



Hanshow Lumina Aqua 1410 Product Manual

V1.0.0

HS-ESL-LA0003

For more information, visit our website at: <http://www.hanshow.com>

STATEMENT

This document and all its contents contained remain the proprietary material of Hanshow Technology Co., Ltd. (Hanshow) and are protected by Chinese laws and applicable international conventions on copyrights. Any reproduction, transmission, disclosure, revision, modification or use otherwise of this document or the whole or part of its contents, in whatever form and by whatever means, is not permitted without prior express written authorization from Hanshow. Offenders will be liable for any and all damages caused by their offence hereof and will be subject to all remedies that Hanshow is entitled to seek under applicable laws.

ABOUT THE MANUAL

Thank you very much for using Hanshow Lumina Aqua 1410 ESL!

This document mainly describes ESL controller HS_C09959, including features, specification, configuration and precautions. Help you quickly understand all information of this device.



Please read this manual carefully before using the device for the first time, retain the manual for subsequent use or for the next owner. If the instructions contained in this manual are insufficient to resolve issues that occur during device operation or maintenance, please contact Hanshow Technical Customer Service Center (China: 400-0365-305; Netherlands: 0800-022-5037; Belgium: 0800-71-335; France: 0800-91-7602; Thailand: 1800-011-185) directly, we will provide you with multi-channel technical services.

TARGET USERS

This document provides readers with specification, parameter and characteristic etc. information and it is applicable for the below personnel:

- Product Users
- Installation Personnel
- Operating and Maintenance Personnel
- Hardware Engineer
- Test Engineer

SYMBOL DESCRIPTION

Icon	Description
	Information indicated with this icon should be paid special attention and attached great importance by the reader.
	Information indicated with this icon is the explanation on the formal text for the readers to comprehend the text better.
[X-X]	It means special noun definition is provided here.

EXPLANATION OF TERMS

Acronym	Expanded form	Description
ESL	Electronic Shelves Label	Used for displaying product information like promotion information, price and grade, etc.
AP	Wireless Access Point	Access point, also called ESL controller, is used for the data transmission and interaction of controlling information between ESL-Working and ESL.
ESL-Working	ESL-Working System	Manage all the APs and ESLs in store, and ESL-Working 3.0 and above supports multi-store management.
PriSmart	PriSmart Smart Retail System	Administrate commodity data of all stores and send price changing information to ESL.
Wi-Fi	Wireless Fidelity	Wi-Fi.
RF	Radio Frequency	Electromagnetic frequency that can radiate into space.

Table of Contents

1 product description.....	6
1.1 Product appearance and naming.....	6
1.2 Product Features	7
1.3 product specifications.....	8
2 Product factory status description.....	9
2.1 Product nameplate content.....	9
2.2 Product factory packaging form	10
3 Functional use.....	11
3.1 Product hardware description	11
3.2 Product software description.....	11
4 How to use.....	12
4.1 Hardware operating instructions.....	12
4.1.1 Product installation method.....	12
4.1.2 Product installation.....	14
4.1.3 Accessory assembly for different scenarios	14
4.2 Software operation instructions	33
4.2.1 Device initialization.....	33
4.2.2 Daily use of device.....	33
4.3 Precautions.....	34
5 FAQ.....	35
5.1 Helper app related problems	35
What should I do if the helper app logs me out forcibly or I can't log in?	35
5.2 Equipment usage related	36
System backend detected device offline.	36
What if newly replenished or newly installed devices cannot go online in the system?	36
No changes occur after device binding/unbinding.....	36
Template-bound product materials are not displayed on the corresponding devices.	36
What to do if the device displays only the "Hanshow" logo.....	37
What is the device displays distorted.....	37
What if the device reboots repeatedly.....	37
Individual device displays a black screen.	37
Multiple devices on the same rail are simultaneously black screen or repeatedly restarting.	37
The device template display is incorrect.....	37

6 repair.....	38
6.1 Maintenance and return flow chart.....	38
6.2 Service processing time limit	38
7 Maintenance	39
8 Warranty Policy	39
9 Contact information.....	40

1 product description

Lumina Aqua 1410 is a single-sided display digital signage independently developed by Hanshow Technology. It not only has the price change and promotion features of traditional ESLs, but also has features such as video playing, split-screen display, and audio playback etc.

Based on 2.4 GHz Wi-Fi communication protocol, Lumina Aqua 1410 can receive real-time task data based on the MQTT protocol and can download and play media content from the material server based on the HTTP/HTTPS protocols. It integrates modules such as video playback, content rotation, and material overlay.

Lumina Aqua 1410 can improve the ESL display effect, boost marketing efficiency, provide additional marketing promotion function and make installation simpler and more convenient.

1.1 Product appearance and naming

Lumina Aqua 1410 product ID renderings are as shown in [Figure 1-1](#):



Figure 1-1 Lumina Aqua 1410 product renderings

Product naming rules are described in [Table 1-1](#):

Table 1-1 Lumina Aqua 1410 Naming Rules

Lumina Aqua 1410			
① ② ③			
①	Product Name	Lumina	Product Category.
②	Product Series	Aqua	Represents medium-sized LCD ESL products.
③	Size	The first three digits are the product size, and the last digit is reserved.	1410 stands for 14.1 inches.

1.2 Product Features

- Functional characteristics: product price display, video playing, image carousel, product price and materials are displayed separately on ESL screen, advertising display, audio playing.
- Display characteristics: multi-screen synchronization, content carousel, multi-material overlay, no lens.
- Network characteristics: Automatically connect to Wi-Fi network, 2.4GHz proprietary protocol, automatic reconnection after disconnection, scheduled heartbeat reporting.
- Remote control: software upgrade, device reboot, parameter configuration, log acquisition.
- Power supply characteristics: supports forward and reverse connection, short circuit protection.

1.3 product specifications

Table 1-2 Lumina Aqua 1410 Product Specification Sheet

Model	Lumina Aqua 1410
Dimensions (mm)	333.76*200.34*10.1
Display Area (mm)	309.31*173.99
Weight(g)	920
Hardware Platform	
CPU	4-core A7 processor
DDR Memory	128MB
Flash Storage	256MB
Operating System	Linux
Exterior	
Screen Size (inch)	14.1 inches
Resolution (pixel)	1,920*1,080
Display Technology	TFT IPS full viewing angle screen
Display Perspective	≥ 170°
Protective Cover	none
Working Environment	
Product Life	> 30,000 hours
Power Supply	Magnetic charging/guide rail
Operating Temperature	0~50°C
Electrical Parameters	
Operating Voltage	DC12V
Power Consumption Level	7W
Installation Method	Ceiling-mounted and Shelf-mounted
RF Parameters	
Wireless Protocol	WIFI-IEEE 802.11 b/g/n, HiLPC

Working Frequency	2,400MHz ~ 2,483MHz
Others	
Audio	support
Certification	SRRC, MIC, CE, FCC

2 Product factory status description

2.1 Product nameplate content



Figure 2-1 Lumina Aqua 1410 Nameplate Information

The product nameplate shall be subject to the actual content of the final product.

- Product Name: Digital Signage.
- Product model: Lumina Aqua 1410.
- CMIIT ID: SRRC certification number.
- FCC ID: FCC certification number.
- MIC: Japanese MIC certification number.
- CE: European CE certification mark.
- Rating: operating voltage and current.

2.2 Product factory packaging form

Table 2-1 Lumina Aqua 1 410 Package Contents

Packaging parameters	Description
packaging product	Lumina Aqua 1410
package style	corrugated box
Packing quantity	15 pieces
Package Contents	ESLs, certificates, packaging materials
Package weight	14.5 kg
Packing box size	380*370*240mm
Pallet size	1,200*1,000*150mm

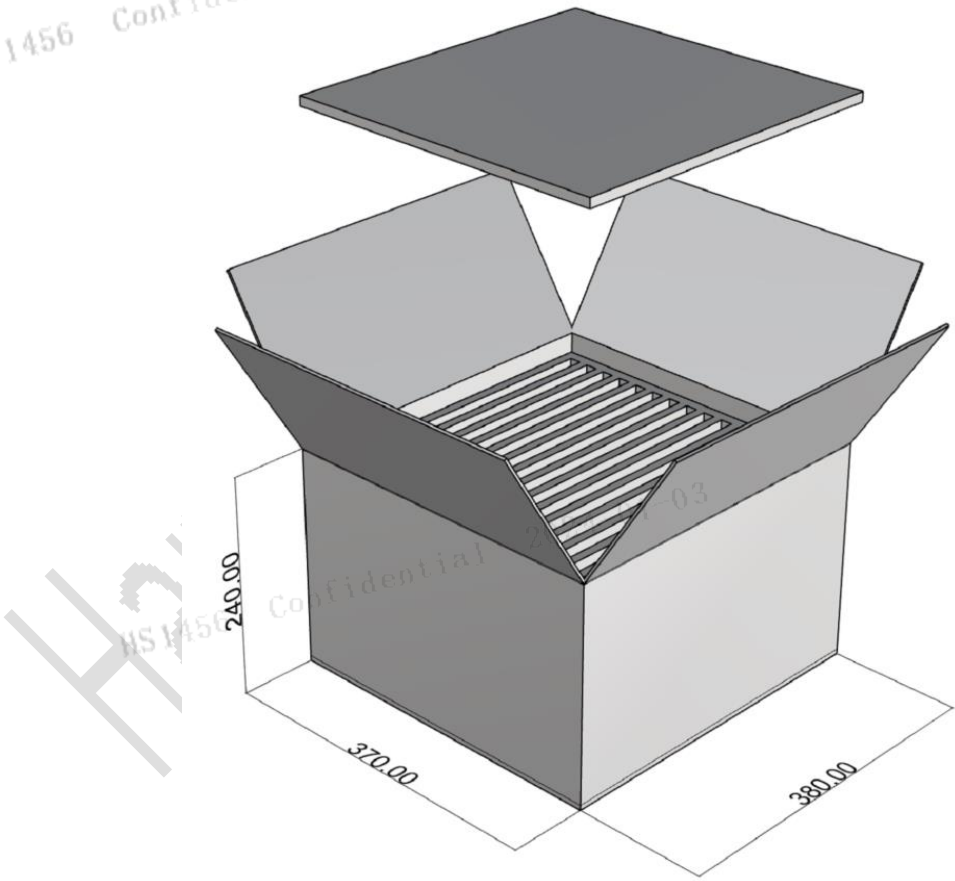



Figure2-2 Lumina Aqua 1410 packaging materials

 **Note:** When the device leaves the factory, it is not equipped with power supply and accessories. Each carton contains 15pcs and protected by C PE bag.

3 Functional use

3.1 Product hardware description

Lumina Aqua 1410 hardware is described in [Table 3-1](#):

Table 3-1 Lumina Aqua 1410 series hardware usage

Type	Name	Description
Product	Lumina Aqua 1410	Double-sided display; price display board, POP display board, etc.
Accessories	Lumina-HS05 ceiling-mounted installation accessories	Ceiling-mounted installation accessory kit.
Accessories	Lumina-HS05 shelf-mounted installation accessories	Shelf-mounted installation accessory kit.
Accessories	Lumina-HS05 base installation accessories	ESL base (for promotion table) installation accessory kit.
Accessories	Lumina 14.1" promotion table	Table installation accessories.

3.2 Product software description

Lumina Aqua 1410 software is are described in [Table 3-2](#):

Table 3-2 Lumina Aqua 1410 software usage

Type	Name	Description
APP	Helper	Store terminal APP; binding and unbinding of Lumina Aqua and products; network configuration, product price changes; template and theme replacement, material binding, etc.
Software	Hanshow All-Star Smart Retail System	All-Star system; manage: system backend, product data, device data, communication tasks, etc.

4 How to use

4.1 Hardware operating instructions

4.1.1 Product installation method

1. Ceiling-mounted installation: Suspended from the ceiling using Hanshow standard guide rails and steel wires. This method applies to scenarios where the display points are fixed and power needs to be introduced from the ceiling. As shown in [Figure 4-1](#):



Figure 4-1 Ceiling-mounted installation effect

2. Shelf-mounted installation: Mounted on the shelf using Hanshow standard guide rails and supporting pole accessories. This method applies to scenarios where the power supply is introduced from the ground, the shelf has space for installing supporting poles, and it is guaranteed to be firm and reliable. As shown in [Figure 4-2](#):



Figure 4-2 Shelf-mounted installation effect

3. Table-mounted installation: Mounted on the promotion table using Hanshow standard guide rails and table accessories. This method applies to single and dual-device installation scenarios, as shown in [Figure 4-3](#):

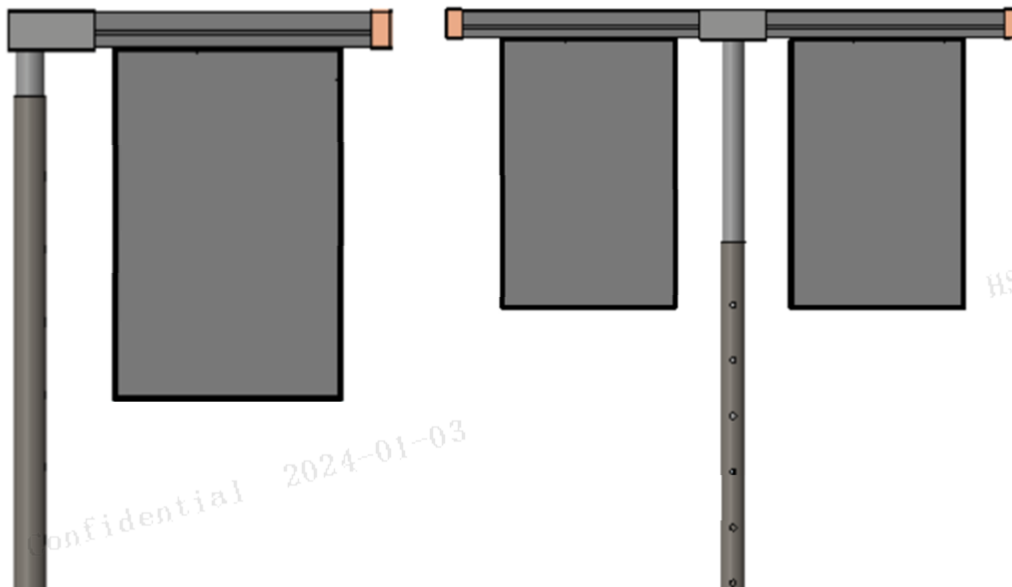


Figure 4-3 Base installation effect

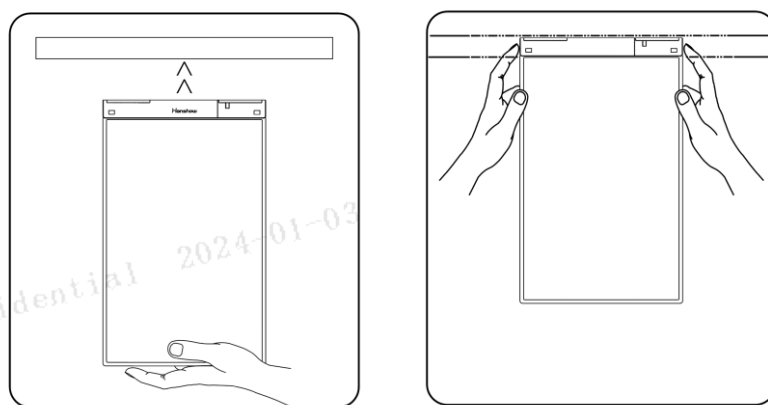
4. Promotion table installation method is as shown in [Figure 4-4](#):



Figure 4-4 Promotion Table installation effect

4.1.2 Product installation

A schematic diagram (rail power supply scheme) of product installation is as follows. Taking advantages of an integrated design and the standard rails provided by Hanshow, Lumina Aqua 1410 can be powered by a standard power supply and be mounted into the guide rail. There are manual pressing devices at both ends of the top of the device, allowing users to quickly assemble and disassemble the device by pressing the device. The assembly and disassembly diagrams are shown in [Figure 4-5](#):



01 Installation

02 Disassembly

Figure 4-5 Product Installation Diagram

4.1.3 Accessory assembly for different scenarios

The installation scenarios according to different needs can be divided into ceiling-mounted installation, pole installation, T-shaped rail installation, L-shaped promotion table rail installation and T-shaped promotion table rail installation.

- Ceiling-mounted installation

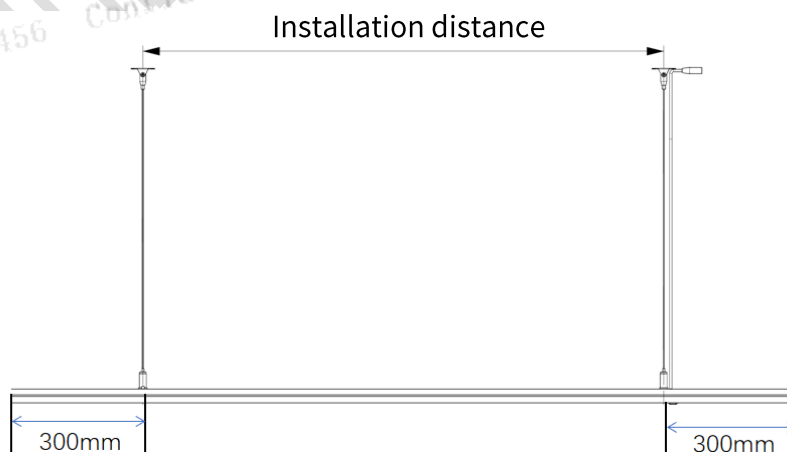


Figure 4-6 Ceiling-mounted installation position diagram

- a. Determine the installation location.

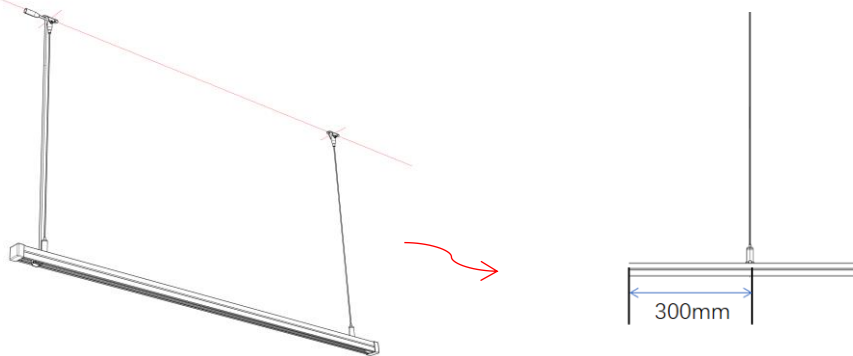
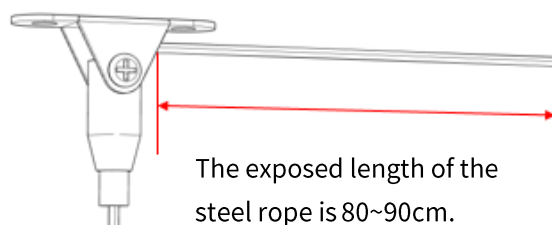


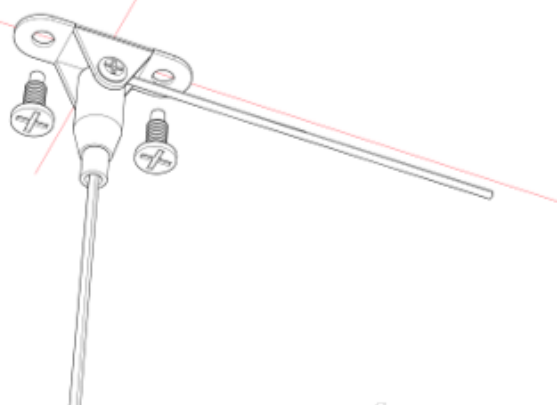
Figure 4-7 Ceiling-mounted installation distance diagram

- i. Ceiling-mounted code installation:

- ①. Thread the steel wire rope into the ceiling hanging code, and expose 80-90mm of the rope (to prevent the steel wire from sliding off).
- ②. Aim at the crosshair position so as to install the ceiling hanging code.



①

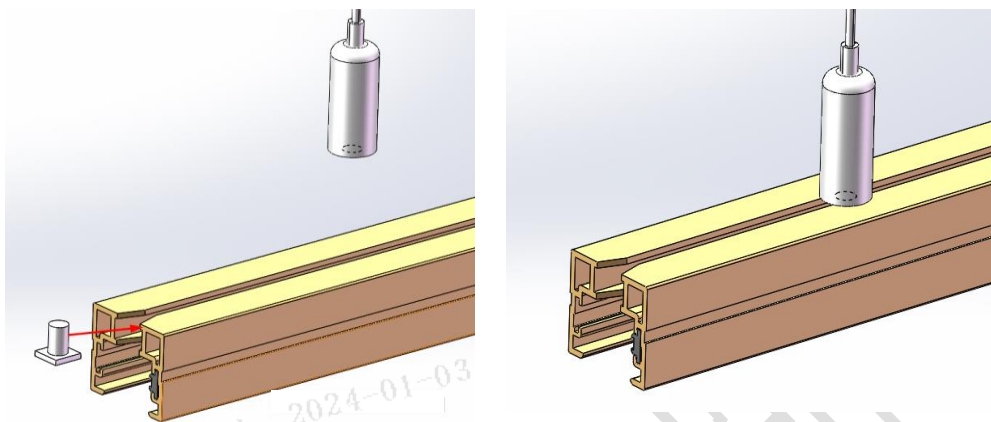


②

Figure 4-8 Ceiling hanging code installation instructions

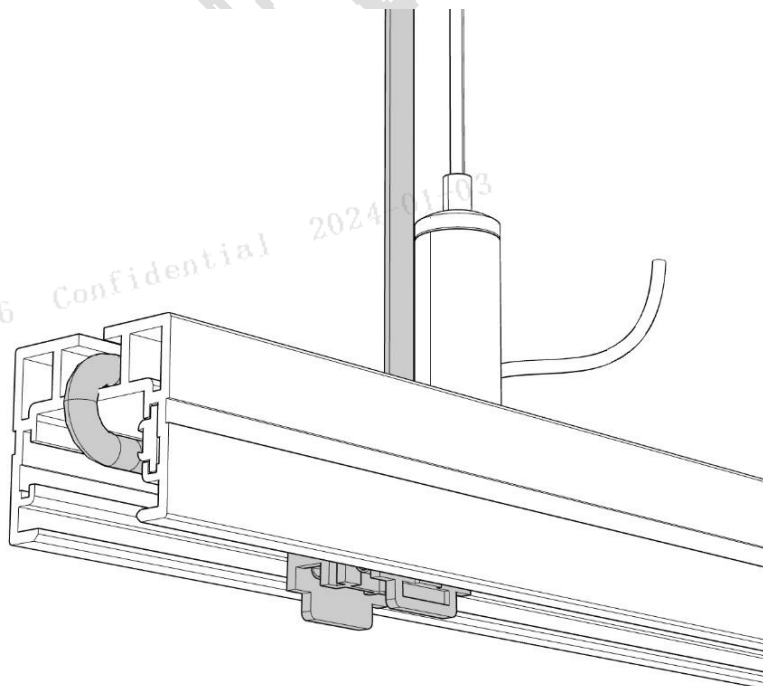
ii. Guide rail hanging code installation:

- ①. (A) Insert the square slider nut into the guide rail.
(B) Slide the mounting screw to a distance of 300mm and fix it.
- ②. Thread the steel wire into the rail hanging code and tighten the hanging code.

**Figure 4-9 Guide rail hanging code installation diagram**

iii. Install the power cable:

Insert the power connector into the guide rail, press repeatedly to ensure that the plug buckle is fully inserted into the guide rail, and hide the wires in the concealed wire duct (non-professionals are not allowed to disassemble it).

**Figure 4-10 Power cable installation diagram**

- iv. Install silicone plug: Insert plugs into both ends of the guide rail.

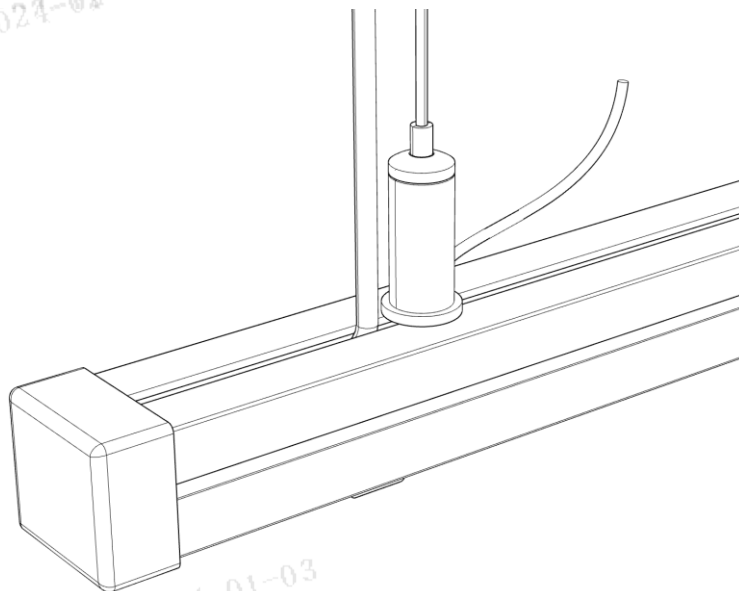


Figure 4-11 Plug installation diagram

- v. Adjust rail height: According to the actual height requirement, pull the steel wire at the lifting end of the guide rail to adjust to the required height (To loosen the thread, you need to press the cylinder on the hanging nut).

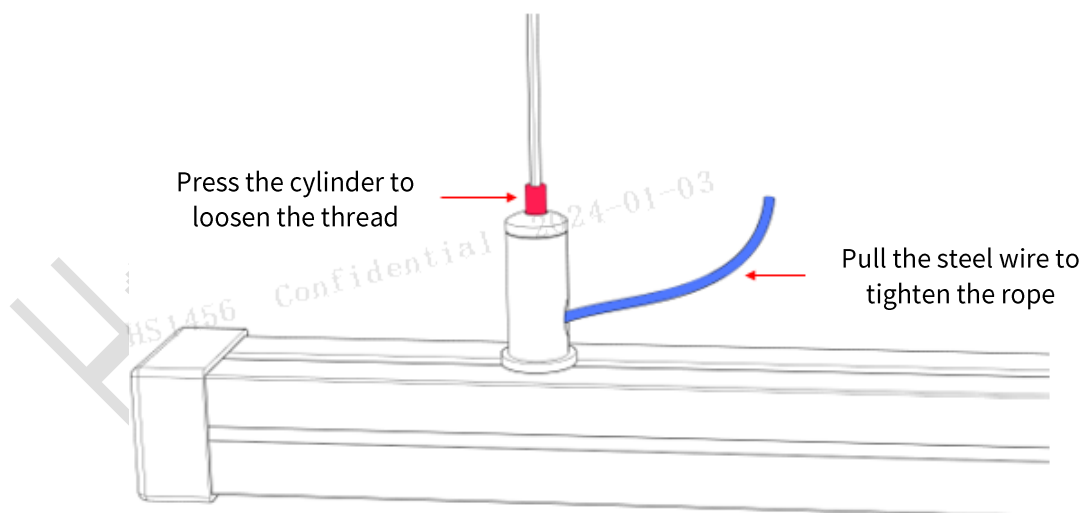
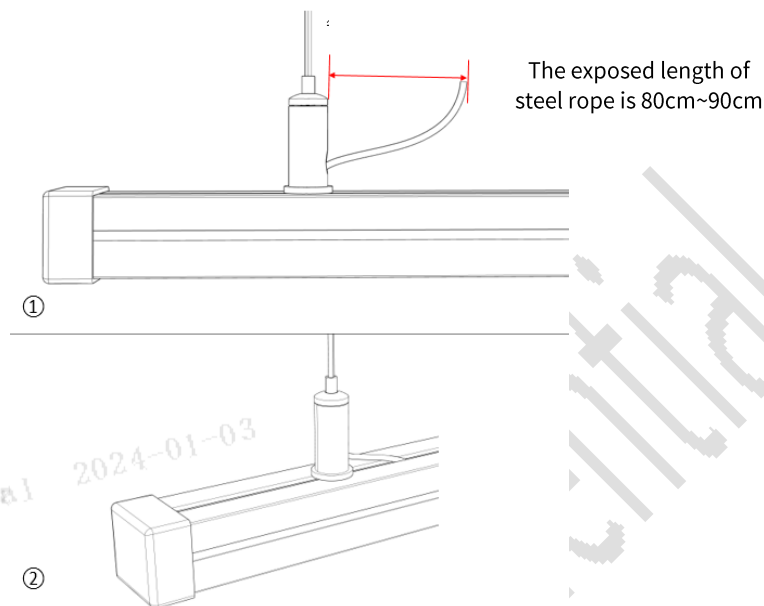


Figure 4-12 Guide rail height adjustment diagram

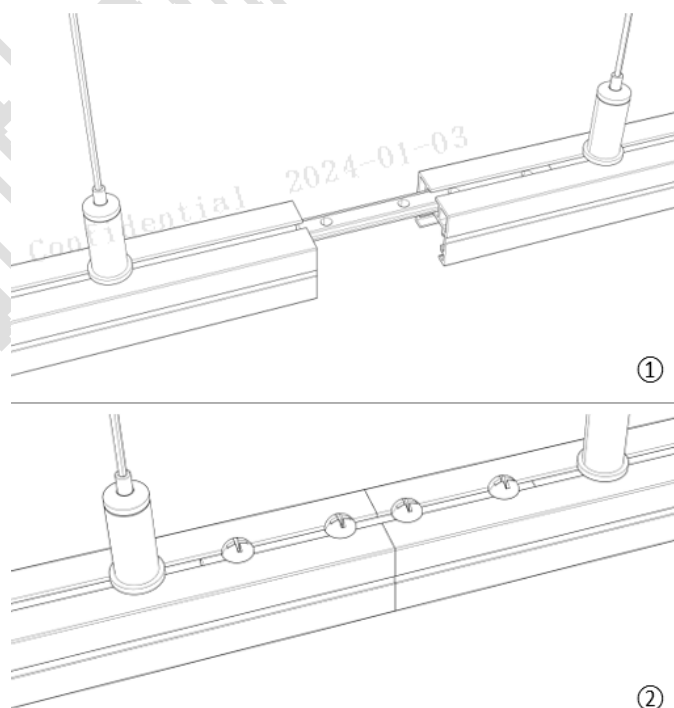
vi. Cut excess wire:

- ①. Reserve 80-90mm steel wire and cut off the excess wire.
- ②. Hide the wire in the guide rail wire duct.

**Figure 4-13 Steel wire routing and cutting diagram**

vii. Assembly of multiple rails (optional):

- ①. Insert the straight connector into the guide rail.
- ②. Tighten the screws and ensure that the 4 screws are fully tightened.

**Figure 4-14 Diagram of assembling multiple rails**

- viii. Install the electronic parts for series connection: Insert the connector into the guide rail and press repeatedly to ensure it is installed in place.

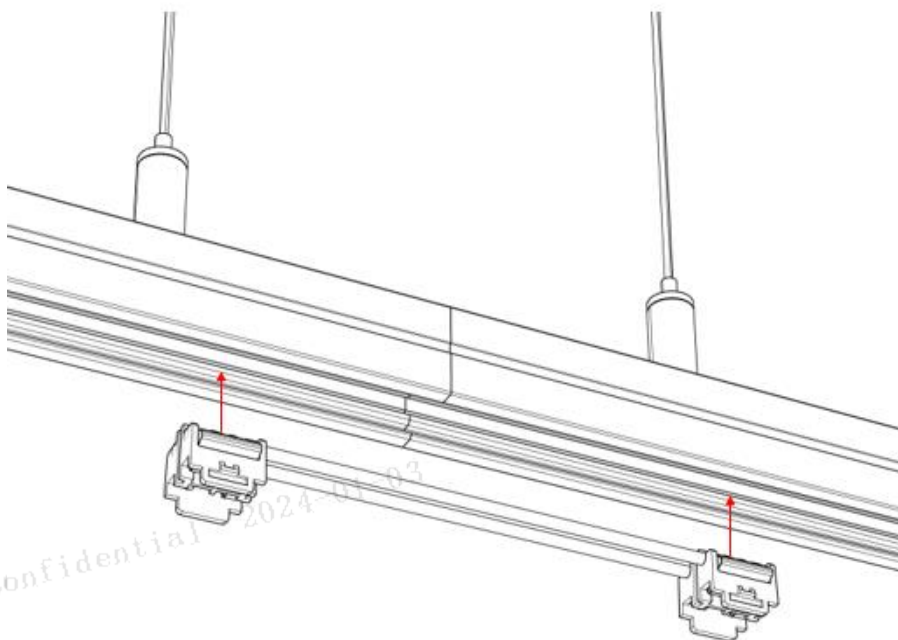


Figure 4-15 Series power supply installation diagram

- ix. Effect after installation:

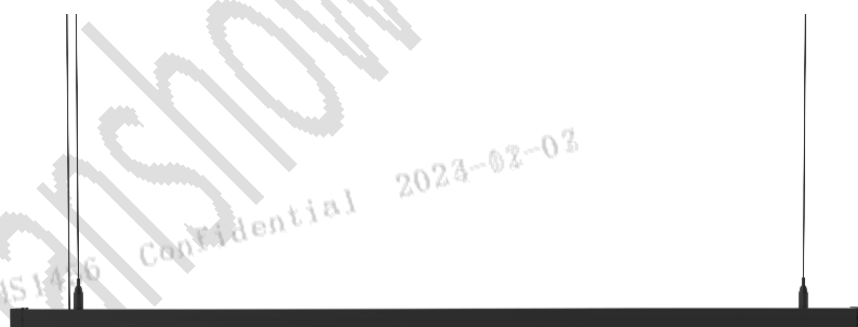


Figure 4-16 Ceiling-mounted installation effect

- Pole installation

- i. Determine the installation location:

- ①. Installable area distance: The available distance for installing the shelf's rail endcap and the length of the shelf are equal.

$$\text{Rail length} = \text{shelf length}$$

- ②. Draw lines to determine the installation location.

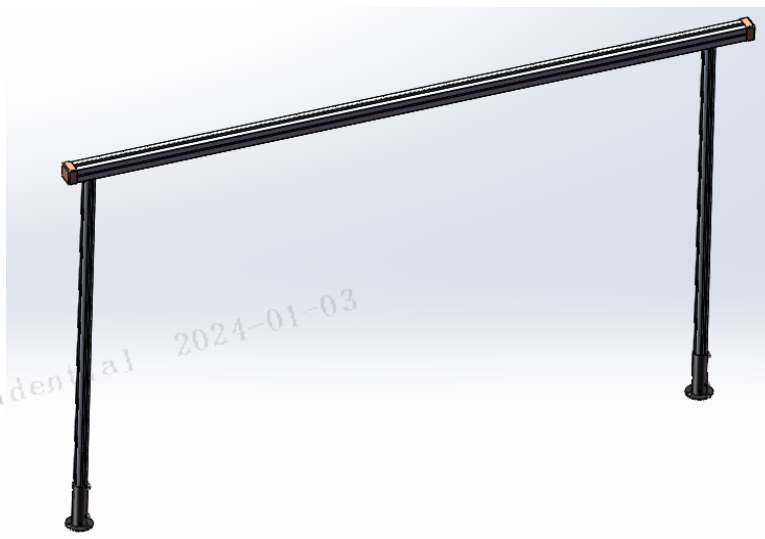


Figure 4-17 Support rod installation diagram

- ii. Cutting the rail:

- ①. If some non-standard shelves need to be cut, measure the actual length of the guide rails and mark the guide rails.
 - ②. Use an angle grinder and a fixed bracket to cut along the marked line.
 - ③. file and grind off the guide rail burrs.

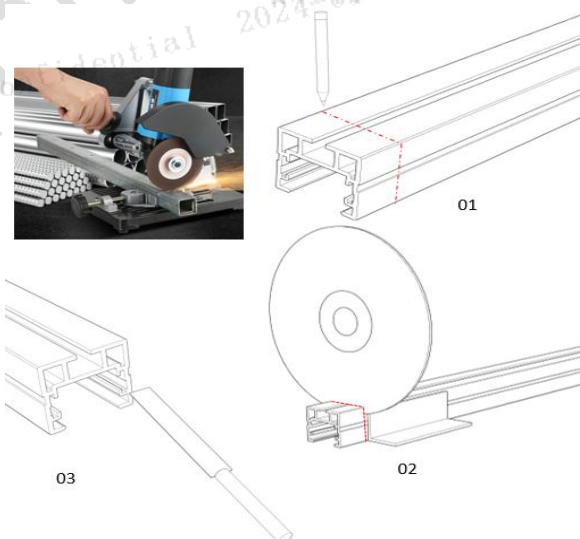
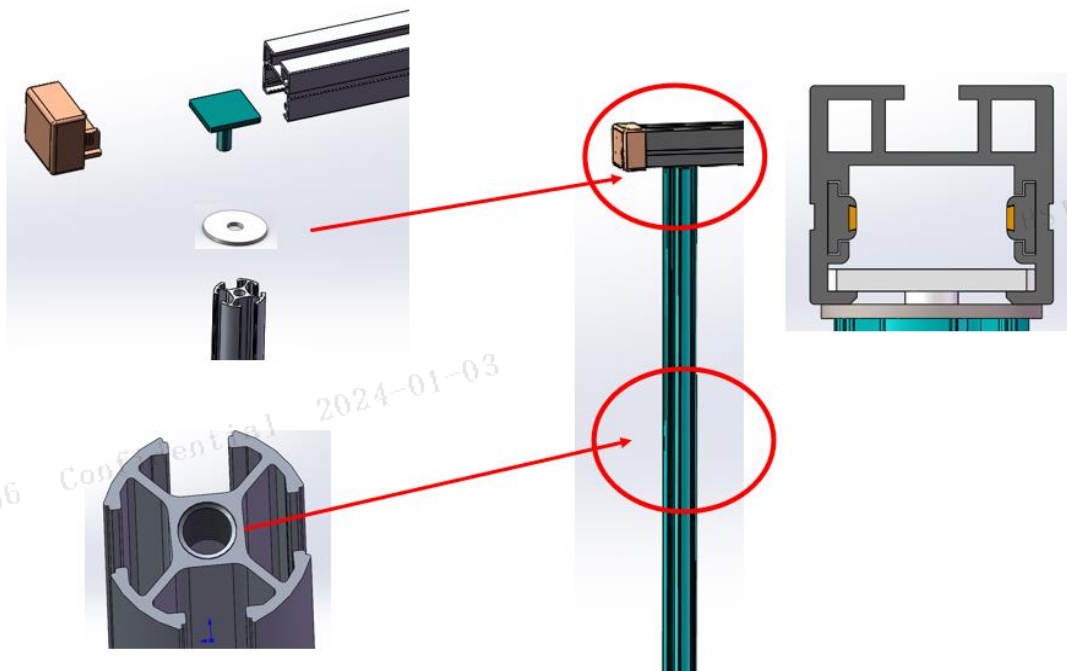


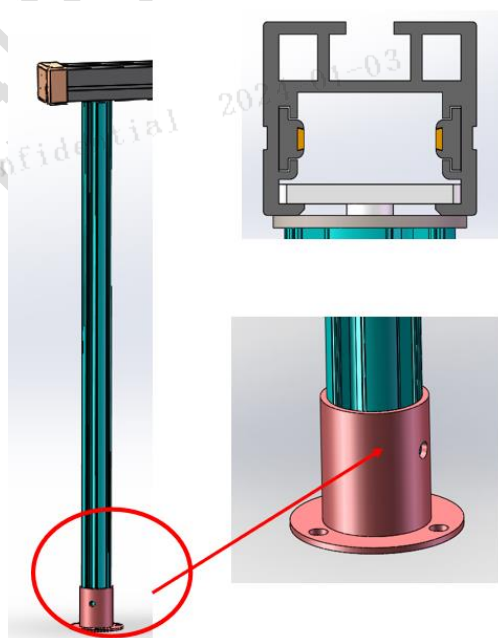
Figure 4-18 Guide rail cutting diagram

iii. Install rail bracket:

- ①. Prepare the guide rails and poles that need to be installed.
- ②. Install the square screws and flat washers on the top of the guide pole, slide the square screws into the guide rail groove, and rotate the pole clockwise to tighten; ensure that the guide rail and pole are installed in place.

**Figure 4-19 Guide rail bracket installation diagram**

- iv. Install guide rail pole flange seat: Insert the lower end of the pole into the flange seat and tighten the screws on the flange.

**Figure 4-20 Guide rail pole installation diagram**

- v. Connect rail power connector: Insert the power connector into the guide rail, and press repeatedly to ensure that the plug buckle is fully inserted into the guide rail.

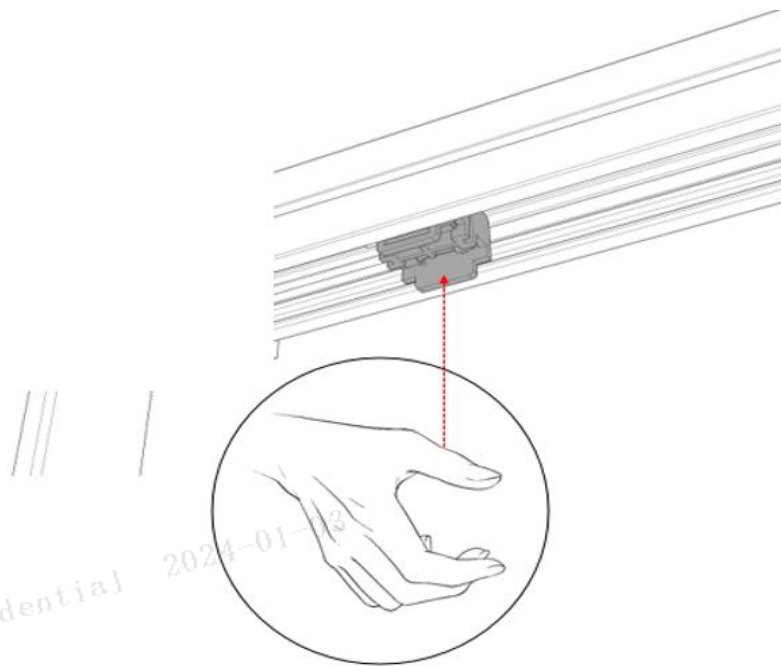
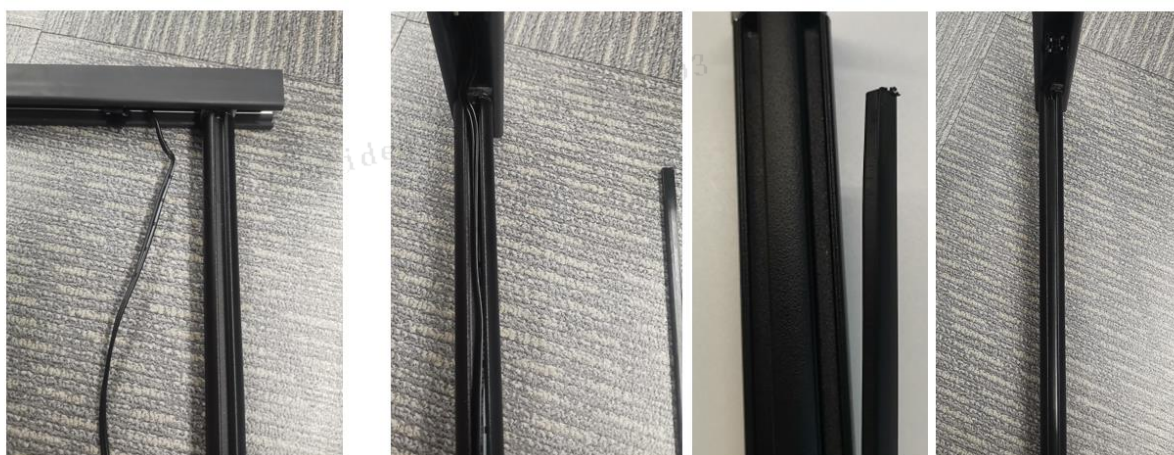


Figure 4-21 Rail power cable installation diagram

- vi. Install pole brackets on shelves:

- ①. Place the assembled guide rail on the table, place the mark to determine the position, and ensure that the pole and guide rail are in line.
- ②. Use M4.2x13 dovetail nails to fix the vertical poles to the shelves in sequence.



Insert power cable
into the rail

Insert power cable
into the vertical pole

Buckle the power cable into the
groove of the pole and seal the pole

Figure 4-22 Shelf support rod assembly diagram



Figure 4-23 Schematic diagram of shelf support rod installation

vii. Connect the power supply:

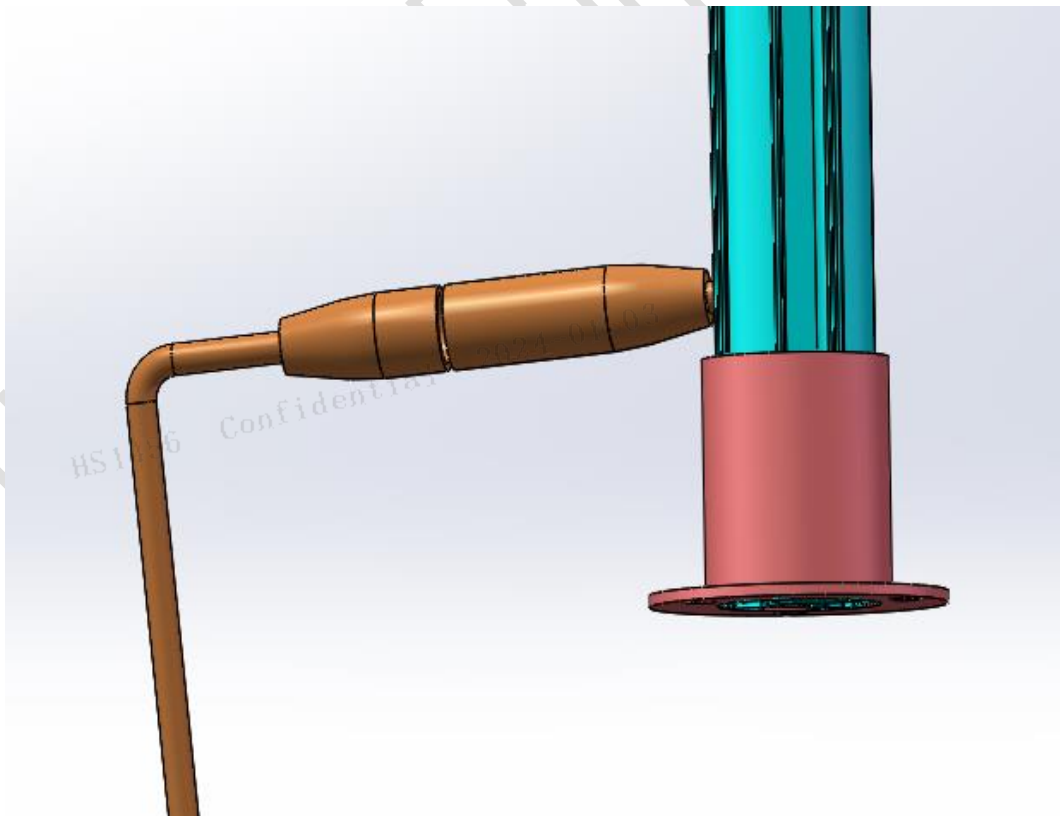
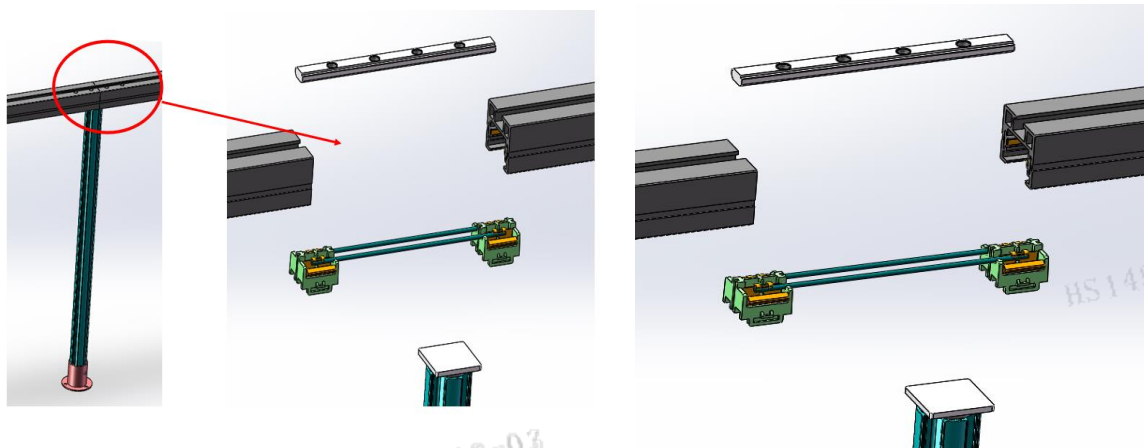


Figure 4-24 Shelf support pole power cable connection diagram

viii. Assembly of multiple rails (optional):

- ①. Make sure the power adapter cable is plugged into place.
- ②. Press repeatedly to ensure it is in place.

**Figure 4-25 pole series installation diagram**

ix. This should be how it looks like after installation:

**Figure 4-26 Schematic representation of the pole installation effect**

- T-shaped rail installation:

Except for the "—" shaped shelves, products can be also displayed in a "T" or "工" shape. That said, Lumina Aqua 1410 may also needs to be installed on the rails at both ends of the shelf. In such cases, the T-shaped rail accessories are also required, besides the aforementioned ceiling-mounted and pole installation scenarios.

- i. Ceiling-mounted rail

- ①. Install T-rail.
 - ②. Fix with M4.2x13 dovetail nails.

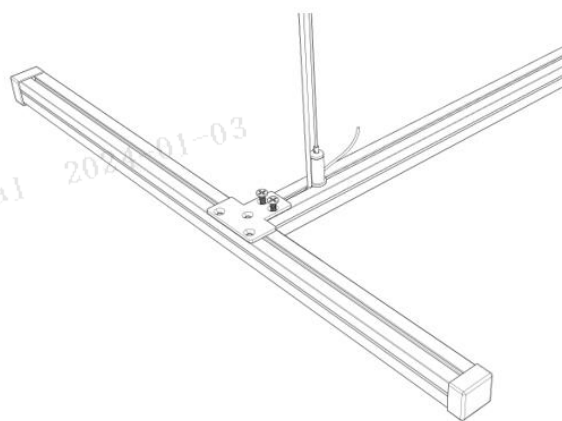


Figure 4-27 Installation diagram of suspended T-shaped rail

- ③. Install the power cable: Insert the power connector into the guide rail, and press upward repeatedly to ensure that the plug buckle is fully inserted into the guide rail.

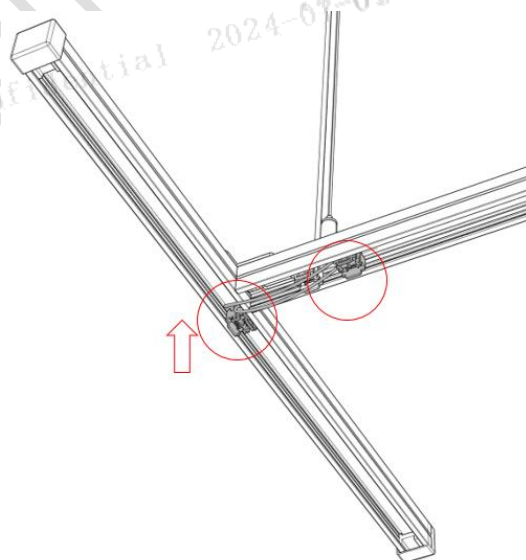


Figure 4-28 Suspension T-rail power supply connection diagram

- ④. This should be how it looks like after installation:



Figure 4-29 Suspension T-shaped guide rail installation effect

- ii. Rail of the supporting bar.

Install T-rail:

- ①. Insert the guide rails into the vertical poles at both ends.
- ②. Fix it with M4.2x13 dovetail nails (the bottom pad is used as support).

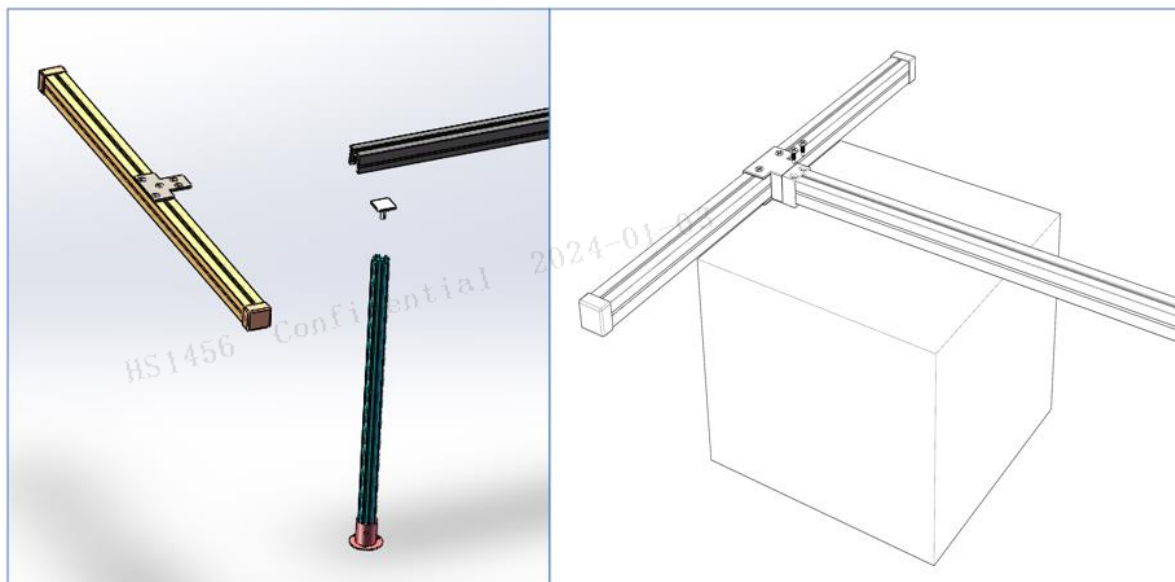


Figure 4-30 pole T-shaped guide rail installation diagram

- ③. Connect rail cable: Insert the power connector into the guide rail, and press repeatedly to ensure that the plug buckle is fully inserted into the guide rail.

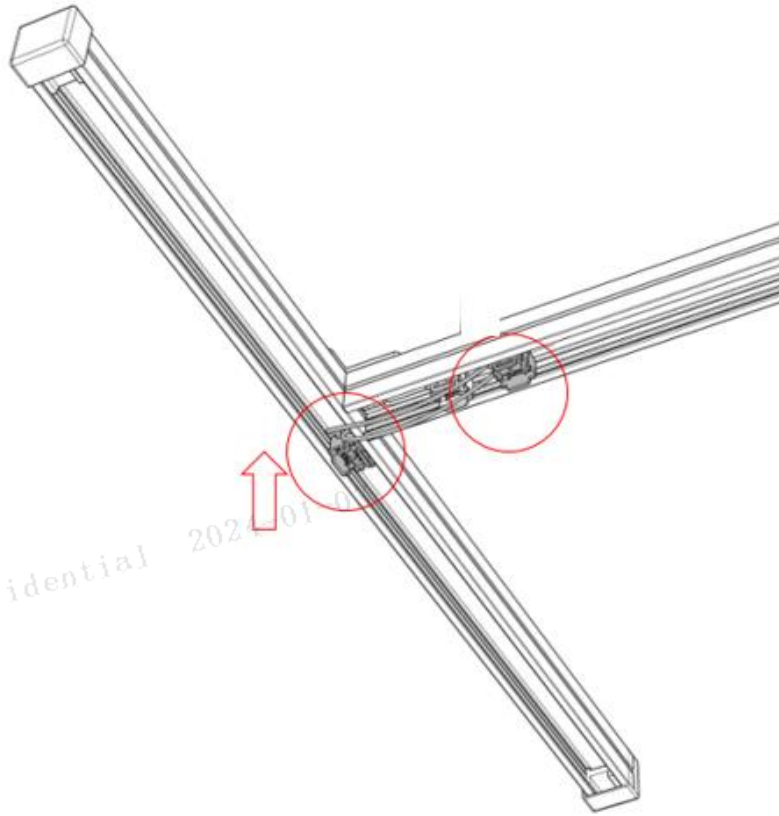


Figure 4-31 pole T-shaped guide rail power connection cable diagram

- ④. This should be how it looks like after installation:



Figure 4-32 Installation effect of support rod T-shaped guide rail

- L-shaped promotion table rail (one-way)

Some shelves mounted in the standalone promotion table area only need to install Lumina ESLs in one direction, so the L-shaped stacking bracket (one-way).

- Assembling the upper part of the bracket and guide rail: Insert the square nut from the side of the guide rail, insert the guide rail into the promotion table bracket, and fix it with two M5*8 cross round head screws.

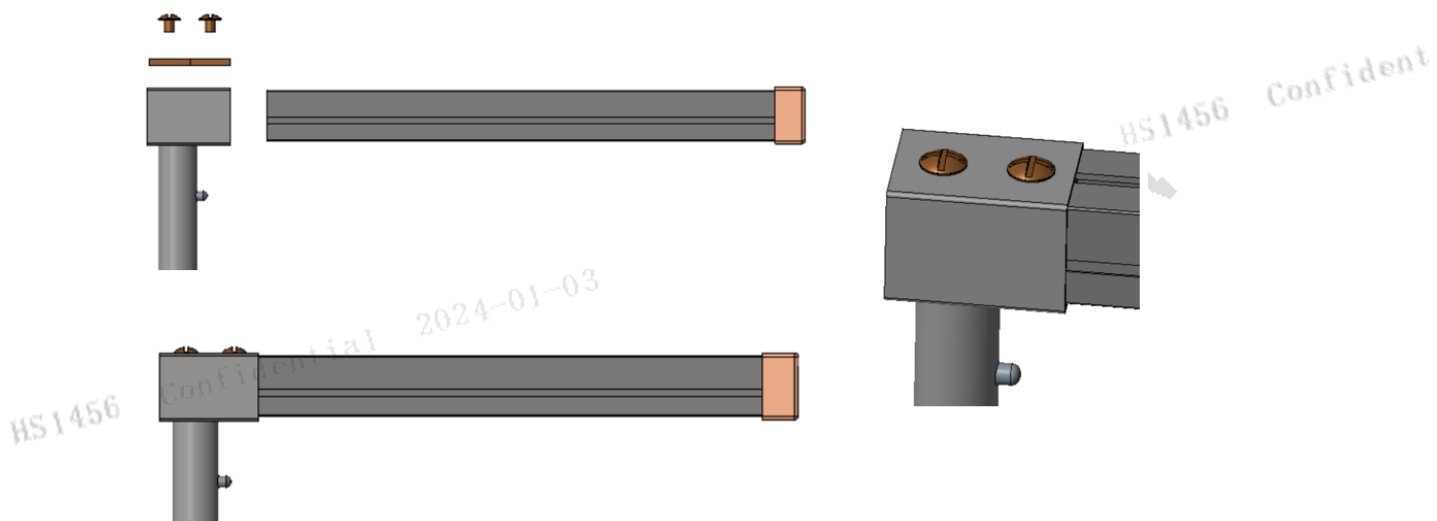


Figure 4-33 L-shaped upper bracket and guide rail installation diagram

- Assembling the upper and lower brackets: First pass the wire through the support pole, then install the upper and lower support poles together, and adjust the height of the promotion table bracket through the V-shaped spring piece. The bracket is adjustable from 50cm to 80cm.

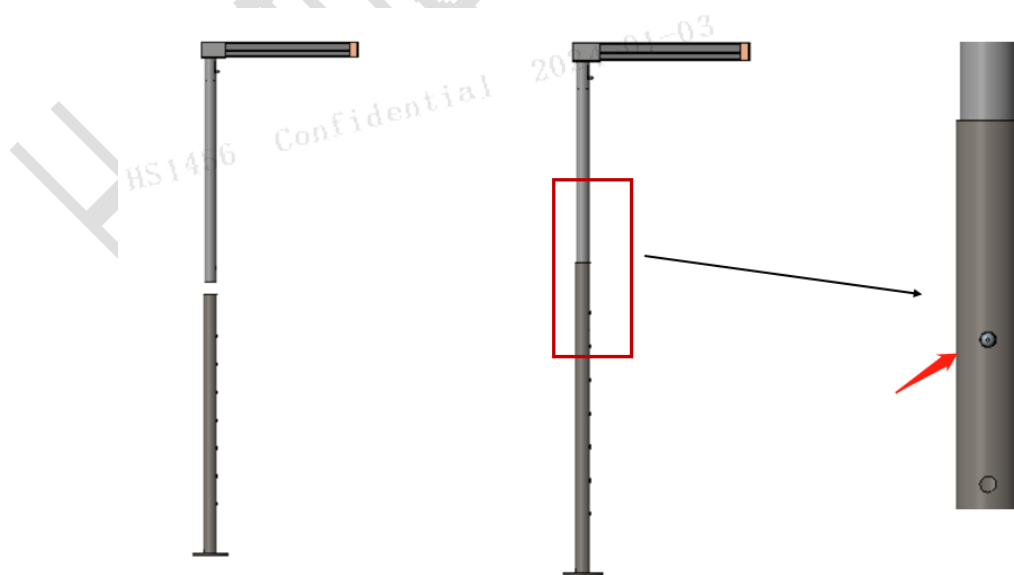


Figure 4-34 Installation diagram of L-shaped upper and lower brackets

- iii. Bracket and base installation: Fix the base and bracket together through 3 M4*6 screws.

 **Note: Make sure the power supply line has been pulled out of the support pole before installation (as shown below).**

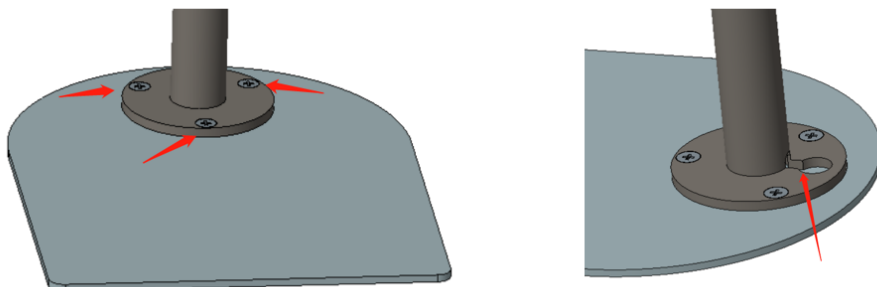


Figure 4-35 L-shaped bracket base installation diagram

- iv. Effect after installation:

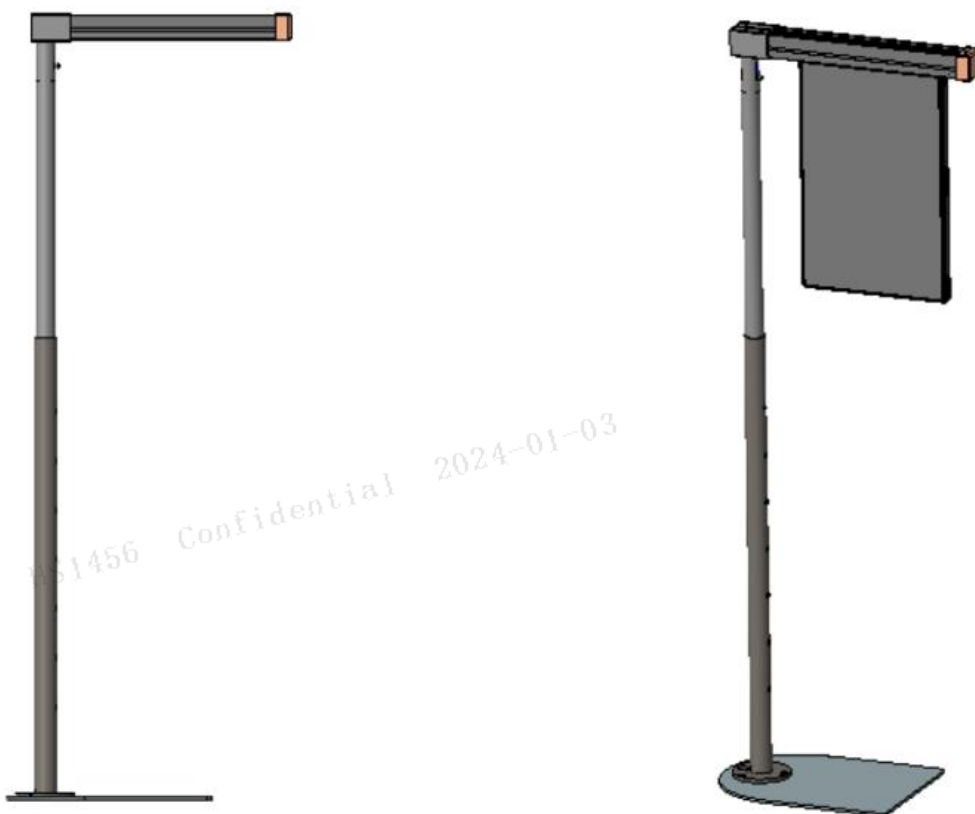


Figure 4-36 L-shaped bracket installation effect

- T-type pile head bracket (left and right two-way)

Some shelves mounted in the standalone promotion table area, Lumina ESLs need to be installed in both left and right directions, our T-shaped promotion table brackets need to be installed.

- Assembling the upper part of the bracket and guide rail: The upper bracket on the promotion table passes through the guide rail and is placed in the center. Square nuts are inserted from both sides of the guide rail and fixed with two M5*8 cross round head screws.

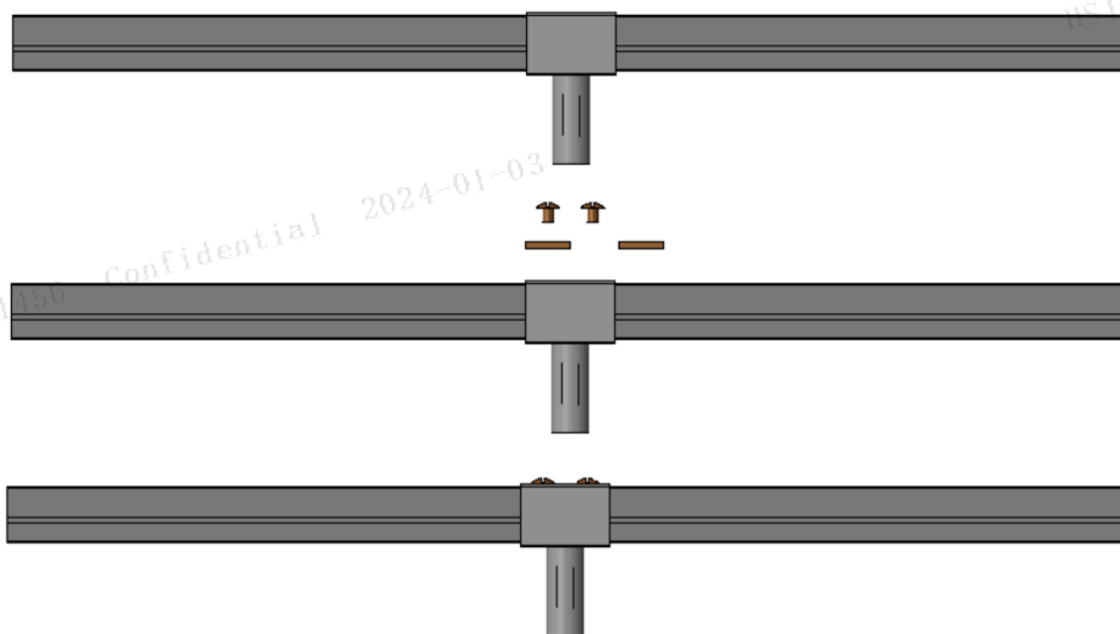


Figure 4-37 T-shaped upper bracket and guide rail installation diagram

- Guide rail installation at promotion table: Install silicone plugs on both sides of the guide rail.

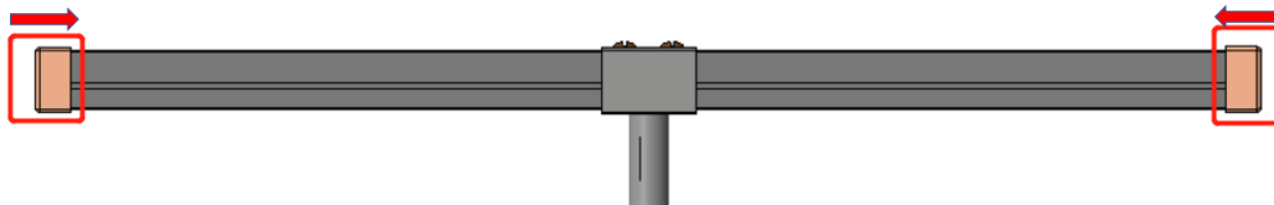


Figure 4-38 T-bracket guide rail plug installation diagram

- iii. Assembling the upper and lower brackets on the promotion table: First pass the wire through the bracket pole, then install the upper and lower brackets together, and adjust the height of the promotion table bracket through the V-shaped spring piece. The height of the bracket is adjustable from 50cm to 80cm.

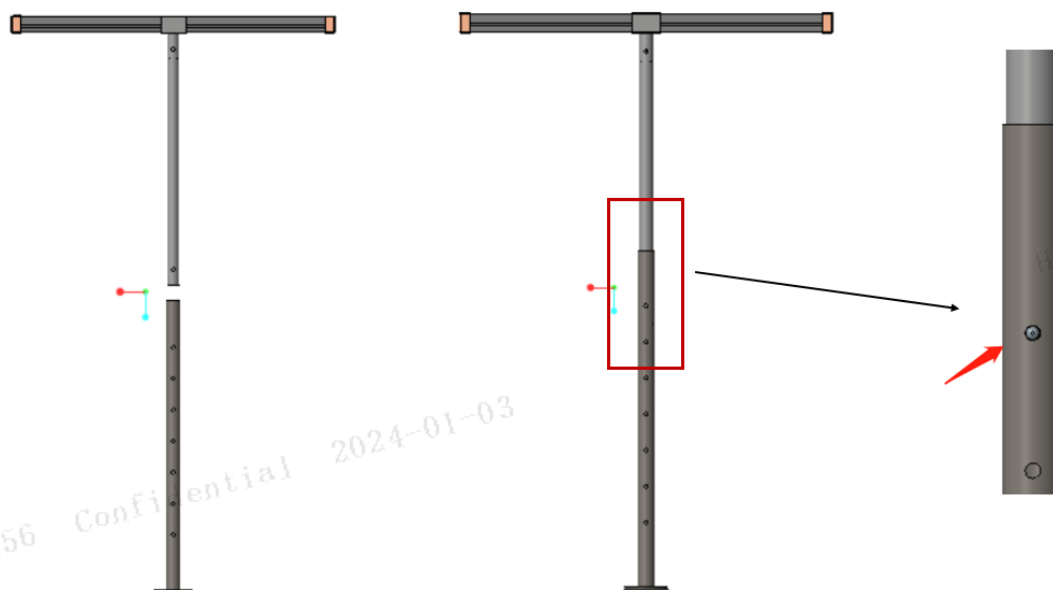


Figure 4-39 T-shaped upper and lower bracket installation instructions

- iv. Bracket and base installation: Fix the base and bracket together through 3 M4*6 screws. Note: Make sure the power supply line has been pulled out of the support pole before installation (as shown below).

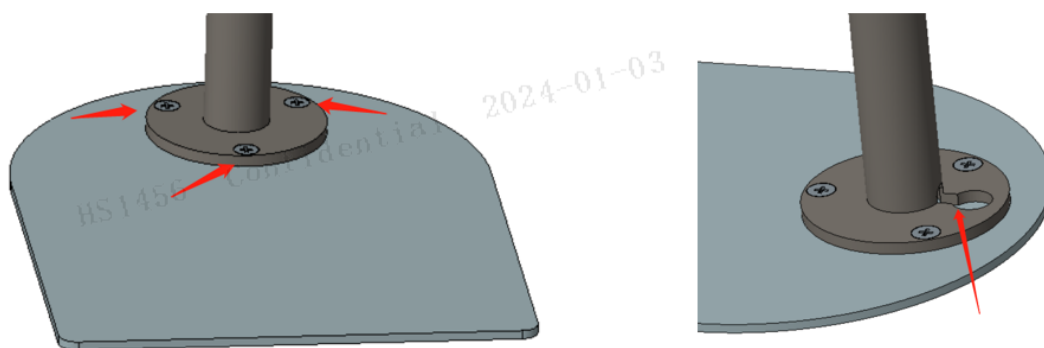


Figure 4-40 T-shaped bracket base installation diagram

v. This should be how it looks like after installation:



Figure 4-41 T-bracket installation effect

4.2 Software operation instructions

4.2.1 Device initialization

After the equipment is installed and powered on, the network needs to be configured. There are two ways to configure the network: either using Hanshow Lumina dedicated AP or customer-owned network configuration;

- For Hanshow Lumina dedicated AP, please refer to the "Hanshow Gateway-mode Router Configuration Guide" document.
- For the customer's own network configuration, please refer to the Lumina ESL networking configuration chapter in the "Hanshow Helper App 1.0 Product Manual" document, which matches the Helper App version 1.0rc12 and above.

4.2.2 Daily use of device

The daily use of the device is divided into mobile app (Helper) and backend system (All-Star).

- the Helper, please refer to the "Hanshow Helper App 1.0 Product Manual" document to complete the daily binding, unbinding and other related operations of the store clerk, matching the Helper app version 1.0rc12 and above.
- All-Star, refer to the "Hanshow All-Star 1.0 User Manual" to complete related business operations such as templates, material uploads, and marketing placement, and is compatible with All-Star Digital Marketing System 1.0.0 RC15SP2 and above.

4.3 Precautions

1. The device supply voltage cannot be powered by a voltage other than 12V.
2. In some scenarios, the device in use needs to be upgraded online. For example, when receiving an upgrade notification from Hanshow, you need to cooperate in connecting the spare devices to the power supply rail and network. At the same time, you must confirm that the device is not powered off during the upgrade process.
3. To avoid affecting the life of the LCD screen, please put the device into sleep mode or power off when there is no need for display.
4. Rain, moisture, water and various liquids may contain minerals that will corrode electronic circuits and housing materials. If the device gets wet, clean it as soon as possible.
5. Do not use or store the device in dusty or dirty areas to avoid damage to its removable parts and electronic components.
6. It is prohibited to throw or knock the device. Rough treatment of the device will damage the internal circuit board.
7. It is prohibited to use harsh chemicals and cleaning agents to clean the equipment.
8. When the equipment is not used for a long time, please cut off the power and save it.
9. Use a dry or damp soft cloth to wipe the device. Do not use wet cloth or liquid to clean the device directly.
10. Please do not disassemble the device without permission to avoid affecting the waterproof level.
11. When disassembling and assembling the power cable connector, be sure to cut off the power supply.
12. Description of the maximum number of load devices for the 96W power supply: the guide rail length does not exceed 4 meters, 8 Lumina Aqua 1410 signages can be powered.

5 FAQ

5.1 Helper app related problems

What should I do if the helper app logs me out forcibly or I can't log in?

- Possibility 1: This can be caused by the inactivity caused timeout, simply log in.
- Possibility 2: This can be caused by incorrect system account/store permission status, reboot or add the corresponding permission.

What should I do if the helper app reports a parameter error during the binding operation?

- This can be caused by incorrect system account/store permission status, reboot or add the corresponding permission.

What should I do if the helper app cannot find products during a search?

- This could be caused by either an incorrect search condition or the system not retrieving the corresponding product information.
 1. Check if the search conditions (product name and code) are correct.
 2. Confirm if the product is still available: is it out of the shelf or unavailable for sale.
 3. If the issue cannot be resolved, contact Hanshow technical support.

5.2 Equipment usage related

System backend detected device offline.

1. First, confirm that the corresponding device is powered on and within the communication range of the Wi-Fi.
2. Secondly, confirm if your Wi-Fi is connected and the internet available. If you can rule out the above-mentioned possibilities, investigate whether it is a single device issue or a batch issue:
 - For a single device issue, contact Hanshow technical support.
 - For a batch issue, check store internet. If the internet is verified to be available, contact Hanshow technical support.

What if newly replenished or newly installed devices cannot go online in the system?

- Either the internet has not been configured for the new device, or the internet configuration has not been initialized. Simply configure the internet using the Helper app.

No changes occur after device binding/unbinding.

- Check if the device is online and functioning properly in the system. If offline, follow the steps mentioned in the offline operation instructions section.
- Verify if the information submitted by the system and the helper was successful.
- If the issue cannot be resolved, contact Hanshow technical support.

Template-bound product materials are not displayed on the corresponding devices.

- For Images: The system has no specific resolution or aspect ratio requirements for images. If the images are not displayed, check the binding relationship.
- For Videos: Each template has specific aspect ratio requirements for video materials. If the aspect ratio is inconsistent, the videos may not display correctly.
- If the issue cannot be resolved, contact Hanshow technical support.

What to do if the device displays only the "Hanshow" logo.

- Verify if the materials inside the template are correct. If the issue cannot be resolved, contact Hanshow technical support.

What is the device displays distorted

- Verify if the materials inside the template are correct. If the issue cannot be resolved, contact Hanshow technical support.

What if the device reboots repeatedly

- Check the number of Lumina Aqua devices installed into the rail, whether it is overload. If the issue cannot be resolved, contact Hanshow technical support.

Individual device displays a black screen.

- First, check for backlight display:
 - If the backlight is visible, simply reboot. If the issue cannot be resolved, contact Hanshow technical support;
 - Try to install the device in somewhere else, so as to rule out the virtual connection issue. If the issue cannot be resolved, contact Hanshow technical support.

Multiple devices on the same rail are simultaneously black screen or repeatedly restarting.

- Check if the number of devices exceeds the recommended limit.
- If not, first power off the devices. Then, check for loose connections at the power sources. After reinforcing the power connection, power on the devices again. If the display still doesn't return to normal, contact Hanshow technical support.

The device template display is incorrect.

- Verify the logical content of the template and the product binding logic of the device. If the issue persists, contact Hanshow technical support.

6 repair

6.1 Maintenance and return flow chart

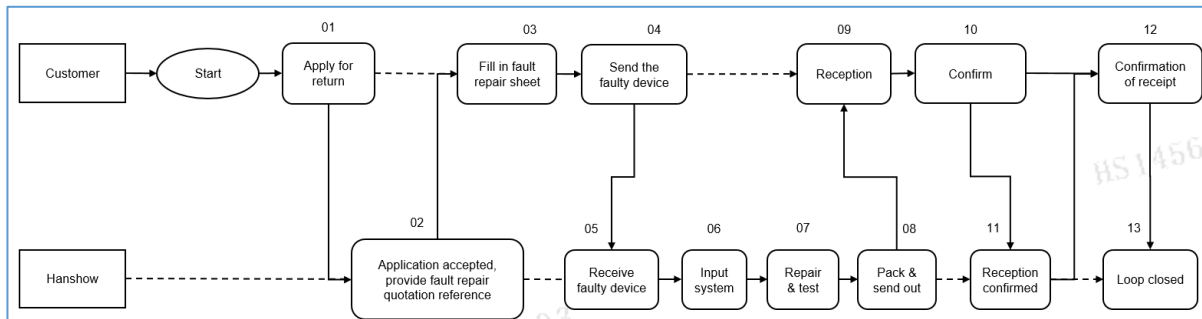


Figure 6-1 Maintenance and return flow chart

6.2 Service processing time limit

Repair of faulty parts: The repair will be completed within 30 working days from the date Party B receives the faulty parts and confirms that they are within the scope of the repair request, or the date of receipt of the repair fee. After the repair is completed, it will be returned to the designated location of Party A in a timely manner. If Party B cannot repair in time for its own sake, Party B shall provide spare parts with the same performance for replacement.

7 Maintenance

- Maintenance and cleaning goals

Maintenance and cleaning are mainly to remove foreign substances and oxide layers attached to the product that are not the product itself, such as dust, lint, grease, rust, other dust, etc.;

- Cleaning method

Use a soft brush or rag to wipe. Some stubborn stains can be wiped with a neutral detergent.

- Storage method

Storage temperature: 10°C ~ 30°C; store in a dry and ventilated environment.

- Precautions


1. Clean regularly (Recommended cleaning once a week).
2. Regularly check the firmness of the installation accessories, and replace any damaged accessories in a timely manner.
3. Try to ensure the overall environmental cleanliness of the installation area.
4. Avoid wiping with sharp objects to avoid scratching the product surface and screen; avoid rinsing directly with water.

8 Warranty Policy

There is a one-year warranty period starting from the date of product delivery; upon expiration of the period, if Hanshow is still required to continue to provide after-sales services for the relevant products, Hanshow should be notified in writing one month in advance to renew the extended warranty agreement.

9 Contact information

Table 9- 1 Hanshow service contact information

Service Method	Content
hotline	400-0365-305
Email service	support@hanshow.com
Work order system	https://service.hanshow.online/
WeChat public account	

10 FCC ID warning

10.1 Warning for nameplate

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, and (2) This device must accept any interference received, including interference that may cause undesired operation.

10.2 Warning for product manual

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The distance between user and device should be no less than 20cm.