Full-Color LED Display Unit

Installation Guide

Legal Information

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Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
FCC compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU.

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: ***http://www.recyclethis.info*** .

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: ***http://www.recyclethis.info*** .

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

Preface

Applicable Models

This guide is applicable to LED display units.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
Note	Provides additional information to emphasize or supplement important points of the main text.

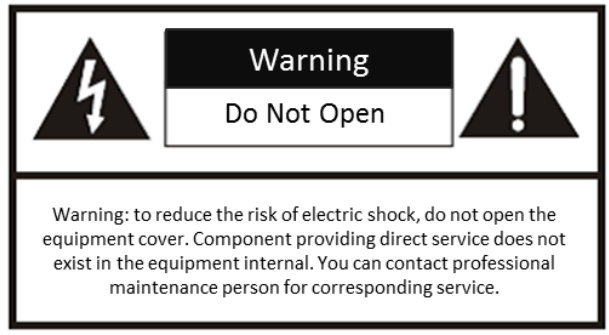
Safety Instructions

For safety concerns, the device has been strictly tested before shipment. However, incorrect installation or usage may lead to hazardous results such as electric shock and fire. To ensure the service life and best performance of the device, please read the notice and plate signs carefully and follow the safety instructions. Keep this guide properly for later use.

Caution

- To ensure safety, the installation parts and the wall should support four times the weight of the device.
- Install the device no more than 5 mm away from the wall or other metal racks in case of lamp board drop resulting in electric shock.
- Please set the brightness of the LED display within 500 nits to avoid power overload.
- The device may generate radio interference in indoor environment. Necessary precautions may be required.
- To reduce the risk of fire or electric shock, please do not expose the device to rain or humid environment.
- Electric discharge may last for a short period of time after the power is shut down. Please wait two minutes after the power is shut down before operating the device.

- To avoid the risk of electric shock, please do not operate when the power is on.
- Please do not plug and unplug the power cable when the power is on.
- Ensure the correct wire sequence of the terminals connected to the AC power supply.
- Do not place anything containing liquid on the device to avoid the risk of fire or electric shock caused by liquid-splashing.
- The device is only suitable for installation on the concrete or non-flammable surfaces, to prevent molten material from dripping to the bottom during fire caused by internal failure.
- Keeping 90 degrees when moving and using the device.
- After installation, there should be no openings around the LED module. The bottom bracket under the wire outlet position should completely cover the bottom hole only to let the wire out, to prevent the molten material from dripping to the bottom during fire caused by internal failure.



Warning

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Disconnect the power plug before maintenance.
- Make sure the power supply is well-grounded.
- The protective grounding of the device should be reliably connected to the building protective grounding.
- To reduce the risk of electric shock, install protective shield on the exposed connector after installing LED screen.
- Disconnect the power plug before installing the protective shield.
- A disconnecting device should be provided on the outside of the equipment. A single device is recommended for AC 220 V / 230 V / 240 V, 6 A circuit breakers. When multiple devices are superimposed, a suitable circuit breaker should be selected according to the total rated current, but it must not exceed the building equipped circuit specifications.
- To prevent injury, the device must be securely fixed to the ground, wall, ceiling, or steel frame. The all-in-one rack should be fixed to the ground with expansion screws.
- The supporting rack can only be used with the device. Using it with other devices may cause instability and injury.
- The device can only be used with the supporting rack. Using it with other equipment (such as a cart, shelf, or handling device) may cause instability and injury.

- Please strictly follow the installation method in this guide.
- The external wire connection between device and hazardous electonic teminals should be operated by professionals.
- This is a class A product and may cause radio interference in which case the user may be required to take adequate measures.

Contents

Chapter 1 Product Introduction

1.1 Overview

Full-color LED display unit (hereinafter referred to as the device, the product, or the LED) is a high-precision product delivering clear and vivid images. It is featured by wide color gamut, stable performance, long service life, strong environmental adaption, cost effective and little cost to use. The device is applicable to scenes, such as radio and television stations, meeting room display, video surveillance, information display, etc.

1.2 Product Components

An LED control system includes sending and receiving cards. The sending card packages images and sends them to the receiving card. The receiving card unpackages and processes the images, and then displays the images on the LED display unit.

The center distance between two pixels is called pixel pitch. The smaller pixel pitch results in higher pixel density per unit area, higher resolution and higher cost. For example, P1.2 indicates 1.2 mm pixel pitch.

Our products are rack-mount system, so the installation process mainly involves rack installation and cabinet installation. The following sections describe how to install the rack and cabinet in details.

Chapter 2 Rack Installation

2.1 About Rack

There are three types of racks for installing our full-color LED products: wall-mounted rack, ultrathin rack and all-in-one rack. The wall-mounted rack is used for installing front-maintenance cabinets only. The ultrathin rack and all-in-one rack can be used for installing front-maintenance cabinets and back-maintenance cabinets. The rack models vary depending on the project scale and installation environment, so the rack illustrations in this manual are for reference only.

2.2 Install the Rack

2.2.1 Precautions

- Installation personnel must wear protective gear.
- Take safety measures when working at heights.
- Make sure that the rack is mounted vertically to the flat ground without tilting or twisting.
- Check that all structural parts and fasteners are fully mounted without missing.
- After all the accessories are mounted, clean all the debris in the rack and avoid metal debris being remained.

2.2.2 Install the Wall-Mounted Rack

The wall-mounted rack is used for installing front-maintenance cabinets only.

Install the Base Frame

Steps

1. Use header corners to connect aluminum extrusion rods from bottom to top.

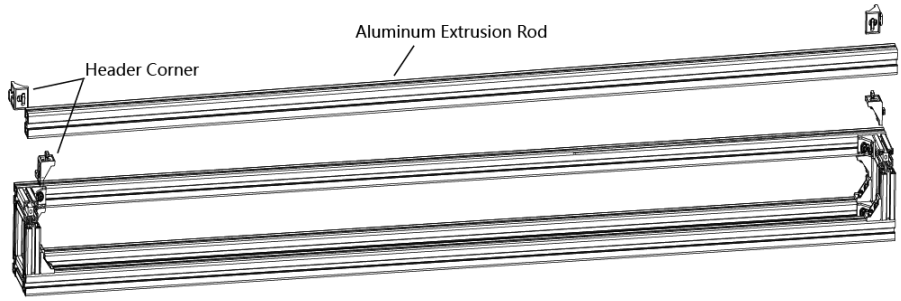


Figure 2-1 Assemble the Base Frame

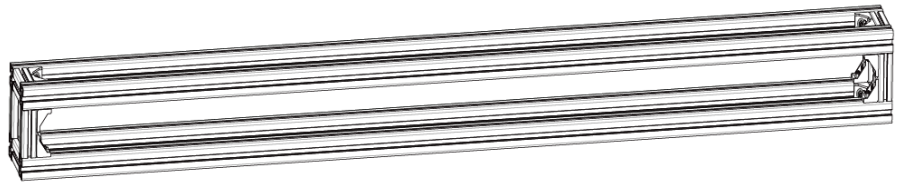


Figure 2-2 Base Frame Assembled

2. Use expansion bolts, T-Shaped bolts and fixing plates to fix the base frame onto the wall.

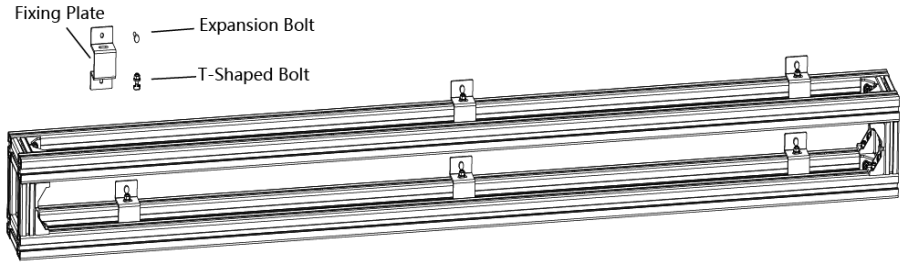


Figure 2-3 Fix the Base Frame onto the Wall

Install the Rack Frame

Steps

1. Use the header corners to connect aluminum extrusion rods to the base frame from left to right.

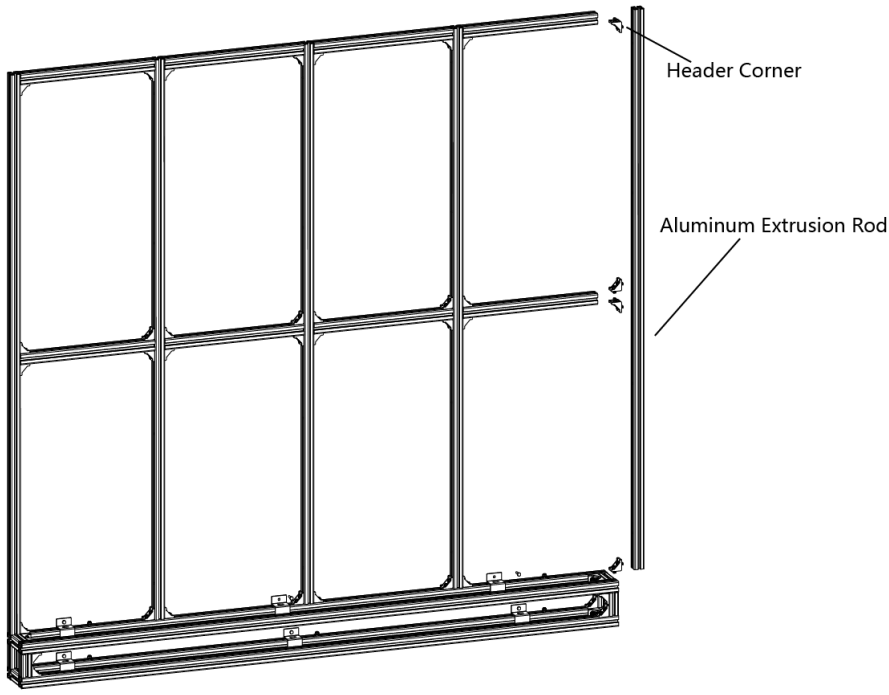


Figure 2-4 Assemble the Rack Frame

2. Use expansion bolts, T-Shaped bolts and fixing plates to fix the rack frame onto the wall.

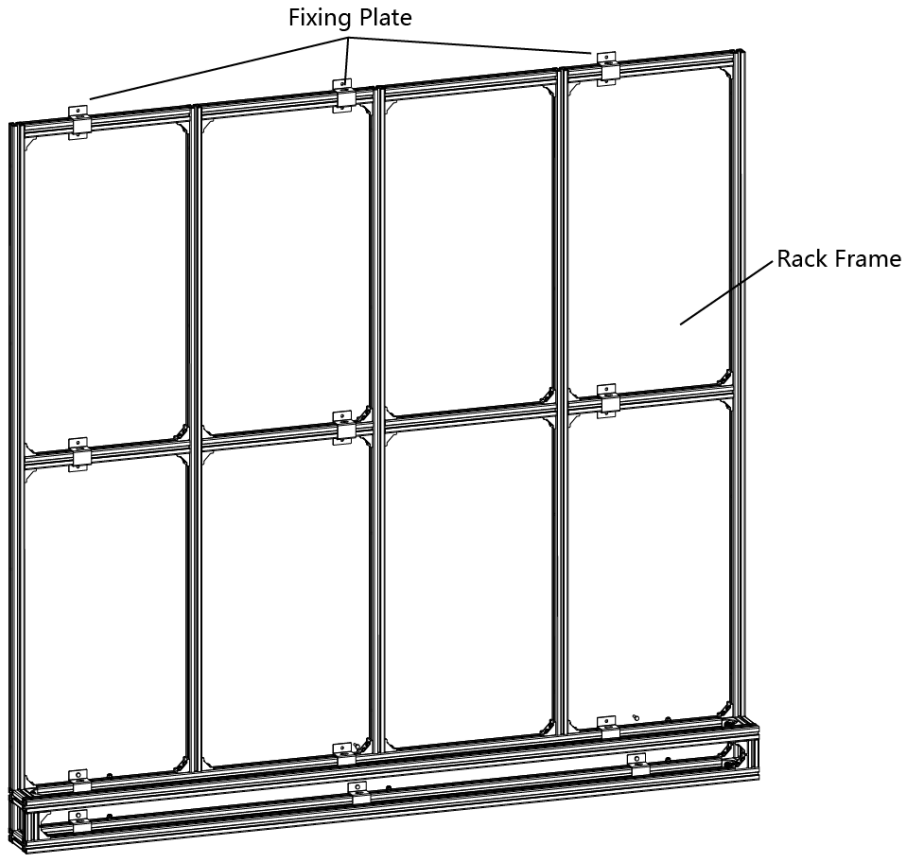


Figure 2-5 Fix the Rack Frame onto the Wall

Install Cabinets into the Rack Frame

After base frame and rack frame are well installed, perform the following steps to install the cabinets into the rack frame:

Steps

1. Install the mounting screws through the holes on the front of the cabinet and lock with the floating nuts on the bracket frame.

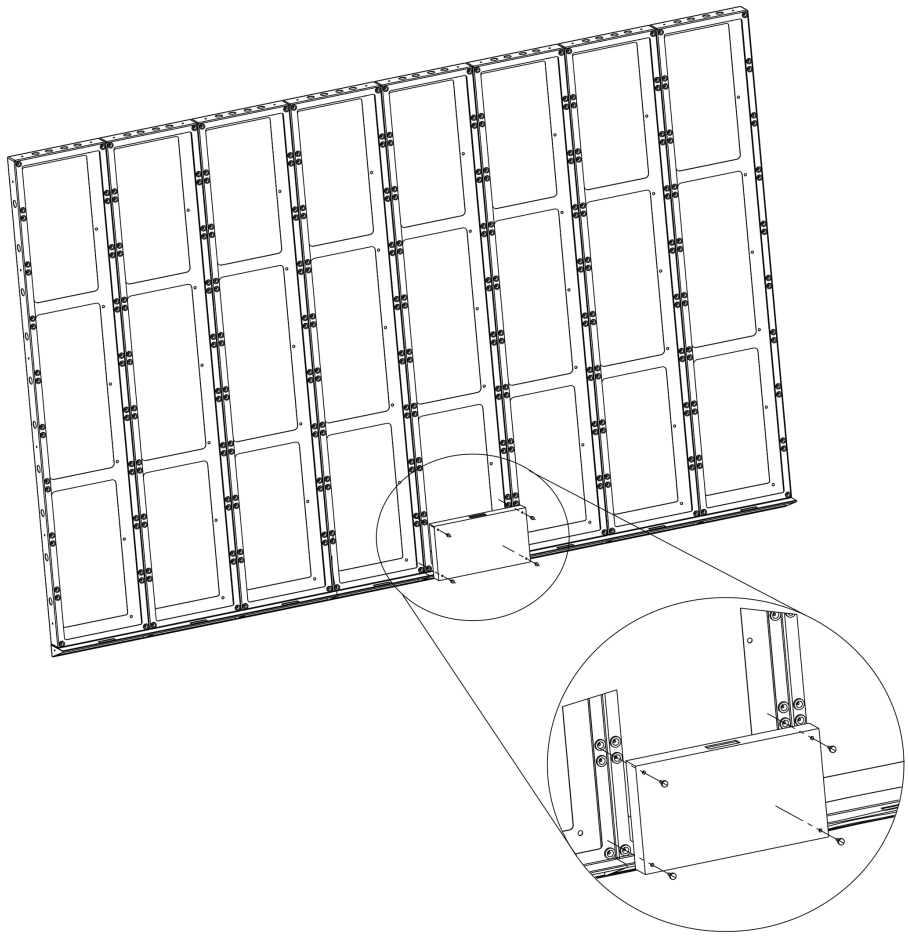


Figure 2-6 Fix the Screen

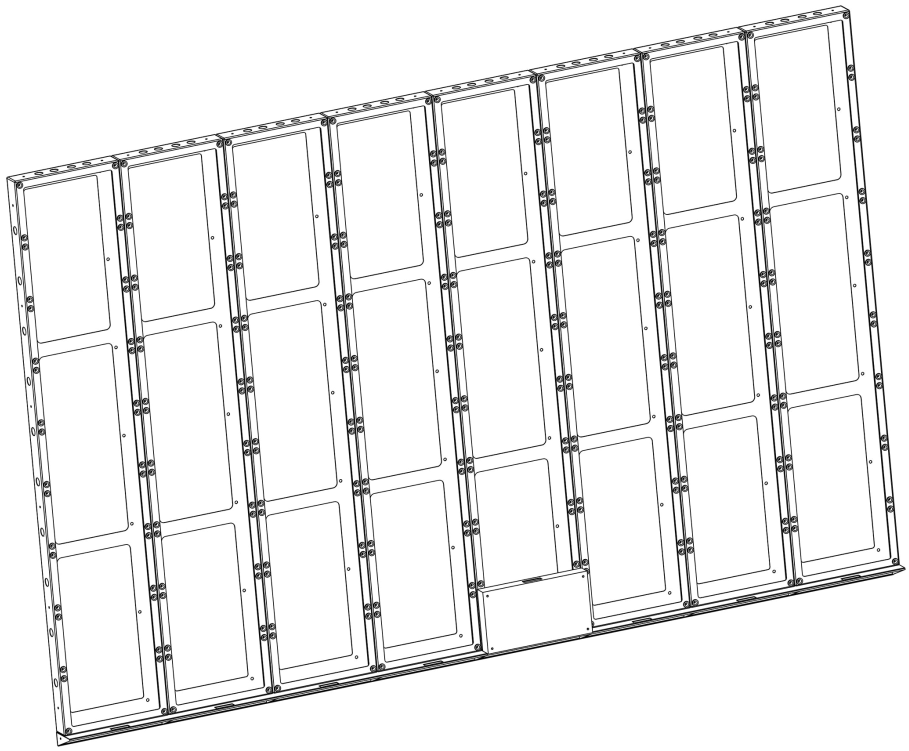


Figure 2-7 Screen Fixed

2. Install the cabinets from the center to both sides until cabinets of the first row installed.

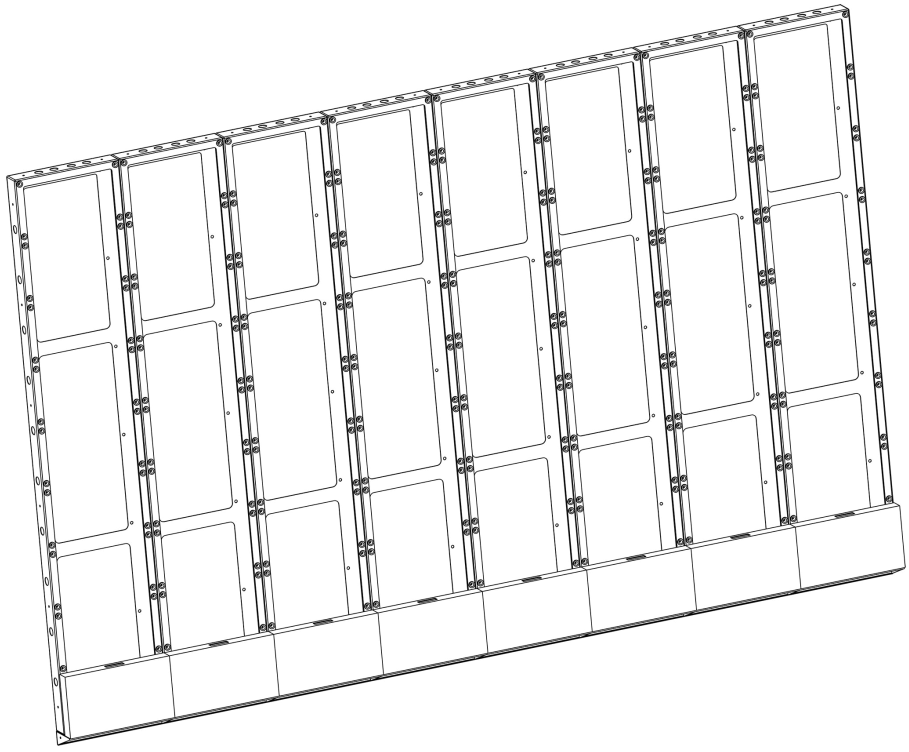


Figure 2-8 Screens Fixed

3. Repeat the above steps to install the other cabinets in the above rows.
4. Use a level to measure and ensure that the cabinets are flat and vertical.

Note

- Do not fix the screws between the connectors and cabinets too tight for future adjustment.
- In normal cases, lock out LED lamp boards after they are adjusted horizontally and vertically because the boards will probably be moved during the installation of other lamp boards.
- Ensure that the screen is flat and without evident gap. Otherwise, make some adjustments.

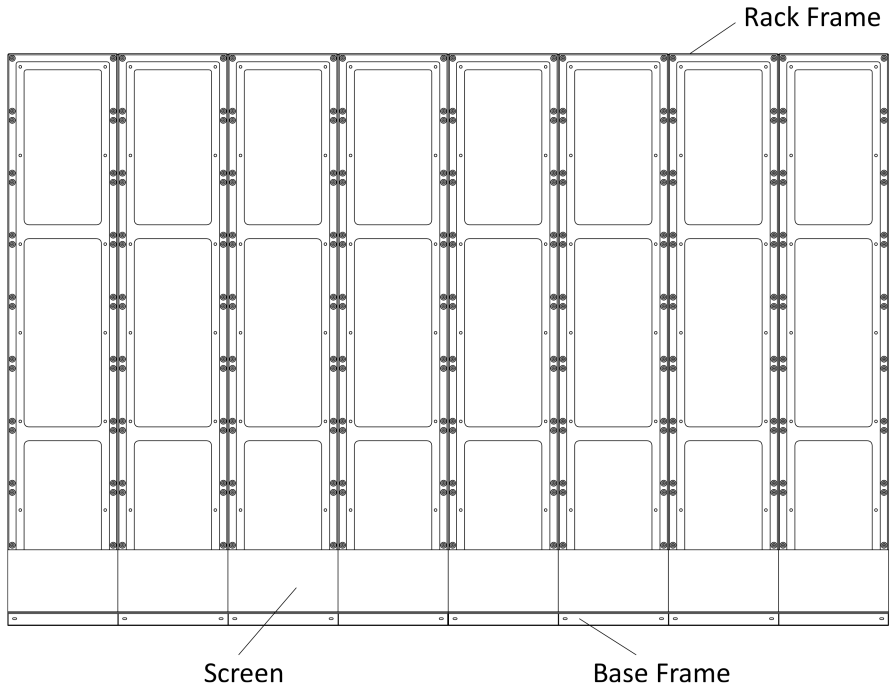


Figure 2-9 Screens of the First Row Fixed

Note

- For details about cabinet stitching, see ***Stitch Cabinet Frames*** .
- For details about lamp boards installation, see ***Install Lamp Boards on the Cabinets*** .

5. Repeat the above steps to install the other cabinets.

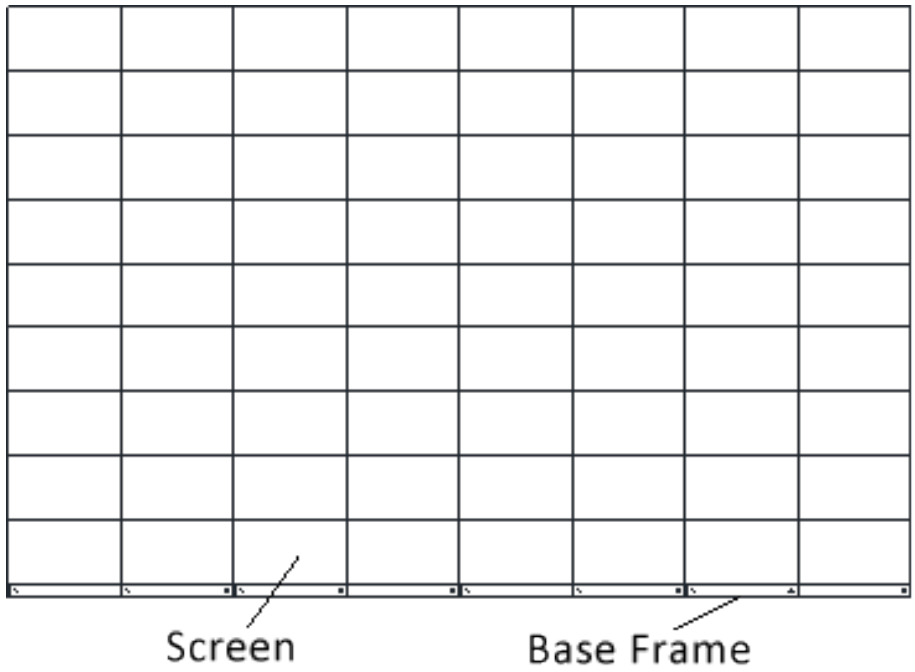


Figure 2-10 Screen Installation Finished

Note

- Install the device no more than 5 mm away from the wall or other metal racks in case of lamp board drop resulting in electric shock.
- After installation, there should be no openings around the LED module. The bottom bracket under the wire outlet position should completely cover the bottom hole only to let the wire out, to prevent the molten material from dripping to the bottom during fire caused by internal failure.
- To ensure safety, the installation parts and the wall should support four times the weight of the device.

2.2.3 Install the Ultrathin Rack

The ultrathin racks are used for mounting front-maintenance products and back-maintenance products.

Install the Bottom Chassis

Steps

1. Use header corners to connect aluminum extrusion rods from bottom to top.

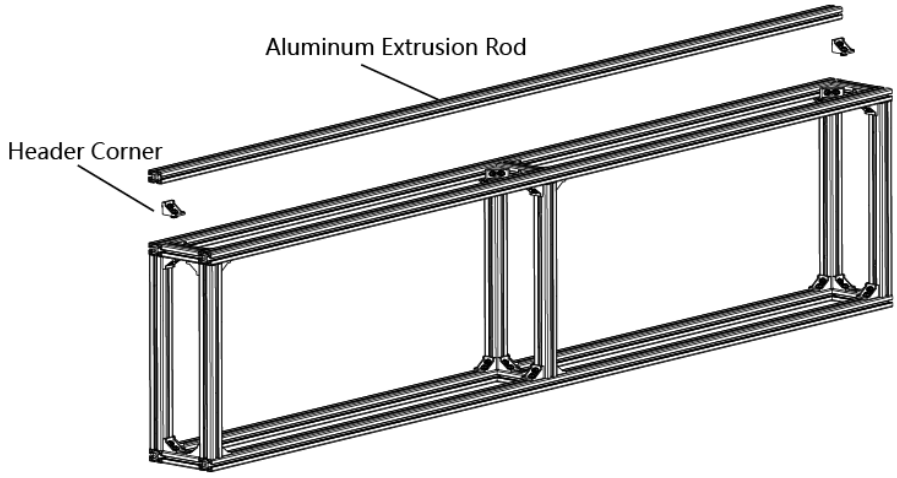


Figure 2-11 Assemble the Base Frame Unit

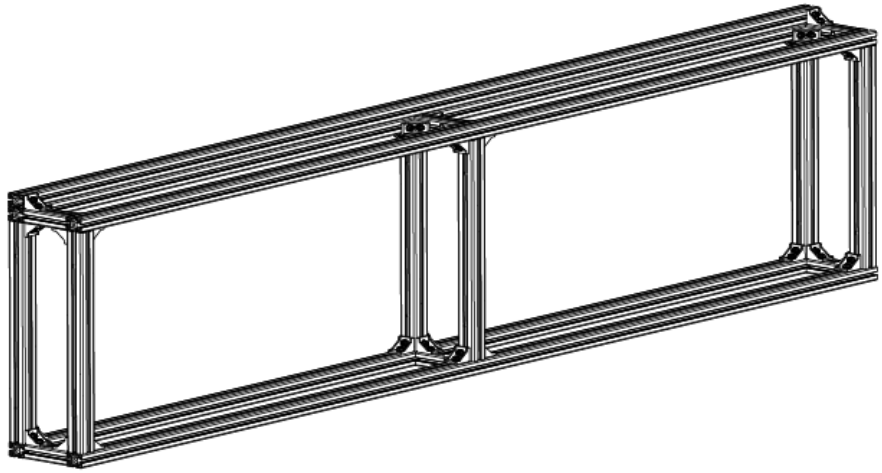


Figure 2-12 Base Frame Unit Assembled

2. Use wedge-locking collector bolts to connect the base frame units.

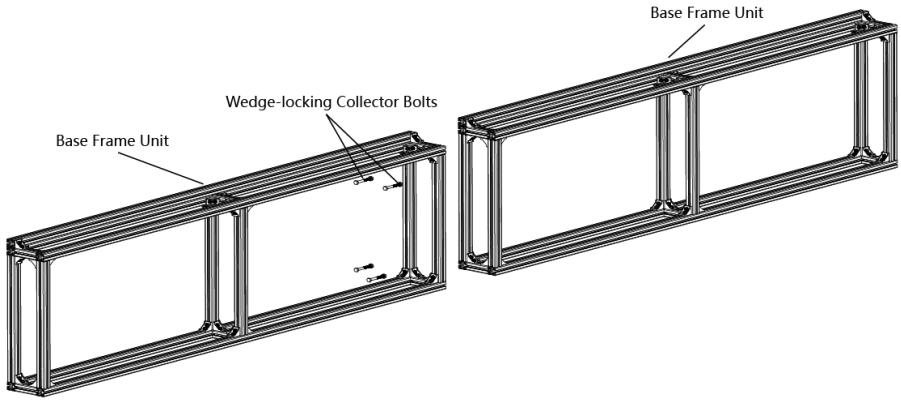


Figure 2-13 Connect the Base Frame Units

3. Position the anchor bolts into the base frame and tighten the bolts.

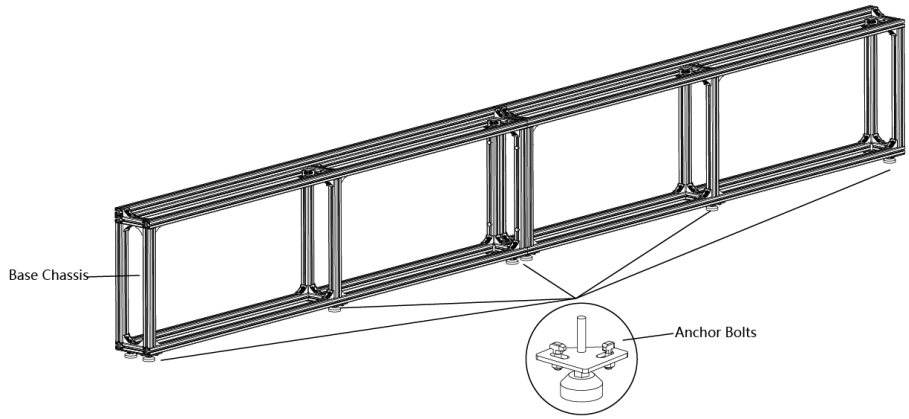


Figure 2-14 Assemble the Base Frame

4. Level the bottom chassis and then tighten the bolts.

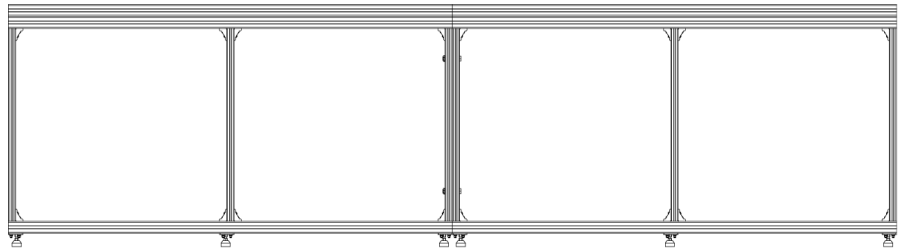


Figure 2-15 Leveled Bottom Chassis

Install the Rack Frame

Steps

1. Use header corners to connect aluminum extrusion rods from bottom to top.

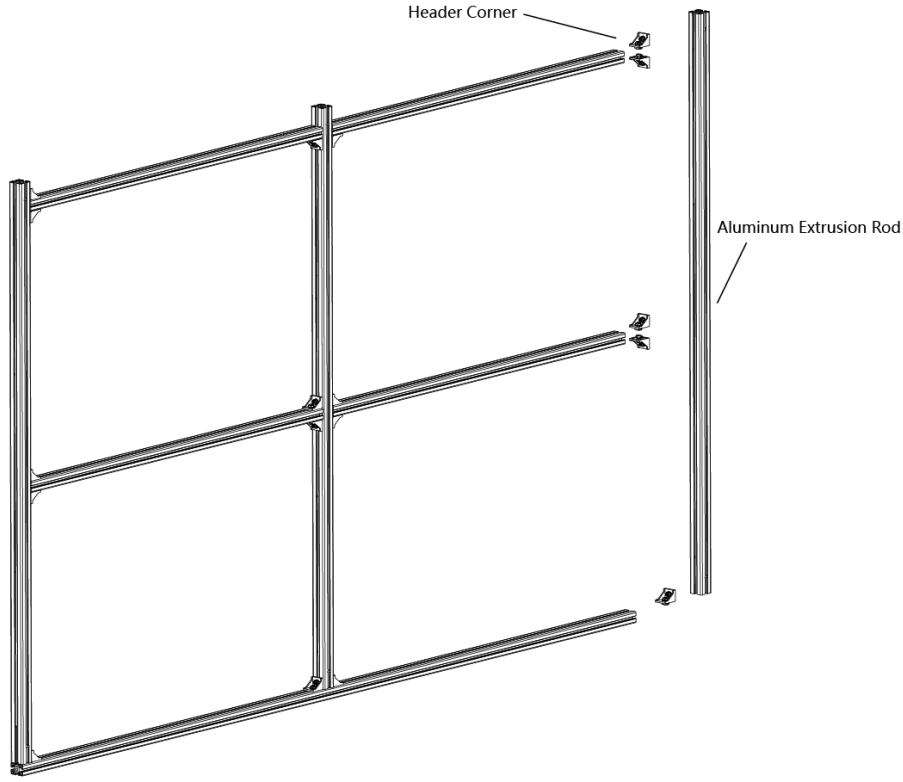


Figure 2-16 Assemble the Rack Frame Unit

2. Use wedge-locking collector bolts to connect the rack frame units.

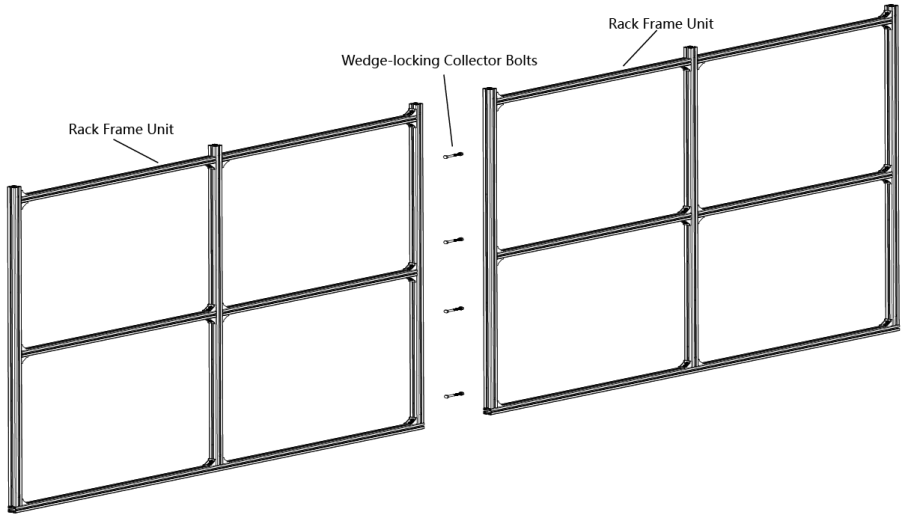


Figure 2-17 Connect the Rack Frame Units

3. Align the rack frame to the base chassis and use wedge-locking collector bolts to fix the frames.

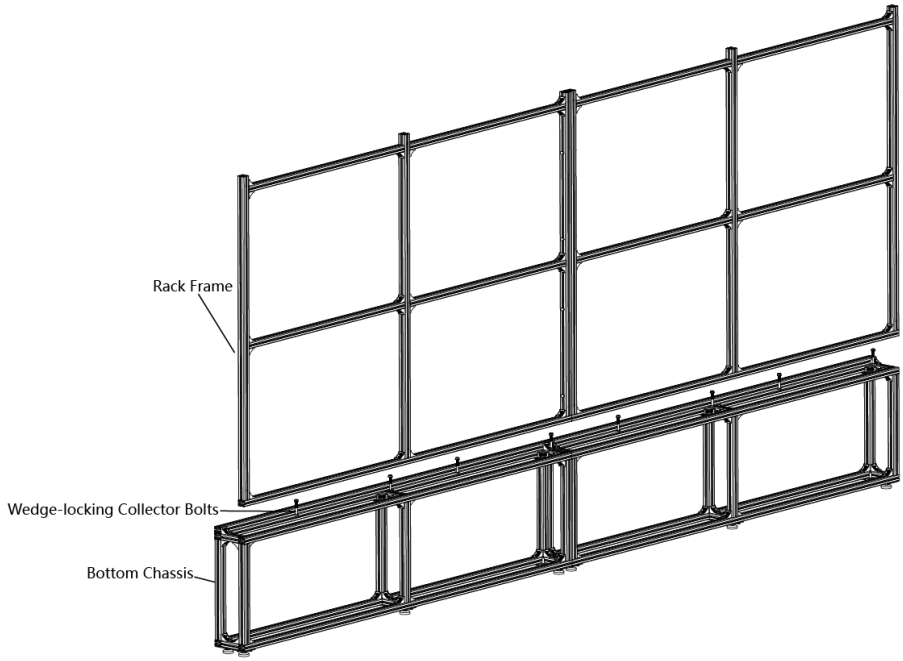


Figure 2-18 Align the Rack Frame to the Base Chassis

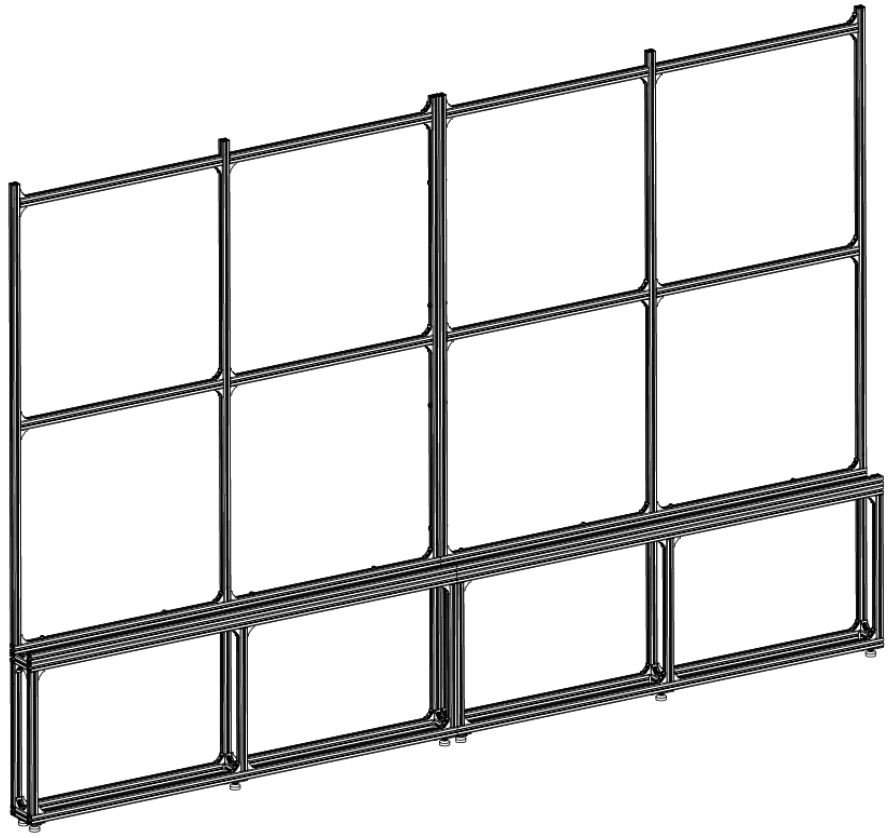


Figure 2-19 Frames Aligned

Install the Rear Pulling Rods (for Large-scale Project)

Steps

1. Use the wedge-locking collector bolts to fix the rear pulling rods into the rack frame.

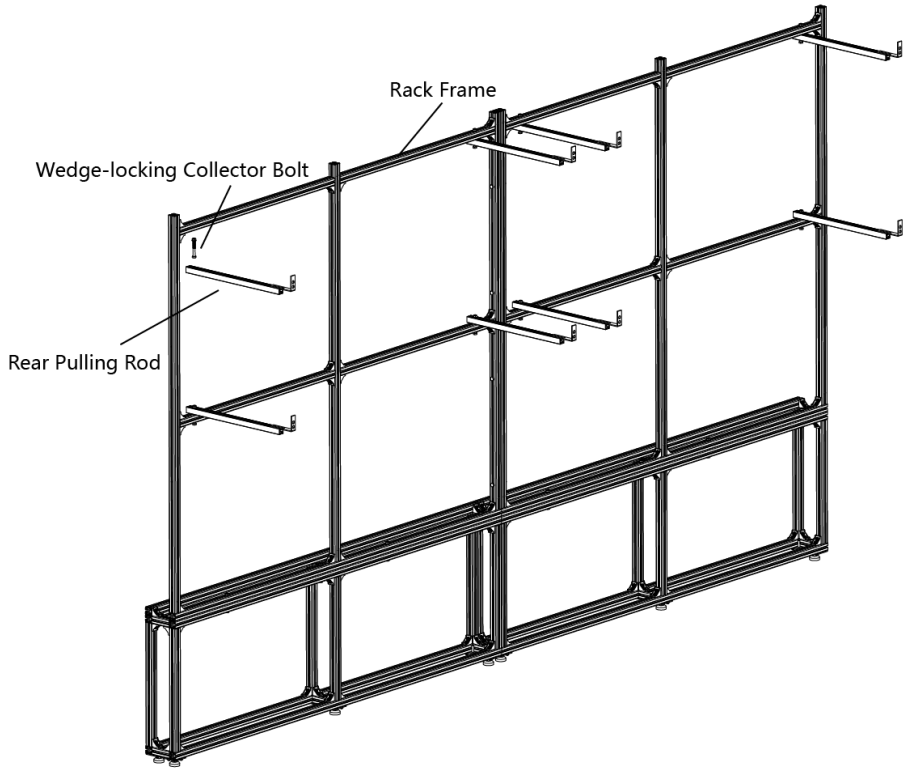


Figure 2-20 Fix the Rear Pulling Rods into the Rack frame

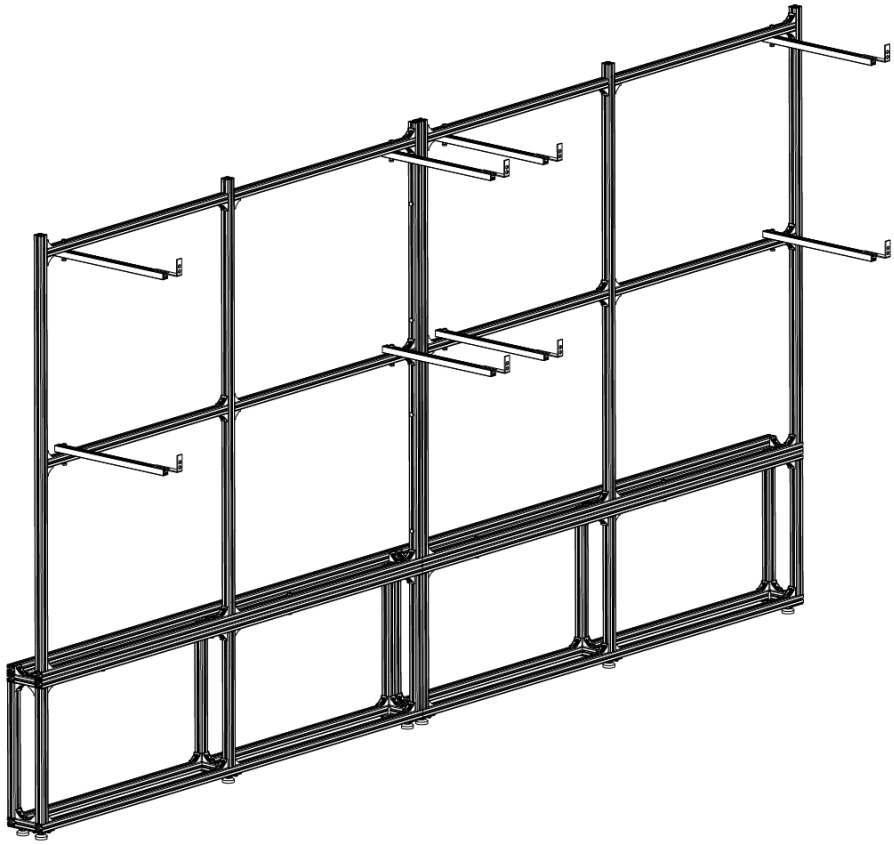


Figure 2-21 Rear Pulling Rods Fixed

2. Use the expansion bolts to fix the rear pulling rods onto the bearing wall.

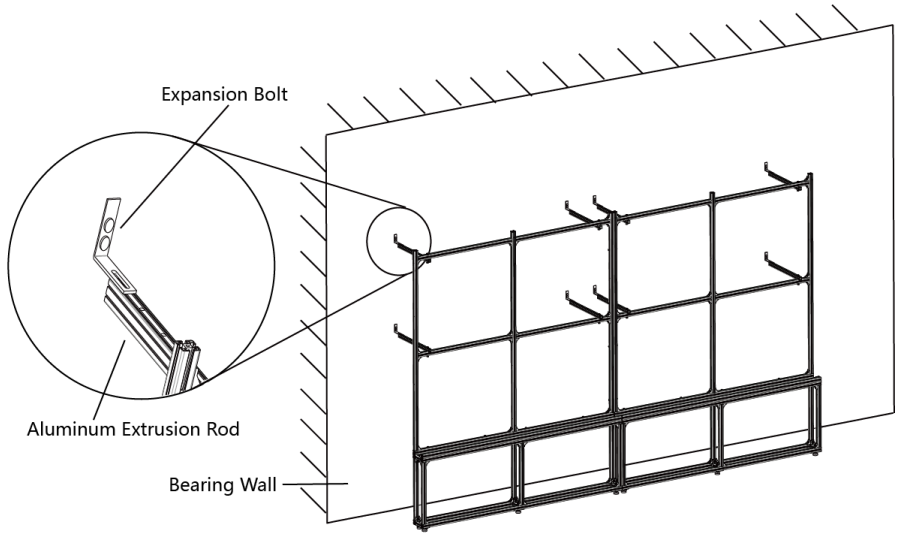


Figure 2-22 Fix the Rear Pulling Rods onto the Bearing Wall

Install the Connectors

The connectors are divided into two parts: customized front joint piece which is used to connect the screens, and back connecting component which is used to connect the rack frame. The following figures list three types of connectors and the positions where the connectors used respectively.

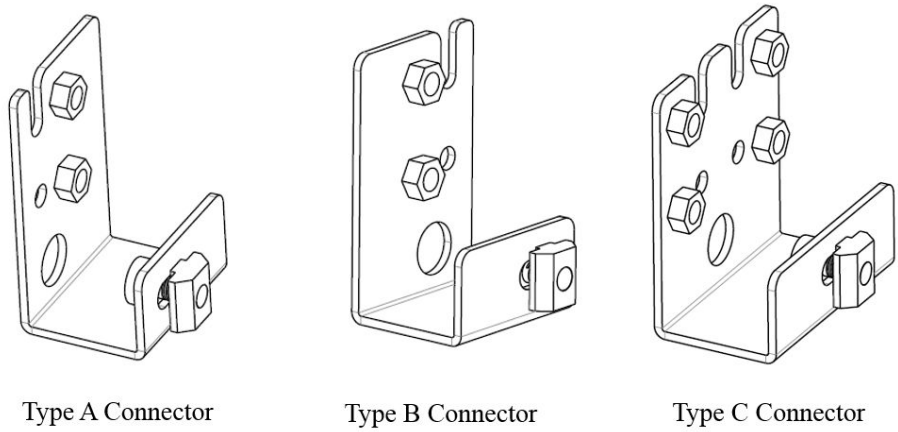


Figure 2-23 Connectors

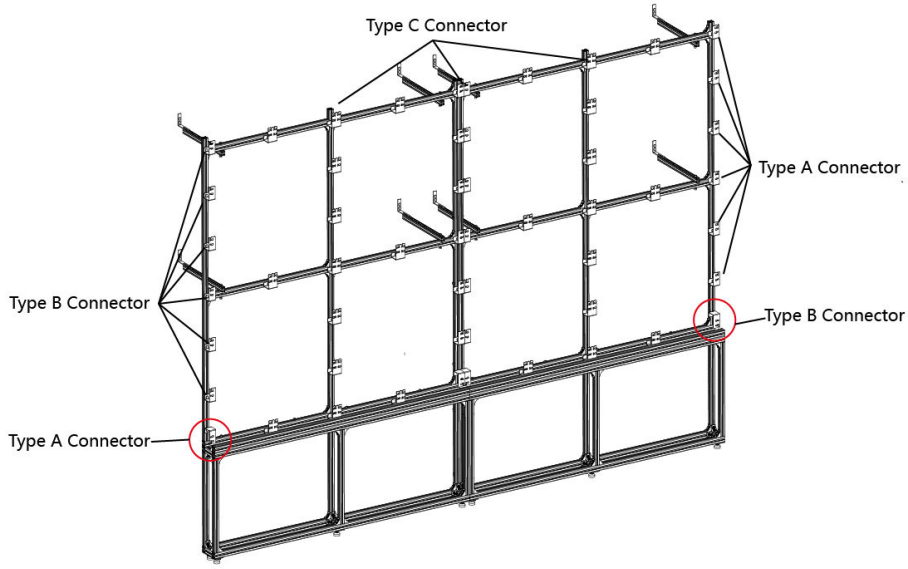


Figure 2-24 Connectors Installed

Note

Please pay attention to the types of outermost connectors between rack frame and bottom chassis.

Steps

1. Twist the hexagonal screws into the T-Shaped nuts.

2. Insert the T-Shaped nuts into the slots of aluminum extrusion rods, and move the connectors to the suitable place.

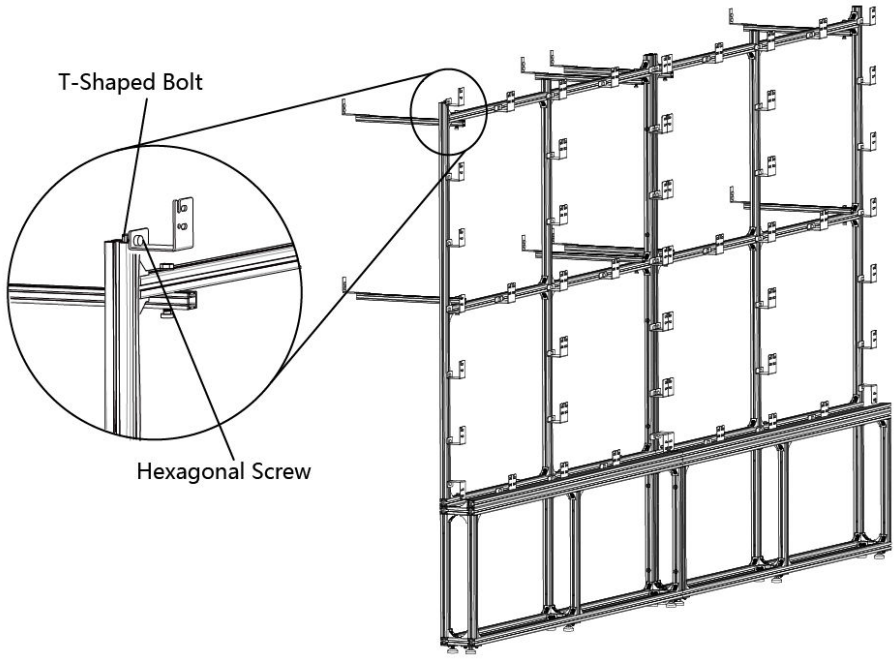


Figure 2-25 Install the Connectors

3. Secure the connectors to the rack frame with screws.

Install Cabinets into the Rack Frame

After the bottom chassis, rack frame and connectors are well installed, perform the following steps to install the cabinets into the rack frame:

Steps

1. Install the first cabinet from the lower middle part. Level and secure the cabinet to the connectors on the rack frame. For screens do not have connectors near the rear, use joint pieces to fix the screen.

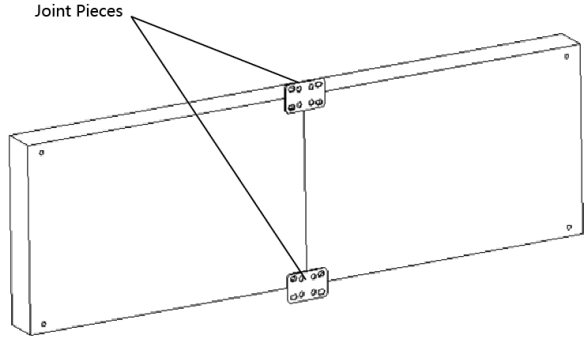


Figure 2-26 Fix the Screen with Joint Pieces

Note

- Install the cabinets from the bottom to the top, from the middle to the sides.
- Do not fix the screws between the connectors and cabinets too tight for future adjustment.
- In normal cases, lock out LED lamp boards after they are adjusted horizontally and vertically because the boards will probably be moved during the installation of other lamp boards.
- Ensure that the screen is flat and without evident gap. Otherwise, make some adjustments.

2. Repeat the above steps to install the other cabinets in the lowest row.

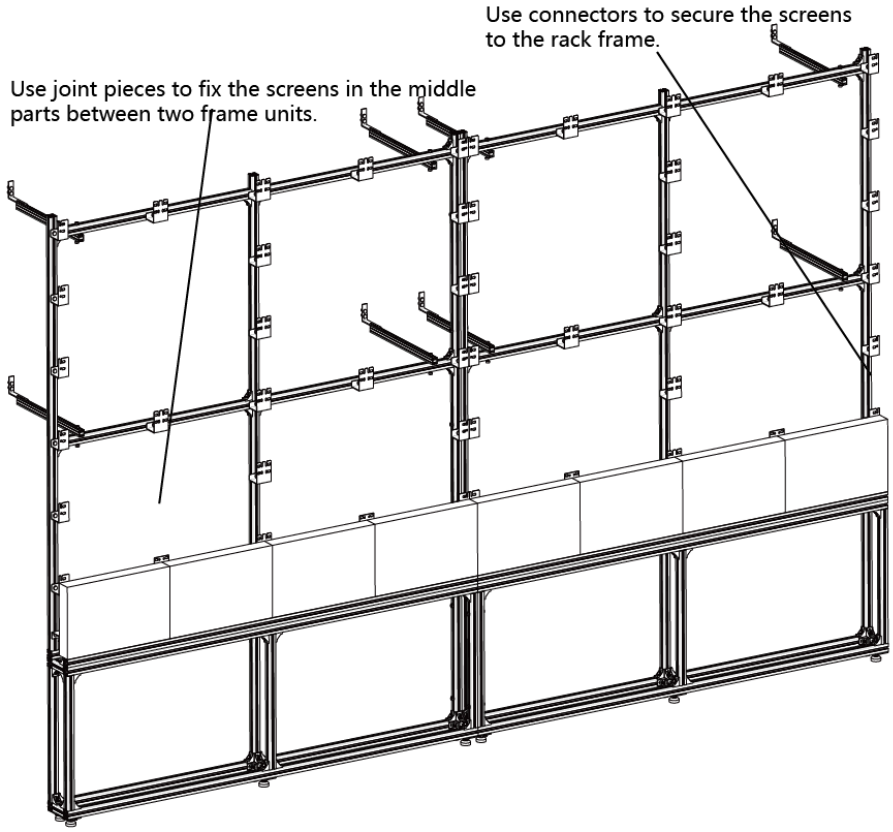


Figure 2-27 Fix the Screens

3. Use a level to measure and ensure that the cabinets are flat and vertical.

Note

When there is a deviation in height, simply place a thin iron sheet under the bottom. Do not try to resolve the deviation by hitting the cabinets on the top because it will result in larger deviation later.

4. Repeat the above steps to complete the installation of other cabinets.

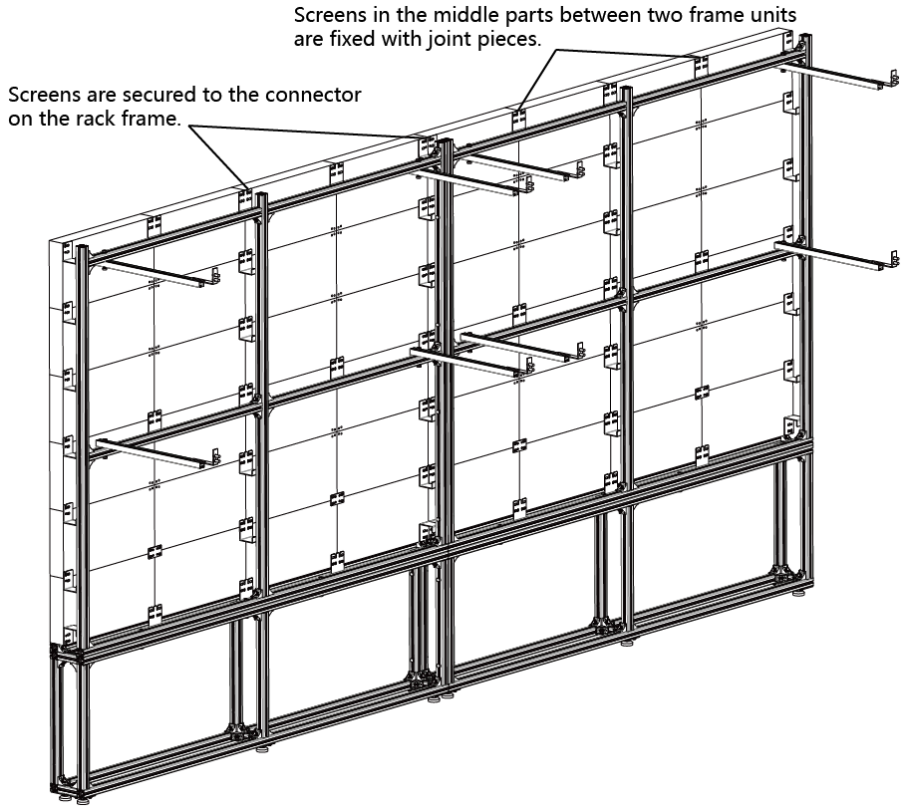


Figure 2-28 Screens Fixed

5. Ensure that all the cabinets are flat and vertical and the seams between the cabinets are even. Then tighten the screws to complete the installation.

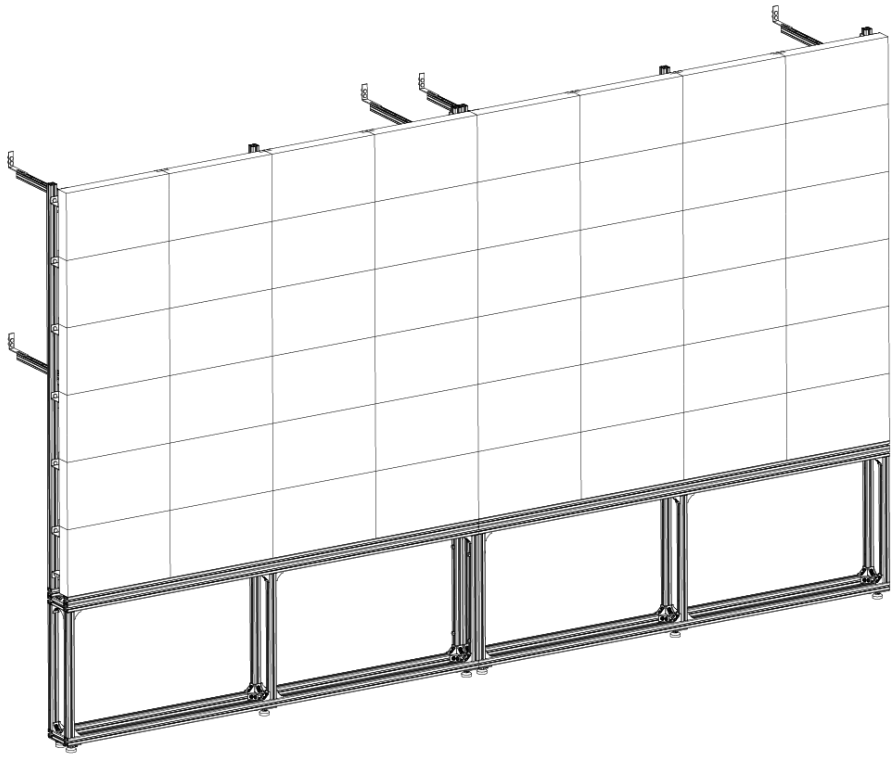


Figure 2-29 Screen Installation Finished

Note

- For details about cabinet stitching, see ***Stitch Cabinet Frames*** .
- For details about lamp boards installation, see ***Install Lamp Boards on the Cabinets*** .

2.2.4 Install the All-in-One Rack

The all-in-one racks are used for mounting front-maintenance products and back-maintenance products.

Install the Bottom Chassis

Steps

1. Use header corners to connect aluminum extrusion rods.

Note

It is recommended to assemble the base frame units from bottom to top.

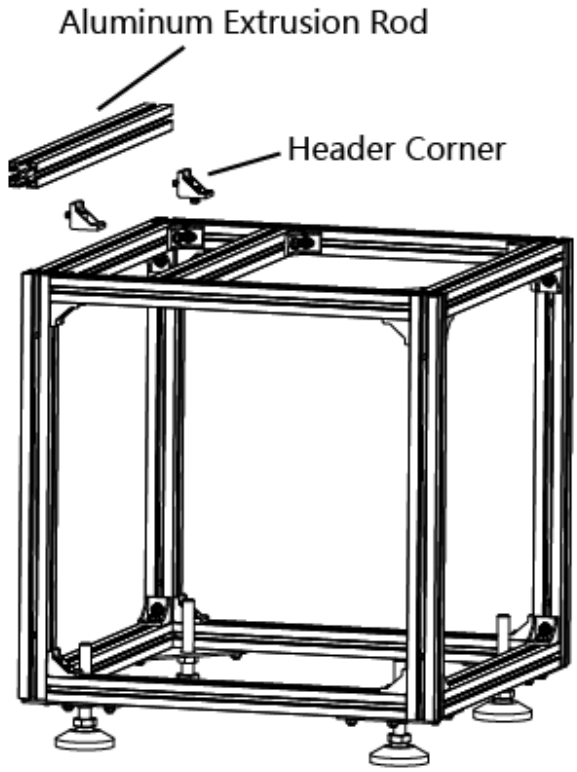


Figure 2-30 Assemble the Base Frame Unit

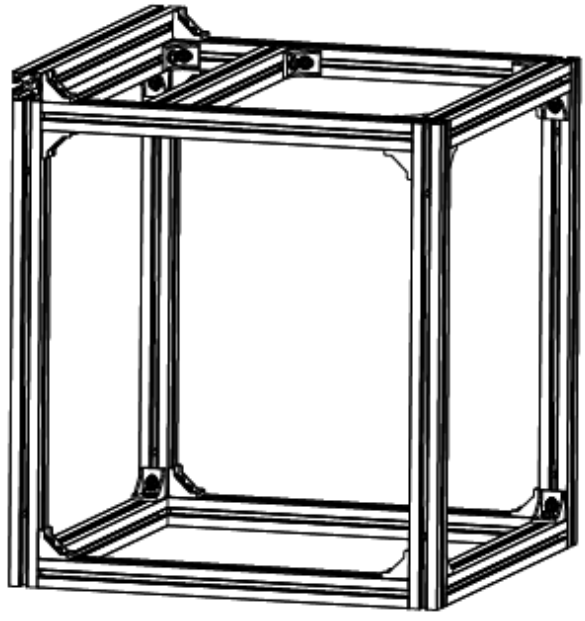


Figure 2-31 Base Frame Unit Assembled

2. Use wedge-locking collector bolts to connect the base frame units.

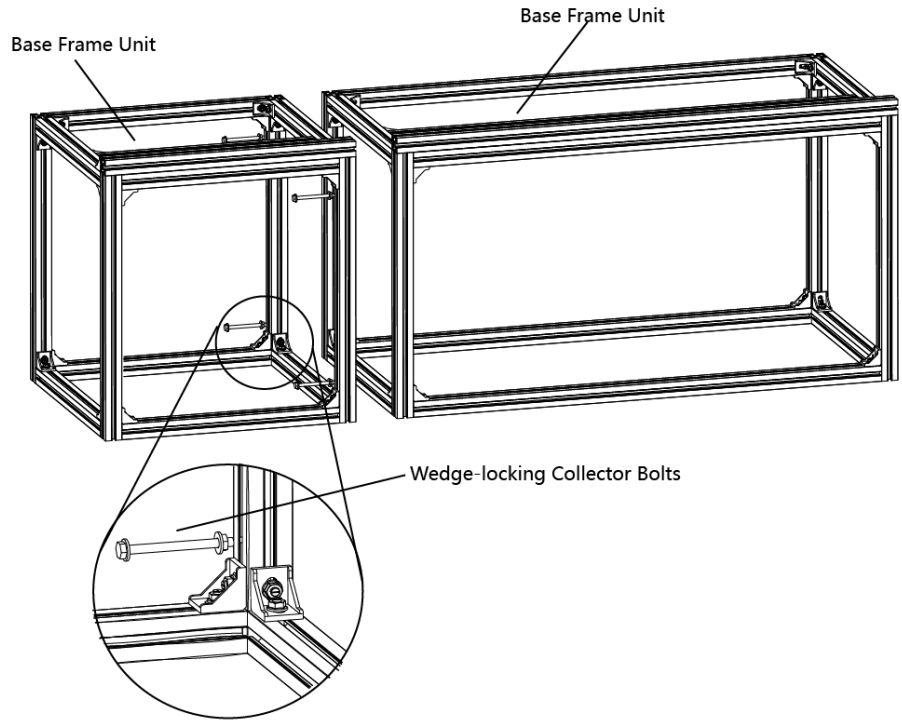


Figure 2-32 Connect the Base Frame Units

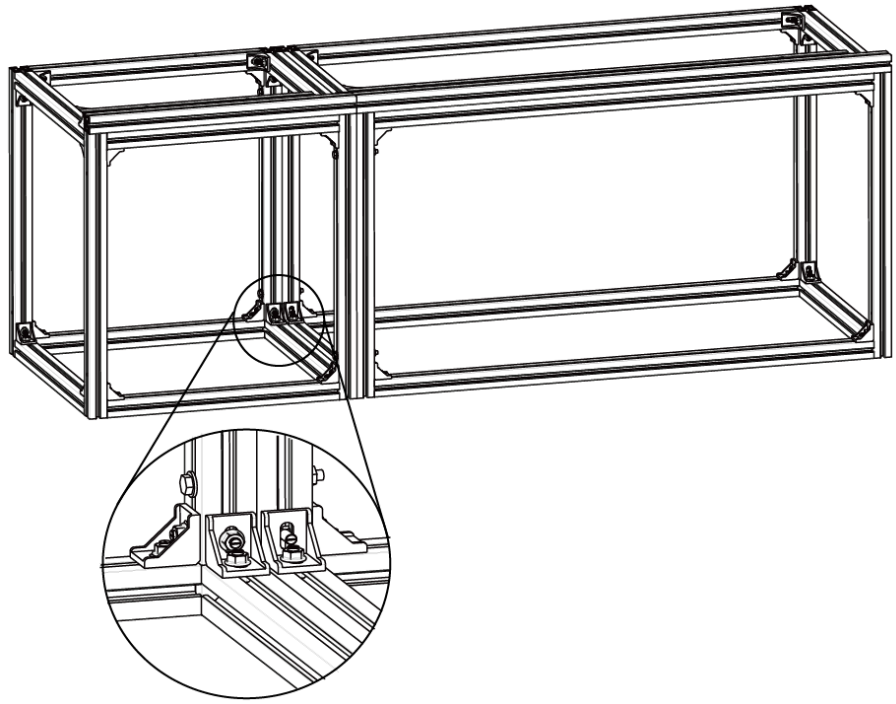


Figure 2-33 Base Frame Units Connected

3. Repeat the above steps to connect the other base frame units.

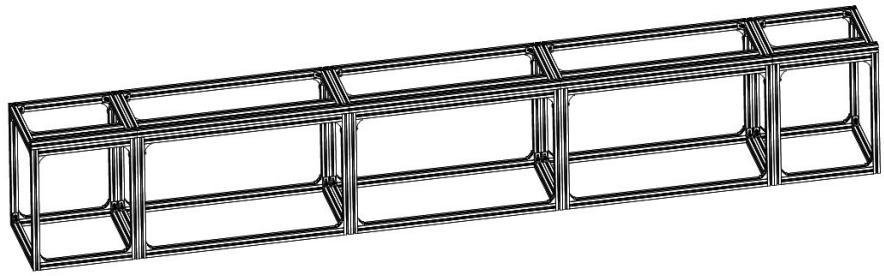


Figure 2-34 Base Frame

4. Position the anchor bolts into the base frame and tighten the bolts.

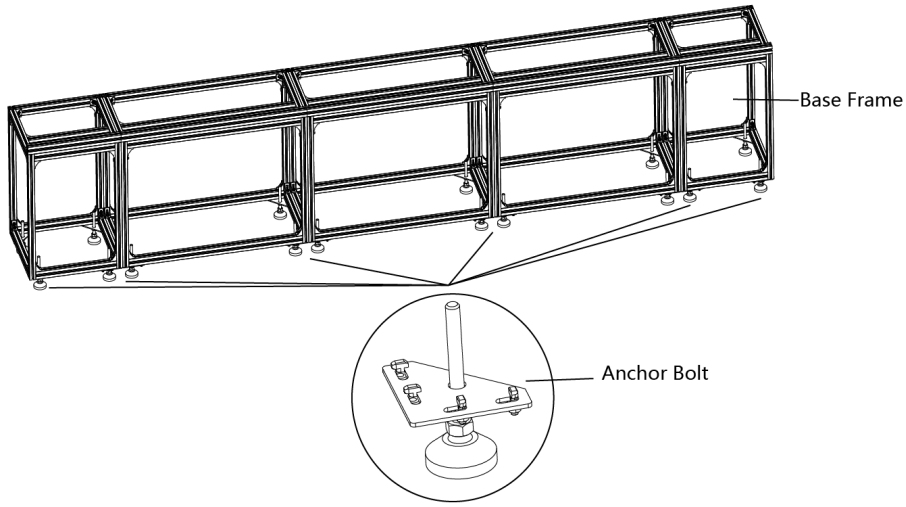


Figure 2-35 Assemble the Base Frame

5. Level the bottom chassis and then tighten the bolts.

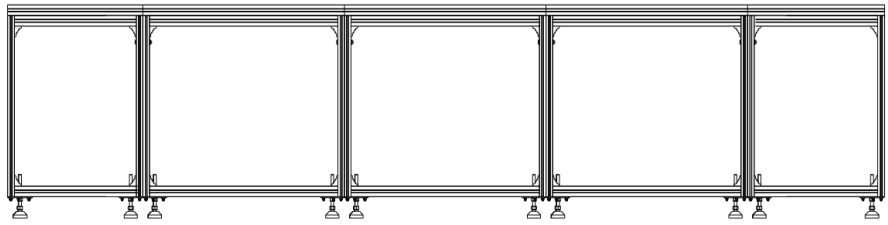


Figure 2-36 Leveled Bottom Chassis

Install the Rack Frame

Steps

1. Use header corners to connect aluminum extrusion rods.

Note

It is recommended to assemble the rack frame units from bottom to top.

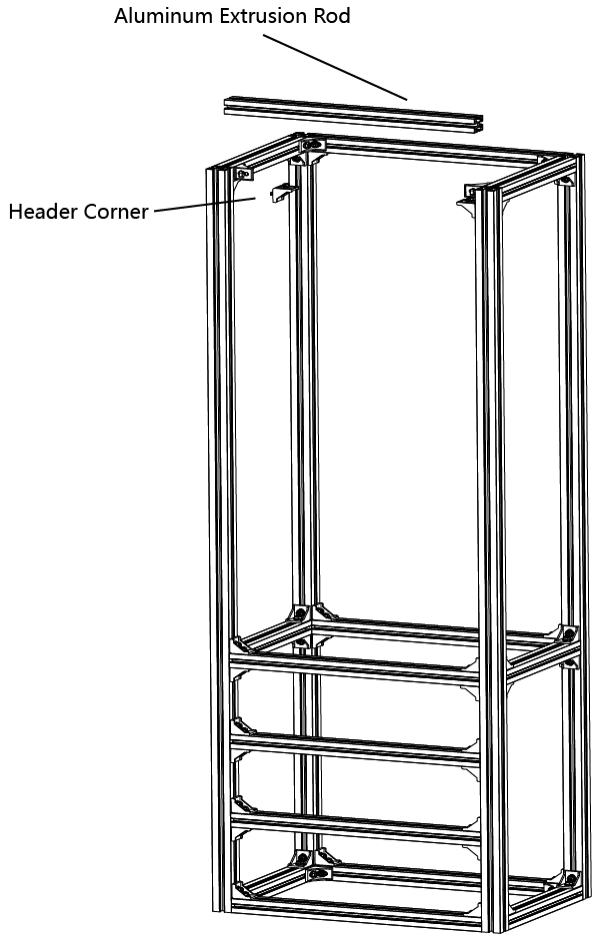


Figure 2-37 Assemble the Rack Frame Unit

2. Use wedge-locking collector bolts to connect the rack frame units.

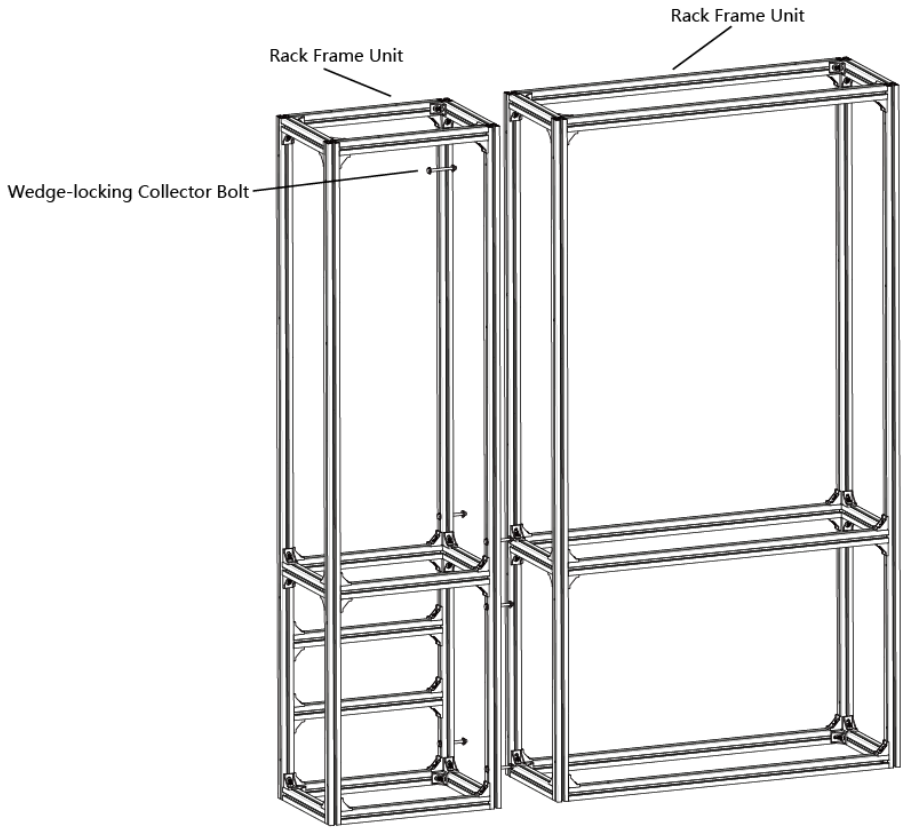


Figure 2-38 Connect the Rack Frame Units

3. Repeat the above steps to connect the other rack frame units.

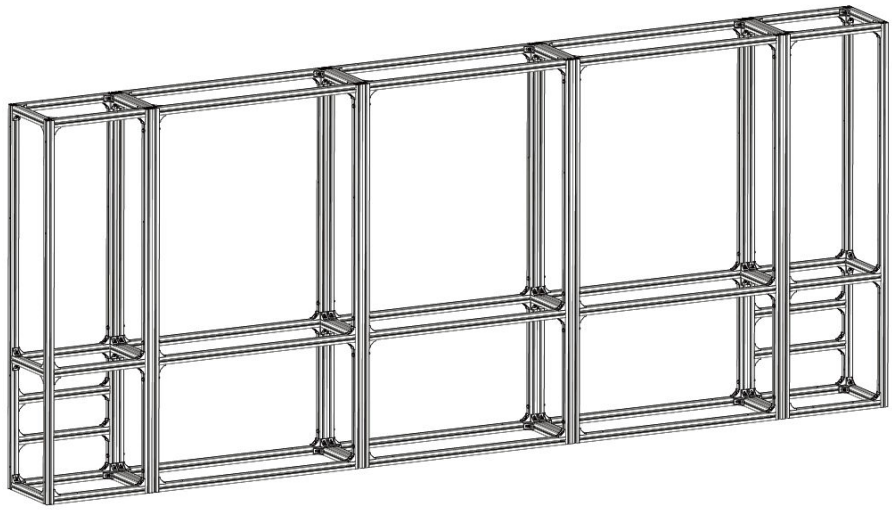


Figure 2-39 Rack Frame

4. Align the rack frame to the base chassis and use wedge-locking collector bolts to fix the frames.

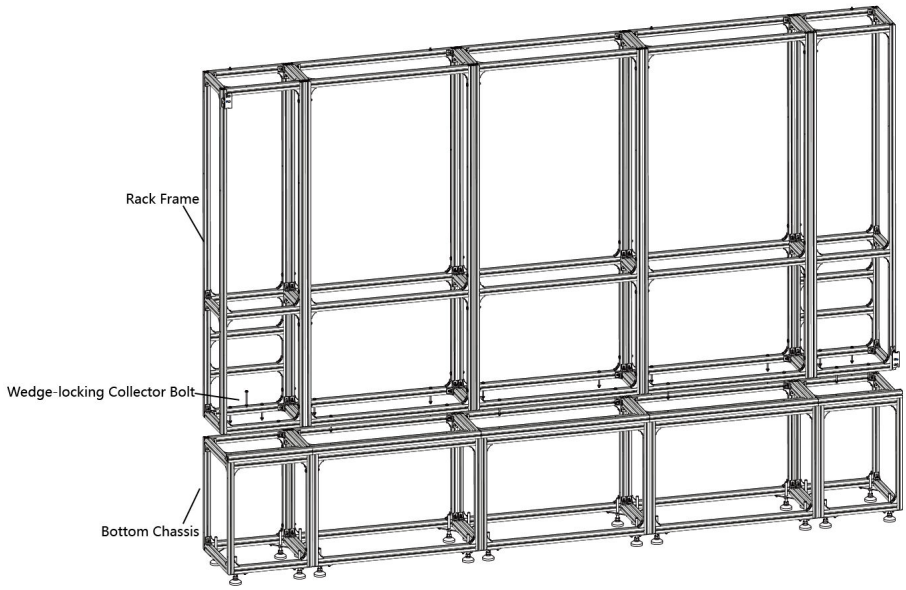


Figure 2-40 Align the Rack Frame to the Base Chassis

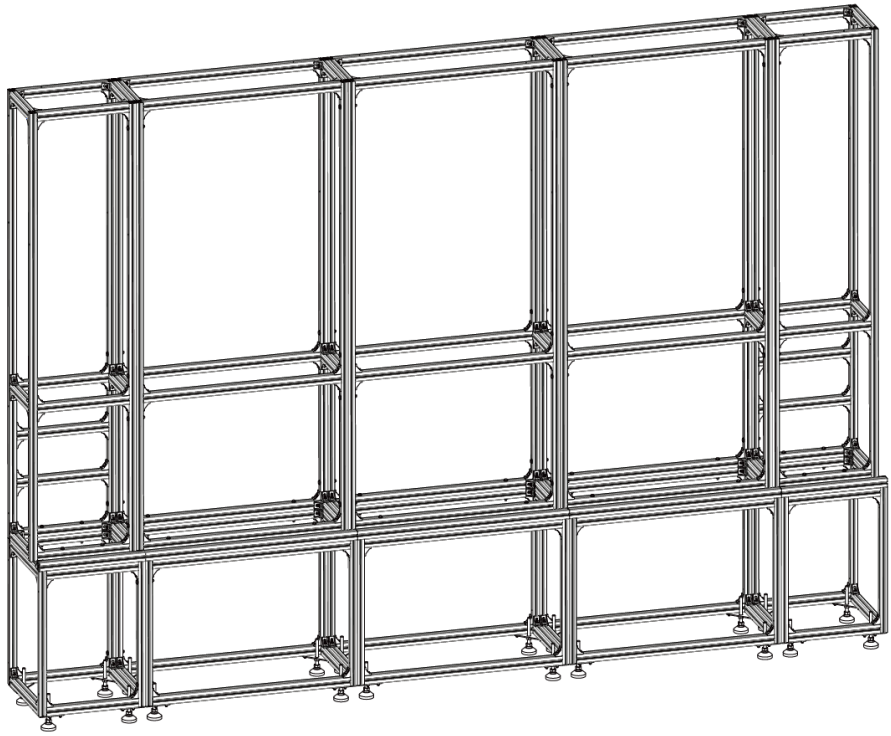


Figure 2-41 Frames Aligned

Install the Rear Pulling Rods (for Large-scale Project)

Steps

1. Use the wedge-locking collector bolts to fix the rear pulling rods into the rack frame.

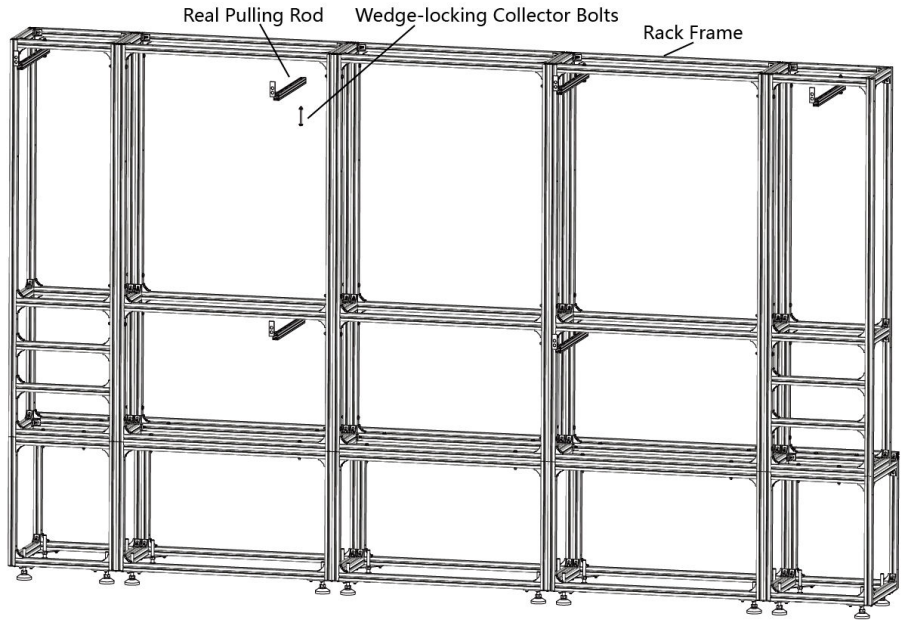


Figure 2-42 Fix the Rear Pulling Rods into the Rack Frame

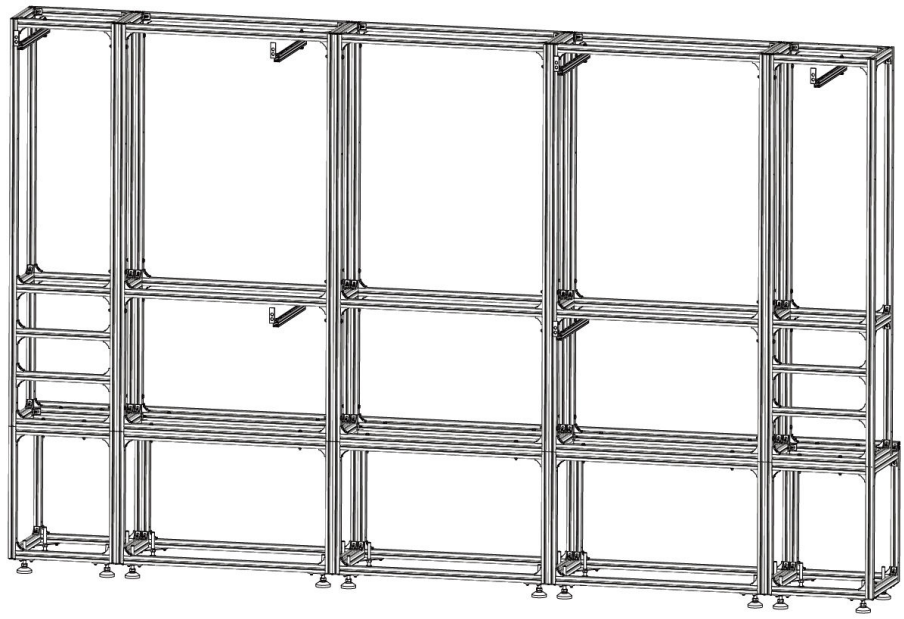


Figure 2-43 Rear Pulling Rods Fixed

2. Use the expansion bolts to fix the rear pulling rods onto the bearing wall.

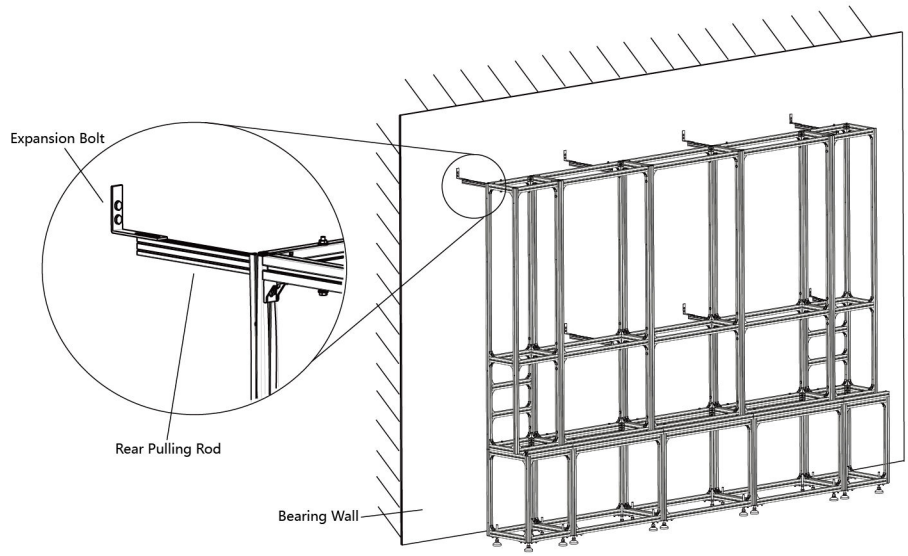


Figure 2-44 Fix the Rear Pulling Rods onto the Bearing Wall

Install the Connectors

The connectors are divided into two parts: customized front joint piece which is used to connect the screens, and back connecting component which is used to connect the rack frame. The following figures list three types of connectors and the positions where the connectors used respectively.

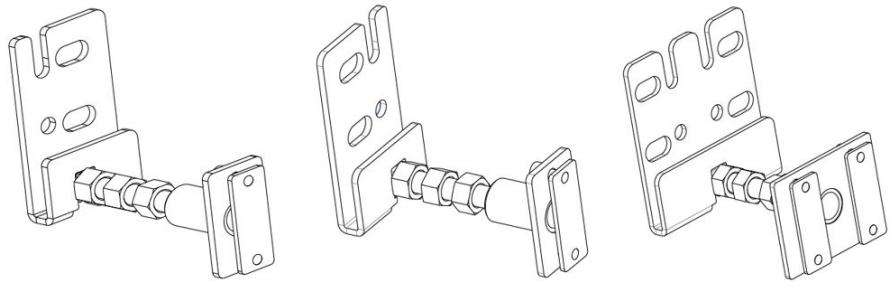


Figure 2-45 Connectors

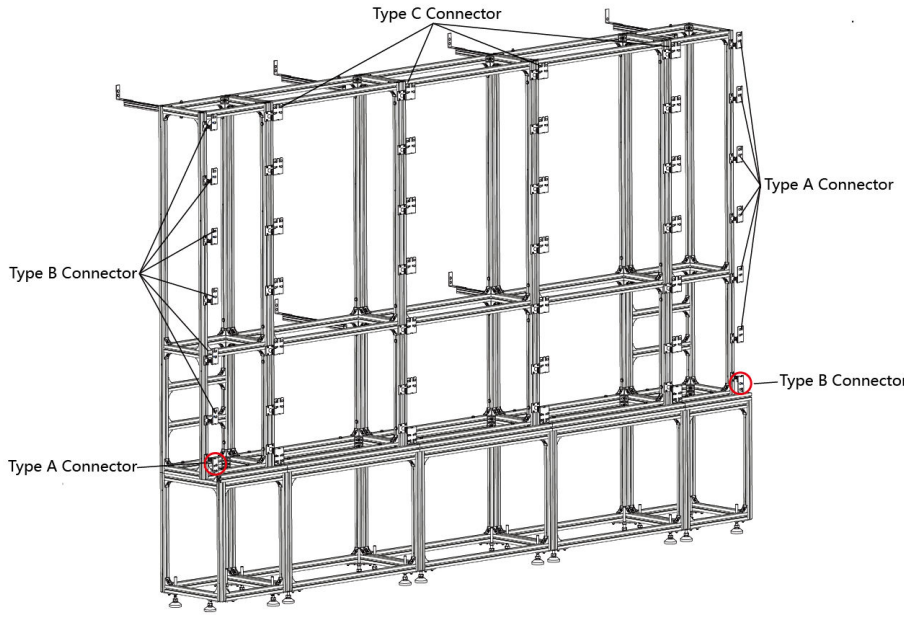


Figure 2-46 Connectors Installed

Note

Please pay attention to the types of outermost connectors between rack frame and bottom chassis.

Steps

1. Twist the hexagonal screws into the screw thread plates.
2. Insert the screw thread plates into the slots of aluminum extrusion rods, and move the connectors to the suitable place.

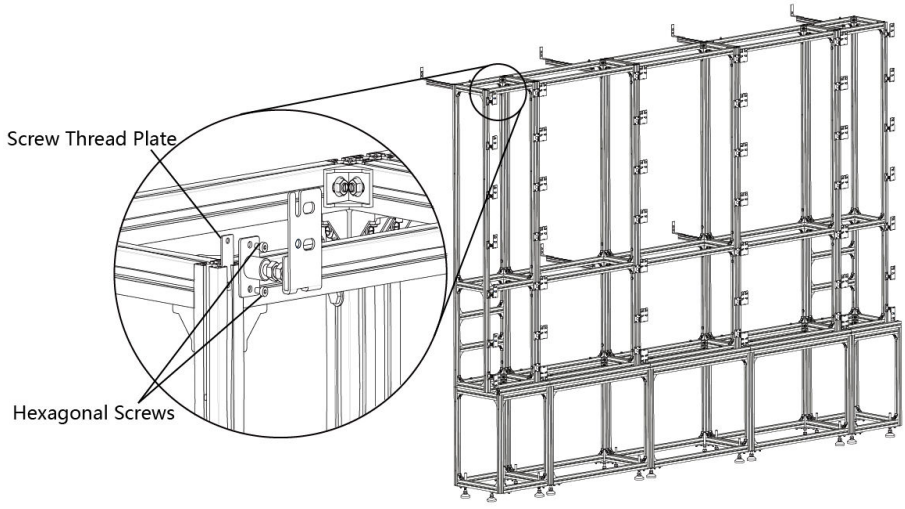


Figure 2-47 Install the Connectors

3. Secure the connectors to the rack frame with screws.

Install Cabinets into the Rack Frame

After the bottom chassis, rack frame and connectors are well installed, perform the following steps to install the cabinets into the rack frame:

Steps

1. Install the first cabinet from the lower middle part. Level and secure the cabinet to the connectors on the rack frame. For the screens do not have connectors near the rear, use joint pieces to fix the screen.

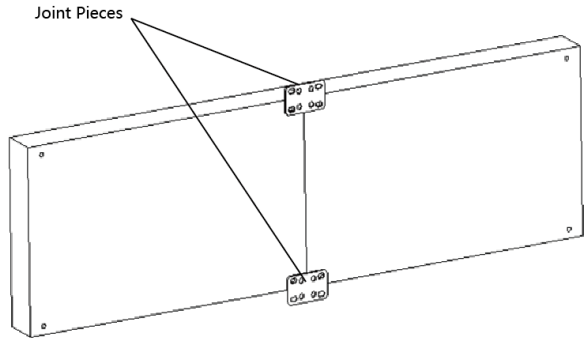


Figure 2-48 Fix the Screen with Joint Pieces

Note

- Install the cabinets from the bottom to the top, from the middle to the sides.
- Do not fix the screws between the connectors and cabinets too tight for future adjustment.
- In normal cases, lock out LED lamp boards after they are adjusted horizontally and vertically because the boards will probably be moved during the installation of other lamp boards.
- Ensure that the screen is flat and without evident gap. Otherwise, make some adjustments.

2. Repeat the above steps to install the other cabinets in the lowest row.

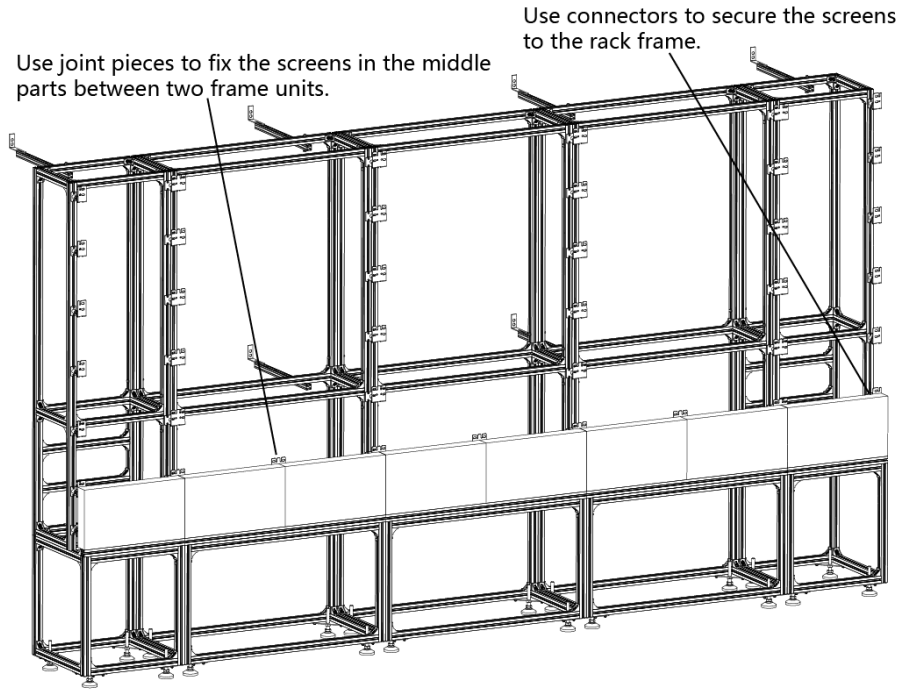


Figure 2-49 Fix the Screens

3. Use a level to measure and ensure that the cabinets are flat and vertical.

Note

When there is a deviation in height, simply place a thin iron sheet under the bottom. Do not try to resolve the deviation by hitting the cabinets on the top because it will result in larger deviation later.

4. Repeat the above steps to complete the installation of other cabinets.

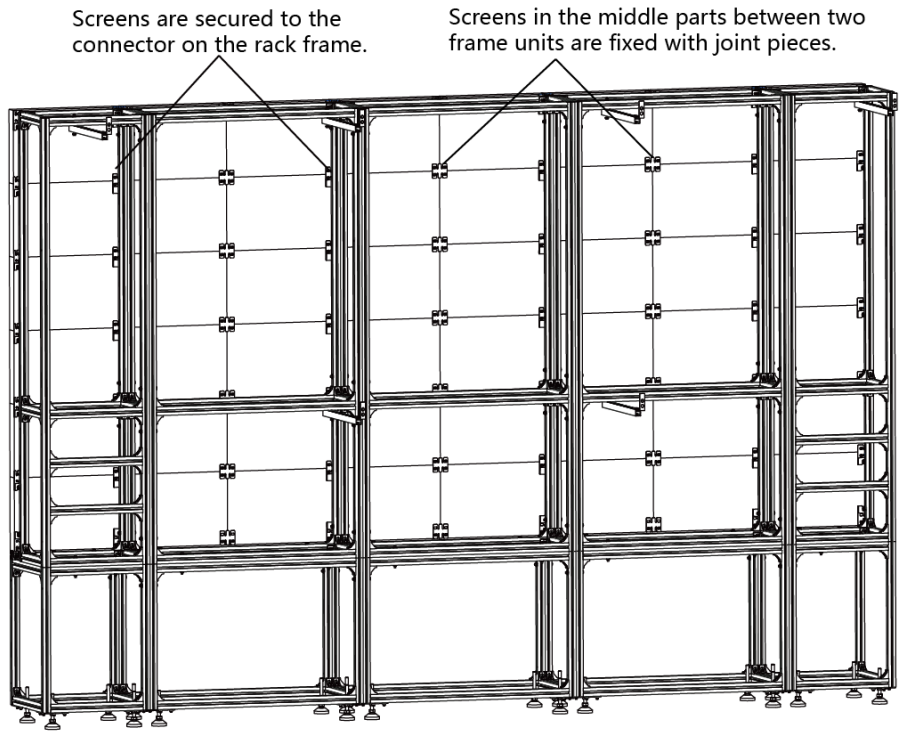


Figure 2-50 Screens Fixed

5. Ensure that all the cabinets are flat and vertical and the seams between the cabinets are even. Then tighten the anchor bolts to complete the installation.

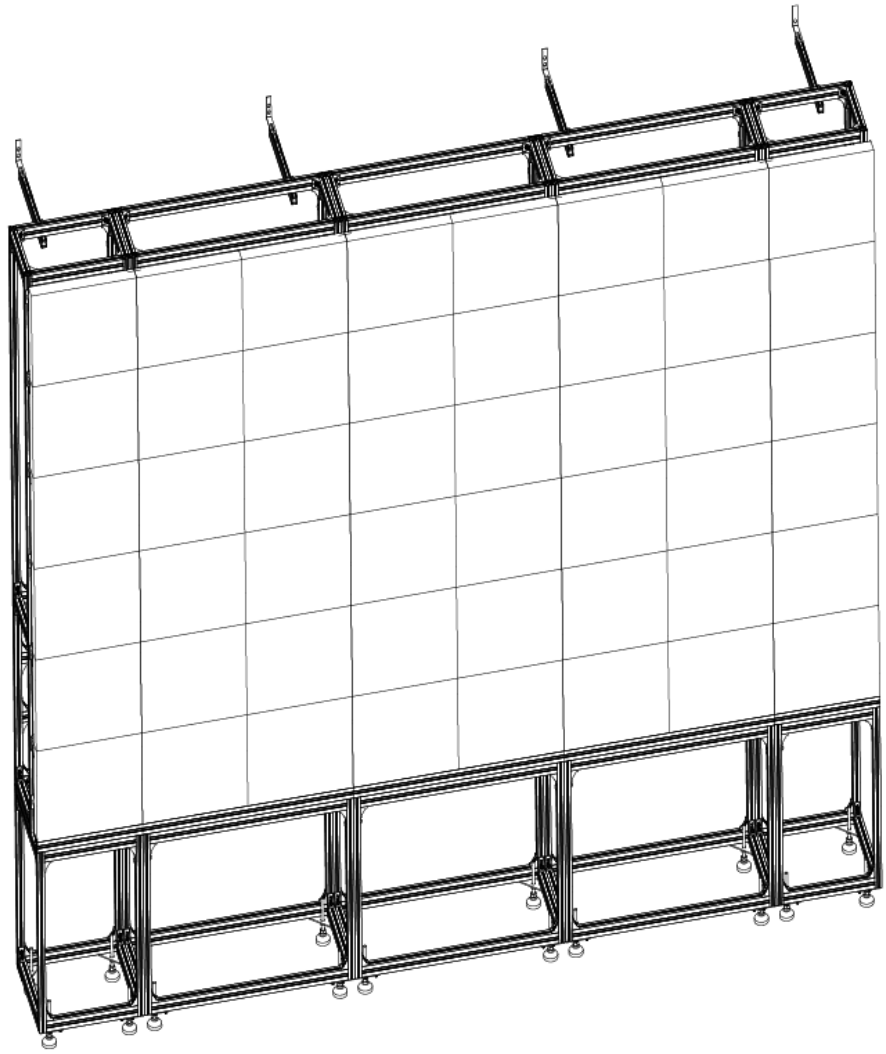


Figure 2-51 Screen Installation Finished

Note

- For details about cabinet stitching, see ***Stitch Cabinet Frames*** .
- For details about lamp boards installation, see ***Install Lamp Boards on the Cabinets*** .

Install the Cover Plates and Door Plates for Bottom Chassis

Steps

1. Use T-Shaped bolts to install the front cover plates and lateral cover plates for bottom chassis respectively.

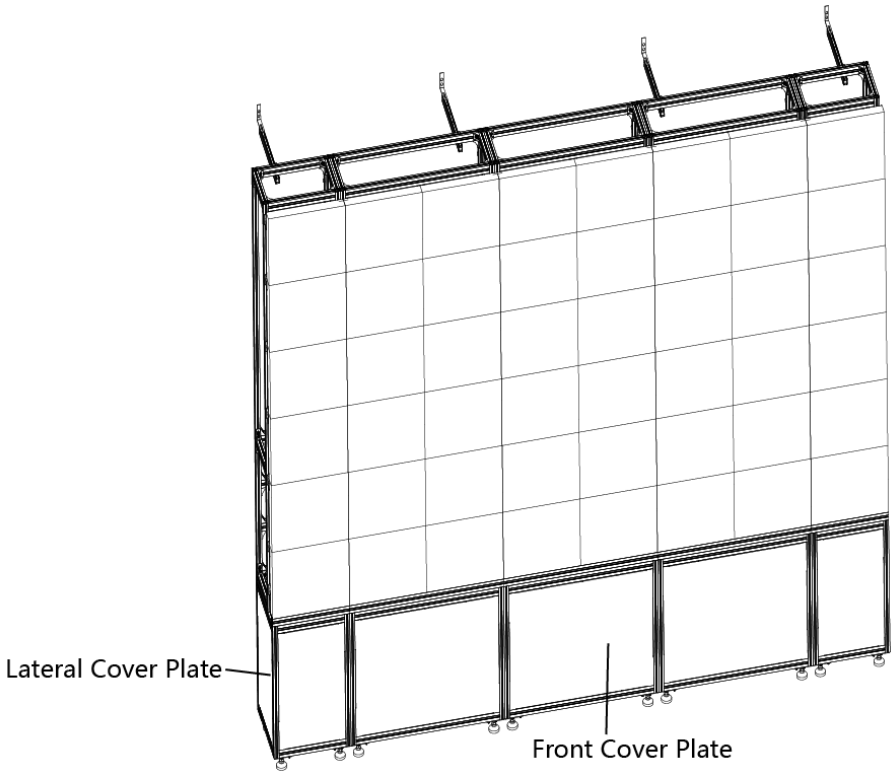


Figure 2-52 Install the Cover Plates

2. Use T-shaped bolts or door hinge to install the door plates including upper fixing plates, lower fixing plates, left door plates and right door plates.

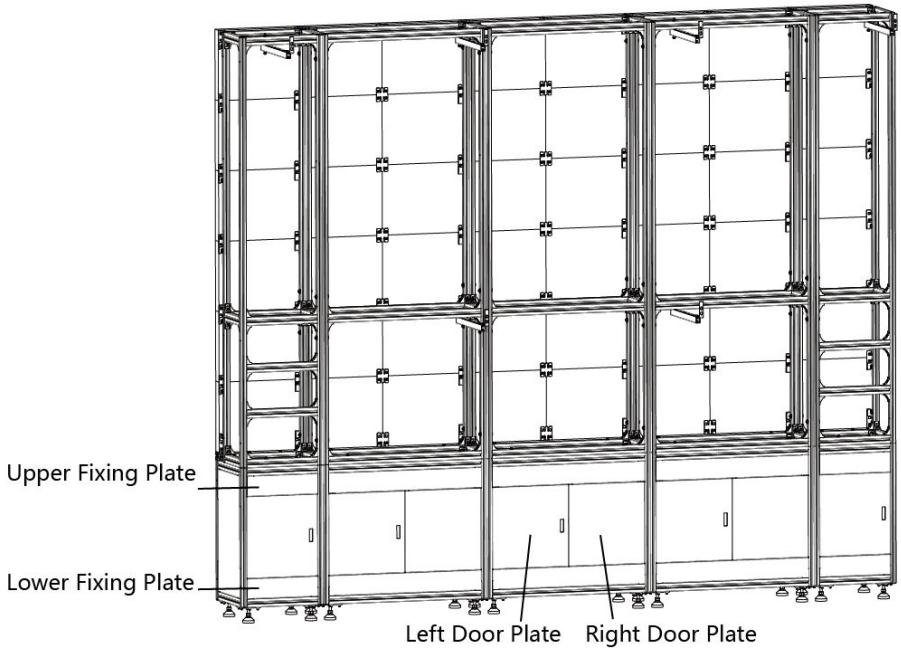


Figure 2-53 Install the Door Plates

Chapter 3 Cabinet Installation

3.1 Introduction

3.1.1 About the Cabinet

A cabinet is a basic unit for LED engineering installation in which LED modules are neatly mounted on a metal sheet (cast aluminum) box, with a built-in independent receiving card and switching power supply, an engineering installation structure, and independent display.

3.1.2 Load Capability of the Cabinet

Load Capability of Network Interfaces

The following table lists the load capability of a single network interface of the sending card for different screen types.

Table 3-1 Load Capability of Network Interfaces

Screen Type	Max Load of a Single Network Interface
P1.2	4 cabinets
P1.4	6 cabinets
P1.5	7 cabinets
P1.6	8 cabinets
P1.8	10 cabinets
P2.5	16 cabinets

Load Capability of Power Cables

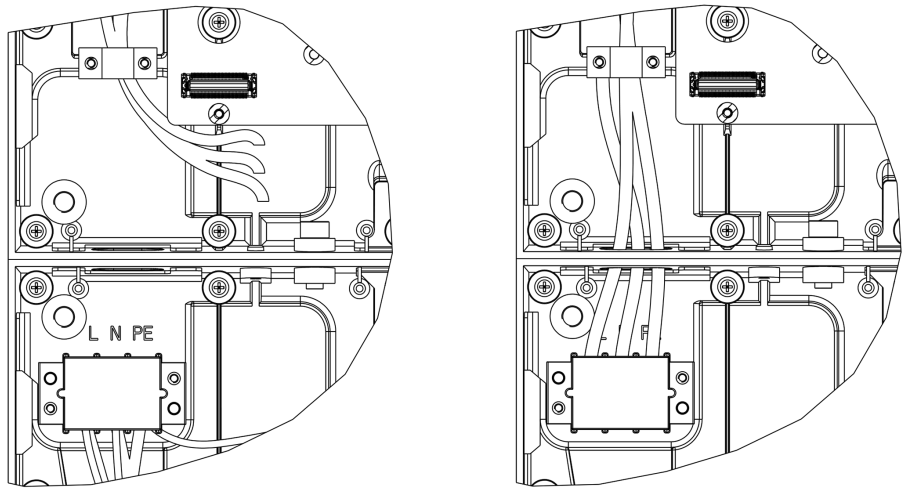
Table 3-2 Load Capability of Power Cables

Cabinet Type	Max Load of a Single Power Cable
Front-Maintenance Cabinet	15 rows

Follow the instructions below when connecting power cords:

- If your video wall has 15 rows of LED displays or fewer, connect a single power cord to each column from the bottom of the lowest display. That is, use one power cord for each column.
- If your video wall has more than 15 rows of LED displays, connect two power cords to each column both from the bottom of the display. That is, use two power cords for each column.

The power cable connection between the cabinets is as follows.



（1） Before Connecting （2） After Connecting

Figure 3-1 Power Cable Connection

3.2 Install the Cabinets

3.2.1 Precautions

Read the following precaution tips before you install the LED screens:

- Install the LED screens after the decoration construction is completed.
- Avoid humid or high-pH environment to prevent damage to the LED lamps.
- Do not expose the device to rain or humid environment to reduce the risk of fire or electric shock.
- Electric discharge may last for a short period of time after the power is shut down. Please wait two minutes after the power is shut down to operate the device.
- Only use the original power cable delivered with the device. Contact authorized dealer to purchase power cable with same specifications.
- Please do not frequently plug and unplug the power cable when the power is on.

3.2.2 Stitch Cabinet Frames

Cabinet Frame Locating

Align two cabinet frames with the locating studs, locating holes and installation holes. Single cabinet frame has 2 locating studs, 2 locating holes and 8 installation holes. The locating studs, locating holes and installation holes are shown as follows.

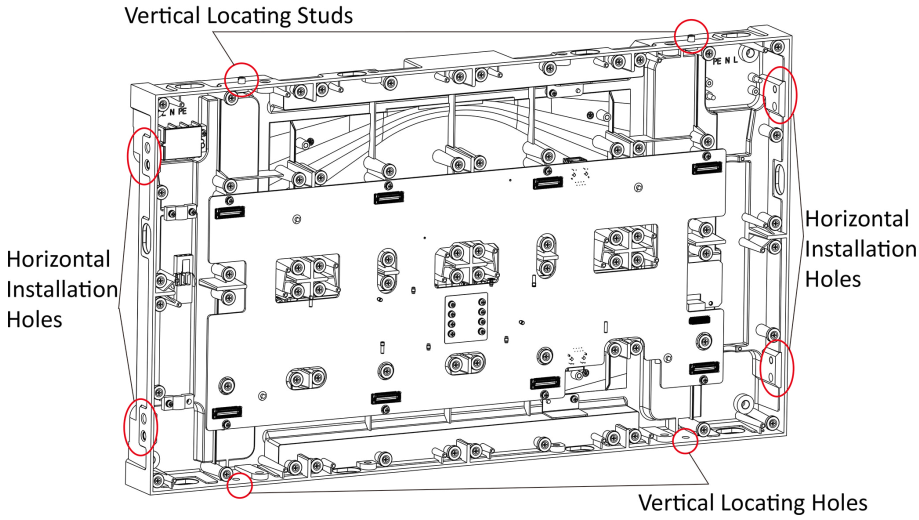


Figure 3-2 Locating Studs, Locating Holes and Installation Holes

Stitch Cabinet Frames Horizontally

Steps

1. Align the installation holes in the horizontal direction of the two adjacent cabinet frames, and adjust the cabinet frames to the relative level.

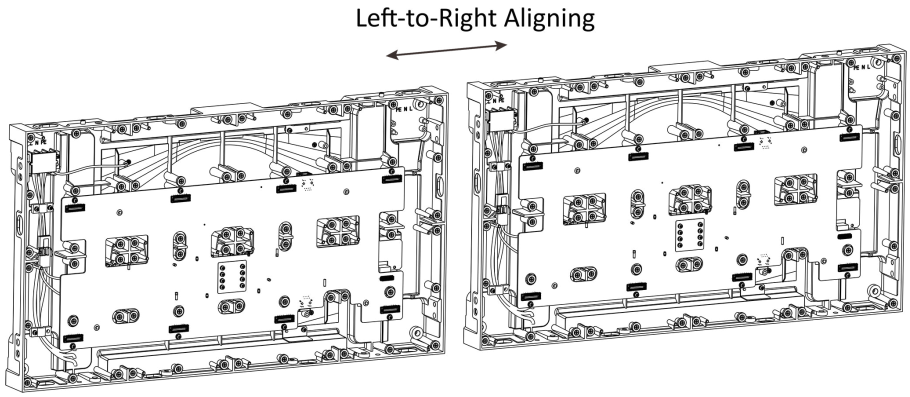


Figure 3-3 Align the Cabinet Horizontally

2. Insert the M6 screws into the installation holes.

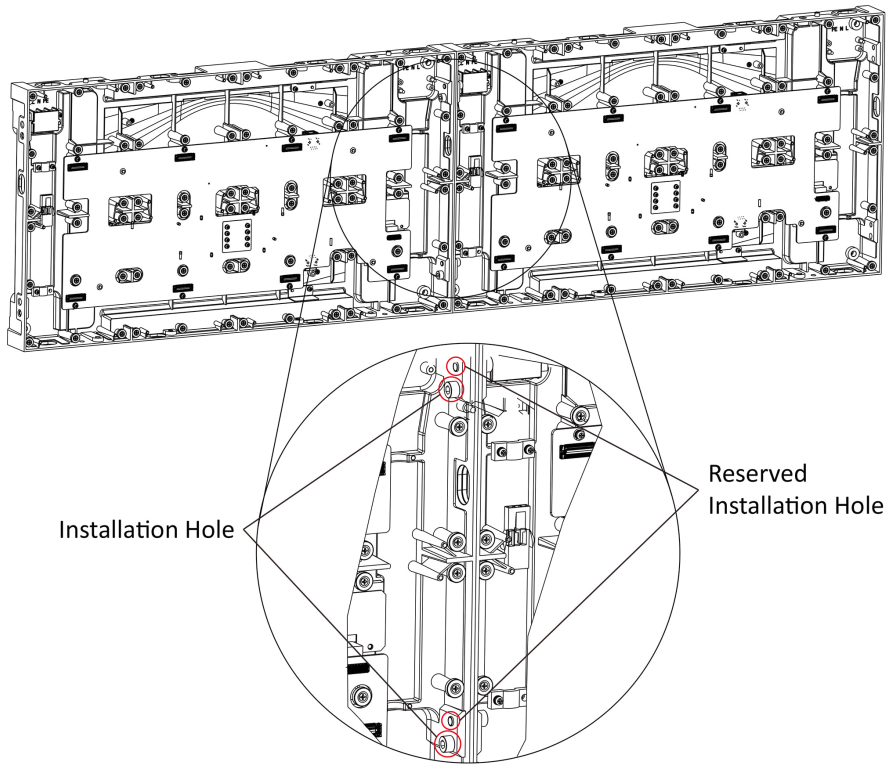


Figure 3-4 Cabinet Stitching Horizontally

Note

- There are 2 installation holes in the installation place, with one to be reserved.
- You can insert the screws from left to right or from right to left according to the actual situation.
- Adjust the flatness of the cabinet frames to ensure the horizontal and vertical alignment between the cabinet frames.

Stitch Cabinet Frames Vertically

Steps

1. Align the locating studs in the vertical direction of the two adjacent cabinet frames to the locating holes, and adjust the cabinet frames to the relative level.

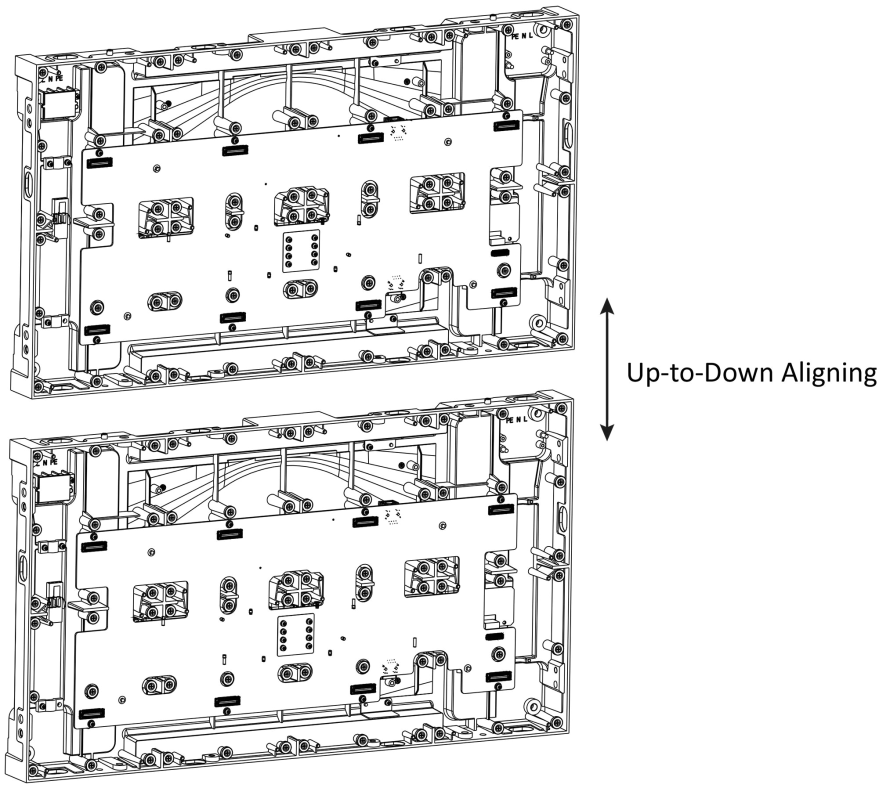


Figure 3-5 Align the Cabinet Vertically

2. Fix the cabinet frames with the M6 screws.

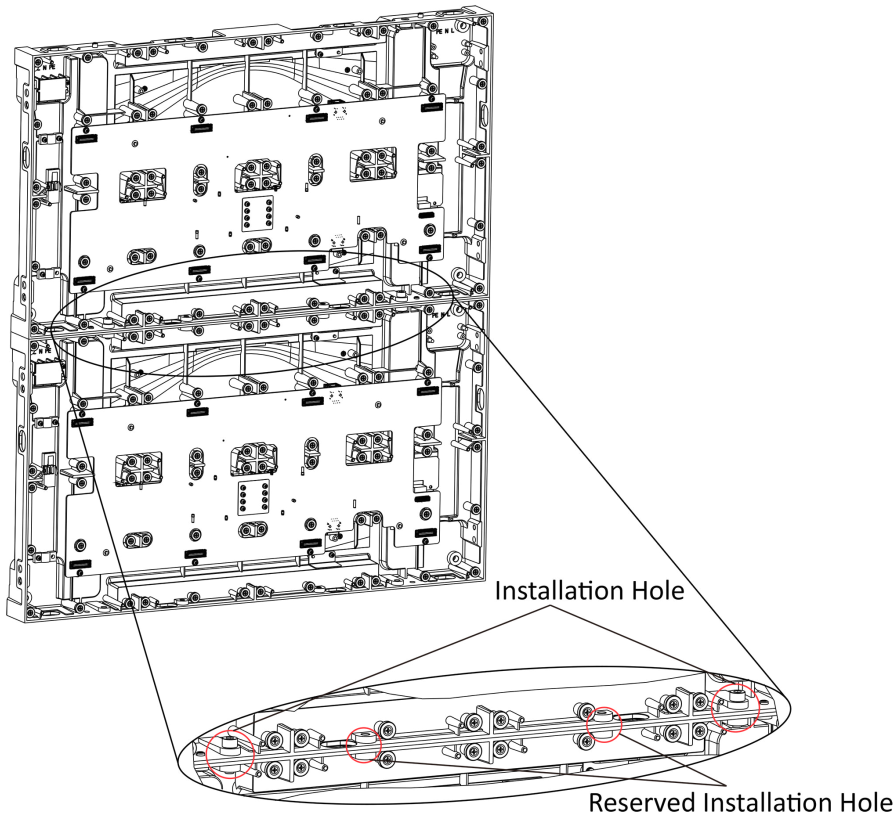


Figure 3-6 Cabinet Stitching Vertically

Note

- There are 4 installation holes in the installation place, with the middle two of them to be reserved.
- Insert the screws up to down into the outer installation holes, and down to up into the middle installation holes.
- Adjust the flatness of the cabinet frames to ensure the horizontal and vertical alignment between the cabinet frames.

3.2.3 Install Lamp Boards on the Cabinets

Fix the lamp boards on the cabinet frames by magnetic attraction. One cabinet frame is equipped with eight lamp boards.

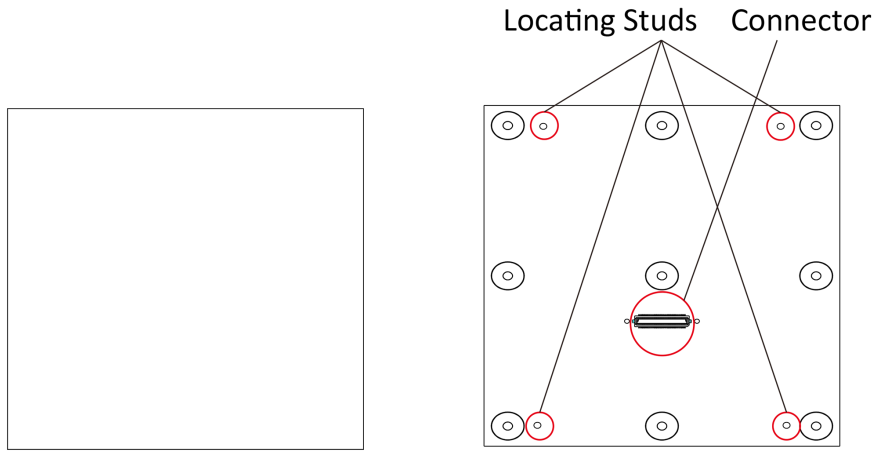


Figure 3-7 Front and Back of the Lamp Board

Steps

1. Placing the lamp boards on the front of the cabinet frames, align the lamp boards and the edge of the cabinet frames initially.

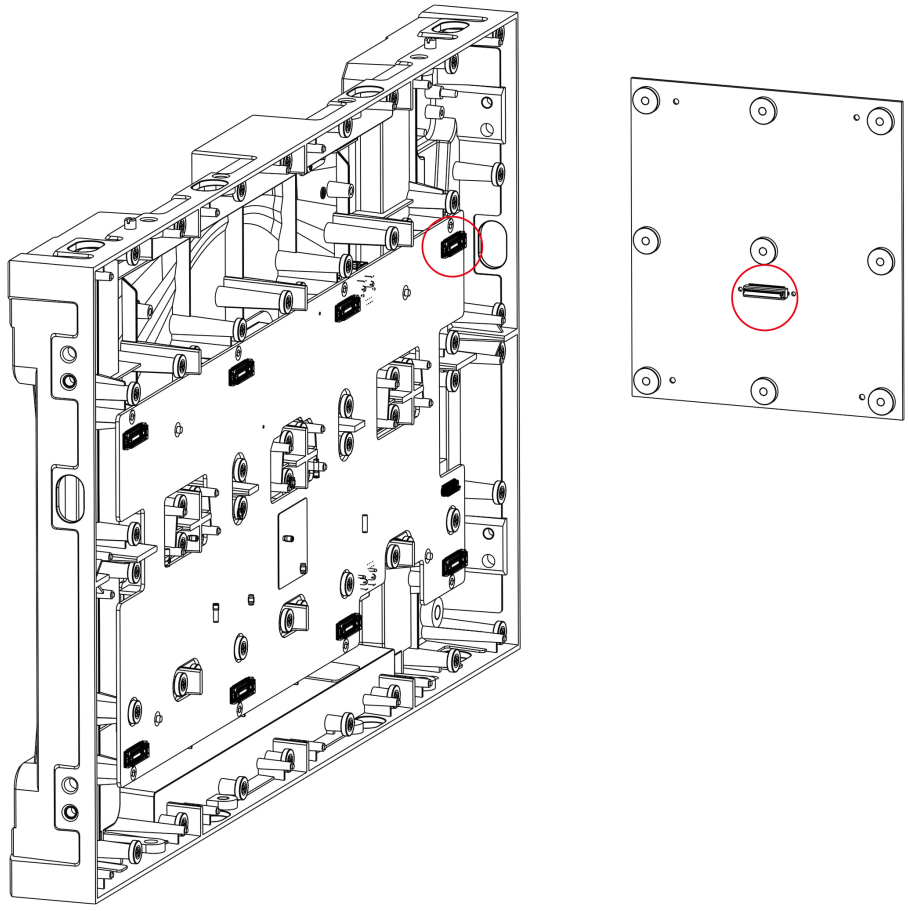


Figure 3-8 Adsorb Lamp Board

Note

Please align the connector and pay attention to the direction of lamp boards when adsorbing the lamp board.

2. Align and adsorb the lower edge of the lamp boards with the cabinet frames, and then align the locating studs on the lamp boards to the locating holes on the cabinets and adsorbs the remaining three sides of the lamp boards.

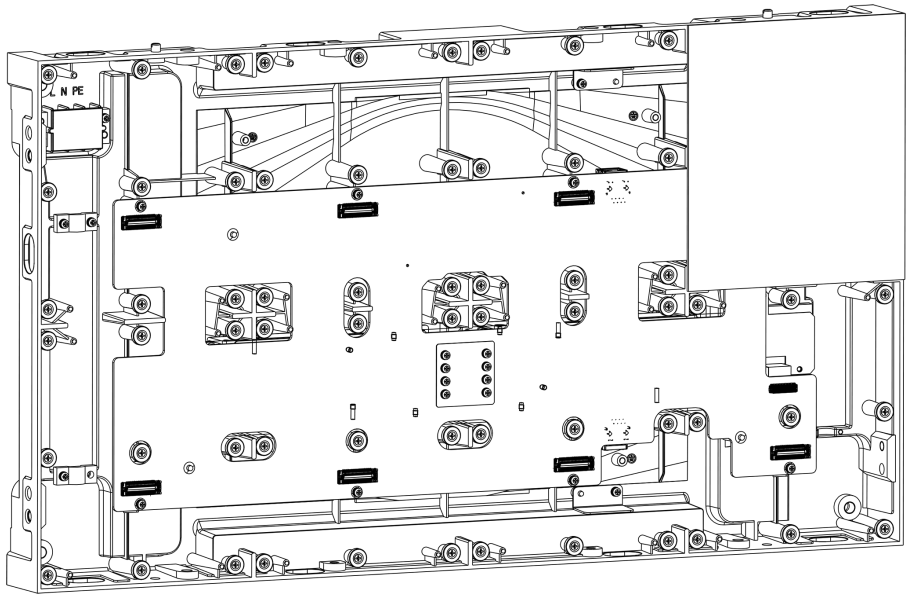


Figure 3-9 Install the First Lamp Board

3. The lamp board adsorbs to the cabinet automatically.

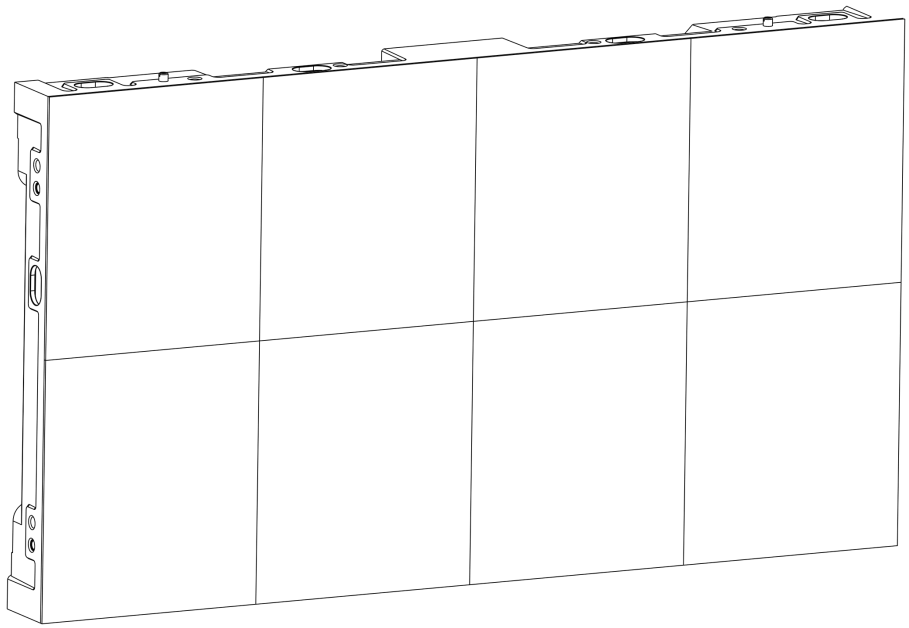


Figure 3-10 Lamp Board Installation Finished

4. **Optional:** If you need to remove the lamp boards, remove the first lamp board by using the LED vacuum pumping tool, and remove other lamp boards with hands.

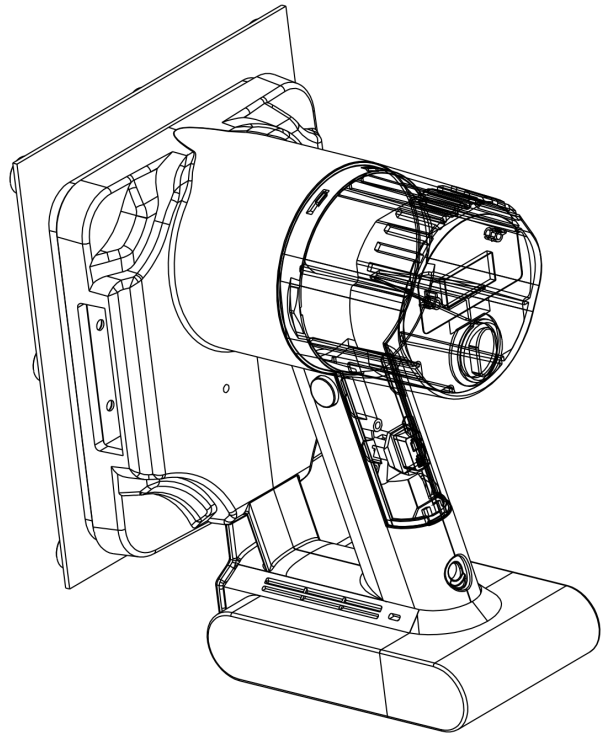


Figure 3-11 LED Vacuum Pumping Tool

3.2.4 Adjust Lamp Boards on the Cabinets Horizontally

Rotate the screws on the cabinet frames with a word screwdriver to push the adjusting points and lamp boards out until the cabinet is level with others.

In the following figure, all the circled points are adjusting points, and there are 9 adjusting points for each cabinet.

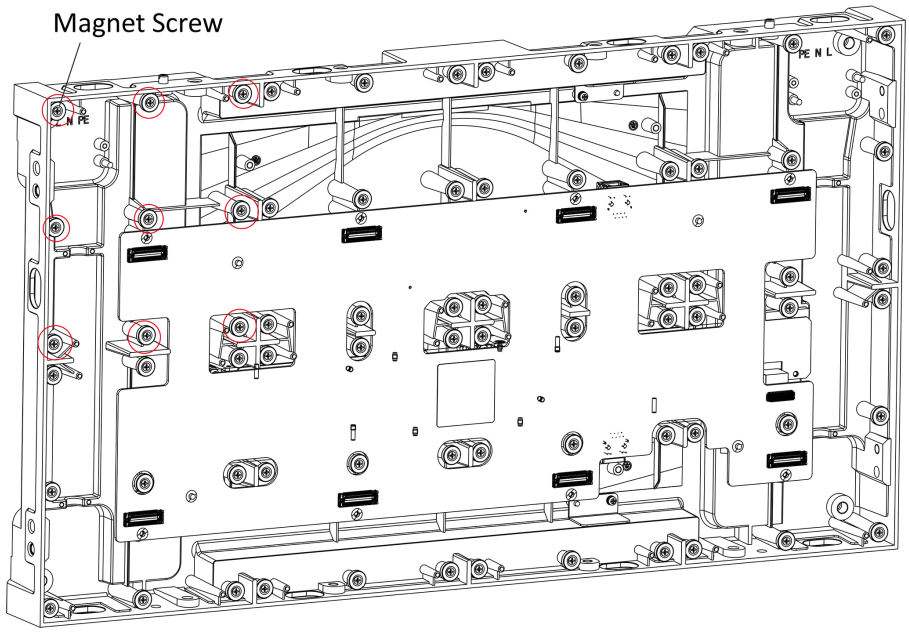


Figure 3-12 Points Adjustable on the Front of Cabinet Frames

3.2.5 Install Protective Shield

To reduce the risk of electric shock, install protective shield on the exposed connector after completing LED screen installation.

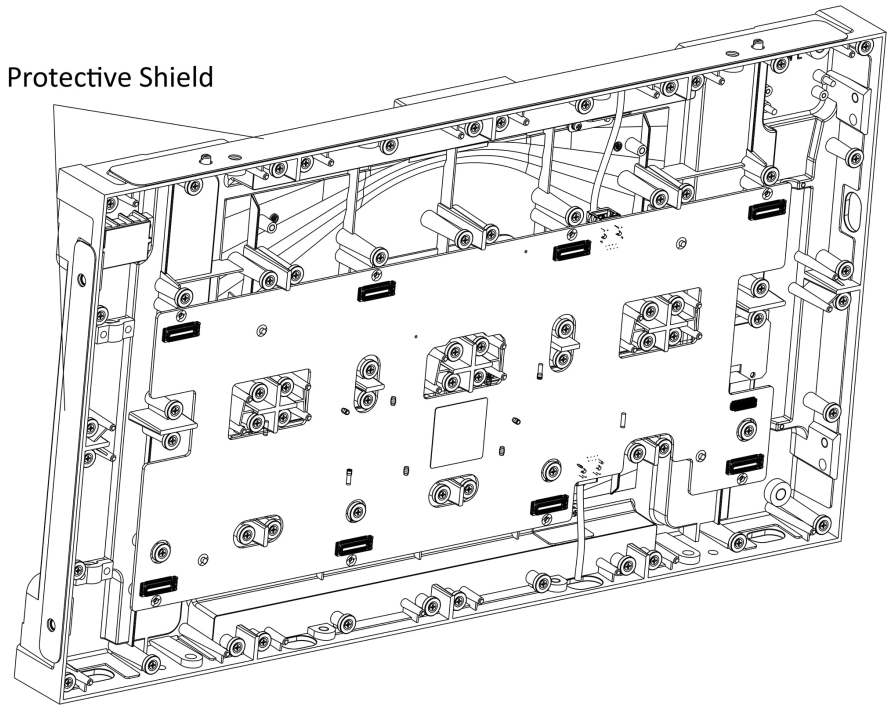


Figure 3-13 Install Protective Shield

Danger

- To reduce the risk of electric shock, install protective shield on the exposed connector after installing LED screen.
- The power cable of LED screen should be grounded before powering on the screen.
- Before installing the protective shield, ensure that the power is cut off.

3.3 Configuration Example

The following two figures show the connection diagrams of P1.2 cabinets. The resolution is 2880 × 1620. Max load of a single network interface for P1.2 is 4 cabinets. For details, see ***Load Capability of the Cabinet*** .

If the power consumption of the cabinet is 200 W, 15 cabinets can be divided into one group. Assign one power cable to each column with 15 rows or less.

Note

- The signal cables are marked in green and the power cables in red.
- The power consumption of a one-to-two power cable is 4000 W. The power consumption of a one-to-one power cable is 2000 W.

3.3.1 Cabling Diagram for 16 Output Interfaces

Please connect power cords and network cables according to the following diagram.

- Power cords connection: connect L/N/PE interfaces, and fix the baffle. For details about the first row and the 16th row power cords connection, see ***The First Row Power Cord Connection*** and ***The 16th Row Power Cord Conenction*** .
- Network cable connection: pass the network cable through the hole and insert into the network interfaces. For details about the 5th row network cable connection, see ***The 5th Row Network Cable Connection*** .

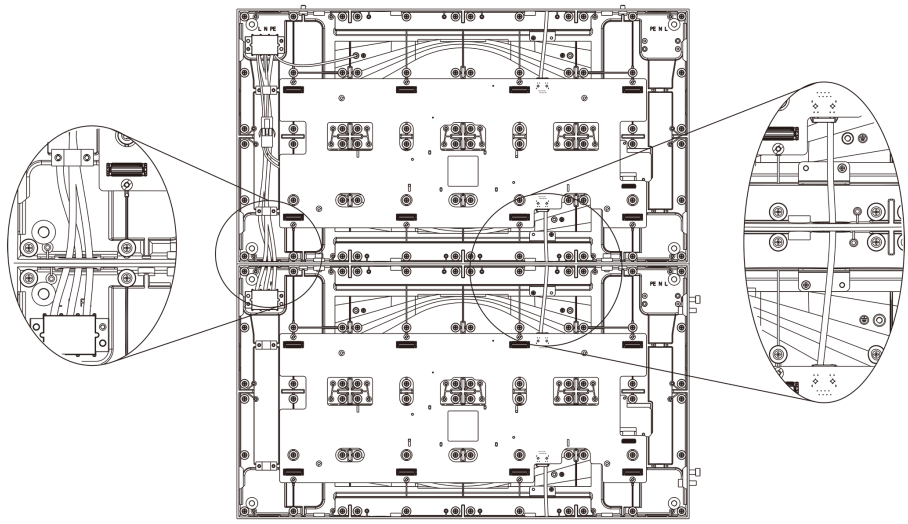


Figure 3-14 Power Cords and Network Cables Connection

If the sending card provides 16 output interfaces with 12 network interfaces used, the cabling is shown in the following figure.

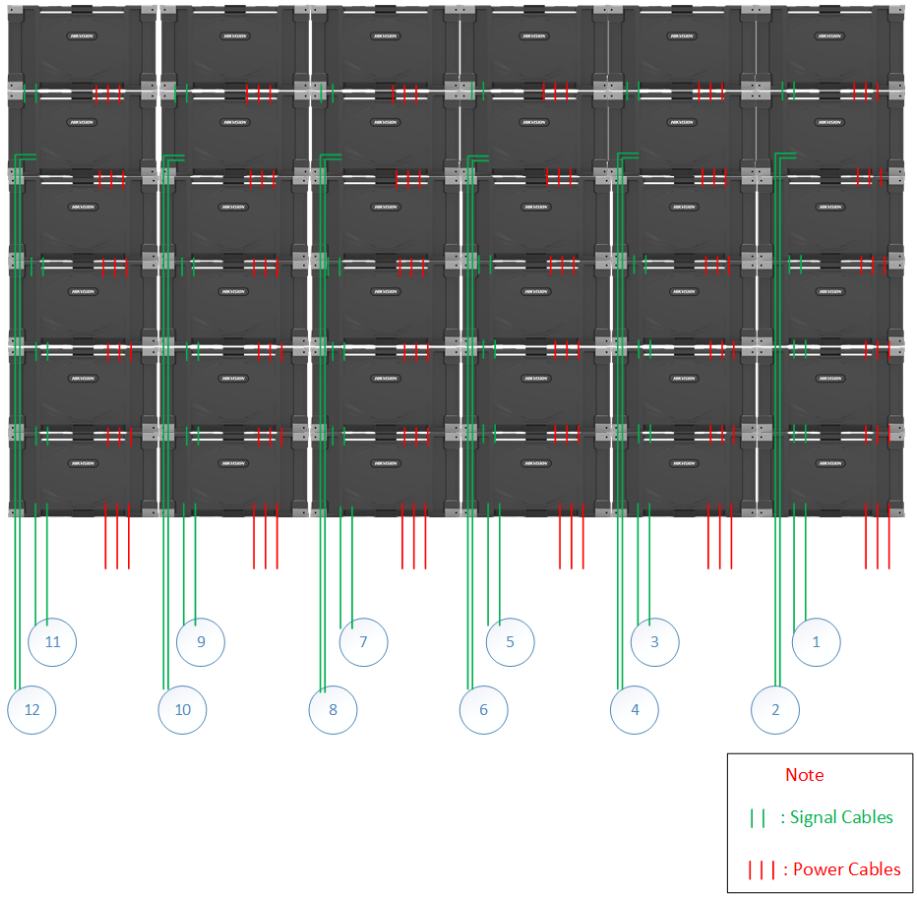


Figure 3-15 Cabling Diagram for 16 Output Interfaces

The following figure shows the related cabling diagram on the client.

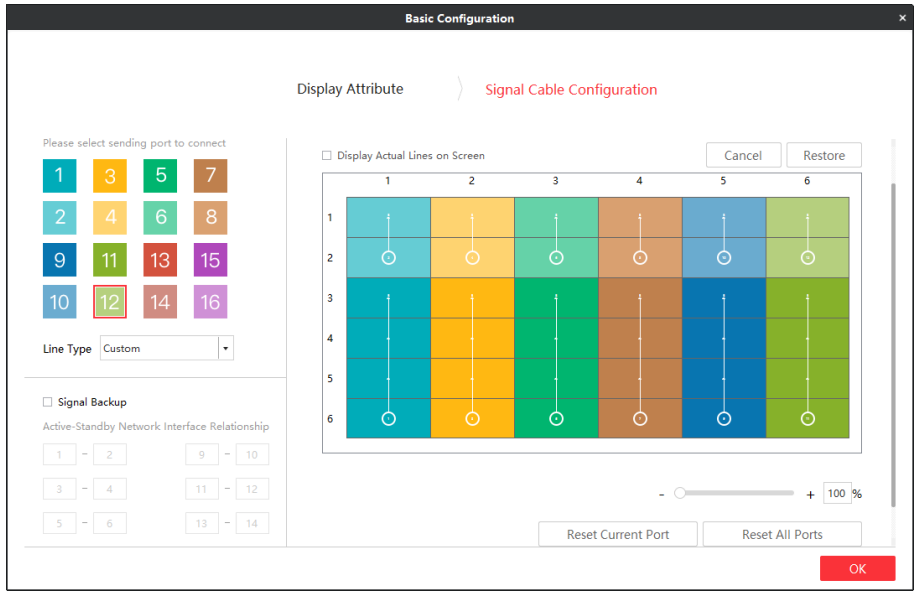


Figure 3-16 Cabling Diagram for 16 Output Interfaces on the Client

3.3.2 The First Row Power Cord Connection

For the power cord connection of the first row, please remove the original power cord first and then connect an external power cord.

Steps

1. Unfasten the terminal block to remove the original power cord.

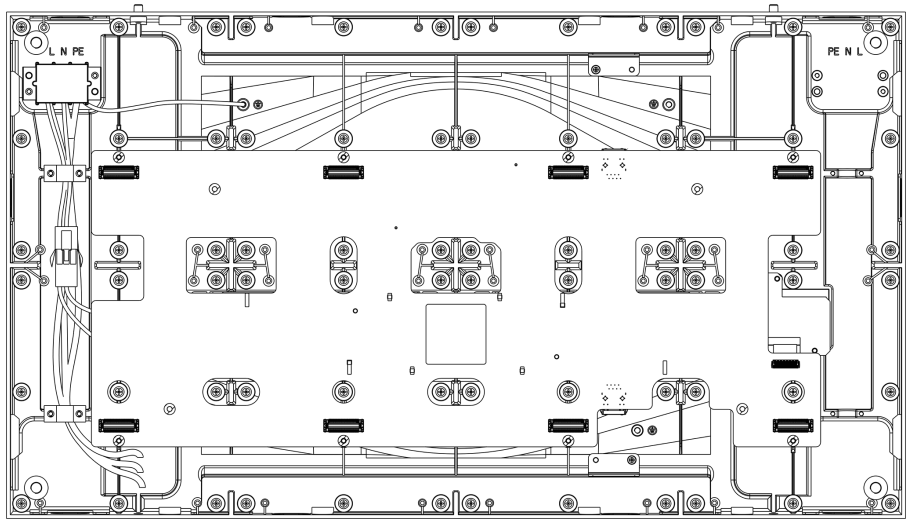


Figure 3-17 Before Connecting Power Cord

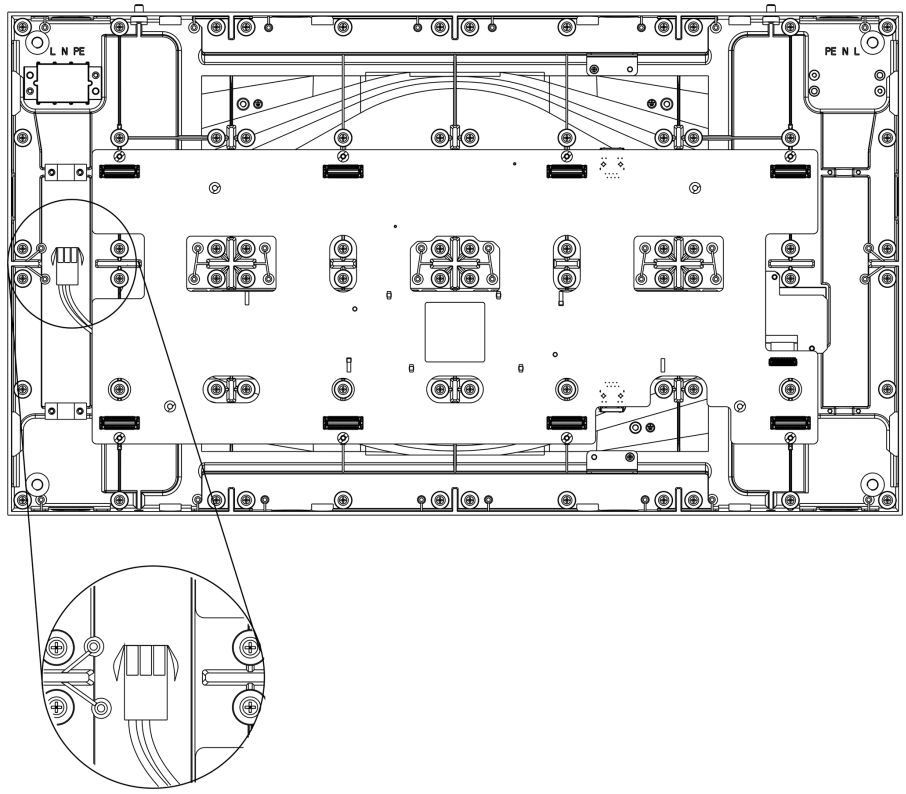


Figure 3-18 Remove the Original Power Cord

2. Connect an external power cord from the reserved cabling hole on the bottom of the cabinet.

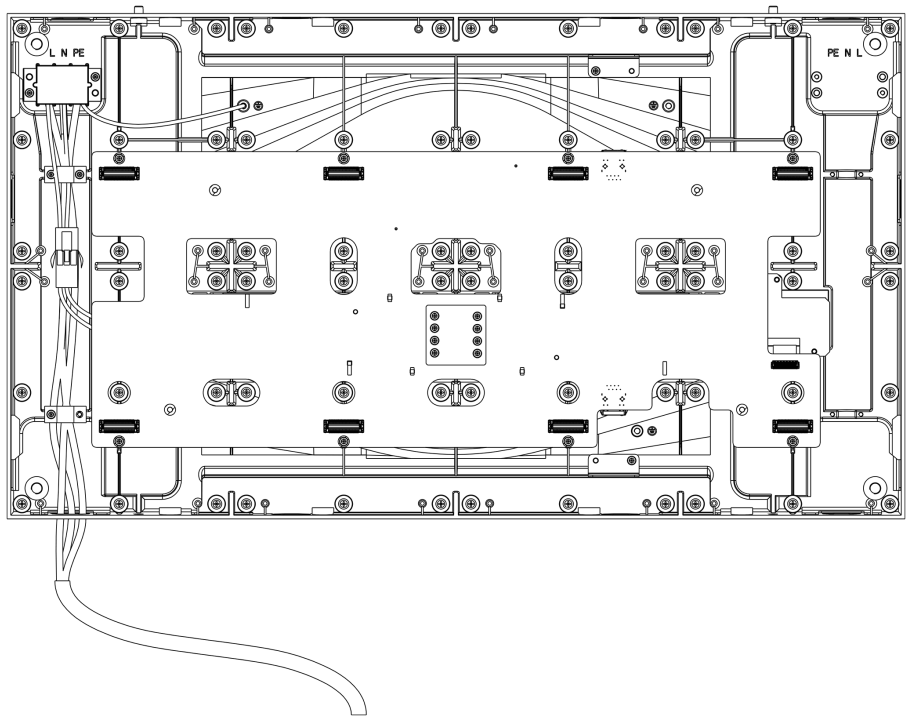


Figure 3-19 Connect External Power Cord from the Bottom

3.3.3 The 16th Row Power Cord Conenction

Because the max load of a single power cord are 15 rows of cabinets, please connect the power cords of the cabinets in the 16th row according to the following diagrams.

Steps

1. Remove the original power cord of cabinet in the 16th row, and meanwhile remove the baffle of the reserved cabling hole.

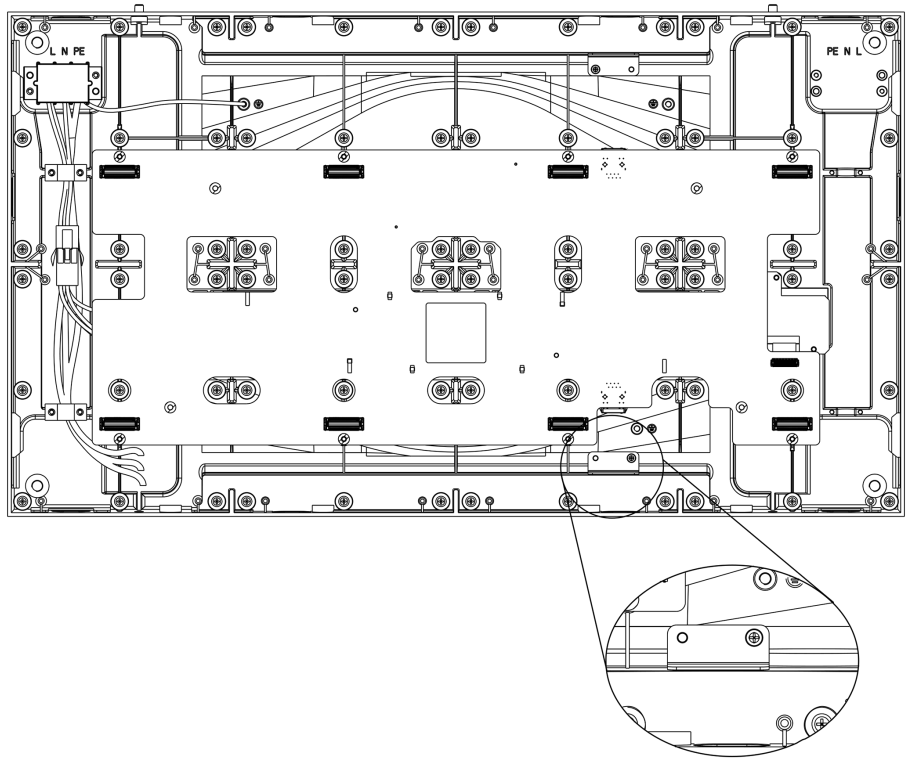


Figure 3-20 Before Connecting Power Cord of the 16th Row

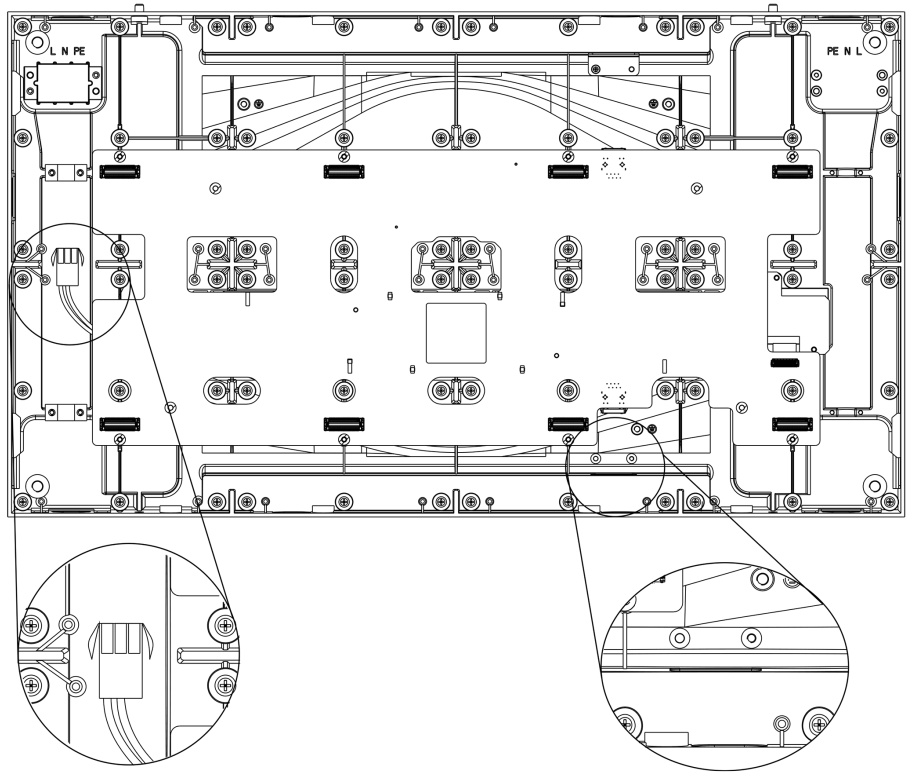


Figure 3-21 Remove the Original Power Cord and Baffle

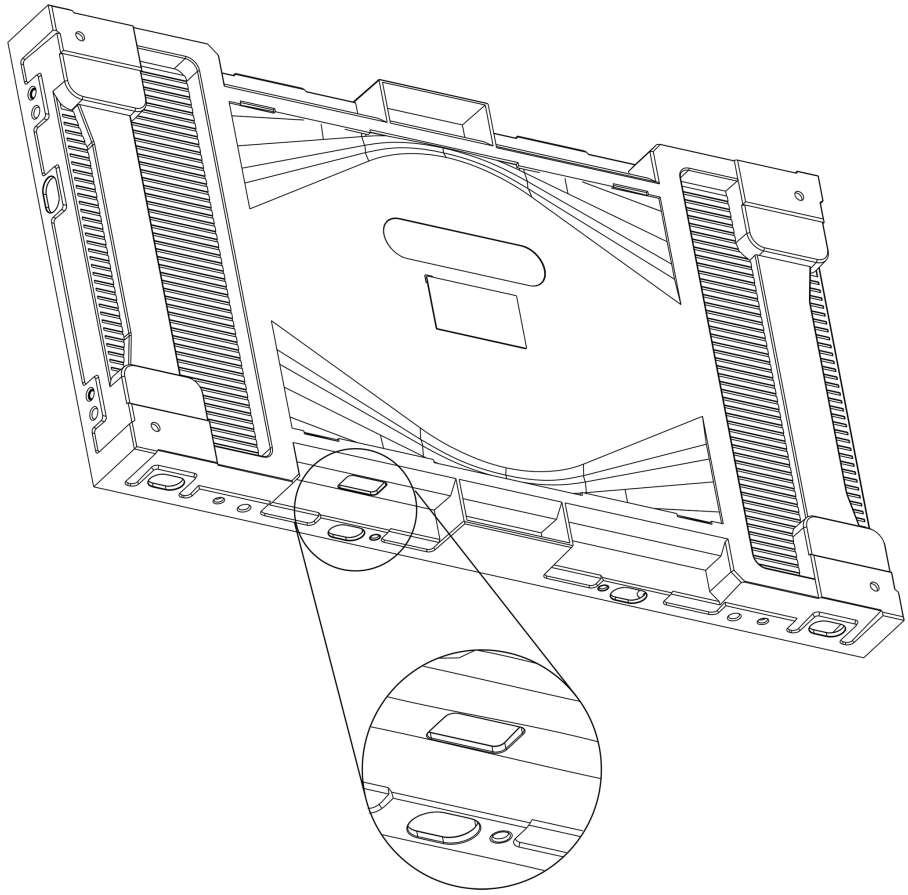


Figure 3-22 Back of the Cabinet after Removing the Baffle

2. Connect an external power cord from the reserved cabling hole, and fix the cord on the cabinet.

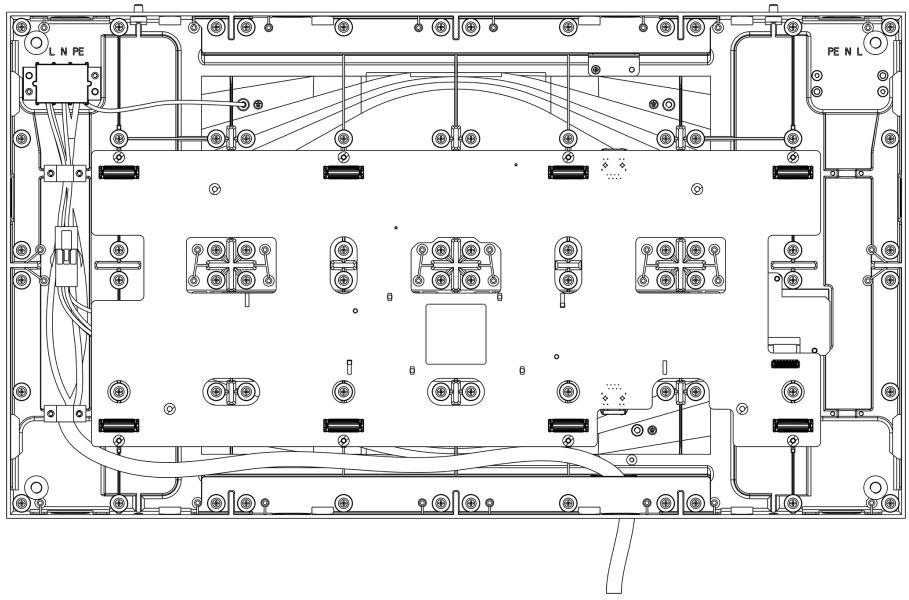


Figure 3-23 Front View of External Power Cord Connection

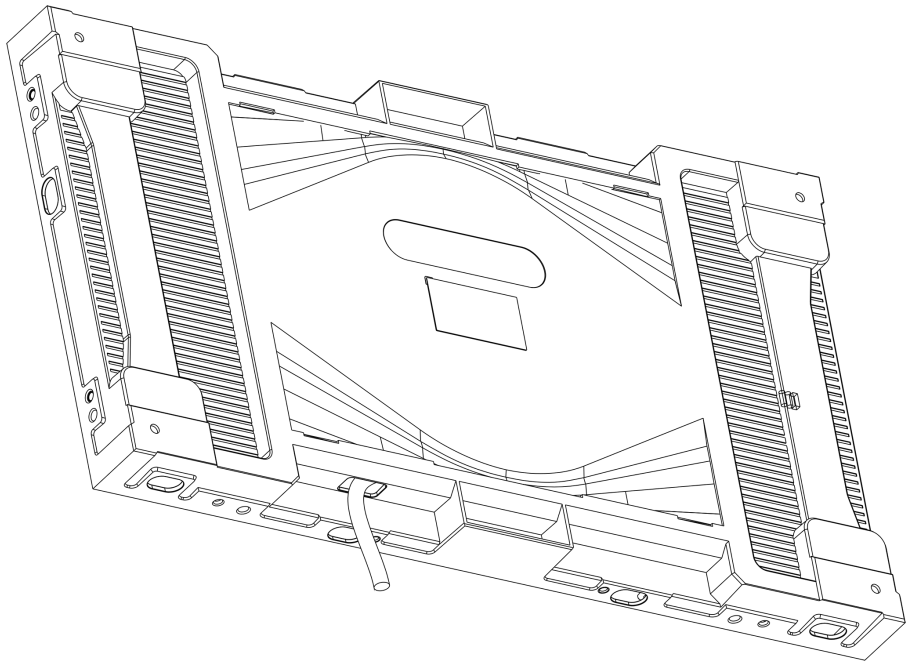


Figure 3-24 Rear View of External Power Cord Connection

3.3.4 The 5th Row Network Cable Connection

Because the max load of a single network cable are 4 rows of P1.2 cabinets, please connect the network cables of the cabinets in the 5th row according to the following diagrams.

Steps

1. According to the network cable connection method in ***Figure 3-67*** diagram, connect the network cables from 1 to 4 rows.
2. Connect another network cable to the network interface of the cabinet in the 5th row from the cabling hole on the right side of the bottom.
3. Repeat the above step to finish the network cable connection of other cabinets.

Note

Do not remove the baffle under the network interface. Please connect the network cable from the cabling hole on the right side of the cabinet bottom.

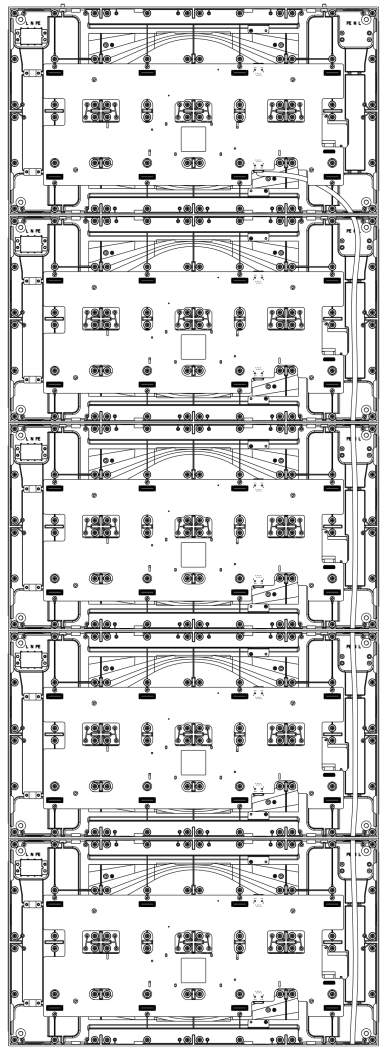


Figure 3-25 Network Cable Connection of the 5th Row

3.3.5 Signal Redundancy

The whole project adopts redundancy mode. Use the 16-interface sending card as an example. Client enables redundancy mode, and then system automatically set even network interfaces (LAN) to be standby. The standby network interfaces do not need connections via client.

LANs relationship: LAN 1 corresponds to LAN 2 (standby), LAN 3 to LAN 4, ……, and LAN 15 to LAN 16.

According to on-site project cabling, LAN 1 connects to the first cabinet while LAN 2 connects to the last cabinet of the first group.

Note

When the standby signal cable is connected, the wiring connected from the cabinet to another cabinet needs to be disconnected.

The following figures shows the cabling and the related cabling diagram on the client.

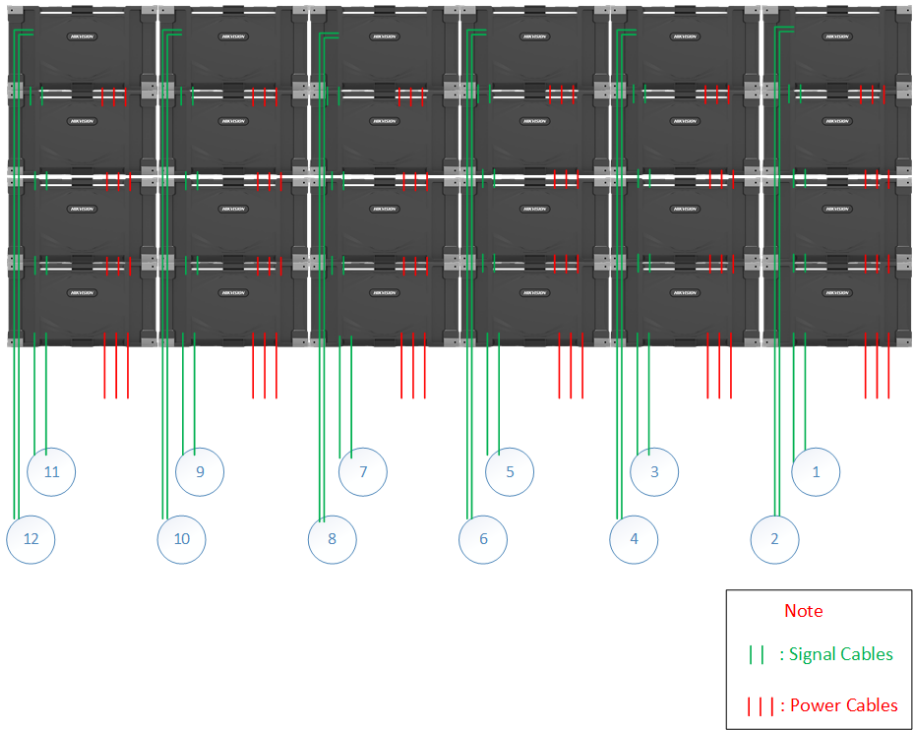


Figure 3-26 Cabling Diagram in Signal Redundancy Mode

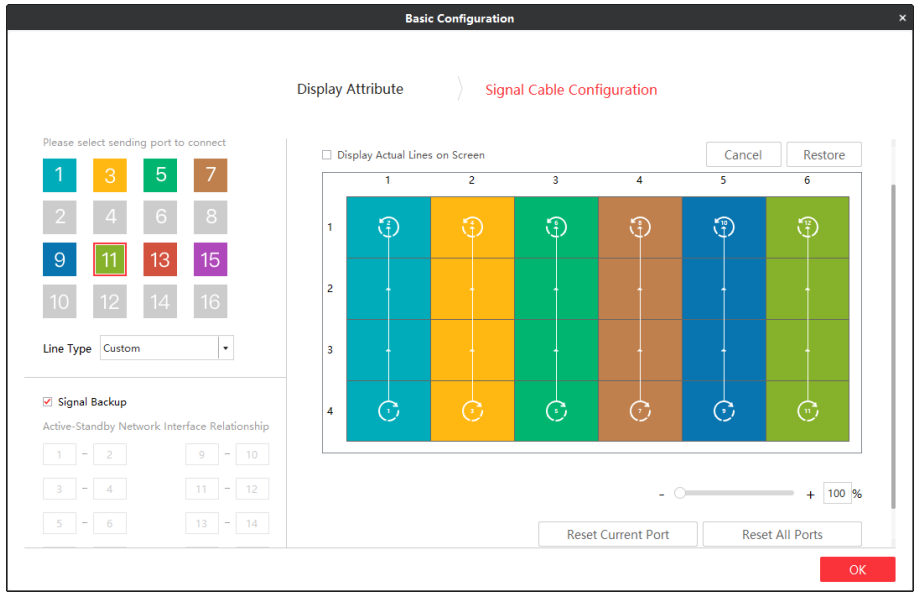


Figure 3-27 Cabling Diagram in Signal Redundancy Mode on the Client

Chapter 4 Software Debugging

4.1 Log into the Device

Steps

1. Install and open the LED client.

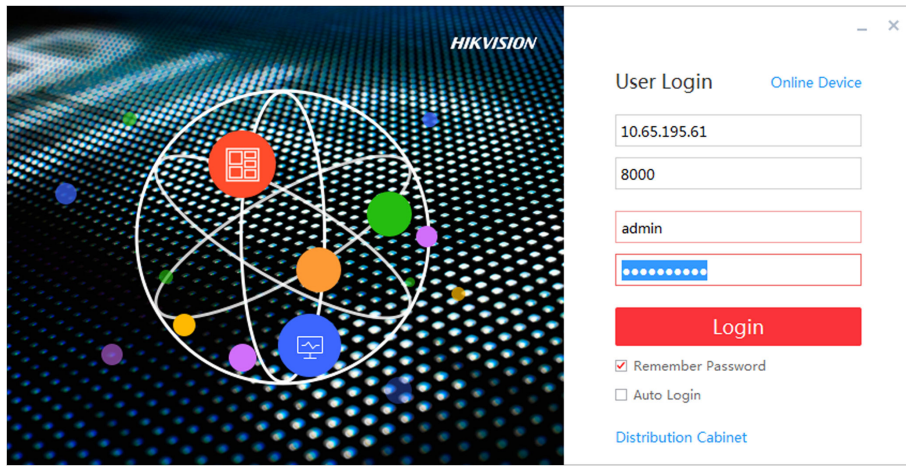


Figure 4-1 Login Interface

2. Click **Online Device** to search for online devices.
3. Activate the desired online device.
   - If the device is not activated, activate the device and set a password.
   - If the device is activated, enter the password to log in.
   - If you forget the password, reset the password using your OA account.

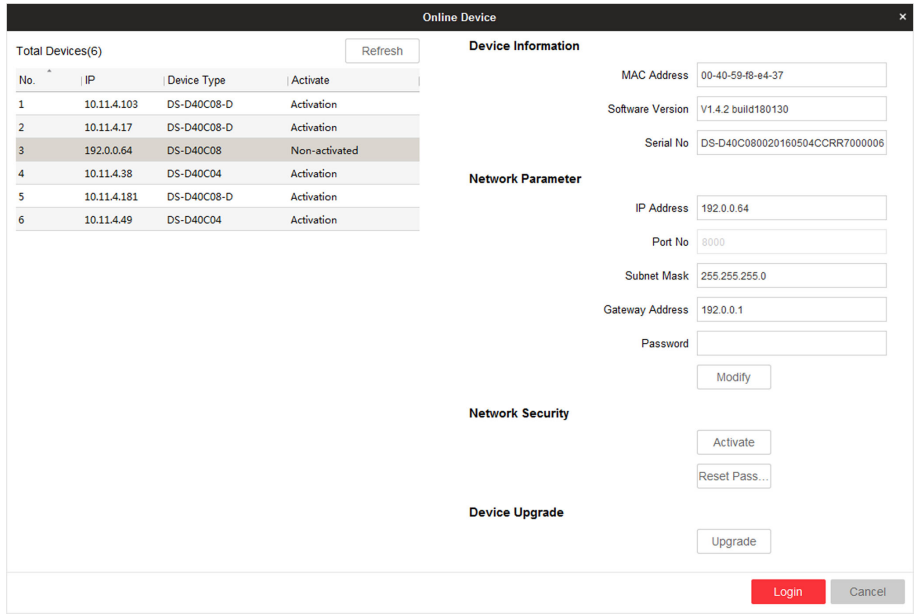


Figure 4-2 Online Device

4. Choose the device and change the IP address and gateway.

Note

- Ensure that the device resides on the same network segment with your PC client.
- Change your PC's IP address to the device's IP address which is displayed on the LED display controller at intervals.

5. Click **Refresh**.
6. Choose the device and log in.

Note

The default username is **admin**, password is **admin12345**, and port is **8000**.

4.2 Configure Signal Cables

Set **Screen Scale** as, for example, one row with two columns, and select the correct screen type.

Steps

1. Click number one network interface which corresponds to the actual network interface.
2. Click the screen on the right.
3. Hold the mouse and make movements, and the system will connect cables for the signal interfaces according to the movements.

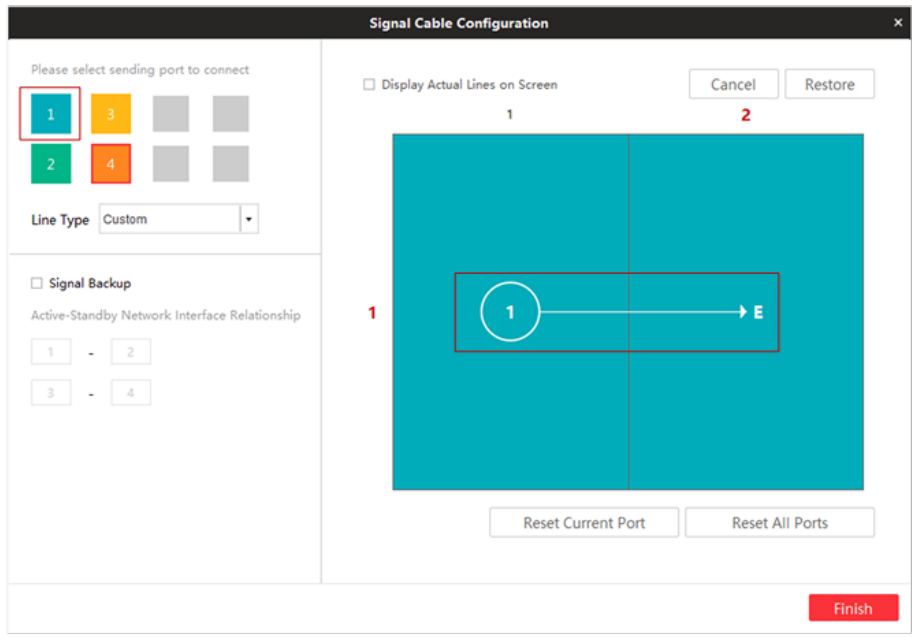


Figure 4-3 Cable Configuration

4. Right click to complete the cable configuration.
5. Repeat the above steps to complete cable configuration for the other network interfaces.
6. Set receiving card parameters, and click **Cure Parameter** to save the configuration.

Note

The engineer password is **Soft12345**.


See Far, Go Further