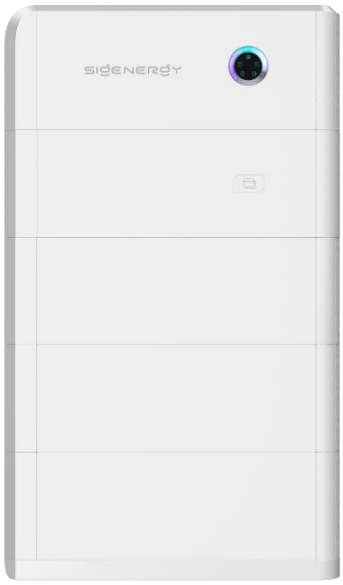
Application note - How to setup the communication between Sigen EV AC Charger and Sigenergy inverters

Revision History

Version 1.0, June 2024 – Initial release



This document provides an overview of possible solutions to setup the communication between Sigen EV AC Charger and Sigenergy inverters before customers plan to charge using PV boost energy.
This document covers the following products.

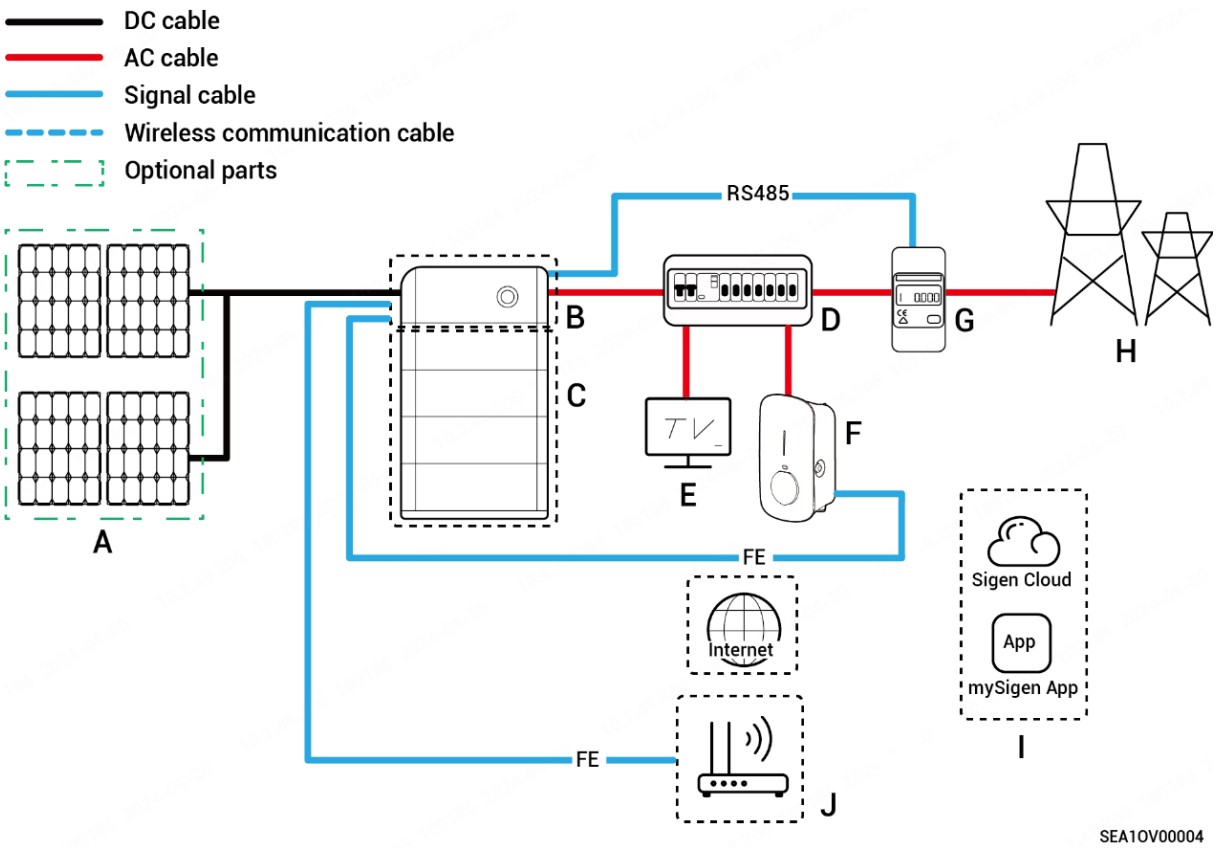
Sigen EV AC Charger models	**Sigenergy Inverters models**
Sigen EVAC Charger series	SigenStor EC series Sigen Hybrid series Sigen PV Max series

Setup the electrical connection

Please ensure the correct electrical connection when installing or setup the products including connecting the FE cable from the Sigen EV AC charger to the Sigenergy inverter etc. Contact your installer when any problems occur.

Scenario #1 - Sigen EVAC and Sigenergy Inverter are connected directly with the Ethernet cable

In this scenario, connected Sigen EVAC to Sigenergy Inverter directly using Ethernet cable when this connection is available.



A. PV panel

B. SigenStor EC/ Sigen Hybrid

C. SigenStor BAT

D. Distribution panel

E. Home loads

F. Sigen EV AC Charger

G. Power Sensor

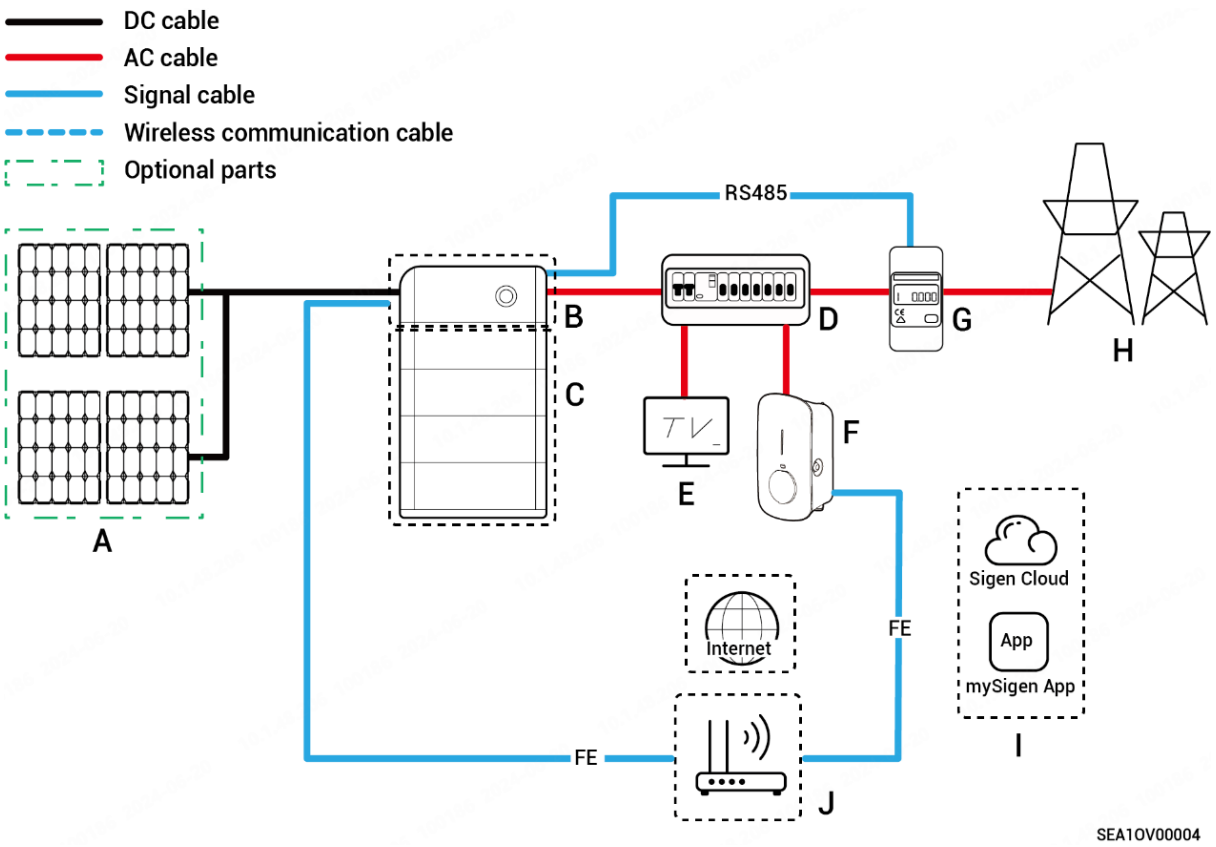
H. Power grid

I. mySigen

J. Router

Scenario #2 - Sigen EVAC and Sigenergy Inverter are connected to the same Router with the Ethernet cable

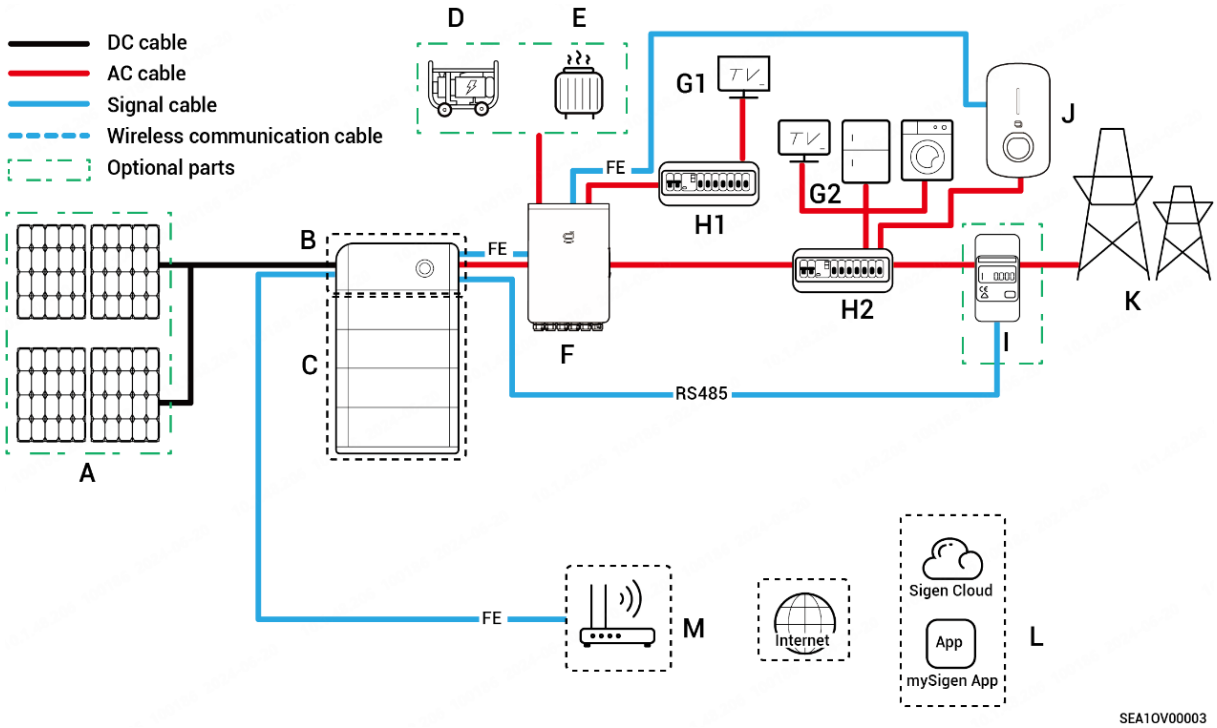
In this scenario, connected Sigen EVAC to the same router which Sigenergy Inverter is connected to. Using Ethernet cable when this connection is available.



A. PV panel
B. SigenStor EC/ Sigen Hybrid
C. SigenStor BAT
D. Distribution panel
E. Home loads
F. Sigen EV AC Charger
G. Power Sensor
H. Power grid
I. mySigen
J. Router

Scenario #3 - Sigen EVAC is connected to Gateway directly with Ethernet cable

In this scenario, connected Sigen EVAC to Sigenergy Gateway directly using Ethernet cable. Sigenergy Inverter is connected to Internet with Ethernet cable, WLAN or CommMod which is described as above.



A. Solar panel B. SigenStor EC/ Sigen Hybrid C. SigenStor BAT

D. Diesel generator E. Smart load F. Gateway G1. Backup home loads

H1. Backup power distribution panel G2. Non-backup home loads

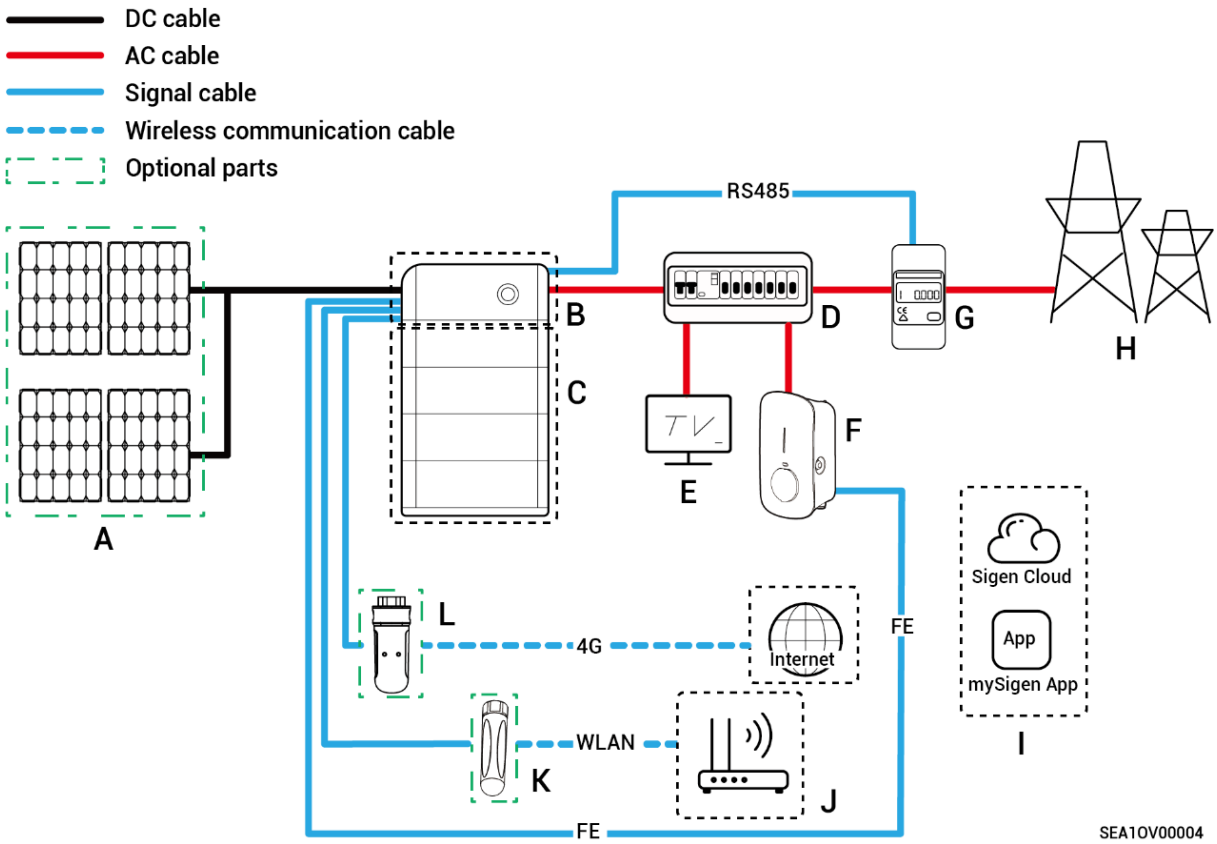
H2. Non-backup power distribution panel I. Power Sensor

J. Sigen EV AC Charger K. Power grid L. mySigen F. Router

N. Antenna O. CommMod

Scenario #4 - Sigen EVAC and Sigenergy Inverter is connected directly with Ethernet cable, Sigenergy Inverter connected to Internet with WLAN or Sigen CommMod

In this scenario, connected Sigen EVAC to Sigenergy Inverter directly using Ethernet cable. But the system is connected to Internet with WLAN or CommMod (wireless method).



A. PV panel

B. SigenStor EC/ Sigen Hybrid

C. SigenStor BAT

D. Distribution panel

E. Home loads

F. Sigen EV AC Charger

G. Power Sensor

H. Power grid

I. mySigen

J. Router

K. Antenna

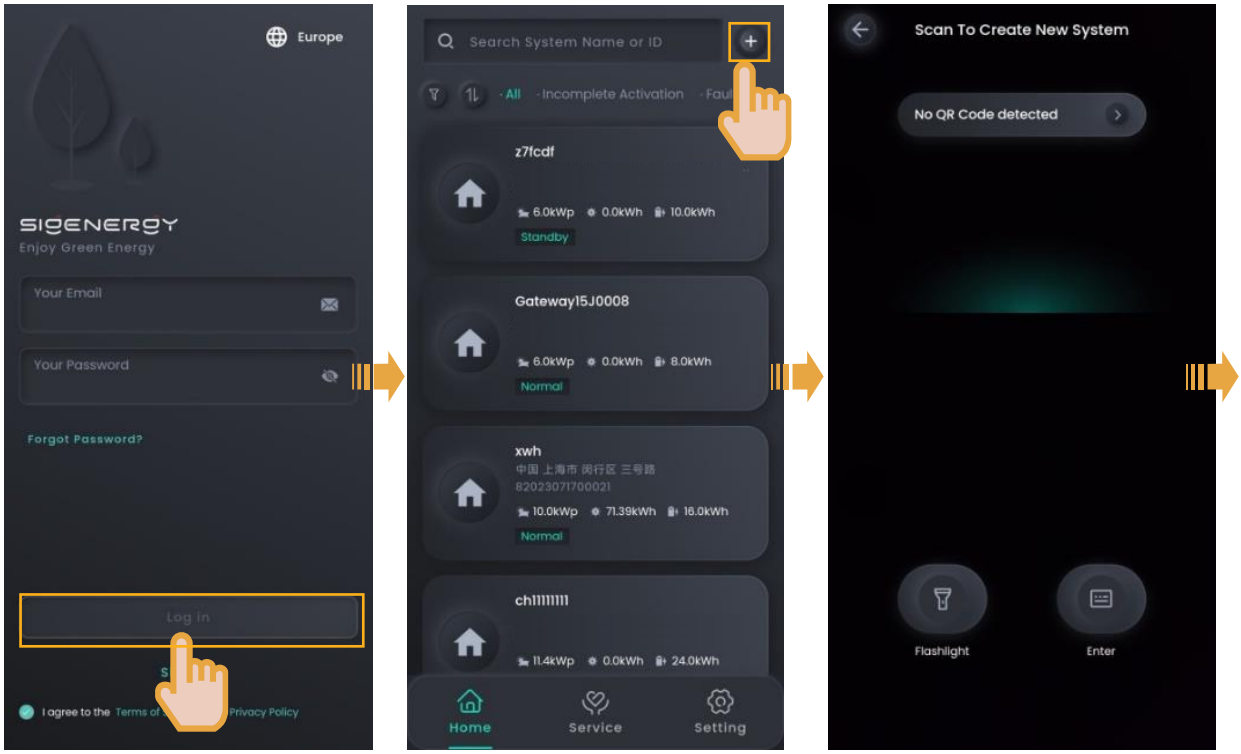
L. CommMod

Update the firmware

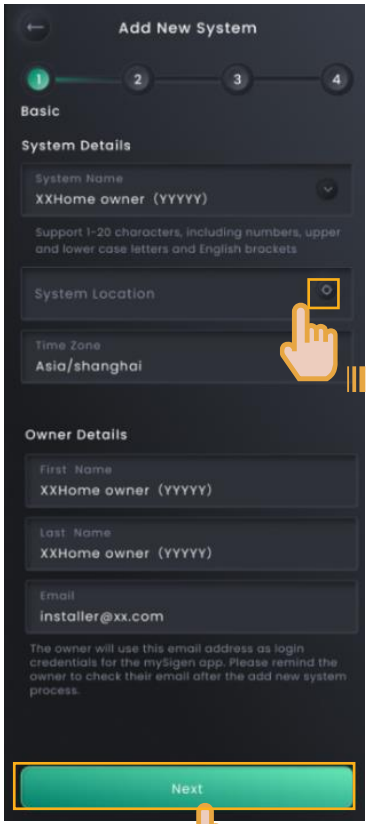
Please update the firmware of both Sigen EV AC charger and Sigenergy inverter to the latest version. To guarantee the correct operation of solar charging, please ensure your APP is version 1.9.4 or newer.

1. App installer account operation

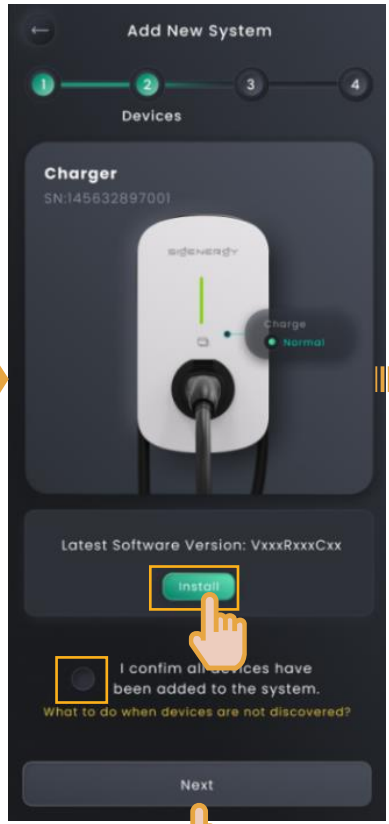
1.1 For new Sigen EV AC charger as connected in Scenario #1~3, please update the firmware of EVAC as in following steps (Pictures below may be varied depending on different version).



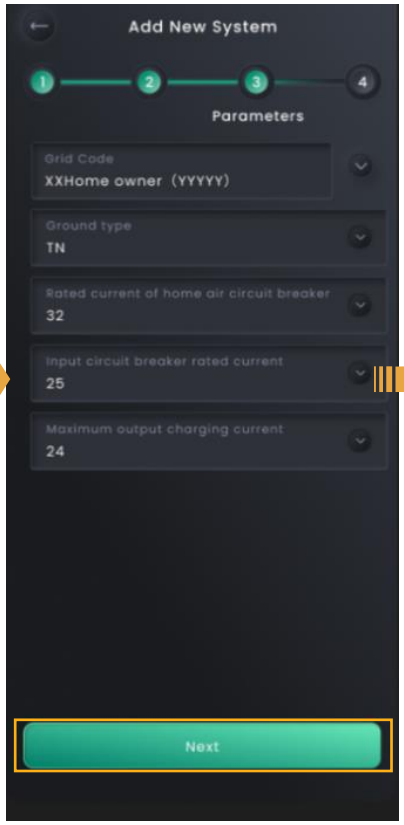
Scan the QR code of Sigen EVAC Charger



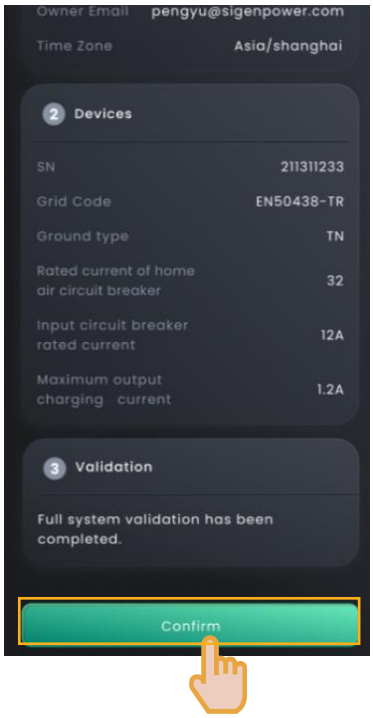
Manually locate the address, set the Time Zone, and enter Owner Details.



Perform upgrades to latest versions for Sigen EV AC charger

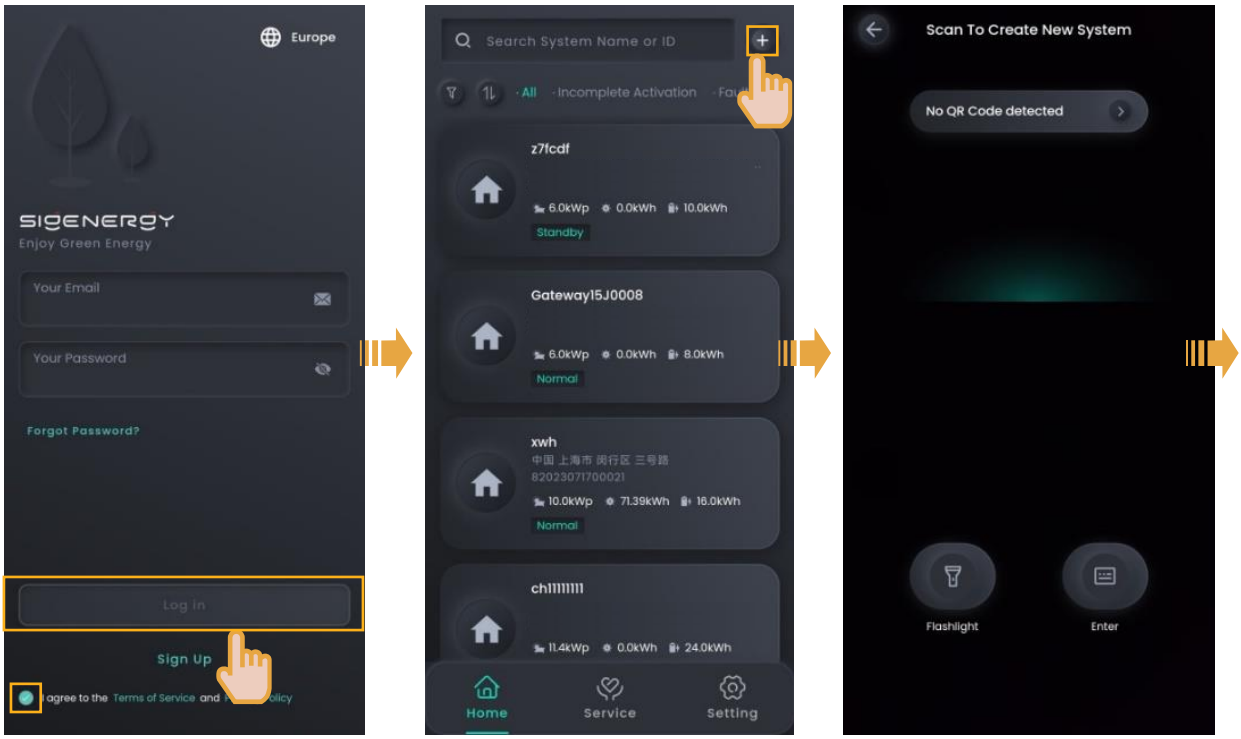


Set parameters as needed.
Rated current of home air circuit breaker
> Input circuit breaker rated current
> Maximum output charging current

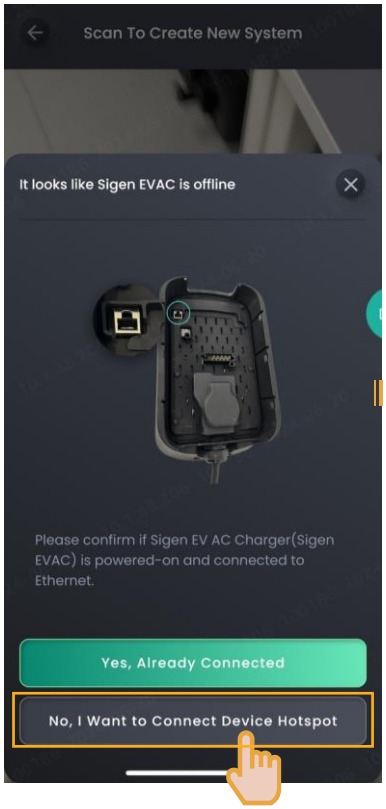


Confirm and finish

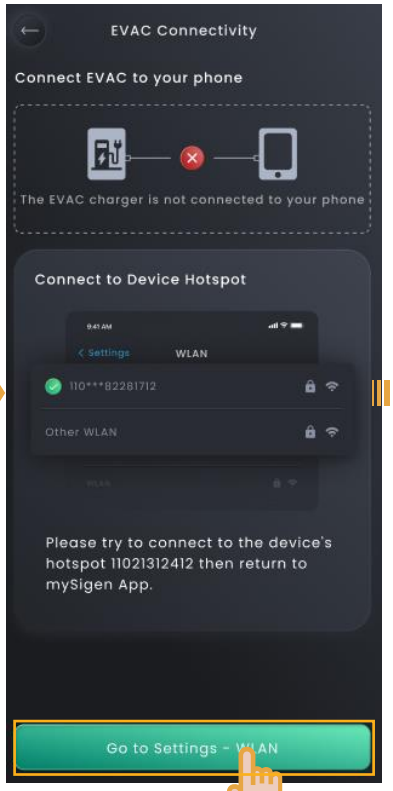
1.2 For new Sigen EV AC charger as connected in Scenario #4, please update the firmware of EVAC as in following steps(Pictures below may be varied depending on different version).



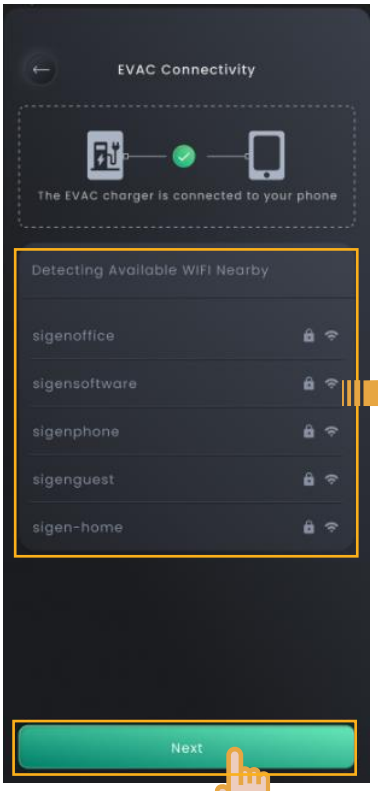
Scan the QR code of Sigen EVAC Charger



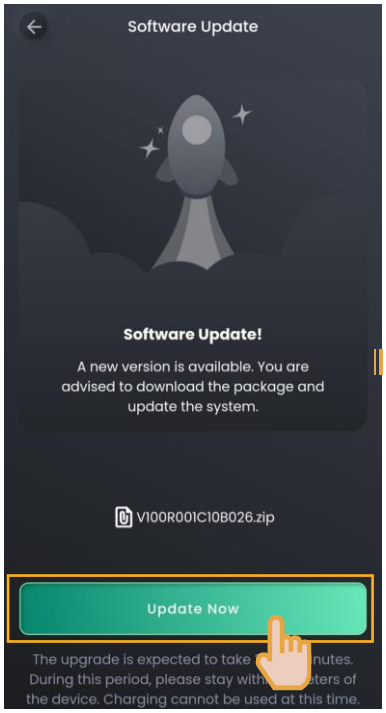
Click this button if the equipment is still not connected to the internet

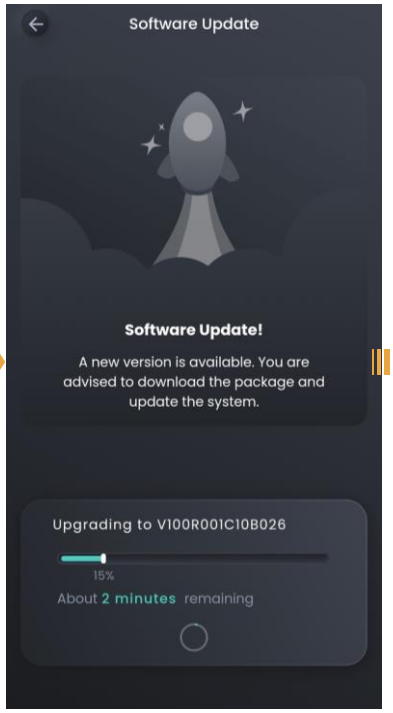


Connect to the equipment's WLAN hotspot. The hotspot is named as equipment SN and the passcode is given on the equipment label.



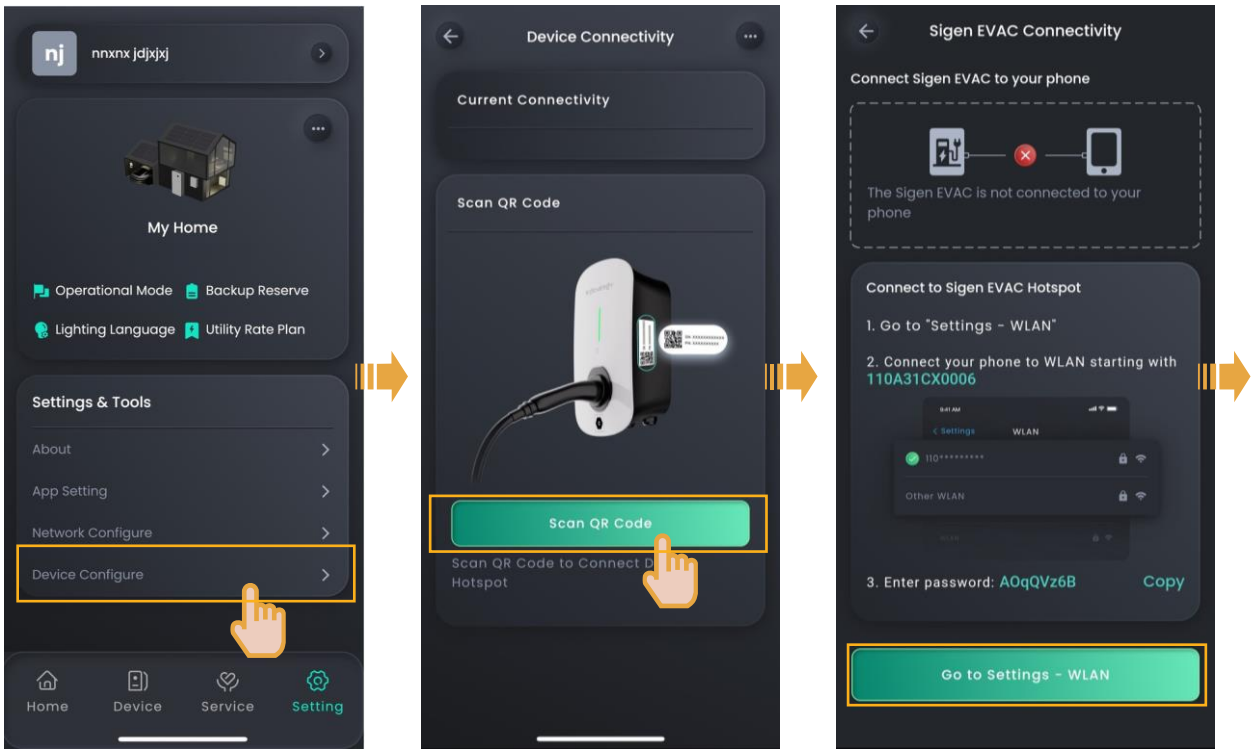
Click this button if no WLAN hotspot is available at the owner's premises

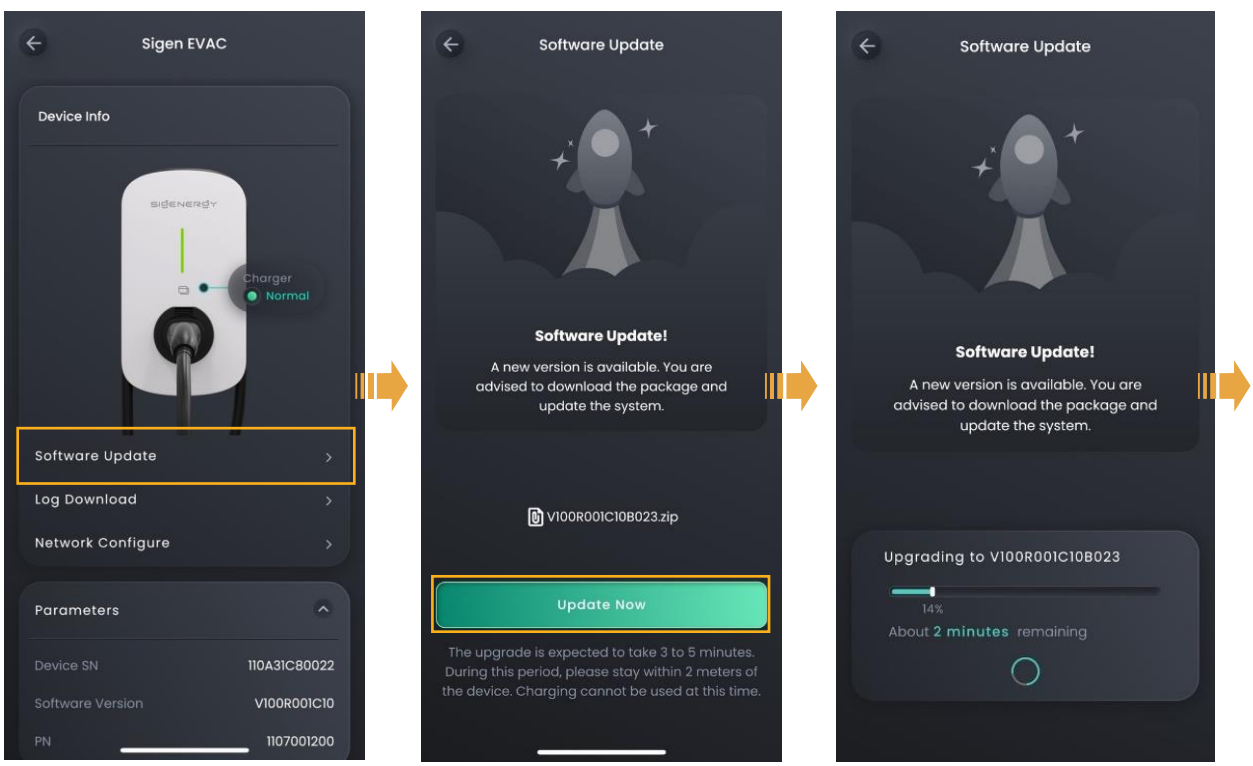


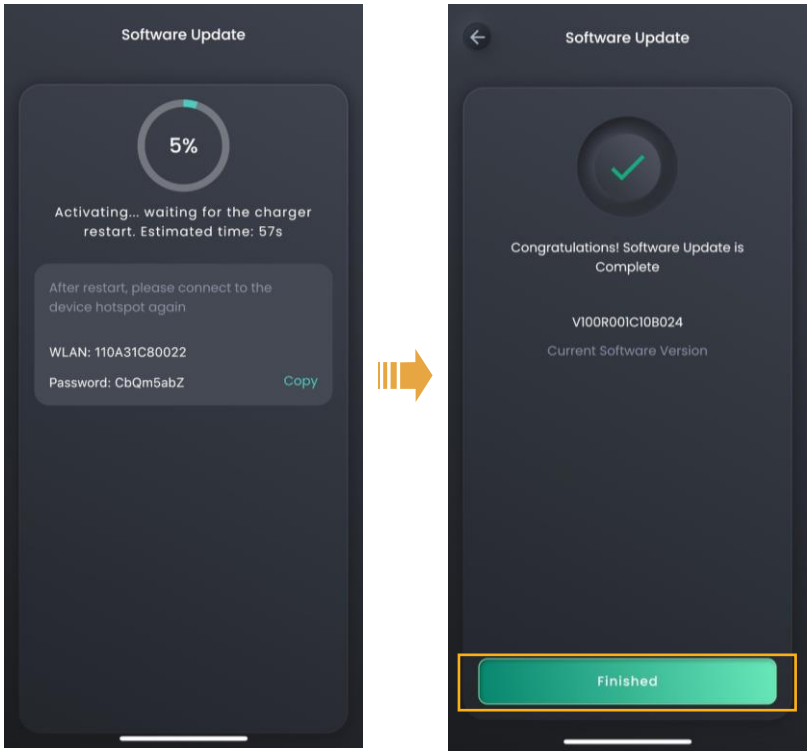


2. App user account operation

2.1 For Sigen EV AC charger is already for use, please update the firmware of EVAC as in the following steps (Pictures below may be varied depending on different version).







Combining Sigen EVAC to Sigenergy Inverter System

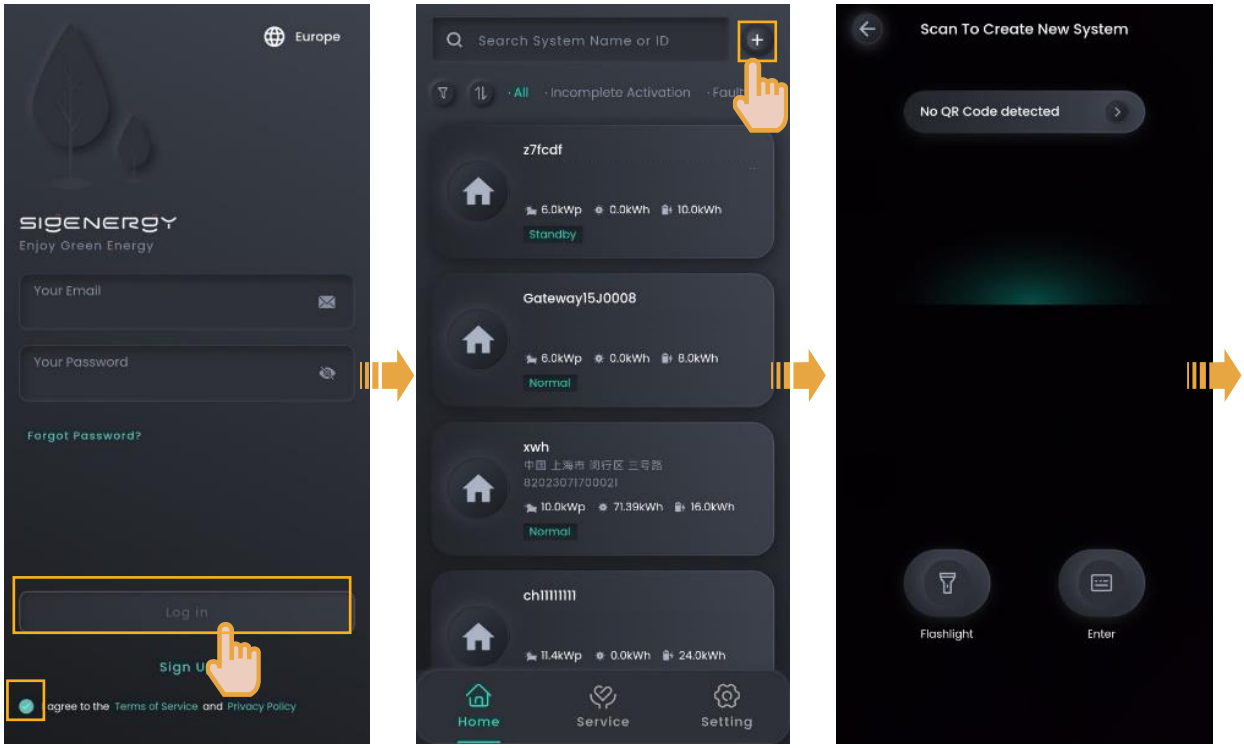
Please ensure the firmware of both Sigen EV AC charger and Sigenergy inverter is updated to the newest version. To guarantee the correct operation of solar charging, please ensure your APP is version 1.9.4 or higher.

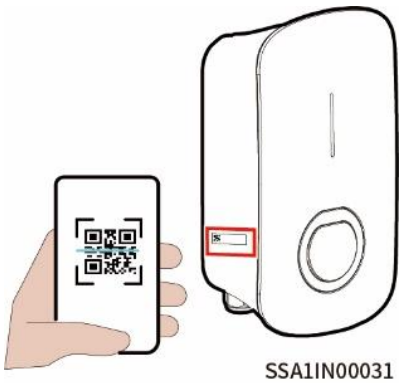
Tips

- The screen for creating new systems differs slightly between PV charging and PV storage & charging networking, but the operations are the same. The illustrations here are for reference only. The actual screen display shall prevail.
- Before creating new systems, please check that Sigen EVAC is connected to our inverter with the Fast Ethernet network cable.

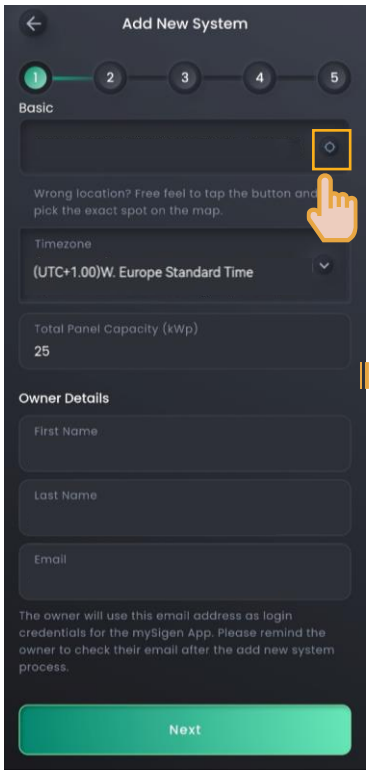
1. App installer account operation

1.1 Creating New Systems in Both Sigen EVAC and Other Devices

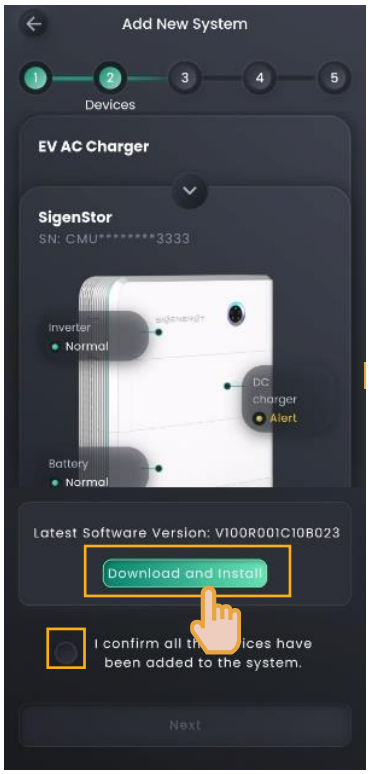




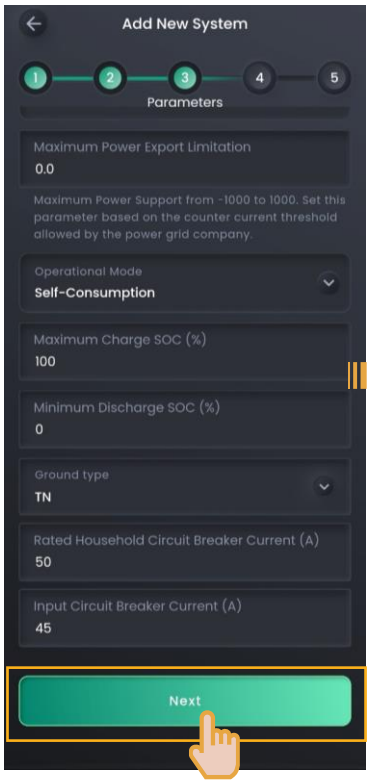
Scan the QR code of Sigen EVAC Charger



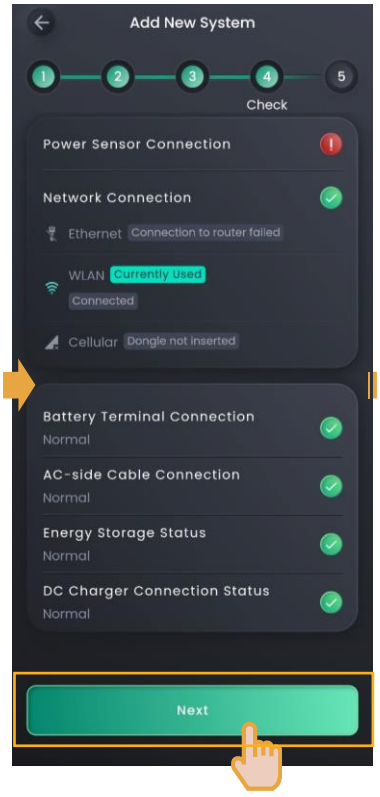
Manually locate the address, set the Timezone, and enter Owner Details.



Perform upgrades where necessary.

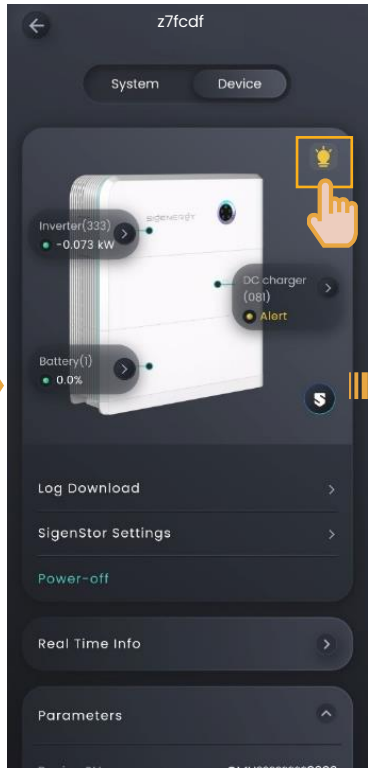


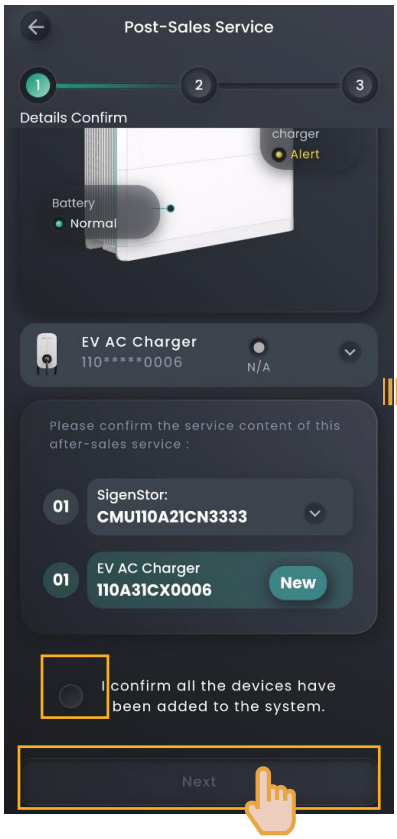
Set parameters as needed. Rated Household Circuit Breaker Current > Input Circuit Breaker Current > Default Output Charging Current

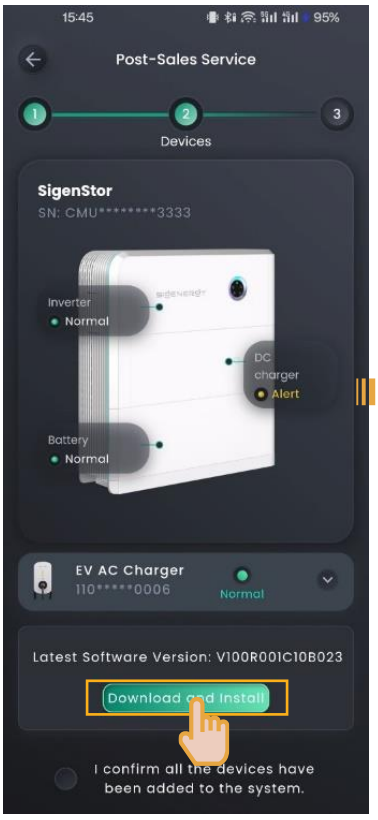


To modify the parameter values you set before, click to confirm the modification and create new systems

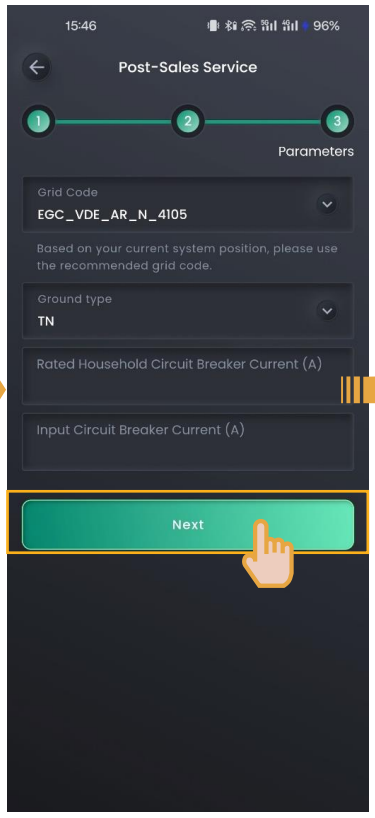
1.2 Adding Sigen EVAC to an Existing Power Station







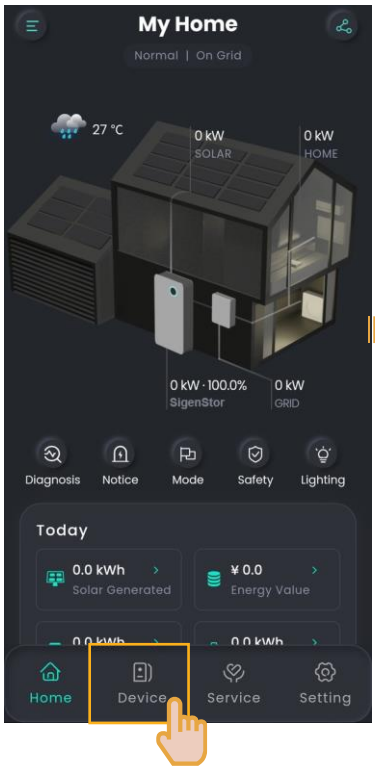
Perform upgrades where necessary.

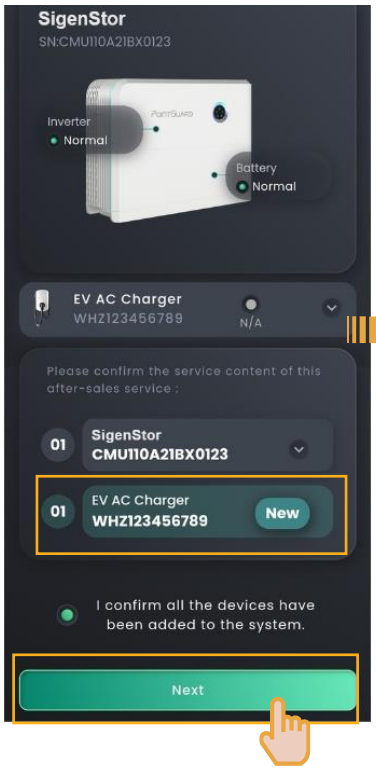


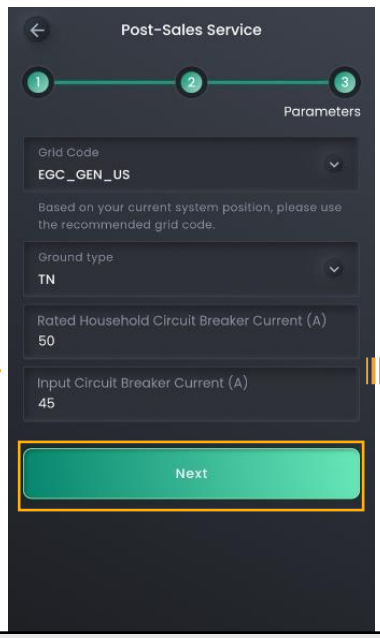
Set parameters as needed. Rated Household Circuit Breaker Current > Input Circuit Breaker Current > Default Output Charging Current

2. App user account operation

Please follow the below step to combine Sigen EV AC Charger and Sigenergy Inverter.







Set parameters as needed.
Rated Household Circuit Breaker Current
> Input Circuit Breaker Current
> Default Output Charging Current