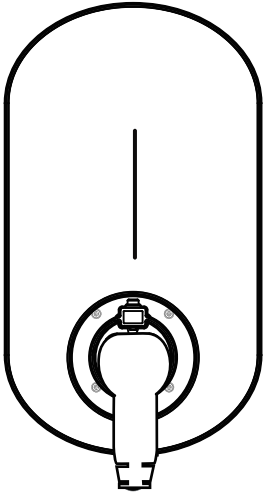
EVMATE

Install Manual



GREEN ESS™

Catalog

01 Foreword

Thank you for using our EVMATE Charger. In order to guide the relevant users in using our charger products, this User's Manual is hereby formulated. This Manual introduces the composition, installation, debugging, daily operation and maintenance of charging system, as well as the emergency handling of troubles thereof.

02 About this Manual

2.1 Manual Description

Without written permission from us, neither entity nor individual shall extract or copy any part or all of this Manual (software, and etc.), or disseminate it in any form (including materials and publications).
All right reserved, no infringement allowed. The contents hereof are subject to change without prior notice.
Due to product upgrading or other reasons, the contents of this Document may be updated irregularly. Unless otherwise agreed, this Document is for reference only, and all statements, information, and recommendations in this Document do not constitute any express or implicit warranty.
This Document describes the product introduction, component introduction, installation, debugging, system maintenance, and other operations of DC charger system.
The images in this Document are for reference only, and the specific structure is subject to the actual product.

2.2 Installation Notice

From the perspective of professionalism, safety and reliability, the AC charger must be installed by electrical professionals certified by competent authorities. in order to correctly and quickly install the DC charger and have the ability to troubleshoot it and set up a communication system, the installer must read this manual carefully before installation and operation. In case of any problem during the installation process, the installation personnel may log onto our website to leave a message or call our round-the-clock service hotline

2.3 Safety Precautions

Do not place imflammable, explosive, or flammable materials, chemicals or vapors, or other hazardous materials near the charger;
Please keep the charging gun head clean and dry. In case there is any dirt, please wipe it with clean dry cloth. It is strictly prohibited to touch the charging gun core with your hands when it is electrically charged;
It is strictly prohibited to use the charger when there is any defect, crack, wear, crack or exposed charging cable in the charging gun or charging cable. In case any defect is found, please contact the staff in a timely manner;
Do not attempt to disassemble, repair, or modify the charger. In case there is a need for repair or modification, please contact the staff. Improper operation may cause damage, water leakage, electric leakage, and other situations;
It is strictly prohibited to plug and unplug the charging gun during the charging process, so as to ensure the personal safety and vehicle safety during the charging process;
In case of rain or thunder, please charge your vehicle with caution;
Please prevent children from approaching or using the charger during the charging process, so as to avoid personal injury;
Please close the charging station door during the charging process, so as to avoid electric shock;
Please charge the vehicle only after making sure that it is powered off;

Warning

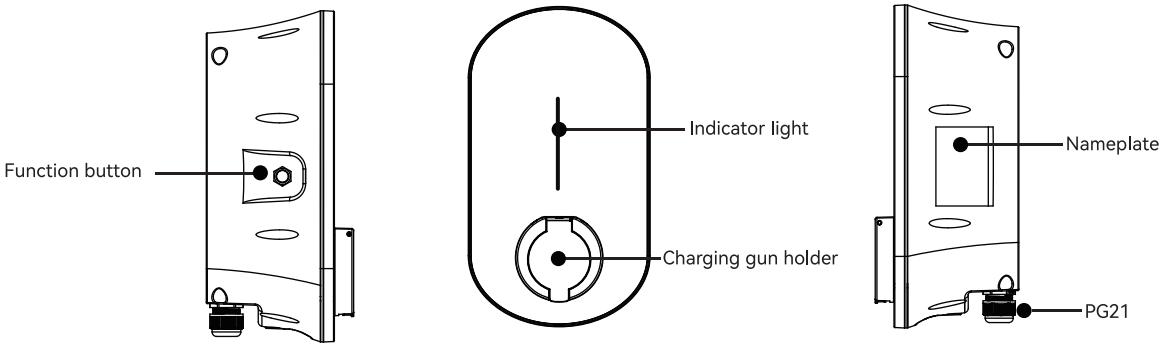
The input and output voltages of this equipment are dangerous high voltages that endanger human life. Therefore, please strictly follow all warnings and operating instructions on the machine and in the manual when you perform all work related to this equipment. Do not remove the cabinet outer housing of this equipment unless authorized professional maintenance personnel.

2.4 Safety Symbol

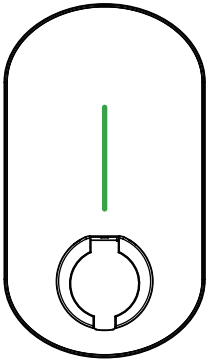
Signs	Meaning	Signs	Meaning
	Electric shock hazard! DC charger should be installed and maintained by professional technicians.		DC voltage output (DC)
	Mind the Fire		AC voltage output (AC)
	Caution Hot! Do not touch the surface of the equipment while it is in operation.		Please read the manual
	Pay attention to grounding. To protect safety and prevent electric shock, please connect the ground wire.		After the charger reaches the end of life, it must be disposed of by a professional organization and cannot be thrown into the trash can.

03 User Interface

3.1 Charging Function

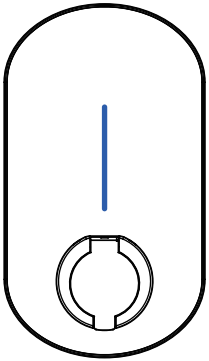


3.2 Indicator Light



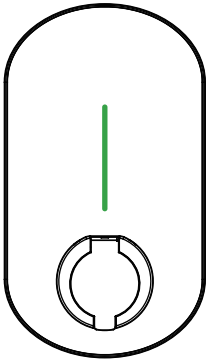
Green single flash

The charging pile is idle.



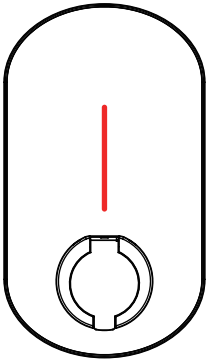
Blue light

Seeking WiFi/Blutooth.



Green double flash

Charging in progress.



Red indicator light

The charger is faulty.

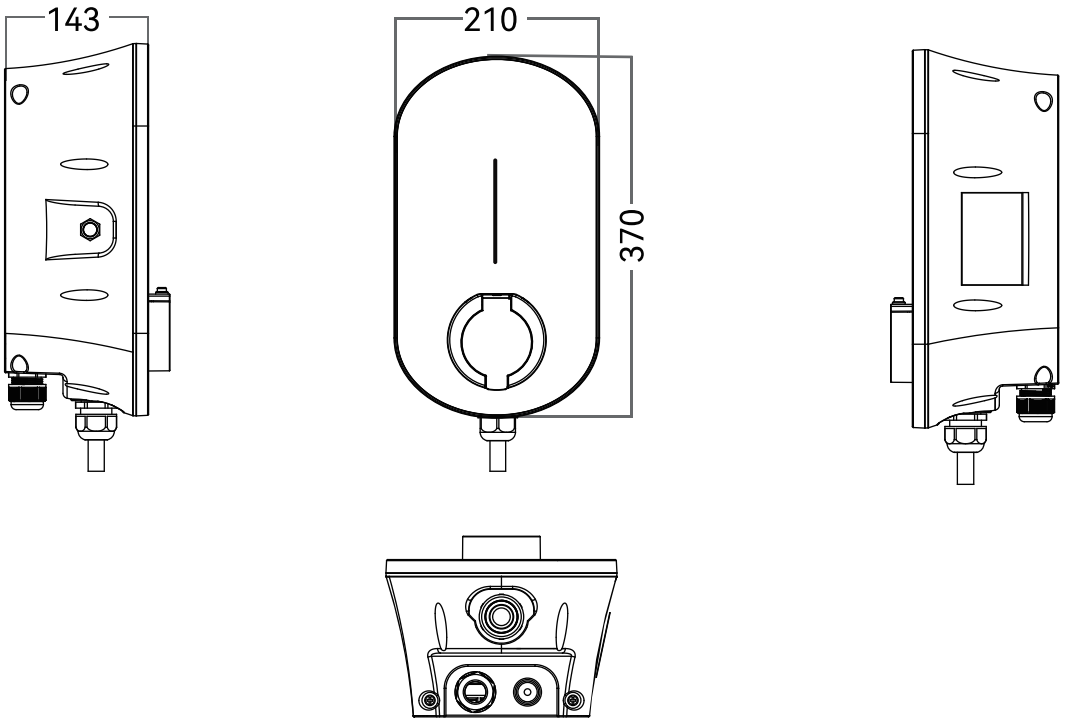
3.3 Packing List

	Product Name	Quantity
	AC Charger	1
	M5 x4 Screw	4

	Product Name	Quantity
	M6.0 x 40 Self Tapping Screws	4
	Wall Plug	4

04 Structure

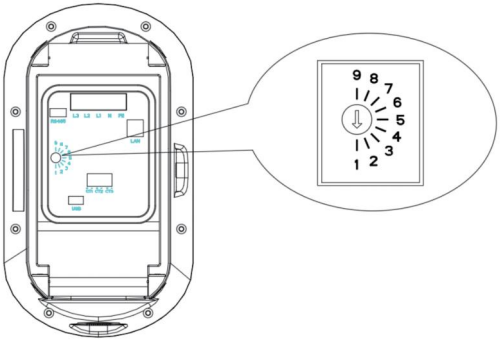
4.1 Structure Drawing



(Unit: mm)

4.2 Maximum Output Current

To serve installations which do not have a suitable supply capacity to enable the Incorporation of a charging system operating at 32A, the AC charger can support different values of maximum output current through the setting of an integral rotary switch.



Settings are detailed in the table below.

Before setting the rotary switch, ensure that the power supply to the charger has been isolated.

	Switch Setting Number	1	2	3	4	5	6	7	8	9
EVMATE7	7.4kW Maximum Output Current	13A	16A	20A	22A	24A	26A	28A	30A	32A
EVMATE11	11kW Maximum Output Current	6A	8A	10A	11A	12A	13A	14A	15A	16A
EVMATE22	22kW Maximum Output Current	13A	16A	20A	22A	24A	26A	28A	30A	32A

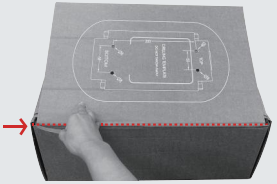
4.3 Unpacking

1

Step 1

Check the appearance of the package whether there is water damage, packaging damage, if there is damage please contact customer service.

2



Tear from left to right

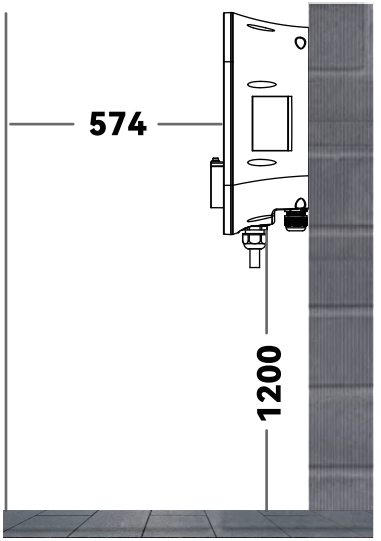
Step 2

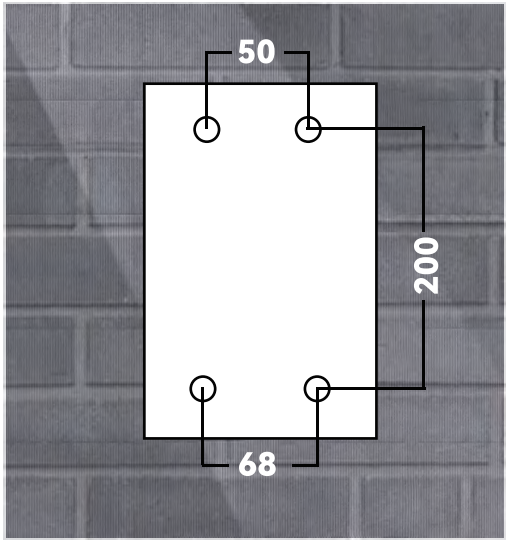
Remove perforated positioning board from packaging.

4.4 Installation of Structure

Step I

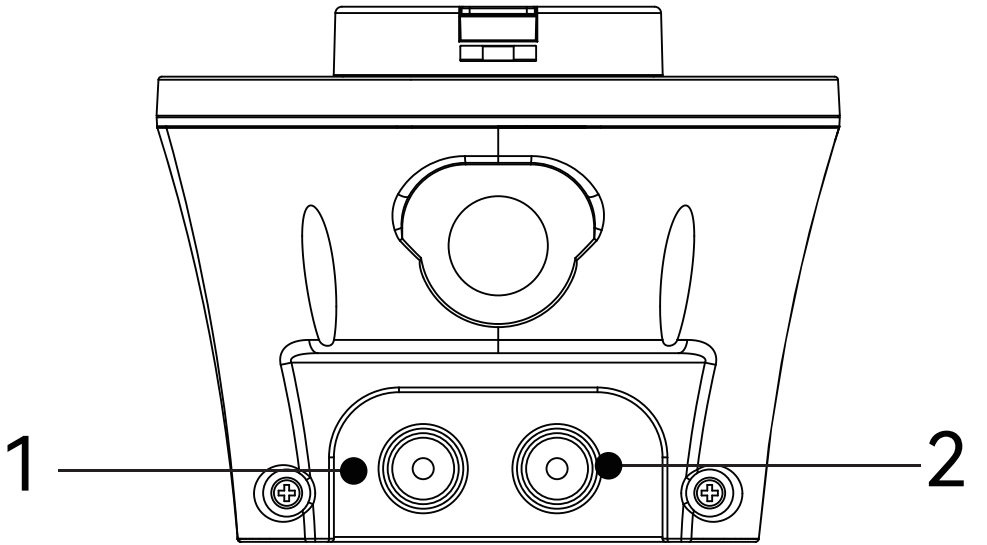
- Remove the locating cardboard from the packaging carton.
- Based on the size of the locating cardboard, drill a fixing hole with a diameter of 8mm, knock in the expansion plug: D8*40, align the base and the hole, and fix it with self-tapping screws M6*40.
- The installation location requires a vertical plane, an open space, and the distance from the ground and parking space dimensions as shown in the figure. (Unit: mm)





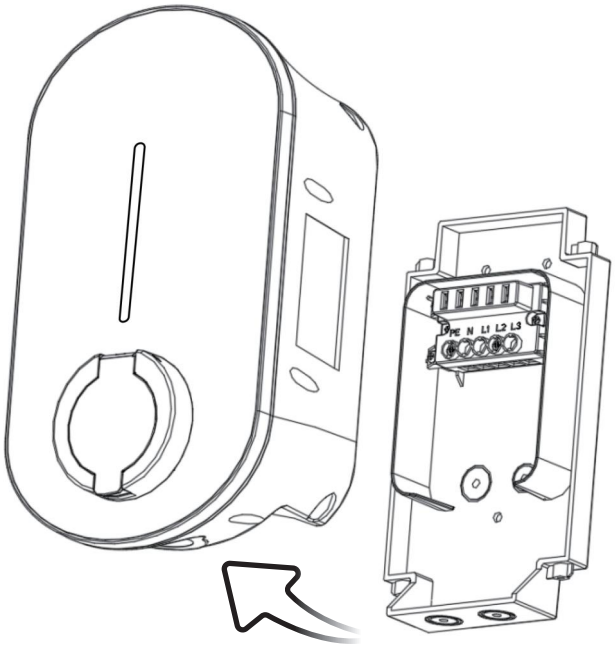
Step II

- Resere two Φ25 hole marks on the installation base.
- Connect the input power cable and use a metal hole opener to open hole No. 1.
- Hole No. 2 is a spare hole for connecting the AC transformer and network cable. If necessar, drill a hole from this position for connection.



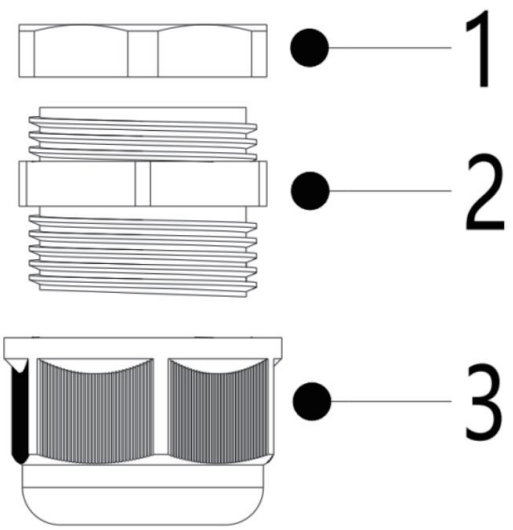
Step III

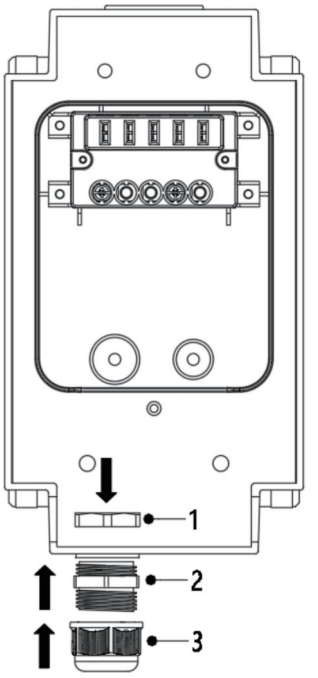
- The direction of the installation arrow is the direction of separation between the housing and the installation base.



Step IV

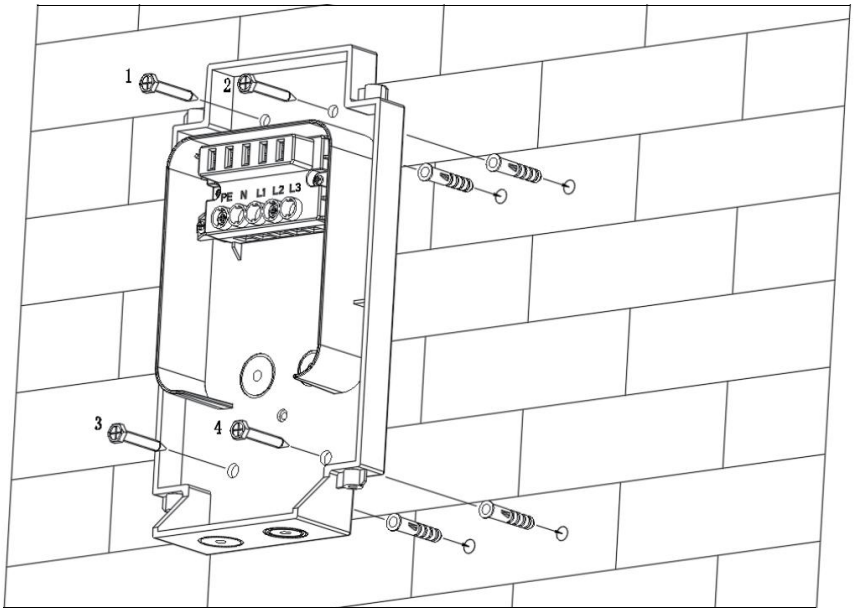
- Install an M25 waterproof lock on the hole opened in the installation base, which can lock wires with a diameter of 13-18mm.
- Mark 1 is the internal locking ring of the AC pile
- Mark 2 is a through-hole threaded ring
- Mark 3 is the external locking ring of the AC pile
- Install the M25 waterproof lock as shown in the figure





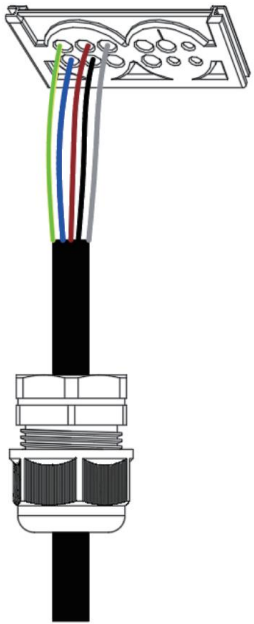
Step V

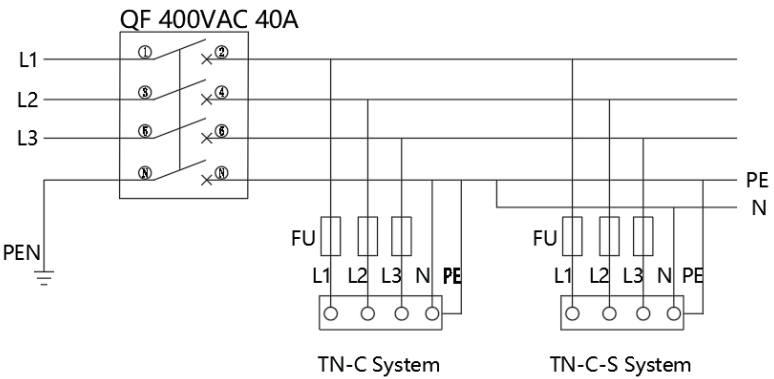
- Insert Wall Plug*4 into the drilled mounting holes first, making sure that the Wall Plugs are fully inserted into the mounting holes.
- Align the mounting holes of the mounting base, first use No. 1 screws and No. 4 screws to fix them, and then install the remaining screws in sequence. There is no need to tighten the screws during this process, and finally tighten all screws uniformly.



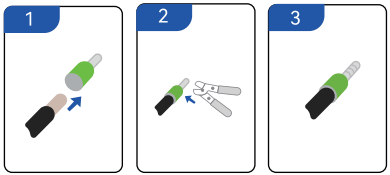
Step VI

- The charger grid system must adopt TN-C system.
- A type 40A leakage protection switch needs to be installed at the upstream end of the charger.
- The reserved hole of the dust cover is not conductive, and the corresponding hole needs to be poked
- open under the condition of how many cables are connected
- The rated power and current of the charger, the power supply cable must be permanently connected to the existing building facilities and comply with local national laws and regulations, and the rated input current must be selected to match the input fuse.

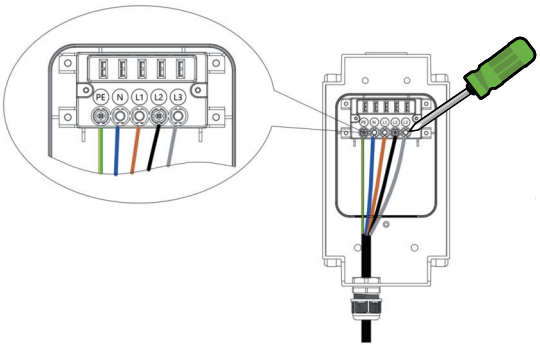




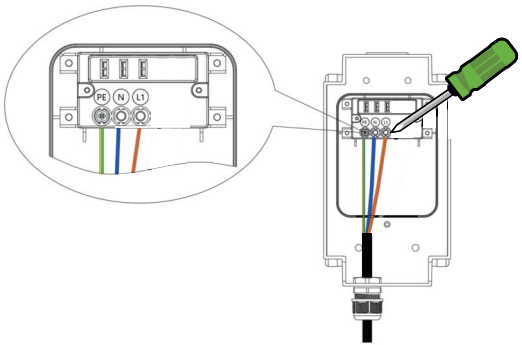
- As shown in the fgure, there are 5 terminal blocks from left to right, namely PE, N, L1, L2, and L3. Single-phase circuits can be connected to PE, N, and L1.
- We recommend using cables larger than 6mm². The equipment should be connected to a grounded fxing metal wiring system, or the equipment grounding conductor should operate together with the circuit conductor and be connected to the charger.
- The screw fxing torque is 3.0Nm.ounding terminal or equipment wire.



EVMATE7	7.4kW 230VAC(1P+N+PE)		6mm² or 9AWG
EVMATE11	11KW 400VAC(3P+N+PE)		4mm² or 11AWG



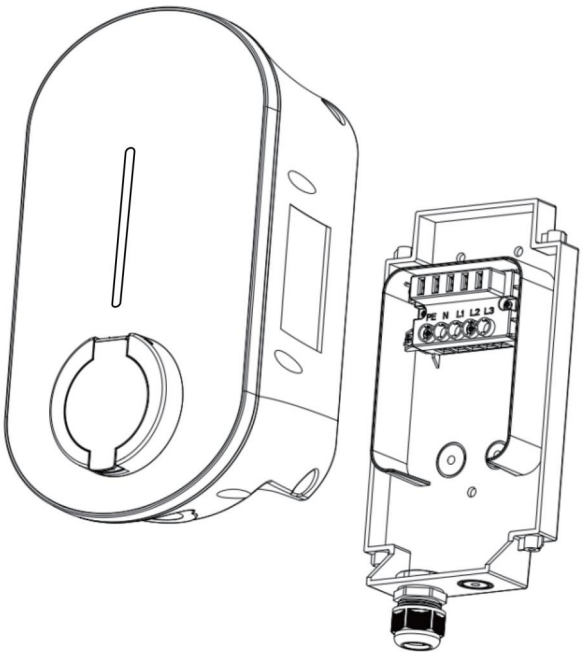
Three Three-phase wiring diagram



Single Single-phase wiring diagram

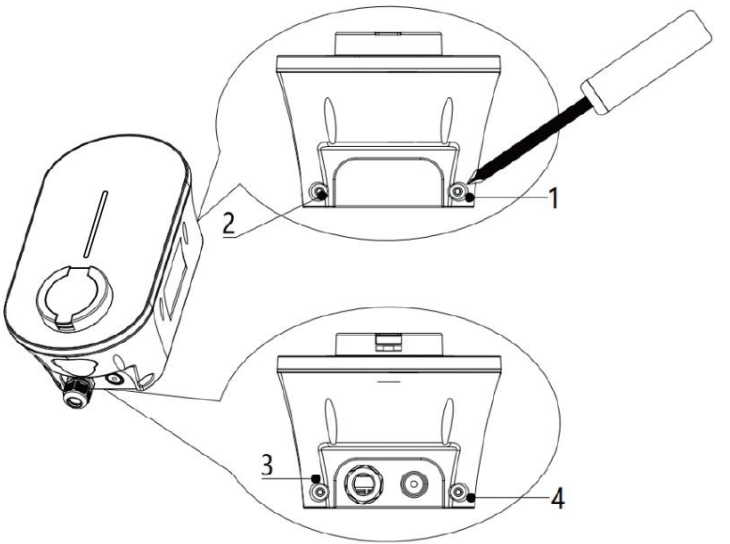
Step VII

- After connecting the power cable, check that there are no foreign objects in the base and fix the housing to the installation base in the direction of the arrow.



Step VIII

- When the base is fully secured to the base.
- According to the direction marked by the numbers, align the screw holes of the housing and the base, and fix them with 4 cross spherical column head screws M5*10.
- During operation, protect the charger to avoid scratches.
- During operation, protect the charger to avoid scratches. Pay special attention to damage to operating tools



05 How to Operate the Charger

It is advised to operate and monitor the charger via iGE APP.

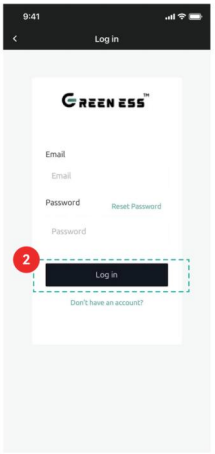
For more APP and charger information, visit www.greeness.com.au

By default, charging process starts once the gun is pluged in the vehicle.

Android

iOS

Lauch the iGE and log in with your iGE account



Bind a EV Mate

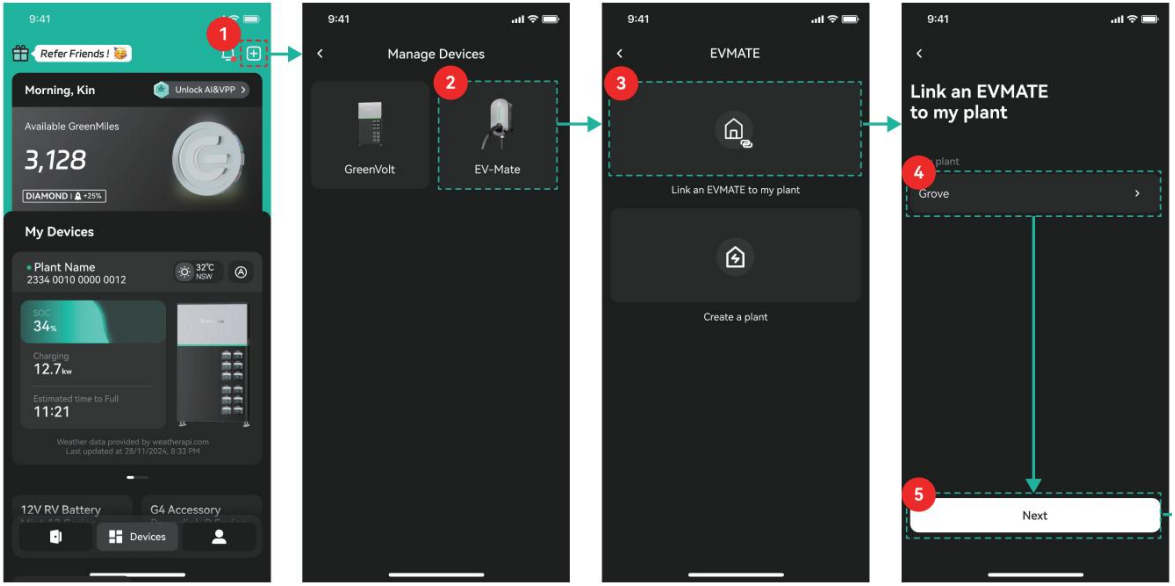
(1) Go to the page of Device, click "+" to enter the page of Manage Device.

(2) Click EV-Mate.

(3) Click Link an EVMATE to my plant.

(4) Click My Plant, select the plant (supports multiple EVMates).

(5) If no plant exists, you'll be directed to Create Plant.

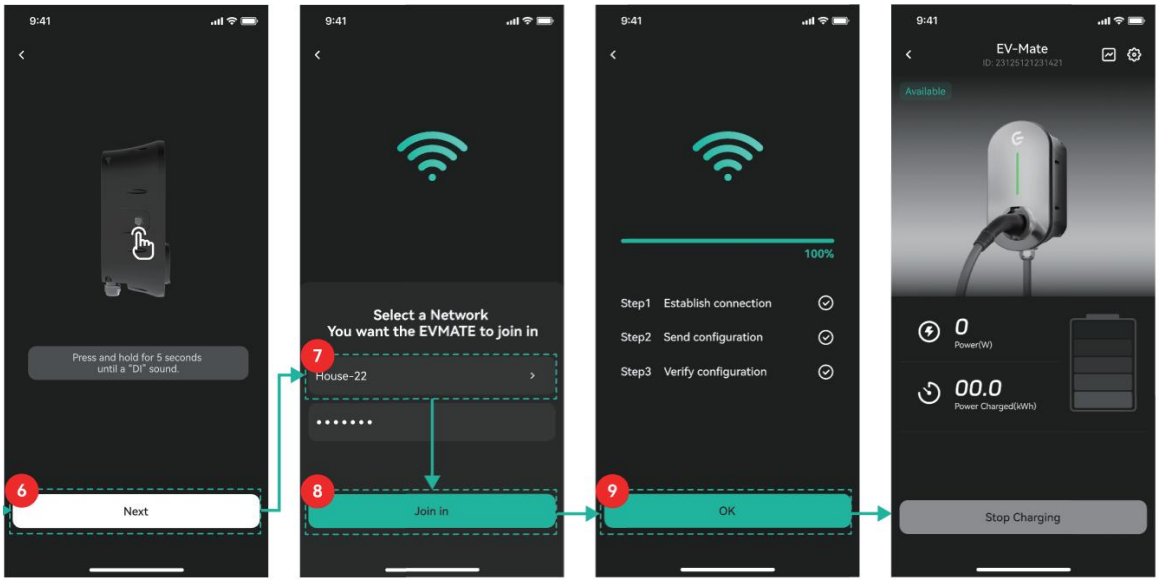


(6) Press and hold EVMate's left button for 5 seconds until a beep is heard, then click Next.

(7) Select Wi-Fi SSID and enter its password.

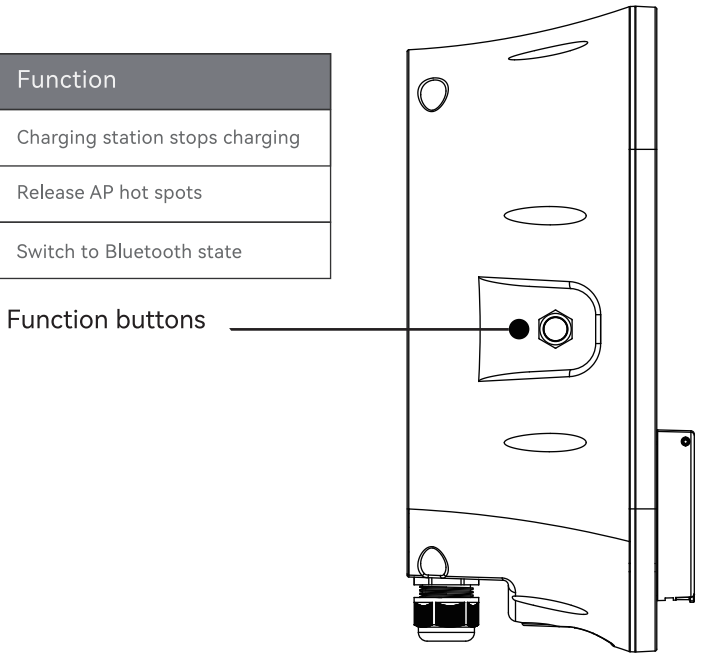
(8) Click Join in.

(9) After all tasks are ticked ok, Click OK to return the page of EV Mate.



Button Control Functions

	Operation	Function
1	Touch the button	Charging station stops charging
2	Press three times consecutively	Release AP hot spots
3	Press and hold for 10s	Switch to Bluetooth state



06 Trouble-shooting and Maintenance

	Possible reason	Measures
LED light is not on	Unable to supply power	Check whether the power cable is connected properly
Unable to start charging function	The charging gun is not inserted correctly	Re-plug the charging gun and confirm that the gun is connected successfully.
	There may be foreign matter or damage in the interface of the charging gun.	Clean or replace the charging gun
LED light is on with red	Network exception	Reconfigure the network
	The charging gun is improperly connected to the vehicle socket	Cut off the power supply, unplug the charging gun, re-insert the charging gun into the vehicle socket, and turn on the power supply again.
	Damaged	Please contact the merchant
Protective measures	Overcurrent protection/over/undervoltage protection/short circuit protection/ Leakage protection/ground protec-tion/molded case damaged	Check in turn according to the cause. After troubleshooting, power on again or replace the molded case switch.

The indicator light is abnormal	The light panel is damaged or the cable connection is abnormal.	Check the cable connection or replace the light board
No feedback after inserting the gun	Charging gun CP signal line is disconnected	Check CP signal cable wiring
Unknown fault	—— —— ——	Please contact the manufacturer after-sales service center in time

Equipment Maintenance

Carry out the following inspections on the equipment regularly

- Carry out the following inspections on the equipment regularly:
- Check whether the cables are heated or damaged, and whether the connections are tight and not loose.
- Check whether the action button works normally. After pressing it, confirm whether the control circuit operates.
- Check that all lights are working properly.
- Check whether the internal component connections are secure.
- Check whether the charging gun fixing buckle is damaged and whether the connection is abnormal.

To remove dust and dirt, the charger enclosure can be cleaned using a soft damp cloth.
Fit the weatherproof cap on the vehicle charge connector after every use. This will greatly assist in preventing the buildup of unwanted dirt and debris on the charging contacts, thus reducing the risk of poor electrical connection which could result in premature failure of the device.
Note that should it become necessary to clean the electrical contacts of the vehicle charge connector, a suitable non-conductive electrical contact cleaner must be utilized. The power supply to the charger must be suitably isolated before carrying out this procedure.
Adaptors or conversion adapters are not allowed to be used.
Cord extension sets are not allowed to be used.
The lowest point of the vehicle connector when stored shall be located at a height between 0,5 m and 1,5 m above ground level.（only cable version）.

- Always maintain a clean and clear area within the local vicinity of the charger.

07 Product Parameter

SN	Items			
1	Model	EVMATE7 EVMATE7N	EVMATE11 EVMATE11N	EVMATE22 EVMATE22N
2	Input voltage	230VAC±15%	400VAC±15%	400VAC±15%
3	Rated input voltage	230VAC	400VAC	400VAC
4	Rated input current	32A	16A	32A
5	Input frequency	50Hz	50Hz	50Hz
6	Rated output power	7kW	11kW	22kW
	Rated output current DIANLIUDIANL	32A	16A	32A
7	Output current range	6-32A	6-16A	6-32A
8	Metering accuracy	1.0	1.0	1.0
9	Pulse constant	3000imp/kWh	3000imp/kWh	3000imp/kWh
10	Leakage protection	RCD 30mA AC + >6mA DC	RCD 30mA AC + >6mA DC	RCD 30mA AC + >6mA DC
11	Standby power consumption	＜5W	＜5W	＜5W

12	Material of housing	PC+ABS	PC+ABS	PC+ABS
13	Housing size	210*143*370mm（H*W*L)	210*143*370mm（H*W*L)	210*143*370mm（H*W*L)
14	IP grade	IP55/IK08	IP55/IK08	IP55/IK08
15	Operating temperature	-30℃ to +55℃	-30℃ to +55℃	-30℃ to +55℃
16	Storage temperature	-42℃ to +70℃	-42℃ to +70℃	-42℃ to +70℃
17	Altitude	≤2000m	≤2000m	≤2000m
18	Relative humidity	5%~95%	5%~95%	5%~95%
19	Machine weight	6.6 lb (Socket outlet)/9.7lb (Vehicle connector)	7.7 lb (Socket outlet)/11 lb (Vehicle connector)	11 lb (Socket outlet)/13.2 lb (Vehicle connector)
20	Pilot operated system	Socket outlet/Vehicle connector(5m)	Socket outlet/Vehicle connector(5m)	Socket outlet/Vehicle connector(5m)
21	Mounting method	Wall-mounted/Column-type	Wall-mounted/Column-type	Wall-mounted/Column-type
22	Charge mode	RFID/Plug and Charge/APP (optional)	RFID/Plug and Charge/APP (optional)	RFID/Plug and Charge/APP (optional)
23	Networking mode	4G/Ethernet/WIFI	4G/Ethernet/WIFI	4G/Ethernet/WIFI
24	Design Standard Standard	EN IEC 61851-1:2019 EN 61851-22:2002	EN IEC 61851-1:2019 EN 61851-22:2002	EN IEC 61851-1:2019 EN 61851-22:2002
	Safety protection	Overcurrent protection, over/undervoltage protection, short circuit protection, leakage protection, grounding protection, overtemperature protection, lightning protection, emergency stop protection		