



MVB2S MVB4S

2IN1 Video Processor

User Manual

Applicable to MVB2S MVB4S

Document version:: V2.0

Hardware Version: MVB2S (V5.2) MVB4S (6.0)

Safety Instruction



This symbol reminds the user that there are important operation and maintenance instructions in the user manual of the equipment.



This symbol warns the user that there is dangerous voltage exposed in the casing of the equipment, and there is danger of electric shock.

Precautions

Reading Instructions Users must read and understand all safety and use instructions before using the equipment.

Save Instructions Users should save safety instructions for future use.

Obedience warning Users should observe all safety and operating instructions in the product and user's guide.

Avoid appending Do not use tools or appending equipment not recommended by the manufacturer of this product to avoid danger.

Warning

Power supply

This equipment can only use the power supply indicated on the product. The equipment must be powered by a power supply system with a ground wire. The third line (ground wire) is a safety facility, which cannot be used or skipped.

Unplug the power supply

In order to safely unplug the power supply from the equipment, please unplug the power cord of all equipment rear or desktop power supply, or any power cord connected to the mains system.

The power cord shall be properly wired to avoid being trampled or squeezed by heavy objects.

Maintenance

All repairs must be carried out by certified maintenance personnel. There are no parts in the equipment that can be replaced by users. To avoid the danger of electric shock, don't try to open the cover of the equipment to repair the equipment yourself.

Vent holes

Some equipment housings have vent slots or holes, which are used to prevent the sensitive components in the machine from overheating. Don't block the vent with anything.

Copyright

Copyright 2013 splicer processor and video processor manufacturers reserve all rights.

Trademark

VGA and XGA are registered trademarks of IBM.

VESA is a trademark of video electronics standards association.

HDMI logo and high-definition multimedia interface are trademarks of HDMI Licensing LLC.

CONTENT

Safety Instruction	1
Precautions	1
Warning	1
1 Update Records	1
2 Applicable Model	1
3 Product Overview	2
3.1 Product introduction	2
3.2 Product Features	2
4 Hardware Introduction	3
4.1 Wiring Topology Diagram	3
4.2 Hardware Interface Specifications	4
4.2.1 Front Panel	4
4.2.2 Rear Panel	5
5 Main Interface	6
5.1 Main Interface	6
6 Menu Operation	9
6.1 Input Settings	10
6.1.1 Common Resolutions	10
6.1.2 Custom Resolution	11
6.2 Output Display	11
6.2.1 Common Resolution Settings	12
6.2.2 Custom Resolution	14
6.2.3 Frame synchronization	14
6.3 Screen Configuration	15
6.3.1 Screen Calibration	15
6.3.2 Quick Mapping	16
6.3.3 Advanced Screen Mapping	16
6.3.4 Screen Mapping	17
6.4 Image Settings	20
6.4.1 Image Scaling	20
6.4.2 Input Interception	21
6.4.3 Image Properties	22
6.5 Scene Setup	23
6.6 Advanced Feature	23
6.6.1 Network Settings	24
6.6.2 Scheduled Switching	24
6.6.3 Transition Effect	25
6.7 Brightness Settings	25
6.7.1 Brightness Settings	25
6.7.2 Timing Brightness	25
6.8 Screen Control	26

6.9 USB drive playback	27
6.10 Language	27
6.11 System Settings	28
6.11.1 Version Information	28
6.11.2 Time Setting	29
6.11.3 Key Lock	29
6.11.4 Baud rate of RS232	29
6.11.5 Factory Settings	29
6.11.6 Upgrade the processor	30

Shenzhen Mooncell Electronics Co., Ltd.

1 Update Records

Document version	Hardware version	Release time	Update record
V2.0	MVB2S (V5.2) MVB4S (V6.0)	June 23(nd), 2025	First release of document

2 Applicable Model

The product models applicable to this article are as follows:
MVB2S、MVB4S。

In this paper, MVB2S Sending Controller is used to explain:

3 Product Overview

3.1 Product introduction

MVB2S is an easy-to-operate and feature-rich device that specially developed for LED displays. The maximum load of a single device 1.30 million pixels, the regular version supports a maximum width of 3840 pixels, and a maximum height of 1920 pixels; It supports high-definition multi-type interface input, integrates professional display control technology and powerful video processing capabilities, and it simplifies the scene environment to build a video processor. Using high-performance image processing chip; with advanced interlaced image adaptive processing technology and ultra-clear noise reduction engine, eliminating video image motion smearing and jagged phenomenon, the video image enhancement technology makes the image clearer and more detailed, rich in details, and full of colors, Image quality is stable.

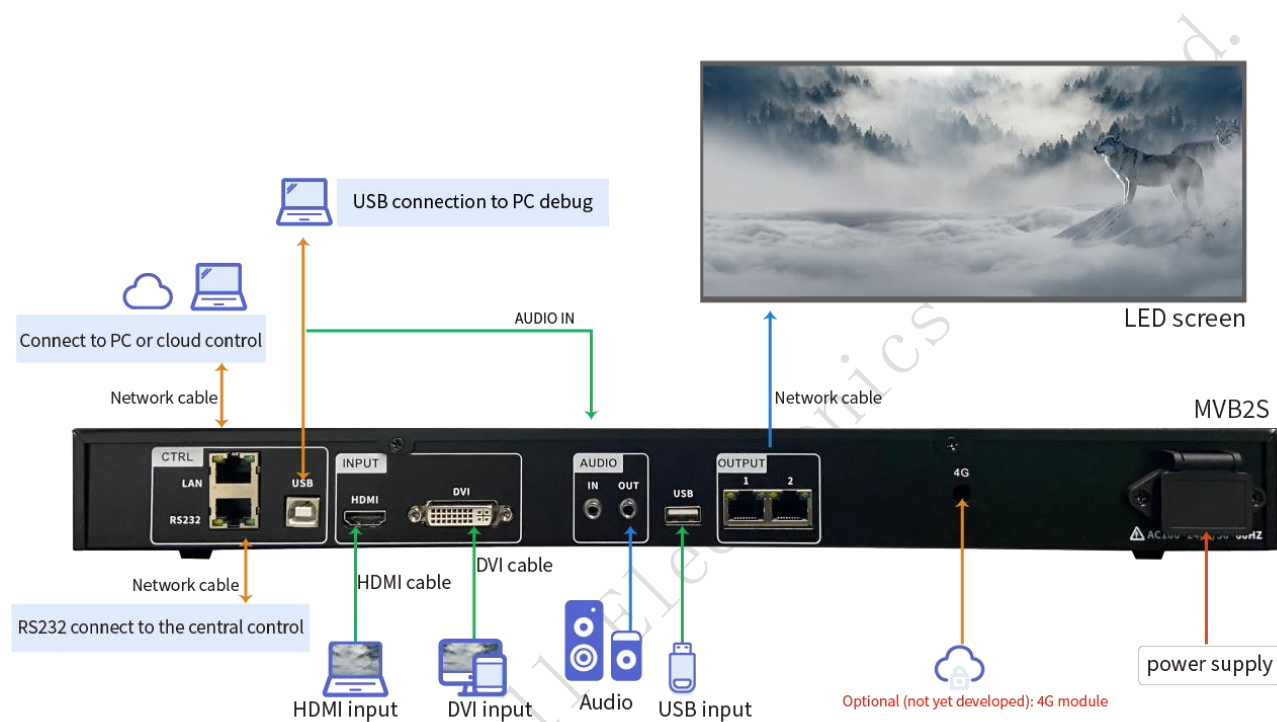
3.2 Product Features

- Support U disk playback, plug and play
- It supports seamless switching or fade-in and fade-out between multiple signal input channels to enhance and present professional-quality presentation pictures.
- The intuitive LCD display interface on the front panel and clear button light prompts simplify the control operation of the system.
- It support to create 8 user scenes as templates, save them and call them directly, which is convenient to use.
- Features two Gigabit Ethernet ports for direct connection to receiving cards, simplifying on-site setup
- Eliminates the need for computer-based display calibration; MVB2S enables straightforward display debugging
- Supports cloud platform management
- Supports input resolutions in both progressive scan and interlaced scan formats

4 Hardware Introduction

4.1 Wiring Topology Diagram

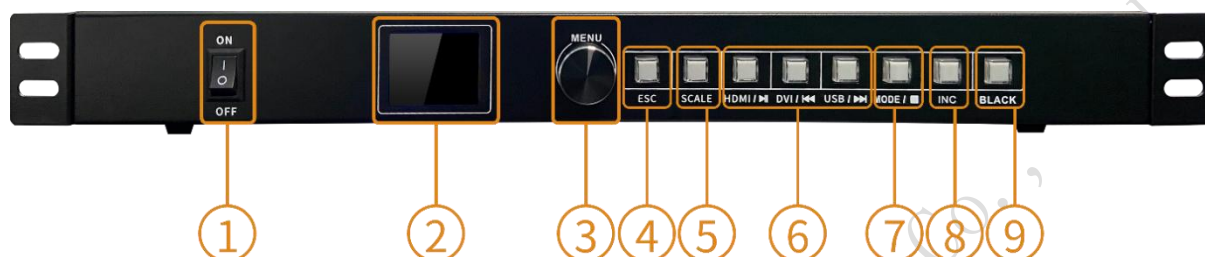
Wiring topology diagram using MVB2S devices as an example.



4.2 Hardware Interface Specifications

Taking the MVB2S device as an example.

4.2.1 Front Panel



* Product photos are for reference only, please refer to the products actually purchased.

Description of data interface:

#	Keys	Illustrations
1	ON/OFF	Power ON/OFF
2	LCD Display	To display the current status of the device and to have the menu settings.
3	Knob	1 、 In the main interface,press the knob to enter the menu operation interface; 2、 In the menu operation interface,rotate the knob to choose the menu, press the knob to select the current menu or enter its sub-menu. 3 、Once the menu that is with parameters selected, you could rotate the knob to adjust the parameters, and make sure to double press the knob to confirm.
4	Esc	Return(ESC)/Cancel the current menu or operation.
5	SCALE	Full Screen Scale Shortcut Key

6	Input Signal Source Key	Input Source Key Description: HDMI: HDMI Source Input Key, when it is on U-Disk playing ,to press“ ”, to pause or play the file. DVI: DVI Source Input Key, when it is on U-Disk Playing, to press the “⏮”, to select to play the previous file. VGA: VGA Source Input key, when it is on the U-Disk playing to press the “⏭”, to select to play the next file. USB: External Media Playing, U Drive Disk Playing Input
7	MODE	Save and load shortcuts Key for scenes
8	INC	Inspection shortcut Key
9	Black	One Click to get the Black Screen Shortcut Key

4.2.2 Rear Panel



* Product photos are for reference only, please refer to the products actually purchased.

数据接口说明:

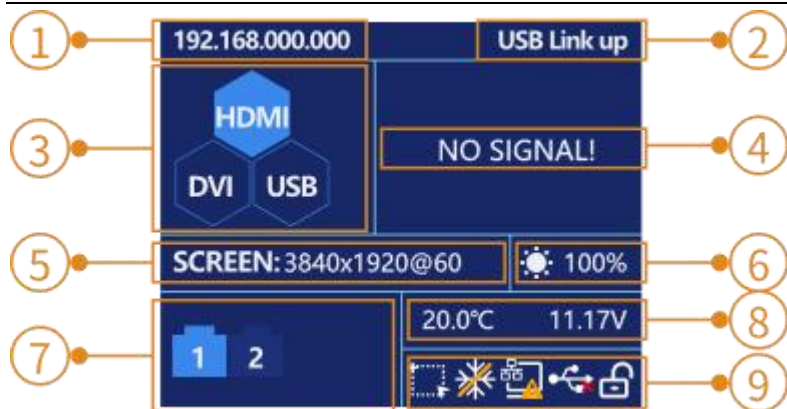
Input Ports			
#	Ports	Unit	Illustrations
3	HDMI	1	HDMI1.4 Standards, the maximum resolution it could support: 3840×2160@30Hz. It is downwards compatible and support HDCP1.4.
4	DVI	1	The maximum resolution, it could support:1920×1080@60Hz. It is backwards compatible Support custom resolution Maximum width: 3840 (3840 × 640@60Hz) Maximum height: 3840 (640 × 3840@60Hz) Interlaced signal input is not supported

5	AUDIO IN	1	3.5mm Audio Interface.
6	USB	1	1×USB 2.0 Interface , connecting to the U-disk , it supports 1080p@30fps Video files。 The U-Disk File System Supports NTFS、FAT32 and FAT16, but the exFAT (FAT64) is not supported. Image Formats: jpg、jpeg、png and bmp。 Video Encoding : MPEG1/2 , MPEG4 , Sorenson, H.263 , H.263, H.264(AVC1), H.265(HEVC), RV30/40, Divx, Xvid。 Video Bit Rate: Below 4000 Audio Encoding : MPEG1/2 Layer I , MPEG1/2 LayerII , MPEG1/2 Layer III, AAC-LC, VORBIS, PCM and FLAC。
Output Ports			
#	Port	Unit	Illustration
7	Network Port	2	2 Ethernet Port Output,directly connecting to the receiving card.
8	AUDIO OUT	1	3.5mm Audio Port It supports the audio channel: 3.5mm audio channel、HDMI、USB
Control Ports			
#	Ports	Unit	Illustration
1	RS232	1	Serial port, connect to central control
	LAN	1	Gigabit network communication interface
2	USB-B	1	For Debugging
8	4G	1	Reserved 4G module part, optional (not yet developed)

5 Main Interface

5.1 Main Interface

After the processor is turned on, the LCD screen displays the use status interface.



#	Icon	Illustration
1	192.168.000.000	Device IP Address
2	USB Connection	100Mbps Ethernet/USB Debugging Connection Status: - 100Mbps Ethernet Connection Status: NET: 103-1 - USB Debugging Connection Status: USB Connected - Not Connected: No Connection
3		 Currently selected HDMI source
		 Currently not selected HDMI source
		 Currently selected DVI source
		 Currently not selected DVI source
		 Currently selected USB source
		 Currently not selected HDMI source
4	No Signal!	Input resolution of the currently selected input source. When no valid input is present, displays: No Signal!
5	SCREEN	Current output screen resolution
6		Display brightness level: 0% indicates a black screen, 100% represents maximum brightness.
7		Display of output port numbers and port status:  : The network port is connected.  : The network port is not connected.

8	20.0°C	Real-time Temperature Monitoring of Equipment
	11.17V	Real-time Power Monitoring for Equipment
9	Connection Methods	 : Full-screen display  : 1:1 Pixel-to-Pixel Display  : Custom Zoom  : Black the screen  : Freeze Frame Activated  : Screen freeze not enabled  : The device connects to the control terminal via a network port.  : The device and control terminal are not connected via an Ethernet cable.  : The device connects to the control terminal via USB.  : The device and control unit are not connected via USB.  : The buttons are locked.  : Buttons are not locked.

6 Menu Operation

Knob:

- In the main interface, press the knob to enter the menu operation interface.
- In the menu operation interface, turn the knob to select the menu function, and the selection status is blue.
Press the knob to select the current menu or enter the submenu function.
- After selecting a menu with parameters, you can adjust the parameters by turning the knob. Please note that you need to press the knob again to confirm after the adjustment is completed.
- ESC: return key.
- Long press the knob to unlock the front panel keys.

Main Menu Function Settings: Input Settings, Output Settings, Screen Configuration, Image Settings, Scene Settings, Advanced Features, Brightness Settings, Picture Control, USB Playback, Language, System Settings—eleven major setting menus, each corresponding to different functional configurations.

As shown in the main menu below:



6.1 Input Settings

Steps: Rotate the knob to the **【Input Settings】** function, press the knob to enter, and configure the input source resolution.

The MVB2S supports HDMI, DVI, and USB video input interfaces. Input resolution can be set via two methods: common EDID or custom configuration:

Input settings as shown below:



6.1.1 Common Resolutions

Step 1: On the Input Settings screen, rotate the knob to Common EDID and press to enter resolution parameter adjustment.

Step 2: With resolution parameters selected, rotate the knob to choose Common EDID.

Step 3: Press the knob to confirm and complete Common EDID setup.

Supported Common EDIDs:

- 1366x0768 60Hz
- 1440x0900 60Hz
- DVI 1080P
- HDMI 1080P

Common EDID as shown in the figure:



6.1.2 Custom Resolution

Step 1: On the Input Settings screen, rotate the knob to Custom, then press to enter Custom EDID.

Step 2: Select Horizontal Valid, press the knob, and rotate it to manually adjust the resolution width.

Step 3: Select Vertical Valid, press the knob, and rotate it to manually adjust the resolution height.

Step 4: Select Apply, then press the knob to confirm the settings.

As shown in the figure:



6.2 Output Display

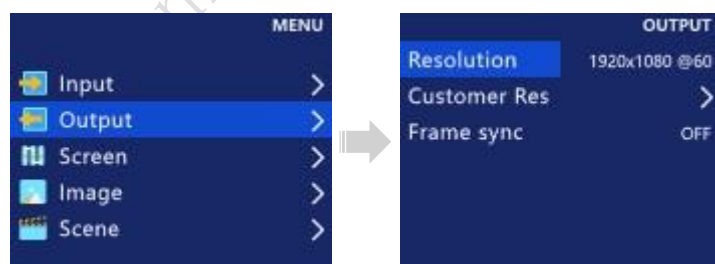
Attention:

- This feature is only available in the standard version of the program.
- The output resolution for the scaled version is fixed at 1920x1080 at 60Hz. Custom settings will cause abnormalities.

Steps: Rotate the knob to the 【Output Settings】 function, press the knob to enter, and set the output resolution.

Output Settings: 【Common Resolutions】 , 【Custom Resolution】 , 【Frame Sync Function Menu】 .

Input Settings as shown in the figure:



6.2.1 Common Resolution Settings

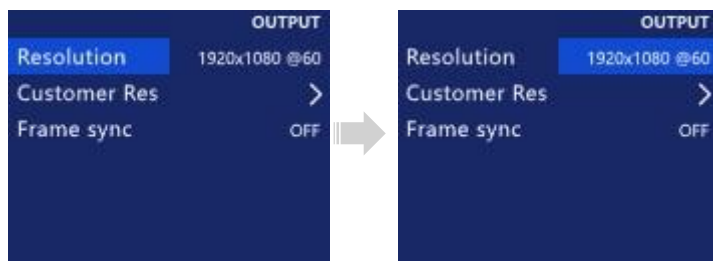
Common Resolutions:

Step 1: On the [Output Settings] interface, rotate the knob to [Common Resolutions] and press to enter resolution parameter adjustment.

Step 2: With resolution parameters selected, rotate the knob to choose a common resolution.

Step 3: Press the knob to confirm and complete the resolution setting.

Common Resolutions as shown:



Supports the following common resolutions:

- ✧ 1024x1280 @60
- ✧ 1280x0720 @60
- ✧ 1366x0768 @60
- ✧ 1440x0900 @60
- ✧ 1280x1024 @60
- ✧ 1680x1050 @60
- ✧ 1920x1080 @60
- ✧ 1920x1200 @60
- ✧ 2048x1024 @60
- ✧ 2304x1080 @60
- ✧ 2560x1080 @60
- ✧ 3840x0640 @60
- ✧ 1080x1920 @60

When applied to LED displays, we can choose a preset output resolution larger than the LED screen's resolution, or set the output resolution to match the LED display's resolution exactly.

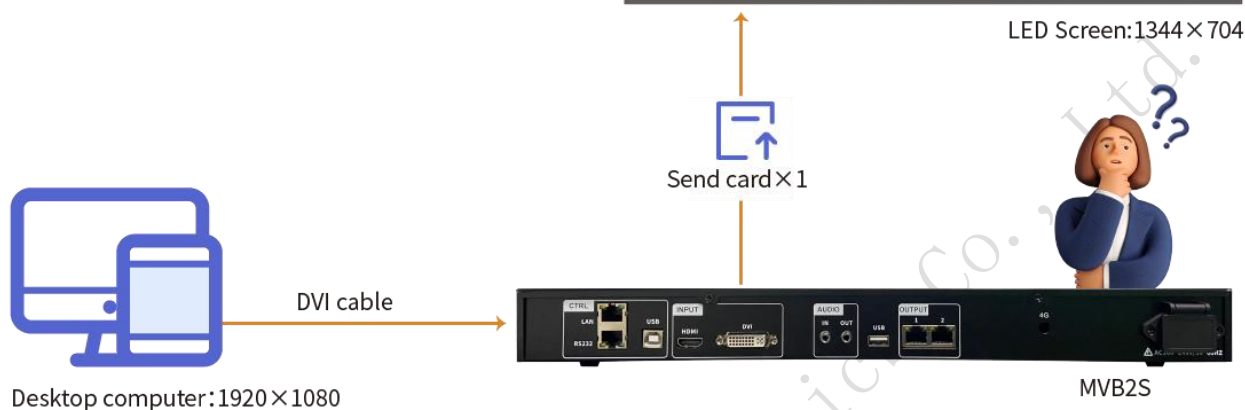
As shown in the figure:

How to set processor resolution?

Desktop resolution 1920×1080, DVI output MVB2S

A sending card carrying

LED screen resolution 1344×704

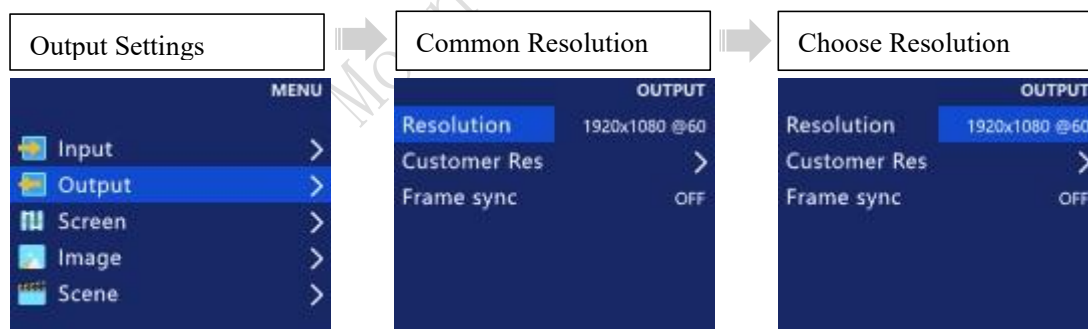


Operation Method:

Step 1: Ensure all hardware device interfaces are functioning properly and input/output cables are correctly connected.

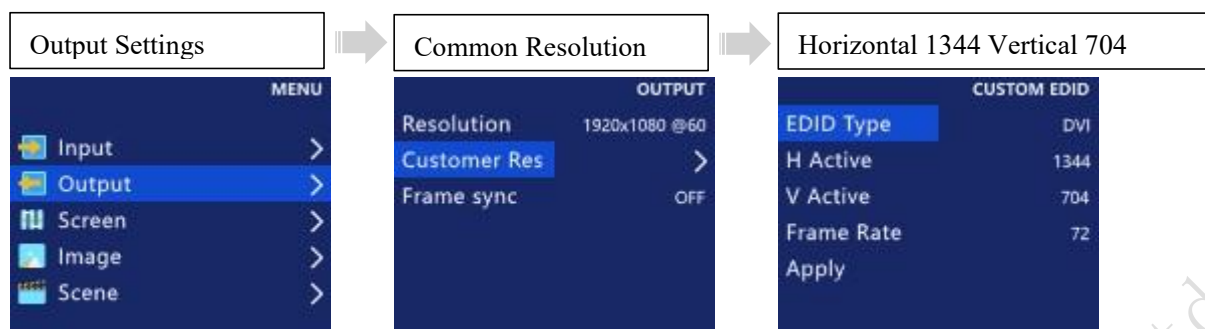
Step 2: Select a preset resolution larger than the LED screen's 1344X704, such as "1366X768, 1680X1050, 1920X1080". Press the knob to set.

As shown below:



Step 3: Set full-screen display, which scales the entire computer desktop to fit the LED screen. Specific steps: Main Menu > [Output Settings] > Enter [Custom Resolution] and modify the horizontal dimension to 1344 and the vertical dimension to 704.

As shown below:



Step 4: Set up local display. Press the “SCALE” key to toggle between full-screen and local view (default 1:1 pixel-to-pixel output).

Step 5: Save the configured parameters as a template. Procedure: Main Menu > “Scene Settings” > Save. Select one template to save.

6.2.2 Custom Resolution

Step 1: On the [Output Settings] interface, rotate the knob to [Custom Resolution], then press to enter resolution parameter adjustment.

Step 2: With resolution parameters selected, set the resolution by rotating the knob.

Step 3: Press the knob to confirm the resolution setting. Select Apply and press the knob again to complete the configuration.

As shown in the figure above:

6.2.3 Frame synchronization

Frame synchronization can be enabled or disabled:

In scenarios involving multi-screen display, complex animation playback, or situations requiring multiple LED display devices to show identical content simultaneously, the frame synchronization feature ensures that all display units present perfectly consistent visuals. This prevents screen tearing, delays, or desynchronization. As shown below:

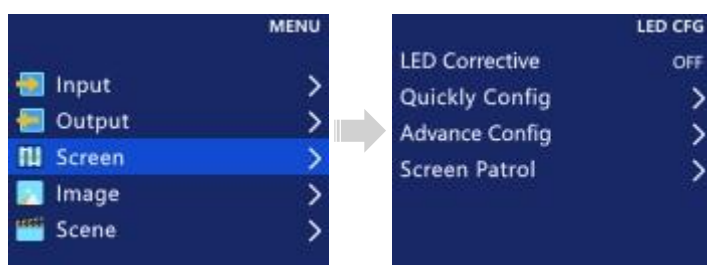


6.3 Screen Configuration

Steps: Rotate the knob to the **【Screen Configuration】** function, then press the knob to enter Screen Configuration.

Function settings in Screen Configuration: **【LED Screen Calibration】**, **【Quick Screen Mapping】**, **【Advanced Screen Mapping】**, and **【Screen Inspection】**.

As shown in the Screen Configuration below:



6.3.1 Screen Calibration

Screen calibration is a technique used to enhance the brightness uniformity and color fidelity of LED displays. It involves collecting brightness (and chromaticity) data from each pixel (or each primary subpixel) area on the LED display, to generate correction coefficients for each primary sub-pixel or a correction coefficient matrix for each pixel. This data is fed back to the display's control system, which applies the correction coefficients to enable differential driving of each pixel (or primary sub-pixel). This process ensures pure, refined images and true color reproduction on the LED display.

Screen calibration can be enabled or disabled. When enabled, the device activates the calibration enable function of the screen receiving card, which automatically calibrates screen uniformity based on pre-stored calibration data.

When disabled, the device deactivates the calibration enable function of the receiving card, preventing it from executing calibration data.

Note: Currently, screen calibration activation/deactivation applies only to brightness calibration. This function requires the screen receiving card to store calibration data; otherwise, display abnormalities may occur.

Screen calibration is illustrated below:



6.3.2 Quick Mapping

Attention

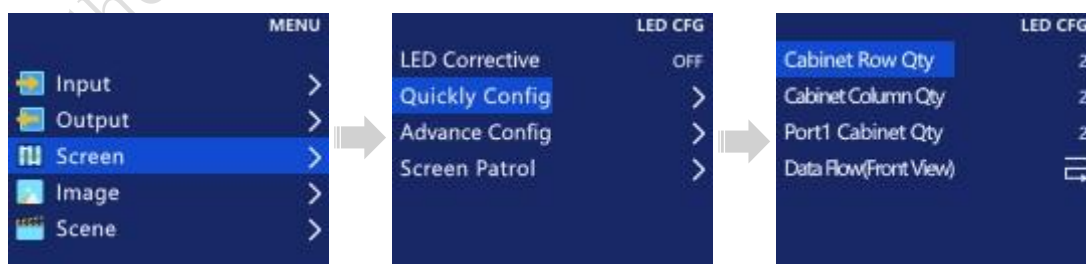
- The number of cabinets supported by Network Port 1 must be greater than or equal to the number supported by Network Port 2.
- The number of cabinets supported by each network port must be an integer multiple of the number of rows or columns displayed on the screen.
- The total number of pixels across all cabinets supported by Network Port 1 must not exceed 650,000 pixels.

Quick Screen Mapping:

Step 1: On the [Screen Configuration] interface, rotate the knob to [Quick Screen Mapping] and press to enter.

Step 2: Set the number of rows and columns for each network port cabinet. Select from eight common wiring methods.

As shown below: Quick Screen Mapping and 8 Wiring Methods:





6.3.3 Advanced Screen Mapping

- Step 1: On the [Screen Configuration] interface, rotate the knob to [Advanced Screen Mapping], then press to enter.
- Step 2: Set the number of rows and columns for each network port enclosure; select horizontal offset, vertical offset, and wiring method from eight common wiring options.
- Step 3: Select the application and press the knob to confirm settings, or choose to restore default settings.
- As shown below for Advanced Screen Mapping:



6.3.4 Screen Mapping

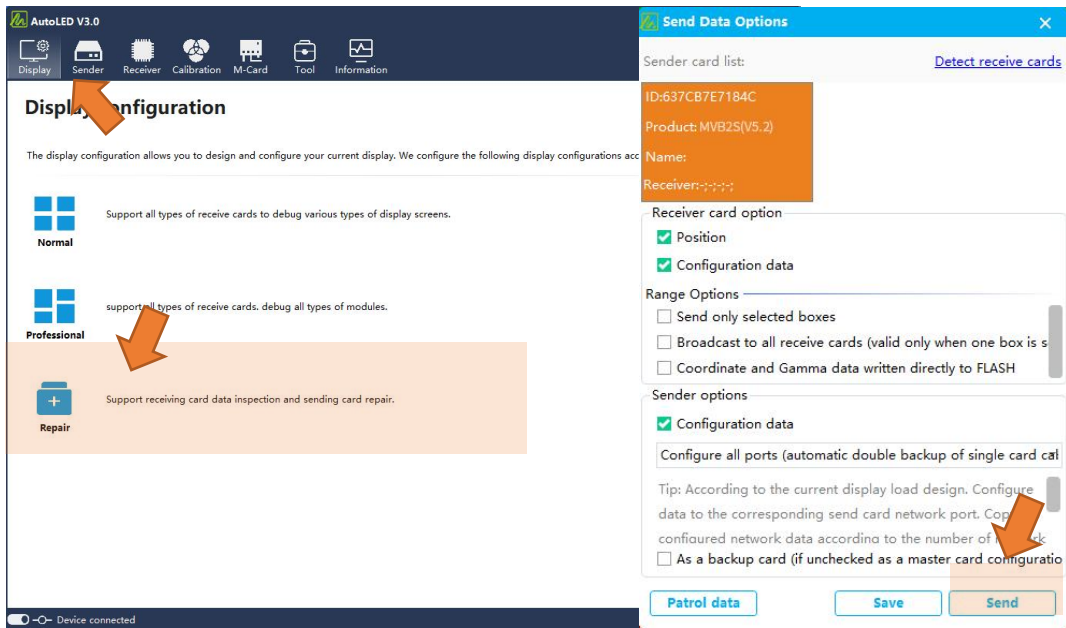
Attention:

Before performing screen inspection, it is necessary to use the upper computer software to set and save the inspection data.

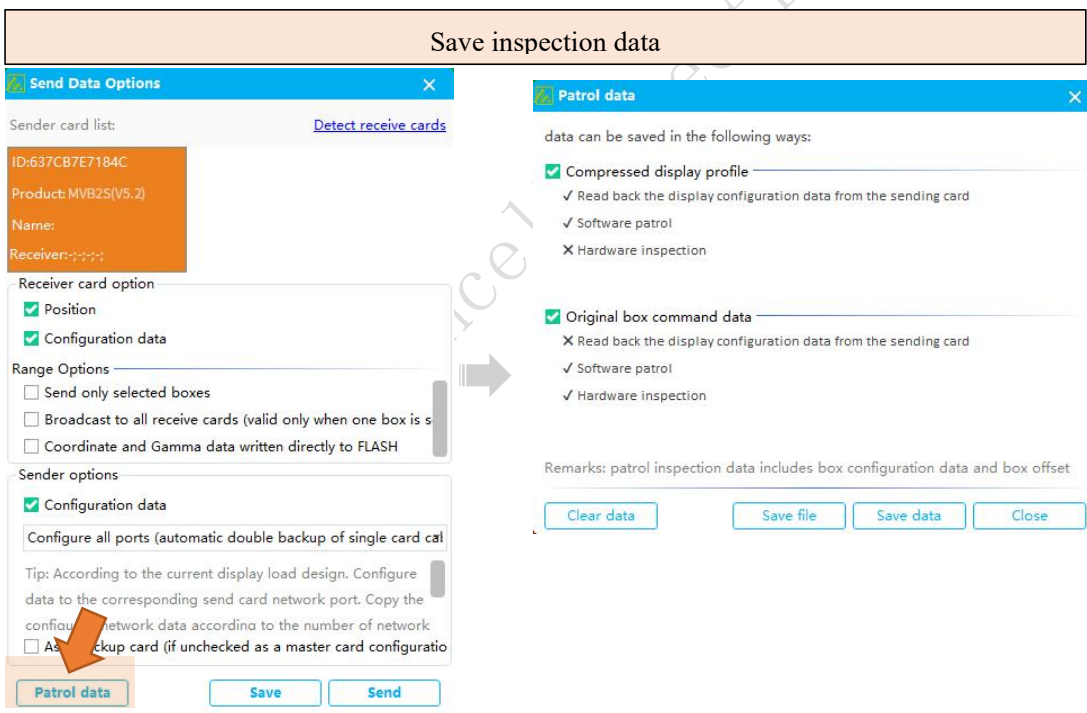
Operation method of setting and saving inspection data by upper computer software;

Step 1: Send the display screen connection file in the screen configuration interface of the upper computer software.

Send a screen mapping file



Step 2: Click Patrol Data to save the data.



The Inspection documents can be backed up and saved to the sending card for the screen patrol function, and the parameter content of the patrol document backup is the patrol content of the "All" patrol type shown in the table below.

✧ Select the inspection type, all, sending card and receiving card;

Inspection Type	Application Scenario	Inspection Content
All	When replacing the receiving card: the parameters shown on the right will be sent to the sending card and the receiving card again to restore the backup inspection data.	Location parameters of sending card: image interception parameters, network port offset parameters, (excluding scaling parameters) Receiving card: location parameters, configuration data parameters (excluding gamma value)
Sending card	Enabled only when the sending card parameters are abnormal: the sending card parameters shown on the right will be re-distributed to the sending card to restore the backup inspection data.	Location parameters: image capture parameters, portal offset parameters, (excluding scaling parameters)
Receiving card	Enabled only when the location parameters of the receiving card are abnormal: the parameters of the sending card shown on the right will be re-distributed to the sending card to restore the backup inspection data. After the unlimited inspection is started: the automatic updating parameters can be directly changed on the screen with faults, without manual distribution.	One inspection: location parameters of sending card and receiving card. Unlimited inspection: repair the location parameters of the sending card and the receiving card for the first time, and then only repair the location parameters of the receiving card.

✧ Number of inspections: You can select "Once" or "Unlimited" when selecting the inspection of receiving card, and only "Once" is available for other types.

Note: USB must be unplugged after the receiving card is turned on. After unplugging USB, the menu cannot be operated. To temporarily turn off the wireless patrol, you can press and hold the button for 10 seconds or plug in USB again to temporarily turn it off. To permanently turn it off, you need to click Turn off the patrol on the menu.

✧ Start patrol inspection, and perform patrol inspection according to the selected patrol inspection type and patrol inspection times.

✧ Patrol solidification, patrol back to the gamma parameter, and write and save the parameter sent by patrol to the corresponding memory, so that the parameter can be directly loaded when the equipment restarts.

Tips:

- It is necessary to start the inspection before the inspection and curing operation.
- The solidified inspection parameters correspond to the inspection type selected during inspection.
- During curing, the parameters of the sending card are stored in the flash of the sending card and the parameters of the receiving card are stored in the flash of the receiving card.

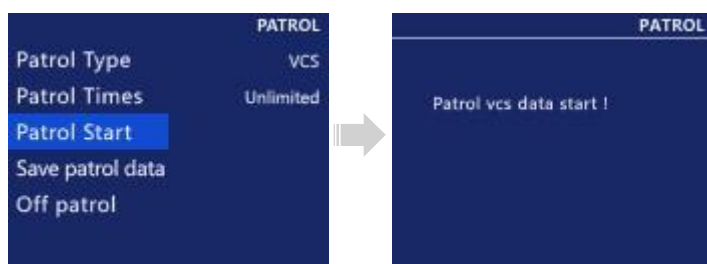
✧ Turn off the inspection. When the receiving card turns on the unlimited inspection, click to exit the inspection operation.

Screen Inspection:

Step 1: Turn the knob to [Screen Inspection], and press the knob to enter.

Step 2: Set patrol type, patrol times and patrol data; Press the knob to confirm the selection of "Turn on patrol", "Cure patrol" and "Turn off patrol".

Step 3: Wait for the inspection to be completed, or press and hold the knob to exit during the unlimited inspection of the receiving card.

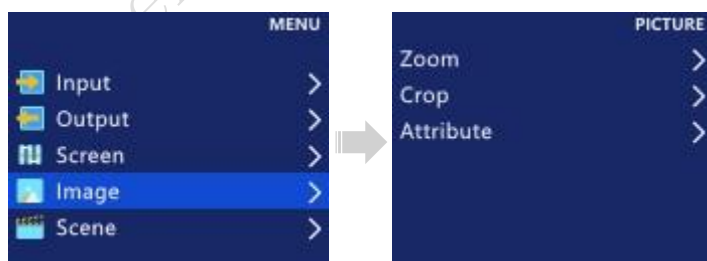


6.4 Image Settings

Steps: Rotate the knob to the **【Image Settings】** function, then press the knob to enter image settings.

Image settings functions: **【Image Scaling】**, **【Input Interception】**, **【Image Properties】**.

Image settings as shown below:

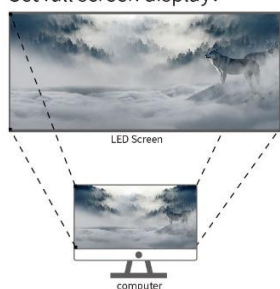


6.4.1 Image Scaling

Display the image output from the video processor in full screen on the LED display. If the resolutions match exactly, there is no need to adjust the “image scaling” setting. If the resolutions differ, scaling must be configured. The image will be scaled down or up on the LED screen. Adjust the horizontal start, vertical start, horizontal width, and vertical height to achieve the desired image dimensions.

As shown below:

Set full screen display?



full screen display

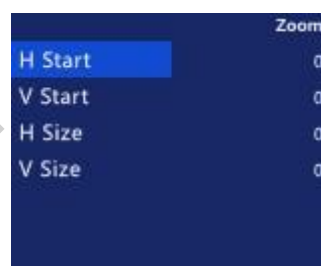
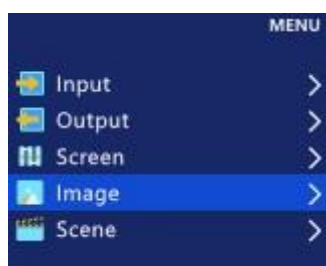


Point to point display

Step 1: On the [Image Settings] screen, rotate the knob to [Image Scaling] and press the knob to enter.

Step 2: Set “Horizontal Start,” “Vertical Start,” “Horizontal Width,” and “Vertical Height.” Press the knob to confirm the settings.

Image scaling as shown below:

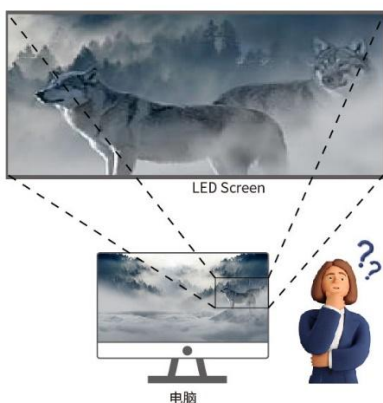


6.4.2 Input Interception

Attention:

- The system defaults to the “Off” state (all parameter adjustment options below are grayed out and cannot be modified).
- Parameters can only be effectively adjusted when the status is “On”.

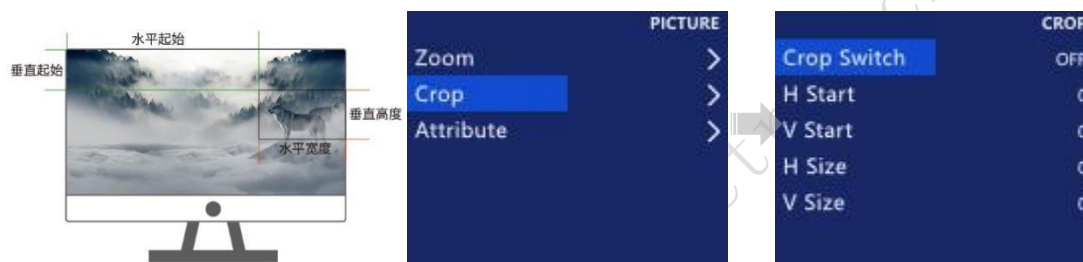
How to display the captured portion in full screen on an LED screen?



Step 1: On the [Image Settings] screen, rotate the knob to [Input Interception], then press the knob to enter.

Step 2: Set “Horizontal Start,” “Vertical Start,” “Horizontal Width,” and “Vertical Height.” Press the knob to confirm the settings.

As shown in the image below:



6.4.3 Image Properties

Step 1: On the [Image Settings] interface, rotate the knob to [Image Properties] and press to enter.

Step 2: Adjustable image property parameters: [Brightness], [Contrast], [Color Temperature], [Saturation], [Sharpness], [Hue]. Select each parameter (highlighted in blue) and adjust using the knob.

Step 3: Press the knob to confirm, completing the common EDID settings.

Image Properties:

Brightness: Adjusts the brightness value of the output image. System default is 50, adjustable from 0-100.

Contrast: Adjusts the contrast value of the output image. System default is 50, adjustable from 0-100.

Color Temperature: Adjusts the color temperature mode of the output image. Default is Warm; can also be set to Normal.

Saturation: Adjusts the saturation value of the output image. Default is 26, adjustable from 0-128.

Sharpness: Adjusts the sharpness value of the output image. Default system setting is 20, adjustable from 0 to 64.

Tint: Adjusts the tint value of the output image. Default system setting is 50, adjustable from 0 to 128.

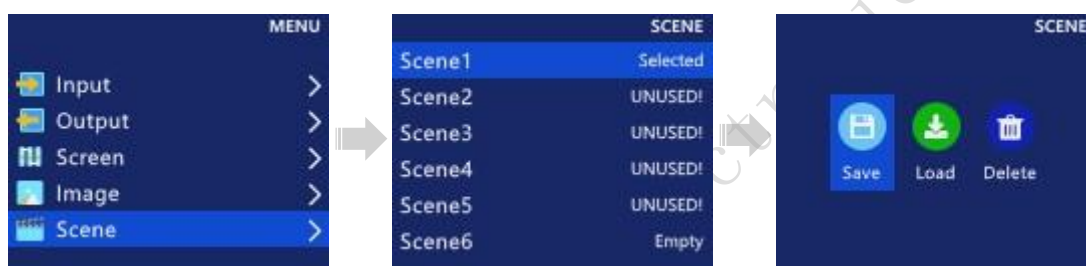
Note: The three parameters—Saturation, Sharpness, and Tint—can only be adjusted in USB playback mode.



6.5 Scene Setup

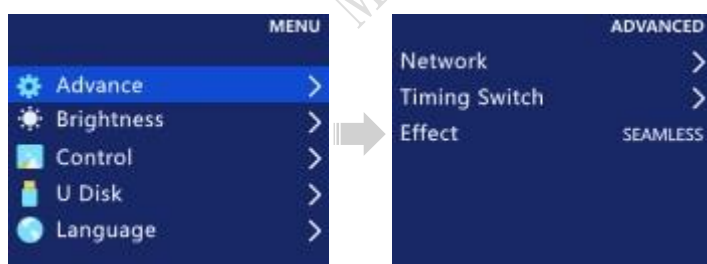
In Scene Settings, you can save and load parameters configured for the video processor, as well as clear data from saved scene presets. This includes parameters such as: output resolution, signal source, display mode, scaling parameters, cropping, brightness, contrast, saturation, sharpness, hue, and color temperature. This facilitates future use, with the system providing 8 templates for user storage.

As shown in the image properties below:



6.6 Advanced Feature

Advanced Features menu contains three submenus: **【Network Settings】**, **【Scheduled Switching】**, and **【Switching Effects】**. As shown in the figure below: Advanced Features:



6.6.1 Network Settings

Step 1: On the Advanced Features interface, rotate the knob to Network Settings and press to enter.

Step 2: DHCP On: Automatically requests IP allocation from the router. The DHCP server can automatically assign IP addresses to devices on the network, reducing manual configuration effort.

DHCP Off: Fixed IP remains unchanged.

Step 3: Configure the “Default Gateway,” “Subnet Mask,” “IP Address,” and “Port Number.”

Network Settings as shown:



6.6.2 Scheduled Switching

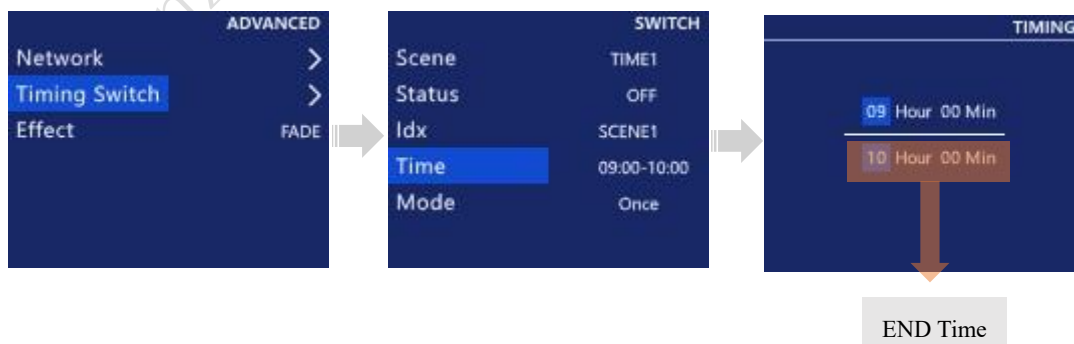
Step 1: On the 【Advanced Features】 interface, rotate the knob to 【Scheduled Switching】 and press to enter.

Step 2: While the knob is blue, press it to set parameters and press again to confirm.

Supported Timer Functions:

- Periods: Set the number of timer periods, up to 5 segments
- Status: Enable or disable the selected timer period
- Scene: Select a saved scene
- Time: Set the start and end times for the timer period
- Frequency: Set the execution frequency for this period (once or daily)

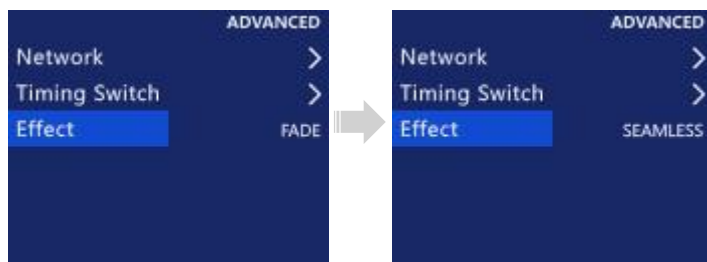
Timer Switching Example:



6.6.3 Transition Effect

Step 1: On the Advanced Features interface, rotate the knob to Switch Effects and press to enter.

Step 2: Rotate the knob to set parameters, choosing either “Fade In/Out” or “Seamless Transition.” Press the knob to confirm. Switching effects as shown below:



6.7 Brightness Settings

6.7.1 Brightness Settings

Function menu in Brightness Settings: [Brightness] and [Scheduled Brightness] menus.

Step 1: Press the knob to enter the [Brightness Settings] interface.

Step 2: Select the “Brightness” mode. Rotate the knob to adjust the brightness value.

Step 3: Select the “Scheduled Brightness” mode. Press the knob to enter the scheduled brightness settings.

Configure the “Time Slot,” “On/Off,” “Brightness Level,” “Duration,” and “Frequency.”

6.7.2 Timing Brightness

Supports scheduling for the following menu functions:

Time Slots: Set the number of scheduled time slots, up to 5 slots maximum

Switch: Enable or disable scheduled brightness functionality

Brightness: Toggle brightness levels

Time: Start time - End time for scheduled brightness

Frequency: Number of times this slot executes, can be set to one-time or repeat

As shown in the brightness settings below:



6.8 Screen Control

Steps: Rotate the knob to the **【Screen Control】** function, then press the knob to enter.

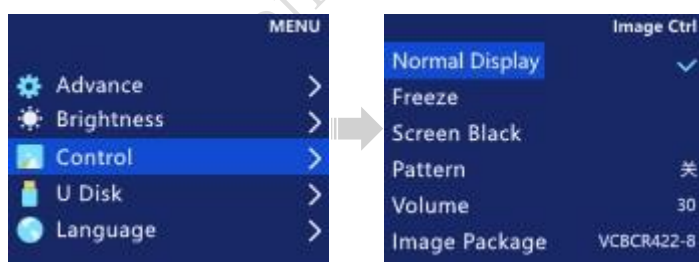
Within the Screen Control function menu, there are six options: **【Normal Display】**, **【Freeze】**, **【Black Screen】**, **【Test Mode】**, **【Volume】**, and Image Package Type.

Freeze: Default “Off” state. Using the knob, rotate to ‘On’ to freeze the output display uncontrollably. Rotate back to “Off” to resume normal display.



- Black Screen: Default “Off” state; toggle to ‘On’ for black screen mode. This function can also be quickly activated via the “BLACK” button on the front panel.
- Test Mode: Default “Off” state; cycles through test patterns including “White, Red, Green, Blue, Black”.
- Volume: Sets the numerical value for the output audio volume. Default is 30, adjustable from 0 to 100.

As shown in the following screen control:



6.9 USB drive playback

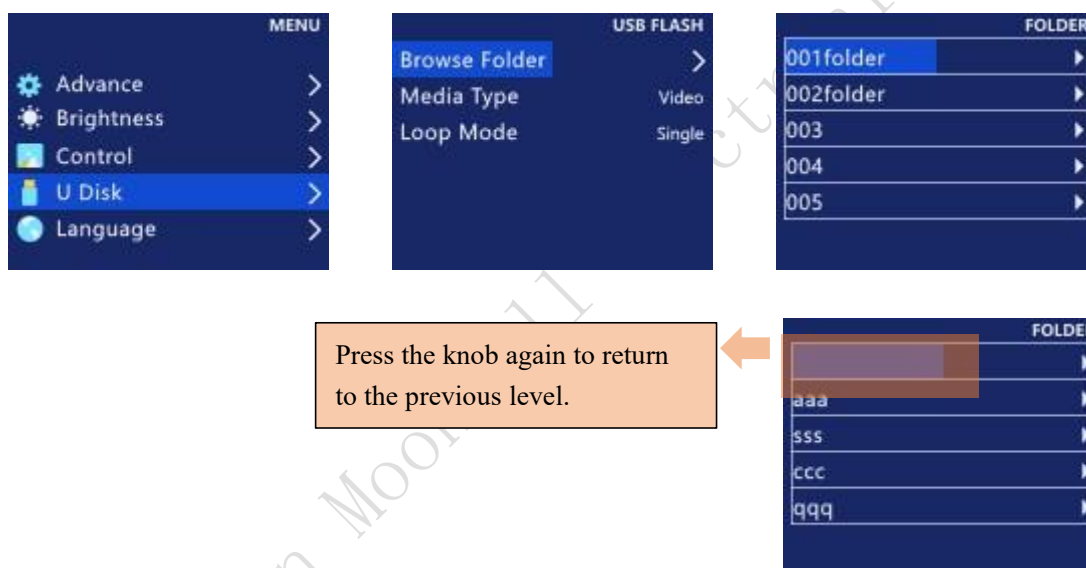
Attention:

To use this feature, first insert the USB drive into the video processor's USB port, then press the “USB” signal switch button on the front panel to enter USB drive mode.

If a USB drive is inserted into the processor but the “USB” signal switch button on the front panel is not pressed, you will not be able to access or play files from the USB drive. A prompt will appear: “Current signal source is not a USB device!”

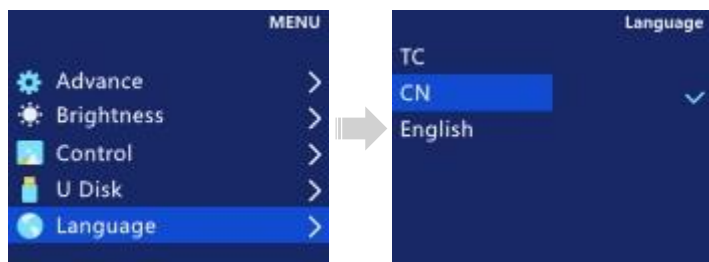
After pressing the front panel “USB” button to switch to USB information, pressing ‘USB’ again enables playback operations for files in the USB root directory (e.g., “Pause/Play, Previous Track, Next Track, Stop”). At this point, other signal switching functions (“HDMI, DVI, USB”) are disabled. Press “Esc” to exit USB playback mode.

USB playback as shown below:



6.10 Language

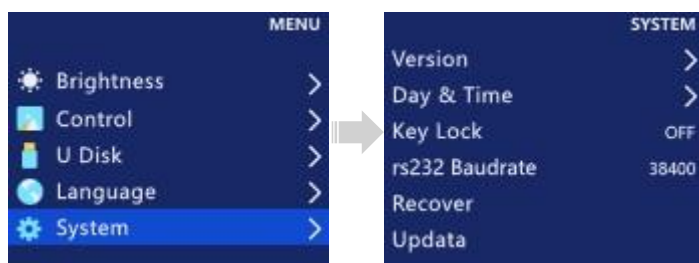
The default system language is "Simplified Chinese", which can be switched to "English" and "Traditional Chinese". Press the knob to confirm.



6.11 System Settings

System Settings Function Menu: 【Version Information】, 【Time Settings】, 【Key Lock】, 【RS232 Baud Rate】, 【Factory Settings】, 【Upgrade Processing】 Six function menus.

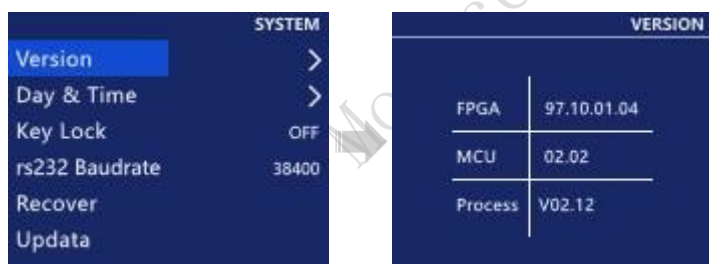
As shown in the system settings below:



6.11.1 Version Information

The current version number of the video processor system program.

As shown in the version information below:



6.11.2 Time Setting

Select the corresponding number and turn the knob to increase or decrease the value. Press the knob to confirm the setting. As shown in the figure below for time settings:



6.11.3 Key Lock

The key lock function is turned on to prevent misoperation and lock the key function of the front panel. Default "on" state, automatic locking after 3 minutes of no operation; Unlocking method: After pressing the knob, there is a prompt, and long press the knob to unlock.

6.11.4 Baud rate of RS232

The data transmission rate from one device to another, that is, bits per second (bit/s), has typical baud rates of 300, 1200, 2400, 9600, 19200, 38400, 115200, 230400 and so on. It needs to be used with serial communication software.

6.11.5 Factory Settings

Press the knob to pop up the prompt message "Are you sure you want to restore the factory settings? (Confirm/Return) "; Press the knob to confirm, and press the Esc key to return.

Set Parameters:

- Output Resolution: 1920X1080 60Hz
- Signal Source: HDMI
- Scaling Parameters: 0, 0, 1920, 1080
- Crop: Off
- Brightness: 50
- Contrast: 50
- Saturation: 26
- Sharpness: 20
- Hue: 50
- Color Temperature: Warm
- Black Screen: Off

- Transition Effect: Fade In/Out
- Test Screen: Off
- Volume: 30
- USB Playback Settings: Video, All Loop

6.11.6 Upgrade the processor

Copy the upgrade program to a USB drive, insert it into the USB port, and select “Upgrade Processor.” After the upgrade completes and the system automatically reboots, the status screen will appear, indicating the upgrade is finished.

Note: The USB drive's file system must be NTFS, FAT32, or FAT16. exFAT (FAT64) is not supported.



WeChat Official Account Platform

Company address: Mooncell Building, the third industrial zone of Baoshi South Road, Shiyan Street, Baoan District, Shenzhen.

Tel: 400-881-3531

Website: www.mooncell.com.cn