USER MANUAL



Quick Start Guide

V1.0.1

DVolt COMPACT

Foreword

General

This manual introduces the installation, functions and operations of the charging station (hereinafter referred to as the "device"). The installation and commissioning instructions are intended for qualified installers who can assess the work and identify potential danger. Read carefully before using the device, and keep the manual safe for future reference.

Symbols

The following symbols might appear in the manual.

Symbol	Description
DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
TIPS	Provides methods to help you solve a problem or save time.
NOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.1	Updated the contents of installation and operation instructions.	June 2026
V1.0.0	First release.	May 2026

Privacy Protection Notice

As the device user, you might collect the personal data of individuals such as their names, email addresses, face images, audio and fingerprints. You shall be fully responsible for any activities associated with processing personal data. You commit to comply with your local privacy protection laws and regulations to protect the legitimate rights and interests of individuals, and shall implement measures which are required by applicable law, including but not limited to, providing clear and comprehensive information to individuals before processing their personal data, obtaining consent from individuals when necessary, informing individuals of the existence of the surveillance area, and providing required contact information.

Intelligent Product Usage Statement

Intelligent products utilize AI technology to effectively enhance security. The intelligent recognition and alarm functions of the product might be affected by factors such as environmental lighting, camera angles, object obstructions, and network delays, potentially leading to false alarms, missed alerts, or response delays. This intelligent product is solely intended to be used as a security assistance tool. The results from performing identification are for reference only and do not constitute absolute guarantee of personal or property safety. Users need to combine these products with necessary physical security measures to enhance overall protection. Except as otherwise provided by laws or in the event of intentional or gross negligence on the part of the company, the company shall not be liable for any losses caused by the aforementioned factors not attributable to the company.

About the Manual

- This manual is provided for general reference only. Discrepancies might exist between the product and this manual, including but not limited to printed, electronic, or any other editions.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. Specifications and documentation are subject to change without prior notice. For the latest versions, as well as legal notices, consult the printed manual, the product webpage, our official website, or scan the QR code to access the electronic edition.
- The manual will be updated as necessary to reflect product changes and applicable legal requirements. These updates will not diminish your statutory rights, nor will they remove or weaken the safety information or essential instructions provided at the time of purchase.
- Although we make every effort to ensure accuracy, errors or deviations in descriptions of functions, operations, or technical data might occur. If there is any uncertainty or controversy, we reserve the right of final explanation.
- All trademarks, registered trademarks and company names referenced in this manual are the property of their respective owners.

Important Safeguards and Warnings

This section introduces content covering the proper handling of the device, hazard prevention, and prevention of property damage. Read carefully before using the device, and comply with the guidelines when using it.

Transportation Requirements



When you transport or move the device, please note the following safeguards to ensure product safety.

- During transportation, avoid exposing the device to direct sunlight and rain, and do not let it fall.
- Do not place heavy stress on the device, violently vibrate or immerse it in liquid during transportation.
- Protect the charging connector and charging cables from being squeezed during transportation.

Storage Requirements



Do not expose the device to fire sources, and do not store it together with corrosive, flammable or explosive materials.



- Do not place the device in a place exposed to sunlight or near heat sources.
- Pack the device with packaging provided by its manufacturer or packaging of the same quality before transporting it.
- If the device needs to be stored away for a short or long period, place it indoors in a dry and well ventilated location. Ensure the location does not expose the Device to high temperatures and humidity, heavy dust and metal powder. Additionally, the ambient temperature of the location must be between –40 °C and +70 °C (–40 °F and +158 °F), and the relative humidity must be between 5% and 95%.

Installation Requirements



- The installer of the device must have required certification or qualified training for performing installations and maintenance of device. They must also have knowledge and skills in the following areas:
  - Basic knowledge and skills in installing the device and components.
  - Basic knowledge and skills in low-voltage wiring and in connecting low-voltage electronic circuits.
  - The ability to read and understand the manual.
- Exercise all necessary precautions during installation to ensure your safety.

- Installation and wiring must be carried out by professionals to avoid electric shocks.
- The power must be cut off before wiring to avoid electric shocks.
- Strictly comply with the local electrical safety code and standards, and check whether the power supply is correct before operating the device.
- Reliably ground the grounding terminal of the device to improve safety.
- Do not leave bolts, washers, or other metals inside the device to avoid explosions and fire.
- The exposed parts of the cable terminal must be wrapped with insulation tape to avoid fire and property damage.
- The pole of the device must be installed on non-combustible materials, such as concrete, to avoid fire breaking out.
- Do not install the device in areas containing explosive gases to avoid explosions.



- When installing the device, make sure that the power plug and appliance coupler can be easily reached to cut off power.
- The front cover must be properly closed to avoid damage to the device.
- The main loopback terminal of the device must be firmly connected to the wiring interface to avoid property loss.
- Do not install the device in an environment that might expose it to vibrations, shocks and electromagnetic interference, to avoid it sustaining damage.
- Do not drop or splash liquid onto the device, and make sure that there is no object filled with liquid on the device to prevent liquid from flowing into it.
- Do not place the device in a place exposed to sunlight or near heat sources.
- To ensure the long-term stability of the device, avoid installing it in areas exposed to harsh weather conditions. Expansion due to heat or contraction due to cold can impact the installation process, subsequently affecting the device's performance over time.
- Install the device in a well-ventilated place, and do not block its ventilation. Also, install it vertically with ample space for proper airflow.
- Avoid installing the device in a location that has conductive dust, hazardous gases or steam.
- The installation foundation should be higher than the ground, and drainage ditches should be set around the device to protect it from sustaining damage.

Operating Requirements



- An electric vehicle can only be charged when it is stationary with its engine off.
- Minors and persons with limited ability are strictly prohibited from approaching the device to avoid injury.
- Force charging is strictly prohibited when the electric vehicle or the device fails.
- If the device produces smoke, fire, abnormal noise, or water leaks into it, immediately move away from the device, and contact your local dealer or the service center.
- If the charging adapter or charging cable becomes defective, cracked, worn, broken, or the charging cable is exposed, it is forbidden to use the device. If you find any of the above problems, please contact your local dealer or the service center.
- Electric vehicles are not allowed to be charged during rainy or stormy conditions.
- To reduce the risk of fire and electric shock, do not expose the device to rain and damp environments.



Do not place the device in a humid, dusty, extremely hot or cold site that has strong electromagnetic radiation or unstable illumination.

Maintenance Requirements

DANGER

- All maintenance personnel of the device must have required certification or qualified training for maintaining the device. They must also have knowledge and skills in the following areas:
  - Basic knowledge and skills in installing the device and components.
  - Basic knowledge and skills in low-voltage wiring and in connecting low-voltage electronic circuits.
  - The ability to read and understand the manual.
- Personnel must wear protective shoes at all times during maintenance.
- The replacement of accessories must be performed by professionals. It is strictly prohibited to leave wires or metal in the controller as it could lead to explosion or fire.

WARNING

- If the device behaves abnormally, contact your local dealer or the service center. Do not dismantle or modify the device without a qualified professional present. We are not responsible for problems caused by unauthorized modifications and repairs.
- After the main PCBA is replaced, configure the parameters before you perform operations to avoid property damage.
- We recommend you conduct routine safety checks on the device at least once a week.
- To ensure the long-term performance of the device, it is important to periodically perform maintenance based on the installation environment. We recommend conducting monthly checks to ensure optimal functioning.
  - The device should be maintained by professionals.
  - Make sure that the device is properly grounded.
  - Check whether there are potential safety risks around the pole of the device. Ensure the device is not in an extremely hot, corrosive environment that has flammable and explosive materials.
  - Make sure that the connection points of the input terminals are securely and properly connected, and check for any abnormalities.
  - Make sure none of the connection points are loose.
- Keep the connector clean and dry. If there is dirt, wipe it away with a clean and dry cloth after powering off the device.

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1 Product Introduction

1.1 Overview

The D-Volt Compact is a sleek, compact home EV charger, designed for seamless integration into residential spaces. With its minimalist aesthetic and compact form, it combines elegant design with effortless installation and intuitive operation. Built with multiple layers of electrical protection, it delivers a safe, reliable, and user-friendly charging experience for everyday home use. The charger is available in both socket version and cable version, with certain models also offering 4G connectivity.

1.2 Appearance

Product Appearance

Figure 1-1 Socket version and cable version



Table 1-1 Description of functions

Item	Description
Card reader	After authorization, charging can be started or stopped by swiping the card at the designated area.
Socket version	Only socket version devices come with an electronic lock.
Cable version	The connector of the cable version supports plug or unplug feedback.
4G	Insert a SIM card to establish remote connection between the device and the cloud platform, enabling remote monitoring, data transmission, and operational control of the device.

Figure 1-2 AC charging port

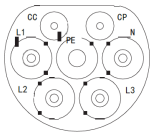


Table 1-2 Description of the port

Symbol	Description
L1	AC output (single-phase).
L2	AC output (three-phase).
L3	
N	Neutral wire.
PE	Grounding protection.
CC	Charging connection confirmation.
CP	Control guidance.

Charger Body Host Port

Figure 1-3 Port of the host

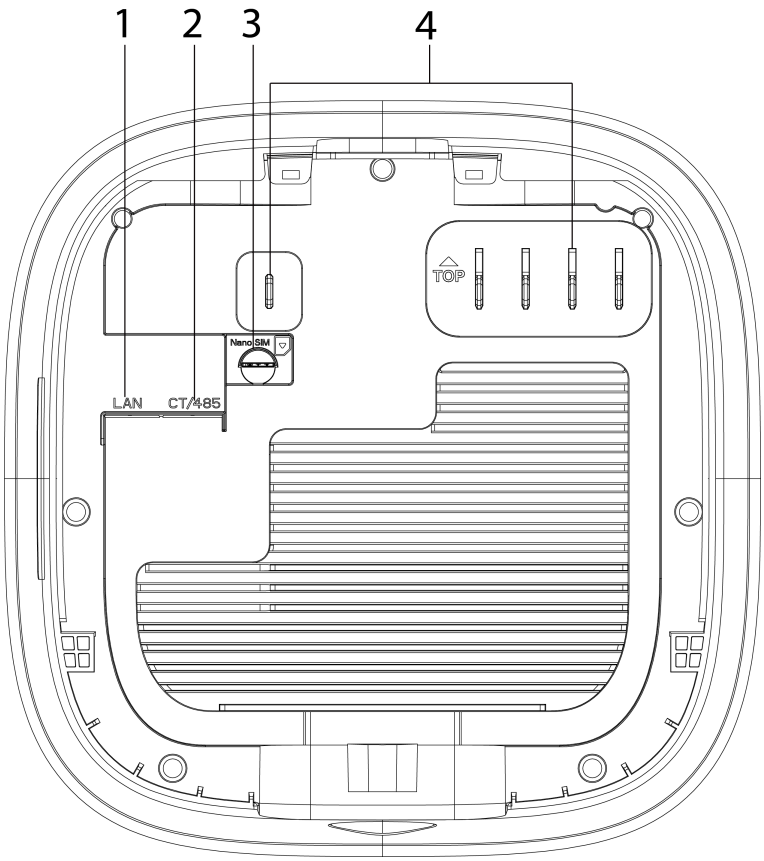


Table 1-3 Description of host port capabilities

No.	Description
1	LAN port. The LAN port is used for Ethernet communication.
2	CT/485 port. RS-485 port for DLB and PV green energy applications.
3	Nano SIM card slot.
4	High-voltage plug connector.

Real Panel of the Host

Figure 1-4 Port of the real panel

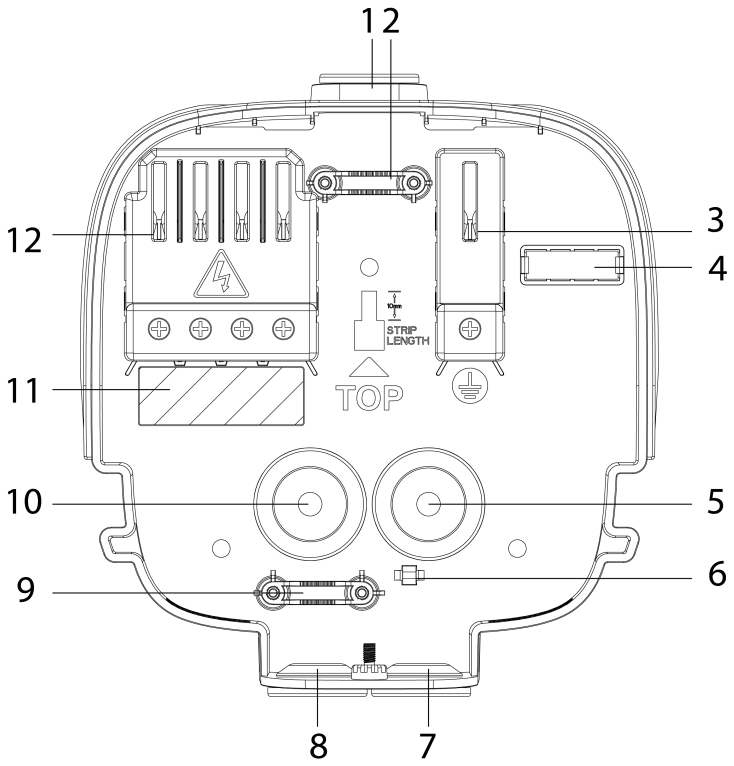


Table 1-4 Description of port capabilities

No.	Name	Description
1	Strong current inlet hole	Top inlet.
2	Strong current wire fixing channel	
3	High voltage terminal block 2	PE grounding wire connection.
4	Level gauge	Base enclosure leveling adjustment.
5	Low voltage inlet hole	Rear inlet.
6	Low voltage cable tie point	Low-voltage wiring retention structure.
7	Low voltage inlet hole	Top/bottom inlet.
8	Strong current inlet hole	Bottom inlet.
9	Strong current wire fixing channel	

No.	Name	Description
10	Strong current inlet hole	Rear inlet.
11	Strong current wiring indicator label	Wiring guide for different power system configurations.
12	Strong current terminal 1	AC mains input (female terminal block).

1.3 Packing List

Ensure all the items below can be found in the packing box.

The following list is applicable for wall-mounted installation only.

Figure 1-5 Packing list

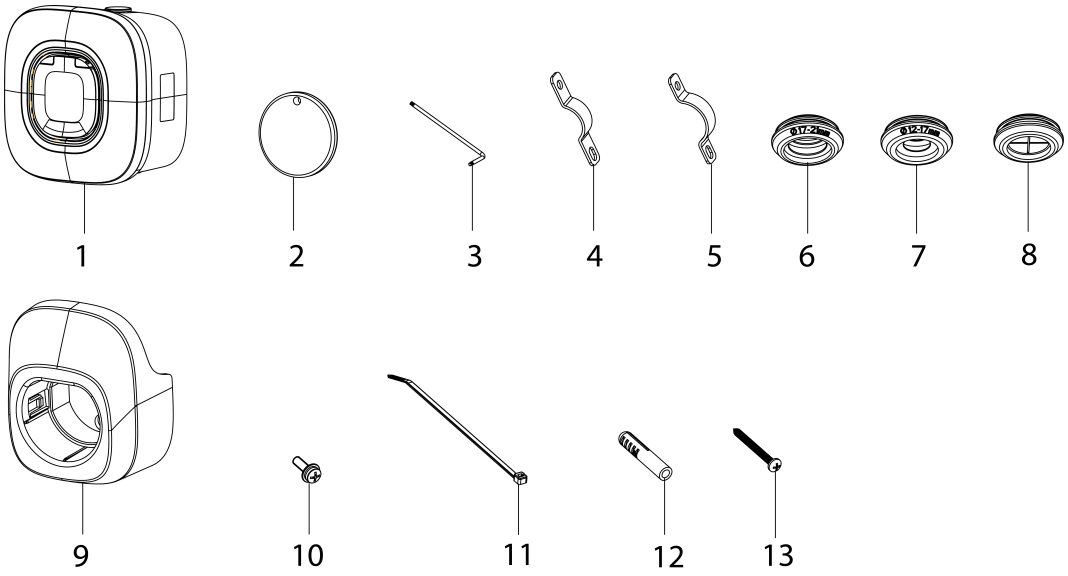


Table 1-5 Description of the packing list

No.	Description	No.	Description
1	Charging point.	8	Split cable gland. Quantity: 2.
2	RFID card.	9	Charging cable holder. Only available on the cable version.
3	Hexagon wrench.	10	Machine screw (M3×10). Quantity: 2.

No.	Description	No.	Description
4	Cable clamp (6 mm^2). Suggested wire size: Φ12–17 mm.	11	Cable tie. Quantity: 2.
5	Cable clamp (10 mm^2). Suggested wire size: Φ17–21 mm.	12	Expansion tube. Quantity: 3. Additional 3 units for the cable version.
6	Pre-punched gland (Φ17–21). Suggested wire size: Φ17–21 mm.	13	Self-tapping screws (ST4.8×50). Quantity: 3. Additional 3 units for the cable version.
7	Pre-punched gland (Φ12–17). Suggested wire size: Φ12–17 mm.	—	—

1.4 LED Indicator

Table 1-6 Description of the LED indicator

LED Indicator Status	State Description
Yellow	Starting
	Software upgrading
	Restore to factory settings
Green	Available
Flashing green	The charging cable has been connected, or after successful card authentication, you can now plug in the connector
	Finished
Blue	Reserved
Flashing blue	Charging
Flashing red	Charging fault

1.5 Features

- Supports multiple network connections: Wi-Fi (2.4G/5G), Bluetooth, Ethernet and 4G.
- Offline configuration: Supports offline configuration using app through Bluetooth.
- Multiple start methods: Free vending (plug and play), RFID control and app control.

- Easy installation: The installation mode of first installing the charger and then connecting the wires enables quick installation by a single person.
- Leakage protection: It provides 30 mA Type A and 6 mA DC residual current protection (RCD), with PEN conductor protection functionality.
- Convenient maintenance: Supports Bluetooth, USB and OTA for upgrade, maintenance, detection and diagnosis.
- System expansion: The current transformer interface supports dynamic load balancing for home applications.
- Working temperature: –30 °C to +50 °C or –22 °F to +122 °F without derating.
- High grade protection: IP55 protection class, and IK10 anti-vandalism class.
- Protection capabilities: Comes with protection against overvoltage, undervoltage, overcurrent, short circuits, lightning surges, electric surges, leakage, overtemperature, metering failure, CP disconnection, and vehicle PE disconnection. It can also detect relay sticking and LN reverse connection, and offers grounding protection, PEN protection (for British regions), and Integral 30 mA Type A RCD (EN 61008) + 6 mA DC protection (EN 62955), Tamper-protection (Smart Charging), and data security. The device is also dustproof and waterproof so that you can feel secure and comfortable while using it.
- Supports OCPP 1.6J.

2 Installation

Before starting the installation of the charging station, check the following:

- The installation must be in accordance with IEC 60364 and any applicable local regulations.
- All necessary permits have been obtained from the local authority that has jurisdiction.
- The existing electrical load has been calculated to find the maximum operating current for the charging station installation.
- The correct specification of power supply cable has been routed to the installation area, and there is sufficient cable length to strip and connect the wires.
- The power supply cable must remain within its bending tolerance during and after installation.
- The plugs, screws, and drill bits used for installing the charging station are suitable for the wall structure.
- Before installing the equipment, a circuit breaker with RCD must be installed upstream of the EV charger.

  According to IEC 61851-1 8.5. The connection point of the EV supply equipment must be protected by an RCD with a rated residual operating current not exceeding 30 mA. RCDs must comply with one of the following standards: IEC 61008-1, IEC 61009-1, IEC 60947-2 and IEC 62423.RCDs protecting connection points must be at least Type A.

2.1 Preparations

Complete the following corresponding preparations before real panel backplate installation, based on the planned cable entry method and type.

For top/bottom power cable entry installations

No pre-installation steps are necessary.

We do not recommend top-entry power cable installation for outdoor scenarios.

For rear power cable entry installations

Before mounting the rear panel backplate, drill 25 mm diameter cable entry holes at the designated locations:

- Strong current inlet hole (rear inlet): Required.
- Low voltage inlet hole: Required only if installing communication or control cables.

2.2 Tools Required

The commonly used tools and instruments during device installation and maintenance are listed in the table below.

Insulation and anti-static treatment should be checked before using the tools.

Table 2-1 Tools

Auxiliary Device	Quantity	Application
Scissors	1 set	Unpack the unit and trim the cables to the required length.
Side-cutting pliers	1 piece	Cut excess wires, and cut nylon cable ties.
Screwdriver	1 set	Install and remove cross recessed and plum blossom screws.
Adjustable wrench (double-ended, monkey wrench)	1 set	Move hex and four-legged bolts and nuts.
Electrician's knife	1 piece	Cable stripping, and more.
Electrician's rubber mallet	1 piece	Cable shaping and equipment position correction.
Electric drill	1 piece	Open hole.
Multimeter (accuracy: millivolt level)	1 set	Measure AC voltage, current, and resistance.
Wire stripper	1 piece	Peel off the insulation layer at the end of the wire.
Cable tie	1 roll	Used to bundle cables to ensure that they are secure and aesthetically pleasing.
Insulation tape	1 roll	Used for bare wire wrapping.
Earth resistance tester	1 set	Measure ground resistance.
Common auxiliary materials on site also include spirit level, insulating tape, self-adhesive label paper, soldering tin, nylon cable ties, and more.		

2.3 Functional Diagram

Wall Mount

Figure 2-1 Cable version

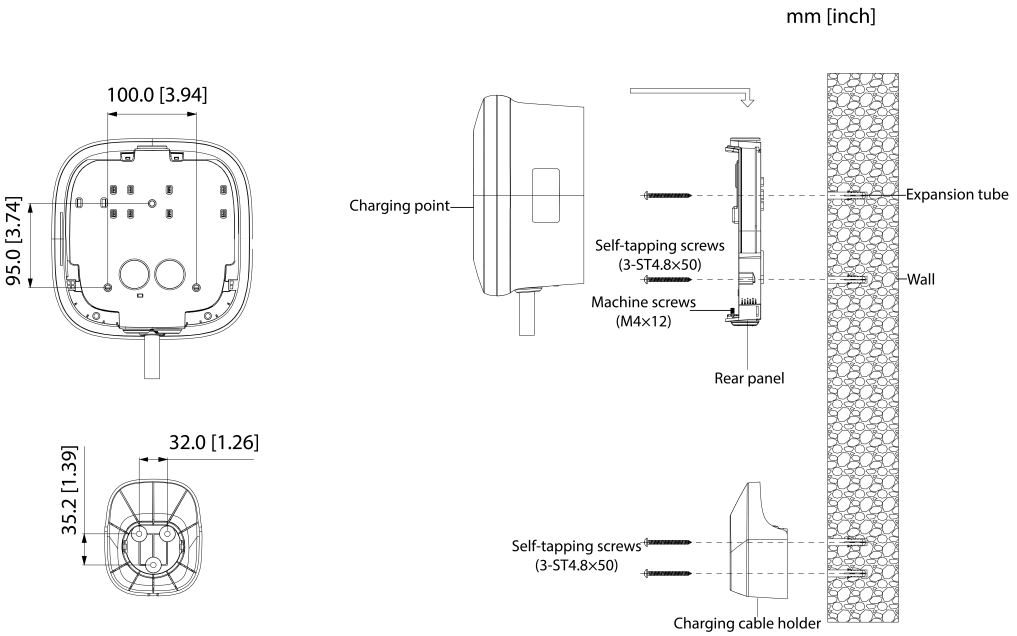
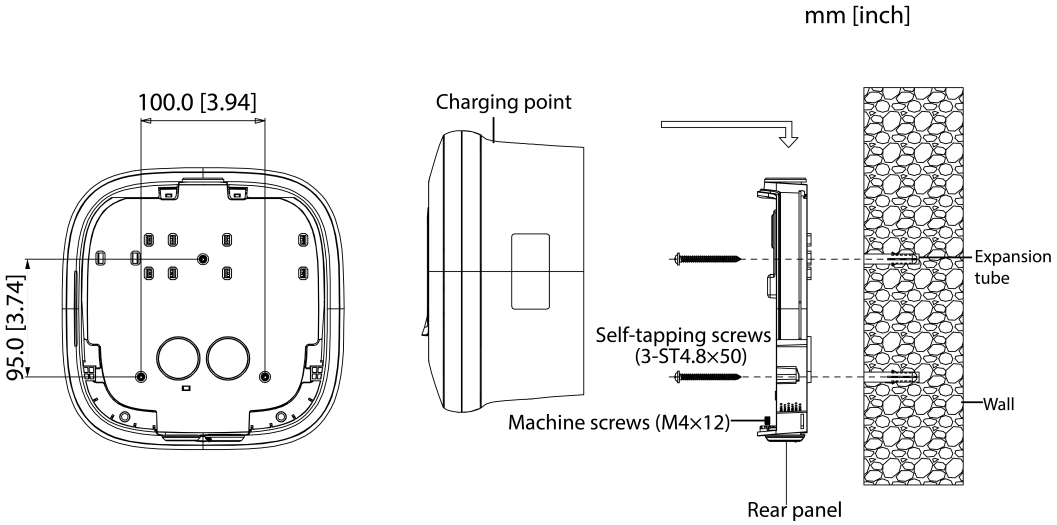


Figure 2-2 Socket version



(Optional) Pedestal Mount

The following diagram is for reference only. The pedestal mount should be performed based on the actual product.

Figure 2-3 Cable version

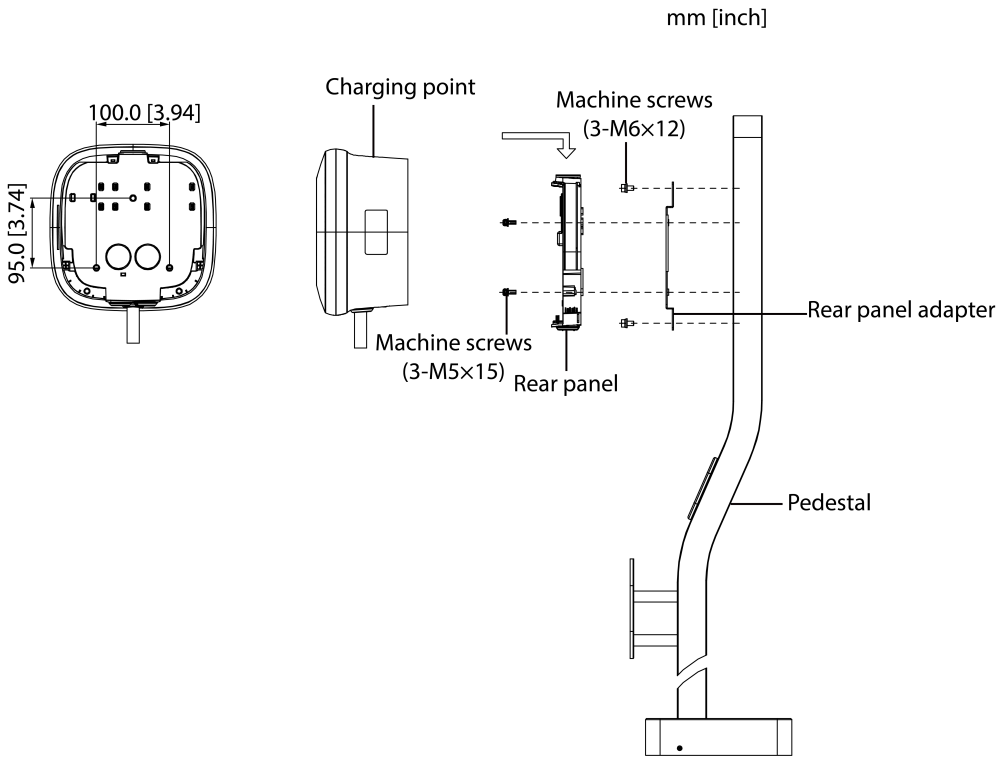
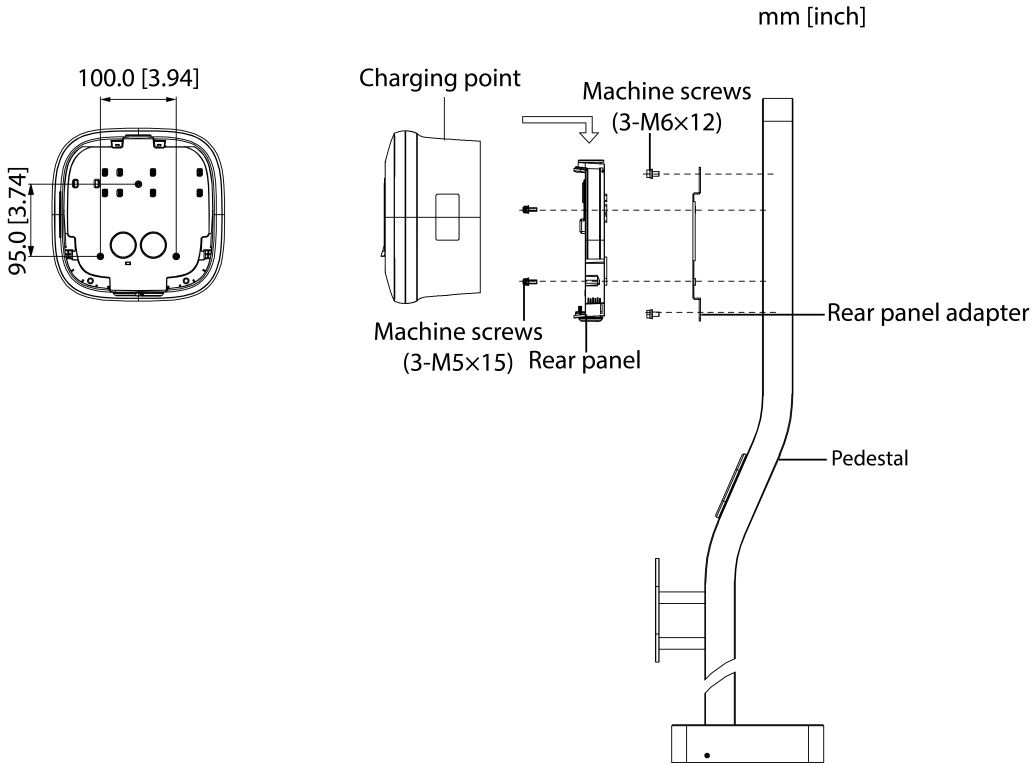


Figure 2-4 Socket version



2.4 Installation Notice

- If Ethernet communication is selected, the device needs to be connected to the weak current box using a network cable. If SIM card communication is selected, there is no need to connect a network cable.
- When choosing the installation location for the charging station, avoid selecting a position that is exposed to direct sunlight or susceptible to external impact.
- For wall-mounted and pedestal-mounted, we recommend adding an additional 60 cm of cable length.
- Ensure that there is a minimum free space of 600 mm around the charging station.
- The height of the connector for the cable version should be above 500 mm from the ground.
- The chosen location should not result in sharp bends in the charging cable.
- The input/output power line of the system is introduced and extracted from the bottom of the charging body, and the power cable should be laid through the cable trench.
- AC power supply should use 230 V for single-phase and 400 V for three-phase.
- AC power line is recommended to use copper core wire. The cross-sectional area is recommended to be 3 x 6 mm^2 (single-phase)/5 x 6 mm^2 (three-phase).
- Outdoor power lines should be laid according to electricity regulations, and the laying alignment of power line must be separated from the signal line.
- The AC input starts wiring from the user's power distribution switch and is connected to the incoming copper bar at the incoming switch of the charger. The user's power distribution should be equipped with overcurrent, short circuit, lightning protection and other protective devices.
- For single-phase, brown, blue, and yellow/green correspond to L (Live), N (Neutral), and PE (Protective Earth) respectively. For three-phase, brown, black, gray, blue, and yellow/green correspond to L1, L2, L3, N, and PE, respectively. If the power line has only one color, it is necessary to attach wire number identification (or use a marked casing).
- Broken, damaged, or scratched power lines cannot be used.

2.5 Wall Mount

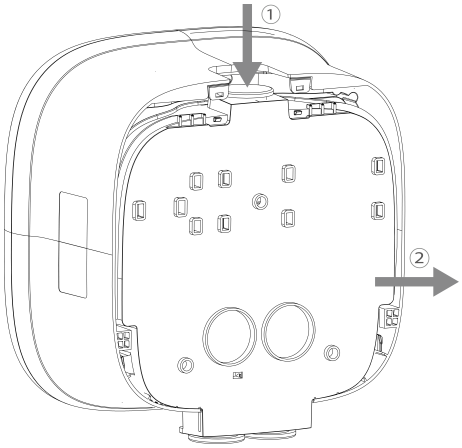
Procedure

Step 1 Remove the device from the packaging and securely position the charging point.

Step 2 Press firmly on the top sealing plug or U-slot of the mounting back plate until the internal latch mechanism disengages. Slide the mounting back plate horizontally outward to fully separate the charging point from the rear panel backplate.

During pressing, keep your fingers within the U-slot and your palm against the outer surface of the pillar to prevent injury.

Figure 2-5 Separate the charging point from the rear panel backplate



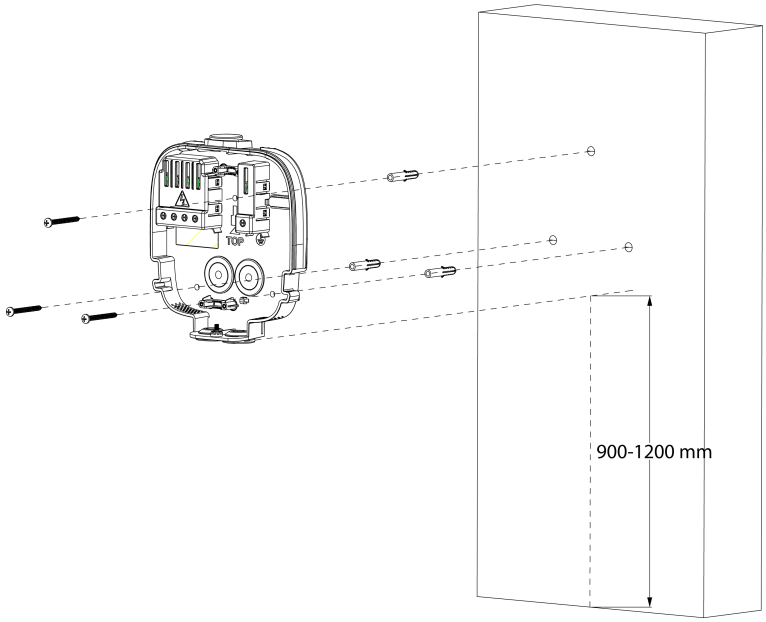
Step 3 Position the rear panel against the wall at the appropriate height and level it using the built-in spirit level.

1. Mark the wall through the 3 mounting holes of the rear panel using a pencil, and then remove the panel.
2. Drill 3 holes at the marked locations, each with a diameter of 8 mm and a depth of 50 mm.
3. Insert 3 expansion tubes into the holes, and then secure the rear panel using 3 self-tapping screws.

Recommended installation height:

- General recommendation: 900–1200 mm.
- For applications under Directive (EU) 2019/882: 600–900 mm.

Figure 2-6 Fix the mounting rear panel backplate



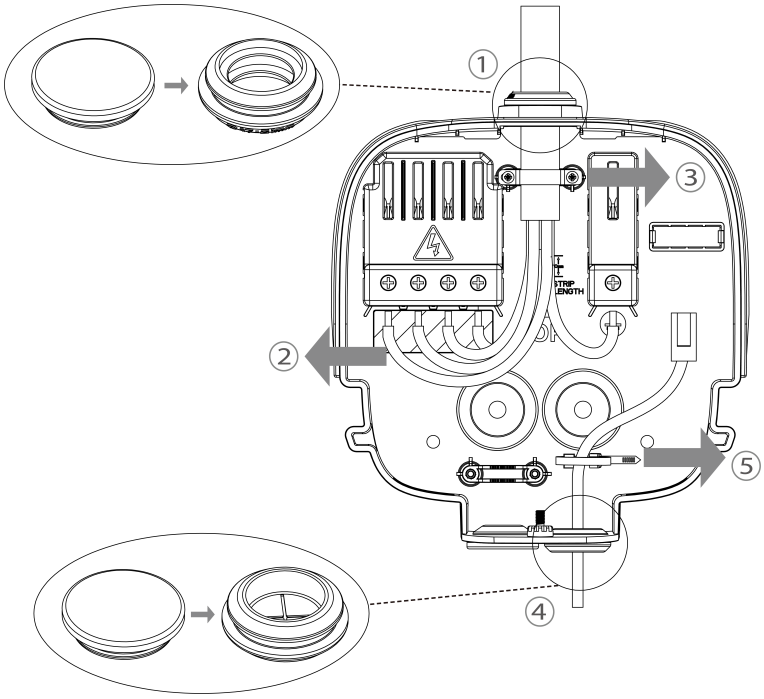
Step 4 Route the cable and connect it to the designated terminals.

Power supply wiring offers 3 entry methods. Select the appropriate connection scheme based on the actual pre-installed cable configuration.

- Top power entry

1. Remove the sealing plug located above the mounting back plate. Select a compatible pre-punched gland from the accessory kit based on the actual cable diameter, then install it in place of the original sealing plug.
2. Route the power cable through the gland and connect the wires to the designated terminals according to the specified wiring. For details, see "3 Wiring ".
3. Secure the power cable using appropriately sized cable clamps.
4. (Optional) Connect the network cable. You need to remove the sealing plug at the lower-right side of the device. Use the provided split cable gland. Trim the gland's cross-slit to match the outer diameter of the network cable, and then install the gland and route the cable through it.
5. Secure the network cable with cable ties.

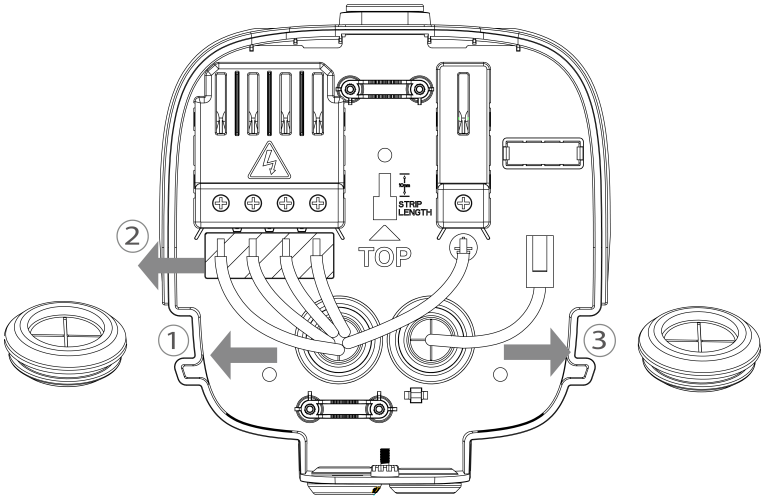
Figure 2-7 Top power entry



- Rear power entry

1. Install the appropriately sized cable gland into the pre-drilled hole, and then route the power cable through the gland.
2. Terminate the power cable conductors to their designated terminals according to the specified wiring sequence.
3. (Optional) Connect the network cable.
   a. Install a split cable gland at the rear entry's low voltage inlet hole.
   b. Trim the gland's cross-slit to match the network cable's outer diameter.
   c. Secure the gland, and then route the network cable through it.

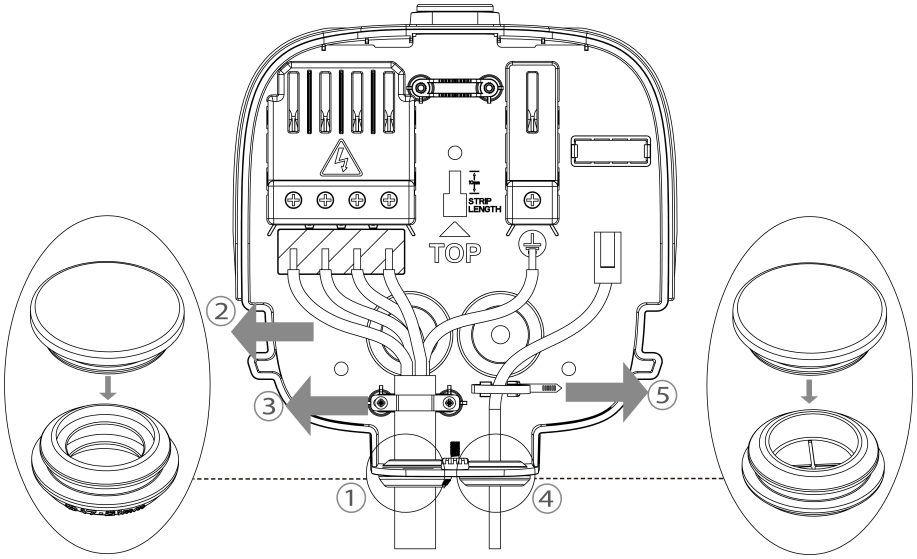
Figure 2-8 Rear power entry



- Bottom power entry

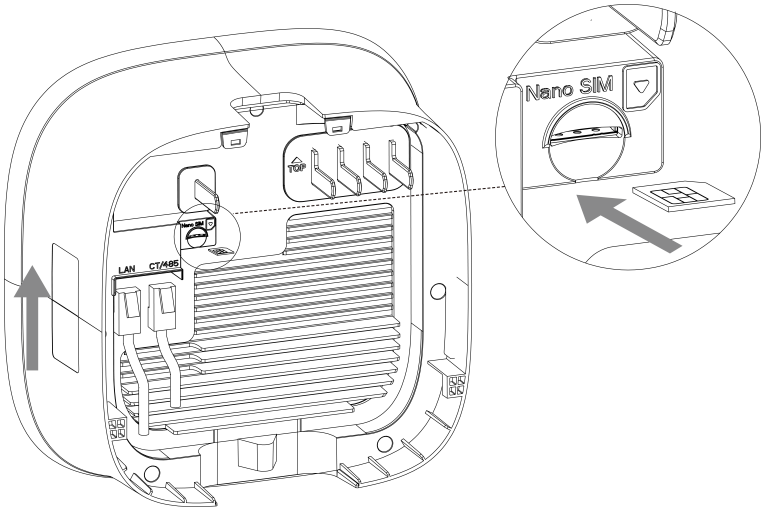
  Refer to the top power entry procedure for general steps. A key difference is that both the power cable entry and the cable clamp are positioned at the lower-left.

Figure 2-9 Bottom power entry



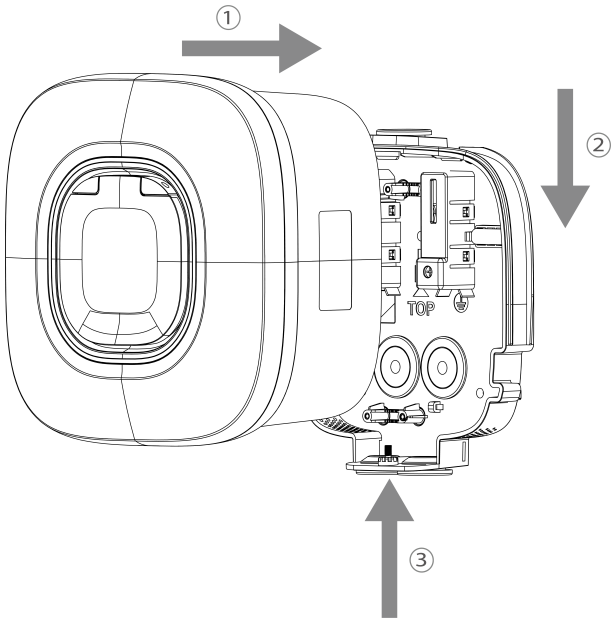
Step 5 (Optional) For low-voltage cables (such as network cable) or SIM card installation, perform the corresponding operations at the rear of the charger body.

Figure 2-10 Install the Nano SIM card



Step 6 Align the charger body with the mounting backplate and lower it into place from top to bottom. Secure the charger body by tightening the machine screws at the bottom of the mounting backplate to complete installation.

Figure 2-11 Fix the charger body



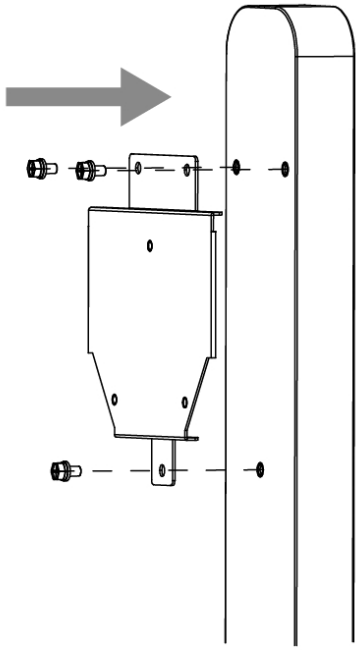
2.6 (Optional) Pedestal Mount

Pedestal mount is achievable with user-supplied mounting poles.

Procedure

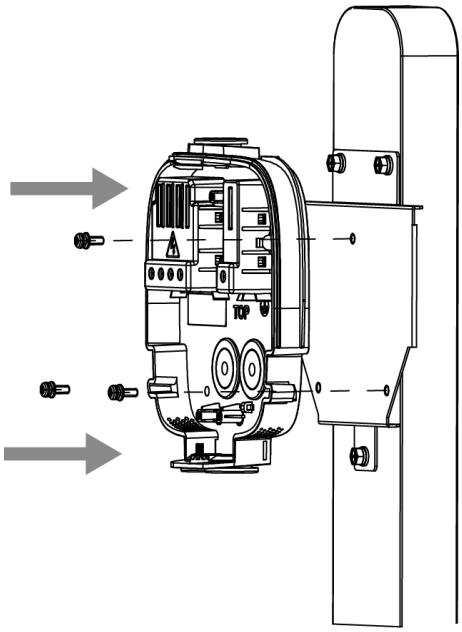
Step 1 Secure the adapter back plate to the mounting pole using screws.

Figure 2-12 Secure the adapter back plate



Step 2 Align the mounting back plate with the adapter back plate and fasten with screws.

Figure 2-13 Secure the mounting back plate



Step 3 Refer to step 4 to step 6 of the wall-mounting instructions to complete the pedestal mount.

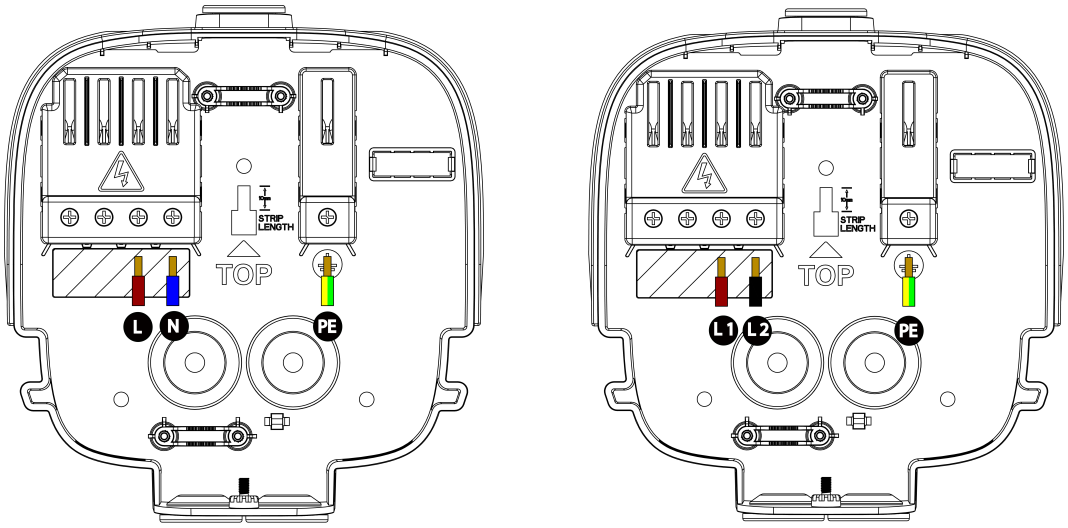
3 Wiring

The device supports both single-phase and three-phase power connections. Select the appropriate wiring method based on your device model.

1. Using the stripping guide on the mounting back plate, strip about 10 mm of insulation from the cable.
2. Insert the exposed conductor into the corresponding terminal slot.
3. Tighten the terminal screws to 2 N·m with a Torx® torque screwdriver.

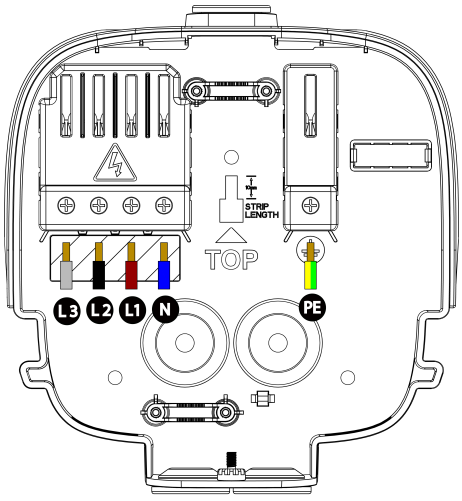
- The wire colors referenced in this manual comply with IEC 60446.
- Local wiring color standards might vary. Connect the power cables according to the phase references.

Figure 3-1 Single-phase wiring



TN/TT IT

Figure 3-2 Three-phase wiring



TN/TT

4 Operation Instructions

4.1 Initializing by App

Prerequisites

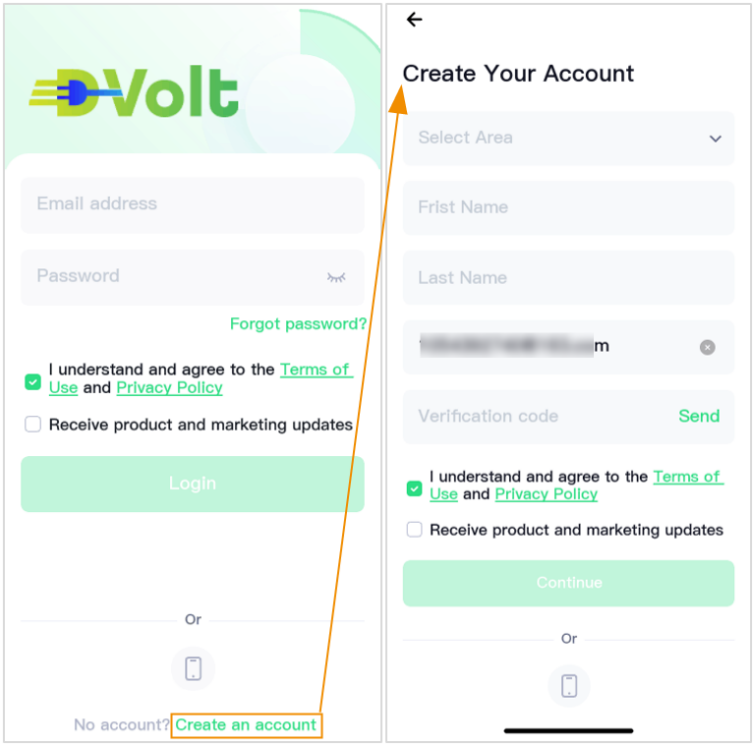
Download and install the D-Volt app from Google Play or Apple App Store.

For first-time users

Select **Create an account** to register.

- Username will be your email address or phone number.
- The same character cannot appear 5 times or more in the password.
- The password cannot be the same as the username or the reverse of the username.
- The password must be between 8 and 32 characters and must include at least 2 types of characters (excluding ";:'<>/\&() and space symbols).

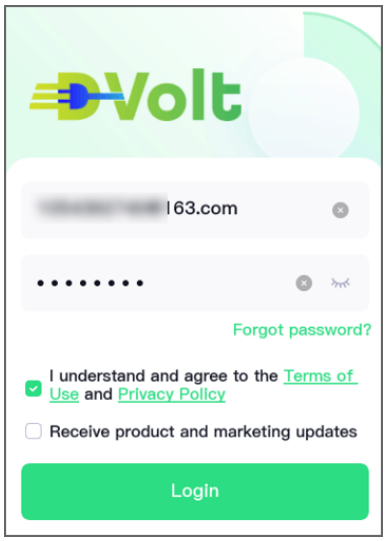
Figure 4-1 Register and login



Already have an account

You can login either by email or by phone number.

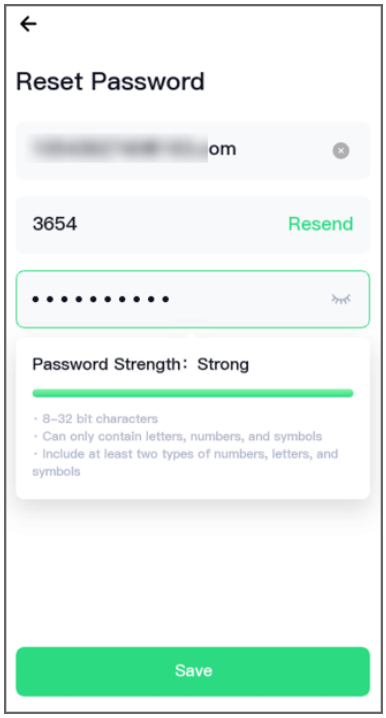
Figure 4-2 Login



4.2 Resetting the Password

If you forget your password, you can select **Forgot password?** to reset it.

Figure 4-3 Password resetting



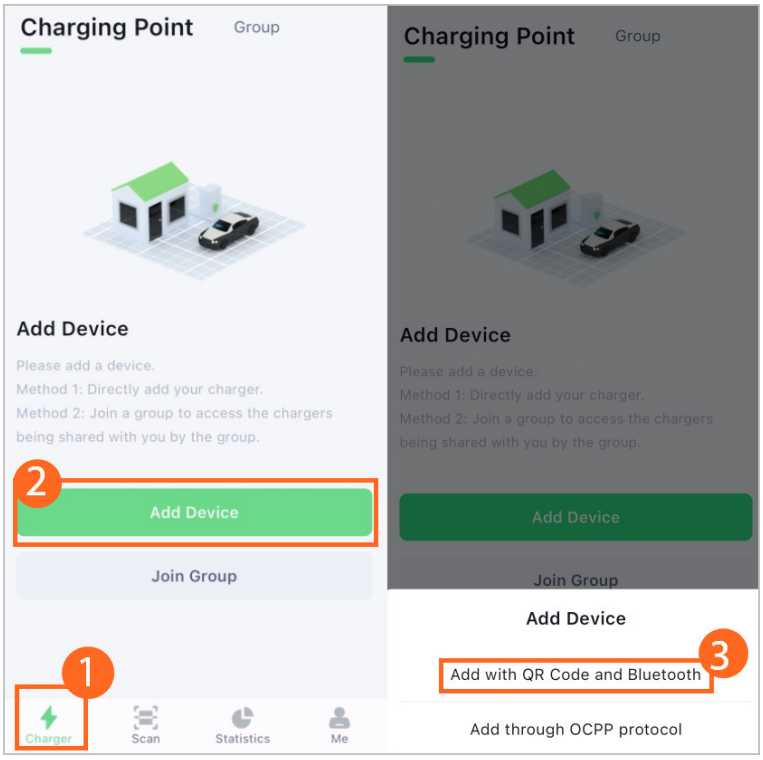
4.3 Adding Chargers and Connecting to the Cloud Service

Procedure

Step 1 Select the **Charger** tab, and then tap **Add Device**.

Step 2 Select the **Add with QR Code and Bluetooth**.

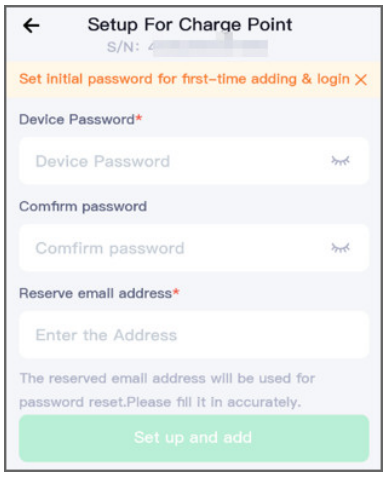
Figure 4-4 Add the device



Step 3 Scan the QR code on the charger, or tap **S/N** at the lower-left to manually enter the device serial number.

Step 4 Create a password for charger, provide an email address for password recovery, and then tap **Set up and add**.

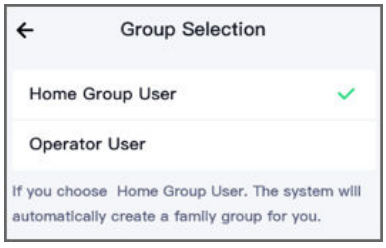
Figure 4-5 Enter S/N



Step 5 Select the scenario: home use or commercial use.

If you want to use the chargers for home use, select **Home Group User**.

Figure 4-6 Group selection



Step 6 Select **Network Connection** (Wi-Fi, Ethernet, or 4G).

- Wi-Fi
  1. Enable Wi-Fi mode on your phone, and then tap **Enable**.
  2. Choose a Wi-Fi network, enter the password for connection, and then tap **Connecting**.

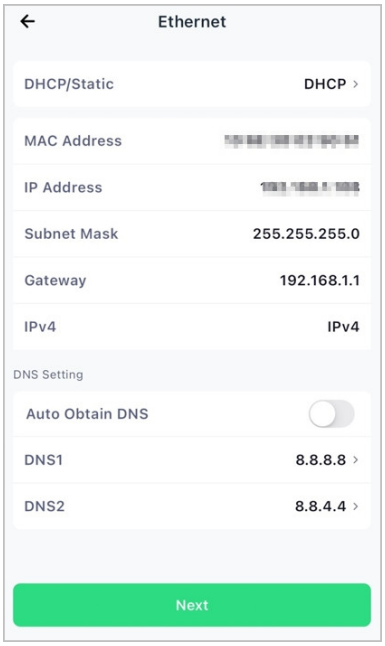
  The device supports both 2.4 GHz and 5 GHz Wi-Fi.

Figure 4-7 Wi-Fi



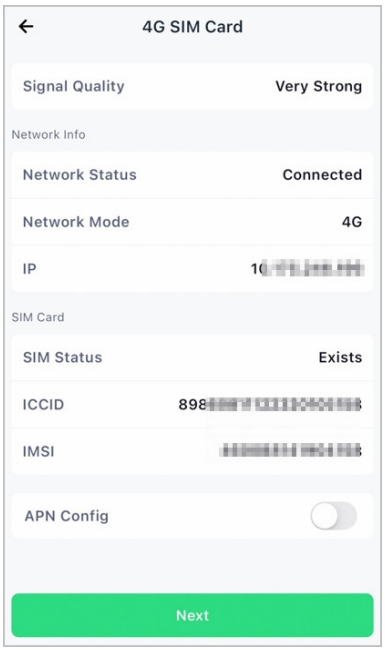
- Ethernet: Connect the Ethernet cable to the charger and follow the on-screen instructions to complete the operation.

Figure 4-8 Ethernet



- 4G SIM Card: Insert a SIM card into the charger and follow the on-screen instructions to complete the operation.

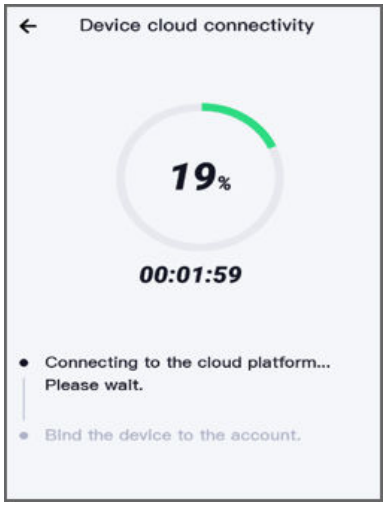
Figure 4-9 4G



Step 7 Connect to the cloud service.

Once the charger is connected to the cloud platform and linked to your account, remote control functionality is active.

Figure 4-10 Device cloud connectivity



4.4 Charging Points Management

Procedure

Step 1 Select **Charger** > **List View**, check the connected charging devices.

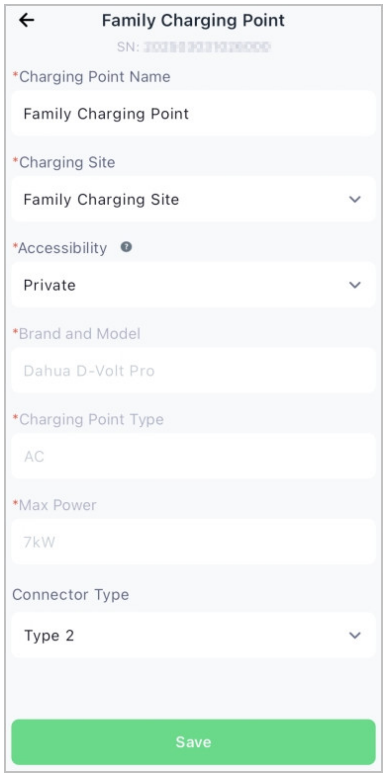
Step 2 Tap ⚙ to edit device information, configure settings or delete the device.

Figure 4-11 More operations



- **Edit Details** allows you to edit the information of the charger.

Figure 4-12 Edit details



- **Charging Point Config** allows configuration for the device.

Figure 4-13 Charging point configuration

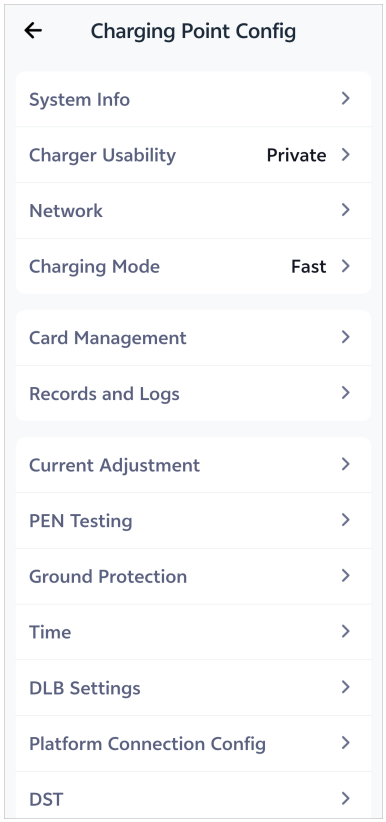


Table 4-1 Description of settings

Parameter	Description
System Info	View system information of the charger, and change device password.
Charger Usability	• Includes 2 types: **Private** and **Plug and Play**. ◇ For home use scenario, select **Private**. ◇ Charging without authentication process, select **Plug and Play**. Switching the charger usability mode will cause the device to go offline for a short period of time. • Usage method: Supports swiping card.
Network	When the **Bluetooth Setting** is selected, you can configure it.
Charging Mode	You can select 3 modes, including **Fast** , **Green** and **Eco**. This feature is only supported for home use scenario.
Card Management	This is for RFID card pairing. Once enabled, swiping an RFID card on the card reader of the device will automatically read the card number for authentication.
Records and Logs	View charger records and log information.
Current Adjustment	Allows adjustment of the device current control. You can set power by period. **Scheduled Adjustment** is only supported for home use scenario.
PEN Testing	In the open state, if a corresponding fault is detected, an alarm will be triggered. This feature is exclusively supported by PEN devices.
Ground Protection	Configure ground protection.
Time	Set the time zone.
DLB Settings	The dynamic load balancing function automatically balances the charger's electricity usage to prevent overloading the electrical system when multiple appliances are being used. • Default is 6 A, configurable maximum household load allowance (from 6 A to 100 A). • After DLB installation, configure it according to the actual household current conditions. It will then automatically enable load balancing function. • Possible causes of DLB limitation include the current rating of the household circuit breaker or a restriction on the maximum power draw from the grid.

Parameter	Description
Platform Connection Configuration	Platform connection settings.
Electronic Lock	Configure the electronic lock setting.
DST	Set daylight-saving time.
Remote Update	The device must be connected to the D-volt platform before it can be upgraded remotely through network.
Updated through Bluetooth	Update the device's main control package through Bluetooth.

4.5 (Optional) DLB Installation Instructions

We have 2 models of DLB, which support single-phase and three-phase.

- Single-phase DLB (DHI-ICS-ME-CT-1L) is suitable for home use when the power input of the house is a single-phase cable.

Figure 4-14 Single-phase

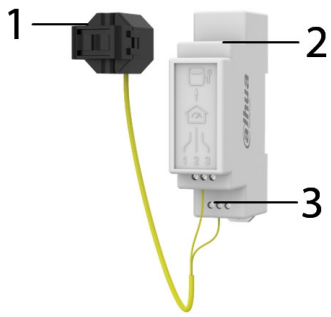
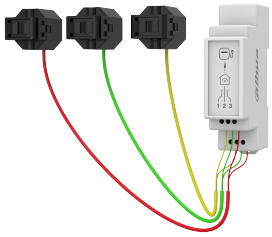


Table 4-2 Name description

No.	Name
1	Current transformer
2	RJ45
3	Junction

- Three-phase DLB (DHI-ICS-ME-CT-3L) is suitable for home use when the power input of the house is a three-phase cable.

Figure 4-15 Three-phase



4.5.1 Preparations

Preparations for installation

- Confirm the maximum current of each phase for the house. This value defines the maximum capacity configuration of the dynamic load balancing.
- Ensure that the distance from the charging station to the DLB adapter is not too long (the installation length of unshielded network cables must not exceed 30 meters; the installation length of shielded network cables must not exceed 150 meters).
- Ensure that there is enough space on the DIN rail inside the home power distribution box to install the DLB adapter.

Tools and materials required for installation

Table 4-3 List of tools and materials

Name	Quantity
Screwdriver	1
Wire cutter	1
RJ-45 crimping tool	1
Tape measure	1
RJ-45 Ethernet connector	1
Network cable	1

4.5.2 Installation Diagram

Figure 4-16 Installation diagram

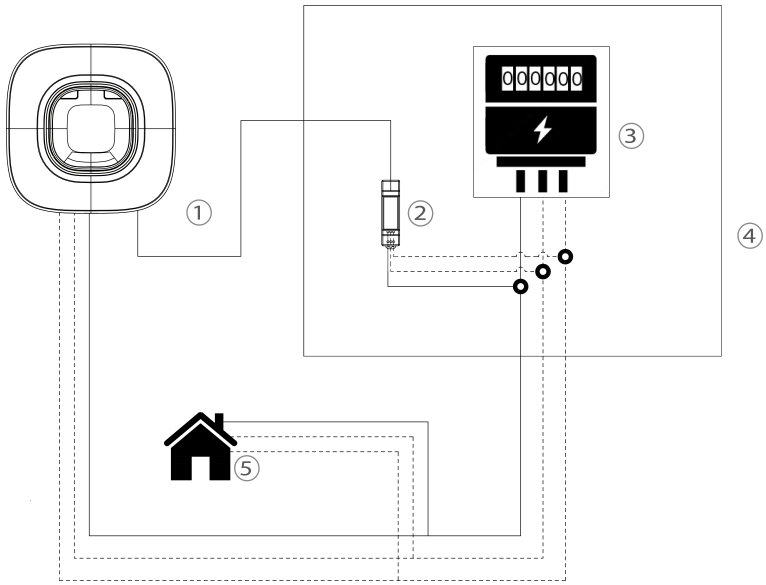


Table 4-4 Description of the part

No.	Name
1	Charging station
2	DLB adapter
3	Electric meter
4	Distribution cabinet
5	Household electricity

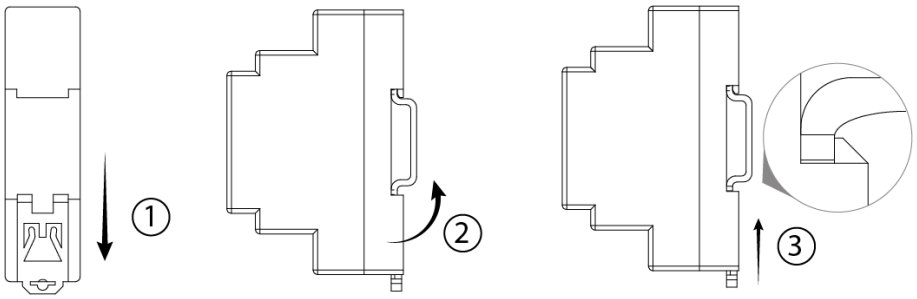
4.5.3 Installation

Procedure

Step 1 In the distribution box, disconnect the charging station's switch and post warning signs to prevent accidental power supply to the charging station during installation.

Step 2 Install the DLB adapter on the DIN rail of the distribution box according to the steps shown in the diagram.

Figure 4-17 Install the DLB adapter



Step 3 In the distribution box, install the current transformer of DLB in sequence on the phase line of the household main input power (the phase line must have an insulation protective layer).

The direction arrow on the current transformer must point from the electrical meter to the charging station.

Figure 4-18 Install the current transformer of DLB (three-phase)

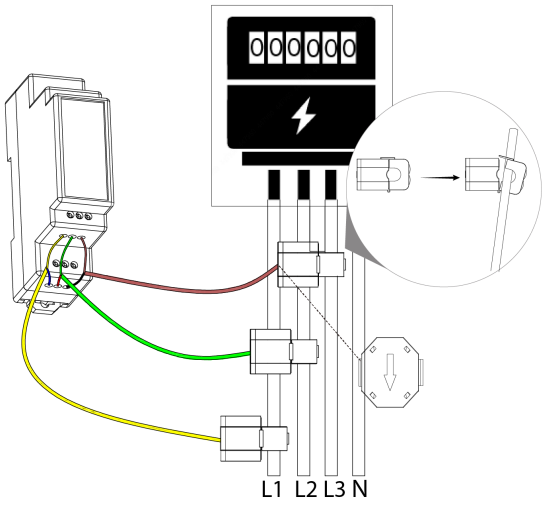
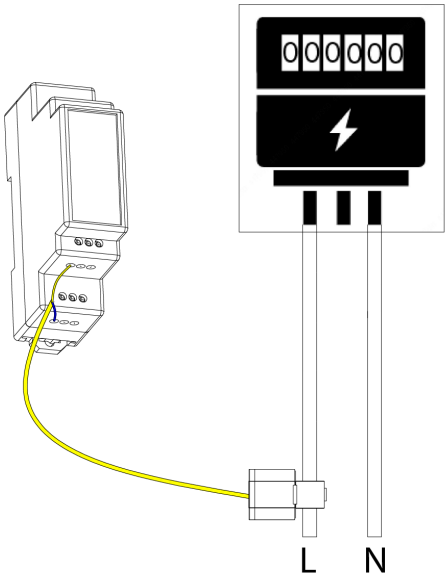


Figure 4-19 Install the current transformer of DLB (single-phase)



Step 4 Run the network cable from the distribution cabinet to the charger, leaving an appropriate length at both ends for easy connection.

DANGER

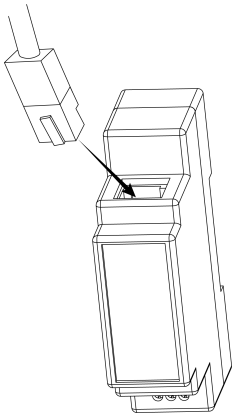
If the current transformer is installed on a phase line without insulation, it might result in product damage, or even cause injury or death to personnel.

- Ensure that the current transformer is installed on the phase line of the main power supply in the home, and install it in the right direction and correct order.
- Read the label on the current transformer to ensure the correct installation direction.
- If you use phase rotation method for installation, please make sure that the current transformer matches the phase rotation.
- After installation, use a cable tie to secure the wires of the current transformer to prevent them from entangling with other wires.
- If you have a three-phase meter but the selected equipment is a single-phase charging station, the current transformer (CT) must match the phase of the connected power supply.
- If you have a three-phase meter and the selected equipment is a three-phase charging station, but the actual connection is single-phase, the charging station's input line must be connected only to the L1 phase. The supply phase on the meter side must match the phase where the current transformer (CT) is installed.

Step 5 Install the network cable as shown in the figure, with one end of the cable connected to the DLB adapter and the other end connected to the charging station.

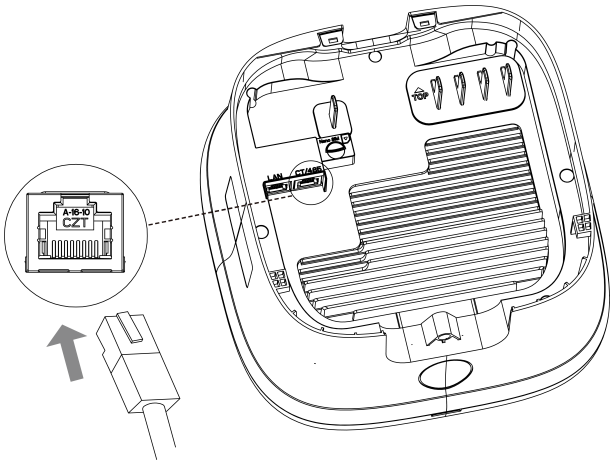
If the network cable does not come with a pre-installed RJ45 connector, it is necessary to manually crimp the RJ45 connector and then insert it into the DLB adapter interface.

Figure 4-20 The other end of the cable connected to the charging station



Step 6 Insert the Ethernet cable into the DLB adapter socket reserved on the interface board.

Figure 4-21 Wiring



Step 7 Install the wiring cover and panel of the charging station.

Step 8 In the distribution box, turn on the switch of the charging station.

4.6 (Optional) Setting Power by Period

Time-based power setting automatically adjusts the charging power of the charging station based on preset power levels for different time periods.

Procedure

Step 1 Select **Charger** > **List View**, tap ⚙, and then select **Charging Point Config**.

Figure 4-22 Charging point configuration



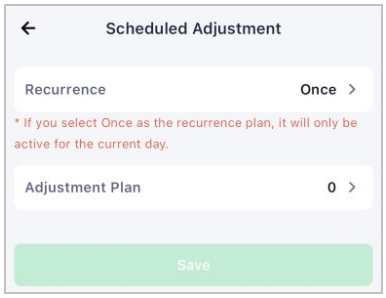
Step 2 Select **Current Adjustment** to configure the output power of the charging station.

- **Immediate Adjustment** : Supports adjustable current from 6 A to 32 A. The default value is 32 A.
- **Scheduled Adjustment** : Supports scheduled charging with configurable time periods, including **Once**, **Every Day** and **Every Week**.

  The function is only supported in **Private** and **Plug and Play** modes, but not in **Public** mode.

  1. Select **Recurrence** , select **Once**, **Every Day** or **Every Week** as needed, and then tap **Save**.

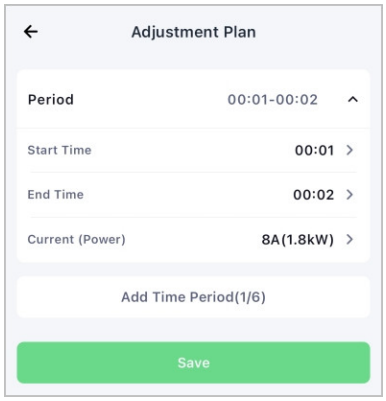
Figure 4-23 Set the adjustment plan



2. Select **Adjustment Plan** > **Add Time Period**, add different time periods, and then tap **Save**.

You can add up to 6 time periods.

Figure 4-24 Add a period



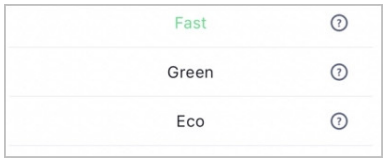
4.7 (Optional) Configuring Solar Green Power

Homes equipped with both photovoltaic (PV) and grid charging capabilities can choose to use solar green power for charging stations, supporting 3 charging modes, including **Fast** , **Green** and **Eco**.

- Charger usability must be set to **Private**. Only for home use scenario.
- In **Eco** and **Green** modes, the charging station must be connected to a CT clamp.

Select **Charging Point Config** > **Charging Mode**, enable the charging mode, and then select the mode as needed.

Figure 4-25 Mode



Fast

When you select **Fast**, the charging station uses both photovoltaic (PV) and grid power to deliver the highest possible charging rate. It means charging without restrictions, utilizing the maximum current allowed by the charger settings.

- The default mode is **Fast**.
- When the photovoltaic (PV) power generation is insufficient, the imported grid power/current must not exceed the limits stipulated by local regulations.

Green

The charging station relies solely on photovoltaic (PV) charging. It will automatically stop if the PV output to the EVSE is suspended.

In **Green** mode, the charging system is restricted to using only power generated by the photovoltaic system. Importing power from the grid is not permitted under any circumstances. This mode requires that the local electrical grid infrastructure supports reverse power flow, which means the charging station's current transformer must be capable of detecting when current is flowing back into the grid. If this condition is not met, **Green** mode will not function and will remain disabled.

Eco

When green power is insufficient, grid power supplements up to 6 A to meet the basic charging requirements of the EV charger. When green power is sufficient, only green power is used for charging.

Appendix 1 EU Declaration of Conformity Regulatory Information

Appendix Table 1-1Description of the regulatory information

Technology	Frequency Bands	Max. Output Power (EIRP)
WLAN (802.11B/G/N)	2400–2483.5 MHz	20 dBm
WLAN (802.11A/N/AC)	5150–5250 MHz	23 dBm
	5250–5350 MHz	20 dBm
	5470–5725 MHz	27 dBm
	5725–5850 MHz	14 dBm
Bluetooth	2400–2483.5 MHz	20 dBm
RFID	13553–13567 kHz	60 dBμA/m (10m)
LTE B1	1920–1980 MHz; 2110–2170 MHz	25 dBm
LTE B3	1710–1785 MHz; 1805–1880 MHz	25 dBm
LTE B5	824–849 MHz; 869–894 MHz	25 dBm
LTE B7	2500–2570 MHz; 2620–2690 MHz	25 dBm
LTE B8	880–915 MHz; 925–960 MHz	25 dBm
LTE B20	832–862 MHz; 791–821 MHz	25 dBm
LTE B28	703–733 MHz; 758–803 MHz	25 dBm

Appendix 2 Security Commitment and Recommendation

Zhejiang Dahua Vision Technology Co., Ltd. (hereinafter referred to as "Dahua") attaches great importance to cybersecurity and privacy protection, and continues to invest special funds to comprehensively improve the security awareness and capabilities of Dahua employees and provide adequate security for products. Dahua has established a professional security team to provide full life cycle security empowerment and control for product design, development, testing, production, delivery and maintenance. While adhering to the principle of minimizing data collection, minimizing services, prohibiting backdoor implantation, and removing unnecessary and insecure services (such as Telnet), Dahua products continue to introduce innovative security technologies, and strive to improve the product security assurance capabilities, providing global users with security alarm and 24/7 security incident response services to better protect users' security rights and interests. At the same time, Dahua encourages users, partners, suppliers, government agencies, industry organizations and independent researchers to report any potential risks or vulnerabilities discovered on Dahua devices to Dahua PSIRT, for specific reporting methods, please refer to the cyber security section of Dahua official website.

Product security requires not only the continuous attention and efforts of manufacturers in R&D, production, and delivery, but also the active participation of users that can help improve the environment and methods of product usage, so as to better ensure the security of products after they are put into use. For this reason, we recommend that users safely use the device, including but not limited to:

Account Management

1. **Use complex passwords**

   Please refer to the following suggestions to set passwords:

   - The length should not be less than 8 characters;
   - Include at least two types of characters: upper and lower case letters, numbers and symbols;
   - Do not contain the account name or the account name in reverse order;
   - Do not use continuous characters, such as 123, abc, etc.;
   - Do not use repeating characters, such as 111, aaa, etc.

2. **Change passwords periodically**

   It is recommended to periodically change the device password to reduce the risk of being guessed or cracked.

3. **Allocate accounts and permissions appropriately**

   Appropriately add users based on service and management requirements and assign minimum permission sets to users.

4. **Enable account lockout function**

   The account lockout function is enabled by default. You are advised to keep it enabled to protect account security. After multiple failed password attempts, the corresponding account and source IP address will be locked.

5. **Set and update password reset information in a timely manner**

   Dahua device supports password reset function. To reduce the risk of this function being used by threat actors, if there is any change in the information, please modify it in time. When setting security questions, it is recommended not to use easily guessed answers.

Service Configuration

1. **Enable HTTPS**

   It is recommended that you enable HTTPS to access Web services through secure channels.
2. **Encrypted transmission of audio and video**

   If your audio and video data contents are very important or sensitive, we recommend you to use encrypted transmission function in order to reduce the risk of your audio and video data being eavesdropped during transmission.
3. **Turn off non-essential services and use safe mode**

   If not needed, it is recommended to turn off some services such as SSH, SNMP, SMTP, UPnP, AP hotspot etc., to reduce the attack surfaces.

   If necessary, it is highly recommended to choose safe modes, including but not limited to the following services:

   - SNMP: Choose SNMP v3, and set up strong encryption and authentication passwords.
   - SMTP: Choose TLS to access mailbox server.
   - FTP: Choose SFTP, and set up complex passwords.
   - AP hotspot: Choose WPA2-PSK encryption mode, and set up complex passwords.
4. **Change HTTP and other default service ports**

   It is recommended that you change the default port of HTTP and other services to any port between 1024 and 65535 to reduce the risk of being guessed by threat actors.

Network Configuration

1. **Enable Allowlist**

   It is recommended that you turn on the allowlist function, and only allow IP in the allowlist to access the device. Therefore, please be sure to add your computer IP address and supporting device IP address to the allowlist.
2. **MAC address binding**

   It is recommended that you bind the IP address of the gateway to the MAC address on the device to reduce the risk of ARP spoofing.
3. **Build a secure network environment**

   In order to better ensure the security of devices and reduce potential cyber risks, the following are recommended:

   - Disable the port mapping function of the router to avoid direct access to the intranet devices from external network;
   - According to the actual network needs, partition the network: if there is no communication demand between the two subnets, it is recommended to use VLAN, gateway and other methods to partition the network to achieve network isolation;
   - Establish 802.1x access authentication system to reduce the risk of illegal terminal access to the private network.

Security Auditing

1. **Check online users**

   It is recommended to check online users regularly to identify illegal users.
2. **Check device log**

By viewing logs, you can learn about the IP addresses that attempt to log in to the device and key operations of the logged users.

3. **Configure network log**

   Due to the limited storage capacity of devices, the stored log is limited. If you need to save the log for a long time, it is recommended to enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

Software Security

1. **Update firmware in time**

   According to the industry standard operating specifications, the firmware of devices needs to be updated to the latest version in time in order to ensure that the device has the latest functions and security. If the device is connected to the public network, it is recommended to enable the online upgrade automatic detection function, so as to obtain the firmware update information released by the manufacturer in a timely manner.

2. **Update client software in time**

   We recommend you to download and use the latest client software.

Physical Protection

It is recommended that you carry out physical protection for devices (especially storage devices), such as placing the device in a dedicated machine room and cabinet, and having access control and key management in place to prevent unauthorized personnel from damaging hardware and other peripheral equipment (e.g. USB flash disk, serial port).



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