Hisense

XIH007-S
XIH009-S
XIH012-S
XIH015-S

USER MANUAL

Read the manual carefully and ensure you have fully understood its contents before operating this device for the first time.

Version：2026.3

Precautions for use

- **During the use of the product, moisture may also cause a short-circuit inside the device.**
- **If the device experiences the following situations during use, please carry out dehumidification treatment:**
  - **— If the usage environment exceeds the requirements for using the device, that is, the indoor temperature goes beyond the range of -10°C - 40°C and the humidity goes beyond the range of 10% - 90%.**
  - **— The screen has not been used for more than 10 days.**
- **If the device is damaged due to the usage environment exceeding the product standards, the warranty service will not be provided.**
- **Even if the usage environment meets the product standards, the rapid inflow of external hot and humid air can still cause condensation on the device surface. In this case, you should wait for the device to dry completely.**
- **Condensation will occur if the surface temperature of the product is lower than the ambient air temperature, or if the product surface is cooled in the presence of hot and humid air.**
- **If condensation occurs on the product, it may lead to product malfunctions. In this case, the warranty service cannot be provided.**
- **Please do not let the air outlet of the air conditioner blow directly on the screen surface.**
  - **— If the air outlet of the air conditioner blows directly on the screen surface, it may cause condensation on the screen surface.**
  - **— If the air outlet of the air conditioner is too close to the screen, you can install a wind deflector as shown in the following figure to prevent the air from the air - conditioner outlet from affecting the screen.**

CONTENT

1. Scope of Application

The XIH-S series features a cabinet with a versatile 16:9 aspect ratio, seamlessly integrating into displays of 2K to 8K and beyond,making it ideal for a variety of applications including broadcasting, security and control rooms, educational settings, and retail and exhibition spaces.

2. Key Features

High refresh rate, high gray scale:
Revel in the exquisite detail and lifelike visuals, stable and even brightness, without the distraction of flickering.

Drive Type:
Constant Current PWM, characterized by low power consumption and blanking function, high refresh rate, improved first-row dimming and low gray-scale color deviation improvement function.

Wide viewing angle, high contrast:
Pixel-level uniformity, good consistency and high contrast.

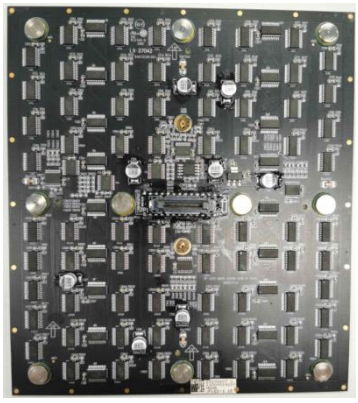
Superior reliability and high protection:
Flip chip COB package, IP65 protection of the luminous surface, high reliability and long lifespan.

Intelligent storage:
The comes with its own built-in memory, supporting read-back and storage of individual LED Module correction parameters.

High compatibility:
Front maintenance, with options for power and signal redundancy.

3. LED Module Images

Front



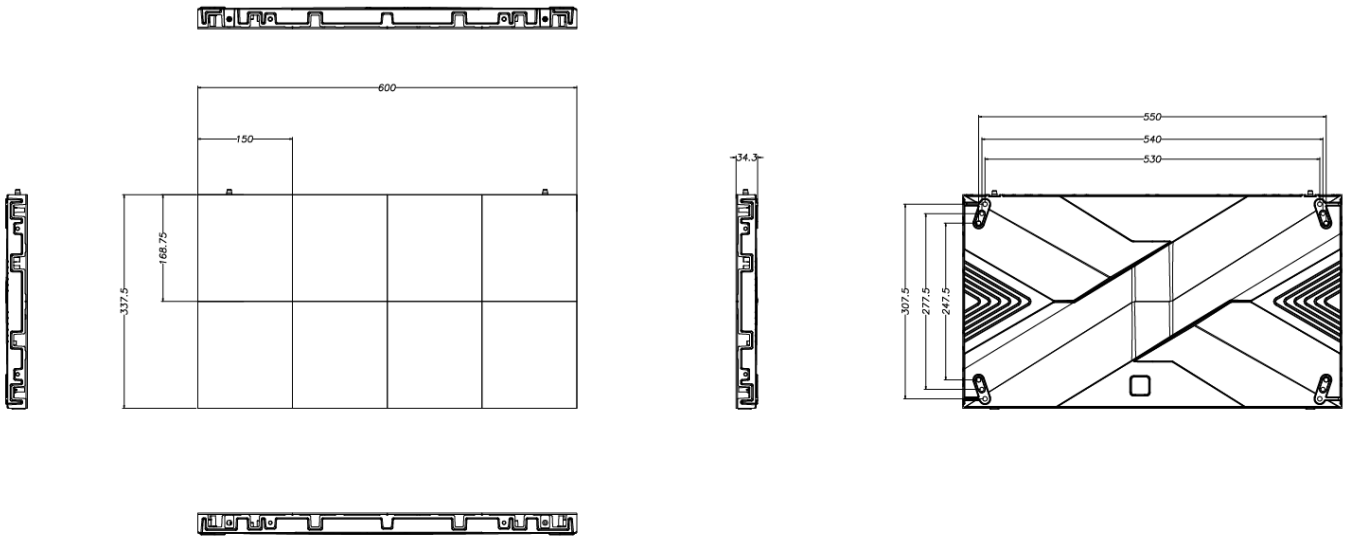
Back

4. Technical Parameters

Spec \ Model		XIH007-S	XIH009-S	XIH012-S	XIH015-S
Physical Parameter	**Pixel Pitch**	0.78 mm	0.9375 mm	1.25 mm	1.56 mm
	Pixel Configuration	Flip-chip COB (1 red,1 green,1 blue)			
	Module Resolution (W x H)	192 x 216	160 x 180	120 x 135	96 x 108
	Module Dimension (W x H)	150 x 168.75 mm 5.91 x 6.64 inch			
	Cabinet Resolution (W x H)	768 x 432	640 x 360	480 x 270	384 x 216
	Cabinet Dimension (W x H x D)	600 x 337.5 x 34.3 mm 23.62 x 13.29 x 1.35 inch			
	No. of Modules per Cabinet (W x H)	4 x 2			
	Cabinet Weight	4.04 kg 8.91 lbs			
	Cabinet Materials	Die-cast aluminum			
Optical Parameter	**Brightness (Typ.)**	600 nits			
	Brightness (Customizable.)	1,000 nits	1,000 nits	1,000 nits	800 nits
	Contrast Ratio	10,000 : 1			
	Visual Viewing Angle (H x V)	155° x 155°			
	Bit Depth	13 bit (13~15 bit Customizable)			
	Color Temperature	8500K ± 500K			
	Color Gamut	＞110% DCI-P3			
	Brightness Uniformity	97%			
	Color Uniformity	± 0.003 Cx,Cy			
Electrical Parameter	**Video Frame Rate**	60 Hz			
	Max Power Consumption	420 (W/㎡)	420 (W/㎡)	350 (W/㎡)	373 (W/㎡)
	Avg Power Consumption	168 (W/㎡)	168 (W/㎡)	140 (W/㎡)	150 (W/㎡)
	Max Heat Generation	1433 (BTU/㎡)	1433 (BTU/㎡)	1194 (BTU/㎡)	1273 (BTU/㎡)
	Avg Heat Generation	573 (BTU/㎡)	573 (BTU/㎡)	478 (BTU/㎡)	512 (BTU/㎡)
	Power Supply	100~240 V AC			
	Refresh Rate	3,840 Hz			
Operational Parameter	**Operating Temp / Humidity**	-10~45°C / 10~90% RH			
	Storage Temp / Humidity	-20~60°C/ 10~90% RH			
	IP Rating	IP20			
	Lifetime	100,000 Hrs			
Service	**Maintenance**	Front 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.

5. Mounting Holes



6. Cabinet Appearance

Back

Front

LED Moduel installation method

The internal components of the display Cabinet are shown in the following figure:

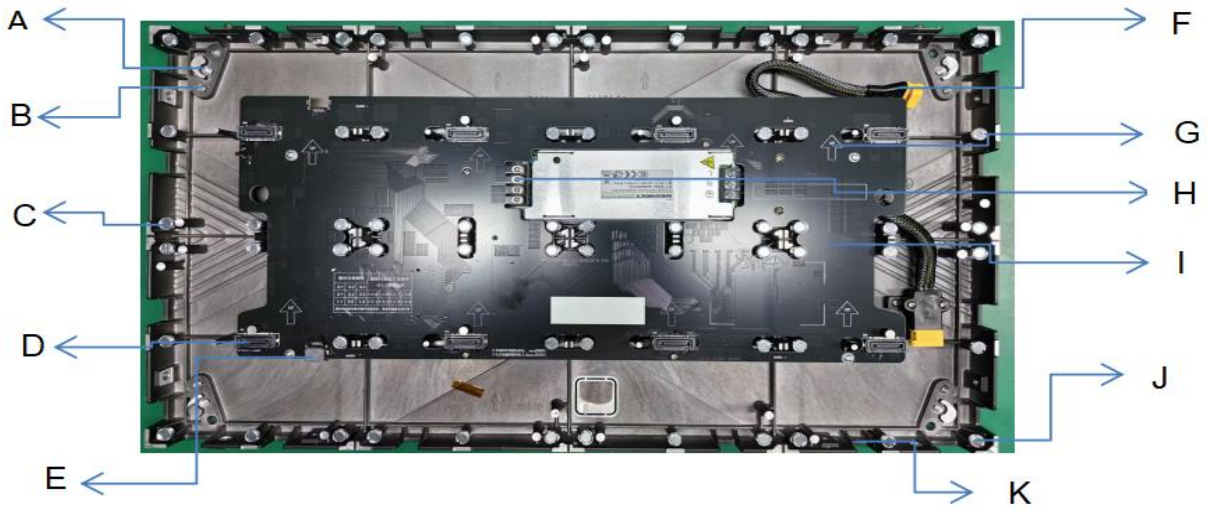
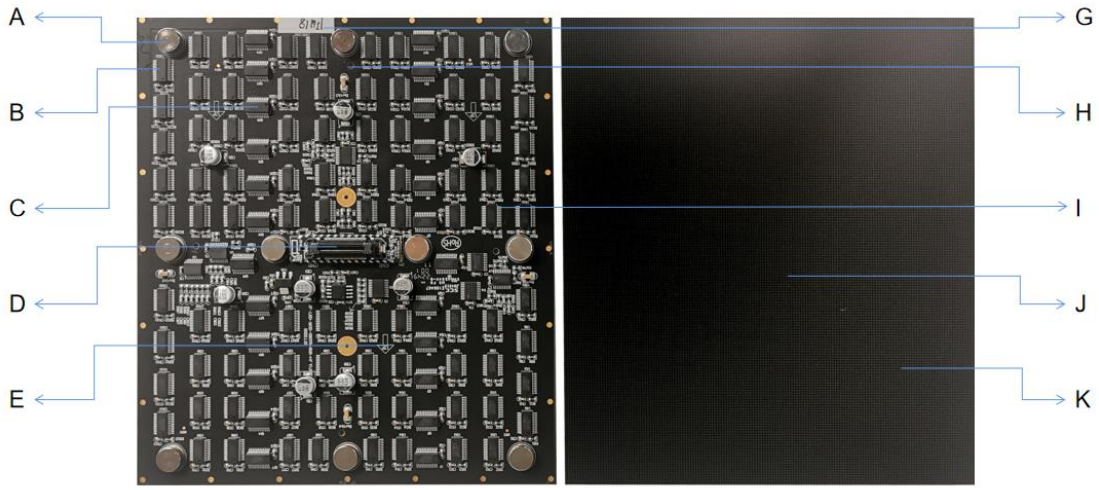


Image of the interior of the LED Cabinet

A	Screw holes for connecting plates	It is used to fix the connecting plate in the Cabinet and to correct the flatness between the Cabinet bodies.
B	Pre-installed screw holes	The screw hole position used for pre-installation;
C	magnet	used for magnetic fixation of LED Modules on PCB;
D	Power Data Interface	It is used to transmit data and provide power supply for the PCB.
E	RJ45 data port	The top symmetric position is the output interface for data transmission between Cabinetes.
F	AC power line	It supplies AC power to the Cabinet.
G	HUB board direction arrow	Used to install the HUB board to confirm the installation direction.
H	power output terminal	The AC is converted to DC and distributed to all parts of the enclosure.
I	HUB board/adapter board	The back of the HUB board houses the AC-DC power supply and the receiving card.
J	Positioning Magnetic Pin	It is used to position the PCB LED Module.
K	up and down wire holes	Used for AC and data lines;

See the figure below for details on LED Module.



Front/Back Image of LED Module

A	plate magnet	The LED Module is fixed to the magnet on the Cabinet.
B	drive IC	PCB key material, driving the light-emitting chip;
C	Driver Control Management Circuit	The driver IC is used to control the driver LED chip.
D	data power interface	Used for data connection transmission and power input;
E	Directional Arrow	Used to mark the installation direction of LED Module.
G	panel address code	The physical address for labeling the LED Module.
H	location hole	The positioning column on the Cabinet body is used to realize the positioning of the LED Module during installation.
I	Receiving card	The LED Module, a PCB-based carrier for ICs, contains control circuits.
J	luminescent chip	The PCB display panel shows the smallest unit.
K	pouring sealant	It is used to protect the light-emitting chip and achieve waterproof and anti-crash functions.

For the first time installation, if the LED Module has been stored for more than 6 months (calculated from the date of manufacture) without installation, or if the vacuum packaging is found to be damaged and leaking air, the LED Module needs to be baked in an oven before installation. Bake COB products at 80°C for 48 hours and GOB products at 60°C for 48 hours. If the equipment is

7. Instructions for Installation

7.1 Schematic diagram of the panel installation structure

Schematic of panel installation structure: (for reference only)

A	aluminium extruded sections	40×40mm aluminum profiles;
B	Code/fixing screw	40×40 angle code assembly, including fixed T-type screws and expansion screws, as specified by installation location.
C	Sheet metal pressing plate	The Cabinet is fixed to the steel structure (120*40*6mm) by screw connection.
D	vertical connecting bolt	For vertical tightening between Cabinetes (M6×20mm);
E	transverse coupling screw	For horizontal tightening between Cabinetes (M6×20mm);
F	stay bolt	Designed to connect the external connector plate, it secures the Cabinet body (M8×70mm) by fastening the

		aluminum profile.
G	Die-cast aluminum connection plate	Used to adjust and correct the flatness between adjacent 4 Cabinetes (80*80*9mm).
H	connecting plate screw	For fixed die-cast aluminum connection plates (M8×16mm);
I	Load-bearing beam (aluminum profile)	Aluminum profiles designed to support the full weight of the screen assembly.
J	LED Cabinet	The cabinet is equipped with an adapter plate, a receiving card and an LED module.

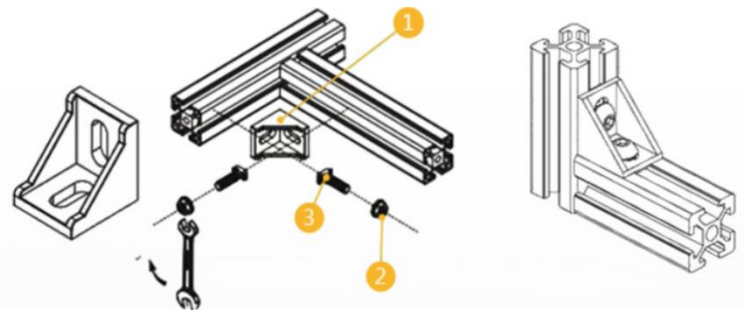
7.2 Installation steps

7.2.1 Construction and installation of structural supports

Prior to the fabrication of the steel structure, the drawings must either be confirmed by our company or provided directly by our company. Please carry out the structural construction in strict accordance with the design drawings issued by our company. Given that fine-pitch LED displays have high precision requirements for the installation structure, the dimensional error of the completed structure must be kept within an acceptable range, and the overall structure must be free from deformation.

Installation Structure Schematic Diagram

(refer to the actual project for detailed drawings)



Aluminum Profile + Angle Bracket Installation Diagram

(On-site construction is required for the installation of the overall structure)

7.2.2 Cabinet installation

Note: This product only supports front installation.

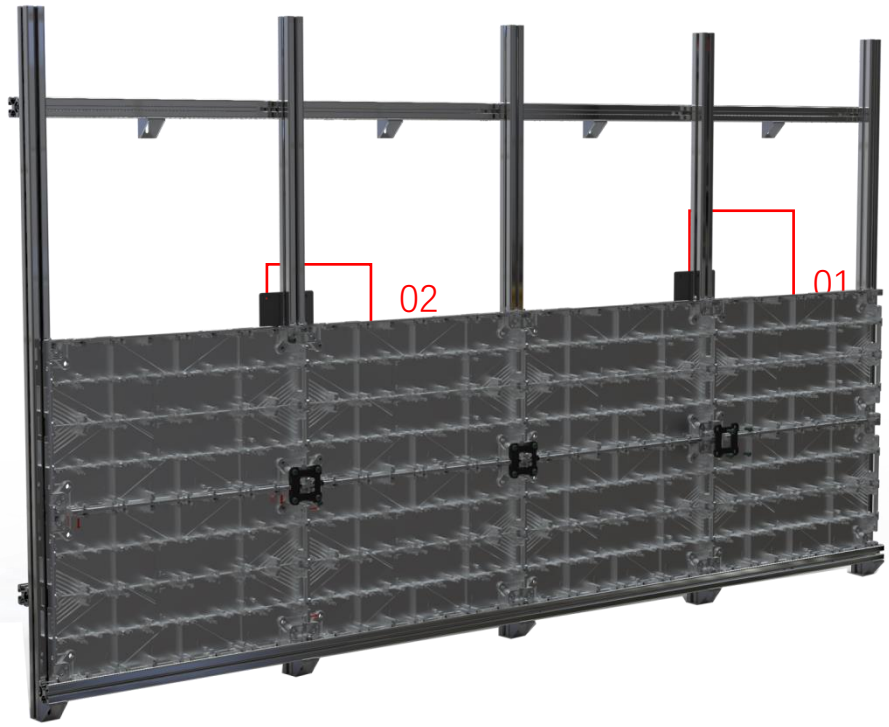
1、The display surface of the Cabinet assembly must be controlled within a tolerance range of ±0.1mm.

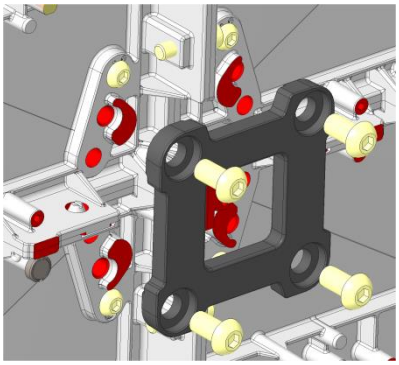
2、For front-mounted units, to ensure proper heat dissipation and ventilation, leave at least 100mm clearance from the walls on all sides of the enclosure.

3、The product can be installed with just a 5mm hex wrench.

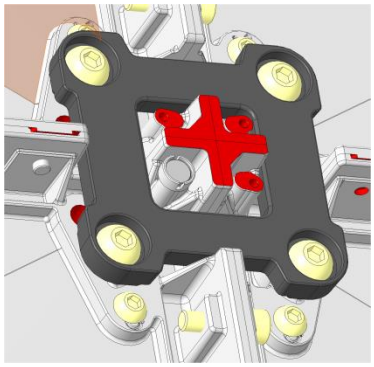
pay attention to ：

To ensure the installation level is flat, start from the bottom center and install sequentially to both sides. After completing the first layer, proceed to install the second layer from the center to both sides, and follow this sequence for other layers. Note that the directional arrows inside the Cabinet all point upward.

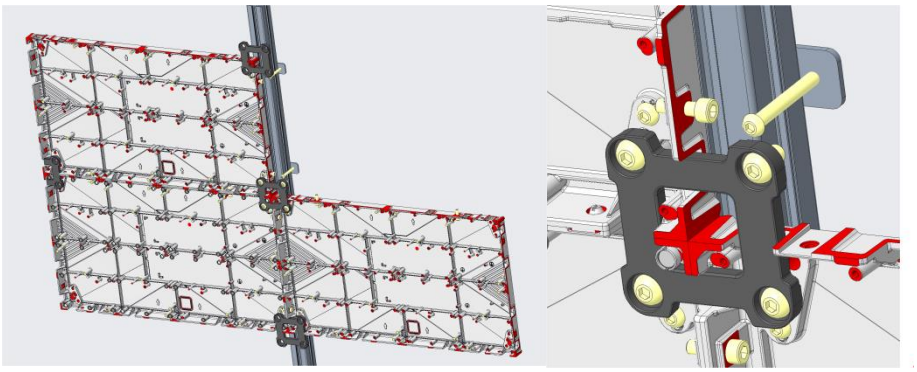




01 Schematic diagram of the installation of the connecting plate inside the Cabinet



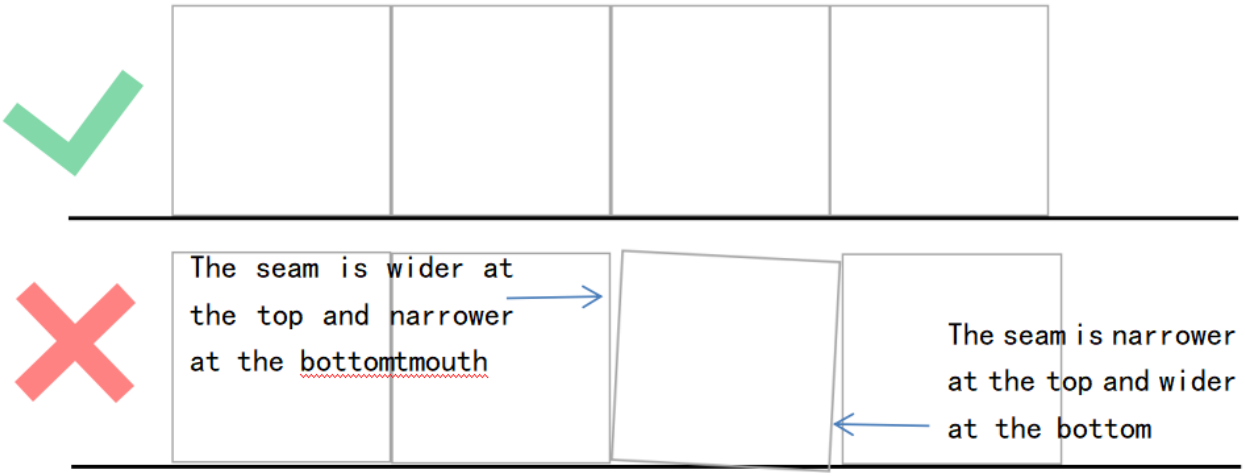
02 Connecting screw inside the Cabinet



Schematic diagram of the rear connection plate fixing the screen body

The installation sequence of the above three operations is as follows: first, tighten the left, right, upper and lower screws of the cabinet; second, fix the connecting pieces inside the installation cabinet; finally, install the back connecting pieces to secure the cabinet to the steel structure.

Note： The flatness error of the bottom cabinet installation on the first layer must be controlled within 0.05 mm; otherwise, a flared opening (either at the top or bottom of the cabinet joint) will occur, leading to the failure of the upper cabinet installation.



If the seam is wider at the top and narrower at the bottom, the overall installation gap will become excessively large when installing the top row of cabinets, resulting in distinctly visible dark lines.

If the seam is narrower at the top and wider at the bottom, the installation space will shrink when mounting the top 2–3 rows of cabinets, leading to issues such as the cabinets failing to fit or the LED Module being unable to be assembled and disassembled.

Note:

- When fabricating the steel structure, ensure the flatness of the bottom supporting beams without fail.
- When installing the cabinets, ensure the installation flatness of the bottom row of cabinets without fail.

7.2.3 Connection of Signal Cables and Power Cables

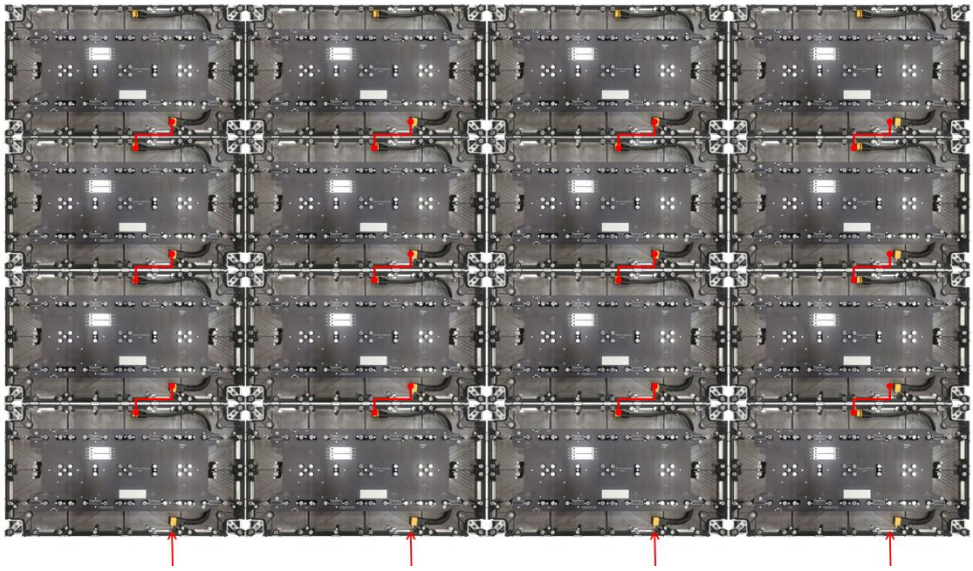
Signal/power cable installation

explain ：

1. The Cabinet has a top-mounted power inlet. Ensure sufficient space is reserved for the cable. The cable specification is 3×1.5 mm², supporting up to 16 units.
2. The Cabinet body interfaces are available in two types: hard connection and soft connection. The manual specifies the hard connection method, with detailed instructions provided below.

3. A single data port contains two types of AC power Cabinet data cables, enabling AC and data connections upon connection.

① **Power supply wiring inside the Cabinet**

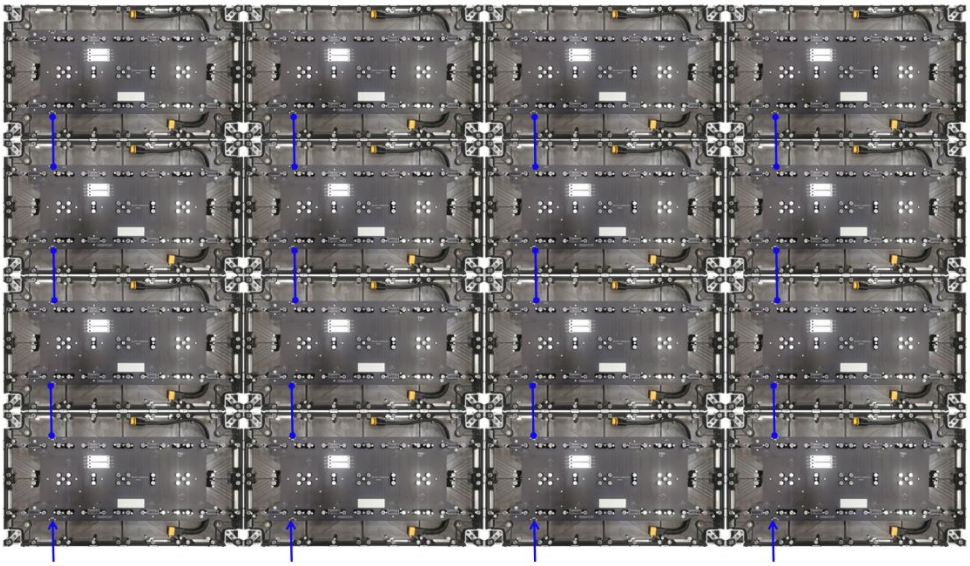


(The image above may differ from the actual product and is for wiring reference only.)

On the right side of the front panel, you'll find black-and-yellow AC connectors for wiring. Simply connect them as shown in the figure below.

Note: Maximum cascading quantity of cabinet power cables: ≤16 units (AC220V)

② **The network cable inside the Cabinet is connected.**



(The image above may differ from the actual product and is for wiring reference only.)

The two network ports on the HUB board are not directional and can be connected either from top to bottom or from bottom to top.

① **Cabinet arrangement order**

4-1	4-2	4-3	4-4
3-1	3-2	3-3	3-4
2-1	2-2	2-3	2-4
1-1	1-2	1-3	1-4

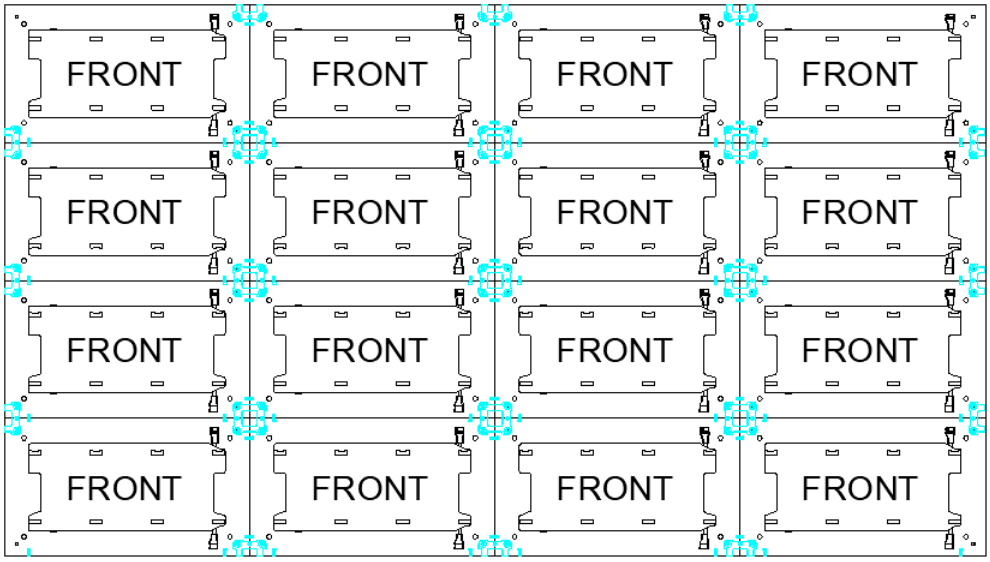
The first Cabinet is in the lower left corner of the screen, and the others are arranged to the right and upward.

② **The sequence of the LED Module**

4-1-5	4-1-6	4-1-7	4-1-8	4-2-5	4-2-6	4-2-7	4-2-8	4-3-5	4-3-6	4-3-7	4-3-8	4-4-5	4-4-6	4-4-7	4-4-8
4-1-1	4-1-2	4-1-3	4-1-4	4-2-1	4-2-2	4-2-3	4-2-4	4-3-1	4-3-2	4-3-3	4-3-4	4-4-1	4-4-2	4-4-3	4-4-4
3-1-5	3-1-6	3-1-7	3-1-8	3-2-5	3-2-6	3-2-7	3-2-8	3-3-5	3-3-6	3-3-7	3-3-8	3-4-5	3-4-6	3-4-7	3-4-8
3-1-1	3-1-2	3-1-3	3-1-4	3-2-1	3-2-2	3-2-3	3-2-4	3-3-1	3-3-2	3-3-3	3-3-4	3-4-1	3-4-2	3-4-3	3-4-4
2-1-5	2-1-6	1-1-7	2-1-8	2-2-5	2-2-6	2-2-7	2-2-8	2-3-5	2-3-6	2-3-7	2-3-8	2-4-5	2-4-6	2-4-7	2-4-8
2-1-1	2-1-2	2-1-3	2-1-4	2-2-1	2-2-2	2-2-3	2-2-4	2-3-1	2-3-2	2-3-3	2-3-4	2-4-1	2-4-2	2-4-3	2-4-4
1-1-5	1-1-6	1-1-7	1-1-8	1-2-5	1-2-6	1-2-7	1-2-8	1-3-5	1-3-6	1-3-7	1-3-8	1-4-5	1-4-6	1-4-7	1-4-8
1-1-1	1-1-2	1-1-3	1-1-4	1-2-1	1-2-2	1-2-3	1-2-4	1-3-1	1-3-2	1-3-3	1-3-4	1-4-1	1-4-2	1-4-3	1-4-4

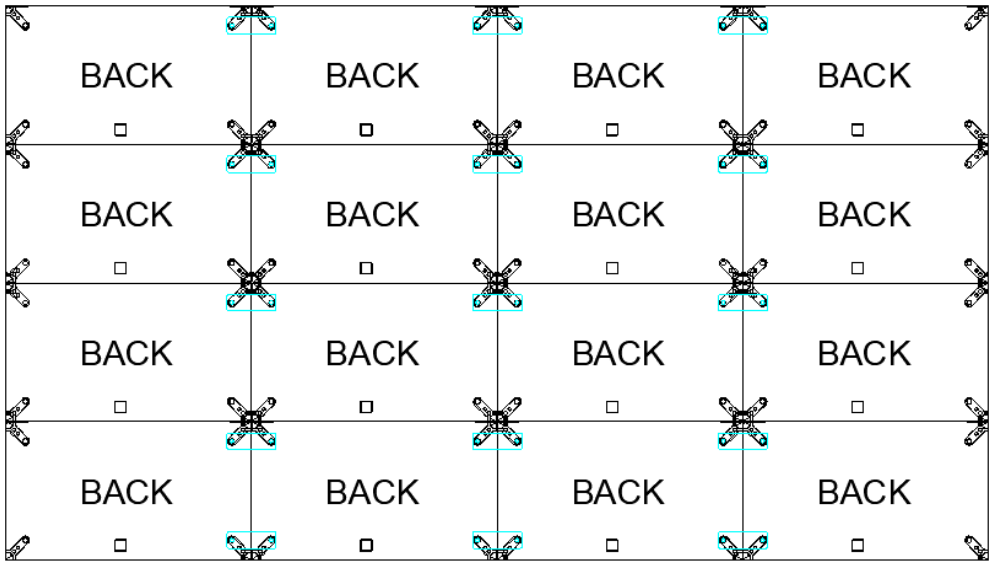
1) The Cabinet size is 600*337.5mm; the LED Module size is 150*168.75mm;
2) One Cabinet contains 8 LED Module arranged in 4 columns and 2 rows.
3) The first LED Module is located at the lower left corner of the unit Cabinet, and the LED Modules are arranged in a right and upward direction.

③ **Layout of internal connectors in the housing**



The panel features a cross-shaped design with a die-cast aluminum connector (reversed) on one side, and half a die-cast aluminum connector installed on the outer edges of all four sides.

④ **Layout of the back pressure plate on the Cabinet**



Install the sheet metal pressure plate between the crossbar and the bracket

7.2.4 panel installation

explain ：

1. The enclosure and LED Module are installed separately, with the LED Module being installed only after the enclosure is installed and the wiring connections are completed.
2. The installation direction of the LED Module must be consistent with the orientation of both the panel's arrow and the housing's arrow.
3. Before installing the LED Module, check the magnet's position for any adhering

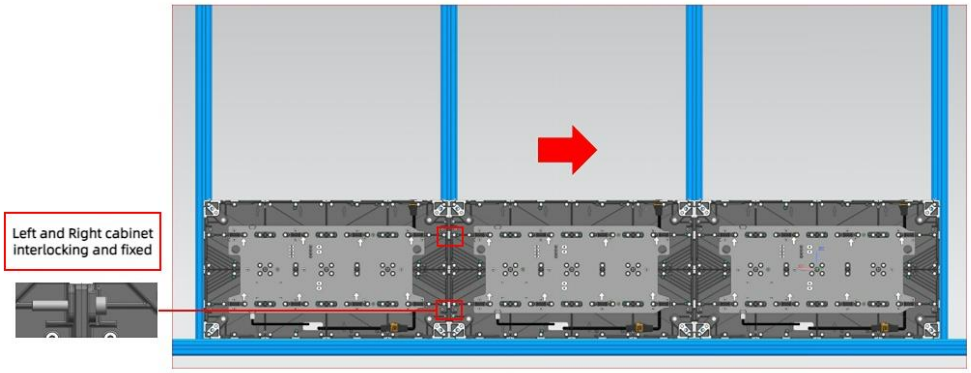
materials to prevent uneven installation.

pay attention to ：

1. If the LED Moduel's surface is uneven during installation, first remove it with the maintenance tool, then level it using the dedicated tool before reattaching to the Cabinet.
2. The maximum height adjustment for the magnet is 0.4mm. Exceeding this limit may cause poor contact between the LED Module connectors.

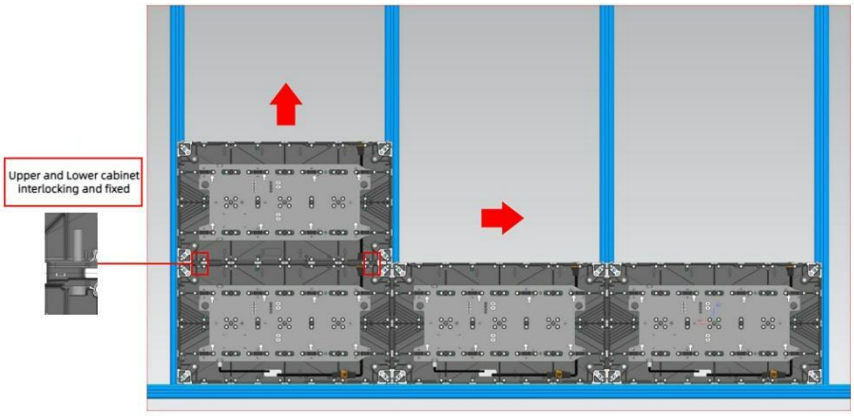
7.3 Base Cabinets Installation

Begin by aligning and securing the cabinets in a left-to-right sequence. After ensuring the cabinets are level with one another, fasten each pair of adjacent cabinets using two M6x20 round head screws;



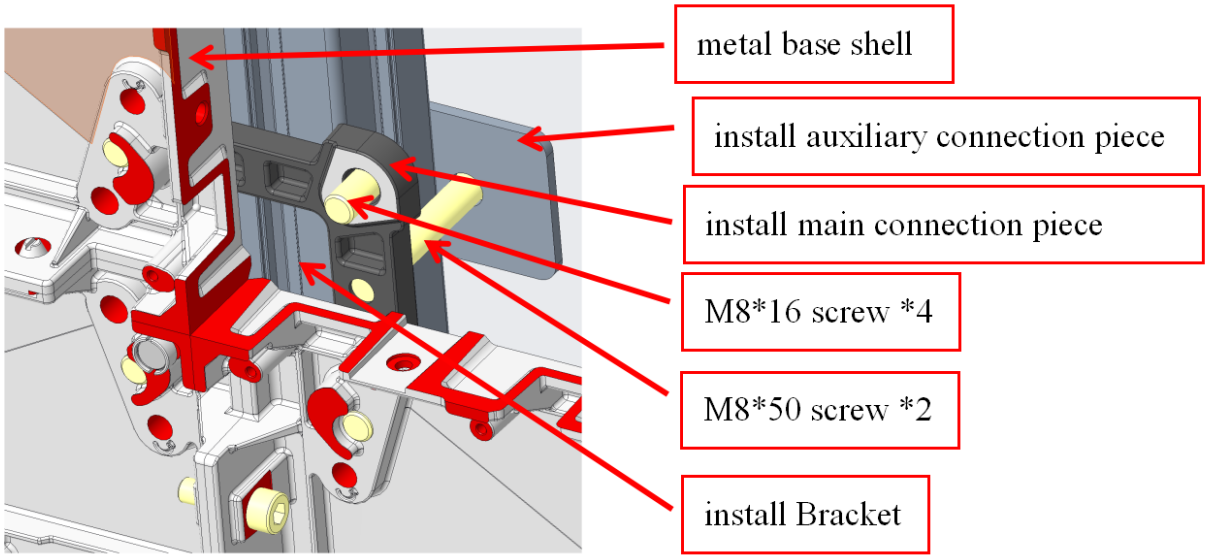
7.4 Upper Cabinet Installation

Install the cabinets sequentially from left to right. Upon achieving a uniform alignment between the cabinets, secure the upper cabinet to the lower one with two M6x20 round head screws. Similarly, for lateral stability, fasten each adjacent cabinet on the same horizontal plane with an additional set of two M6x20 round head screws;

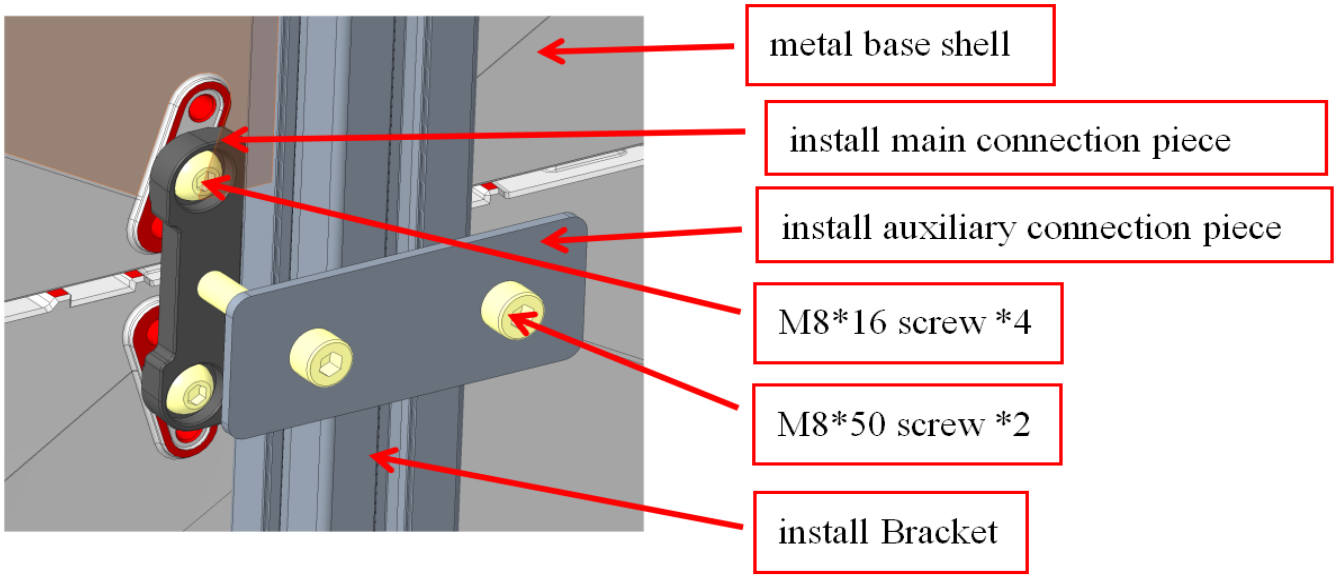


7.5 Rear Connection Piece Installation

Affix the primary connection pieces to the rear of the cabinet with four M8x16 pan head screws. Subsequently, rigidly fasten the primary connection plate to the steel framework by attaching the auxiliary connection plate using two M8x50 pan head screws.



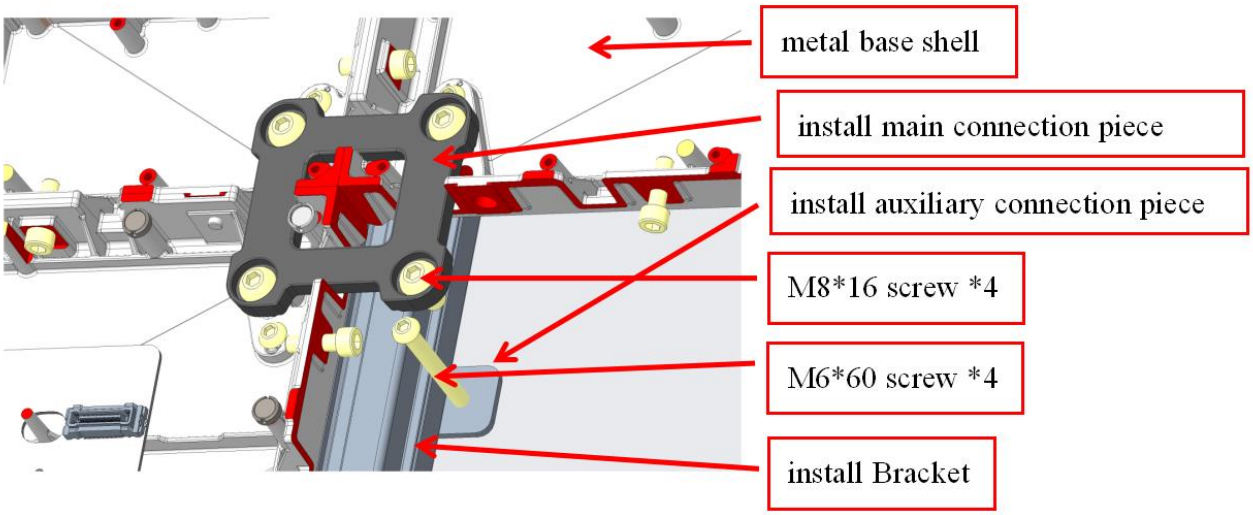
Rear Mounting Detail Schematic Diagram-A



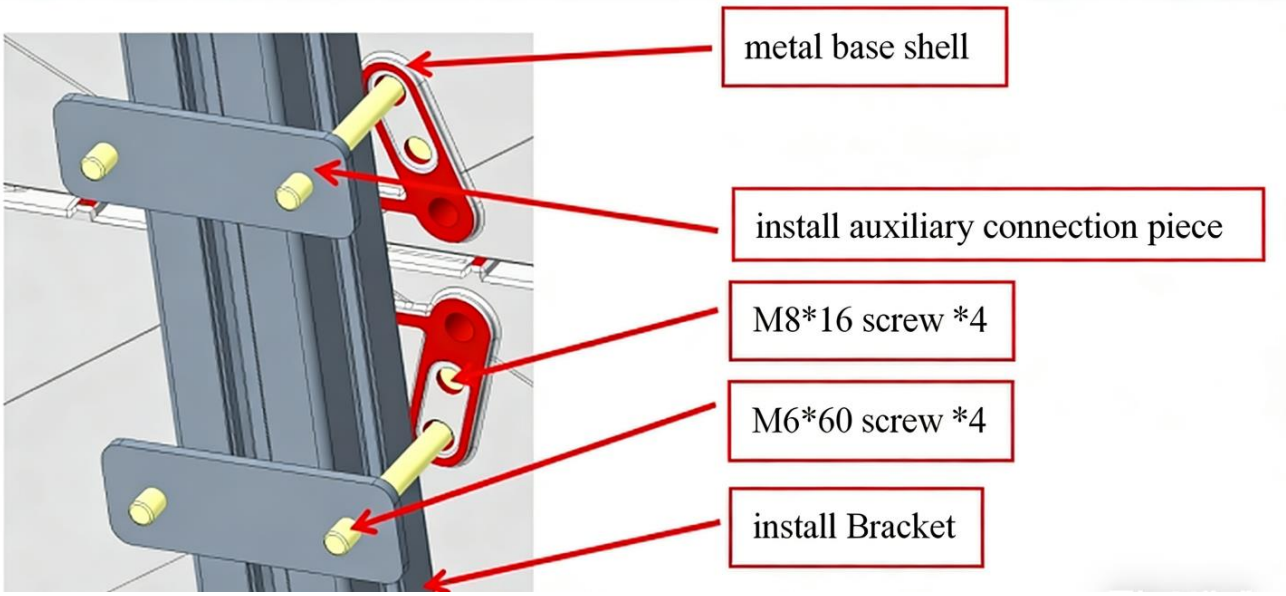
Rear Mounting Detail Schematic Diagram-B

7.6 Front Connection Piece Installation

Affix the primary connection pieces to the interior of the cabinet with four M8x16 pan head screws. Subsequently, rigidly fasten the primary connection plate to the steel framework by attaching the auxiliary connection plate using four M6x60 pan head screws.



Front Mounting Detail Schematic Diagram-A



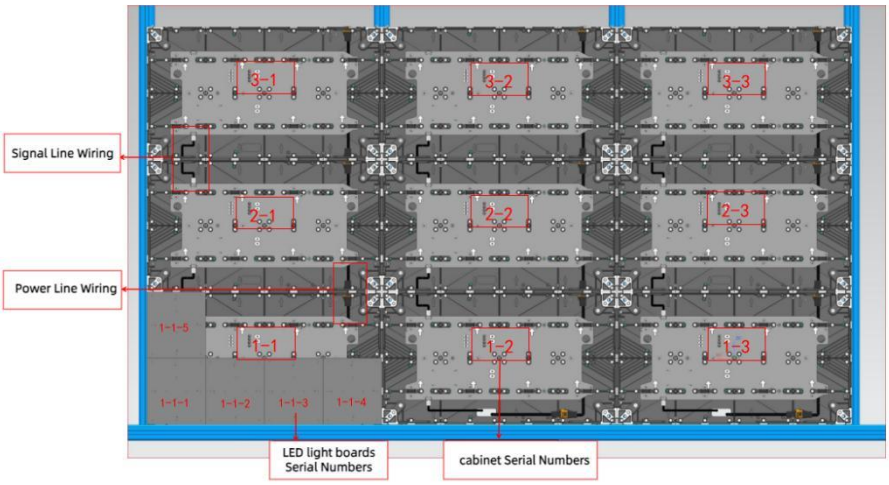
Rear Mounting Detail Schematic Diagram-B

7.7 Screen Cabling and LED Module Installation

All signal and power cables within the screen enclosure must be fed through the designated openings in the base cabinets. Inter-cabinet signal transfer is facilitated by utilizing a 120mm category cable to connect the units vertically.

Power transmission can be achieved by plugging the connectors attached to the internal wiring of the cabinets into each other.

The LED Module shall be installed adhering to a systematic approach, commencing from the leftmost side and advancing towards the right, followed by an ascent from the lowermost to the uppermost position. It is a mandatory requirement that the serial numbers of the LED Modules are strictly aligned with the serial numbers of the respective cabinets to ensure accurate correspondence.



7.8 Installation Tool Kit

Each provided tool kit includes the following items:

No.	Item	Qty.
1	Multi-functional tool kit	1
2	PH2 screwdriver	1
3	Diagonal pliers	1
4	T-handle Hexagon wrench with an 87mm length	1
5	Zip ties	100
6	Anti-static gloves	3

Note：All screw installations across the screen can be efficiently executed utilizing a No. 5 Hexagon wrench.

8. Precautions

Temperature range:

The ambient operating temperature should be kept between -10□~45□;

The storage temperature should be kept between -20□~60□;

Humidity range:

The operating humidity should be kept between10%-90%RH; no condensation.

The storage humidity should be kept between 10%-90%RH; no condensation.

Dust-proof and waterproof:

The LED Module surface is rated IP65. Water infiltration from the sides or back can cause electrical short circuits, resulting in damage to the circuit boards and electronic components.

Electrostatic Discharge (ESD) protection

The power supply, cabinets, and the metal shell of the screen body must be effectively grounded with a grounding resistance of less than 10 Ω to prevent electrostatic discharge that could damage electronic components.

Maintenance instructions：

The interiors of the cabinets pose an electrical hazard and shall not be opened by individuals who are not qualified professionals.

Module Cleaning：

Wipe the surface of the LED module gently with clean soft cloth damped with water.Do not power on the LED Display until the cleaned surface of the LED module gets completely dry.

Cabinet Connections

A maximum of 20 cabinets can be connected with an AC supply of 220V and 10 cabinets with a supply of 110V.

9. Dehumidification

LED displays are products sensitive to temperature and humidity. During use, the temperature and humidity of the environment need to be controlled:

① When the environmental humidity is within the range of 35% - 55%RH, it is recommended to turn on the display screen once a week and use it normally for more than 4 hours each time to remove the moisture from the display screen.

② When the environmental humidity is above 55%RH, dehumidification treatment of the environment is re- quired. It is recommended to use the display screen normally for more than 8 hours per week to prevent the display screen from being affected by moisture, which may cause malfunctions.

③ When the display screen has not been used for a long time, pre-heating and dehumidifying the display screen are necessary before use to avoid moisture-induced malfunctions of the LED lamp beads. The specific method is as follows: light up the screen at 0% brightness for 2 hours, then at 10% brightness for 2 hours, 20% brightness for 2 hours, 40% brightness for 2 hours, 60% brightness for 2 hours, and gradually increase the brightness for aging. This product can perform the automatic dehumidification function to assist in achieving dehumidification.

9.1 Screen cleaning

Cleaning tools

Tools	Recommended choices	No use
Wiping cloth	Lint-free and soft microfiber cloths (such as lint-free cleaning cloths and eyeglass cleaning cloths); they must be brand - new or thoroughly cleaned to avoid adhering hard particles.	Rough towels, paper tissues, chemi- cal fiber fabrics.
Cleaning fluid	Special screen cleaner or distilled water (tap water should not be used as water scale will remain).	Solutions containing alcohol, ammo- nia, strong acids or strong alkalis.
Auxiliary tools	Soft brush, compressed air canister (cold air)	Hard brush, heat gun, blade, high-pressure water gun, etc.

Necessary preparations before cleaning

Power off and cool down: Turn off the power, unplug the plug, and wait for the screen to cool down completely (at least 30 minutes). This helps avoid the risks of static electricity or short-circuits and prevents the cleaning agent from evaporating and leaving marks.

Environment selection

Operate in a dust-free and low-humidity environment to avoid secondary pollution during the cleaning process.

Screen cleaning

1. Cleaning of surface dust

   Use a soft brush or a compressed air canister (keep a distance of ≥ 20 cm from the screen) to gently remove

   the dust in the gaps and on the surface. Direct wiping is prohibited! Dust particles may scratch the screen.

2. Wet wiping for stain removal

   Step 1: Fold a slightly damp cleaning cloth and gently wipe the screen in one direction (e.g., horizontally). Step 2: For stubborn stains, dip the cloth in a small amount of cleaning agent and soften the dirt by making small circles. Then wipe it clean in one direction.

   Step 3: Immediately dry the water marks with a dry microfiber cloth to avoid leaving stains after drying.

   Notes:

- The cleaning agent or distilled water must be sprayed on the microfiber cloth (never spray directly on the

  screen).
- Gently wipe in one direction (e.g., horizontally), avoiding circular motions or pressing hard.
- For stubborn stains, you can increase the amount of cleaning agent, but make sure the cloth is slightly damp rather than dripping wet.

3. Drying and inspection

   Let it air - dry naturally for 5 minutes, or pat dry the remaining water marks with another dry microfiber cloth.

   Check for water stains or scratches under strong light

10. User Instructions

Electrostatic Discharge (ESD) protection:

The installation personnel must wear anti-static wriststrap and gloves, and all tools must be strictly grounded during the assembly process.

Operation method:

It is strictly forbidden to assemble modules, cabinets, or the entire screen while electricity is on.

Operations must be performed with the power completely turned off to ensure personal safety.

Disassembly and Transportation:

Do not drop,push,crush or compress the package to,so as to prevent the LED module from

falling and bumping and avoid such problems as kit breaking,LED LED Moduledamage,scratching and breakage,or component fall-off.

Environmental Safety Check:
A thermometer and hygrometer must be installed at the display screen site to monitor the surrounding environment of the screen body, in order to promptly detect any dampness, moisture, and other related issues.

Use of the Display Screen：

A. The ambient humidity should be strictly controlled to fall within the range of 35% Relative Humidity (RH) to 55% RH. It is advisable to activate the display screen a minimum of once per week, with each operational session extending beyond four hours to facilitate the removal of residual moisture from the display.

B. When the environmental humidity exceeds 55% RH but does not surpass 90% RH, it becomes necessary to implement dehumidification measures. To mitigate the risk of dampness affecting the screen and precipitating operational issues, it is recommended that the screen be utilized for a minimum of eight hours per week under normal conditions.

C. Should the display screen remain dormant for an extended period, it is essential to undertake a process of preheating and dehumidifying the screen prior to reactivation to preempt any lamp-related moisture issues. The recommended procedure is as follows: Initially, set the screen at a 0% brightness level for a duration of two hours, followed by increments to 10%, 20%, 40%, and 60% brightness levels at respective two-hour intervals, thereby progressively enhancing the brightness throughout the aging process. Adherence to this protocol is crucial to ensure the display screen's optimal performance and to maintain the integrity of the warranty.

D. Condensation problem

In the event of the presence of condensation on the LED display, it is imperative that the LED display not be Power ON. Prior to any operational initiation, the area must be subjected to dehumidification utilizing an air conditioning system. The display screen may only be safely energized once all internal condensation has been thoroughly evaporated. Neglecting to adhere to this procedure may result in irreversible damage to the LED display screen, thereby potentially voiding any warranty coverage and incurring liability for associated repair or replacement.