ELECTRIC VEHICLE CHARGER

Model: HPEST3S-3210-2

HPEST1S-3210-2

READ AND SAVE THESE INSTRUCTIONS
Installer: Leave this manual with the owner

TABLE OF CONTENTS

SAFETY INSTRUCTIONS

Important note: Please read this booklet before installing and switching on this appliance. The manufacturer assumes no responsibility for incorrect installation and usage as described in this booklet. Keep the instruction book for future reference. All the information in the manual is valid for the charging station model in this manual.

This instruction book details the install guidance for the charger. If you're unsure which model you have, please check the rating label on the charger.

The unit is designed for installations inside or outside, with the Innovative safety systems we have built into the charger ensuring its safe usage. This guidance provides information to assist when installing the unit. The charger must be professionally installed by a qualified electrician according to local and national regulations applicable at the time of installation and used in accordance with the manufacturer's instructions.

● This unit must be grounded (Earthed).
● This unit is only to be installed by a qualified electrician in accordance with local building and electrical codes and standards.
● This unit is designed to connect a electrical supply voltage of AC380V~415V 50/60Hz for three-phase series .
● Do not put fingers into the socket.
● This unit is not suitable for use in dangerous places where there is high amounts of dust, dangerous gas or in an explosive and flammable environment.
● Do not use this unit other than its intended purpose.
● Do not use if the socket is damaged.
● Disconnect the charging from the vehicle prior to driving off.
● To prevent electrical shock,do not plug-in or un-plug with wet hands .
● Do not use a power washer to clean or wash the charger.

Important: Under no circumstances will compliance with the information in this manual relieve the user of his/her responsibility to comply with all applicable codes or safety stan-dards.

TECHNICAL DATA

Item \ Model	Datasheet	HPEVC1S-3210-2	HPEVC3S-3210-2
Input	Power Supply	1P+N+PE	3P+N+PE
	Rated Voltage	AC220 ~240V 50/60Hz	AC380 ~415V 50/60Hz
	Rated current	2 × Max 32A (6-32A adjustable)	
Output	Output Voltage	AC220 ~240V 50/60Hz	AC380 ~415V 50/60Hz
	Maximum Current	2 × Max 32A (6-32A adjustable)	
	Rated Power	2 ×7.4KW	2 × 22KW
Configuration	Charger socket or connector	T2S + Type E	
	Material	Metal powder spraying	
	Colour	Black	
	Indicator light	Three colour LED	
Safety	Ingress Protection	IP54	
	PCB protection	Over current protection , The max 32A-Recommended 36A	
		Residual current protection (AC Type A 30mA, DC6mA)	
		Earth check	
		Over/Under voltage protection	
		Over temperature	
		PEN protection	
	Certification	CE, UKCA	
	Certification Standard	EN 61851,EN 62196	
Power consumption	Standby power consumption	<10W	
Enviroment	Work Temperature	-25℃~50℃	
	Work Humidity	3%~95%	
	Work Altitude	<2000m	

PRODUCT DESCRIPTION

1.LCD display
2.RFID area
3. Working status indicator
4. T2S Socket
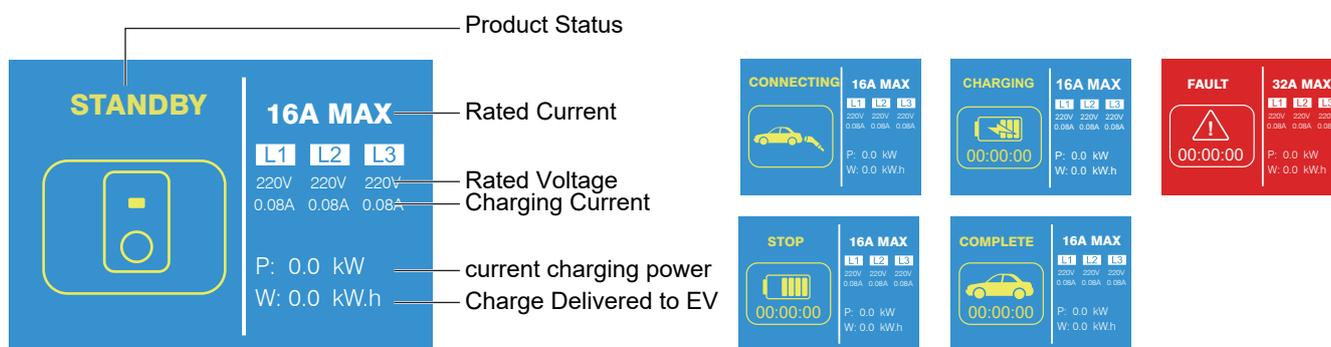5. Antenna
6. Out shell
7. Base
8. Lamp
9. Type-E Socket
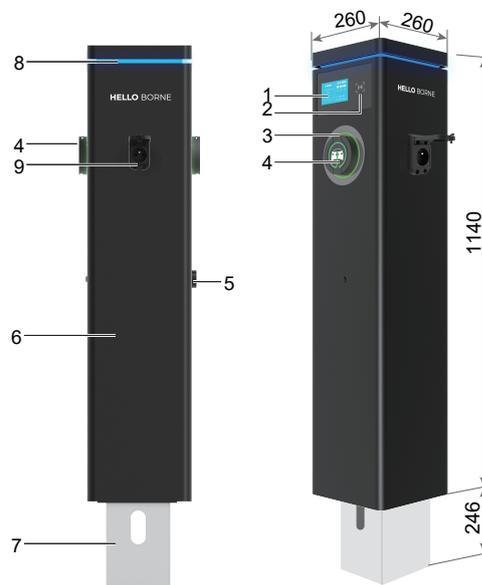
USER INSTRUCTIONS

INDICATOR LIGHT

Light Display Status	Product Status
Blue, green and red flashing alternately	Product power-on self-check
Blue light glowing	Standby
Blue light flashing	Connection confirmation
Green light glowing	Charging
Green light flashing	Turn off charging from APP or OCPP
Red light glowing	Over temperature

LCD DISPLAY

Product Status

STANDBY

16A MAX — Rated Current

L1 L2 L3

220V 220V 220V — Rated Voltage
0.08A 0.08A 0.08A — Charging Current

P: 0.0 kW — current charging power
W: 0.0 kW.h — Charge Delivered to EV

CONNECTING 16A MAX L1 L2 L3 220V 220V 220V 0.08A 0.08A 0.08A P: 0.0 kW W: 0.0 kW.h

CHARGING 16A MAX L1 L2 L3 220V 220V 220V 0.08A 0.08A 0.08A 00:00:00 P: 0.0 kW W: 0.0 kW.h

FAULT 32A MAX L1 L2 L3 220V 220V 220V 0.08A 0.08A 0.08A 00:00:00 P: 0.0 kW W: 0.0 kW.h

STOP 16A MAX L1 L2 L3 220V 220V 220V 0.08A 0.08A 0.08A 00:00:00 P: 0.0 kW W: 0.0 kW.h

COMPLETE 16A MAX L1 L2 L3 220V 220V 220V 0.08A 0.08A 0.08A 00:00:00 P: 0.0 kW W: 0.0 kW.h

RFID

RFID function, you need to make sure that the connector is connected to the electric vehicle. In the connection confirmation mode, tap your card in the RFID area of the charger to start charging, and then tap your card in the RFID area again to stop charging.

Note: After starting and stopping charging once, tapping your card in the RFID area in connection confirmation mode will not continue to charge. If you want to continue charging, you need to unplug the connector and reconnect to the electric vehicle.

TELECOMMUNICATION

This product complies with the OCPP1.6J service protocol. After you set the IP/URL and ID by the APP and install the internet traffic card (SIM card) on the 4G router, the product will automatically connect to the server to enable backstage control. To set the IP/URL and ID, please refer go to the settings in the APP.

Install the mobile data card on the 4G router (Mention already comes with SIM card fitted. If you need to change SIM card then follow)

4G／3G SIM card installation:
The sizes of SIM cards that can be used by routers are as follows:
1.The size of the Micro SIM card is 25 × 15mm, which can be directly putted into the router SIM card sleeve.
2. The size of the Nano SIM card is 15 ×12mm or 12 ×9mm, which can be used with a 25 ×15mm ferrule.
**Installation and removal of SIM card:**
Press the yellow button on the right side of the SIM cardholder with a sharp object, and the SIM card sleeve will pop up.after you install or remove the SIM card,Reinsert the SIM card sleeve into the router.
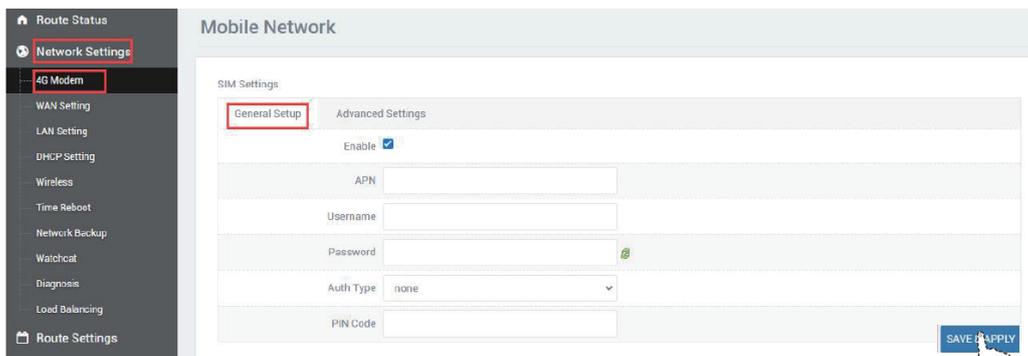
USER INSTRUCTIONS
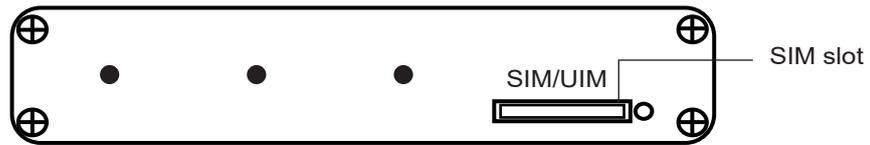
WI-FI connection：

After the mobile data card is installed, connect the power to the charger, and the indicator light will be lit, the status of the indicator is as follows:
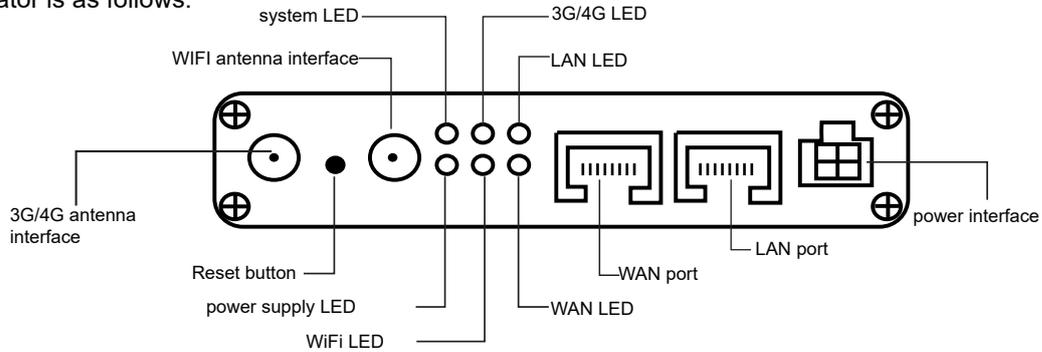
LED	Status	Definition
PWR	OFF	No power is plugged in, or the machine is damaged
	Normally on	The power input is correct and the machine is energized
SYS	OFF	The system did not start
	Normally flash	The system is starting up
	Normally on	The system is up and running
3G/4G	Normally on	Not registered to 3G/4G networks
	Quick flash	Registered to 3G/4G networks
	Slow flash	Not registered to 3G/4G networks
WIFI	Normally on	SYS have ok,wifi have working
	Normally flash	The WiFi client connects successfully and has data interaction
WAN	OFF	WAN port cable not inserted (generally used for broadband line access)
	Normally flash	WAN port cable insertion with data interaction
	Normally on	WAN port cable insertion, no data interaction
LAN1	OFF	No cable is inserted at the corresponding LAN port
	Normally flash	The corresponding LAN port has cable insertion and data interaction
	Normally on	The corresponding LAN port has cable insertion and no data interaction

APN setting：

If you use an ordinary mobile phone data card, you don't need to care about the location of the APN setting, and the default is empty. If you use an APN card, you need to set the APN in "Network Settings"-"4G Modem"-"General Setup", fill in by yourself.
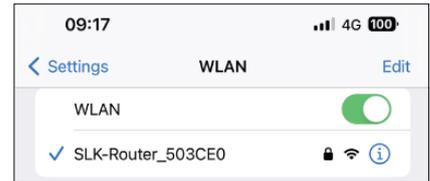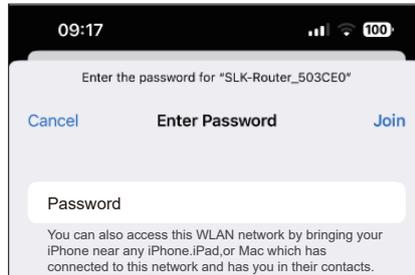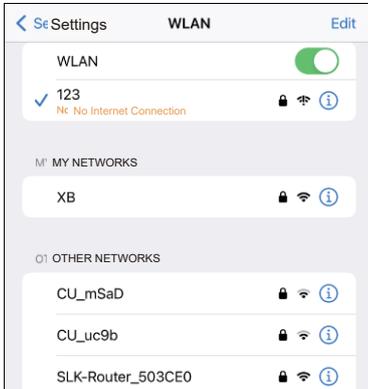
USER INSTRUCTIONS

When the SYS light signal and the WIFI signal light are normal, the charger WI-FI and the 4G router WI-FI signal are paired and connected.

Step 1: Make a WI-FI connection. (Via smartphone)

Detect the wireless network connection of the wireless router, and then click the Connect button to establish the connection, the wireless password is: slk100200.
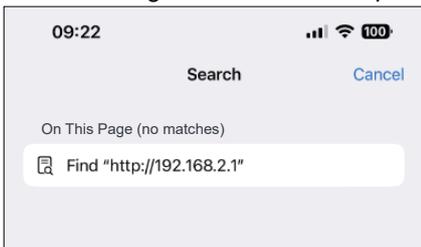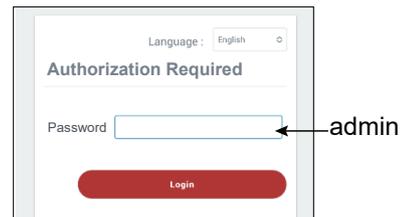

Step 2: Connecting to the router

Next log in the Router Web Settings page.

Enter "http: //192.168.2.1" in the Web browser address bar, and enter the Log In in the pop-up log in authentication box. Record the user name and password.

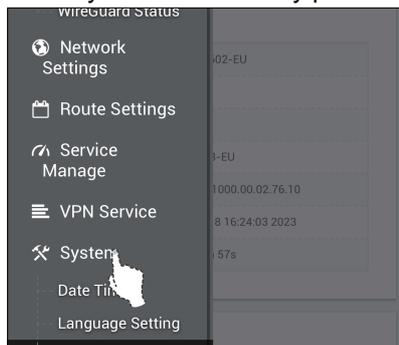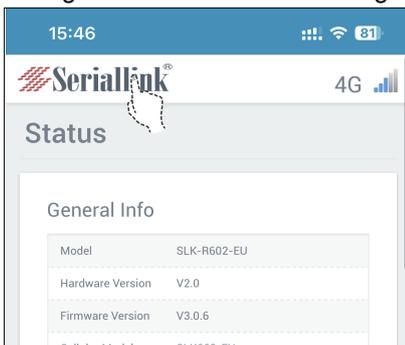Please first log in with the default password: admin.

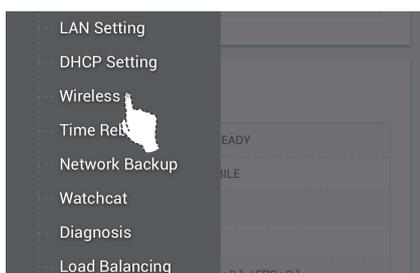http: //192.168.2.1   admin

Step 3: Go to the router Web Settings page

1. After a successful log in, enter the Web Settings page, click the logo "**Seriallink®**" and then you can set up and manage the router. Please first log in , Click "system" and "Modify password".
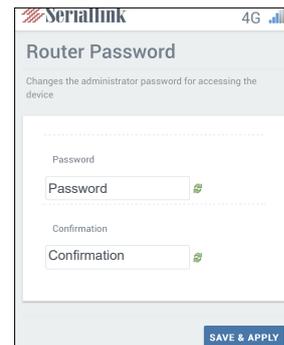
Input new password,and click apply. Password changed successfully.

Change the wireless network name
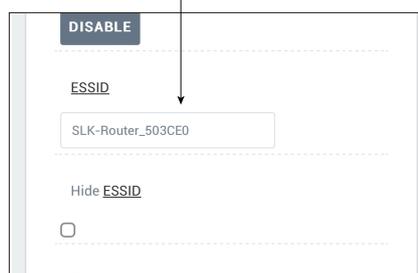
Setting new wireless network name

NOTE: After the wireless network name is changed, the phone WiFi needs to be reconnected to this router WiFi.
According APP INSTRUCTIIN to connecting the charger to APP , and then conduct subsequent manipulation.

INSTALLATION INSTRUCTIONS

Warning: Before attempting to install or start up the charger must ensure that the safety instructions in this manual have been carefully read and observed by technically competent personnel. Keep this manual with the charger for future reference.

This charger must not be started or put into use without having been commissioned by a fully trained and authorized person.

UNPACKING

1.Take the charger out of the box.
2.Follow the **ATTACHMENT** on page 10 to check all items and to see if there are any missing.
3.Check the unit is correct and whether it matches with order model.
4.Check whether the unit has defects or is damaged due to defectiveness or transportation.
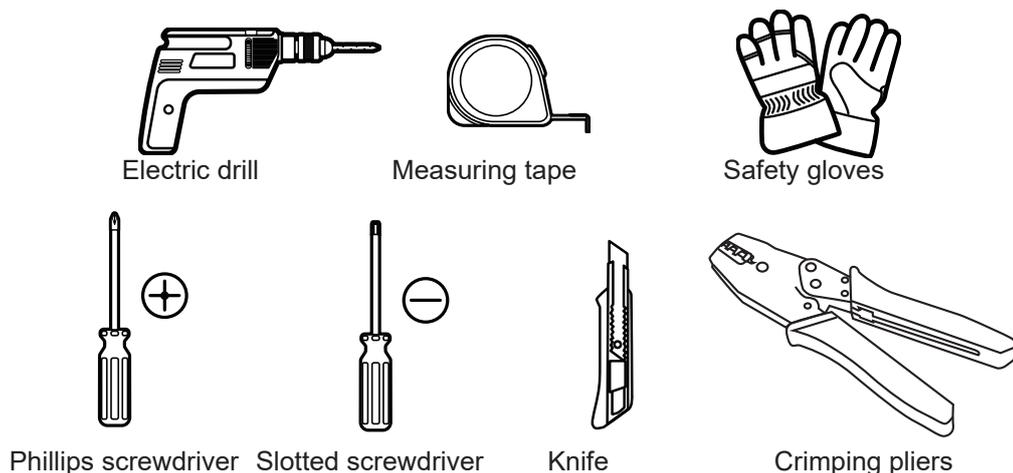5.Make sure all packaging is disposed of responsibly and in accordance with the current regulations in your region.

ATTACHMENT

		electric vehicle charger	
1 x EV Charger and base	Wiring cap	Manual	Key
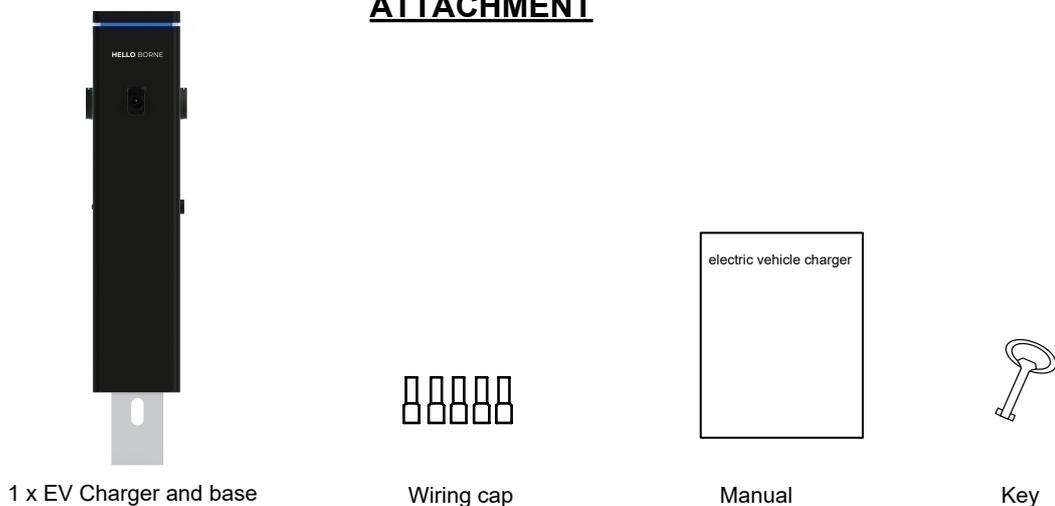
BEFORE INSTALLATION

1. Installer or end user must read and understand all the content covered in this manual before installing or using this unit.
2. Choose a suitable installation location to install.
3. Make sure that the installation location complies with current laws and regulations.
4. Confirm that there is a suitable input voltage power supply at the installation site (consistent with the nominal power supply of the product).
5. Make sure the supplied fixings are suitable for the mounting location. If not suitable, alternatives must be obtained locally before proceeding with the installation.
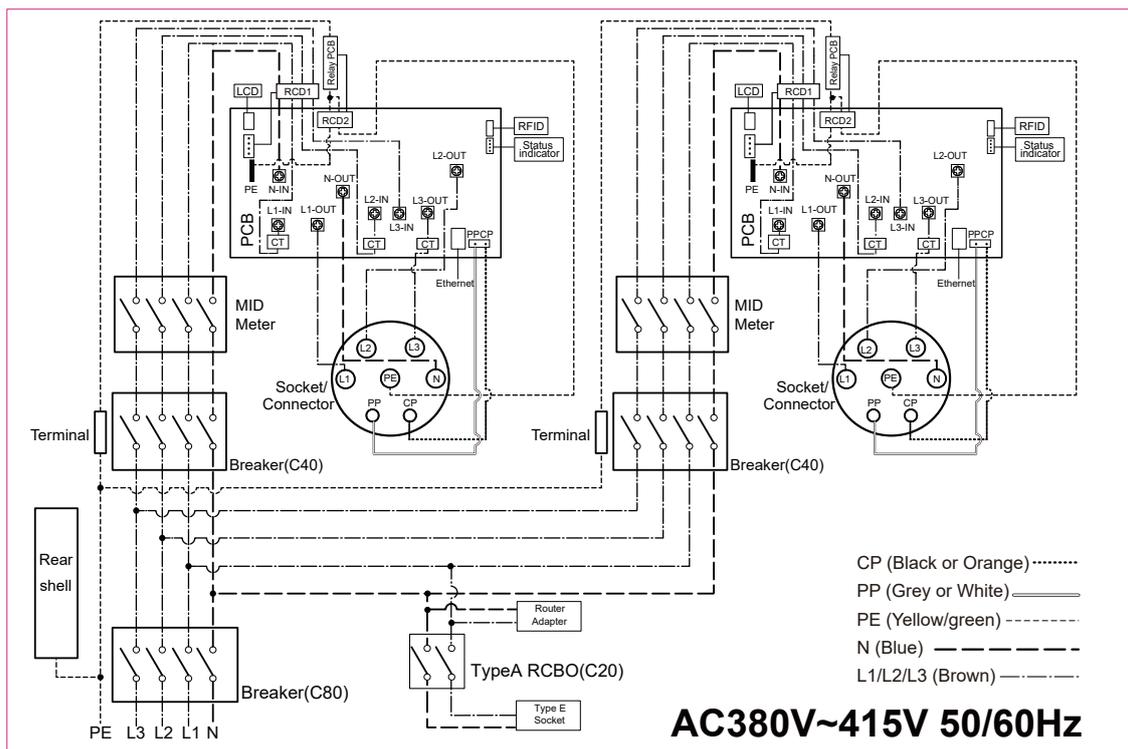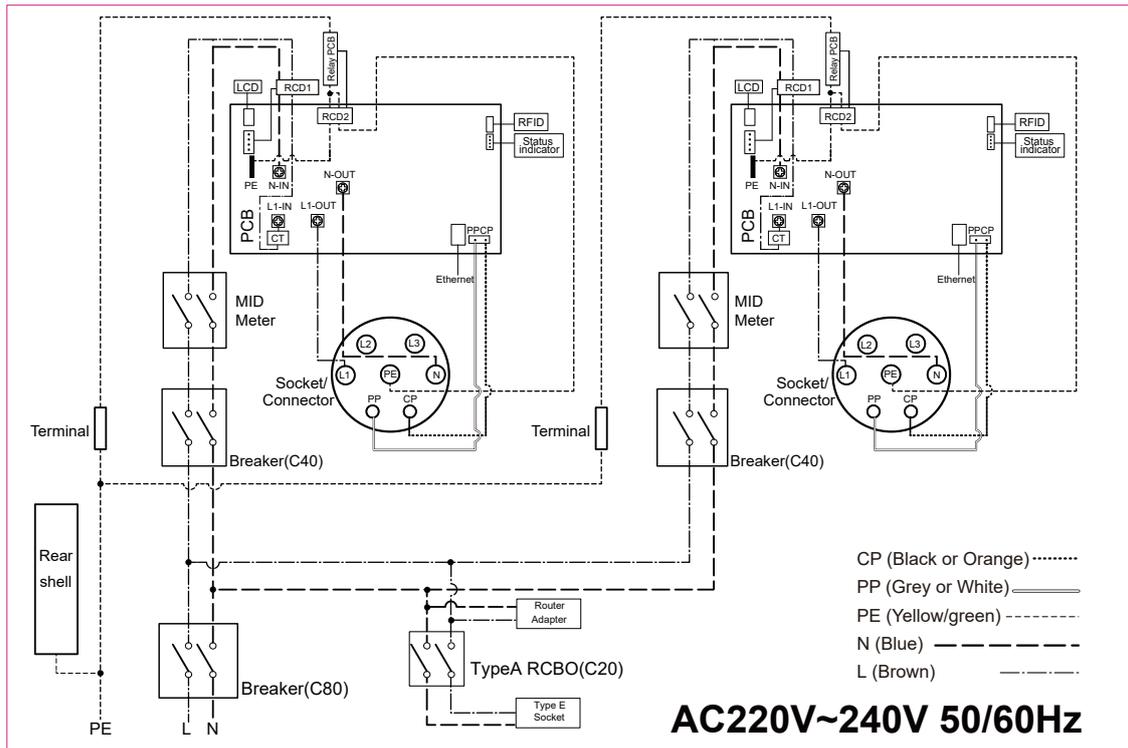
TOOLS/MATERIALS REQUIRED (NOT INCLUDED)

Electric drill	Measuring tape	Safety gloves
Phillips screwdriver	Slotted screwdriver	Knife	Crimping pliers

WARNING

▲ Make sure that the power source is turned off before installing the unit.

▲ Manufacturers and distributors are not responsible for any loss or related responsibilities caused by any incorrect installation.

▲ The installer shall not be responsible for the loss and damage of the product, system or property caused by improper installation.

▲ This product should be installed in a place where there is no water accumulation.

CONNECT ELECTRICAL WIRING

CP (Black or Orange) ········
PP (Grey or White) ─────
PE (Yellow/green) ─ ─ ─ ─
N (Blue) ─ ─ ─ ─
L (Brown) ─ · ─ · ─ ·

AC220V~240V 50/60Hz

CP (Black or Orange) ········
PP (Grey or White) ─────
PE (Yellow/green) ─ ─ ─ ─
N (Blue) ─ ─ ─ ─
L1/L2/L3 (Brown) ─ · ─ · ─ ·

AC380V~415V 50/60Hz

Note: The charger must be electrically protected by installing externally a Miniature Circuit Breaker (MCB) and any other protection devices according to the wiring regulations at the time.

INSTALLATION INSTRUCTIONS

## INSTRUCTION FOR INSTALLING THE BASE OF THE PEDESTAL

1. The pedestal EV charger needs to be installed solid to the ground during installation to ensure that the length, width and depth of the cement pour from the ground to the hole dug out are 800*800*400mm, as shown in Fig 1.

2. In order to ensure that the pedestal base is firm and won't move during pouring the concrete, the following bending of the tabs should be carried out on the bottom of the pedestal before placing into the ground, as shown in Fig 2.

Unit: mm

Dimension of cement pier

Fig. 1

Design sketch of pedestal bottom bending

Fig. 2
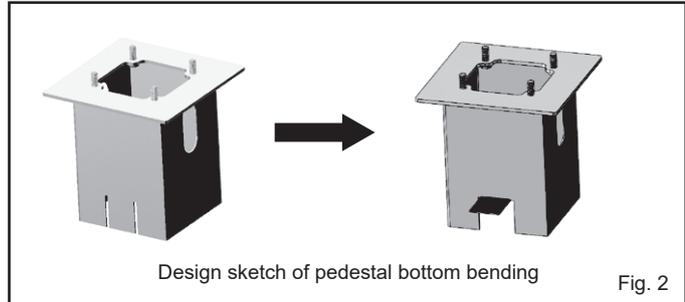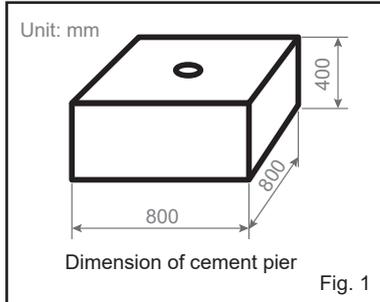
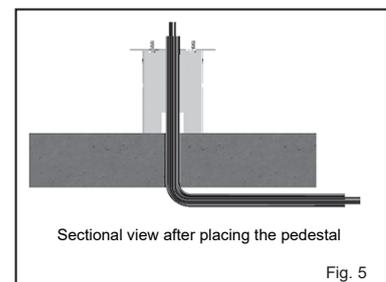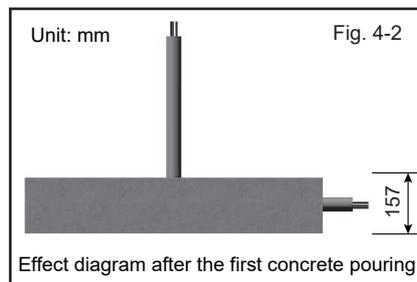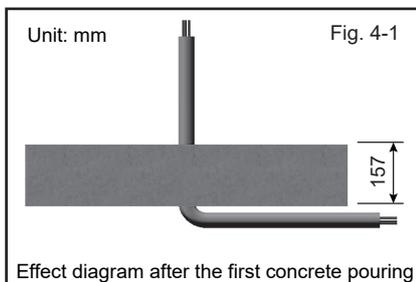## It is recommended that the installation of the buried base is done in the following order.

1. Protrude the buried cable bushing from the center of the installation pedestal EV charger, and the vertical length of the reserved cable bushing shall be about 450mm, as shown in Fig. 3. (Diameter range of cable bushing is 30mm<Φ<50mm).

Note: the cable and bushing can also be pre-buried in the concrete layer of the first pouring, and the corresponding reserved length of the cable bushing also needs to be changed. Please construct according to the actual demand, see Figure 4-2, the follow-up steps are exactly the same.

Fig. 3

Schematic diagram of cable and bushing
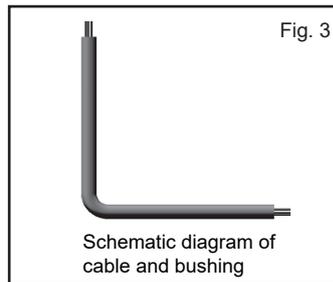
2. Under the premise of ensuring that the cable and bushing are vertical, the length, width and depth of the pour concrete are 800*800*157mm. After pouring, ensure that the cable and bushing are in the installation center, as shown in Fig. 4-1 or Fig. 4-2.

3. Pass the cable bushing through the middle of the pedestal and place the pedestal in the center of the concrete to ensure that the pedestal does not sink, as shown in Fig. 5.

Unit: mm

Fig. 4-1

157

Effect diagram after the first concrete pouring

Unit: mm

Fig. 4-2

157

Effect diagram after the first concrete pouring

Sectional view after placing the pedestal

Fig. 5

4. Under the premise of ensuring that the pedestal does not sink, continue pouring concrete, the length, width and depth are 800*800*243mm. After pouring, ensure that the pedestal is 2~3mm higher than the concrete plane. The effect after completion is as shown in Fig. 6.

Note: During pouring, the extended screw must be well protected to prevent damage or destruction of the screw thread during pouring, which may lead to the failure of normal installation of the pedestal EV charger!


Effect diagram of the second concrete pouring   Fig. 6
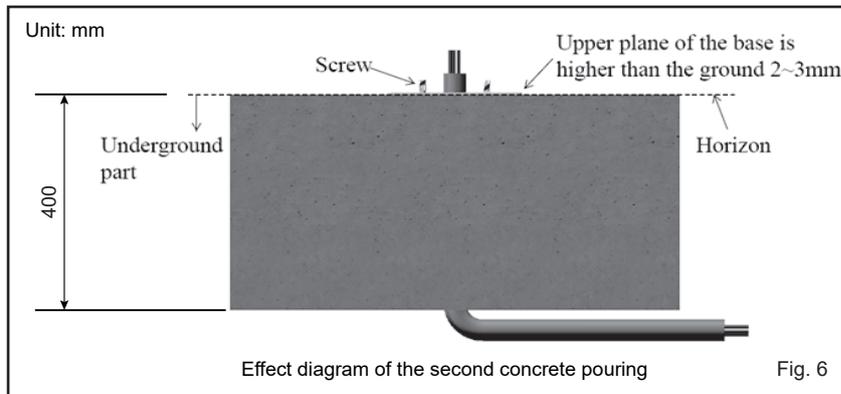
INSTALLATION

1.Remove the rear shell by key.

2.Remove and retain the four nuts from the base.

 Note:Bend structure A at 90° right angles to from a buckle to prevent ejection after the concrete is poured.

3.Install the base at the selected position, embed the base into the ground, and ensure that the top of the base is 2-3mm higher than the ground，Concrete into place, with the electrical service cable fed up through the middle of the base.

4.See the right figure for fixing(Fig.4)

5. Turn on the three breakers .

6.Use the key to install the removed rear shell.

NOTE：

Breaker(C80) controls the power supply of the whole product;

The two breakers (C40) can respectively control the power on and off of the two charging points.
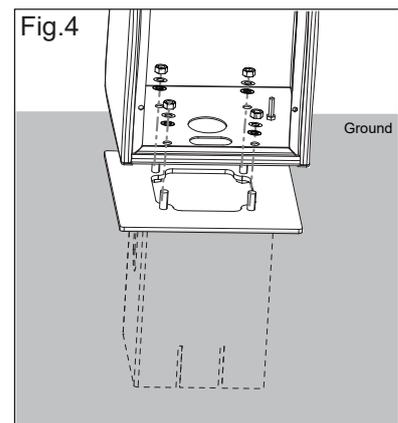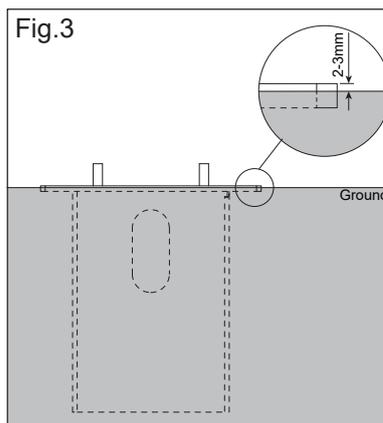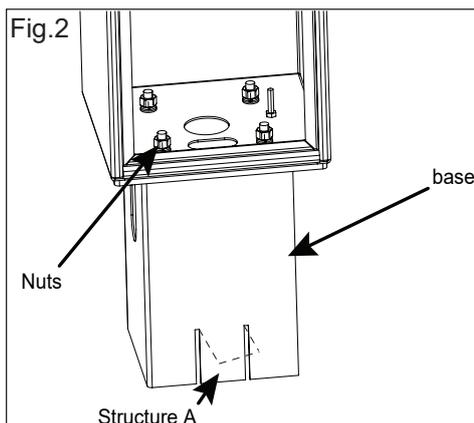
INSPECTION

1. Check that this unit must be grounded (Earthed).

2.Make sure you are satisfied that the installation is complete and is in a safe condition.

3.Switch ON the power, which it will cycle the red, blue and green lights to self-check and then enter the corresponding light indication. The unit and test in accordance with the current Electrical Wiring Regulations.

NOTE: Make sure this product has been installed in compliance with the current Electrical Wiring Regulations.
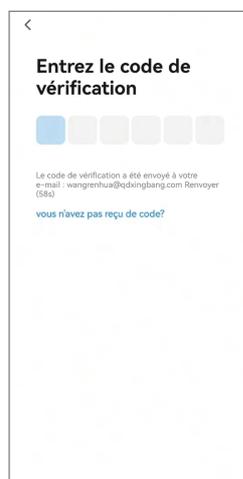
REGISTER

Step 1. Application platform download Tuya app 🔵 .
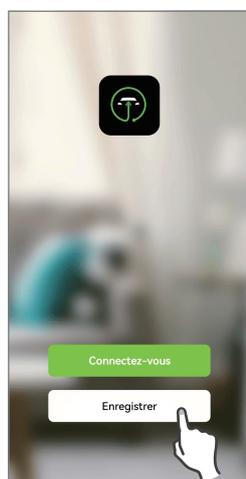
Étape 2 - 1: cliquez sur Enregistrer

Étape 2 - 2: consultez le Protocole d'application, entrez le numéro de e-mail enregistré et appuyez sur obtenir le Code de vérification

Étape 2 - 3: Entrez le Code de vérification.

Étape 2 - 4: Entrez le mot de passe de connexion du numéro de compte et cliquez sur Terminer pour terminer l'inscription.

Step 2. Open the tuya app register an account to log in or log in directly through the relevant app bound by tuya. **Note:** You can register your account through your mobile phone number or email. The following takes mobile phone number registration as an example to describe the steps in detail:
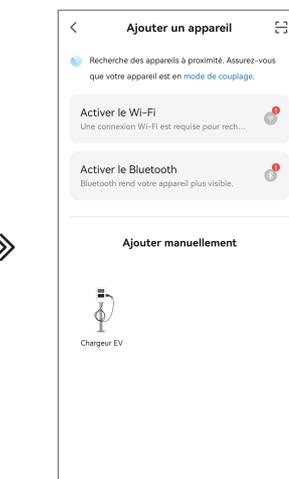
ADD DEVICE
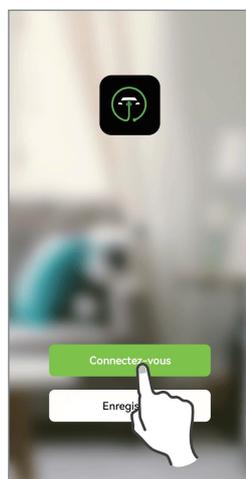
Étape 3 - 1: cliquez sur se Connectez-vous

Étape 3 - 2: consultez le contrat d'application, entrez le compte enregistré et le mot de passe, puis cliquez sur se connecter.

Étape 5: Le réseau et le Bluetooth ne sont pas activés.

Step 3. Check the app agreement, click log in, input the newly registered account and password to log in to the tuya app, and complete the app log in.

Step 4. Reset wifi(refer to the function button instruction for the wifi reset operation guide),Click "Add Device" to add the charger device that needs to be connected.

Note: Make sure the connector un-plug before add the device.

Step 5. After turning on wifi , bluetooth and geolocation, the tuya app automatically searches for connectable devices.
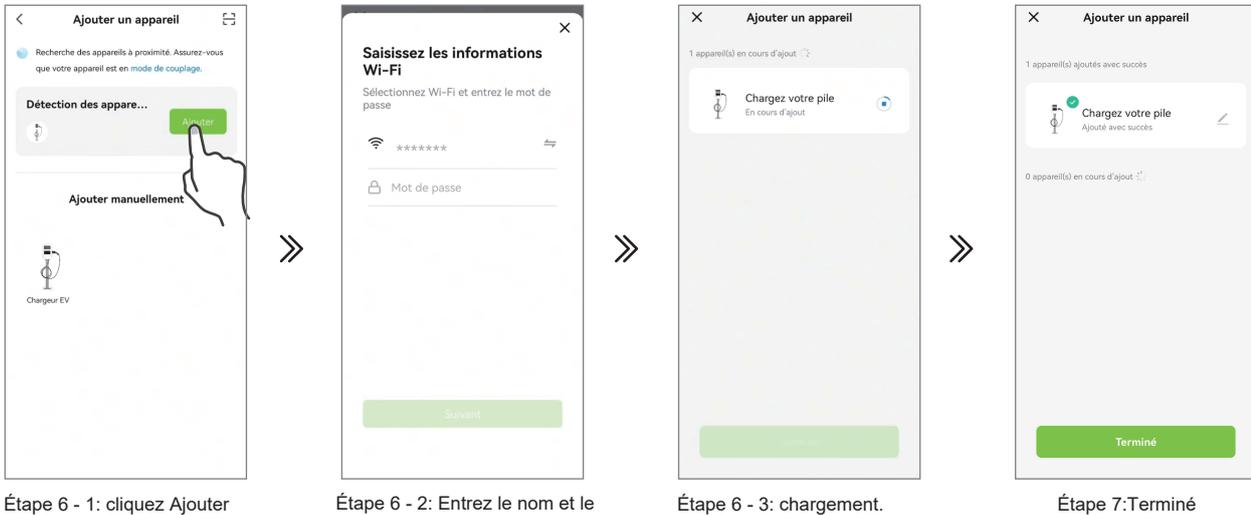
Note 1: When connecting the device,the mobile phone must be close to the charger.

APP INSTRUCTION

NOTE2: The charger needs to be connected to WiFi.
The Wi-Fi name is the charger's 4G router WI-FI name(page 9:Change the wireless network name) .
The default wifi name of the charger or (on page 9) the wifi name set by the user
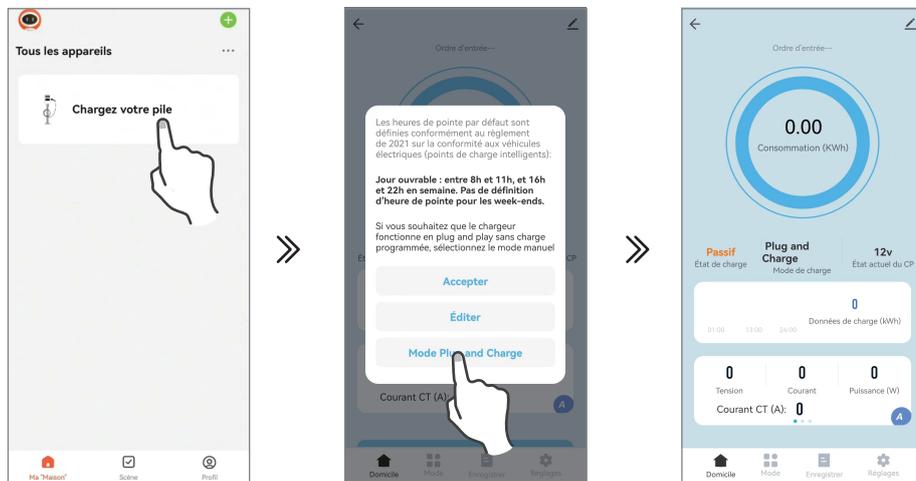

Étape 6 - 1: cliquez Ajouter

Étape 6 - 2: Entrez le nom et le mot de passe Wi-Fi et appuyez sur Suivant.

Étape 6 - 3: chargement.

Étape 7:Terminé

Step 6. After clicking ADD, enter the wifi and wifi password, wait for the device to connect to the network.
Step 7. If you need define a new device name, click" ✎ " if not need, click "done" to confirm the connection is successful.

Étape 8: cliquez sur le périphérique approprié.

Étape 10 - 1: interface de sélection par défaut

Étape 10 - 2: interface de contrôle de l'appareil

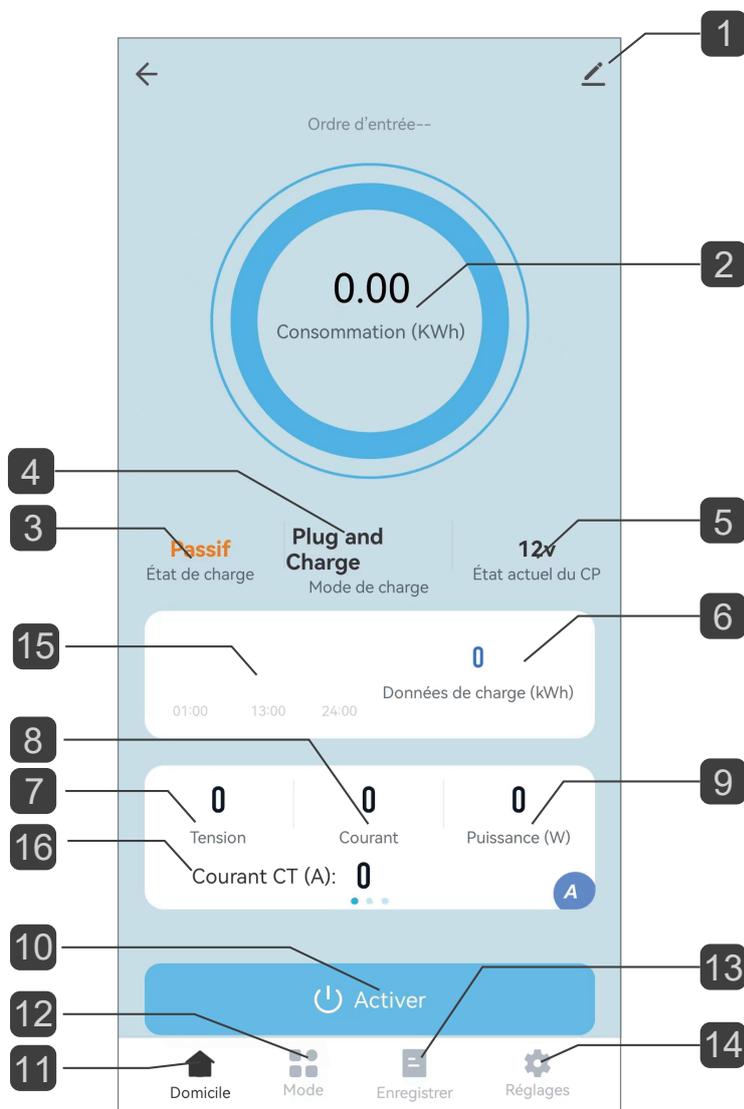**Step 8.** Click the relevant device icon to enter the device control interface.
Step 9. The first connection will appear the default selection interface, you can select the default mode, edit the charging time or select the manual mode.
Step 10. Click manual mode.
Step 11. After connecting to the car, then charging without any operation.

OPERATE INTRODUCTION

INTRODUCTION INTERFACES

1 Modifier
2 Une seule charge
  Consommation d'énergie
3 État de charge
4 Mode de Charge
5 CP state
6 Charges cumulées
  Consommation d'énergie
7 Tension de charge

8 Courant charge
9 Puissance de charge
10 On/off
11 Domicile
12 Mode de charge
13 Enregistrer
14 Réglages
15 Enregistrement de la consommation d'énergie
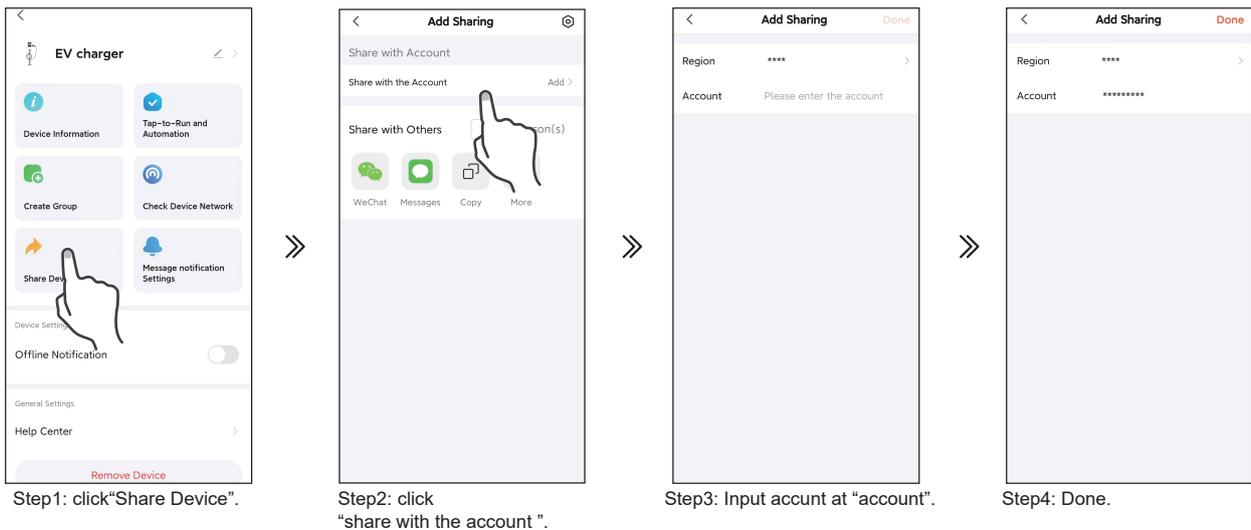16 Courant total actuel de la maison

APP INSTRUCTION

1 Edit

(1). You can set the charger name by clicking " ✏ "

(2). **Offline Notification**: When the charger is powered off, it will prompt the device to be offline on the home screen.

(3). **Share Device**: You can share the APP with others by share device. Shared users only have the using right and cannot share the APP again.
Refer to the following steps:

Step1: click "Share Device".

Step2: click "share with the account ".

Step3: Input acunt at "account".

Step4: Done.

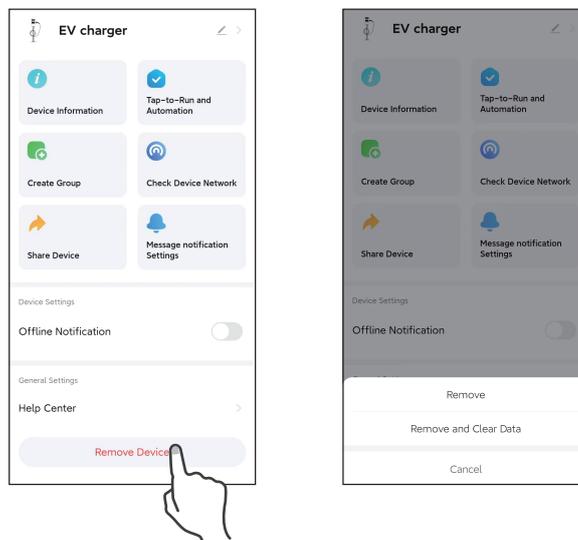(4). **Software Update**: When their is a software update available a message will appear on the APP screen to confirm the update.

(5). **Remove Device**
1. **Remove**： Disconnect device connection.
2. **Remove and Clear Data**： Disconnect device connection and wipe "Charging record" and "Error Log"data .

APP INSTRUCTION

12 Charging mode

(1).manual mode:control charger by Enable and Turn off charger on APP.
(2).Schedule: Timed charging.
NOTE 1: When you choose the set time point to turn on the charging , you must adjust the hours setting, otherwise the default charging time is only 1 minute;
2: When you choose the set time point to turn off the charging, there is no hours setting;
3: When you choose the date choose, this time of each week will default to on or off charging.
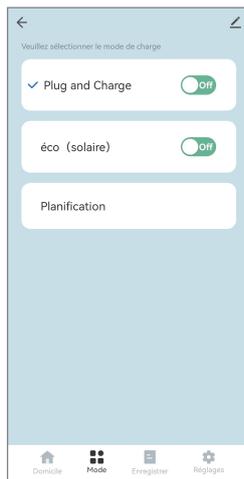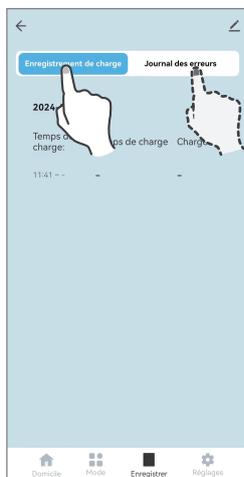
Mode de charge
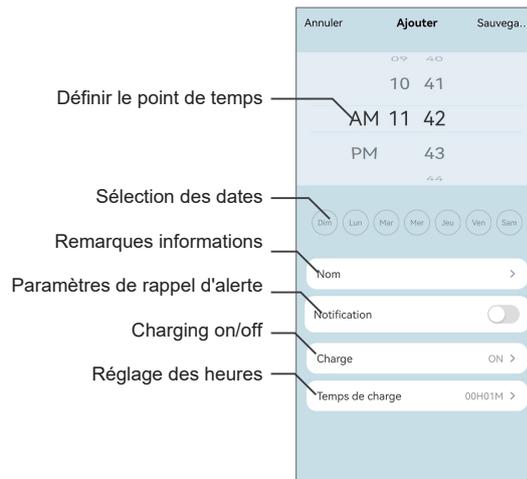
Mode de charge

13 Record

You can view "Charging record" and "Power" on this interface.
NOTE:Only the information that is turned on or off through the APP will be recorded in the charging record.
When the charging is turned on by the function button, there is no charging record.

Enregistrer

14 Setting

(1). Order input: Input order tab.

you can set power management from this tab. To use this function a CT clamp is required. To set maximum current:

1. Click Input order tab to enter command input field.

2. Input "homevalue", this value is the limited protection value of household entry current, the seting range is0-999, and the factory default setting is 099A (the system will automatically optimize the current value when the actual value is 5A less than the value set); the setting value is recommended to be set according to therated current value of the total household current. Is "home099" will set the maximum to 94A.

(2). Set Current tab(A): You can set max charging current, max charging current not more than the current of DIP switch setting.

NOTE: 1. After the APP is connected at the first time, the current value displayed here is not the set current value, it is a current setting form.

2. It will take effect only after clicking to enter to set any current value, and the current value adjustment range is 6-32A;

3. If the current value has never been set here, the value displayed here is invalid

(3). Temperature Monitor: can check device interior temperature value.
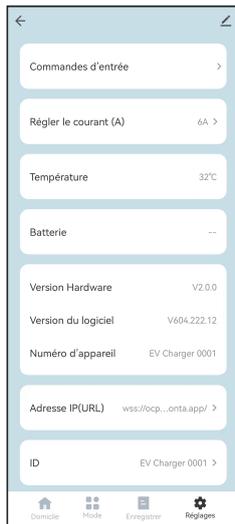
Input order	Function
HOME value	Set household entry current
RESET	Clear all charging data
No.RFID	Card number binding

NOTE: If the order is entered incorrectly, the device will still beep twice, but the order will not be executed; The wrong order that was entered cannot be corrected, until you disconnect device from the APP and wipe the data and connect it again.

When entering a home value, it is case-insensitive and has no spaces in the middle, such as: home045.

URL

Charger ID

Setting

(4).IP Address: Change the address of the OCPP back-office server；

(5).ID： The product name in the OCPP back-office server.

NOTE:1.make sure the ID is only.

2. After the ID is replaced, it can be concluded that the ID replacement is complete only when the Device number is consistent with the replaced ID;
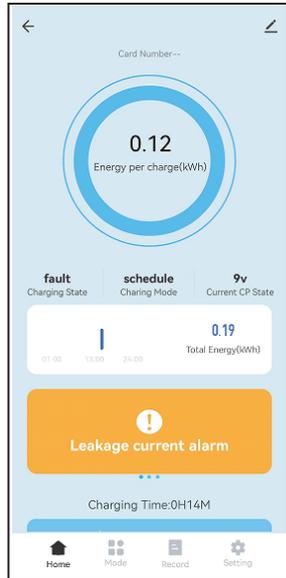
If the Device number does not change after changing the ID, you can exit the APP and then power off and restart the EV charger.

3.After the IP or ID is replaced, it must be powered off and restarted to take effect.
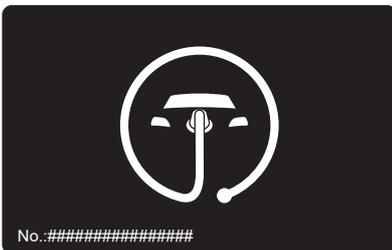
APP INSTRUCTION

FAULT INTERFACE

If device has fault, you can view the cause of the failure in the center of the main interface of the APP.

CARD REGISTRATION

No.:##############

Setup the RFID card for the customer

Go in to settings, Input orders.

Using the number on the front of the card enter the letters and numbers followed by RFID. It is case sensitive.

Ie **SPEVC##########**

Do not use any spaces,
Test it by plugging in the car and swiping the card. Charging should start.
If you get 5 beeps, then the number is wrong or there was as space between the full stop.
Both supplied cards have the same number so you only need to do this once.

Input orders

SPEVC##########

Cancel   **Confirm**

MAINTENANCE

The charger enclosure does NOT need to be opened for routine maintenance tasks.

1. Regularly clean the external surfaces of the equipment with a damp cloth
In order to avoid damaging the surface smoothness, do not clean the internal parts with soluble substances and alcohol.
2. Regularly inspect the exterior of the equipment for visual damage, if damage affects safety, isolate the equipment and prevent its use until appropriate repairs have been completed.
3. Once a year, the charger and switchgear (if installed) should be electrically inspected by an appropriately qualified electrician in accordance with the current legislation for the installation location. A record of the tests and results must be kept.

TROUBLESHOOTING

TROUBLESHOOTING

Red light flashing	One fast, two slow	CP fault
	Two fast, one slow	Over current
	Three fast, one slow	Leakagecurr fault
	Three fast, two slow	Under voltage fault
	Four fast, one slow	Over voltage fault
	Six fast, two slow	Adhesion fault
	Seven fast, one slow	Earth fault
	Red light glowing	Over temperature

Product Disposal
In accordance with European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in national law, used electrical devices must be collected separately and recycled in an environmentally responsible manner. Ensure you return your used device to your dealer or obtain information regarding a local, authorised collection and disposal system. Failure to comply with this EU Directive may result in a negative impact on the environment.