# Absenicon X series

# X108 User manual

# Catalogue

# Safety Information


The following marks on the product and in this manual indicate important safety measures.


WARNING!
Safety risk! Might cause equipment damage or safety risk.


WARNING!
Please read the manual before operating.


WARNING!
Dangerous voltage! Might cause equipment damage or electric shock.


WARNING!
Hot surface! Do not touch.


WARNING!
Flammable!


WARNING!
Possible damage to eyes.

WARNING: Be sure to understand and follow all safety guidelines, safety instructions, warnings and precautions listed in this manual.
This product is for professional use only!
This product may result in serious injury or death due to fire hazard, electric shock, and crushing hazard.

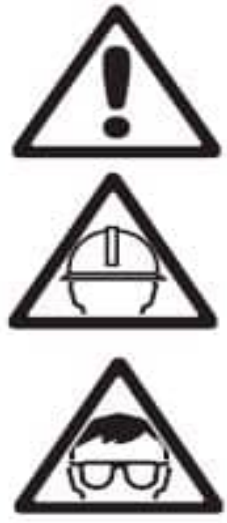
Please read this manual carefully before installing, powering up, operating and maintenance of this product.
Follow safety instructions in this manual and on the product. If you have any questions, please seek help from Absen.

Beware of Electric Shock!

• To prevent electric shock the device must be properly grounded during installation, Do not ignore using the grounding plug, or else there is a risk of electric shock.
• During a lightning storm, please disconnect the device's power supply, or provide other suitable lightning protection. If the equipment is not in use for a long time, please unplug the power cord.
• When performing any installation or maintenance work (e.g. removing the fuses, etc.,) make sure to turn off the master switch.
• Disconnect AC power when the product is not in use, or before disassembling, or installing the product.
• The AC power used in this product must comply with local building and electric codes, and should be equipped with overload and ground fault protection.
• The main power switch should be installed at a location near the

product and should be clearly visible and easily reached. This way in case of any failure the power can be promptly disconnected.
• Before using this product check all electrical distribution equipment, cables and all connected devices, and make sure all meet current requirements.
• Use appropriate power cords. Please select the appropriate power cord according to the required power and current capacity, and ensure the power cord is not damaged, aged or wet. If any overheating occurs, replace power cord immediately.
• For any other questions, please consult a professional.

Beware of Fire!
• Use a circuit breaker or fuse protection to avoid fire caused by power supply cables overloading.
• Maintain good ventilation around the display screen, controller, power supply and other devices, and keep a minimum 0.1 meter gap with other objects.
• Do not stick or hang anything on the screen.
• Do not modify the product, do not add or remove parts.
• Do not use the product in case ambient temperature is over 55 ℃.



Beware of Injury!
• Warning: Wear a helmet to avoid injury.
• Ensure any structures used to support, fix and connect the equipment can withstand at least 10 times the weight of all the equipment.
• When stacking products, please hold products firmly to prevent tipping or falling.
• Ensure all components and steel frames are securely installed.
• When installing, repairing, or moving the product, ensure the working area is free of obstacles, and ensure the working platform is securely and stably fixed.
• In the absence of proper eye protection, please do not look directly at the lit screen from within a 1 meter distance.
• Do not use any optical devices that have converging functions to look at the screen to avoid burning the eyes.

Product Disposal

• Any component that has a recycling bin label can be recycled.

• For more information on collecting, reusing and recycling, please contact the local or regional waste management unit.

• Please contact us directly for detailed environmental performance information.

WARNING: Beware of suspended loads.

LED lamps used in the module are sensitive and can be damaged by ESD (electrostatic discharge). To prevent damage to LED lamps, do not touch when the device is running or switched off.

WARNING: The manufacturer shall not bear any responsibility for any incorrect, inappropriate, irresponsible or unsafe system installation.

# 1. Product Introduction

Absenicon X series has three size, 108″, 136″, 163″ (This user manual is only for 108″), which are 16:9 standard ratio. Absenicon X series has features of super high level display effect and micro-pitch, which are based on new technology of Micro LED. The purpose of Absenicon X series is to satisfy the requirement of high-end meeting room, lecture theater, lecture hall and other middle-and large-sized spaces better.

Absenicon X series adopt Highly integrated design and built-in speakers, control system and other equipment, which means that the product does not need any other external equipment. The lifting design of control box and 5mm narrow trims make the screen-to-body ratio be 98%. All size of products have the installations of wall mounting and Electric lifting bracket.

Absenicon X series product get perfect upgrades which are based on original products. The X series product can be integrated with equipment of Crestron and Extron by contract of central control, so it can realize the centralized control and promote the efficiency of management.

In addition, the display effect of X series gets giant improvement with technology of inverted COB. What's more, the product not only realizes the interactive function of infrared touch, but also has diverse meeting modes and intelligent environment. Therefore, the product has higher ability to promote attention of audience, strength influence of speech and improve efficiency of meeting.

## 1.1 Main product features

- **New technology of Micro LED improves display effect comprehensively**

X series product uses inverted COB and Micro LED display technology to realize the high density integration of LED matrix and micro-pitch. The technology highly improve the display effect, 15000:1 contrast ratio, 90% BT2020 color gamut, 3840 refresh rate and 14 bite gray scale. All improvement can more precisely restore the log of enterprise, brand identity and color schemes. 600 nits brightness can make sure the content is shown clearly in any environment conditions

- **Highly integrated screen**

Absenicon X series adopts highly integrated All-in-one design, which means it does not need any other external equipment. Two 15W speakers, control system , intelligent system and other equipment are all Integrated in finite space of screen, which make it appearance clean.

- **Infrared touch improve the interactive function**

Absenicon X series can choose to install the frame of infrared touch, which improves the function of interaction. The function of infrared touch can recognize some gestures and precise control of multi-points touch function. Therefore, the product can be more suitable and convenient for diverse meeting schemes.

- **High screen-to-body ratio**

There is no any gaps between cabinets and broader inside screen to block the display content. The lifting design of control box and 5mm narrow trim make the screen-body-ratio achieve to 98%, which can give the audience better immersive experience.

Top / left / right / bottom border width is 5 / 5 / 5 / 40mm respectively

- **Whole screen correction and excellent picture consistency**

Calibrating the whole screen before leaving the factory uniforms the screen brightness and color,which can eliminate the phenomenon of Mosaic, bright / dark lines, uneven modularity and others.

- **Comfortable using experience**

The surface of the screen is more like nature luminous resource, so it is different from traditional products which are pixels luminescence. Thus, the lighting is smoother and gives audience a comfortable experience. The surface temperature of X series product is 10℃ lower, compared With other products, because of the inverted COB technology. The operation of product will not increase the room temperature and be silent in order to give a cheerful watching experience.

- **Remote control and interface is simple and easy to use**

Remote control enables switching, brightness / color temperature adjustment, content switching, page turning and other functions; the remote control adopts infrared and Bluetooth dual signal transmission mode, the maximum remote distance can reach 20m.
Compatible with the mainstream central control system: it can be integrated with the central control equipment such as Crestron and Extron by providing the network control protocol to quickly build a professional conference ecological environment, to achieve centralized control, and greatly improve the efficiency of business management

- **Wireless screen projection of a variety of split screen modes**

Screen projection: the laptop screen is immediately shared to the large screen through the screen projection. PPT, pictures and other documents are easily projected too, which makes work report faster.
Wireless flash cast： support computer, mobile phone, tablet and other device; support IOS, Android, Windows and other kinds of systems.
multi-device screen projection: support full screen, two split screen, four split screen and other screen projection modes to present more content and get efficient meeting decision.

- **Intelligent system and massive applications downloadable**

The X-series screen has Android 11.0 system and can be compatible with more software to meet more needs. At the same time, it supports 2.4GHz / 5GHz dual-band wireless signal which is smooth. You can cast the screen and surf the Internet simultaneously.

- **Max protection performance**

Surface encapsulation technology can protect chip and other internal devices effectively. The ability of defence make screen do not scare of damp, dirt, strike, static electricity, trail of touching, oxidation and blue-light. The life span of product is over 100,000 hours.

- **Energy saving and low-carbon**

The new technology of energy saving lower 40% consumption compared with other kinds of

products at the same situation. In addition, the packaging of product also adopt the recycle material to show and spread the thoughts of environment-protection.

- **Convenient installation**

The Absenicon X series adopts shipping method of whole vertical cabinets, which makes the installation much easier. All three size of Absenicon X series support with wall mounting and Electric lifting bracket.

- **Convenient maintenance with wonderful service**

The maintenance of modules does not need to reverse space. The daily cleaning process can use wet cleaning tool to wipe directly, which is easy to clean and protect. The Absen serive can go directly to your place to help at any time and any place.

## 1.2 Protect specifications

| Parameter | | Absenicon X108 | | |
|---|---|---|---|---|
| Physical Parameter | LED Type | Flip Chip COB | | |
| | Display Diagonal Size (Inch) | 108 | | |
| | Pixel Pitch (mm) | 1.25 | | |
| | Display Size（W×H）/（mm） | 2400*1350 | | |
| | Screen Size（W×H×D）/（mm） | 2410*1395*39.3/2442*1426*39.3(touch vision) | | |
| | Packaging Size(W×H×D)（mm） | 1700*880*1140mm（Standard packaging） | | |
| | Net Weight（kg） | 86.8/94.8(touch vision) | | |
| | Display Weight（kg）(Including frame and rim) | Wall mounting | Mobile stand | Electric lifting bracket |
| | | 98.8/ 106.8（touch version） | 108.8/ 116.8（touch version） | 256.8/ 264.8（touch version） |
| Display Parameter | Pixel Per Display（Pixels） | 1920*1080 | | |
| | Maximum Brightness（nit） | 600 | | |
| | Contrast Ratio | 15000:1 | | |
| | Gray Scale（Bit） | 14 | | |
| | Refresh Rate (Hz) | 3840 | | |
| | Viewing Angle(H/V)（°） | 160/160 | | |
| Electrical Parameter | AC Operating Voltage（V） | AC 100-240V | | |
| | Power Consumption（Max）(W) | 376 | | |
| | Power Consumption（Avg.）(W) | 1128 | | |
| System parameter | Android system | Android 11.0 | | |
| | Wifi | Support Wifi 6.0 | | |
| | Blue tooth | Support Blue tooth 5.0 | | |
| | CPU | 64-bit quad-core 1.8 GHz CPU | | |

| | | |
|---|---|---|
| | System Memory | DDR4-4GB |
| | Storage | 32GB |
| | Control Interface | RJ45*1，RS232*1 |
| | I/O Interface | HDMI1.3 IN*3，HDMI1.3 OUT*1，USB2.0*4，Audio OUT*1，SPDIF OUT*1 |
| | OPS | Optional |
| Application parameter | Operating Temperature（℃） | -10℃～40℃ |
| | Operating Humidity（RH） | 10～80%RH |
| | Storage Temperature（℃） | -40℃～60℃ |
| | Storage Humidity（RH） | 10%～85% |
| | IP Rating（Front/Rear） | IP40/IP21 |
| | Maintenance | Front-maintenance |
| | Certification | CCC,CE,FCC,ETL |

*REMARK:POWER CONSUMPTION TOLERANCE: ±15%, ACCORDING TO THE ACTUAL SITUATION.*

## 1.3 Screen dimensional drawing(mm)

### 1.3.1 The wall mounting dimensional drawing of X108(mm)

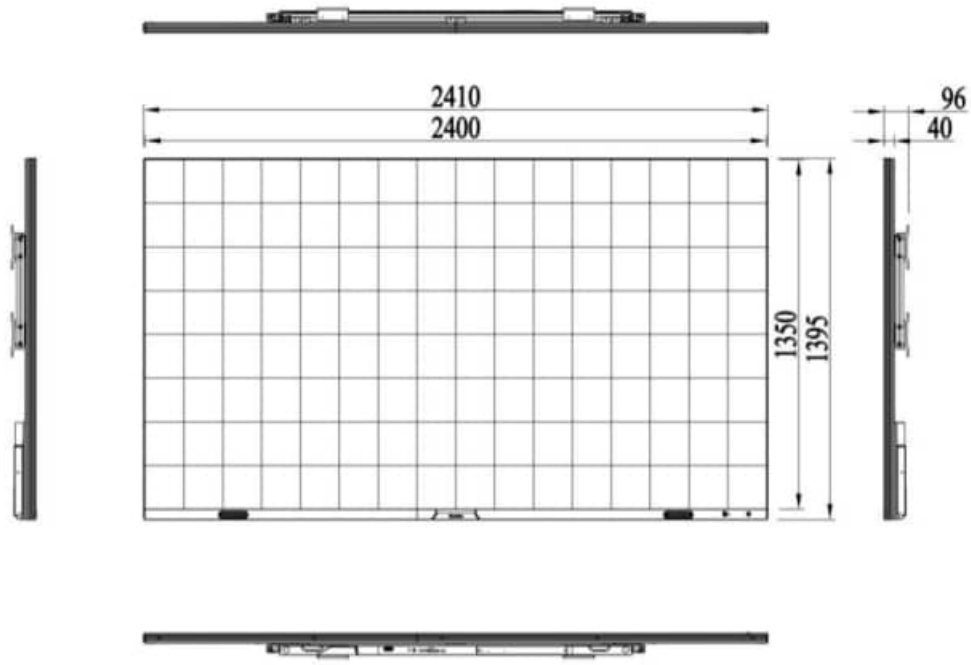



Figure 1. The dimensional drawing of non-touch version wall mounting X108

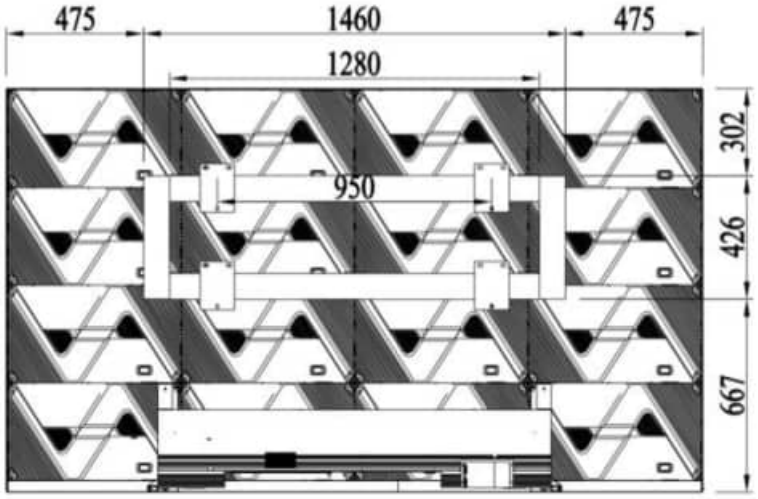



Figure 2. The back view of non-touch version wall mounting X108

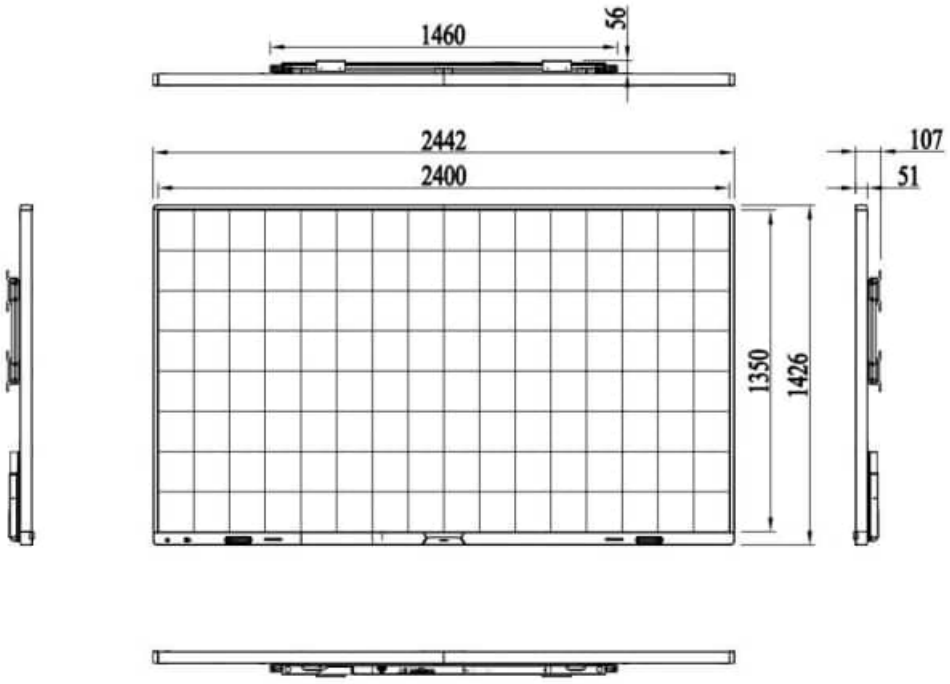



Figure 3. The dimensional drawing of touch version wall mounting X108

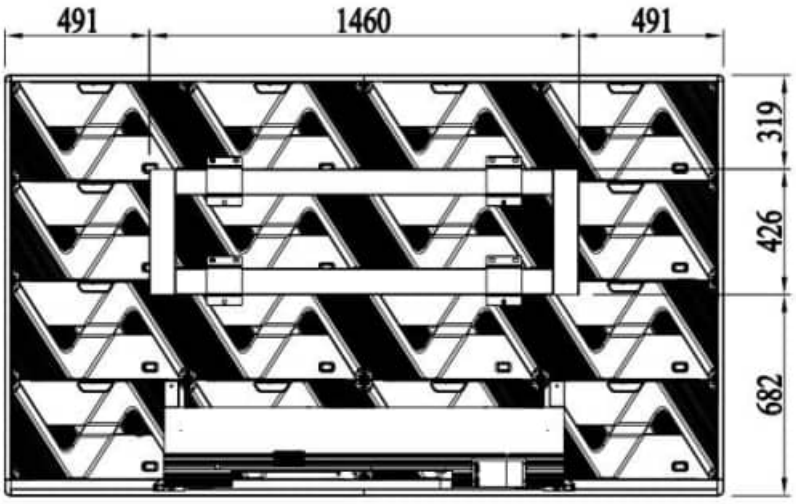



Figure 4. The back view of touch version wall mounting X108

### 1.3.2 The dimensional drawing of mobile stand X108(mm)

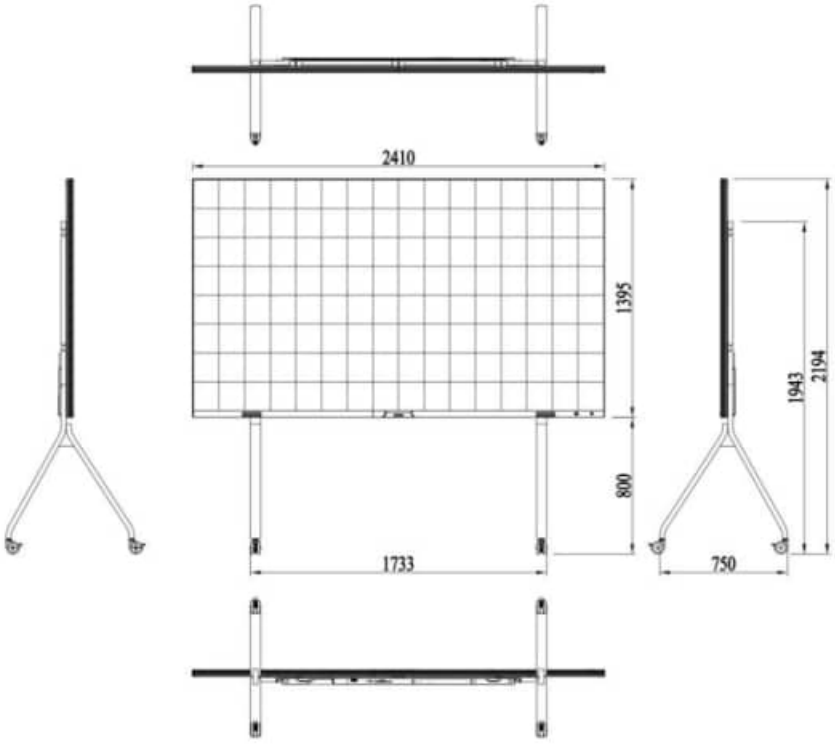



Figure 5. The dimensional drawing of non-touch version mobile stand X108

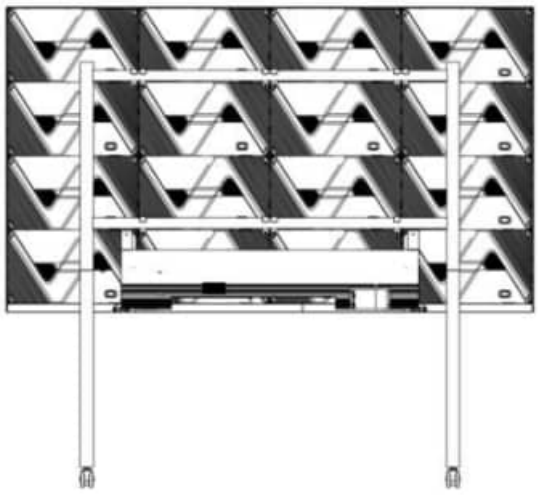


Figure 6. The back view of non-touch version mobile stand X108

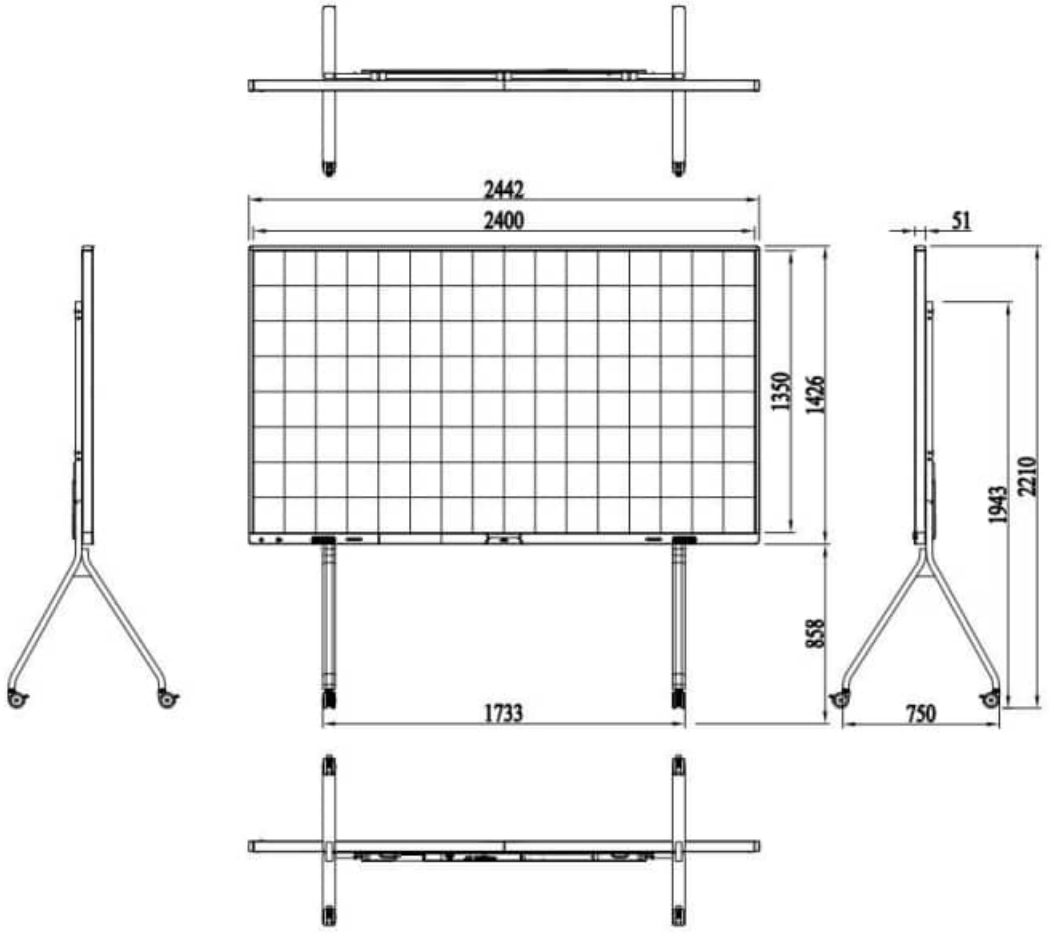



Figure 7. The dimensional drawing of touch version mobile stand X108

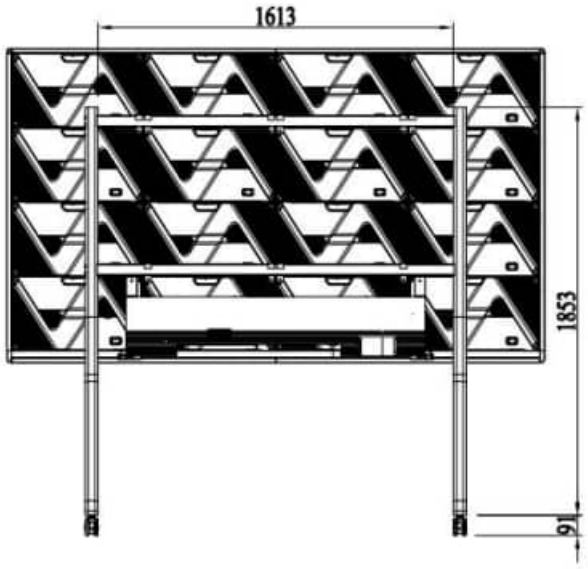
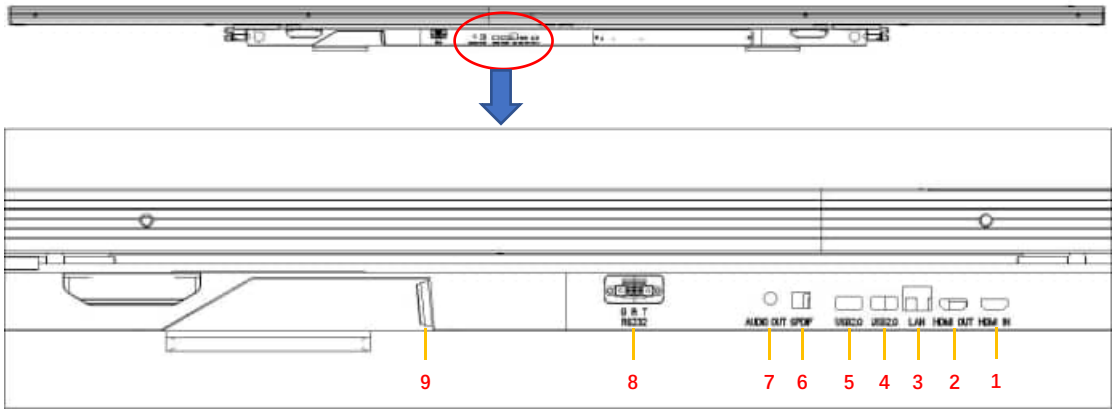



Figure 8. The back view of touch version mobile stand X108

## 1.4 The interface of Device

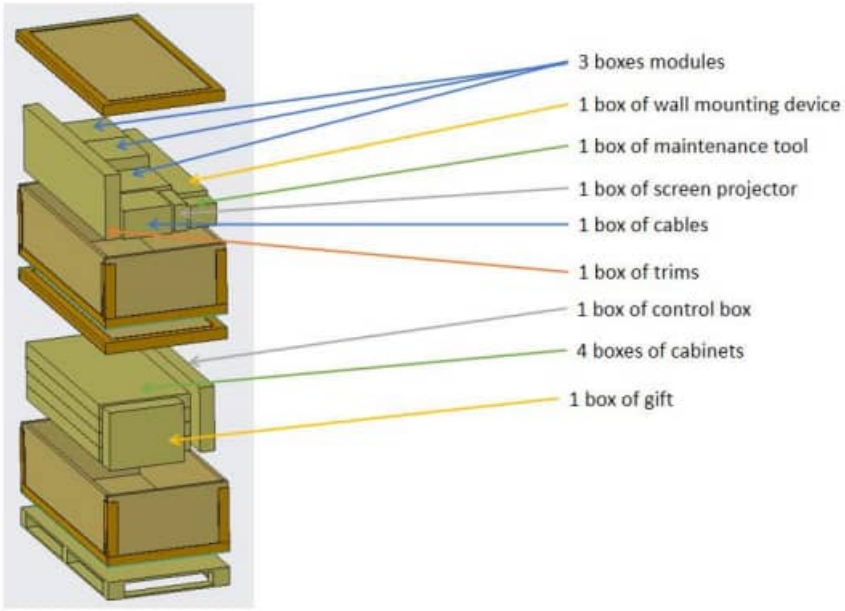


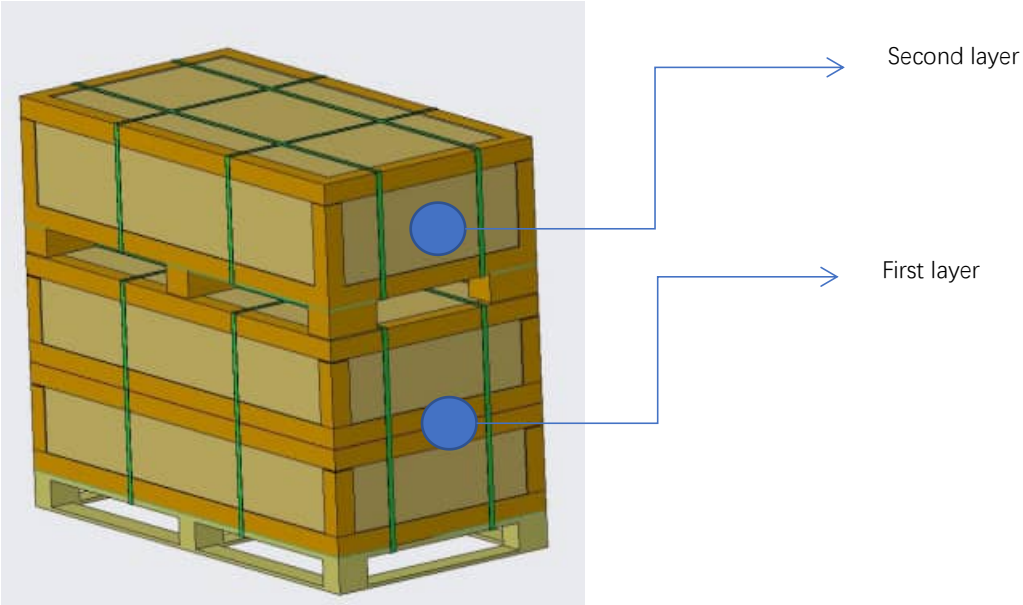

| | | | |
|---|---|---|---|
| 1 | HDMI IN | 6 | SPDF |
| 2 | HDMI OUT | 7 | AUDIO OUT |
| 3 | LAN | 8 | RS-232 |
| 4 / 5 | USB2.0 | 9 | POWER |

## 1.5 Standard Packaging

### 1.5.1 Standard packaging of X108

- The standard packaging of X108 is carton packing which can support for 800kg without any deformation
- The first layer carton packaging size: 1700x870x1140mm
- The second layer carton packaging size: 1700x870x520mm
- The mobile stand can put into carton packaging directly



# 2. Product Installation

The product can realize installation of wall mounting ,mobile stand and Electric lifting bracket.

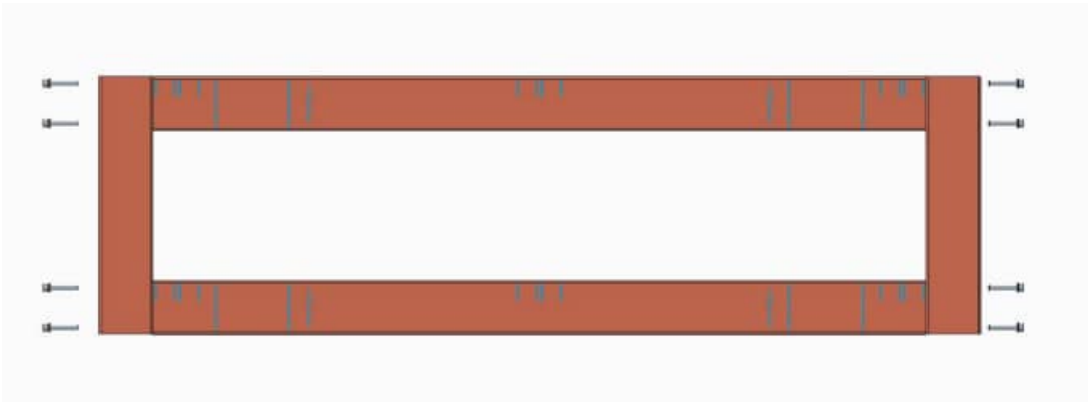
## 2.1 Installation tools

| serial number | Tool name | photos | serial number | Tool name | photos |
|---|---|---|---|---|---|
| 1 | art knife |  | 5 | Pre-maintenance tools |  |
| 2 | Allen key |  | 6 | PH2 Phillips screwdriver |  |
| 3 | flexible sleeve |  | 7 | rubber mallet |  |
| 4 | laser level |  | 8 | pneumatic drill |  |

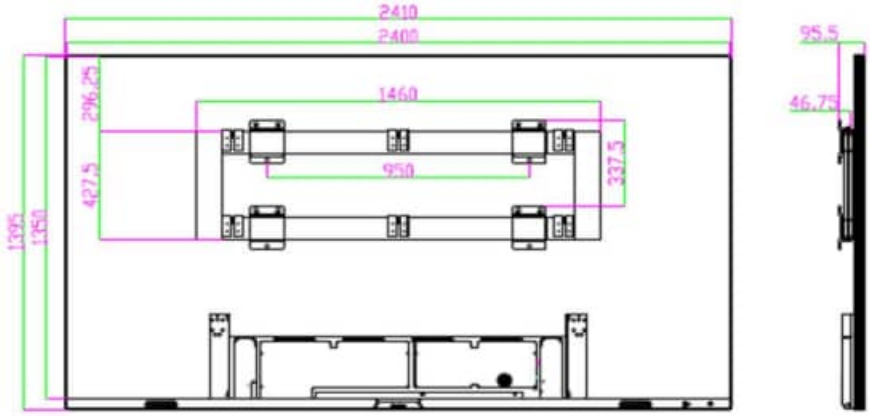
## 2.2 Wall Mount Installation Guide

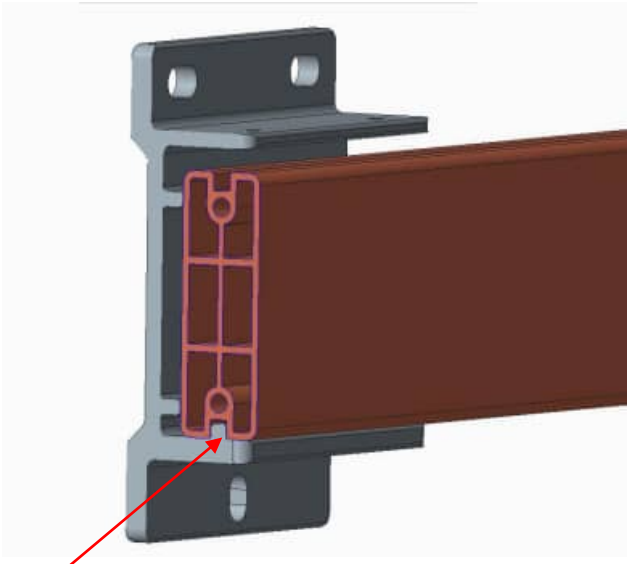
### 2.2.1 Installation step of wall mounting equipment

Step 1: Taking out the back frames from packaging, including the horizontal and vertical beams. Setting it up on the ground with the front side facing up (the side with the silkscreen logo on the beams is the front side); Assembling the four sides of the back frames, including two horizontal beams and two vertical beams, and fixing them by eight M8X60 screws.



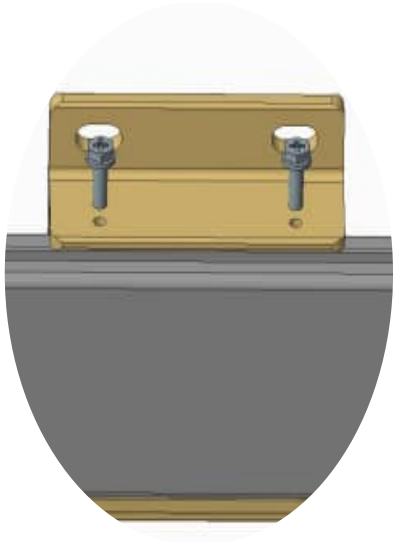
Step 2: Installing the fixing angle code of back bracket. As the following pictures shown, the pictures shows the detail installation process.

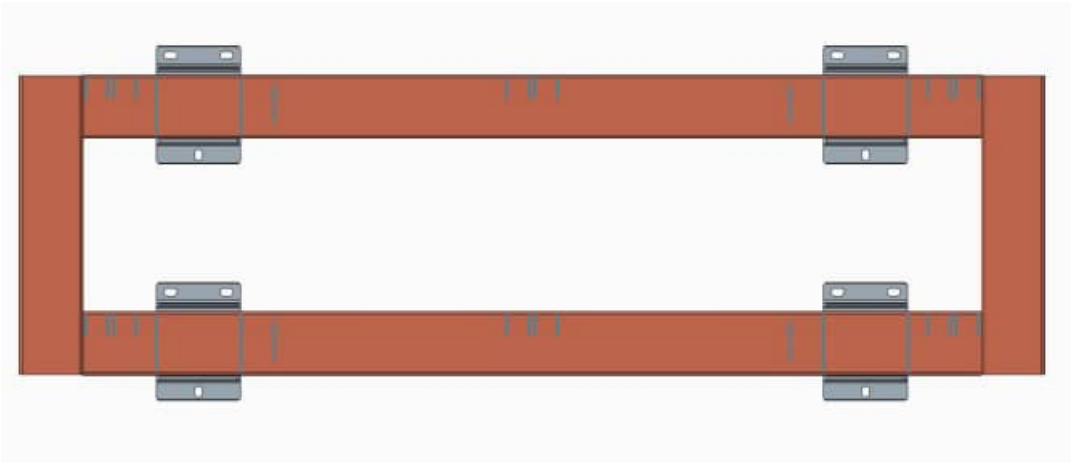


Notes: When installing the wall bracket, the groove at the bottom of the wall bracket needs to be in contact with the protruding part of the Angle code.

Step 3: Using 8pcs M6X20 to lock the safety screws at the angle code to make sure the wall bracket will not mover, after finish the installation of the wall bracket.

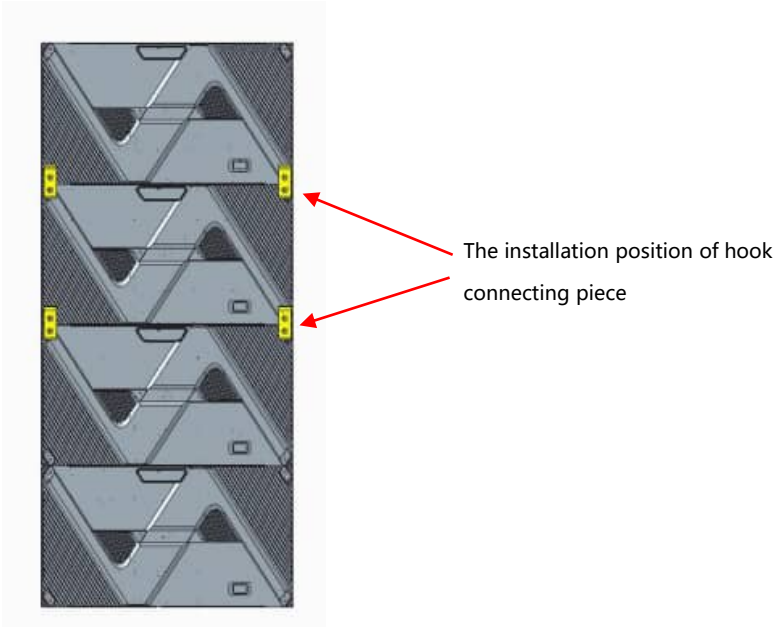




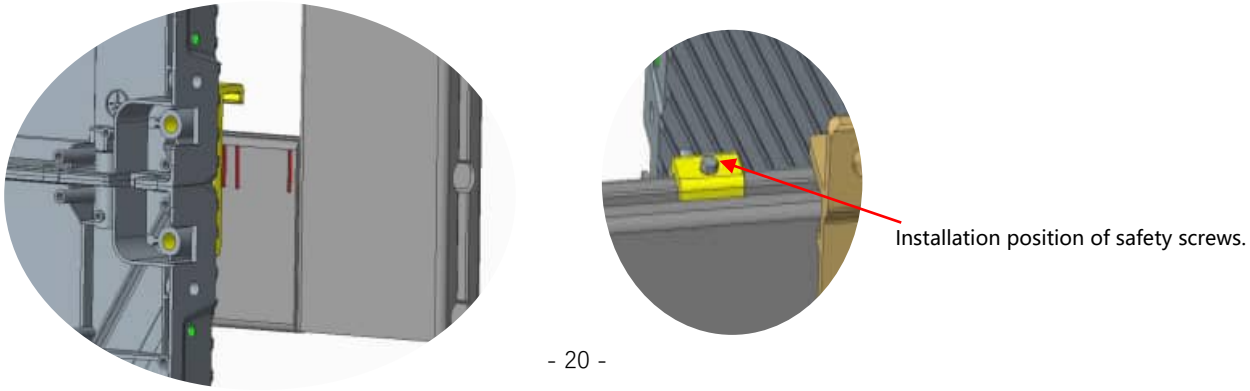
**Schematic diagram of the completed installation**

## 2.2.2 Screen installation

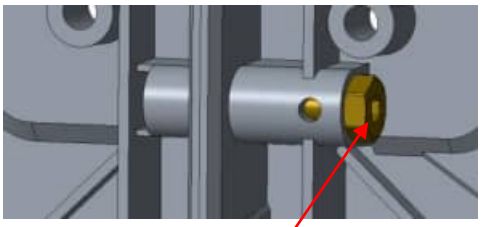
Step 1: Taking out the box and using 24 M6X16 screws to install the hook connecting piece which is in the back of the cabinets. In addition, the left and right side' s cabinets only need to be installed one side of the cabinet.



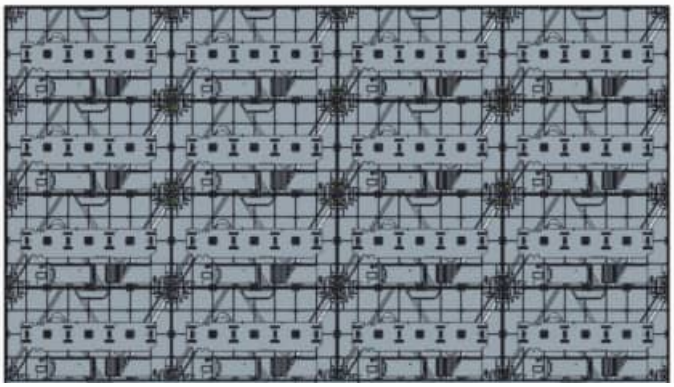

Step 2: Hanging the cabinets at middle position first, and hooking the hook connecting piece on the back of the cabinets into the groove of the back of the back frame beam profile. Finally, installing the cabinets safety screws by two M4X10 screws.



Step 3: Hanging the left and right sides of the cabinets in turn and locking the cabinets by the connecting bolts on the left and right of the cabinets.

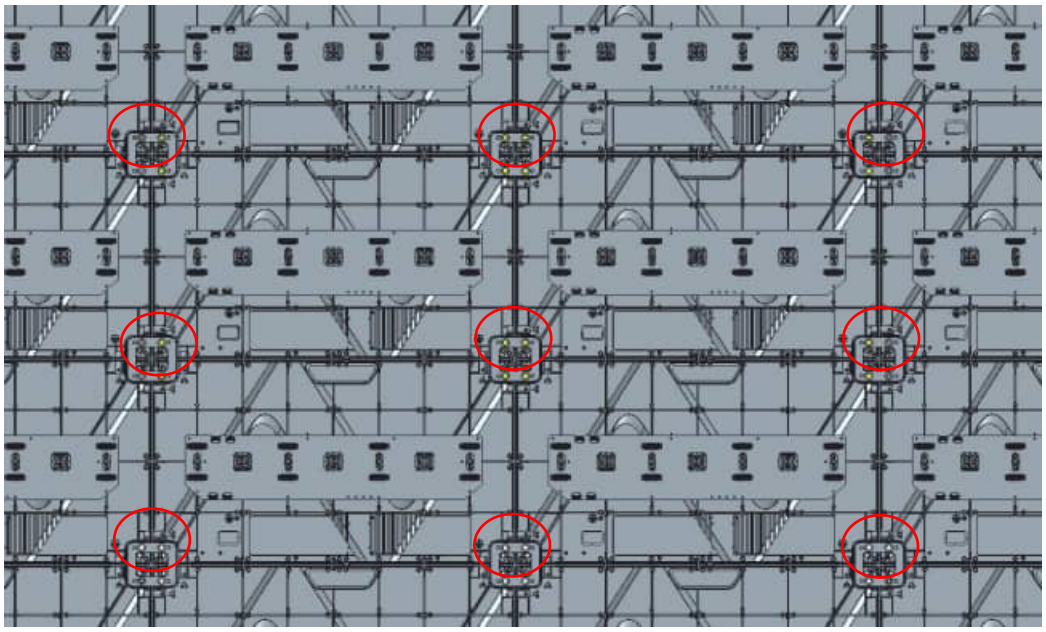


Connecting bolts of left and right cabinets



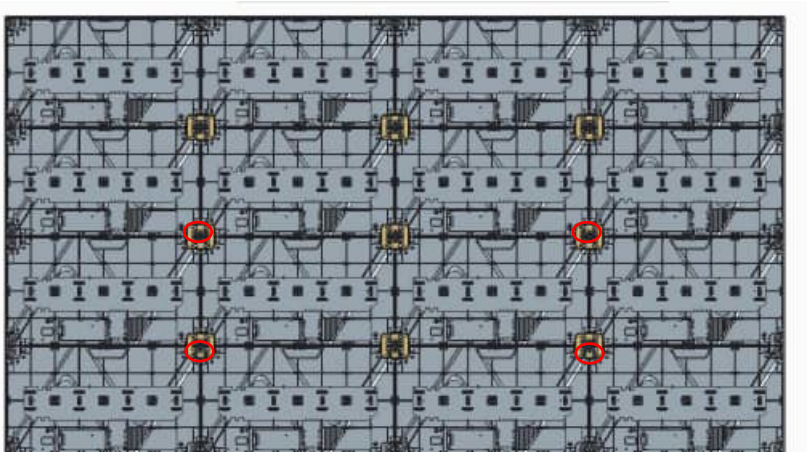
Schematic diagram of the completed box installation

Step 4: Using 34 M8X20 fixing screws to install the leveling connecting piece inside the box.

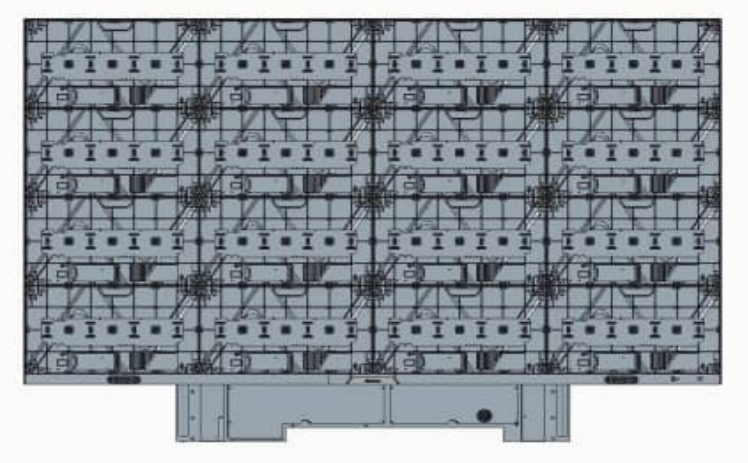


## 2.2.3 Trims and control box installation

Step 1: control box installation: Lifting the control box upward from the bottom of the cabinet, and then using 4 M6*30 screws to lock it from the front to complete the installation of the control box.



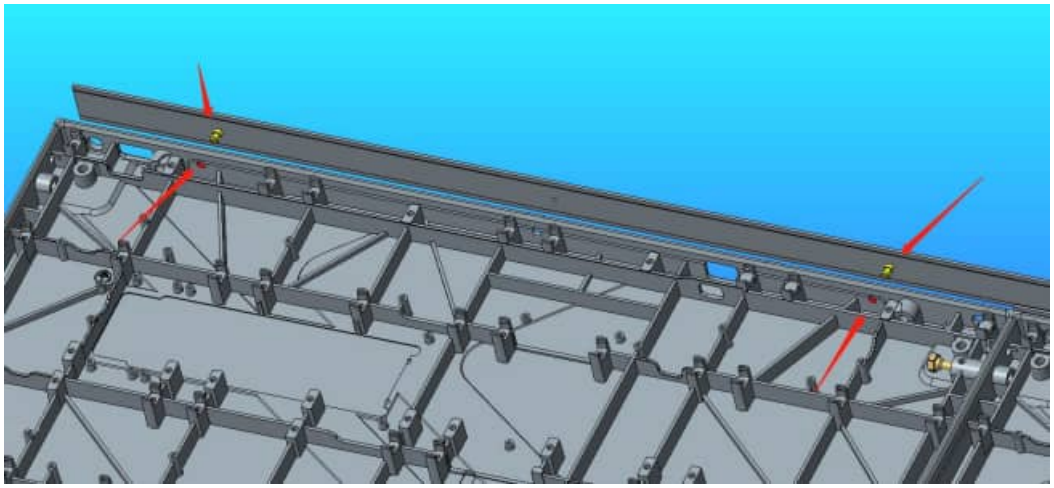
**Control Box Mounting Screw Fixing Hole Diagram**



**Schematic diagram of the completed installation of the control box**

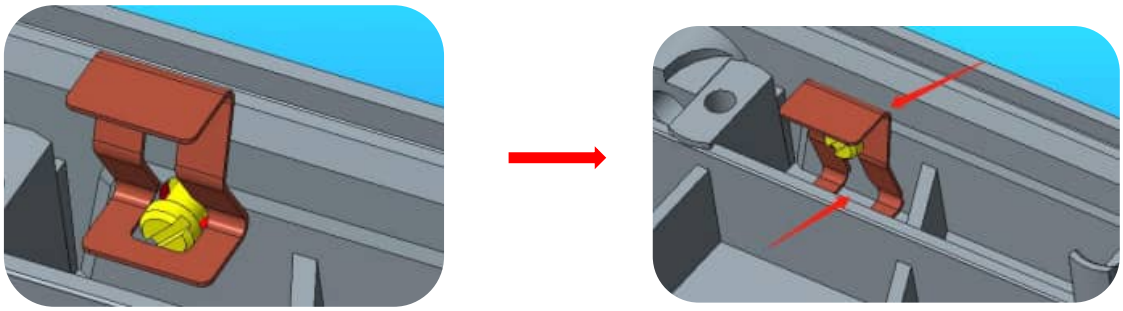
Step 2 (Non-touch version，the touch version content in part 2.4 ):

The installation of top, left and right trims: The upper, left and right trims are fixed and mounted through the trims positioning columns with corresponding positioning holes in the cabinets, and then fixed by the internal fittings of



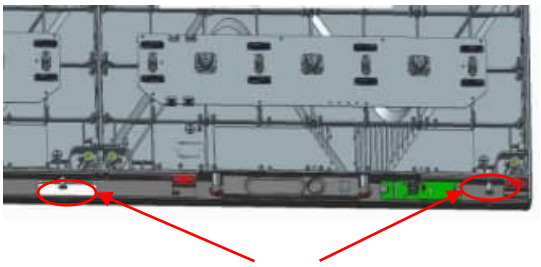
the edging shrapnel.

**Buckle Installation Guidelines:**

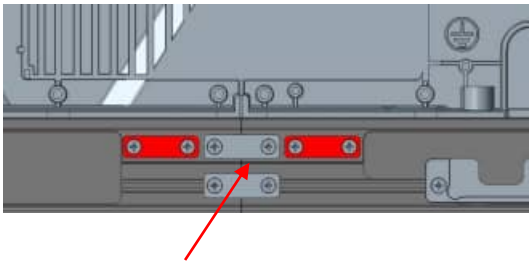


Step 3: Installation of bottom trims (Non-touch version， the touch version content in part 2.4 )

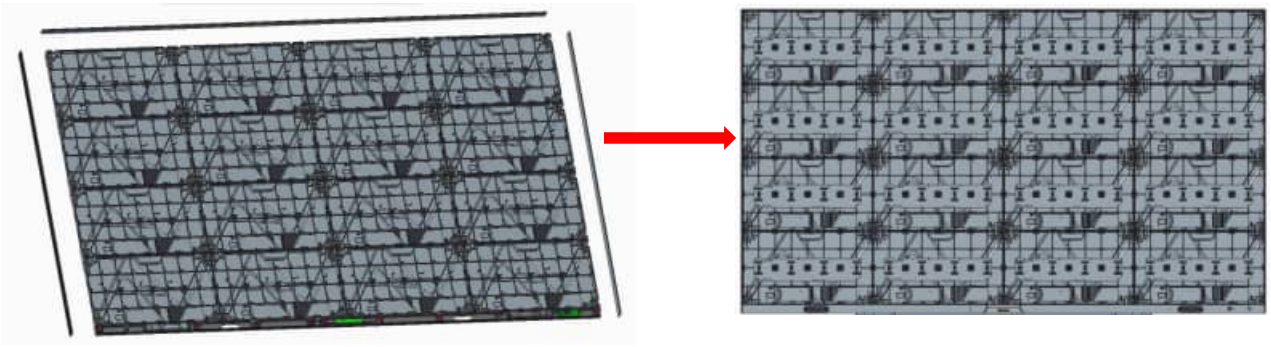
Using 5 M6X16 countersunk head screws to install the bottom trims on the bottom side of the cabinet, and using KM3X8 screws to fix the bottom trims with the connecting piece, which can use for adjusting the flatness .



screw fixing position of bottom trim



Installation position of trims

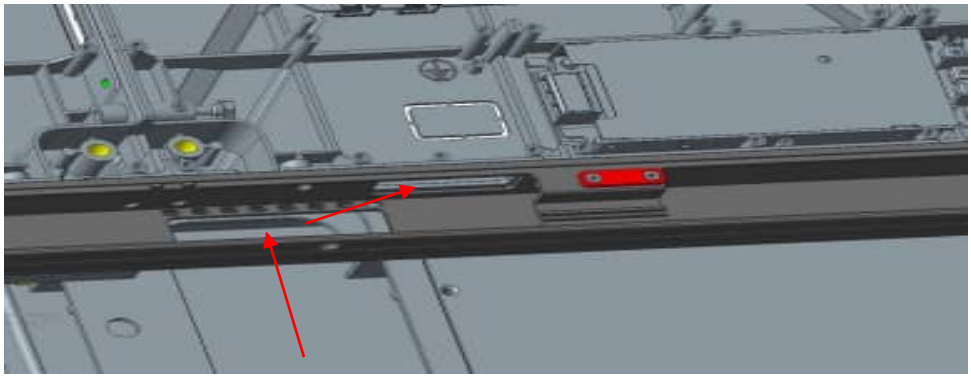


**Schematic diagram of the completed installation of the wrap-around trims**

### 2.2.4 Connect the power and network cables

Step 1:

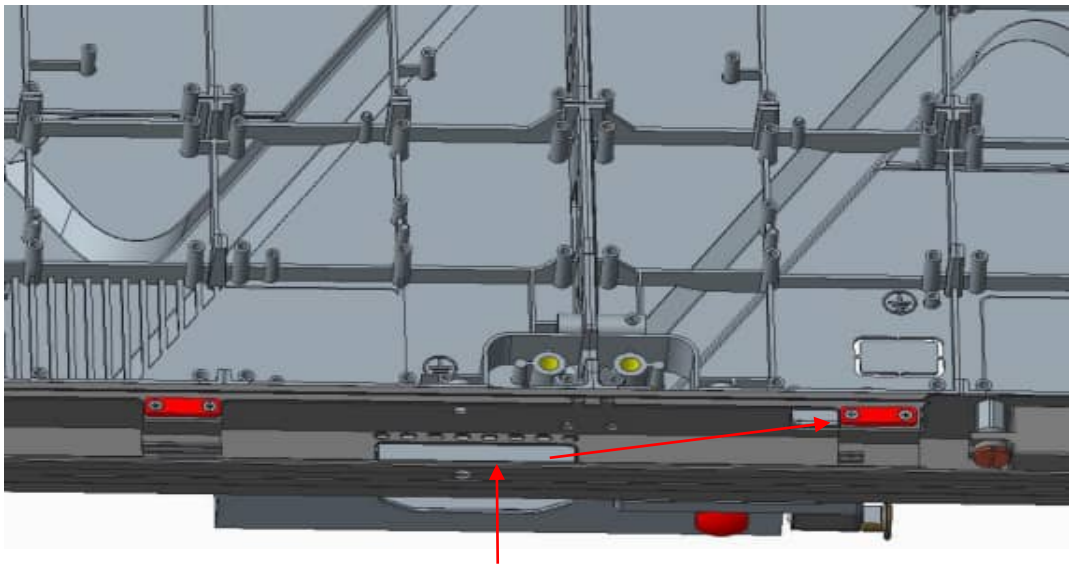
Getting through 4 main power cords from the hole of left side of bottom trim. The order of cabinets, from left to right, is the first column to forth column, which will be corresponding with the order of label on power cord. Then, connecting the power cord and earth wire at the bottom of the cabinets.



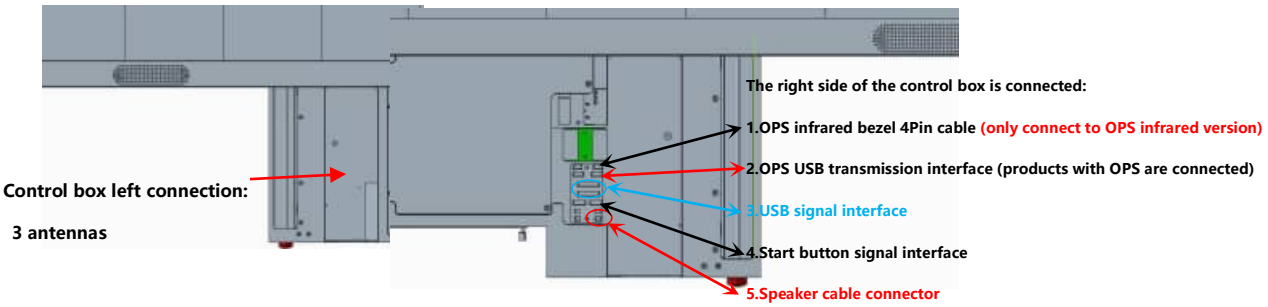
Schematic diagram of power cord threading holes

Step 2:

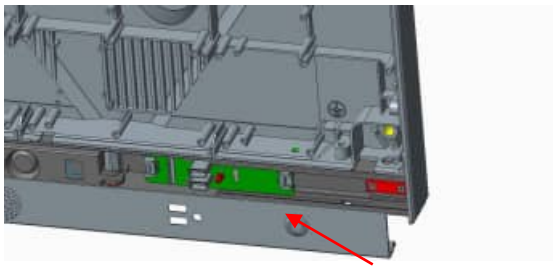
Getting through 4 main network cables from the hole of right side of bottom trim. The order of cabinets is the same as above from left to right as the first column to forth column, which will be corresponding with the order of label on network cables Then, connecting the network cables. (Note: network cables threading mode refer to the power cords threading mode)



Step 3: Connect the antenna, audio screen cable, and other wires from the lower wrap to the control box




### 2.2.5 Install the bottom trim cover and connect the screen on button 5P cable

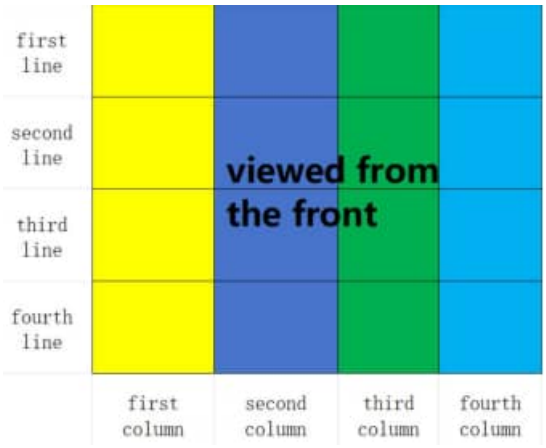


### 2.2.6 Mounting modules

Because this product adopts the whole screen calibration, in order to ensure the best display effect, it must be installed in accordance with the order of our company's identification as the figure shown on below.

Installation serial number schematic (front view）：

The numbering of the installation order of cabinets:



The numbering of the installation order of modules:

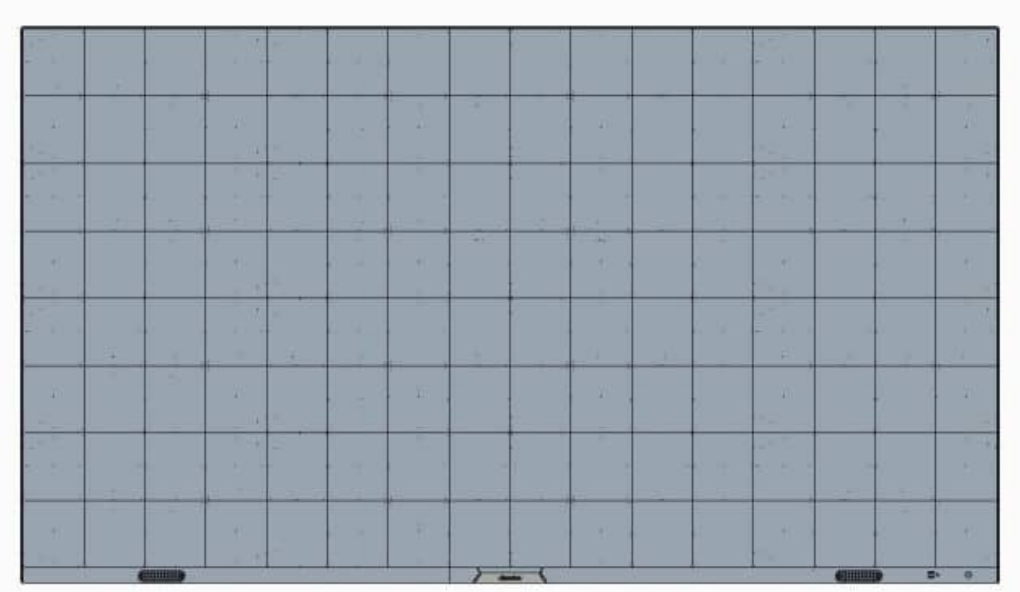
| | Correction code for the first row of box light panels | | | | Correction code for the second column of box light panels | | | | Third column box light panel correction code | | | | Fourth column of box light panel correction code | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| first line | 1-1-1-1 | 1-1-1-2 | 1-1-1-3 | 1-1-1-4 | 1-1-2-1 | 1-1-2-2 | 1-1-2-3 | 1-1-2-4 | 1-1-3-1 | 1-1-3-2 | 1-1-3-3 | 1-1-3-4 | 1-1-4-1 | 1-1-4-2 | 1-1-4-3 | 1-1-4-4 |
| | 1-1-1-5 | 1-1-1-6 | 1-1-1-7 | 1-1-1-8 | 1-1-2-5 | 1-1-2-6 | 1-1-2-7 | 1-1-2-8 | 1-1-3-5 | 1-1-3-6 | 1-1-3-7 | 1-1-3-8 | 1-1-4-5 | 1-1-4-6 | 1-1-4-7 | 1-1-4-8 |
| second line | 1-2-1-1 | 1-2-1-2 | 1-2-1-3 | 1-2-1-4 | 1-2-2-1 | 1-2-2-2 | 1-2-2-3 | 1-2-2-4 | 1-2-3-1 | 1-2-3-2 | 1-2-3-3 | 1-2-3-4 | 1-2-4-1 | 1-2-4-2 | 1-2-4-3 | 1-2-4-4 |
| | 1-2-1-5 | 1-2-1-6 | 1-2-1-7 | 1-2-1-8 | 1-2-2-5 | 1-2-2-6 | 1-2-2-7 | 1-2-2-8 | 1-2-3-5 | 1-2-3-6 | 1-2-3-7 | 1-2-3-8 | 1-2-4-5 | 1-2-4-6 | 1-2-4-7 | 1-2-4-8 |
| third line | 1-3-1-1 | 1-3-1-2 | 1-3-1-3 | 1-3-1-4 | 1-3-2-1 | 1-3-2-2 | 1-3-2-3 | 1-3-2-4 | 1-3-3-1 | 1-3-3-2 | 1-3-3-3 | 1-3-3-4 | 1-3-4-1 | 1-3-4-2 | 1-3-4-3 | 1-3-4-4 |
| | 1-3-1-5 | 1-3-1-6 | 1-3-1-7 | 1-3-1-8 | 1-3-2-5 | 1-3-2-6 | 1-3-2-7 | 1-3-2-8 | 1-3-3-5 | 1-3-3-6 | 1-3-3-7 | 1-3-3-8 | 1-3-4-5 | 1-3-4-6 | 1-3-4-7 | 1-3-4-8 |
| fourth line | 1-4-1-1 | 1-4-1-2 | 1-4-1-3 | 1-4-1-4 | 1-4-2-1 | 1-4-2-2 | 1-4-2-3 | 1-4-2-4 | 1-4-3-1 | 1-4-3-2 | 1-4-3-3 | 1-4-3-4 | 1-4-4-1 | 1-4-4-2 | 1-4-4-3 | 1-4-4-4 |
| | 1-4-1-5 | 1-4-1-6 | 1-4-1-7 | 1-4-1-8 | 1-4-2-5 | 1-4-2-6 | 1-4-2-7 | 1-4-2-8 | 1-4-3-5 | 1-4-3-6 | 1-4-3-7 | 1-4-3-8 | 1-4-4-5 | 1-4-4-6 | 1-4-4-7 | 1-4-4-8 |

Numbering instructions:

The first bit is the screen number; the second bit is the box row number, from top to bottom, the top is the first row; the third bit is the box column number: The fourth bit is the module number

For example, 1-1-1-2 is the second module of the first row and column of the first screen.

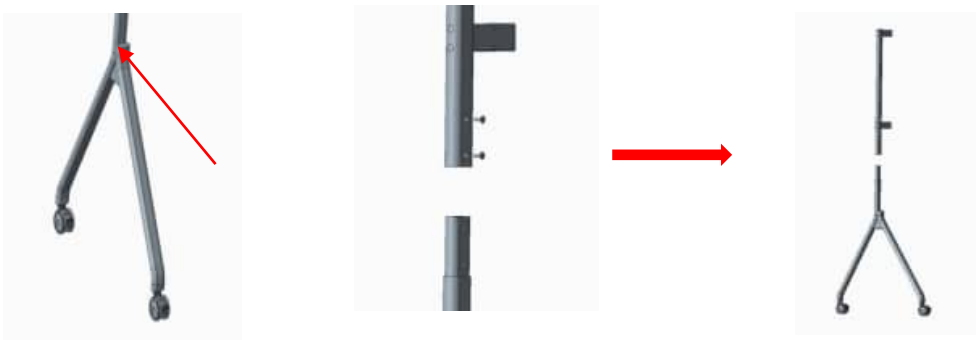
The picture of completed installation:



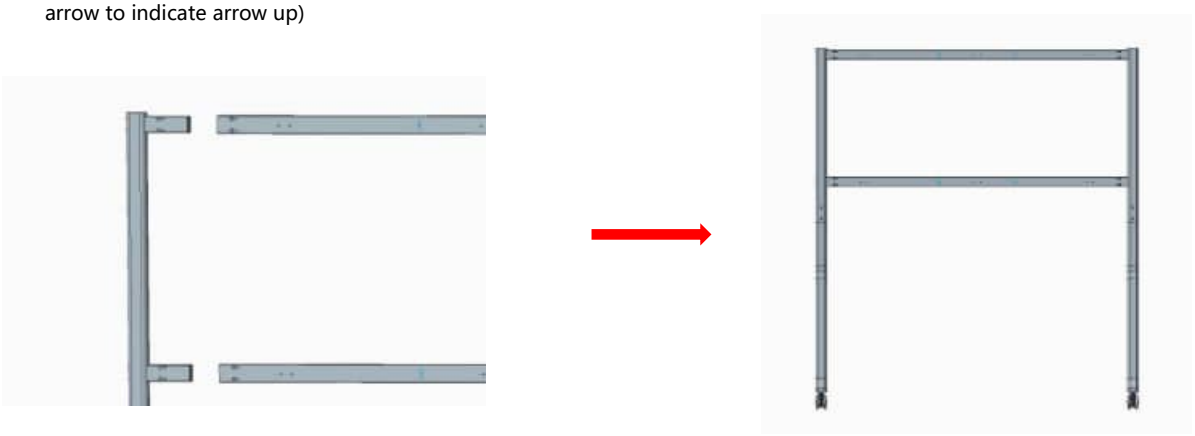
## 2.3 The Guide of Mobile Version （Non-touch version）

### 2.3.1The steps of installation for mobile stand

Step 1: Taking out the mobile brackets from packaging and using 4 M6X16 screws to fix the two mobile bracket legs respectively. (Note: the mobile support legs have steps at the front)

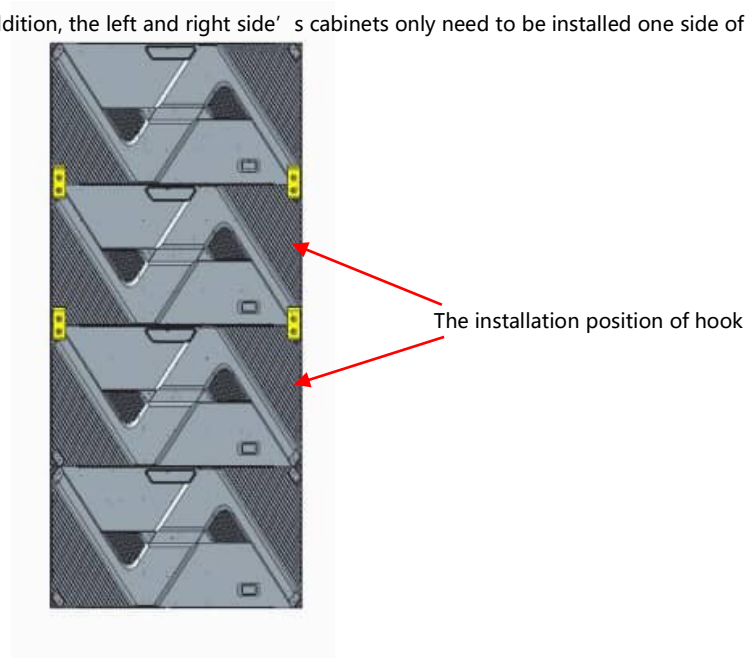


Step 2: Using 12 M6X16 screws to assemble the crossbeam and mobile bracket legs (Note: the crossbeam has an arrow to indicate arrow up)



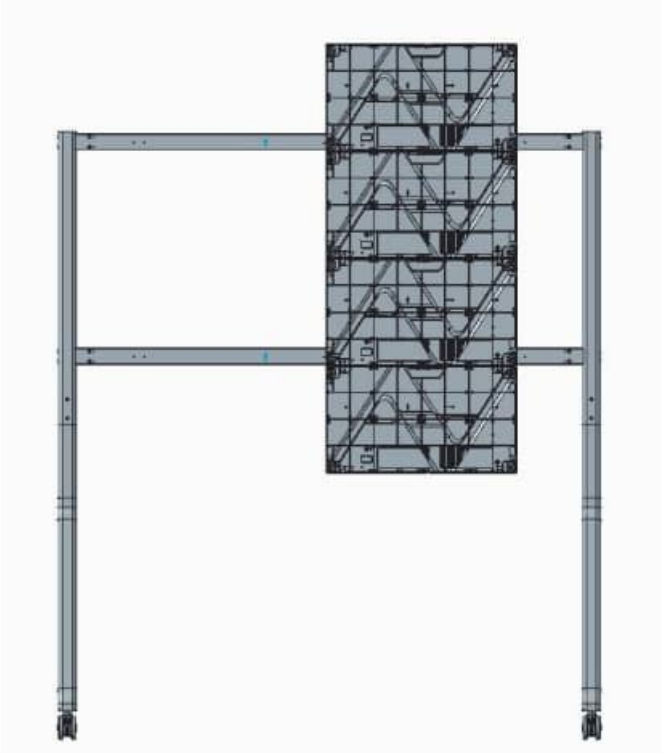
## 2.3.2 Screen installation

Step 1: Taking out the box and using 24 M6X16 screws to install the hook connecting piece which is in the back of the cabinets. In addition, the left and right side’ s cabinets only need to be installed one side of the cabinet.

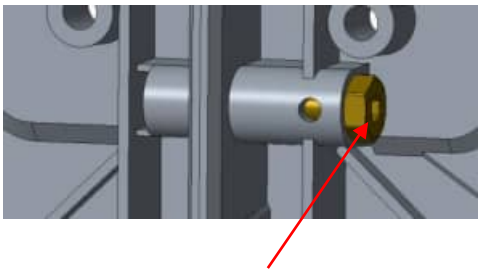



Step 2:

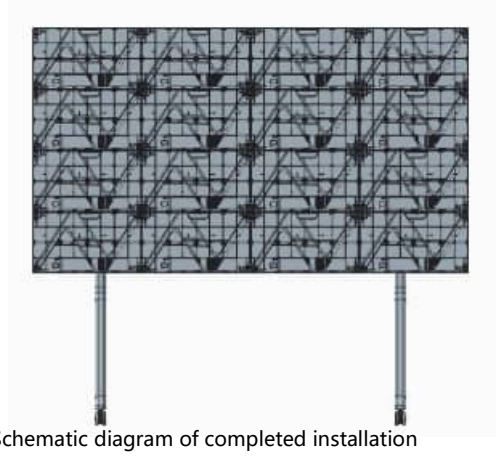
Hanging the middle row of cabinets first. Then, Using the hook, on the back of cabinet, to hook into the printing place of the beam.



Step 3: Hanging the left and right sides of the cabinets in turn and locking the cabinets by the connecting bolts on the left and right of the cabinets.

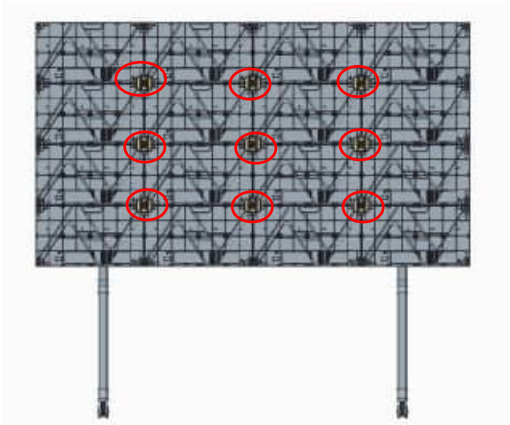


Left and right box connecting bolts

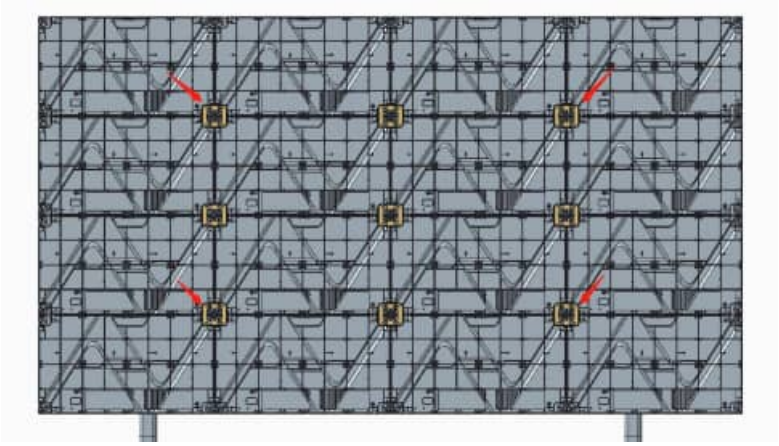


Schematic diagram of completed installation

Step 4: Using 30 M8X20 screws to install the leveling connecting piece inside the box.

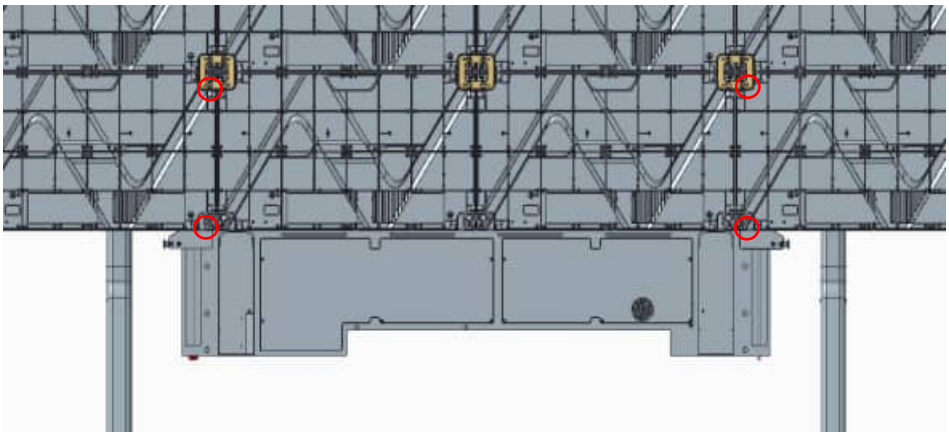


Step 5: Using 4 M6X35 screws to install the security screws, to ensure that the screen will not move left and right (Note: fixed corners can be))

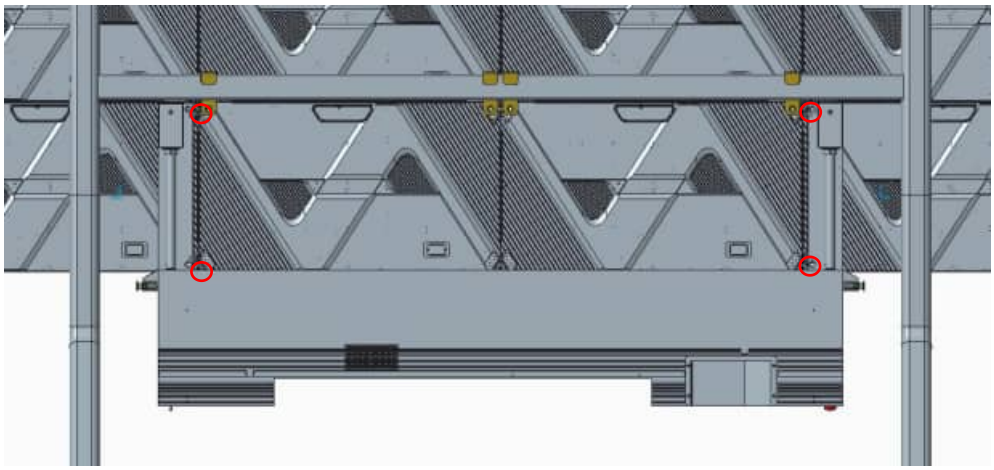


### 2.3.3 Trims and control box installation

Step 1: control box installation: Lifting the control box upward from the bottom of the cabinet, and then using 4 M6*30 screws to lock it from the front to complete the installation of the control box.



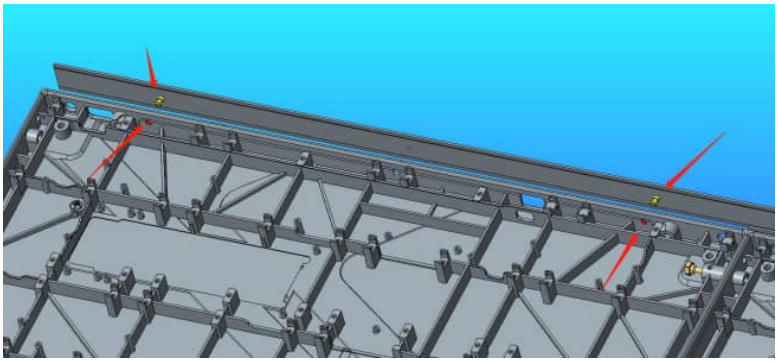
**Front mounted control box**



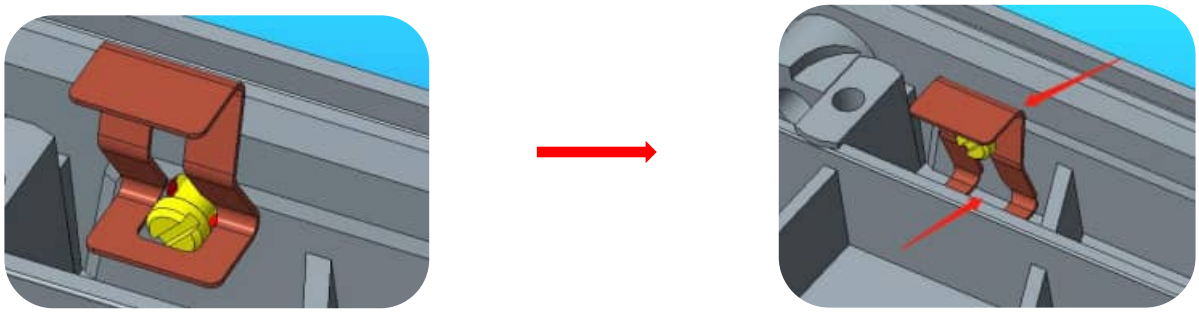
**Rear mounted control box**

Step 2 (Non-touch version，the touch version content in part 2.4 ):

The installation of top, left and right trims: The upper, left and right trims are fixed and mounted through the trims positioning columns with corresponding positioning holes in the cabinets, and then fixed by the internal fittings of the edging shrapnel.

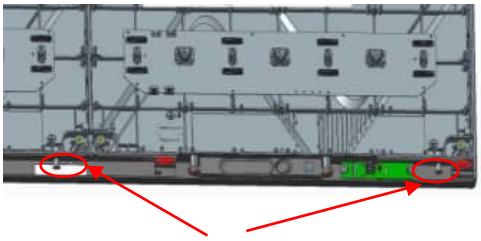


**Buckle Installation Guidelines:**

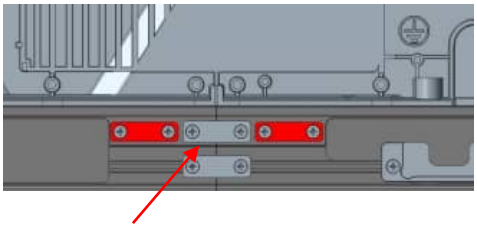


Step 3: Installation of bottom trims (Non-touch version， the touch version content in part 2.4 )

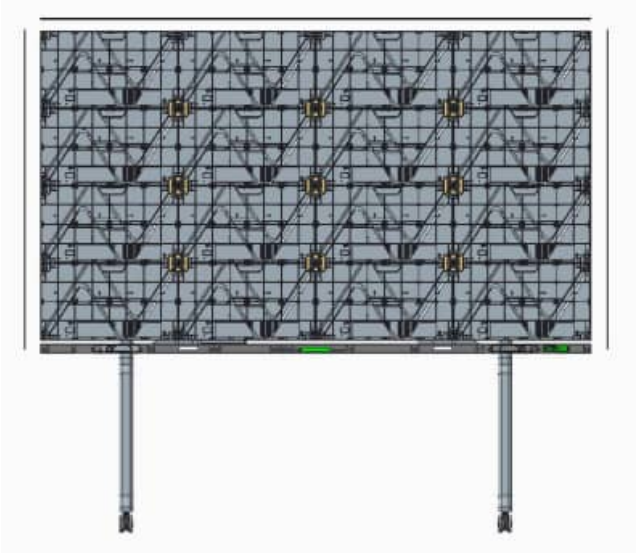
Using 5 M6X16 countersunk head screws to install the bottom trims on the bottom side of the cabinet, and using KM3X8 screws to fix the bottom trims with the connecting piece, which can use for adjusting the flatness .



screw fixing position of bottom trim



Installation position of trims

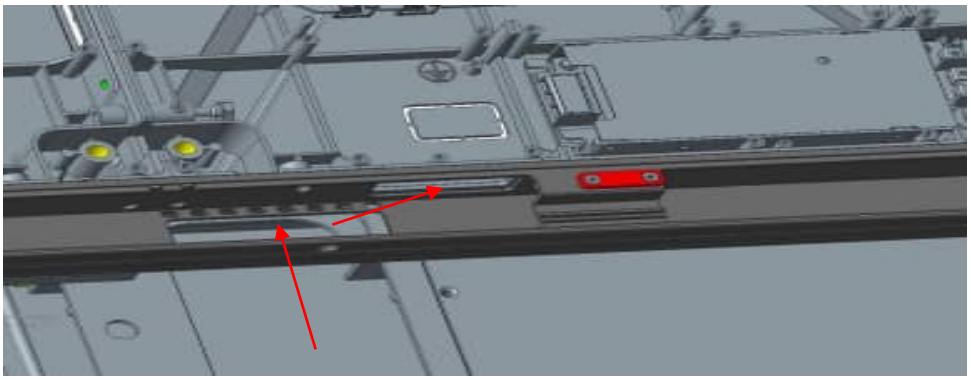


**Trims Installation Schematic**

### 2.3.4Connect the power and network cables

Step 1:

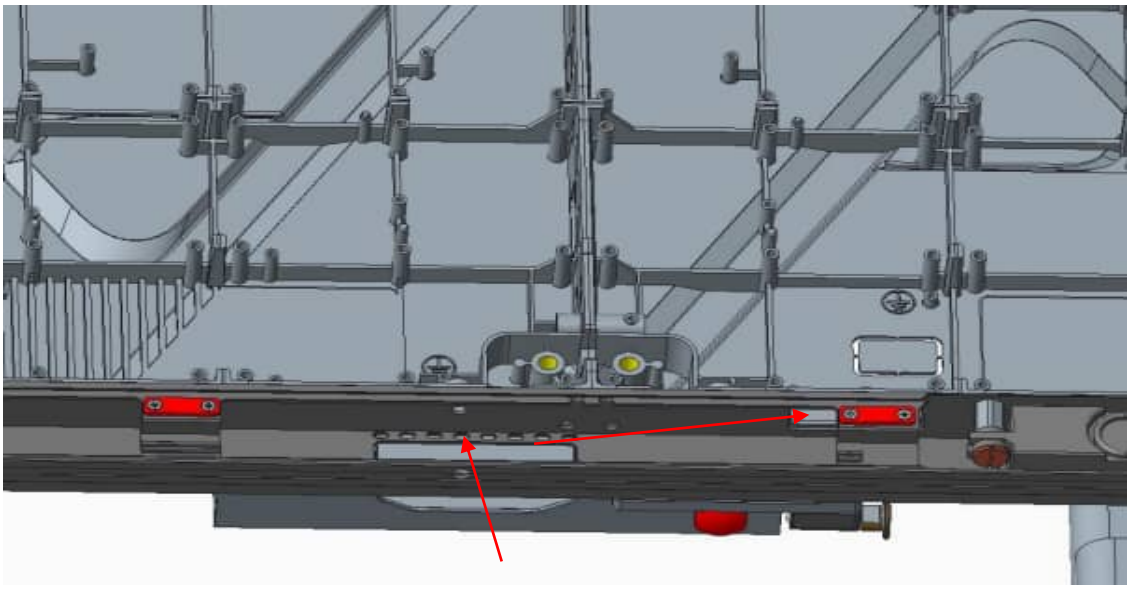
Getting through 4 main power cords from the hole of left side of bottom trim. The order of cabinets, from left to right, is the first column to forth column, which will be corresponding with the order of label on power cord. Then, connecting the power cord and earth wire at the bottom of the cabinets.



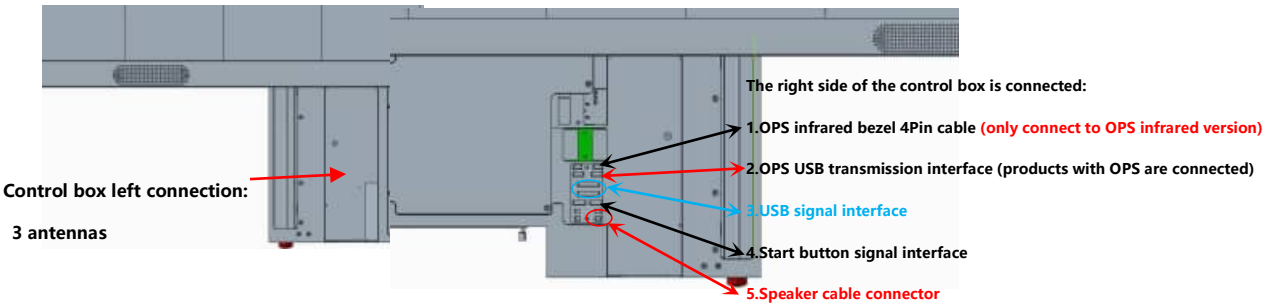
Schematic diagram of power cord threading holes

Step 2:

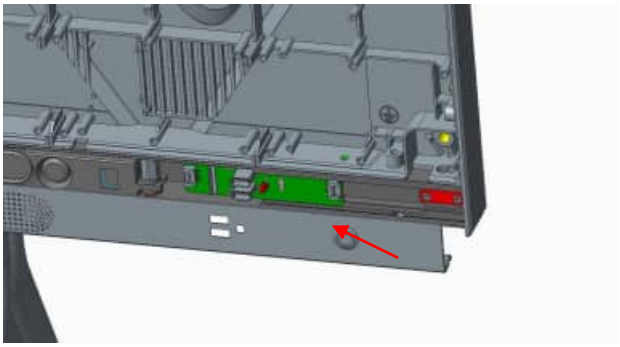
Getting through 4 main network cables from the hole of right side of bottom trim. The order of cabinets is the same as above from left to right as the first column to forth column, which will be corresponding with the order of label on network cables Then, connecting the network cables. (Note: network cables threading mode refer to the power cords threading mode)



Step 3: Connect the antenna, audio screen cable, and other wires from the lower wrap to the control box




### 2.3.5Install the bottom trim cover and connect the screen on button 5P cable

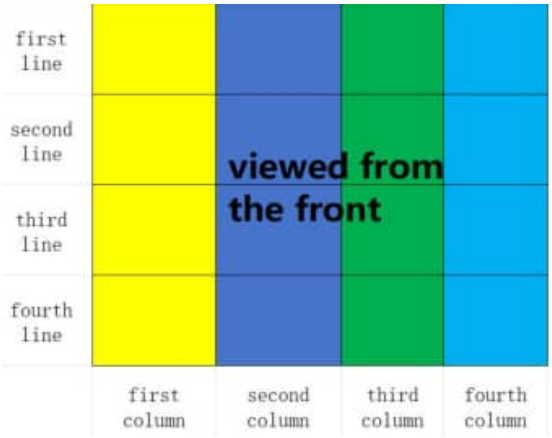


### 2.3.6 Mounting Modules

Because this product adopts the whole screen calibration, in order to ensure the best display effect, it must be installed in accordance with the order of our company's identification as the figure shown on below.

Installation serial number schematic (front view）：

The numbering of the installation order of cabinets:



The numbering of the installation order of modules:

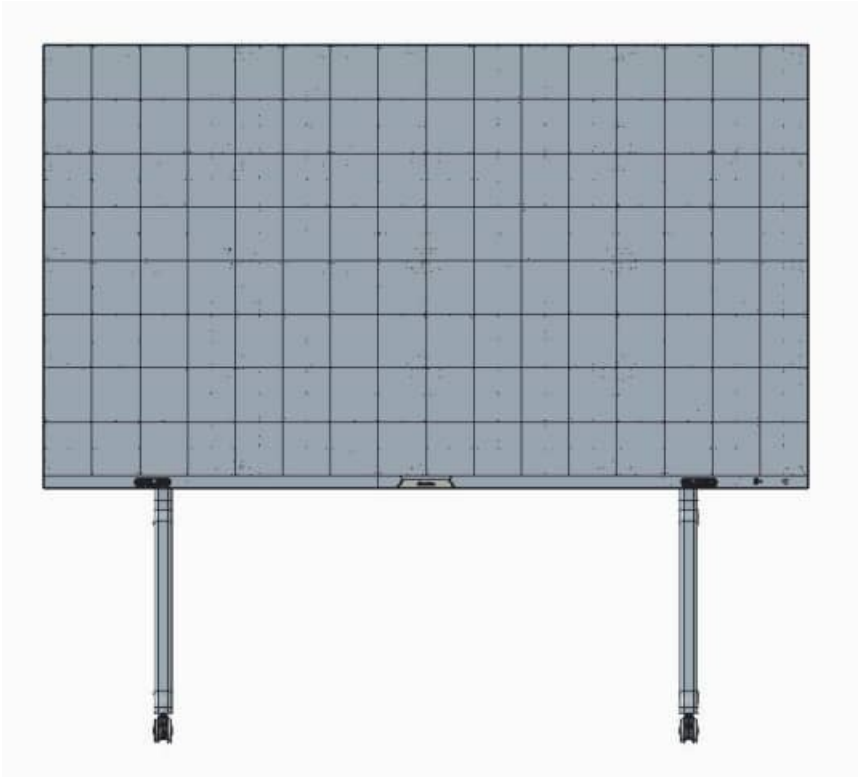
| | Correction code for the first row of box light panels | | | | Correction code for the second column of box light panels | | | | Third column box light panel correction code | | | | Fourth column of box light panel correction code | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| first line | 1-1-1-1 | 1-1-1-2 | 1-1-1-3 | 1-1-1-4 | 1-1-2-1 | 1-1-2-2 | 1-1-2-3 | 1-1-2-4 | 1-1-3-1 | 1-1-3-2 | 1-1-3-3 | 1-1-3-4 | 1-1-4-1 | 1-1-4-2 | 1-1-4-3 | 1-1-4-4 |
| | 1-1-1-5 | 1-1-1-6 | 1-1-1-7 | 1-1-1-8 | 1-1-2-5 | 1-1-2-6 | 1-1-2-7 | 1-1-2-8 | 1-1-3-5 | 1-1-3-6 | 1-1-3-7 | 1-1-3-8 | 1-1-4-5 | 1-1-4-6 | 1-1-4-7 | 1-1-4-8 |
| second line | 1-2-1-1 | 1-2-1-2 | 1-2-1-3 | 1-2-1-4 | 1-2-2-1 | 1-2-2-2 | 1-2-2-3 | 1-2-2-4 | 1-2-3-1 | 1-2-3-2 | 1-2-3-3 | 1-2-3-4 | 1-2-4-1 | 1-2-4-2 | 1-2-4-3 | 1-2-4-4 |
| | 1-2-1-5 | 1-2-1-6 | 1-2-1-7 | 1-2-1-8 | 1-2-2-5 | 1-2-2-6 | 1-2-2-7 | 1-2-2-8 | 1-2-3-5 | 1-2-3-6 | 1-2-3-7 | 1-2-3-8 | 1-2-4-5 | 1-2-4-6 | 1-2-4-7 | 1-2-4-8 |
| third line | 1-3-1-1 | 1-3-1-2 | 1-3-1-3 | 1-3-1-4 | 1-3-2-1 | 1-3-2-2 | 1-3-2-3 | 1-3-2-4 | 1-3-3-1 | 1-3-3-2 | 1-3-3-3 | 1-3-3-4 | 1-3-4-1 | 1-3-4-2 | 1-3-4-3 | 1-3-4-4 |
| | 1-3-1-5 | 1-3-1-6 | 1-3-1-7 | 1-3-1-8 | 1-3-2-5 | 1-3-2-6 | 1-3-2-7 | 1-3-2-8 | 1-2-3-5 | 1-2-3-6 | 1-3-3-7 | 1-3-3-8 | 1-3-4-5 | 1-3-4-6 | 1-3-4-7 | 1-3-4-8 |
| fourth line | 1-4-1-1 | 1-4-1-2 | 1-4-1-3 | 1-4-1-4 | 1-4-2-1 | 1-4-2-2 | 1-4-2-3 | 1-4-2-4 | 1-4-3-1 | 1-4-3-2 | 1-4-3-3 | 1-4-3-4 | 1-4-4-1 | 1-4-4-2 | 1-4-4-3 | 1-4-4-4 |
| | 1-4-1-5 | 1-4-1-6 | 1-4-1-7 | 1-4-1-8 | 1-4-2-5 | 1-4-2-6 | 1-4-2-7 | 1-4-2-8 | 1-4-3-5 | 1-4-3-6 | 1-4-3-7 | 1-4-3-8 | 1-4-4-5 | 1-4-4-6 | 1-4-4-7 | 1-4-4-8 |

Numbering instructions:

The first bit is the screen number; the second bit is the box row number, from top to bottom, the top is the first row; the third bit is the box column number: The fourth bit is the module number

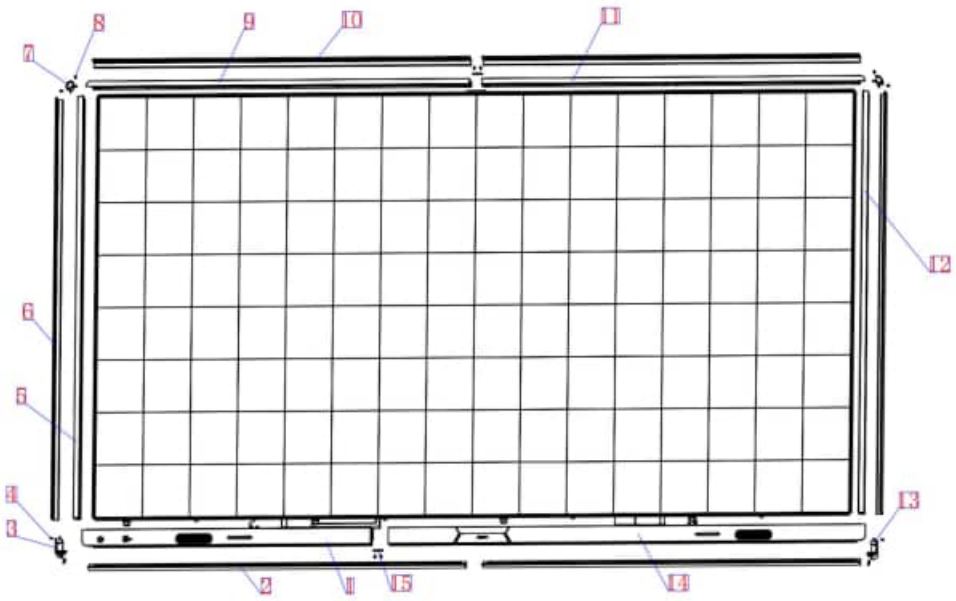
For example, 1-1-1-2 is the second module of the first row and column of the first screen.

The picture of completed installation



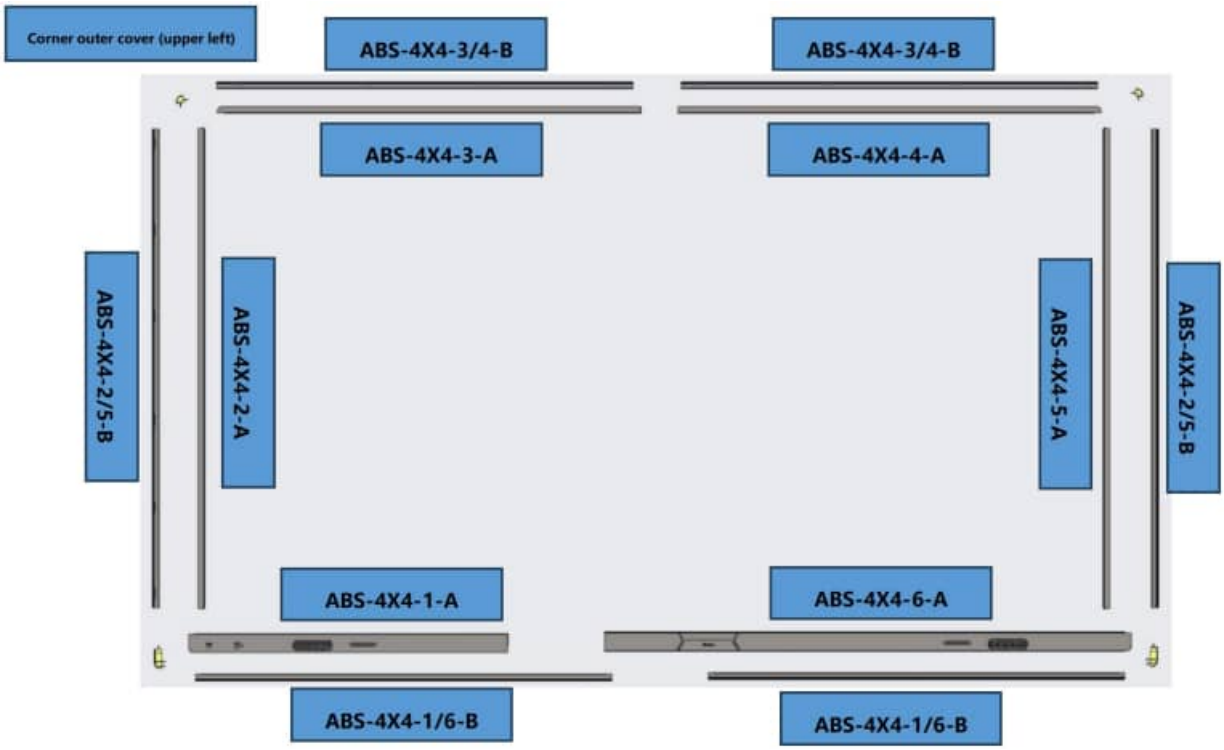
## 2.4 Trim installation (touch version)

### 2.4.1 list of touch version trim




| Serial No. | Material Name | dosage | norm | note |
|---|---|---|---|---|
| 1 | Bottom inner frame-left | 1 | subassemblies | |
| 2 | Bottom frame | 2 | subassemblies | |
| 3 | Lower left corner | 1 | | |
| 4 | KM3X8 | 6 | | Left and right corner fixing |
| 5 | Left inner frame | 1 | subassemblies | |
| 6 | Left and right frames | 2 | subassemblies | |
| 7 | upper corner | 2 | | |
| 8 | PM3X8 | 8 | | Upper corner + upper and lower frame fixing piece |
| 9 | Upper inner frame - left | 1 | subassemblies | |
| 10 | Upper frame | 2 | subassemblies | |
| 11 | Upper inner frame - right | 1 | subassemblies | |
| 12 | Right inner frame | 1 | subassemblies | |
| 13 | Lower right corner | 1 | | |
| 14 | Bottom inner frame - right | 1 | subassemblies | |
| 15 | Upper and lower frame mounts | 2 | | |
| 16 | Edge Mounting Shrapnel | 24 | | |
| 17 | Infrared control line | 1 | Wire length 2300mm | |
| 18 | directional marker | 2 | | |
| 19 | touchpen's pointer | 1 | | |

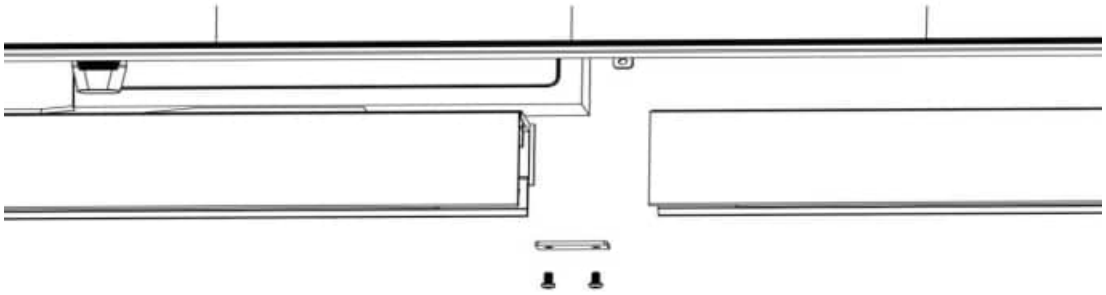
### 2.4.2 Schematic diagram of Trim for touch version



### 2.4.3 Steps of installation

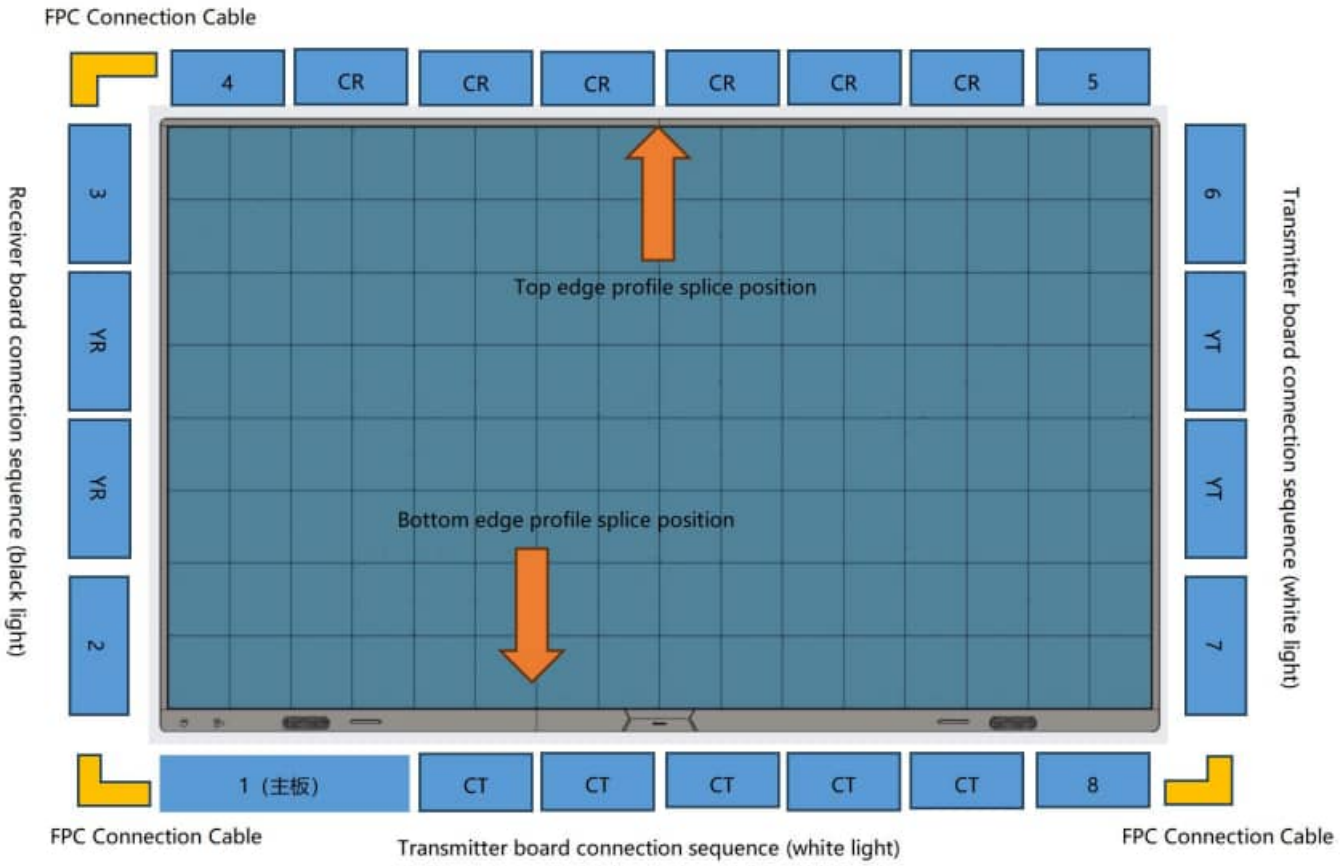
Step 1: Installing the top , left and right trims which the last letter is " A ". The installation method can be read in part 2.2.2

Step 2: Using two PM3X8 screw to connect the bottom trim.

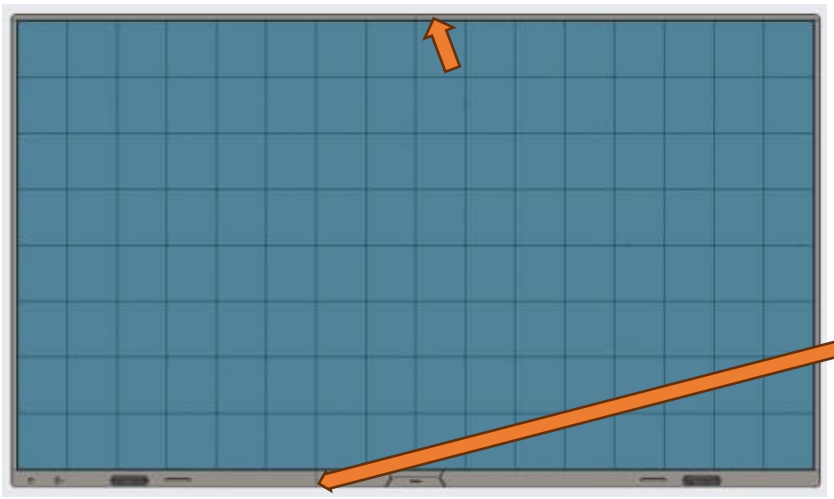


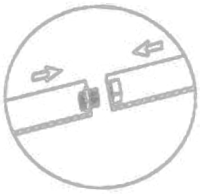
Step 3: Attach the bottom trim to the lower side of the cabinet by five M6X16 countersunk head screws.

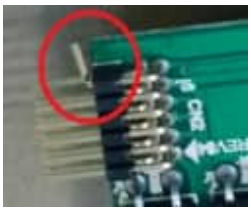
Step 4: The schematic diagram is about how to connect FPC cables of touch panel



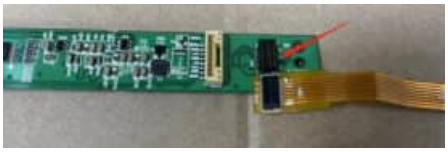
Some points need to be cared about connecting FPC cables process:

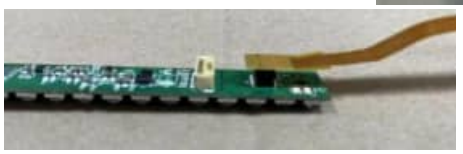






- **Pay attention to the position of the pins when inserting them.**
- **Avoid bending pins due to hard mounting**
- **Take care of alignment when plugging in the wires;**





Step 5: The process of connecting power cords and network cables is same as non-touch version. (In part 2.2.4 or 2.3.4)

Step 6: Using three HM3X6 screws to fix the secure ground wire (lower left, upper left, lower right).

Step 7: The installation of modules is same as non-touch version. (can read in part 2.2.6 or 2.3.6)

Step 8: When module installation is completed, the touch function can be tested

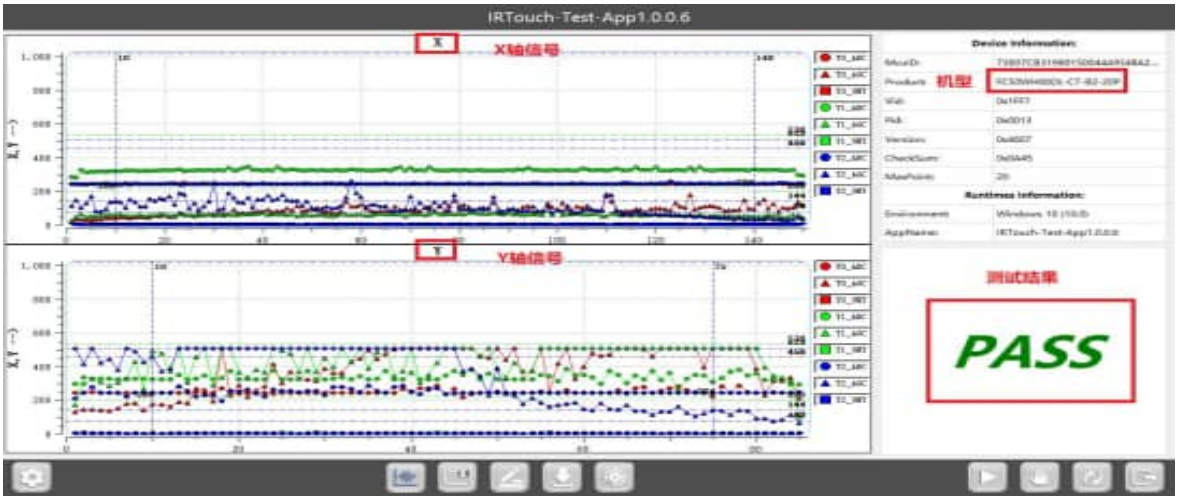
## 2.4.4 touch function test

- **Connected to a computer for testing**

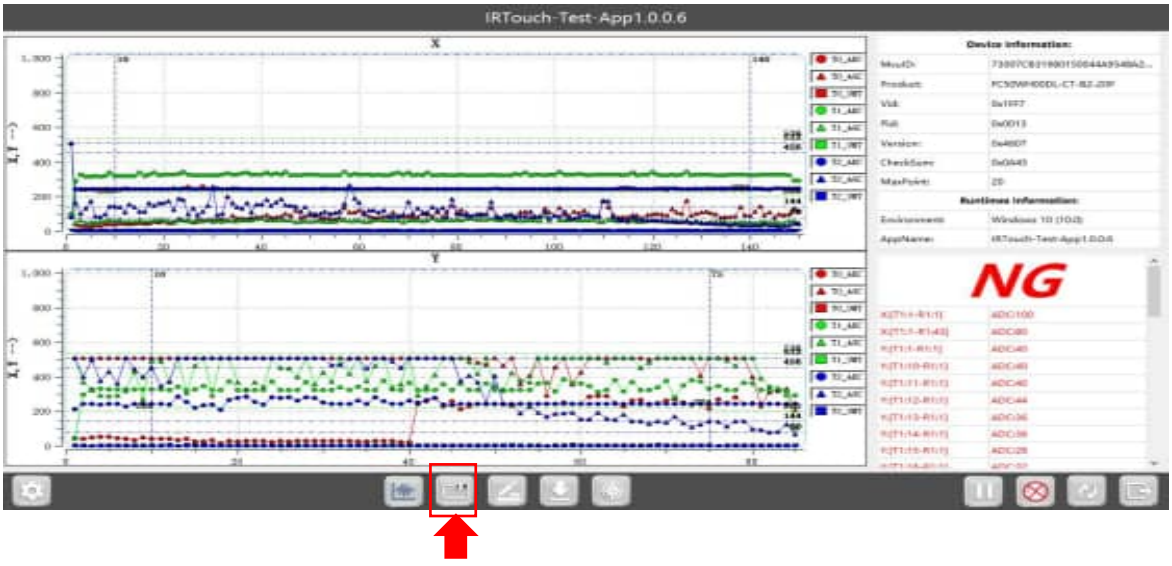
**Step1: Open the IRTouch-Test software.**

**Step2: Touch Frame connects to PC by USB**


**Test result: Pass**



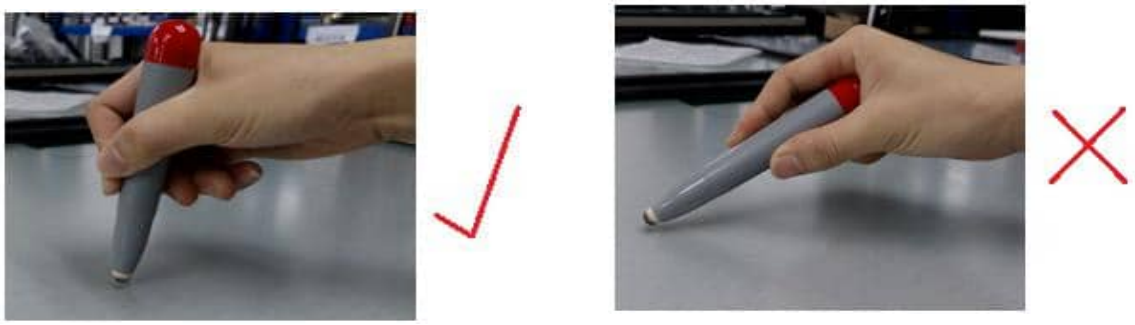

**Test Result: NG**



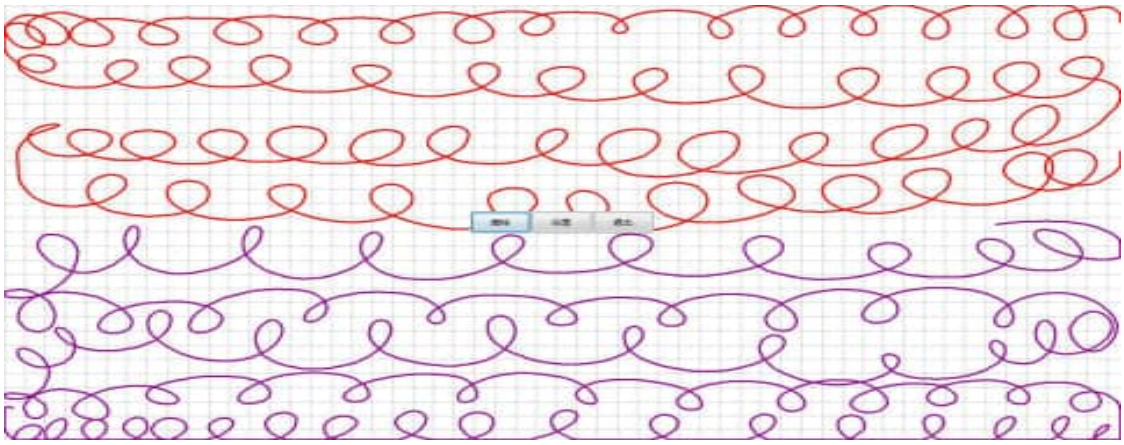

**The matrix can be viewed by clicking on it**

## 2.4.5 Connecting to PC to test drawing

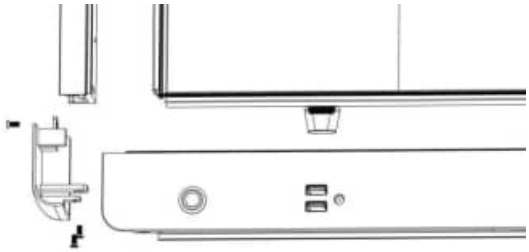
- The diameter of the touching object used to draw the line test (a stylus is recommended) needs to be greater than 8mm;
- When drawing a line with more than two points, the gap between two touches (two pens) is required to be more than 25mm;
- Do not move the mouse of the testing computer during line drawing test;
- When drawing lines, the angle between stylus and glass surface should be greater than 70 degrees;



- Two styluses can start to draw lines simultaneously with one stylus draws a curve from the upper right corner of the touch screen along the edge, and the other stylus draws a curve from the lower left corner along the edge. The two styluses should draw the whole touch screen. The "Clear" button on the line drawing interface can clear the line drawing operation and enter a blank page.



Step 9: Using four KM3X8 and PM3X8 screws to fix four corner of trims after the test is completed. Finally, the trims with last letter "B" which are decorative function can be installed.



# 3. Guide of maintenance

## 3.1 maintenance tools

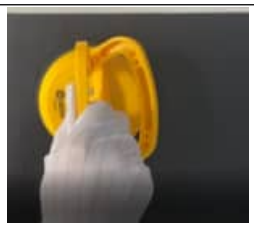
| | Tools | Function | Picture |
|---|---|---|---|
| Maintenance tool list | Front maintenance tool | Install/Remove LED Module |  |
| | PH2 Phillips screwdriver | Remove/install the screws for the HUB, receiving card |  |
| | Multimeter | Measuring power supply system |  |

## 3.2 Instruction of maintenance

### 3.2.1 maintenance of modules

The modules of X108 can be quickly removed by passive front maintenance. Unfolding the handle of the front maintenance tool, and placing the front maintenance tool on the surface of the faulty module. Then, pulling up the handle of the front maintenance tool, and gently pull the maintenance tool outward to take the module out.

Note: Before maintaining the module, it is necessary to use a dust-free cloth to clean the dust the surface of the maintenance tool, before using the maintaining tool.

| | | | |
|---|---|---|---|
| Picture |  |  |  |
| Steps | ❶ Confirm the location of the faulty module and place the front maintenance tool in the middle of the faulty module | ❷ Pull up the handle of the maintenance tool, gently pull the maintenance tool outward, and take out the module | ❸ Install the spare module on the screen. |

### 3.2.2 HUB/Receiving card /Power maintenance

Using the maintenance tool to remove the module which is the faulty panel, and then using a screwdriver to remove the screw fixing the HUB board for replacement

| **HUB board maintenance** | Picture |
|---|---|
| ❶ After removing the module with the maintenance tool, remove the current equalizing wire on the HUB board |  |
| ❷Use a PH2 Phillips screwdriver to remove the screws fixing the HUB board and replace the faulty HUB board |  |
| **Receiving card maintenance** | Picture |
| Remove the HUB board, the receiving card is on the back of the HUB board, remove the screws of the receiving card for maintenance |  |
| **Power supply maintenance** | Picture |
| ❶ After removing the module with the maintenance tool, remove the current equalizing wire on the power supply |  |
| ❷Use a PH2 Phillips screwdriver to remove the fixing power supply screw to directly replace the faulty power supply |  |

### 3.2.3 Announcements

1. When touching LED light boards or panels, paying attention to anti-static and do the following effective protection:

a. Wear a grounded electrostatic wrist strap or electrostatic gloves;

b. The screen is strictly grounded, and the grounding resistance is required to be ≤10 ohms, and a point inspection is carried out every six months;

2. When cleaning the surface of the lamp panel, do not use unknown chemical liquids, but use a clean dust-free or clean water damp cloth to wipe light.

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