



# 8x8 HDMI 4K60Hz Matrix Switcher

## User Manual





# Safety and Notice

The device has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the device should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit.
- Always unplug the power to the device before cleaning.



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## Features

- HDMI resolution up to 4K@60Hz YUV4:4:4
- HDMI Bandwidth 18 Gbps and support 3D, HLG, HDR 10
- HDCP 1.4/2.2 compliant
- Supports EDID management
- Supports Dolby Atmos & Dolby Vision via copy EDID
- Supports HDMI ARC on Coaxial only
- Supports 4K@60Hz resolution auto downscale to 1080p@60Hz
- Supports 3.5mm (PCM 2ch) & Coaxial (PCM 2ch & Digital 5.1ch) audio extraction
- Supports 3.5mm audio embedded (ENC)
- Supports HDMI CEC turn On TV ( not support turn off)
- Controllable via front-panel buttons, IR remote, RS232, Web GUI

## Supported Resolution

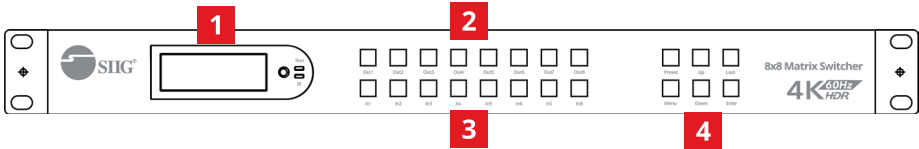
- 480p@60Hz
- 576P@50Hz
- 720P@60Hz
- 1080P@24Hz
- 1080P@50Hz
- 1080P@60Hz
- 4K@24Hz
- 4K@30Hz
- 4K@60Hz YUV4:2:0
- 4K@60Hz YUV4:4:4

## Package contents

- 8x8 HDMI 4K60Hz Matrix Switcher
- Power adapter DC 12V/3A
- IR Ext RX Cable
- Remote control
- Mounting kit
- CD for User Manual & Control Software

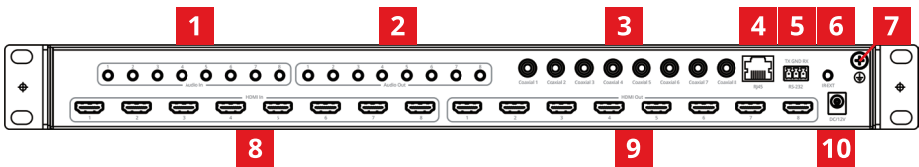
# Layout

## Front panel



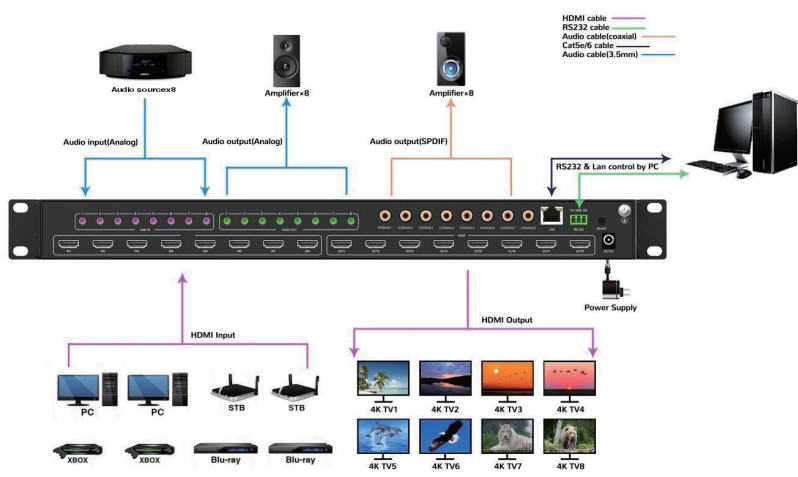
1. **LCD:** Showing matrix information
2. **Output button:** 1~8
3. **Input button:** 1~8
4. **Function button:** Preset; Menu; Up; Down; Lock; Enter

## Rear panel



1. **3.5mm Audio In:** for audio embedded
2. **3.5mm Audio Out:** for audio extract
3. **Coaxial Audio Out:** for audio extract
4. **RJ-45:** for network control
5. **RS-232:** for RS-232 control
6. **IR-EXT:** connect to IR Ext RX Cable for IR remote control
7. **Grounding:** connected to ground
8. **HDMI In:** connect to HDMI source
9. **HDMI Out:** connect to HDMI display
10. **DC jack:** connect to power adapter DC 12V/3A

# Application



# LCD screen introduction

## • Key operation

Channel	Button method
Any Key	The first operation of the button can wake Up the screen and complete the key function while the blue button light will light Up.
Input 1-8	Directly press the number key, such as input channel 1, and select "1" to press (only when the output port is selected, the input channel number will be valid)
Output 1-8	Directly press the number key, such as the output channel 5, select the key "5" and press it again to cancel the selection. Long press output any channel number to select all channels, and long press again to cancel. After press the button, no next operation is performed within 10 seconds, and the operation state ends.
Menu	Function Button; Enter the function option or back to previous option. Long press back to function option, the next step is not performed for 30 seconds, screen back to select channel interface.
Enter	Confirm Button: Enter function selection mode
Up	Button for Up option
Down	Button for NEXT option
Preset	Quick selection scene button
Lock	Long press lock (button built-in blue light on), Long press again to cancel lock (button built-in blue light off)



## • Video switching operation

The signal switch includes 8 free switching channels, which can be configured as input/output according to the requirements, forming a matrix of 1 x 8 ~ 8 x 1, which can switch any input. Signal to a channel output or all channel output.

### Switch the input to the output

Operation format: "output channel" + "input channel"

For Example: Output port 1, 2, 4 switch to input 3

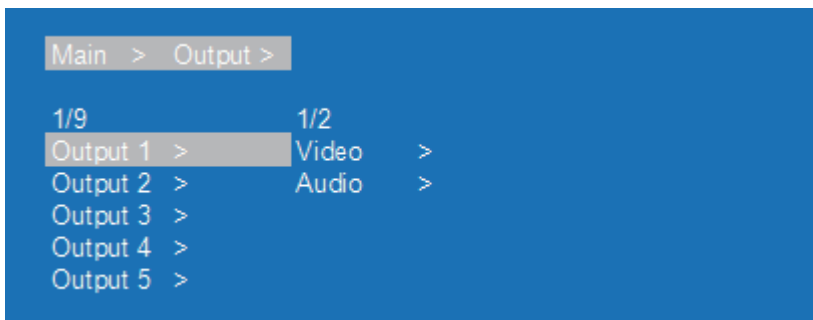
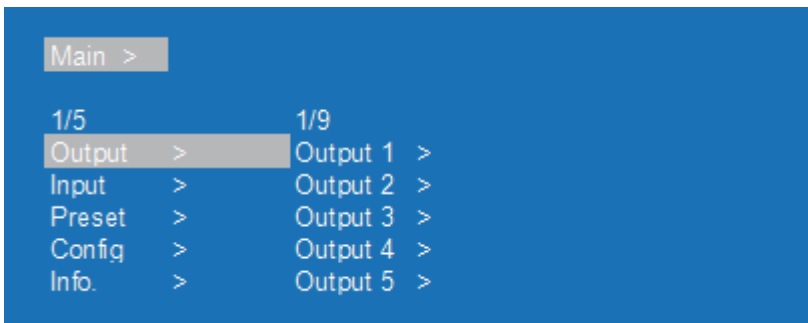
Operation: Press Out number "1" "2" "4" + In number "3" to complete the switch

For Example: Switch all outputs to input 4

Operation: Long press input number "4" to complete the switch

## • Output signal Control

Output interface has nine sub-menus: Output 1~Output 8 and All, switch the video source of the output port and turn on/off the output audio video signal.

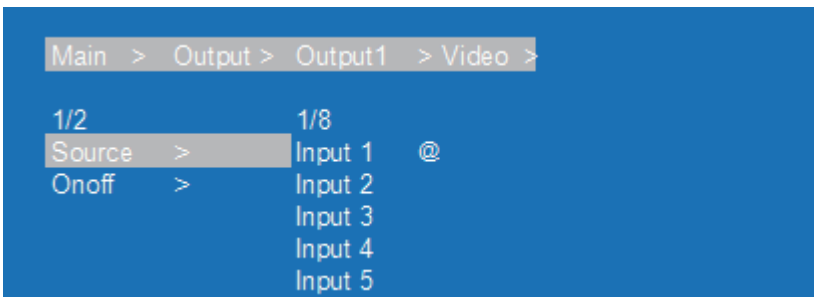
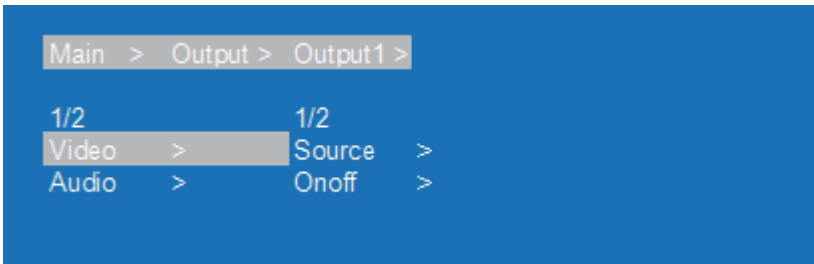


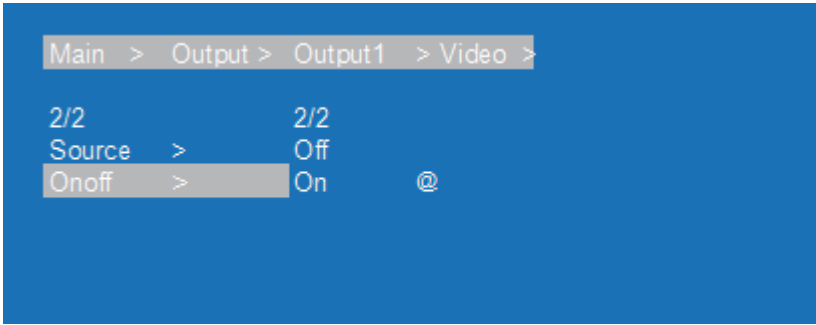
## • Output video switch and on/off

Switch any output to one input, or switch all outputs to one input;  
Default 8×8 matrix, 8 inputs and 8 outputs, one to one output

Operation instructions:

1. Select "Output" in the menu and press "Enter"
2. Then use "Up" "Down" button to select "Output 1~8 or All",  
The bottom color of the selected output port becomes white.
3. Press "Enter" enter next page.
4. Press "Up" "Down" button to select "Video", press "Enter"
5. Press "Up" "Down" button to select "Source", press "Enter"
6. Press "Up" "Down" button to select "Source", press "Enter"
7. Press "Up" "Down" button to select "Input 1~8", press "Enter",  
switch done
8. Press "MENU" button back to previous option, Press "Up" "Down"  
button to select "Onoff"
9. Press "Enter"
10. Press "Up" "Down" button to select "Onoff", output video on/off  
done. (This function is on by default)



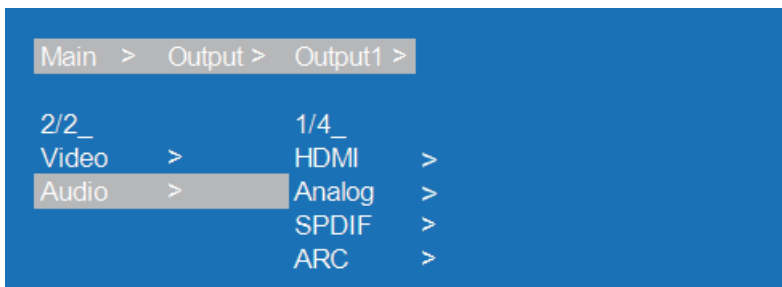


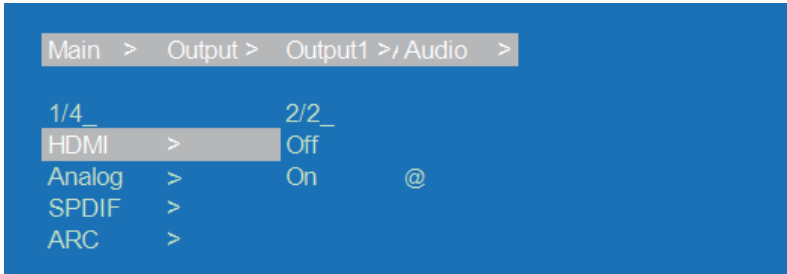
## • Output Audio on/off control

On/off output audio, include HDMI, Analog, SPDIF, ARC; ARC function is off by default.

Operation instructions: (turn off other audio is same)

1. Select "Output" and press "Enter"
2. Press "Up" "Down" button to select "Output1~8 or All(meas all outputs)". The bottom color of the selected output port becomes white.
3. Press "Enter"
4. Press "Up" "Down" button to select "Audio", Press "Enter"
5. Press "Up" "Down" button to select the mode: HDMI; Analog; SPDIF; ARC, press "ENTER"
6. Press "Up" "Down" button to select "On/Off", output audio on/off done

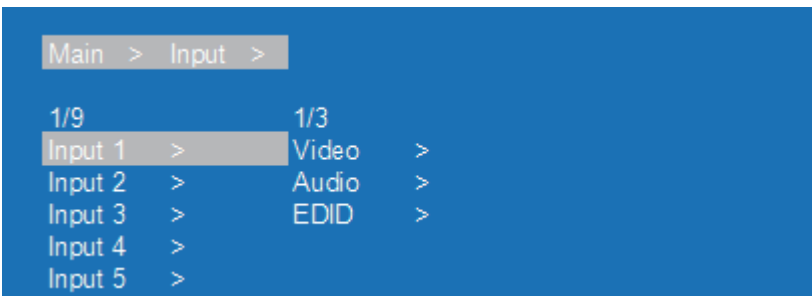
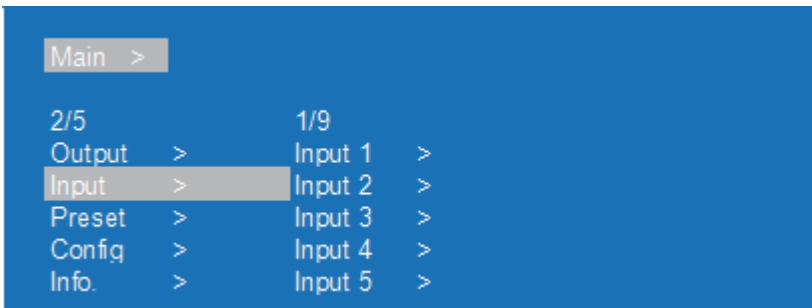




## • Input signal Control

Input signal control interface has nine sub-menus: Input 1~8 and All(means all inputs),

The third level sub-menu includes Video, Audio, and EDID settings.

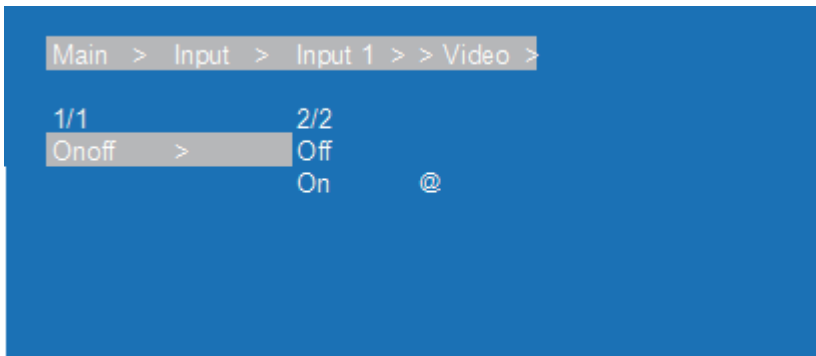
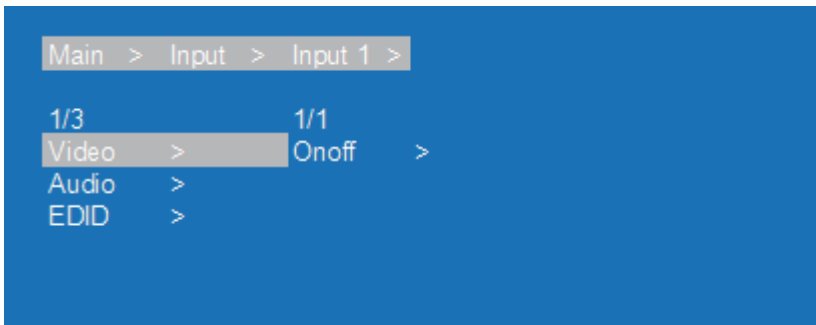


## • On/off input video

Turn on/off input video settings

Operation instructions:

1. Select "Input", Press "Enter"
2. Press "Up" "Down" button to select "Input 1~8 or All", Press "Enter"
3. Press "Up" "Down" button to select "Video", Press "Enter"
4. Select "Onoff", Press "Enter"
5. Press "Up" "Down" button to select "On/Off", On/off input video done

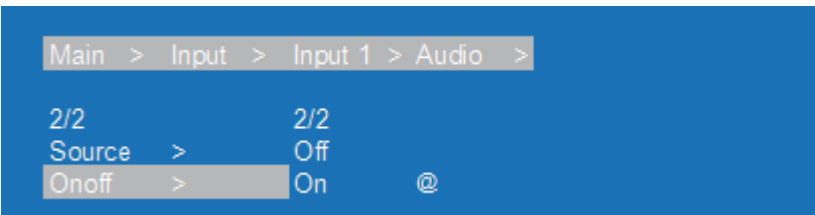
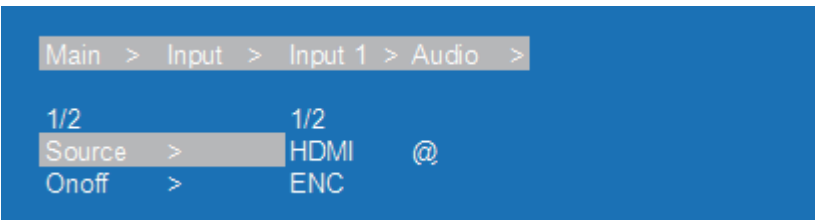
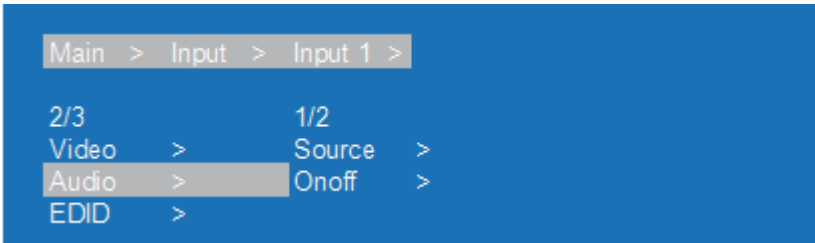


## • On/off input audio and choose audio source

Choose HDMI input audio or Analog audio embedded and On/off input audio

Operation instructions:

1. Select "Input", Press "Enter"
2. Press "Up" "Down" button to select "Input 1~8 or All", Press "Enter"
3. Press "Up" "Down" button to select "Audio", Press "Enter"
4. Press "Up" "Down" button to select "Source", Press "Enter"
5. Press "Up" "Down" button to select "HDMI/ENC", Press "Enter",  
The selected off/on show @
6. Press "Menu", then press "Up" "Down" button to select "Onoff", Press "Enter"
7. Press "Up" "Down" button to select "On/Off", input audio on/off done.



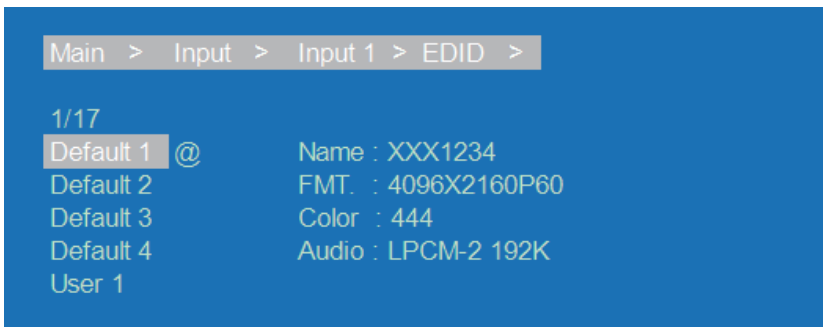
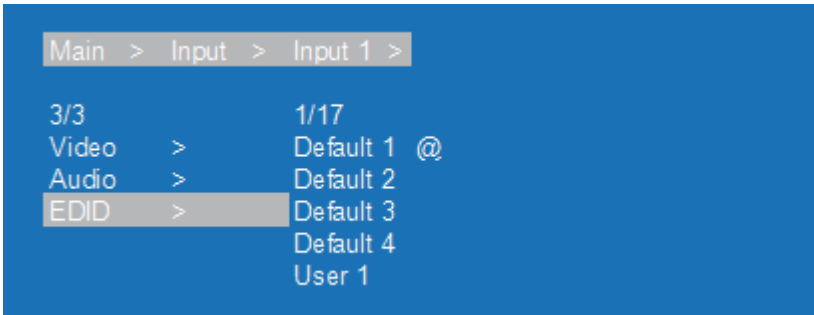
## • EDID Settings

EDID Mode can set each input's EDID, Include: Default EDID; User EDID; Copy EDID;

1-4 are Default EDID, 5-8 are User EDID, 9-16 are Copy output 1-8 EDID, 17 is temporary EDID.

Operation instructions:

1. Select "Input", Press "Enter"
2. Press "Up" "Down" button to select "Input 1~8 or All", Press "Enter"
3. Press "Up" "Down" button to select "EDID", Press "Enter"
4. Press "Up" "Down" button to select EDID "Default 1", Press "Enter", setup complete
5. The selected EDID will show EDID details (name, Max resolution, audio format, sound track)

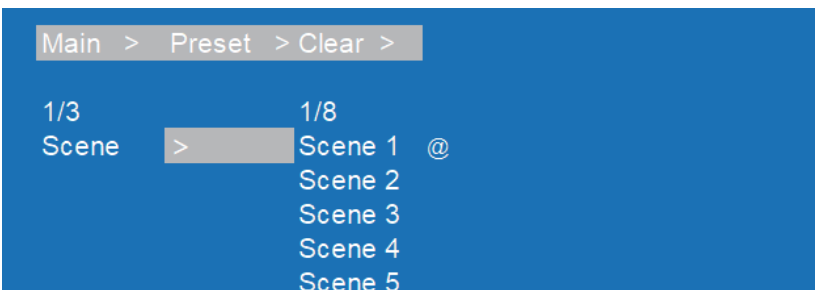
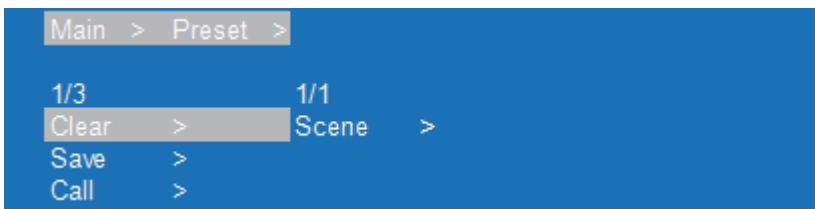
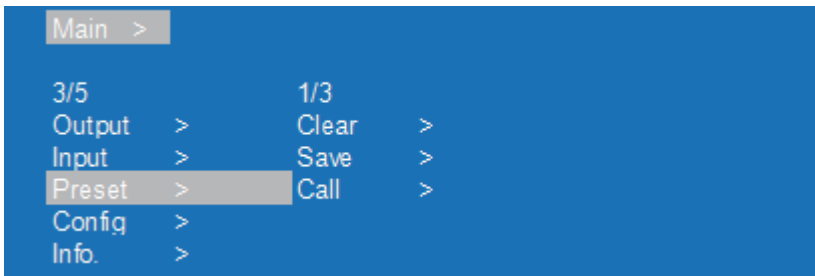


## • Preset scene settings

Preset can save video, audio, EDID, system settings, support 8 differences presets, It can be changed and called by web page, command and panel buttons. The default preset is same as the factory setting PTP.

Operation instructions:

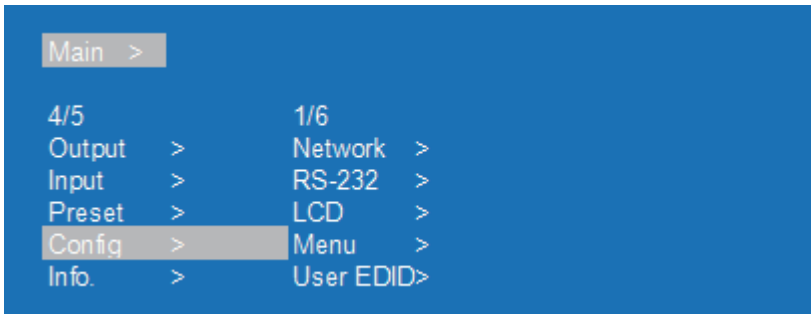
1. Select "Preset", Press "Enter", then Enter preset scene interface;
2. Save preset: Select "Save" on preset interface, then select one of "Preset 1~8"; Press "Enter", save current scene.
3. Call preset: Select "Call" on preset interface, Select one of the saved preset 1-8 presets; Press "Enter", Call the preset scene saved previously.
4. Clear preset: Select "Clear" on preset interface, Select one of the saved preset 1-8 presets; Press "Enter", this preset will return default.





## • System configuration

System configuration can set the device's network parameter, RS-232 baud rate, LCD screen, Menu, User EDID , system parameter.



## • Network parameter settings

1. Set DHCP/IP/MASK/GW/Port/DNS/MAC
2. DHCP: Default Off(Static), After turn on(Dynamic), IP/MASK/GW are unable to set.
3. IP address: Default 192.168.1.168
4. MASK address: Default 255.255.255.0
5. GW: Default 192.168.1.1
6. PORT: TCP & UDP port, Default TCP 5000, UDP 5001.
7. DNS: Default 144.144.144.144 (unalterable)

Operation instructions:

1. Select"Config", Press"Enter"
2. Press "Up" "Down" button to select"Network", Press"Enter"
3. Press "Up" "Down" button to select"DHCP", Press"Enter", you can select"Yes/On"to turn on/off DHCP
4. Press "MENU", Select"IP/MASK/GW/Port/DNS/MAC", Press"Enter"
5. Such as change IP address: After select IP, Enter and select Part 1~4, then Set IP address parameters for each part; Press "Enter" again, LCD will show the current network parameters.  
(Do the same for other parameters)

Main > Config >

1/6		1/7	
Network >		DHCP >	
RS-232 >		IP >	
LCD >		MASK >	
Menu >		GW >	
User EDIC >		Port >	

Main > Config > Network >

1/7		1/2	
DHCP >		No @	
IP >		Yes	
MASK >			
GW >			
Port >			

Main > Config > Network >

2/7		1/4	
DHCP >		Part1 >	
IP >		Part2 >	
MASK >		Part3 >	
GW >		Part4 >	
Port >			

Main > Config > Network > IP >

1/4		193/256	
Part1 >		188	
Part2 >		189	
Part3 >		190	
Part4 >		191	
		192 @	

Main > Config > Network > IP > Part1 >

193/256			
192 @		DHCP :	Off
193		IP :	192.168.1.200
194		MASK :	255.255.255.0
195		GW :	192.168.1.1
196		MAC :	4658-4E93-5E83

## • RS-232 parameter settings

It can change device's baud rate, but Data/Stop/Parity are used for checking and cannot be set

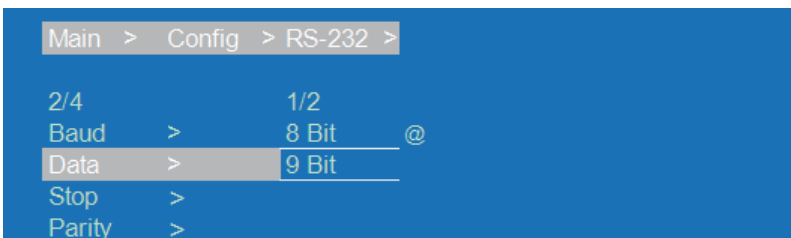
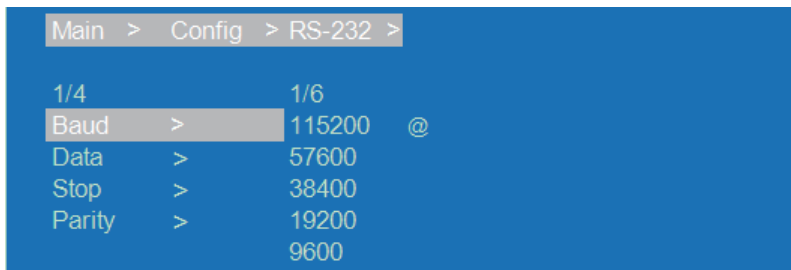
Baud: device's baud rate provide 6 choices, 115200, 57600, 38400, 19200, 9600, 4800. The device is 115200 by default.

Data/Stop/Parity: is used only for view and cannot be changed, Unless use the highest account.

The underscore show that this parameter cannot be set.

Operation instructions:

1. Select "Config", Press "Enter"
2. Press "Up" "Down" button to select "RS-232", Press "Enter"
3. Press "Up" "Down" button to select "Baud", Press "Enter"
4. Press "Up" "Down" button to select Baud rate you need, Press "ENTER", Baud rate set done.



## • LCD screen settings

You can set LCD screen's bright and Screen rest time; Bright is 8 by default, Screen rest time is 30s by default.

Operation instructions:

1. Select "Config", Press "Enter"
2. Press "Up" "Down" button to select "LCD", Press "Enter"
3. Press "Up" "Down" button to select "Bright", Press "Enter"
4. Press "Up" "Down" button to select LCD brightness level, The higher the brightness level, the greater the brightness, otherwise the lower the brightness.
5. Press "Menu", then press "Up" "Down" button to select "Time", Press "Enter"
6. Press "Up" "Down" button to select screen rest time.

```

Main > Config >
3/6          1/2
Network >    Bright >
RS-232 >    Time >
LCD >
Menu >
User EDIC >
  
```

```

Main > Config > LCD >
1/2          9/9
Bright >     4
Time >       5
              6
              7
              8 @
  
```

```

Main > Config > LCD >
2/2          6/11
Bright >     3 S
Time >       5 S
              10 S
              20 S
              30 S @
  
```

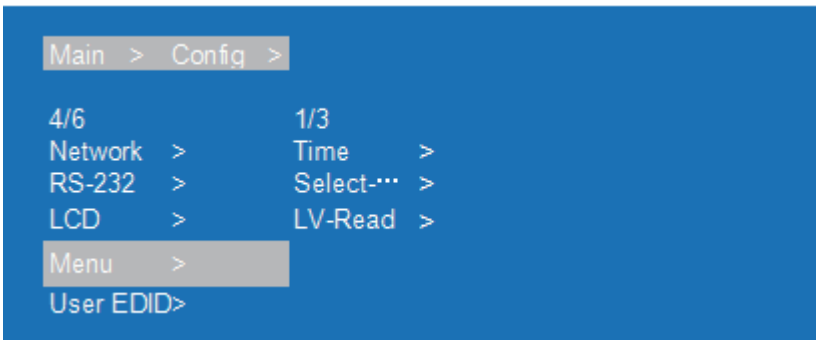
## • Menu settings

You can set menu time, Select-run, LV-Read.

1. Time: No next operation within 30s and return to the channel interface.
2. Select-run: The default is Disable, Press the button to switch parameters to complete the setting. No need press "Enter".
3. LV-Read: The default level is 1. It's not possible to switch level directly, Unless you get client access and then switch by command.  
(Note that a low level can't set a high level)

Operation instructions:

1. Select "Config", Press "Enter"
2. Press "Up" "Down" button to select "Menu", Press "Enter"
3. Press "Up" "Down" button to select "Time", Press "Enter"
4. Press "Up" "Down" button to select the time you need.
5. Press "MENU", Press "Up" "Down" button to select "Select-run", Press "Enter"
6. Press "Up" "Down" button to select "Disable/Enable", settings done



Main > Config > Menu >

1/3		5/10	
Time	>	3 S	
Select-...	>	5 S	
LV-Read	>	10 S	
		20 S	
		30 S	@

Main > Config > Menu >

2/3		1/2	
Time	>	Disable	@
Select-...	>	Enable	
LV-Read	>		

Main > Config > Menu >

3/3		2/4	
Time	>	0	
Select-...	>	1	@
LV-Read	>	2	
		3	

## • User EDID settings

You can save default EDID, output EDID and temporary EDID to the User EDID.

Operation instructions:

1. Select "Config", Press "Enter"
2. Press "Up" "Down" button to select "User EDID", Press "Enter"
3. Press "Up" "Down" button to select "User 1~4 or ALL", Press "Enter"
4. Press "Up" "Down" button to select default EDID, output EDID or temporary EDID to save User EDID, while you can check EDID information.

```

Main > Config >
5/6                               1/5
Network >                         User 1 >
RS-232 >                           User 2 >
LCD >                               User 3 >
Menu >                             User 4 >
User EDID>                         ALL >
  
```

```

Main > Config > User EDID >
1/5                               1/13
User 1 >                          Default 1 @
User 2 >                          Default 2
User 3 >                          Default 3
User 4 >                          Default 4
ALL >                              Output 1
  
```

```

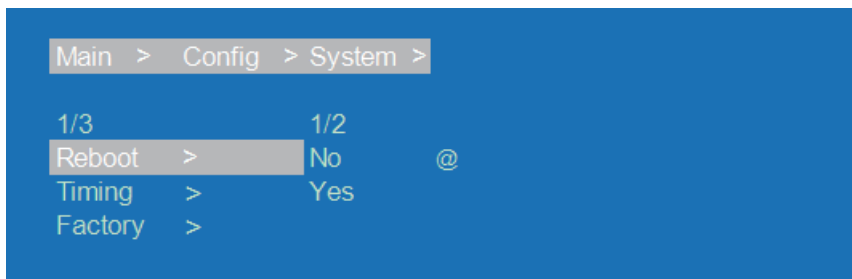
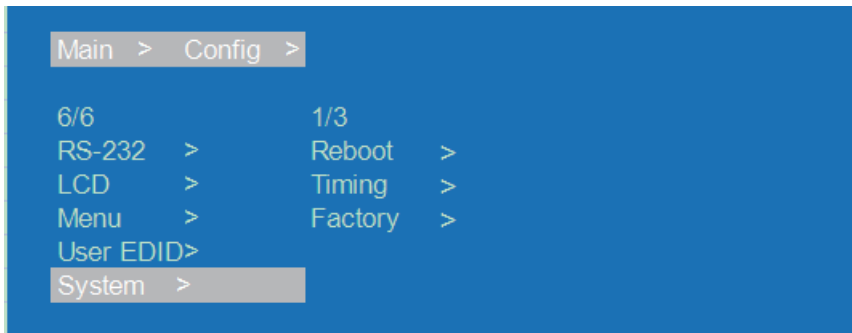
Main > Config > User EDID > User 1 >
1/13
Default 1 @                        Name : XXX1234
Default 2                          FMT. : 4096X2160P60
Default 3                          Color : 444
Default 4                          Audio : LPCM-2 192K
Output 1
  
```

## • System Reboot

Restart device

Operation instructions:

1. Select "Config", Press "Enter"
2. Press "Up" "Down" button to select "System", Press "Enter"
3. Press "Up" "Down" button to select "Reboot"+Press "Enter"
4. Press "Up" "Down" button to select "Yes"+ Press "Enter",  
Device Reboot done.



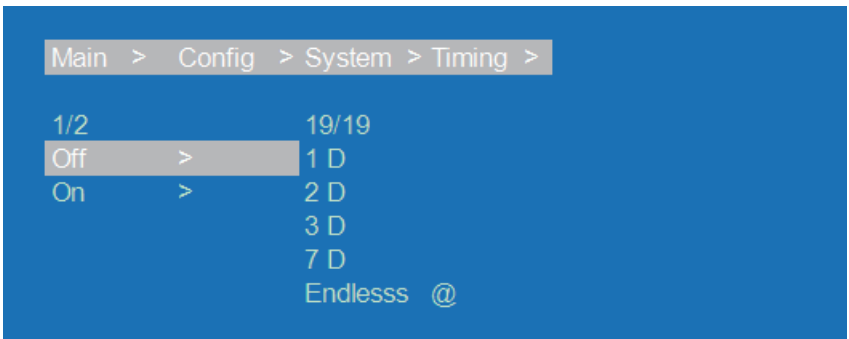
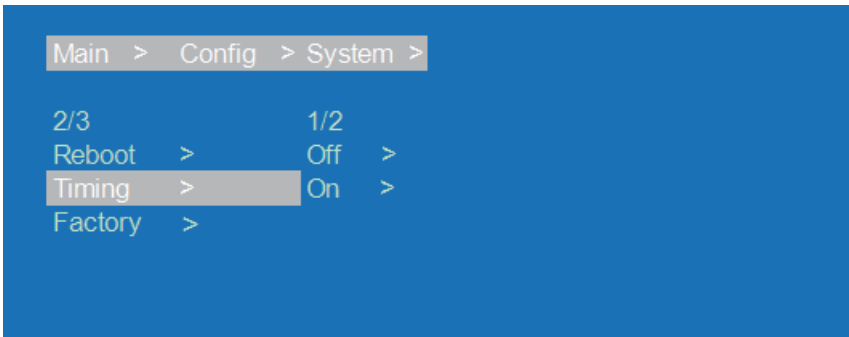


## • System timing switch settings

The default is Endless, no timing Settings; The timing units are S/M/H/D, Second/minute/hour/day

Operation instructions:

1. Select "Config", Press "Enter"
2. Press "Up" "Down" button to select "System", Press "ENTER"
3. Press "Up" "Down" button to select "Timing"+ Press "ENTER"
4. Press "Up" "Down" button to select "Off/On", Press "ENTER"
5. Press "Up" "Down" button to select time you need



## • System factory data reset

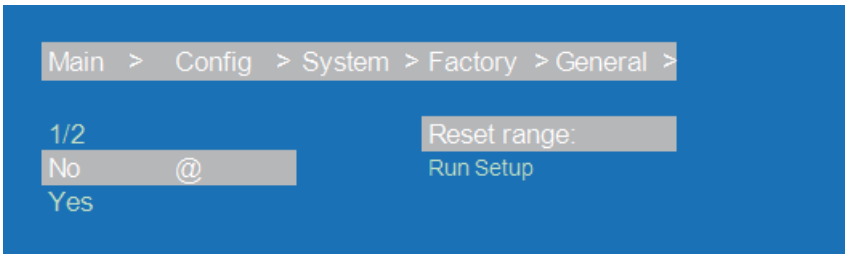
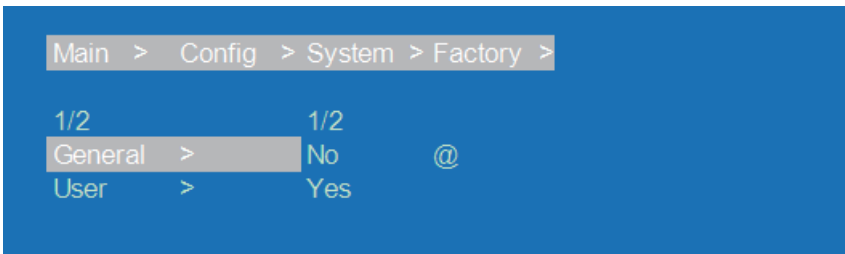
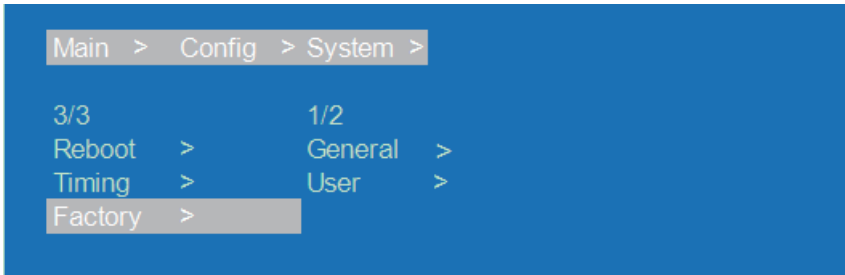
Device function initialization Settings,

General will restore video/audio/EDID/baud to default.

User will restore all settings to default except account.

Operation instructions:

1. Select "Config", Press "Enter"
2. Press "Up" "Down" button to select "System", Press "Enter"
3. Press "Up" "Down" button to select "General"+Press "Enter"
4. Press "Up" "Down" button to select "Yes", Device factory data reset done.



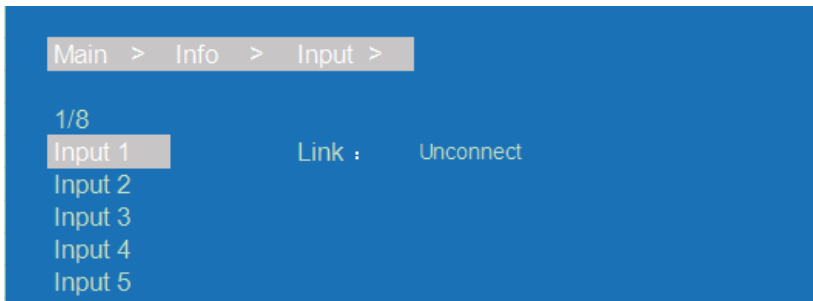
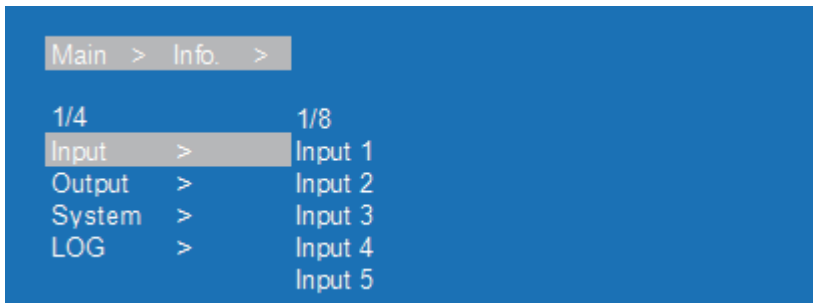
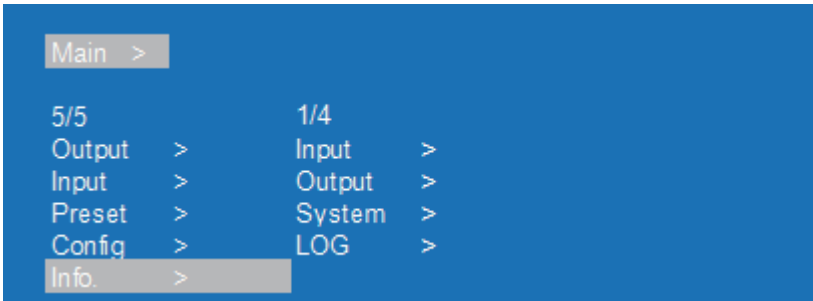
## • Input / Output information

Input information: Input connection status, Input resolution, Color gamut color depth, audio format and input HDCP version.

Output information: output connection status, output resolution, Color gamut color depth, audio format

Operation instructions:

1. Select "INFO", Press "Enter"
2. Press "Up" "Down" button to select "Input/Output", Press "Enter"
3. Press "Up" "Down" button to select Input/Output port, then see Input/Output information.

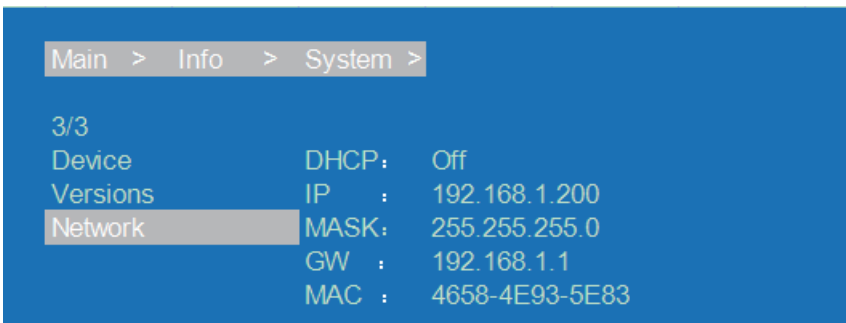
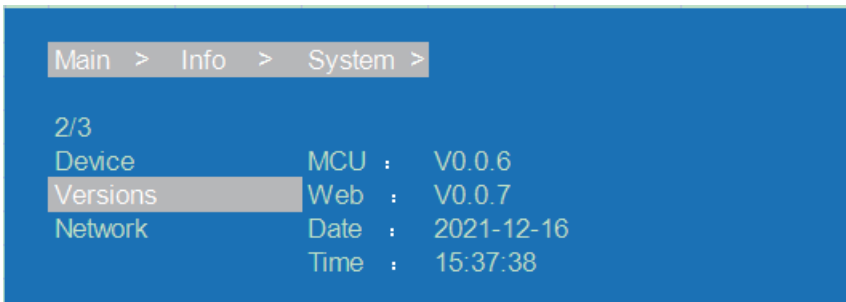


## • System information

It is used for checking device system information (Manufacturer/Device ID/device type), Version(MCU/web page) and Network parameter(IP/GW, Mask)

Operation instructions:

1. Select“INFO”, Press“Enter”
2. Press “Up” “Down” button to select“Device”, Press“Enter”
3. Press “Up” “Down” button to select“Device/Versions/Network”, then you can check information.



- **LOG:**

It used for checking device information: running time, startup times, operation times, runs errors times.

Operation instructions:

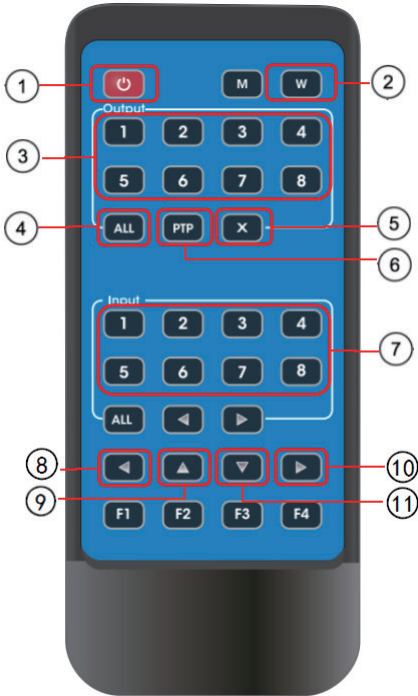
1. Select“LOG”, Press“Enter”

```
Main > Info. >
4/4          1/1
Input >      Common
Output >
System >
LOG >
```

```
Main > Info. > LOG >
1/1
Common Time : 2D 16:29:52
        Boot : 36
        EXE : 5934
        ERR : 0
```



# Remote Control Description



1. Standby mode
2. Lock or Unlock panel button
3. Choose output from 1~8
4. Choose all the outputs
5. X: Turn on/off output port which you select
6. PTP button: Mirror all inputs and outputs (Ex. Input 1 to output 1, input 2 to output 2, etc)
7. Choose Input from 1~8
8. Menu button (back to previous option)
9. UP button
10. Enter button
11. DOWN button

# Audio function introductions

## • HDMI audio

PCM support 2.0, 5.1, 7.1 channels

Digital support Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS Audio, DTS-HD maximum 7.1 channels

The supported audio format, channel, and sampling rate depend on the EDID

## • Audio extraction

3.5mm audio only support PCM 2.0 channels

Coaxial audio output support PCM 2.0, Dolby & DTS 2.0, 5.1 channels

## • 3.5mm audio extraction

1. When the 8×8 matrix is selected for one to one output, the 3.5mm audio output can only output the audio of the port
2. When the HDMI output port is muted, coaxial and 3.5mm audio output will not be affected
3. 3.5mm audio only support PCM2.0, otherwise Auto-Mute
4. 3.5mm audio left and right channels cannot be reversed output
5. 3.5mm audio will Auto-Mute when digital audio input

## • Coaxial audio extraction

1. When the 8×8 matrix is selected for one to one output, the coaxial audio output can only output the audio of the port
2. When the HDMI output port is muted, coaxial and 3.5mm audio output will not be affected

- **Audio embedded (ENC)**

8×3.5mm audio support embedded, 3.5mm line in 1~8 correspond HDMI IN 1~8, 3.5mm audio only support PCM 2.0 format audio. After the audio embedding function is turned on, embedded audio will be output through HDMI/3.5mm/Coaxial ports.

- **HDMI ARC on Coaxial audio**

Supports output 1~8 HDMI audio transmission back to Coaxial 1~8, support PCM 2.0, Dolby & DTS 2.0, 5.1 channels.

Operation instruction:

1. HDMI source and TV both need to support CEC, TV also need to support ARC. You need to turn on the TV and HDMI source CEC and ARC functions.
2. HDMI source connect to TV
3. TV's HDMI ARC port connect to output 1~8
4. Use a Coaxial cable to connect the power amplifier to Coaxial port (correspond HDMI ARC output)
5. Turn on matrix's ARC function by panel button/command/WEB, done





# EDID management

The matrix included 4 EDID modes:

Default EDID, User EDID, Output EDID, Temp1,  
control EDID by WEB and RS-232.

Factory Default: Default1 4K60 444 HLG 2CH

The instructions of RS-232 are follow:

Send instruction: #edid\_d in%8,d source=%d switch EDID, "in%8,d"  
parameter need to input 255 or 0~7 (255 means all input),  
source=%d=0~24(Correspond the table below)

EDID MODE	EDID Index	EDID
Default EDID	0	4096x2160@60-444 HLG 2CH(default)
	1	4096x2160@60-420 HLG 2CH
	2	4096x2160@30-444 HLG 2CH
	3	1920x1080P@120-444 HLG 2CH
User EDID	4-7	User EDID is set by user, with power-off memory function, new EDID will auto-cover old EDID.
Output EDID	8-15	Copy output 1-8 ports' EDID with storage function. without power-off memory
Temp1	24	Temporary EDID

# RS-232 control

Control software operation:

The serial control software is illustrated with SXCOSM as an example.

Double-click the software in the CD

In the parameter configuration area, select the serial port number that the serial line connects to the PC

Basic Settings:

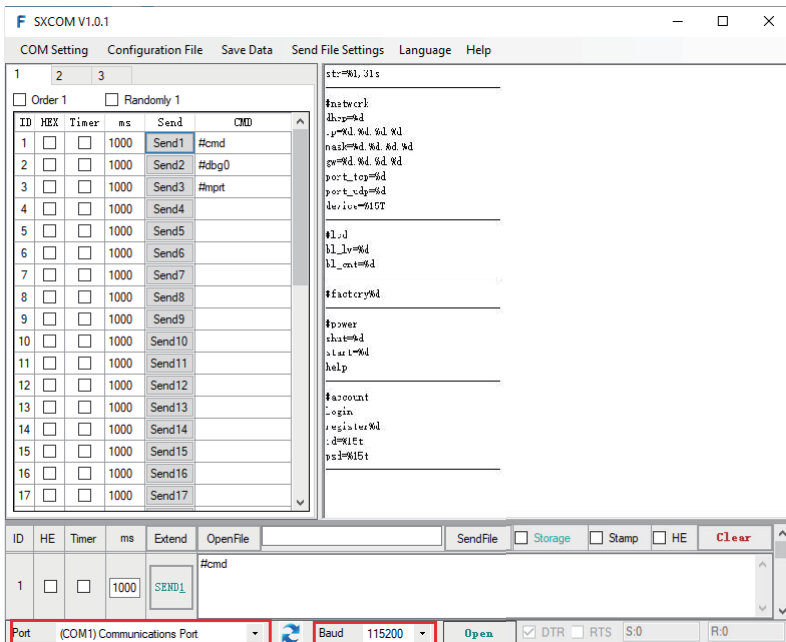
Baud rate: 115200 (default)

Data location: 8

Stop bit: 1

Check bit: no

Enter Port Command in Send options.



**Instructions:**

All commands start from "#", command head "%c": "d" parameters.  
 The "\_" in the commands cannot omit. Parameter: %d: 0 means ALL.  
 Command head & Parameter 1 &Parameter 2... need to add one "SPACE".

The following table is only an example.

Type	Format	Data	Rule
instructions	#video_%c	d:data	
Target 1	in%8,d	0~7:assign port 255:all port	parameter 2 attributes are available
Target 2	out%8,d	0~7:assign port 255:all port	All parameter attributes are available
Parameter 1	source=%d	0~7: input channel	
Parameter 2	onoff=%d	0:image output turn off 1:image output turn on	

Please refer to the " Command list" in the CD for details

Example: ALL output turn off.

Operation format: #video\_d out255 onoff=0

# WEB control

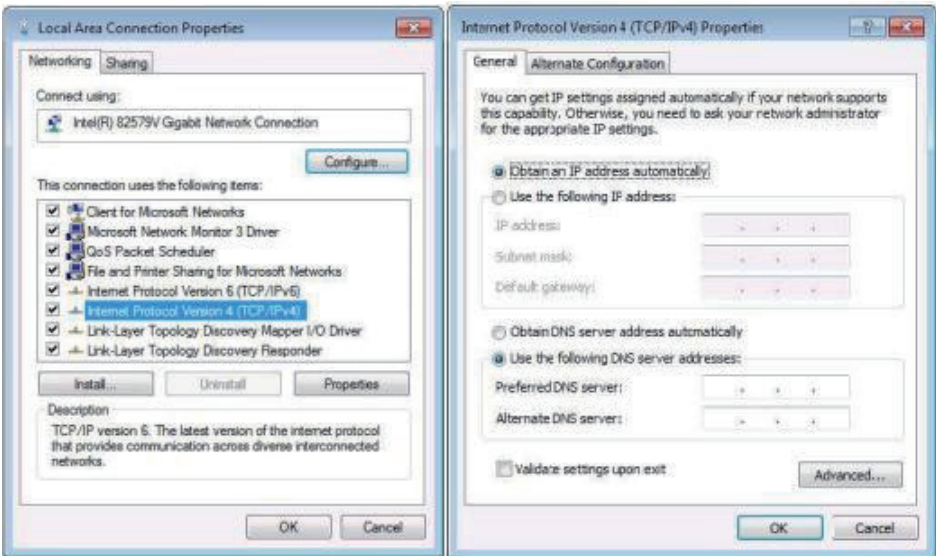
Change the IP address of your PC to connect the matrix

Matrix Default IP address: 192.168.1.168

Account: admin

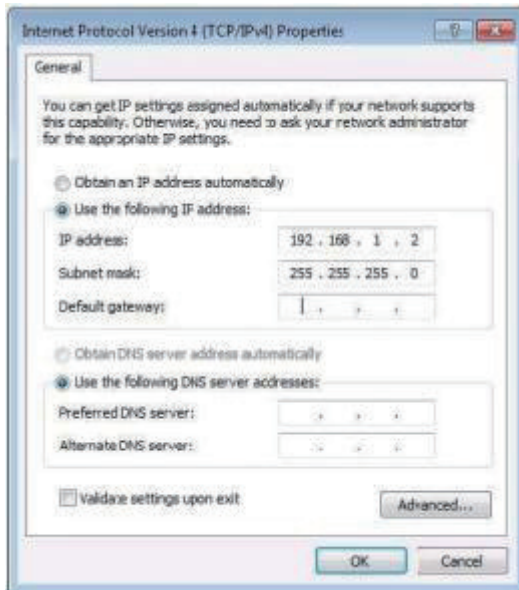
Password: 123456

1. Connect the HDMI Matrix and PC to the LAN switch.
2. Configure your PC as follows:  
Click Windows Start > Control Panel > Network and Sharing Center  
Click Change Adapter Settings.  
Highlight the network adapter you want to use to connect to the device and click Change settings of this connection.
3. Connect to the device and click change settings of this connection:
4. Highlight Internet Protocol Version 4 (TCP/IPv4) by clicking on the item
5. Click Properties.



6. Select Use the following IP Address for static IP addressing and fill in the details.

For TCP/IPv4 you can use any IP address in the range 192.168.1.2 to 192.168.1.254 (excluding 192.168.1.168).



7. Click OK.
8. Click Close.

## • Status interface

Status interface include 3 parts: input information, output information and device version information

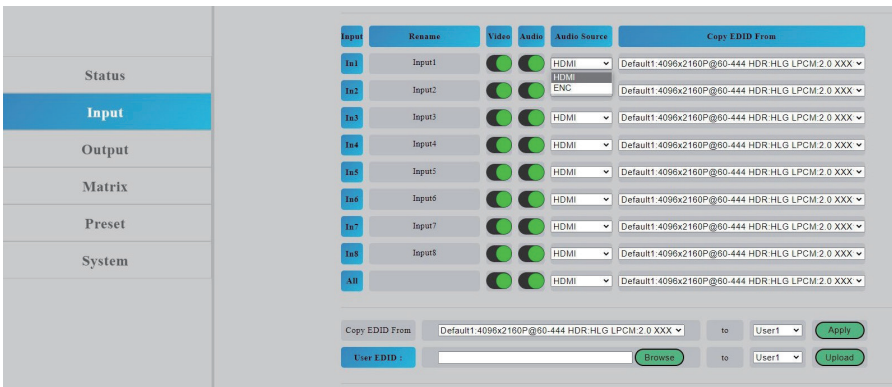
1. Input info: Displays the status and information of the current device input port, Includes the connection status, input resolution, gamut color depth, HDCP version information and input audio format of each input port.
2. Output EDID info: Displays the status and information about the output port, Includes the connection status, output resolution and color gamut, output audio format, EDID manufacturer of each output port.
3. Device info: Displays the current name of the device, MCU and HTML of version number(Same as on the screen)
4. “√”show that open or connect normally, “x”show that close or not connected.

<b>Status</b> Input Output Matrix Preset System	Input info					
		<b>Connect</b>	<b>Resolution</b>	<b>Color</b>	<b>Audio</b>	<b>HDCP</b>
	<b>In1</b>	√	3840×2160P 60	444 24bit	NPCM	HDCP2.2
	<b>In2</b>	x	x	x	x	x
	<b>In3</b>	x	x	x	x	x
	<b>In4</b>	√	3840×2160P 59.94	422 24bit	PCM-2 48K 24bit	HDCP2.2
	<b>In5</b>	√	3840×2160P 59.94	RGB 24bit	PCM-2 48K 16bit	None
<b>In6</b>	x	x	x	x	x	
<b>In7</b>	x	x	x	x	x	
<b>In8</b>	√	3840×2160P 59.94	444 24bit	PCM-2 44.1K 24bit	HDCP2.2	
	Output EDID Info					
	<b>Connect</b>	<b>Resolution</b>	<b>Color</b>	<b>Audio</b>	<b>MFR</b>	
<b>Out1</b>	√	3840×2160P 30	444 None	LPCM-2 96K	AG128A7	
<b>Out2</b>	x	x	x	x	x	
<b>Out3</b>	x	x	x	x	x	
<b>Out4</b>	√	4096×2160P 60	444 SMPTE	DTS-6 48K	GSM0001	
<b>Out5</b>	√	3840×2160P 60	444 SMPTE	LPCM-2 48K	SAM7119	
<b>Out6</b>	x	x	x	x	x	
<b>Out7</b>	√	1920×1080P 120	444 None	LPCM-2 48K	ACR052A	
<b>Out8</b>	√	4096×2160P 60	444 Dolby-Vision	MAT-8 48K	MEIA296	
	Device Info					
	<b>MCU Version:</b>					V0.0.10
	<b>HTML Version:</b>					V0.0.10

## • Input interface

Interface introduction: This page is mainly used for renaming input ports, switching video signals (opened by default), switching audio input, selecting EDID, and switching audio source signals.

1. **Rename:** Modify the current name of input port, support 1~15 characters(numbers, letters and underscores) which is synchronized with the screen.
2. **Video:** Switch input video, Once the input video is off, the audio extraction output is muted.
3. **Audio:** Switch audio of audio source (include HDMI and embedded audio), The default is on.
4. **Audio Source:** Switch audio source, HDMI: select input source audio, ENC: select embedded audio input.
5. **Switch EDID:** Set default, copy, user EDID, and show EDID information(HDR, audio channel, resolution, color gamut)
6. **User EDID:** Save default/copy EDID to User EDID, and upgrade the BIN file to the User EDID.
7. **All:** select all input ports to realize fast switch .



The screenshot shows a control panel for the input interface. On the left is a vertical navigation menu with options: Status, **Input** (highlighted), Output, Matrix, Preset, and System. The main area contains a table of input ports and a section for EDID management.

Input	Rename	Video	Audio	Audio Source	Copy EDID From
In1	Input1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX
In2	Input2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI ENC	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX
In3	Input3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX
In4	Input4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX
In5	Input5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX
In6	Input6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX
In7	Input7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX
In8	Input8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX
All		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HDMI	Default1.4096x2160P@60-444 HDR HLG LPCM2.0 XXX

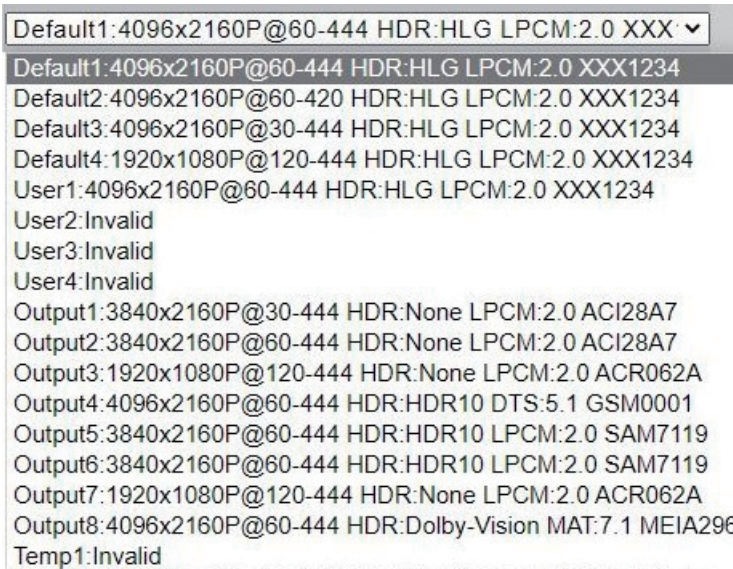
Below the table, there is an EDID management section:

Copy EDID From:  to

User EDID:    to

Operation instructions:

1. Rename: Double click the left mouse button to Enter the name editing to customize the name, name modify done.
2. Video/Audio: Click the two-way button to complete the switch setting of input video and audio; Green means on and gray means off.
3. Audio source: Use the mouse to click the white combobox to switch the corresponding input audio source.
4. Copy EDID from: Use the mouse to click the white combobox to complete the corresponding EDID switch. The combobox'll show the current EDID information.



5. User EDID selection:
 

Click the white combobox, select EDID, then select user 1 ~ 4 in the combobox, and finally click apply, User EDID settings done.

Click browse and select the path where the bin file is located, then select user 1 ~ 4 in the combobox and finally click Upload.

The EDID can be imported into user EDID.



## • Output interface

Interface introduction: The page used for port renaming, switching output video(on by default), switching audio output(HDMI/3.5mm/ Coaxial), ARC function(off by default).

1. Rename: Modify the current name of output port, support 1~15 characters(numbers, letters and underscores) which is synchronized with the screen.
2. Video: Switch output video, close the output port video does not affect the audio extraction function, the 5V output needs to be turned off at the same time.
3. Audio-HDMI: Switch HDMI output audio, on by default.
4. Audio-Analog(3.5mm): Switch Analog audio extraction output, on by default .
5. Audio-SPDIF(Coaxial): Switch SPDIF audio extraction output, on by default.
6. ARC: Switch ARC audio return output, off by default.
7. CEC: TV with CEC function, support start up; shutdown can not be supported.

Status	Output	Rename	Video	Audio-HDMI	Audio-Analog	Audio-Spdif	ARC	CEC
Input	Out1	Output1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Output	Out2	Output2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Matrix	Out3	Output3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preset	Out4	Output4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System	Out5	Output5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Out6	Output6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Out7	Output7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Out8	Output8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	All		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Operation instructions:

1. Double click the left mouse button to Enter the name editing to customize the name, the output port name modify done.
2. Click the two-way button to complete the switch setting of output video, audio and ARC function; Green means on and gray means off.

- **Matrix interface**

Interface introduction: The page is used for displaying the input source corresponding to the current output port, Switching the input to a output port and output the image; Vertical axis means output port selection, abscissa axis means input port selection, All means select all output

Status								
Input								
Output								
<b>Matrix</b>								
Preset								
System								
	<b>Input1</b>	<b>Input2</b>	<b>Input3</b>	<b>Input4</b>	<b>Input5</b>	<b>Input6</b>	<b>Input7</b>	<b>Input8</b>
<b>Output1 :</b>	Input1	Input2	Input3	Input4	Input5	Input6	Input7	Input8
<b>Output2 :</b>	Input1	<b>Input2</b>	Input3	Input4	Input5	Input6	Input7	Input8
<b>Output3 :</b>	Input1	Input2	<b>Input3</b>	Input4	Input5	Input6	Input7	Input8
<b>Output4 :</b>	Input1	Input2	Input3	<b>Input4</b>	Input5	Input6	Input7	Input8
<b>Output5 :</b>	Input1	Input2	Input3	Input4	<b>Input5</b>	Input6	Input7	Input8
<b>Output6 :</b>	Input1	Input2	Input3	Input4	Input5	<b>Input6</b>	Input7	Input8
<b>Output7 :</b>	Input1	Input2	Input3	Input4	Input5	Input6	<b>Input7</b>	Input8
<b>Output8 :</b>	Input1	Input2	Input3	Input4	Input5	Input6	Input7	<b>Input8</b>
<b>All :</b>	Input1	Input2	Input3	Input4	Input5	Input6	Input7	Input8

Operation instructions:

Click the input box to switch the corresponding output port, The above picture show the PIP one to one output.

## • Preset interface

Interface introduction: The page is used for renaming, saving, calling and clearing of preset scene.

1. The device can preset 8 scenes and support scene renaming.
2. Clear means clears the current saved scene.
3. Save means save the current changed scene, the video, audio and system settings can be saved, but network parameter can not be saved.
4. Call means call the changed scene.

Status						
Input						
Output						
Matrix						
<b>Preset</b>						
System						
		<b>Preset</b>	<b>Rename</b>	<b>Clear</b>	<b>Save</b>	<b>Call</b>
		<b>Preset1</b>	1to1	Clear	Save	Call
		<b>Preset2</b>	all4	Clear	Save	Call
		<b>Preset3</b>	Scene3	Clear	Save	Call
		<b>Preset4</b>	Scene4	Clear	Save	Call
		<b>Preset5</b>	Scene5	Clear	Save	Call
		<b>Preset6</b>	Scene6	Clear	Save	Call
		<b>Preset7</b>	Scene7	Clear	Save	Call
		<b>Preset8</b>	Scene8	Clear	Save	Call

Operation instructions:

1. Double click the left mouse button , Click Enter to the name edit box, custom name done.
2. Click Clear, scene clear done
3. Click Save, save the current scene
4. Click Call, call the saved scene

## • System interface

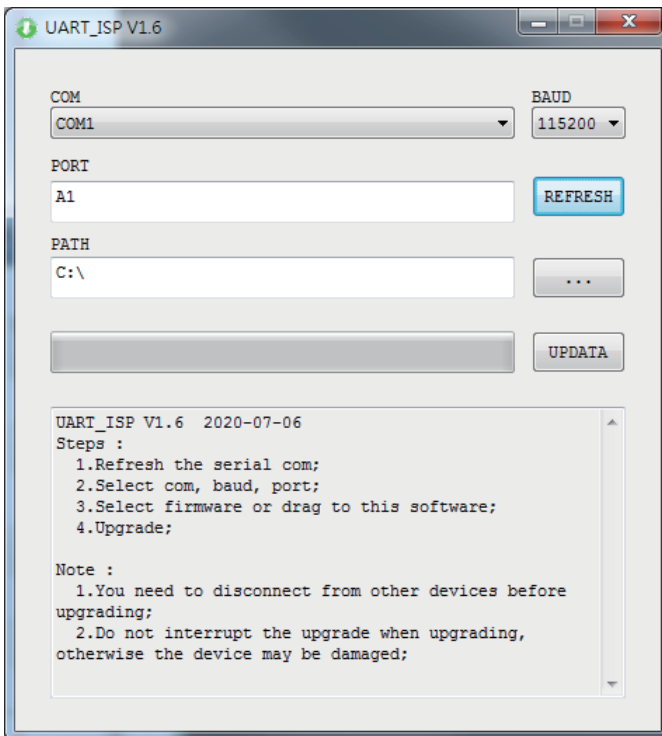
Interface introduction: The page can modify and show network parameters and control protocol parameters, modify web login account and password, reboot device, general restore factory, user restore factory.

1. Mac address can only be displayed and cannot be modified.
2. IP address is 192.168.1.168 by default, it can be modified.  
After DHCP is opened, dynamic IP is used, In this case, the IP address cannot be modified and can assign by router.  
After DHCP is off, static IP is used, In this case, the IP address can be modified. After the modification, click Apply.
3. MASK and GW address can be modified, but the prerequisites are same as the IP address.
4. DHCP use two-way button as switch, click directly to open DHCP. Green button means open DHCP, Gray means close DHCP.
5. Account management: Enter your account and password in the white box, Click Apply, It takes effect on next login, support 1~15 characters(numbers, letters and underscores)
6. Click Reboot/Factory General/Factory User, click Enter according to the prompt, Device Reboot/restore factory done.

<ul style="list-style-type: none"> <li>Status</li> <li>Input</li> <li>Output</li> <li>Matrix</li> <li>Preset</li> <li style="background-color: #00a0e3; color: white;">System</li> </ul>	<b>Network</b>														
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00a0e3; color: white;">Mac Address :</td> <td style="text-align: right;">46:58:4E:95:0A:64</td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">IP Address :</td> <td style="text-align: right;">192.168.100.117</td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">Net Mask Address :</td> <td style="text-align: right;">255.255.255.0</td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">Gate Way Address :</td> <td style="text-align: right;">192.168.100.1</td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">DHCP :</td> <td style="text-align: right;">On <span style="color: green;">▶</span></td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">TCP Port :</td> <td style="text-align: right;">5000</td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 10px;"> <input type="button" value="Apply"/> </td> </tr> </table>	Mac Address :	46:58:4E:95:0A:64	IP Address :	192.168.100.117	Net Mask Address :	255.255.255.0	Gate Way Address :	192.168.100.1	DHCP :	On <span style="color: green;">▶</span>	TCP Port :	5000	<input type="button" value="Apply"/>	
	Mac Address :	46:58:4E:95:0A:64													
	IP Address :	192.168.100.117													
	Net Mask Address :	255.255.255.0													
	Gate Way Address :	192.168.100.1													
	DHCP :	On <span style="color: green;">▶</span>													
	TCP Port :	5000													
	<input type="button" value="Apply"/>														
	<b>Account management</b>														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00a0e3; color: white;">User Name :</td> <td style="width: 150px;"><input type="text"/></td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">New Password :</td> <td><input type="password"/></td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">Confirm the Password :</td> <td><input type="password"/></td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 10px;"> <input type="button" value="Apply"/> </td> </tr> </table>	User Name :	<input type="text"/>	New Password :	<input type="password"/>	Confirm the Password :	<input type="password"/>	<input type="button" value="Apply"/>								
User Name :	<input type="text"/>														
New Password :	<input type="password"/>														
Confirm the Password :	<input type="password"/>														
<input type="button" value="Apply"/>															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00a0e3; color: white;">Reboot :</td> <td style="text-align: right;"><input type="button" value="Reboot"/></td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">Factory General :</td> <td style="text-align: right;"><input type="button" value="Factory General"/></td> </tr> <tr> <td style="background-color: #00a0e3; color: white;">Factory User :</td> <td style="text-align: right;"><input type="button" value="Factory User"/></td> </tr> </table>	Reboot :	<input type="button" value="Reboot"/>	Factory General :	<input type="button" value="Factory General"/>	Factory User :	<input type="button" value="Factory User"/>									
Reboot :	<input type="button" value="Reboot"/>														
Factory General :	<input type="button" value="Factory General"/>														
Factory User :	<input type="button" value="Factory User"/>														

# Firmware Upgrade

1. Connect PC and Device with RS-232, open software "UART\_ISP\_V1.6.exe" on PC
2. Click"Refresh" refresh the serial port number and select the correct serial port number
3. Baud data is 115200 by default.
4. Input"A1" on the port, Select the path where the program resides to Upgrade the MCU.
5. Input "F0"on the port, Select the path where the program resides to Upgrade the web page.
6. Click"Update", the system start to Update until "Succeed"is displayed in the information bar, Update done



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**Dear Valued Customer**

**WE REALLY**

**APPRECIATE**

**YOUR PURCHASE**

**~thank you~**

## **Support**

For more info or tech support  
<http://www.siig.com/support>