

Hisense

RNM019GE
RNM026GE
RNM029GE
RNM039GE

USER MANUAL

Before operating the device for the first time, carefully read this manual and ensure full understanding of all contents.



Precautions for Use

- During product operation, moisture may cause short circuits inside the device.
- Perform dehumidification treatment if the following conditions occur during use:
- The operating environment fails to meet requirements, i.e. ambient temperature outside the range of -20°C to 40°C, or humidity outside 10% to 90%.
- The screen has been left unused for more than 10 days.
- Damage caused by operation beyond specified environmental conditions shall not be covered by warranty.
- Even under qualified operating conditions, rapid inflow of hot and humid ambient air may lead to condensation on the device surface. Allow the device to dry completely before reuse.
- Condensation will occur if the product surface temperature is lower than ambient temperature, or when the cold product surface is exposed to hot and humid air.
- Condensation on the product surface may cause malfunction, which is non-warrantable.
- Do not direct air conditioner vents straight toward the screen.
- Direct airflow from air conditioner vents may result in screen condensation.
- If the air conditioner is placed too close to the screen, install an air deflector as illustrated to avoid airflow impact on the screen.

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1. Introduction to the RNMGE Series

1.1 About the RNMGE Series

Designed for effortless installation and rapid maintenance, the RNMGE series delivers high-quality visual performance with outstanding image clarity and rich detail in rental and staging environments. It seamlessly integrates with a wide range of rental display products to create unique, visually stunning installations. It is widely used across various stage design and live event applications.

2. Product Features and Specifications

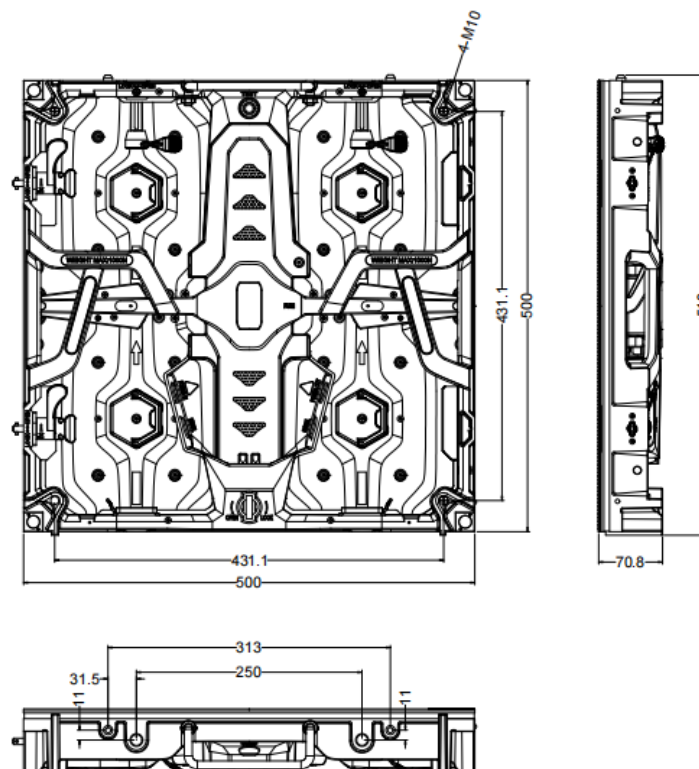


Figure 2-1 RNMGE Series Cabinet (Dimensions: 500 × 500 mm)

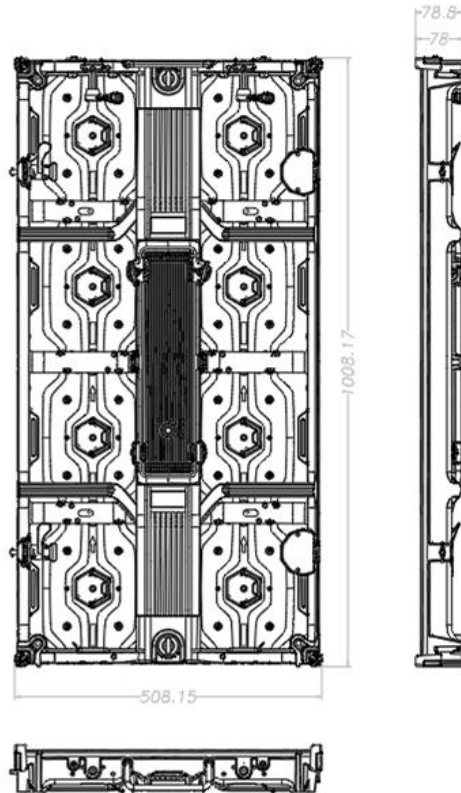


Figure 2-1 Spider Max Series Cabinet (Dimensions: 500 × 1000 mm)

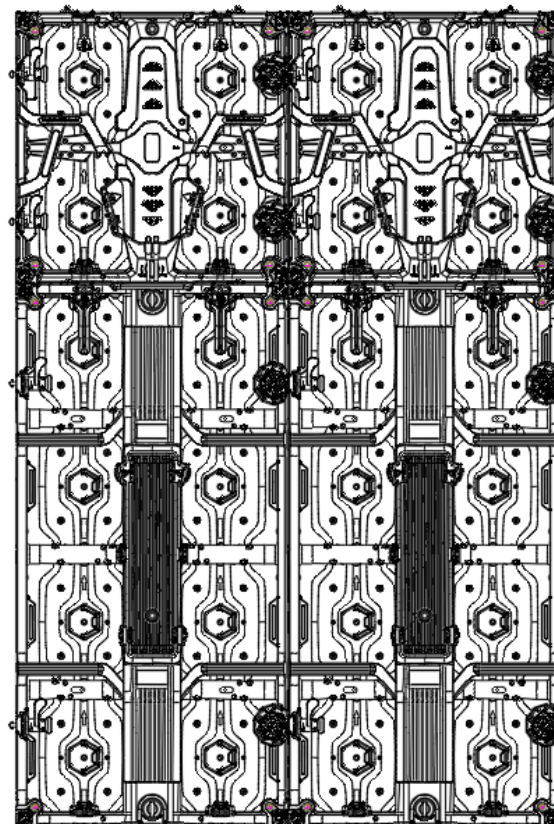


Figure 2-3 Splicing Diagram between Spider Series and Spider Max Series Cabinets

Note: The Spider Series and Spider Max Series can only be spliced vertically, not horizontally

2.2 RNMGE Series Main Features

1. Combined with high-precision angle blocks, the cabinet supports seamless splicing across 5 angles (0°, 3°, 6°, -3°, and -6°) to form flat, convex (outer curve), and concave (inner curve) display configurations.
2. Features a built-in protective mechanism that is simple to operate while offering exceptional corner-LED protection during handling and setup.
3. CNC-machined cabinet surface ensures high flatness. Direct mounting of modules onto the cabinet surface minimizes assembly tolerances between the module housing and frame, significantly improving visual seamlessness.
4. Supports both front and rear serviceability for cabinets and modules, adapting effortlessly to complex installation environments.
5. Board-to-board (cableless) connection between modules and power units enables rapid installation and maintenance.
6. Excellent thermal conductivity and efficient heat dissipation ensure reliable, long-term operational stability.
7. Equipped with quick-lock mechanisms for fast, seamless cabinet assembly within 10 seconds.
8. Built-in climbing handles allow technicians to climb the cabinet directly for installation and servicing, meeting diverse on-site operational demands.
9. Integrated magnetic positioning design automatically aligns cabinets during hanging installations, dramatically boosting setup efficiency.
10. Modular cabinet structure allows full interchangeability across different pixel pitches, achieving maximum versatility with a single cabinet design.

2.3 Main Components of the Cabinet

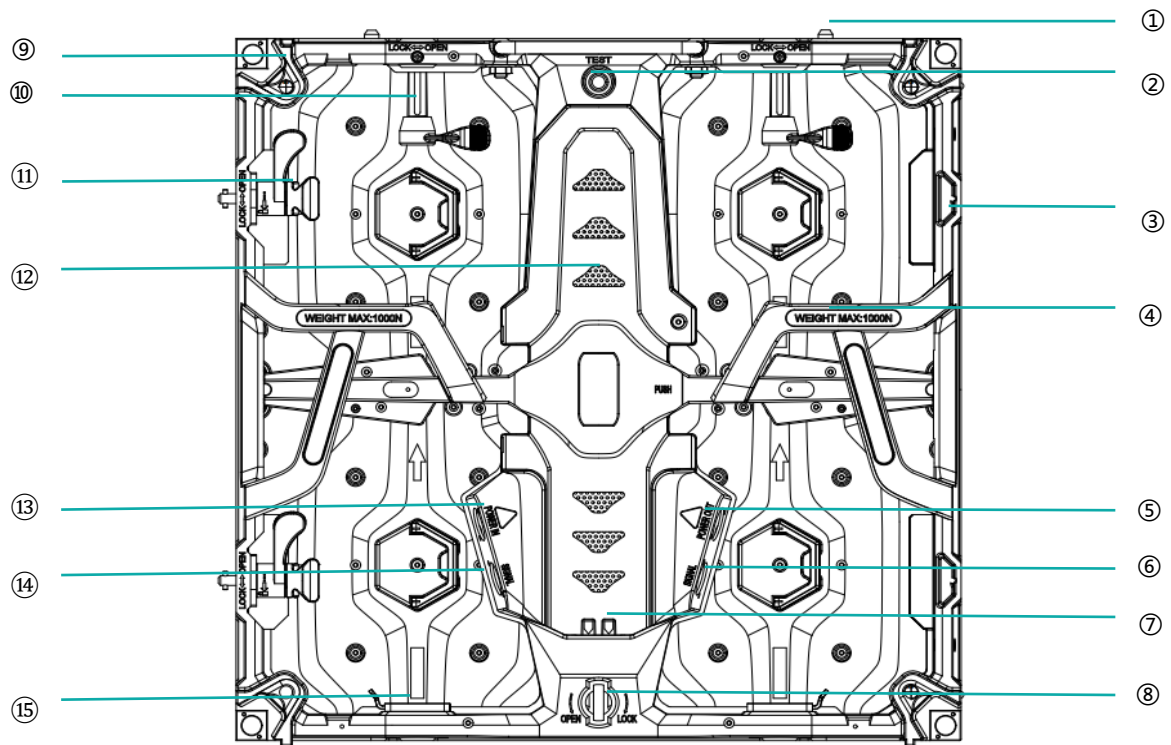
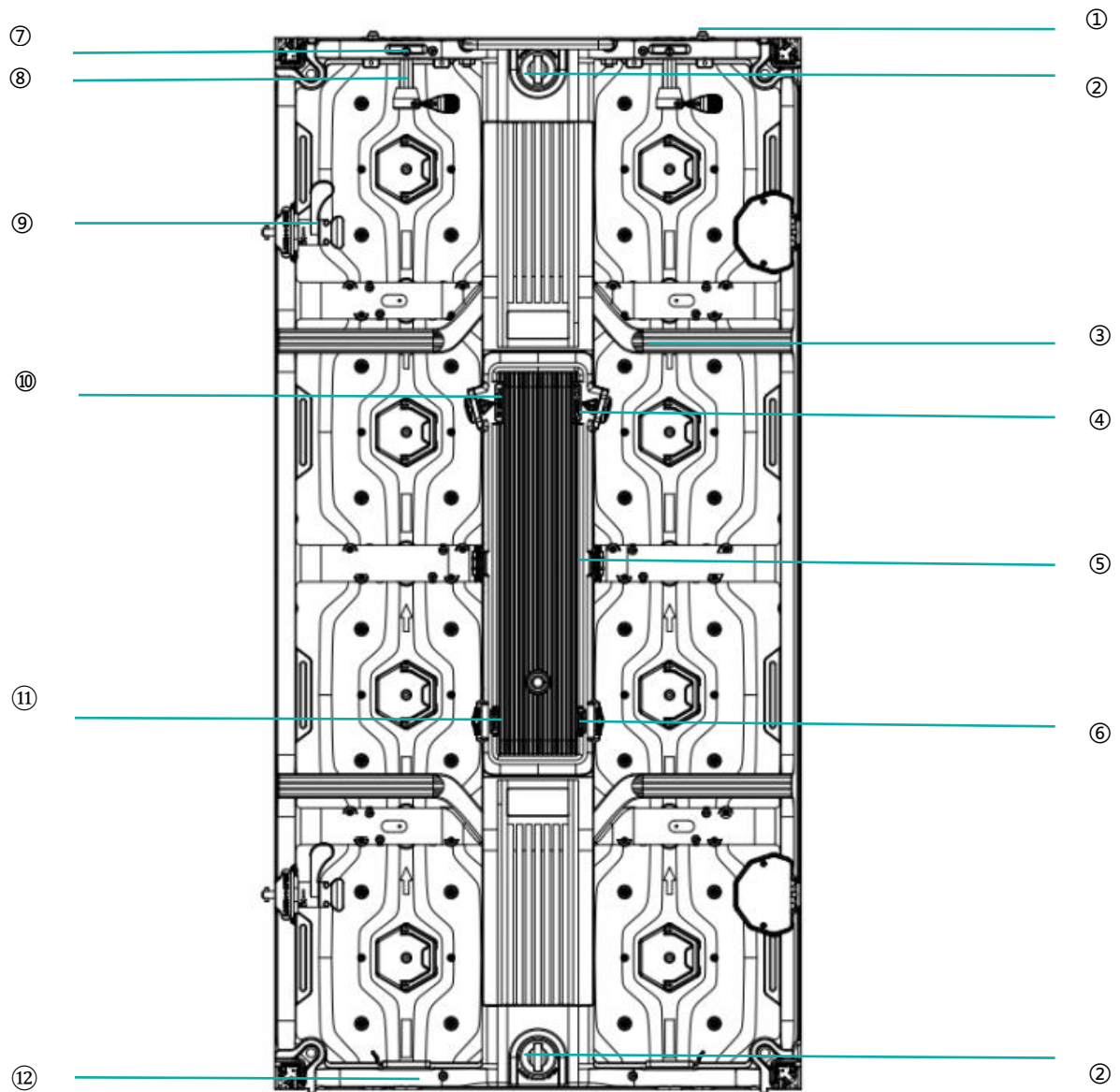


Figure 2-3 SpiderCabinet Components Diagram

- | | |
|--------------------|------------------------|
| ① Positioning Pin | ⑧ Rigging Loop |
| ② Test Button | ⑨ Corner Protector |
| ③ Angle Lock | ⑩ Top Lock |
| ④ Climbing Handle | ⑪ Left Lock |
| ⑤ Power Output | ⑫ Ventilation Hole |
| ⑥ Signal Output | ⑬ Power Input |
| ⑦ Backup Data Port | ⑭ Signal Input |
| | ⑮ Bottom Lock Receiver |



- ① Positioning Pin
- ② Rigging Loop
- ③ Climbing Handle
- ④ Power Output
- ⑤ Test Button
- ⑥ Data Output

- ⑦ Corner Protector
- ⑧ Top Lock
- ⑨ Left Lock
- ⑩ Power Input
- ⑪ Data Input
- ⑫ Bottom Lock Catch

3. Specifications

Model	RNM019GE	RNM026GE	RNM029GE	RNM039GE
Pixel Pitch	1.953 mm	2.604 mm	2.976 mm	3.91 mm
Pixel Configuration	SMD1212	SMD1515	SMD2121	SMD2121
Module Resolution (W x H)	128 x 128	96 x 96	84 x 84	64 x 64
Module Dimension (W x H)	250 x 250 mm			
Cabinet Resolution (W x H)	256 x 256	192 x 192 192 x 384	168 x 168 168 x 336	128 x 128 128 x 256
Cabinet Dimension (W x H x D) mm	500 x 500 x 70	500 x 500 x 70 500 x 1,000 x 71	500 x 500 x 70 500 x 1,000 x 71	500 x 500 x 70 500 x 1,000 x 71
No. of Modules per Cabinet (W x H)	2 x 2	2 x 2 2 x 4	2 x 2 2 x 4	2 x 2 2 x 4
Cabinet Weight	7.5 kg	7.5 kg 12.7 kg	7.5 kg 12.7 kg	7.5 kg 12.7 kg
Cabinet Materials	Die-casting Al			
Curve Adjustment (Optional)	-6°~+6° (3° step)			
Miter Cut (Optional)	45° (500 x 500 mm)			
Brightness	800 nits			
Contrast Ratio	8,000 : 1			
Visual Viewing Angle (H x V)	160° x 140°			
Bit Depth	14 bit (14~16 bit Customizable)			
Color Temperature	8,000K ± 500K			
Video Frame Rate	60 Hz			
Max Power Consumption	500 (W/m ²) 125 (W/Cabinet@500 x 500 mm)			
Avg Power Consumption	170 (W/m ²) 43 (W/Cabinet@500 x 500 mm)			
Power Supply	100~240 V AC			
Refresh Rate	3,840 Hz (7,680 Hz Customizable)			
Operating Temp / Humidity	-20~45°C / 10~90% RH			
Storage Temp / Humidity	-20~50°C/ 10~65% RH			
IP Rating	Front IP20 & Rear IP20			
Lifetime	100,000 Hrs			
Maintenance	Module Front & Rear Access / Power Supply Rear Access			

* According to the current Hisense test environment

** Product specifications may vary per region, and specifications are subject to change. This material may include corporate names and trademarks of third parties which are the properties of the third parties respectively.

Disclaimer

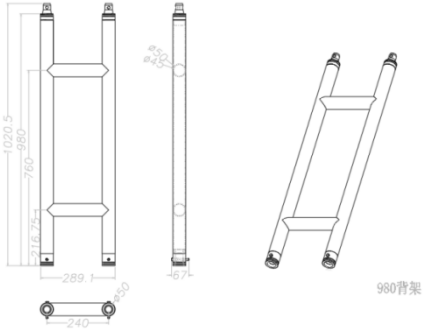
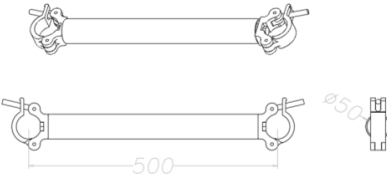
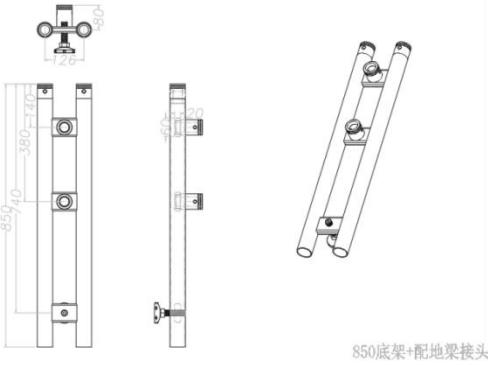
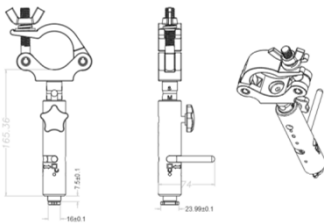
1. All data are based on Hisense's current test environment.
2. Product specifications may vary by region. Specifications are subject to change without prior notice.

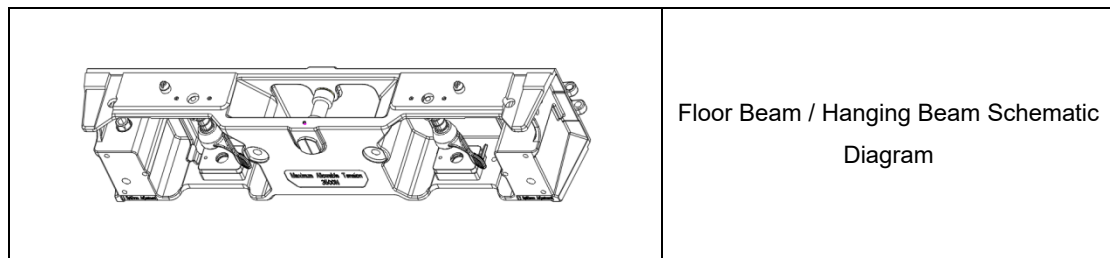
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4.Installation Methods

4. 1 Installation Accessories

4.1.1 Ground Installation Accessories

 Technical drawing of the 980mm back frame. It includes a front view with dimensions: total height 1020.5, mounting hole spacing 760, mounting hole diameter 216.75, and base width 289.1. A side view shows a height of 467. An isometric view is also provided. The label '980背架' is at the bottom right.	980mm Back Frame Dimension Diagram
 Technical drawing of the 500mm crossbar. It shows a front view with a length of 500 and a side view with a diameter of 50. The label '500横梁' is at the bottom right.	500mm Crossbar Dimension Diagram
 Technical drawing of the 850mm base frame. It includes a front view with dimensions: total height 850, mounting hole spacing 380, mounting hole diameter 141, and base width 740. A side view shows a height of 20. An isometric view is also provided. The label '850底架+配地梁接头' is at the bottom right.	850mm Base Frame Dimension Diagram
 Technical drawing of the back frame connector. It includes a front view with dimensions: total height 165.36, mounting hole spacing 160.1, and mounting hole diameter 23.96. A side view shows a height of 23.96. An isometric view is also provided.	Back Frame Connector Dimension Diagram



Ladder Frame Assembly Procedure:

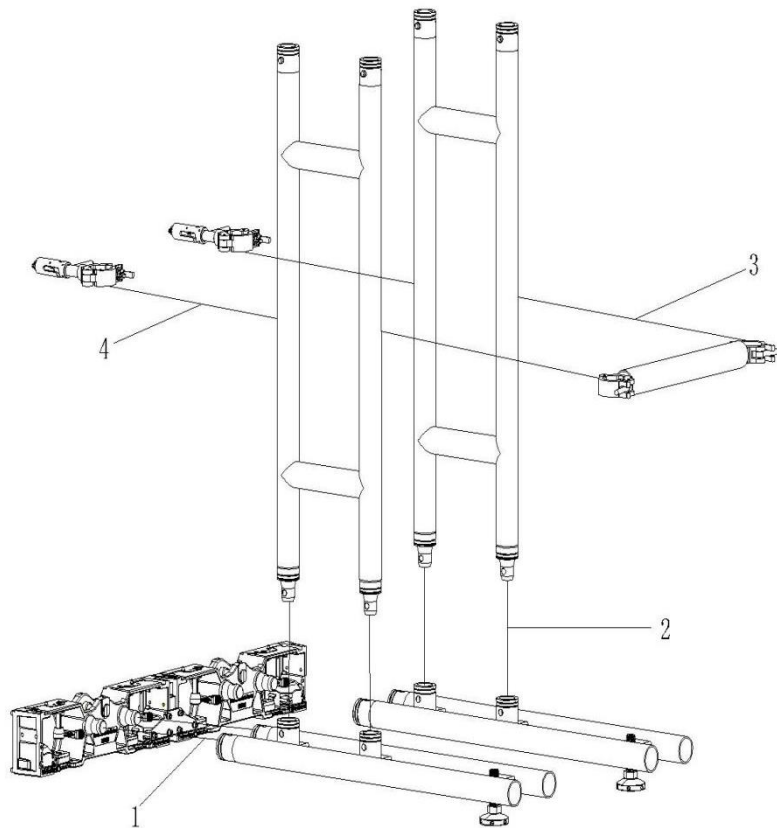


Figure 4-1 Ladder Frame Exploded View

According to the sequence shown in Figure 3-1 (Ladder Frame Exploded View), the installation steps for the ladder frame are as follows:

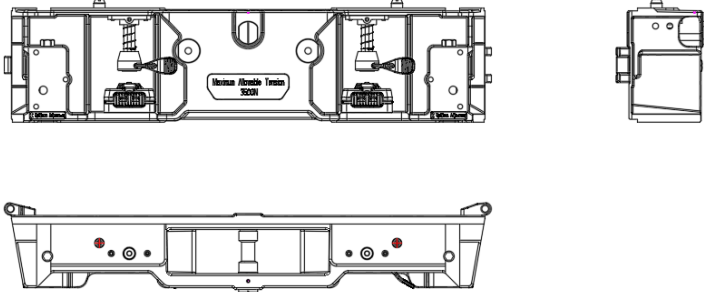
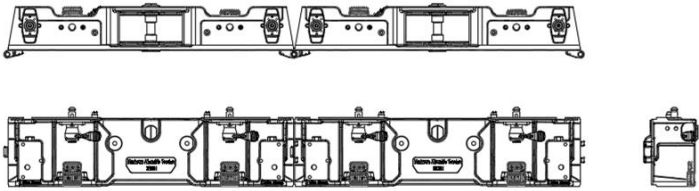
Step 1: As shown in the diagram, adjust the leveling feet of the base bar (hanging bar) to a suitable height, then connect the 850mm base frame to the base bar (hanging bar).

Step 2: As shown in the diagram, connect the 1000mm ladder frame to the 850mm base frame.

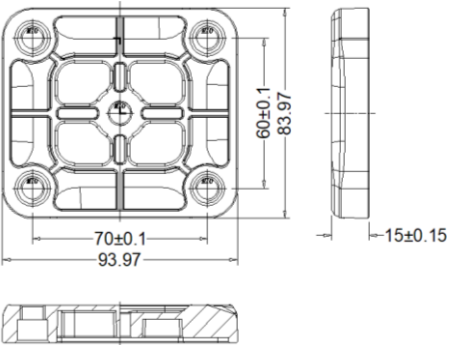
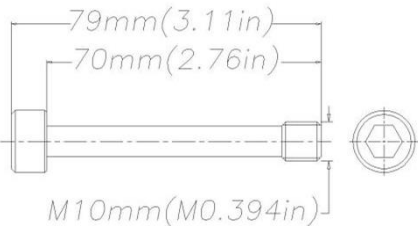
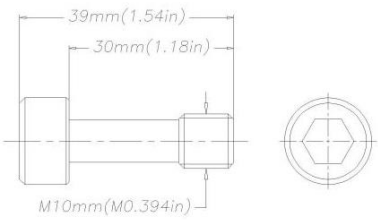
Step 3: As shown in the diagram, connect the 500mm crossbar to the 1000mm ladder frame.

Step 4: Secure the LED display cabinets onto the base bar. Fasten the stacking connectors into the rigging loops on the back of the cabinets, then connect the display cabinets to the 1000mm ladder frame using the stacking connectors.

4.1.2 Hanging Beam (Floor Beam)

One Hanging, One Floor Beam	
	Components: ● Dowel pin ● Foot cup adjustment mechanism (adjustable range) ● Lock seat ● Top lock
Installation steps: By inserting a tool into the hanging beam (floor beam) and rotating the foot cup adjustment mechanism, the height of the hanging beam (floor beam) can be changed, allowing for adjustment within a certain range.	
One Hanging, Two Floor Beams	
	Components: ● Dowel pin ● Top lock ● Foot cup adjustment mechanism (adjustable range) ● Connecting plate ● Lock seat ● Spacer block
Installation steps: First, insert the spacer block into the center of the two hanging beams (floor beams), tighten it, and then fix the front and rear connecting plates separately.	

4.1.3 Connecting Plates and Bolts

	Connecting Plate (For use in ground-stacking installation)
	M10*70 Bolt (For use in ground-stacking installation)
	M10*30 Bolt (For use in hanging and ground-stacking installation)

4. 2 Cabinet Connection

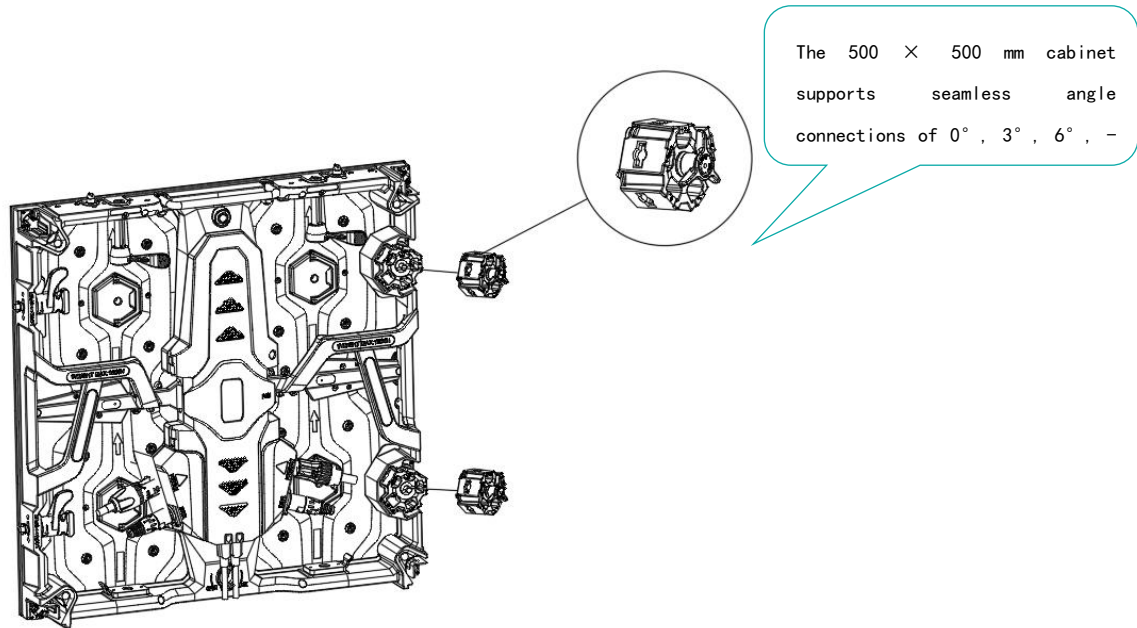


Figure 4-2 Angle Lock Assembly Diagram

4.2.1 Angle Splicing Between Cabinets

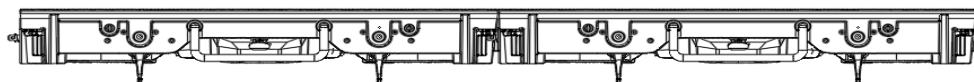


Figure 4-3 Section View of 0° Cabinet Connection

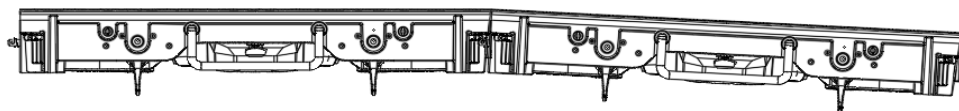


Figure 4-4 Section View of 3° Cabinet Connection

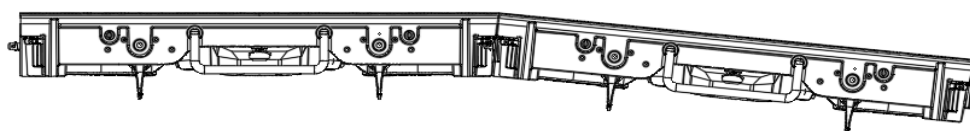


Figure 4-5 Section View of 6° Cabinet Connection

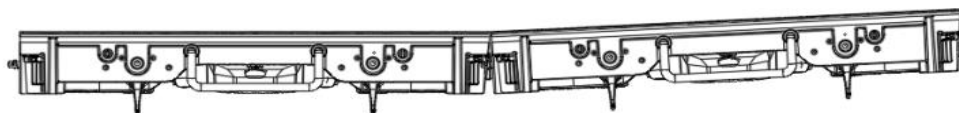


Figure 4-6 Section View of -3° Cabinet Connection

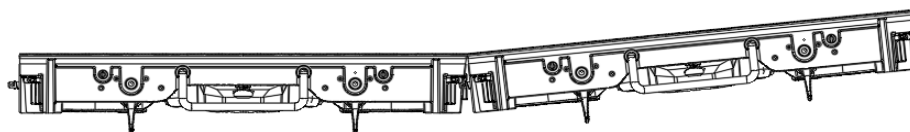


Figure 4-7 Section View of -6° Cabinet Connection

As shown above, this product supports connection angles of 0°, 3°, 6°, -3°, -6°, as well as 90-degree right-angle connection (customized option). Select the desired angle according to your project requirements for assembly.

Note: The angle locks are non-standard options. Please request a separate quote if required.

4.2.2 Vertical and Horizontal Cabinet Splicing

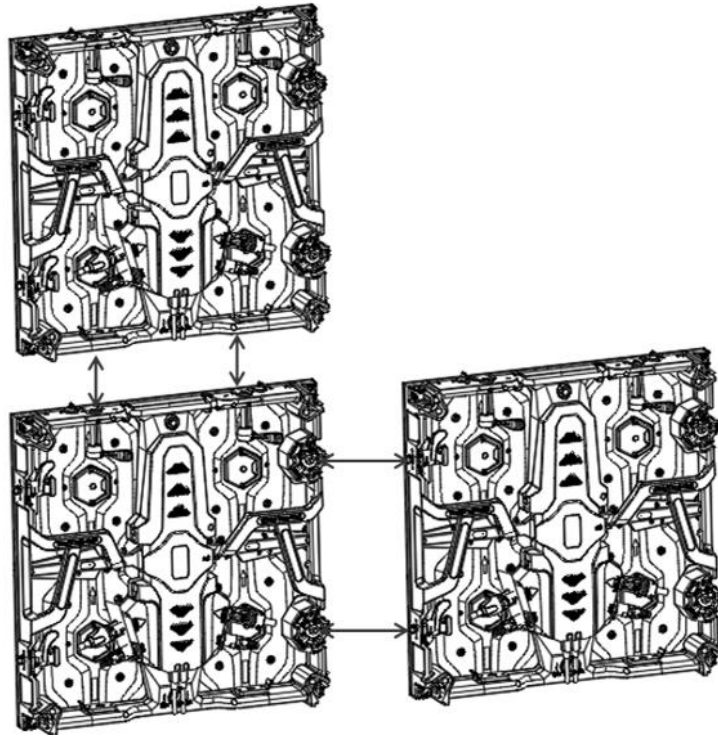


Figure 4-8 Schematic Diagram of Vertical and Horizontal Cabinet Splicing

Installation Procedure:

First, adjust the angle lock to the 0° position (flat) and secure it into the cabinet. Next, assemble the cabinets vertically and horizontally as shown in Figure 3-8, and lock them in place using the left locks and top locks to complete the inter-cabinet connection.

Note: The angle locks are non-standard options. Please request a separate quote if required.

4.3 Installation Methods

4.3.1 Hanging Installation (Rigging)

Note:

1. The RNMGE series supports hanging up to 20 cabinets vertically.
2. According to internal testing, a single hanging bar can withstand a maximum load of 3,000 N.
3. When using steel wire ropes for hanging, ensure that every rope is under tension (fully taut). The maximum hanging height per hanging bar is 10 meters.

Step 1: First, secure the hanging bar onto the truss using steel wire rope shackles.

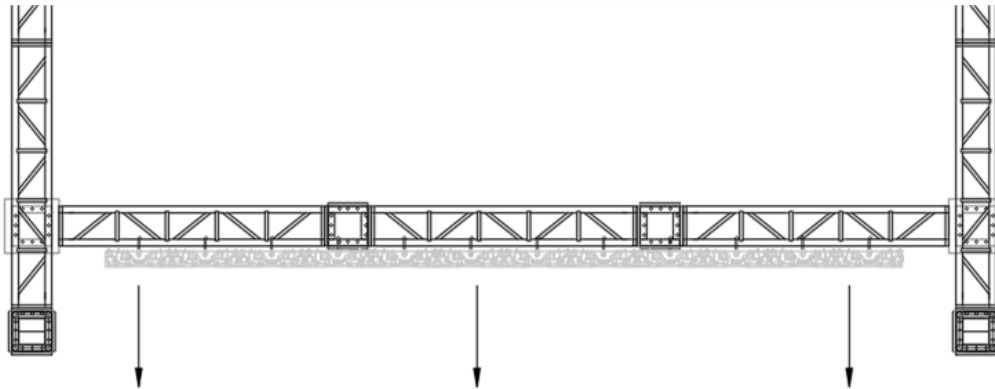


Figure 4-9 Installing the Hanging Bar

Step 2: Align the quick locks on the cabinet with the mounting holes on the hanging bar.

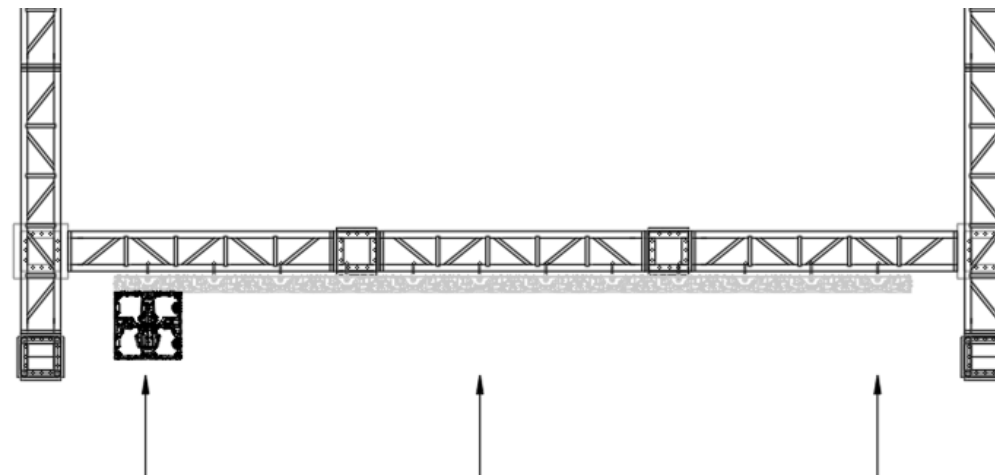


Figure 4-10 Installing the First Row of Cabinets

Step 3: Align the side mounting holes between adjacent horizontal cabinets.

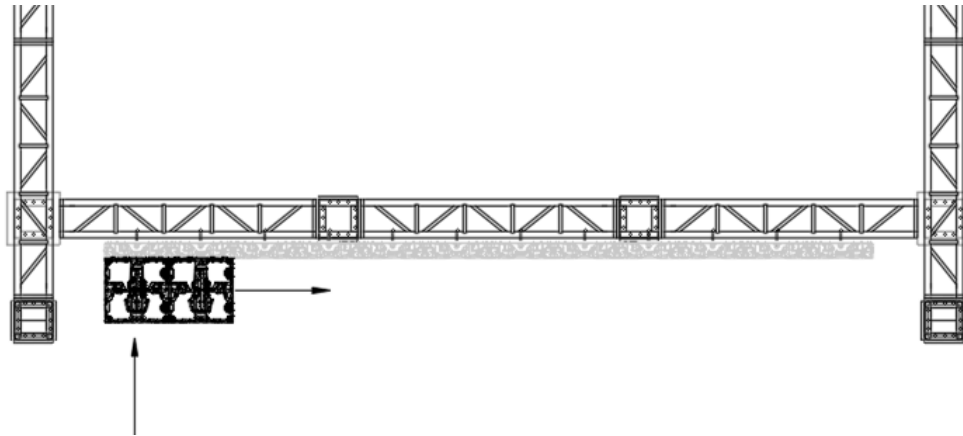


Figure 4-11 Installing Horizontal Cabinets

Step 4: Hoist the hanging bar to an appropriate height. Align the positioning holes of the lower cabinet with the positioning pins of the upper cabinet, insert them fully, and then secure the vertical fast locks. Repeat these steps according to your screen layout until the display installation is complete.

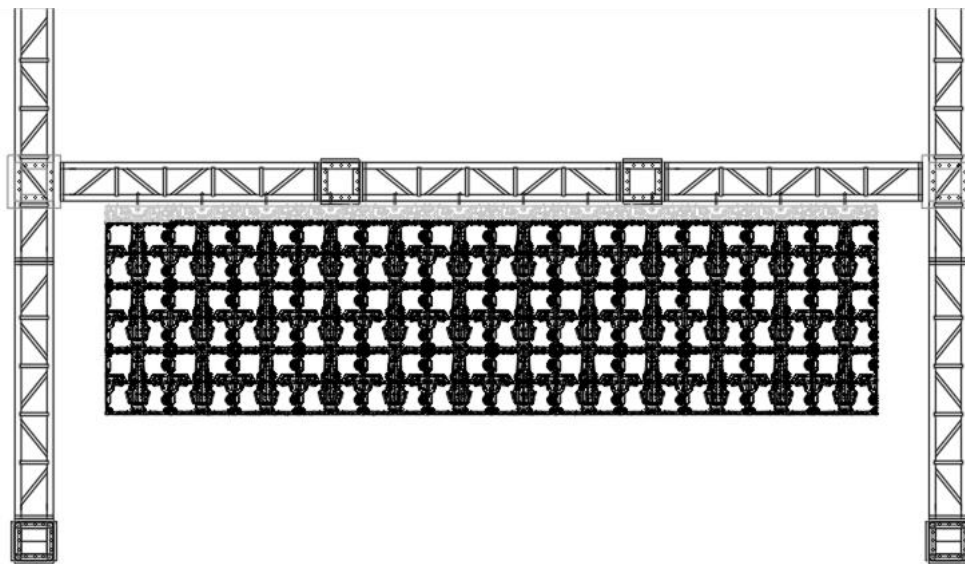


Figure 4-12 Installing Vertical Cabinets

4.4.2 Ground Stacking (Standard Ladder Frame Installation)

Note: In principle, the maximum installation height should not exceed 4 meters. For installations exceeding 4 meters, structural reinforcement is required—please contact us for a separate quote.

Step 1: Fix the base bar (①) onto the ground base, place the base onto the floor, and

Step 2: Based on the screen layout, attach the ladder frame supports to the bases via base adapter brackets. Connect the ladder frame (②) to the base, securing it with safety pins. Combine multiple units according to the above procedure to form a single structure: connect the bases together, join adjacent ladder frame supports using

connecting rods (③), and secure the display cabinets to the ladder frame using frame clamps (④).

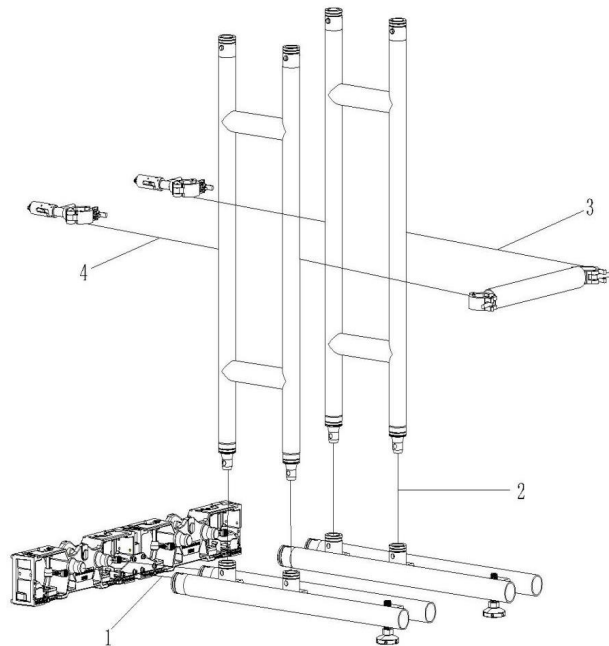


Figure 4-13 Ladder Frame Installation Diagram

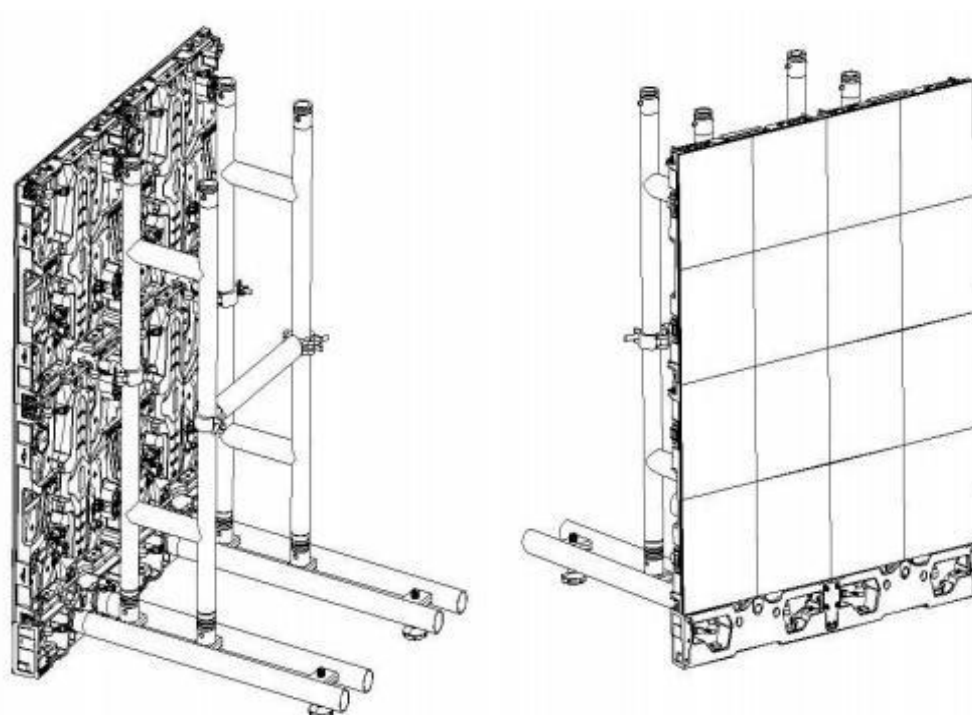
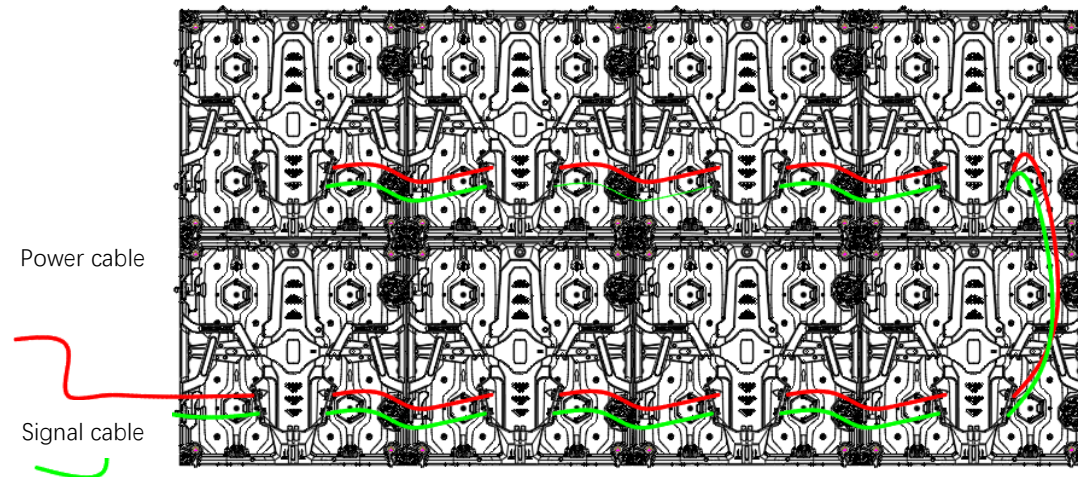


Figure 4-14 Completed Ladder Frame Assembly Diagram

4.4 Power and Signal Wiring Diagram

Connect the power cables and network (data) cables according to the wiring diagrams provided by our company. Power on the system and verify whether all cabinets are receiving power normally, whether the receiving cards are getting signal, and whether the LED indicator lights are flashing correctly.



Note: RNMGE Series: At 220V (16A), a single power chain can cascade up to 16 cabinets maximum; at 110V (16A), it can cascade up to 8 cabinets maximum.

5. Front and Rear Cabinet Maintenance

5.1 Front Maintenance

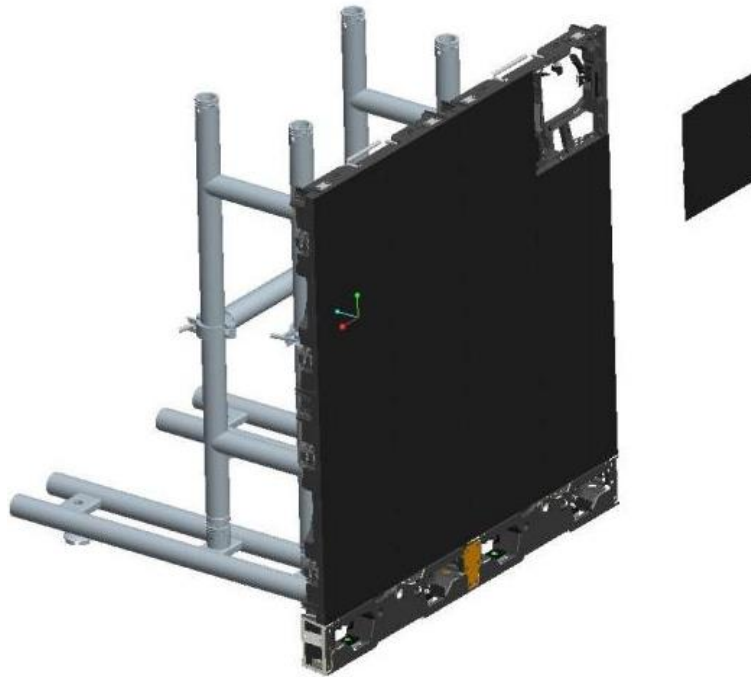


Figure 5-1 Front Maintenance Diagram

As shown in Figure 5-1, front maintenance involves the following steps:

Step 1: Place the front maintenance tool against the module surface.

Step 2: Engage the tool to vacuum-suction and grip the module securely.

Step 3: Pull the module outward firmly to complete the front disassembly process.

5.2 Rear Maintenance

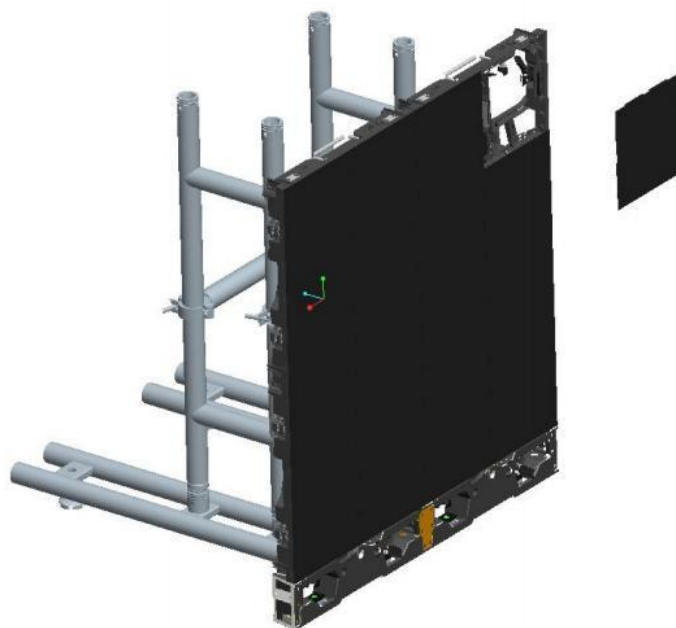


Figure 5-2 Rear Maintenance Schematic Diagram

As shown in Figure 4-2, module disassembly involves the following steps:

Step 1: First, unscrew all screws connecting the rear of the module to the display cabinet.

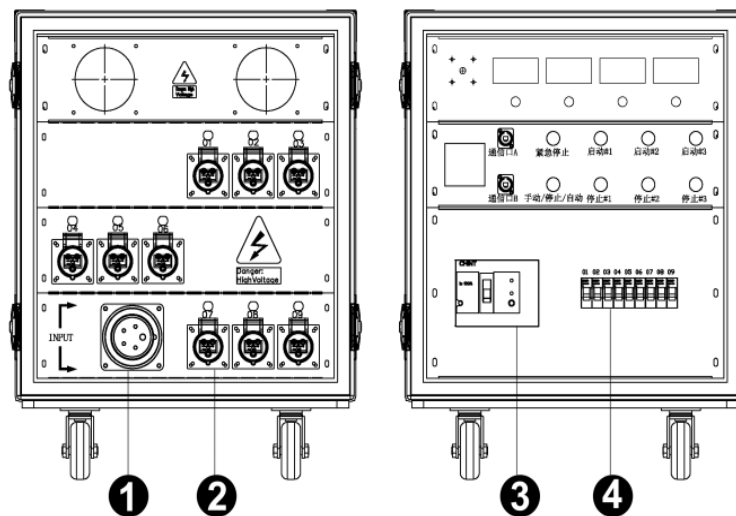
Step 2: Hold the module handle, push the module outward horizontally, and then pull it out through the cabinet to complete the rear disassembly process.

5.3 Distribution Box for Rental LED Display

The distribution box for rental LED display is specifically designed for rental application. The distribution box has features such as small size, light weight, quick installation and maintenance, and is designed with truckles for easy movement and transportation. The CEE standard compliant power plugs are used for the inputs and outputs.

The “stepwise delayed power-on” mode is used for the output to avoid instant impacts of large load on the power grid. This can effectively protect the electronic elements in the LED display and extend its lifespan. The multiple outputs, strong compatibility, and high flexibility can realize quick power connection.

The highly reliable and enclosed cabinet can avoid direct contact with human body and effectively prevent foreign objects. Protection against short circuit, overcurrent, overvoltage, overload, overtemperature, and lightning is provided.

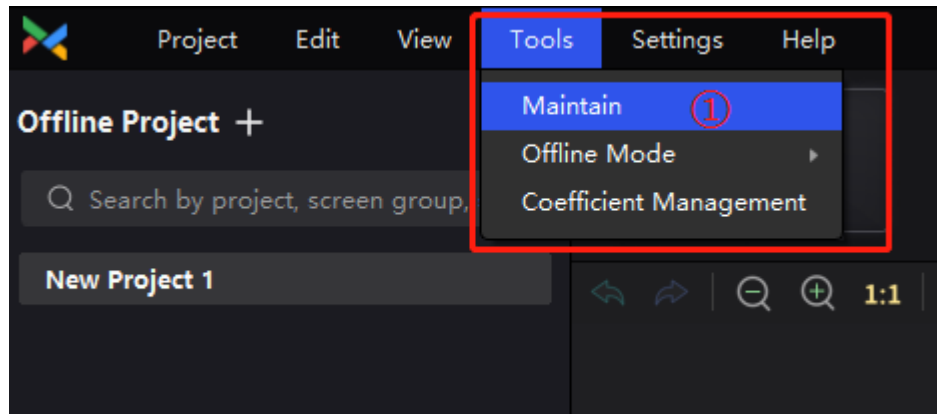


No.	Components	Remarks (s)
1	Input port	3-Phase , 5-wire power supply
2	Output port	Power output port
3	Master switch	Control main power on or power off
4	Air switch	Control branch power on or power off

6.Nova Control System

6.1 Operating Procedure

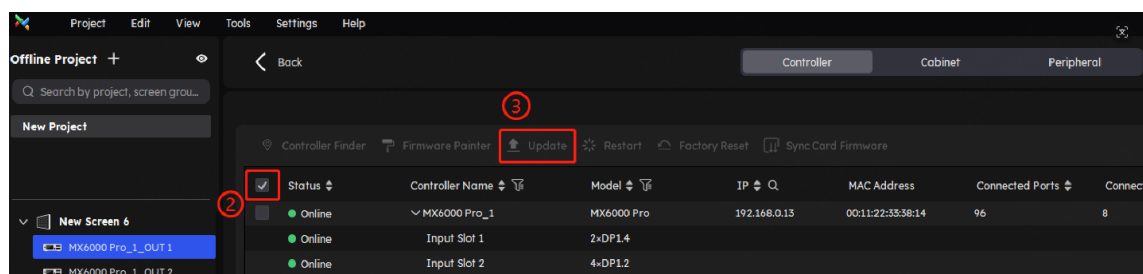
Step1: From the menu bar, choose Tools > Maintain.



Step2: On the Controller page, select the target controller.

Step3: Click Update to update the controller's firmware by downloading from the cloud or uploading a local file.

1. Select the Cloud tab to view the latest version release notes and click Update to download and automatically install the package.
2. Choose the Local tab, click Upload File, and select either a firmware file (.img) or a compressed file (.zip) from the pop-up folder. Verify the file name and version number, then click OK to proceed with the update.



Note: When updating the firmware, it's recommended to use a wired network connection between the PC and the controller. If you need to update via the cloud, ensure the PC is connected to the Internet.

All the devices of a screen must be upgraded at the same time.

V1.5.0 controllers introduced support for the YCbCr 4:2:0 format, resulting in changes to the EDID compared to V1.4.0. When upgrading from an earlier version to V1.5.0, if the controller was previously outputting a non-recommended resolution (for instance, the recommended resolution is 1920×1080@60Hz, but the graphics card was forced to output 3840×2160@30Hz), after the upgrade, the output resolution might revert to the recommended 1920×1080@60Hz. In such cases, users may need to force the resolution back to 3840×2160@30Hz. It is advised before upgrading that users with NVIDIA A or P series professional graphics cards use EDID locking or mosaic settings to prevent resolution errors after the upgrade.

In V1.4.0, the controller defaulted to the UTC time zone. With the update to V1.5.0, a time zone setting has been added to accommodate scheduling needs across different regions.

This update may cause the controller's time zone to change after the initial upgrade, resulting in a shift in controller time. Users need to manually set the time zone once after upgrading to V1.5.0 to ensure that previously created schedules run correctly.

When upgrading card-based controllers (MX6000 Pro and MX2000 Pro), all of the cards must be upgraded at the same time. If the cards span across different screens, the controllers that are under the same screen as the card must also be upgraded together.

6.1.1 Special Note

The COEX platform includes LED display controllers and receiving cards, which together constitute a complete system.

Starting from COEX V1.5.0, Calcube2.X calibration software is no longer supported. Please use the official version of the CC3 software for screen calibration. Additionally, certain new or optimized features require upgrading the firmware of both the controllers and receiving cards. You can download the latest product user manual, firmware package, and CC3 at NovaStar official website: <https://www.novastar.tech/downloads>

6.2 Version Introduction

6.2.1 Release Notes

VMP V1.5.0 includes several new features including 7-color multi-batch adjustment, cabinet topology duplication, SPDIF audio output, peripheral maintenance, and checking for new updates. Additionally, this version optimizes monitoring, calibration coefficient management, cabinet maintenance, ST 2110, and project/screen group management, along with other enhancements and bug fixes.

6.2.2 Compatible Product

Product	Model
Controller	MX6000 Pro, MX2000 Pro, MX40 Pro, MX30, MX20, KU20, CX40 Pro
Input Card	MX_4× HDMI 2.0, MX_2×HDMI 2.1, MX_4×DP 1.2, MX_2× DP 1.4, MX_1× DP 1.4+1× HDMI 2.1, MX_4×12G-SDI, MX_1×ST 2110 (25G), MX_2×ST 2110 (25G), MX_1×ST 2110 (100G), MX_1× DP 1.4 (8K@60Hz)
Output Card	MX_4×10G_Fiber, MX_1×40G_Fiber
Receiving Card	A10s Pro and its derivative cards, CA50E, XA50 Pro, A8s Pro and its derivative cards, A8s and its derivative cards, A8s-N, A7s Plus, A5s Plus, B6s
Fiber Converter	CVT10, CVT10 Pro, CVT8-5G
Multifunction Card	MFN300
Brightness Sensor	NS060
3D Emitter	EMT200 Pro

6.3 Key Features

6.3.1 Release Notes

Reason for Optimization

Through intelligent real-time monitoring and remote alerts, it enables quick fault detection and reduces maintenance costs.

Ensures stable screen operation and minimizes hardware wear during major events.

Optimization Details

Monitor overall screen operating status.

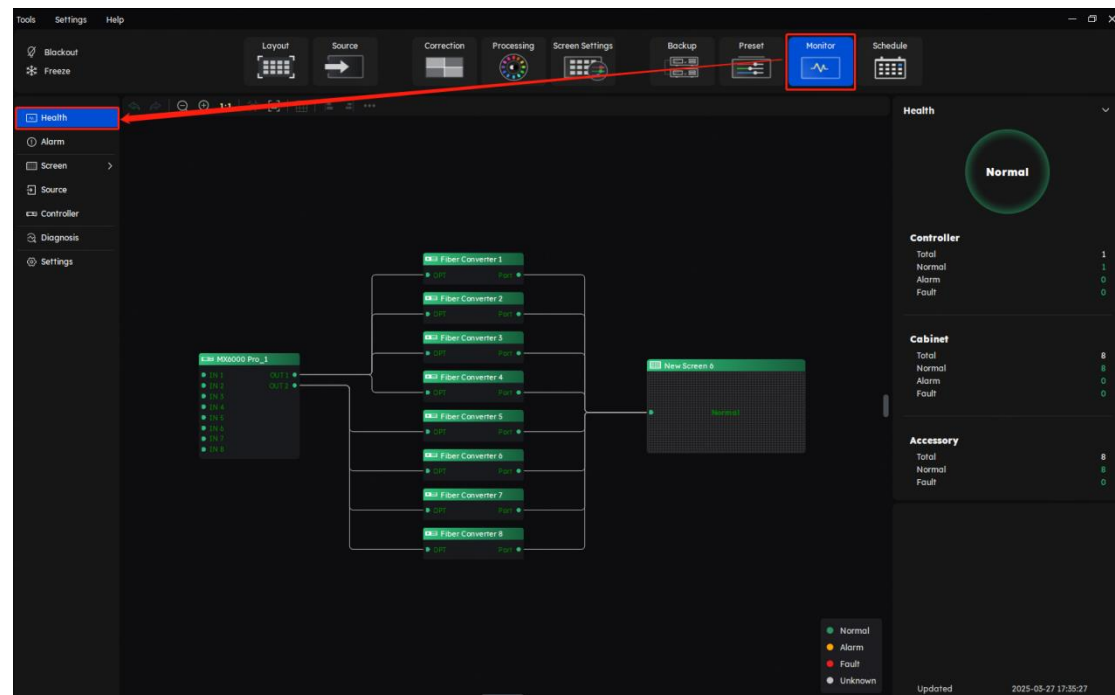
New monitoring options include: cabinet temperature, module temperature, receiving card PHY temperature, module voltage, module flat cable, cabinet humidity, cabinet power, cabinet smoke, and input source monitoring.

Support manual diagnostics or create diagnostic schedules and view diagnosis reports.

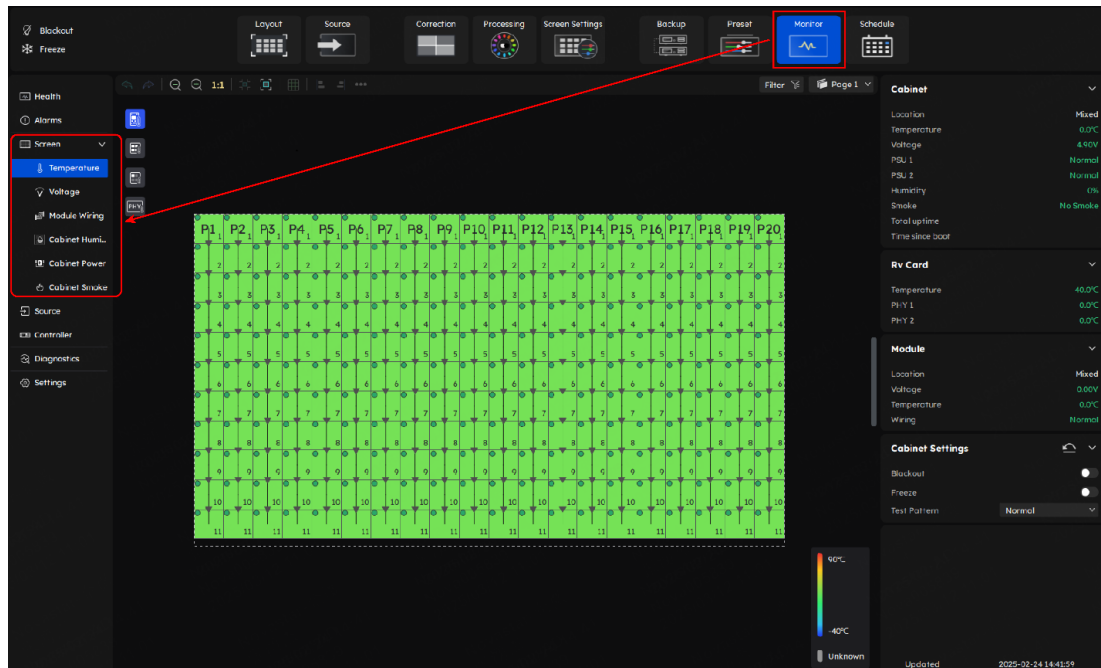
Set monitoring schedules.

Receive alarm notifications via email.

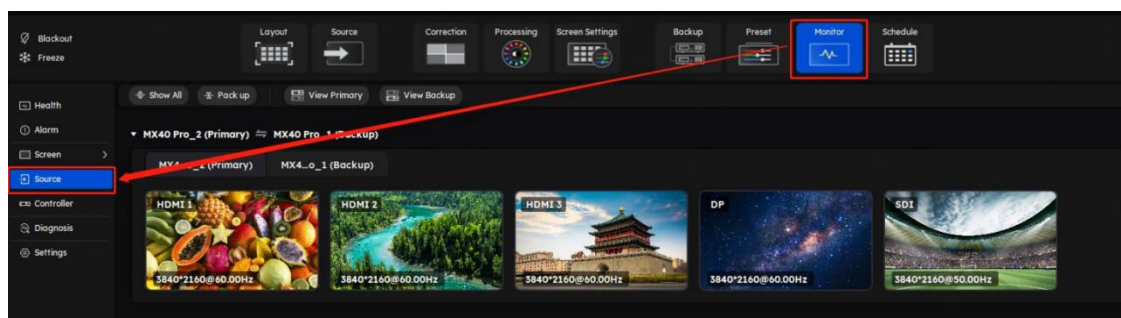
VMP Screenshot



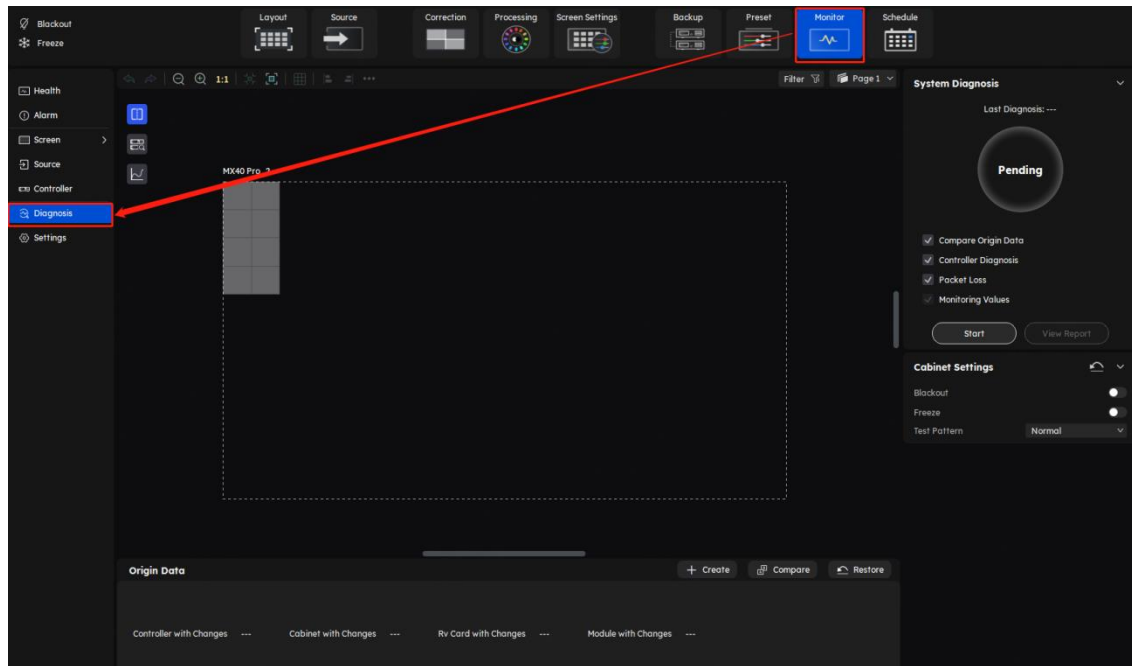
Screen Monitoring



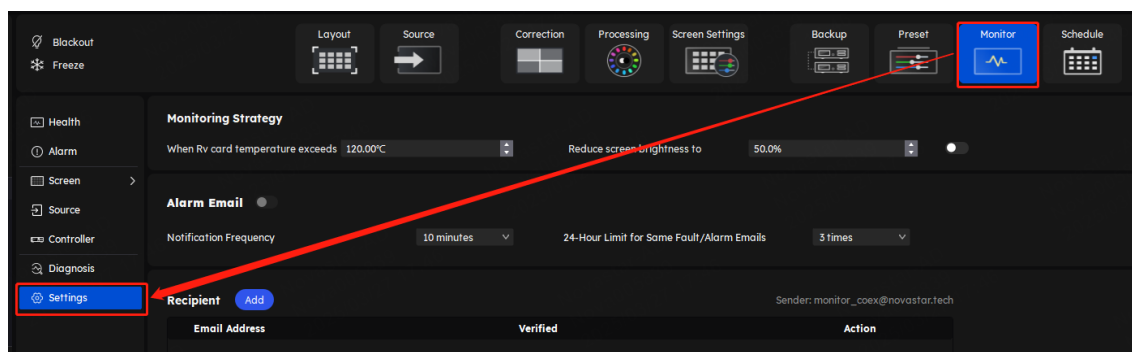
Input Source Monitoring



Diagnostic



Monitoring Schedule & Email Notification



6.3.2 7-color Multi-batch Adjustment

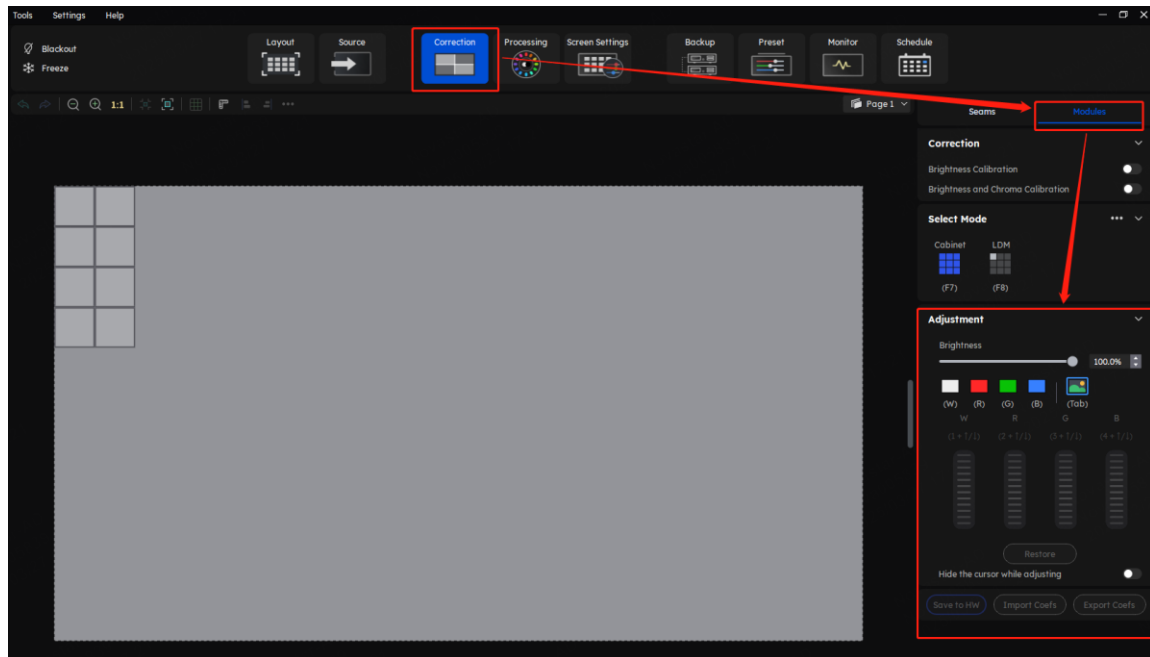
Reason for Optimization

By optimizing the coupling between multi-batch coefficients, it improves adjustment efficiency and reduces trial-and-error time.

Optimization Details

Support for 7-color multi-batch adjustment. Reset coefficients for both single-color and 7-color adjustments.

VMP Screenshot



6.3.3 SPDIF Audio Output

Reason for Optimization

Supports connecting with digital audio devices via the SPDIF interface to meet specific audio output needs.

Optimization Details

Select a single input source as the audio output.

VMP Screenshot



6.3.4 Check for Updates

Reason for Optimization

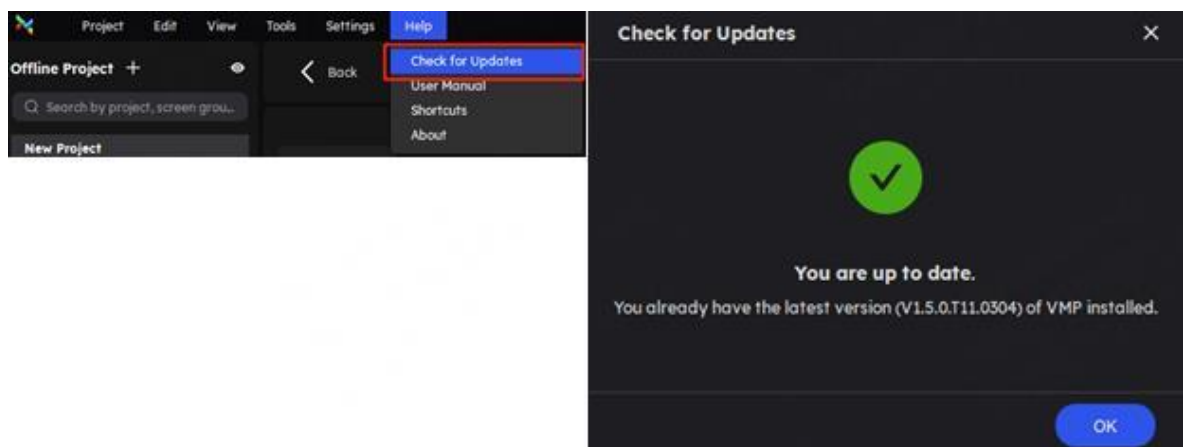
When the computer is connected to the Internet, VMP automatically pushes new version information, highlights key updates, and completes the download and installation process with one click.

Optimization Details

Supports automatic detection of new versions of VMP and the controller, and notifies the user accordingly.

Supports online updates for VMP and controllers.

VMP Screenshot



6.3.5 Calibration Coefficient Management

Reason for Optimization

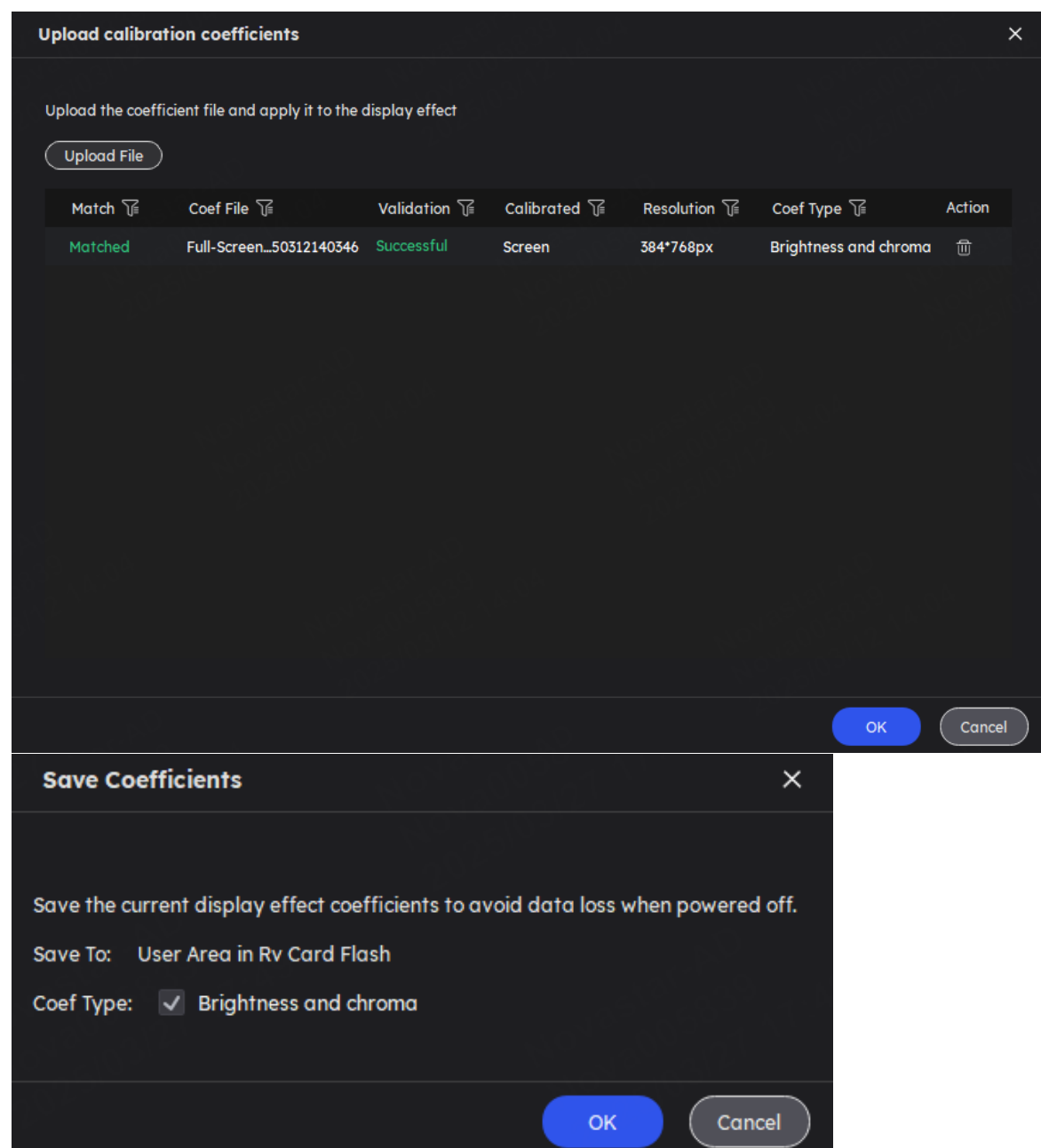
Optimizes the upload process and establishes a tiered control mechanism for calibration coefficient management. This enhances efficiency while minimizing the risk of display errors from on-site mistakes.

Optimization Details

Batch upload of cabinet/module calibration coefficient files with auto ID matching.

Control changes to factory calibration coefficients by applying for a License (see VMP User Manual). Coefficients can only be saved to module flash memory during the license's valid period.

VMP Screenshot



6.3.6 ST 2110

Reason for Optimization

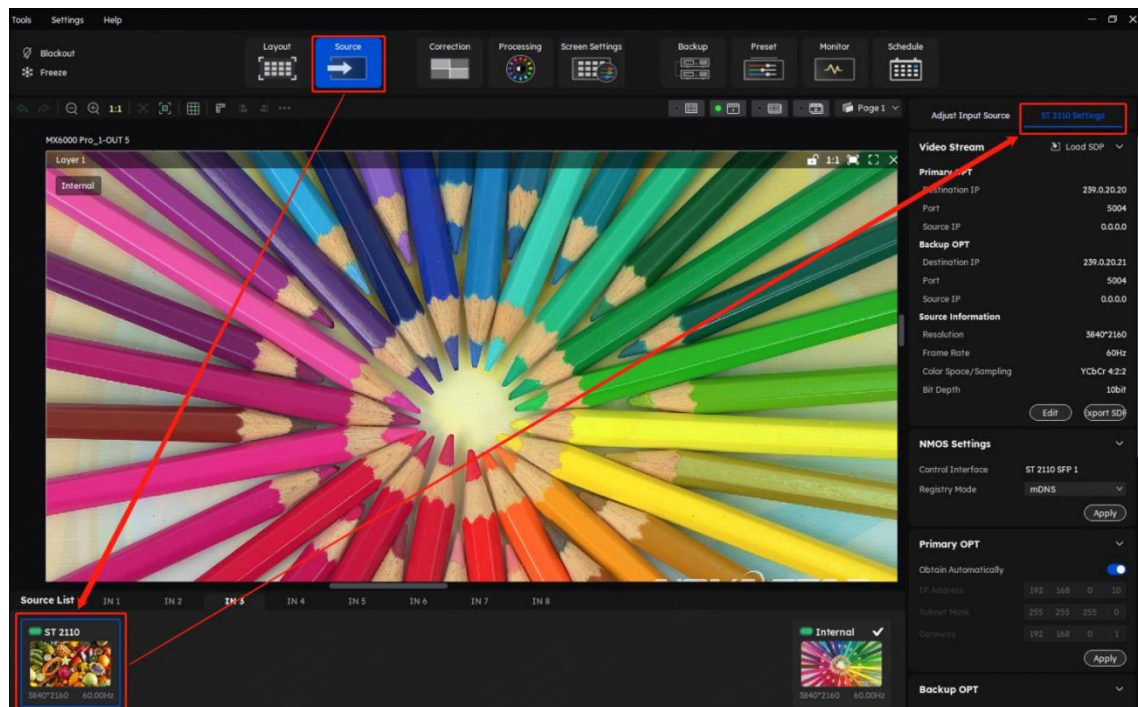
Supports one-click generation of standardized description files for direct third-party parsing.

Introduces a unicast registration mode to meet application needs in complex network environments.

Optimization Details

Set parameters for NMOS registration mode, PTP and FEC; export SDP files.

VMP Screenshot



6.3.7 Project/Screen Group Management

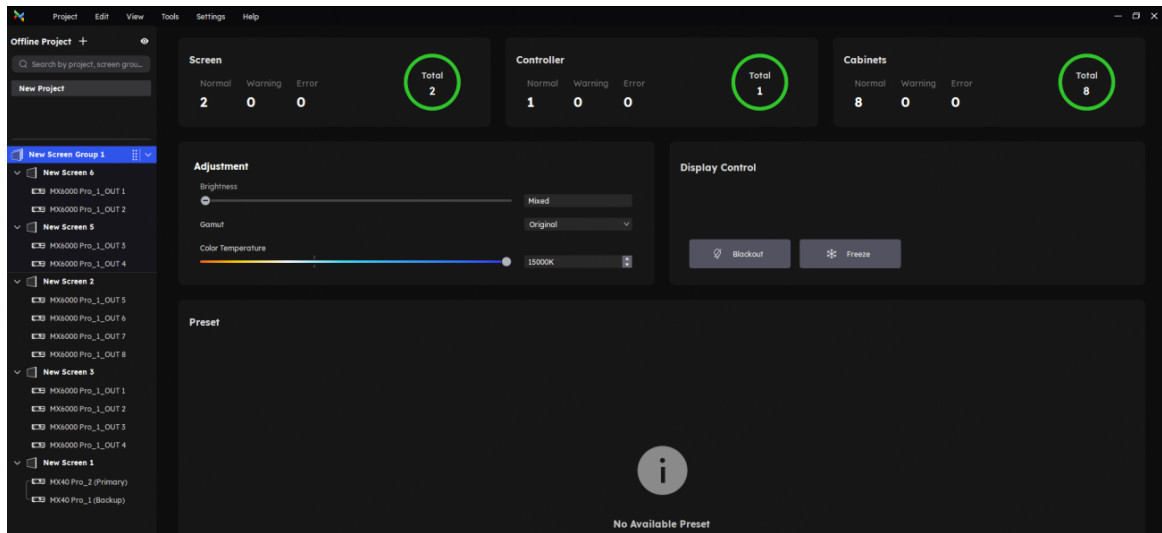
Reason for Optimization

Supports batch parameter adjustments across screens, addressing multi-screen coordination challenges.

Optimization Details

Support batch adjustment of parameters, display control, and preset switching for project/screen groups.

VMP Screenshot

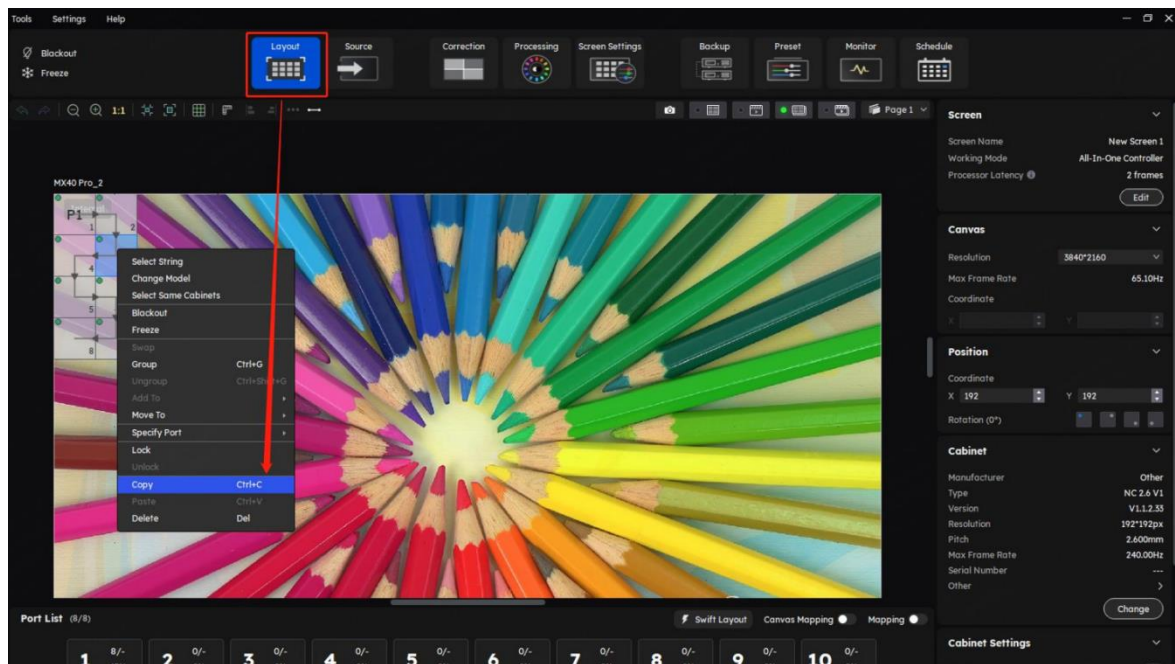


Reason for Optimization

Enables quick reuse of screen configurations in large projects, allowing fast duplication without repeated setup across multiple screens on-site.

Optimization Details: Allows topology duplication via keyboard shortcuts or right-click menu.

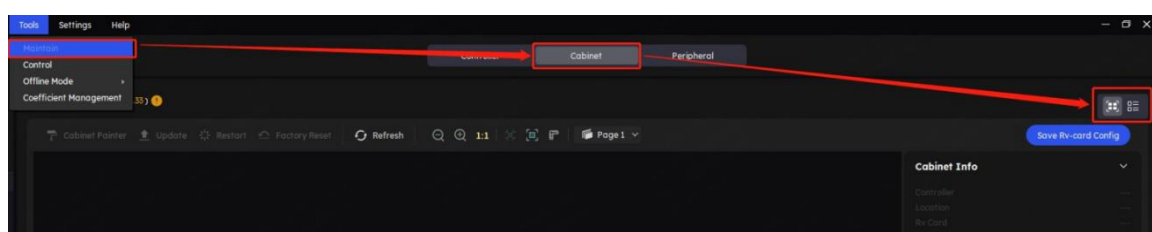
VMP Screenshot



Optimization Details

New topology view in cabinet maintenance interface.

VMP Screenshot



5.3.10 Peripheral Maintenance

Reason for Optimization

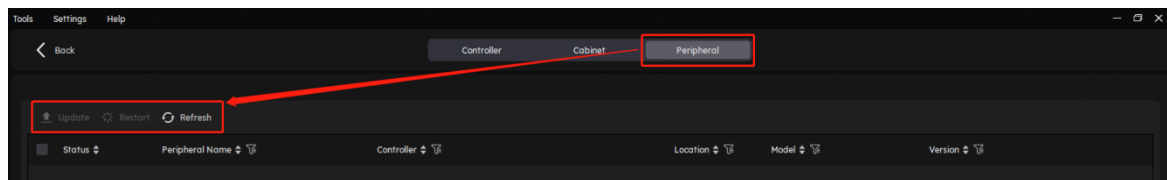
Enables unified management of firmware versions for various peripheral devices.

Supports batch updates for multiple devices at once.

Optimization Details

Firmware updates for multifunction cards, EMT200 and EMT200 Pro emitters.

VMP Screenshot



6.4 Other Optimizations

Name	Description
UI Upgrade	The VMP interface has been redesigned to be more flat and minimalist, with clearer and smarter interface logic, and significantly enhanced visual distinction.
Cabinet Factory Reset	Allows the user-adjustable receiving card parameters to be reset to default values.
Art-Net	Allows for setting of the start address.
Manual Cabinet Topology Adjustment	Manual cabinet topology adjustment for connecting unconnected cabinets or modifying/deleting existing connections.
Brightness Limit	Allows manual setting of the brightness limit.
Brightness Component	Supports adjustment of RGBW brightness components.
Color Space/Sampling	Supports YCbCr 4:2:0 color space/sampling.
Controller Firmware Update	Supports formatting multiple controllers of the same model but different firmware versions to a unified version.
Controller Identify	Customizable background color for controller identify.
Coordinates Ruler	Option to show or hide the coordinates ruler.
Video on Top	Introduces a new view with video on top and cabinets underneath, allowing for layer adjustments within this view.
Add Controller	Supports adding controllers to the device list via IP address.
Offline Mode	I Supports adding more than 25 controllers. I A single Ethernet port can load over 32 cabinets, up to 512. I Allows mixed use of cabinets of the same model but different sizes under a single Ethernet port. When overwriting, it follows the specifications of the selected cabinet.
Multi-Mode	Allows switching between multiple modes on the same screen when the receiving card model and multi-mode data (including receiving card parameters and mode list) are the same.

6.5 Bug Fixes

1. Fixed the issue preventing NCP updates on certain custom receiving cards.
2. Fixed the issue with uploading calibration databases that have Chinese characters in their names.
3. Fixed the issue where VMP wouldn't start when the OS language was set to certain languages.
4. Fixed the inability of the shutter fit function to recognize NCP adaptive frame rate 3.0.
5. Fixed the occasional lack of notifications in the editing area when an external source in sync settings is selected and then disconnected.
6. Fixed rare crashes and freezes.
7. Fixed ineffective color temperature adjustments and the grayed-out color gamut dropdown during backup verification after device backup.

6.6 Known Issues

1. In V1.4.0, the controller defaulted to the UTC time zone. With the update to V1.5.0, a time

zone setting has been added to accommodate scheduling needs across different regions. This update may cause the controller's time zone to change after the initial upgrade, resulting in a shift in controller time. Users need to manually set the time zone once after upgrading to

V1.5.0 to ensure that previously created schedules run correctly.

2. When using extended displays with inconsistent resolutions, VMP may show interface display issues. Setting the same scaling ratio and restarting VMP can resolve this.
3. On the Monitor > Health interface, some scenarios have overlapping cards and wiring.
4. Changing the resolution after opening VMP might lead to interface issues, which can be resolved by restarting VMP.

7. Packaging Transportation and Storage

7.1 Package

Flight case: 1 pack 5pcs cabinets (500x1000mm)

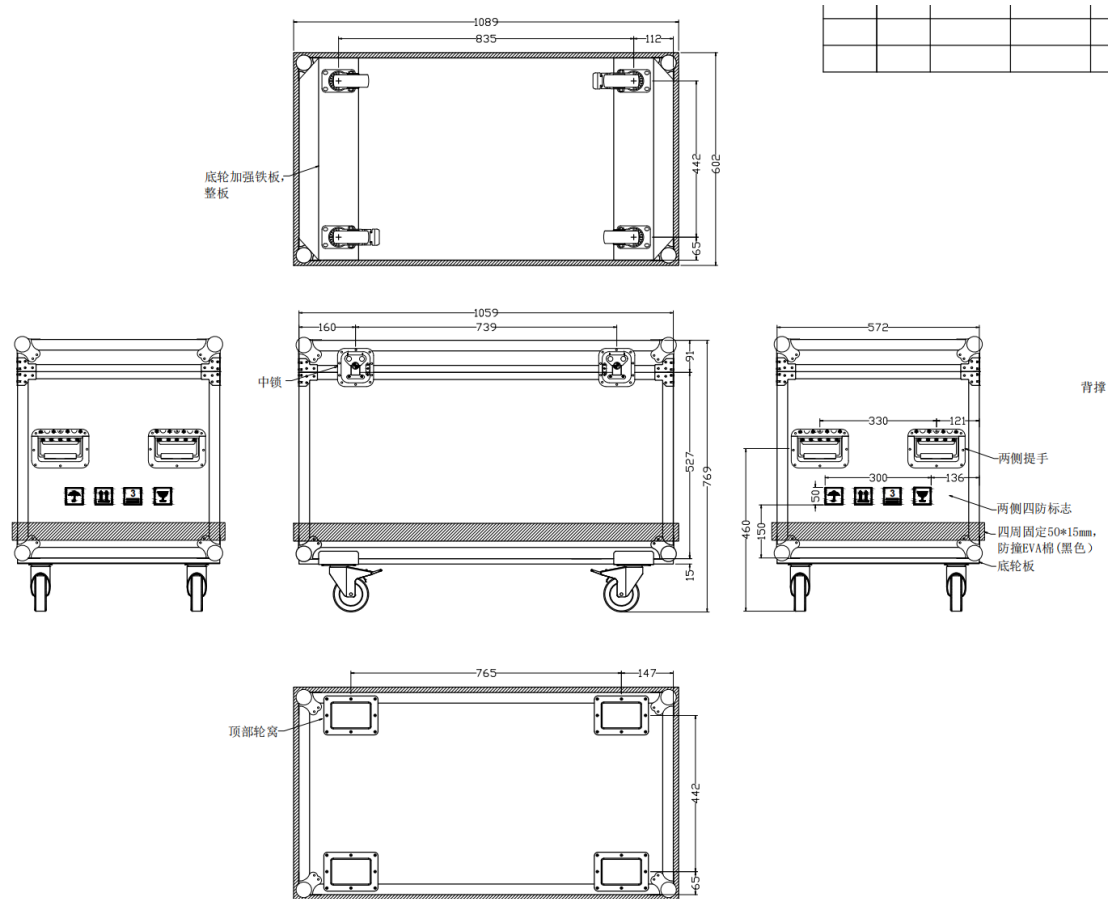


Figure 7-1 Packaging Dimensions Diagram for 5-in-1 Flight Case

Flight case: 1 pack 6pcs cabinets (500x500mm)

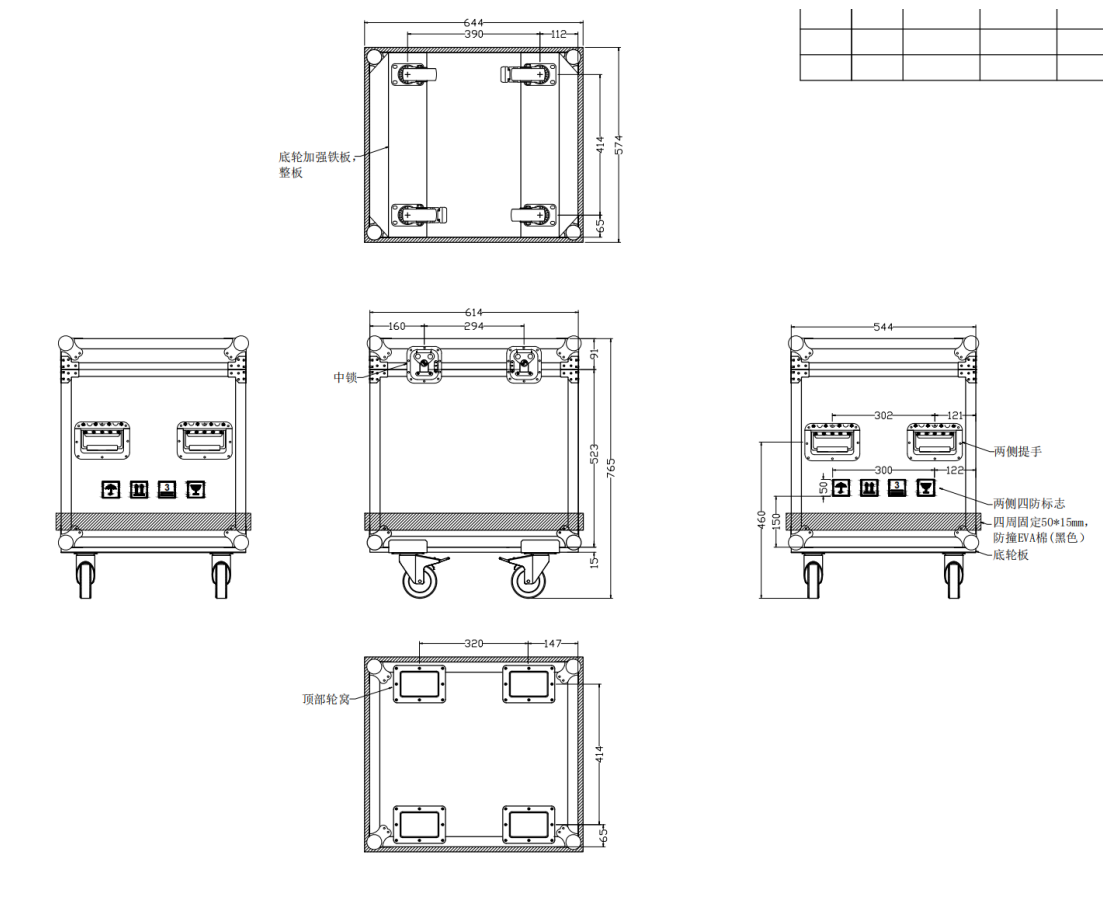


Figure 7-1 Packaging Dimensions Diagram for 6-in-1 Flight Case

Packaging Information:

Specification	Flight Case 6-in-1	Flight Case 5-in-1
Dimensions (L × W × H, mm)	644*574*765MM	1089*602*769MM
Weight	90KG	100KG

7.3 Storage

The cabinets shall be stored in an environment with an ambient temperature ranging from -30°C to +60°C and a relative humidity ranging from 10% to 60% RH. Do not store the cabinets in an environment with volatile, corrosive, or flammable chemical products.

8.Troubleshooting and Component Replacement

8.1Common Faults and Troubleshooting Methods

8.1.1 Failure in Lighting up the Display

Causes:

- 1) No power is supplied to the display or the control devices.
- 2) The LED display does not have input signals.
- 3) The control PC is in sleep mode or the graphics card is set incorrectly.

Troubleshooting method:

- 1) Check AC power input of the display and the control devices.
- 2) Check cables between the sending box and the receiving card. Check whether the DVI cable between the control PC and the sending box is connected reliably.
- 3) Check whether the control PC is in sleep mode or monitor protection mode. If the control PC is not in sleep mode, check whether the graphics card is configured properly on the software.

8.1.2 Incomplete Picture or Incorrect Position of Picture Displayed

Causes:

- 1) The connecting file for the screen is incorrect.
- 2) Receiving card signal cables between cabinets do not contact properly.
- 3) The displaying position and screen size are set incorrectly.

Troubleshooting method:

- 1) Check whether the display's signal cable connection method is same to that of the loaded file xxxx.scr.
- 2) Check whether the signal cable is connected to the cabinet receiving card. If the receiving card is faulty, replace the receiving card.
- 3) Check whether Displaying Position and Screen Size on the software are set to actual screen size.

8.1.3 Screen Blinking

Causes:

- 1) The ports on the sending box are loose, or the signal cables are too long.
- 2) The output resolution of the playing device or sending box is set incorrectly.

Troubleshooting method:

- 1) Check whether the DVI cable and signal cable are connected to the display and devices, or whether the length of signal cables exceeds the maximum transmission distance (the effective transmission distance shall not exceed 10 m for DVI cable, 100 m for signal cable, 300 m for multi-mode optical fiber, and 15 km for single-mode optical fiber).
- 2) Check whether the resolution of the playing device and the sending box is greater than or equal to the resolution of the screen.

8.1.4 Blinking of a Cabinet in the Display

Causes:

- 1) The output of receiving card or hub card is faulty.
- 2) The receiving card program is incorrect.

Troubleshooting method:

- 1) Check whether the receiving card signal cable and hub card in the cabinet are connected correctly.

2) Check the receiving card program for the cabinet or check the receiving card.

8.1.5 Failure in Lighting up of a Cabinet in the Display

Causes:

- 1) The power supply, receiving card, or hub card for the cabinet is faulty.
- 2) Signal output of the previous cabinet is faulty.

Troubleshooting method:

- 1) Check voltage at the DC side of the power supply and the receiving card power supply. Check the receiving card signal indicator light in the cabinet. Check whether the hub card contacts properly with the receiving card.
- 2) Check output signals of the receiving card of the previous cabinet, or replace the signal cable.

8.1.6 Failure in Lighting up Part of the Modules in the Cabinet

Causes:

- 1) Output of the power supply for the modules is faulty.
- 2) Output of signal which controls the related modules is faulty.

Troubleshooting method:

- 1) Check DC voltage for the modules.
- 2) Check the hub card ports or flat cables that control the modules.

8.2 Replacement of Main Components

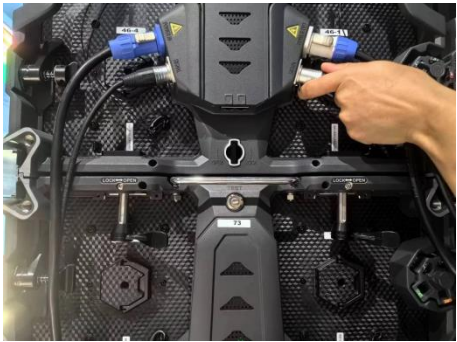
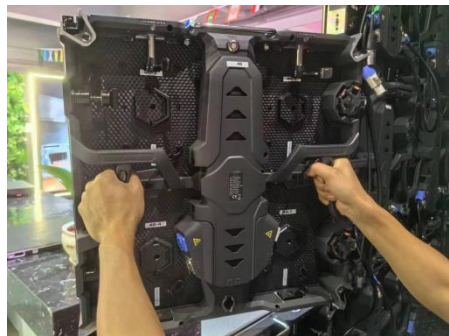
7.2.1 Replacement of Module

Disconnect the power supply of the display , replace the module as following steps:

Steps	Picture	Description
Step 1		First, remove the two M3*8 screws at the rear of the module.
Step 2		When the module becomes loose after being pushed outward, hold the module handle, push it gently, angle it to the right, and extract the module from the rear of the cabinet. Then, replace it with a new module.

8.2.2 Cabinet Replacement

Disconnect the main power to the display system, then follow the steps below to replace a cabinet:

Steps	Picture	Description
Step 1		Unplug all power and data cables before removal.
Step 2		Press the release button (valve) to pop open the quick lock.
Step 3		Hold the cabinet with both hands and remove it safely.
Step 4		When installing a new cabinet, align the positioning pins at the top and bottom. First secure the left and right angle locks, then engage the top and bottom quick locks to complete the installation.

8.2.3 Power Supply Replacement

Disconnect the main power to the display system, then follow the steps below to replace the power supply unit:

Steps	Picture	Description
Step 1		After disconnecting the power, open the back cover of the power box.
Step 2		Unscrew the fasteners using a Phillips screwdriver, disconnect the wiring connectors, remove the faulty power supply, and replace it with a new PSU box.

8.2.4 Receiving Card Replacement

Disconnect the main power to the display system, then follow the steps below to replace the receiving card:

Steps	Picture	Description
Step 1		Open the back cover of the power box and remove the four mounting screws on the receiving card.
Step 2		Pull out the faulty receiving card vertically/horizontally from the hub board, then replace it with a new receiving card.

8.3 Display Maintenance

1.LED lamps are precision electronic components. Please wear gloves and handle with care when installing or removing indoor small-pitch modules.

2.For indoor displays, do not install near air conditioning vents to prevent moisture, which can cause short circuits and damage to the lamps.

3.If the display is not used for a long time, please power it on at least twice a week for 30 minutes each time to remove moisture.

8.4 Technical Support

High Voltage Danger! Do not disassemble the power supply or receiving card inside the cabinet. In case of issues, contact the LED display manufacturer promptly for assistance.

8.5 Disclaimer

Hisense shall not bear any warranty responsibility for defects or damage caused by the following situations:

4. Unless otherwise agreed in a contract or agreement, this warranty does not apply to consumables, including but not limited to connectors, networks, optical fibers, cables, power cables, signal cables, aviation connectors, and other wires and connections.
5. Defects, malfunctions, or damage caused by improper use, handling, operation, display installation/disassembly, or any other customer misconduct. Defects, malfunctions, or damage caused during transportation.
6. Unauthorized disassembly and repair without permission from Hisense.
7. Improper use or maintenance that does not comply with the product manual.
8. Human-caused damage, physical damage, accidental damage, and product misuse, such as component defects/damage, PCB board defects, etc.
9. Product damage or failure caused by force majeure events, including but not limited to war, terrorist activities, floods, fires, earthquakes, lightning, etc.
10. Products should be stored in a dry, ventilated environment. Any product defects, malfunctions, or damage caused by storage in an external environment that does not comply with the product manual, including but not limited to extreme weather, humidity, salt spray, pressure, lightning, sealed environments, compressed space storage, etc.
11. Products used under conditions that do not meet product parameters, including but not limited to low or high voltage, extreme or excessive power surges, and improper power conditions.
12. Defects, malfunctions, or damage during installation due to failure to follow technical guidelines, instructions, or precautions.
13. Natural loss of brightness and color under normal conditions. Normal degradation of product performance and normal wear and tear.
14. Lack of necessary maintenance.
15. Other repairs caused by reasons other than product quality, design, and manufacturing.
16. Failure to provide valid warranty documents. The product serial number is torn or damaged. The product shell or other external parts are damaged.
17. Repairs requested after the warranty period.
18. Products with significant damage caused by improper handling, accidents, improper maintenance, and non-compliance with the product manual.
19. Product failure caused by mismatched playback or control equipment not provided by Hisense. If the product is damaged due to such equipment and requires repair by Hisense, fees shall be charged accordingly.