

Product User Manual

Product Type: FA27 Series

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Warning

It is a Class A product and operation of this device in a residential environment may cause radio interference.

There is a high possibility that the device will be damaged and cannot be recovered due to ignoring the warning.

- 1) Do not invert or throw the device during handling and storage;
- 2) Do not tilt and collide the device during installation to avoid scratches;
- 3) Do not drench or soak the device;
- 4) Do not close the air outlet of the air conditioner to the display;
- 5) Do not place or use the display in the environment with volatile, corrosive and flammable chemicals;
- 6) Do not use the product at the humidity above 80% or in outdoor rainy environment;
- 7) Do not use water or chemical solvents to clean display device;
- 8) Do not use electrical accessories not certified by the device manufacturer;
- 9) Ensure that the display and auxiliary equipment are correctly and reliably grounded before use;
- 10) In case of abnormalities, such as peculiar smell, smoke, electric leakage and abnormal temperature, please cut off the power supply immediately, and then contact professional;
- 11) This equipment has two input sockets, which must be disconnected at the same time to disconnect the power supply from the equipment;
- 12) Connect it to 100-240V AC power supply;

◆Caution!

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

- 1) Wear anti-static gloves and anti-static wrist strap when installing and repairing the product;
- 2) Good ventilation on the back of the display must be considered when designing the cooling solution;
- 3) The storage environment of the display shall be ventilated and dry, and the humidity shall not exceed 85%RH;
- 4) Under normal circumstances, it must be ensured that the display is powered on at least twice a week, and each light-up time is not less than 2 hours;
- 5) If the display is installed in the seaside, saline areas, the areas with sulfurized gases, near the fume exhaust in kitchen, and the indoor and outdoor sites with large temperature difference, it may cause equipment failure and affect the service life. If it is unavoidable, please consult our professional and technical personnel;
- 6) This product is only suitable for safe use at altitudes below 5000m;
- 7) The operating ambient temperature of the display must not exceed - 10 ~ 40 °C;

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◆ Onsite service requirements for service provider!

- 1) Before going to the site, contact the customer in advance to confirm the on-site installation environment and communicate with the customer about the specific installation time;
- 2) According to the on-site installation situation, it is necessary to carry installation tools for drilling and flaring, and spirit level. In case of special requirements, it may be necessary to additionally carry such equipment as self-tapping screws and cutting machines;
- 3) It is necessary to arrive at the customer's site on time according to the time scheduled. In case of not arriving on time for special reasons, it is needed to communicate with the customer in advance to explain the reasons;
- 4) Before installation, the goods shall be checked according to the packing list attached with the goods. In case of wrong delivery, omission or damage of goods, photos shall be taken in time and communication shall be made with the agent and manufacturer for handling;
- 5) When installing the product, keep hands clean and wear anti-static gloves;
- 6) Installation must be carried out according to the marked cabinet number and the serial number of the LED panel;
- 7) During installation, attention shall be paid to the flatness and gap between the cabinet and the LED panel, and adjust it in time to avoid rework;
- 8) Check the status of the whole screen after the product is lit up to ensure the best display effect;
- 9) Provide unified training guidelines for customers to let them understand product functions and how to use them;
- 10) When the installation for a project is completed, fill in the record form required to be filled in on site, and take photos for record.

◆Precautions for construction!

- 1) Tools such as laser level, tape measure, lifting line for plane measurement, trepanning and punching tools, etc. should be available;
- 2) Upon arrival at the site, confirm that the reserved dimensions—including length, width, thickness, and the quantity and type of wires—meet the specifications;
- 3) The height above the ground and the center location must be confirmed with the user and clearly marked in the absence of a steel back frame;
- 4) Check the steel structure and wall flatness and levelness when installing wall mounting bars;
- 5) Check the flatness of the wall mounting bars and measure the distance between the top and bottom when installing them;
- 6) If it is found that the cabinet shakes up and down severely when installed, it is necessary to insert pads to the back beforehand until it does not shake;
- 7) It is necessary to check whether the gap between the display and the wall is consistent up and down after the cabinet is installed;
- 8) Back connection plates should be fastened at the splicing points when the upper and bottom rows of cabinets need to be joined;
- 9) Check the gaps between two rows of cabinets that were joined, and adjust them in time if they are too large;
- 10) After the screen is installed, it is necessary to check whether the four corners are flush with the decoration.

Remark: This manual system takes FM27 series engineering screen as example, introduces product composition, interface, specification, as well as installation, function use and other operation instructions, aims to let you use product quickly and efficiently;

I. Product Introduction



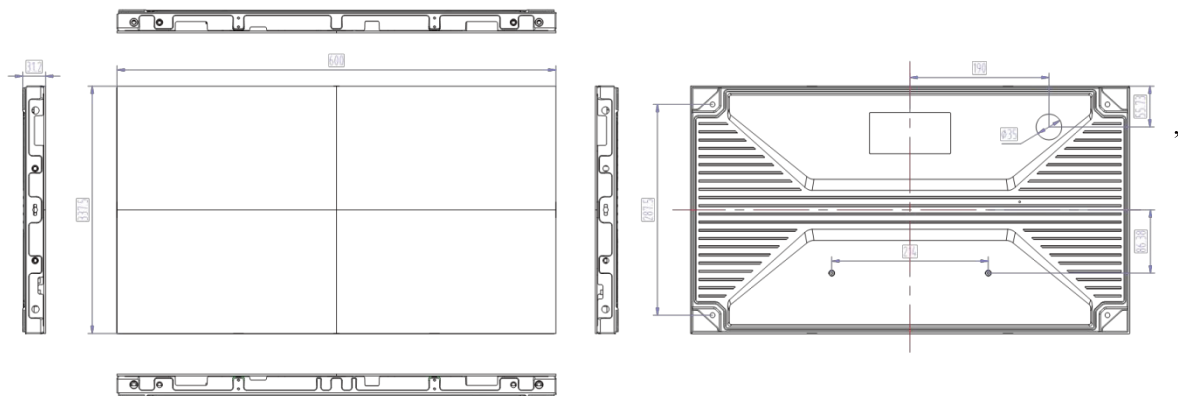
1.1 Product Features

- 1) High-precision CNC-machined die-cast magnesium-aluminum alloy, reducing weight by approximately 15% compared to the previous generation. The slim design combines aesthetics and practicality.
- 2) The body thickness is 31mm, with a 6mm snap-on bezel, achieving an extremely high screen-to-body ratio, which is both aesthetically pleasing and highly protective.
- 3) Full front maintenance design supports hot-swapping, enabling ultra-fast repair and reducing maintenance costs.
- 4) Box body can be optionally equipped with a quick-lock connection design, significantly enhancing the efficiency of the entire machine's installation and deployment.
- 5) Hard connection structure replaces FFC cables, keeping the entire machine's wiring neat and effectively reducing the risk of line faults.
- 6) Integrated three-in-one circuit boards, simplifying wiring and significantly improving the overall machine's operational stability.
- 7) Designed with a standard 16:9 aspect ratio with all resolutions from 2K to 16K, presenting vivid and high-definition images.

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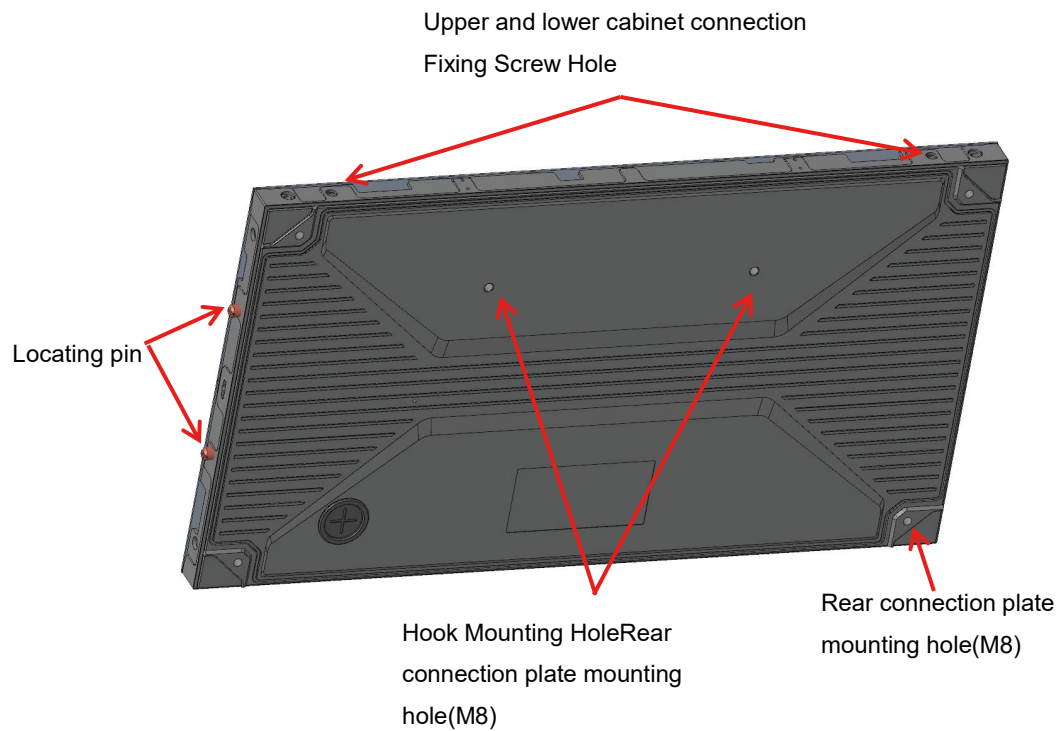
- 8) Box body can be freely spliced in 4K or less, creating an integrated LED display terminal with various forms, flexibly adapting to various scenarios and applications.
- 9) Equipped with PWM driver chips, there is no loss of color or detail in low-brightness and low-gray-scale scenarios, ensuring excellent picture quality.
- 10) Wide viewing angle, high refresh rate, and high contrast ratio, providing clear and transparent display effects in all scenarios.
- 11) Fanless cooling design is energy-efficient;
- 12) Passed CE/CB/ETL/FCC certifications, complies with RoHS environmental standards, meets EMC Class A standards, and has low radiation for greater safety.

1.2 Product Dimensions

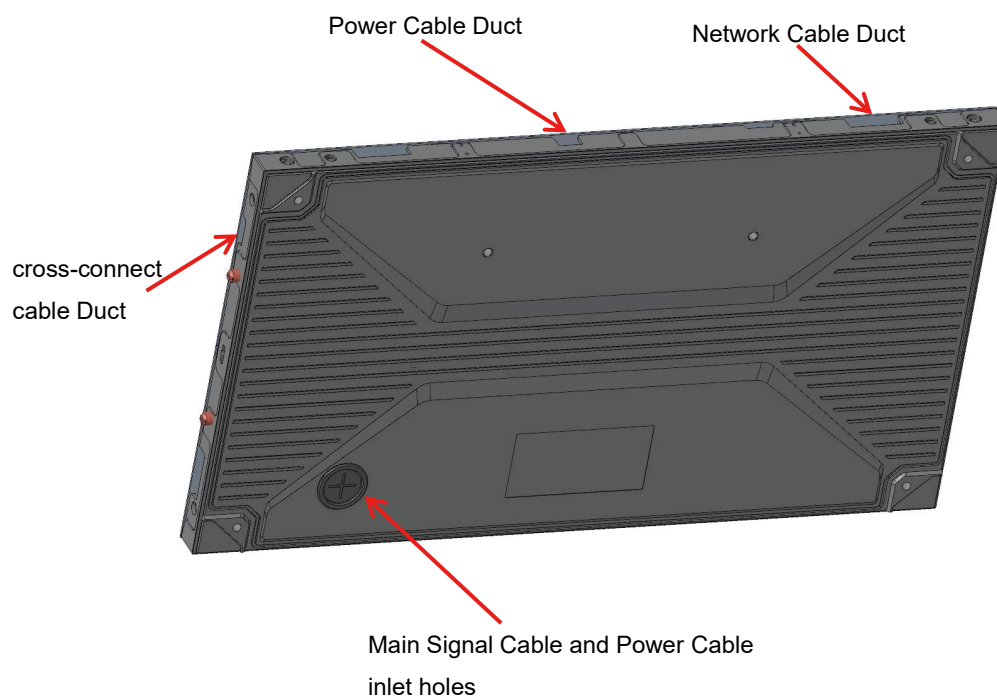


II. Product Components

(1) Cabinet Structure



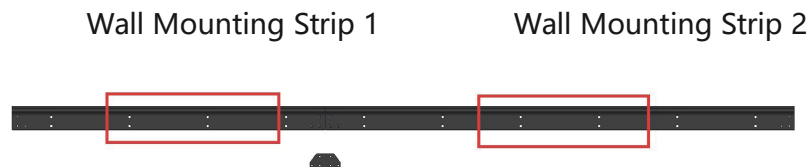
(2) Cable hole position



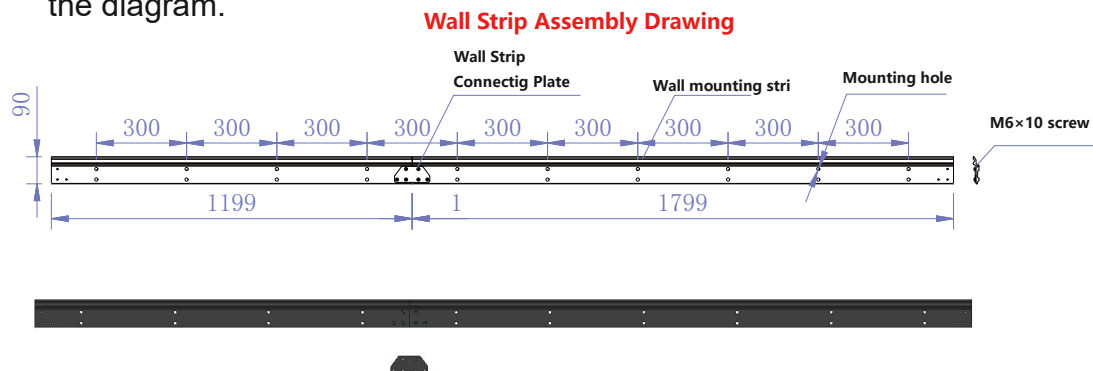
III.Product Installation

3.1 Wall Mounting Rail Installation

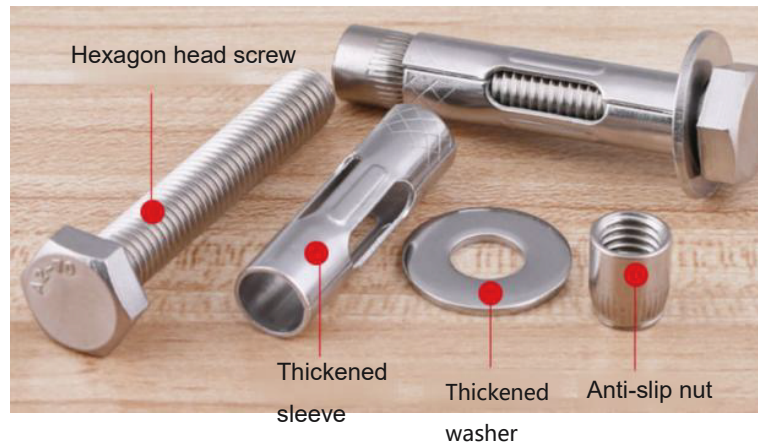
- ① Determine the drilling positions for the upper and lower wall-mounted strips according to the on-site environment and the height of the large screen from the ground. A level must be used to ensure horizontality.
- ② The upper and lower wall-mounted strips consist of Wall-Mounted Strip 1 and Wall-Mounted Strip 2 respectively, which are connected by connecting plates. The connecting plates are fixed with six M6×16 countersunk screws.



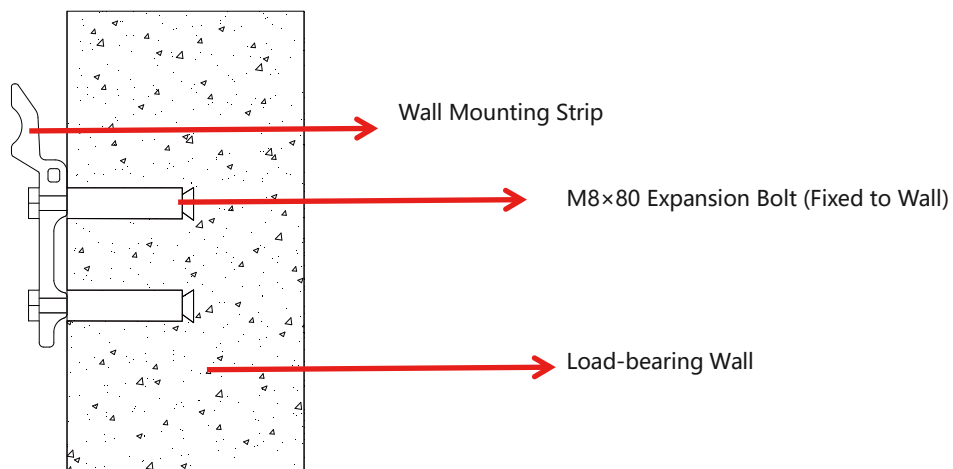
- ③ The drilling positions for installing Wall Strip 1 and Wall Strip 2 are shown in the diagram.



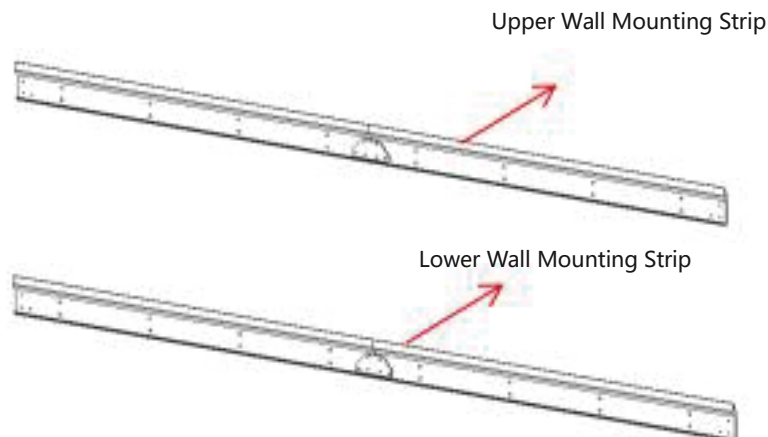
- ④ Mark the positions of the corresponding holes, then use a tool to drill holes at the marked points. Each hole has a diameter of 10 mm.
- ⑤ Install M8×80 expansion bolts at the corresponding hole positions. The expansion bolts are shown in the diagram.



- ⑥ Side sectional view of the installed wall mounting strip.



- ⑦ The front view of the installed wall mounting strip is shown in the figure below.



- ⑧ Verify the installation quality of the wall mounting strips by confirming:

- 1) Levelness:

Use a spirit level to check the wall mounting strip for levelness. If it is not level, loosen the expansion bolts, manually adjust the strip to a horizontal position, and then retighten the bolts.

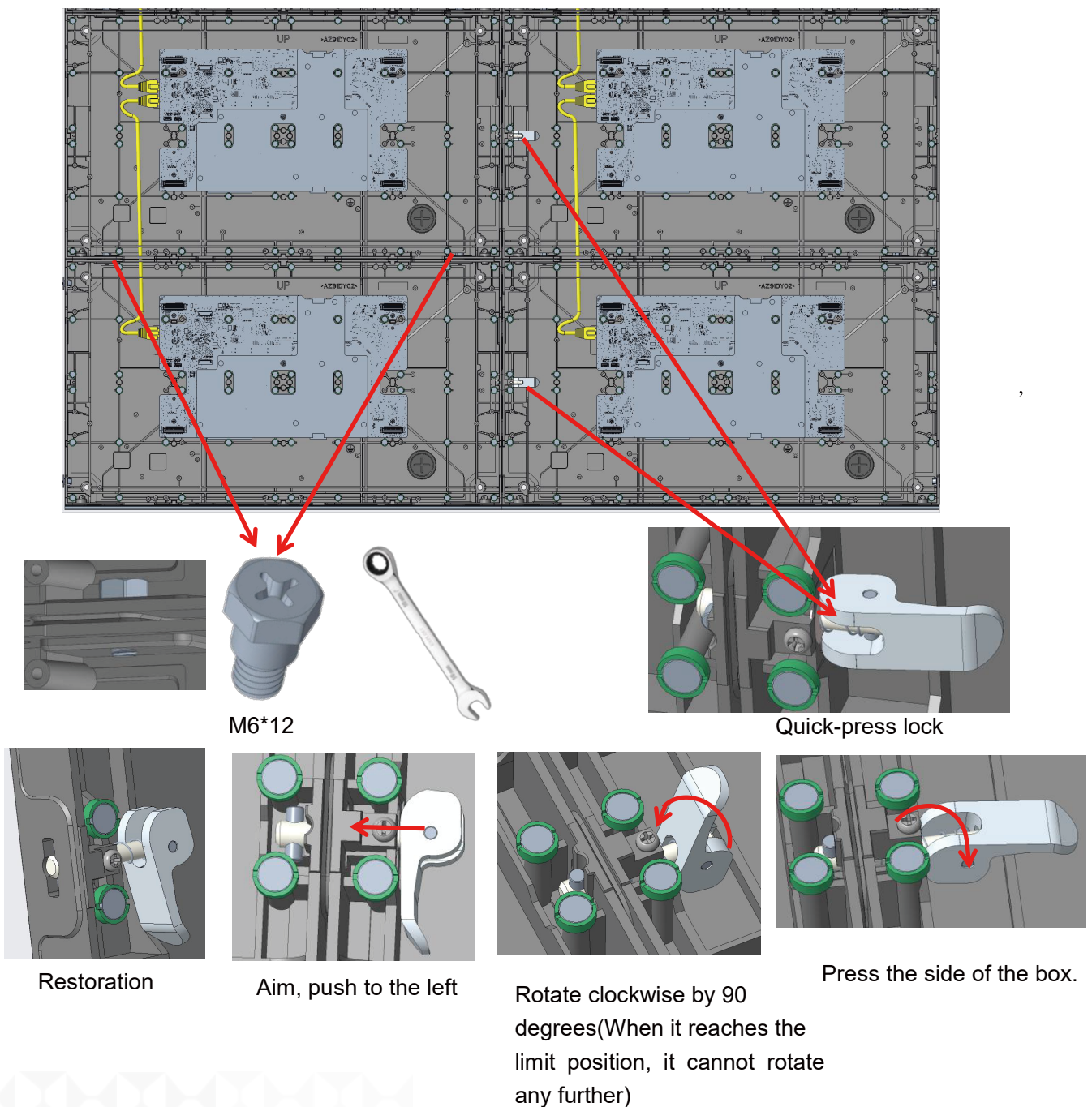
- 2) Correct spacing between upper and lower strips. Inspect and adjust using the following methods:

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Use a tape measure to verify the spacing between the upper and lower wall mounting strips. If the spacing is not within the required range, loosen the expansion bolts, fine-tune the spacing manually, and then retighten the bolts.

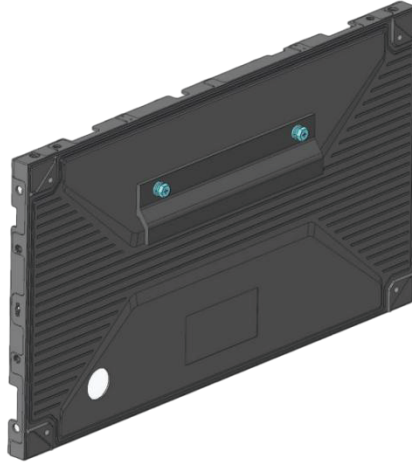
3.2 Cabinet Assembly

- ① Cabinets are assembled into one row by serial number before delivery.
- ② Fasten adjacent cabinets (left/right, top/bottom) using M6×12 cross recessed hexagon combination screws with a No.10 ratchet wrench, as illustrated below:

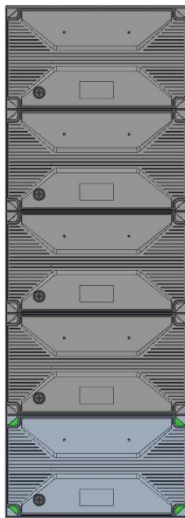


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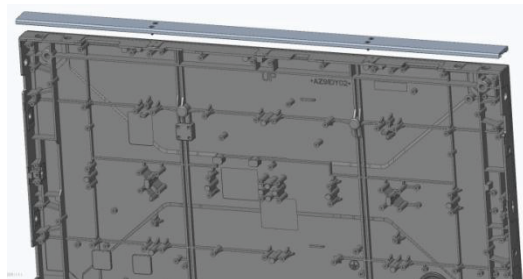
③ Arrange the cabinets into a single row according to their serial numbers. Mount the hooks on the rear side of the cabinets, fasten the hooks using M8×16 screws, then suspend the cabinets onto the wall mounting strips using the hooks.



④ Secure the top trim with M3×8 mm Phillips countersunk screws using a Phillips screwdriver, as shown below (example with 5-cabinet assembly; actual configuration subject to delivery). Install the bottom frame in the same manner. (Top and bottom frames are universal.)



Top and bottom trims



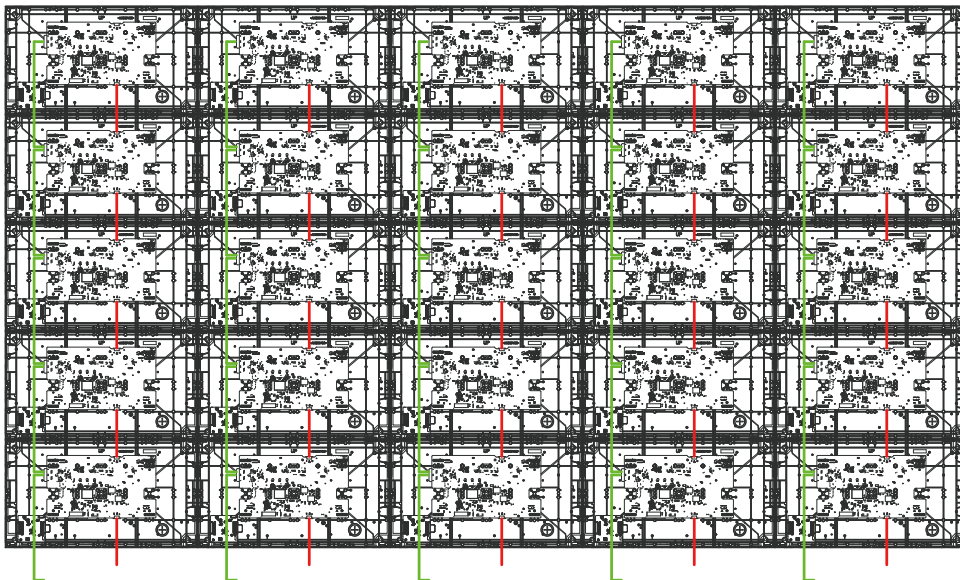
⑤ Position each column of cabinets according to the corresponding number, and secure them horizontally using M8×12 Phillips hexagon combination screws. Manually adjust the flatness of the cabinets during installation, then tighten the screws once leveled.



⑥ Screen Wiring:

1) Single Power & Single Signal Wiring Diagram:

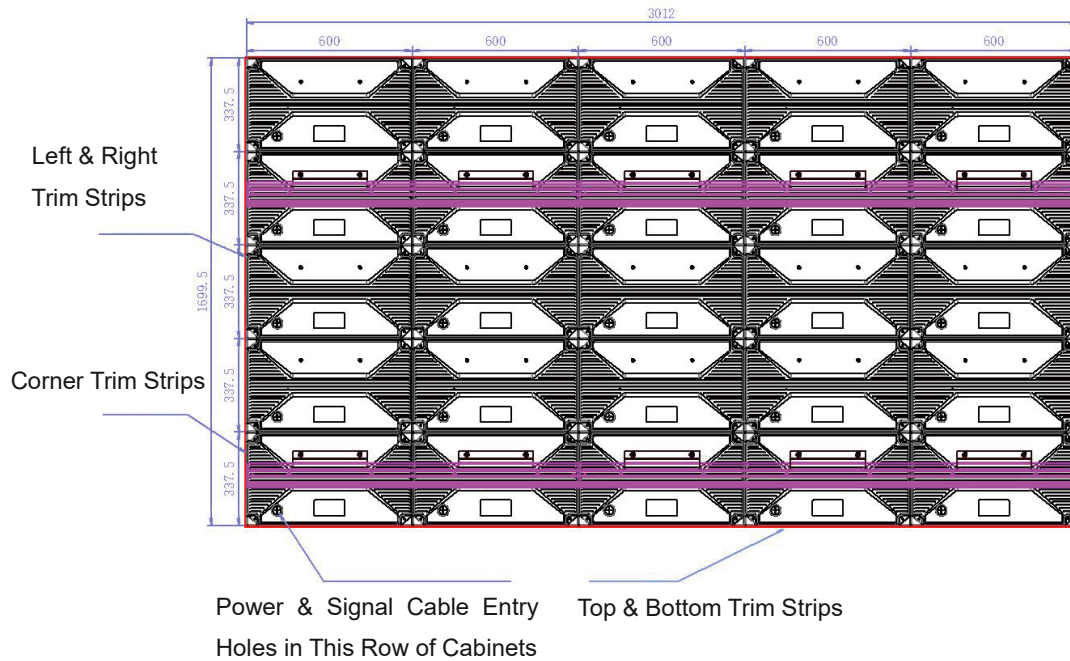
Red lines represent branch power cables, and green lines represent signal cables. Connect the power and signal cables between adjacent cabinets.



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3.3 Install the left, right and top trim.

The left and right side edges are fastened through the snap. The side edge with the sticker "R" is the right side edge, and the one with the sticker "L" is the left side edge ;



3.4 LED Panel Installation

- * Installation can be performed left to right, right to left, bottom to top, or top to bottom, depending on the on-site installation conditions.
- * If poor flatness occurs during assembly, adjust and correct it promptly.



- ① The LED panels are connected by means of rigid connection, positioned via the positioning holes on the cabinet, and connected through connectors on the bridge board and the back of the LED panels. Proper force shall be applied during installation; forced insertion is strictly prohibited. (Anti-static gloves must be worn when installing LED panels.)
- ② Explanation of cabinet and LED panel serial numbers: Each cabinet is marked in the upper-right corner on the inside. This number indicates the corresponding position of the cabinet during factory calibration. Each LED panel is also labeled on the back. For example, in the label 4-3, the number 4 means the panel was calibrated to be installed on Cabinet No. 4, and 3 indicates its position within Cabinet No. 4.

1-1	1-2	6-1	6-2						
1-3	1-4	6-3	6-4						
2-1	2-2	7-1	7-2						
2-3	2-4	7-3	7-4						
3-1	3-2	8-1	8-2	●	●	●	●		
3-3	3-4	8-3	8-4						
4-1	4-2	9-1	9-2						
4-3	4-4	9-3	9-4						
5-1	5-2	10-1	10-2						
5-3	5-4	10-3	10-4						

IV.Control System

4.1 Power Supply Voltage Requirements

The supply voltage must match the voltage marked on the display power supply: 110V/220V $\pm 10\%$, frequency: 50Hz $\sim$ 60Hz.

4.2 Control Software

PC host software name: Subject to factory default configuration.

Note: For detailed software operations, refer to the relevant software user manual

4.3 Notes

① Before powering on the screen, check the connections of cables between cabinets and main power cables. Incorrect connection, reverse polarity, short circuit, open circuit or loose connections are strictly prohibited. Verify with a multimeter or similar tools. Before performing any maintenance on the screen, disconnect all power supplies to ensure personal and equipment safety. Hot-plugging and live operation of all devices and cables are forbidden.

② Do not pull hard when plugging or unplugging power cables, Ethernet cables and other wires. Do not place heavy objects on power cables, signal cables or communication cables. Avoid trampling or squeezing the cables. Do not randomly connect private wires inside the screen assembly.

To prevent fire caused by overloaded power cables, do not operate overloaded. Refer to the maximum power consumption of the product. Avoid turning on all load switches at the same time, as this may cause excessive peak voltage. Prevent fire hazards due to overloaded power cables.

V.Simple Troubleshooting

(1) Partial display screen does not light up after power-on

- ① Check for poor contact of the Ethernet cable inside the cabinet.
- ② Check for poor contact of the power cable inside the cabinet.

(2) Indicator light does not illuminate

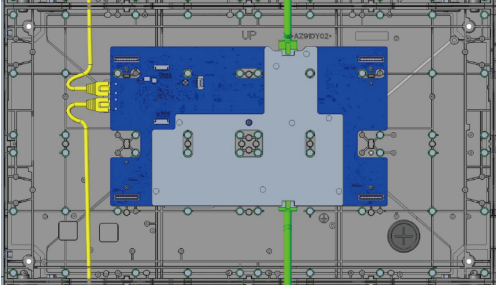
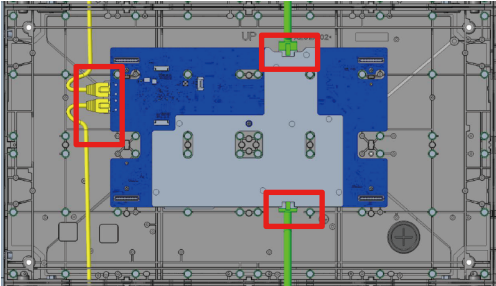
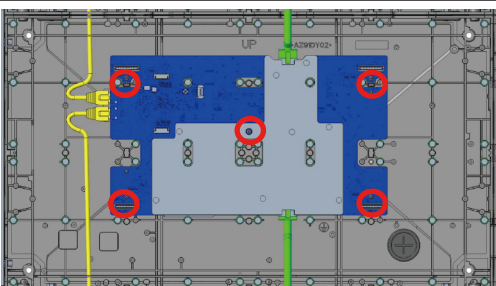
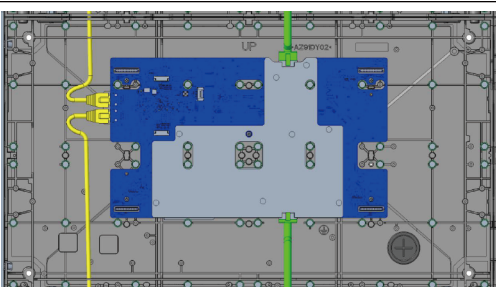
- ① Check whether the power supply is normal.
- ② Check whether the main power switch is turned on.

(3) No image displayed after connecting to a computer via HDMI cable

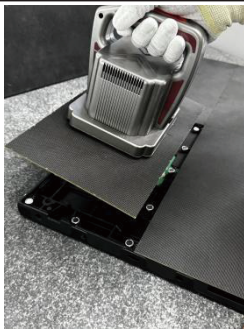
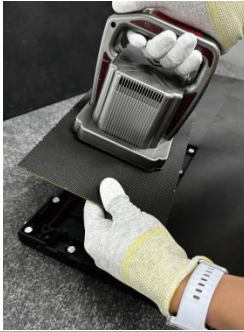
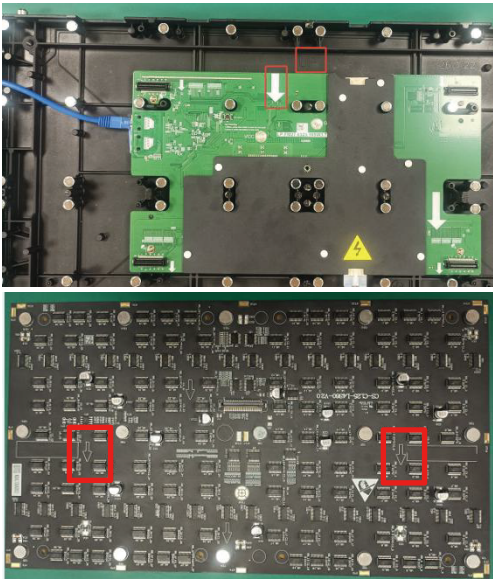
- ① Check if the current input is set to the HDMI channel.
- ② Check if the HDMI cable between the display and the external computer is loose or faulty.

VI.Component Replacement

(1) Replacement of 3-in-1 Board

Step	Illustration	Procedure
1		Locate the faulty cabinet and remove all LED panels.
2		Disconnect the power cable and Ethernet cable.
3		Remove the screws securing the 2-in-1 board.
4		Take out the faulty 2-in-1 board and install the new one.

(2) LED Panel Replacement

Step	Illustration	Procedure
1		Locate the faulty LED panel. Attach the front maintenance tool to the position directly below the panel.
2		After the tool has securely gripped the panel, pull the panel out in a parallel direction.
3		Hold the panel firmly with the whole hand, then rotate the maintenance tool away from the panel surface.
4		When installing the lamp panel, make sure the arrow direction is consistent with the arrow on the hub.

VII.Special Statement

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