M4 M8 M10 M10-G

2IN1 Video Processor

User Manual

Applicable to M4 M8 M10 M10-G

Document version:： V2.0

Hardware Version： （V1.0.0）

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.

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

1 Update Records

Document version	Hardware version	Release time	Update record
V2.0	V1.0.0	July 17(nd), 2025	First release of document

2 Applicable Model

The product models applicable to this article are as follows:
M4、M8 M10 M10-G

In this paper, M10-G Sending Controller is used to explain:

3 Product Overview

3.1 Product Introduction

M10-G is a 10-network port 2-in-1 processor developed by Mooncell for LED display, which integrates professional 4K main control and powerful 4K multi-screen video processing capabilities. It supports two device working modes: sending card mode and processor mode. 10 Gigabit network port output, the maximum load of a single device is 6.50 million pixels, the widest is 15360 pixels, and the highest is 15360 pixels. It is easy to operate and has rich functions, which is conducive to simplifying the on-site construction environment. The M10-G can receive and process multiple types of video signals, featuring high-definition 4K@30Hz image processing. It supports 3*screen display, capable of simultaneously handling 3* 4K@30Hz signals, with HDMI and DVI loop-through; SDI input and loop-through, delivering premium image display. M10-G features a brand-new appearance and button knob interaction design, which supports LCD intelligent screen matching and device network port backup testing, layer attribute settings, synchronization settings, scene settings, etc., simplifying device operation.

3.2 Product Features

3.1 Improve the display effect

- Multiple input interfaces
  - 1×HDMI1.4（IN&LOOP）
  - 1×HDMI1.4
  - 1×DVI（IN&LOOP）
  - 1×SDI（IN&LOOP）
- Output interface
  - 10 gigabit network ports
  - Maximum load 6.50 million pixels, custom output resolution, maximum width 15360 pixels, maximum height 15360 pixels
- Support HDMI audio input

  1 channel 3.5MM interface audio input, 1 channel 3.5MM interface audio output

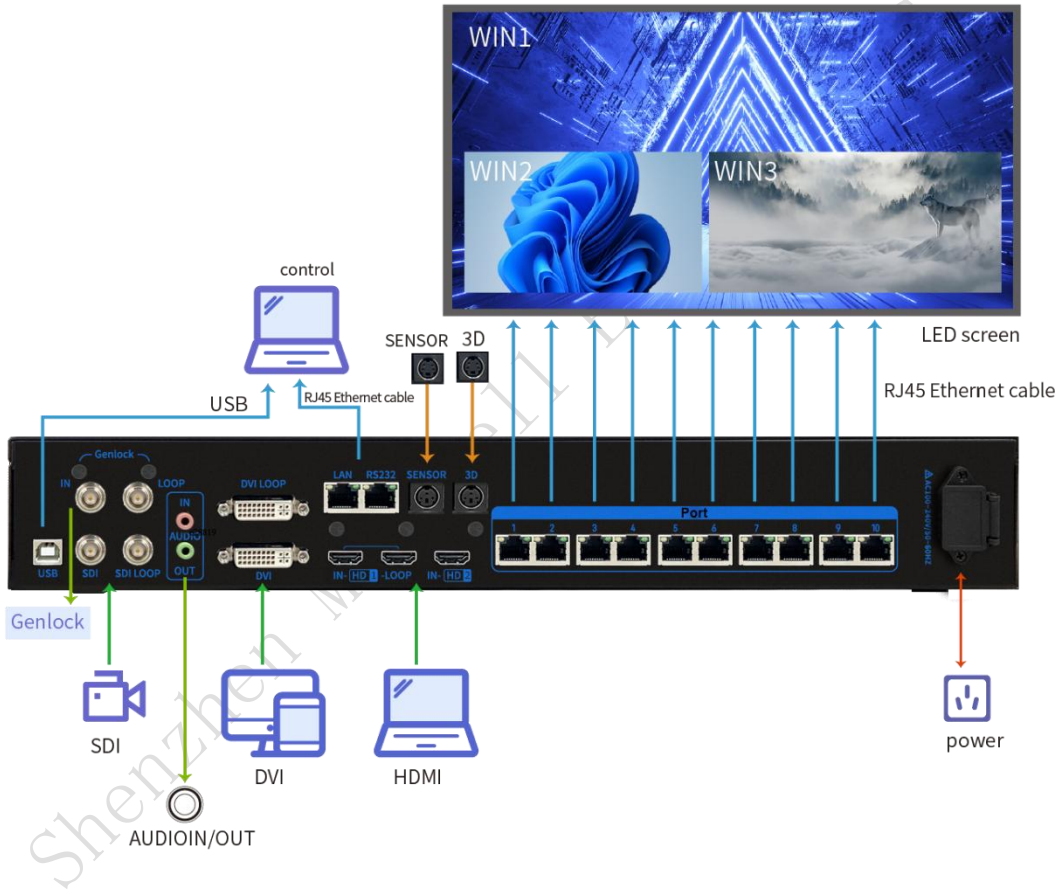
3.2 Diversified Display Function

- It supports to have just one-click to get the black screen.
- Support dual mode switching. Support sending card mode, processor mode
- The same type of input interface supports splicing input
- Support 3 screen display, 3*4K@30Hz at the same time, the size and position can be adjusted separately, and the layer priority can be adjusted
- Video processing capability, support output screen scaling. Support one-click full-screen zoom, pixel to pixel, Support arbitrary interception of input sources
- Support multi-scene saving and recall. Support 10 kinds of scene templates, directly call
- Support backup, device backup, Network port backup test, input source hot backup
- 3D: With 3D transmitter and matching 3D glasses, achieve 3D display effect
- Support brightness adjustment
- EDID management, support input resolution management of DVI, HDMI, SDI interfaces
- Support key lock function

- Support data inspection function
- Support PC software to control window opening, drag and drop the window size and position arbitrarily
- Support USB interface, 100M network control, support RS232 serial port protocol control
- The front panel's intuitive LCD display interface and clear button light prompts simplify the control operation of the system

4 Hardware Introduction

4.1 Wiring Topology Diagram



4.2 Hardware Interface Specifications

Taking the M10-G 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. LCD Resolution 320×240
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	Key	Function: Layers and function buttons Input: Input source and function buttons

Key Illustration		
Key	#	Illustration
WIN1	1	WIN1 layer on, off and layer status display: - - Blue is always on: Layer is on - Blue flashing: Layer is being edited - Blue is always off: the layer is not open
WIN2	2	WIN2 layer on, off and layer status display: - - Blue is always on: Layer is on - Blue flashing: Layer is being edited - Blue is always off: the layer is not open
WIN3	3	WIN3 layer on, off and layer status display: - - Blue is always on: Layer is on - Blue flashing: Layer is being edited - Blue is always off: the layer is not open
SCALE	6	Blue is on: WIN1 full screen display Blue is always off: custom/Pixel-to-pixel
MODE	7	Save and load scene shortcuts
FN	8	Customizable shortcuts
DVI1	4	Input source key description: Blue blinking: The source is selected, but there is no signal
HDMI1	5	
SDI	9	
HDMI2	0	
TEST	/	Enter the test settings menu, the blue light is always on
BLACK	/	Black screen shortcut, blue light is always on

4.2.2 Rear Panel

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

Rear panel description		
Input Interface		
Interface	QTY	Illustration
HDMI1 IN HDMI2	2	2 × HDMI1.4 input interface: - Interface form: HDMI-A Signal standard: HDMI 1.4 backward compatible - Supports audio input - Support 10bit - Maximum support 3840 × 1080@60Hz/3840 × 2160@30Hz video source input - Support HDCP1.4 - Does not support interlaced signal input - Support two HDMI1.4 splicing inputs - Support custom resolution Custom maximum width: 4092 (4092 x 1136@60Hz) Custom maximum height: 3981 (1060 x 3981@60Hz)
DVI	1	1 x DVI input interface: - Interface form: DVI-I socket Signal standard: DVI 1.0, HDMI 1.3 backward compatible - Supports up to 1920 x 1200@60Hz video source input - Support HDCP1.4 - Does not support interlaced signal input - Support custom resolution Custom maximum width: 3840 (3840 x 640@60Hz) Custom maximum height: 640 (640 x 3840@60Hz) - Support two DVI splicing inputs

SDI	1	1 × SDI input interface: - Supports ST-424 (3G), ST-292 (HD) and ST-259 (SD) standard video source inputs - Single channel supports up to 1920 × 1080@60Hz resolution video source input - Support de-interlacing - Does not support input resolution and bit depth settings
Output Interface		
Interface	QTY	Illustration
Network Port	10	10 Gigabit network port output: - Single network port 650,000 pixels - Maximum load 6.50 million pixels, limit width 15360, limit height 15360 Network port status indicator description: - Plug in the network cable. The green light is always on, and the yellow light is flashing.
HDMI1 LOOP	1	1 × HDMI1.4 loop-out interface: Interface form: HDMI-A Signal standard: HDMI 1.4 backward compatible Resolution: VESA standard, ≤ 3840 × 2160@30Hz Support audio input
DVI LOOP	1	1 × DVI 1.0 loop-out interface: Interface form: DVI-I socket Signal standard: DVI 1.0
SDI LOOP	1	1 × SDI loop out interface: Meets 3G-SD standard, does not support interlaced scanning
Audio Interface		
Interface	QTY	Illustration
AUDIO IN	1	1 channel standard 3.5MM interface audio input
AUDIO OUT	1	1 channel standard 3.5MM interface audio output

Control Interface		
Interface	QTY	Illustration
USB	1	1×USB 2.0 (Rectangular Port), Control and debug the sending card via computer
LAN	1	100Mbps Ethernet port for network-controlled devices
RS232	1	Serial port for integration with central control systems
Extended Function Interface		
Interface	QTY	Illustration
3D	1	Connect 3D Transmitter
SENSOR	1	Connect the optical sensor to capture ambient light levels and enable automatic brightness adjustment.
Genlock	1	Genlock control interface, one input channel, one loop-through output channel
Power supply interface		
Interface	QTY	Illustration
Power connector	1	AC-100-240V-50/60Hz AC Power Interface

5 Main Interface

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

#	ICON	Illustration
1	2025-3-24 09:29	Display real-time time Device IP address
2	000.000.000.000	Display real-time time Device IP address
3		 HDMI1 signal source is not currently selected.
		 HDMI2 signal source is currently selected.  HDMI2 signal source is not currently selected.
		 DVI1 signal source is currently selected.  DVI1 signal source is not currently selected.
4	SCREEN	Current output screen resolution
5		Output network port numbers and status display:  ： Network port connected.  ： Network port disconnected.
6	● WIN1 ● WIN2 ● WIN3	Display the input source and input resolution information of the window: NO SIGNAL!: The input resolution of the currently selected input signal source has no valid input. UNUSED!: The current window is not in use.
7		Device real-time temperature monitoring
		Device real-time power monitoring
		Screen brightness display: 0% for black screen, 100% for maximum brightness
8		Synchronization enabled

	Video Mode	Video control mode activated
9	Connection Ways	: Full-screen display 1:1 : Pixel to pixel display : The output display is currently in normal display mode. : The current output screen status is black. : The device and control terminal are connected via an Ethernet : The device and control terminal are not connected via an Ethernet : The device and control terminal are connected via USB : The device and control terminal are not connected via USB : Key locked : Key unlocked

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.

Function settings in the main menu include: [Screen Size], [Brightness Adjustment], [Smart Connect], [Layer Attributes], [Input Settings], [Scene Settings], [image mosaic], [Display Control], [Advanced settings], [Timing Switch], [Communication Settings], [Language], and [System Settings]—thirteen major setting categories, each corresponding to different function configurations. As shown in the main menu:

6.1 Screen Size

Step 1: Rotate the knob to the [Screen Size] function, press the knob to enter, and set the screen size and refresh rate. Step 2: Adjust the horizontal width, vertical height, and refresh rate of the screen as needed.

As shown in the input settings:

6.2 Brightness Setting

6.2.1 Manual Brightness

The brightness setting function menu includes two options: [Manual Brightness] and [Timed Brightness]. Step 1: In the [Brightness Settings] interface, press the knob to enter the brightness adjustment settings. Step 2: With "Manual Brightness" selected, press the knob and rotate it to adjust the brightness value.

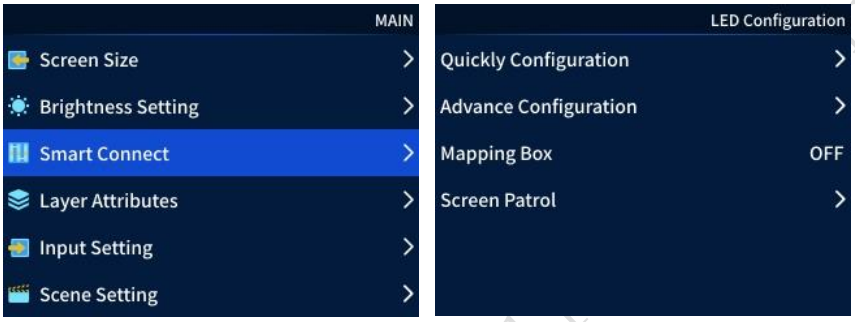
6.2.2 Timing Brightness

Supports the following menu functions for timing:

- Time Slot: Set the number of timed periods (maximum of 5 slots can be configured)
- Status: Enable or disable the timed brightness function
- Brightness: Adjust the brightness value
- Time: Set the start and end time for timed brightness adjustment
- Mode: Set the execution frequency of the time slot (can be set to once or repeated)

6.3 Smart Connect

Step: Rotate the knob to the [Smart Connect] function and press the knob to enter. The Intelligent Screen Configuration includes the following function settings: [Quickly Configuration], [Advanced Configuration], [mapping box], and [Screen patrol. As shown in the Intelligent Screen Configuration interface:



6.3.1 Quickly Configuration

Note:

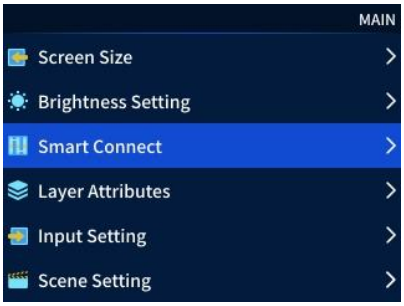
The number of cabinets loaded by Network Port 1 must be ≥ the number of cabinets loaded by Network Port 2.

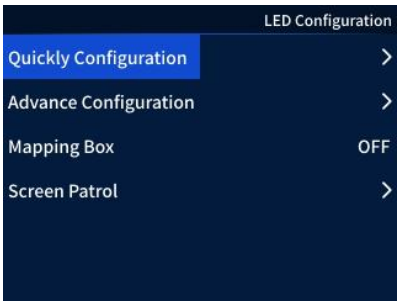
The number of cabinets loaded by each network port must be an integer multiple of the number of rows or columns of cabinets in the display screen.

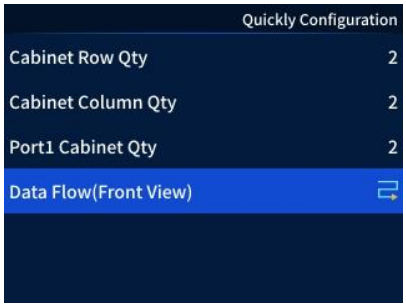
The total number of pixels in all cabinets loaded by Network Port 1 must not exceed 650,000 pixels.

Step 1: In the [Smart Connect] interface, press and rotate the knob to [Quickly Configuration], then press to enter.

Step 2: Set the number of cabinet rows and columns for each network port. Eight common wiring methods are available for selection. As shown in the Quick Screen Connection and wiring methods interface:





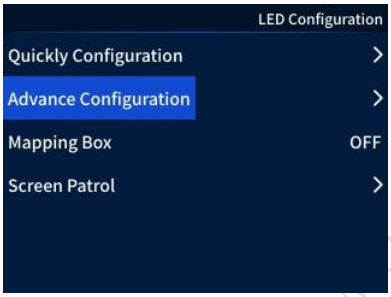


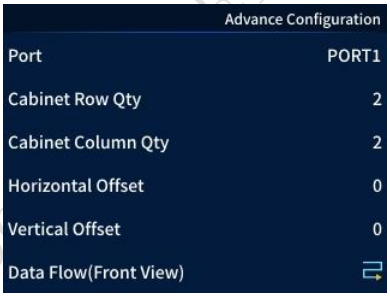
6.3.2 Advanced Configuration

Step 1: In the [Smart Connect] interface, press and rotate the knob to [Advance Configuration], then press to enter.

Step 2: Set the number of cabinet rows and columns for each network port; configure horizontal offset, vertical offset, and select from eight common wiring methods.

Step 3: Choose "Apply" and press the knob to confirm the settings, or select "Restore Default Settings" to reset. As shown in the Advanced Screen Configuration interface:





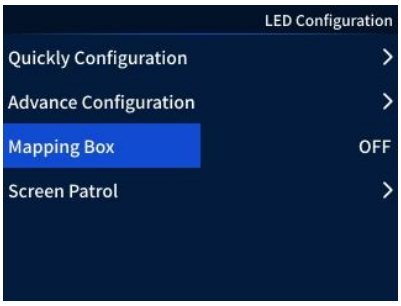
6.3.3 Mapping Box

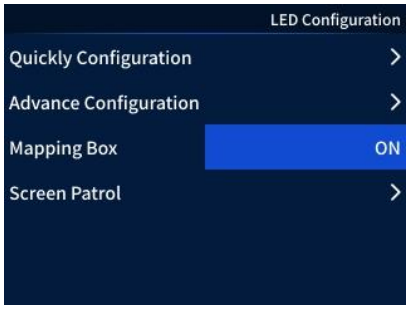
Marking Box can be used to display the connection relationship between each cabinet of the LED display and the sending card, and can also be used to check or view the wiring method between the cabinets of the screen.

Step 1: In the [Intelligent Screen Configuration] interface, press and rotate the knob to [Cabinet Marking].

Step 2: Set the cabinet marking status to "On" to enable the function, or "Off" to disable it.

As shown in the cabinet marking interface:



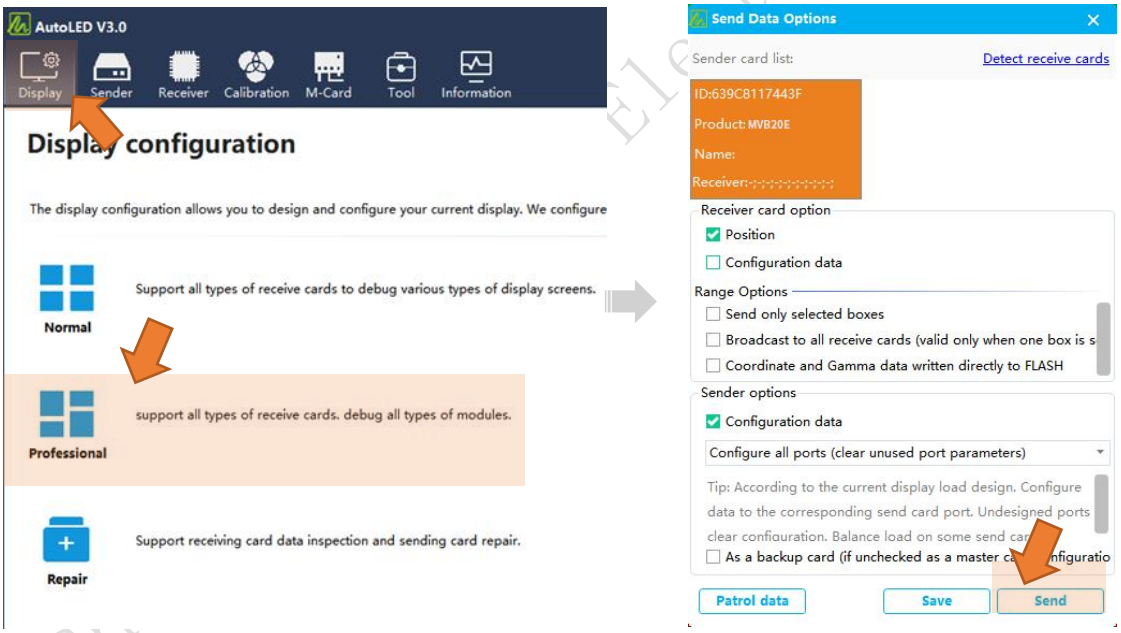


6.3.4 Screen patrol

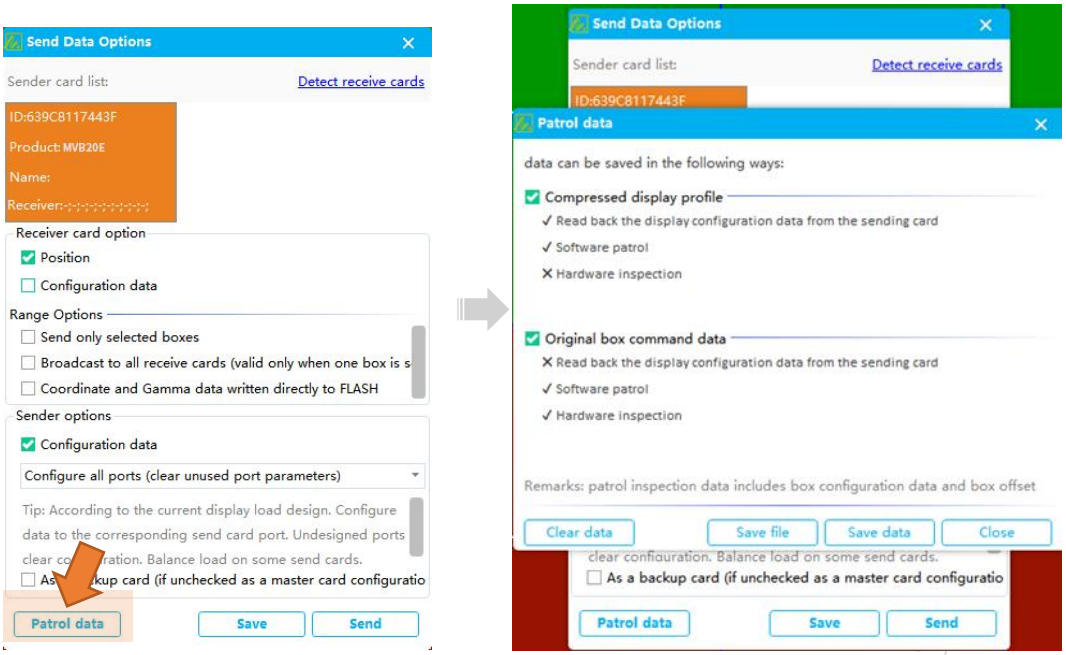
- Before executing screen patrol, it is necessary to use the host computer software to set and save the patrol data.
- Method for setting and saving patrol data using host computer software:

Step 1: In the [Screen Configuration] interface of the host computer software, send the display connection file in the [professional] section.

Send a screen mapping file



Step 2: Click [Patrol Data] to save the data.



The patrol 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 patrol type, all, sending card and receiving card;

Type	Application Scenario	patrol 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 patrol 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 patrol 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 patrol data. After the unlimited patrol is started: the automatic updating parameters can be directly changed on the screen with faults, without manual distribution.	One patrol: location parameters of sending card and receiving card. Unlimited patrol: 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 patrols: You can select "Once" or "Unlimited" when selecting the patrol 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 , and perform patrol according to the selected patrol patrol type and patrol patrol 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 patrol before the patrol and curing operation.
- The solidified patrol parameters correspond to the patrol type selected during patrol.
- 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.

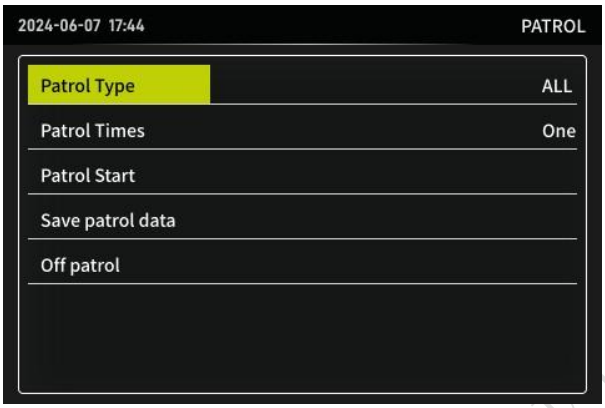
✧ Turn off the patrol. When the receiving card turns on the unlimited patrol, click to exit the patrol operation.

Screen patrol:

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

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

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



6.4 Layer Attributes

M10-G supports 3 simultaneous screens, operable either via physical buttons or through the menu. Steps are as follows: Button operation:

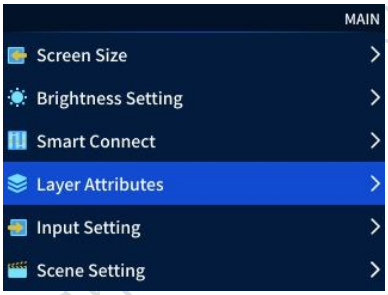
Step 1: Briefly press "WIN1", "WIN2", or "WIN3" in the front panel【FUNCTION】area to quickly activate the corresponding layer. The LCD interface will enter the corresponding layer's properties interface.

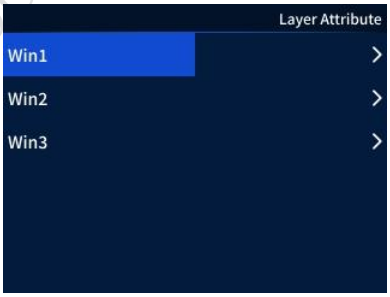
Step 2: Briefly press the input source in the【INPUT】area to select an input source for the layer.

Menu operation:

Step 1: Press the knob to enter the main interface menu.

Step 2: Rotate the knob to select【Layer Attributes】and press. Then rotate to choose a layer and press again to enter the property settings for the corresponding layer. As shown in the layer properties interface:





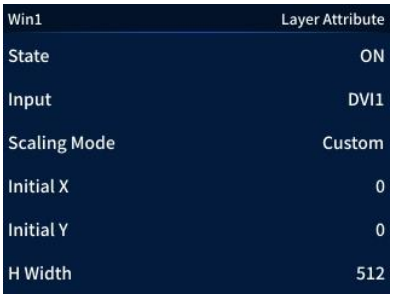
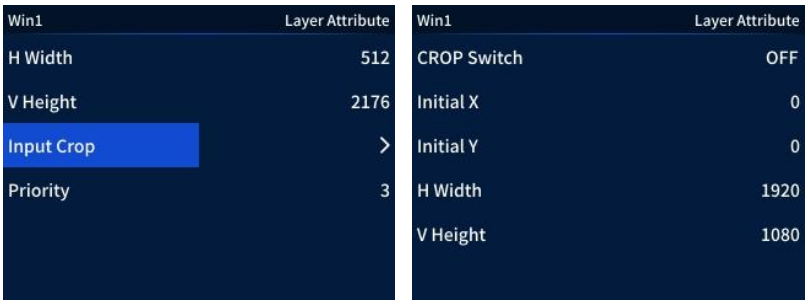
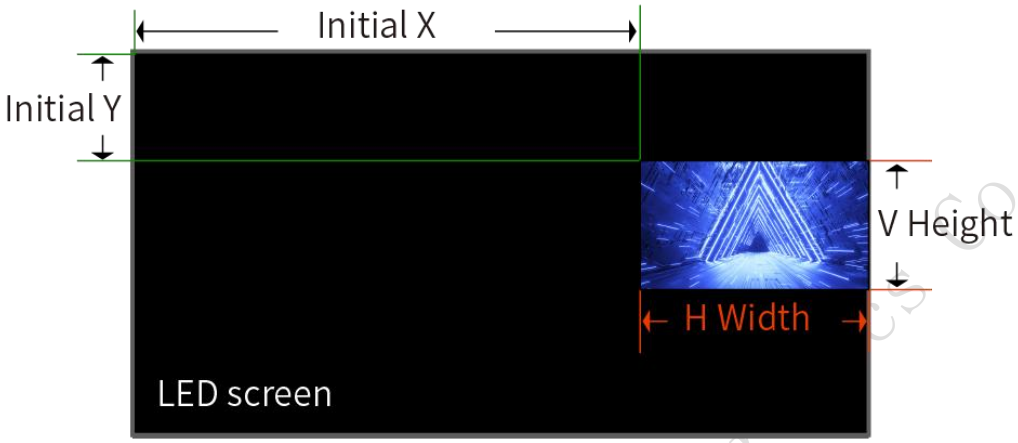


Table: Layer Property Descriptions

Function	Illustration
Status	The current layer state can be “enabled” or “disabled”.
Signal Source	The input source currently selected for the layer.
Zoom Mode	Layers support three display modes: • Full Screen: The layer adapts to full-screen display. • pixel-to-pixel: 1:1 pixel-to-pixel display. • Custom: Customize the layer size; the output image is scaled and displayed according to the layer dimensions.
Horizontal Start	Horizontal distance from the top-left corner of the layer to the left edge of the screen.
Vertical Start	Vertical distance from the top-left corner of the layer to the top edge of the screen.
Horizontal Width	Horizontal width of the layer.。
Vertical Height	Vertical height of the layer.
Input interception	Capture a partial area of the input source and display it scaled to fill the entire layer: • Crop Switch: Enable or disable cropping for the selected layer. • Horizontal Start: Set the horizontal starting coordinate for cropping the current input source. • Vertical Start: Set the vertical starting coordinate for cropping the current input source. • Horizontal Width: Define the horizontal width of the cropped area from the current input source. • Vertical Height: Define the vertical height of the cropped area from the current input source. (As shown in Figure 5-12: Input Cropping)
Priority	The display priority of layers: the higher the number, the higher the priority, and the more forward the layer content will be displayed.





6.5 Input Settings

Step: Rotate the knob to the [Input Settings] function, press the knob to enter, and set the input source resolution. M10-G supports HDMI, DVI, and SDI video input interfaces. The input resolution can be configured in two ways: common EDID and custom settings. As shown in the input settings interface:

6.5.1 Common EDID

Step 1: In the [Input Settings] menu, press and rotate the knob to [Common EDID], then press to enter the resolution parameter adjustment interface. Step 2: With the resolution parameter selected, rotate the knob to choose a common EDID setting. Step 3: Press the knob to confirm and complete the common EDID configuration. Supported common EDID settings include:

1366×768@60Hz

1440×900@60Hz

1920×1080@60Hz
2304×1152@60Hz
2560×900@60Hz

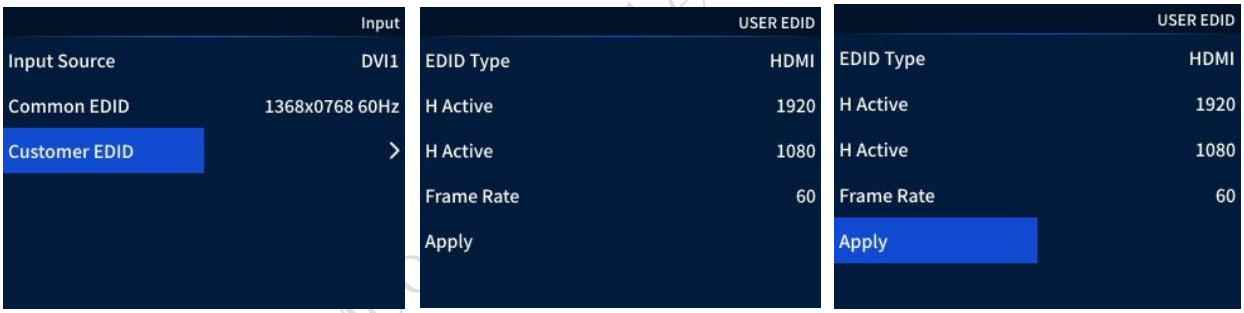
6.5.2 Customer EDID

Step 1: In the [Input Settings] interface, rotate the knob to [Customer EDID] and press to enter "Custom EDID".

Step 2: Select [Horizontal Active], press the knob, and rotate to customize the resolution width.

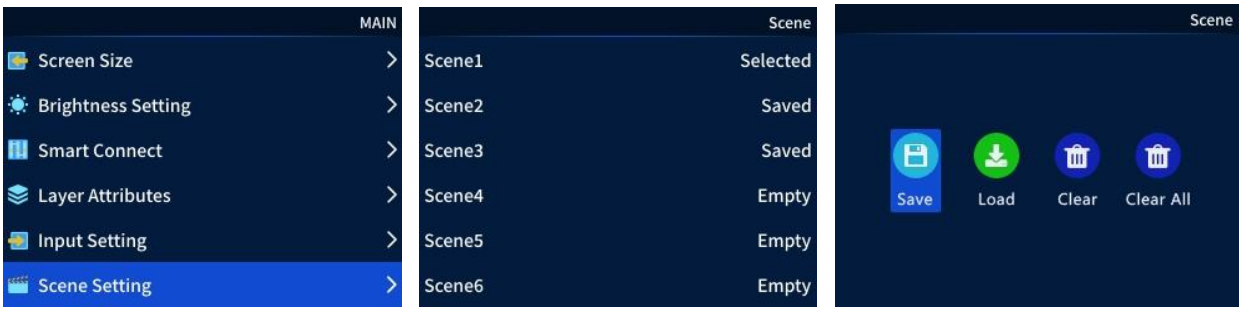
Step 3: Select [Vertical Active], press the knob, and rotate to customize the resolution height.

Step 4: After adjusting the refresh rate, select [Apply] and press the knob to confirm the settings.



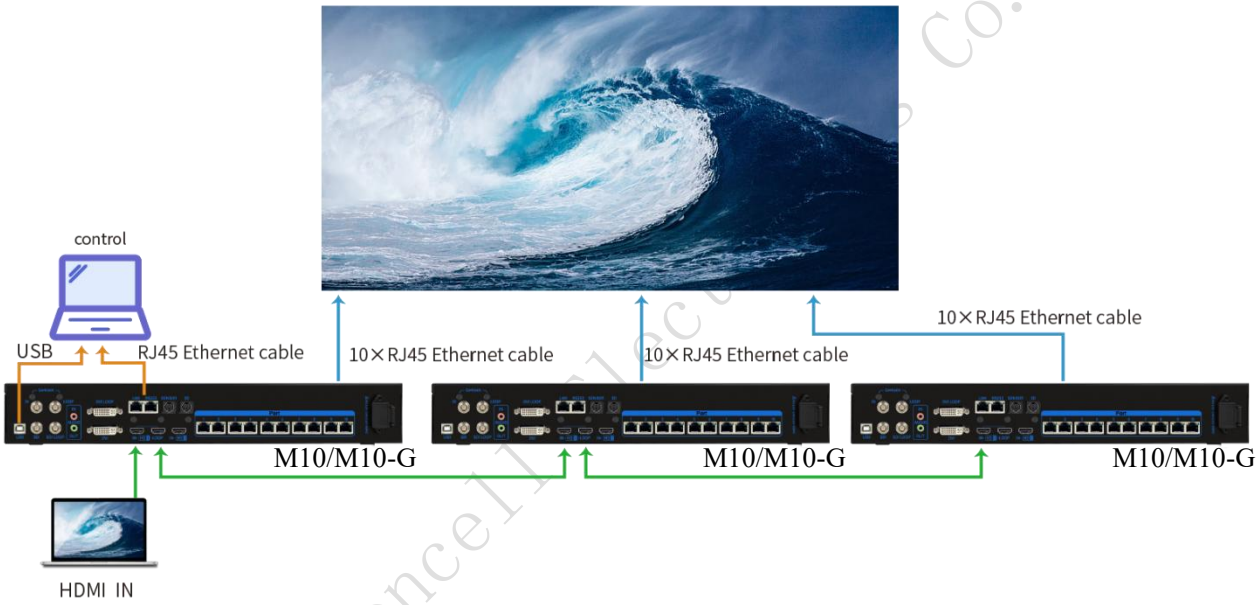
6.6 Scene Setting

In the scene settings, we can save and load the configured parameters of the video processor, as well as delete the data of previously saved scene presets. The parameters include: output resolution, signal source, display mode, scaling parameters, cropping, and brightness, facilitating future use. The system provides 10 templates for users to save.



6.7 Image Mosaic

When the pixel count of the display screen exceeds the load capacity of a single device, multiple devices can be spliced to complete the display screen loading.
When using splicing and loading, ensure that each device has the synchronization function enabled and uses the same input source as the synchronization source.
After enabling image mosaic, the automatic scaling and pixel-to-pixel display functions of WIN1 in full-screen mode are unavailable.
As shown in the splicing and loading connection method: Taking the HDMI input source as an example:

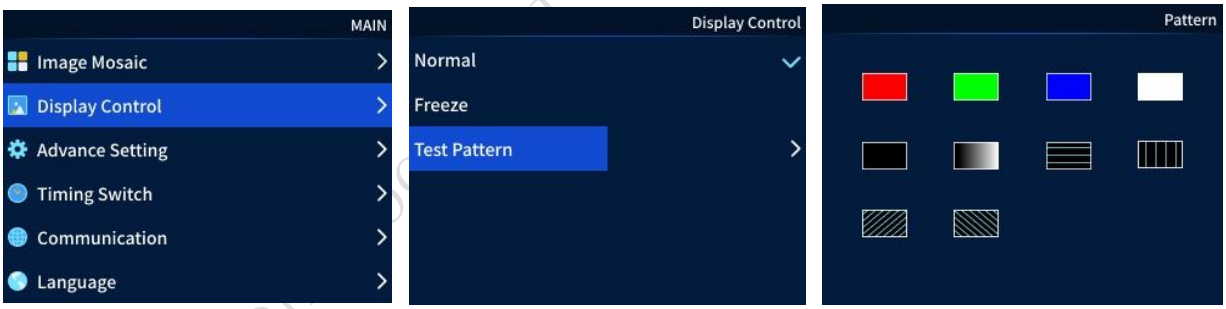


Step 1: On the main menu interface, rotate the knob to the [Tiling and Loading] function and press the knob to enter.
Step 2: Set the "Status" to "On", then adjust parameter values sequentially as needed. As shown in the tiling and loading interface:

Function	Illustration
Total H Pixel	Total horizontal pixel count of the LED display requiring splicing and loading.
Total V Pixel	Total vertical pixel count of the LED display requiring splicing and loading.
Loaded Area width	Horizontal pixel count of the area loaded by the current device.
Loaded Area height	Vertical pixel count of the area loaded by the current device.
Loaded Area Initial X	Horizontal distance (in pixels) from the top-left corner of the current device's loaded area to the left edge of the display.
Loaded Area Initial Y	Vertical distance (in pixels) from the top-left corner of the current device's loaded area to the top edge of the display.

6.8 Display Control

Step: Rotate the knob to the [Display Control] function and press the knob to enter. The Display Control function menu includes three options: [Normal Display], [Freeze], and [Test Pattern]. As shown in the Display Control interface:



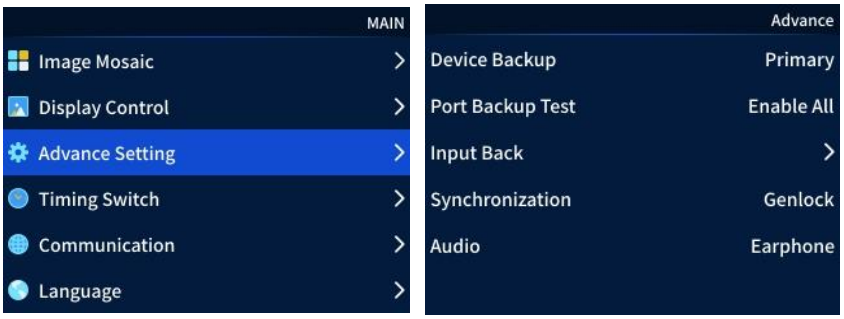
Normal Display: The screen normally displays the content of the current layer.

Freeze: Freezes the current frame.

Test Pattern: Test patterns include solid colors (red, green, blue, white, black), as well as gradients, grid lines, and other test patterns.

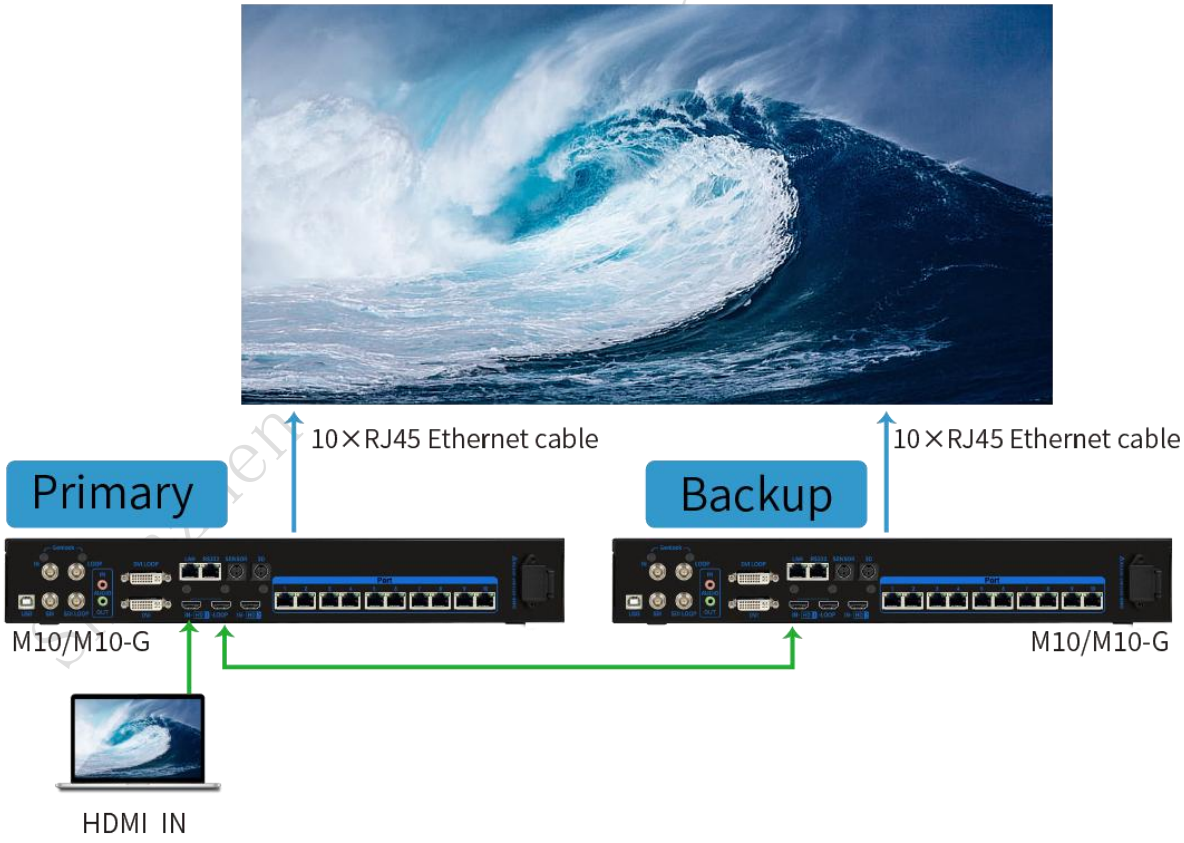
6.9 Advanced Setting

The advanced function menu includes five options: [Device Backup], [Port Backup Test], [Input Backup], [Synchronization Settings], and [Audio Settings]. As shown in the Advanced settings interface:

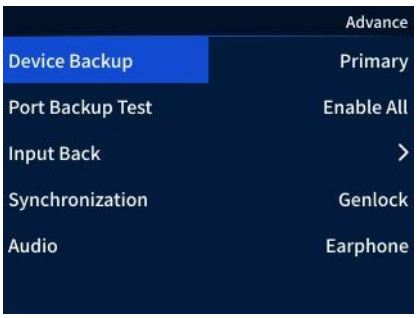


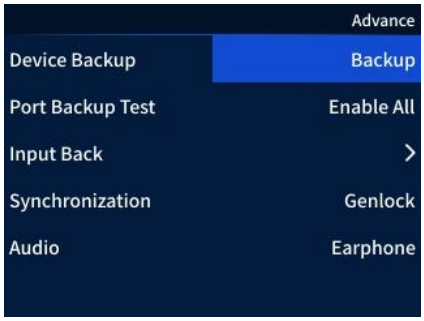
6.9.1 Device Backup

Device backup is used to establish a master-slave relationship between two devices. One device is set as the master control device, and the other as the backup device. If the master device fails, the backup device takes over its functions to ensure normal display without black screen issues. As shown in the device backup connection method:



Step 1: In the [Advanced Setting] interface, press and rotate the knob to [Device Backup], then press to set as Master or Backup. As shown in the Device Backup interface:

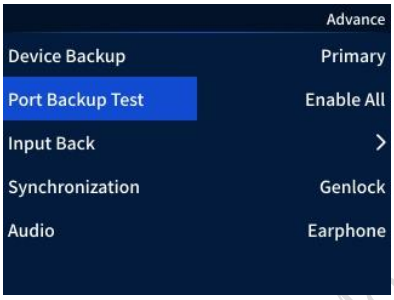


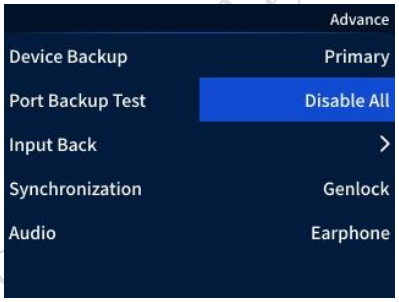


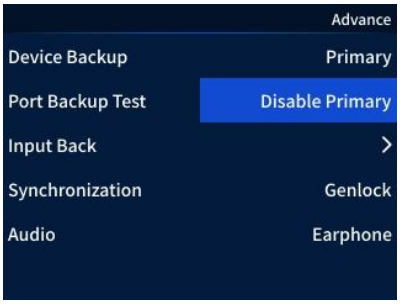
Note:
When devices are set up in master-backup mode, the load capacity of the same network ports on both the master and backup devices must be identical, and the cabinet wiring methods must be exactly opposite.
The layer property settings in both the master and backup devices must be consistent.

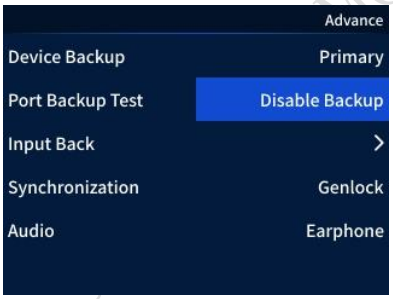
6.9.2 Port Backup

Step 1: In the [Advanced Setting] interface, rotate the knob to [Network Port Backup Test] and press to enter.
Step 2: Options include: "Enable All Network Ports", "Disable All Network Ports", "Disable Primary Network Port", and "Disable Backup Network Port". As shown in the Network Port Backup Test interface:



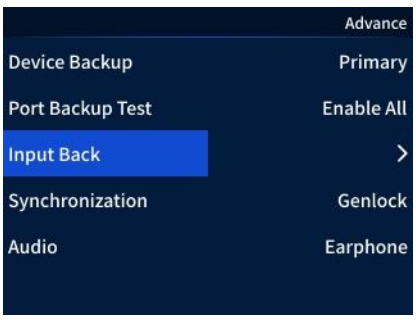






6.9.3 Input Backup

Step 1: In the [Advanced Functions] interface, rotate the knob to [Input Source Hot Backup] and press to enter. As shown in the Input Source Hot Backup interface:



Note

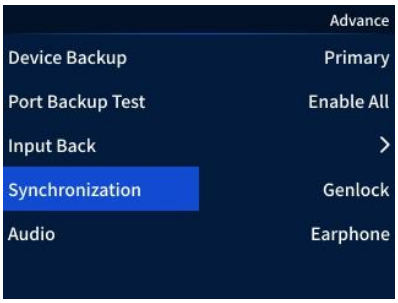
- Each group of input sources serves as backups for each other.
- Only input sources of the same type can be set as mutual backup sources.
- Supports one-to-one backup only; one-to-many or many-to-one configurations are not supported.

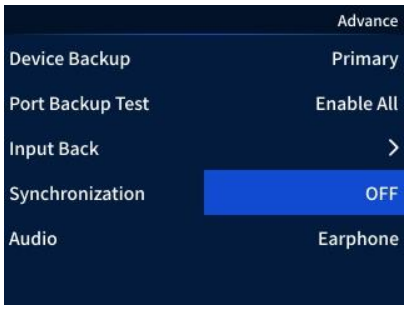
Input Source Hot Backup Constraints:
When Input Source A and Input Source B are set as mutual backups, and the window currently uses Input Source A:

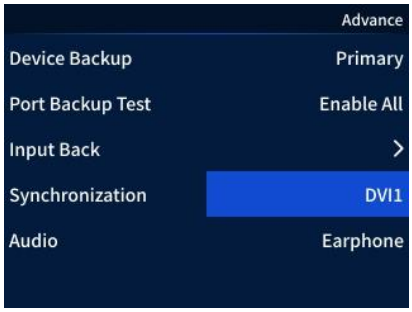
Input Source A	Input Source B	Window Display
No Signal	Signal Present	Automatically switch to B; when A recovers and B has a signal, do not switch.
No Signal	Signal Present	Automatically switch to B; when A recovers and B has no signal, switch to A.
No Signal	No Signal	Do not switch.
Signal Present	No Signal	After manually changing to B, automatically switch to A.

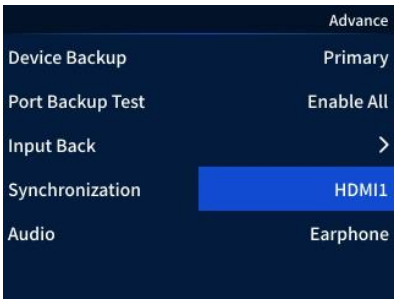
6.9.4 Synchronization Settings

Step 1: In the [Advanced Functions] interface, rotate the knob to [Synchronization Settings] and press to enter. Step 2: Adjustable options include: "Genlock", "Off", "DVI1", "HDMI1", "HDMI2", and "SDI".
As shown in the Synchronization Settings interface:





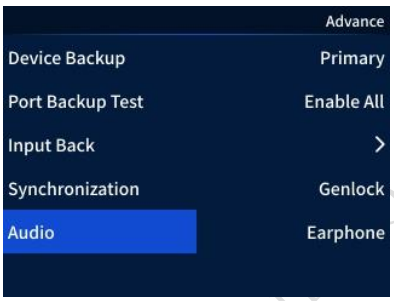


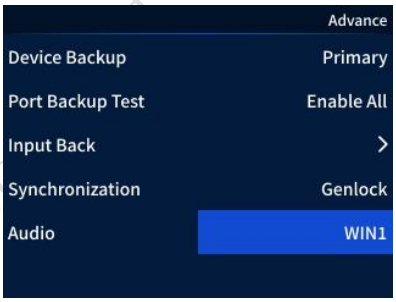


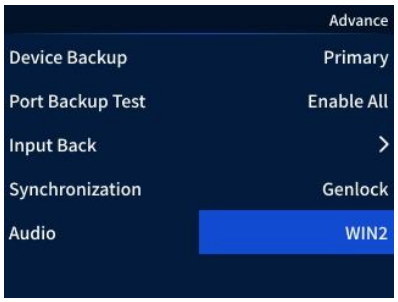
6.9.5 Audio Settings

Step 1: In the [Advanced Settings] interface, rotate the knob to [Audio Settings] and press to enter. Step 2: Adjustable options include: "Headphone Jack", "Window 1", and "Window 2".

As shown in the Audio Settings interface:







6.10 Timing Switch

Step 1: Rotate the knob to [Timed Switching] and press to enter the settings.

Step 2: When the option is highlighted in blue, press the knob to set parameters, then press again to confirm. Supports the following menu functions for timing:

Time Slot: Set the number of timed periods (up to 5 slots can be configured)

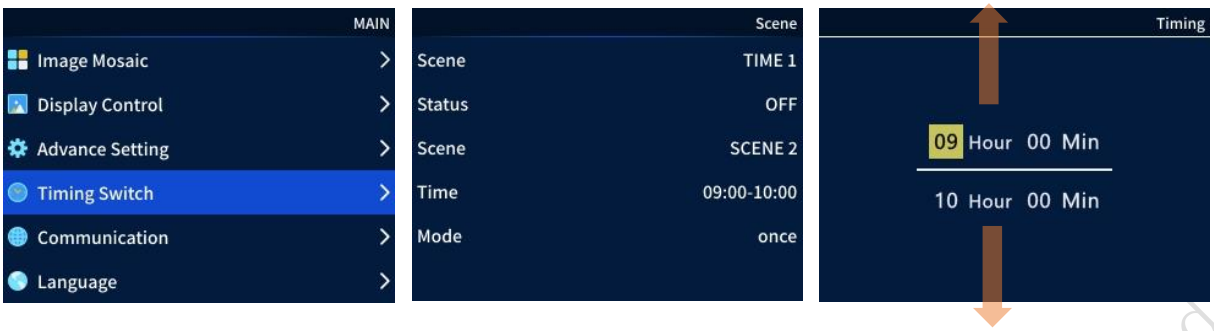
Status: Enable or disable the selected timed switching period

Scene: Select a saved scene preset

Time: Set the start and end time for timed switching

Mode: Set the execution frequency of the time slot (can be set to once or daily)

As shown in the Timed Switching interface:



6.11 Communication Settings

6.11.1 Network Settings

Step 1: In the [Communication Settings] menu, press and rotate the knob to [Network Settings], then press to enter.
Step 2: DHCP Enable: Automatically requests IP assignment from the router device. The DHCP server can automatically assign IP addresses to devices on the network, reducing manual configuration efforts. DHCP Disable: The fixed IP remains unchanged.
Step 3: Configure the "DHCP", "Net Mask", and "Port Number". As shown in the Network Settings interface:

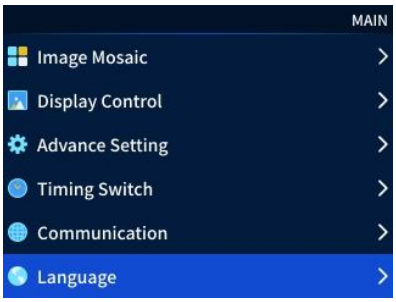
6.11.2 RS232 Baud Rate

The data transfer rate from one device to another, measured in bits per second (bit/s). Common baud rates include 300, 1200, 2400, 9600, 19200, 38400, 115200, 230400, etc. Requires compatibility with serial communication software.

6.12 Language

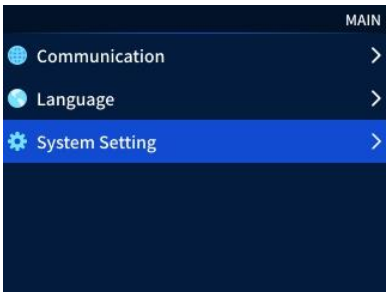
The default system language is "Simplified Chinese" and can be switched to "English". Press the knob to confirm.

As shown in the Language interface:



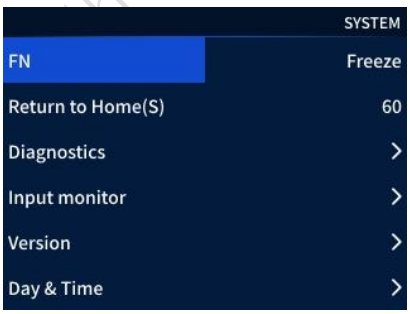
6.13 System Setting

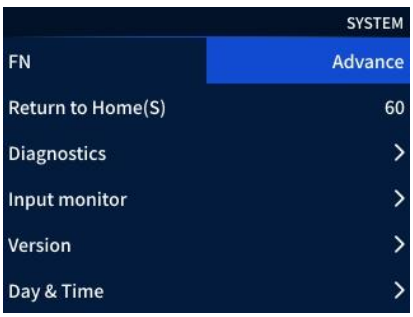
The system settings function menu includes the following eight options: [FN Hotkeys], [Return to Home Screen Duration], [Diagnostics], [Input Monitor], [Version Information], [Day&Time], [Key Lock], and [Factory Settings]. As shown in the System Settings interface:

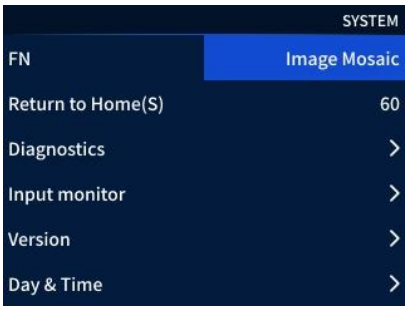


6.13.1 FN Hotkey

This function serves as a shortcut key. A short press allows quick access to the set function interface without navigating level by level through the main menu. Step 1: In the [System Settings] menu, press and rotate the knob to [FN Hotkey], then press to configure. Step 2: Options include "Freeze", "Advanced Settings", and "Tiling and Loading". As shown in the FN Hotkey interface:





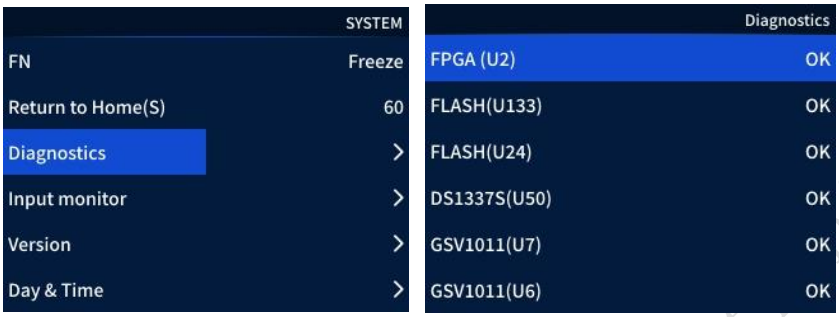


6.13.2 Return to Home Screen Duration

The duration the system remains on the current interface without any operation after entering a menu.

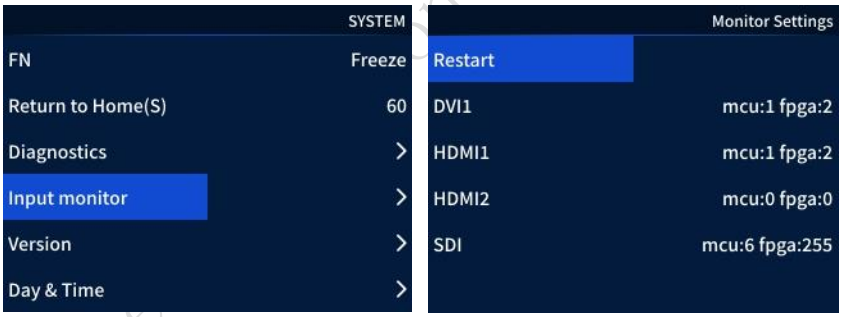
6.13.3 Diagnostics

This function is used to detect whether each component of the device is operating normally, facilitating troubleshooting. As shown in the Device Self-Test interface:



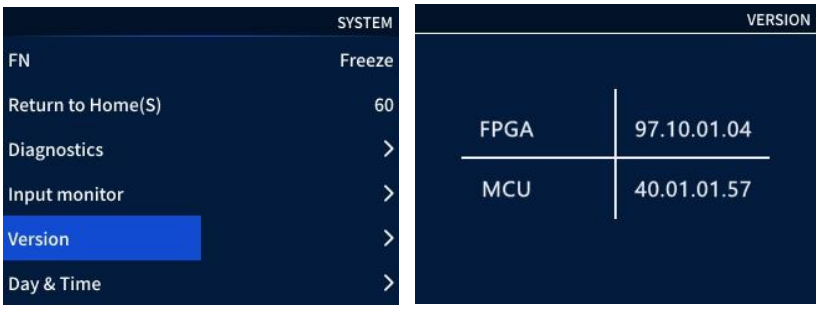
6.13.4 Input Monitor

This function is used to detect whether each component of the device is operating normally, facilitating troubleshooting. As shown in the Device Self-Test interface:



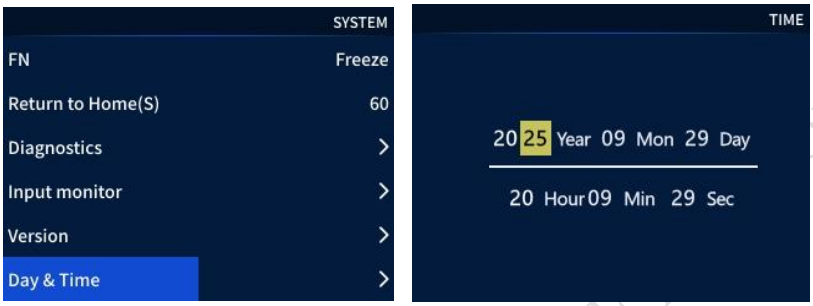
6.13.5 Version Information

This function allows you to view the FPGA and MCU versions of the device. As shown in the Version Information interface:



6.13.6 Time Setting

Select the corresponding number and rotate the knob to increase or decrease the value. Press the knob to confirm after setting. As shown in the Time Settings interface:



6.13.7 Key Lock

Enabling the key lock function prevents accidental operations by locking the front panel keys. By default, it is set to "On" and will automatically lock after 3 minutes of inactivity. Unlock method: After pressing the knob, a prompt will appear; long-press the knob to unlock.

6.13.8 Factory Setting

Press the knob to pop up the prompt: "Confirm restore factory settings? (Confirm/Cancel)". Press the knob to confirm, or press the Esc key to cancel.

- Output resolution: 1920×1080 60Hz
- Signal source: HDMI
- Scaling parameters: 0, 0, 1920, 1080
- Cropping: Off
- Brightness: 50
- Freeze: Off
- Black screen: Off
- Test pattern: Off

WeChat Official Account Platform

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Website: www.mooncell.com.cn