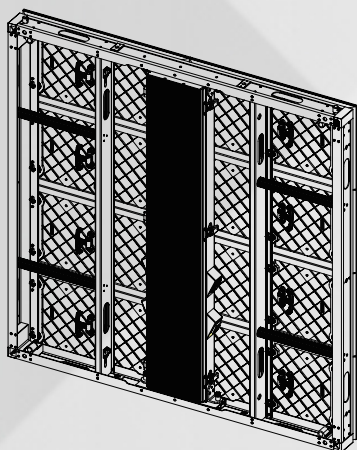




ES Series LED Screen

User Manual



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CAUTION

Warning: This is a Class A product, in a living environment, the product may cause radio interference, in this case, user may be required to take practical action against interference.



Caution 1

In order to avoid any physical damage, please read user manual carefully before connecting the switches.

1. LED screen should only be operated by trained professionals.
2. Do not expose any parts of LED screen to naked flame/smoke.
3. Personal are advised to wear safety helmet during operation.
4. Make sure all AC powers are well connected before turning on the switch.
5. Turn off all switches of LED screen, computer terminals, system box and monitors before performing any maintenance work.
6. Do not touch the power supply when switch is not turned off.

Caution 2:

In order to protect the normal lifespan of LED screen and avoid the damage of electronic components and luminescent tubes. Avoid the damage of device driver and loss of data. Please read the device installation operation rules carefully before operating the LED screen.

1. Turn off all switches of LED screen, computer terminals, system box

and monitors before connecting any cables.

2. Wear anti-static ring before replacing any electronic components.
3. Do not hot plug all computer connection cables while the power is running, ensure that all power is disconnected before unplugging any cables from the ports especially serial line ports.
4. To ensure the safety of product operation, please check the condition of the power cables every year.

Caution 3:

1. Make sure the LED screen should be properly grounded before working.
2. When the high voltage input is no more than 240V, the leakage current is no more than 3.5mA/m².

Caution 4:

1. The LED screen usage/storage environment should confirm to the requirements of the parameter sheet, otherwise the LED screen will be seriously damaged.
2. Avoid the cabinet working under condition with high content of organic solvent detergent (such as kerosene, rust-proof oil, etc.).

Caution 5:

1. Warning for CE certification:

Warning: This equipment conforms to CISPR class 32 standard. In a residential environment, the equipment may cause radio interference.

2. Warning for FCC certification:

This equipment conforms to part 15 of the FCC rules. Operation is subject to the following two conditions.

- (1) This equipment can not cause harmful interference.
- (2) This equipment must accept any interference received, including interference that may cause unanticipated operation.

Warning: Changes or modifications to the equipment that are not expressly approved by the party responsible for compliance may not allow the user to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for Class A digital devices in accordance with Part 15 of the FCC Rules.

These restrictions are intended to provide reasonable protection against harmful interference with residential facilities. This equipment generates, uses and radiates radio frequency energy, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, users are encouraged to try to correct the interference by one or more of the following measures:

- Reorient and relocate the receiving antenna.
- Strengthen separation between device and receiver.
- Connect the equipment to a socket with a different circuit from that to which the receiver is connected.
- Ask for help from the dealer or an experienced radio/TV technician.

Special statement:

If you need repair or modify the product, please contact our company in advance.

Warranty period:

In principle, the warranty period of the product is based on the warranty period stated on the quotation.

During the warranty period, our company will not guarantee any problem caused by the following reasons.

- Problems caused by users disassembling product arbitrarily or not properly maintaining it.
- Problems arising from incorrect transportation and storage.
- Problems arising from use beyond the rated parameters of the product.
- Problems arising from incorrect installation.
- Problems caused by fire, earthquake, storm, flood, lightning and other natural or man-made disasters such as riots, wars, radiation, etc.

Sign for restricted use of harmful substances in electronic and electrical products :



1. The sign indicates that the environmental protection period of electronic and electrical products is 10 years;
2. It indicates that the electronic and electrical products contain some harmful substances, which can be used safely within the environmental protection period. They should be entered the recycling system after exceeding the environmental protection period.

Preface

Outdoor LED display ES series cabinets, are made of aluminum materials, adopting modularization and standardized design concepts, covering YES-P03JUFU, YES-P04IUFU, YES-P05JUFK, YES-P07IUFU, YES-P10EUFU, YES-P15GUFK. It is a lightweight and energy saving outdoor fixed product of YESTECH.

ES series cabinets are light and thin, 1000mm*1000mm cabinet only 25kg/m²; support both front and rear maintenance; quick and convenient installation, more user-friendly; it has ultra-large size and ultra-high brightness, which more meets the market demand, widens the applications, and makes it as an important choice of commercial advertising, radio and television media, municipal engineering, stadiums and other applications.

In order to ensure that the product can be used normally under reasonable conditions and get your approval for the product, we will detail the installation and use process and precautions of the product. Please read it carefully before installing and debugging the display.

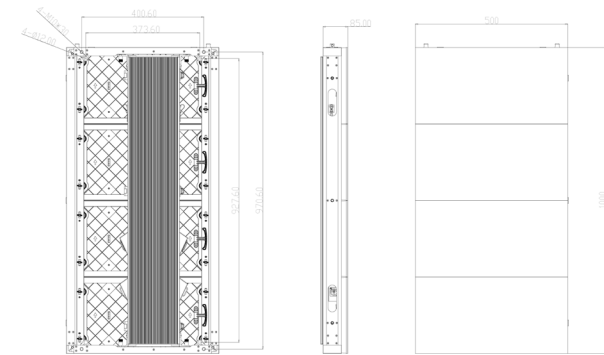
Warm reminder: If there is no special instructions, all models of this series have the same operation method as this manual.

Chapter 1 LED Cabinet

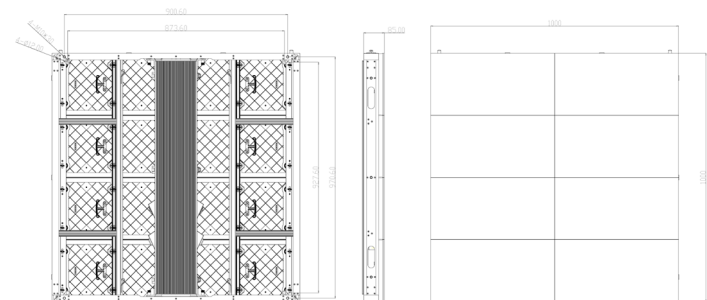
The interior of the LED cabinet contains the structure, the module and the control receiving part.

1.1 Cabinet Structure

The frame structure of the ES series box is made of aluminum. Compared with the traditional iron structure, the weight is reduced by more than 50%. The size of the cabinet is 500*1000*85mm and 1000*1000*85mm (Figure 1.1.1).



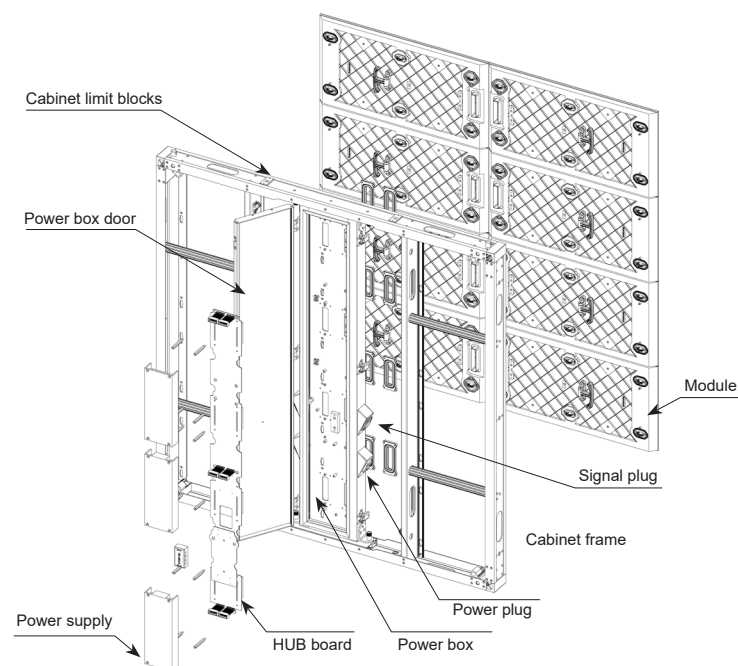
500*1000 Cabinet



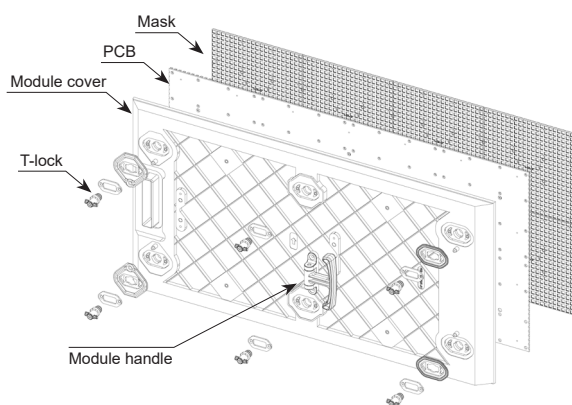
1000*1000 Cabinet

Figure 1.1.1 Schematic diagram of the cabinet

1.2 Product Structure Diagram



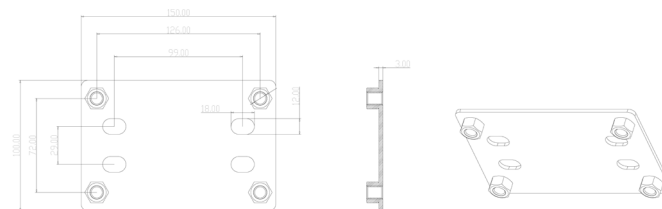
1.2.1 Cabinet structure diagram



1.2.2 Module structure diagram

Chapter2 Cabinet Connection

2.1 Connection of connector and cabinet



The rear and front connector

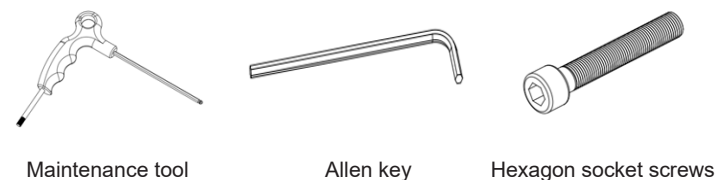


Figure 2.1.1 Cabinet connection components

As shown in Figure 2.1.2, when the cabinet is installed, the upper and lower, left and right limit blocks of the cabinet can ensure the flatness of the front and rear of the screen, and the M8 socket head screws can be used to fine-tune the position of the upper, lower, left and right limit blocks of the cabinet, which can ensure the screen body. The gap between the upper and lower, left and right; the box can be fixed on the steel frame by using M10 socket head cap screws and the front and rear connecting pieces of the box to complete the installation of the entire screen; when the screen needs maintenance, insert the maintenance tool into the T-lock, left and right Rotate the tool to complete the disassembly and installation of the module.

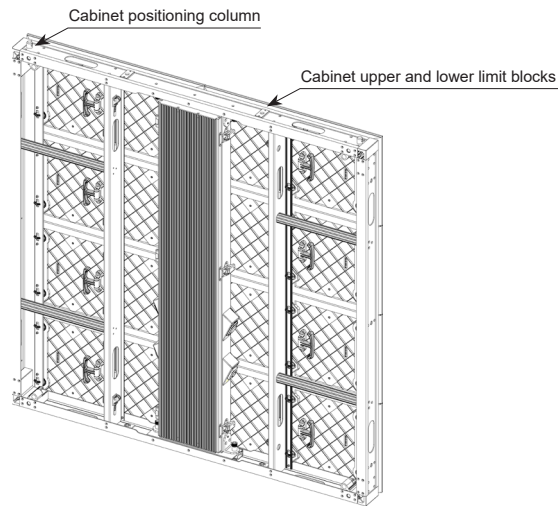
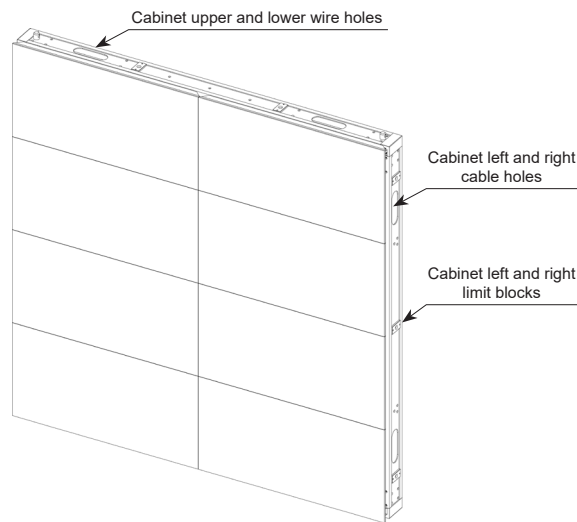


Figure 2.1.2 Connection of cabinet

2.2 Signal and power cable connection between cabinets

ES series is adopting removable cable design, adopting Cat5 cable(signal cable)and power cable to connect each cabinets. Convenient connection between cabinets. We only need to connect the signal cable connector of the previous box to the idle socket of the input end, and the same is true for the connection of the power cord. A port input a port output, the box input signal from the previous box output signal, the box output signal of the next box input signal.

But the signal cable is used for signal transmission between the screen and the sending card (PC, video processor, etc.) (fiber + photoelectric converter is recommended for long-distance signal transmission).

There is no fixed input or output port for the signal. In actual operation, either side can be used as input or output. The operation is very flexible, as shown in Figure 2.2.1.

The source of the signal is the sending card end, including a PC equipped with a sending card, an independent main control box, and a video processor equipped with a sending card.

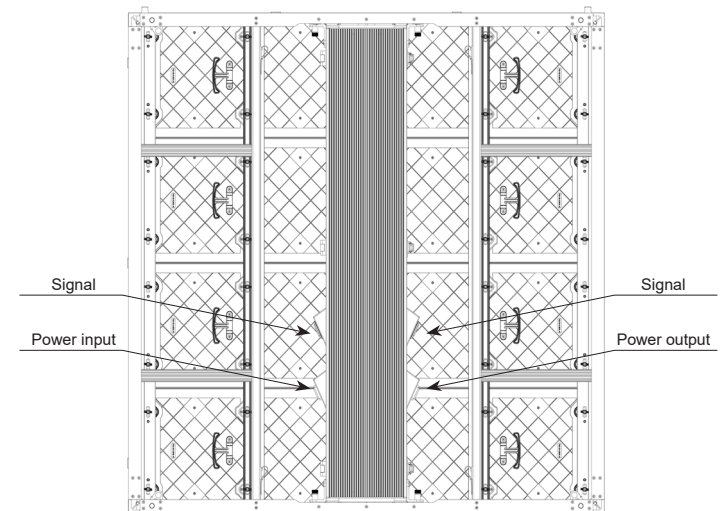


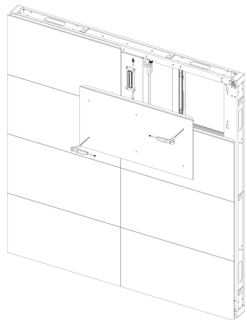
Figure 2.2.1 Signal cable and power cable connections between cabinets

Chapter 3 LED Screen Installation

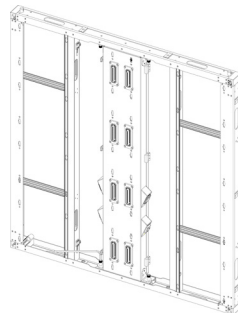
For LED screen installation, the ES series provides customers two installation methods: front maintenance fixed installation and rear maintenance fixed installation.

3.1 Front maintenance fixed installation

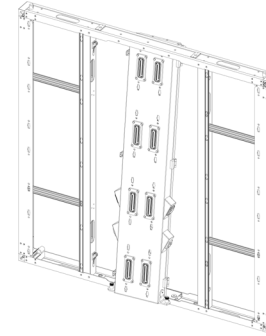
Front maintenance and fixed installation. In this way, after disassembling the module, the cabinets frame is first installed on the wall or on the steel frame. The wall needs to be firm and reliable, and then the module is fixed on the cabinets frame from the front. There is no maintenance channel reserved behind the screen, but in order to ensure that the internal components of the power box can be maintained from the front, at least 80mm of space needs to be reserved behind the cabinets, so that the power box can be rotated to 180°, so that we can maintain power box from the front. As shown in Figure 3.1.1.



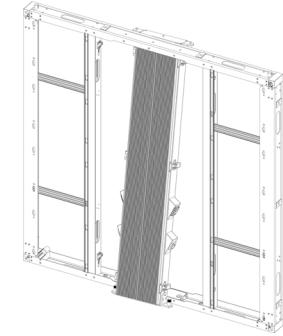
Unlock the module with a tool



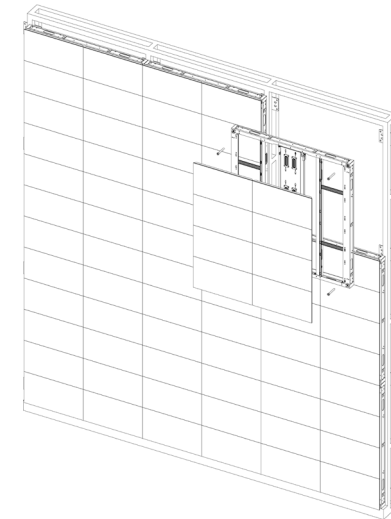
Unlock the power box



Take out the power box



Fix power box, remove some components



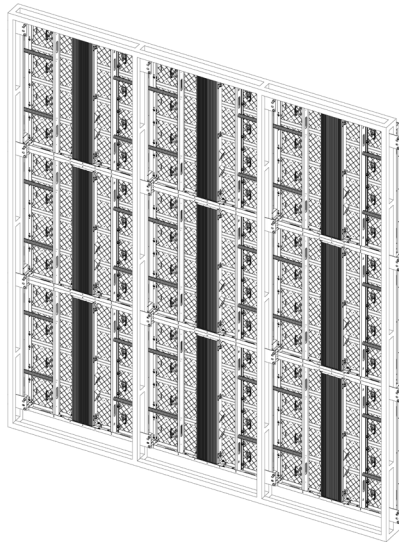


Figure 3.1.1 Front maintenance

3.2 Rear maintenance fixed installation

Rear maintenance fixed installation, this method is to fix the cabinet on the steel frame, and reserve a maintenance channel needs behind the steel frame. The cabinets is fixed on the steel frame through the installation plate. This method is relatively convenient. As shown in Figure 3.2.1.

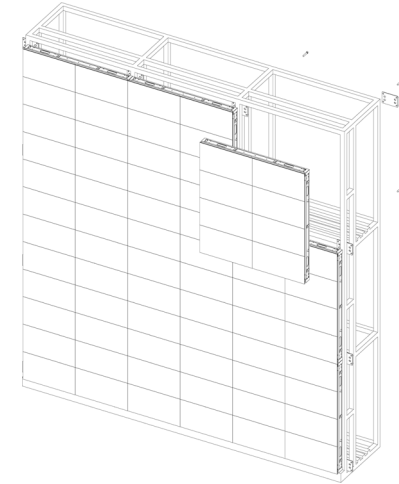
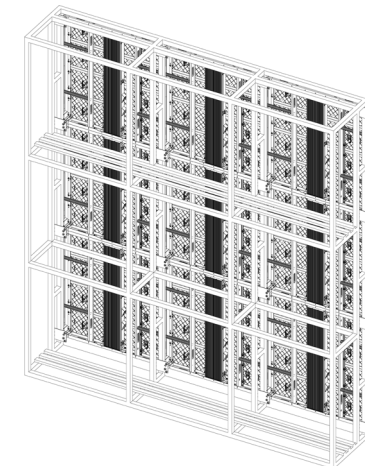


Figure 3.2.1 Rear maintenance

Chapter 4

Frequently Asked Questions for LED Screen

4.1 Software Questions

1. Connection interruption or prompt unable to find the control card when starting the software, or the interface of the software is not adjustable, that is gray status, and there is no main controlling icon of the software LED control equipment list.

Solutions:

- Change USB cable.
- Check the equipment connection in the equipment manager.
- Ensure that the computer is free of virus.
- If it is the internal sending card, probably due to the loose slot or damaged PCI, or the interference of foreign matter. Please insert sending card again or clean PCI interface by rubber.

2. Indicator light of the output port of sending card is not on.

Solutions:

- Probably relevant control software has not been installed, if so, please ensure the software is successfully installed.
- Or the FPD of the graphics card is closed, if so, please right click "my computer" on the desktop, and then click properties → setting → advanced → display → FPD.

4.2 Hardware Questions

1. There is no content on the LED display.

Solutions:

- Check whether the screen is powered on.
- Check whether the output signal is open.
- Ensure whether the display area is correct.

2. The cabinet of the LED display is blurred or not bright in certain cabinets.

Solutions:

- Check whether modules and HUB is connected.
- Check whether the configuration file is uploaded correctly.
- Ensure the calibration is open and correct.
- Please change the broken masks if there is.

3. The picture of the LED indoor screen cabinet is in a wrong order.

Solution: Please recheck and connect signal cables in right way.

4. Individual LED lamps are not on.

Solution: Please repair or replace the dead LEDs.

Chapter 5 LED Screen Maintenance

Proper use is very important for the long lifespan and proper functioning of the LED display. So daily maintenance of the LED display must be done carefully.

1. Please read the ES Series LED display User Manual carefully. The manufacturer do not take any legal responsibility of the consequence due to the incorrect, incomplete, irresponsible, or unsafe use of the installation system.
2. Please handle the LED display cabinet carefully, avoid collision and strike.
3. Please check the cabinet carefully to ensure there is no loose screw before using.
4. Please confirm the steel frames are kept in place firmly before installation, for the screen already been installed for a long time, regular checking for the connection parts are required. If found any loose part, strengthen or change new hanging parts in time.
5. Keep the whole cabinet frames away from oil, acid and other corrosive material.
6. Pay attention to the anti-static work of the screen body, do not touch the LED face directly by hand, wearing gloves when you install and debugging of the screen is recommended.
7. Null line and firing line of the power cable in the computer or the control system can't be connected reversely, it should be connected strictly according to the original position.
8. If the power switch trip happened frequently, please check the screen body or replace the power supply switch.
9. When lighting the screen, turn on the PC first, then turn on the LED display. When stopping work of the screen, turn off the LED

display firstly, then turn off the PC (otherwise, it will cause serious consequences such as the screen highlights, burn the lamp).

10. If abnormalities such as short-circuit, tripping, wire burning, or smoking are exist after moving the screen, the power-on test should not be repeated and the problem should be figured out in priority.

11. Master the installation method well, also the original data recovery, backup, and the controlling parameter setting, basic data preset modification.

12. Inspect the virus regularly, delete irrelevant data.

13. Software operation is under professional engineers.

14. Installing and disassembling the LED display, pay attention to protect the LEDs on the four sides of the cabinet from damage.

15. For the warehouse where placing the products, it must to keep it ventilated and dry, do not let the moist air gathering in the warehouse, choosing a site that in higher terrain is suggested.



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