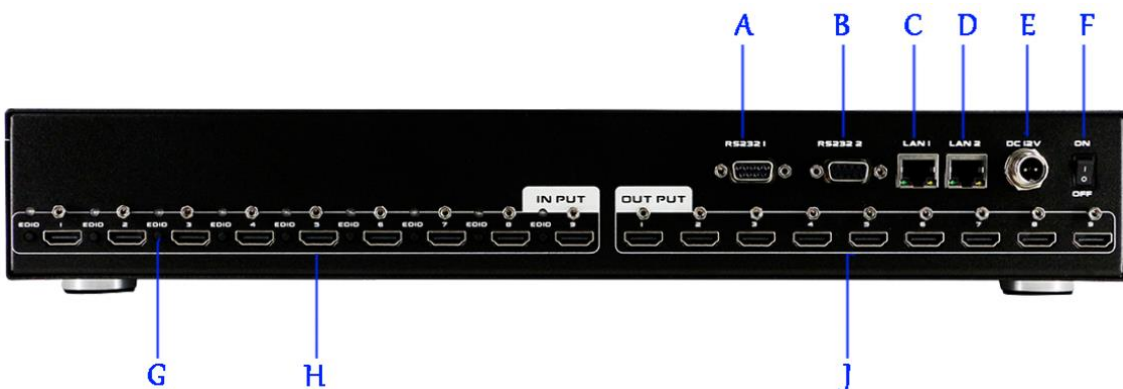
4. Panels

Front panel



NO.	Name	Function	
A	ACTIVE	Flashing while using the buttons/ WEB switching successfully	
B	POWER	light up after power on, it will light off after power off	
C	INPUT	Input buttons with background light, from 1~9 output buttons	
D	CONTROL	MENU	Select between View, Switch, Scene Save/ Recall and Setup
		UP	Upward and short cut button for switching to ALL outputs
		SAVE	For saving the scene or setup
		ENTER	Enter button
		DOWN	Downward and short cut button for canceling to ALL outputs
		RECALL	For recalling the saved scene
E	LCD SCREEN	Operation information real-time Display	
F	NETWORK	Flashing while using the WEB control operation	
G	OUTPUT	Output buttons with background light, from 1~9 input buttons	

Back panel



NO.	Name	Function
A	RS232-1	RS232 male control port for the 3 rd party control or sending RS232 commands
B	RS232-2	RS232 female control port for the 3 rd party control
C	LAN 1	IP control, default IP address is 192.168.0.80
D	LAN 2	IP control, default IP address is 192.168.1.80
E	DC 12V	With screw power supply port
F	ON/OFF	Power OFF/on switch
G	EDID	EDID Key for the EDID handshaking

H	INPUT	9 female HDMI input ports
J	OUTPUT	9 female HDMI output ports

5. Packing

FIX1818E	1	Unit
Power adapter	1	Pcs

6. Control

6.1 Font buttons switching operation

6.1.1 Switching operation

Switching with industry 2-key fast switching, first press the input button and then select/press output button. Details are as follow:

- There are 1~9 nine input buttons, 1~9 nine output buttons. First press MENU to show SWITCH interface, then can continue the next switching step
- Press input number at the INPUT area, the input button will light up with blue light
- Then press output number at the OUTPUT area, and the output button will light up. Users also can press the UP button to realize 1 to ALL switching.
- If need to cancel switching, can press the button again to cancel. Users also can press the DOWN button to cancel all outputs

6.1.2 Scene Operation

- The system can save 40 scenes, after switching successfully in the SWITCH interface, press MENU button and switch to SCENE interface.
- Enter the wanted scene save number (1~9), then press SAVE. If want to reload the saved scene, press the scene number and press RECALL button

6.1.3 Setup Operation

- First press MENU switch to SETUP interface, then continue next operation
- Via SETUP, it can realize IP address changing, in SETUP interface can use UP/ DOWN button to position, enter the needed IP address from the left button side, then press SAVE button to save

6.1.4 View Operation

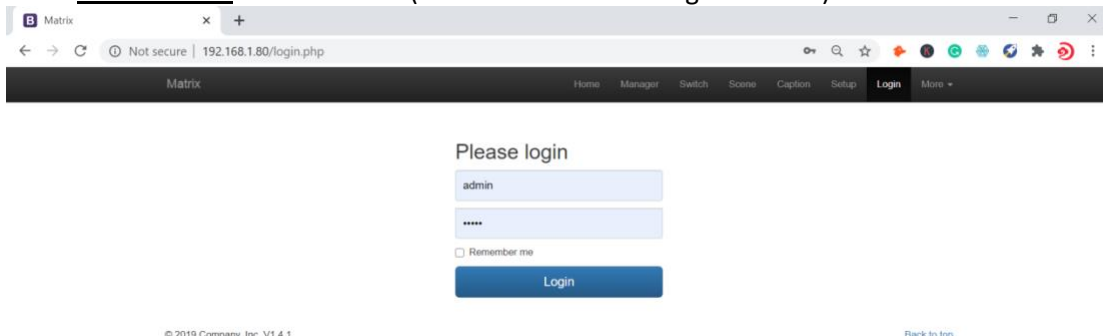
- Via MENU button switch to VIEW interface, will display the current switching status

6.2 WEB GUI Control

The default IP address are 192.168.0.80(LAN1) and 192.168.1.80(LAN2).

6.2.1 Login Operation

Accordingly, to connected LAN port, enter the corresponding IP address, if using the LAN2, then enter 192.168.1.80 in the browse (Recommend with Google Chrome) as below:

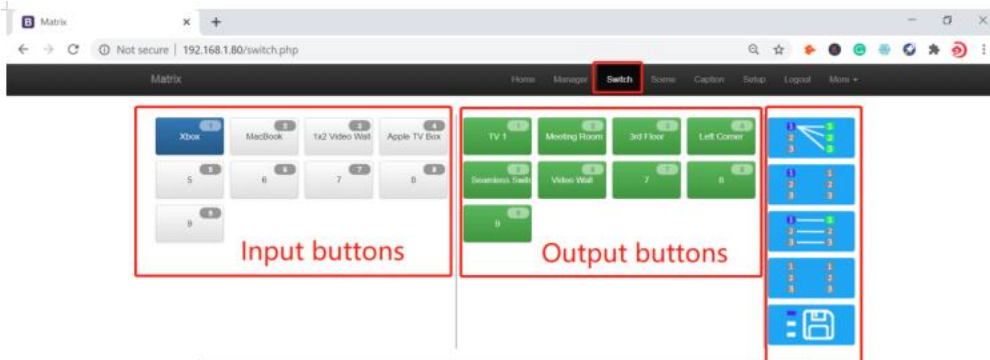


Note: The default username and password is the same: admin, click login after entering. Please make sure the control PC is at the same IP segment.



6.2.2 Switch

Switch interface:



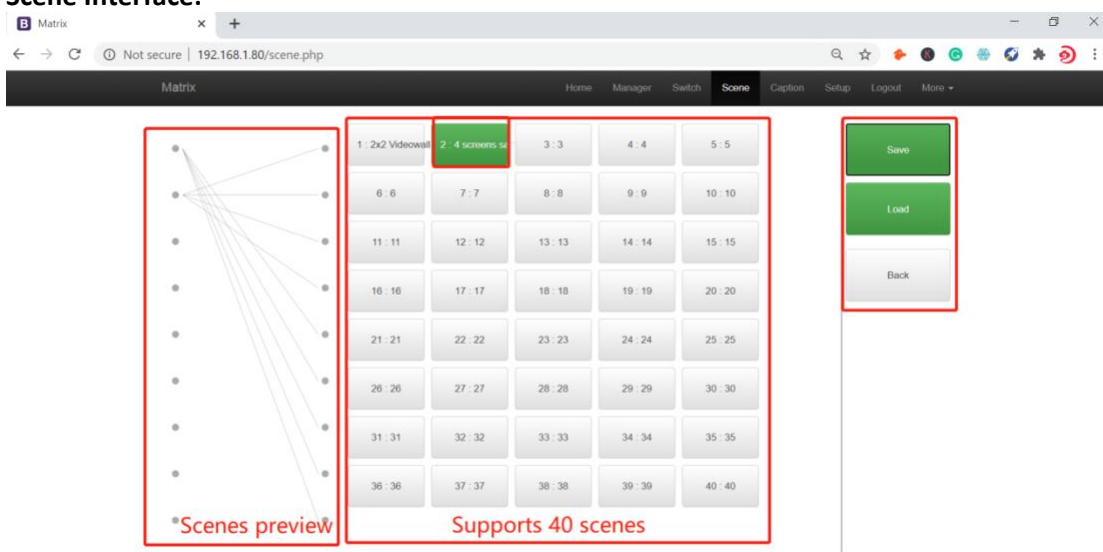
Users can do the input sources switching by clicking the Input buttons first, then pressing the Output buttons.

Or users can use the shortcut buttons on the right for the fast switching:

	Switch one input to all the outputs
	Close one input to all the outputs
	Switch all inputs on all outputs
	Close all inputs to all outputs
	Switch to the scenes Save and Recall interface

6.2.3 Scene

Scene Interface:



© 2019 Company, Inc. V14.1

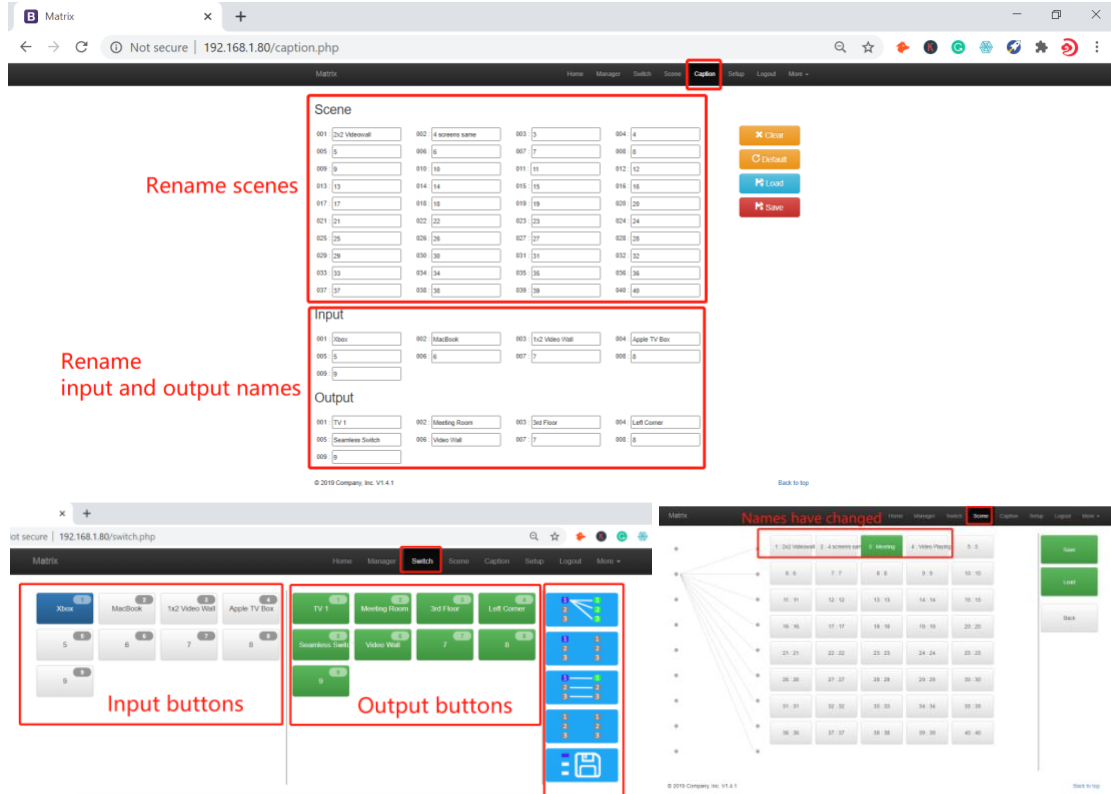
Back to top

It can support 40 scenes in total, users can preview each scene switching status by clicking on any of the scene number. Click "Save" to save the switching status, and "Load" to recall the scenes. "Back" to return back to the switch interface.

6.2.4 Caption:

For changing the input, output and scenes' name

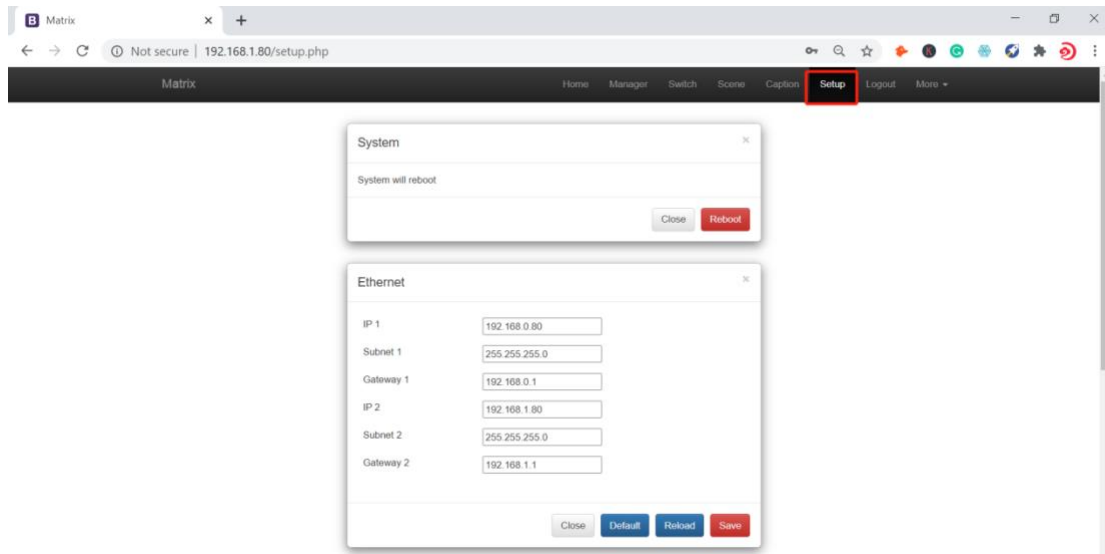
Users can rename the scenes, input and output names here, users can change all the names and then need to click the "Save" button on the right. After renamed the names, users will see the input, output and the scenes names have changed once click to the "Switch" and "Scenes" interface. With this renaming function, it can be easier for the users to know the sources and ends.

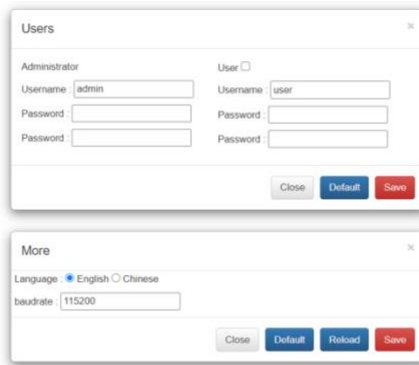


6.2.5 Setup

Setup interface:

Users can reboot, change the IP address, set up the login user names, language and the RS232 baud rate settings here. After changed the IP address, will need to reboot the matrix switcher, then the new IP address will take effect.





© 2019 Company, Inc. V1.4.1

[Back to top](#)

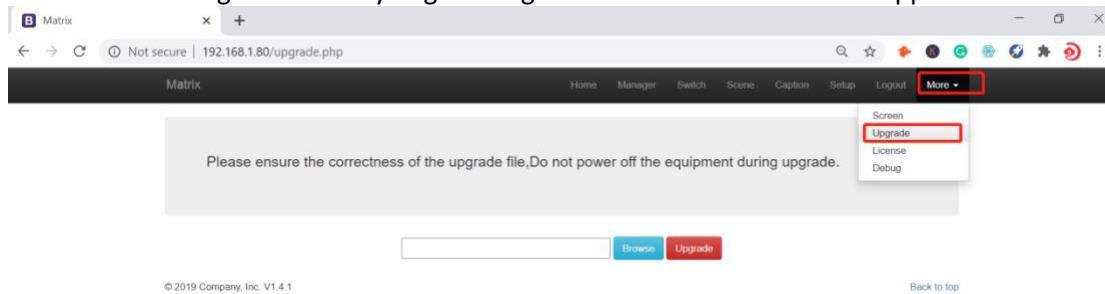
6.2.6 More:

For the more interface, users mainly can do the firmware upgrade here.

Screen is for the other matrix models which with the touch screen, so users can monitor the touch screen switching status.

For the upgrade, users need to check with the factory to get the firmware, the firmware is “.zip” format.

License and Debug is for factory engineering team to have the technical support.



© 2019 Company, Inc. V1.4.1

[Back to top](#)

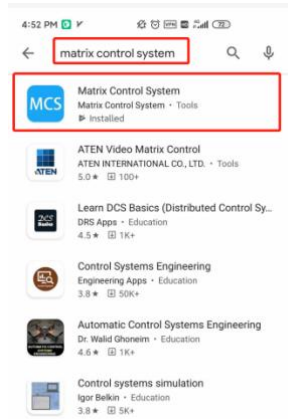
6.2.7 Manager

This Manager interface, it allows the users to manage at most 254 units of the matrices which are installed at the same area network and at the same gateway but different IP addresses. As below are showing 3 matrices, users can rename each matrix and click button to do the switching or open in a new manage window.

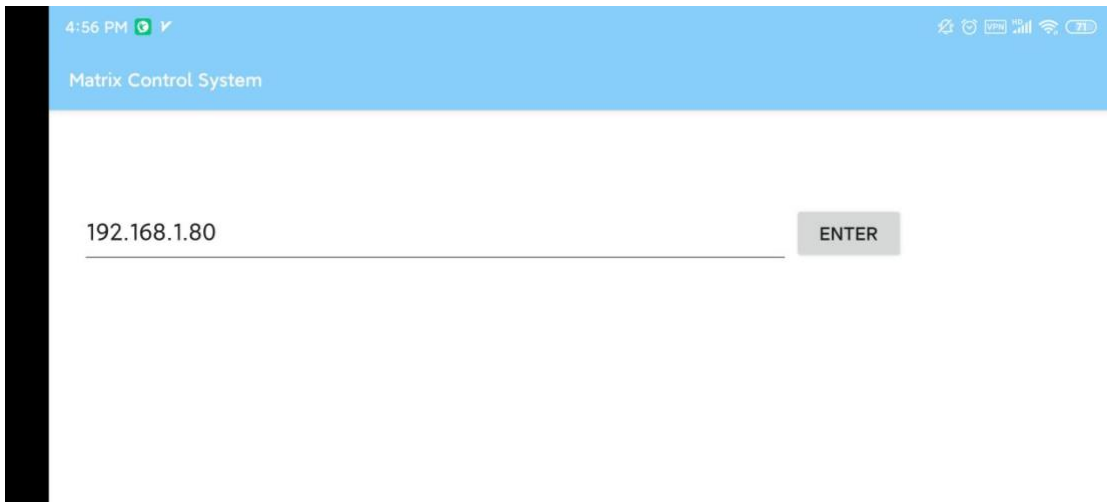


6.3 APP Control

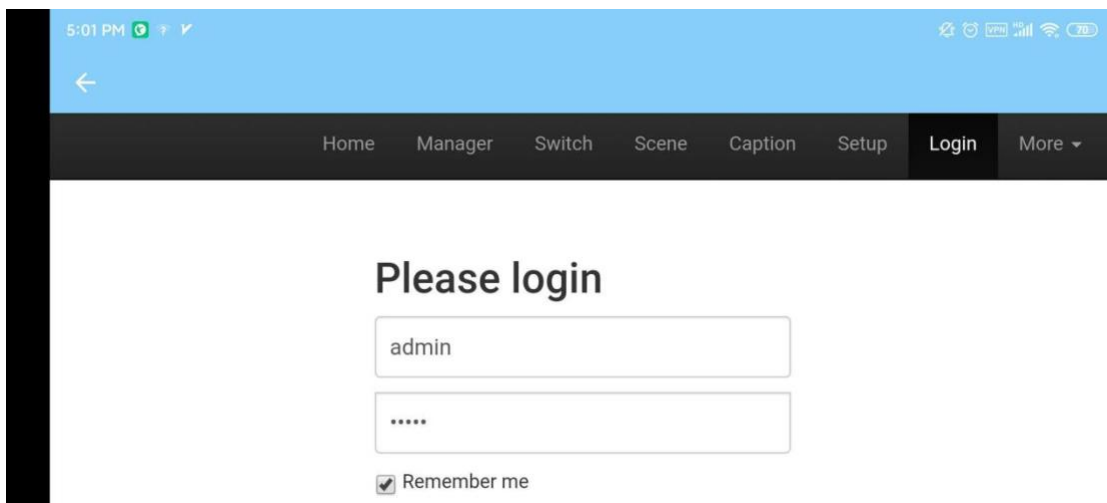
The matrix switchers also can support the iOS and Android APP control, users can search the keyword “Matrix Control System” in Apple store or the Google Play Store.



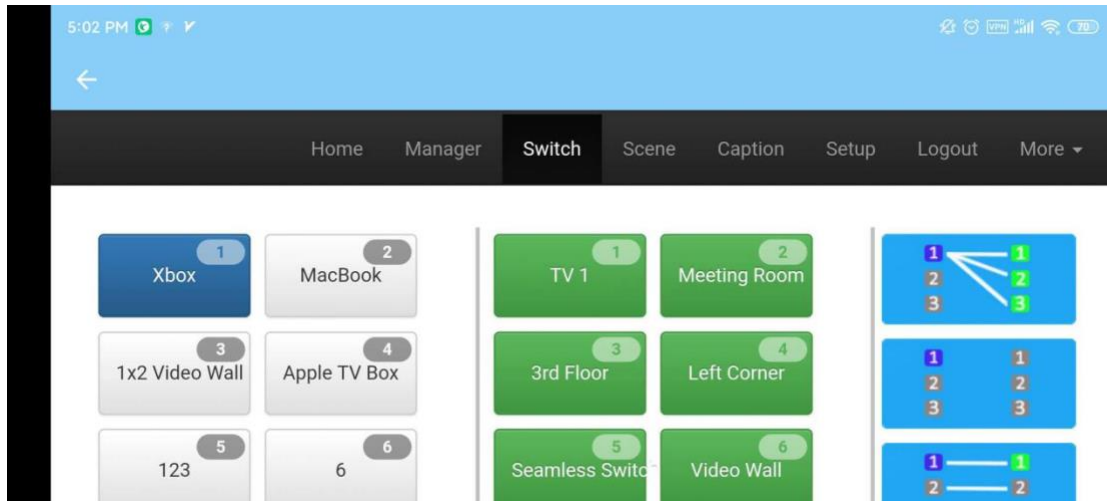
Step 1: Make sure the matrix well connected with the WIFI router, and the iPad/Android devices are connected to this same WIFI. Then open on the MCS (matrix control system) APP and Enter the IP address of the matrix switcher(the default IP addresses are: 192.168.0.80 or 192.168.1.80):



Step 2: After Enter the IP address, it will need to login, the default username and password both are the admin:



Step 3: After log in successfully, users can do the same functions as the WEB GUI operation:



6.4 RS232 control command

RS232 cable with straight-through connection (USB-RS232 can be used directly to control)

Communication protocol:

Baud rate: 115200

Data bit: 8

Stop bit: 1

Check bit: None

Commands	Explanation	Function description
YAll.	Y=1,2,3,4.....	Switch Input Y to all the outputs Eg. "1ALL." means switch input 1 to all outputs
All1.	One to one	Switch all the channels to be one to one. Eg. 1->1, 2->2, 3->3.....
YXZ.	Y=1,2,3,4..... Z=1,2,3,4.....	Switch Input Y to Output Z Eg. "1X2." means switch Input 1 to output 2
YXZ&Q&W.	Y=1,2,3,4..... Z=1,2,3,4..... Q=1,2,3,4..... W=1,2,3,4.....	Switch Input Y to Output Z, Q, W Eg. "1X2&3&4." means switch Input 1 to Output 2, 3, 4
SaveY.	Y=1,2,3,4.....	Save current status to scene Y Eg. "Save2." means saving current status to Scene 2
RecallY.	Y=1,2,3,4.....	Recall the saved scene Y Eg. "Recall2." means recall the saved Scene 2
BeepON.	Beep sound	Buzzer on
BeepOFF.		Buzzer off
Y?.	Y=1,2,3,4.....	Check the Input Y to outputs switching status Eg. "1?." means to check Input 1 switching status

Note:

- Every command ends with a period "." and it can't be missing.
- The letter can be capital or small letter.
- Switch success will return as "OK" and failed will return as "ERR".

7.Trouble Shooting and Attention

No signal on the display?

- Make sure all the power code well connected

- Check the display switcher and make sure it's in good condition
- Make sure the the DVI cable between the device and display are short than 7 meters
- Reconnect the DVI cable and restart the system
- Make sure the signal sources are on
- Check the cables between the devices and displays are connected correctly.
- Dial the switcher 7 to 1, then dial the switcher1,2 and choose the corresponding inputs.
- Make sure the resolution less than WUXGA (1920*1200)/ 60HZ
- Make sure the display can support the output resolution.

8. After Sales

1.1 Warranty Information

The Company warrants that the process and materials of the product are not defective under normal use and service for 2 (2) year following the date of purchase from the Company or its authorized distributors.

If the product does not work within the guaranteed warranty period, the company will choose and pay for the repair of the defective product or component, the delivery of the equivalent product or component to the user for replacement of the defective item, or refund the payment which users have made.

The replaced product will become the property of the Company.

The replacement product could be new or repaired.

Whichever is longer, any replacement or repaired of the product or component is for a period of ninety (90) days or the remaining period of the initial warranty. The Company shall not be responsible for any software, firmware, information, or memory data contained in, stored in, or integrated with the product repaired by the customer's return, whether or not during the warranty period.

2.2 Warranty limitations and exceptions

Except above limited warranty, if the product is damaged by over usage, incorrectly use, ignore, accident, unusual physical pressure or voltage, unauthorized modification, alteration or services rendered by someone other than the Company or its authorized agent, the company will not have to bear additional obligations. Except using the product properly in the proper application or normal usage