

MINI FLIP-COB SERIES DISPLAY INSTALLATION MANUAL

ONLY LED

SMARTER-BRIGHTER-GREENER

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Product introduction

Dear Customer,

Thank you for using the miniCOB high-definition small-pitch LED electronic display from Shenzhen Only Optoelectronic Technology Co., Ltd. Small-pitch indoor LED displays are highly sought after for their characteristics of high refresh rate, high grayscale, high brightness utilization rate, no image retention, low power consumption, low EMI, reflection-free indoor application, light weight, ultra-thinness, high precision, minimal transportation and usage space, silent operation, and efficient heat dissipation. Small-pitch LED displays are widely used in scenarios such as indoor and outdoor intelligent advertising machines, stage performances, conference rooms, exhibitions, sports events, hotel lobbies, etc. Among them, models representing small-pitch displays such as P0.93, P1.25, P1.56, and P1.87 have become popular products.

LED electronic displays are large-scale display systems integrating microelectronics technology, computer technology, and information processing. With advantages such as vibrant colors, wide dynamic range, high brightness, long lifespan, stable and reliable operation, they have become leaders among display media, widely used in commercial advertising, sports venues, information dissemination, news releases, securities trading, etc. They are currently one of the most advanced display media internationally.

Through continuous technological improvements and updates by our professional R&D team, our company adopts internationally advanced LED display–specific chip systems and leading full–color control systems for LED displays, achieving advanced functions such as constant current noise reduction, common cathode technology for energy consumption reduction, high grayscale, high brightness, full digitalization to ensure true color reproduction of displayed images, automatic brightness adjustment, and network cloud cluster control.

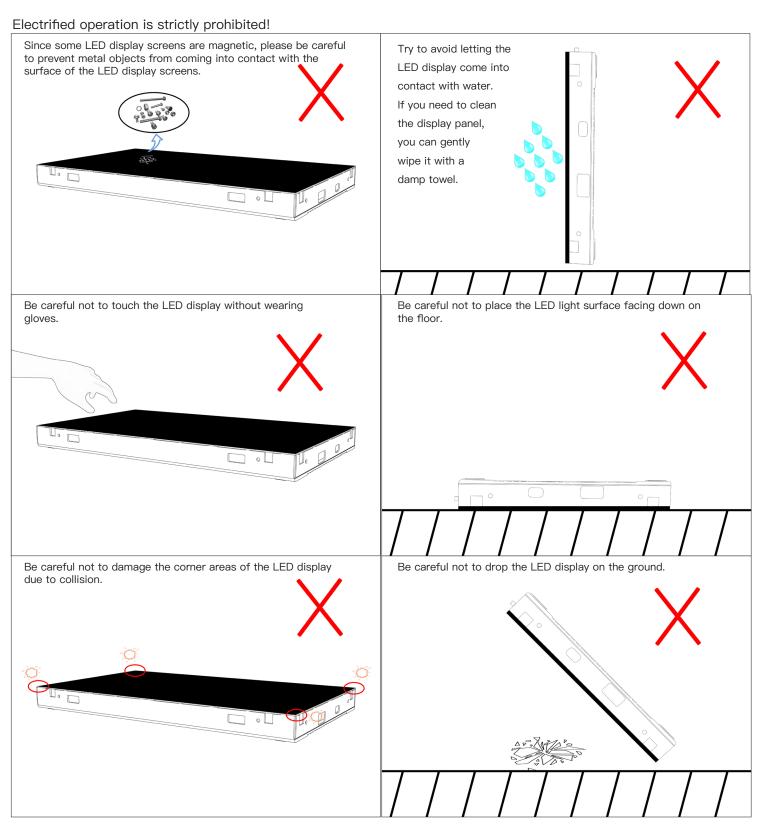


Key Attention

COB high-definition small-pitch LED display screens feature high consistency. During installation, no paint, dust, welding slag, or other contaminants should adhere to the module light surface or the display screen surface, as this may affect the display effect. It is recommended to wear clean anti-static gloves during installation to prevent fingerprints from forming on the surface of the light board.

This product is not suitable for installation near the sea or water sources, as high salt fog, high temperature, and high humidity can easily cause the display components to become damp, oxidized, and corroded. If installation in such environments is indeed necessary, prior communication with our company is mandatory. Our company will provide targeted treatment based on the special requirements of the on–site environment before the product can be used in special environments.

Note: This product is a high-precision electronic product. Please handle it with care during installation and disassembly, and avoid collisions that may cause damage.



Parts and functions

1.LED display body



Cabinet

The bottom shell for installing the module.



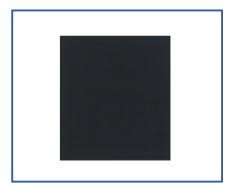
Internal connection piece B

The connection and fixation between cabinets.



Connecting screw B

Used for fixing the connection piece B.



Module

The main display unit of the display screen.



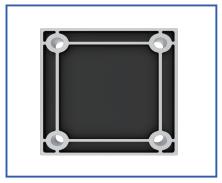
Edge lock screw

Used for connection between cabinets.



Signal inlet

Connect the control box to the display screen and provide signals to the display



Structural connection piece A

The connection and fixation between the cabinet and the main steel frame structure.



Connecting screw A

Used for fixing the connection piece A.



Network cable for connection between cabinets

Signal connection between cabinets.



Suction cup

Special tool for disassembling the module.



Power inlet

Power the display screen.



Control box

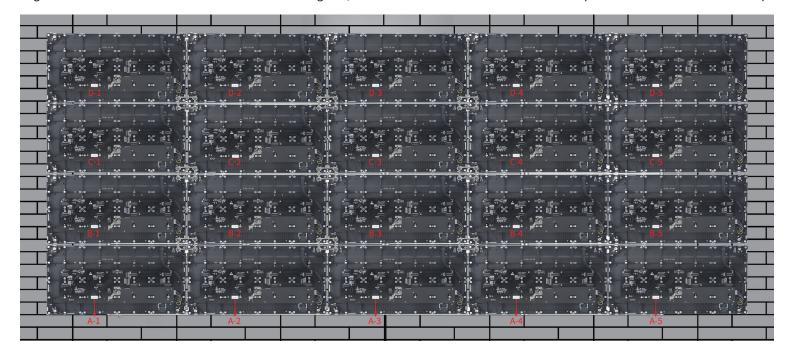
Provide signals to the display screen.



Wall-mounted bracket

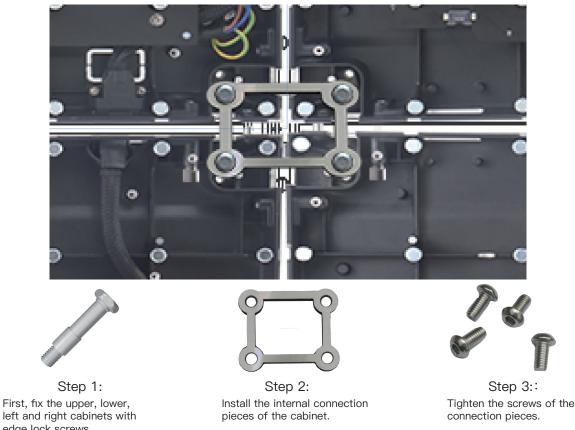
Used for hanging the screen body on the wall.

- 1. Cabinet assembly (It is necessary to strictly follow the numbering sequence in the cabinet assembly schematic diagram for assembly.)
- 1.1. On a flat and level tabletop, carry out the splicing of cabinets. According to the cabinet numbering in the assembly schematic diagram, start from the bottom row and use edge lock screws to splice the cabinets one by one from left to right. Note that the cabinets shall not be misaligned, and the cabinet numbers must strictly follow the cabinet assembly



1.2. After completing the first row, assemble the second row and use edge lock screws to splice the cabinets vertically and horizontally.

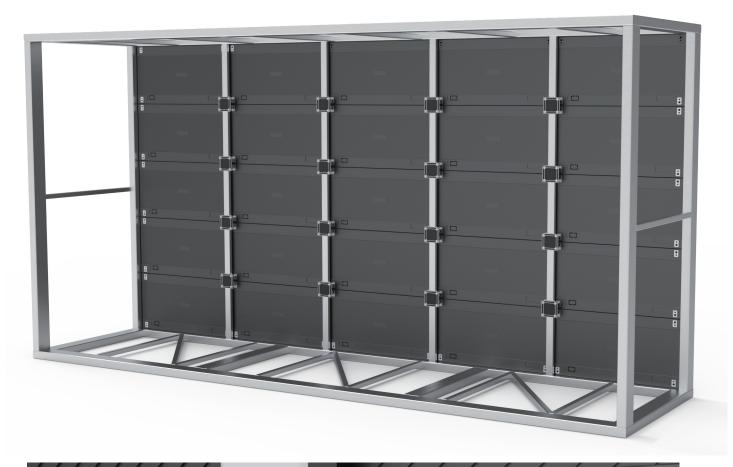
After assembling the second row, install the internal connection pieces between the first and second rows while ensuring no misalignment of the cabinets.

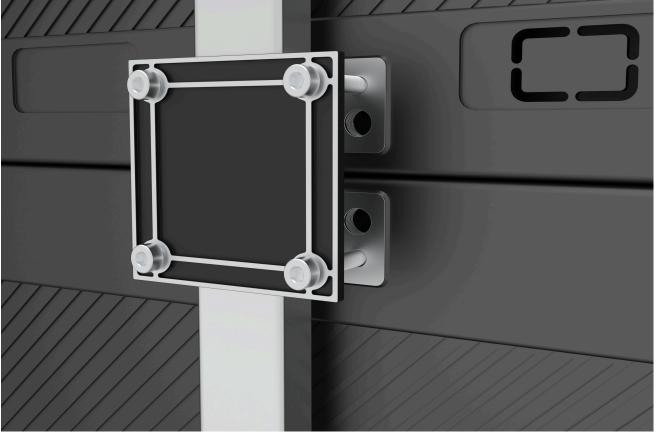


left and right cabinets with edge lock screws.

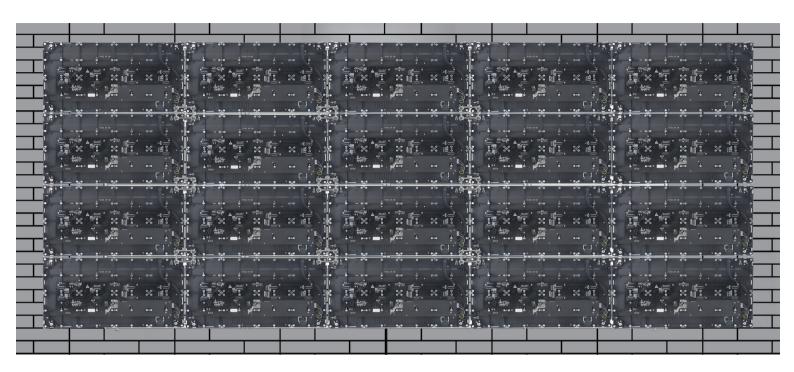
1.3. Follow the above method to complete the assembly in sequence.

- 2. Install the structure.
- 2.1. Steel structure installation: Fix the assembled cabinet on the prepared steel structure with structural connection piece A. During installation, pay attention to ensuring the screen body is horizontal.



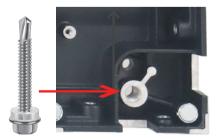


2.2 Wall-mounted Installation A: Determine the installation position of the display screen on the wall and ensure the horizontal level of the bottom of the display screen (it is recommended to use an infrared level).



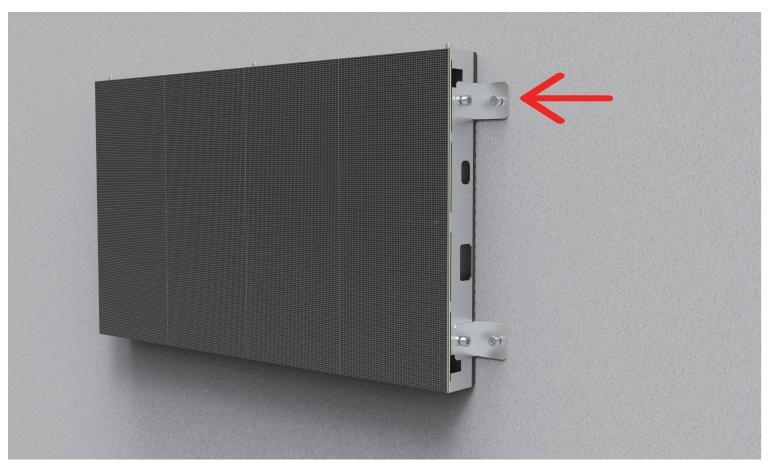


Step 1: First, use an infrared level to calibrate the bottom level.



Step 2: Directly fix it on the wall with drill-tail screws.

2.3 Wall-mounted Installation B: Determine the installation position of the display screen on the wall and ensure the horizontal level of the bottom of the display screen (an infrared level is recommended). Fix the assembled screen body directly to the wall with L-shaped hooks while aligning it with the bottom horizontal line.





Step 1: First, use an infrared level to calibrate the horizontal level of the bottom.

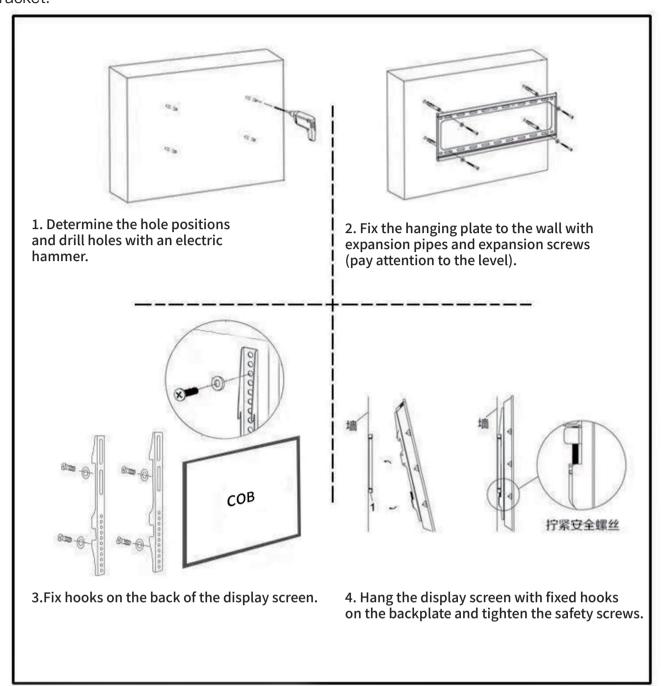


Step 2:

Fix it on the wall with L-shaped hooks and screws.

2.4 Hanger Installation: Install vertical hanger brackets at appropriate positions on the back of the cabinet.

According to the size of the screen body and its pre-installed position, fix the horizontal bracket on the wall, ensuring the horizontal level of the bracket. Hang the assembled screen body on the wall bracket.



Due to the limited load-bearing capacity of the bracket, for example, it is recommended to use two display brackets for a 5*5 COB display.

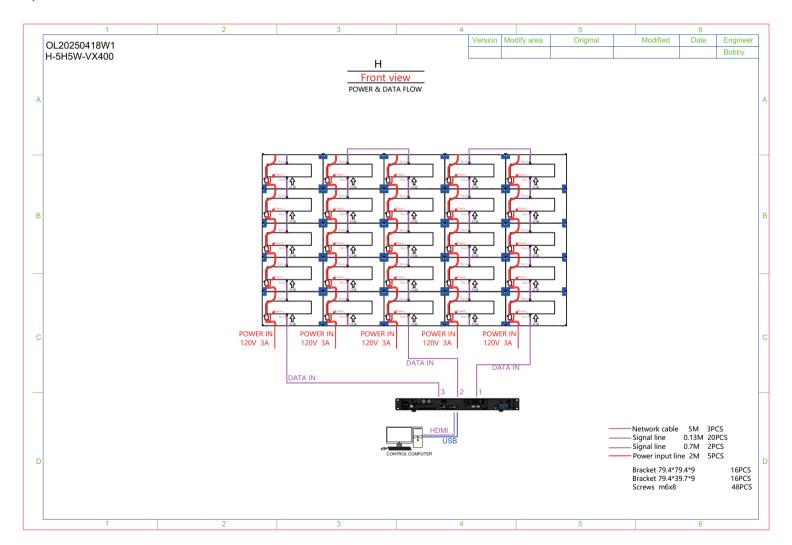


3, Cabinet Wiring

After installing the cabinet structure, start the internal wiring of the cabinets according to the system wiring diagram.

First, please carefully read the wiring diagram. According to the diagram, pass the corresponding power cables and network cables through the wire holes between the corresponding cabinets for connection.

The power supply cable of the cabinet is default to enter from the bottom of the screen body. The main power supply cable has a default length of 2M, and other lengths need to be customized. After completing the internal wiring of the cabinets, connect the power inlet and link the control system.



4. Power-on test

Check whether the power cables of the cabinets are properly connected.

If there is no abnormality, power on for testing.

Check whether each cabinet is properly powered and whether the receiver cards inside the cabinets are working normally. If the indicator light of the receiver card is always red and the green light flashes once every second, it is normal; otherwise, it is abnormal. Detect whether all receiver cards can be detected, and deal with any abnormalities in a timely manner. Power off after the test is normal.

5. Module installation must be carried out with power off. Live operation is prohibited. Installation must be strictly carried out according to the lamp board number!

To ensure the surface finish of the cabinet, please wear gloves during operation. This product is a high-density LED product, so please handle it with care.

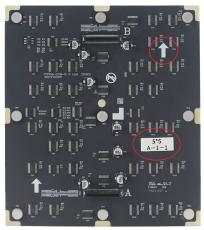
Before installation, confirm that the arrows on the cabinet and HUB board point upward, and install the lamp board with the arrow pointing upward. (With upward arrows marked on the cabinet, HUB, and lamp board)

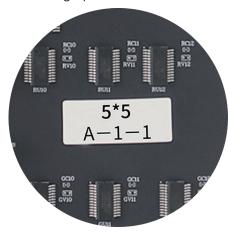
According to the module numbers in the cabinet lamp board installation diagram, locate the corresponding modules for installation. For example: "A-1-1" — the first letter "A" indicates the first row, the second number "1" indicates the first column, and the third number "1" indicates the first lamp board in the first row and first column. Installation must be carried out strictly according to the numbers shown in the diagram. Do not install incorrectly.

During installation, ensure that there is no misalignment between modules. If minor misalignment occurs, make small adjustments in a timely manner to ensure better display effects.

Pay attention to maintaining the installation flatness of the screen surface during installation.

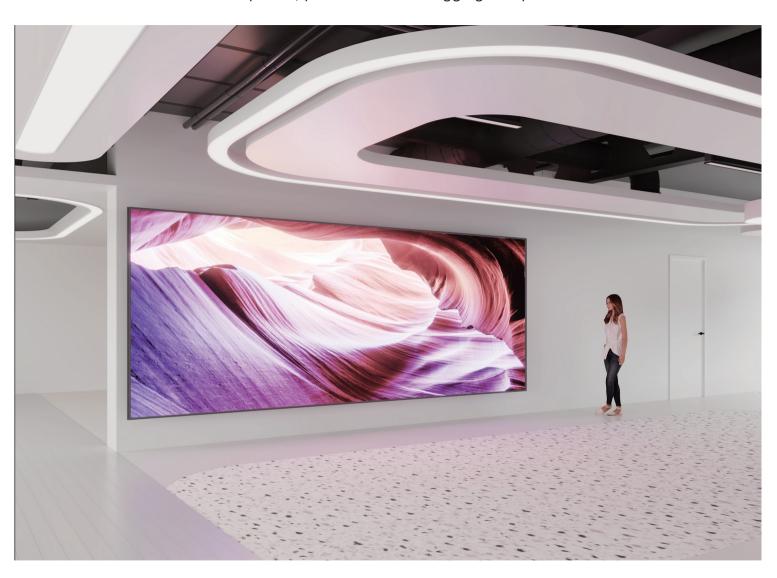
After installation, use a dust-free cloth to wipe off dust and fingerprints on the module surface.





E-1-1	E-1-2	E-1-3	E-1-4	E-2-1	E-2-2	E-2-3	E-2-4	E-3-1	E-3-2	E-3-3	E-3-4	E-4-1	E-4-2	E-4-3	E-4-4	E-5-1	E-5-2	E-5-3	E-5-4
E-1-5	E-1-6	E-1-7	E-1-8	E-2-5	E-2-6	E-2-7	E-2-8	E-3-5	E-3-6	E-3-7	E-3-8	E-4-5	E-4-6	E-4-7	E-4-8	E-5-5	E-5-6	E-5-7	E-5-8
D-1-1	D-1-2	D-1-3	D-1-4	D-2-1	D-2-2	D-2-3	D-2-4	D-3-1	D-3-2	D-3-3	D-3-4	D-4-1	D-4-2	D-4-3	D-4-4	D-5-1	D-5-2	D-5-3	D-5-4
D-1-5	D-1-6	D-1-7	D-1-8	D-2-5	D-2-6	D-2-7	D-2-8	D-3-5	D-3-6	D-3-7	D-3-8	D-4-5	D-4-6	D-4-7	D-4-8	D-5-5	D-5-6	D-5-7	D-5-8
C-1-1	C-1-2	C-1-3	C-1-4	C-2-1	C-2-2	C-2-3	C-2-4	C-3-1	C-3-2	C-3-3	C-3-4	C-4-1	C-4-2	C-4-3	C-4-4	C-5-1	C-5-2	C-5-3	C-5-4
C-1-5	C-1-6	C-1-7	C-1-8	C-2-5	C-2-6	C-2-7	C-2-8	C-3-5	C-3-6	C-3-7	C-3-8	C-4-5	C-4-6	C-4-7	3-4-8	C-5-5	C-5-6	C-5-7	C-5-8
B-1-1	B-1-2	B-1-3	B-1-4	B-2-1	B-2-2	B-2-3	B-2-4	B-3-1	B-3-2	B-3-3	B-3-4	B-4-1	B-4-2	B-4-3	B-4-4	B-5-1	B-5-2	B-5-3	B-5-4
B-1-5	B-1-6	B-1-7	B-1-8	B-2-5	B-2-6	B-2-7	B-2-8	B-3-5	B-3-6	B-3-7	B-3-8	B-4-5	B-4-6	B-4-7	B-4-8	B-5-5	B-5-6	B-5-7	B-5-8
A-1-1	A-1-2	A-1-3	A-1-4	A-2-1	A-2-2	A-2-3	A-2-4	A-3-1	A-3-2	A-3-3	A-3-4	A-4-1	A-4-2	A-4-3	A-4-4	A-5-1	A-5-2	A-5-3	A-5-4
A-1-5	A-1-6	A-1-7	A-1-8	A-2- 5	A-2-6	A-2-7	A-2-8	A-3-5	A-3-6	A-3-7	A-3-8	A-4-5	A-4-6	A-4-7	A-4-8	A-5-5	A-5-6	A-5-7	A-5-8

6. After the installation is completed, power on for debugging and put it into use.



7. Live operation is prohibited during module disassembly, assembly, and maintenance (front maintenance)!

Before maintenance, identify the modules to be disassembled or assembled, mark them, and then power off.

Use a suction cup tool to remove the module from the front of the screen. (With images showing the suction cup tool gripping the module and pulling it out).

Determine the module direction according to the arrow markings and replace the module.



8. Three-in-One Driver Board Maintenance (Front Maintenance)

Turn off the power supply of the display screen.

Remove the module from the front of the screen using a suction cup tool, unplug the power input cable, and use tools such as a screwdriver to remove the screws fixing the driver board for replacement.

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