

22 kW Wall Charger User Manual

Application

The EV charger provides AC power to the vehicle's onboard battery charger. It can be installed in various public, company, and community parking lots, as well as large, medium, and small charging stations. It supports self-service charging and is suitable for all types of unmanned parking lots, allowing users to charge independently.

Main Function

- Supports charging via RFID card or mobile application.
- Equipped with a Screen Display.
- Displays information such as charging status, charging current, and kWh.

Warning

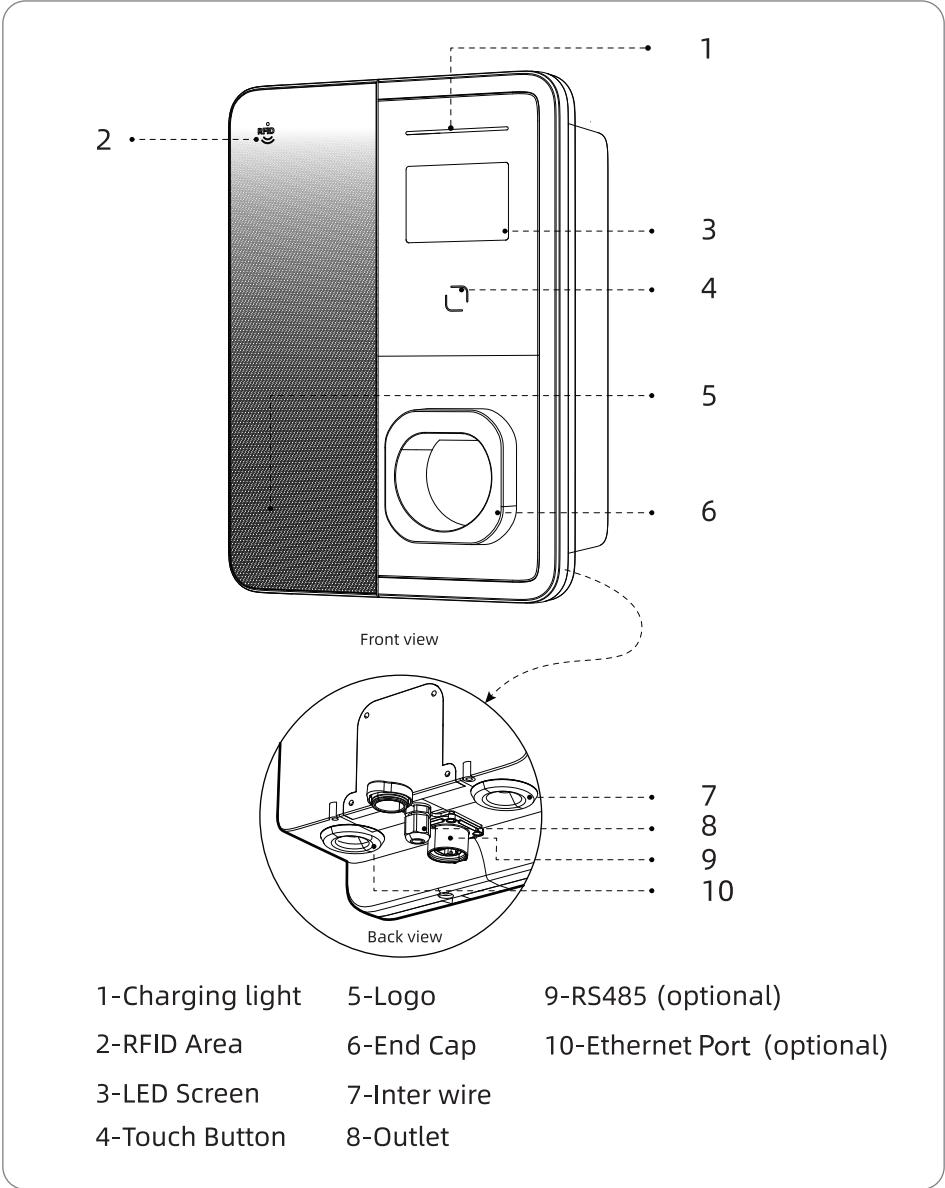
It may cause danger, harm, or damage to the device if you do not operate in accordance with the safety guidelines.

Electrical and fire risk

Do not use a damaged or dirty charge connector. The electrical system for the connection of the EV charger must be inspected by a professional. Meet the current requirements of the station. Failure to follow the safety instructions can result in danger, injury, and damage to the equipment. Check the charging station and connector for any visible damage before each use. EV chargers can only be used to charge Electric Vehicles (EVs) or Plug-in Hybrid Electric Vehicles (PHEVs). Do not install the charging station in a closed container to avoid overheating.

Product View

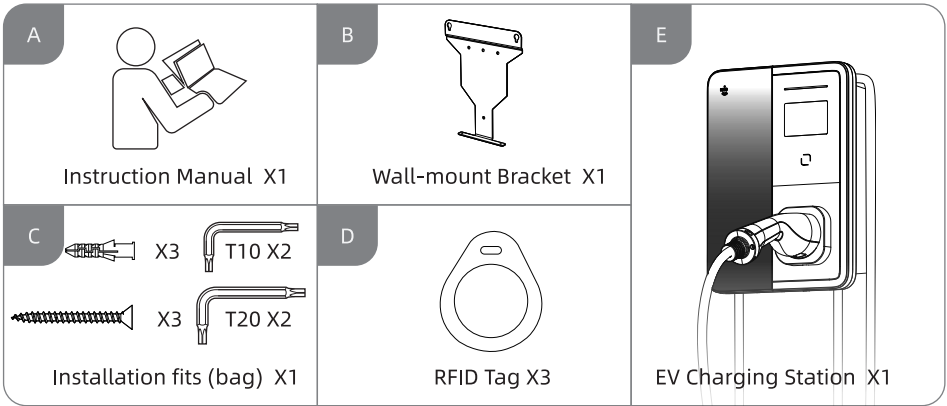
1.1 Appearance



1.2 Product Specification

EV Wall Charger (European Standard)				
Model NO.	Item	EVPC02-07	EVPC02-11	EVPC02-22
Input	Rated Voltage	230V AC	380V AC	380V AC
	Rated Current	32A	16A	32A
	Power Frequency	50 Hz		
	Power Wiring	Hardwired		
Output	Max Current	32A	16A	32A
	Output Voltage	230V AC	380V AC	380V AC
	Rated Power	7.4kW	11kW	22kW
	Charging Connector	Type 2		
	Cable Length	5m		
	Cable Specification	3x6mm ² +1x0.5mm ²	5x2.5mm ² +1x0.5mm ²	5x6mm ² +1x0.5mm ²
	Enclosure Material	Plastic PC		
User Interface	Display	3.5 inch LED		
	Start Mode	RFID card/ APP/Plug and Play		
Safety	Application Standard	IEC 61851, IEC62196, EN50620 / IEC62893		
	Certification	CE, CB, RoHS		
	Ingress Protection	IP65 (Enclosure)		
	Electrical protection	Over Current Protection, Over/Under Voltage Protection, Over Temperature Protection, Surge Protection, Leakage Protection, Ground Protection etc.		
Environment	Installation	Wall Mounted / Pole Mounted		
	Working Temperature	-25°C~+45°C		
	Working Humidity	5%~95%		

1.3 Product list



1.4 Transportation and Storage

The product is packed well before leaving the factory. Avoid sharp pounding, jolting, and damage to the package during transport. The storage and transportation temperature is -40°C to $+70^{\circ}\text{C}$. The humidity is 95%. The ambient air should not contain acidity, alkalinity, or other corrosive or explosive gases.

Installation Instruction

2.1 Safety Tip

Personnel assembling and using the EV charger must adhere to the following principles and rules: Ensure proper operation by relevant personnel and the device before powering on. Please confirm the device is properly grounded to avoid unnecessary accidents.

All tools must be insulated to prevent short circuits or personal injury from accidental contact with uncovered metal frames.

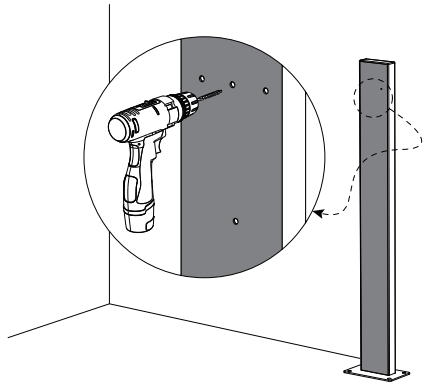
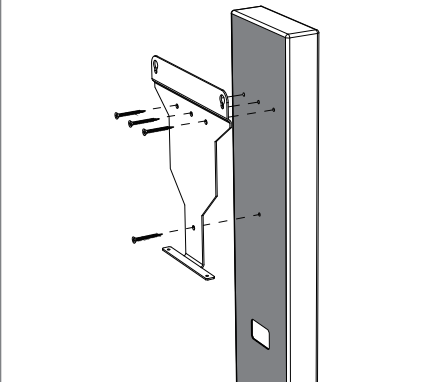
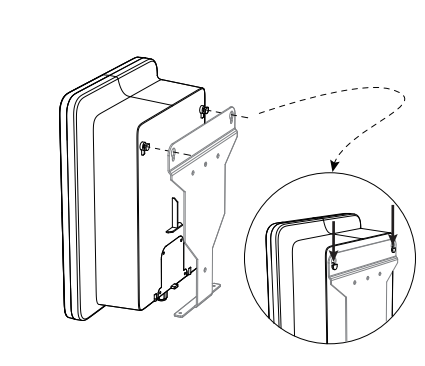
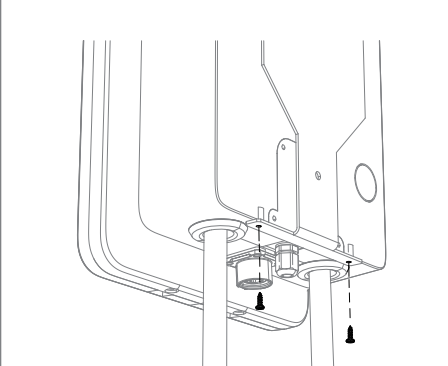
Confirm that the EV charger operates reliably throughout its lifespan. The device should be kept clean and maintained in an environment with constant temperature and humidity. The EV charger must not be used in environments containing volatile, flammable, or explosive gases. Children must not touch the EV charger.

2.2 Installation Guider

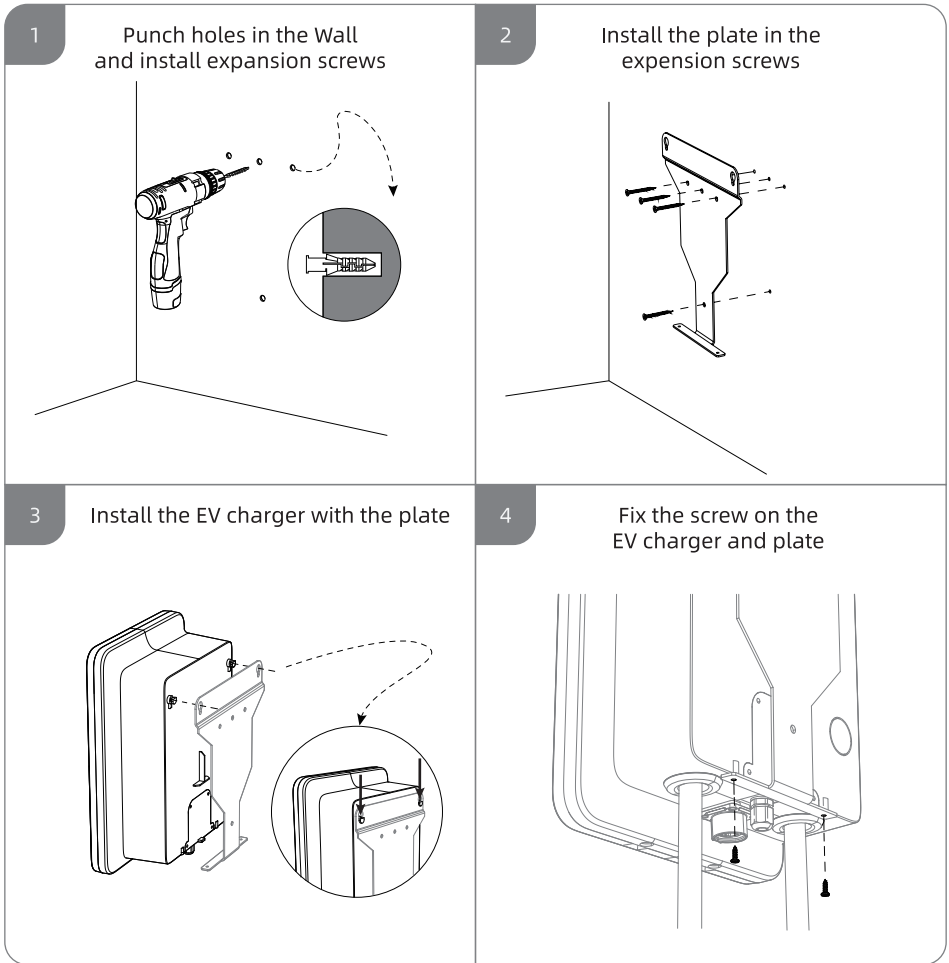
Danger!

Installation by untrained personnel may pose a danger.
Only electrician who is trained and qualified can install the EV charger.
The electric shock would happen if don't install accord with operation procedure.
The electric shock or the serious hazard would happen if don't observe operation instruction of safety precaution.

Pole mounted installation

<p>1 Punch holes in the Column</p> 	<p>2 Install the plate in the screws</p> 
<p>3 Install the EV charger with the plate</p> 	<p>4 Fix the screw on the EV charger and plate</p> 

Wall mounted installation



2.3 Electrical connection

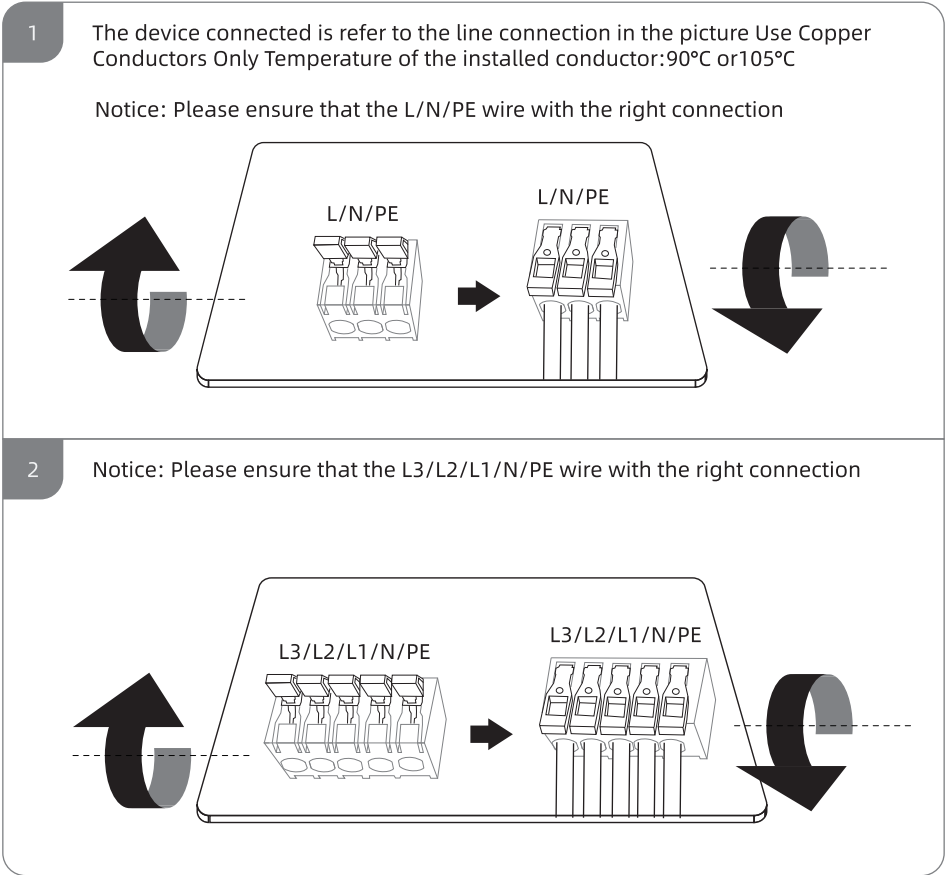
Before use

PLEASE NOTE: This procedure may only be carried out by an authorised electrician!

Electrical connection:

The protection of the charging system must be carried out in accordance with the relevant national regulations. It depends on, for example, the required circuit breaker rating, the internal network resistance, conductor cross-section, cable length, and the maximum capacity of the charging system. The individual phases of the supply voltage must each be fused with circuit breakers.

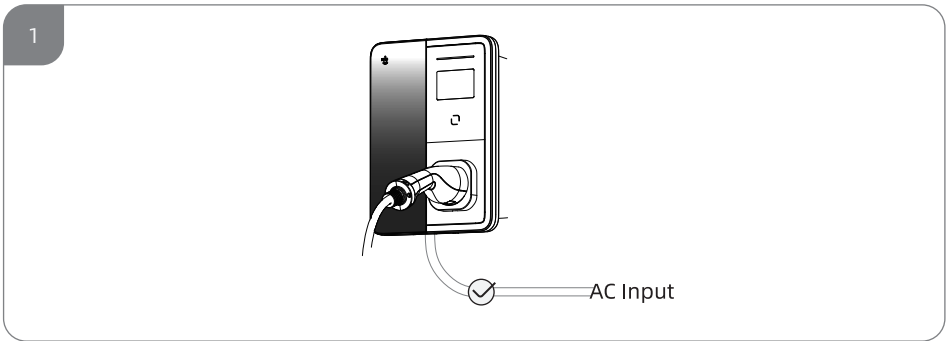
CAUTION: Please be sure that there is no voltage in the power lines which are to be connected to the EV charger.



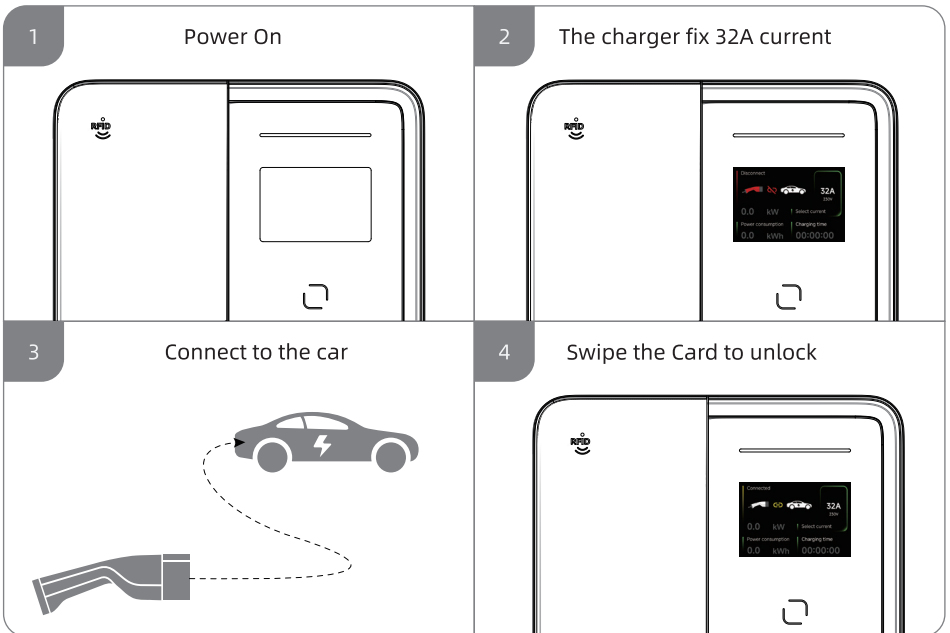
Charging Instruction

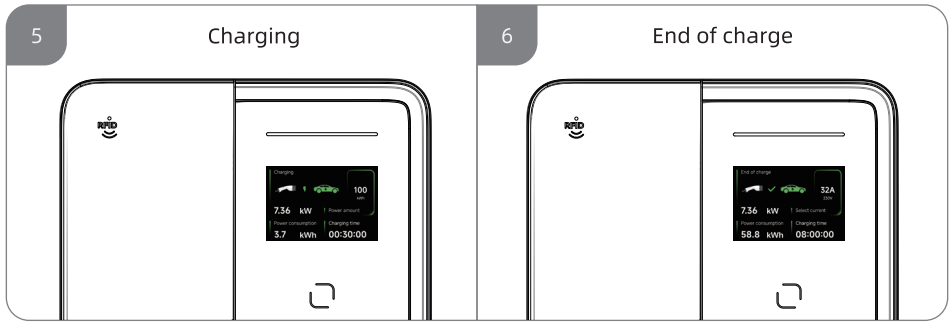
3.1 Charge preparation

After plug in, according to the screen prompt operation, start to charge.

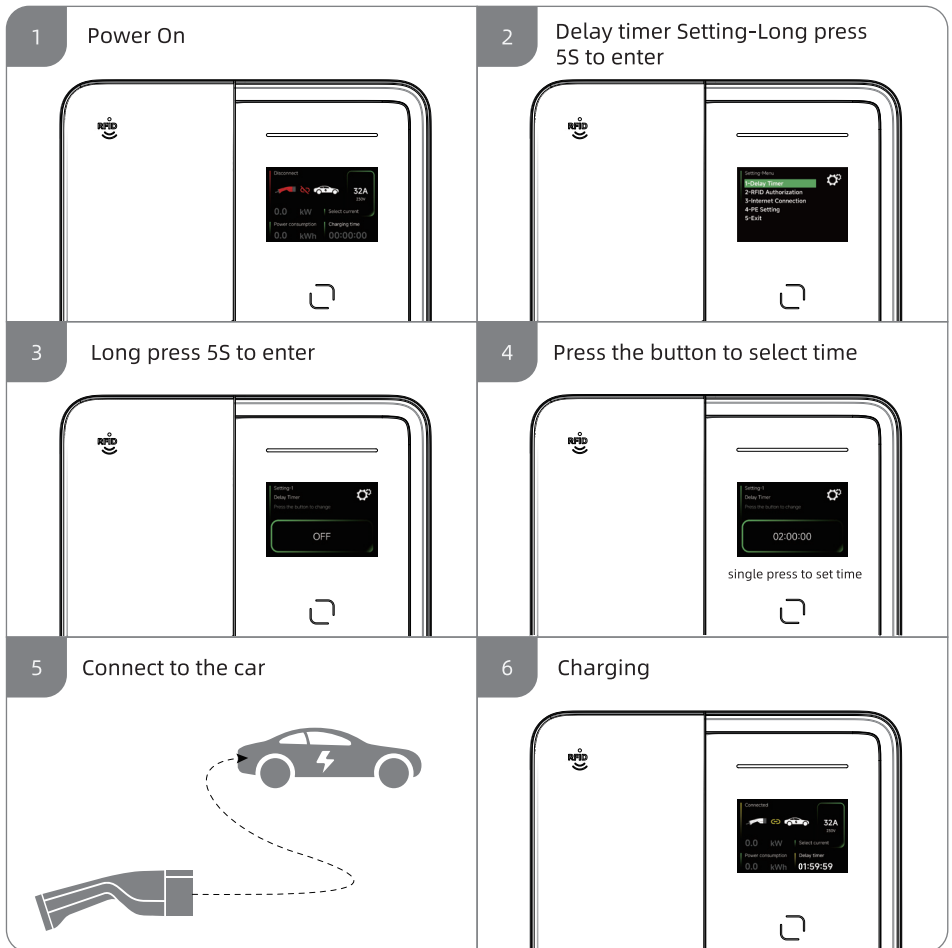


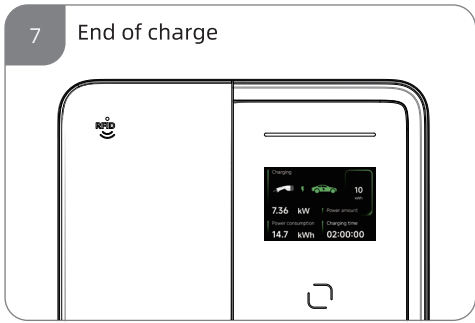
3.2 Start to charge (RFID)



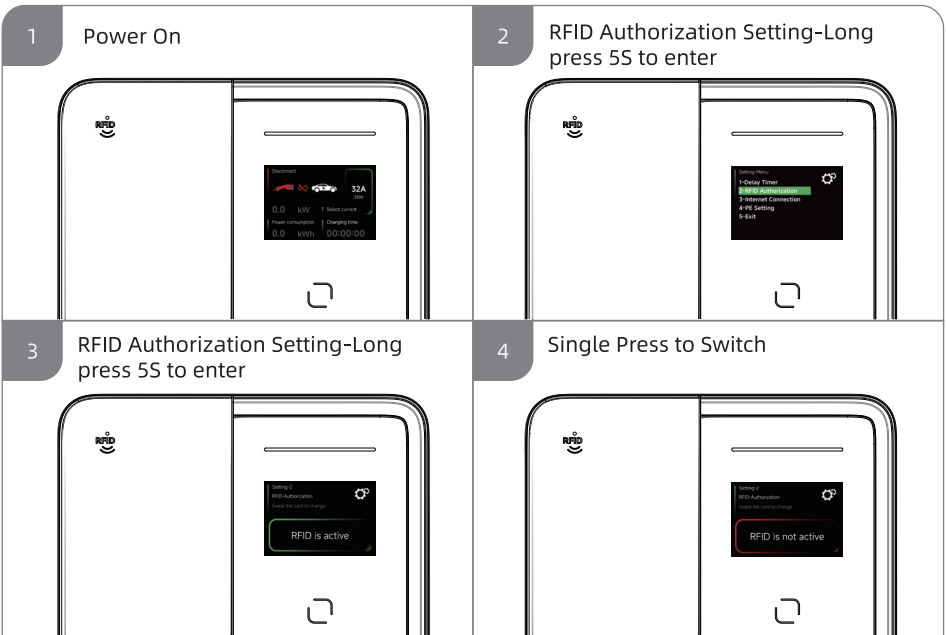


3.3 Delay Timer Setting





3.4 RFID Authorization



3.5 Internet Connection

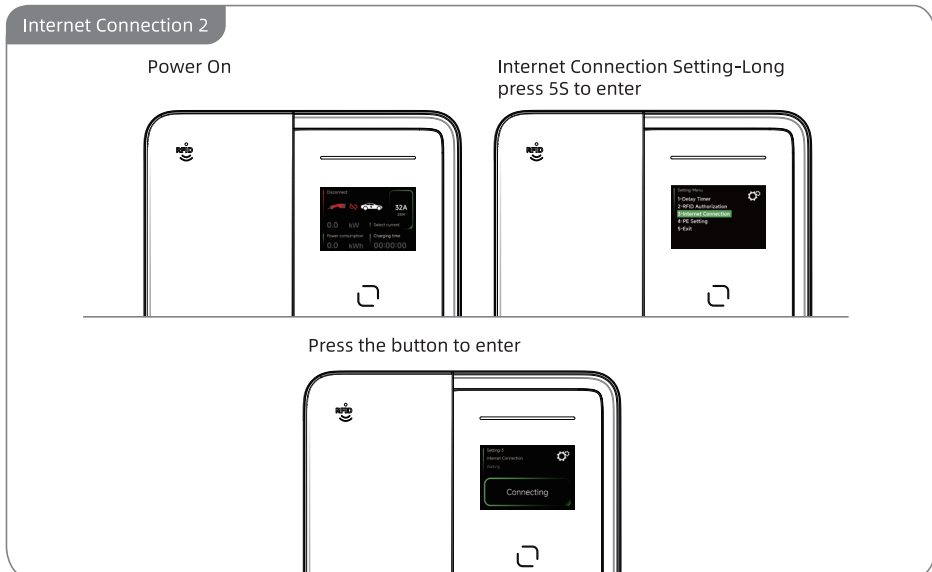
Smart Life APP Use Guide



- Download "Smart Life" APP
- Register user account & log in
- Networking

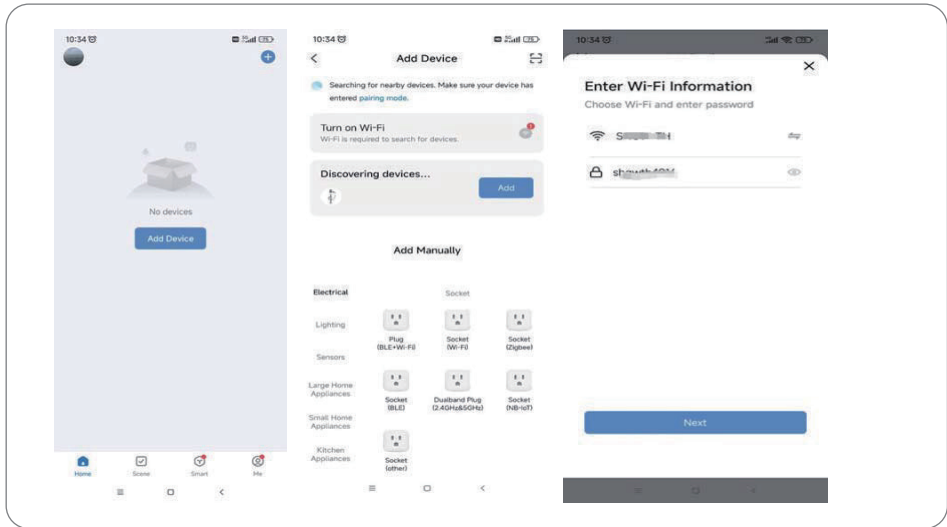


Connect the power of the wall box, put the RFID card on wallbox (RFID location)over 10 seconds/or long press the button to enter the internet connection mode and enter into networking mode

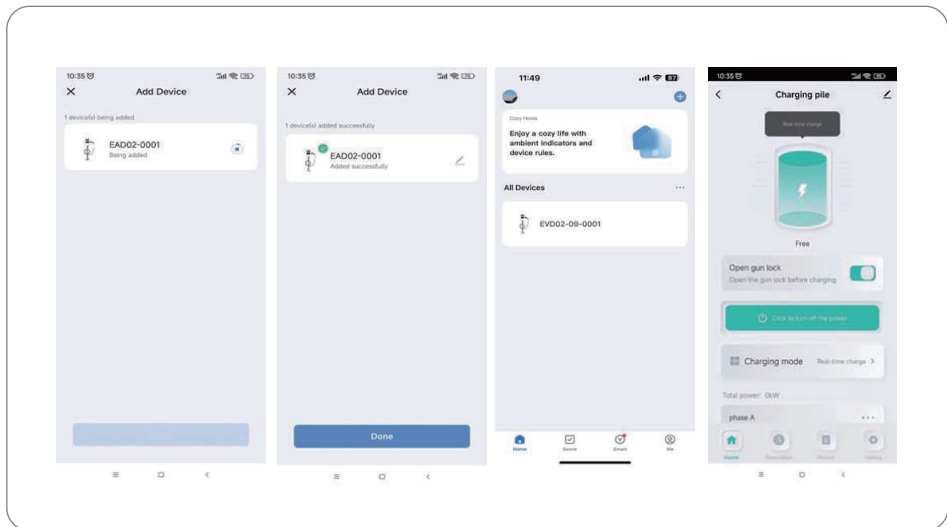


Open the SmartLife APP and Operate the Connection from the Phone

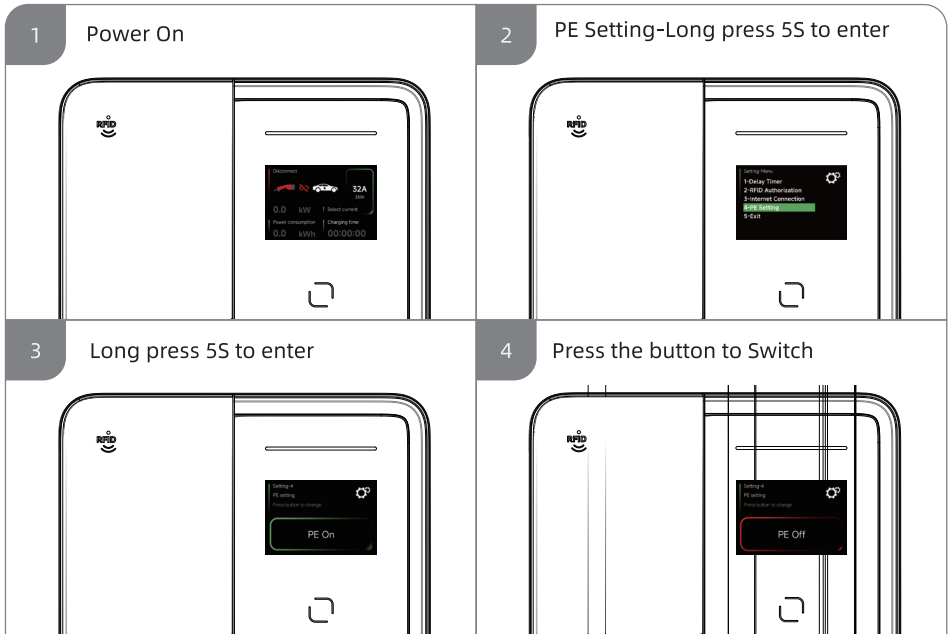
Click the "Add Device", and click "Add", and Enter user Wi-Fi information. Click "Next".



Wait for the connection to establish (approximately 1 minute). Once connected, click "Done." Click the EV charger icon to begin smart control. The app allows you to view and adjust various settings, including charging status, charging records, power consumption, open gun lock, current selection, timer delay, and total power settings.



3.6 PE setting



PE Wire Detect Function

1. Function Overview

This product includes PE cable detection to ensure proper grounding. If the environment lacks a grounded PE wire, the device will trigger ERROR 13, indicating the need to connect the PE cable correctly.

2. Error Condition

- When the PE wire is not grounded, ERROR 13 is displayed.
- Resolution requires establishing a proper PE cable connection.

3. Temporary Solution

To bypass detection temporarily:

- Step 1: Long-press the button for 5 seconds to enter PE setting mode. (PE ON(means open PE wire detection) /PE OFF (means close PE wire detection))
- Step 2: Select OFF mode
- Step 3: Long-press the button for 5 seconds again to confirm.
- Step 4: The device can now operate normally.

Note: This is a temporary work around and should not replace permanent grounding.

4. Long-term Solution

- For a permanent fix, install and connect a PE wire in your home's electrical system to ensure safety and compliance.

5. Important Remark.

- **Always consult a qualified electrician for PE cable installation.**

Malfunction and Maintenance

4.1 Maintenance caution

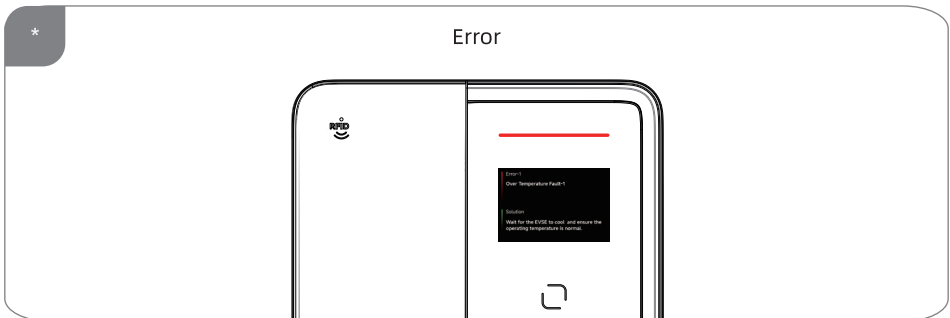
Periodically check for aging in the wiring, ideally during a monthly power cut. Conduct a leakage test on the external leakage protector to ensure its proper functioning. Visually inspect incoming lines to ensure no wires are damaged.

4.2 Breakdown and Maintenance

Error	Meaning	Solution
Error 1	The temperature is too high. (the temperature in the housing has increased to over 75°C)	The temperature is too high. (the temperature in the housing has increased to over 75°C)
Error 3	The charging current is too high (the charging current is 10% higher than the set value for 5 seconds)	Disconnect the device from the vehicle. Then start the charging process again.
Error 4	The charging current is too high (the charging current is 100% higher than the set value for 1.5 seconds)	Disconnect the device from the vehicle. Then start the charging process again.
Error 5	Residual current (residual current is greater than 6 mA DC or 30 mA AC)	Autorecovery of the charging process if there is no residual current.
Error 6	Self test failed	Disconnect the device from the vehicle and the mains. Restart the charging process. If the error reoccurs, send the charger to the dealer for repair.
Error 7	Under voltage (input voltage below 180 V for 5 sec.)	Autorecovery of the charging process if the voltage increases to over 190 V within 5 seconds.

Error 8	AC input is overvoltage	<ol style="list-style-type: none"> Under the faults status, the input voltage 220V to 240V products require the input voltage beyond 180V, the input voltage 100V to 240V products require the input voltage beyond 80V. If the conditions met step 1 and the fault cannot be eliminated, Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 9	The main relay's main contact cannot be disconnected	Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 10	The main relay's main contact cannot be connected	Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 11	The temperature of the input cable connector is too high	<ol style="list-style-type: none"> After the plug temperature is reduced and the fault is eliminated re-charge normally. Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 12	The temperature of the input cable connector is seriously too high	<ol style="list-style-type: none"> After the plug temperature is reduced and the fault is eliminated, re-charge normally. Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 13	The PE wire of the machine is not grounded or in poor contact with the power grid ground wire	<ol style="list-style-type: none"> Check and confirm the ground wire is connect the machine or not. After eliminating the ground wire problem, if the fault persists, Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 14	CP voltage fault (positive voltage is not any of 6V, 9V, 12V)	<ol style="list-style-type: none"> Check and confirm the ground wire is connect the machine or not. After eliminating the ground wire problem, if the fault persists, Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 15	P negative voltage fault (when CP is PWM, the negative voltage is not -12V, such as short circuit of the can end diode will cause CP negative pressure to be divided by the car end to ground resistance like positive pressure)	<ol style="list-style-type: none"> Check and confirm the positive and negative of connector's CP wire are not connect through the human body. After eliminating the step 1, if the fault persists, and the vehicle charge with the other machine shows working,Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 16	The charging wallbox under the single-phase or three-phase input, the live wire and the neutral wire reverse connection	<ol style="list-style-type: none"> Check whether the input live wire and neutral wire reverse connection or not If the fault still exists after confirming that the input live wire and neutral wire is not reversed, Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 17	S phase or T phase is no voltage under the three-phase input mode	<ol style="list-style-type: none"> Check the three phase input wire of 3 live wires and 1 neutral wire is connect right or not. After confirming the three phase input wire is connect right, if the fault persists, Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 19	In host mode (the host RS485 interconnection address is 1) It is Received the packets from other hosts	<ol style="list-style-type: none"> Check and confirm that only one RS485 address is host address 1 If the fault still exists after the fault is confirmed in 1, Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 20	In slave mode (when the RS485 interconnection address of the slave is greater than 1), the host cannot receive any packet from it	<ol style="list-style-type: none"> Check and confirm that the interconnection of the RS485 address should have a set to the host address 1, and all the interconnection harness connection is reliable. If the fault still exists after the fault is confirmed in 1,Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 21	The interconnection RS485 address of the machine exceeds 0-9	Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com

Error 22	The AC voltage and current sampling circuit fault, and the CT clamp's cable disconnection fault	1. If reported Error 22 and charging is stopped, it may be the voltage and current sampling circuit fault, and the internal circuit of the machine fault, which needs to be sent for after-sales repair. 2. The yellow light is blinking, the fault code Error 22 and the charging current are displayed alternately by every 5 seconds. If eliminate the CT clamp wire disconnection problem, Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 23	Smart meter, RS 485 communication loss, inter-board CAN communication loss, Linky communication loss, etc	1.Communication loss with the smart meter (RS-485), inter-board CAN, or other communication systems. Check if the communication wire is properly connected. If the connection is correct and the fault persists, it may be an internal circuit fault 2.Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 24	The temperature sampling circuit inside the machine is faulty	Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 25	The input plug temperature sampling circuit is faulty	Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 26	The ADC sampling reference voltage is faulty	Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 27	The status detection of the electronic lock at the machine is faulty	1. Check and confirm the charging cable connector should be connected tightly with the wallbox. 2. If the wallbox still cannot charge normally after the charging cable connecting the machine tightly, Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 28	In T2S mode, the CC sampling of the charging connector on machine exceeds the limiting value	Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com
Error 29	In T2S mode, the CC sampling of the charging connector on machine exceeds the limiting value seriously	Contact after-sales support for repair as an internal circuit fault is indicated. You can reach Wundercurrent customer support at +91 9313197730 or wundercurrentev@gmail.com





This product meets all the basic EU regulatory requirements relevant to it.



Refer to instruction manual



Warning: Electricity



General warning sign



Non-**switched** protective conductor.



This product meets the requirements of Protection, Class I in accordance with IEC Standard 61140.



Products marked with this symbol meet the requirements of the EU Directives restricting the use of certain hazardous substances in electrical and electronic equipment.



The surface of the charging equipment can become very hot if exposed to direct sunlight.



The charging equipment is suitable for operation up to an elevation of 2,000 metres above sea level.



This symbol indicates the lowest possible temperature in °C at which the device may be operated.



This product may not operate if used on IT or other unearthed systems such as isolated winding generators or isolating transformers



This symbol indicates that this product's protection rating meets the requirements of Protection Class IP65. This means that it is protected against dust in harmful quantities and temporary submersion in water.



Selective collection of waste electrical and electronic equipment. Electrical equipment must not be disposed of with household waste. Pursuant to European Directive 2012/19/EU on waste electrical and electronic equipment, and its transposition into national law, waste electrical equipment must be collected separately and disposed of in designated collection points. Contact the local authorities or the vendor for advice on recycling.



Made in China