MU Series

LED Display Operation Manual

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CAUTION

Warning:This is a CALSS A-level product.In the living environment,this product may cause radio interference.In this case,the user may be required to take practical actions for the interference.

Caution 1

To avoid any physical damage, read this installation rule carefully before connecting the switch.

1.Untrained non-professionals do not conduct any operation on the LED display screen;

2. Fireworks are strictly prohibited;

3.The operation must be wearing a safety helmet;

4. Before opening the switch, check whether all the AC power supplies are well connected;

5. Before starting any maintenance work, all switches should be closed, including LED boards, computer terminals, system boxes and monitors;

6. When the switch is not turned off, please do not touch the power supply.

7. Indoor display screen is strictly prohibited to be used in outdoor working environment;

8. The indoor screen should be equipped with air conditioning without the indoor air conditioning or the indoor environmental temperature is higher than 30℃ ;

9. When the indoor screen is placed and not in use for a long time, ensure the regular power-on test (regular power-on test standard: at least 2 hours of power-on test within a week).

10.Long time white balance will accelerate the aging of components, will affect the life of the display screen.

11.Can not directly climb on the cabinet, the cabinet handle, control box, frame and other parts can not be stepped on, if you need to climb, need to use the pile rack and other auxiliary tools.

12.The indoor screen can not be installed in a humid environment, the air conditioning can not be blown against.

Caution 2:

To ensure the normal service life of the display and prevent the damage of electronic components , LED, and the damage of the installation equipment driver and data loss, please read the installation setting operation rules carefully before operating the display.

1.Before connecting any cable, close all switches including LED board, computer terminal, system box and monitor;

2.Please wear the anti-static ring on the wrist before replacing the electronic device;

3.All computer connecting lines are strictly prohibited to hot plug, must close all power before breaking off, pay attention to the serial line;

4. In order to ensure the operation safety of the product, the power cable should be checked once a year

Caution 3:

1. The display screen must be properly grounded before working properly.

2. When the high voltage input of this product is less than or equal to 240V, the leakage current is less than or equal to 3.5 mA / m^2.

3. Display ground resistance must be 1Ω ;.
4. If the display screen is equipped with an flight case, the flight case cannot be exposed to the rain. After each performance, please pay attention to the moisture-proof treatment of the air box.

Caution 4:

1. The display use / storage environment shall be executed according to the parameter table requirements, otherwise the display will be seriously damaged;
2. The cabinet should avoid working in the environment with high content of organic solvent detergent (such as kerosene, anti-rust oil, etc.)

Caution 5:

1. Warning language for CE certification:

Warning: This equipment meets the Class CISPR 32 standard. In a residential environment, the device may cause radio interference.

2. Warning language for FCC certification:

The device complies with FCC Rule Part 15. The operation has the following two conditions:

(1) The equipment shall not cause harmful interference;

(2) The device must accept any interference. Received errors, including interference that may lead to unexpected operations.

Warning: Changes or modifications to this device not explicitly approved by the party responsible for compliance may deny the user the right to operate the device.

Note: The device has been tested according to the FCC Rule Part 15 and found to meet the limits of Class A digital equipment.

These restrictions are intended to provide reasonable protection against harmful interference in residential facilities. Such equipment produces, uses and radiates RF energy and, if not installed and used

as indicated, may cause harmful interference to radio communications. Cause harmful interference to radio communication. However, there is no guarantee that no interference will occur in a particular installation. If this device does cause harmful interference the radio or television reception can be determined by turning off and turning on the device, the user is encouraged to attempt to correct the interference by one or more of the following measures:

-Adjust or reposition the receiving antenna.
-Strengthen the separation between the equipment and the receiver.
-Connect the device to a different socket than the circuit connected to the receiver.
-Seek help from a dealer or an experienced radio / TV technician.

Special Statement:

Our company will not compensate for any personal injury or material loss caused by users arbitrarily transforming or repairing this product; in case of needing to repair or transforming this product, please contact us in advance.

Quality Assurance Period:

In principle, the product warranty period is subject to the product warranty period indicated on the quotation sheet.

During the warranty period, our company will not guarantee any problems arising due to the following reasons.

-Problems arising by user arbitrary breakdown of the product or failure to perform proper maintenance.
-Problems arising without proper transportation, custody.
-Problems arising from the use of product ratings.
-Problems from not installed installation.
-Problems arising from fire, earthquakes, storms, floods, lightning and other natural disasters or riots, war, radiation energy, etc.

Mark of restricted use of hazardous substances in electronic and electrical products:

1. The mark indicates that the environmental protection service period of the electronic and electrical products is 10 years;
2. It means that the electronic and electrical products contain some harmful substances, which can be used safely during the use period of environmental protection. After exceeding the environmental protection period, they should enter the recycling cycle system.

Preface

MU series LED indoor / outdoor display cabinet, using die-cast aluminum cabinet, the modular and standardized design concept, at present, the same cabinet is compatible with multiple models (more choices for pixel pitch in future), covering indoor and outdoor multiple pixel pitch, is a high-end rental product of YES TECH.

MU series cabinet comes in two sizes, MU indoor has P1.9/P2.6/P2.9/P3.9/P4.8, MU outdoor has P 2.9/P3.9/P 4.8 / P5.9, within 8 KG of 500 * 500 cabinet, 500 * 1000 cabinet about 13 KG; Support front and back maintenance, dual-mode compatibility; quick and convenient, more humane; The display screen refresh rate has up to 3840 HZ, visual refresh at the 60Hz frequency, no flicker or dark stripes. And it has the oversized size, ultra-high brightness for the flat installation . Applied to the stage, entertainment, bar, banquet hall, cinema, market, large-screen display screens in buildings, normally using steel structure connector for installation or hoisting.

In order to ensure that our company's products can be used normally under reasonable conditions and get your approval of the products, we will make detail instruction on the installation and use process and the matters needing attention. Please read them carefully, and then carry out the installation and debugging of the display screen.

Tips: If not special specified, all models of this series will operate in the same way as in this manual.

Chapter 1 LED Cabinet

1.1 Cabinet Structure

The MU cabinet is divided into 500 * 500 cabinet and 500 * 1000 cabinet. Appearance is shown in figure 1.1.1 to 1.1.2.

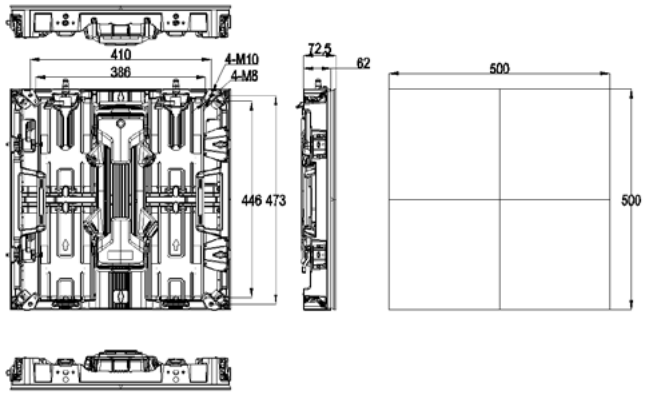


Figure 1.1.1 500*500 cabinet size

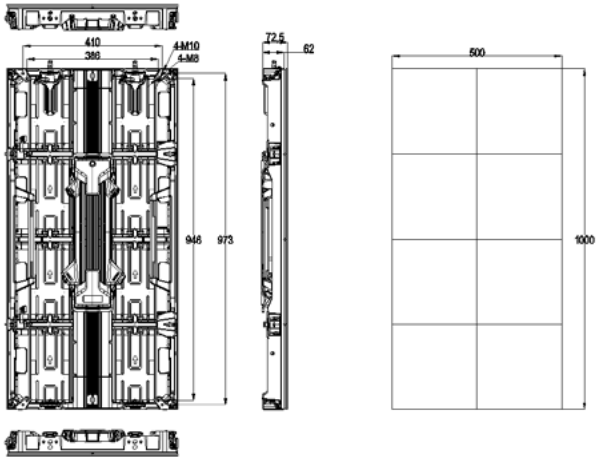


Figure 1.1.2 500*1000 cabinet size

1.2 Cabinet Structure

The cabinet is composed of three parts: cabinet frame, module and control box. The cabinet frame is composed of cabinet frame, upper and lower lifting lock, lifting lock seat, left and right fast lock, arc lock, curved lock, top handle, cabinet handle, etc. The module is composed of LED board, bottom shell, bottom shell handle, etc. The control box is composed of the control box shell, buckle lock, button switch, power input, output, signal, power supply, HUB, receiving card, etc. See Figure 1.2.1 to 1.2..5

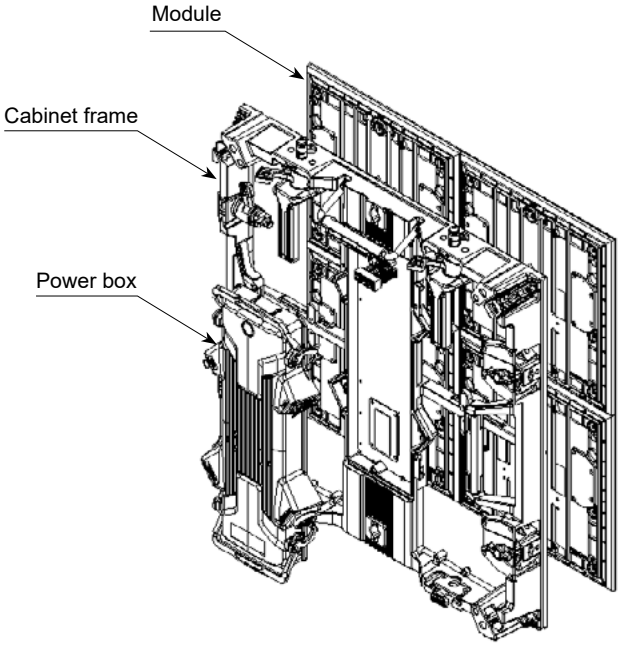


Figure 1.2.1(500*500 cabinet)

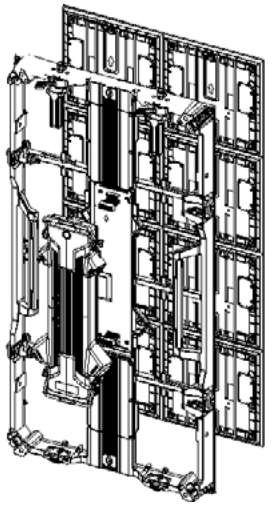


Figure 1.2.2(500*1000 cabinet)

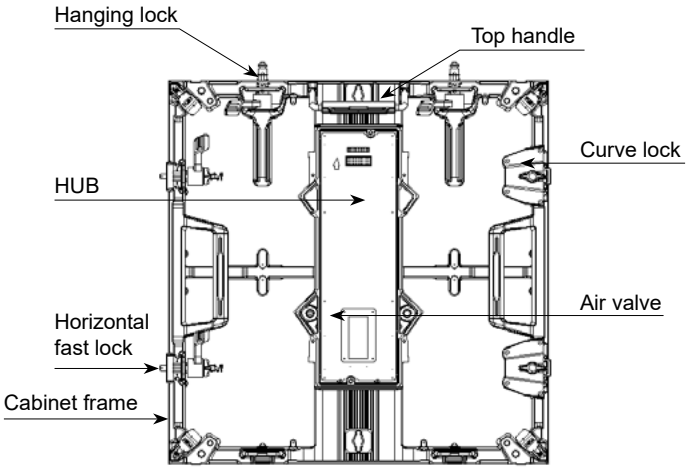


Figure 1.2.3(500*500 cabinet frame)

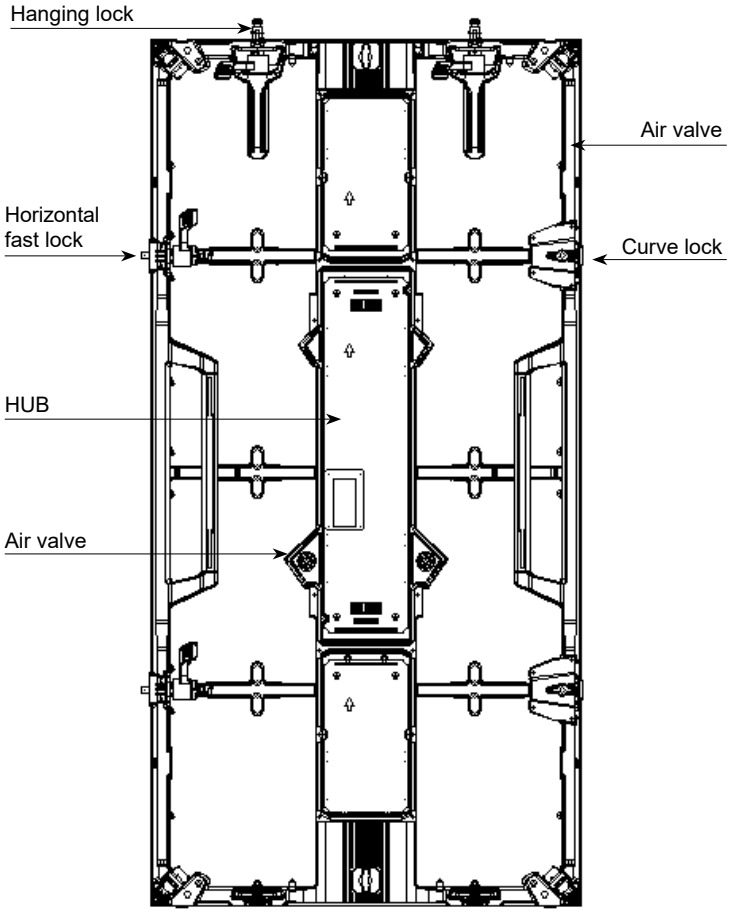
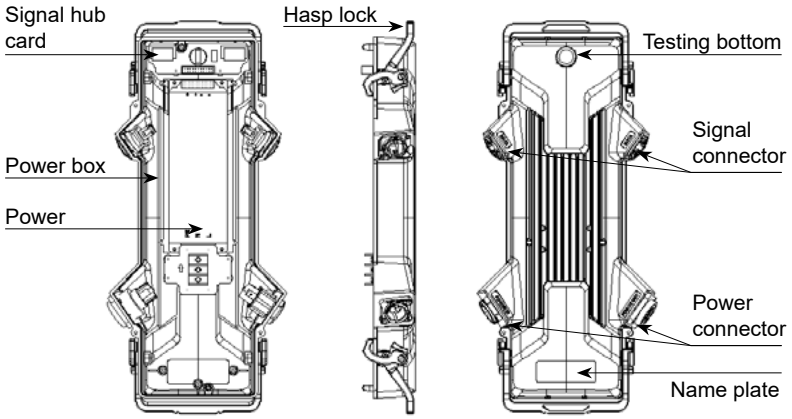


Figure 1.2.4 (500*1000 cabinet frame)



Note: MU 500 * 500 control box and 500 * 1000 control box length size is different, the appearance structure is the same
For easy illustration, only the 500 * 500 control box is listed as an introduction
Figure 1.2.5 (Control box)

1.1 Operation instructions of control box (500 * 500 and 500 * 1000 box operation)

MU control box removal method: make the control box lock up to the end, you can pull the control box out of the box;the control box installation method: the control box lock down to the end, you can lock the control box with the cabinet. Note: Both the control box and the housing should be aligned horizontally during removal or installation to avoid damage to the connector above the HUB. Figure 1.3.1 to 1.3.2.

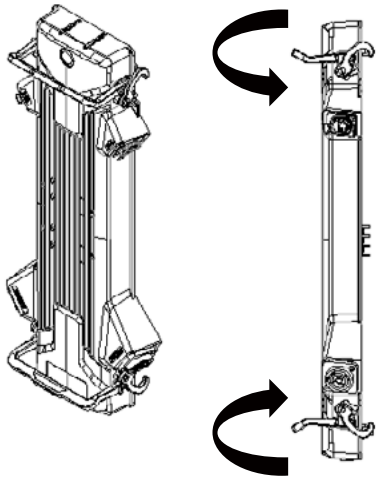


Figure 1.3.1(Control box buckle lock release state)

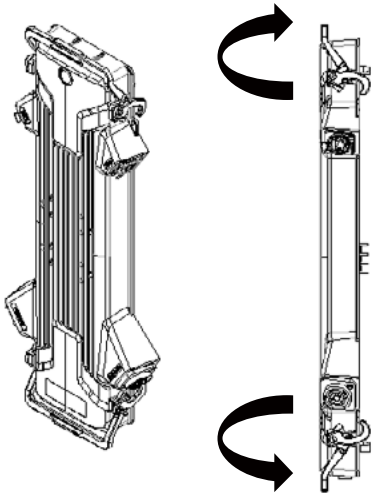


Figure 1.3.2 (Control box lock state)

1.2 Corner protection operation instructions (500*500 and 500*1000 cabinet corner protection operation mode is the same)

The corner guard of the MU box changes from the protection state to the closed state. Pull the corner guard by hand until it reaches the top, and the corner guard will automatically jam. The corner guard of the box is changed from the closed state to the protected state. Press the corner guard button and the corner guard automatically springs down.

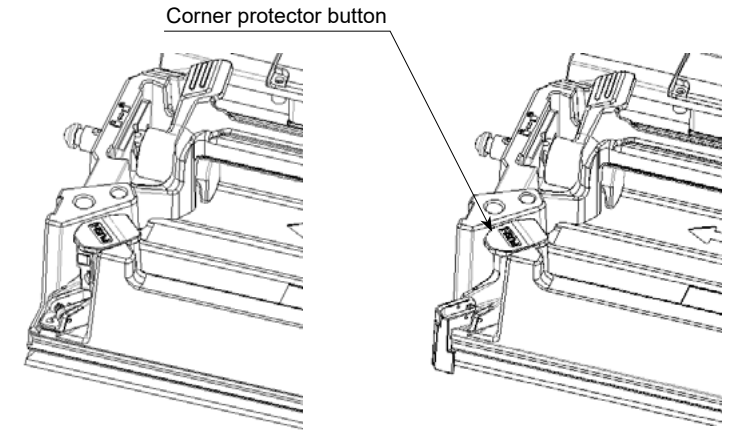


Figure 1.4.1. Corner protector operation way

Chapter 2 Installation Of The LED Screen

2.1 Hanging Instruction

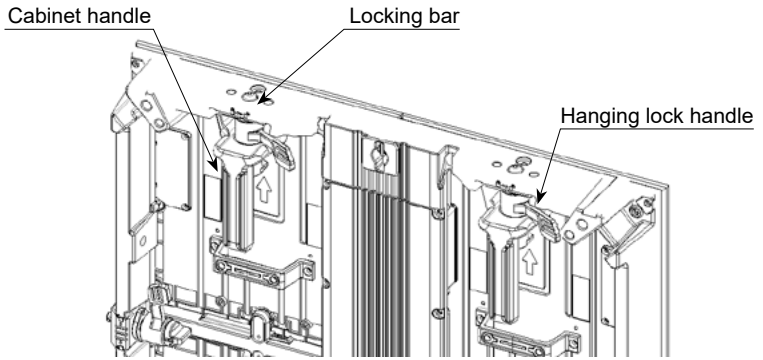
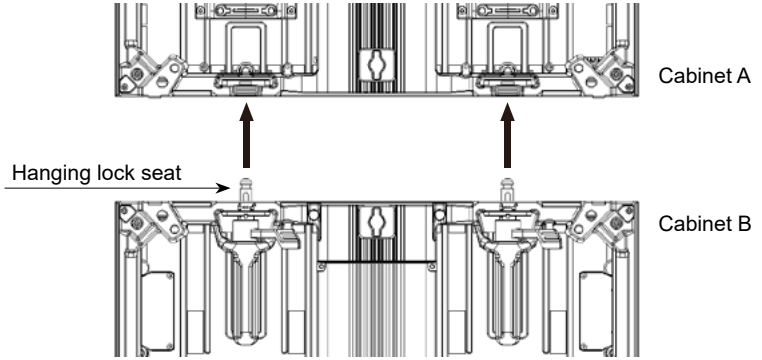
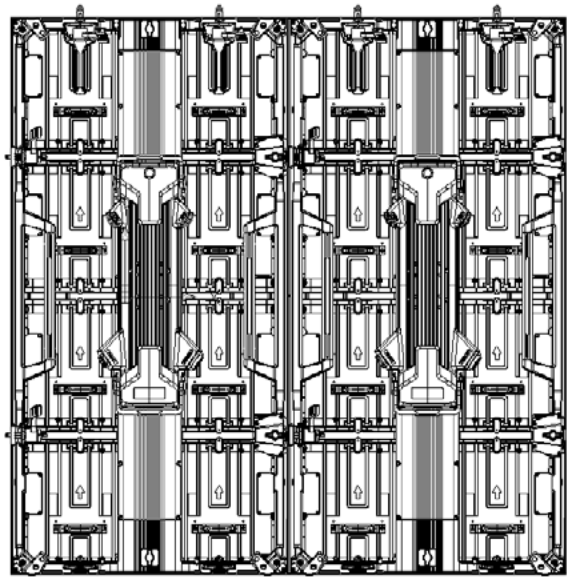


Figure3.1 Cabinet front corners

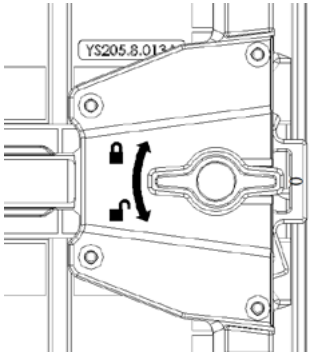
As shown in Figure 2.1.1, when hoisting, first check whether all the handles of the lifting lock are in the release state. If the handles of the lifting lock are not in the release state, turn to the release state, then hold the handles on the box with each right hand, and push the lock rod of the lifting lock accordingly.



As shown in figure 2.1.2, hold the upper handle of cabinet B, lift the cabinet, align the locking pin of cabinet B with the lifting lock seat hole of cabinet A, and directly push it up. The locking seat of cabinet A will automatically catch the locking pin of cabinet B, slowly release the grip, and then tighten the lifting lock handle of cabinet B. cabinet lifting mode 500 x 500/500 x 1000 The operation mode of the cabinet is the same. Note :500*500 cabinet and 500*1000 cabinet can be lifted from each other.



Cabinet horizon connecting



Adjust the arc lock angle, loosen the arc lock handle screw, pull the arc lock to the required angle, and then lock the arc lock handle screw

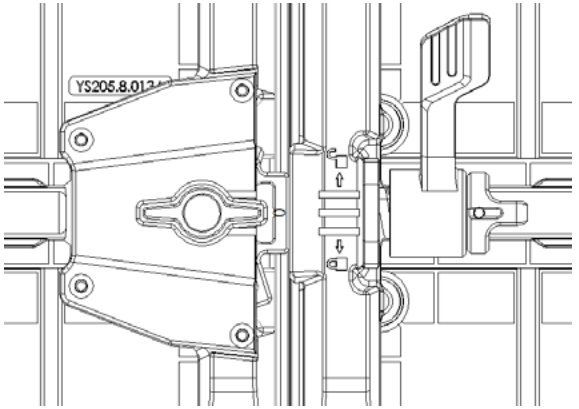


Figure 2.1.3

As shown in figure 2.1.3, the above diagram is the left and right splicing diagram of the straight side cabinet. After the left and right sides of the cabinet splicing are aligned closely, the left and right quick lock latch of the left cabinet is pushed to the left and rotated 90 degrees. Then lock the handle of the left and right quick lock in the direction indicated. The operation of the 500*500/500*1000 cabinet is the same. Note :500*500 cabinet and 500*1000 cabinet cannot be connected left and right

2.2 Hanging Installation &Usage

The hoisting method is to hang the cabinet on the aluminum hanging beam. This method must have a suitable location for installation, such as a beam or hanging beam above. This method can also be mounted on the TRUSS, and can also be installed on other similar structures with strong structure, as shown in Figure 2.2.1.

In this way, the top of the display is an aluminum hanging beam, and then the following cabinet is connected to the cabinet, and then the following cabinet is connected to the above cabinet, and the right cabinet is connected to the left cabinet, so that a whole can be formed. The structure of aluminum hanging beam is shown in Figure 2.2.2, and the complete installation structure of rope and TRUSS is shown in Figure 2.2.3.

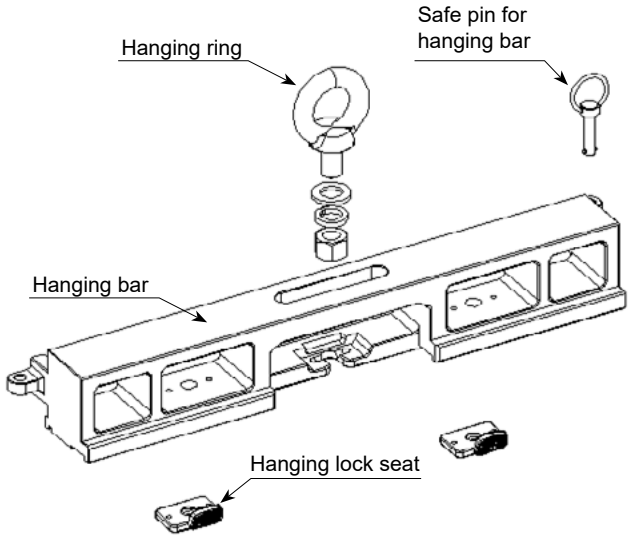


Figure 2.2.1 Aluminum hanging bar structure

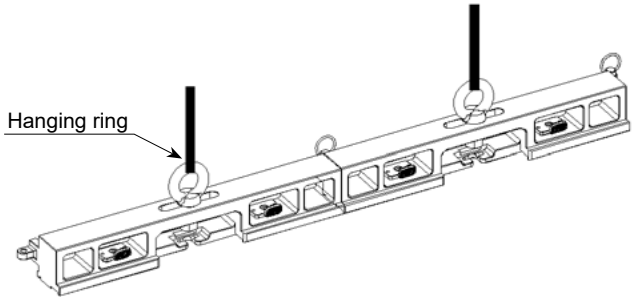


Figure 2.2.2 Aluminum hanging bar structure(rope)

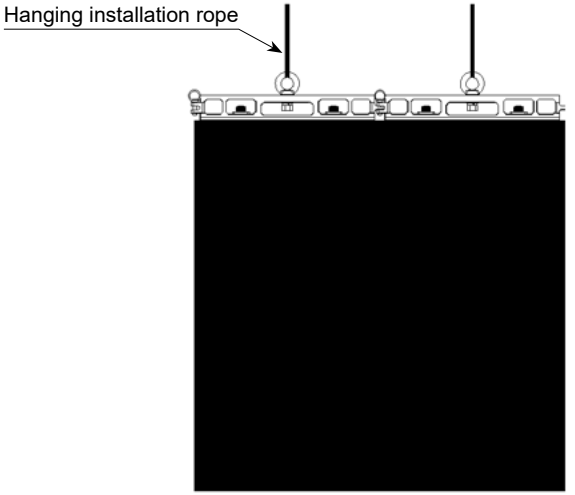


Figure 2.2.4 Hanging installation front view

The use of hanging beam installation, after our test, each cabinet can bear 10000N, safety factor of 8:1, 170kg, install 20 cabinet (500*500 boxes) or install 10 cabinet (500*1000 boxes) high is safe.

Note: When hoisting with a suspended rope, ensure that each rope is stressed (the rope is tight). A maximum of 10 meters of cabinet can be lifted per beam (20pcs of 500*500 cabinet or 10pcs 500*1000 cabinet).

2.3 Stacking Installation &Usage

When the cabinet is stacked, the use of floor beam, floor frame, gripper and stacking frame can realize the rapid assembly of the screen. Stacking shelves can be stacked up to 10 meters and must use counterweight blocks. The counterweight block is provided by the customer himself, and the weight of the counterweight block should be matched according to the use environment of the cabinet installation, such as the wind of the installation site and the flatness of the installation ground. Be sure to carry out counterweight under the guarantee of screen safety. When the ground is uneven, the use of floor beams and floor frame adjusting foot cups can ensure the smooth installation of the display screen, as shown in figure. 2.3.1 and figure. 2.3.2.

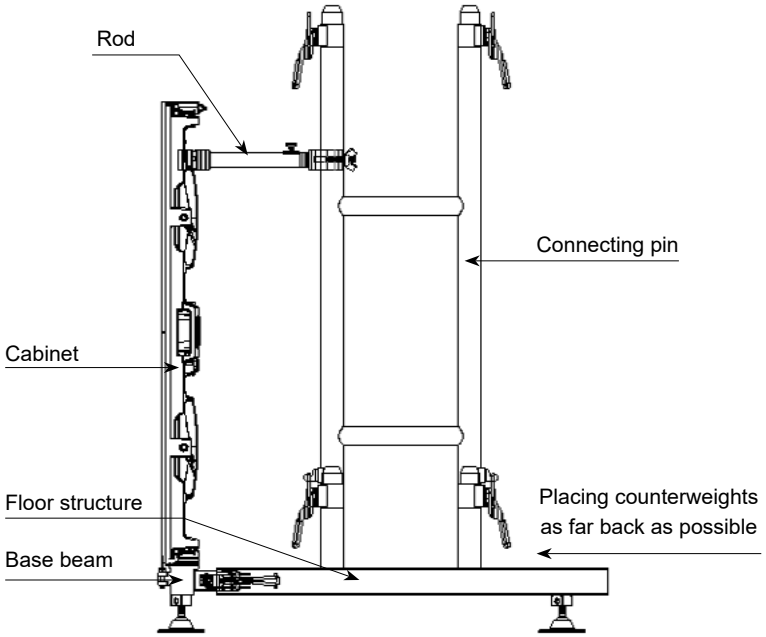


Figure 2.3.1 Effect of stacking installation

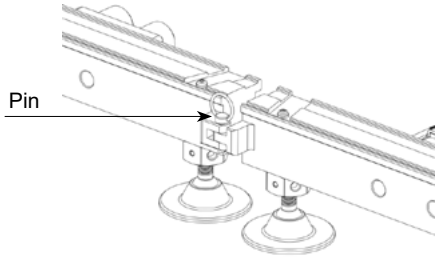


Figure 2.3.2 Stacking

The ground beam, the floor frame, and the connecting frame are assembled together, and are connected by the lock buckle and connected into a row. The floor beams should be installed in each column, and the floor frames should be installed every meter. The light hook of the rocket rod is fixed on the pipe of the connecting frame, and the screws do not need to be tightened temporarily. Figure 2.3.3 to 2.3.4.

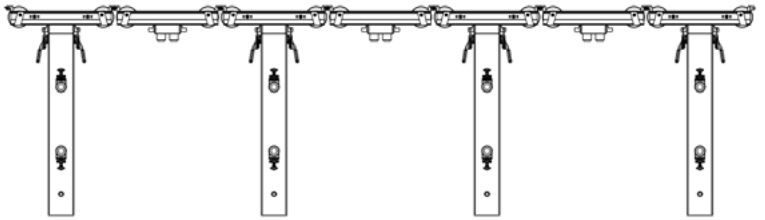


Figure2.3.3 Stacking installation

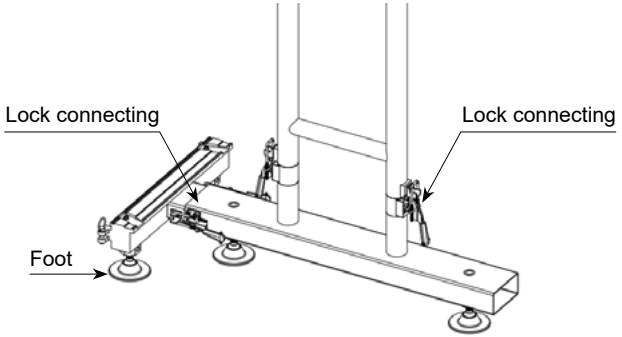


Figure 2.3.1 Stacking installation 2

Insert the cabinet into the positioning pin hole of the ground beam, insert the bolt of the rocket rod into the cabinet hole, rotate the rocket rod bolt 90 degrees, rotate the sleeve of the rocket rod, and fix the cabinet together, and finally fix the light hook screw of the rocket rod. In particular, after the cabinet is fixed by the rocket rod, check whether the cabinet is tilted, if there is tilt, be sure to adjust the rocket rod expansion stroke. If the height of the cabinet is uneven, it is solved by adjusting the foot of the floor beam and the floor frame. Figure 2.3.5

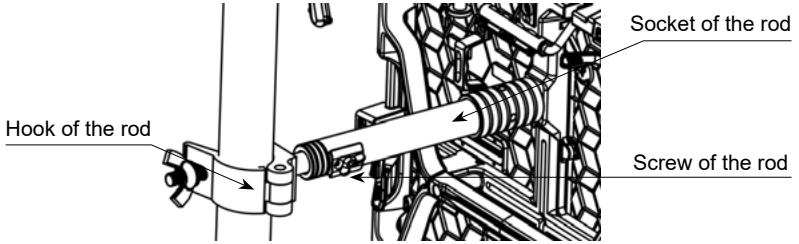


Figure 2.3.5 Stacking installation 3

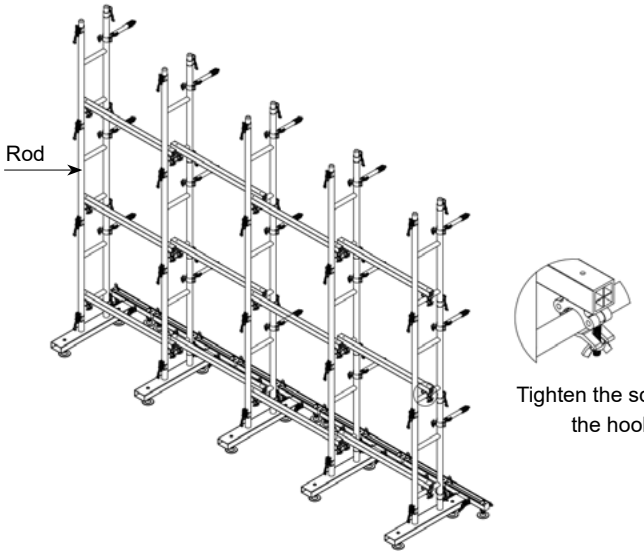


Figure 2.3.6 Stacking installation 4

Chapter 3 Common Questions

3.1 Software Problems

1. During start up, the connection is interrupted or a message is displayed indicating that the main control card cannot be found, or the software interface can't be adjust, that is, the gray state, and the software "LED Control Device List" has no main control icon.
Solution: Replace the USB cable; device management view device connections. Make sure the computer is virus-free; If it is built-in, the slot may be loose or the PCI may be damaged or interfered with. Reinsert or test the PCI interface with an eraser.
2. The indicator of the main control output network port is off.
Solution: There may be two cases, may not install the relevant control system software, please confirm the installation; Or if the FPD of the video card fails to open, right-click on the desktop My Computer → Properties → Settings → Advanced → Display →FPD.

3.2 Hardware Problems

1. The LED display does not show any content.
Solution:
a, Check whether the power is turned on;
b. Check whether the output signal source is open;
c. Check whether the display area is correct.
2. LED display display flower screen or block is not bright.
Solution:
a. Check whether the module is connected to the HUB;
b, Ensure that the check configuration file is loaded correctly;
c. Confirm that the correction is on or correct;
d. If the mask is damaged, it needs to be solved.
3. The LED indoor display picture is misplaced.
Solution: Re-confirm and connect the signal cable in the correct way.
4. Some pixels are not bright.
Solution: Repair and replace the LED

Chapter 4 Maintenance Of The Display Screen

The correct use of LED display is essential for the life and normal work of LED display, so in daily life, it is necessary to do a good job in the maintenance and maintenance of LED display.

1. Please read the "MU Series LED Display Operation Manual" carefully, the manufacturer does not assume any legal responsibility for the consequences caused by incorrect, incomplete, irresponsible or unsafe use of the installation system;
2. When moving the display cabinet, please handle it gently. Do not knock or collide with hard objects.
3. Please check whether the screws in each part of the cabinet are loose before use;
4. Before installing the screen, check whether the steel frame is firmly in place. For the display screen that has been installed for a long time, check the firmness of the mounting point regularly. If there is loosening, pay attention to timely adjustment, re-reinforcement or update the lifting;
5. The whole cabinet frame structure is prohibited from contact with oil, acid and other corrosive substances;
6. Pay attention to the anti-static work of the screen . Do not touch the lamp surface directly with your hands. It is recommended to wear gloves to install and debug the display.
7. The neutral line and the live line of the computer and control part of the power line can not be reversed, and should be plugged in strict accordance with the safety requirements;
8. The power switch of the display screen often trips, and the screen should be checked in time or the power switch should be replaced;
9. Open the screen should first open the PC, then open the LED screen; When turning off the screen, the LED screen should be turned off first, and then the PC should be turned off (Turning off the PC first

and not the LED screen will cause high highlights in the screen body, burning the lamp, and the consequences are serious);

10. If short circuit, tripping, wire burning, smoke and other abnormal appearance are found after moving, power testing should not be repeated, and problems should be found in time;

11. Proficient in installation methods, original data recovery, backup, control parameter setting, basic data preset modification;

12. Regularly check for viruses and delete irrelevant data;

13. Non-full-time personnel, please do not operate the control system software;

14. Can not perform in the storm storm dust;

15. After each performance, disassemble the display screen and put it back into the flight case before wiping the stains such as water stains on the surface of the positive and negative sides of the cabinet . The flight case must be clean and dry. If it is wet, it must be taken out to air or dry with the fan.

16. When installing and disassembling the display screen, pay special attention to protect the lights on the four sides of the display screen to prevent the LED light from being damaged;

17. Outdoor screen should not only consider the problem of humidity, but also do a good job of waterproof, dust-proof and other daily maintenance work; Good sealing installation can help the display to reduce the risk of water, regularly clean the dust attached to the display inside and outside, can also help the display better heat dissipation, reduce the attachment of water vapor;

18. The indoor screen should be properly ventilated, which can make the water vapor attached to the display quickly evaporate and reduce the relative humidity of the indoor environment. However, avoid ventilation in some windless and humid weather, which will increase indoor humidity;

19. Indoor screen in the room can be placed desiccant, the use of physical moisture absorption method, reduce the moisture in the air, reduce the probability of moisture;

20. If there is an air conditioner installed in the space where the display screen is installed, you can turn on the air conditioner for dehumidification in humid weather;

21. When it is wet and rainy, the wall is easy to condensation, and the cabinet should not be placed against the wall to avoid the water beads on the wall;

22. For the warehouse where the product is placed, it must be kept ventilated and dry, and the humid air cannot be gathered in the warehouse. It is recommended to locate at a higher place.

www.yes-led.com

Facebook

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