SYSOLUTION

S70S Instruction

Version：V.1.1

Statement

Dear user friend, thanks for choosing SHENZHEN SYSOLUTION TECHNOLOGY CO.,LTD (hereinafter referred to as Xixun Technology) 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

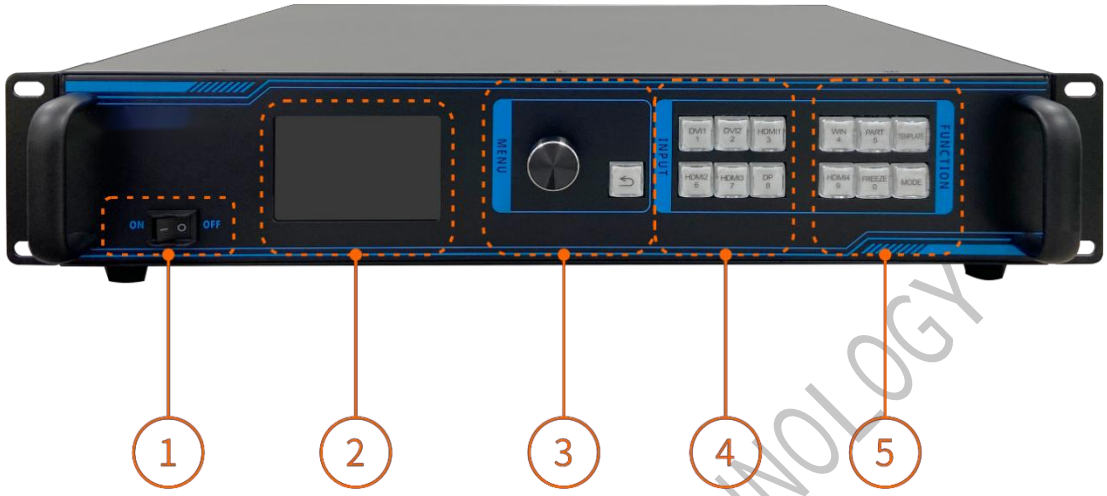
No.	Version	Updates	Revision Date
1	Ver.1.0	initial issue	2023.08.29
2	Ver.1.1	Add content	2024.11.14

The document is subject to change without prior notice.

Catalogue

Interface Definition

Front Panel



Front Panel Description			
No.	**Button**	**Description**	
1	Power Switch	device power on/off	
2	LCD	Display operation menu	
3	Operation button	Knob button for menu selection， Back button	
4	Input source switching buttons	DVI1	DVI1 Input port/number key 1
		DVI2	DVI2 Input port/number key 2
		HDMI1	HDMI1 Input port/number key 3
		HDMI2	HDMI2 Input port/number key 6
		HDMI3	HDMI3 Input port/number key 7
		DP	DP Input port/number key 8
5	Function	Win	Layer selection/number key4

	buttons	TEMPLATE	Multi-screen template shortcut key
		SIZE	Adjustment screen reseller shortcut/number key 9
		FREEZE	Image black screen/number key 0
		MODE	Loading Scene Shortcuts

Back Panel

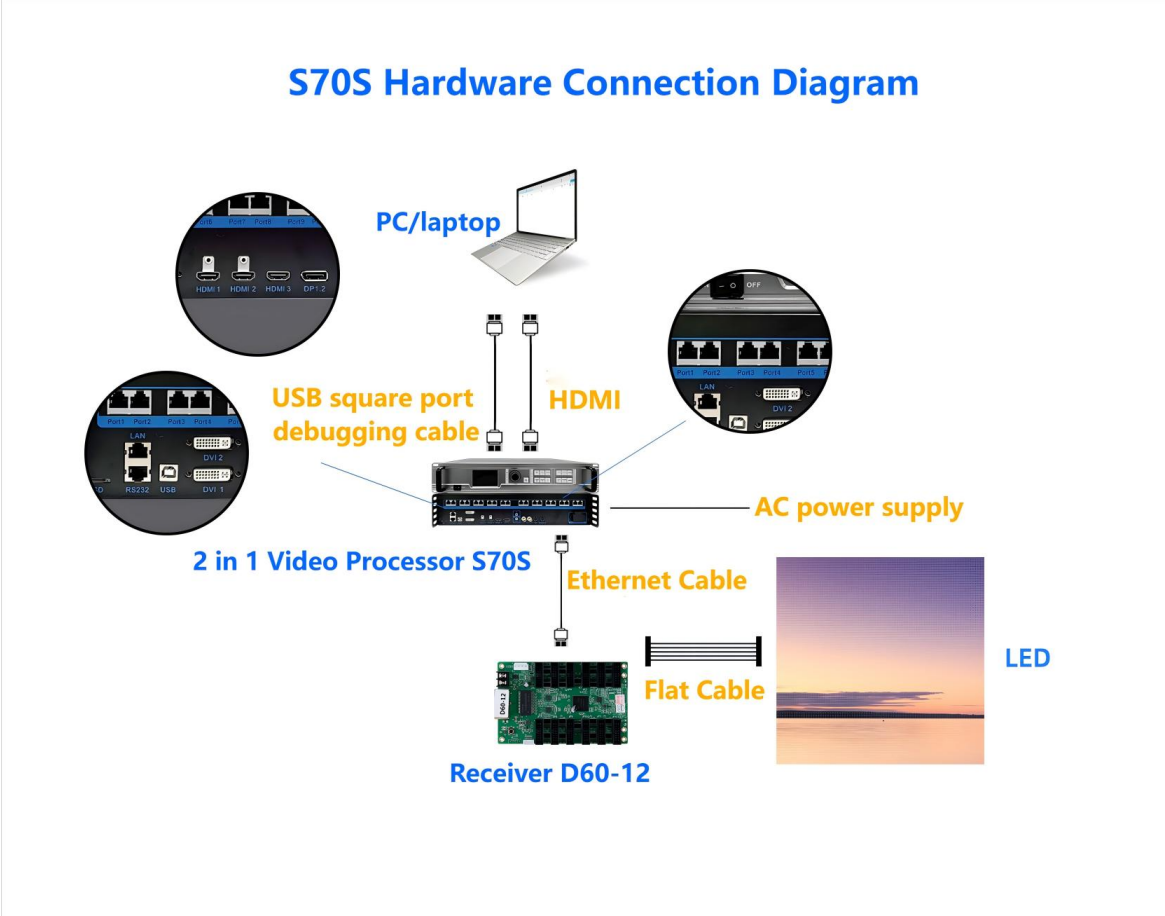
Input Interface		
Interface	**Quantity**	**Description**
HDMI2.0 (HDMI3)	1	Only one signal can be input at the same time. support maximum 3840 × 21Hz60@60/7680 × 1080@60Hz resolution video source input. Support custom resolution. Ultimate width：7680（7680×1080@60Hz） Ultimate height：7680（1080×7680@60Hz） Ultimate height
DP1.2	1	
HDMI1.3 (HDMI1 、HDMI2)	2	Supports up to 2304×1152@60Hz resolution video source input. Supports custom resolutions. Ultimate width：3840（3840×640@60Hz）

		Ultimate height：3840（640×3840@60Hz） Interlace signal input is not support.
DVI（DVI1、DVI2）	2	Supports up to 2304×1152@60Hz resolution video source input. Supports custom resolutions. Ultimate width：3840（3840×640@60Hz） Ultimate height：3840（640×3840@60Hz） Interlace signal input is not supported.
Output Interface		
Interface	**Quantity**	**Description**
Network port	20	It can load up to 13,000,000 pixels, up to 15360 pixels in wide and up to 15360 pixels in high, and can be stitched up and down at will.
Audio Interface		
Interface	**Quantity**	**Description**
AUDIO IN	1	External audio input source
AUDIO OUT	1	Audio output, can be set to output any window signal source audio or external audio input source.
Control connector		
Interface	**Quantity**	**Description**
LAN	1	100 megabit network port to control devices through the network

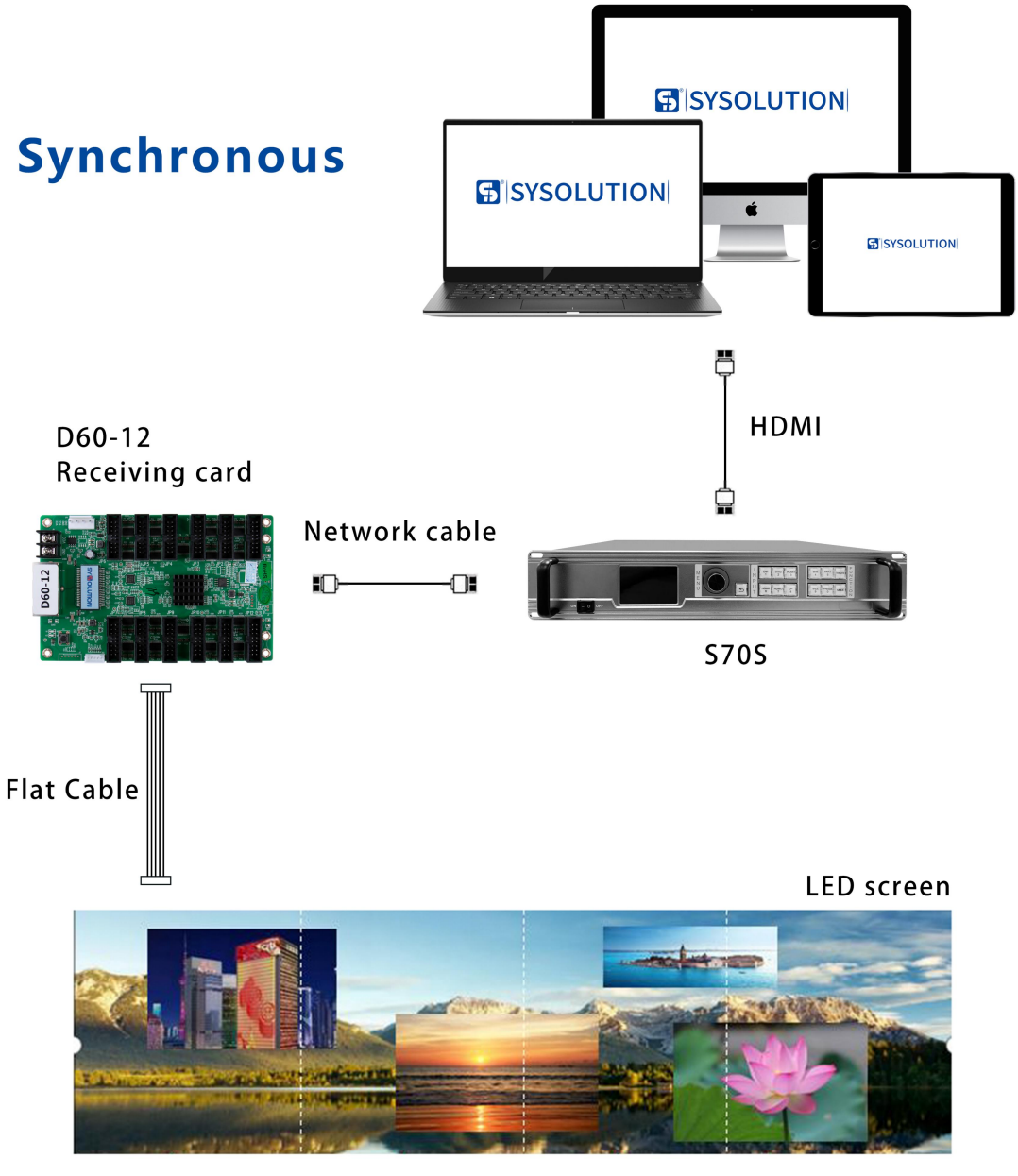
RS232	1	Serial port, interfacing with central control
USB	1	1×USB 2.0 (Type-B, square port): upper computer control interface
Backup and recovery		
Interface	**Quantity**	**Description**
SD card	1	Backup configuration parameters to SD card, restore configuration parameters from SD card
Extended Function Interface		
3D	1	Connection to 3D transmitter; (reserved interface, customized function)
SENSOR	1	Connect the light-sensing probe for automatic brightness adjustment.
Power supply interface		
interface	**Quantity**	**Description**
Power connector	1	AC-100-240V-50/60HZ AC power supply interface

Hardware Connection Diagram

Hardware Connection Diagram



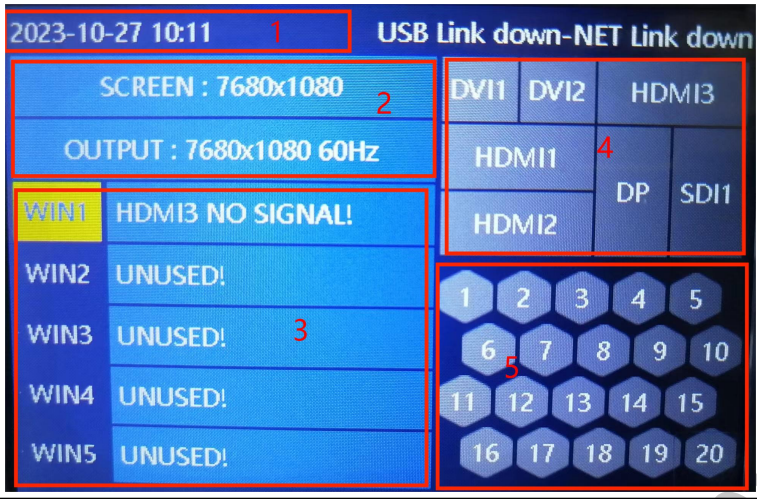
synchronous mode connection



Operation Menu

working status

After the video processor run up, will see the LCD screen status as in below:

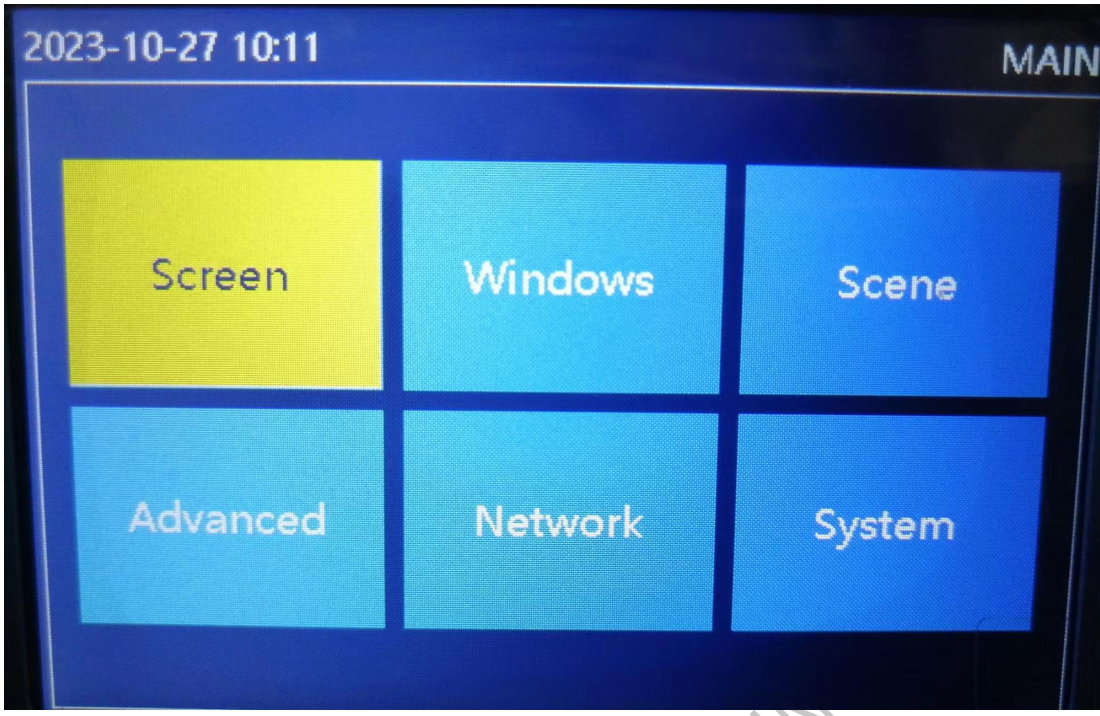


No.	Description
1	clock and time
2	setup the led screen total resolution
3	Windows for used and window' s signal status: gray color means the window closed
4	Input signal source, blue means has signal, gray means no signal
5	Gitbyte Ethernet port, blue means already connected with receiver card, gray means no connection

Main Menu

Press the knobe in the status interface and enter the main Menu interface, then press knobe to enter sub menu, ESC for exit.

There are 5 menus : screen configuration, display window, application pre set, advanced functions and system setup.

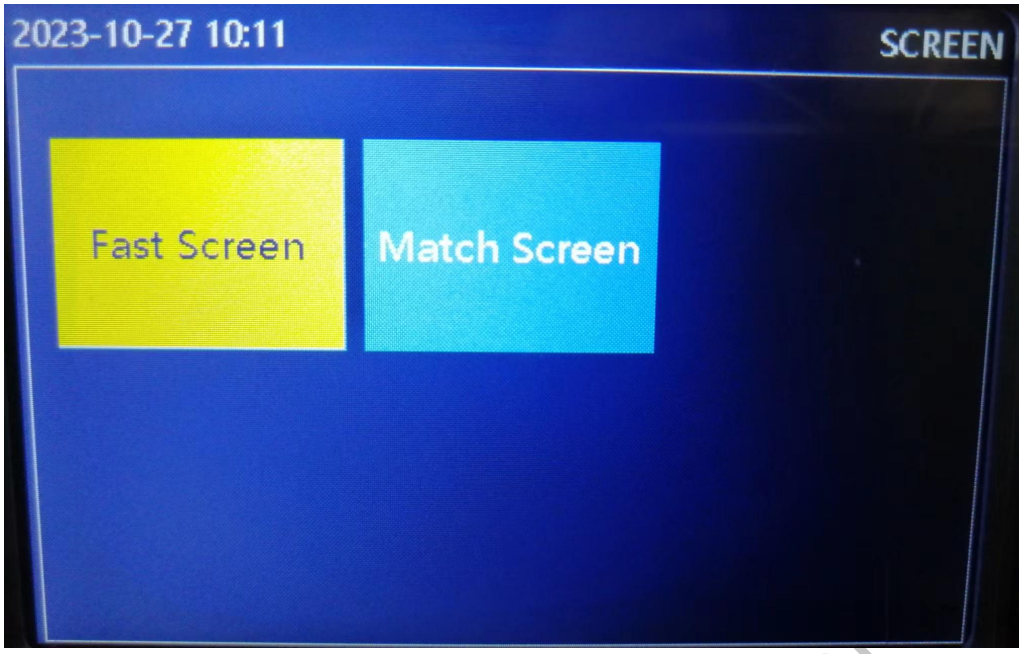


screen configuration

It contains "normal display" and "Auto match display".

Normal display: setup output resolution, screen width and height pixels for video processor quickly

Auto match screen: auto recognize the led screen configuration files from the upper software.



Normal display

Setup output resolution, screen width and height pixels.

Resolution: support fixed and customized setup

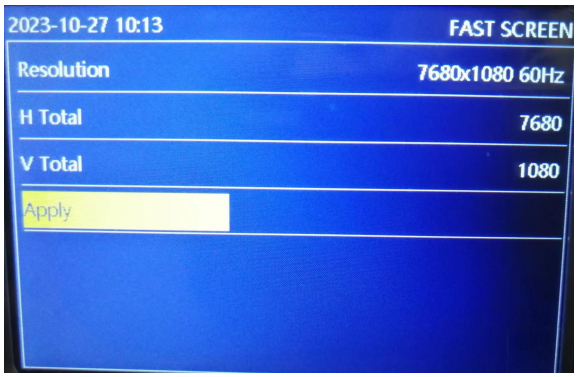
Fixed resolution choices： 3840x2160_60Hz、4096x2160_60Hz、4320x1920_60Hz、4800x1920_60Hz 、 2560x3840_60Hz 、 6144x1536_60Hz 、 7680x1080_60Hz 、7680x1200_60Hz 、 8192x1152_60Hz 、 9216x1080_60Hz 、 10240x900_60Hz 、15360x640_60Hz、

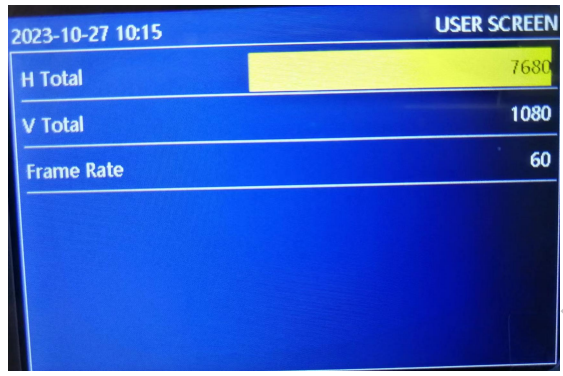
Customized resolution: maximum width 15360, maximum height 15360, refresh rate 0-120Hz, total capacity no more than 1040,0000 pixels.

Screen width in Horizontal : led screen width pixels in real

Screen hright in vertical: led screen height pixels in real

Click Apply to setup.

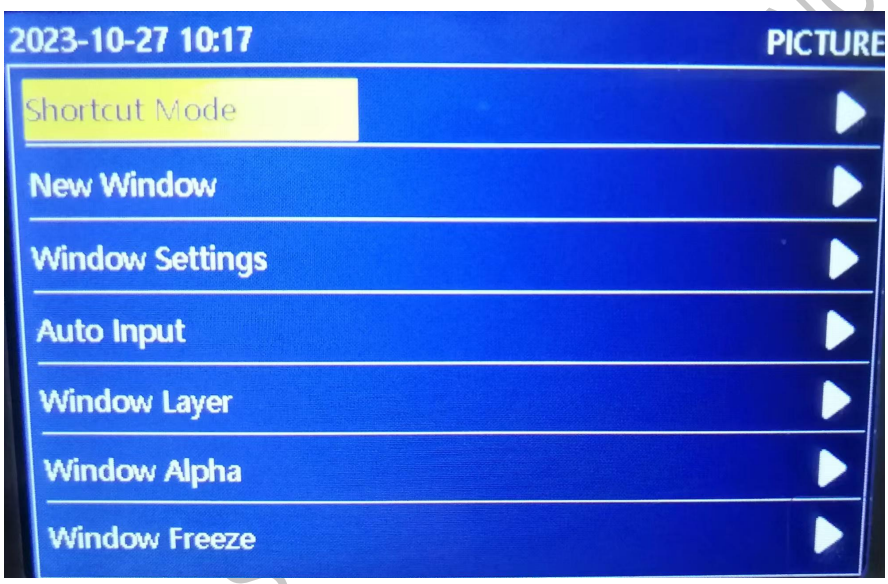




display window

Set specific parameters for window opening and each window, including window size, position, layer stacking order, transparency, window freezing, etc.

To open a window, you can choose a shortcut window or customize a window.



Shortcut Window

Can select the templates to open window and choose numbers, positon and size.

Window 1: select 4K for input signal source, can open one or two windows.

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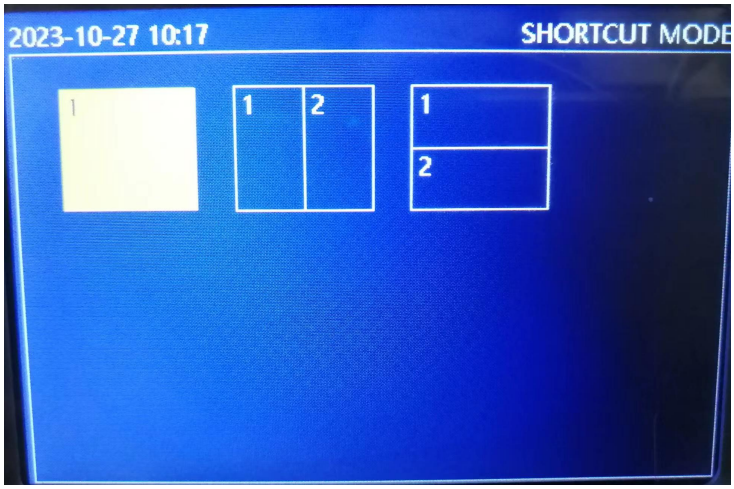
Window 2: select 2K for input signal source, can open 1 to 5 windows.

Use the knobe to choose directly.

The green color means the selected window after open window setup success.

Press “Return” key to status interface, press “’ WIN’ to select winodw, press Source signal key to switch window signal.



customized open window

Add new window in order, select the signal source and set size and postion.

Window serial number: add the window in order, can not change the serial number.

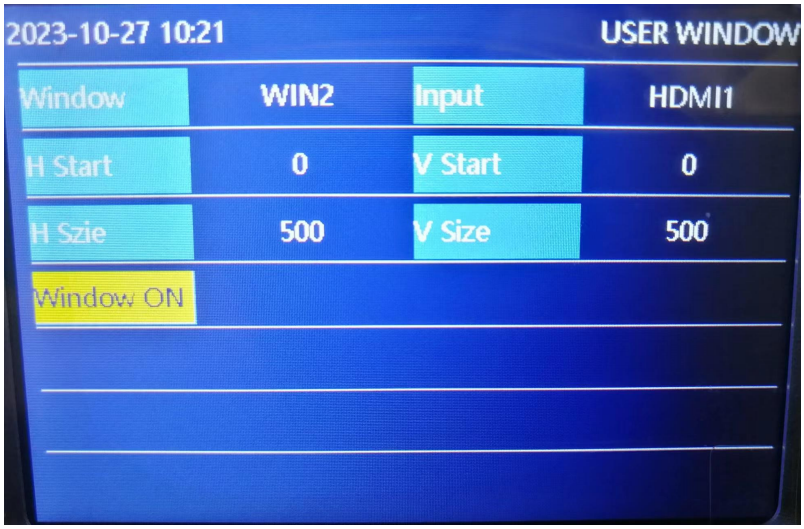
Signal Source : use the knobe to choose the signal source for the current window, can choose 2K for all windows, only window 1 can use 4K signal source.

Window width, height and positon: change the values by knobe after selected each item or directly input the digital numbers.

Press “Return” key to status interface, press “’ WIN’ to select winodw, press Source signal key to switch window signal.

NOTE: horizontal start+horizontal wide ≤ led screen total width

Vertical start+vertical height≤led screen total height



Window parameters

Can set each window’ s signal source, window size and position, display switch and input image capture. Default parameters as those of openning window.

Window serial number: use the knobe to select the window that need to be setup.

Signal source: use the knobe to choose the input signal source for the current window, can choose 2k for all windows, only window 1 can choose 4K signal.

Window width, height and positon: change the values by knobe after selected each item or directly input the digital numbers.

Can set width, height, position for each window within the led screen resolution range, can set each window overlay or tile display.

NOTE: horizontal start+scale horizontal wide ≤ led screen total width

Vertical start+scale vertical height≤led screen total height

Display switch: turn on or off window display

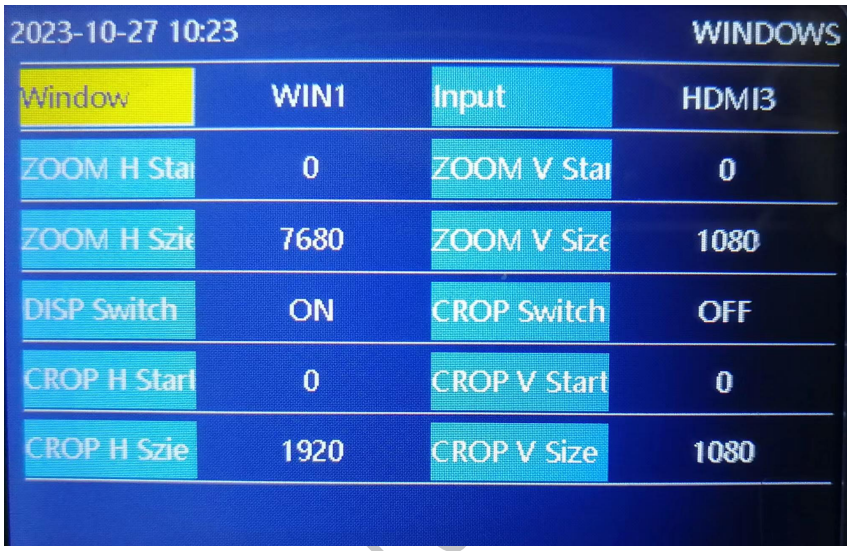
Capture switch: turn on or off capture input image capture. When turn off, window will display full screen image from input signal source.

When turn on, window will display part of image from signal source according to the pre set parameters.

Capture width, height and position: modify the values by knobe or input digital numbers directly.

NOTE: capture horizontal start+ capture horizontal wide ≤Input signal source resolution width

Capture Vertical start+capture vertical height≤Input signal source resolution height



Layer switching

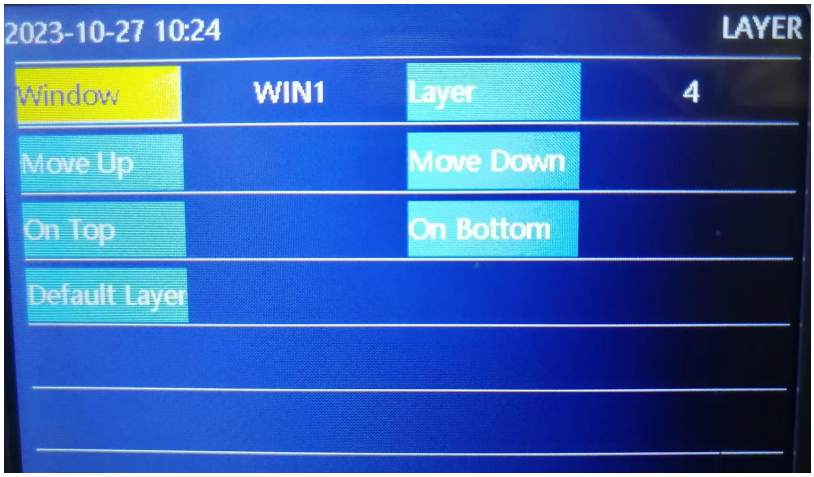
Set the layer position where each window is located, that is, the window stacking order.

Select window: use the knobe to select the window that need to be setup

Current layer: the layer for the selected window, there are 4、3、2、1、0 layers, layer 4 is the bottom, layer 0 is the top one.

Turn the knob to select "Layer Up", "Layer Down", "Layer Top", and "Layer Bottom" in the execution interface to change the position of the selected layer, while other layers are

changed in order.



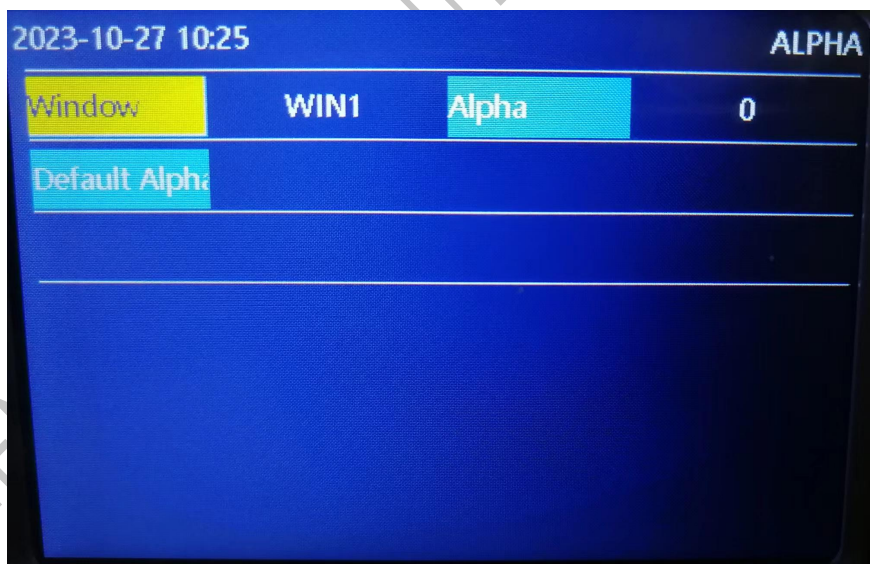
Transparency

Set the image transparency for each window.

Window number: Select the window to be set with the knob.

Transparency: Optional values range from 0 to 100, with higher values indicating higher transparency.

Restore default: The image is restored to opaque.



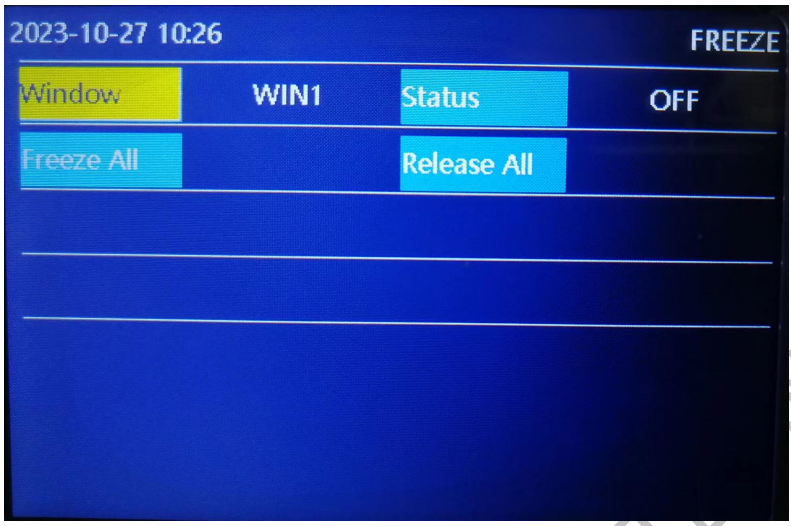
Freeze

Set the image screen displayed in the window to freeze.

Window number: Select the window to be set with the knob.

Frozen state: The switch selects the window to display the frozen image.

You can freeze all windows with one click, or release the frozen state of all windows with one click.



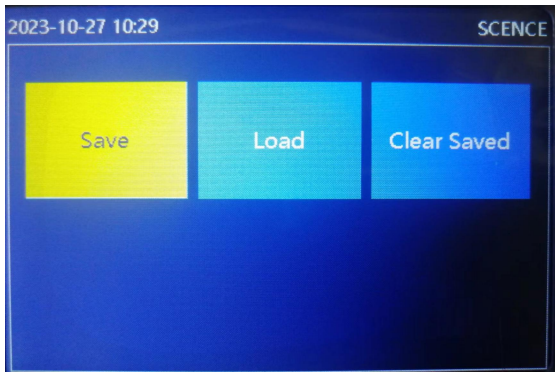
Scene presets

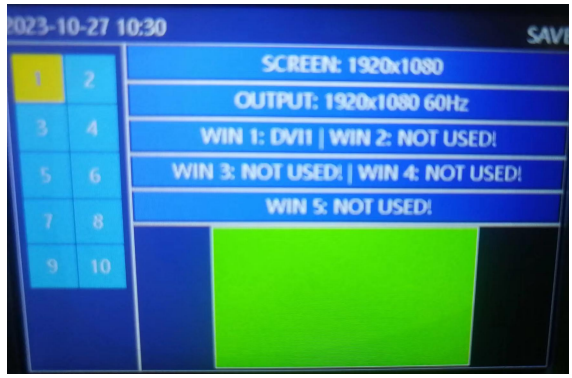
Save multiple usage scenarios, save settings for "screen splicing", "window display", and input signal sources, and quickly load and call saved scenario applications.

Save: Saves the current display effect as the scene preset. Select the button to execute the save, open the save interface, select the saved scene number to complete the scene save. If the selected scene number already has parameters, it will be overwritten by new scene parameters.

Load: Invoke saved scene presets.

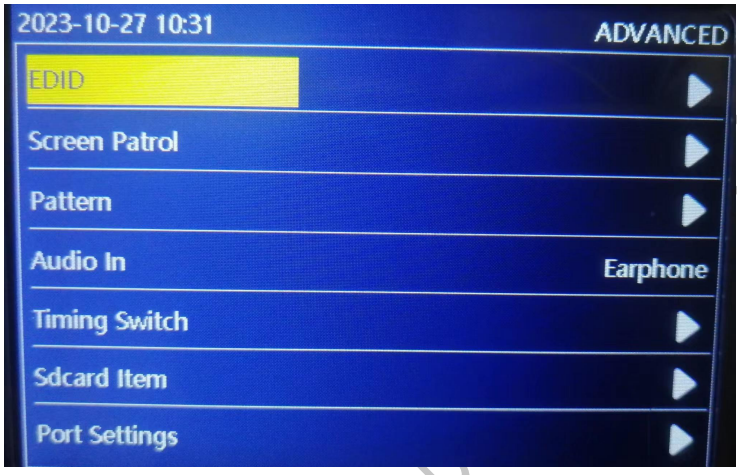
Clear Data: Clears all saved scene presets.





Advanced

Enter Advanced, set up EDID, screen inspection, test mode, audio following, timed switching, and SD card backup.



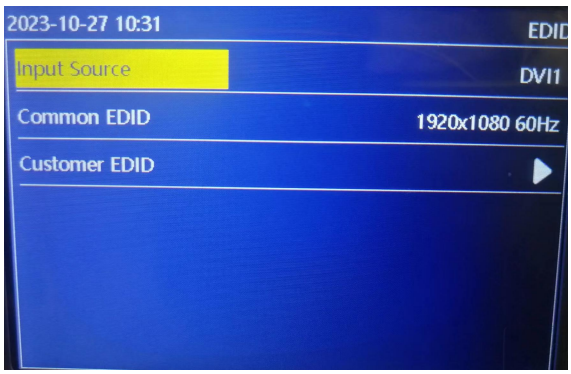
EDID

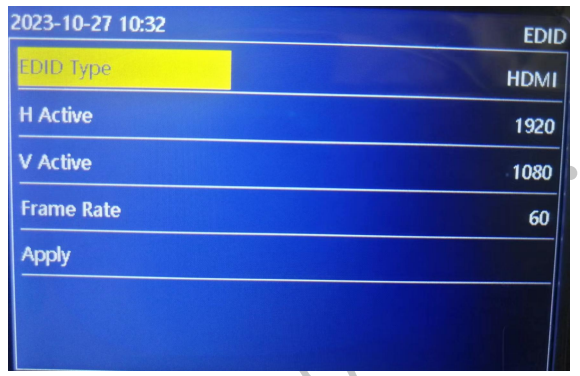
Set input signal interface EDID information, supporting common EDIDs and customization.

Input signal: Select the input interface to change the EDID.

Common EDID: 2K input interface supports 1366x768_ 60Hz, 1400x900_ 60Hz, 1920x1080_ 60Hz, 2304x1152_ 60Hz, 2560x900_ 60Hz; 4K input interface supports 1366x768_ 60Hz, 1400x900_ 60Hz, 1920x1080_ 60Hz, 2304x1152_ 60Hz, 2560x900_ 60Hz, 3072x3072_ 60Hz, 3840x1080_ 60Hz, 3840x2160_ 60Hz

Custom EDID supports two types: HDMI and DVI, with customized adjustments for width, height, and refresh rate. It supports a maximum horizontal width of 4092, a maximum vertical height of 4092, and a refresh rate of 0-180Hz.





Screen inspection

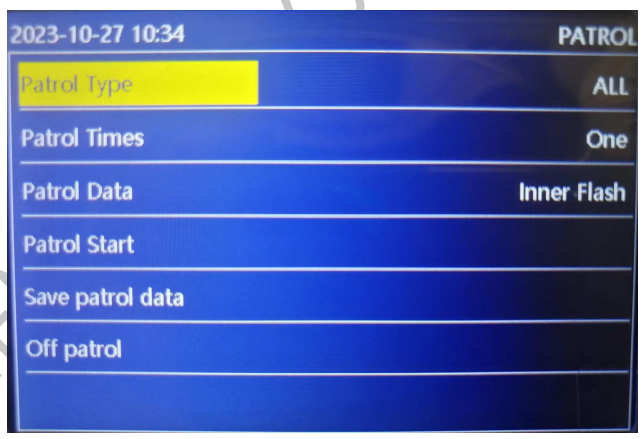
Screen inspection

Inspection type: optional for all, sending card, or receiving card.

Patrol frequency: can be either once or continuous, and continuous can only be selected when the inspection type is selected as receiving card.

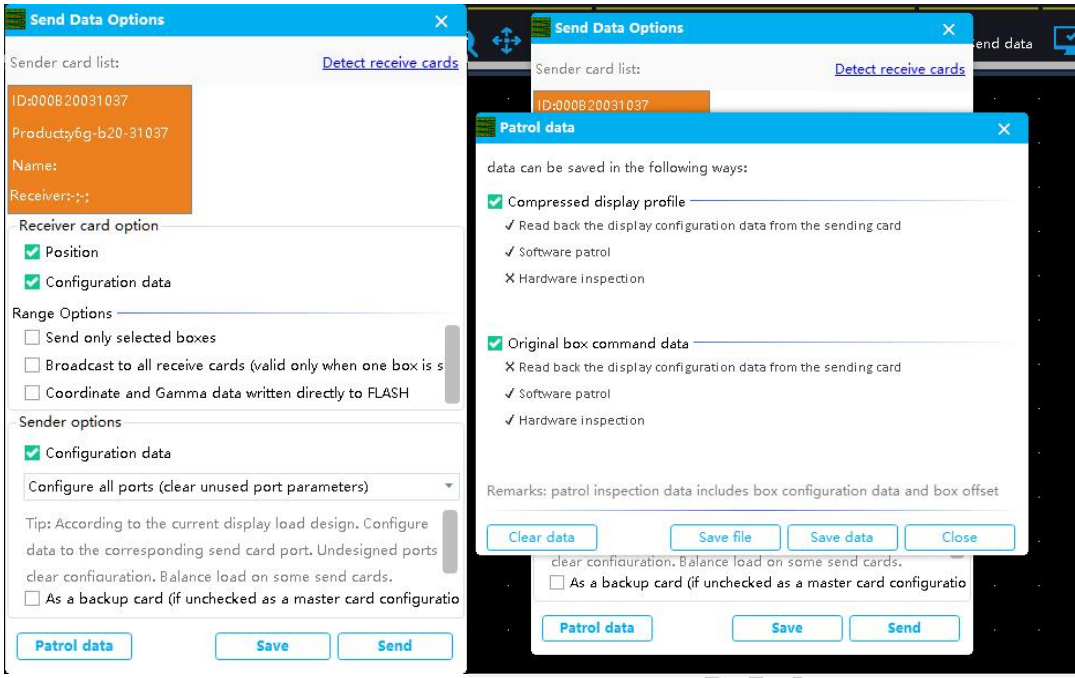
Inspection data: Optional internal storage or external SD card for storage.

Patrol solidification: Data is saved to hardware.



Before using the inspection, it is necessary to use the upper computer software to save the inspection data to internal storage or external SD card storage. The operation of the

upper computer software is as follows:



Send the display screen connection file in the complex screen adjustment interface of the upper computer screen configuration interface, and then click on the adjacent inspection data to save the data. For internal storage inspection, you can choose the inspection type: receiving card, sending card, all; You can choose the number of inspections, only the receiving card can conduct unlimited inspections, and sending cards can only be selected once; Cure after inspection.

Attention: After the unlimited inspection of the receiving card is enabled, the USB needs to be unplugged. After unplugging the USB, the menu cannot be operated. To restore, press and hold the button for 10 seconds to close the inspection or plug in the USB again to close it.

External SD card inspection

Send the display screen connection file in the complex screen adjustment interface of

the upper computer screen configuration interface, then click on the patrol data next to it to save the data, and then save the file to the SD card (the file suffix must be:. bin). For external SD card patrol, you can choose the patrol type: receive card, send card, all; You can choose the number of inspections, only the receiving card can conduct unlimited inspections, and sending cards can only be selected once; Cure after inspection.

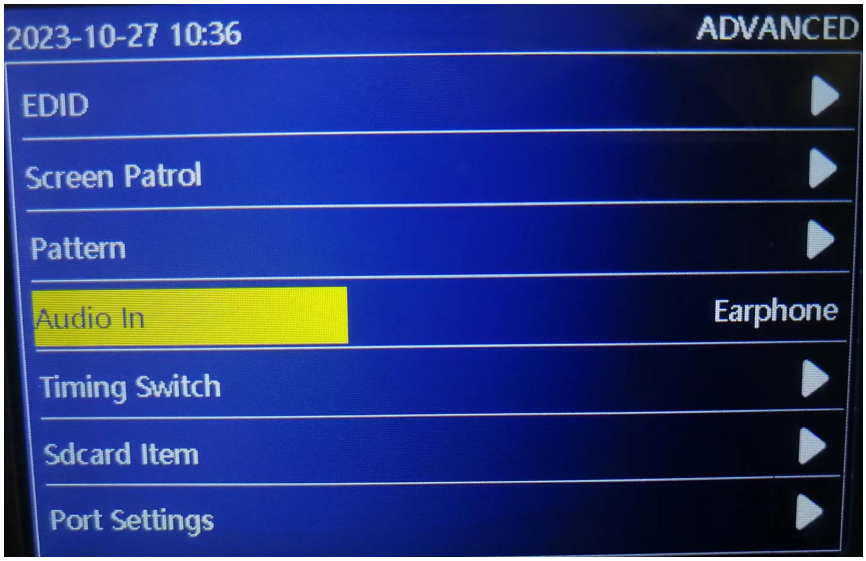
Attention: After the unlimited inspection of the receiving card is enabled, the USB needs to be unplugged. After unplugging the USB, the menu cannot be operated. To restore, press and hold the button for 10 seconds to close the inspection or plug in the USB again.

Test Mode

Switch the test image output and select the corresponding test image output.

Audio Follow

Select the input signal source for outputting audio, which can be a window signal or an external headphone jack input.



Timed switching

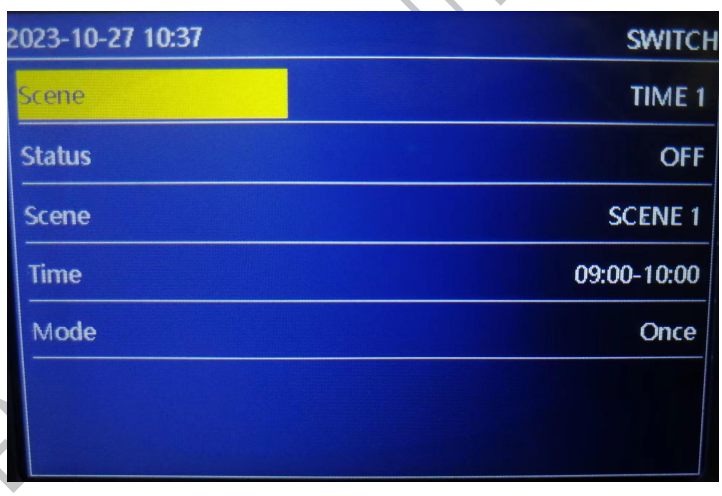
Time period: Up to 5 timed scenes can be set.

Status: Turns on or off the selected timed switching period.

Scene: Select the scene preset for timed switching calls.

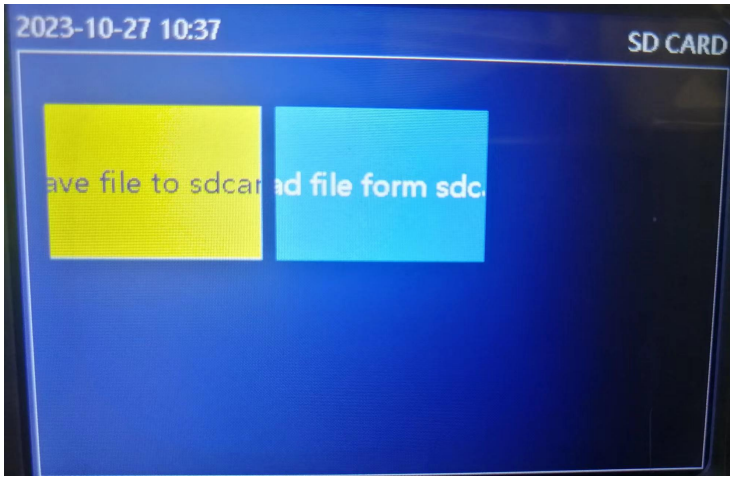
Time: The time range for timed switching.

Number of times: The selected timed switching period is executed once or repeatedly.



SD card backup

Backup the video processor settings parameters to the SD card, or restore the settings parameters from the SD card to the video processor



System settings

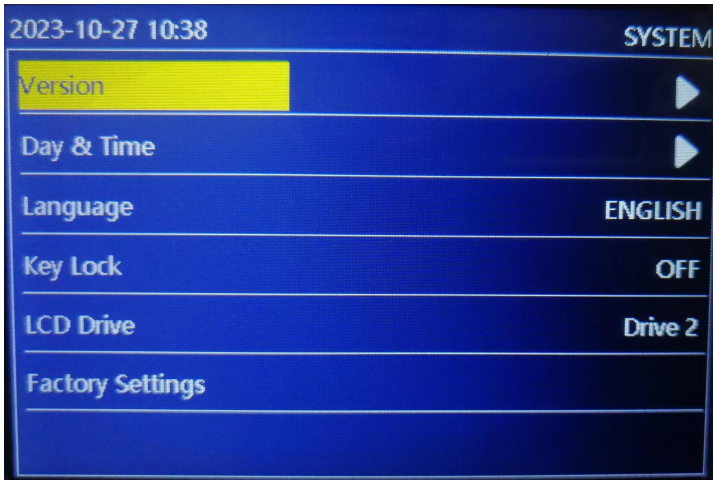
The system settings include version information, time settings, language, keylock, and factory settings.

Language: Supports both Chinese and English, with the default language being 'Chinese'.

Key lock: Lock the front panel button function, default to the "off" state, select the "on" state, and then press the OK button to confirm. After 3 minutes of opening, there will be no operation to automatically lock.

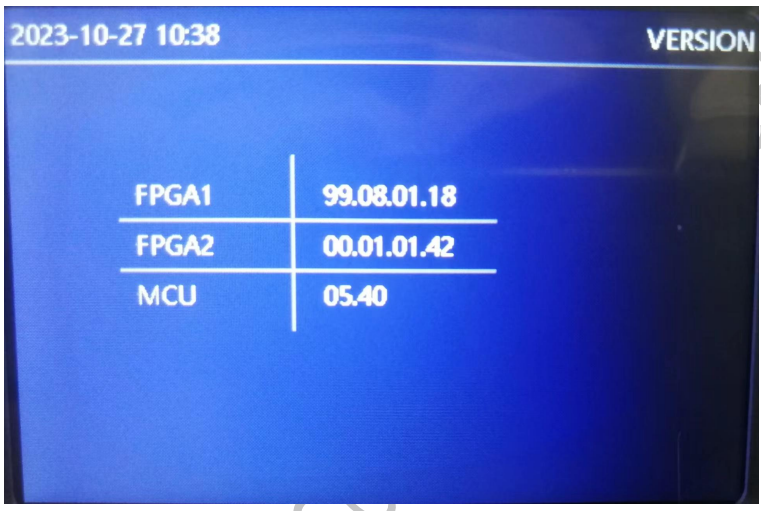
Unlock method: Press the OK button and there will be a prompt. Press any button again to unlock.

Factory settings: After selection, press the OK key to restore the device to its default factory settings.



Version information

View video processor FPGA and MCU software version information.

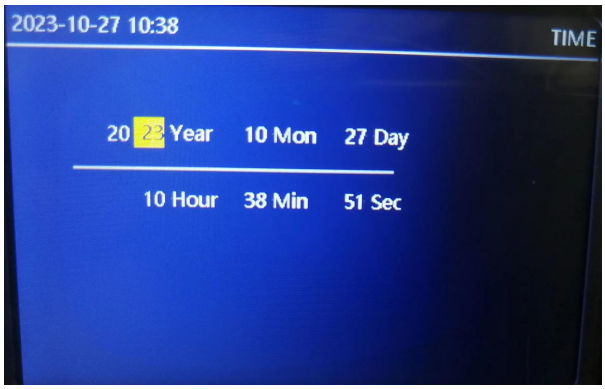


Time setting

Set the local clock and date of the video processor. The video processor motherboard has a built-in button battery or supercapacitor, which can keep the clock running normally after power failure. If the device is not powered on for a long time before use, it is necessary to reset the time and clock. The timing of the switch is based on this, and restoring the factory settings will not change the time setting parameters.

Rotate the knob to select the value that needs to be adjusted. Press "OK" to select it and

it will turn green. Rotate the knob to adjust and press "OK" to save.



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: S70S.

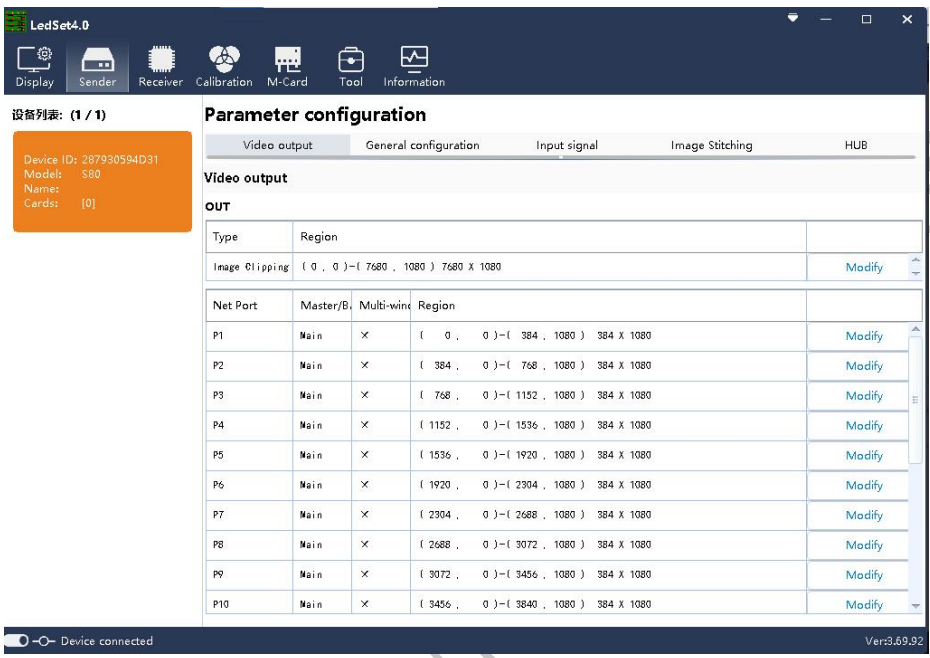
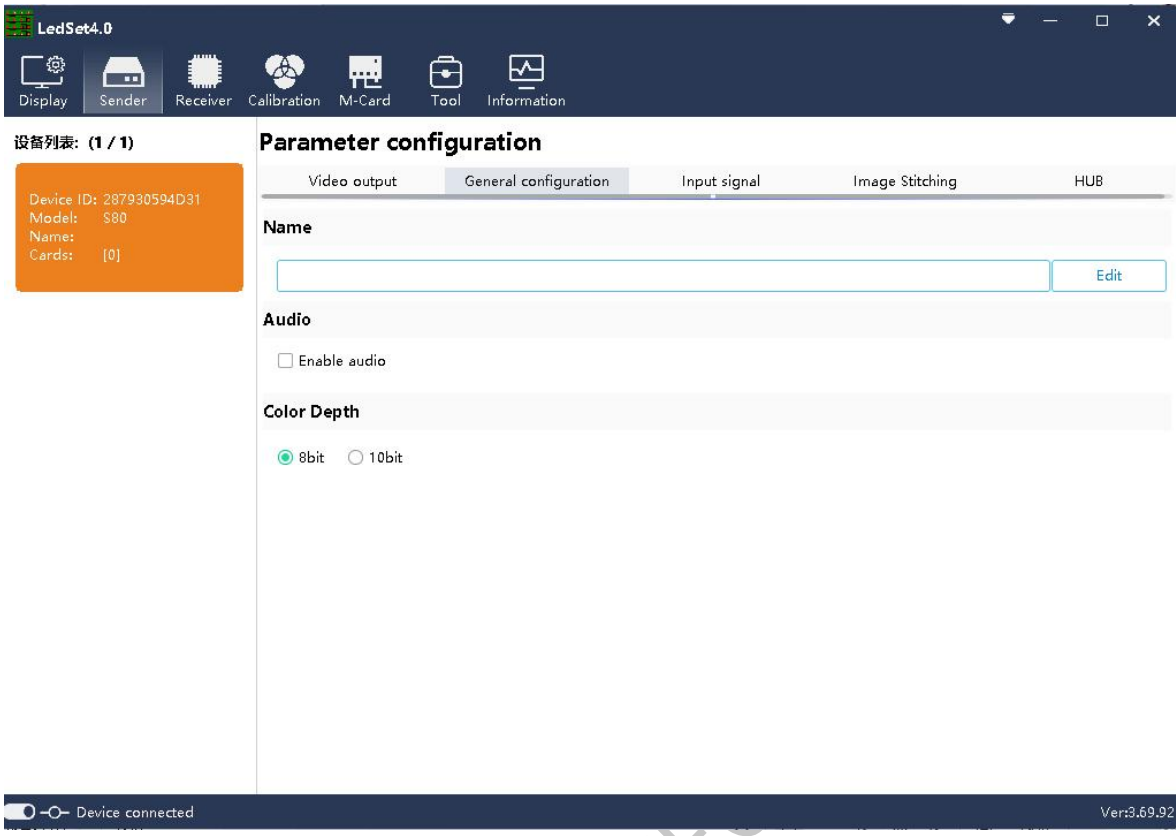


Image output

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.

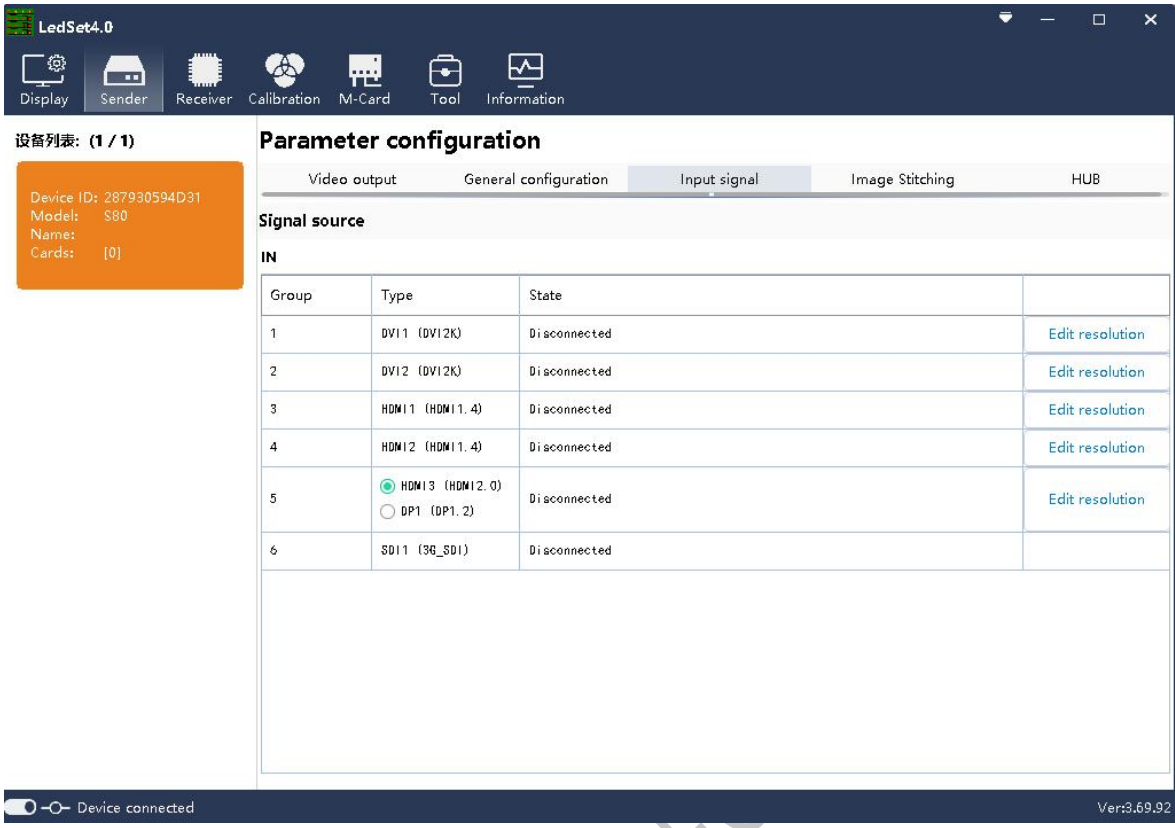
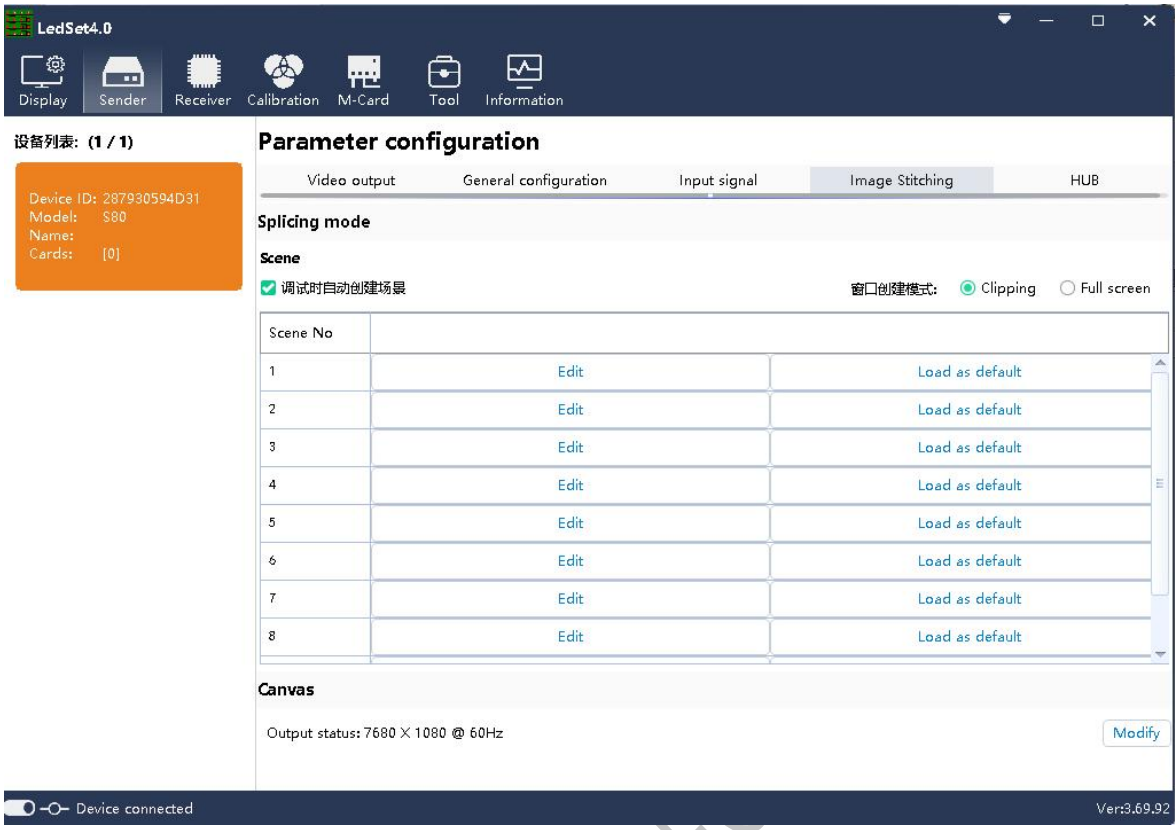


Image stitching

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.