



AURORA DISPLAYS

LDC600XXSFP-COB-PLUS-L

User Manual

v1.0

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Warning

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

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%RH 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 piece of equipment features one input socket and one output socket, which must be disconnected at the same time to disconnect the power supply from the equipment; Connect 100-240V AC power supply;
- 12) This product is an indoor product. It is strictly prohibited to use it in direct sunlight.

MISE EN GARDE

Ce produit appartient à la classe A. Dans un environnement résidentiel, l'utilisation de cet équipement peut causer des interférences radio.

La possibilité d'endommager l'appareil et l'incapacité de récupération en raison de l'ignorance du contenu suivant d'avertissement est extrêmement élevée.

- 1) Ne pas retourner et jeter l'équipement pendant la manipulation et le stockage ;
- 2) Ne pas incliner et heurter et rayer l'équipement pendant le processus d'installation ;
- 3) Ne pas tremper et immerger l'équipement dans l'eau ;
- 4) Ne pas activer la sortie d'air du climatiseur à proximité de l'écran d'affichage ;
- 5) Ne pas placer ou utiliser l'affichage dans un environnement contenant des produits chimiques volatils, corrosifs ou inflammables ;
- 6) Ne pas utiliser l'équipement dans un milieu où l'humidité est supérieure à 80% ou pendant les jours de pluie extérieurs ;
- 7) Ne pas nettoyer pas l'équipement d'affichage avec de l'eau et des solvants chimiques ;
- 8) Ne pas utiliser d'accessoires électriques qui ne sont pas certifiés par le fabricant de l'équipement ;
- 9) Il faut s'assurer que l'écran et ses accessoires sont mis à la terre correctement et de manière fiable avant l'utilisation ;
- 10) Si une anomalie se produit sur l'écran, telle qu'une odeur anormale, de la fumée, une fuite électrique ou une température, veuillez couper immédiatement l'alimentation et contacter un professionnel ;
- 11) Ce dispositif a deux prises d'entrée qui doivent être déconnectées en même temps pour déconnecter l'alimentation du dispositif. L'alimentation en courant alternatif de l'appareil doit être de 100-240 V.
- 12) Ce produit est destiné à un usage intérieur et ne doit pas être utilisé sous la lumière directe du soleil.

◆ 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 working environment temperature of the display screen should not exceed -10~40 °C
- 8) In order to ensure long-term and more uniform display effect, do not play fixed images for a long time

◆REMARQUE!

Il est fort probable que vous ne soyez pas en mesure d'obtenir le meilleur effet d'affichage si vous ignorez le contenu de l'avis.

- 1) Porter des gants antistatiques et un bracelet antistatique lors de l'installation et de l'entretien ;
- 2) Le flux d'air régulier à l'arrière de l'écran doit être pris en compte lors de la conception du schéma de dissipation thermique ;
- 3) L'environnement de stockage de l'affichage doit être ventilé et sec, et l'humidité ne doit pas dépasser 85% ;
- 4) Dans des circonstances normales, le dispositif d'affichage doit être mis sous tension et allumé au moins deux fois par semaine, et chaque durée d'allumage ne doit pas être inférieure à 2 heures ;
- 5) Si l'écran est installé en bord de mer, dans une zone saline alcaline, dans une zone gazeuse contenant du soufre, dans des endroits proches de l'évacuation de fumée de la cuisine ou dans un endroit où il y a une grande différence de température intérieure et extérieure, cela peut provoquer une défaillance de l'équipement et affecter la durée de vie. Si cela est inévitable, veuillez consulter notre personnel professionnel et technique ;
- 6) Ce produit est uniquement destiné à une utilisation à une altitude ne dépassant pas 5000m.
- 7) L'environnement de fonctionnement de l'affichage ne doit pas dépasser - 10°C ~ 40°C
- 8) Afin de garantir un effet d'affichage plus uniforme à long terme, ne lisez pas d'images fixes pendant longtemps.

- ◆ 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;

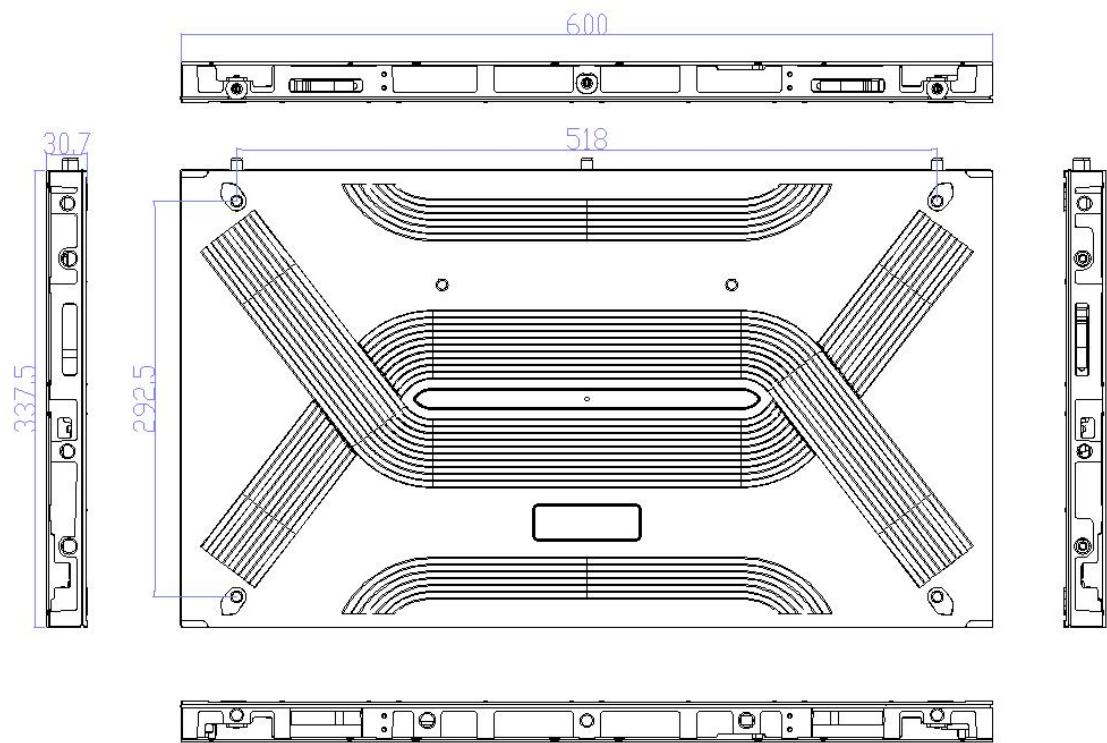
* Note: This manual takes the LDC600XXSFP-COB-PLUS-L series display as an example to introduce the product composition, interface, specifications, as well as instructions for installation and functional use, so that you can use the product quickly and efficiently.

1. Product Introduction

1.1 Product Features

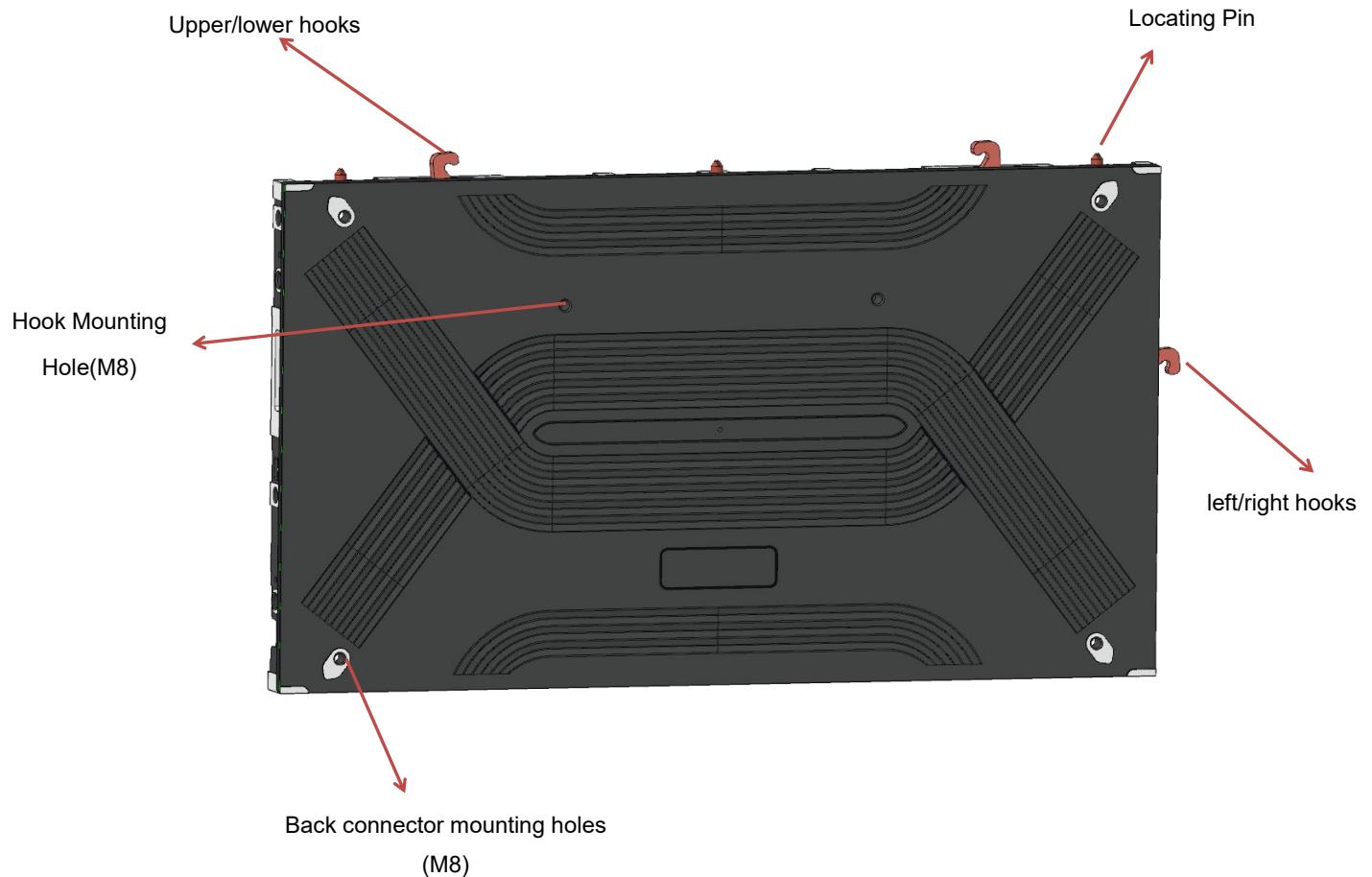
- (1) COB integrated packaging with high protection;
- (2) RGB inverted chip for stability and reliability;
- (3) High contrast, wide viewing angle, and exceptional display performance;
- (4) Uniform screen surface illumination with soft light source, effectively suppressing moire patterns;
- (5) PWM constant current drive chips for low power consumption;
- (6) High refresh rate, which can reach 3840 Hz;
- (7) Front maintenance installation with hard-connected LED panel for easy installation and disassembly;
- (8) One-piece die-cast aluminum cabinet combined with high-precision processing ensures assembly flatness;
- (9) 16:9 aspect ratio design of cabinet for free assembly into standard 2K/4K/8K resolutions;
- (10) Stable quality, complete high-end testing equipment, rigorous testing process, standard production technology, and strict quality control.

1.2 Product Dimension

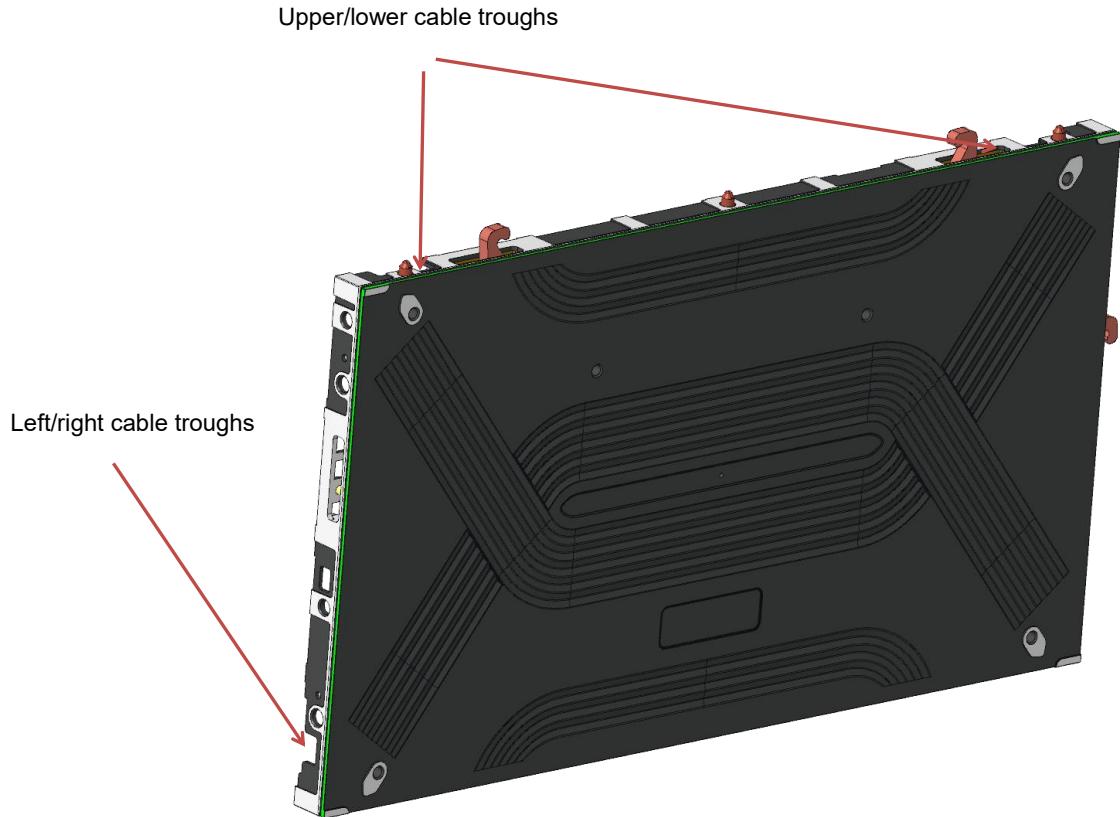


2. Product Components

2.1 Cabinet Structure



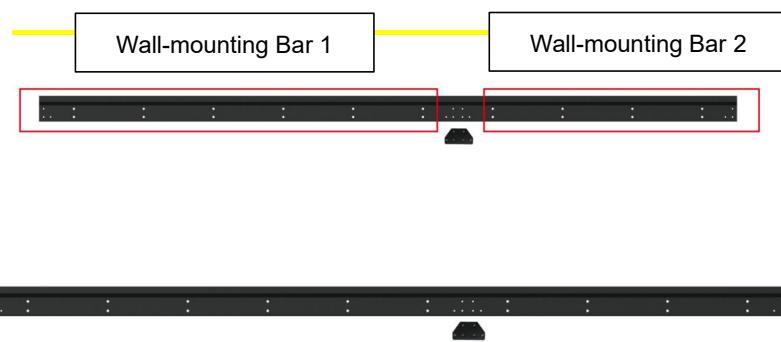
2.2 Wring Hole Location



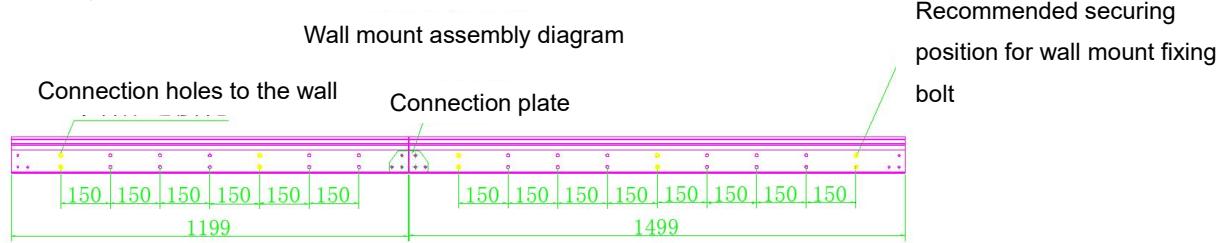
3. Product Assembly

3.1 Install wall-mounting bar

- (1) Locate the positions to drill holes for upper and lower wall-mounting bars according to onsite environment and distance requirement between screen and floor, and use level instrument to ensure position precision
- (2) The upper and lower wall-mounting bars are respectively composed of the wall-mounting bar 1 and the wall-mounting bar 2, which are joined by connection plates. Use six M6*16 countersunk head screws to fix connection plates



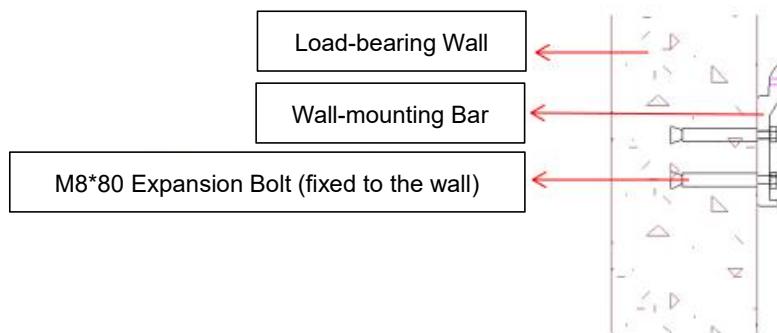
- (3) The drilling hole positions for wall mount 1 and wall mount 2 are as shown in the diagram;



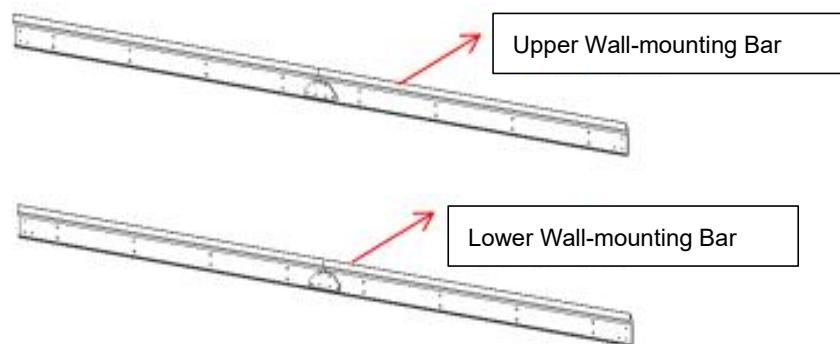
- (4) Draw dowel points on the wall and drill 10mm hole at each point;
- (5) align wall-mounting bars to holes drilled in previous step and fix bars with M8* 80 expansion bolts as shown below:



(6) Side profile diagram of installed wall-mounting bar:



(7) Front view diagram of installed wall-mounting bars:



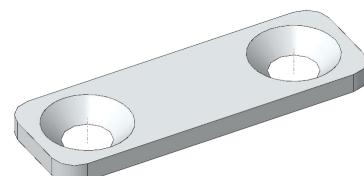
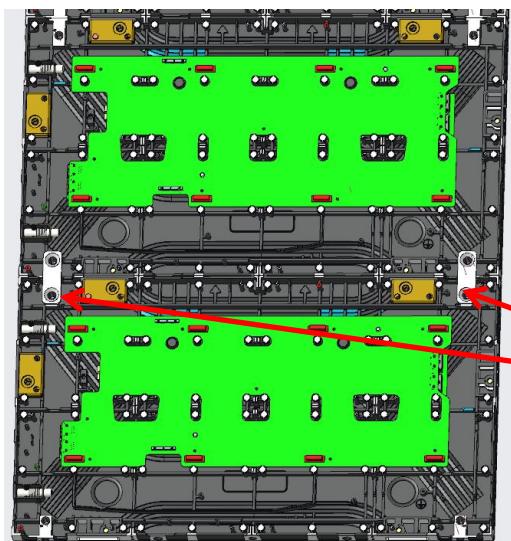
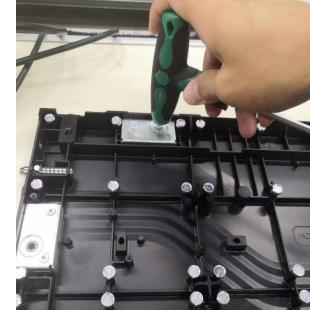
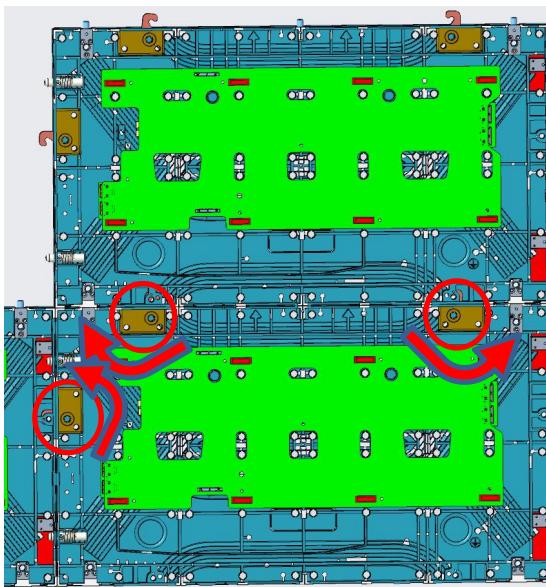
(8) Check whether the wall-mounting bar is properly installed, which requires:

- levelness check;
- spacing check, by following steps:

- 1) Use a level instrument to measure the horizontalness of wall-mounting bar. If it is not horizontal, make adjustment by loosening the expansion bolt and gently pushing wall-mounting bars. And then tighten the wall-mounting bar with screws.
- 2) Use a tape measure to check the spacing between the upper and lower rows of wall-mounting bars. If the spacing is not ideal, make adjustment by loosening the expansion bolt and gently pushing wall-mounting bars. And then tighten the wall-mounting bar with screws.

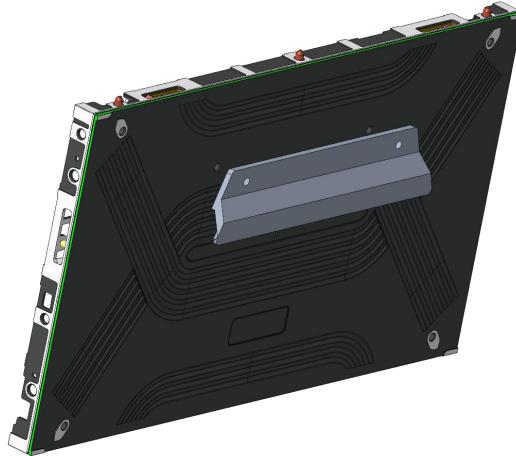
3.2 Box assembly

- ① When shipping, the cabinets are arranged in a column according to their numbers;
- ② Use an Allen wrench to lock the cabinet up and down, left and right through the cabinet lock hooks, and fix the upper and lower cabinets with M8*16 hex socket countersunk head screws as shown in the figure below:

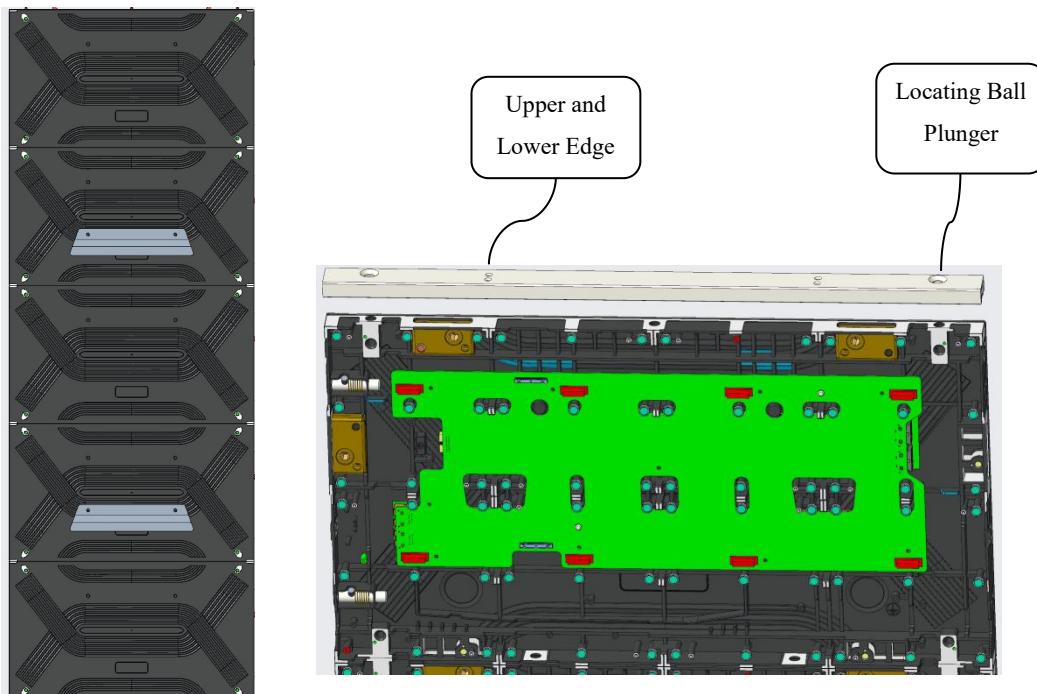


Fix with M8*16 hex socket countersunk head screws

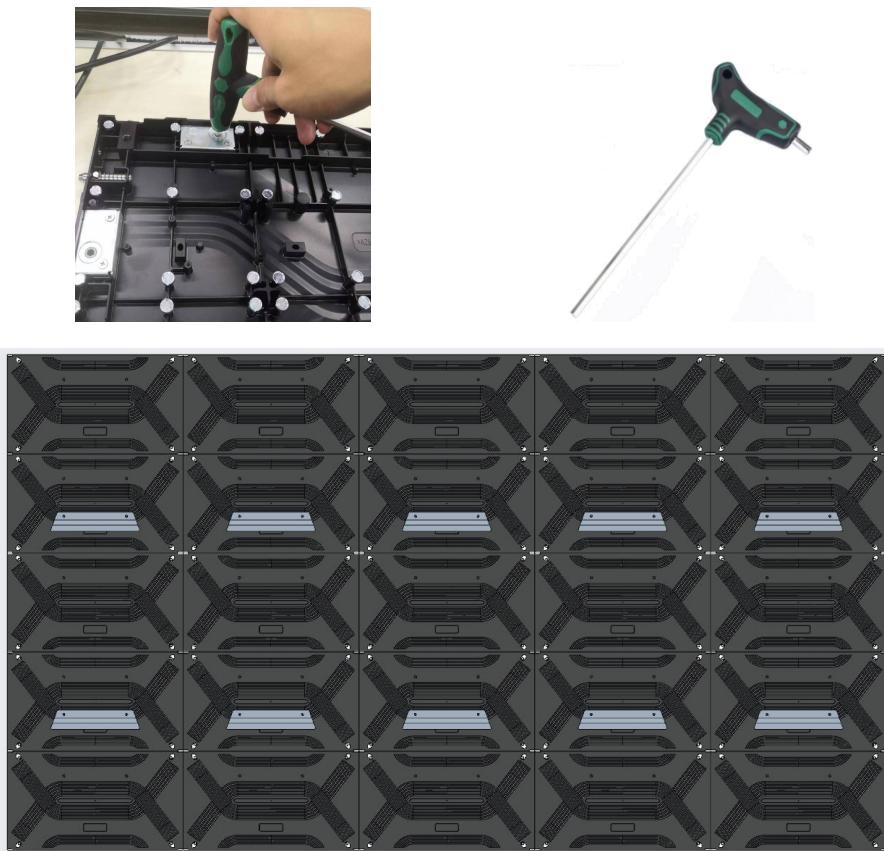
③ Arrange the cabinets in a column according to their numbers, install hooks on the back of the cabinets, and hang the cabinets on the wall mounts using the hooks;



Use two M8*25 hex head bolts and flat and spring washers to install the hooks on the corresponding cabinets. The top cabinet needs to have the locating pins removed, and the top edge strip should be fixed with a cross screwdriver using M8x20mm hex socket flat head machine screws for the edging. As shown in the figure below (taking the five-piece edging as an example; shipping should be subject to actual product), the top edging of the lower frame should be fixed with a cross screwdriver using screws KM3*20 (common for upper and lower frames).



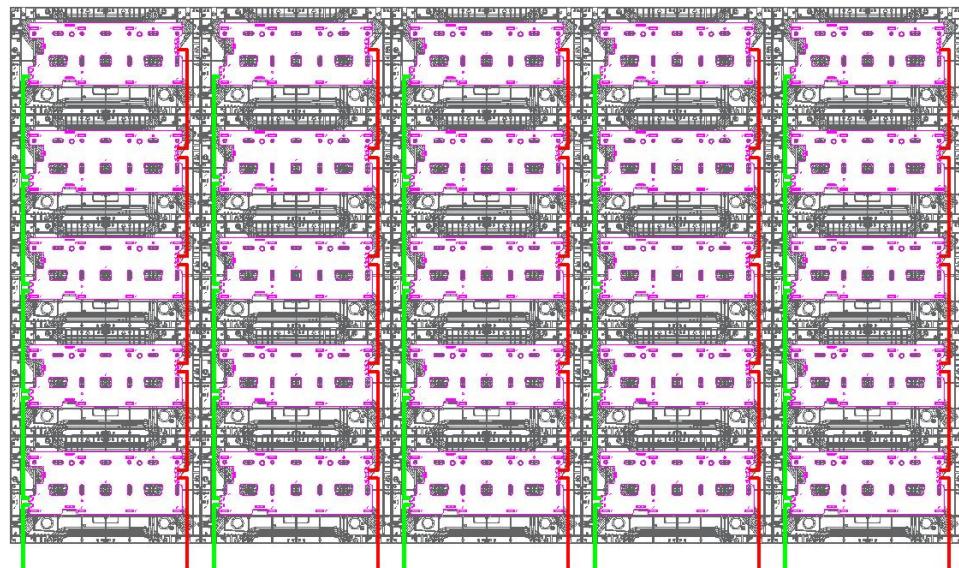
④ Place each column of cabinets according to the corresponding numbers, align the left and right spring locating pins of the cabinets with the holes, and tighten the left and right hooks between each column of cabinets with an Allen wrench;



⑤ Screen wiring:

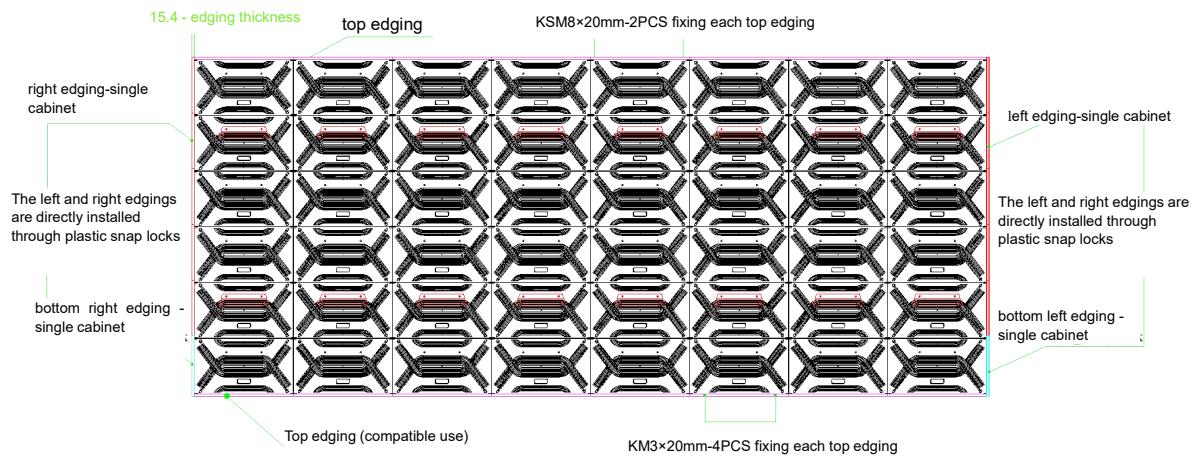
1) Single power supply and single signal wiring diagram:

Red represents the branch power cables, and green represents the signal cables, connecting the power supplies and signal lines between the cabinets.



3.3 Install Left, Right, and Top Edgings

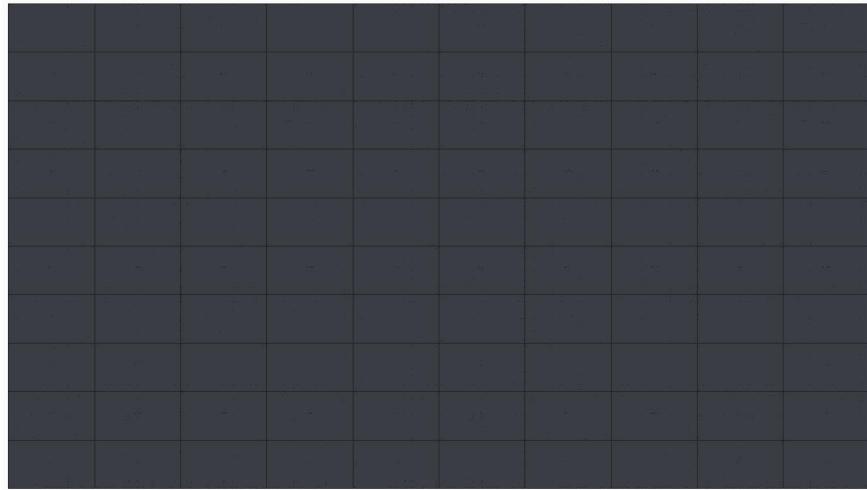
From a front view, the left and right edgings are secured by snap locks into the side spring locating pin holes (the spring locating pins on the far left of the entire screen needs to be removed). The edging with the “R” sticker is the right edging, and the one with the “L” sticker is the left edging;



3.4 Light Panel Installation

- * The installation order can be from left to right, from right to left, or from bottom to top, or from top to bottom, depending on the on-site installation environment;
- * During the assembly process, if poor flatness is found, adjustments and repairs should be made promptly.

- ① The connection method of the LED panel is a hard connection, positioned by the locating holes on the cabinet, and connected through the bridge board and the connectors on the back of the LED panel. During installation, care should be taken with the force applied, and forceful insertion is prohibited (ESD gloves should be worn during the installation of the LED panel);



② Cabinet and LED panel serial number description: each cabinet has a mark number in the top right corner (inside), and this number represents the corresponding position of the cabinet when installed during factory calibration. Each LED panel (back) also has a mark number, such as: 4-3, where 4 represents the installation of this LED panel during factory calibration in cabinet 4, and 3 represents its position in cabinet 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						

4. Control System

4.1 Input Voltage Requirement

The input voltage should be 110V/220V/±10%, frequency 50Hz~60Hz, consistent with the display power supply voltage.

4.2 System Connection Diagram

- (1) Turn off the power supply of all screens and devices before connection.
- (2) Connect the DVI signal of the computer (or other equipment) to the controller through the DVI cable, or connect with the HDMI cable.
- (3) Connect the output signal of the controller to the screen with the signal input cable.
- (4) When all connections are completed, plug the controller, computer or other equipment in firstly, and then other devices.

4.3 Safety Precautions

- (1) Before the screen is powered on, the cables connection between cabinets, main cables and other cables must be checked without wrong connection, reverse connection, short circuit, circuit break, loosening, etc., and tested with multimeter and other tools. Before any maintenance of the screen, please disconnect all the power supply inside the screen to ensure the safety of personnel and the equipment. All equipment and cables are forbidden to operated under live electrical work.
- (2) Do not hardly pull out and insert power cord, cable and other wires, or lay heavy objects on the power cord, signal cable, communication cable, etc. Avoid trampling or squeezing the cables. Unqualified or self-added cables should not be indiscriminately connected inside the screen.
- (3) In order to avoid the fire caused by the overload of power cords, do not overloading the product. Please refer to the maximum power consumption of the product and avoid turning on all load switches at the same time. Otherwise, it is easy to cause high peak voltage and may cause fire.

5. Screen Configuration

control software: Nova LCT-Mars

playback software: Nova Studio.

Remarks:

For detailed operation, please refer to the specification of the specific software system.

If you need technical support, please contact us.

6. Common Hardware Faults Troubleshooting

(1) Part of the display is not lit after power on

- ① Check whether the Ethernet cables inside the cabinets are in good contact;
- ② Check whether the power cables inside the cabinets are in good contact.

(2) Indicator light is not on

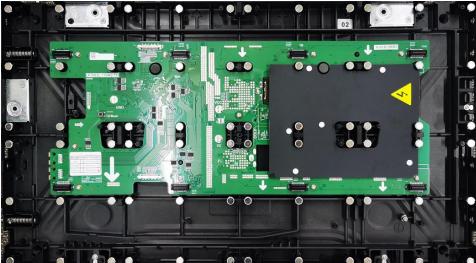
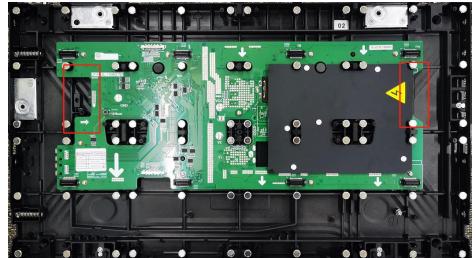
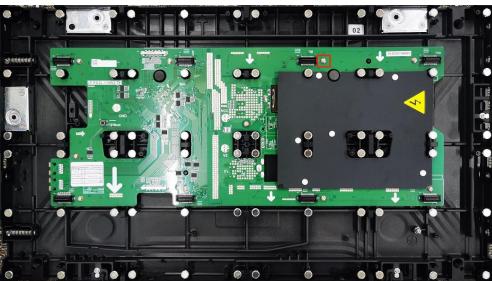
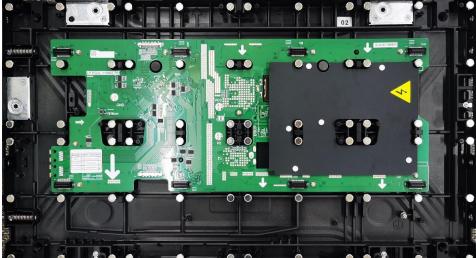
- ① Check whether the power supply is normal;
- ② Check whether the power switch of the system is turned on.

(3) No image on the display after connecting its to the computer with HDMI cable

- ① Check whether it is currently on HDMI channel;
- ② Check whether the HDMI cable on the system and the external computer falls off or is defective.

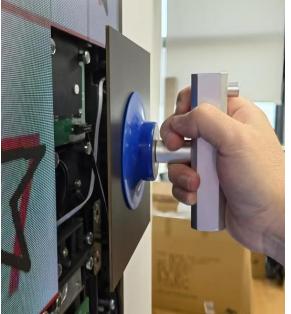
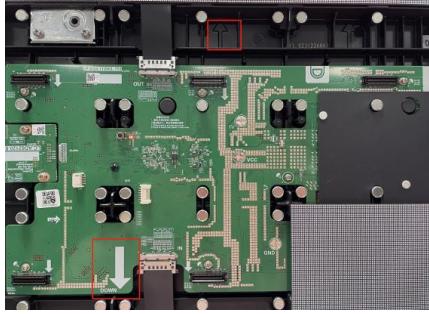
7. Component Replacement

(1) Three-in-one panel replacement

Step	Illustration	Method
Step1		Find the location of the faulty box and remove all light panels
Step 2		Disconnect the power cord and network cable
Step3		Remove the screws from the three-in-one panel
Step 4		Remove the faulty three-in-one panel and replace it with a new one

(2) Lamp panel replacement

Steps	Illustration	Method
Step 1		Find out the specific position of the faulty LED panel, and stick the suction cup side of the front maintenance tool to the center of the LED panel, and press with a slight force

Step 2		<p>Gently remove the LED panel in a parallel direction</p>
Step 3	 <p>Pressure release button</p>	<p>Press the pressure release button on the suction cup handle to remove the LED panel</p>
Step 4	 	<p>*The arrow on the cabinet pointing upwards indicates the direction for hanging *The LED panel is installed with the arrow downwards according to the three-in-one board card arrow indication.</p>

8. Special Statement

- Intellectual Property Rights: The hardware design and software programs of this product are protected by copyright. The contents of this product and the manual shall not be copied without the authorization of the company.
- The contents of this manual are for reference only and do not constitute a commitment of any kind.
- The company reserves the right to make improvements and changes to the product design without prior notice

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