

# Premier+ Series User Manual

#### Introduction

This manual may contain technical inaccuracies, operational inconsistencies, or typographical errors. We will update the content as product features are enhanced, and will periodically improve or revise the products and procedures described herein. Updates will be included in future versions of this manual without prior notice.

#### **Environmental Declaration**

Comply with local regulations regarding equipment packaging materials, depleted batteries, and disposal of used equipment, and support recycling initiatives.

#### **About This Manual**

This document is used to guide users. The screenshots and diagrams in this document are for explanation only. The actual situation may vary.

#### Agreement

Pattern	Agreement
()	Note: Add necessary information to the description of the operation content

Symbol	Agreement
黑体	Interface menu, such as click Zoom

#### **Precautions for Installation and Use**

- Do not install devices in flammable and explosive environments.
- The temperature and humidity at the installation site must be within the normal operating range.
- Keep the device near vents to prevent heat accumulation.
- Ensure sufficient space around the device for proper heat dissipation.
- Do not remove device parts or connect cables while the power is on
- Implement Electrostatic Discharge (ESD) protection measures during installation and maintenance. Before handling the product, wear an ESD, wrist strap or ESD gloves that are grounded. All tools must be strictly grounded during assembly.
- The shell, cabinet, and screen of the switching power supply must be strictly grounded with a grounding resistance of no more than 10 ohms. Perform spot checks every six months.
- Do not knock, scratch, bump, or scratch the display surface with hard objects.
- Do not flood or soak the device.
- Do not turn the air outlet of the air conditioner directly against the display or make the temperature difference between the inside and outside of the display too large.
- Do not place or use the display in an environment where volatile, corrosive, or combustible chemicals are present.
- When cleaning the surface of the LED module, do not use unknown chemical liquids to avoid damage or corrosion of the LED.
- When cleaning the LED tube, gently wipe it with a clean soft rag dipped in alcohol, and wait until dry before use.
- When cleaning the kit, wipe the kit gently with clean soft cloth dipped in water. Do not leave any trace of water after wiping, and dry the kit before using.
- It is strictly prohibited to install and debug the large screen during the interior decoration.
- If any abnormal situation occurs on the display, such as odor, smoke, leakage, abnormal temperature, wading in the screen, etc., please cut off the power supply immediately, and then contact our technical personnel.
- Under normal circumstances, ensure that the display is on at least twice a week and the startup time is not less than 2 hours; It should be lit for no less than 2 hours a day during the return of tide.
- In order to ensure the display effect of the LED, it is necessary to regularly clean the dust with a soft anti-static brush.
- When servicing LED modules, it is recommended to use a thermostatic electric soldering iron, the temperature of the electric soldering iron is adjusted according to the composition of the tin wire.
- When repairing LED welding, the electric soldering iron temperature is generally set at about 315°C, the welding time is not more than 5s (preferably 3s), and the welding number is not more than three times.
- When repairing CMOS devices, the soldering iron temperature must be kept below 315°C, the welding time should not exceed 3s, and the welding times should not exceed three times.

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newline

- To ensure LED stability and service life, the module working surface temperature should not exceed 60°C, storage temperature should not exceed 60°C, otherwise necessary cooling measures must be taken.
- Use only the dedicated LED display switching power supply provided. The module adopts DC 4.6 input.
   Do not directly connect to 220V, otherwise the whole module will be burned.
- When installing the LED module, ensure that the power port is correctly connected, and the positive and negative terminals must correspond to each other; If the positive and negative terminals are reversed, power off in time to avoid damage to components.
- The module's operating voltage must not exceed 5.5V (maximum allowable).
- Avoid dropping, pushing, squeezing, or applying pressure to the module during use or transportation.

#### Special statement

- The figures in this document are for reference only. The actual product shall prevail.
- We do our best to ensure that the information in this manual is correct. Information is subject to change without prior notice due to upgrades or other reasons.
- This manual can be used as a guide for the use of multiple models of products. However, the usage information of each product is not listed. Please check it according to the actual product.
- Access to the Internet is at your own risk, including but not limited to the product may be subjected to network attacks, hacker attacks, virus infection, etc. The Company will not be responsible for the resulting product abnormal work, information leakage and other problems, the company will provide you with product related technical support in a timely manner.

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## **Chapter 1: Product Introduction**

This Series offers ultra-high color consistency, featuring a mirror-like black screen when idle and delivering vibrant brightness. Utilizing advanced fully flip-flop co-patterned Micro LED chips, this series achieves over 50% energy savings while maintaining the same brightness. The screen body temperature rise is minimal, ensuring high stability and reliability. The product is designed to withstand high-level pressure and collisions, with waterproof and dustproof capabilities. This Series supports infinite splicing combinations with no visible seams, delivering a stunning visual experience. Its hot-swappable modules ensure worry-free operation.

#### 1.1 Features

(1) Efficient Heat Dissipation: High-precision seamless splicing, silent and fanless design, and a die-cast aluminum body;

(2) Low Power Consumption: Common cathode circuit design ensures energy efficiency and low power consumption. It features a high refresh rate, HDR

(High Dynamic Range) for dynamic image display, and 16-bit high grayscale with low brightness;

(3) High Protection: TOPCOB technology provides surface waterproofing, anticollision, and moisture-proof capabilities;

(4) **Dual Redundancy:**Dual backup for both power and signal ensures uninterrupted operation;

(5) Easy Maintenance: Full front maintenance with hot-swappable modules and an overall rigid connection design.

### **1.2.1 Cabinet Appearance**



Fig 1-1

No	Descriptions
1	Power Output Terminals
2	Output Holefor Network Cable
3	Input Holefor Network Cable
4	Power Input Terminals



Fig 1-2

No	Descriptions
1	Sheet Ironof Light Plate
2	Positioning Copper Column
3	Power Supply, Signal Interface

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### **1.2.2 Detail Product Drawing**







Fig 1-7









### 1.3 Internal Components of the Cabinet:



Fig 1-13



■ The internal structure of the fine-pitch LED is shown as follows:

Version 1	Version 2
LED Module *8	LED Module *4
Power Signal Converter Board *1	Power Signal Converter Board *1
Power Supply *1	Power Supply *1
Power Connector*2	Power Connector*2
Signal Port (RJ45 Network Port) *2	Signal Port (RJ45 Network Port) *2

■ The interface of the receiving card is shown as follows:



Fig 1-14

No	Description
1	The power indicator shows a steady red light when the power supply is functioning normally
2	The signal light blinks green rapidly (5 to 10 times per second), indicating normal data signal transmission
3	The hole positions are used to reinforce the receiving card and enhance its anti-vibration capability
4	The Goldfinger interface is used to connect to the screen adapter or unit board. The front left guide is the first pin in the figure above

### **Chapter 2: Installation and Wiring**

#### 2.1 Out-of-cabinet Inspection

Inspect the packages for damage. If intact, verify the main components against the shipping list.

The main components include cabinets, signal cable, power cable, USB cable, DVI cable, and sending cabinet. For

details about the components, refer to the shipping list.

#### Common cables include:



Power Cables



HDMI cables



signal input cables



USB cables



DisplayPort (DP) cables



**DVI** cables



### 2.2 Common tools

Common tools for LED installation preparation (the actual delivery may vary; the picture is for reference only):



Hexagon socket head cap screws





Allen key

Rubber Hammer



Connector (or Coupling Piece)



Grinder (or Sander)



Gloves (or Mittens)





### 2.3. Cabinet layout:

- 1. Open the packing cabinet to check the number of each cabinet, and find the packing cabinet of accessories (installation tools, screws, connecting pieces, etc.).
- 2. Unpack the cabinets and arrange them according to their numbered sequence, ensuring proper alignment based on cabinet size(Figure 2-4) .

	600	600	600	600	600	600
337,5	A6-1	A6-2	A6-3	A6-4	A6-5	A6-6
337,5	A5-1	A5-2	A5-3	A5-4	A5-5	A5-6
337,5	A4-1	A4-2	A4-3	A4-4	A4-5	A4-6
337,5	A3-1	A3-2	A3-3	A3-4	A3-5	A3-6
337,5	A2-1	A2-2	A2-3	A2-4	A2-5	A2-6
337,5	A1-1	A1-2	A1-3	A1-4	A1-5	A1-6

Fig 2-4

#### 2.4 Ground installation process:



warning: The flatness tolerance for the black elf series cabinet splicing display screen must be within +/- 0.1mm and should remain vertical to the reference plane. Installation process:

1. First, assemble the cabinets in the first row and adjust them to ensure they are level. The first row foundation is crucial.

2.After leveling, tighten the locks inside the left and right cabinets.

3.Secure the connection between the back of the cabinet and the cabinet connector with screws.



M5 screw

Front view

° °	o o	۰ ۰
٥ ٥	0 0	o o

Back view



1. Pay attention to the direction of the arrow on the

cabinet. Ensure that the cabinets are level and install the

connecting piece accordingly



2. Use a hexagon socket wrench to tighten the screws.



3. Ensure that the top and bottom are level, with a tolerance of no more than +/- 0.1mm.

4. Proceed to connect the lower piece and secure it in place.





5. Place the cabinets on the ground, ensuring that their centers are level with the square tube.



6. Use the long connecting pieces and hexagon screws to secure the cabinet to the square tube.



7.For multiple cabinets, secure them from the center first, then install the left and right sides.



8. Proceed to secure the front connection piece.



9. Proceed to secure the rear connector







10.Install the power connector between the cabinets.

11. Install the short network cables between the cabinets.



11. After installing the connector, verify the flatness of the connection and ensure the signal cable is properly connected. Once confirmed, connect the long signal cable and the long power cable according to the installation diagram.



# 2.5 Back Frame Installation: (For details, refer to the steel structure design and installation diagram.)





# 1. Use a level or laser to check the alignment and mark the distance

2. Position the wall mount according to the horizontal mark, ensuring the screws are properly aligned and marked.



3. Use expansion screws to secure the marked points.



4. Secure the cabinet in the larger hole with set screws, then use a hex socket wrench to tighten the screws and mount it onto the bracket









 Use M5 screws to secure the connection, ensuring that the top and bottom are level. The tolerance must be within +/- 0.1mm.



7. Install the power connector between the cabinets



8. Install short network cables between cabinets

9. After installing the connector, please confirm the flatness of the connection and whether the signal cable is connected normally. After confirmation, connect the long signal line and long cable according to the installation drawing.











#### 2.6.1 Signal Cable Connection

Signal cables shall be connected based on the wiring diagram of the delivered products for the project.



Fig 2-21 Signal Cable Connection Diagram of P0.9

#### 2.6.2 Power Cable Connection

Power cables shall be connected based on the wiring diagram of the delivered products for the project.



Fig 2-22 Power Cable Connection Diagram of P0.9

#### 2.7.1 Module Layout

Screen calibration is performed on this series product before shipment, and the product needs to be installed sequentially according to the cabinet number, as shown in Figure :

### Module facing up

# Corresponding caibnet number

-		(	60	0		T		6	00			6	00			6	00			6	00			6	00	
A6	-1-5	A6-1	-6 /	A6-1-7	A6-1	-8 A	46-2-5	A6-2-6	A6-2-7	A6-2-8	A6-3-5	A6-3-6	A6-3-7	A6-3-8	A6-4-5	A6-4-6	A6-4-7	A6-4-8	A6-5-5	A6-5-6	A6-5-7	A6-5-8	A6-6-5	A6-6-6	A6-6-7	A6-6
A6	-1-1	A6-1	-2 /	A6-1-3	A6-1	-4 A	6-2-1	A6-2-2	A6-2-3	A6-2-4	A6-3-1	A6-3-2	A6-3-3	A6-3-4	A6-4-1	A6-4-2	A6-4-3	A6-4-4	A6-5-1	A6-5-2	A6-5-3	A6-5-4	A6-6-1	A6-6-2	A6-6-3	A6-6
A5	-1-5	A5-1-	-6 /	A5-1-7	A5-1	-8 A	\$-2-5	A5-2-6	A5-2-7	A5-2-8	A5-3-5	A5-3-6	A5-3-7	A5-3-8	A5-4-5	A5-4-6	A5-4-7	A5-4-8	A5-5-5	A5-5-6	A5-5-7	A5-5-8	A5-6-5	A5-6-6	A5-6-7	A5-6
A5	-1-1	A5-1	-2 /	45-1-3	A5-1	-4 A	5-2-1	A5-2-2	A5-2-3	A5-2-4	A5-3-1	A5-3-2	A5-3-3	A5-3-4	A5-4-1	A5-4-2	A5-4-3	A5-4-4	A5-5-1	A5-5-2	A5-5-3	A5-5-4	A5-6-1	A5-6-2	A5-6-3	B A5-6
A4	-1-5	A4-1-	-6 /	44-1-7	A4-1	-8 A	4-2-5	A4-2-6	A4-2-7	A4-2-8	A4-3-5	A4-3-6	A4-3-7	A4-3-8	A4-4-5	A4-4-6	A4-4-7	A4-4-8	A4-5-5	A4-5-6	A4-5-7	A4-5-8	A4-6-5	A4-6-6	A4-6-7	7 A4-6
A4	-1-1	A4-1	-2 /	A4-1-3	A4-1	-4 A	4-2-1	A4-2-2	A4-2-3	A4-2-4	A4-3-1	A4-3-2	A4-3-3	A4-3-4	A4-4-1	A4-4-2	A4-4-3	A4-4-4	A4-5-1	A4-5-2	A4-5-3	A4-5-4	A4-6-1	A4-6-2	A4-6-3	3 A4-1
A3	-1-5	A3-1-	-6	A3-1-7	A3-1	-8 A	43-2-5	A3-2-6	A3-2-7	A3-2-8	A3-3-5	A3-3-6	A3-3-7	A3-3-8	A3-4-5	A3-4-6	A3-4-7	A3-4-8	A3-5-5	A3-5-6	A3-5-7	A3-5-8	A3-6-5	A3-6-6	A3-6-7	A3-1
A3	-1-1	A3-1	-2 /	A3-1-3	A3-1	-4 A	43-2-1	A3-2-2	A3-2-3	A3-2-4	A3-3-1	A3-3-2	A3-3-3	A3-3-4	A3-4-1	A3-4-2	A3-4-3	A3-4-4	A3-5-1	A3-5-2	A3-5-3	A3-5-4	A3-6-1	A3-6-2	A3-6-3	3 A3-
A2-	-1-5	A2-1	-6	A2-1-7	A2-1	-8 A	2-2-5	A2-2-6	A2-2-7	A2-2-8	A2-3-5	A2-3-6	A2-3-7	A2-3-8	A2-4-5	A2-4-6	A2-4-7	A2-4-8	A2-5-5	A2-5-6	A2-5-7	A2-5-8	A2-6-5	A2-6-6	A2-6-7	7 A2-1
A2	-1-1	A2-1	-2	A2-1-3	A2-1	-4 A	2-2-1	A2-2-2	A2-2-3	A2-2-4	A2-3-1	A2-3-2	A2-3-3	A2-3-4	A2-4-1	A2-4-2	A2-4-3	A2-4-4	A2-5-1	A2-5-2	A2-5-3	A2-5-4	A2-6-1	A2-6-2	A2-6-3	3 A2-
A1	-1-5	A1-1	-6	A1-1-7	A1-1	-8 A	41-2-5	A1-2-6	A1-2-7	A1-2-8	A1-3-5	A1-3-6	A1-3-7	A1-3-8	A1-4-5	A1-4-6	A1-4-7	A1-4-8	A1-5-5	A1-5-6	A1-5-7	A1-5-8	A1-6-5	A1-6-6	A1-6-7	A1-
A1	-1-1	A1-1	-2 /	A1-1-3	A1-1	-4 A	41-2-1	A1-2-2	A1-2-3	A1-2-4	A1-3-1	A1-3-2	A1-3-3	A1-3-4	A1-4-1	A1-4-2	A1-4-3	A1-4-4	A1-5-1	A1-5-2	A1-5-3	A1-5-4	A1-6-1	A1-6-2	A1-6-3	A1-1

Fig 2-17 Front View of the Display

#### Module Layout

Screen calibration is performed on this series product before shipment, and the product needs to be installed sequentially according to the cabinet number, as shown in Figure :



600	600	600	600	600	600
A8-1-3 A8-1-1 A8-1-2	A8-2-3 A8-2-1 A8-2-1 A8-2-2	AB-3-3 AB-3-1 AB-3-1 AB-3-2	AB-4-3 AB-4-1 AB-4-1 AB-4-2	A8-5-3 A8-5-1 A8-5-2	A6-8-3 A8-8-1 A8-8-1 A8-8-2
A513 A514 A514 A512	A523 A521 A522	A533 A5-3 A5-31 A5-32	A5-4-3 A5-4-1 A5-4-1 A5-4-2	A5-53 A5-5-1 A5-5-2	A5-8-3 A5-8-1 A5-8-1 A5-8-2
A4-1-3 A4-1-4 A4-1-1 A4-1-2	A423 494 A421 A422	A433 A434 A431 A432	A443 A441 A442	A453 A451 A452	A48-3 A48-1 A4-8-2
A3-1-3 A3-1-4 A3-1-1 A3-1-2	A323 A324 A321 A322	A3-33 A3-3 A3-3 A3-3 A3-32	A343 A341 A341 A342	A3-5-1 A3-5-2	A3-6-3 A3-6-1 A3-6-1 A3-6-1
A2-1-3 A2-1-4 A2-1-1 A2-1-2	A223 2 22 A221 A222	A233 A2-3 A2-3 A2-3 A2-32	A243 A241 A241 A242	A253 A251 A252	A2-8-3 A2-8-1 A2-8-1 A2-8-1
A1-1-3 A1-1-1 A1-1-1 A1-1-2	A1-23 A1-24 A1-21 A1-22	A1-3-3 A1-3-4 A1-3-1 A1-3-2	A1-4-3 A1-4-1 A1-4-1 A1-4-2	A1-53 A1-5-1 A1-5-2	A1-8-3 A1-8-1 A1-8-1

Fig 2-17 Front View of the Display

#### 2.8 Intelligent control distribution box

The Smart Control Distribution Box can be used for distributing electric power to the LED display, and has the function for real-time monitoring of the temperature, humidity, smoke, and mains voltage of the external environment. The control software has the scheduled start/stop function, allowing you to set any time for the LED display to be remotely started or stopped



Fig 2-25 Internal Structure of Distribution Box

SN	Component	Remark (s)
1	Main switch	MCCB
2	Temperature sensor	Used for temperature detection
3	PLC	Used for smart control
4	Relays	Used to control the ON/OFF of the AC contactor
5	Circuit breaker	MCB,Connect to display live wire
6	Neutral wire socket	Connect neutral wire
7	Power Port	1
8	AC Contactor	Used to control the ON/OFF of the current
9	Earth wire socket	Connect earth wire

The PLC communication system is RS485, It uses converter from control computer RS232 to RS485. For more detail information, please refer to our Intelligent Power Distribution Management System Manual.



Fig 2-26 Distribution Box PLC Connection Diagram



#### 2.9Load Calculation

#### 2.9.1 Total Display Power

Total display power = total cabinet power + peripheral device power + cooling device rate

Switching Power Supply

Single supply power (W) = output voltage (V) \* Output current (A)

- Total Cabinet Power
- Total Number of Cabinets \* Cabinet Power
- Total cabinet area \* Maximum power per square \*120% (reserved for switching power supply)

ONOTE: For details about the maximum power per square box, see the device parameters of the corresponding cabinet model. For details, see 1.3 Device Parameters

■ Total Power of Peripheral Device

The processor and lighting equipment behind the screen are about 2KW.

Total Power of the Heat Dissipation Device

Air conditioning power  $\approx 10m2/P \approx 800W$ . For example, a  $30m^2$  cabinet screen requires a 3P cooling air conditioner, then the total cooling power is  $800w^*3 = 2.4kw$ .

#### 2.9.2 PDC Cable Model Selection

#### Table 2-1 Mapping to PDC Cable Models

PDC Model	Incoming Cable Model	Maximum Currency(A)	Minimum Tube (mm)
10KW PDC	RVV5×6mm <sup>2</sup>	25	25
20KW PDC	YJV5×10mm²	55	50
30KW PDC	YJV5×10mm <sup>2</sup>	70	50
40KW PDC	YJV4×25+1×16mm <sup>2</sup>	100	50
60KW PDC	YJV4×35+1×16mm <sup>2</sup>	125	65
80KW PDC	YJV4×50+1×25mm²	150	80
100KW PDC	YJV4×70+1×35mm <sup>2</sup>	190	80
120KW PDC	YJV4×95+1×50mm²	235	80
120KW PDC	YJV4×120+1×70mm <sup>2</sup>	265	100
150KW PDC	YJV4×150+1×70mm <sup>2</sup>	300	120
180KW PDC	YJV4×180+1×95mm <sup>2</sup>	360	150

#### **Chapter 3: System Solution Overview**





#### 3.1 Scope of Application

This series supports seamless screen assembly of any size, making it ideal for permanently installed LED displays in public spaces such as conference rooms, command centers, and control rooms.



Control room

Meeting room

Fig 3-2



Monitoring room

Training room







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#### 3.2.1 Specification

■ The equipment parameters of the fine-pitch LED series unit cabinet are listed in Table 3-2-2

Ν	ame	P0.7	P0.9	P1.2	P1.5
	Pixel Structure	Flip Chip COB	Flip Chip COB	Flip Chip COB	Flip Chip COB
Module Composition	Pixel Pitch(mm)	0.78125	0.9375	1.25	1.5625
	Module Resolution(W×H)	192*216	320*180	240*135	192*108
	Module Size(mm)	150*168.75		300*168.75	
	Unit Module Composition(W× H)	4*2		2*2	
	Module Resolution(W×H)	768*432	640*360	480*270	384*216
Unit Cabinet Composition	Unit Size (mm)		600'	*337.5*28	
	Unit Area(m <sup>2</sup> )		(	0.2025	
	Unit Weight(kg/unit)			4.7	
	Pixel Density (pixels/m²)	1638400	1137777	640000	409600
	Point Brightness Correction		S	upport	
	Single Point Color Correction		S	upport	
	White Balance Brightness (nits)			1000	
	Color Temperature(K)		2000-120	000(adjustable)	
Optical Parameters	Horizontal View Angle(°)			170	
Farameters	Vertical Viewing Angle(°)			170	
	Distance Deviationof Light Point Center			< 3%	
	Luminance Uniformity		÷	≧98%	
	Chroma Uniformity		±0.003	Within Cx,Cy	
	Contrast Ratio		1	0000:1	

	Name	P0.7	P0.9	P1.2	P1.5
	Peak Power Consumption (W/m²)	600	500	450	450
	Average Power Consumption (W/m <sup>2</sup> )	200	170	150	15-
	Power Supply Input		AC100~240	√ (50-60Hz)	
	Frame Frequency (Hz)		50	&60	
	Refresh Rate(Hz)		≥3	3840	
Electrical Parameter	Operating Temperature (°C)		-10	~ +45	
	Storage Temperature (°C)		-3	0~60	
	Operating Humidity (%)		10 ~ 80	) anti-fog	
	Storage Humidity (%)		Storage	: 10~70%	
Maintenance	Maintenance Type		Front Ma	aintenance	

### Chapter 4: LED Display Control Settings

#### 4.1 Power-on Testing

- ① Ensure all devices are properly connected before configuring the LED display.
- ② Before powering on the LED display, use a multimeter to test the live, neutral, and ground wires of the AC power supply to ensure they are properly connected.
- ③ Ensure the ground wire maintains reliable contact with the ground and is properly insulated from the live wire.
- ④ The connected power supply should be kept away from high-power equipment.
- (5) For 3-phase, 5-wire systems, distribute the load evenly across phases to maintain three-phase balance.
- 6 The input voltage must match the voltage requirements indicated on the cabinet's rating tag.
- ⑦ Connect the provided USB cable from the sending box to the control PC's USB port.
- ⑧ Ensure cables for the LED display are connected according to the provided power and signal cable connection diagrams.

#### 4.2 Preparation for Debugging

#### 4.2.1 Starting the System

- ① Start the control PC and load the Windows system.
- 2 Activate the graphics card driver and set the control PC's graphics card to replication mode. Confirm that the green indicator on the sending box blinks once per second.





#### 4.2.2Installing the Software

Open the optical disk provided for the delivered products. Install the LED control software LCT stored in the optical disk to the control PC. Then install LCT



Fig 4-2 Software Installation

NOTE: You can follow the software installation wizard to install the software.

#### 4.3 Display Configuration

Run LCT. Make sure that Control System on the main window is 1. Click the User option and select Advanced Login, as shown in Figure 4-3.

2			Logout(E)		1 Y V3	- AND
Cloud Monitoring ocal System Infor	Screen Configuration	Brightness	Calibration	Screen Control	Monitoring	Multi-function Card
onitor Information		Julei Device			tains of Device	
	<b>CE 26</b>					<b>1</b>

Fig 4-3 Main Window of LCT

Enter the initial password "admin", as shown in Figure 4-4, to go to the advanced user window



Fig 4-4 User Login

After login, click Screen Config on the main window, as shown in Figure 4-5

System(§) Setting	(C) Tools(I)	Plug-in (P) U	lser(U) Lan	guage(L) Help(	B	BOTH	
Cloud Monitoring	creen Configurat	Brightness	Calibration	Screen Control	Monitoring	Multi-function Card	1
Control System	1	Other Device	Unkno	wn <u>View De</u>	tails of Device	i.	
Monitor Information							
			2				
			0		(	D	

Fig 4-5 Main Window for Advanced User

Click Next, as shown in Figure 4-6:

	Pressent		
urrent Operatio	COW88	~	
Configure Screen			
) Cloud Restore	Europe	~	
) Local Restore		Bro	wse

#### Fig 4-6 Screen Configuration

# The following window is displayed. Set Sending Board Resolution (1920×1080 recommended). Set Graphics Output Resolution to the same value as Sending Board Resolution. Then click Save to save the settings.

аргау мосе			Retrest
Current Display Mode			(Contraction)
Sending Card ???	Graphics Out	put R., 1536 x 864	Curre ???
lelect input Source Sending	Card Resolution:		
Video Input		3D Function	
AutomatiHD	ui 🗸 Send	Enable	Settings
ource Configuration			
Source: HDMI	~		
Resolution: 1920 x 10	60 px	m. (1920 0	x 1080 -
Refresh Rate T60	Hr Innud Sou	Ince Bit De Bit	
			Gat
lot Backup Verification			
fot Backup Verification			
edundancy Set the Current Devi	et as Primary	Set as Backup	Sat
Hot Backup Verification Verify Iedundancy Set the Current Devl	et as Primary <b>ry</b>	Set as Backup Backup	E Set
Hot Backup Verification	et as Primary ry Serial Number of Drivense Part	Set as Backup Backup Serial Number of Backup Sending	Setial Number of

Fig 4-7 Sending Board Configuration

After configuring the parameters on the Sending Board page, click Recaiving Card to display the following

window:

- 1) Click Load From File to load the file xxxx.rcfg stored in the optical disk.
- 2) Click Send to Receiving Card.
- After sending, confirm that the loaded picture received by scan board is normal on the screen. Then click Save.



newline

	siving card Screen	Connection				
Module Informati	tion					
Chip:	MBI5153	Size:	96W×27H	Scann	ing Type 1/27 scan	
Direction:	Horizontal	Data Group	os 1	<u>Adjust</u>	RG	Check M
Cabinet Informat	tion					Set Rotation
O Regular				🔘 Irregular		
Width (Pixel)	384	€ <=1196		Width:	?? Height: ??	
Height (Pixel	1) 216	€ <=216		Loading erro	or. Please try to adjust pe	
Module Cas	C From Left to	Right 🗸		Construct C	a View Cabinet	
-						
Performance Se	ettings		Elimin 🗖 Ria	🙆 🗆 10684		Sand Parform
Data Group	E	ings	org			Send renorman
Refresh Rate	2400	Hz	Grayscale Level	13Bit grayscale		1
DCLK Frequ	8.3 ~	MHz	Refresh Rate Ti	4 ~		
Data Phase	6 ~		DCLK Duty Cycle	50 v	(25~75) %	
GCLK Fre	12.5 🗸	MHz	GCLK Duty Cy	50 ~	(25~75) %	
	0	(0~9)	Row Blanki	59 🗘	(=4,72us)	
GCLK Phase:						
GCLK Phase: Line Cha	2	(0~23)	Ghost Control En	24	(1~58)	
GCLK Phase: Line Cha Blanking	30	(0~23) (5~32) F	Ghost Control En	24	(1~58)	l
GCLK Phase: Line Cha Blanking	2 ¢	(0~23) (5~32) F	Ghost Control En	24	(1~58) (0~175)	
GCLK Phase: Line Cha Blanking	2 €	(0~23) (5~32) F	Ghost Control En	24	(1~58) (0~175)	
GCLK Phase: Line Cha Blanking	- · · · · · · · · · · · · · · · · · · ·	(0~23) (5~32) F	Ghost Control En	1	(1~58) (0~175) Save to File Read fr	om Re., Send to Recei.,
GCLK Phase: Line Cha Blanking		(0~23) (5~32) F	Ghost Control En	1	(1~58) (0~175) from.) Save to File (Read fr	om Re. Send to Recei
GCLK Phase: Line Cha Blanking Smart Setting Current Recei	2 € 30 €	(0~23) (5~32) F	Ghost Control En	24 🚖	(1~58) (0~175) from.) Save to File Read fr	om Re. Send to Recei. Restore Facto

Fig 4-8 Scan Board Configuration

After configuring the parameters on the Scan Board page, click Screen Connection to display the following window:

Screen Configuration-COM99	nection	×
Screen1		Quantity o 1 ~ Configure
Screen Type: Sending Card Number	Standard Screen Basic Information Coordinate: X: 0 Y: 0	Complex Screen
Ethemet Port No.	Coulding Card Port Port Receiving Card Widhto	Capachy
Detect Communic Read the Numbe	r.) Test Pattern	Enable Mapping Load from File Save to File Read from HW Send to HW

Fig 4-9 Screen Connection

1) Click Read File to load the file xxxx.scr stored in the optical disk, as shown in Figure 3-10.

- 2) Click Send to HW.
- 3) After sending, confirm that the screen is complete. Then click Save.

Screen Configuration-COM99							- 0	×
Screen1						Quantity o 1	Configure	
Screen Type: Sending Card Number	<ul> <li>Stand</li> <li>Basic Infor</li> <li>Coordinat</li> </ul>	dard Screen mation e: X: 0	Y: 0 Virtu	○ Com al Mo □ E	plex Screen	Screen Ar 1920	x 1080	
Ethernet Port No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Receiving Card Size	Columns 1 2	4 Ro 1 Sending Card:1 Port 1 Red Jing Card:4 Widt :480 Sendin Card:1 Pot 1 Receiving Card:3	2 Sendin Card:1 Port2 Red ing Card:4 Widt:480 Sendin Card:1 Port2 Receiving Card:3	ResetAll Sending Card:1 Port3 Red Ving Card:4 Widt: 480 Sending Card:1 Port3 Receiving Card:3	Hided Red 4 Sending Card:1 Port4 Red ying Cald:4 Widt:480 Sending Card:1 Port4 Receiving Cald:3		Port. Capacity	
Width: 400 Pito Entire Height: 270 Apply to Entire Set Blank Apply to the Curren.	3	Sending Card:1 Pot:1 Receiving Card:2 Widtt :480	Sendin, Card:1 Po t:2 Receiving Card:2 Widtt :480	Sending Card:1 Po t3 Receiving Card:2 Widtt :480	Sending Card:1 Pot4 Receiving Card:2 Widtt:480			
	4	Sendin Card:1 Polt:1 RecSing Card:1 Width:480	Sendin Card:1 Pot:2 Rec <mark>S</mark> ving Card:1 Width:480	Sending Card:1 Pot:3 Rec <mark>S</mark> ring Card:1 Width:480	Sending Card:1 Polt4 Rec <mark>S</mark> ring Card:1 Width:480			
Detect Communic Read the Number Tes	st Pattern		Enab	e Mapping Loa	d from File	to File Read from HV	W Send to HW	>
Restore Factor.				Ex	port Screen M Sav	e System Co Sav	Close	

Fig 4-10 Screen Connection with Loaded File

#### 4.4 Brightness Adjustment

On the main window, click **Brightness**, as shown in Figure 3-11, to display the brightness adjustment interface:

System(S)	Settings (	(C) Tools(T	) Plug-in	(P) User	(U) Lang	uage(L) I	Help(H)			
				<b>•</b> ;						
Cloud Monit	toring Scr	reen Configura	ation Brig	htness Ca	alibration	Screen Cor	ntrol   Monitoi	ring Multi-	function Card	Ŧ
-Local System	n Informatio	n								
Control Sy	/stem	1	Other E	)evice	0	Vie	w Details of D	evice		
- Monitor Inform	mation									
	Iml						<b>T</b> -			
	1955		-					<b>7</b> 1		
L										

#### Fig 4-11 Main Window for Advanced User

There are four brightness adjustment modes, namely Manual, Schedule, Auto, and Auto Adjustment by Hardware. After adjustment is finished, click Save to HW to save the adjustment results to the hardware. 1.Manual Adjustment

Select Manual and adjust the brightness by dragging the scroll bar below Brightness Adjustment or directly modifying the brightness value (the maximum value is 255) next to the scroll bar.

99-Screen1			
	O Manual Adjustment	🔘 Auto Adjustm	ent
rightness			
Brightness			255(100%)
	Grayscale	Contrast	
dvanced Settings Gamma	Color Te Color G	am	_
dvanced Settings Gamma Gamma	Color Te Color G	am	
dvanced Settings Gamma Gamma O Gamma	Color Te Color G	am	2.8
dvanced Settings Gamma Gamma O Gamma Low Graysca	Color Te Color G	am	2.8
dvanced Settings Gamma Gamma O Gamma Low Graysca	Color Te Color G	am 0.0%	2.8

#### Fig4-12 Manual Adjustment

**Display Quality:** Includes Soft mode and Enhanced mode. The Soft mode is generally used for indoor LED displays while the Enhanced mode is used for outdoor LED displays.

Gamma Adjustment: Includes Mode A and Mode B. The LED display in Mode A can light up earlier than that in Mode B.

Gain: For chips with current gain function, adjusting the current gain can improve the chip's current output.

RGB brightness: Adjusts the brightness of Red (R), Green (G) or Blue (B) separately.

#### 2.Automatic Adjustment

Schedule, Auto, and Auto Adjustment by Hardware are automatic adjustment modes. Automatic adjustment function is not recommended for indoor LED display products because the indoor environment has stable ambient light and is rarely affected by the ambient brightness. If you really need to use this function, you can configure this function by using the wizard.

#### 4.5 Firmware Program Update

In the Screen Configuration interface, click Program Update. In the popup window, you can either click Cloud Update to match and install the firmware package automatically, or select and load a package manually. Alternatively, you can click Local Update to load and install the firmware package from your computer.

wooule mormation		12100			
Chip:	Common C	Size:	32W×16H	Scanning Type 1/8 scan	
Direction:	Horizontal	Data Groups	2	Adjust RG.	Check M.
Cabinet Informatio	n				Set Rotation
Regular				O Irregular	
Width (Pixel)	32	+=65		Width: 77 Height 27	
Height (Pixel)	16	+=128	1	Loading entry Please try to, adjust pe	
Nodule Casc.	From Right to	Program Up	odate	× abinet	
Performance Settin	198	Choose an	upd		
Data Group E	More Sett	Cloud U	pdate the receiv	rted to the network, anto	Send Perform.
Refresh Rate	450	~			^
Grayscale Level	Normal 4096	× (			
Shift Clock Fre	12.5	v Local 9	pdate Load firms	are package locall 395	
Phase Position	6	*			
Row Blanking	15	÷			
Line Changing	3	+ (0-12)			
Minimum OE w.	160 ns				
	68.96%				~

Fig4-13



#### **Operating Procedure**

**Step 1:** On the menu bar, choose User > Advanced Synchronous System User Login. Enter the password and click Login.

The default password is "admin

Step 2: Type "admin" to open the program loading window as shown in

nniheol mennor								
Select the communicati	on port for operatio	0						
Communication port					1.000	1.1	6	
for the current operati	10.41.200.45.5200			~	Device q.	. 1	1	econnec
Program updating								
Program Pat C.We	ers\Administrator\Ap	pData/Roaming/N	iovaLCT 2012\u	nzip/D/ATA_	DH7512-1_V	4.7.2.26_0930	B	rowse
Advanced								/pdate
Extend the operation iter	n							
Read-back of recei								
rdware Program Versio	Information							
ardware Program Versio	n Information						1	
ardware Program Versio Refres O Refres.	Sendi 1	Outp	1 🔄 R	ecei [1	÷	Refres		Refresh
ardware Program Versio	s Information	Outp	1 💽 R	ecei [1	¢	Refres		Refresh
ardware Program Versio	n Information Sendi 1	😫 Outp	1 🛊 R	ecei [1	ı	Refres		Refresh
ardware Program Versio	Sendi 1	🔄 Outp	1 🔮 R	ecei [1		Refres		Refresh
ardware Program Versio	n Information Sendi 1	Outp.	1 🛊 R	ecei [1	÷	Refres		Refresh
ardware Program Versio	n Information Sendi 1	Outp	1 🛊 R	ecei [1	•	C Refres	(	Refresh
ardware Program Versio	n Information Sendi 1	Outp_	1 🐑 R	ecel_ [		Refres		Refresh
ardware Program Versio	n Information Sendi 1	Uutp	1 🐑 R	ecei. [		Refres		Refresh
ardware Program Versio	n Information Sendi 1	Dutp	1 🔄 R	ecel. [		Refres		Refresh
ardware Program Versio	sendi 1	Outp_	1 🔄 R	ecei. [	*	Refres		Refresh
ardware Program Versio	sendi 1	Outp_	1 🐑 R	ecei. [	1	Refres		Refresh
ermation Console	n Information Sendi 1	Outp	1 💽 R	ecei. [	1	Refres		Refresh
erdware Program Versio Refres O Refres. Commention Console	n Information Sendi 1	Outp	1 💽 R	ecei. [	1	Refres		Refresh
ormation Console	Information Sendi 1	Outp	1 💽 R	ecel. [	•	Refres		Refresh

Fig4-14

Step 3: Choose a communication port.

If you need to reconnect the sending card, click Reconnect.

**Step 4:** Specify the viewing range and click Refresh to view the current program version of the hardware.

□ **Refresh All:** View the program versions of all the sending cards and receiving cards.

□ **Refresh Specified:** View the program versions of the specified sending cards and receiving cards. If the module has an MCU, select Refresh Module MCU to view the MCU version.

Refres_ () Refres	Sendi	Ulp		recei	P 19	Reites
Hardware program ven	sion information					
C serving care				10.00		
In 1/4 0 E 0 Totald	Domarka 2022 04	22 MOTEL 6640	DO 1/4 0 E	O OTD		
⊕-V1.0.5.0 Total1.	Remarks:2022.04	22 MCTRL660P	R0 V1.0.5	.0.STD		
⊕- V1.0.5.0 Total1.	Remarks:2022.04	22 MCTRL660P	RO V1.0.5	.0.STD		
⊕- V1.0.5.0 Total1	Remarks:2022.04	22 MCTRL660F	RO V1.0.5	.0.STD		
⊕- V1.0.5.0 Tetal1	Remarks:2022.04	22 MCTRL660P	RO V1.0.5	.0.STD		
⊕-V1.0.5.0 Total1	Remarks:2022.04	22 MCTRL660P	RO V1.0.5	.0.STD		



In the Update Program interface, select the appropriate driver IC and decoding method based on your actual requirements, then either match the package file automatically or choose it manually, and click Update.

- Auto match: Select Auto Match, and the software will automatically select the appropriate package file based on the receiving card model, and the specified driver IC and decoding method.
- Manual selection: Unselect the Auto Match, and manually choose the required package file from the list

Integrate	d Group_Hl	B75E_V1.2.3.0.zip			
Select Chip Driver IC	: MBI5050		Decodin	5953 Decoding 🔍	Browse
rogram P	DATA_MEV416	_¥4.9.0.0			🗌 Auto Ma
		1	integrated Packs	se	
		DA	TA_MRV412_V4.9.	0.0	
		DA	TA_MRV416_V4.9.	0.0	

Fig4-16

- Step 6: Click Advanced, select the items to be updated, and click OK.
- Step 7: Click Update.

**Step 8:** Set to update the programs of all receiving cards or the specified receiving card, and then click OK.

All receiving cards			
<ul> <li>Specified receiving c</li> </ul>	ard		
Sending card	1	0	
Ethernet port	1	*	
Receiving card	1	0	
OK	Ca	ncel	
Specified broadcast data ope	erating tip	s:	
Broadcast corrsponding valu	es: sendi	ng card(256); E	t 🕜

Fig4-17

Step 9: After the programs are updated successfully, click OK.

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newline

#### 4.6 Send calibration data to the receiver card

**Step 1:** Click or choose Tools > Calibration from the menu bar.

System( <u>S</u> )	Settings (C	) Tools( <u>T</u> )	Plug-in (P	) User( <u>U</u> )	Languag	e( <u>L)</u> H	lelp( <u>H</u> )			
Cloud Monito	oring Scre	en Configurat	tion Brightn	ess Calibr	ration	reen Con	trol Monitor	ring Multi-f	function Card	
Local System	Information			1						
Control Sys	stem	1	Other Dev	ice	0	Vie	w Details of D	levice		
Monitor Inform	nation									
	即				<b>S</b>	$\mathbf{\nabla}$		•		
		1							,,	
Our in Obt										
Service Status:	: Service ver	rsion:test								.:

Fig4-18

Step 2: Select the Single-Screen Mode tab.

Step 3: Select the Manage Coefficients tab

Screen Calibration		-		×
Single-Screen Mode Combined-Sc + +	Online Calibration Offline Calibration Manage Coefficients Double Calibration Coefficients			
Current Operation	Network Setting			
COM99 1	Local IP 192.168.1.146 V Port 8080 Reconnect			
Current Screen	2			
Screen1	Communication Information			
Scieen	13.33.37 Enable network monitoring successionly			
Settings of Displaying Image				
Position to Display Image:				
Primary Display 🗸 🗸				
Device Response Time				
100 💠 ms				
Method to Display Image:				
Hardware Test Pattern				
F				
Enable/Disable Calibration				
Brightnes     Low Gra				
Chroma				
Eull-Gravec		-		
Parlays     Parlays     Parlays	Calibration Preparation: Enable only one layer and manua	) <b>C</b>	lear	
Dark or Save				

Step 4: Click on the light board flash as shown

Screen Calibration		2	х
Single-Screen Mode Combined-Sc • •	Online Calibration Offline Calibration Manage Coefficients Double Calibration Coefficients		
Corrent Operation Communication Port COW99 V	Select Operation		
Current Screen	C+7 Upload coefficients		
O Screen1	Save calibration coefficients to database		
	Set coefficients for a new receiving card		
	Set coefficients for a new module		
	Z Adjust coefficients (Color is not uniform on screen)		
California of Displaying Income	🛃 Erase or reload calibration coefficients		
Position to Display Image:	C Reset calibration coefficients		
Device Response Time	Upload coefficients (for factory use)		
Method to Display Image: Hardware Test Pattern	Module Flash 1		
Fashia Dinekia Colibertian	Opload thermal compensation coefficients		
Disable			
O Brightnes D Low Gra			
O Dirginites Co Cow Gra			
Chroma			
O Full-Grayse			
Dark or Save			



**Step 5:** Click Flash Calibration, click View Lamp Board Calibration Factors, click Save Calibration Factors to Receiver Card, and click Cure.

Screen Calibration	- 0 ×
Single-Screen Node Combined-Sc + +	Online Calibration Offline Calibration Manage Coefficients Double Calibration Coefficients
Current Operation Communication Port	Sand by Addresa Send by Topology
CON99 ~	Current Screen Starting coordinateX=0, T=0 Size512W×256H
Current Screen	
O Streen1	● Full ○ Select by pix ○ Select by Topology □ Select operat
Settings of Displaying Image	Operate all pixels.
Position to Display Image:	
Primary Display 🗸 🗸	
Device Response Time	
100 🗘 ms	
Method to Display Image:	
Handware Test Pattern 🔍	
	1 2 3
Enable/Disable Calibration	
O Disable	
O Brightnes Dow Gra	
O Chroma	Hash Check View Receiving Card Calibra Ciview Module Calibration Coefficient
O Full-Graysc.	Cont Tana Restored SPI Bill Rate L a Control Integral Maderia
Dark or Save	

Fig4-21



### 4.7Image Booster Engine

Step 1: Open as shown Image Booster Engine

loud Monitor	ing Sc	reen Configu	ration Br	ightness	Calibration	Screen Contr	ol Monito	ring Multi-	function Card
cal System I	nformatic	n							50
Control Syst	tem	1	Other	Device	0	View	Details of	~~~	54
							1	Fest Tool In	nage Booster B
nitor Inform:	ation								
nitor Informa	ation	<u>()</u>	R		<b>S</b>	V	L	•	

Fig4-22

- Step 2: Colorimeter Connect
- Step 3: Check the Hz value
- Step 4: Automatic acquisition settings
- Step 5: Start





### 4.8 Screen Play

loud Monitorin	ng Scre	een Configu	ration Bri	ghtness	Calibration	Screen Control	Monitoring	Multi-function Car	d
ocal System In	formatior	1							1
Control Syste	m	1	Other	Device	Unkno	wn <u>View D</u>	etails of Test T	ool mage Booste	r Eng
onitor Informat	ion								

#### Fig 4-24 Test Tool

	Test Tool Window 1	+					- ×
x Y	0	3 ‡ 0 ‡	₩ <b>-●</b>	480		Hide	Lock     OSD       Backmost     Reset
	Solid Color	Loop:	Repeat List ∨				Add
	Grayscale Gradient	No.	Content	Original	Playbac	Path	Operation
	Grid	1					
88	Checkerboard	3					
0	Circle	4					
•	Test Pattern	6					
0	Locate	8					
۵	Text	9 10					
C	Video/Image						
	Aging						
o	Settings						

Fig 4-25Video/Image Settings W/H Add



#### Step 3: Add video source

$\rightarrow$ $\checkmark$ $\uparrow$	→ U盘(E:) >		~	C 在 U 盘 (E:) 中搜索
只▼ 新建文件夹				≣ • □
🕖 音乐 🔹 🖈	名称 ^	~ 修改日期	类型	大小
🛛 视频 🔹 🖈	🧧 首件参数	2024/5/30 17:09	文件夹	
诺瓦NCE培训	🧰 图纸	2024/7/29 16:51	文件夹	
	늘 V综合	2024/7/22 10:57	文件夹	
女装使用又件	1 箱体文件	2024/7/25 20:56	文件夹	
室案例	🔁 学习附件	2024/5/17 10:23	文件夹	
— 新加卷 (D:)	🚞 ZC1.25COB	2024/7/17 16:57	文件夹	
	🧰 作业指导书	2024/5/17 9:41	文件夹	
此电脑	480270	2024/1/11 14:55	MP4 文件	385611 KB
— U 盘 (E:)	o 512288	2024/2/28 14:07	MP4 文件	23,542 KB
CAD包	<b>6</b> 40360	2024/1/11 14:53	MP4 文件	30,998 KB
	• 创意水果(1)	2024/6/4 16:26	MP4 文件	32,393 KB
文件な	Z(N): 480270			Supported File(* avir* wmv

Step 4: as shown

Fig 4-26



Fig 4-27

#### **Chapter 5: Hardware Troubleshooting Analysis**

#### 5.1 Module Failure:

Fault type	fault description	Symptoms and Solutions	Cause
LED light	Dead Lamp	Replacement of Modules	Dead or Bad Soldering
LED Pixel Block	Pixel Block Black or Missing Color	Replacing an IC or Module	Driver IC/Resistor Poorly Soldered or Not Working
LED Modules	One or More LED Modules in a Row are Black or Faulty	Check the Connection of the Module to the Adapter Board	Not Connected or Poorly Connected



Fig 5-1

If the above defects occur, prioritize replacing the spare module. If the module still fails after replacement, check and replace the connecting board and the firmware of the receiver card.



Fig 5-2

Replace the problematic module and check for poor contact, dead lights, black or color blocks. If the driver IC is not functioning due to false welding, welding, or replacement issues, contact our technicians for further assistance.



### 5.2 Power Failure:

Fault Type	Fault Description	Symptoms and Solutions	Cause
Power Supply Module	The entire module is black	Check the power connection of the module	Poor power-to-module connection
Power Supply	The entire module is black	Replacing a faulty power supply	There's a problem with the power supply that powers the receiver card.
Power Supply	Several neighboring module areas are black	Replacing a faulty power supply	There's a problem with the power supply that powers the receiver card.



Fig 5-3

# Prioritise checking the power cord for poor contact



Fig 5-4

If multiple adjacent module areas are black:

1.Check if the receiver card signal light is functioning.

2.Use a test pen to verify power supply output.

3.Replace the power supply if no voltage is detected.

#### **5.3 Data Transmission Faults:**

Fault Type	Fault Description	Symptoms and Solutions	Cause
Fiber Optics	Black screen	Check fiber optic connections and data I/O sequence	Fiber optic cable damage or data I/O errors
CAT5e	Black screen of the whole column of the display	Check the network cable between the sending box and the first scan card	Bad connection or faulty RJ45
CAT5e	Black screen of one of the modules in a column	Check RJ45 cables between modules	Bad connection or faulty RJ45
CAT5e	All modules are lit, but the order of each column is not correct	Check and correct the RJ45 cable connection order	Incorrect connection sequence







Fig 5-5

Check the signal lamp to determine if it is functioning. If the display is abnormal, investigate the faults described above one by one.



#### 5.4 Regular Maintenance and Precautions

- Ensure that the LED display is well ventilated, dry and operating at the right temperature.
- Regularly check the internal components of the LED display to ensure that the cables are connected correctly, the power supply is working properly, the ground wire connection is not damaged, and the lightning arrester is operating properly.
- Regularly clean the LED module surface with an anti-static soft brush to maintain display cleanliness and prevent brightness inconsistencies.
- Precautions for use.
- Power on the LED display first, followed by the remote display.
- Before shutting down the display system, turn off the power of the LED display first, then turn off the computer.
- It is best to turn off the LED display when editing a video playlist.
- In case of a fault, turn off the power of the LED display first, and then contact our technical service department for technical support.
- EASY FRONT SERVICE DESIGN

The cabinet and the module are packed separately, the cabinet is installed first and then the module, and the cabinet and the module are connected through pin headers. Intelligent adjustment: The unique 6-axis alignment function ensures that the video wall is perfectly aligned and seamless, and the screen flatness tolerance is less than 0.1mm

The final installation of the product requires steel structure bracket fixation, and professional front maintenance tools are used to disassemble the LED module.



(1)



(2)



(3)



