SYSOLUTION

S45S

Operating Instruction

Version：V.1.1

Statement

Dear user friend, thanks for choosing SHENZHEN SYSOLUTION TECHNOLOGY CO.,LTD (hereinafter referred to as Sysolution) as your LED advertising equipment control system. The main purpose of this document is to help you quickly understand and use the product. We strive to be precise and reliable when writing the document, and the content may be modified or changed at any time without notice.

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Update Record

NO.	Version Number	Update	Revised date
1	Ver.1.0	initial issue	2023.08.29
2	Ver.1.1	Add contents	2024.11.07

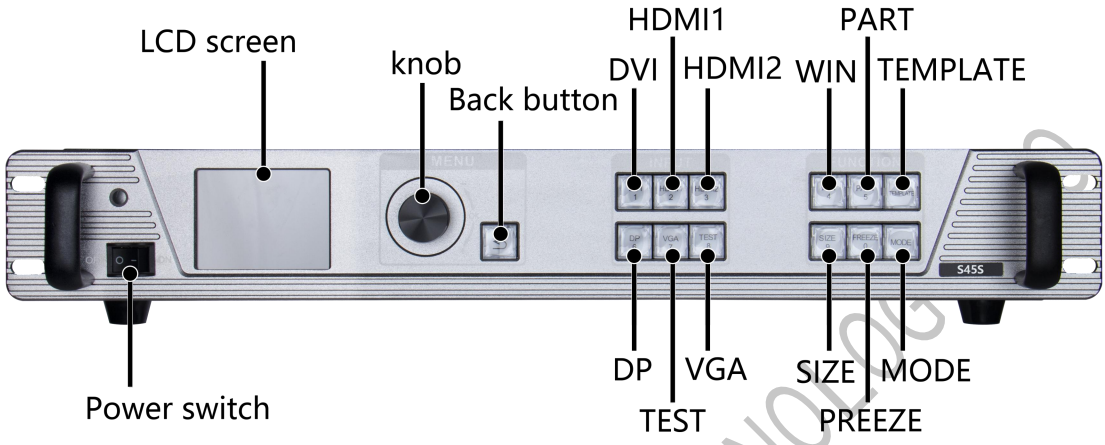
Note: The document content is subject to modification without prior notice.

Include the model number: S45S S52 S50 S60E

Catalog

Interface Definition

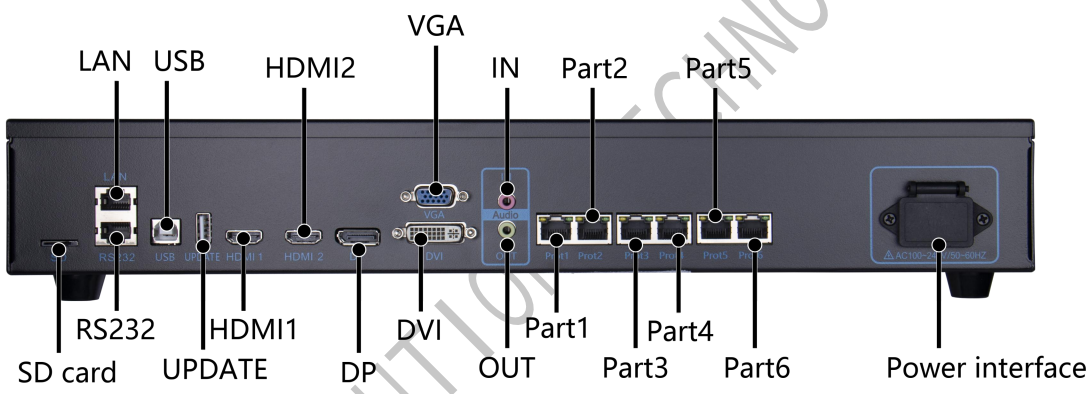
Front Panel



Front Panel Description		
Number	**Button**	**Description**
1	Power Switch	Device power on/off
2	LCD screen	Display operation menu
3	Operation buttons	Knob button for menu selection Return button
4	Input source switching keys	DVI, DVI input/number key 1 HDMI1, HDMI1 input/number key 2 HDMI2, HDMI2 input/number key 3 DP, DP input/number key 6 VGA, VGA input/number key7

		TEST, Test card key/number key8
5	Function keys	WIN, Layer Selection/number key 4 PART, partial full-screen shortcut/number key 5 TEMPLATE, multi-screen template shortcut key SIZE, screen resizing shortcut/number key 9 FREEZE, image black screen / number key 0 MODE, loading scene shortcut

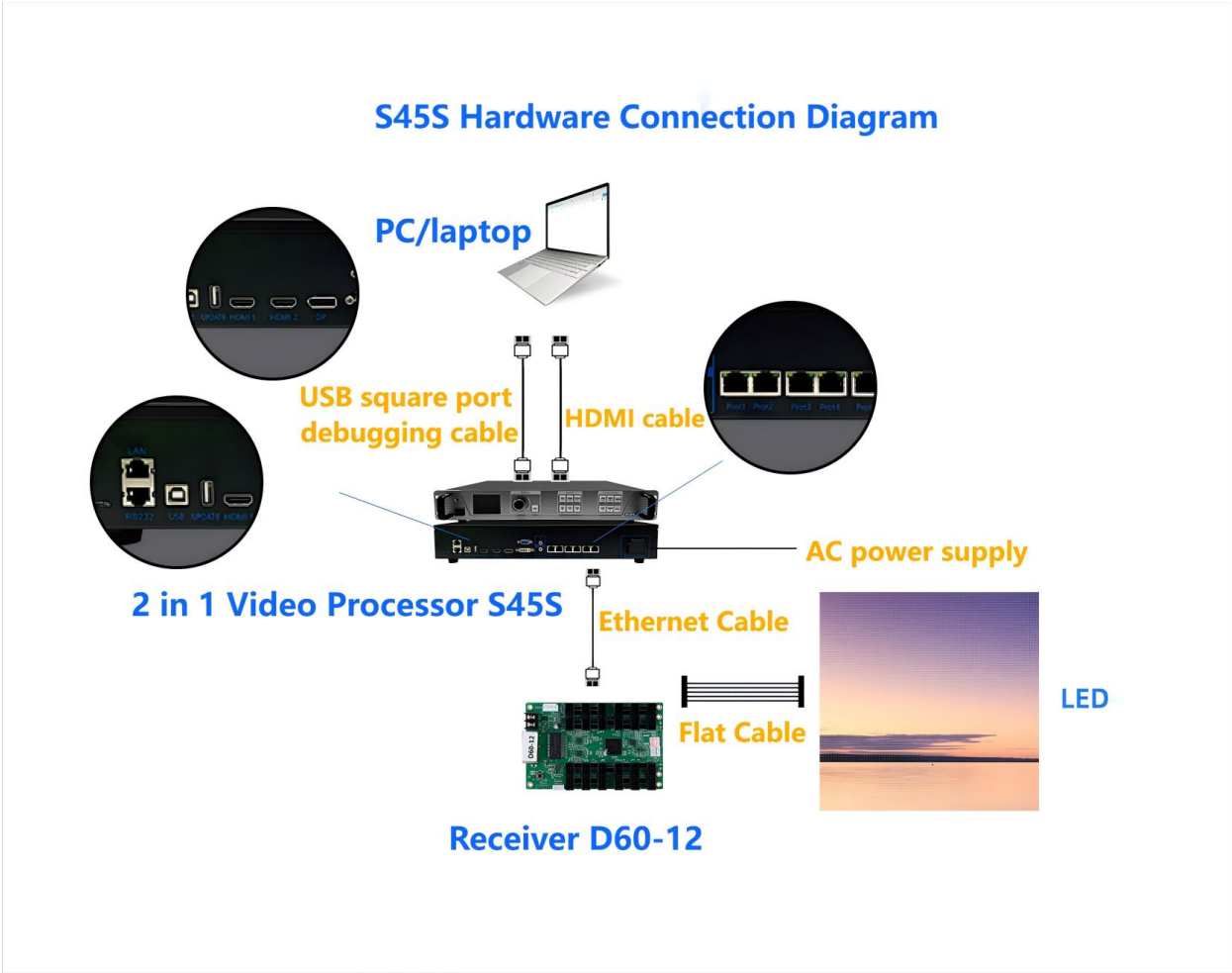
Rear Panel



Extended Function Interfaces		
Interface	**Number**	**Description**
SD card	1	Install SD card to store large screen configuration parameters for data patrol
Input Interfaces		
Interface	**Number**	**Description**
DVI	1	1920x1080/60HZ, 3840*540/60HZ and EDID management
HDMI1	1	1920x1080/60HZ, 3840*1080/60HZ and EDID management

HDMI2	1	1920x1080/60HZ, 3840*1080/60HZ and EDID management
DP	1	1920x1080/60HZ, 3840*2160/60HZ and EDID management
VGA	1	1920x1080/60HZ and EDID management
Output Interfaces		
Interface	**Number**	**Description**
Gigabit network port	6	Interface type: RJ45 Transmission speed: 1000BaseTX Support receiving card: D70/D90 series receiving card and multi-function card
Processor Control Interfaces		
Interface	**Number**	**Description**
UPDATE	1	USB upgrade port
USB	1	Support 1920×1200@60Hz
LAN1	1	100M network communication interface (reserved interface)
RS232	1	Serial port interface
Power supply interface		
Interface	**Number**	**Description**
Power connector	1	AC power input interface 100V~240V

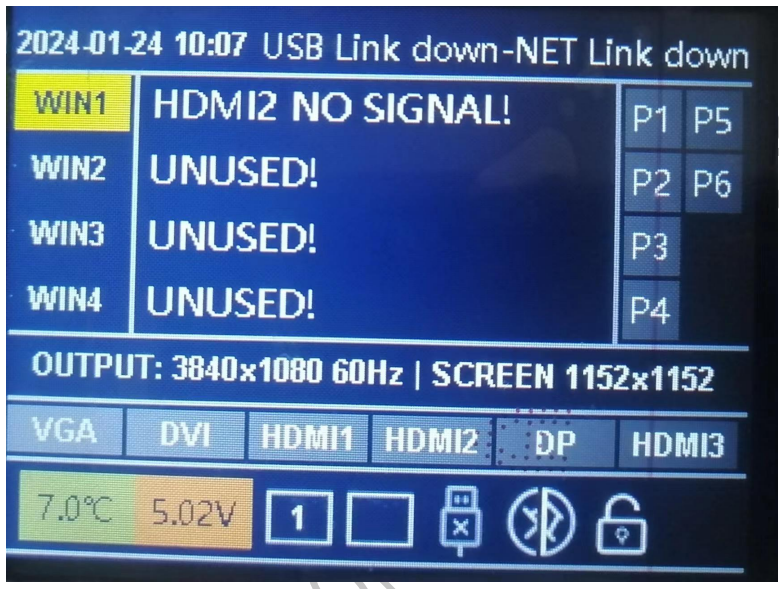
Hardware connection diagram



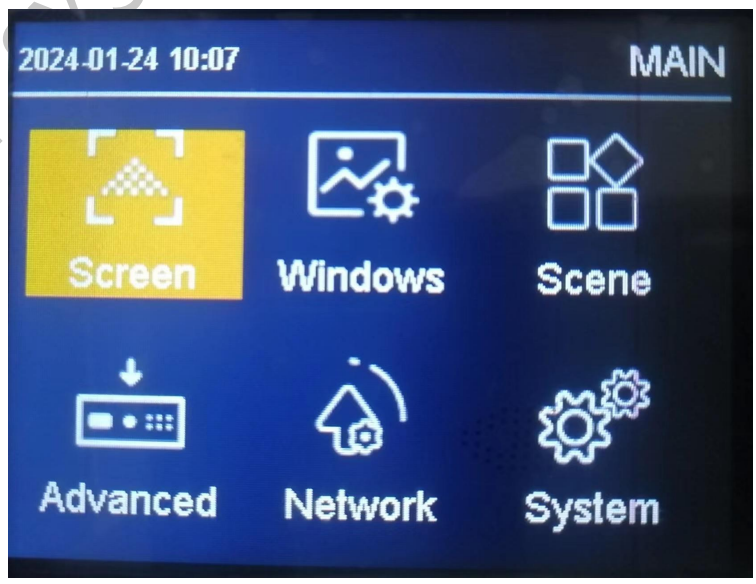
Operation Menu

LCD screen Interface Instructions

When power on and device run up, lcd screen will show like the screenshot in below:



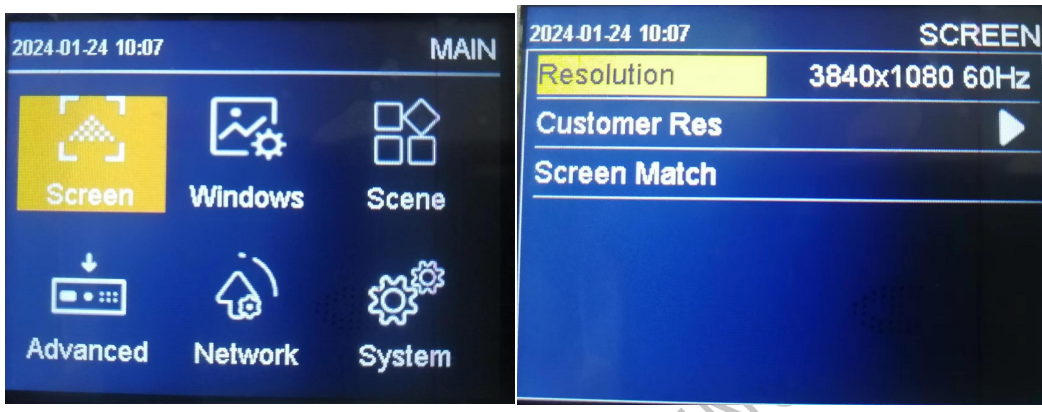
It accurately displays the signal source resolution, each window information, network port connection status, key lock status, USB debugging cable connection status and other information input from our front end.



Screen Parameters

Output Resolution

Enter "Output" Menu and will see the screenshot in below:



The system presets 18 output resolutions, see the picture above. When actually applied to an LED display screen, we can choose a preset output resolution that is larger than the LED screen resolution, or set it to an output resolution that is exactly the same as the LED display screen resolution.

For example, we use a desktop computer with a 1920X1080 resolution monitor. The graphics card output is set to copy or extend the 1920X1080 resolution. The DVI line is output to the video processor. The LED screen resolution is 1344X704 and use one sending card to support. How to set it up? What about the LED video processor parameters? The following introduces the general setting method:

Operation method:

First of all, the interfaces of each hardware device must be normal and the input and output connections must be correct. I will not go into details here.

Step1, Set the output resolution. Specific operations: Main menu - "Output" - "Resolution" to select a preset resolution larger than 1344X704, such as "1366X768, 1680X1050, 1920X1080", apply;

Step2, set full-screen display, that is, the entire desktop of the computer is scaled and displayed on the LED screen. Specific operations: Main menu - "Output" - enter "Window Adjustment" and change the horizontal width to 1344 and the vertical height to 704;

Step3, Use the set parameters as a template. Specific operations: Main menu - "Scene" to save, select a template to save.

Customized Resolution

When there is no output resolution that meets our needs among the 18 preset output resolutions, such as 1920X1280 size, then it is necessary to customize the resolution. Specific operations: Main menu - "Output Display" - "Resolution" - " Custom Resolution", set the screen width to 1920, the screen height to 1280, the refresh rate to 60, and apply.

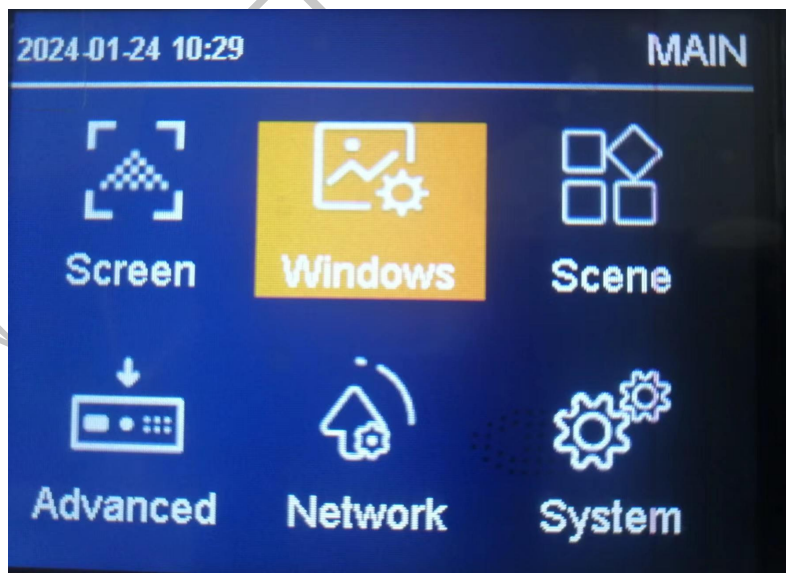
Match Screen

Screen matching: Automatically identify the LED screen parameters set using the host

computer software LEDSET4.0.

Window Display

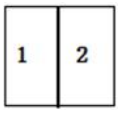
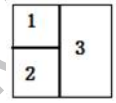
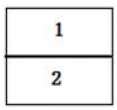
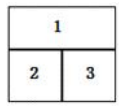
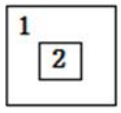
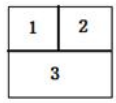
Set quick window opening, window size, window input image screenshot, image quality settings, built-in test images, input audio selection, output volume, image freezing, and output black screen.

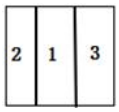
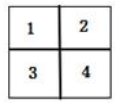
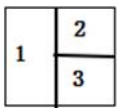


Shortcut Window

Quickly set the desired output quantity and window placement, and can open up to 4

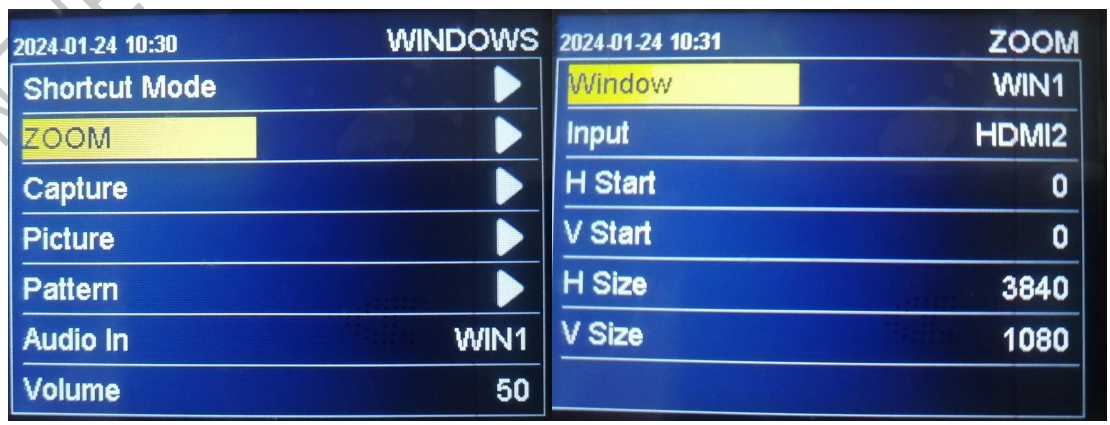
windows.

No.	Demonstration	Notes	No.	Demonstrations	NOTES
1		Windows 1 and 2 can not cross the middle vertical line	6		Windows 1,2 and 3 can not cross the vertical lines but windows 1 and 2 can move up and down.
2		Windows 1 and 2 can not cross the middle horizontal line	7		Window 1 can move freely within the screen, windows 2 and 3 can not cross the vertical line but can move up and down.
3		Window 2 cannot start against the left and right sides of window 1. The interval is one	8		Window 3 can move freely within the screen. windows 1 and 2 can not cross the

		column. Windows 1 and 2 can move freely within the screen.			vertical line but can move up and down.
4		Window 1 can move freely within the screen, window 2 and 3 can no cross the middle vertical lines.	9		Windows 1,2,3,4 can not cross the vertical lines but can move up and down.
5		Windows 1,2 and 3 can not cross the vertical lines but windows 2 and 3 can move up and down.			

Zoom

In zoom, you can set the input signal source of each window, the size and position of the window. The default parameters are the parameters set when opening the window quickly.



Window serial number: Use the knob to select the window to be set;

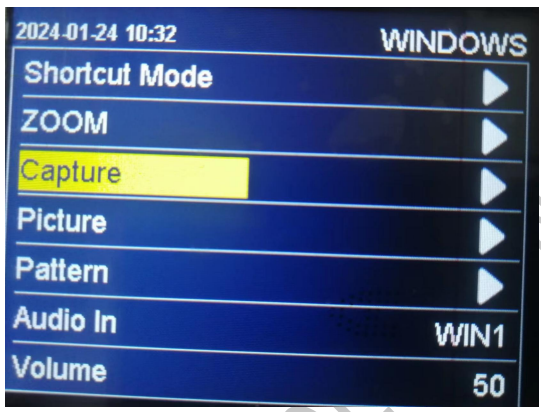
Signal source: The knob selects the input signal source of the current window.

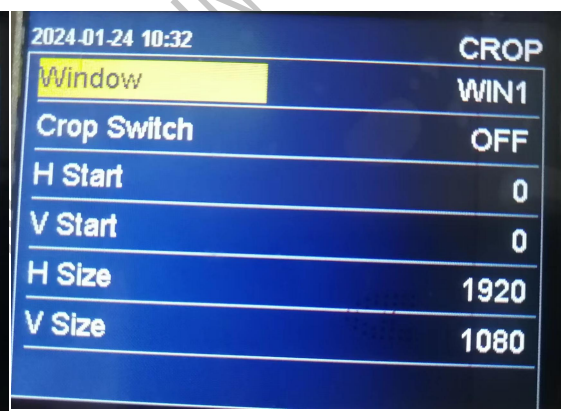
Window width, height and starting position: After selecting, rotate the knob to change the value, or press the digital key to enter the value;

Note: Parameter settings follow the multi-window precautions in "Quick Window Opening".

Capture

In screenshot, you can set the input image interception switch of each window to intercept the size and position of the input image. Default parameters are full screen capture.





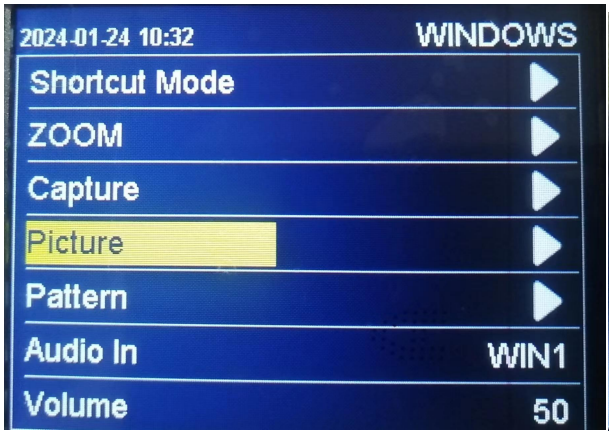
Window serial number: Use the knob to select the window to be set;

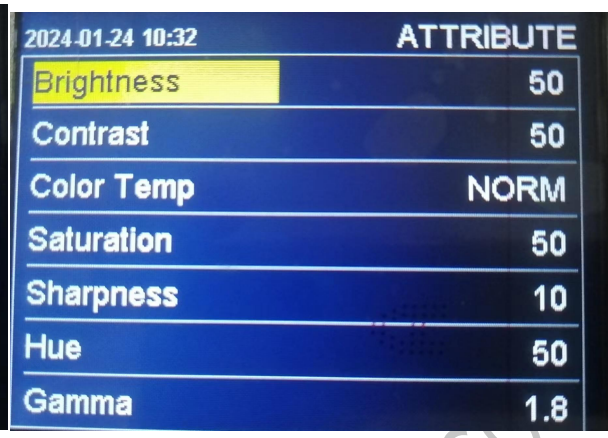
Interception status: set the interception switch;

Width, height and starting position: After selecting, rotate the knob to change the value, or press the digital key to enter the value.

Image

In the image, you can set the output image brightness, contrast, color temperature, saturation, sharpness, hue, gamma value, or restore the image to factory settings with one click.

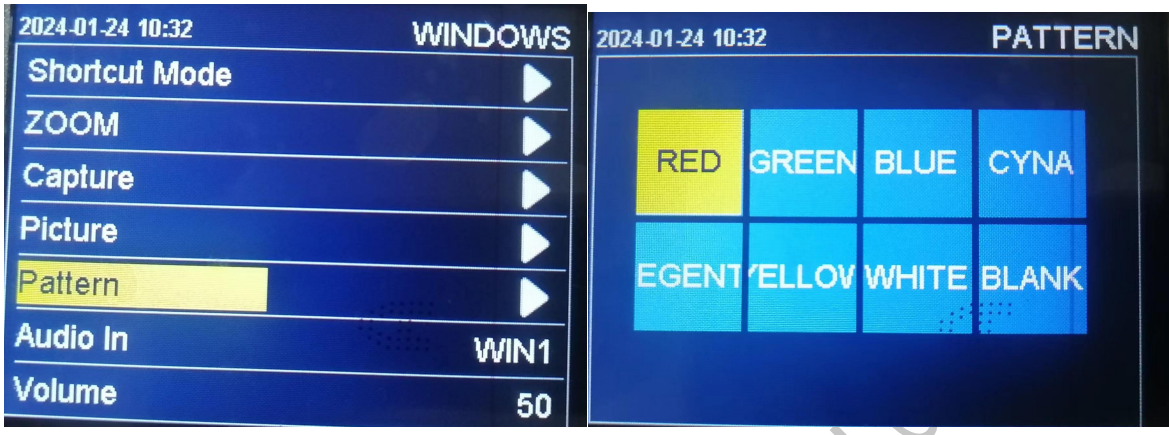




- Brightness, adjust the output image brightness value, the system default is 50, 0-100 can be set;
- Contrast, adjust the output image contrast value, the system default is 50, 0-100 can be set;
- Color temperature, adjust the color temperature mode of the output image. The system defaults to normal color temperature, and you can choose "cold color or warm color";
- Saturation, adjust the output image saturation value, the system default is 50, 0-100 can be set;
- Sharpness, adjust the output image sharpness value, the system default is 10, 0-15 can be set;
- Hue, adjust the hue value of the output image. The system default is 50 and can be set from 0 to 128;
- Gamma, adjust the gamma value of the output image, the default is 1.8, 1.8, 2.0, 2.2, 2.4, 2.6 are optional;
- Restore to default, quickly restore all image settings to default values with one click.

TEST Mode

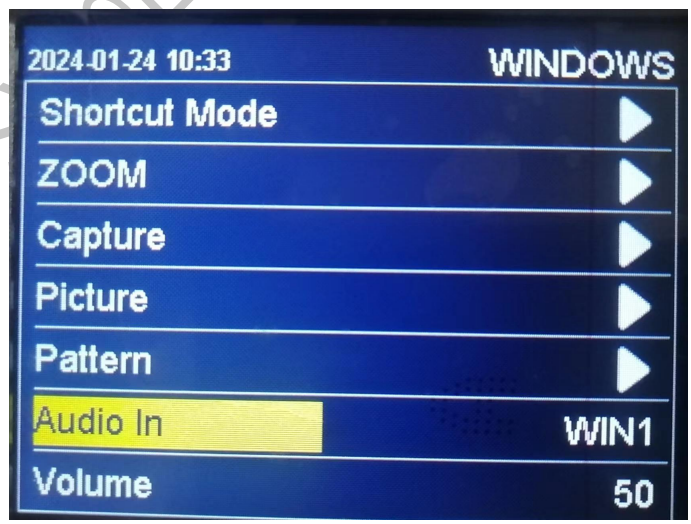
In test mode, you can turn on or off the output of built-in test images.



It is off by default. When it is on, select white, red, green, blue, black and other test picture outputs.

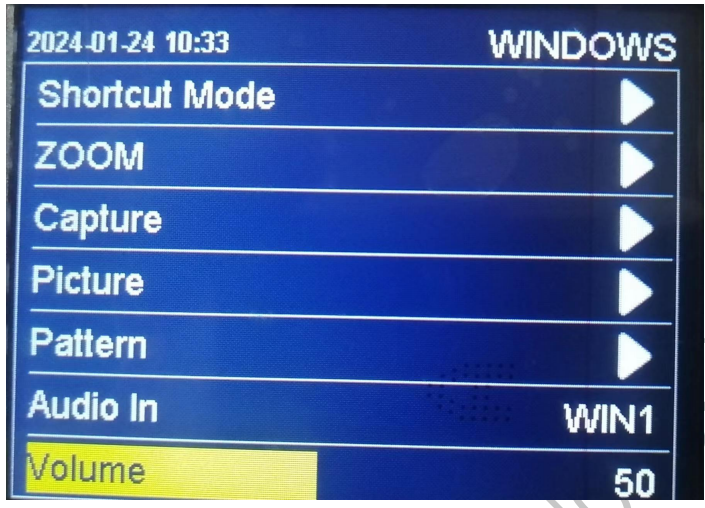
Audio Input

In the audio input, you can select the audio input corresponding to the input signal following windows 1, 2, 3, 4 or the external headphone input.



Volume

The knob sets the audio output volume, the default is 50, 0-100 levels are optional.



Freeze

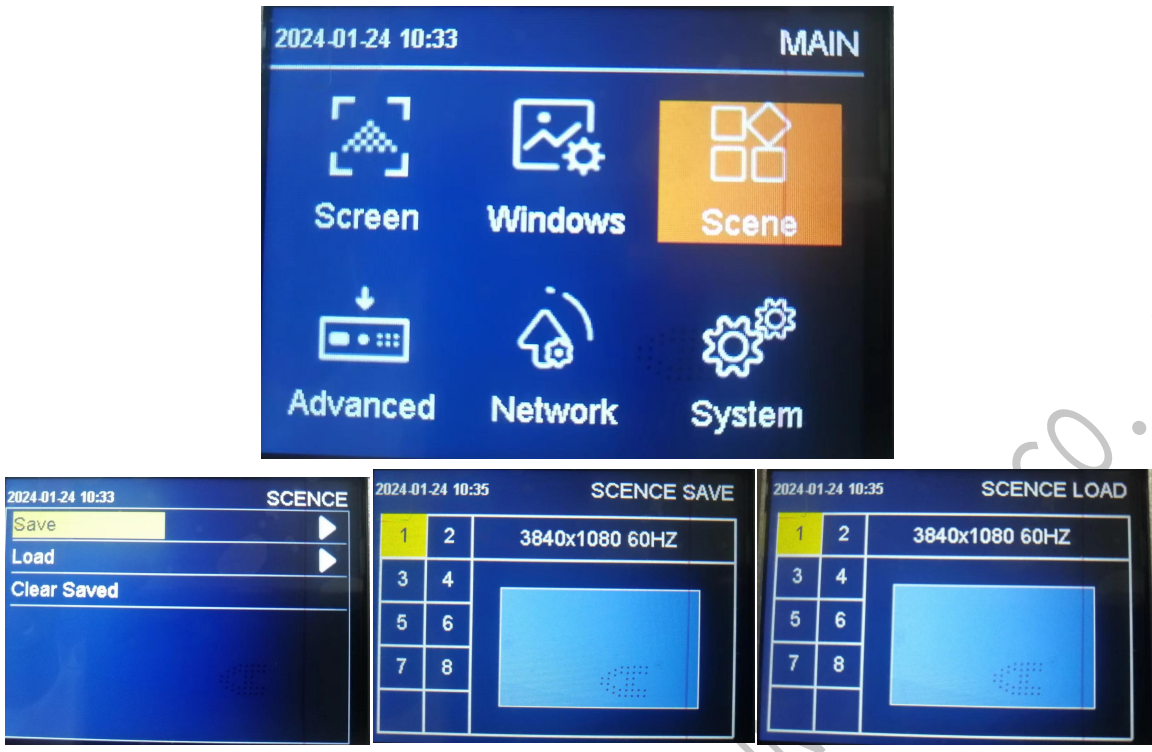
By operating the knob, when it is turned to "on", the output picture freezes uncontrollably, and when it is turned to "off", the output picture continues to be displayed.

Black Screen

It is off by default, and when switched on, the processor outputs a black screen.

Scene Preset

Save multiple usage scenarios, save the setting parameters of "screen splicing", "window display" and input signal source, and quickly load and call the saved scene application.



Save

Save the current display effect as a scene preset.

Select the knob to save, open the save interface, and select the saved scene number to complete the scene saving. If the selected scene number already has parameters, it will be overwritten by the new scene parameters;

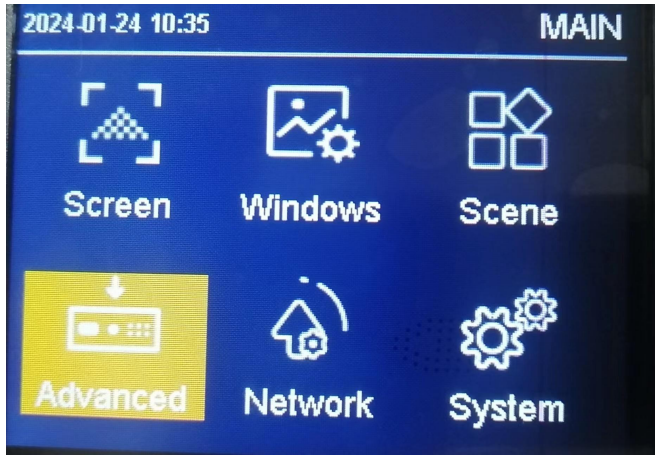
Load

Recall saved scene presets;

Clear data: Clear all saved scene presets.

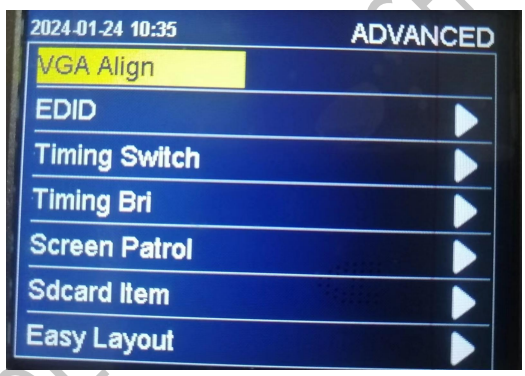
Advanced Functions

Set up VGA correction, EDID, scheduled switching, scheduled brightness, screen inspection, SD card backup, simple screen connection, and forced output.



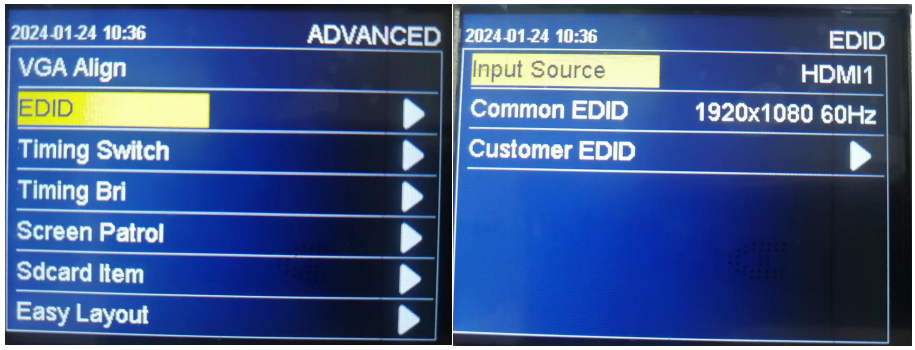
VGA Correction

Input VGA signal. When the LED screen has abnormal phenomena such as picture loss or offset, this function can be used to automatically adjust the position of the VGA signal.



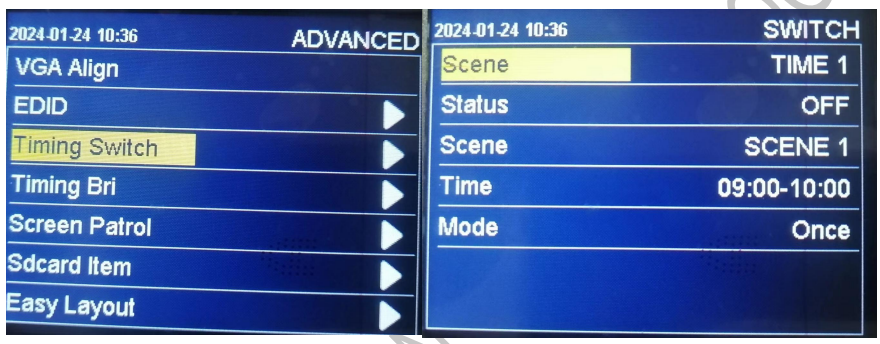
EDID

The EDID of the input signal HDMI1, HDMI2, HDMI3, DP, and DVI can be selected. Common resolutions such as 1366x768_60Hz, 1440x900_60Hz, 1920 × 1080_60HZ, 2560 × 1080_60HZ, 3840 × 1080_60HZ, 3840 × 2160_60HZ can be set, and the EDID can also be customized according to the actual situation.



Scheduled Switching

Timing can be set to switch scene modes.

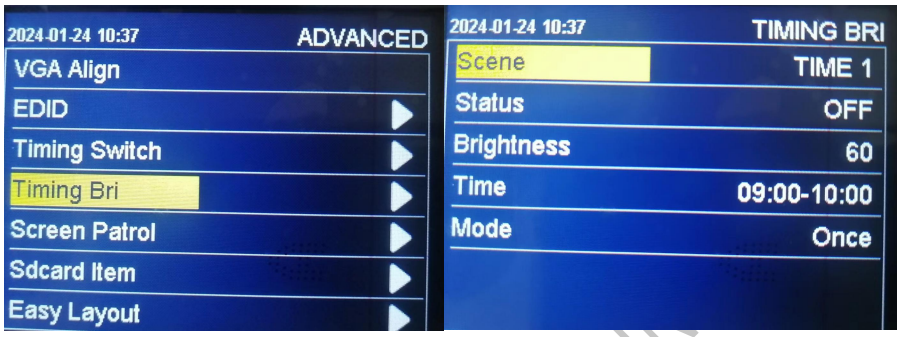


- Time period, you can set segments 1-5, 5 time periods. If the time overlaps, the previous time period will be executed first.
- Status, closed by default, open to start scheduled switching, and switch the port at the set time.
- Scene, select the scene preset called by scheduled switching.
- Time, customize the start and end time.
- Number of times, choose single or daily.

Scheduled Brightness

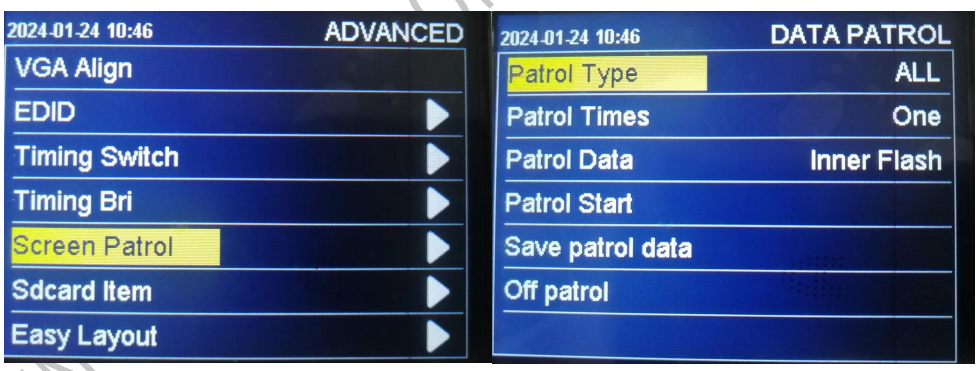
- Time period, you can set segments 1-5, 5 time periods. If the time overlaps, the previous time period will be executed first.

- Status, closed by default, open to start scheduled switching, and switch the port at the set time.
- Brightness, set the brightness value, the range is "0-100".
- Time, customize the start and end time.
- Number of times, choose single or daily.



Screen Inspection

Timing can be set to switch scene modes.



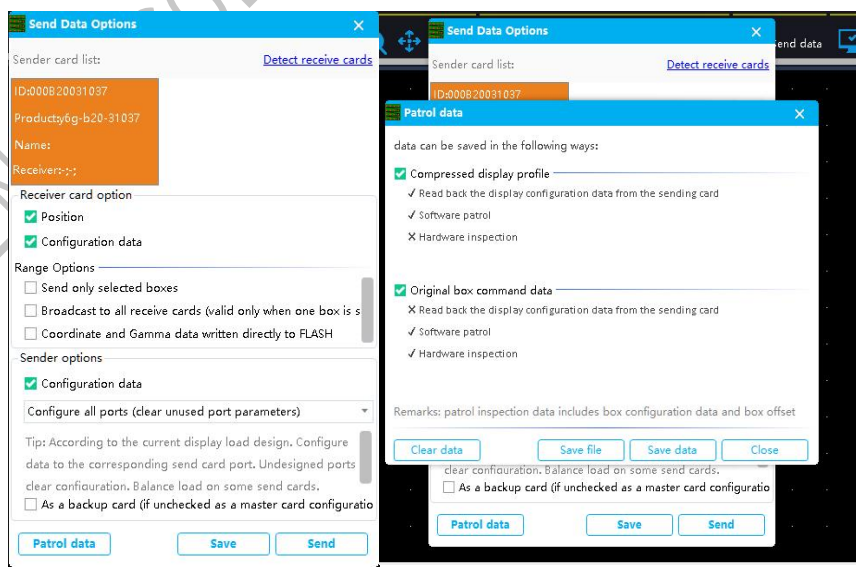
LED---Screen inspection---Internal inspection

Send the display connection file in the complex screen adjustment in the host computer screen configuration interface, and then click the inspection data next to it to save the data. For internal storage inspection, you can select the inspection type: receiving card, sending card, all; can Select the number of inspections. Only the receiving card inspection can be inspected infinitely. For the sending card, all inspections can only be selected once. Curing is

performed after inspection. Note: After the unlimited inspection of the receiving card is turned on, the USB needs to be unplugged. After unplugging the USB, the menu cannot be used. To operate and restore, you can press and hold the button for 10 seconds to turn off the inspection or plug in the USB again to turn it off;

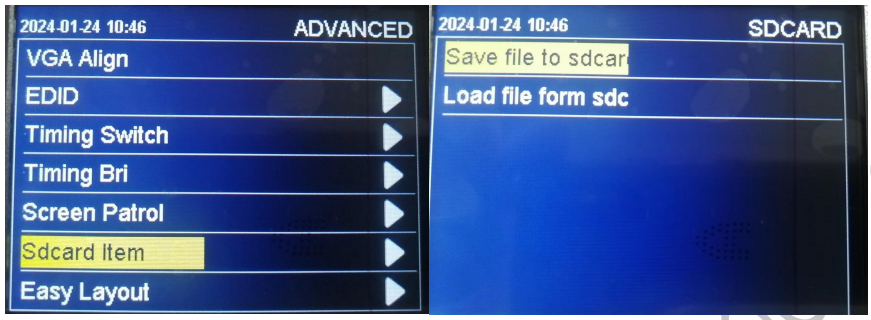
LED---screen inspection---external SD card inspection

Send the display connection file in the complex screen adjustment in the host computer screen configuration interface, then click the inspection data next to it to save the data, and then save the file to the SD card (the file suffix must be: .bin), and use the external SD card The inspection type can be selected for inspection: receiving card, sending card, all; the number of inspections can be selected, only receiving card inspection can be inspected infinitely, sending card, all can only be selected once; curing is performed after inspection; Note: receiving After the unlimited inspection of the card is turned on, the USB needs to be unplugged. After unplugging the USB, the menu cannot be operated. To restore, you can press and hold the button for 10 seconds to turn off the inspection or replug the USB;



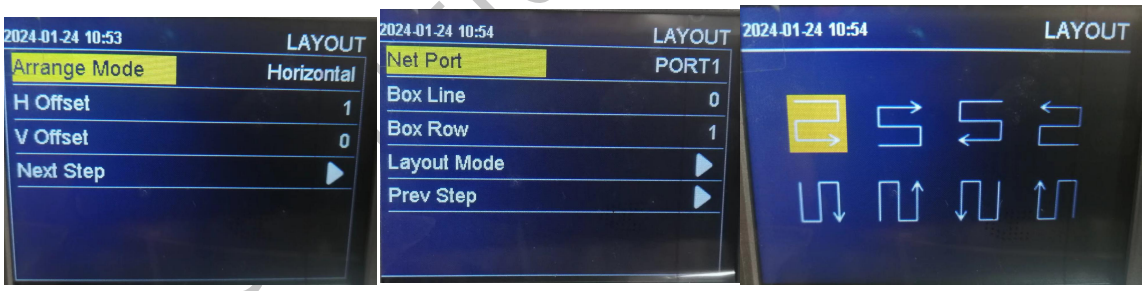
SD Card Backup

Back up the video processor setting parameters to the SD card, or restore the setting parameters from the SD card to the video processor.



Simple Screen Connection

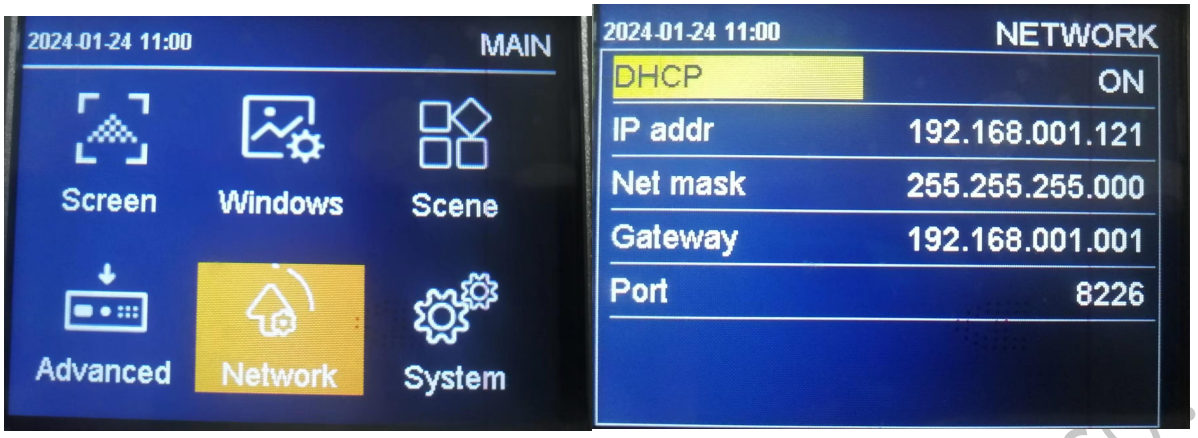
As shown in the figure below, the processor provides 8 common display connection methods, and users can choose and apply them according to the actual connection conditions of the network cable.



Arrangement mode, select horizontal and vertical arrangement, set horizontal and vertical offset, next step, set the number of cabinet columns, cabinet rows, wiring method, and set the next network port after completion.

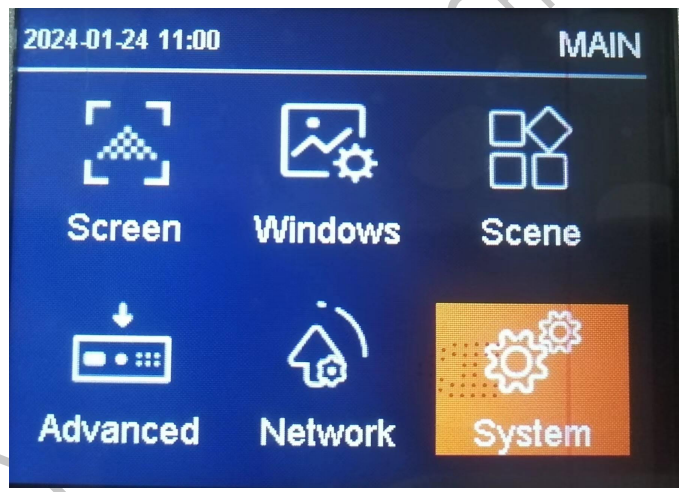
Network Setup

Set the processor 100M network control port parameters.



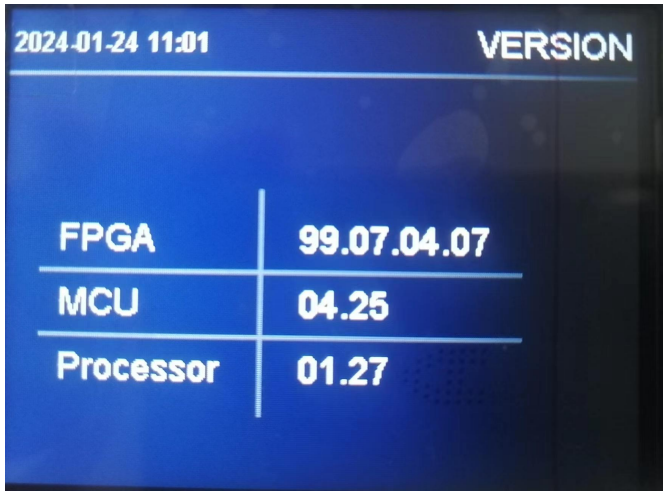
System setup

Check the processing version information, set the processor's built-in clock, menu language, key lock, factory settings, and upgrade the processing firmware with a USB flash drive.



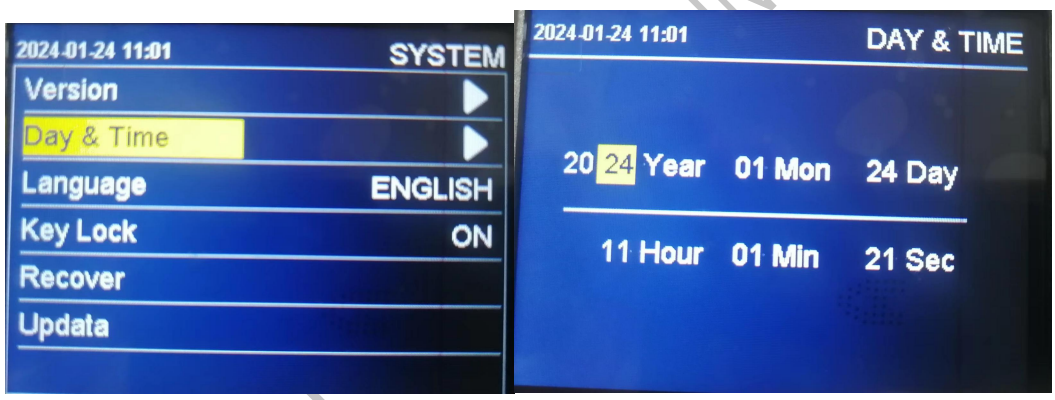
Version

View processor, FPGA, and MCU version information.



Date And Time Setup

Set the processor's built-in time and clock.



Language

Set the processor menu language, Chinese and English are available.

Key Lock

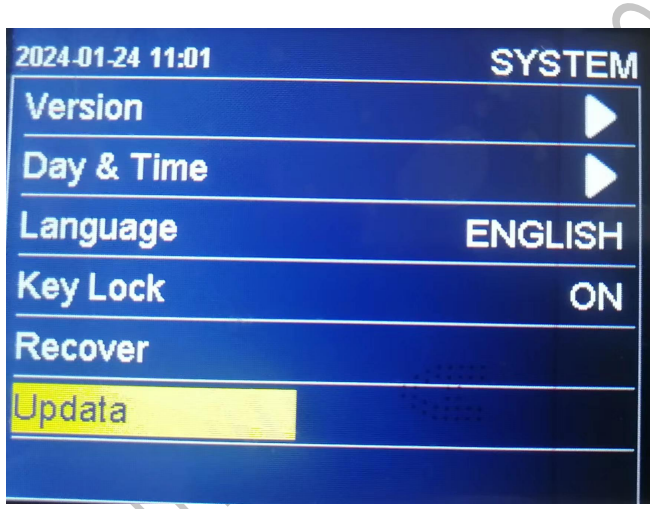
Turning on the key lock function is to prevent misoperation and lock the front panel key functions. The default "off" state, select the "on" state, and then press the OK button to confirm, it will automatically lock if there is no operation for 3 minutes;

Ex-Factory Setup

; Restore all processor setting parameters to factory default settings.(Do not use it unless with Technical support)

Upgrade Processor

Insert the USB flash drive and select the upgrade processor.(Do not use it unless with Technical support)



The firmware program file MVB_PROCESSOR.bin is saved in the root directory of the U disk, and the U disk is connected to the processor USB interface. Select System---Upgrade Processor, and the processor will automatically start the upgrade operation.

Note: The firmware program file name must be "MVB_PROCESSOR.bin"; during the upgrade process, do not power off the processor.

LedSet4.0 Software Operation

Enter the software setup interface

Open LedSet4.0 software, click "Sender" to enter the send card parameter setting interface.

The device list shows the sender model recognized by the software: S45S.

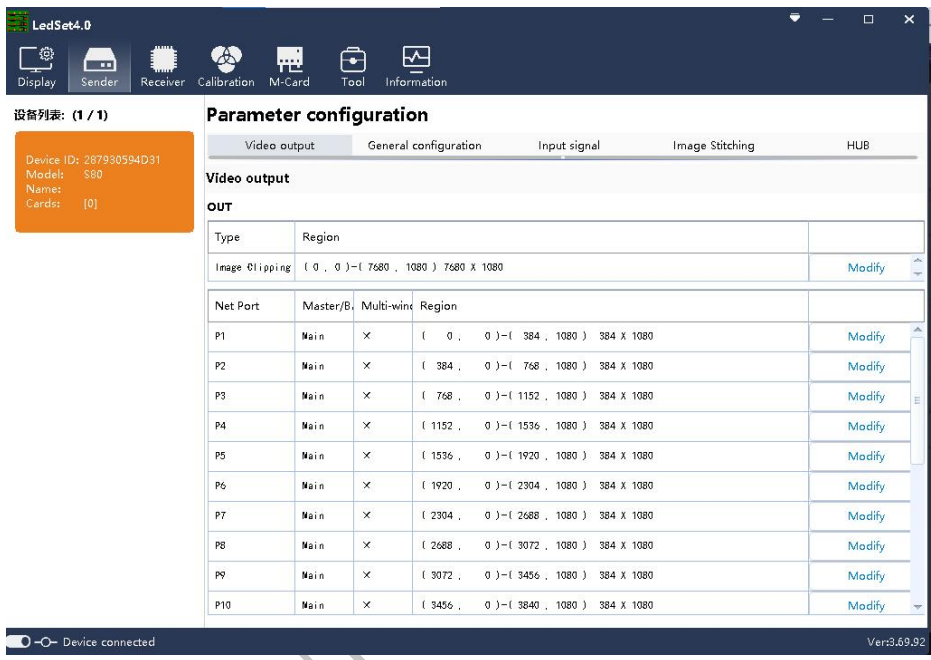
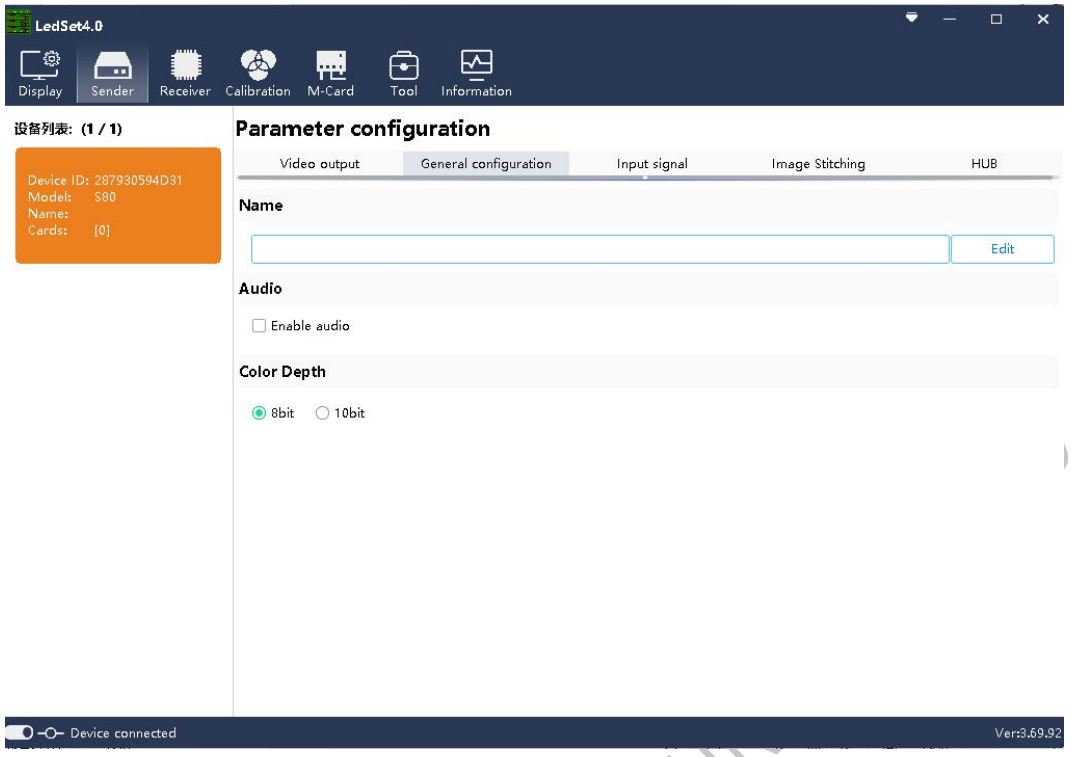


Image output

Click "Image Output" in the parameter configuration. The software will display the size of the image clipping and the position of each net port. By clicking Modify, you can set the horizontal and vertical offsets, width and height of the image clipping; horizontal and vertical image offset positions can be set for each net port.

Common Configurations

Click General Configuration in the Parameter Configuration. You can edit the settings for the processor name, if audio and color depth are enabled or not.



Input signal

Click "Input Signal" in the parameter configuration to open the input signal source setting interface. Click "Modify Resolution" to set the EDID information of the corresponding input interface; choose 4K input signal source, either HDMI2.0 or DP1.2.

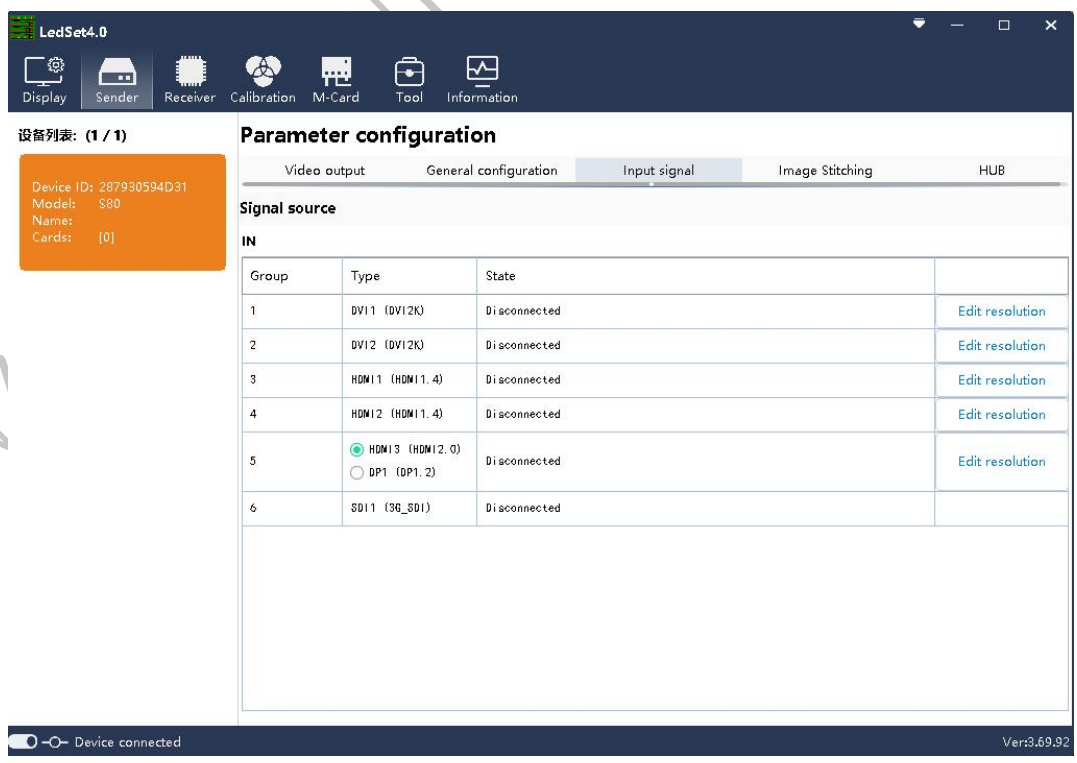
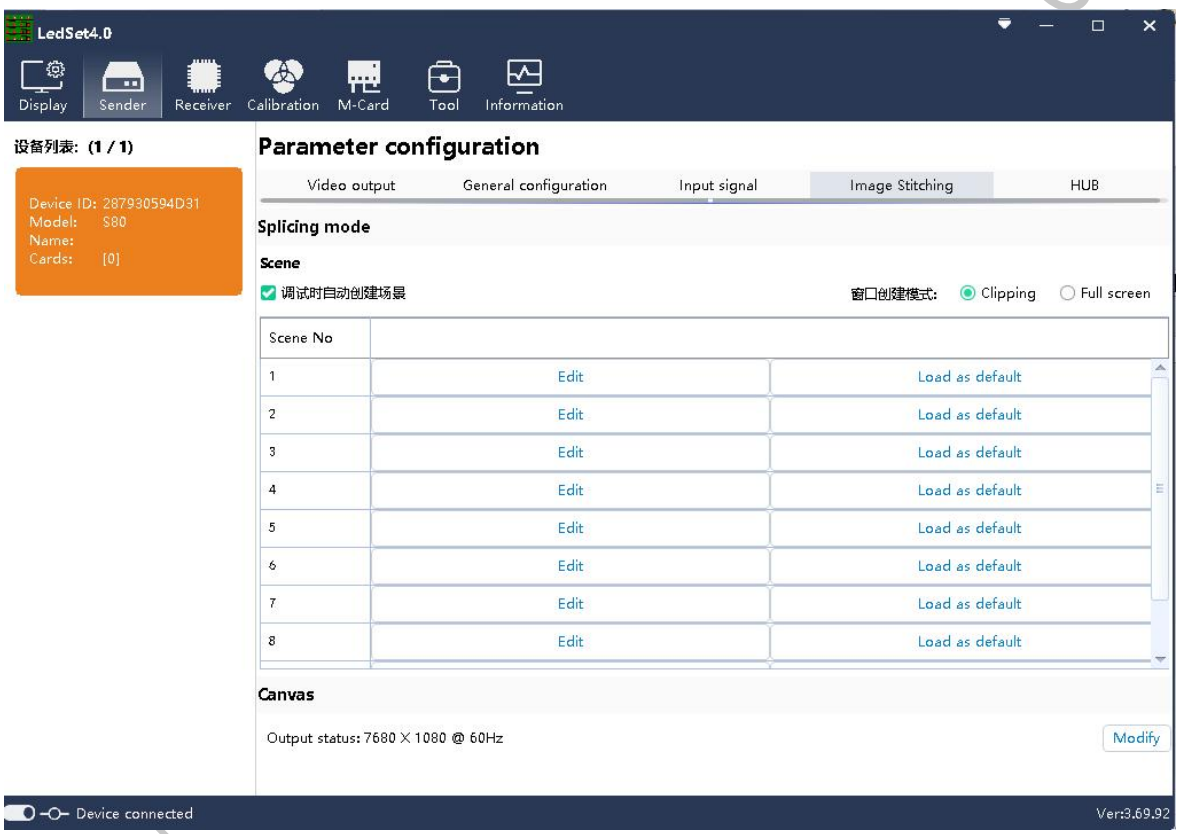


Image stitching

Scene Activation

By clicking on " Image stitching " in the parameter configuration, 10 different scene modes can be set and saved in the scene. Click "Scene Activation and as default" to display the scene mode in the output, and the scene number is marked with (√). Click "Edit" to enter the scene setting interface.



Scene Editing

In the scene editing interface, you can set pane open, pane deletion, size and position modification of each pane, pane stacking order, pane input signal source switching, pane input signal image capture.