LED Controller

Quick Start Guide

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Preface

Applicable Models

This manual is applicable to the LED controllers.

Symbol Conventions

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

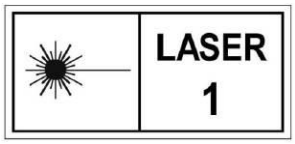
Symbol	Description
Note	Provides additional information to emphasize or supplement important points of the main text.
Caution	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
Danger	Indicates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

Safety Instructions

Caution

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- The device must be connected to an earthed mains socket-outlet.
- The socket-outlet shall be installed near the device and shall be easily accessible.
- Do not touch the bare components (such as the metal contacts of the inlets) and wait for at least 5 minutes, since electricity may still exist after the device is powered off.
- Never place the device in an unstable location. The device may fall, causing serious personal injury or death.
- This device is not suitable for use in locations where children are likely to be present.
-  CAUTION: Risk of explosion if the battery is replaced by an incorrect type.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).

- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- Dispose of used batteries according to the instructions.
- Keep body parts away from fan blades. Disconnect the power source during servicing.
- Class 1 laser product used with compatible Class 1 fiber optical transceivers according to IEC 60825-1:2014 and EN 60825-1:2014+A11:2021, and hazard level 1 based on IEC 60825-2:2021 and EN 60825-2:2004+A1:2007+A2:2010. Make sure that the power has been disconnected before you wire, install, maintain, or repair. When any laser equipment is in use, make sure that the device lens is not exposed to the laser beam, or it may burn out. The laser radiation emitted from the device can cause eye injuries, burning of skin or inflammable substances. Before enabling the laser ranging function, make sure no human or inflammable substances are in front of the laser lens. Do not place the device where minors can fetch it.



Note

- Provide a surge suppressor at the inlet opening of the device under special conditions such as the mountain top, iron tower, and forest.
- + identifies the positive terminals of the device which is used with, or generates direct current, and - identifies the negative terminals of the device which is used with, or generates direct current.
- The serial port of the device is used for debugging only.
- The interface varies with the models. Please refer to the product datasheet for details.
- The USB port of the device is used for connecting to a mouse, a keyboard, or a USB flash drive only. The current for the connected device shall be not more than 0.1 A.
- Make sure that the power has been disconnected before you wire, install, or disassemble the device.
- The device shall not be exposed to water dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the device.
- No naked flame sources, such as lighted candles, should be placed on the device.
- If smoke, odor, or noise arises from the device, immediately turn off the power, unplug the power cable, and contact the service center.
- Install the device according to the instructions in Quick Start Guide.
- To prevent injury, this device must be securely attached to the installation surface in accordance with the installation instructions.

- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains. The openings shall never be blocked by placing the device on a bed, sofa, rug, or other similar surface.

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Chapter 1 Introduction

1.1 Overview

The LED controller (hereinafter referred to as the device) controls the full-color LED display (hereinafter referred to as the display or screen) and is suitable for various occasions such as meeting rooms, broadcasting studios, stadiums, airports, stations, banks, advertising locations, and home theaters. After connecting the screens, the device can efficiently manage and control the screens and seamlessly splice the screens.

Note

This radio transmitter (IC:20199-DT60P02HDI2) has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna Type: Dipole Antenna with SMA connector

Antenna Gain: 3.5 dBi

1.2 Appearance

Table 1-1 Available LED Controller Series

Product Series	Number of Data Output Ports	Available Model
DS-DT30	1/2	P
DS-DT60	2/4/6/12/20	C/V/P
DS-DT90	16/24/40	C/V/P

LED controllers of the same series have a uniform appearance, though interface layouts vary across models (check the actual product for details). To demonstrate all possible features, this documentation uses the panel version with the most ports as the standard reference.

1.2.1 DT30 Series

Front Panel

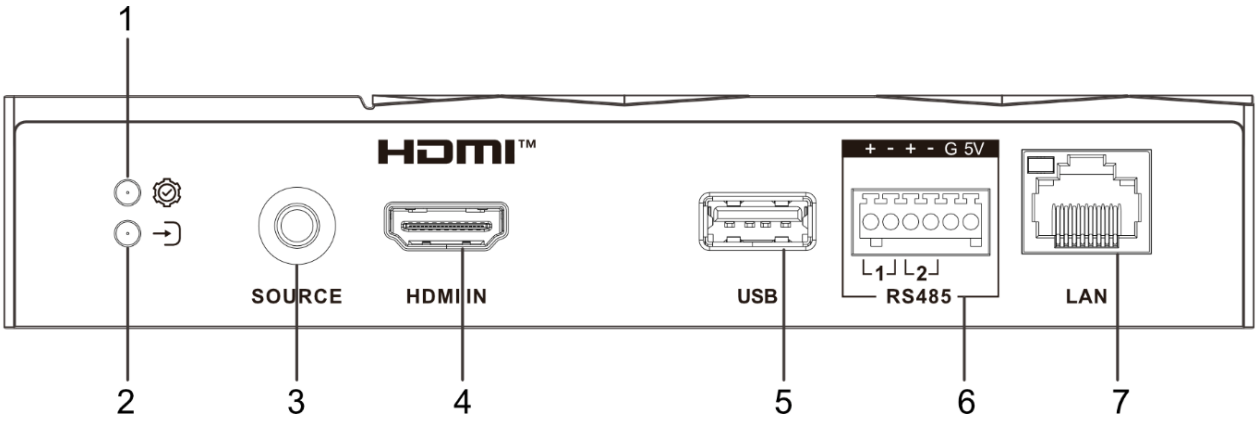

Figure 1-1 DT30 Device Front Panel

No.	Name	Description
1	System status LED	● Solid on: Device in self-test pattern mode. ● Off: No power or device fault detected. ● Fast blinking: Device in active mode. ● Slow blinking: Device in sleep mode.
2	Signal staus LED	● Solid on: Input signal detected. ● Off: No input signal present.
3	Signal source button	Press to cycle through available input sources.
4	HDMI input port (HDMI IN)	Accepts an HDMI source with resolution <2.6MP.
5	USB 2.0 port	● Supports connection with the mouse, keyboard, FAT32-formatted USB flash drive, or RF remote USB dongle. ● Enables import/export of programs, materials and the schedule via FAT32 USB flash drive.

6	RS-485 port	Dual-channel configuration:
		● Channel 1: For central control device connection.
		  ● +: Connects to the positive terminal of the central control device.
		  ● –: Connects to the negative terminal of the central control device.
		● Channel 2: For light sensor connection.
		  ● +: Connects to the positive terminal of the light sensor.

No.	Name	Description
		● –: Connects to the negative terminal of the light sensor. ● Shared terminals: ● G: Ground terminal connection. ● 5V: 5V DC power output.
7	Debug port (LAN)	Provides one Ethernet port for device debugging over a network cable.

Rear Panel

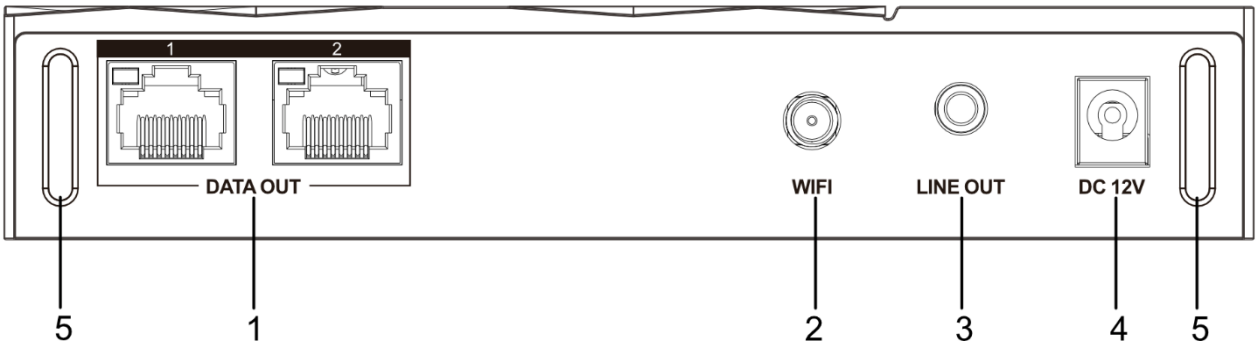

Figure 1-2 DT30 Device Rear Panel

No.	Name	Description
1	Output network port (DATA OUT)	Provides 1 or 2 ports for LED display connection.
2	Wireless port (WIFI)	Install a Wi-Fi antenna, connect to hotspot by using SSID and password from device label, and then configure Wi-Fi via LED Tool client or device web interface.
3	Audio output port (LINE OUT)	Outputs the audio synchronized with the current video to an amplified playback device.
4	DC power input (DC 12V)	Connect the 12VDC power via Φ2.1mm DC adapter.
5	Cabie tie holes	Used for threading nylon cable ties to securely fasten the device to a bracket or other structure, preventing it from moving or falling off.

1.2.2 DT60 Series

2K Device Front Panel

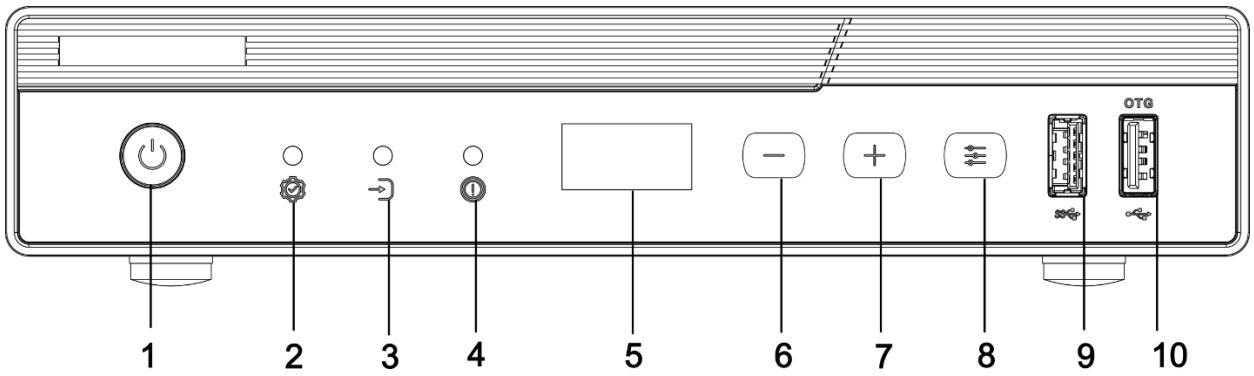

Figure 1-3 2K Device Front Panel

No.	Name	Description

1	Power switch/power LED	• Short press to toggle power state.
		• Power LED status:
		  • On: Device powered on.
		  • Off: Device powered off.

2	Active LED	• Fast blinking: Device in normal operation (non self-test pattern mode). • Slow blinking: Device in soft shutdown. • Solid on: Device in self-test pattern mode. • Off: No power or device fault detected.
3	Signal source LED	• Solid green: Input signal detected. • Off: No input signal present. • Blinking: Signal instability detected.
4	Error LED	• Solid green: Error detected. • Off: Normal status.
5	LCD panel	Displays IP address, signal source, output resolution and frame rate, brightness level, and system status. **Note** This LCD panel is only supported on V and P models.
6	Button –	• Normal mode: Press to decrease brightness. • Self-test mode: Press to cycle backward through test patterns.
7	Button +	• Normal mode: Press to increase brightness.

No.	Name	Description
		• Self-test mode: Press to cycle forward through test patterns.
8	Signal source button	• Press to cycle through available input sources. • Press and hold the button to enter or exit self-test pattern mode.
9	USB 3.0 port	Supports connection with the mouse, keyboard, FAT32-formatted USB flash drive, or RF remote USB dongle. • Applicable model: P. • Function: Supports import/export of programs, materials and the schedule via FAT32 USB flash drive.
10	USB 2.0 port	Supports connection with the mouse, keyboard, FAT32-formatted USB flash drive, or RF remote USB dongle. • C/V model: Enables USB drive debugging. • P model: Enables import/export of programs, materials and the schedule via USB flash drive.

2K Device Rear Panel

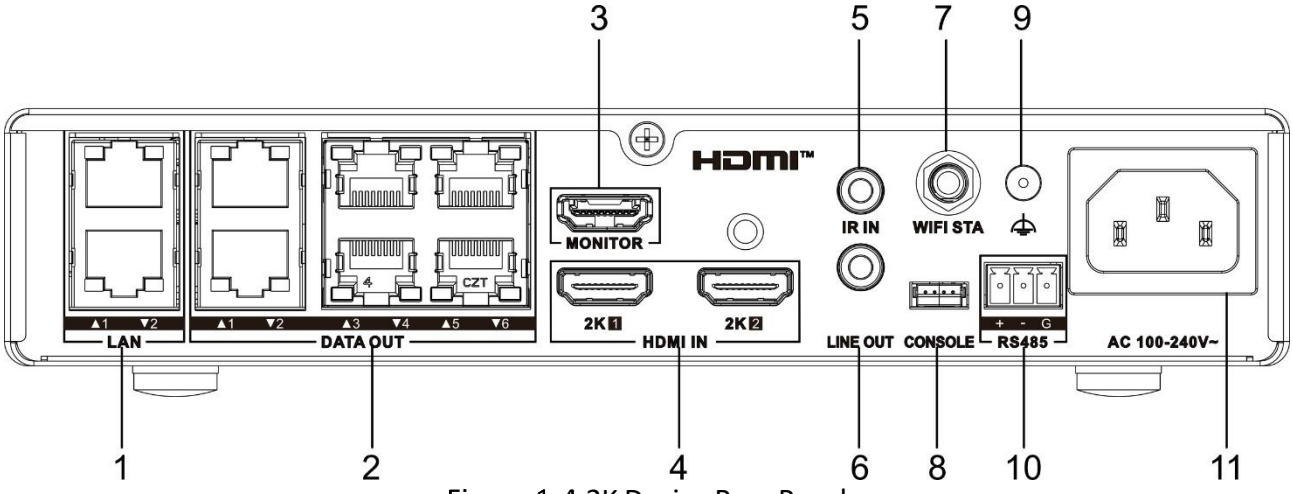

Figure 1-4 2K Device Rear Panel

No.	Name	Description
1	Debug port (LAN)	Provides 2 Ethernet ports for device debugging over network cables.
2	Output network port (DATA OUT)	Provides 2, 4, or 6 ports for LED display connection.

No.	Name	Description
3	HDMI output port (MONITOR)	Connect a monitor to view the LED display status. ● For a single Android signal source, the maximum resolution is 1080p. ● For multiple signal sources, the maximum resolution is 720p. **Note** This port is only supported on V and P models.
4	HDMI input port (2K HDMI IN)	Supports 1, 2, or 3 HDMI input ports, each compatible with signal sources <2.6MP resolution.
5	IR input port (IR IN)	Connect an infrared (IR) control device.
6	Audio output port (LINE OUT)	Connect an amplified audio playback device. ● With multiple signal sources, the system outputs audio from the active source. ● Each video wall outputs audio from one signal source at a time. ● By default, the video wall outputs the audio of the first decoded signal source, but this can be manually switched.
7	Wireless port (WIFI STA)	Install a Wi-Fi antenna to configure Wi-Fi or Bluetooth via the web interface or LED Tool client. **Note** ● This port is only supported on P model. ● Initial Wi-Fi configuration requires activation via LAN cable. Subsequent connections can use Wi-Fi.
8	Console port	Connect a serial cable for device debugging.
9	Grounding terminal	Connect a ground wire.
10	RS-485 port	Connects to the RS-485 port of a central control device.
11	AC power input (AC 100-240V~)	Connect an AC power cord.

4K Device Front Panel

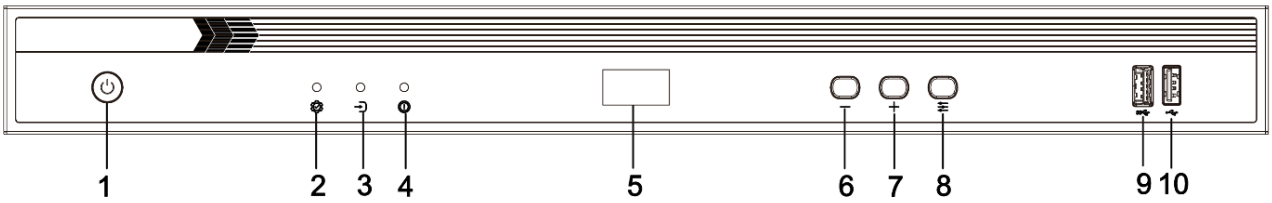

Figure 1-5 4K Device Front Panel

No.	Name	Description

1	Power switch/power LED	● Short press to toggle power state.
		● Power LED status:
		  ● On: Device powered on.
		  ● Off: Device powered off.

2	Active LED	● Fast blinking: Device in normal operation (non self-test pattern mode). ● Slow blinking: Device in soft shutdown. ● Solid on: Device in self-test pattern mode. ● Off: No power or device fault detected.
3	Sigal source LED	● Solid green: Input signal detected. ● Off: No input signal present. ● Blinking: Signal instability detected.
4	Error LED	● Solid green: Error detected. ● Off: Normal status.
5	LCD panel	Displays IP address, signal source, output resolution and frame rate, brightness level, and system status.
6	Button –	● Normal mode: Press to decrease brightness. ● Self-test mode: Press to cycle backward through test patterns.
7	Button +	● Normal mode: Press to increase brightness. ● Self-test mode: Press to cycle forward through test patterns.
8	Signal source button	● Press to cycle through available input sources. ● Press and hold the button to enter or exit self-test pattern mode.
9	USB 3.0 port	Supports connection with the mouse, keyboard, FAT32-formatted USB flash drive, or RF remote USB dongle. ● Applicable model: P.

No.	Name	Description
		• Function: Supports import/export of programs, materials and the schedule via FAT32 USB flash drive.
10	USB 2.0 port	Supports connection with the mouse, keyboard, FAT32-formatted USB flash drive, or RF remote USB dongle. • C/V model: Enables USB drive debugging. • P model: Enables import/export of programs, materials and the schedule via USB flash drive.

4K Device Rear Panel

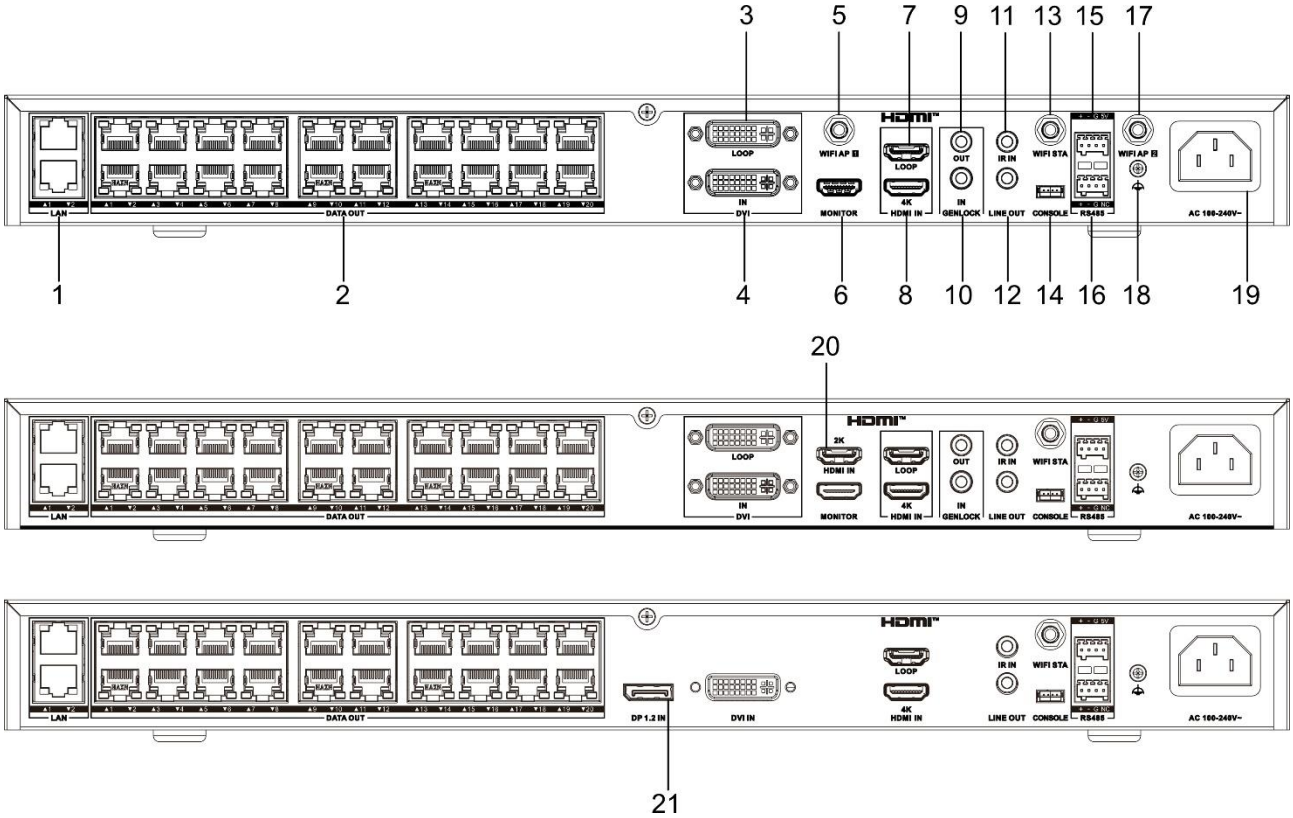

Figure 1-6 4K Device Rear Panel

No.	Name	Description
1	Debug port (LAN)	Provides 2 Ethernet ports for device debugging over network cables.
2	Output network port (DATA OUT)	Provides 12 or 20 ports for LED display connection.
3	DVI loop output port (LOOP)	• Connects to the DVI port of a display device to monitor the signal source status.

No.	Name	Description
		• Connects to the DVI IN port of the next device for signal looping. **Note** This port is only supported on V and P models.
4	DVI input port (DVI IN)	Connect a DVI video source device with a resolution <2.6MP.
5	Wireless port (WIFI AP 1)	Install a Wi-Fi antenna to configure hotspot via the web interface or LED Tool client. **Note** • This port is only supported on P model. • Initial Wi-Fi configuration requires activation via LAN cable. Subsequent connections can use Wi-Fi.
6	HDMI output port (MONITOR)	Connect a monitor to view the LED display status. • For a single Android signal source, the maximum resolution is 1080p. • For multiple signal sources, the maximum resolution is 720p. **Note** This port is only supported on V and P models.
7	HDMI loop output port (LOOP)	• Connects to the HDMI port of a display device to monitor the signal source status. • Connects to the HDMI IN port of the next device for signal looping. **Note** This port is only supported on V and P models.
8	HDMI input port (4K HDMI IN)	Connects a 4K HDMI video source device with a resolution <8.84MP.
9	Sync output port (GENLOCK OUT)	Connect to the GENLOCK IN port of the next device. **Note** • This port is only supported on V and P models. • This port is plug-and-play. No configuration is required.

No.	Name	Description
10	Sync input port (GENLOCK IN)	Connects to the GENLOCK OUT port of the next device. **Note** This port is plug-and-play. No configuration is required.
11	IR input port (IR IN)	Connect an infrared(IR) control device.
12	Audio output port (LINE OUT)	Connect an amplified audio playback device. ● With multiple signal sources, the system outputs audio from the active source. ● Each video wall outputs audio from one signal source at a time. ● By default, the video wall outputs the audio of the first decoded signal source, but this can be manually switched.
13	Wireless port (Wi-Fi STA)	Install a Wi-Fi antenna to configure Wi-Fi or Bluetooth via the web page or LED Tool client. **Note** ● This port is only supported on P model. ● Initial Wi-Fi configuration requires activation via LAN cable. Subsequent connections can use Wi-Fi.
14	Console port	Connect a serial cable for device debugging.
15	RS-485 port for light sensor	Connects to the RS-485 port of a light sensor, ensuring proper pin mapping: ● +: Connects to the positive terminal of the light sensor. ● –: Connects to the negative terminal of the light sensor. ● GND: Connects to the ground terminal of the light sensor. ● 5V: Connects to the power input terminal of the light sensor to provide 5V DC power supply to the light sensor.
16	RS-485 port for central control device	Connects to the RS-485 port of a central control device, ensuring proper pin mapping: ● +: Connects to the positive terminal of the central control device. ● –: Connects to the negative terminal of the central control device. ● GND: Connects to the ground terminal of the central control device.

No.	Name	Description
		• NC: Keep unconnected.
17	Wireless port (WIFI AP 2)	Install a Wi-Fi antenna to configure hotspot via the web interface or LED Tool client. **Note** • This port is only supported on P model. • Initial Wi-Fi configuration requires activation via LAN cable. Subsequent connections can use Wi-Fi.
18	Grounding terminal	Connect a ground wire.
19	AC power input (AC 100-240V~)	Connect an AC power cord.
20	HDMI input port (2K HDMI IN)	Connect a 2K HDMI video source device with a resolution <2.6MP.

1.2.3 DT90 Series

Front Panel

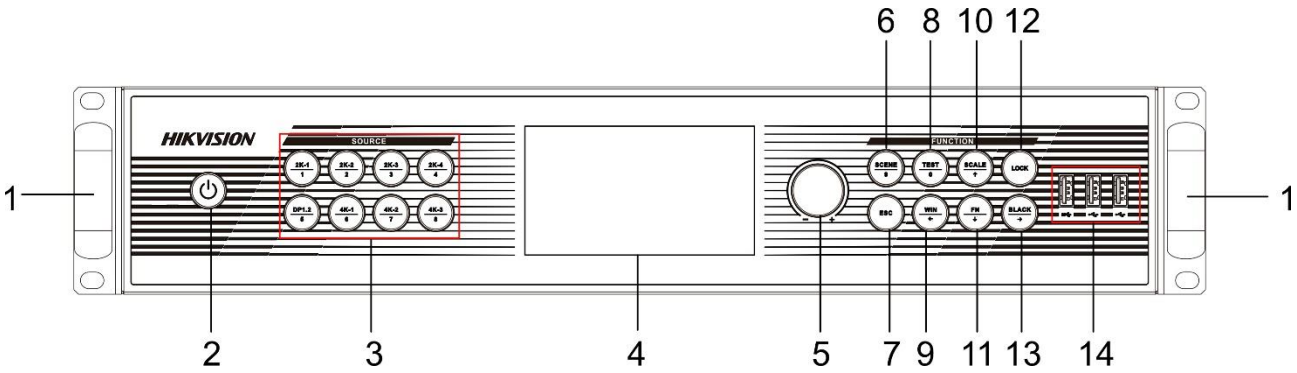

Figure 1-7 DT90 Device Front Panel

No.	Name	Description
1	Mounting Ears	Hold the handles on the mounting ears with both hands to move the device.

2	Power switch/power LED	• Short press to toggle power state.
		• Power LED status:
		  • On: Device powered on.
		  • Off: Device powered off.

3	Signal source button	One-touch switch to the corresponding signal source EDID

No.	Name	Description
		configuration interface. ● 2K-1/1: Corresponds to 2K HDMI IN 1. ● 2K-2/2: Corresponds to 2K HDMI IN 2. ● 2K-3/3: Corresponds to 2K HDMI IN 3. ● 2K-4/4: Corresponds to 2K HDMI IN 4. ● DP1.2/5: Corresponds to DP 1.2 IN. ● 4K-1/6: Corresponds to 4K HDMI IN 1. ● 4K-2/7: Corresponds to 4K HDMI IN 2. ● 4K-3/8: Corresponds to 4K HDMI IN 3. **Note** This button is only supported on V and P models.
4	LCD control panel	● Status monitoring: Displays real-time device status and key parameters. ● Quick configuration: Adjust LED display parameters directly via physical buttons.
5	Knob	Turn clockwise to increase the value, and turn counterclockwise to decrease.
6	SCENE button/9	Enter scene configuration interface.
7	ESC button	Return to the previous menu or exit the current interface.
8	TEST button	Enter self-test configuration interface.
9	WIN button	Enter layer selection interface.
10	SCALE button	Enter screen resolution customization interface.
11	FN button	Enter custom menu interface.
12	LOCK button	Press once to lock the screen, and press again to unlock.
13	BLACK button	● Press to display a black screen (indicator lights up). ● Press again to restore normal display (indicator turns off).
14	USB port	Supports connection with the mouse, keyboard, FAT32-formatted USB flash drive, or RF remote USB dongle. ● P model: 2 × USB 2.0 + 1 × USB 3.0 ports. ● C/V model: 1 × USB 2.0 port. ● P model: Enables import/export of programs, materials and the schedule via USB flash drive.

Rear Panel

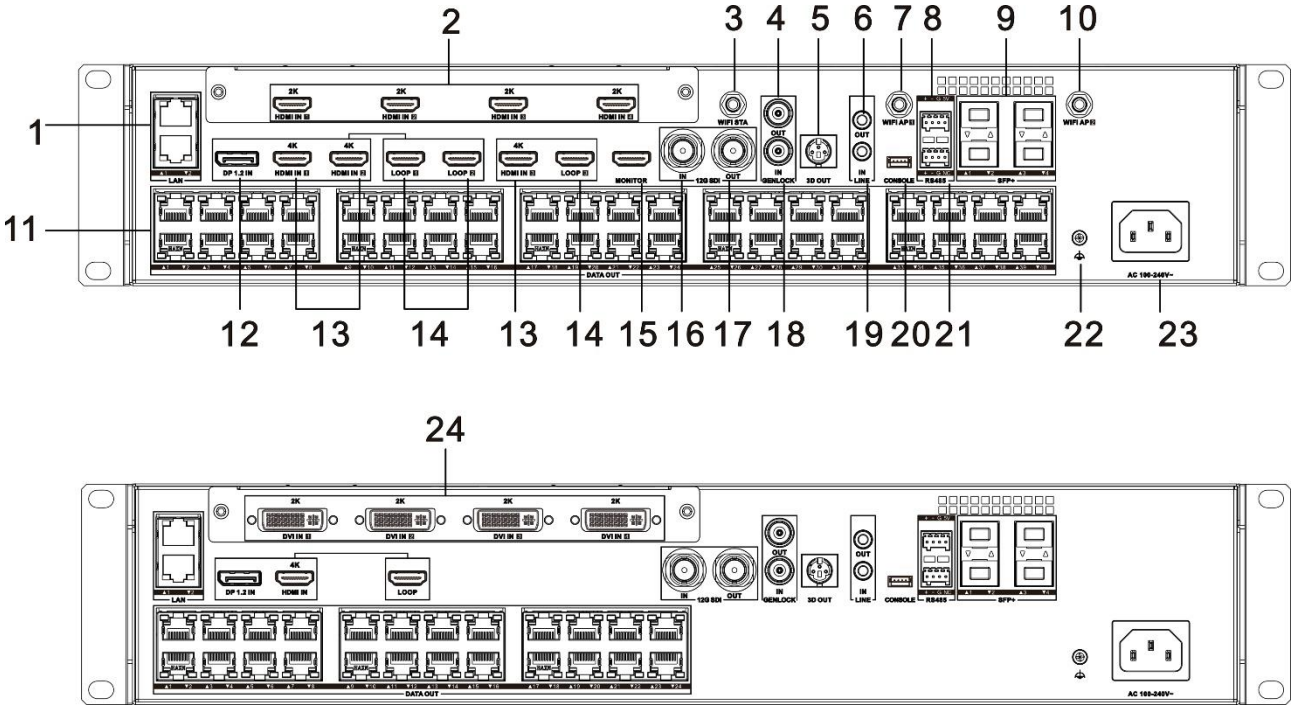

Figure 1-8 DT90 Device Rear Panel

No.	Name	Description
1	Debug port (LAN)	Provides 2 Ethernet ports (baud rate: 115200) for device debugging over network cables.
2	2K HDMI input port (2K HDMI IN)	Supports 4 HDMI input ports, each compatible with signal sources <2.6MP resolution. **Note** This port is only supported on V and P models.
3	Wireless port (Wi-Fi STA)	Install a Wi-Fi antenna to configure Wi-Fi or Bluetooth via the web page or LED Tool client. **Note** ● This port is only supported on P model. ● Initial Wi-Fi configuration requires activation via LAN cable. Subsequent connections can use Wi-Fi.
4	Sync output port (GENLOCK OUT)	Connects to the GENLOCK IN port of the next device.
5	3D output port (3D OUT)	Connects to a 3D signal transmitter for synchronized 3D video playback with 3D glasses.

No.	Name	Description
6	Audio output port (LINE OUT)	Connects an amplified audio playback device. ● With multiple signal sources, the system outputs audio from the active source. ● Each video wall outputs audio from one signal source at a time. ● By default, the video wall outputs the audio of the first decoded signal source, but this can be manually switched.
7	Wireless port (WIFI AP 1)	Install a Wi-Fi antenna to configure hotspot via the web interface or LED Tool client. **Note** ● This port is only supported on P model. ● Initial Wi-Fi configuration requires activation via LAN cable. Subsequent connections can use Wi-Fi.
8	RS-485 port for light sensor	Connects to the RS-485 port of a light sensor, ensuring proper pin mapping: ● +: Connects to the positive terminal of the light sensor. ● –: Connects to the negative terminal of the light sensor. ● GND: Connects to the ground terminal of the light sensor. ● 5V: Connects to the power input terminal of the light sensor to provide 5V DC power supply to the light sensor.
9	10G optical port (SFP+)	Provides 4 ports for long-distance transmission of display mapping data via fiber to the same-model device.
10	Wireless port (WIFI AP 2)	Install a Wi-Fi antenna to configure hotspot via the web interface or LED Tool client. **Note** ● This port is only supported on P model. ● Initial Wi-Fi configuration requires activation via LAN cable. Subsequent connections can use Wi-Fi.

No.	Name	Description
11	Output network port (DATA OUT)	Connects to LED displays via network cables. Port count varies: ● P model: 24 or 40 ports. ● V model: 24 or 16 ports. ● C model: 24 ports.
12	DP input port (DP 1.2 IN)	Connect a DP video source device with a resolution <8.84MP.

13	4K HDMI input port (4K HDMI IN)	● Connect an HDMI video source device with a resolution <8.84MP.
		● Port count varies:
		  ● V/P model: 3 ports.
		  ● C model: 1 port.

14	HDMI loop output port (LOOP)	● Connects to the HDMI port of a display device to monitor the signal source status.
		● Connects to the HDMI IN port of the next device for signal looping.
		● Port count varies:
		  ● V/P model: 3 ports.
		  ● C model: 1 port.

15	HDMI output port (MONITOR)	This port outputs a fixed 1080p signal for connecting to a monitor to view the LED display status. **Note** This port is only supported on V and P models.
16	12G SDI input port (12G SDI IN)	Connect an SDI video source device with a resolution <8.84MP via BNC cable.
17	12G SDI output port (12G SDI OUT)	● Connects to a BNC display for SDI source monitoring. ● Connects to the SDI IN port of the next device for signal looping.
18	Sync input port (GENLOCK IN)	Connects to the GENLOCK OUT of the previous device.
19	Audio input port (LINE IN)	Connects to an active audio source.
20	Debug port (CONSOLE)	Provides one Ethernet port for device debugging over a network cable.

No.	Name	Description
21	RS-485 port for central control device	Connects to the RS-485 port of a central control device, ensuring proper pin mapping: ● +: Connects to the positive terminal of the central control device. ● –: Connects to the negative terminal of the central control device. ● GND: Connects to the ground terminal of the central control device. ● NC: Keep unconnected.
22	Grounding terminal	Connect a ground wire.
23	AC power input (AC 100-240V~)	Connect an AC power cord.
24	DVI input port (DVI IN)	Connect a DVI video source device with a resolution <2.6MP. **Note** This port is only supported on C model.

Chapter 2 Installation

2.1 Safety Precautions

Caution

As a high-precision, system-level electronic product, the device should be installed and maintained by professionals.

In order to avoid personal and property injury, please read the safety precautions in this section carefully before installation. The following safety recommendations do not cover all possible dangerous situations.

Electricity Safety

- During the installation, wiring, disassembly, and maintenance of the device, please disconnect the power supply and do not operate with electricity (except for the operation of the hot plug).
- In the installation and use of the device, make sure to follow the local electrical safety regulations.
- In case of abnormal phenomena such as smoke or odor occur during the use of the device, please cut off the power immediately, unplug the power cord from the socket, and contact the after-sales service center in time.

Anti-Static Measures

The equipment is a precision electronic device. In order to avoid static electricity from damaging the components, in addition to anti-static measures in the equipment room, you must wear anti-static gloves or anti-static wrists during the installation process.

Grounding Requirements

In order to ensure personal safety and device safety, the device must be grounded.

Power Supply Requirements

The device supports 100 VAC to 240 VAC@50/60 Hz power supply. To ensure the stable operation of the device, it is recommended to install UPS for power supply.

Anti-Interference Requirements

- The on-site power supply system must have effective measures to prevent grid interference.
- Do not use the working ground together with the grounding device or lightning protection grounding device of power equipment, and keep the two as far away as possible.
- Keep away from high-power radio transmitters, radar transmitters, and high-frequency and high-current equipment.

- When necessary, electromagnetic shielding can be used for anti-interference.

Environmental Requirements

The device is a system-level monitoring equipment, which is generally placed in the central equipment room of the monitoring system at all levels. The selection of the installation site should comply with the relevant standards of the equipment room construction in the country and region of use.

The device is a standard rack-mounted equipment. Please pay attention to the following information during installation and use:

- Ensure that the temperature in the rack is from 0 °C to 45 °C.
- Ensure that the humidity in the equipment room is between 10% RH and 90% RH (no condensation).
- Ensure that the rack is strong enough to support the weight of the device and its accessories. During the installation, avoid the risk caused by uneven mechanical load.
- Ensure that there is enough installation space for the video and audio cables. The bending radius of a cable should not be less than 5 times the cable outer diameter.
- To ensure good ventilation, install the device at the position above the ground of at least 4 cm.
- Do not block the air vents and outlets of the device. Keep the air vents and outlets at least 4 cm away from the chassis surface.

2.2 Open Package and Check Items

Open the device package to verify that all items in the package are intact according to the packing list.

Table 2-1 DT30 Device Packing List

Item	Quantity
Device	1
Terminal block	1 × 6-position terminal block
DC adapter	1
Rod-shaped Wi-Fi antenna	P: 1
Regulatory compliance and safety information manual	1

Table 2-2 DT60 Device Packing List

Item	Quantity
Device	1

Item	Quantity
Terminal block	2K devices (C/V/P): 1 × 3-position terminal block 4K devices (V/P): 2 × 4-position terminal blocks
Regulatory compliance and safety information manual	1
Mounting ears	1 pair
Connecting brackets	2K devices (C/V/P): 1 pair
AC power cord	1
Rubber feet	4K devices (V): 1 pair
Rod-shaped Wi-Fi antenna	2K devices (P): 1 4K devices (P): 3

Table 2-3 DT90 Device Packing List

Item	Quantity
Device	1
Terminal block	2 × 4-position terminal block
Rubber feet	1 pair
AC power cord	1
Rod-shaped Wi-Fi antenna	P: 3
Regulatory compliance and safety information manual	1

2.3 Install the Device

2.3.1 Install the DT30 Device

Flat Placement

Place the device horizontally on a stable table or desktop, ensuring no risk of tilting or shaking.

Cable Tie Suspension

Step 1 Use two standard cable ties (recommended width ≥5mm) and thread them through the cable tie holes (1) on the back of the device.

Step 2 Secure the device by hanging it on a pipe, railing, or other support structure.

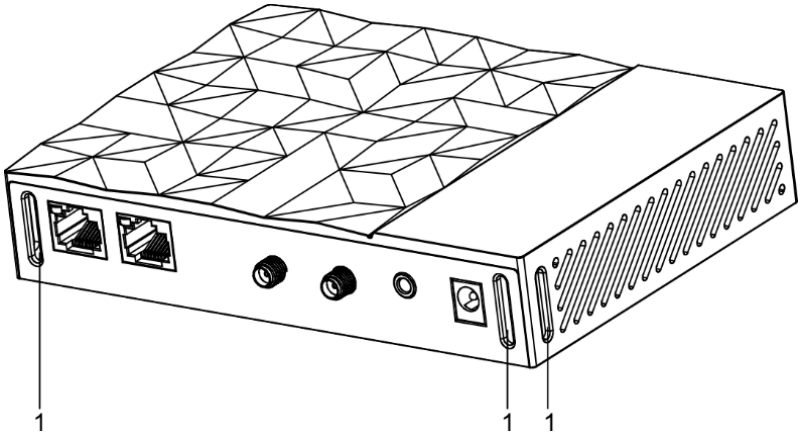

Figure 2-1 Cable Tie Suspension

Wall Mounting

Note

- Ensure the wall is made of concrete or solid brick.
- Prepare two M4 expansion screws.

Step 1 Drill holes in the wall with a 130mm center-to-center distance, matching the diameter of the expansion screws.

Step 2 Insert the expansion screws into the holes.

Step 3 Align the wall-mounting holes (1) at the bottom of the device and press downward until it clicks into place.

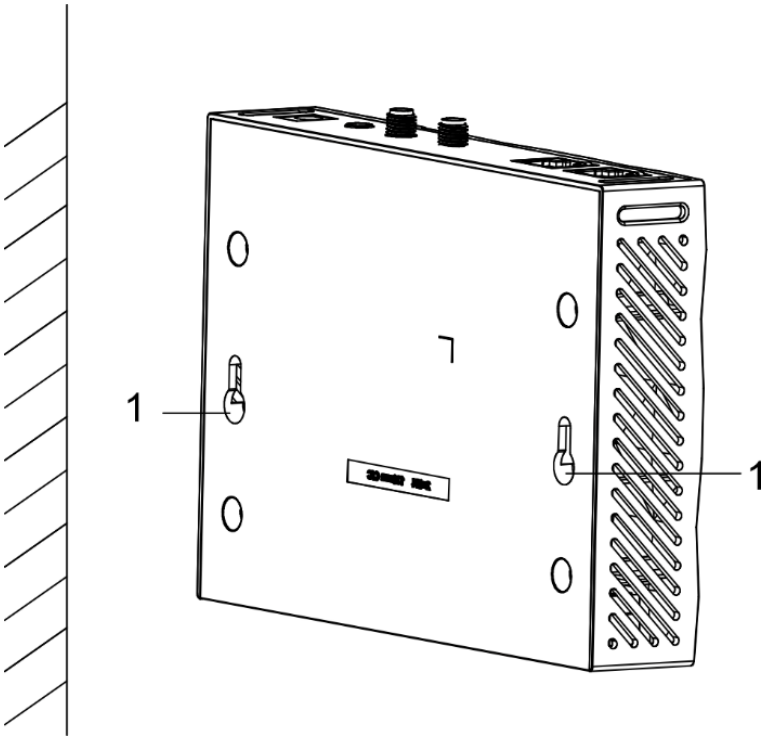

Figure 2-2 Wall Mounting

2.3.2 Install the DT60 Device in the Rack

Install 2K Device

Note

Prepare the rack and screws by yourself.

Step 1 Use two KM3 × 6 countersunk screws (1) to install one mounting ear (2) to the left side of the first device front panel. Use the same method to install the other mounting ear to the right side of the second device front panel.

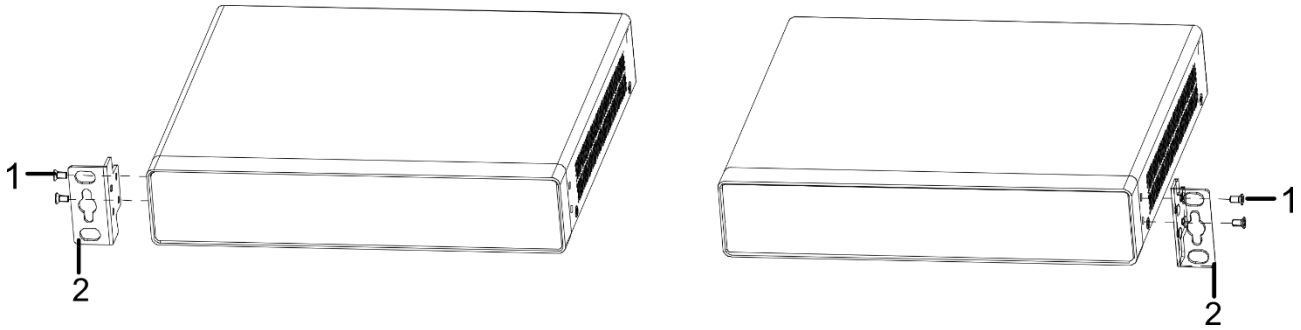

Figure 2-3 Install the Mounting Ears

Step 2 Use two KM3 × 6 countersunk screws (1) to install two connecting brackets (3) to the inner sides of two devices with the FRONT surface facing forward and arrow facing upward.

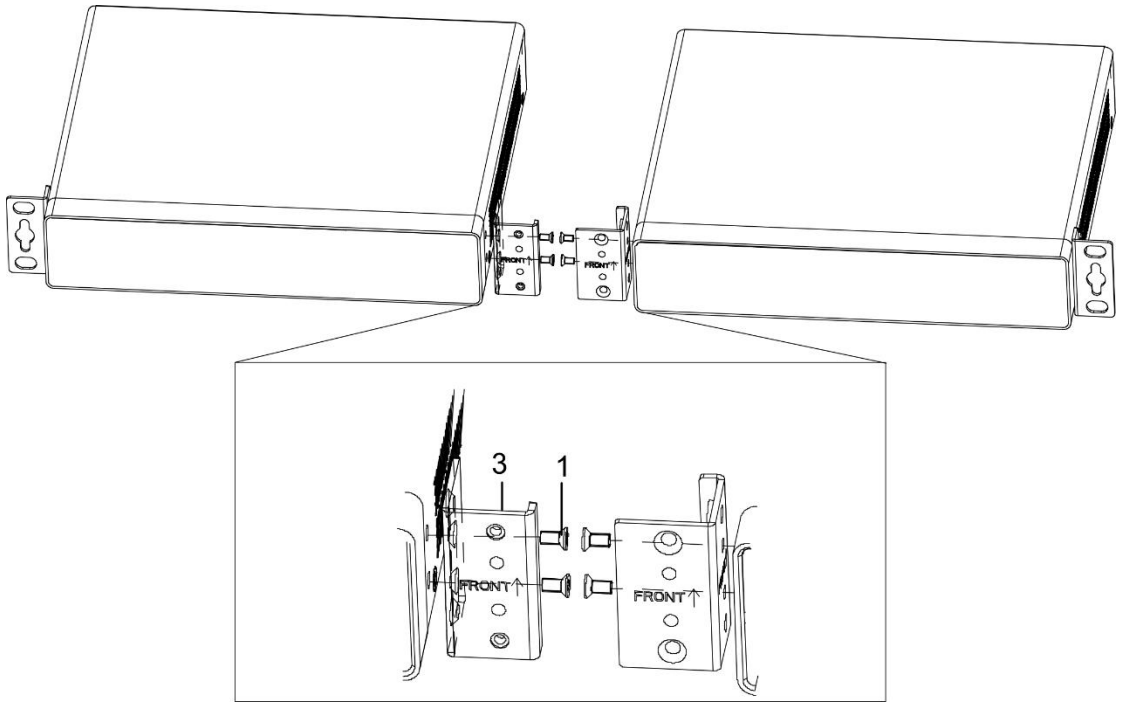

Figure 2-4 Install the Connecting Brackets 2

Step 3 Use two KM3 × 6 countersunk screws (1) to secure the connecting brackets (3).

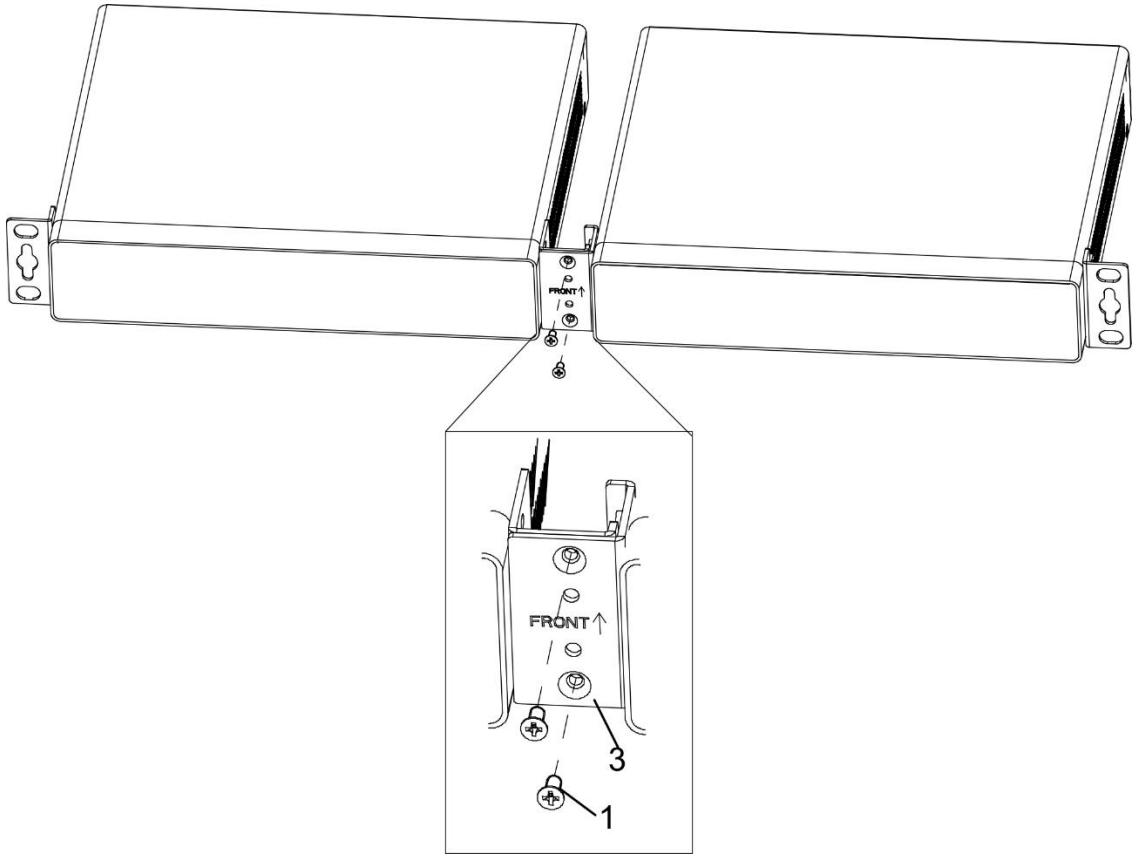

Figure 2-5 Secure the Connecting Brackets 2

Step 4 Prepare the clip nuts and M5 screws or M6 screws to secure two devices to the rack posts.

Note

If you install multiple layers of devices in the rack, keep at least one rack post hole between each layer of devices.

Install 4K Device

Step 1 Use three KM3 × 6 countersunk screws (1) to secure one mounting ear (2) to the left side of the device (3), and the other mounting ear to the right side.

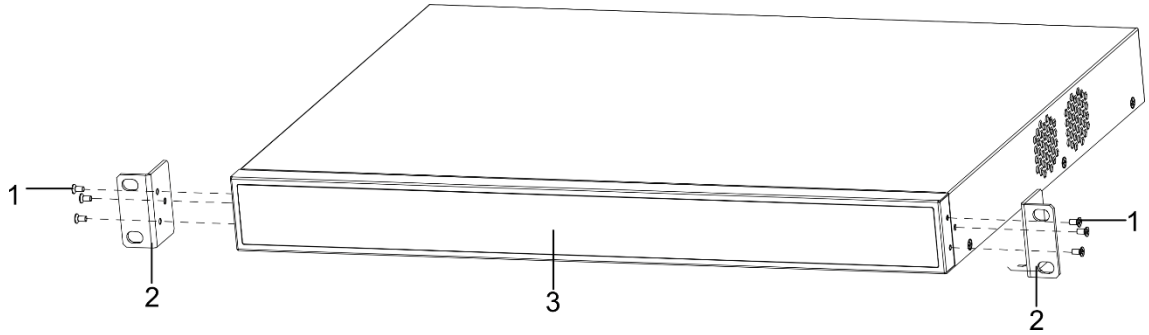

Figure 2-6 Install the Mounting Ears

Step 2 Prepare the clip nuts and M5 screws or M6 screws (5) to mount the device to the rack posts (4).

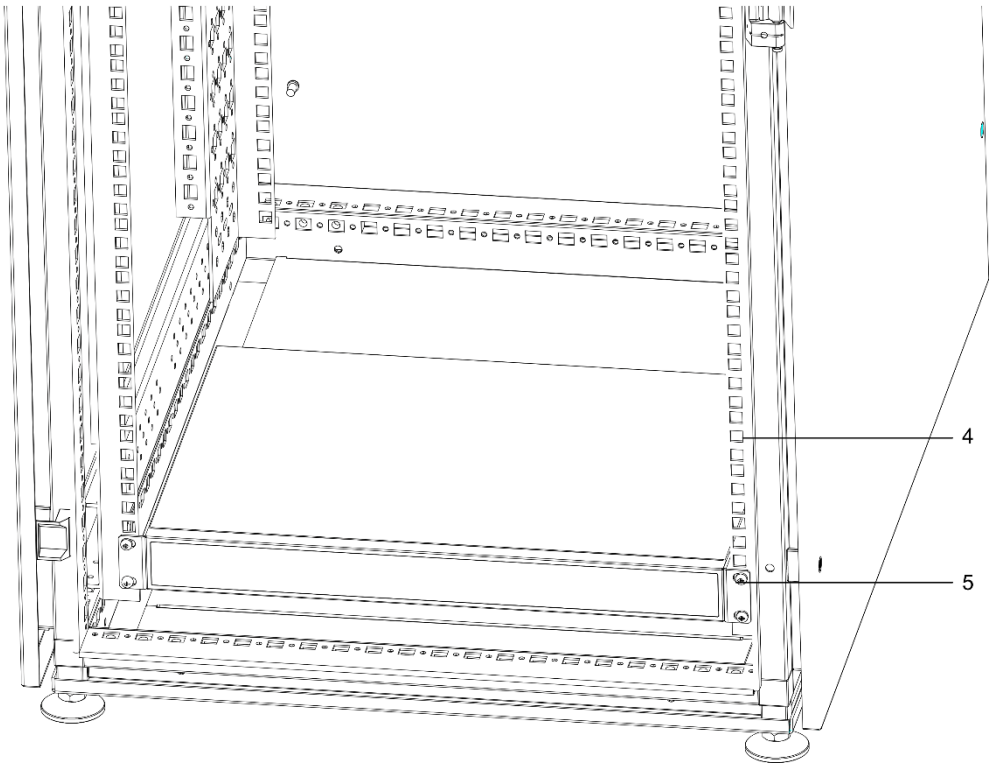

Figure 2-7 Install 4K Device in the Rack

Note

If you install multiple layers of devices in the rack, keep at least one rack post hole between each layer of devices.

2.3.3 Install the DT90 Device in the Rack

The device comes with mounting ears pre-installed. Prepare your own rack and use the rack-provided screws (1) to secure the device to the rack posts (2).

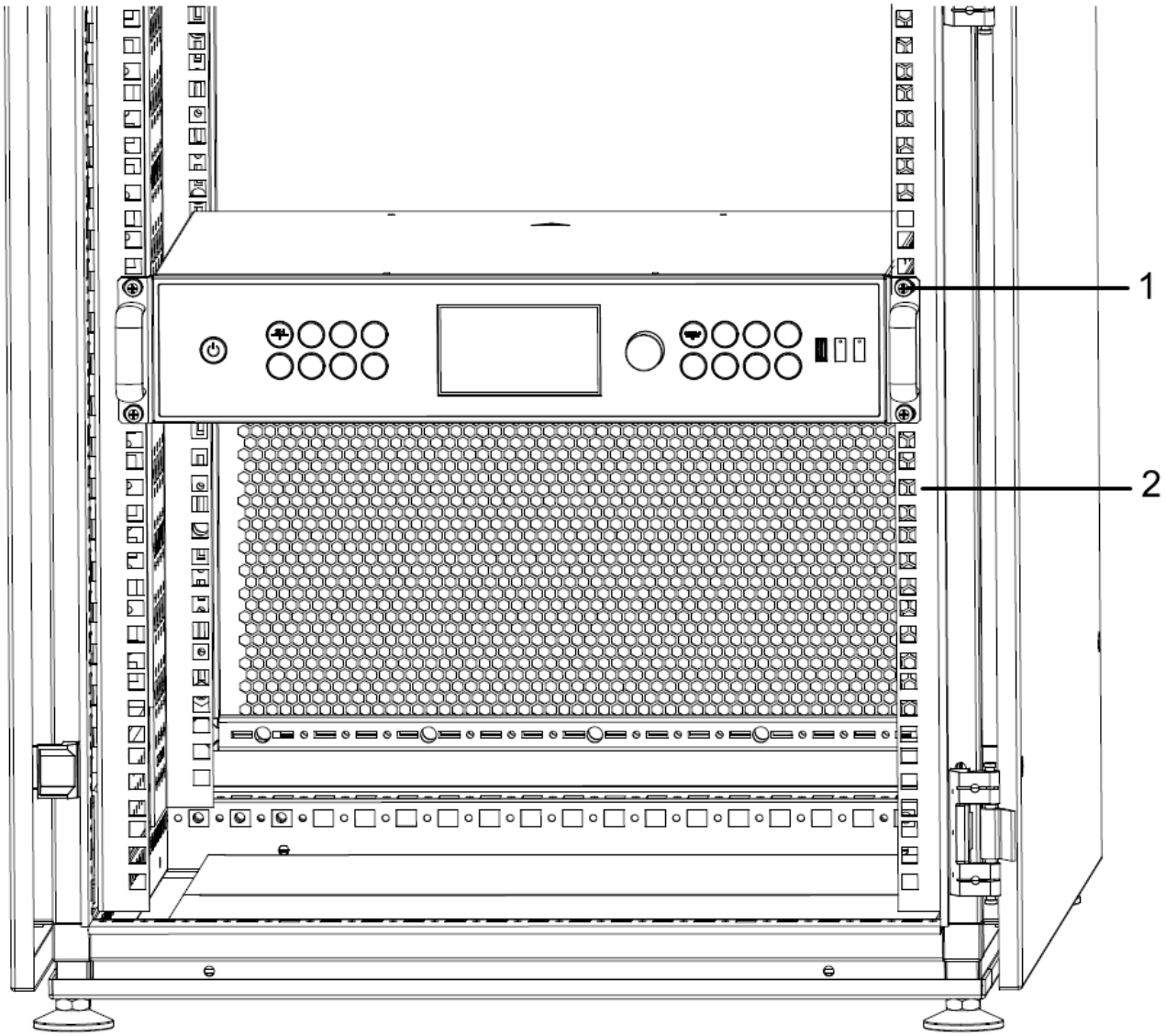

Figure 2-8 Install the DT90 Device in the Rack

Note

If you install multiple layers of devices in the rack, keep at least one rack post hole between each layer of devices.

2.4 Connect Cables

2.4.1 Connect the Ground wire

Connecting the ground wire can release the excessive voltage and current induced by lightning shock. Please select the most suitable connection mode to protect the ground wire according to the installation environment.

The DT60 and DT90 series devices require grounding protection, while the DT30 series does not. The following uses the DT60 series 4K device as an example.

Use Grounding Busbar

Step 1 Connect one end of the ground wire (2) to the terminal post of the server room grounding busbar (3).

Step 2 Connect the other end of the ground wire to the equipment grounding terminal (1) and tighten the screw.

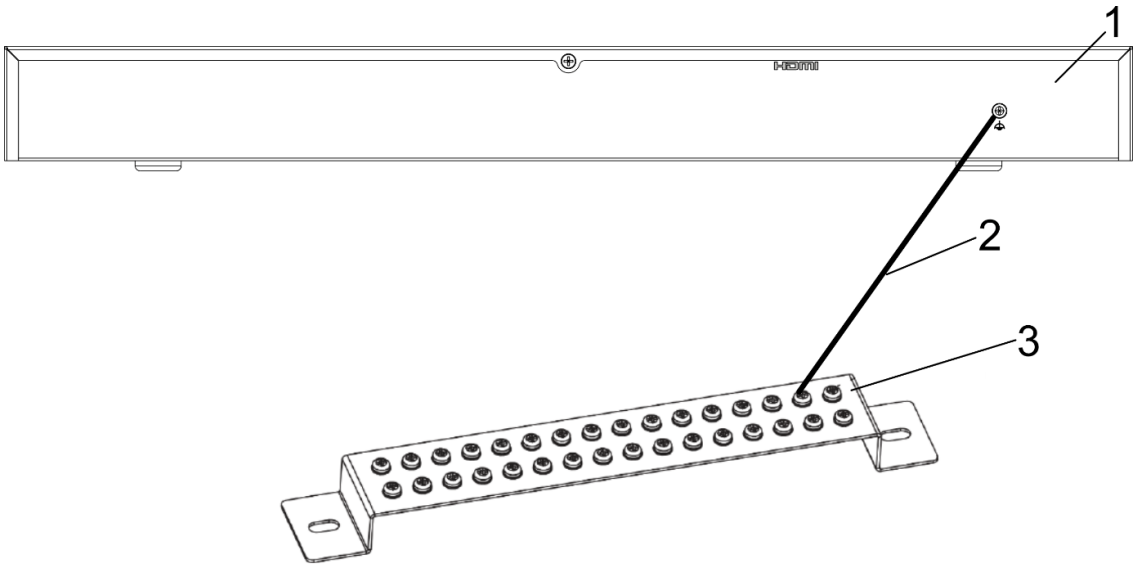

Figure 2-9 Connect the Ground wire to the Grounding Busbar

Use Grounding Electrode

Step 1 Drive an angle steel or steel pipe (4) with a length ≥ 0.5 m into the ground (3) as a grounding electrode.

Step 2 Weld one end of the ground wire (2) to the grounding electrode and then apply anti-corrosion treatment (e.g., galvanizing or coating) to the welded joint.

Step 3 Connect the other end of the ground wire to the equipment grounding terminal (1).

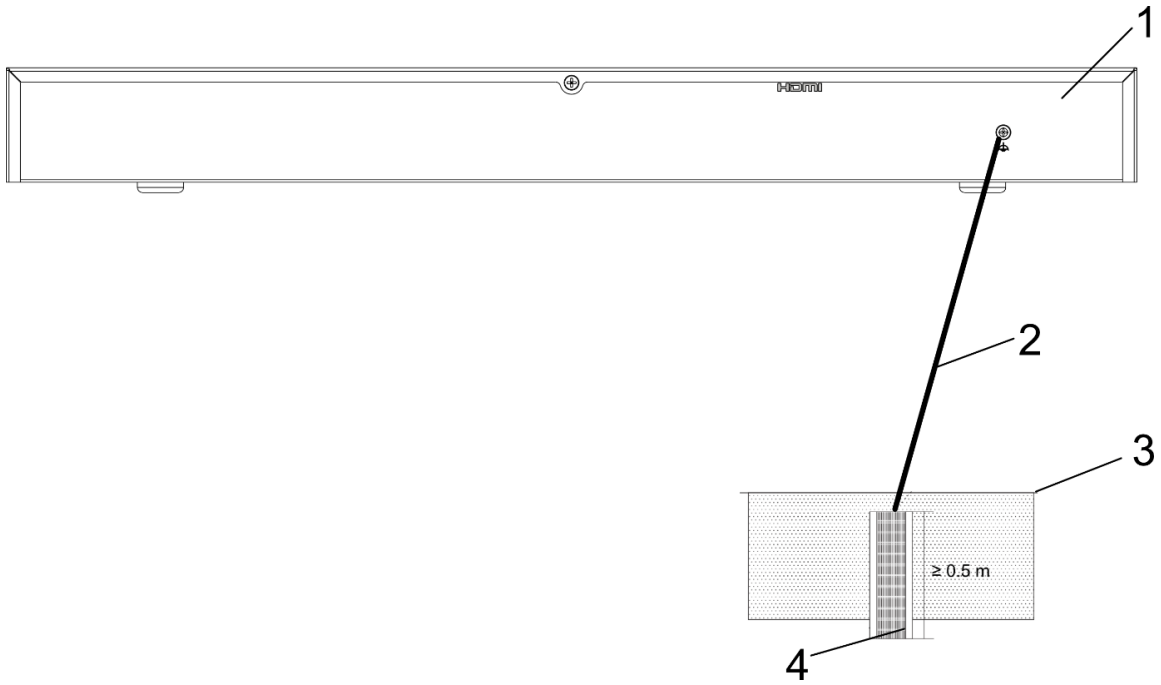

Figure 2-10 Connect the Ground wire to the Grounding Electrode

2.4.2 Connect the Network Cable

For network connections between devices and switches/network equipment, use Category 5e or higher Ethernet cables (Cat6 recommended), with a maximum transmission distance of 100 meters.

2.4.3 Connect the Power Cord

Select the appropriate power cord to connect the power socket of the device to the power supply. Upon cable connection, the device will power on and initiate startup automatically.

- DT30 series: Requires a DC power cord.
- DT60 and DT90 series: Requires an AC power cord.

2.5 Configure Display Mapping

After the device and display are connected, you can use either of the following methods to configure display mapping:

- Use the LED Tool client. Download the LED Tool client, and then scan the QR code in Table 2-4 to view the user manual to lighten the screens.
- Use the web page of the device. Scan the QR code in Table 2-4 to view the user manual to lighten the screens.

Note

Obtaining the manual requires network data traffic. It is recommended to be performed in a Wi-Fi environment.

Table 2-4 Related Documents

Document Name	QR Code
LED Tool client user manual	
LED controller user manual	


See Far, Go Further