

User manual

EV DC Charger

PEVC3401E



Version: V1.00

Safety and Compliance

Save these instructions. Read the manual before installation or usage of device.

- 1) Do not put tools, material or body parts into the electric vehicle connector.
- 2) Do not use the EV DC charger if the cabinet, power cord or charging cable are frayed, have broken insulation or show any other signs of damage.
- 3) Do not install or use the EV DC charger if the enclosure is broken, cracked, open or shows any other indications of damage.
- 4) The EV DC charger should be installed only by a qualified technician.
- 5) Make sure that the materials used and the installation procedures follow local building codes and safety standards.
- 6) The information provided in this manual in no way exempts the user of responsibility to follow all applicable codes or safety standards.
- 7) The manufacturer is not responsible for physical injury, damage to property or damage to equipment caused by the installation of this device.
- 8) This document provides instructions for the EV DC charger and should not be used for any other product. Before installation or use of this product, you should review this manual carefully and consult with a licensed contractor, licensed electrician or trained installation expert to make sure of compliance with local building codes and safety standards.

Warning



Hazardous voltage that gives risk of electrocution



General risk



PE

The input and output voltages of this device are high voltage, which threaten human life safety. Please strictly observe all warnings on the device and user manual. Unauthorized and non-professional service personnel are forbidden to remove the cover of this device.

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1 Product Introduction

1.1 Product Description

The EV DC Charger is the top choice for powering battery electric vehicles (BEV) and plug-in electric vehicles (PHEV) today. It is designed for quick charging in both public and private locations, such as retail and commercial parking spaces, fleet charging stations, highway service areas, workplaces, residences, etc.

1.2 Product Characteristic



4.3 Inch LCD Display

LCD screen can display the real-time charging status, including time, voltage, current, power and temperature.

Convenient operation

Customers can get the convenience of full start and stop charging control through mobile phone Bluetooth or authorized RFID smart card.

IP54

Carries an outdoor rating capability of withstanding solid and liquid intrusions in outdoor settings, making the unit more stable and highly reliable.

High intelligence

Powerful information collection, transmission and communication functions, supporting Bluetooth, Ethernet, 4G and WIFI wireless communication.

Easy to install and use

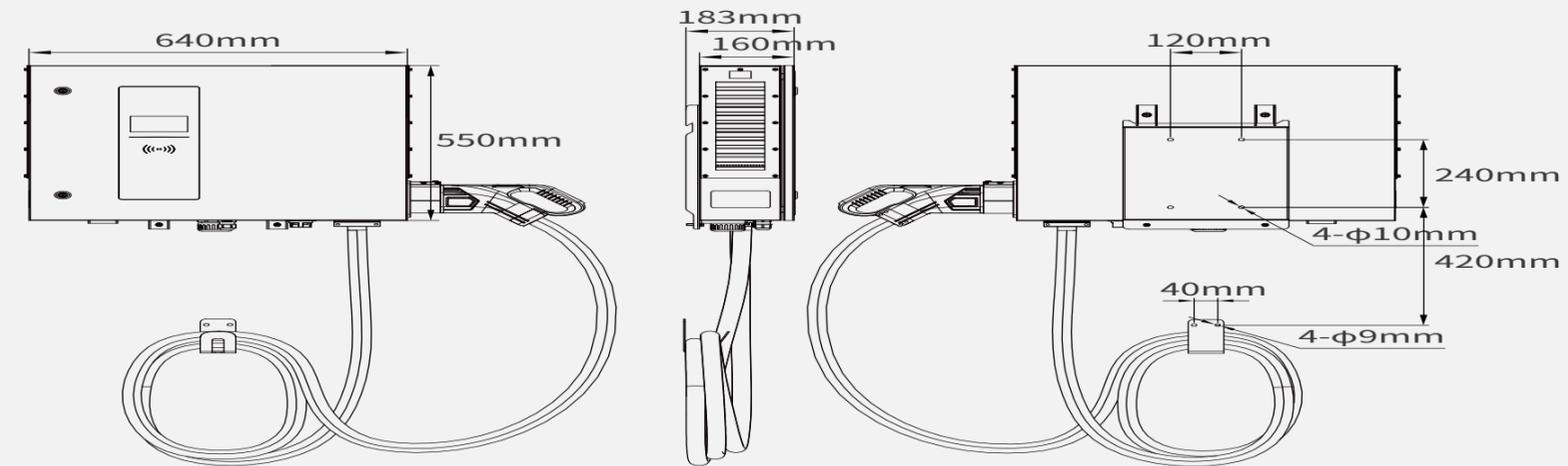
The installation process is simple, payment is convenient and fast, supports mobile application software or IC card swiping. Fully compatible with all EV in the market .

1.3 Product Technical Specifications

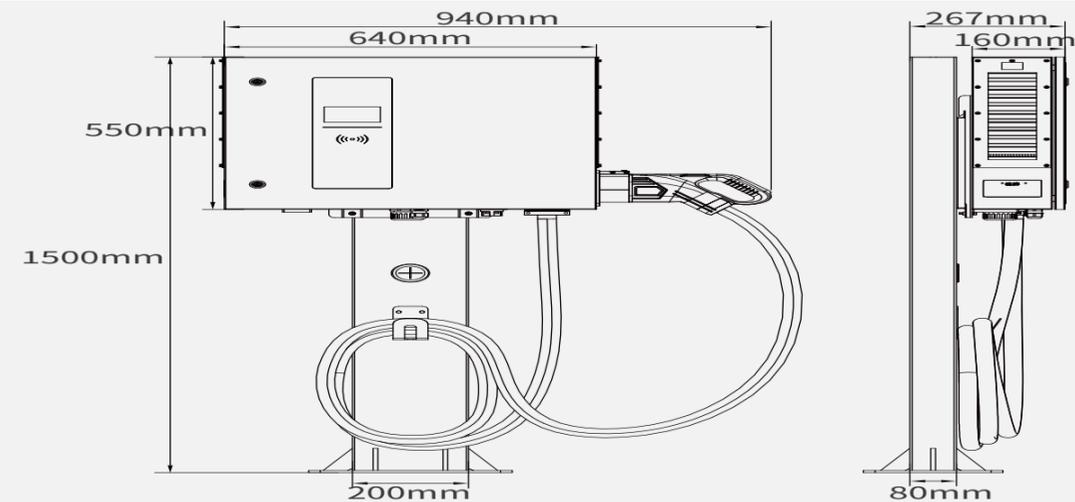
Parameter type	Description	PEVC3401E -30K1000N1	PEVC3401E -40K1000N1
Input	Power Supply	3P+N+PE	
	Rated voltage	400VAC±15%	
	Frequency	50/60Hz	
	THDi	≤5%	
	Efficiency	≥95%	
	Power Factor	≥0.98	
Output	Connector Type	CCS Combo 2	
	Voltage	150-1000VDC	
	Maximum Current	100A	125A
	Power Rating	30kW	40kW
	Voltage Accuracy	≤0.5%	
	Current Accuracy	≤±1%	
General	HMI	4.3-Inch Touchscreen	
	Payment Method	RFID Card,APP	
	Cable Length	5m	
	Network Connection	Cellular modem:GSM/3G/4G LAN:10/100 Base-T Ethernet	
	Communication Protocol	OCPP 1.6J	
	Operating Noise Level	≤60dBA	
	Ingress Protection(IP/IK rating)	IP54	
	Power Meter	Accuracy Class 1.0 energy meter	
	Enclosure	Galvanized steel	
	Place of Installation	Indoor / Outdoor	
	Product Dimension(W*D*H)	650*160*550mm	
	Package Dimension(W*D*H)	750*330*750mm	
	Protection	Over Current,Under Voltage,Over Voltage,Short Circuit,Residual Current,Surge Protection,Over Temperature,Ground Protection	
Certification Standard	EN/IEC 61851-1,EN/IEC 61851-23,EN/IEC 61851-24,IEC62196-1,IEC62106-3		
Environmental	Operating temperature	-30°C~+50°C	
	Storage temperature	-40°C~+75°C	
	Maximum Installation Height	≤2000m	
	Operating Humidity	5%~95% RH	

1.4 External Structure

Wall Mounting



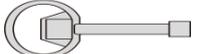
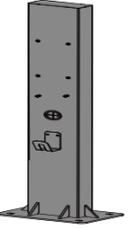
Column Mounting



1.5 Package Contents

Unpack the product. Please check and verify following items after receiving the charger :

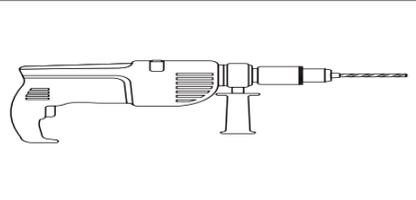
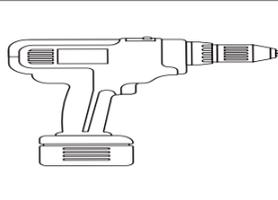
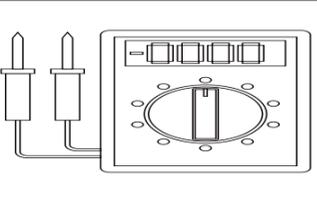
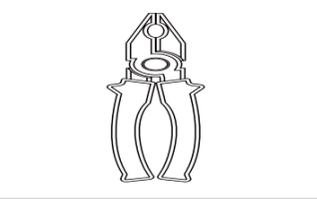
- 1) Visual inspection on charger's external appearance. If there is any break age or other damage, please notify the seller immediately.
- 2) Check type and quantity of all accessories as follows. If there is a shortage in the quantity of any items or if any items are missing, please contact the seller at once.

General parts				
				
User manual (x1)	RFID card (x2)	Certificate (x1)		
				
Bracket (x1)	Key (x2)	Ring terminal SC16-6(x2)	Clod-pressed terminal VE25-16(x6)	
Wall Mounting		Column Mounting		
				
Hook (x1)	Expansion bolt M8×70 (x6)	Combination screw M8×20 (x4)	Expansion bolt M12×100 (x4)	Column (x1)

2 Installation Instruction

2.1 Installation Preparation

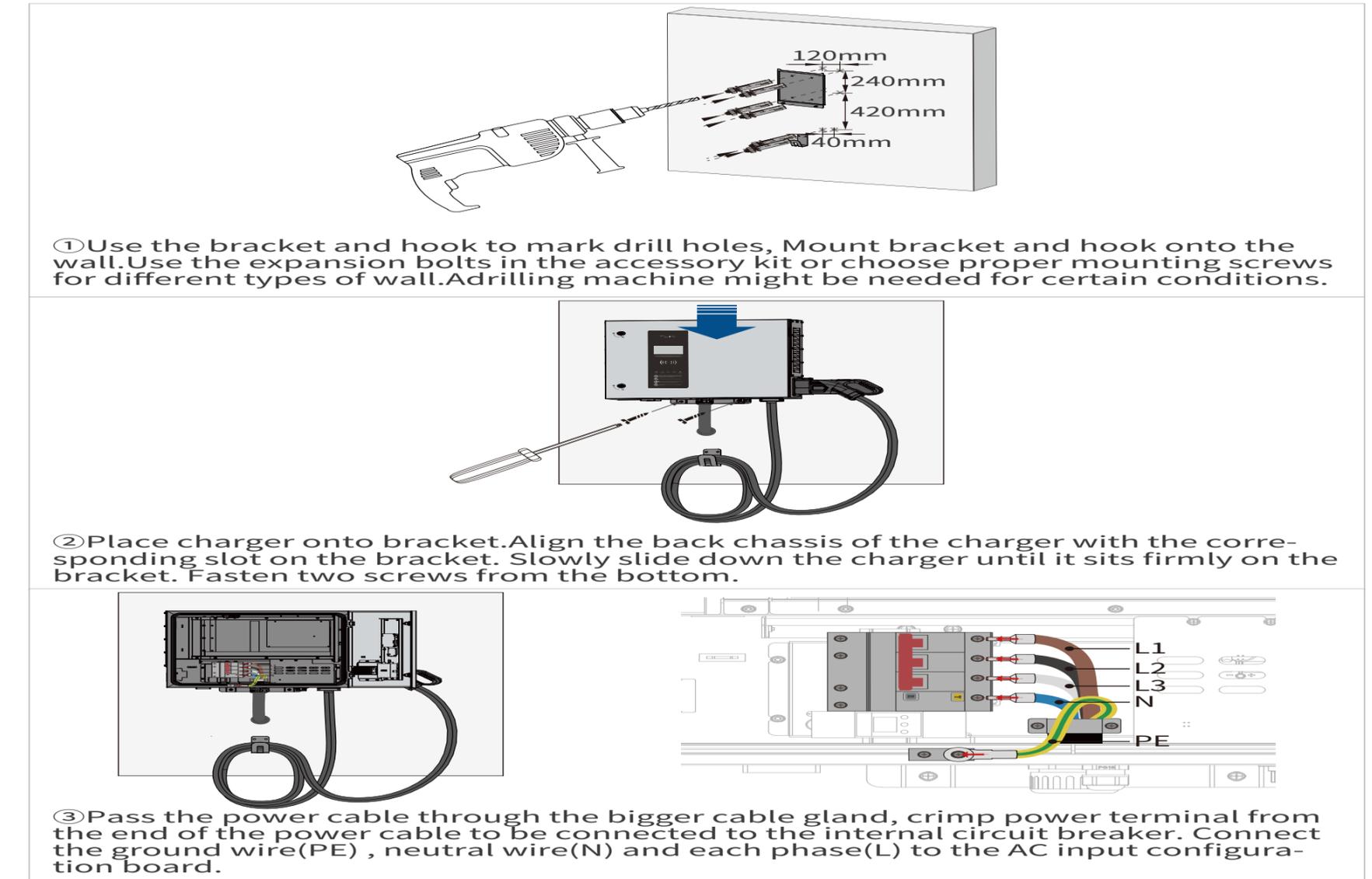
Please prepare the following tools before installation :

			
Hammer drill and drill bit(φ22mm, 7/8 inch)	Electric drill	Multimeter	Hammer
			
Phillips screwdriver M4(length)<100	Adjustable wrench	Diagonal Pliers	Measuring tape (5m)

⚠ Installation Notice

- Electrical devices should only be installed, operated, and maintained by qualified technician. No responsibility is assumed by the manufacturer for any consequences arising out of the use of this device.
- When installing wires, do not turn on the power supply.
- The length of the power cable and communication cable should be properly reserved to facilitate installation and connection.
- Pay attention to protect the charger enclosure during installation to prevent bumping, scratching the surface, etc.
- The charger must be installed vertically, and the deviation of any direction from the vertical position should not exceed 5°.

2.2 Wall Mounting Process

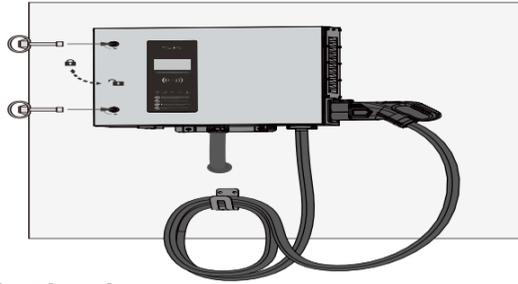


① Use the bracket and hook to mark drill holes, Mount bracket and hook onto the wall. Use the expansion bolts in the accessory kit or choose proper mounting screws for different types of wall. A drilling machine might be needed for certain conditions.

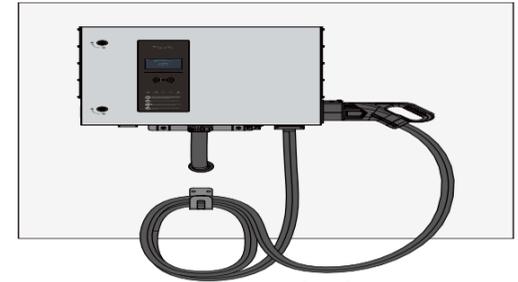
② Place charger onto bracket. Align the back chassis of the charger with the corresponding slot on the bracket. Slowly slide down the charger until it sits firmly on the bracket. Fasten two screws from the bottom.

③ Pass the power cable through the bigger cable gland, crimp power terminal from the end of the power cable to be connected to the internal circuit breaker. Connect the ground wire(PE) , neutral wire(N) and each phase(L) to the AC input configuration board.

2.2 Wall Mounting Process



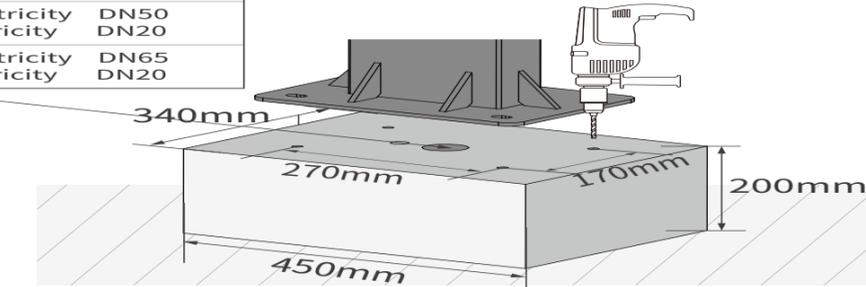
④ Lock the charger cover with the key.



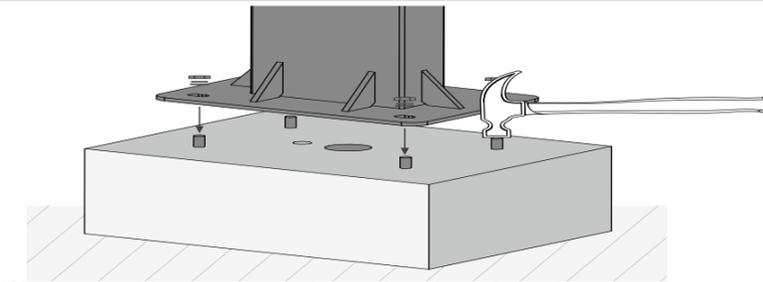
⑤ Complete installation and start to test and charge.

2.3 Column Mounting Process

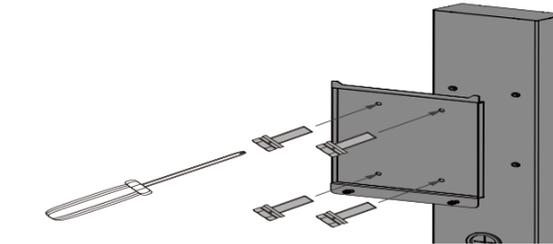
Power	PVC size	
20-30kW	Strong Electricity	DN50
	Weak Electricity	DN20
40kW	Strong Electricity	DN65
	Weak Electricity	DN20



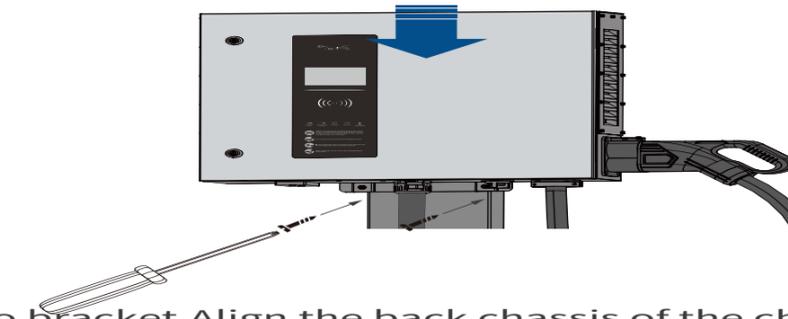
① Make concrete platform, mark the holes position of installation column and drill holes.



② Install expansion bolts in the base mounting holes. Fix the column on the concrete platform with expansion bolts(x4).

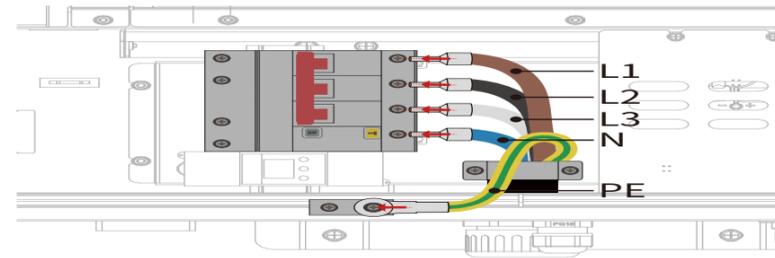


③ Install the bracket on the column.



④ Place charger onto bracket. Align the back chassis of the charger with the corresponding slot on the bracket. Slowly slide down the charger until it sits firmly on the bracket. Fasten two screws from the bottom.

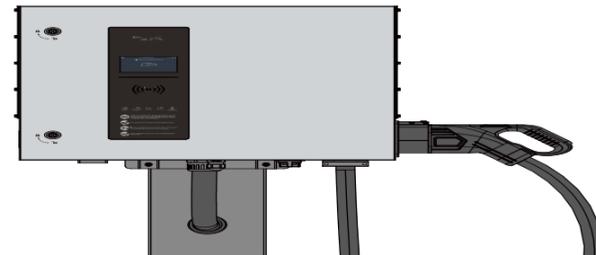
2.3 Column Mounting Process



⑤ Pass the power cable through the bigger cable gland, crimp power terminal from the end of the power cable to be connected to the internal circuit breaker. Connect the ground wire(PE) , neutral wire(N) and each phase(L) to the AC input configuration board.



⑥ Lock the charger cover with the key.



⑦ Complete installation and start to test and charge.

3 Configuration and Operation

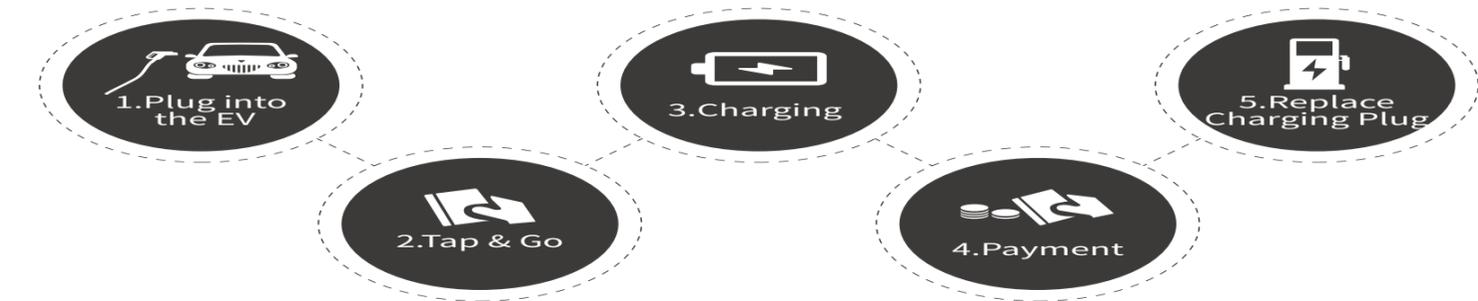
3.1 Power-on Checking

Please check / re-check the following items prior to initial Power-on :

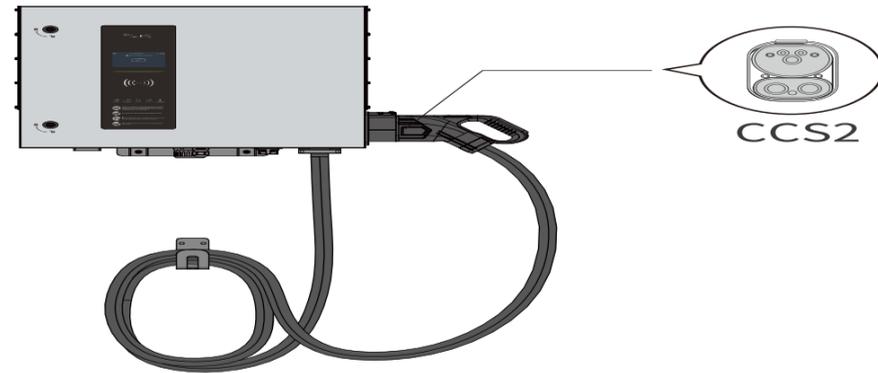
- 1) The location of the charger should be convenient for operational and maintenance.
- 2) Before installation of the charger, ensure that the AC input component in the power supply is properly installed with the required protection.
- 3) Double confirm the charger is installed properly.
- 4) No components or other items have been left inside of the charger.

3.2 Start and stop charging station by your charge card

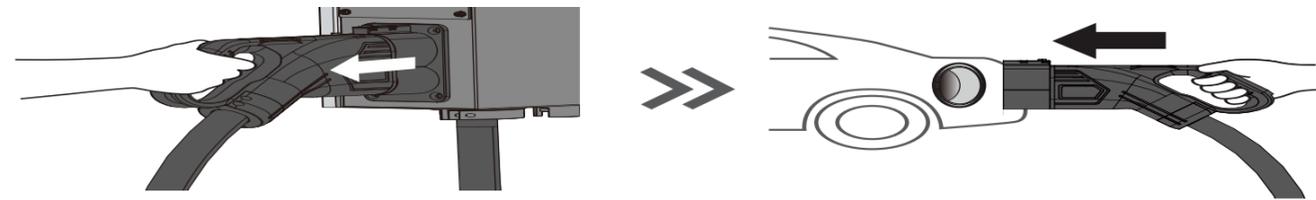
Operation



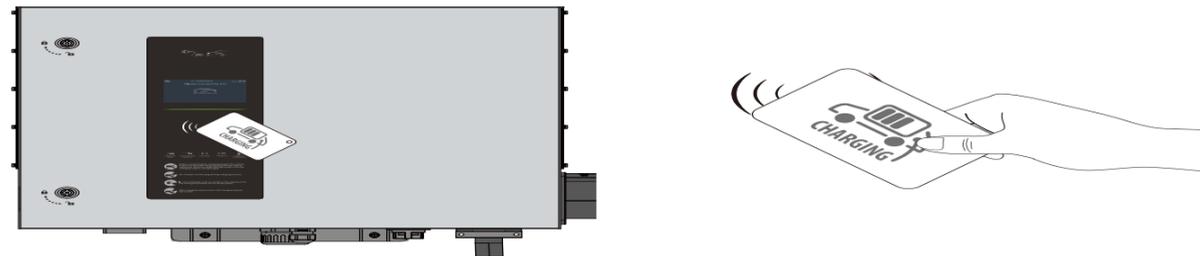
1) Choose a compatible plug (CCS).



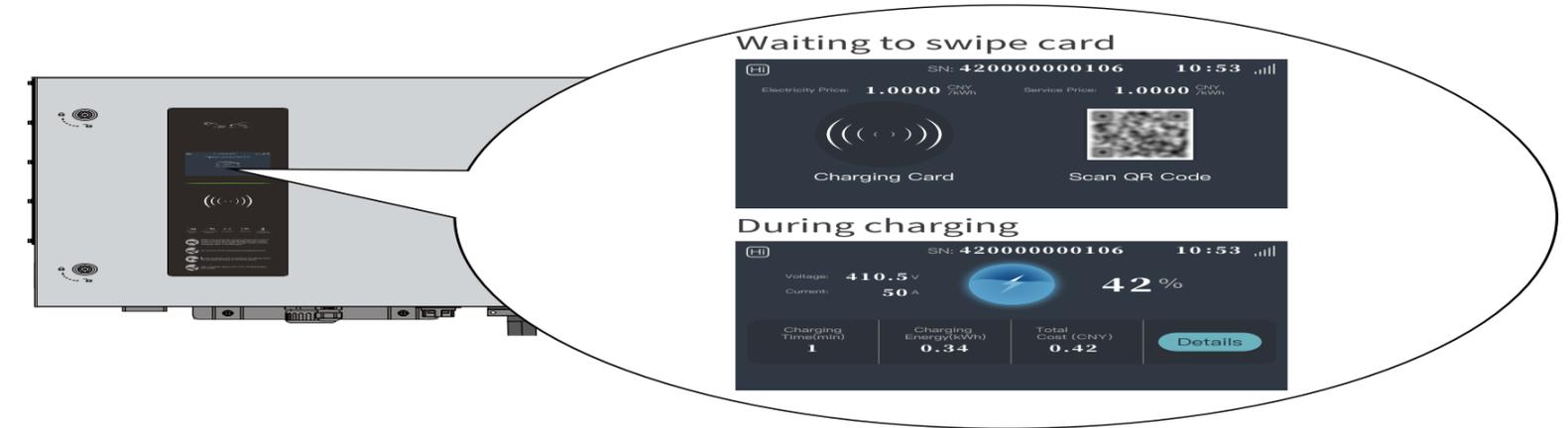
2) Connect the plug to the EV.



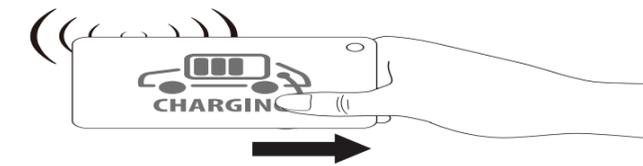
3) Swipe the authorized RFID card to start charging. The authorized RFID can be used directly without any activation or setting.



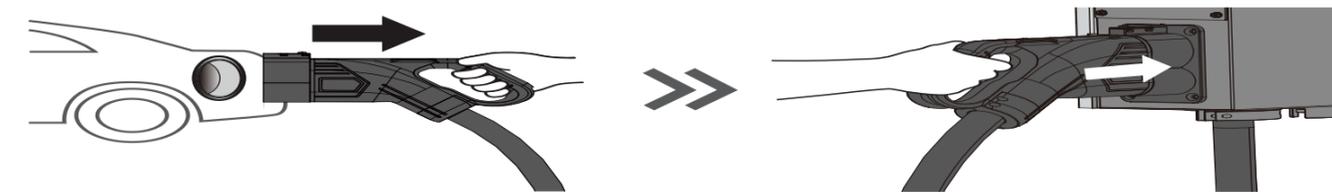
4) Once charging commences, status information is displayed on the screen. The following illustrations demonstrate the start to near complete charging procedure.



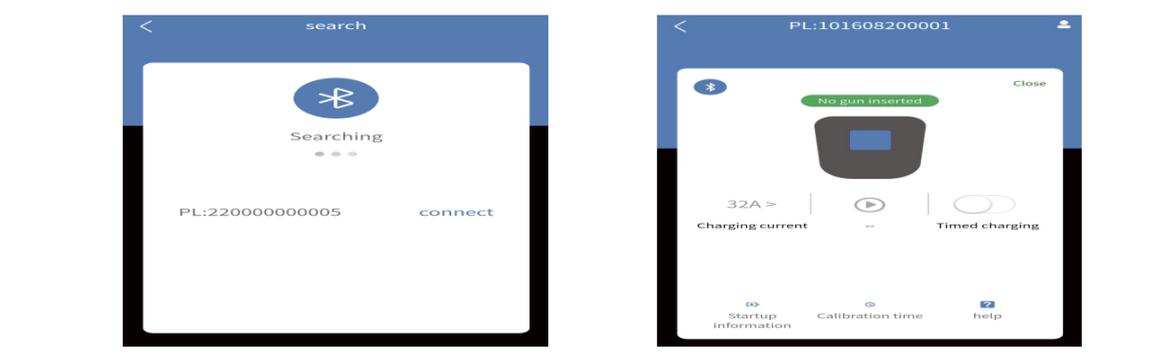
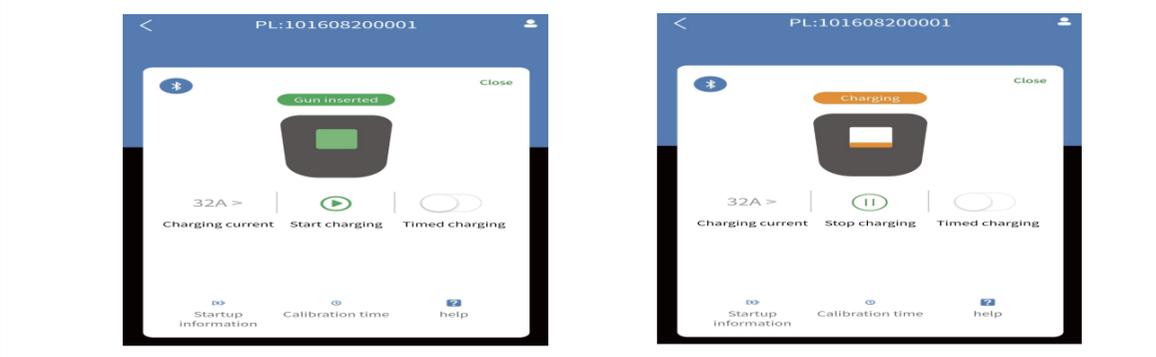
5) Swipe the authorized RFID card to stop.

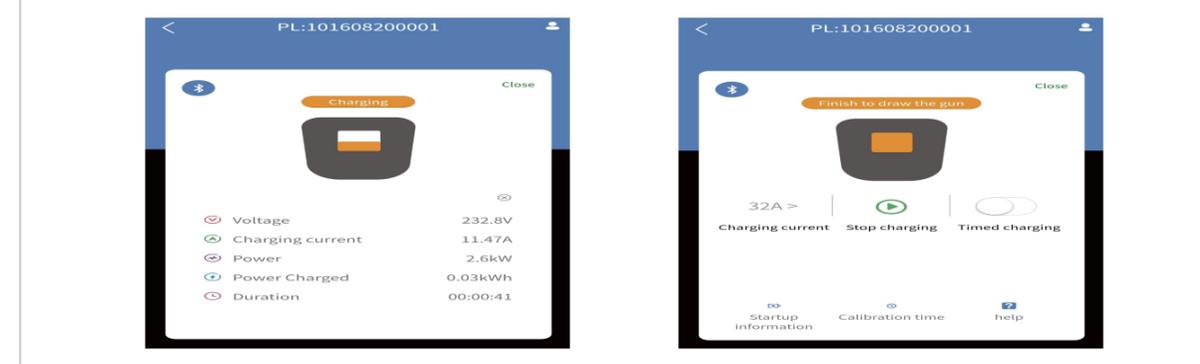


6) Return the plug to the holder.



3.3 Start and stop charging station by APP(Bluetooth)

	<p>Step 1 Download the APP “SINO ENERGY” from APP store, Download the APP “SINO” from Google play.</p> <p>Step 2 Turn on the phone's bluetooth. Click the Add new device icon to enter the search page. If you have used it before, you can click the head directly to select the device to connect.</p>
	<p>Step 3 After entering the search page, find the available Bluetooth devices, and then click connect icon.</p> <p>Step 4 If the connection is successful, it will return to the home page to display the charging information.</p>
	<p>Step 5 Connect your EV car with the charger gun.</p> <p>Step 6 Click the start charging icon and start charging.</p>

	<p>Step 7 Click the startup information icon, can display real-time charging information.</p> <p>Step 8 Click the stop charging icon will stop charging, then unplug the gun to complete the charging.</p>
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4 Indication and Fault

4.1 Indicator Status

	LED Light Status	Description of Charging status
	Green light on	The Charger is power on.
	Yellow light on	The charger is working for EV.
	Red light on	Failure or alarm status, unable to charge.

4.2 Fault Code and Resolution(LCD display)

Fault Code	Fault Status	Troubleshooting suggestion
01	RTC fault	Please contact aftersales service.
02	Card reader fault	Check whether the connecting cable of the card reader is loose.
03	SPD fault	Check whether the SPD is abnormal.
04	EPO fault	Reset emergency stop button.
05	Over voltage alarm	Check whether the input voltage of the equipment is too high.
06	Under voltage alarm	Check whether the input voltage of the equipment is too low.
07	FRAM fault	Please contact aftersales service.
08	Flash fault	Please contact aftersales service.
10	Lean alarm	Place the charging point vertically.
11	DC meter fault	Check whether the meter connecting wire is loose.
13	Over temperature alarm	Stop using for a period of time and wait for the equipment to return to the normal temperature range and restart.
14	Module Comm fault	Communication with the AC/DC module is broken.
15	Guard alarm	The equipment access door is opened.

5 Warranty and Service

5.1 Customer Service

We can provide customers with professional product advice and purchase options. All emails will be responded within 48 hours during working days. We provide online customer service in multiple languages. You can communicate with ease, or contact us through email anytime.

5.2 After service

The warranty of all our products is two years. The specific after-sale plan will be free for replacement or charging a certain maintenance cost according to the specific situations. During the warranty period, customers can apply for replacement or free maintenance for the fault damage caused by product quality. For the fault damage caused by other reasons (human factors, natural factors, etc.), we will provide paid maintenance services.