



SSA-Energy configuration

User Manual 2.0

Vision

Star Charging - Service Cloud Product Department
January 2025 version: V2.0.0
Wanbang Digital Energy Co., Ltd

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Introducing our App -Your on-site work configuration tool.

Star Charging provides Star Services Application(SSA) as a charger and residential energy storage system(RESS) configuration tool for external installation. It supports RESS installers to configure devices using Bluetooth connection, and can also bind this device after logging in. Installers can view device status, issue configurations, upgrade devices, and perform basic operation and maintenance through cloud based operations.



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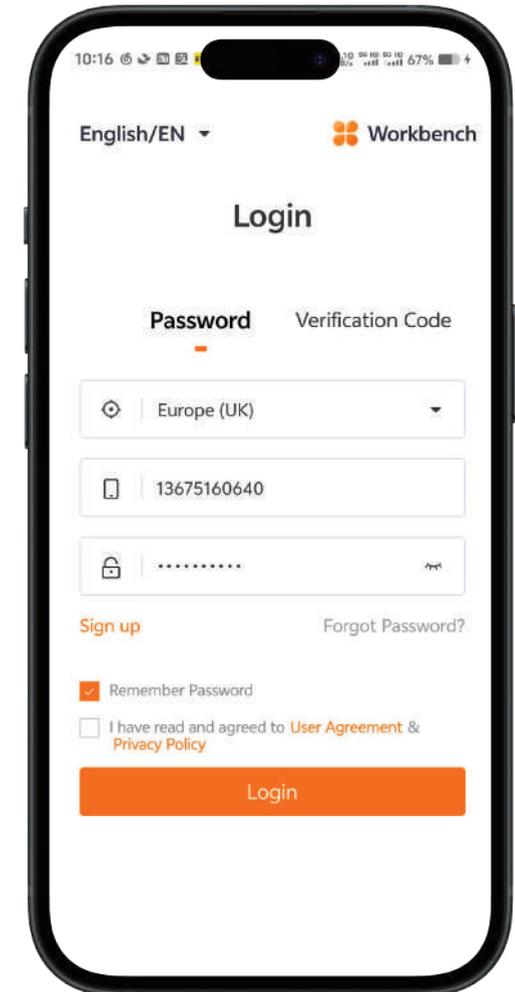
1. Register and log in

Log in

- Select login region: Users can choose according to their actual location. If there is a specified country, please select the corresponding country. For example, in the United Kingdom region, please select "Europe (UK)".
- Login: You can enter the APP by logging in with your username and password or a verification code.
- Remember account: When logging in, users can choose to remember their username and password, and this information will be automatically filled in the next time they log in.

Workbench

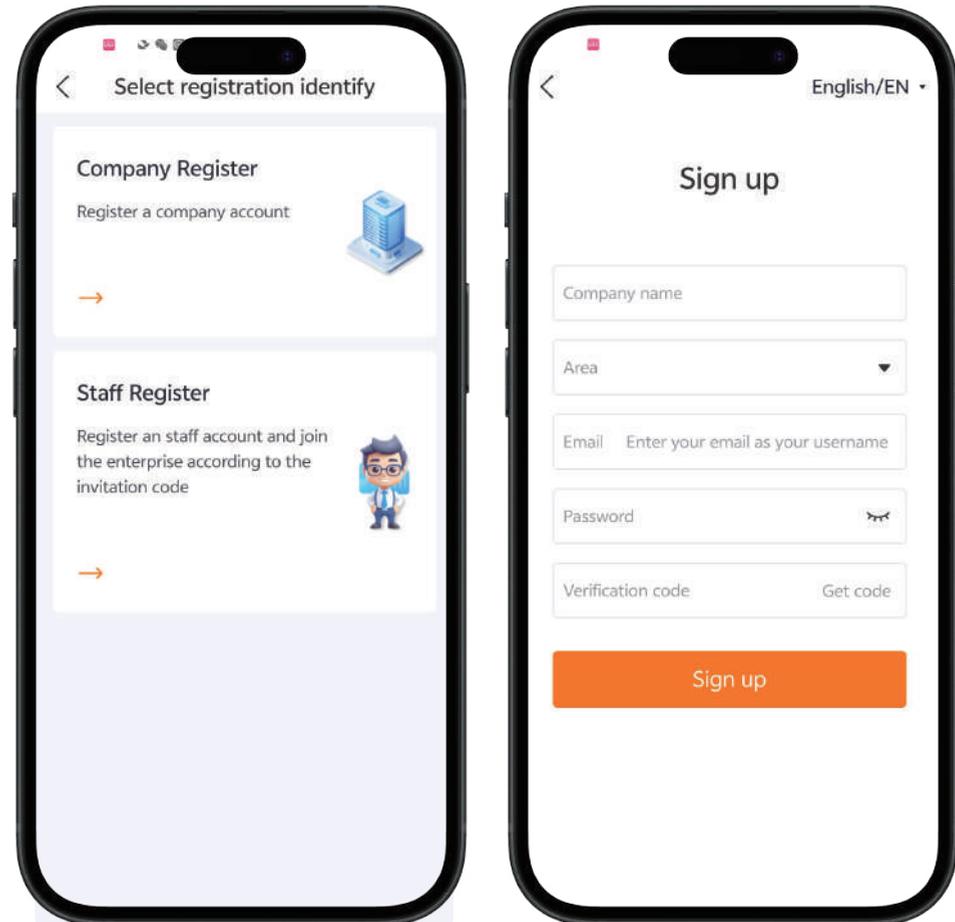
- Workbench: The entrance to the widget is displayed in the upper right corner. Click to enter the tool page, where you can configure chargers, energy equipment, and scanning settings when not logging in.



1. Register and log in

Company registration

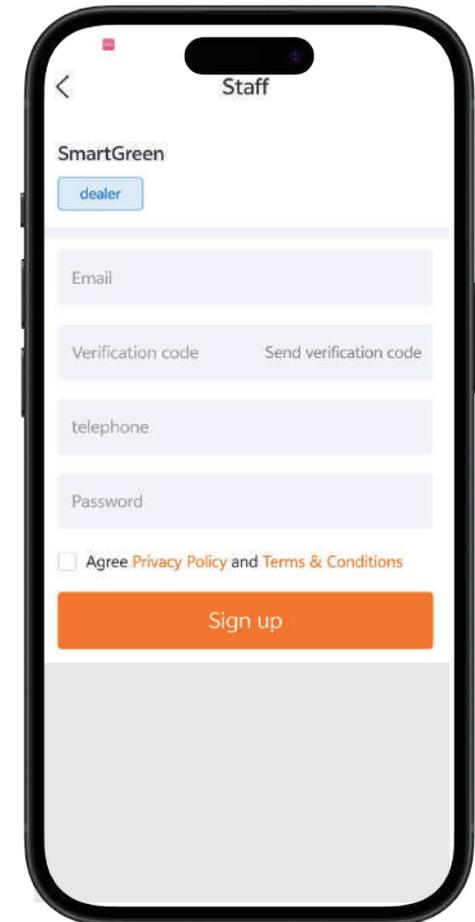
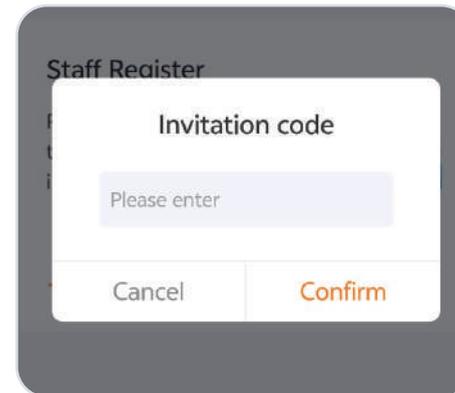
- Enter the company name.
- Select a region; you can choose from 6 continents.
- Enter your email address as your username.
- Enter the password, which should be a string composed of at least 8 digits, English letters, and special symbols.
- The verification code is the one received via email.
- After clicking "Sign up" Successfully, an invitation code will be automatically generated, and staff can register and enter the enterprise through the invitation code.



1. Register and log in

Staff registration

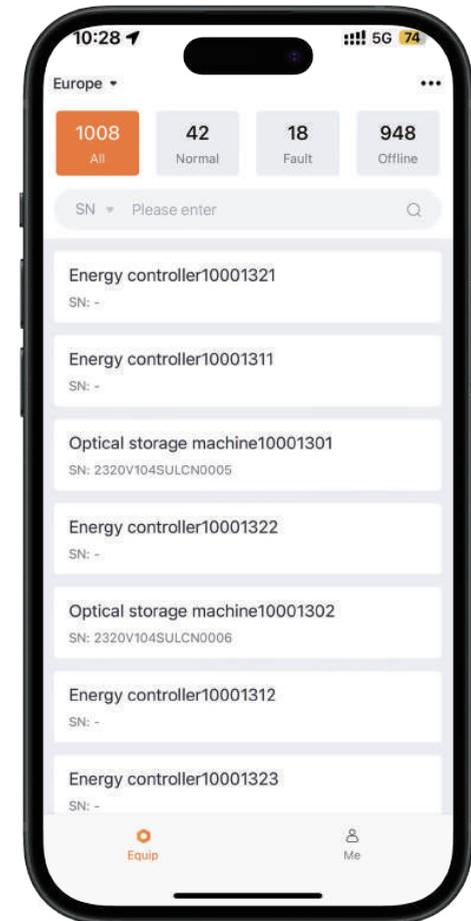
- Enter the invitation code.
- Enter the staff email as the login account.
- Enter a password containing English letters, numbers, and special symbols.
- The verification code is the one received via email.
- After successful registration, staff can log in to the enterprise associated with the invitation code.



2. Equipment Management

Equipment inquiry

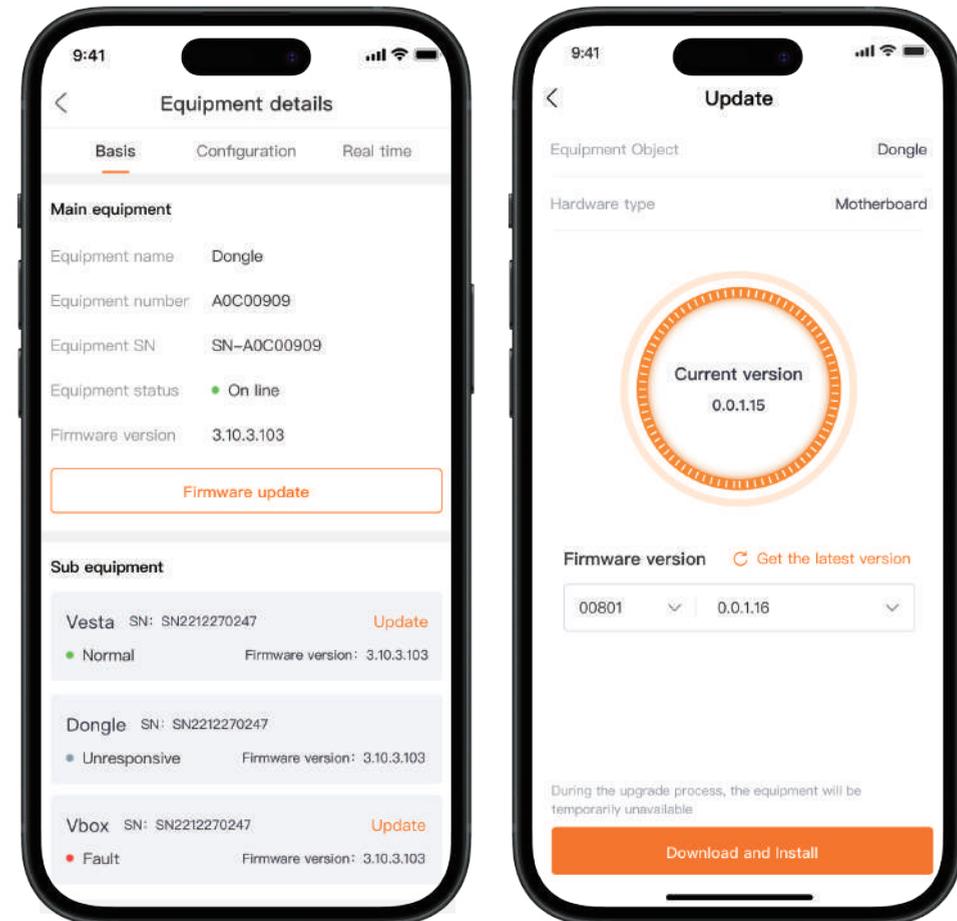
- After entering the APP, you can check the bound energy equipment and query them by equipment status and SN.
- After clicking on the equipment, you can enter the equipment details page, which displays the name, number, serial number, status, firmware number, and sub-equipments under the main equipment.



2.1 Equipment details

Firmware update

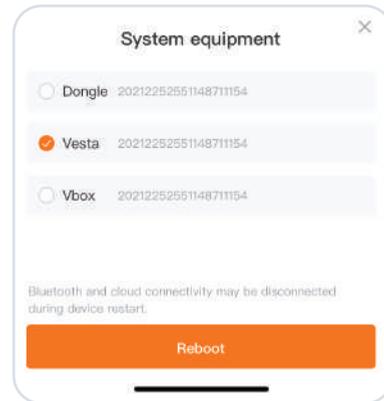
- Go to the firmware update page of the main equipment, select the sub-equipment to obtain the latest firmware number, select the firmware number and click the 'Download and install' button to upgrade.
- Click the sub-equipment update button to enter the sub-equipment update page, where the firmware number of the sub-equipment will be automatically obtained. Then, select the firmware number, click the "Update" button, and upgrade the sub-equipment.



2.1 Equipment details

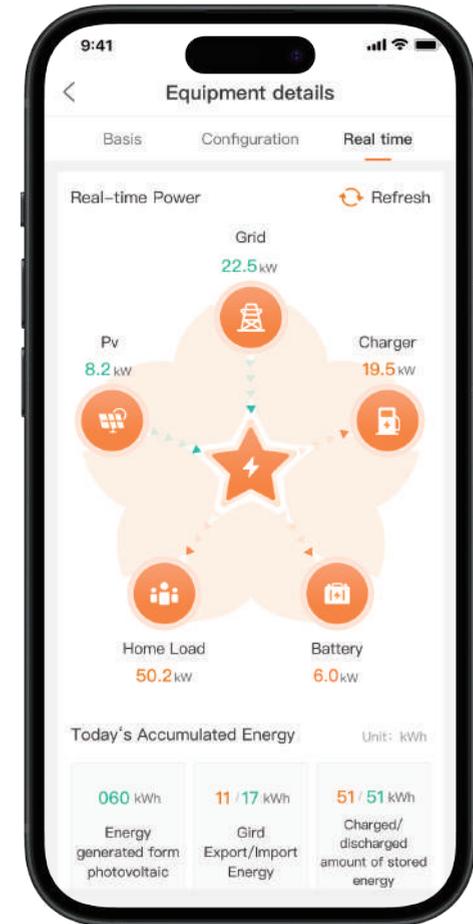
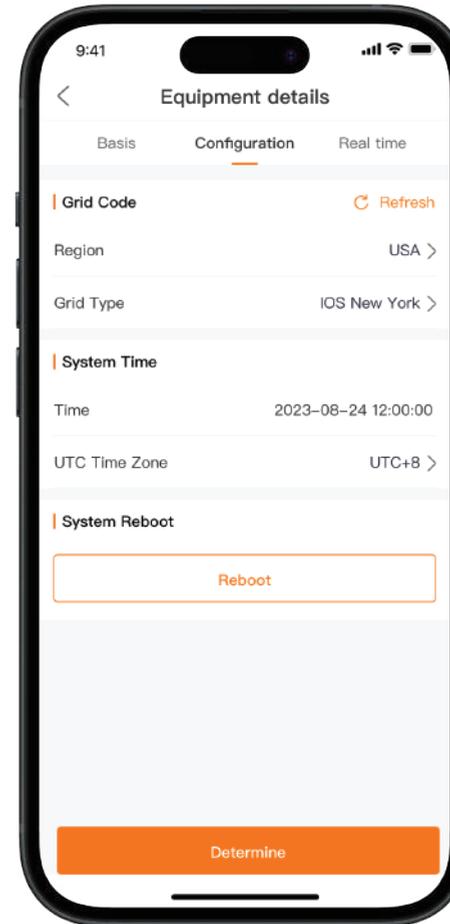
Equipment configuration

- Enter the equipment configuration page, where you can deliver and restart the equipment configuration. After selecting the configuration, click 'configuration' button and obtain the latest configuration. Wait for 60 seconds before refreshing. Click the 'Refresh' button to select the sub-equipment to restart.



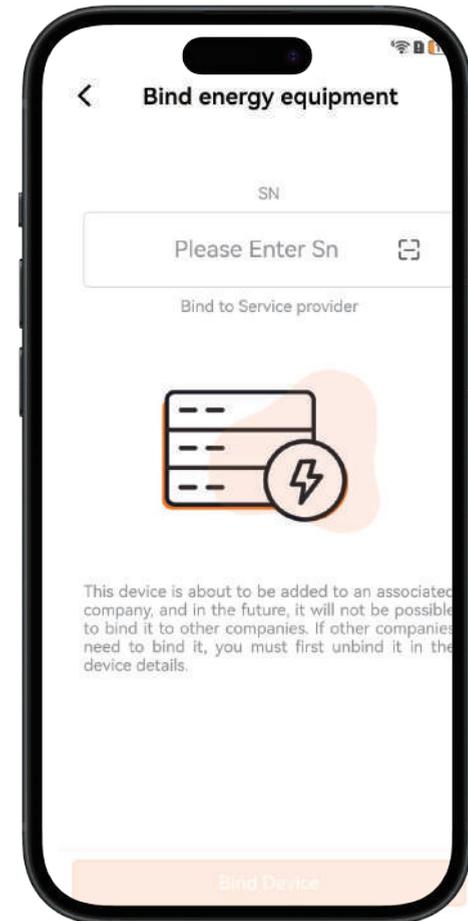
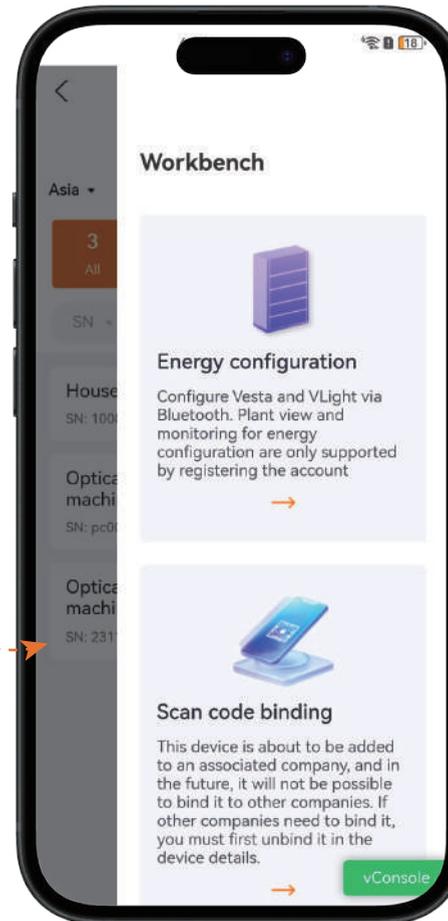
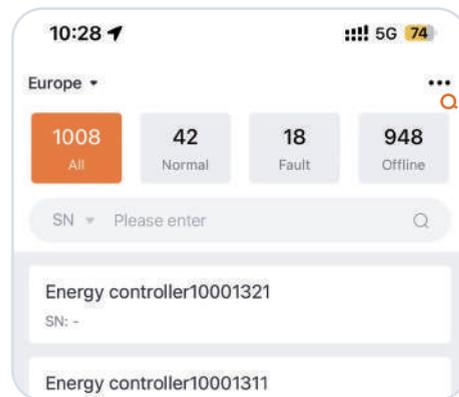
Real-time data

- The real-time page displays the real-time data of the equipment and you can click to view detailed information.



2.2 Binding equipments through SN

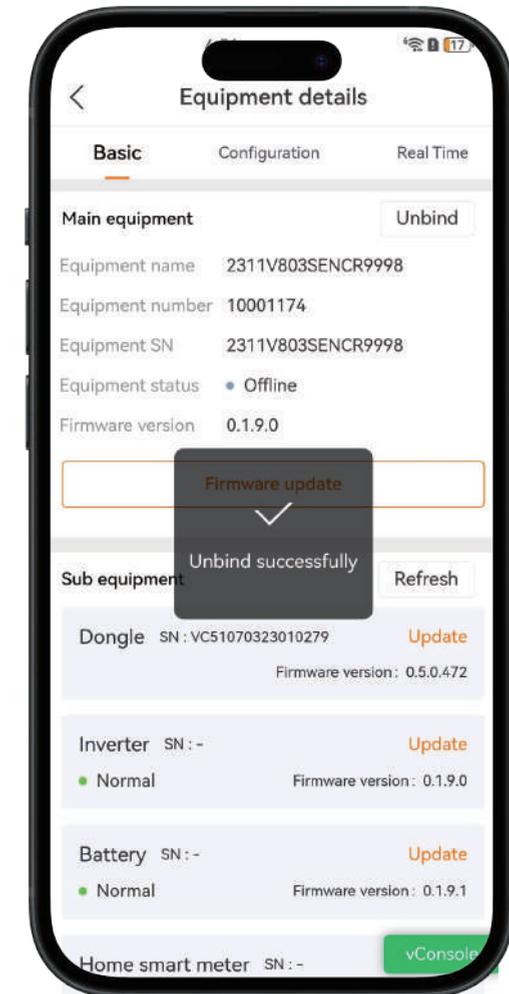
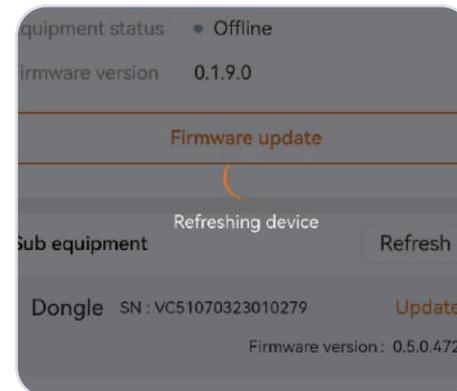
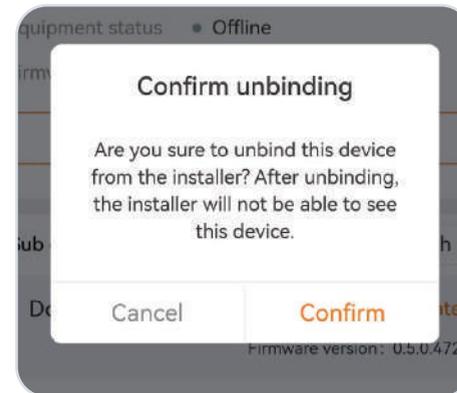
- Enter the list of energy equipment, click the icon in the upper right corner, and then click the 'Scan code binding' button to go to the equipment binding page, where you can bind the installer to the equipment.
- After the binding is successful, a success message will be displayed. After the list is refreshed, you can view the newly bound equipment.



2.3 Unbind equipment

In the equipment details, you can unbind the equipment.

- Click the "Unbind" button to remove the binding between the installer and the equipment. A success message will be displayed upon successful unbinding.
- After clicking the "Refresh" button, there is a 3-second refresh period. If the refresh is successful, the sub-equipment data automatically refreshes after 30 seconds, or a scheduled task refreshes the data every 15 minutes.



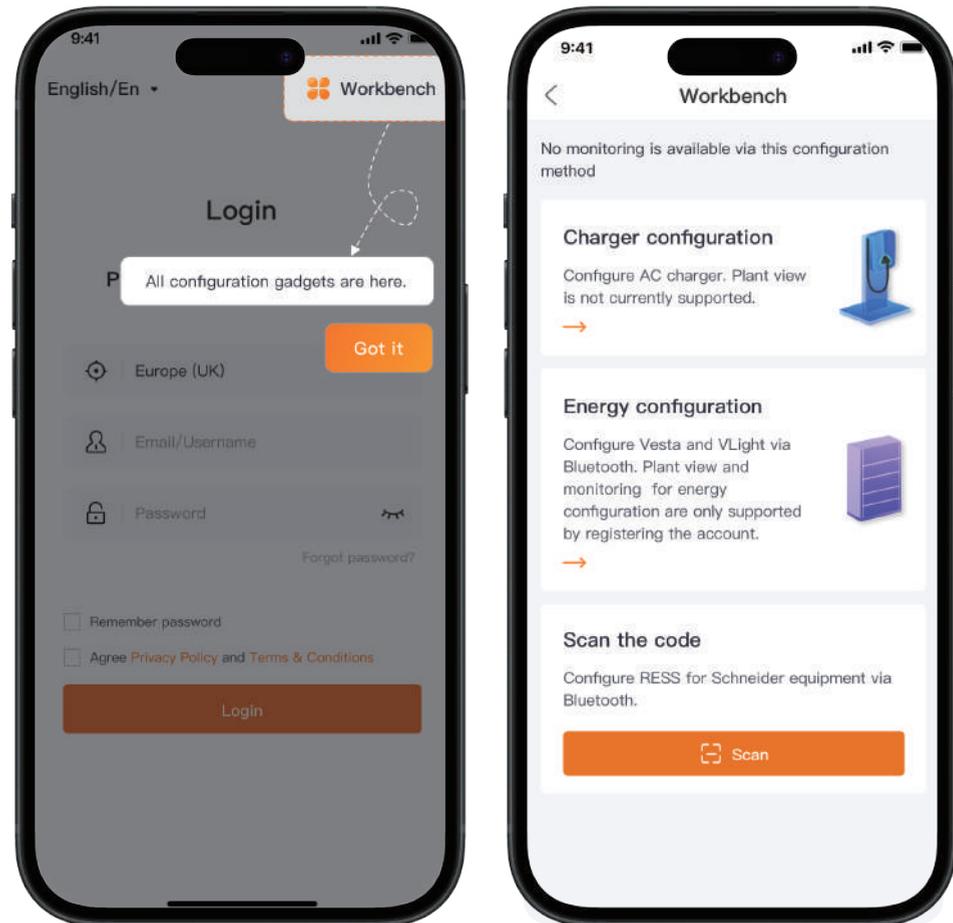
3. Energy configuration via Bluetooth

There are two entrances

- The configurable items without logging in are the same as those when logged in. The difference is that you can bind the device while configuring it when logged in.

Method 1: Not logged in

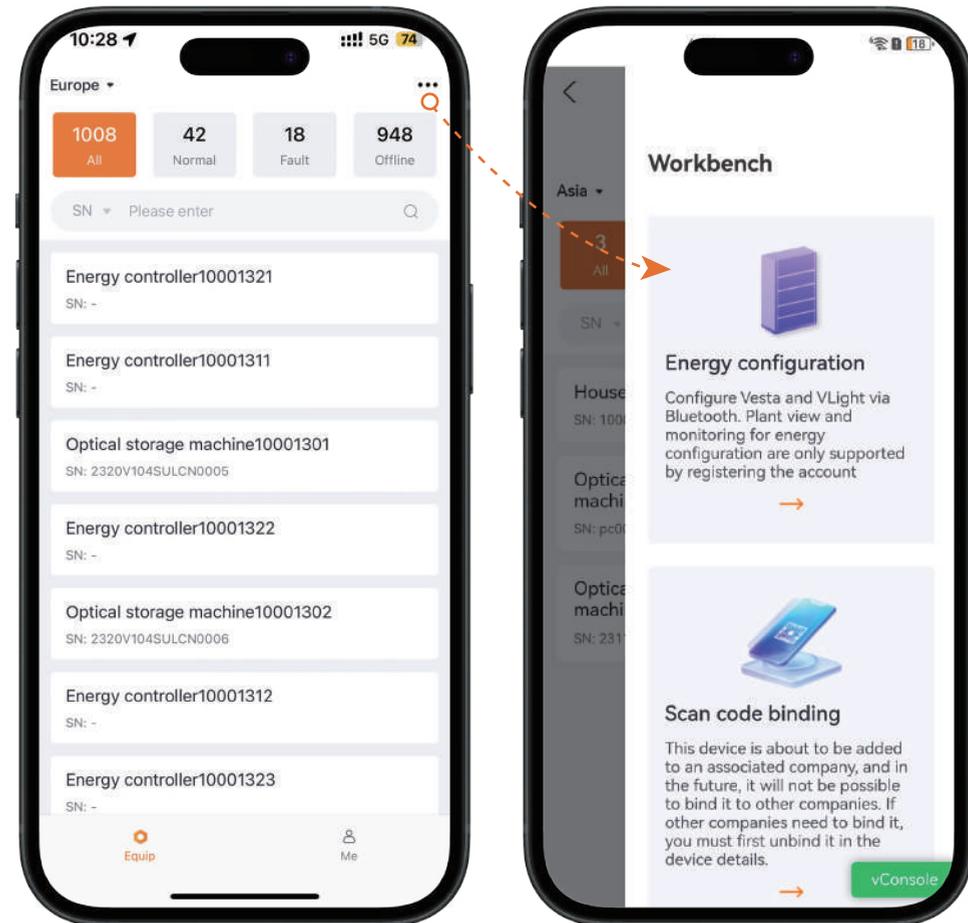
- If you are not logged in, you can configure the energy equipment via Bluetooth on the Workbench.



3. Energy configuration via Bluetooth

Method 2: After logging in

- After logging in, click the "..." icon in the upper right corner of the equipment list to configure the energy equipment via Bluetooth. Select Vesta or vLight equipment to scan the equipment code and configure the equipment after entering.



3.1 Select products and connect via Bluetooth

Select product

- Select the energy configuration and select the corresponding product based on the equipment you want to configure.



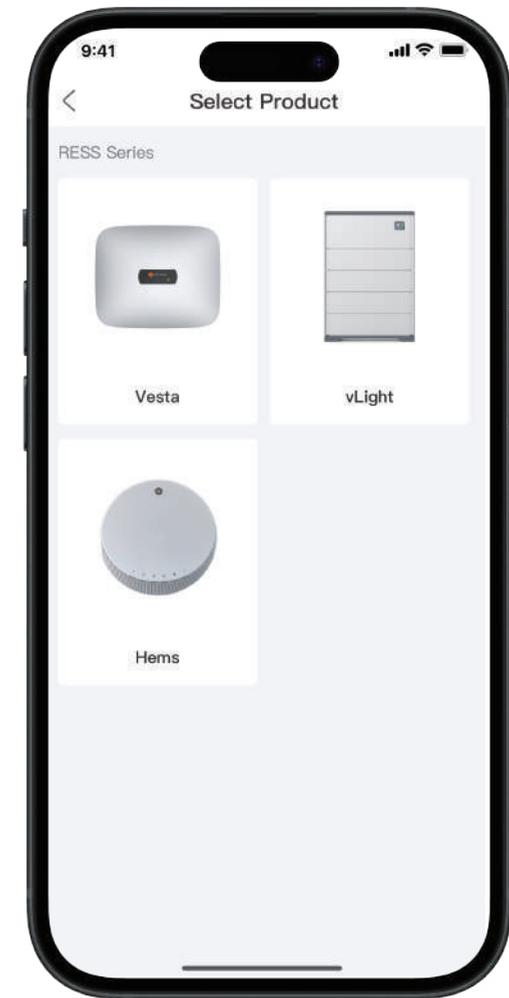
Vesta



vLight



Hems



3.1 Select products and connect via Bluetooth

Follow the scanning instructions to scan the code and enter the PIN to establish a Bluetooth connection.

Vesta guide:

Step one



- ① Turn on the grid power switch
- ② Turn on the DC switch of the Vesta inverter if there is a PV in the system

OK, Go to scan

Step two



- ① Set the vBox rotary switch to ON, then press the green "Black Start" button for 7 seconds. Release the button when the front panel green or yellow light flashes.
- ② After the lights on the vBox controller stop flashing and remain steady, the system is successfully powered on.

OK, Go to scan

Step three

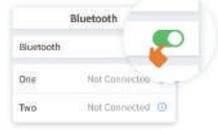


Before connecting your phone through bluetooth, please make sure

- ① All cables are correctly connected in the system as per the instructions from the user manual
- ② The dongsle is connected to the inverter

OK, Go to scan

Step four



Turn-on Bluetooth

- ① Turn on the Bluetooth in your phone

OK, Go to scan

Step five



Power-on the Inverter

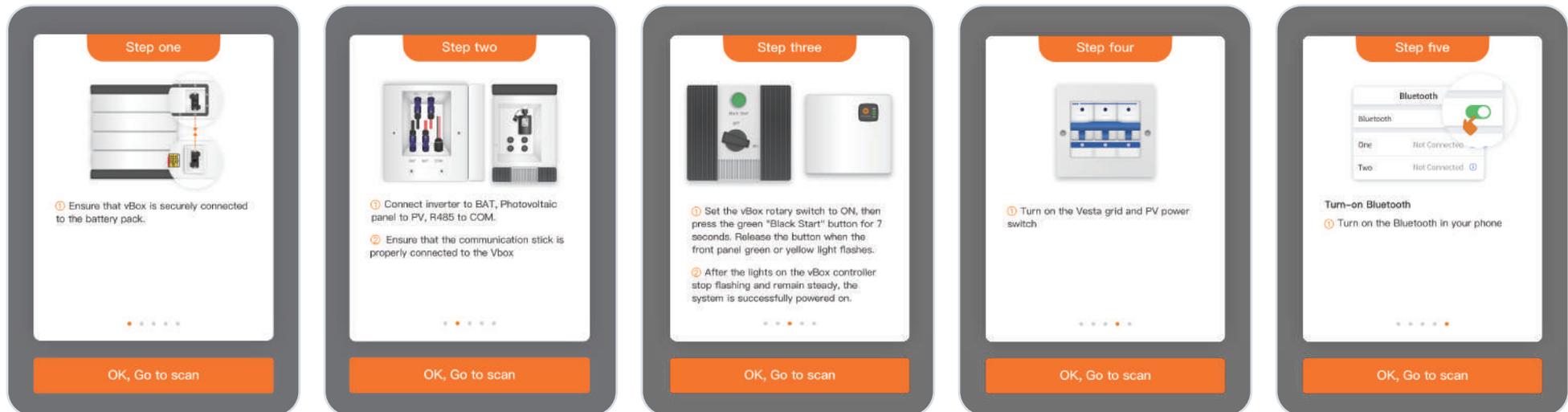
- ① Make sure the DC switch of inverter is in 'ON' position
- ② Power on the system
- ③ Do not close the app while pairing is in progress

OK, Go to scan

3.1 Select products and connect via Bluetooth

Follow the scanning instructions to scan the code and enter the PIN to establish a Bluetooth connection.

vLight guide:



Step one



① Ensure that vBox is securely connected to the battery pack.

OK, Go to scan

Step two



① Connect inverter to BAT, Photovoltaic panel to PV, R485 to COM.
② Ensure that the communication stick is properly connected to the Vbox

OK, Go to scan

Step three



① Set the vBox rotary switch to ON, then press the green "Black Start" button for 7 seconds. Release the button when the front panel green or yellow light flashes.
② After the lights on the vBox controller stop flashing and remain steady, the system is successfully powered on.

OK, Go to scan

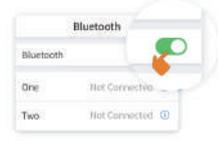
Step four



① Turn on the Vesta grid and PV power switch

OK, Go to scan

Step five



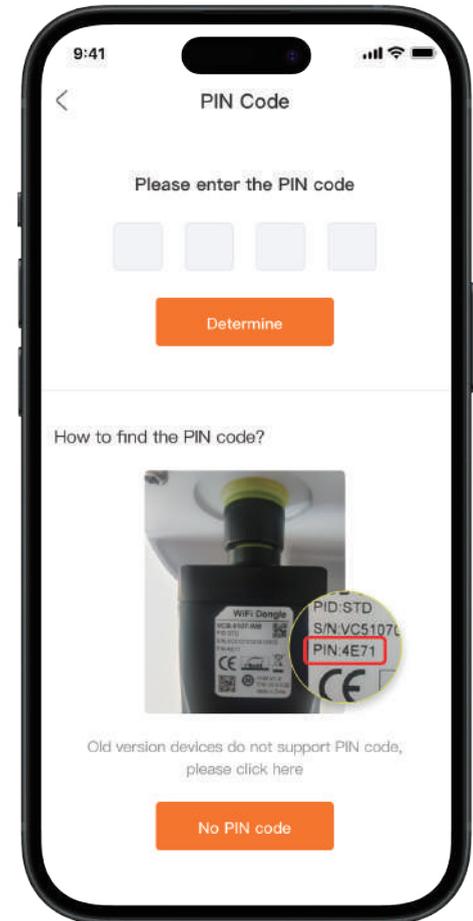
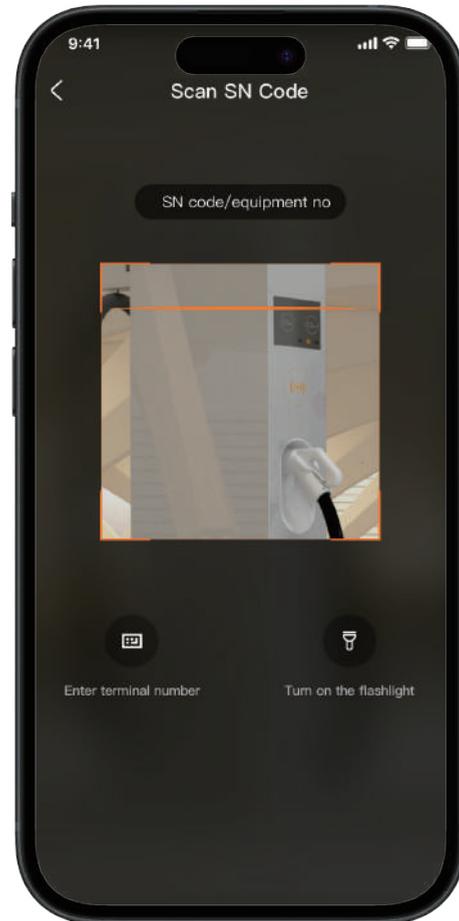
Turn-on Bluetooth
① Turn on the Bluetooth in your phone

OK, Go to scan

3.1 Select products and connect via Bluetooth

Scan code and verify PIN code

- If there are inverters, batteries, meters, charging stations, dongles, and other equipment on site, scan the barcode on the side nameplate of the inverter to establish a connection after the electrical installation is completed and the system is powered on.
- If only batteries are installed on site, scan the barcode on the top of the battery to connect after completing the installation and ensuring that the system is powered on.
- When connecting to Bluetooth, please ensure that the app has Bluetooth permission on the phone and that the phone's Bluetooth is enabled.

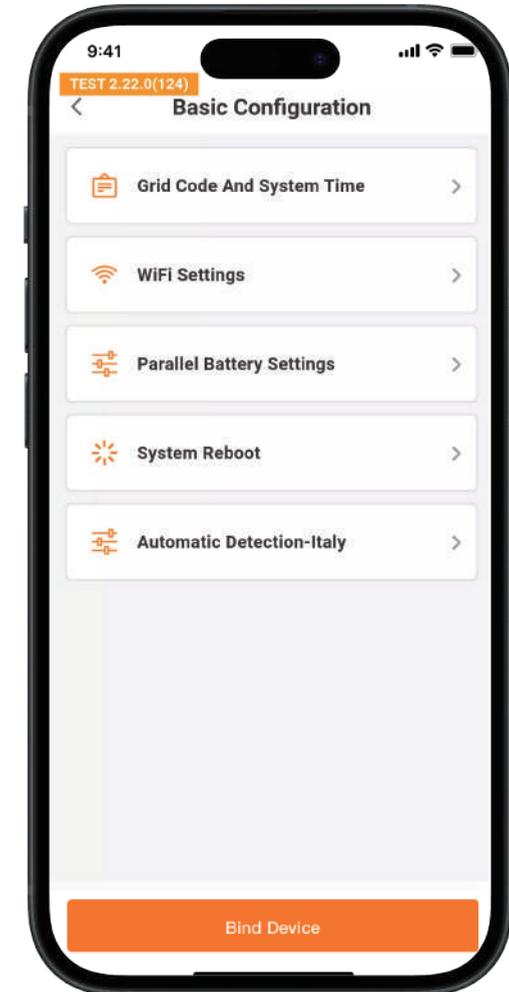


3.2 Configure Vesta or HEMS

After successfully connecting to Bluetooth, you will be taken to the configuration page, where you can see the following configurations.

Configuration

- WiFi settings (necessary)
- Grid code and system time (necessary)
- Parallel battery settings(necessary)
- System restart (unnecessary)
- Automatic Detection-Italy

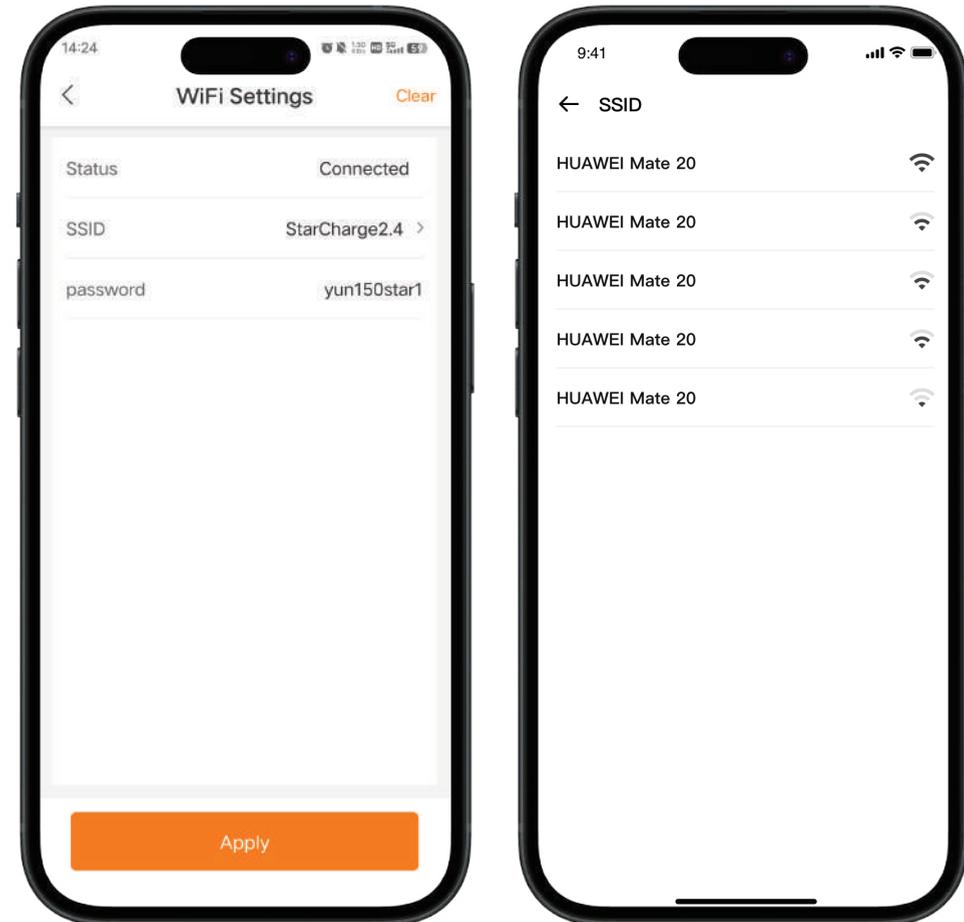


3.2 Configure Vesta or HEMS

The system needs to be connected to the user's home network in order to communicate with the cloud. Otherwise, the user will not be able to view and control the system operation through the app. Please confirm the wireless network and password at home with the user and send them to the device via the app. When the NET light on the dongle is always on or the network connection status on the page is connected, it indicates that the system has successfully connected to the current network.

WiFi settings

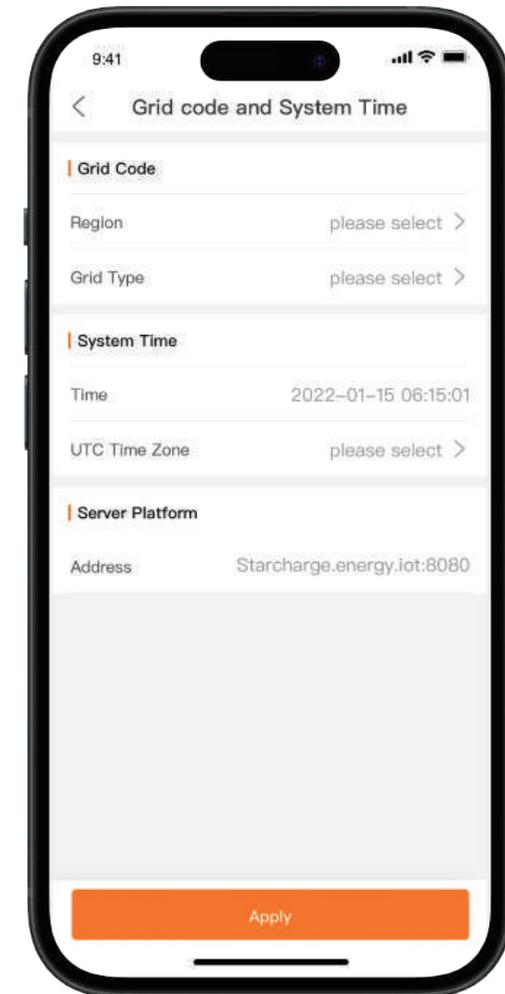
- Check the available networks for the device, select one, and enter the correct password to connect it to the network.
- The device attempts to connect to this network, and the "Network" light remains on to indicate a successful connection.
- Currently, only networks in the 2.4GHz band are supported.



3.2 Configure Vesta or HEMS

Grid code and system time

- The system needs to select the correct grid code based on the location and will operate according to the safety regulations of the corresponding grid. If the selection is incorrect, it may cause system failure or inability to operate. If you are unsure how to make the selection, please contact Star Charge service personnel for assistance.
- When executing the charging and discharging plan, the system needs to obtain the correct timing. Please select and apply the correct time zone. When connected to a network, the system will calibrate regularly to ensure time accuracy. You can also compare the current system time with the latest time.

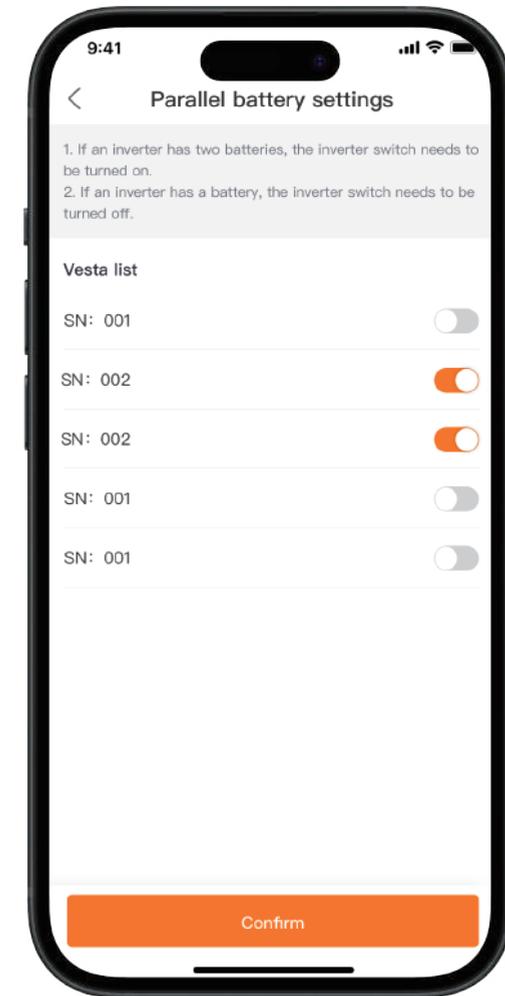


3.2 Configure Vesta or HEMS

Parallel battery settings

This configuration is used to connect one or two batteries to each Vesta. Upgrade information will be delivered based on the device address during firmware upgrade. Be sure to configure it correctly.

- If an inverter has two batteries, the inverter switch needs to be turned on
- If an inverter has a battery, the inverter switch needs to be turned off



3.2 Configure Vesta or HEMS

System restart

- When the system encounters problems again, you can try to restart the software of certain devices for recovery.
- The device may disconnect from the phone's Bluetooth or network connection during a restart.
- The devices that support restarting include:



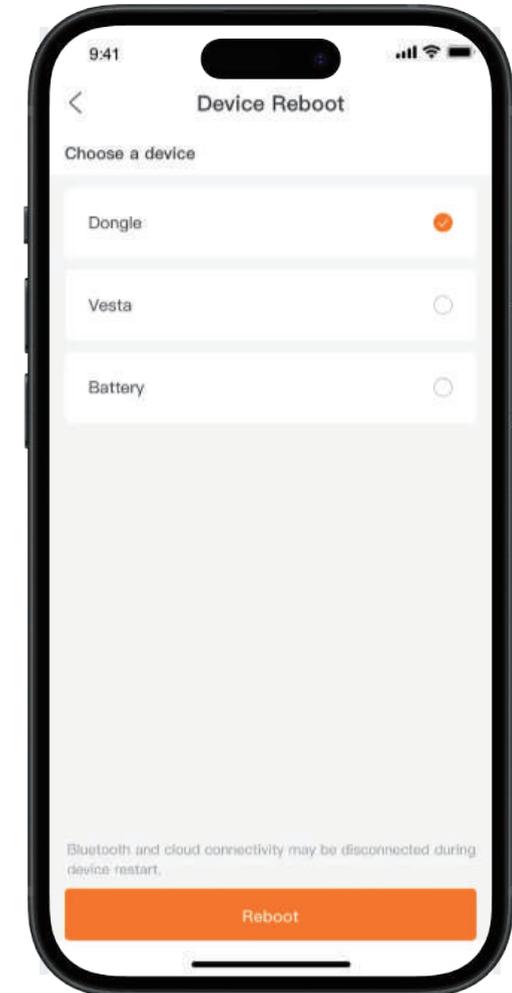
Dongle



Vesta



Battery



3.2 Configure Vesta

Automatic Detection-Italy

After the required settings are configured, this menu can be self-checked. At present, only in support of Italy, the general self-test function will be developed in the future.

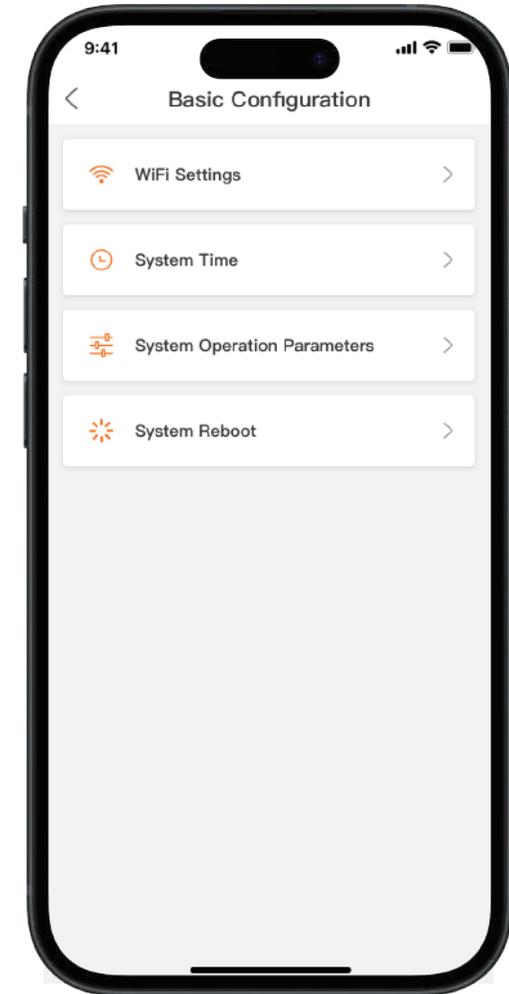


3.3 Configure vLight

After successfully connecting to Bluetooth, you will be taken to the configuration page, where you can see the following configurations.

Configuration

- WiFi settings (necessary)
- System time (necessary)
- System operation parameters (necessary)
- System reboot (unnecessary)

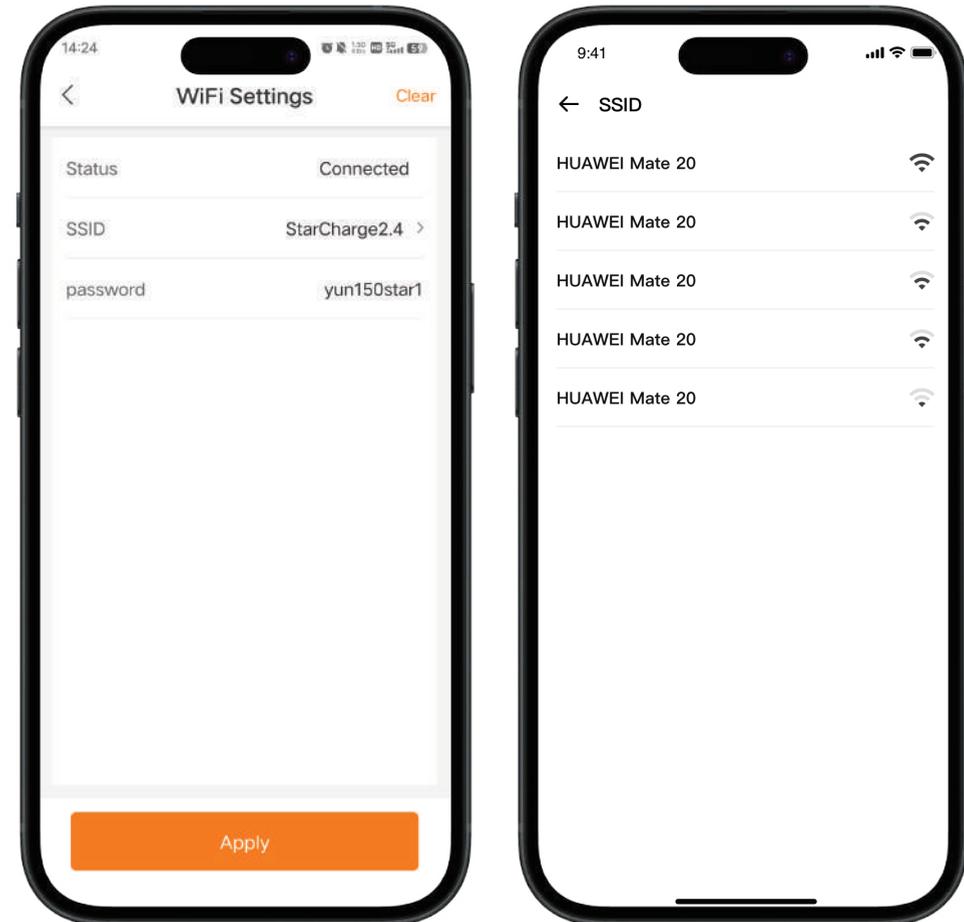


3.3 Configure vLight

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WiFi settings

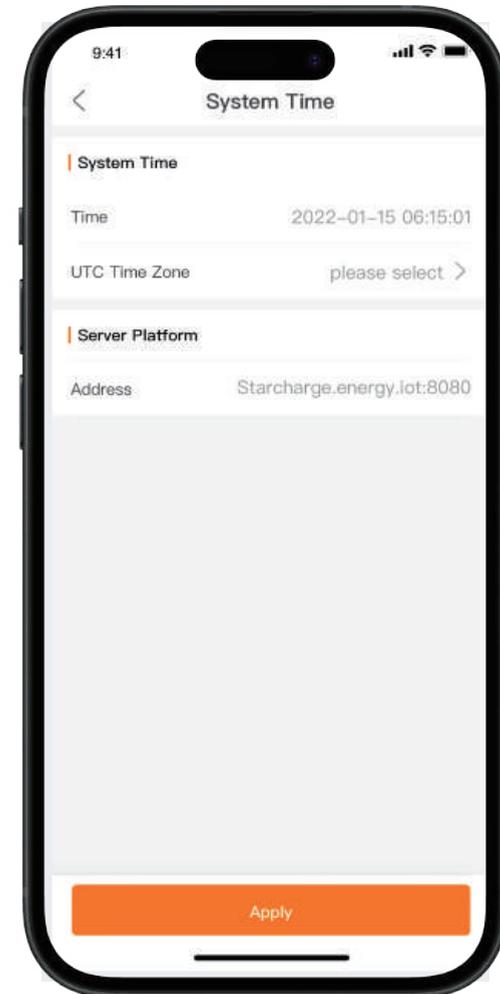
- Check the available networks for the device, select one, and enter the correct password to connect it to the network.
- The device attempts to connect to this network, and the "Network" light remains on to indicate a successful connection.
- Currently, only networks in the 2.4GHz band are supported.



3.3 Configure vLight

System time

- When executing the charging and discharging plan, the system needs to obtain the correct timing. Please select and apply the correct time zone. When connected to a network, the system will calibrate regularly to ensure time accuracy. You can also compare the current system time with the latest time.



3.3 Configure vLight

System restart

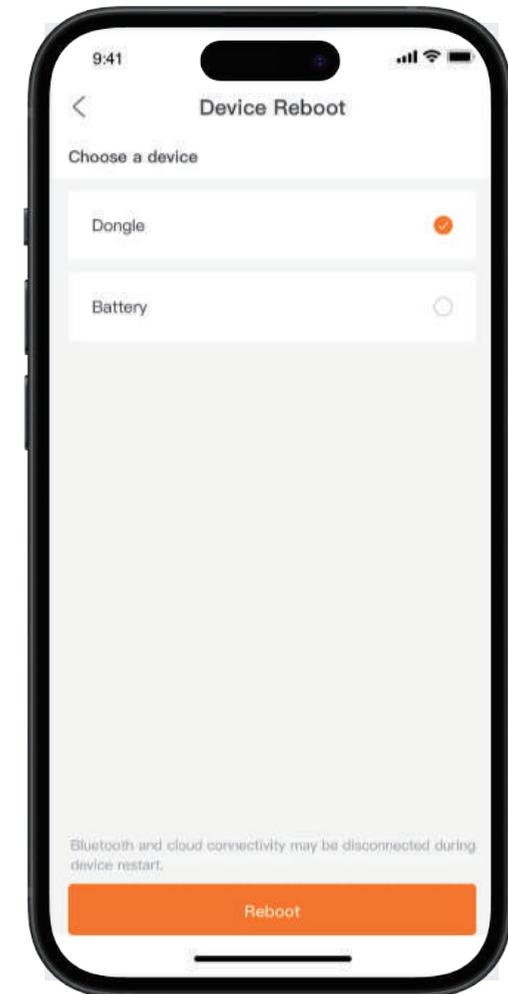
- When the system encounters problems again, you can try to restart the software of certain devices for recovery.
- The device may disconnect from the phone's Bluetooth or network connection during a restart.
- The devices that support restarting include:



Dongle



Battery



3.3 Configure vLight

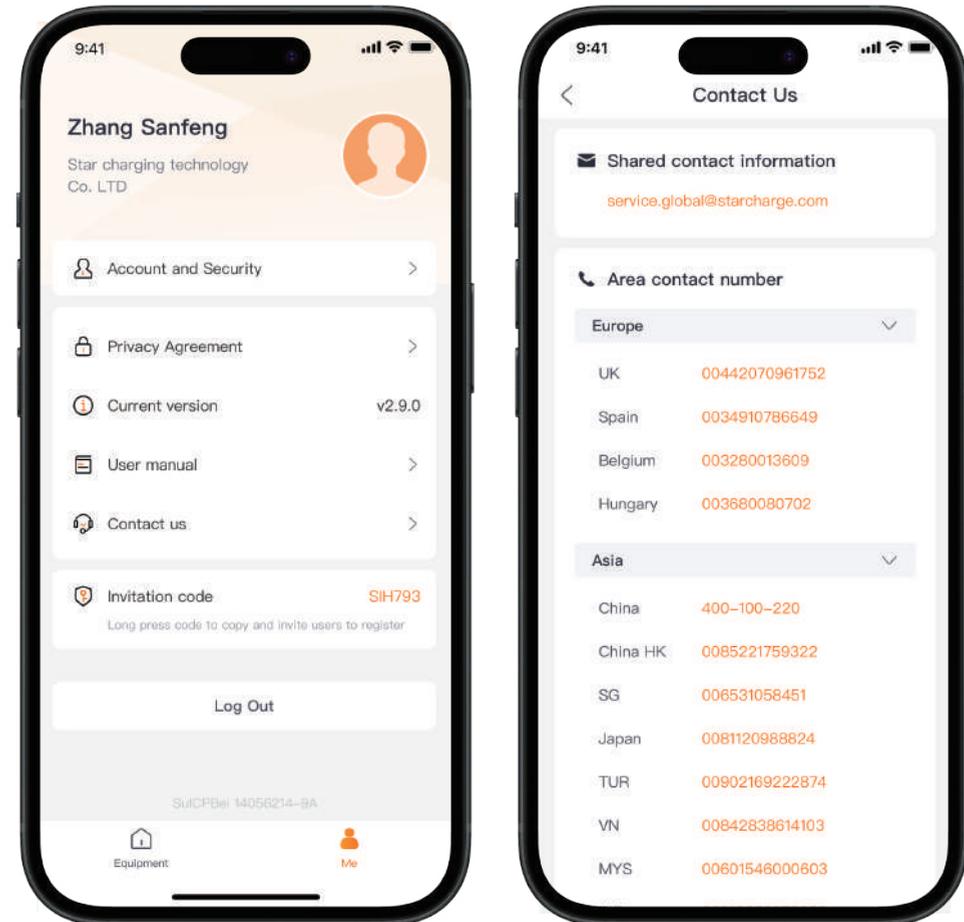
System operating parameters

- vLight is a battery product specifically designed for third-party photovoltaic inverters. The DC side connects to the existing photovoltaic inverter at the user's site. Since the DC port voltage range varies among different photovoltaic inverters, please refer to the nameplate information on the third-party inverter and enter its maximum voltage as the operating parameter for vLight to protect the battery. If this information is unavailable, please contact Star Charge service personnel for assistance.



4. Mine

- Account and Security: Modify account login password
- Privacy Agreement
- Invitation Code
- Current version
- Contact Us





THANK YOU

