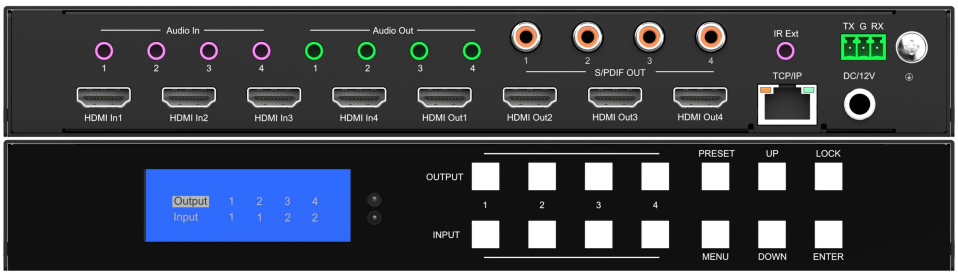
4K60Hz HDMI 4X4 Seamless Matrix Video Wall / Multi-Viewer

Model: MX44VWCV2

OPERATION MANUAL



Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

SURGE PROTECTION DEVICE RECOMMENDED

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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1. Features

- 4x HDMI Inputs which can be independently routed to HDMI Outputs. No switching delay or picture loss during transitions
- Supports resolution up to 4K@60HZ 4:4:4
- Supports Video Wall up to 7 different modes with each monitor with 4K@60Hz 4:4:4 resolution.
- It can display 4 pictures on the same screen and has multiple split display modes
- Supports HDMI audio formats including Dolby-5.1, DTS-5.1
- Analog audio extraction, and the audio can be independently switching
- Compliant HDCP 2.2 with EDID management
- Control via panel button, Remote Control, RS232 Control, TCP/IP Control

2. Package Contents

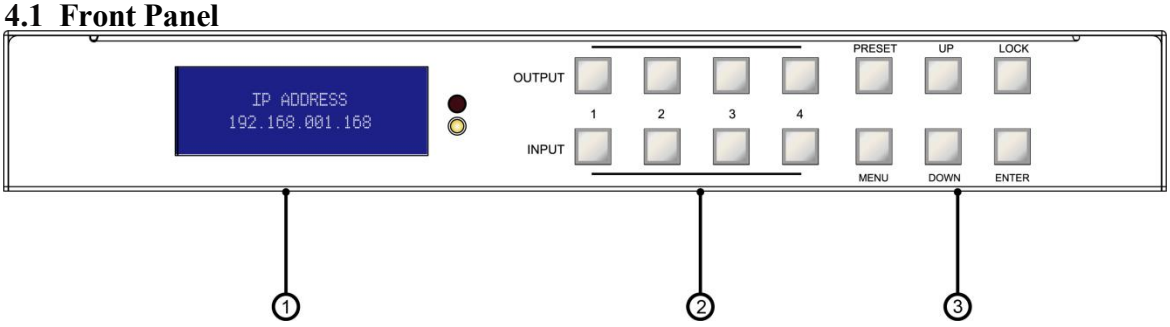
1). 1x Main Unit (4x4 HDMI Matrix)
2). 1x DC 12V/3Apower adapter
3). 1x Remote control
4). 1x Wide-Band IR Receiver cables
5). 1x CD for user manual & Command list
6). 1x 3Pin Phoenix terminal plug

3. Specifications

Operating Temperature Range	-5 to +40°C(23 to +104 °F)
Storage Temperature Range	-10 to +60°C(-14 to +140 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Bandwidth	18Gbit/s
Video Format Supported	4K@60Hz,YUV4:4:4 8bit 4k@30Hz/1080P/1080i/720P
Audio Formats Supported	HDMI digital audio DTS-5 . 1/Dolby-5 . 1
HDCP Compliant	HDCP 2.2 and HDCP 1.4
Input ports	4xHDMI
Output ports	4xHDMI
Matrix mode	4x4 seamless switching
Video wall mode	Multiple video wall modes
Multi-viewer mode	Multiple multi-viewer modes
Power Consumption	23 watts (Max.)
Dimensions	Matrix: L262 x W163 x H36 mm
Mass (Main Unit)	2710g

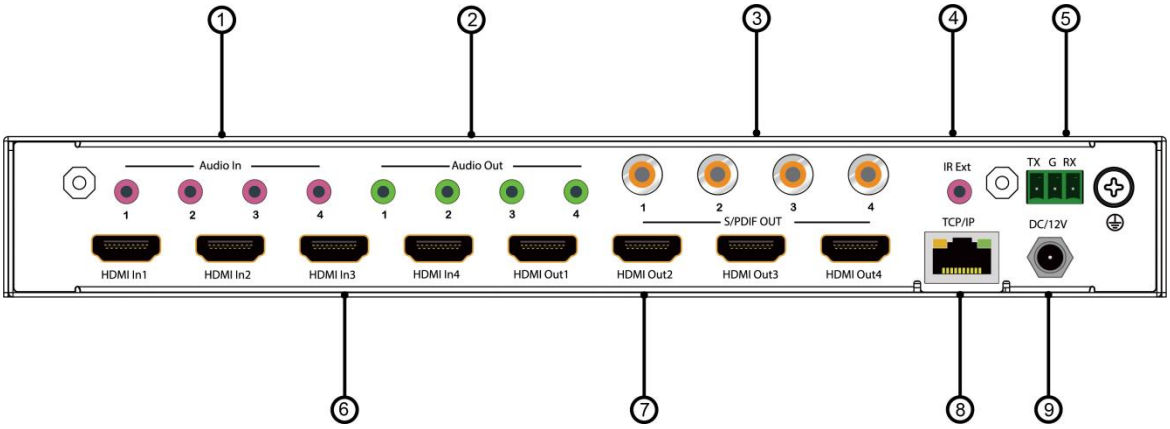
4. Panel Descriptions

4.1 Front Panel



① LCD screen and IR receiving port, indicator light
② Output button OUT1~4 & Input button IN1~4
③ MENU button: PRESET; MANU; UP; DOWN; LOCK; ENTER

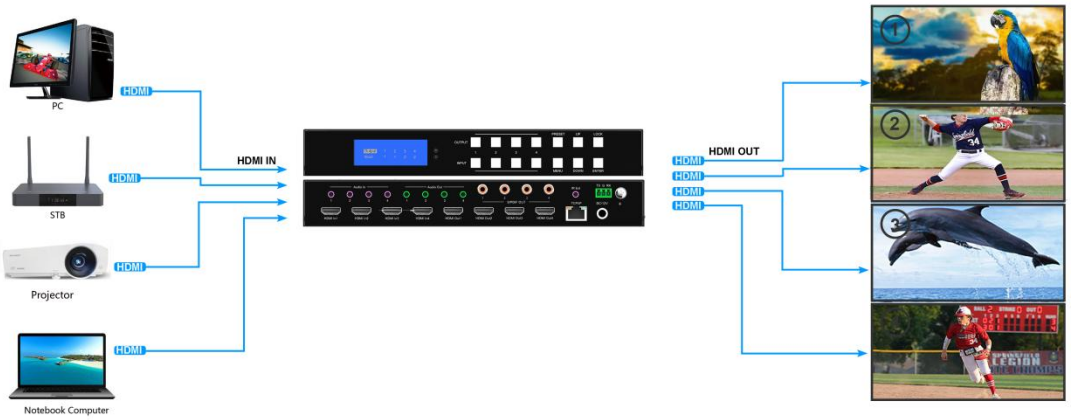
4.2 Rear Panel



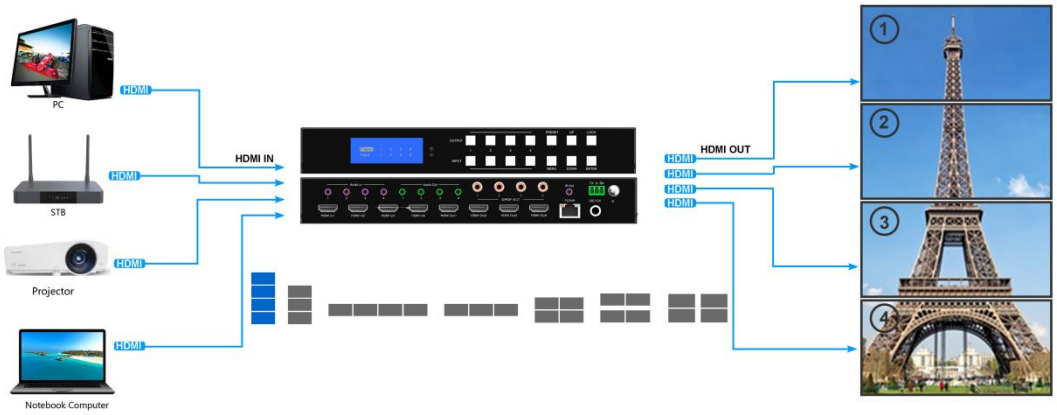
① Audio In
② Audio Out
③ S/PDIF OUT
④ IR Ext
⑤ RS232 port
⑥ HDMI IN x4
⑦ HDMI OUT x4
⑧ Ethernet port
⑨ Power input 12V/3A

5. Wiring Diagram

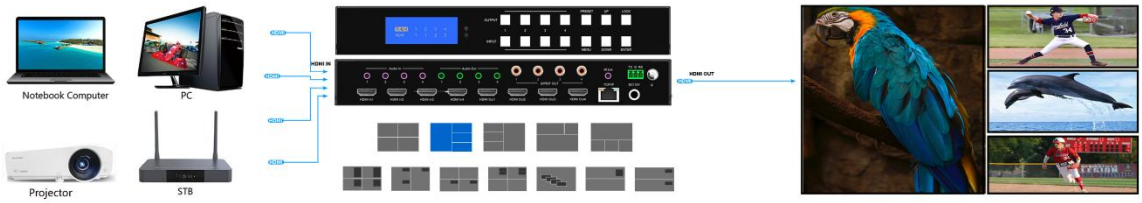
5.1 Seamless Matrix Mode



5.2 Video Wall Mode



5.3 Multi-Viewer mode



6. Input / Output Channel Key Operation

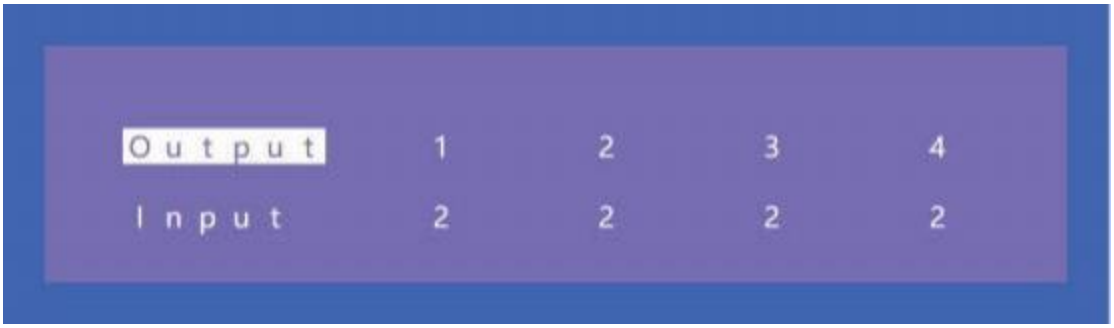
Channel	Button Method
OUT1-4	1. Directly press the number key, such as input channel 1, and select "1" to press (only when the output port is selected, the input channel number will be valid) 2. Long press means all outputs select current input
IN1-4	Directly press the number key, such as the output channel 2, press button "2" and press it again to cancel the selection; Long press output 4 to select all channels, and long press again to cance
MENU	Function Button; Enter the function option or back to previous option
ENTER	Confirm Button: enter function selection mode
UP	Button for UP option
DOWN	Button for NEXT option
PRESET	Preset, short press to quickly enter the preset call function
LOCK	Long press to LOCK, Long press again to UNLOCK

7. Panel Control

7.1 Video

Signal switching includes 4 switching channels, which can be configured as input/output according to requirements to form a matrix of 1 ×4~4 ×4 . It can switch any input signal to 1 channel ofoutput or all channels of output.

Operation format: “output channel” + “input channel”



For example:

1. Switch output 1 to input 4 source

   Operation: press “ 1” in Output area + “4” in IN area to complete the switch

2. Output 2, 1, 3 switch to input 2 source

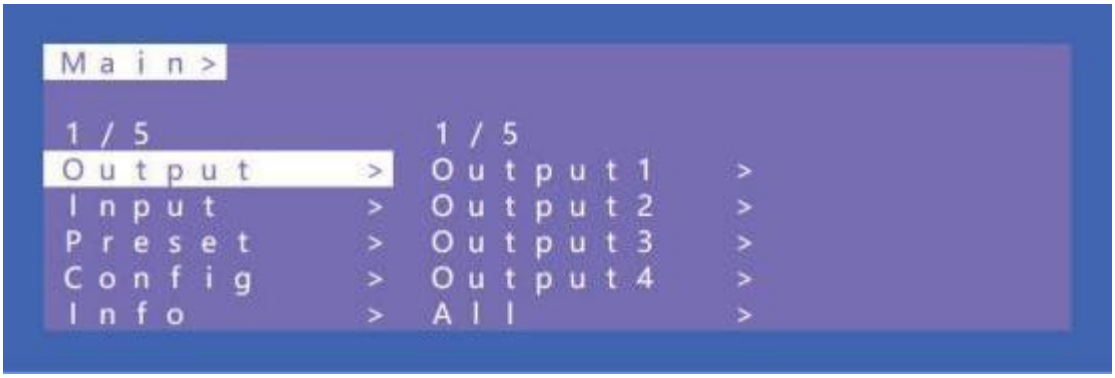
Operation: press “2”, “ 1” and “3” in Output area + “2” in IN source area to complete the switch

3. Switch all output to input 4 source

Operation: press “4” in Output area + “4” in IN area to complete the switch

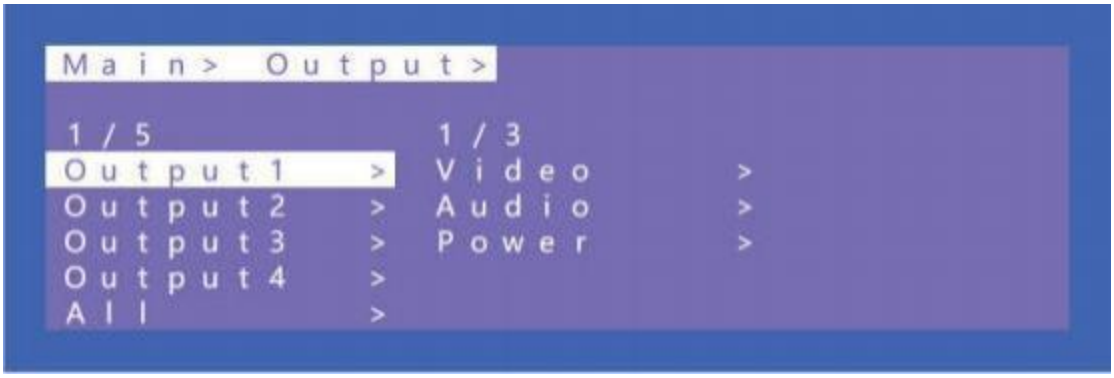
7.2 Main Menu

Main menu is divided into 5 module, which are Output, Input, Preset, Config, Info. Each module has multiple sub-menus that need to be set up accordingly.



7.3 Output

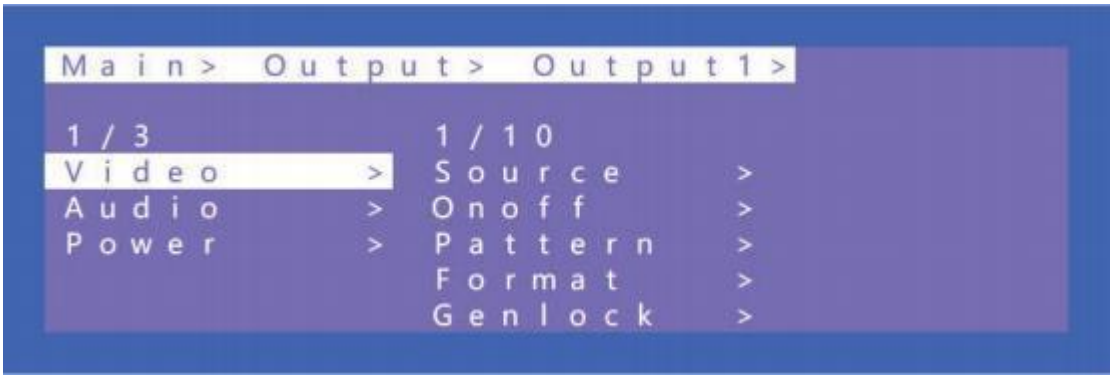
There are 5 sub-menus in Output interface: output1~4 + all, which are used for individual or all output settings. Each channel contains 3 function items, which are video, audio and power.



Choose a desired output before setting each video or audio.

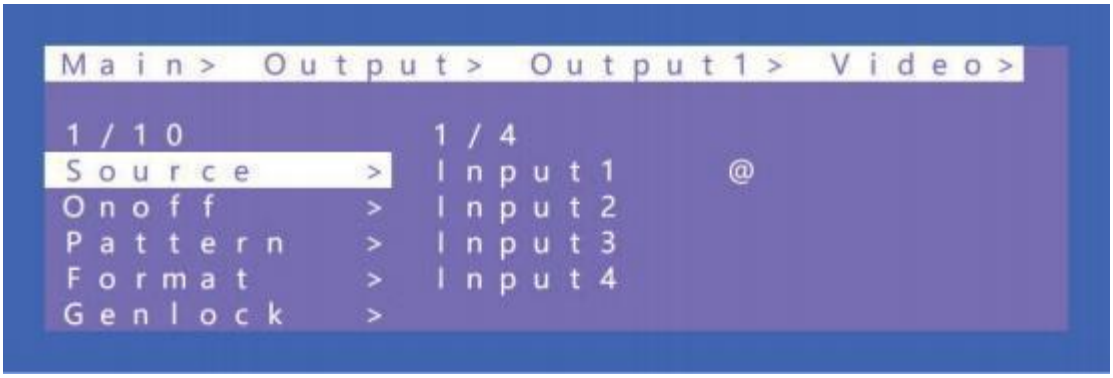
There are 10 options in video: Source, Onoff, Pattern, Format, Genlock, Mirror, Coord, PIP, Wall, Image, Audio.

There are 4 options in Audio: HDMI onoff, HDMI SRC, DEC onoff, DEC SRC.



1 ） Source

Any output can be switched to one input, or all outputs can be switched to the same input; The default 4x4 matrix is 4-way input and 4-way output one to one output.



Operation:

① Select “Output” in the main menu and press “ENTER”

② Press “UP” and “DOWN” to select “output1~4, all”

③ Click “ENTER” to enter the next sub-menu.

④ Press “ UP” and “DOWN” to choose “Video”

⑤ Click “ENTER” to enter the next sub-menu

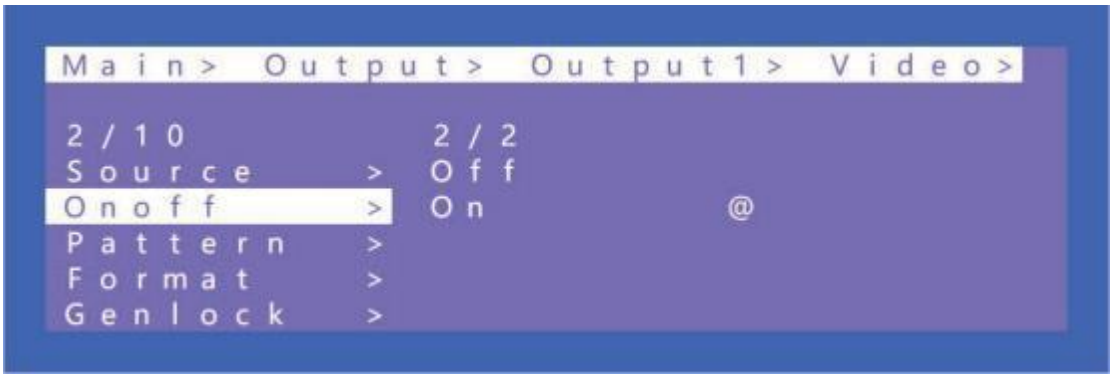
⑥ Press “UP” and “DOWN” to select “Source”

⑦ Click “ENTER” to enter the next sub-menu

⑧ Choose input1~4 to complete switching

2 ） Onoff

Turn on/off any output , or turn on/off all outputs. The video of outputs are enabled by default.



Operation:

① Select “Output” in the main menu and press “ENTER”

② Press “UP” or “DOWN” to select “Output 1~4, all”

③ Click “ENTER” to enter the next sub-menu

④ Press “UP” or “DOWN” to select “Video”

⑤ Press “UP” or “DOWN” to select “Onoff”

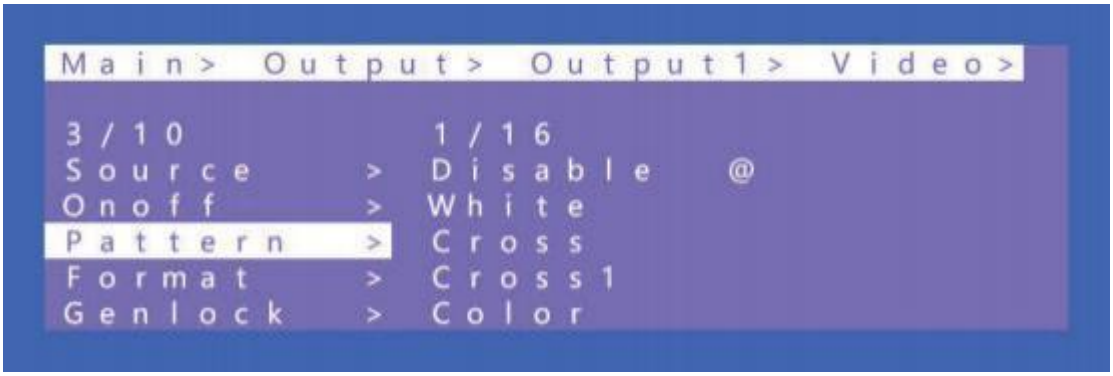
⑥ Click “ENTER” to enter the next sub-menu

⑦ Select “On” or “Off”, press “ENTER” to complete the operation. The blue screen will be displayed after turning offthe output.

3）Pattern

Built-in image ofa matrix can be showed onto the TV by Pattern, which is mainly used for testing in special occasions.

For example: Using Cross or Cross1 images in 4x4 Video Wall mode can test whether each TV frame fits.



Operation:

① Select “Output” in the main menu and press “ENTER”

② Press “UP” or “DOWN” to select “ Output 1~4, all”

③ Click “ENTER” to enter the next sub-menu

④ Press “UP” or “DOWN” to select “Video”

⑤ Press “UP” or “DOWN” to select “Pattern”

⑥ Click “ENTER” to enter the next sub-menu

⑦ Press “UP” or “DOWN” to select “Disable” or other patterns

Remarks:

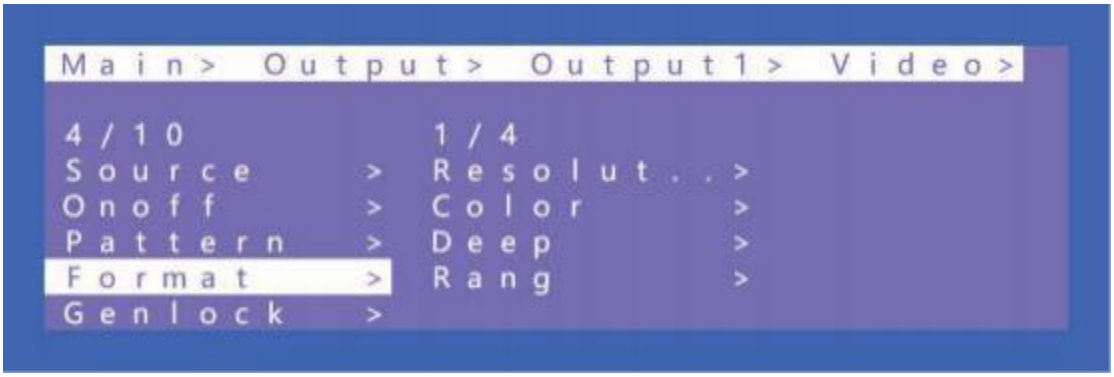
Item 2 to Item 16 represent for different built-in patterns.

4）Format

This function can set the output resolution format and force the output resolution format. But it does not provide upgraded image quality. Example:

The input is 1080P@60Hz and the output is set to 4K60Hz. Although the TV is displayed in 4K@60Hz format, it is actually in1080P@60Hz.

Selecting input mode will enable following input resolution. Switching with matrix will not be seamless unless the resolution from the source is in the same format without HDR.



Operation:

① Select "Output" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " Output 1~4, all"

③ Click "ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select "Video"

⑤ Press "UP" or "DOWN" to select "Format"

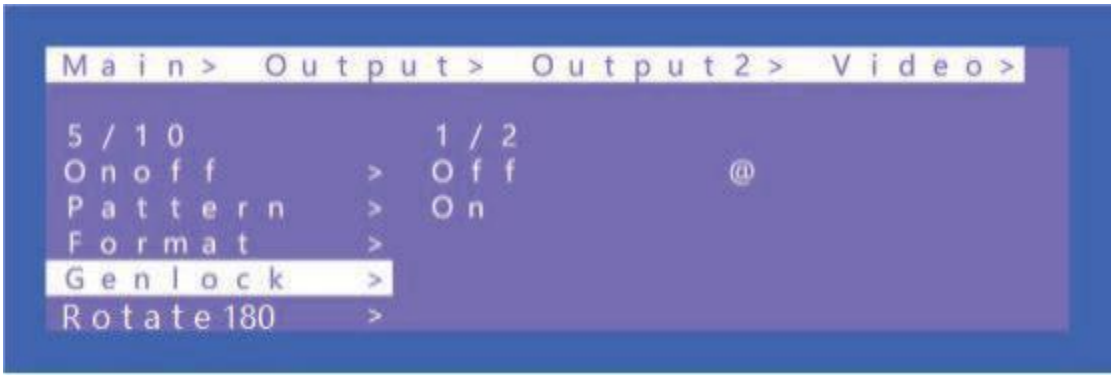
⑥ Click "ENTER" to enter the next sub-menu

⑦ Press "UP" or "DOWN" to select the corresponding resolution, press "ENTER" and there will be a checking time for 10 seconds (It will return to the original resolution ifthe display does not support the selected resolution).

⑧ Press "ENTER" again during the checking time while the output works well to complete the switch.

5) Genlock

Genlock is used to follow an output and defaults to off. Output 1 is gray and cannot be selected. Only Output 2, Output 3 and Output 4 can be enable. Switching the following output resolution will effect other output images. (The image will be black for a while, and the resolution will be subject to the following output and cannot be changed.)



Operation:

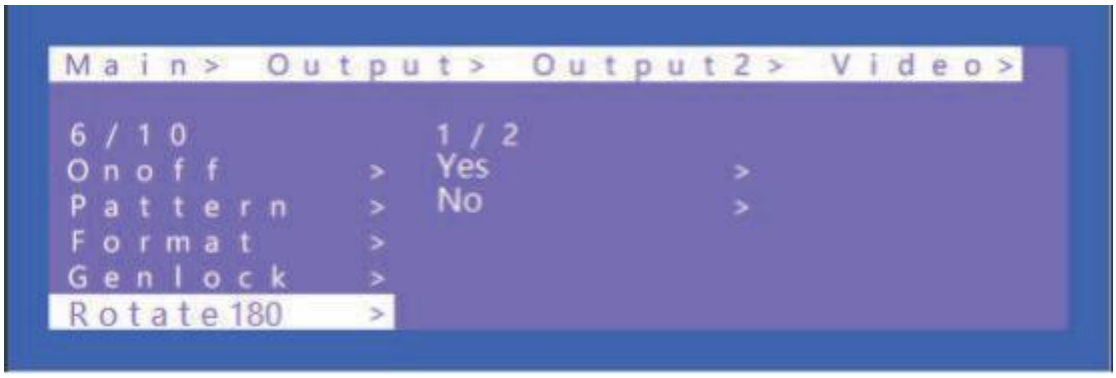
① Select "Output" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " Output 1~4, all"

③ Click “ ENTER” to enter the next sub-menu
④ Press “ UP” or “ DOWN” to select “ Video”
⑤ Press “ UP” or “ DOWN” to select “ Genlock”
⑥ Click “ ENTER” to enter the next sub-menu
⑦ Press “UP ’ or “DOWN” to select “ Off” or “ On” to complete the operation.

6 ） Rotate 180

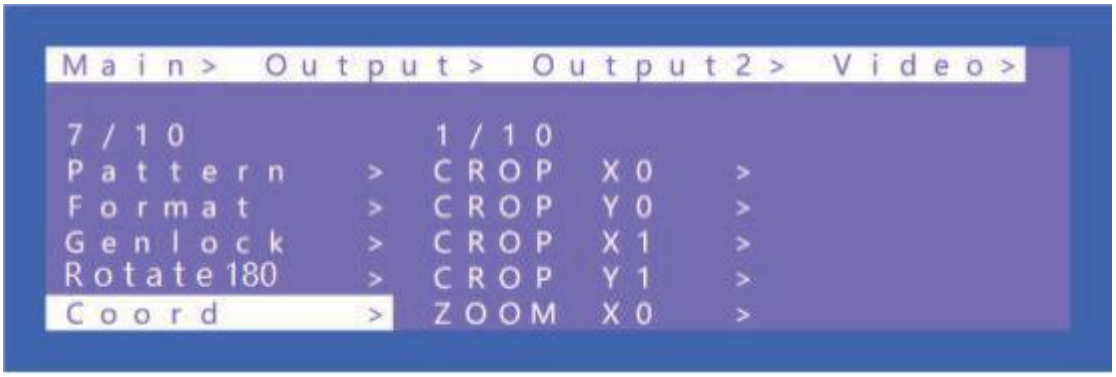
Operation:
① Select “ Output” in the main menu and press “ ENTER”
② Press “UP” or “DOWN” to select “ Output 1~4 , all”
③ Click “ ENTER” to enter the next sub-menu
④ Press “ UP” or “ DOWN” to select “ Video”
⑤ Press Rotate 180
⑥ Click “ ENTER” to enter the next sub-menu
⑦ Press “ UP” or “ DOWN” to confirm the operation.



7) Coord

Coord is mainly used to set the coordinate parameters ofthe image. There are 3 types including Coord and Zoom and Gap, which are CROPX0 , CROPY0 , CROPX1. CROPY1 , ZOOMX0 , ZOOMY0 , ZOOMX1 , CROPY1 , GapX, GapY and a total of 10 coordinate parameters.

The function can implement the parameter adjustment ofmulti-viewer and video wall.
The default start point ofCoord : CROPX0 = 0 , CROPY0 = 0.
The default end point ofCrood: CROPX1 = 6000 , CROPY1 =6000 .
The default start point ofZoom: ZoomX0 = 0 , ZoomY0 = 0
The default end point ofZoom: ZoomX1 = 6000 , ZoomY1 = 6000
The default start point of GapX=0 , GapY=0



Operation:

① Select “ Output” in the main menu and press “ ENTER”

② Press “UP” or “DOWN” to select “ Output 1~4, all”

③ Click “ENTER” to enter the next sub-menu

④ Press “UP” or “DOWN” to select “Video”

⑤ Press “UP” or “DOWN” to select “Coord”

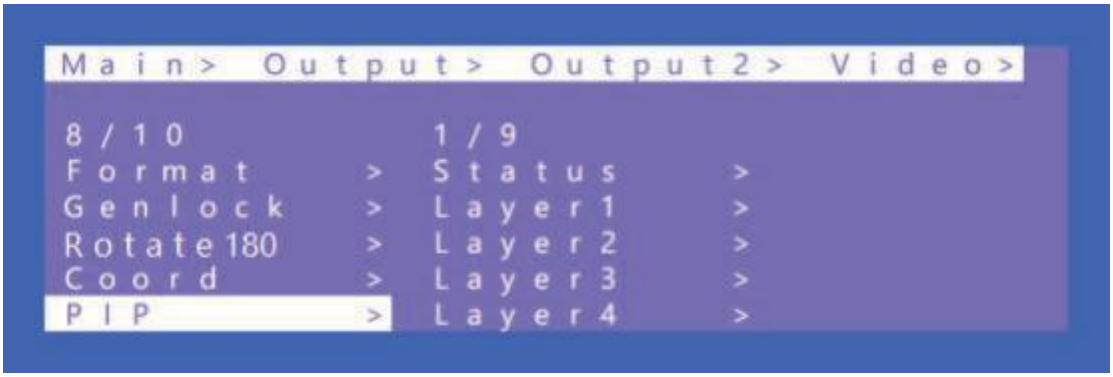
⑥ Click “ENTER” to enter the next sub-menu

⑦ Press “UP” or “DOWN” to select the desired coordinate ofCoord, Zoom and Gap.

⑧ The corresponding display effect will appear on the TV

8）PIP

PIP is mainly used for the layer priority. By default, each output has 4 layers. It can change the sequence ofthe layers in multi-viewer mode. Each layer can choose an output. You can turn on/offthis function by Status.



Operation:

① Select “Output” in the main menu and press “ENTER”

② Press “UP” or “DOWN” to select “ Output 1~4, all”

③ Click “ENTER” to enter the next sub-menu

④ Press “UP” or “DOWN” to select “Video”

⑤ Press “UP” or “DOWN” to select “PIP”

⑥ Click “ENTER” to enter the next sub-menu

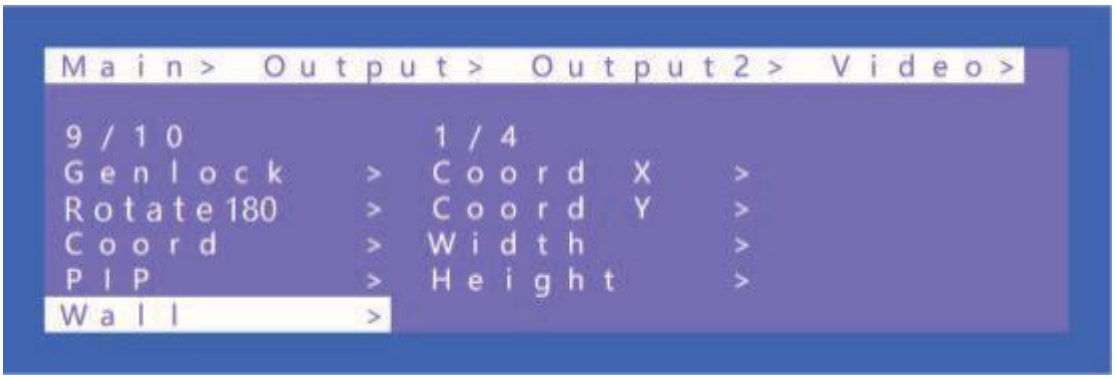
⑦ Press “UP” or “DOWN” to select Status on-off. The layer takes effect after it is enable.

⑧ Layer1～4 can choose the corresponding output1～4

Remarks: A layer can select only one output, cannot select it repeatedly, otherwise it does not take effect.

9）Wall

Wall is used to set the coordinate position of the TV. By default, it is in accordance with the matrix silkscreen making sequence. Set the parameter of CoordX, CoordY + Width, Height after determining the actual position ofthe TV according to the OSD on the TV. The coordinate position ofTV in Video Wall can be changed by using Coord. Width and Height indicate the number ofvideo wall tiling.



Operation:

① Select "Output" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " Output 1~4, all cannot be selected"

③ Click "ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select "Video"

⑤ Press "UP" or "DOWN" to select "Wall"

⑥ Click "ENTER" to enter the next sub-menu

⑦ Press "UP" or "DOWN" to select the coordinate ofCoordX or CoordY. The default coordinate for 2x2 video wall:

Out1(X:0, Y:0)

Out2(X:1, Y:0)

Out3(X:0, Y:1)

Out4(X:1, Y:1)

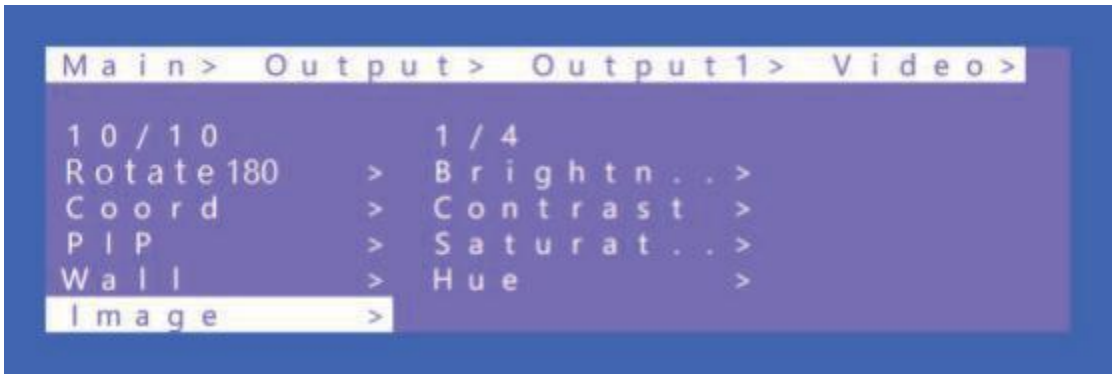
⑧ Set the number ofhorizontal and vertical splices. Set the number ofhorizontal and vertical ofthe first output, the rest outputs will automatically generate a video wall according to the coordinate. For example:

The default sequence ofvideo wall ofoutput 1 and output 2 is reversed.
Set the coordinate ofoutput 2 to X0Y0, horizontal 2 and vertical1.

Set the coordinate ofoutput 1 to X1Y0, horizontal auto, vertical auto.
Set the coordinate of output 3 to X0Y1, horizontal auto, vertical auto.
Set the coordinate ofoutput 4 to X1Y1, horizontal auto, vertical auto.

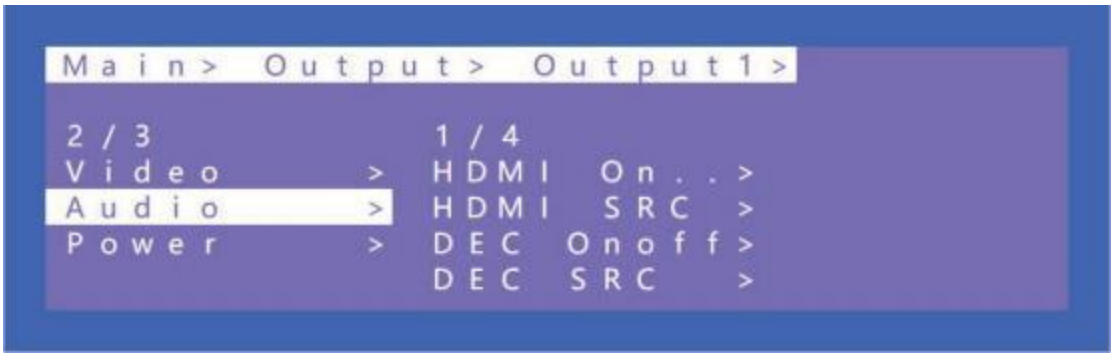
10）Image

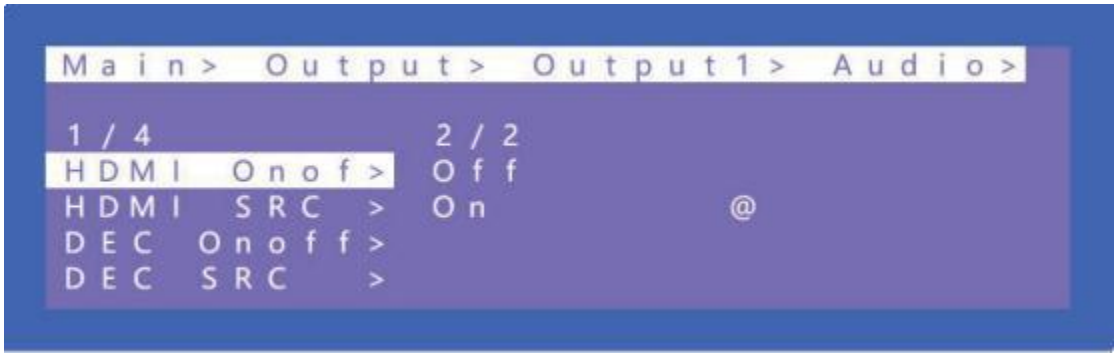
Image is used to set the parameters ofoutput image. There are 4 parameters: Brightness, Contrast, Staturation, Hue, Parameter Ranges from 0 to100 and it is 50 by default.



7.4 Audio

There are 4 function options in Audio: HDMI Onoff, HDMI SRC, DEC Onoff, DECSRC. It can implement audio switching independently, turn off HDMI audio output and audio De-embedding as well as Audio De-embedding switch to another source.





Operations:

① Select “ Output” in the main menu and press “ ENTER”

② Press “UP” or “DOWN” to select “ Output 1~4 , all”

③ Click “ ENTER” to enter the next sub-menu

④ Press “ UP” or “ DOWN” to select “ Video”

⑤ Press “ UP” or “ DOWN” to select “ HDMI Onoff”

⑥ Click “ ENTER” to enter the next sub-menu

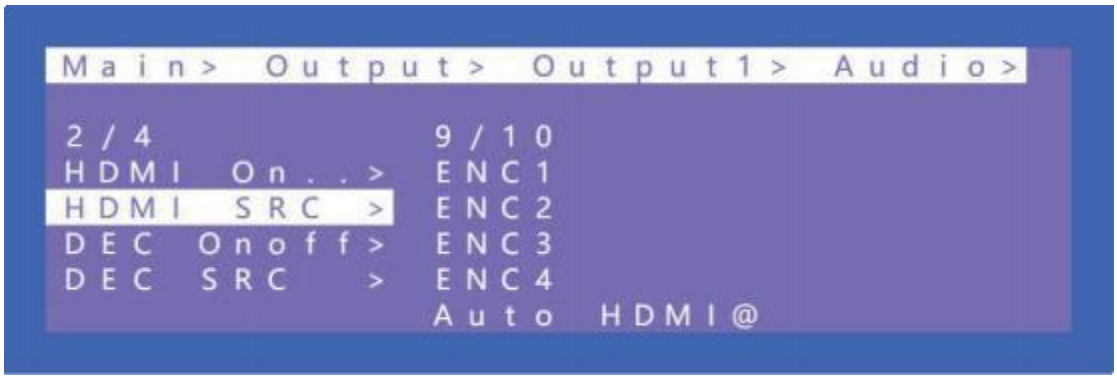
⑦ Press “UP” or “DOWN” to select “ ON” or “ Off” to complete the operation.

2) HDMI SRC

HDMI SRC enables switching to different input signal sources. It supports switching to analog audio in 1~4, HDMI input1~4.

Auto HDMI indicates following the corresponding input.
Auto ENC indicates the corresponding audio in.

That is, audio follow the matrix switch of inputs, not switch other audio source and Auto HDMI is default.



Operations:

① Select “ Output” in the main menu and press “ ENTER”

② Press “UP” or “DOWN” to select “ Output 1~4 , all”

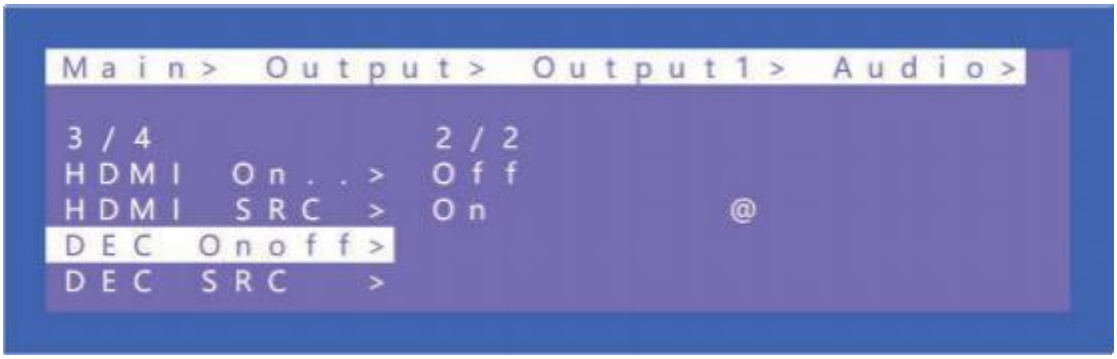
③ Click “ ENTER” to enter the next sub-menu

④ Press “ UP” or “ DOWN” to select “ Audio” and enter the next sub-menu

⑤ Select HDMI1～4 or ENC1～4 and press “ ENTER” to complete the audio switching.

3 ） DEC onoff

DEC onoff can implement the audio out switch. Click “On” to turn on the audio, click “Off” to turn off the audio. It is on by default.



Operations:

① Select “ Output” in the main menu and press “ ENTER”

② Press “UP” or “DOWN” to select “ Output 1~4 , all”

③ Click “ ENTER” to enter the next sub-menu

④ Press “ UP” or “ DOWN” to select “Audio” and enter the next sub-menu

⑤ Select “ HDMI Onoff” to turn on/ offthe audio out

4 ） DEC SRC

DEC SRC enables that the audio extracts to different input source, which can switch to HDMI input 1~4. Auto HDMI indicates that it follows the corresponding input. The default is auto HDMI.

Operation:

① Select “ Output” in the main menu and press “ ENTER”

② Press “UP” or “DOWN” to select “ Output 1~4 , all”

③ Click “ ENTER” to enter the next sub-menu

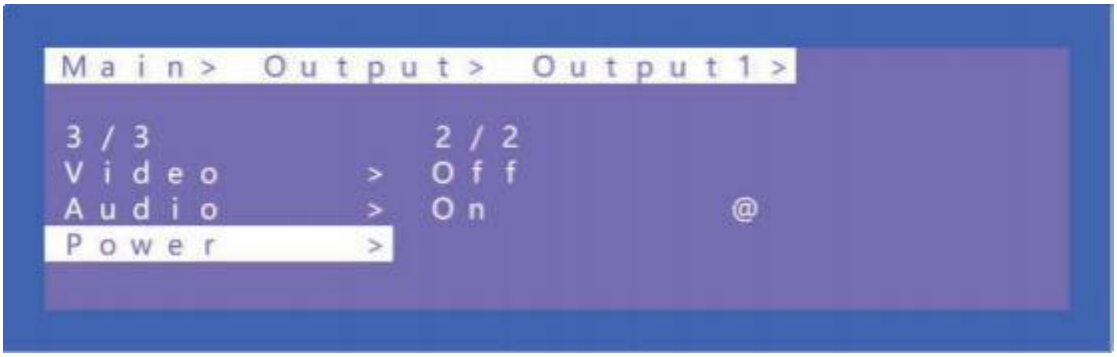
④ Press “ UP” or “ DOWN” to select “Audio” and enter the next sub-menu

⑤ Select “ DEC SRC” to select the desired audio input

7.5 Power

Power is used to turn offHDMI output of5V . It is different from “ Onoff” as there is a blue screen displayed on TV while selecting “off” in “Onoff”. Image will completely turn off after selecting

“Off” in “Power” . It is on by default.



Operation:

① Select “Output” in the main menu and press “ENTER”

② Press “UP” or “DOWN” to select “ Output 1~4, all”

③ Click “ENTER” to enter the next sub-menu

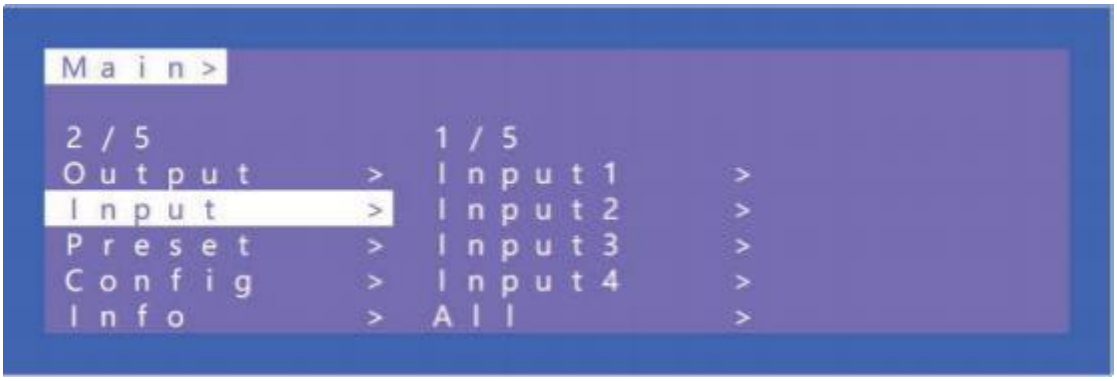
④ Press “UP” or “DOWN” to select “Power” and enter the next sub-menu

⑤ Select “On” or “Off” to complete the operation.

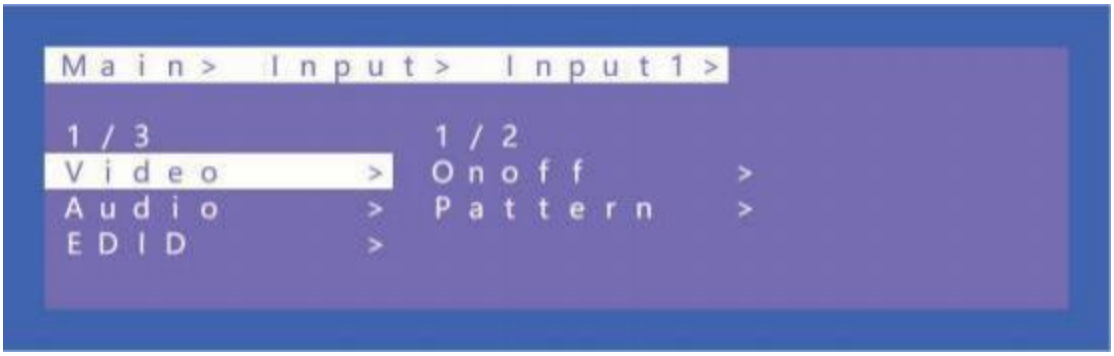
7.6 Input

There are there functions options in Input interface, which are Video, Audio and EDID.

Video is used to provide the switch channel, built-in Pattern switch and selections. Audio is used to set the delay. EDID supports built-in, copy, user and temp.


Main>
2/5
Output >
Input >
Preset >
Config >
Info >
1/5
Input1 >
Input2 >
Input3 >
Input4 >
All >
Main> Input>
1/5
Input1 >
Input2 >
Input3 >
Input4 >
All >
1/3
Video >
Audio >
EDID

e input will have no image and audio when this input is set to “Off”. Pattern provides built-in pattern, the selected built-in pattern will replace the input source image.



Operation:

① Select “ Iutput” in the main menu and press “ ENTER”

② Press “UP” or “DOWN” to select “ Input 1~4 , all”

③ Click “ ENTER” to enter the next sub- menu

④ Press “UP” or “ DOWN” to select “Video” and enter the next sub- menu

⑤ Select “ On” or “ Off” to turn on/ offthe input video

2) Audio

Audio delay setting range（ 0~ 50 , auto） , the default is auto.

Operation:

① Select “ Input” in the main menu and press “ ENTER”

② Press “UP” or “DOWN” to select “ Input 1~4 , all”

③ Click “ ENTER” to enter the next sub- menu

④ Press “ UP” or “ DOWN” to select “ Audio” and enter the next sub- menu

⑤ Select “0~ 50 ” in “Delay”to complete the operation

3) EDID

There are 4 options including built-in EDID, User EDID, Copy HDMI EDID, temp, each input EDID can be set. The default is default 1. When the EDID is copied, the EDID ofthe last TV will be

temporarily stored in the case of continuous power supply after access. Connect a new TV EDID will update.

The default Modify is on. After copying the TV EDID, the audio parameter is automatically changed to LPCM2.0. If closed; The copied EDID does not modify the audio parameters.

Default1	4K60 444-LPCM: 2.0-192Khz	Default2	4K60 420-LPCM: 2.0-192Khz
Default3	4K30 444-LPCM: 2.0-192Khz	Default4	1080P 120 444-LPCM: 2.0-192Khz

Switching the Default 1 to input1 as shown in the following example:

Operations:

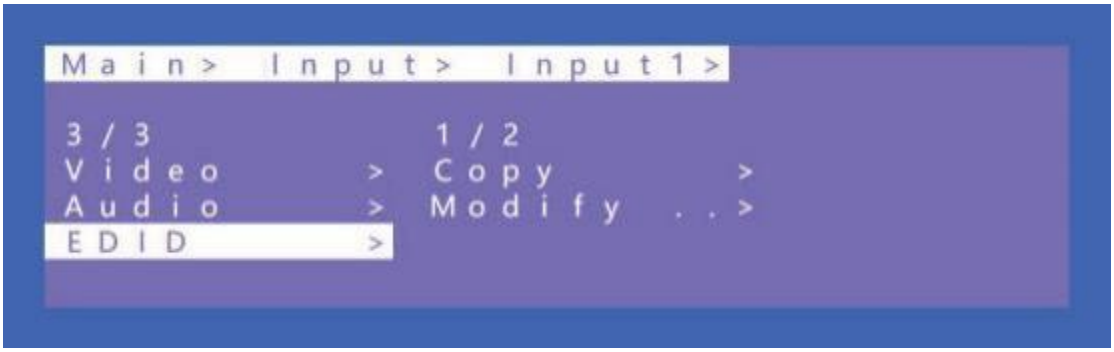
① Select " EDID" in the main menu and press " ENTER"

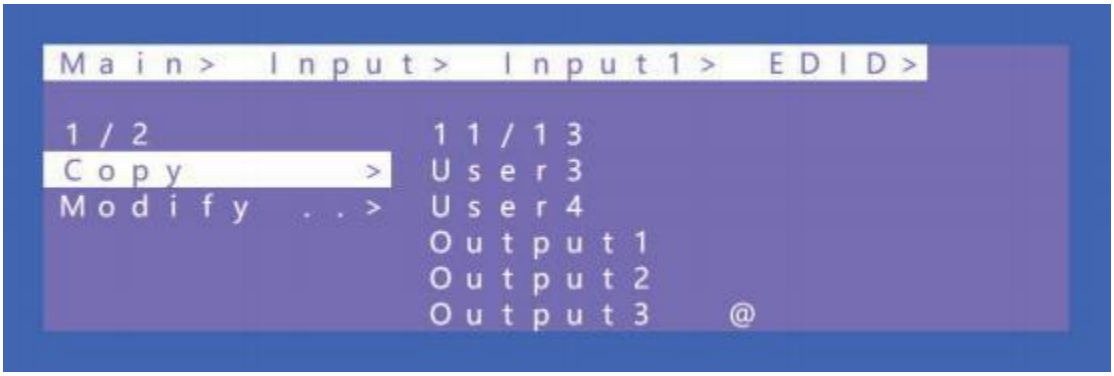
② Press " UP" or " DOWN" to select " Input 1"(the fifth option indicates that select all input)

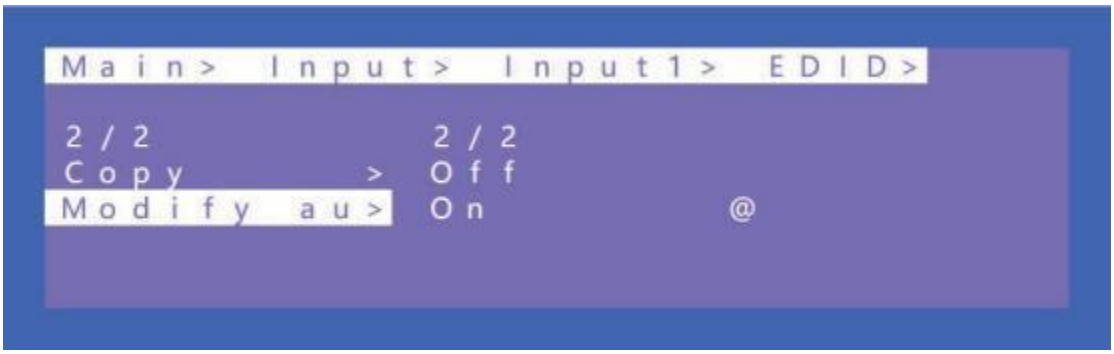
③ Click " ENTER" to enter the next sub-menu

④ Press " Default 1 " to complete the operation

⑤ The selected EDID will show some of its information (resolution, audio format and audio channel)







7.7 Preset

Preset can save the current video, audio, EDID and system settings, supports 8 different scenes. Preset can be modified and called using WEB, commands and panel. The default preset is consistent with its factory settings. There are 4 options as follow:

Clear: Remove the selected preset.

Save: Stores the current preset (can be covered).

Call: Activates the currently selected preset.

Demo: Plays the demo according to the scenes sequence.

Operations:

① Select "Preset" in the main menu and short press "ENTER" to enter the preset interface. Call indicates calling preset, Save indicates saving preset, Clean indicates cleaning preset.

② Save preset: select "Save" in Preset and select "Mode" or "Scene" to save in "Scene" or "P2P"

③ Call preset: Select "Call" in Preset, the select a saved preset to complete the operation. Current scene is the saved preset scene

④ Clear preset: Select "Clear" in Preset, select a saved scene to complete the operation. The saved preset scenes are restored to their default values.

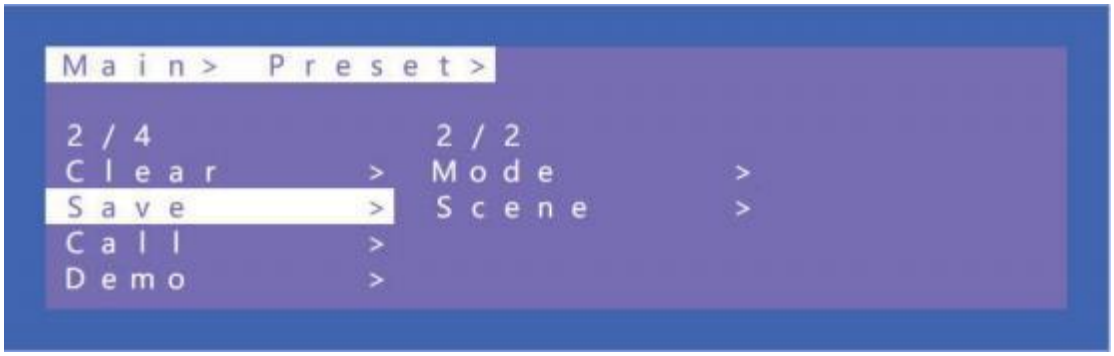
For example:

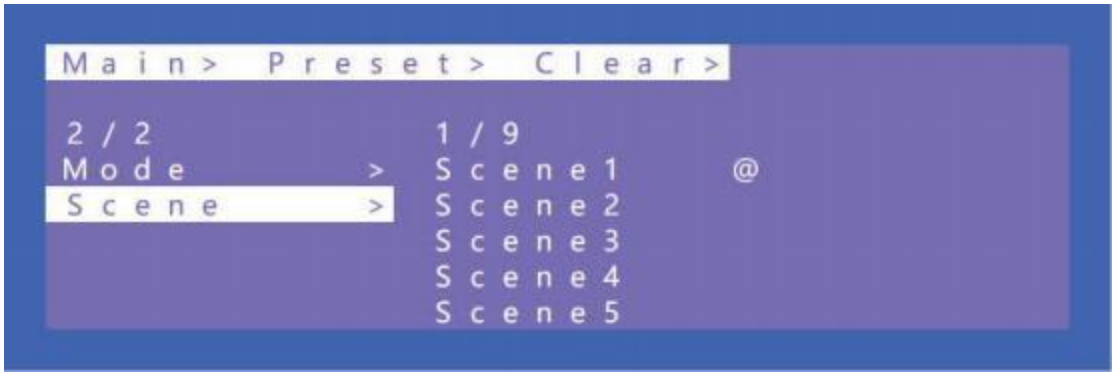
Save: Preset+Save+Scene+Scene1

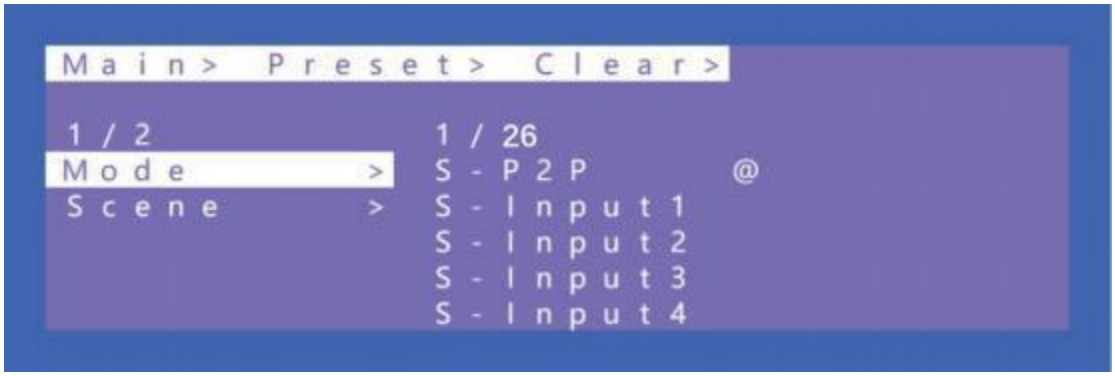
Call: Preset+ Call+Scene+Preset1

Clean: Preset+ Clean+ Scene+ Preset 1

Preset: Preset + Clear + scene +Preset1



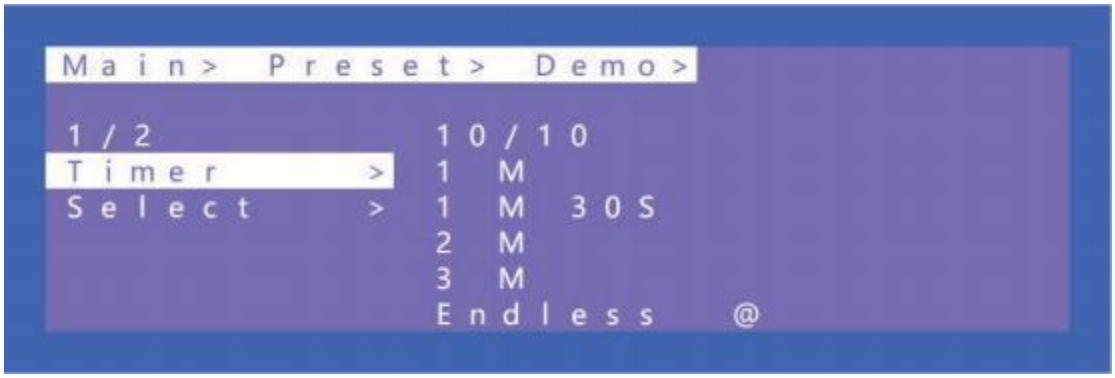




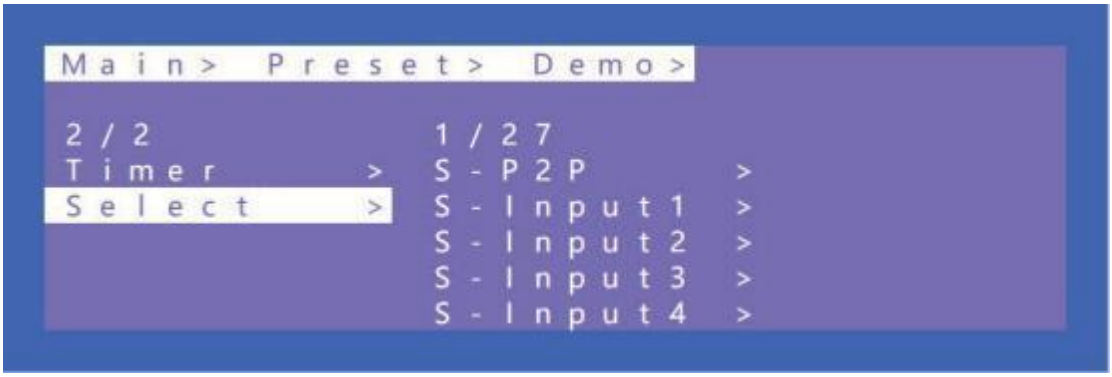
Demo operation:

Timer can set the rotation time, the default is “Endless”, the minimum time is 3 seconds.

Select indicates whether Select whether to perform the scenario in rotation. If this parameter is set to yes, the scenario will be played. If this parameter is not set to yes, the scenario will be skipped.



Demo



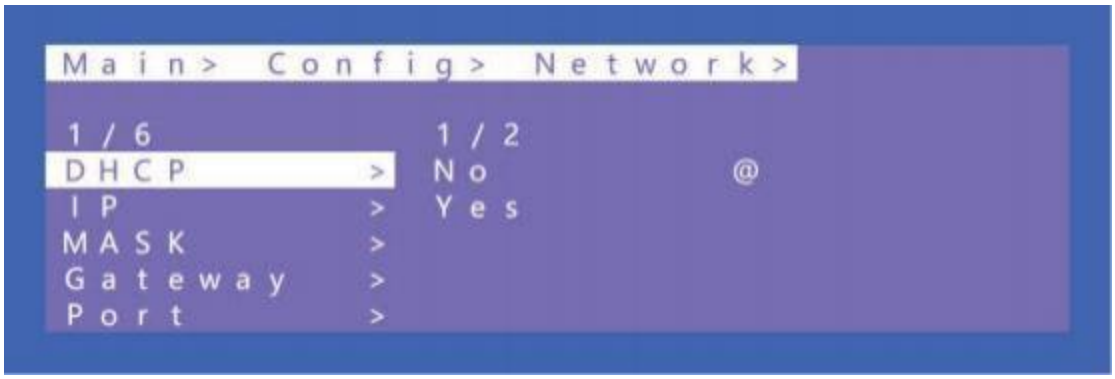
7.8 Config

Config can set network, RS232, LCD, OSD, MENU, user EDID, system.

Gray sections cannot be selected, a higher level is required to enable the function. The level are read-only and read-write.

1) Network

Network can set DHCP, IP, Mask, Gateway, Port and Mac. The Mac address cannot be changed. The default IP address is 192. 168. 1.200



DHCP operation:

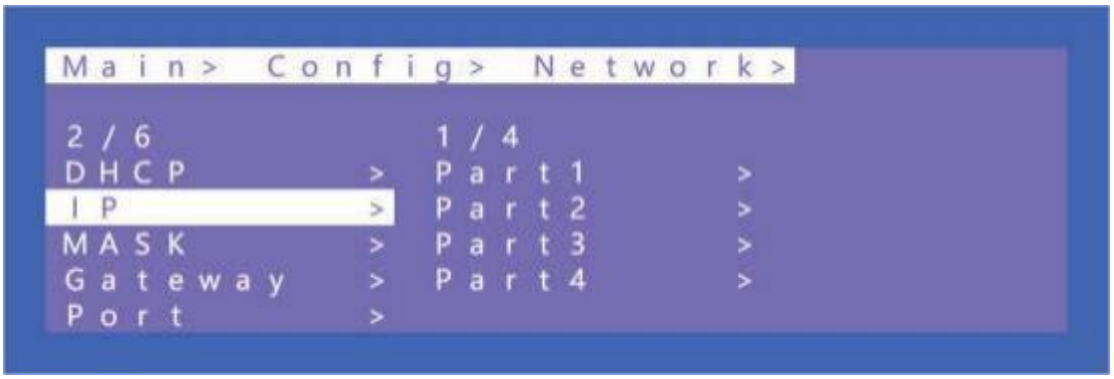
① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " network "

③ Click "ENTER" to enter the next sub-menu

④ Press “UP” or “DOWN” to select baud rate “DHCP”

⑤ Press “UP” or “DOWN” to select “No” or “Yes” to complete the operation.



IP/MASK/gateway Operation:

① Select “Config” in the main menu and press “ENTER”

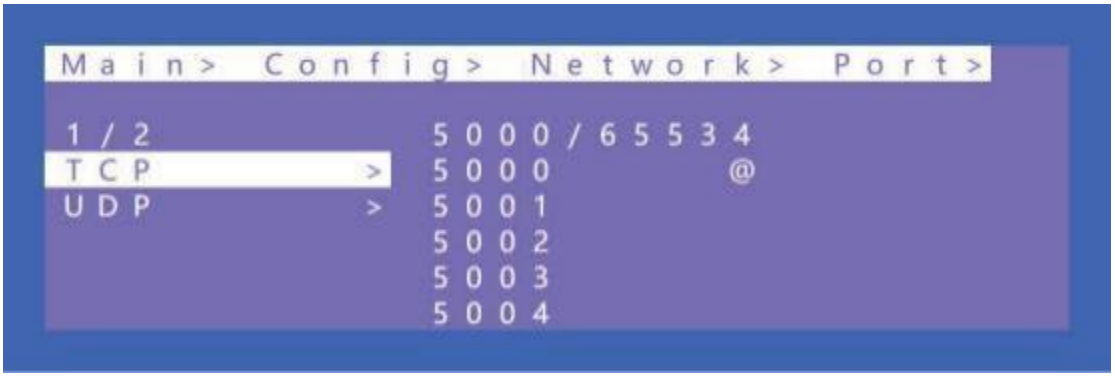
② Press “UP” or “DOWN” to select “ network ”

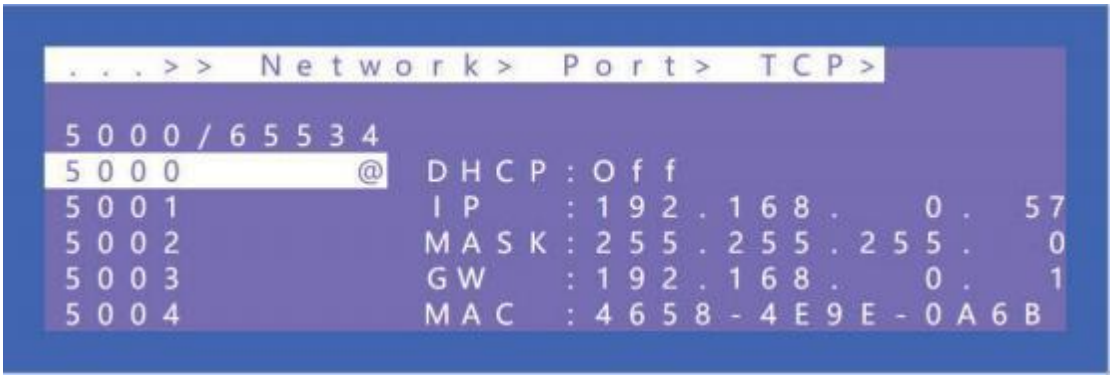
③ Click “ENTER” to enter the next sub-menu

④ Press “UP” or “DOWN” to select baud rate “IP/MASK/gateway”

⑤ Press “UP” or “DOWN” to select “0~255” to complete the operation.

TCP/UDP protocol, default port: TCP5000, UDP 5001





Operation of TCP/UDP port number change

① Select “ Config” in the main menu and press “ ENTER”

② Press “ UP” or “ DOWN” to select “ network ”

③ Click “ ENTER” to enter the next sub-menu

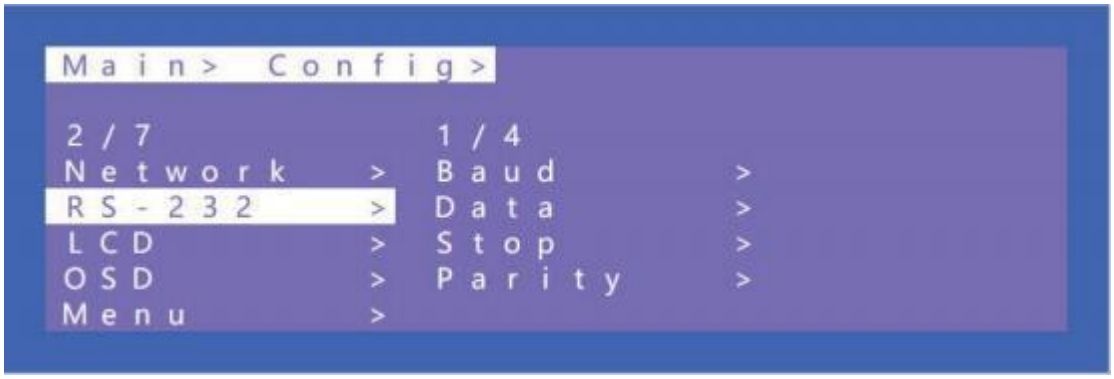
④ Press “ UP” or “ DOWN” to select baud rate “ Port” to enter the next sub-menu

⑤ Select “ UDP” or “ TCP”

⑥ Press “UP” or “DOWN” to select “ 1~65534 ” to complete the operation.

2) RS-232

Data, Stop, and Parity parameters cannot be changed by default. Only baud rate can be change. Other parameters can be changed only when the read/write permission is enabled by instruction, which is not enabled by default



Operation:

① Select “Config” in the main menu and press “ENTER”

② Press “UP” or “DOWN” to select “ RS232 ”

③ Click “ ENTER” to enter the next sub-menu

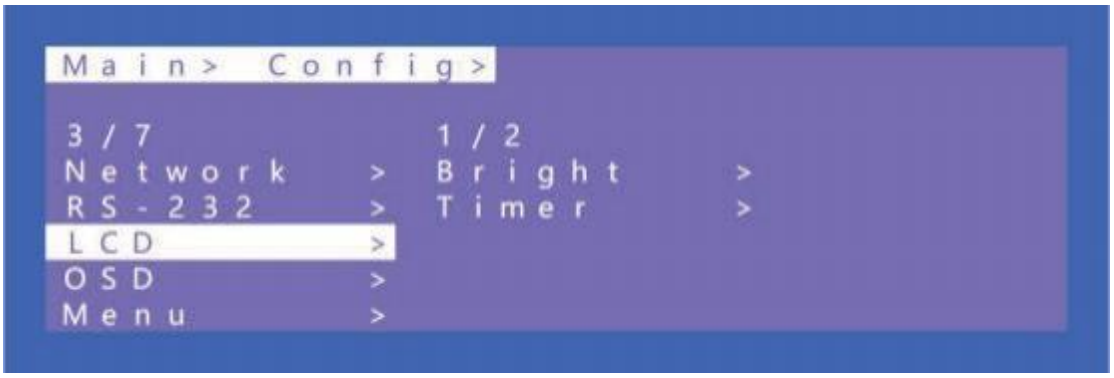
④ Press “ UP” or “ DOWN” to select baud rate “ Baud” to enter the next sub-menu

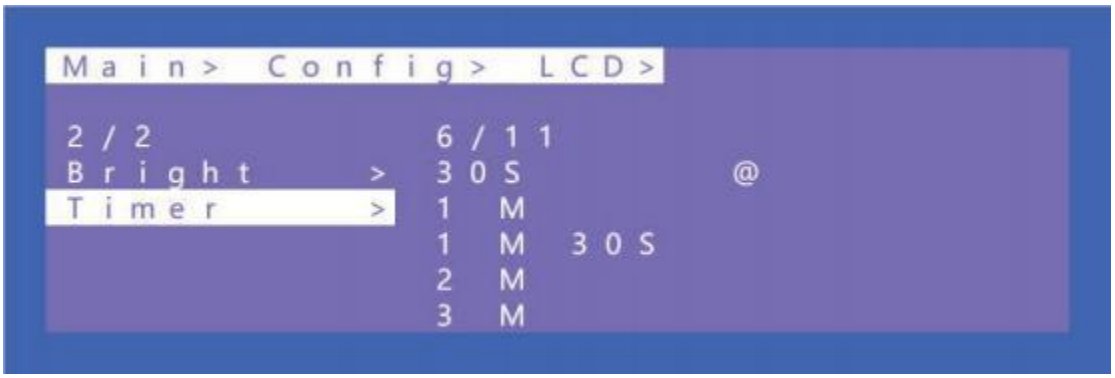
⑤ Select “4800~ 115200 ” and press”ENTER” to complete the operation

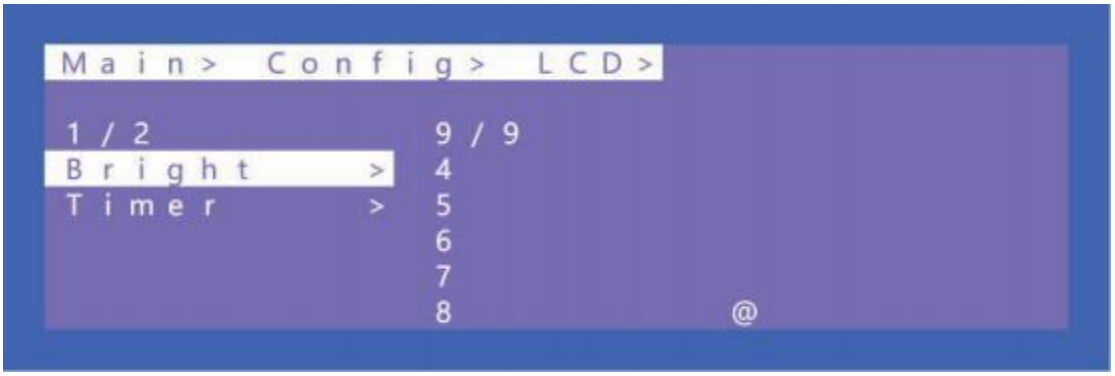
3) LCD

Bright can adjust the brightness ofthe LCD screen, and Timer can set the backlight time. The default backlight level is 8 and the time is 30 seconds.

Bright 0 to 8 indicates the backlight level, and 0 indicates off.
Timer can be set to 3 seconds ~ Endless.







Operation:

① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " Bright "

③ Click " ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select "0~8"

⑤ Click "ENTER" to compete the backlight brightness

4) OSD Setting

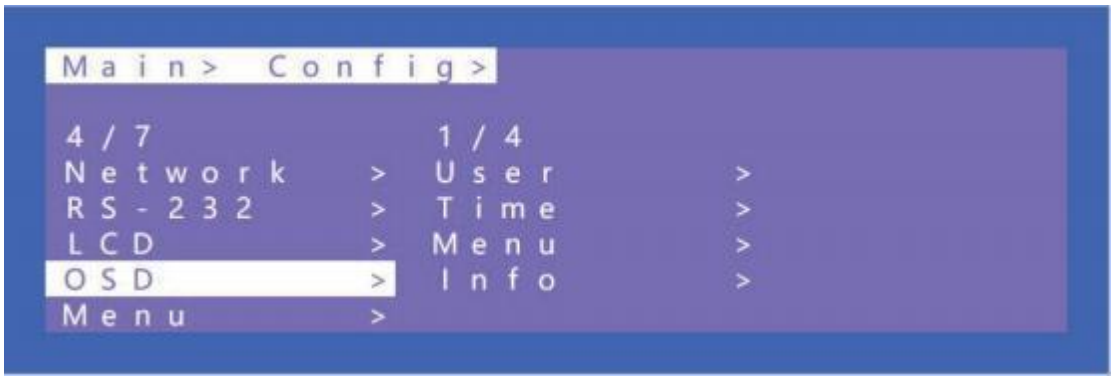
There are 4 options in OSD: User, Time, Menu, Info.
User indicates the output coordinate time of OSD.

Time indicates the running time after the device is power on.

Menu indicates that the LCD is mapped to the TV.

INFO indicates the displayed time of audio and video information.

When the parameter is set to 0 seconds, OSD display is turned off. By default, User and time are endless, menu and INFO are 30 seconds



Operation:

① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " OSD "

③ Click "ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select "User" and press "ENTER"

⑤ Press "UP" or "DOWN" to select "Time" and check the OSD display in the upper left corner ofthe TV

5) Menu

Timer indicates the time of menu returns to the channel.

Select Run indicates whether the confirm button ofthe last sub-menu is enabled.

If it is set to disable, you need to press "ENTER". If it is set to enable, you do not need to press "ENTER"

Operation:

① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " Menu "

③ Click "ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select "Timer" and press "ENTER"

⑤ Press "UP" or "DOWN" to select the return time.

Operation:

① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " Menu "

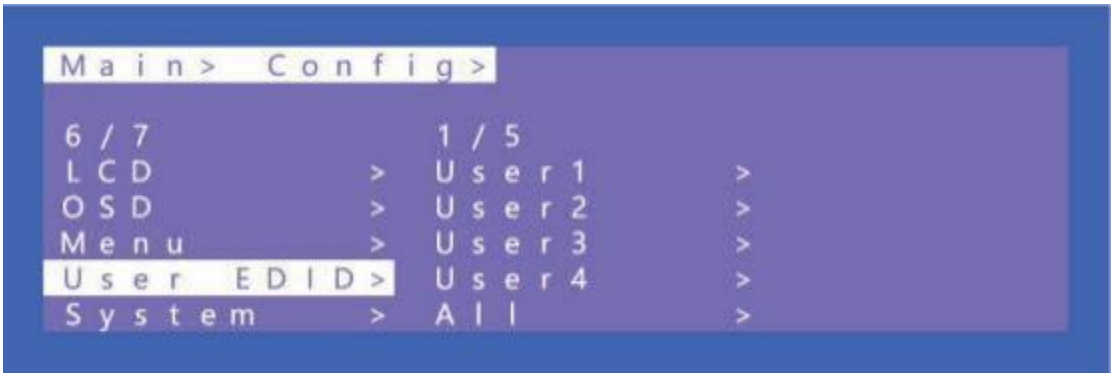
③ Click "ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select " Select Run" and press "ENTER"

⑤ Press "UP" or "DOWN" to select "Disable" or "Enable"

6) User EDID

User EDID can store the EDID ofthe output display device ofthe connection matrix to user1~4, which can be stored in default, output, and temp1, and then used in the EDID list.



Operation:

① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " User EDID "

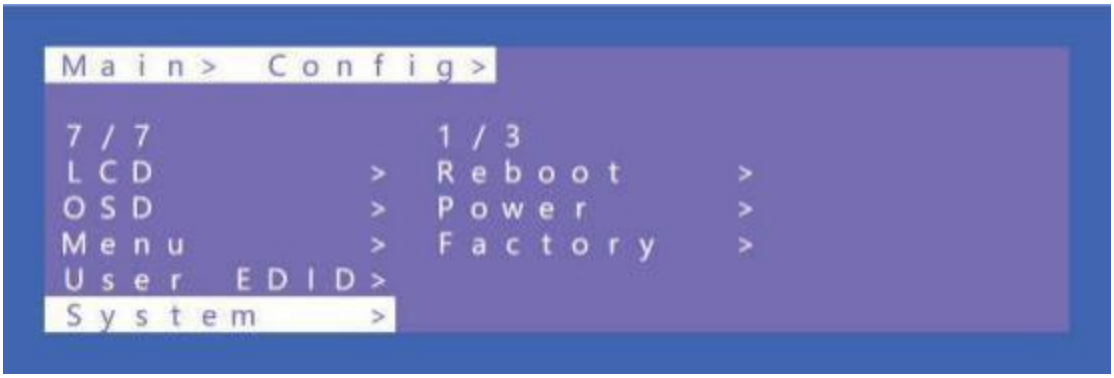
③ Click "ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select "User1 " and press "ENTER"

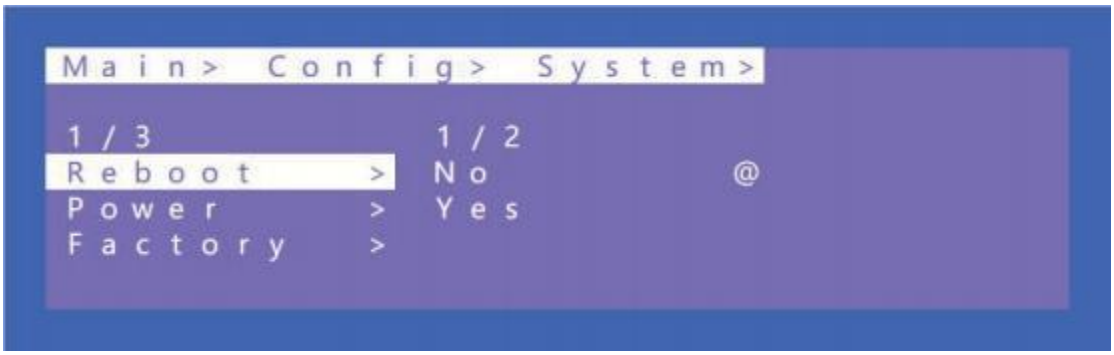
⑤ Select "Output1 " and press "ENTER" to complete the operation

7) System

System Setting includes reboot, Power, and Factory. Reboot indicates device restart, power indicates device sleep, and factory indicates factory data reset.



Reboot



Operation:

① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " System "

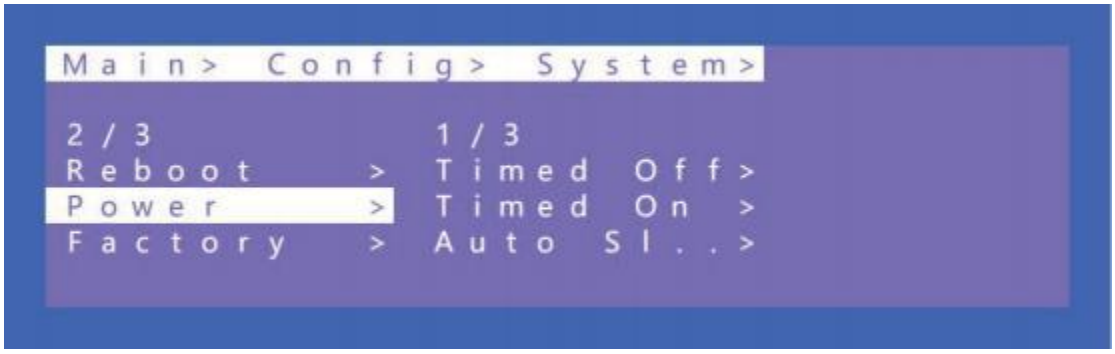
③ Click "ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select "Reboot" and press "ENTER"

⑤ Select "Yes" to complete the reboot.

Timed Off

Timed Off indicates timed standby, Timed On indicates timed wake up, and Auto Sleep indicates automatic sleep.



Operation:

① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " System "

③ Click "ENTER" to enter the next sub-menu

④ Press "UP" or "DOWN" to select "Power" and press "ENTER"

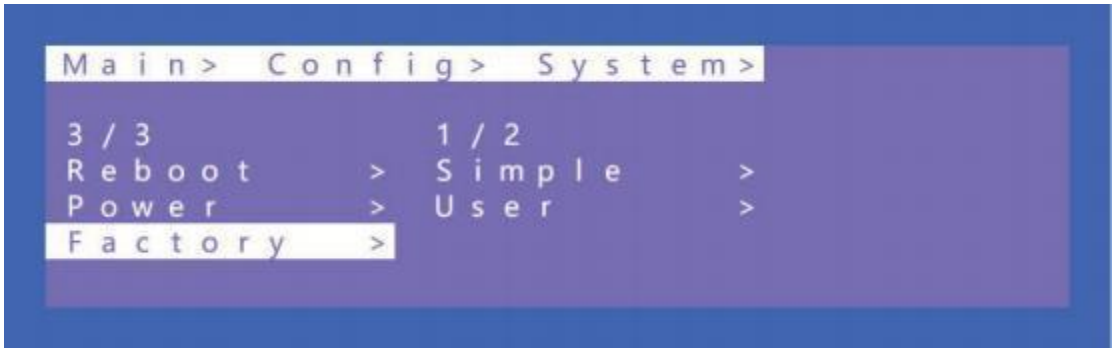
⑤ Select " Timed off" and press "ENTER" to enter the next sub-menu

⑥ Press "UP" or "DOWN" to set the scheduled standby time

Factoty

Simple: partially restores factory settings

User: restores all factory settings



Operation:

① Select "Config" in the main menu and press "ENTER"

② Press "UP" or "DOWN" to select " System "

③ Click "ENTER" to enter the next sub-menu

④ Press “UP” or “DOWN” to select “Factory” and press “ENTER”

⑤ Select “Simple” and press “ENTER” to enter the next sub-menu

⑥ Press “UP” or “DOWN” to select “Yes” to restore factory setting.

7.9 Info

Query device information, including input, output, system, and log. The information can only be queried and cannot be set or changed.

Input: resolution information ofthe signal sources input
Output: EDID information ofthe TV of outputs.

System: System information includes Web, version and company info.
Log: Matrix log

Operation:

① Select “INFO” in the main menu and press “ENTER”

② Press “UP” or “DOWN” to select “ System ”

③ Click “ENTER” to enter the next sub-menu to query the relevant device information.

8. Remote Control

: Standby or power on
: Mute button
: Return to upper level
: Move to next level
: Picture off
: Page turn by 100 ofthe last sub-menu
wm: Page turn by 10 ofthe last sub-menu
: Menu
: All output
: Up
: Menu
: OK
: Enter
: Down
: Return or exit
: Menu

When selecting Output,means Out1--out4
When selecting Input， means In1--In4

: Preset

: (N/A)

: Point to Point

9. Audio Extraction

9.1 HDMI audio

Default HDMI audio output support uncompressed audio PCM, LPCM2.0 digital audio DTS/Dolby5. 1 channel. The maximum sampling rate support 192KHZ, and it supports audio format and channel are forced into LCPM2.0.

Note: To support digital audio, enable modify to off. Otherwise Copy EDID will become forced 2.0 audio.

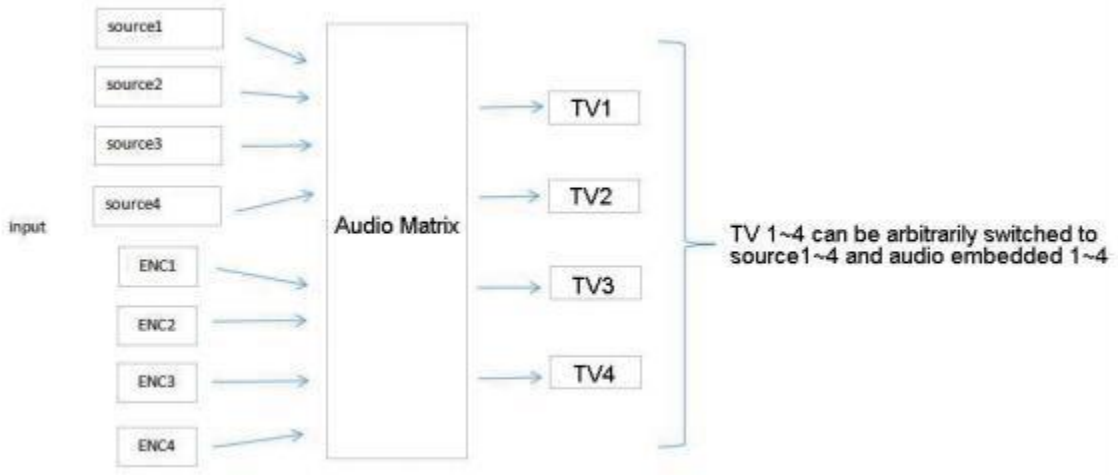
HDMI Source:

① ENC1～4 indicates that HDMI outputs select the embedding audio

② HDMI1～4 indicates that HDMI outputs select other audio source

③ Auto HDMI indicates that the input signal source is switched with the matrix, but the audio state is not switched

④ Auto ENC indicates the HDMI sound will be overwritten and replaced with the corresponding embedded audio



9.2 Audio Extraction

Audio extraction has analog audio extraction and coaxial digital audio extraction (as shown in the figure below). Analog audio extraction is connected to the speakers, coaxial digital audio extraction is connected to amplifier.

*1: Corresponding to the front end, the current channel can only select one audio each time

*2：The EDID sampling rate is forced to be 48Khz by default. Other audio sampling rates can be supported only when the forced modification function is disabled.

1) Analog Audio

① HDMI 1~4 indicates that HDMI output audio select audio from other input signal sources

②Auto HDMI indicates that the input signal source is switched with the matrix, but the audio state is not switched

2) Coaxial audio

1 HDMI 1~4 indicates that HDMI output audio select audio from other input signal sources

2 Auto HDMI indicates that the input signal source is switched with the matrix, but the audio state is not switched

3 Coaxial audio sampling rate up to 96Khz.

10. RS232 Control

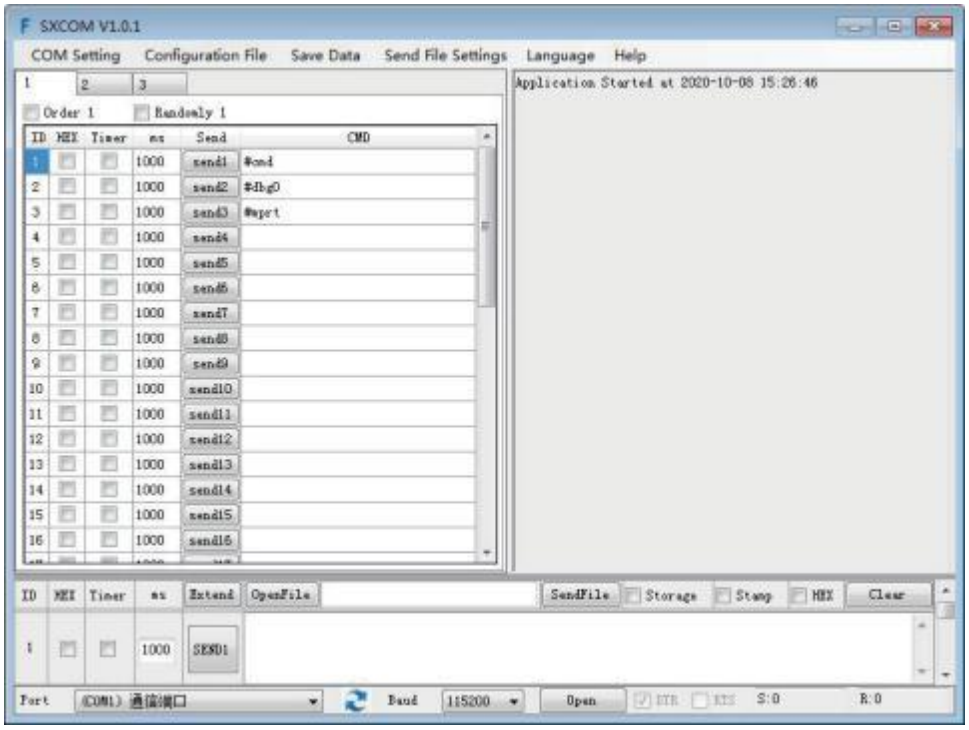
10.1 Open CommUart Assistant.

10.2 Comport setting:

Choose correct COM port that connect to PC in parameter configuration area.

Serial Port Default Settings	
Baud Rate	115200 bps(Default)
Parity Bits	None
Data Bits	8
Stop Bits	1

10.3 Enter Port Command in Send options.



10.4 Command List

1). All commands start with "#"

2)."_" the underline cannot omit.

3) Command head, Parameter and target need to add one "SPACE".

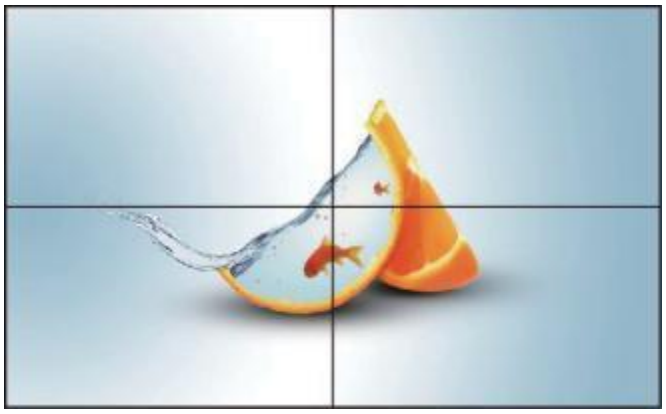
The following table is only an example.Please refer to the list of instructions.

Type	Format	Value	Regulation
Command head	#cmd	without	
Explain	Can be used to search command,after receiving command, the system will feedback all open command format fields		
Example1	#cmd		
	Search all open command		

11. Scene Instructions

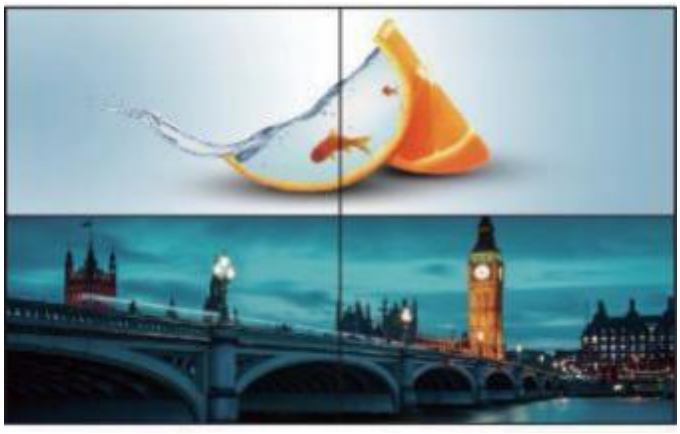
11.1 Video Wall Mode

Remarks: Parts ofthe scene require switching TV ports. For Example: Out2 and out3 need to be swapped when in mode W-2x1.



W-2x2 ： 2 Vertical x 2 Horizontal

W-1x2： 1 Vertical x 2 Horizontal

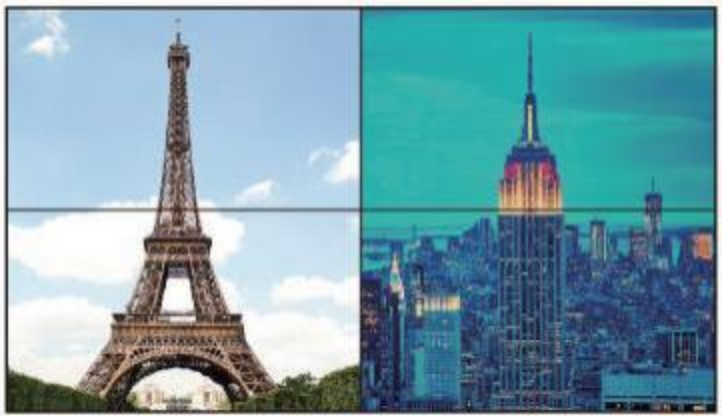


W-1x2 1x2： 1 Vertical x 2 Horizontal

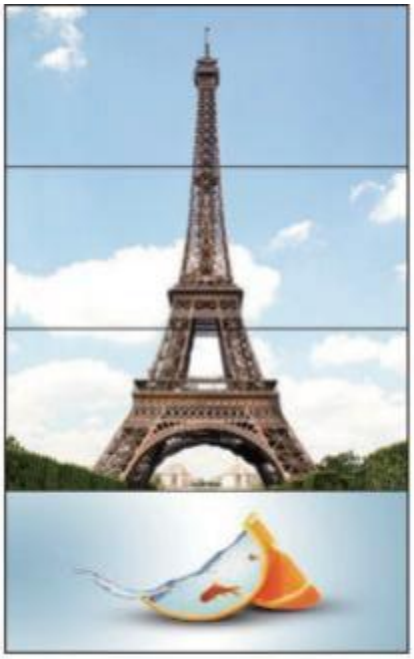
W-1x3: 1 Vertical x 3 Horizontal

W-1x4: 1 Vertical x 4 Horizontal

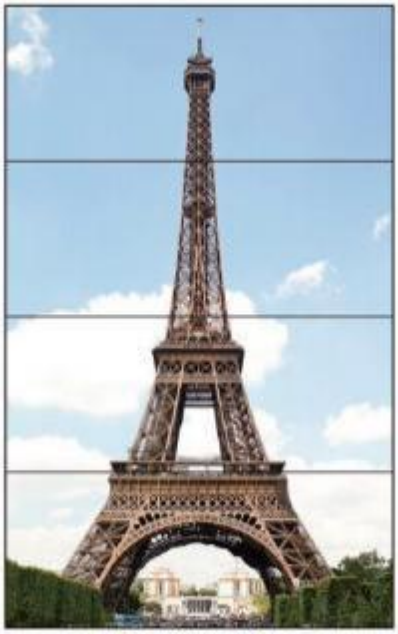
W-2x1： 2 Vertical x 1 Horizontal



W-2x1 W-2x1: 2 Vertical x 1 Horizontal



W-3x1: 3 Vertical x 1 Horizontal



W-4x1： 4 Vertical x 1 horizontal

11.2 Multi-Viewer Mode

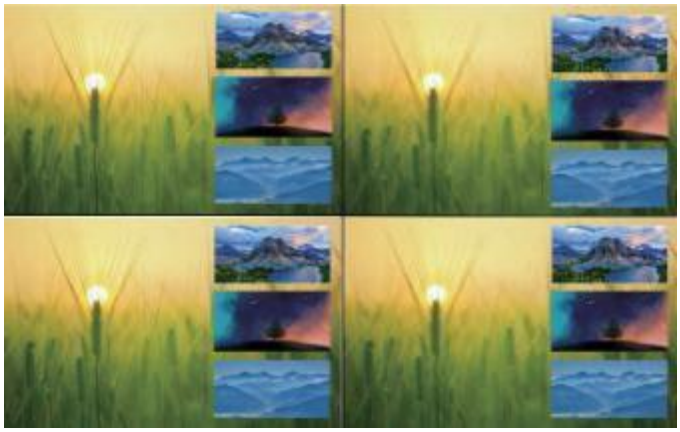
M-2x2

M-3x1-R

M-3x1-L

M-3x1-U

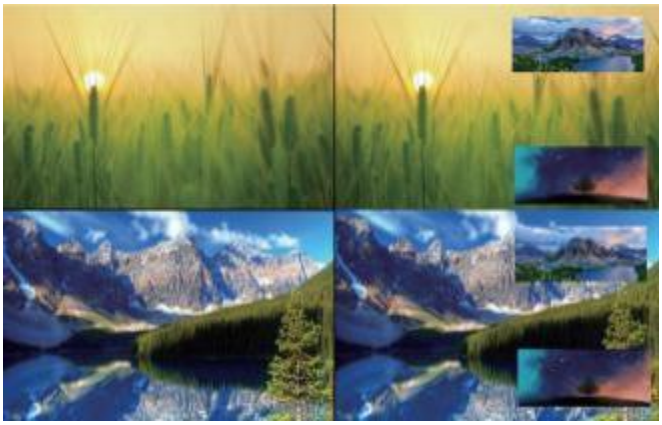
M-3x1-D



M-1+234 A

M-1+2 1+3 1+4 A

M-1+2 3+4 A



M-1+34 2+34 A

M-POP A

M-2x1+34 A

M-2x1+3　2x1+4 A

11.3 Image cropping and TV coordinate change

Input starting point： CROP X0(0) ， CROP Y (0) ，

Input ending point： CROP X1(3000) ， CROP Y0(3000)

Input scaling starting point： ZOOM X0(0) ， ZOOM Y0(0) ，

Input scaling ending point： ZOOM X1(6000) ， ZOOM Y0(6000)

Changing coordinates only supports operation panel;

Default wall coordinates output 1 (0,0) output 2 (1,0) output 3 (0, 1) output 4 (1, 1);
Output 1 number ofwall width=2 and height=2. Other outputs must be auto.

If output 1 and output TV exchange with each other;

Output 1 (1,0) output 2 (0,0) output 3 (0, 1) output 4 (1, 1);
Output 2 Number ofwall width=2 and height=2. Other outputs must be auto.

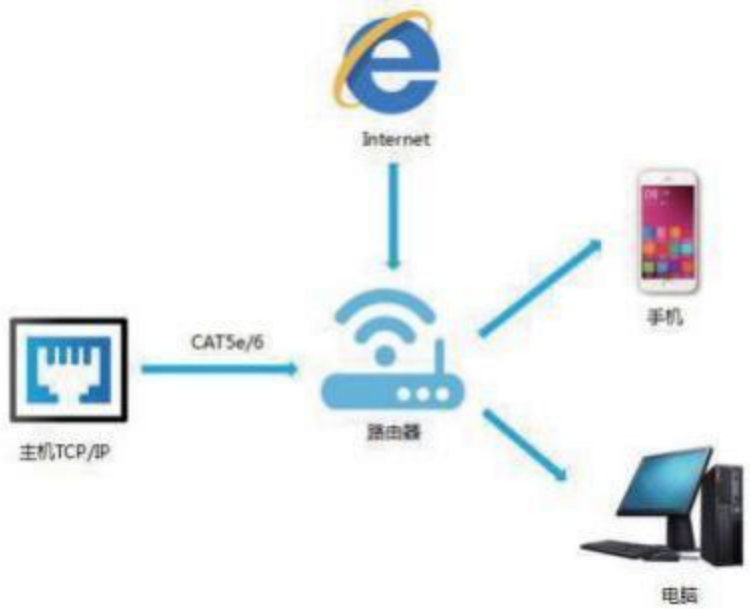
11.4 Cascading

Default coordinates are on the right, changed coordinates are on the left

Cascading wall: Multiple matrices need to be used, and then fill in the coordinates according to the sequence ofthe wall. The height and width ofthe wall should be set for the first output, and all other outputs and matrix outputs should be set to Auto, for example:

wall(x0, y0) height(3) wight(3)	wall(x1, y0) height(auto) wight(auto)	wall(x2, y0) height(auto) wight(auto)
wall(x0, y1) height(auto) wight(auto)	wall(x1, y1) height(auto) wight(auto)	wall(x2, y1) height(auto) wight(auto)
wall(x0, y2) height(auto) wight(auto)	wall(x1, y2) height(auto) wight(auto)	wall(x2, y2) height(auto) wight(auto)

12. Web Control



12.1 Change IP address of PC

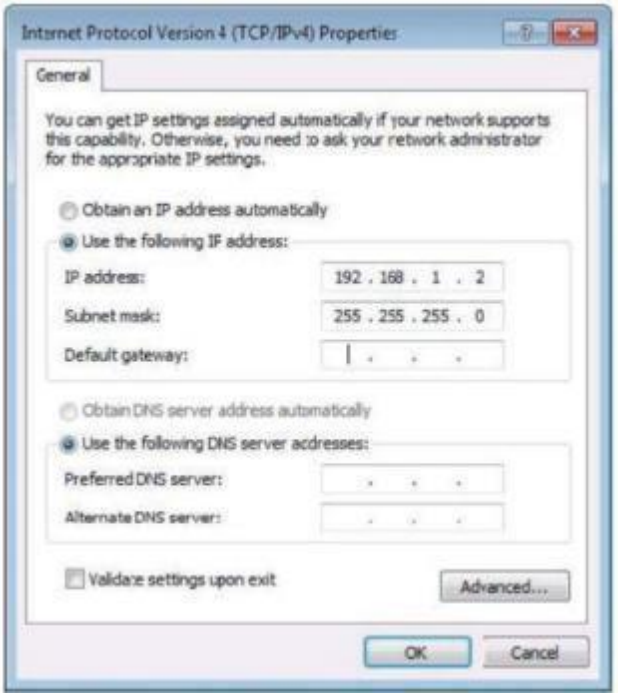
Before configuring the device through the website, it is necessary to configure the IP address ofthe computer configured with the device (mainly to ensure that the computer and the device are set in the same network segment).

1). Open the network control center and set the computer's IP address:

2). Choose to use Static IP, with the IP address set to 196. 168. 1.x (x ranges from 0 to 254, but cannot be consistent with the device's IP address),

3) . Subnet mask set to 255.255.255.0

4). Gateway set to 192. 168. 1. 1



Operating Instruction

12.2 Log in by browser

Default IP address for log-in:192.168.1.200

Type in user name and password (default user and default password: admin)

Note:suggest to use newer version of Google, Firefox, IE11 browser for better compatibility.

13. WEB

13.1 Status

1) In the Status interface, you can only view information but cannot modify it

2) Input INFO displays the resolution, audio and HDCP information ofthe input signal source

3) Output EDID Info interface will display partial EDID information ofTV

4) Device Info displays MCU version and web version

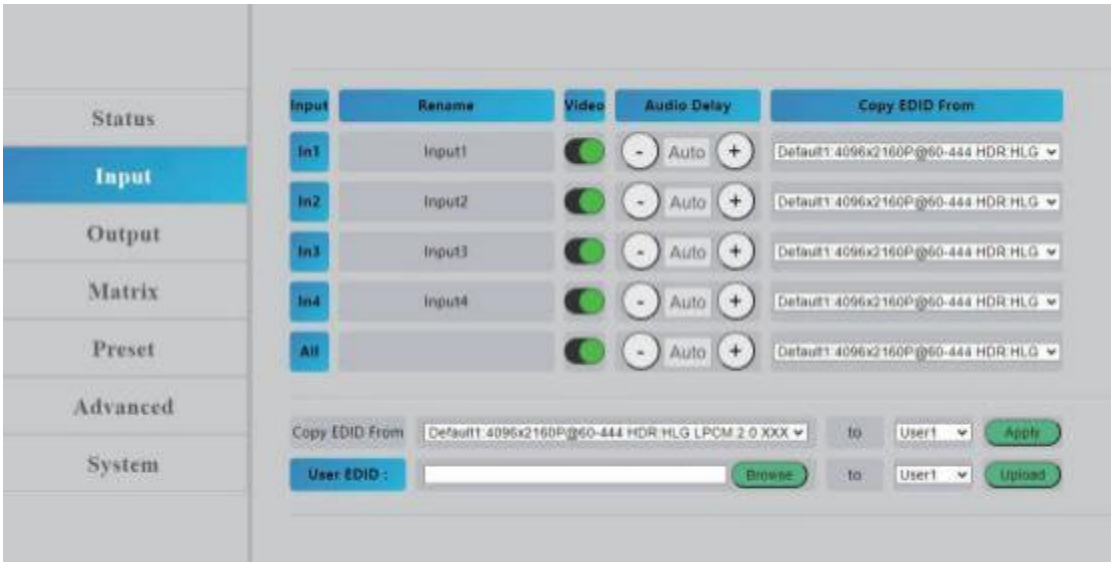
13.2 Input Menu

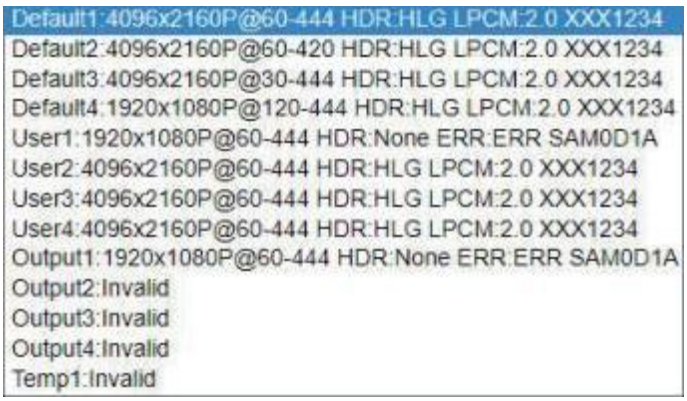
1) Rename: The input name can be changed by double-clicking input1~4.

2) Video: Click the green buttons to enable or disable the video inputs.

3) Audio delay: The default is Auto, click "-" or "+" to adjust.

4) Copy EDID: Default1 ~4, user1~4, output1~4, temp1 can be switched to the inputs





5) USER EDID can save the EDID of Bin document to User1~4. Click Browse to find the route of EDID, select User1~4 and click upload to save it.

6) Copy EDID of sink to User1~4

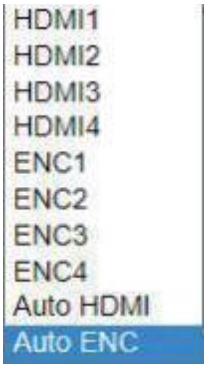
13.3 Output Menu

1) Rename: Output name can be changed, double click output1~4 to modify

2) Video: Click the green button to enable or disable the video outputs.

3) Audio HDMI: Click the green button to enable or disable the audio outputs.

4) HDMI Src Switch HDMI output audio, click the drop-down box to select HDMI1-4, ENC1-4, Auto HDMI, Auto ENC 10 options, no need to confirm after the selection, automatic effect.



5) Audio Dec: Turn on/off audio separation, coaxial and analog on and off at the same time.

6) Dec Src: audio separation switching, click the drop-down list box to select hdMI1-4 and AUTO HDMI options. The options take effect automatically without confirmation.

7) Format: Output video format, the default is auto. Following the output TV EDID specifications, you can manually select 4K60, 4K30, 1080P60, 720P60.

13.4 Matrix

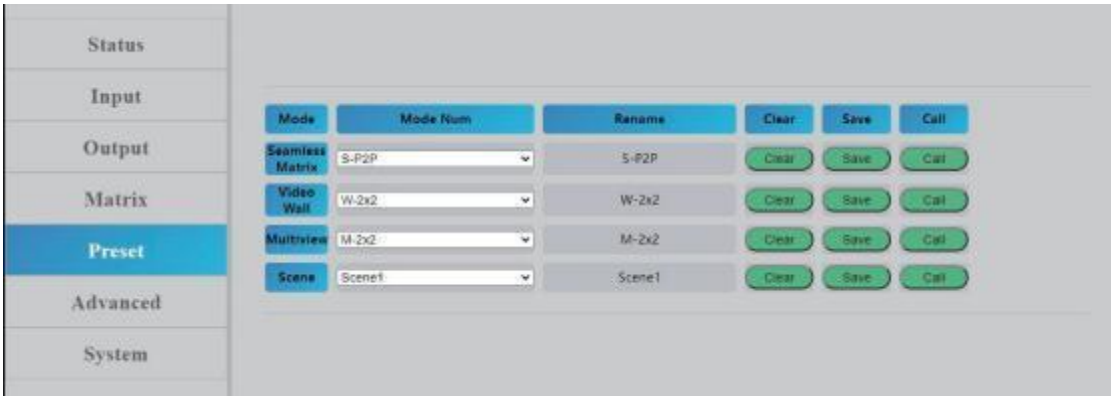
1) Input1~4 corresponds to the input ofmatrix access 1~4, Output1~4 corresponds to the output of matrix 1~4, click the mouse button can directly realize the matrix switch.

2) Output all indicates that all outputs are switched to one input.

3) If the button turns blue, it indicates the input signal source corresponding to the current output TV.

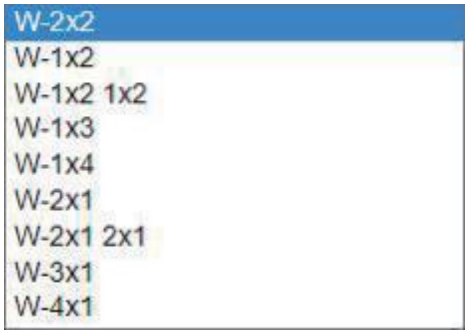
13.5 Preset Menu

Preset can be used to call, save, clean and customize the scene name.

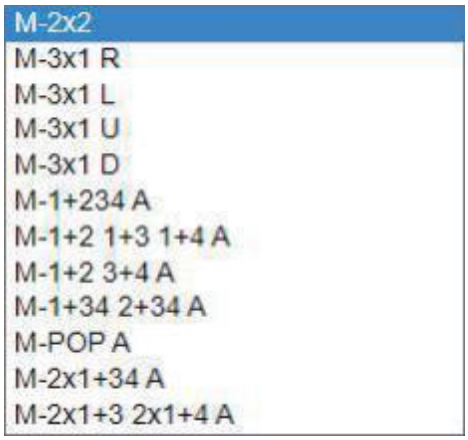


1) Seamless matrix can complete P2P, input1, input2, input3, input4. Click the drop-down box to select "Call", click "Save" to save the current scene, and click "Clear" to clear the scene to the default value.

2) Video wall can customize the new scene. The default mode is the built-in wall mode ofthe system. Click the drop-down box to select call, click Save to save the current scene, and click “Clear” to clear the scene to the default value.



3) Multi View can implement that display 4 pictures on the same screen and has multiple split display modes; The new scene mode can be customized. Click the drop-down box to select "Call" to call directly, click "Save" to save the current scene, and click "Clear" to clear the scene to default value.



4) Scene can save and customize scene. There are 8 scenes. The default scene is the same as factory setting.

5) Rename can change the scene name. Double click to modify the name.

13.6 Advance

1) PIP mode switch. Click the button to enable or disable the mode.

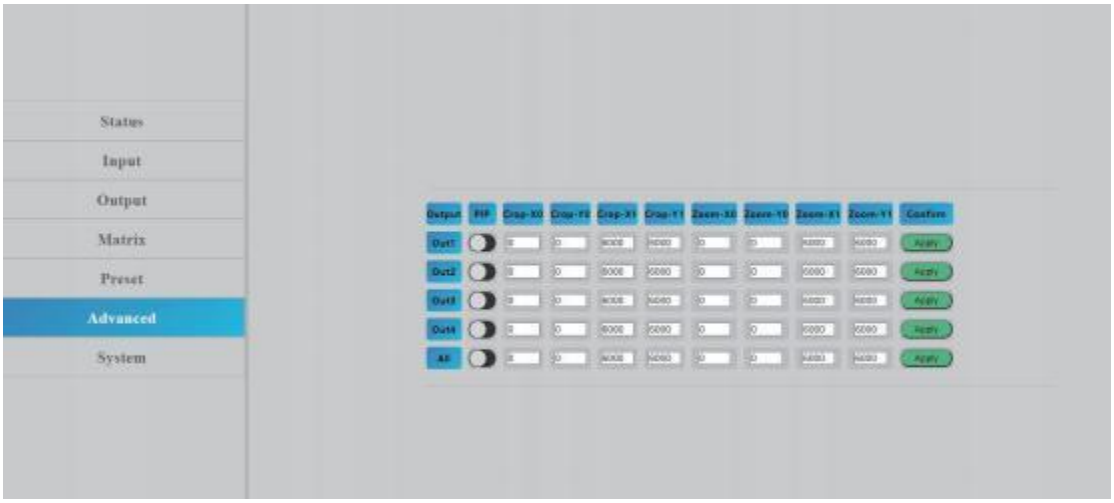
2) Crop-X0 (Image cropping starting point of horizontal coordinates, range 0~6000)
Crop-Y0 (Image cropping starting point of vertical coordinates, range 0~6000)

Crop-X 1 (Image cropping ending point of horizontal coordinates, range 0~6000)
Crop-Y 1 (Image cropping ending point of vertical coordinates, range 0~6000)

Zoom-X0 (Image scaling starting point of horizontal coordinates, range 0~6000)
Zoom-Y0 (Image scaling starting point of vertical coordinates, range 0~6000)

Zoom-X 1 (Image scaling ending point of horizontal coordinates, range 0~6000)
Zoom-Y 1 (Image scaling ending point of vertical coordinates, range 0~6000)

6) Press "Apply" after inputting the coordinates.



13.7 System

1) Network includes Mac address, IP, mask, gate, DHCP, TCP port. Mac address cannot be modified. IP address can modified in condition that DHCP is off and a highest level account is required.

2) Account Management can revise account. A high level account cannot be modified by a low level account which can modify the current login account only.

3) Reboot

4) Factory Simple: restore partial factory settings.

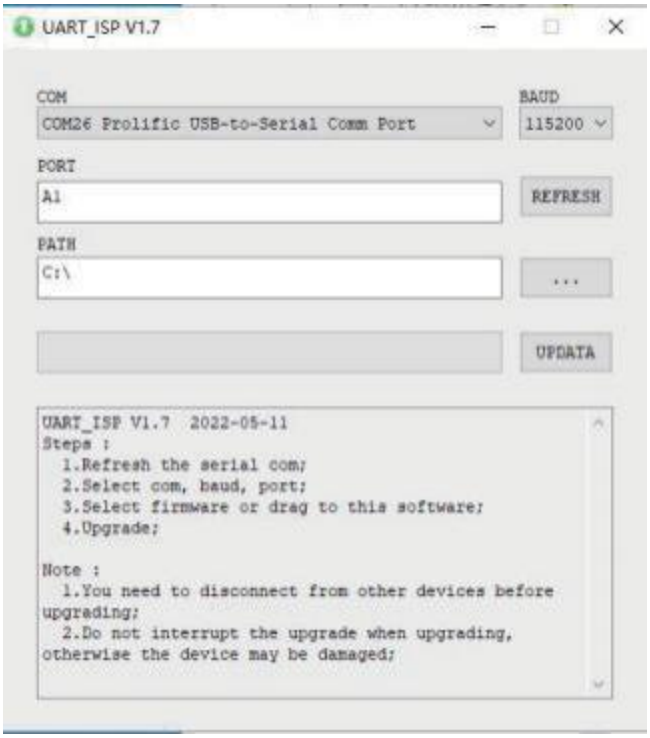
5) Factory User: restore all factory settings.

6) Config management: import or export configuration files

14. Firmware Updating

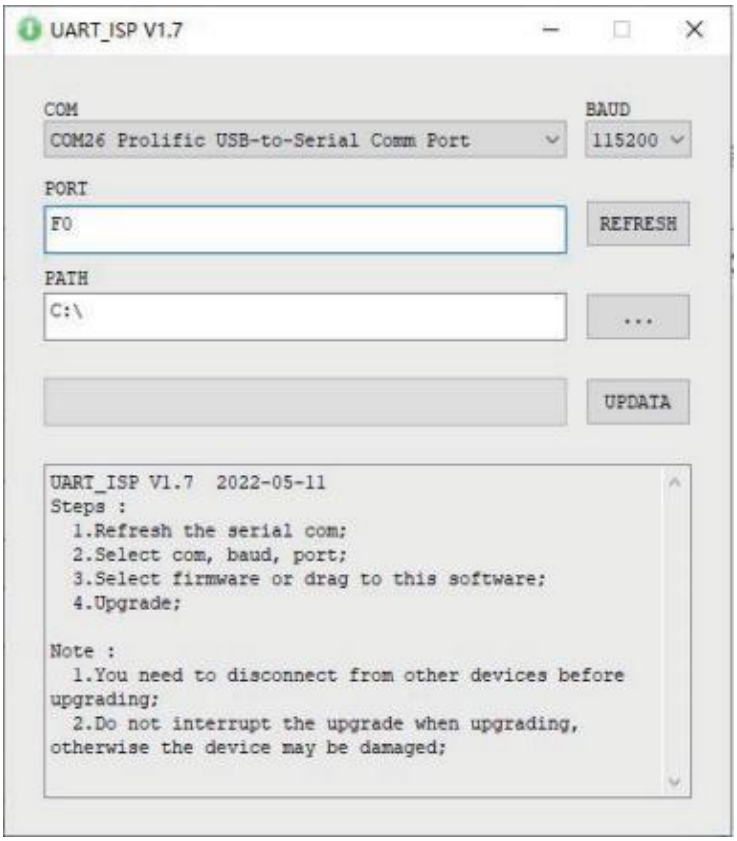
14.1 MCU application layer upgrade

Open the software UART_ISP.exe in PC, select the correct port, the baud rate 115200, input the "A 1" in port, and select the path (.bin format) ofthe program, and click “update” to complete the upgrade.



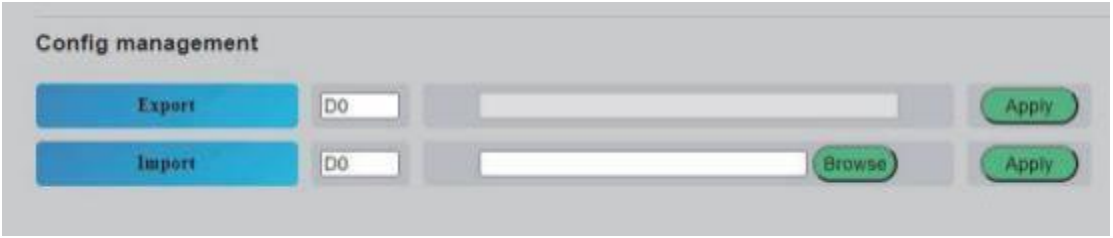
14.2 GUI Web Page Upgrade

Open software UART_ISP_V 1.7 . exe in PC, select correct port, baud rate 115200, input F0 and select a program (xxx.HTML) in path, click update to complete upgrad



14.3 DTA file import/export

PORT: Number setting



Dx: Indicates the DAT configuration, which is generally a .DAT file, PC or web page burning after the completion of the device automatically restart.

D0: Indicates the configuration information at the permission level 0, including running information and general Settings.

D1: Indicates advanced configuration information (also includes D0 information, similarly below), usually including user-defined names, USER EDID, scene, etc.

D2: Indicates the highest level open to customers, including account and password information and infrared learning information

Ex: Indicates USER EDID, which is generally a .bin file.

E0: USER EDID

E1: USER EDID 1;

EDID needs to be stored in user before it can be exported.

CUSTOMER CARE CENTRE

12 MONTH WARRANTY

1. **This product is warranted for 12 months from the date of purchase.**
Subject to the conditions of this warranty, the Customer Care Centre will perform necessary service on the product without charge for parts, or labour if, in the opinion of the manufacturer/ manufacturer's agent, the product is found to be faulty within the warranty period.

2. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care. The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltage, accident, misuse, neglect, build-up of dirt or dust, abuse, mis-adjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.

3. If warranty service is required you should:
   - Telephone the Customer Care Centre on 1300 662 946
   - Provide a copy of your purchase receipt that shows retailer's identity and date of purchase.
   - Send or bring the product to your Customer Care Centre.
     Please note that freight to and/or from your Customer Care Centre must be arranged by you.

4. The warranties hereby conferred do not extend to any costs associated with the delivery, handling, freighting or transportation of the product or any part thereof or replacement of and do not extend to any damage or loss occurring during, or associated with transit.

THIS WARRANTY CARD AND THE PURCHASE DOCKET
(OR SIMILAR PROOF OF PURCHASE)
SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

TROUBLE SHOOTING HELP LINE
(03) 9321 8300

Customer Care Centre
562 Spencer Street, West Melbourne
VICTORIA 3003

Pro.2 Providing AV Solutions

This advice does not limit, override or later your guaranteed rights under the Australian Consumer Law, including remedies for any failure of the Consumer Guarantees, which may include repair or replacement or it a Major Failure (as defined under the Australian Consumer Law) a replacement or refund. These guaranteed rights cannot be varied by Pro.2 or retailers of its products and have no set time limit.