

AURORA SIGNAGE

Outdoor LED Display LUX V2

Models:

LDC960667WPR-L2
LDC1280667WPR-L2
LDC480667WPR-L2

User Guide 04/23



This manual systematically introduces the product components, interfaces, specifications, etc., as well as operating instructions for installation, functional use, etc., designed to enable you to use the product quickly and efficiently;

This manual takes a 4*3 engineering project as an example and can be applied to all LUX 2 series engineering projects.

⌋ Warning⌋

It is a Class A product that may cause radio interference in environment.

The probability of not getting the best display due to ignoring the precautions is extremely high.

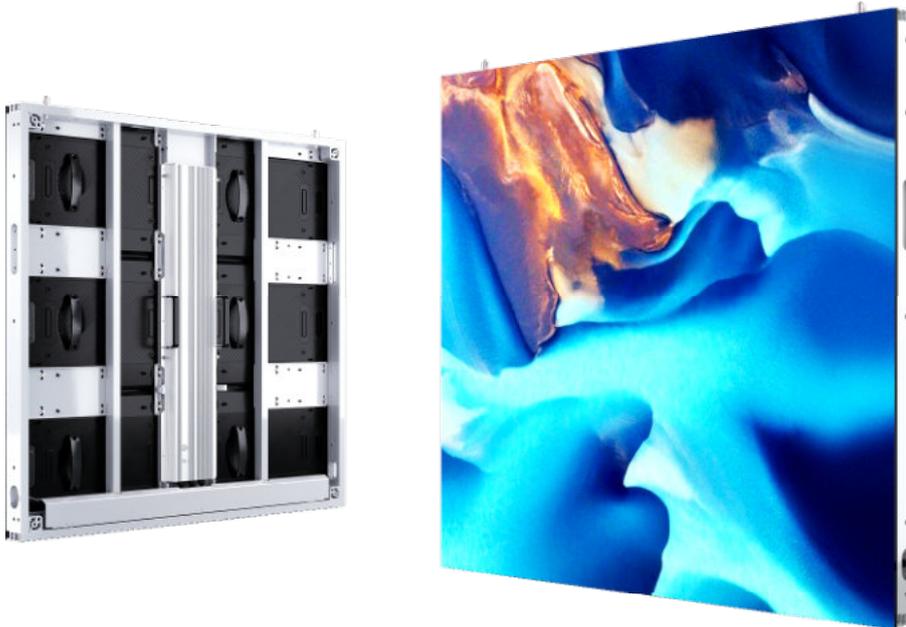
- 1) There is strong electricity inside, non-professionals are prohibited from opening it;
- 2) Good ventilation on the back of the display must be considered when designing the cooling solution;
- 3) The LED panel is designed for branching power supply, and the supporting power supply certified by our company must be used;
- 4) The display should be equipped with an axial flow fan or air conditioning for heat dissipation to ensure long-term stable work of the product;
- 5) The product shall not be modified without permission, so as not to affect the performance and reliability of the product;
- 6) The average power of the display in normal use (normal display of pictures or video signals) is about 20%-30% of the maximum power consumption (show full white screen with the highest brightness). Distribution power must be reserved for the power distribution of the display based on the maximum power consumption, rather than the average power consumption, so as to prevent that in extreme cases (long time display of full white screen in the highest brightness) power supply line heating brings hidden dangers;
- 7) The air inlet and outlet for heat dissipation on the back of the display shall not be covered and blocked, so as not to cause poor heat dissipation and overheating protection;
- 8) The installation and construction process shall be carried out gently, bumping will cause damage or deformation, which will lead to poor installation seams, damage to display light panel or water leakage;
- 9) The door lock on the back of the display must be locked tight after installation is completed to avoid damage from water leakage;
- 10) During the use of the display, please use our matching brightness sensor or brightness timer to ensure that the display keeps the proper brightness during the all-weather work, so as to avoid light pollution.



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I. Product features



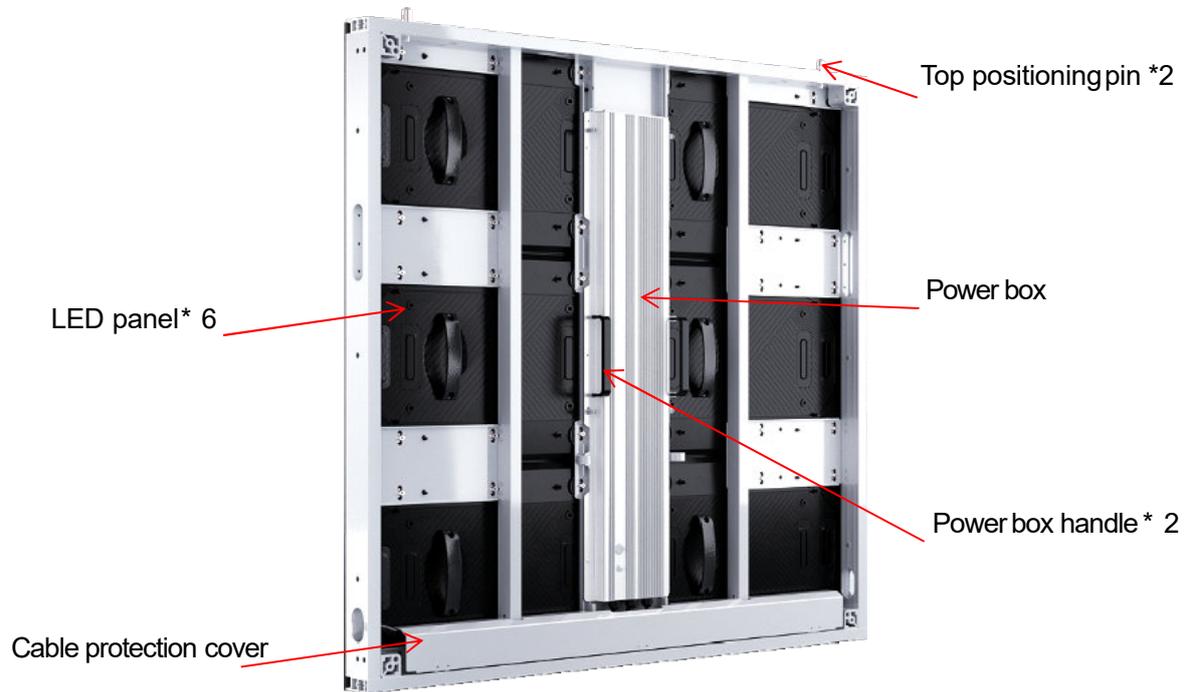
- 1) High-efficiency PFC power supply and high-efficiency voltage conversion techniques, as well as innovative LED panel circuit design, reduce power supply current and transmission loss;
- 2) All ROHS-certified raw materials, lead-free manufacturing process, undertaking the responsibility of environmental protection, meet the requirements of CCC, CQC, CE, ETL, FCC, CB certifications;
- 3) 20bit color depth, 7680Hz ultra-high refresh rate, 15,000:1 high contrast, 10000CD/m² brightness (Note 1), ensuredisplay of color image in strong direct sunlight and dark environment;
- 4) Only 68mm screen thickness and 20.5kg/cabinet weight save the cost of steel structure and occupy less space. Slim screen is integrated with the building;
- 5) Highly integrated minimalist power box design reduces internal connections, devices and shell closely fit, ensuring uniform heat dissipation, and improving product reliability;
- 6) Fully sealed cabinet (front and rear IP65), meets the requirements for use in harsh environment, not afraid of wind and rain;
- 7) Fully compatible with front and rear maintenance, meet different installation environments, outdoor naked-eye 3D arc, right-angle large display can be customized;

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- 8) Self-developed system, for convenient control on multiple terminals including computer/PAD/mobile phone, MaxConfig intelligent control software, supports one-click on screen for remote program release whenever and wherever possible, which is efficient and safe;
 - 9) Multi-terminal status real-time monitoring, and fault alarm, for peace of mind (Note 2).

Note 1: Brightness varies with different configurations. See parameter table for details

Note 2: Hardware environment support is required.

II. Cabinet components



III. Product installation

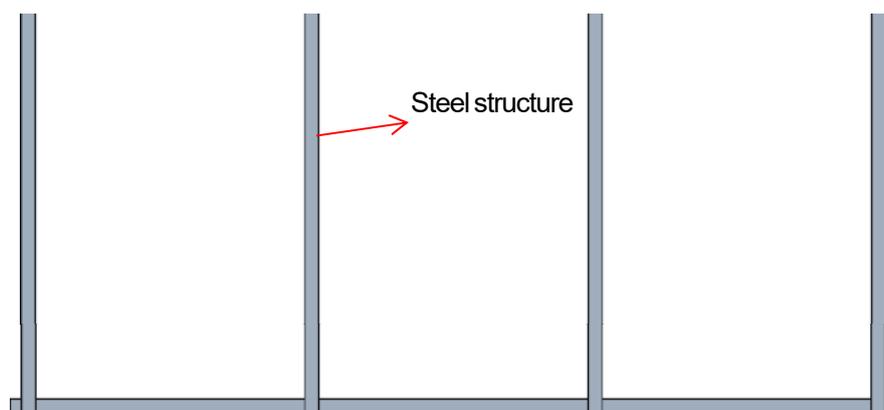
3.1 Tools and accessories used for installation

M8 hex socket head cap screws, 6mm Allen wrench, M10 hex bolts, 16mm hex sockets, connection plate.

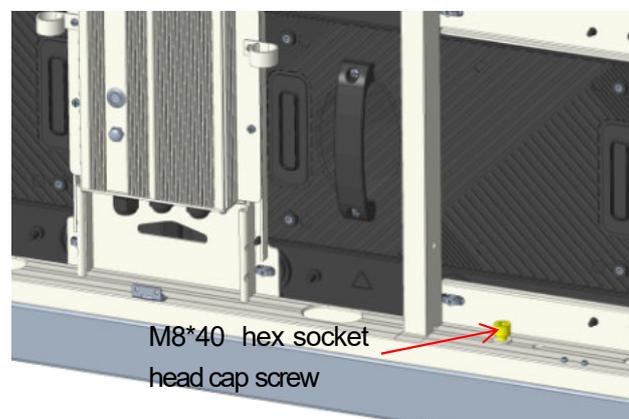
3.2 Installation procedure

Precautions before installation: disassemble the wooden case and take the cabinet out of the wooden case. Take care to avoid bumping during the process to avoid damage to the cabinet.

- ① Customize the steel structure according to the size of the product to be installed.



- ② Place the first row of cabinet on the base of the steel structure, and fix the cabinet with M8*40 hex socket head cap screws.

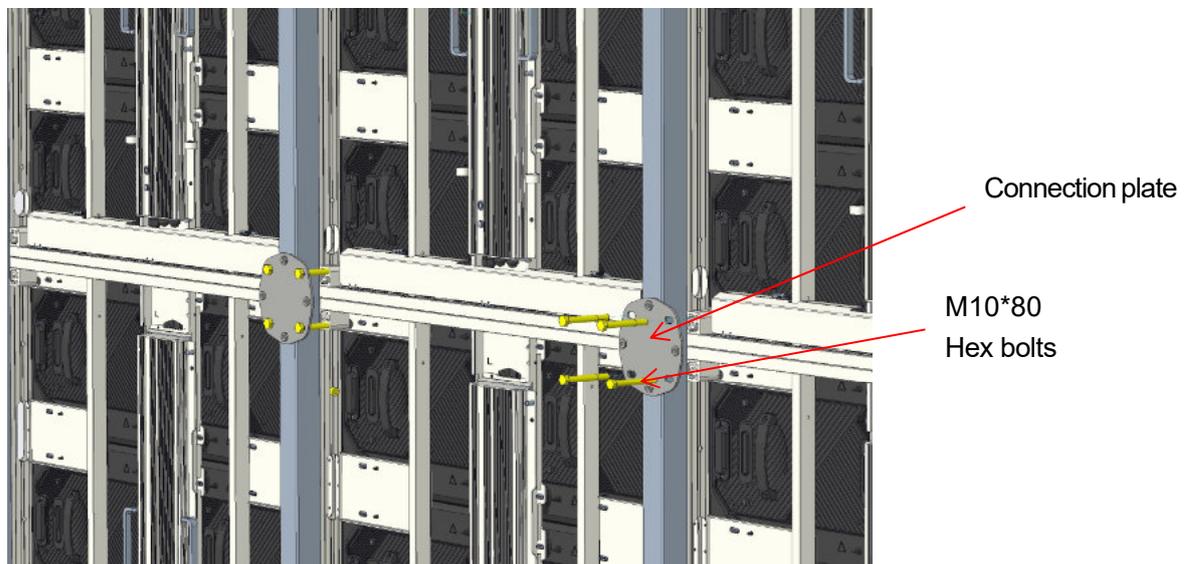


Note: The hex socket head cap screw here should be adjusted to ensure the level of the first row of cabinet.

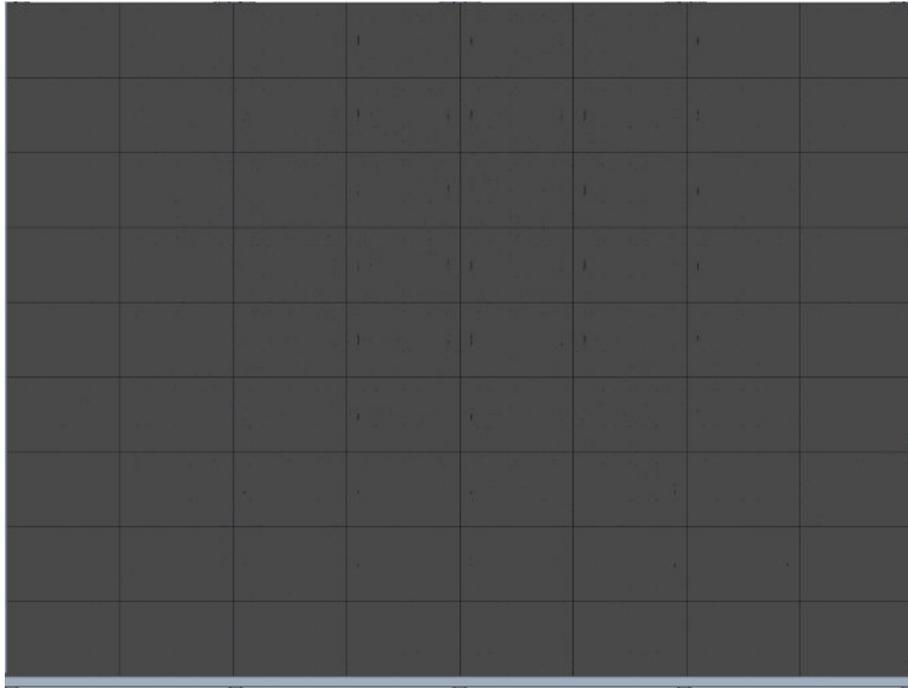
- ③ Between the two adjacent cabinets, use 3 M8*40 hex socket head cap screws to lock.



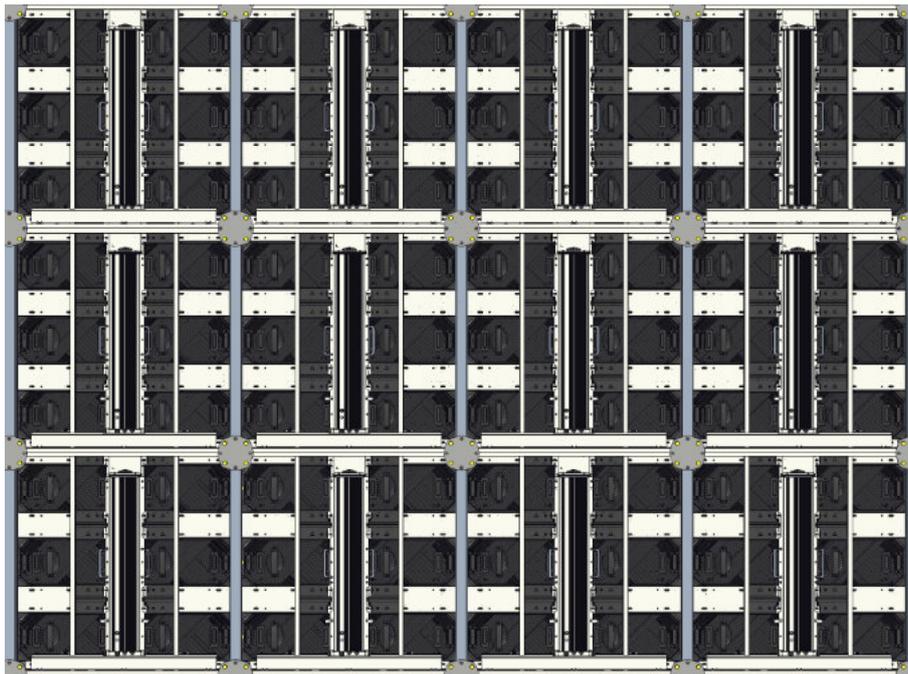
- ④ Follow steps □ and □ to install the second row of cabinet.
- ⑤ Use the connection plate and M10*80 hex bolts to lock the adjacent 4 cabinets by holding the square pipe.



- ⑥ Follow the above steps to install all cabinets, and the overall installation effect is shown as follows:



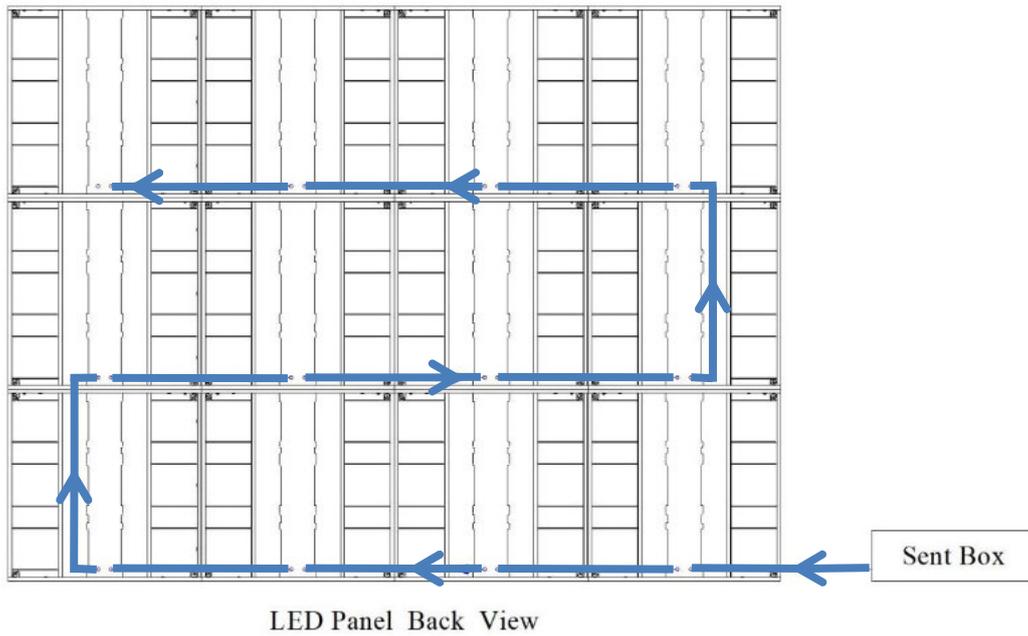
Front view



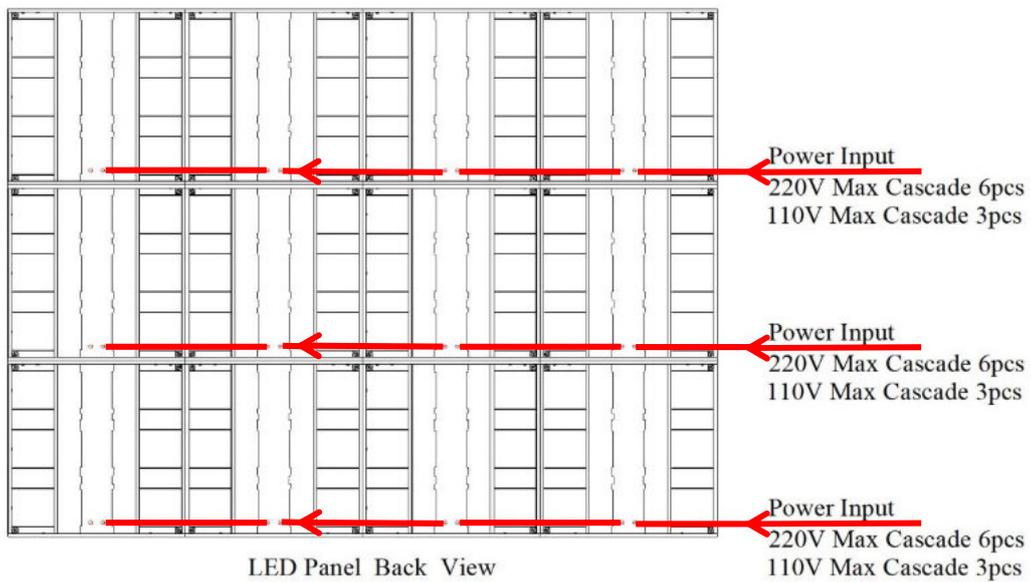
Back view

Note: The installation instructions in this manual are for reference only. For specific projects, install according to the project installation drawings.

3.3 Signal connection diagram



3.4 Power connection diagram



3.5 Installation environment requirements

In order to ensure the stability and security of the system during operation, the following suggestions are put forward for the operating environment:

- ① Hardware environment: CPU dominant frequency > 2.0GHZ, memory > 1G, discrete graphics card, video memory \geq 512MB, and DVI or HDMI output port.
- ② Software environment: Client operating system: XP, Win7, Vista, Win8 or Win10, etc.
- ③ Network environment: The network must be connected when the display is calibrated online.

3.6 Sequence of display power on and off

- ① Display power on: please turn on the computer first, enter the system normally, and then turn on the LED display power;
- ② Display power off: first turn off the power of the LED display, then turn off the control software, and finally turn off the computer.

3.7 Check before commissioning

- ① Before powering on the display, use a multimeter to check whether the live wire, neutral wire, and ground wire of the AC power input terminal are connected;
- ② Ensure that the ground wire is reliably connected to the earth and has an appropriate distance from the neutral wire. The input power supply shall be kept away from high-power electrical equipment;
- ③ Check whether the power cable and signal cable of the display are connected as consistent with the system connection diagram;
- ④ When the three-phase five-wire system is used for power supply, the loads of the phases shall be evenly distributed to ensure the three phases are balanced as far as possible;
- ⑤ The input voltage must meet the cabinet voltage requirements.

IV. Software system

(1) LDC960LUXV2 series products only support maxconfig system;

(2) Control software

① PC side (host) software name: MaxConfig

② Mobile side software name: LedConfig, download address: App Store, Google Play

Note: For specific software operation, please refer to the relevant software instruction manual.

(3) Equipment operation and maintenance managementsystem

Based on the IoT platform, the equipment management system supports multi-terminal access, enabling uniform and efficient remote control and monitoring of equipment within enterprises, schools and other organizations.

V. Common troubleshooting

5.1 Common faults of control system

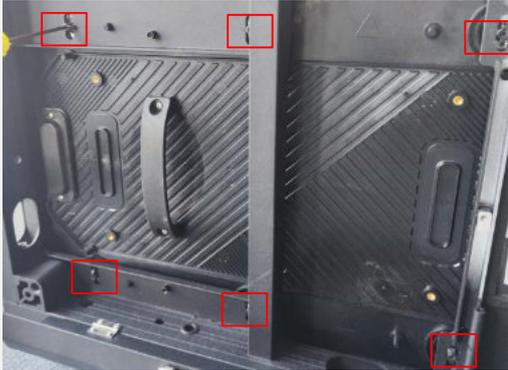
No.	Fault	Solutions
1	Software displays "No Hardware"	Check whether the hardware device is powered on and whether the serial cable is properly connected.
2	Software displays "No panel information"	If the display has been configured with the panel information, try to read it from the hardware on the display connection page. If the display was not configured, configure panel information.
3	Display error	<p>First, check whether the transmitter resolution on the transmitter page is the same as the output resolution. If not, set the resolution to the same.</p> <p>If the resolutions are the same, check whether the parameters in the intelligent setting wizard are correct.</p>

5.2 Common faults of hardware

No.	Fault	Solutions
1	Part of the display is not lit after power on	<ul style="list-style-type: none">① Check whether the network cable in the cabinet is in poor contact.② Check whether the power cable in the cabinet is in poor contact.
2	Screen crash after replacing the module or bridge board	Power off and then restart the display, so that the bridge board reads module data again.
3	White stripes appear in the display area	Relocate the module or bridge board in the fault display area, then power off and restart the display.
4	Whole screen or part of the screen splicing disorder	<ul style="list-style-type: none">① Check the ports connection sequence of the receiver on the display.② Check the connection sequence of signal cables on the display.

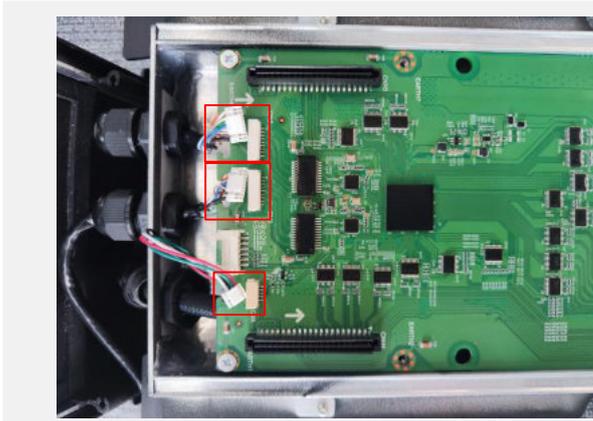
VI. Parts replacement

6.1 LED panel replacement

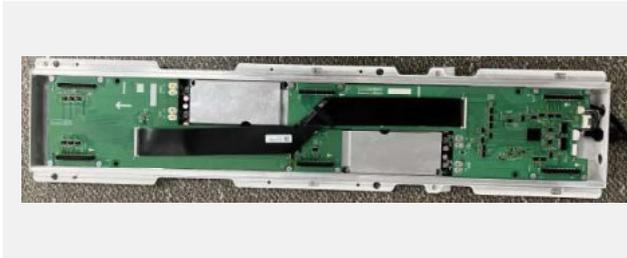
Illustrations	Solutions & steps
 A close-up photograph of the front of a dark grey LED panel. A red screwdriver is positioned at the top left. Six red squares are overlaid on the panel, marking the locations of the side locks: two in the top row and four in the bottom row.	<ol style="list-style-type: none">1. Find the specific location of the faulty panel;
<p data-bbox="443 992 663 1021">Front maintenance</p>  A photograph showing the back of the LED panel. Six red squares are overlaid on the back, marking the locations of the side lock mounting holes: two on the top edge and four on the bottom edge.	<ol style="list-style-type: none">2. The panel can be removed by rotating the 6 side locks clockwise from the back of the cabinet or the 6 side locks counterclockwise from the front of the cabinet;3. Snap the 6 side locks of the new panel into the side lock mounting holes, and rotate the 6 side locks counterclockwise from the back of the cabinet or clockwise from the front to install the panel

6.2 Adapter board and bridge board replacement

Illustrations	Solutions & steps
 <p data-bbox="472 999 683 1025">Back maintenance</p>  <p data-bbox="472 1619 683 1646">Front maintenance</p>	<p data-bbox="922 925 1294 1144">After locating the faulty cabinet, use a Phillips screwdriver to remove the six set screws on the back or front, and take out the power box.</p>



After taking out the power box, remove the three external flexible flat cables and power cables from the fault adapter board/bridge board



Use a Phillips screwdriver to remove the set screws (the set screws are cross-recessed pan head screws M3*6 combined with flat spring washers).

6.3 Power supply replacement

Note: The replacement of power supply must be carried out in the case of power off. Do not operate with live power.

Illustrations	Solutions & steps
	<p>Find out the cabinet corresponding to the faulty power supply, turn the power off, remove the 4 set screws of the protection shell of the power board</p>
	<p>After replacing the power supply, install the setscrews</p>

IV. Special statement

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