

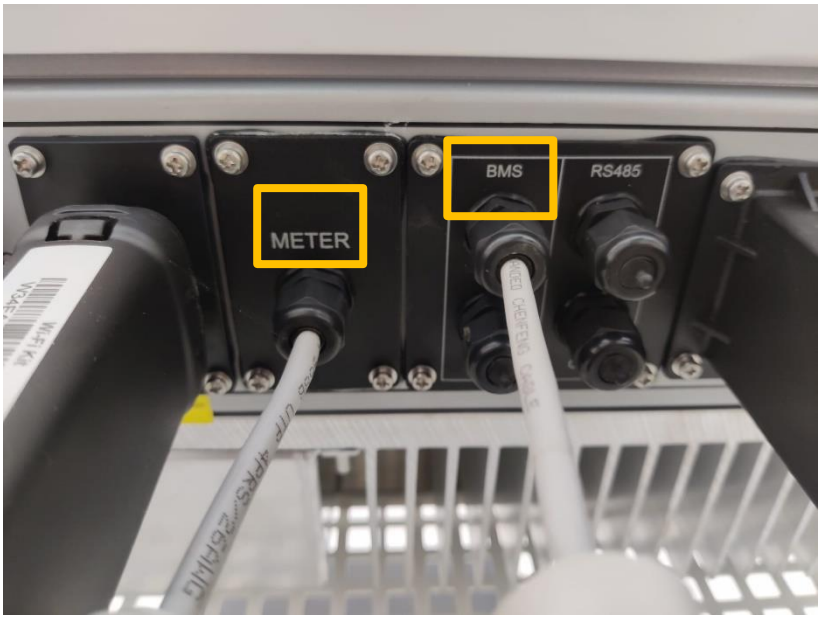


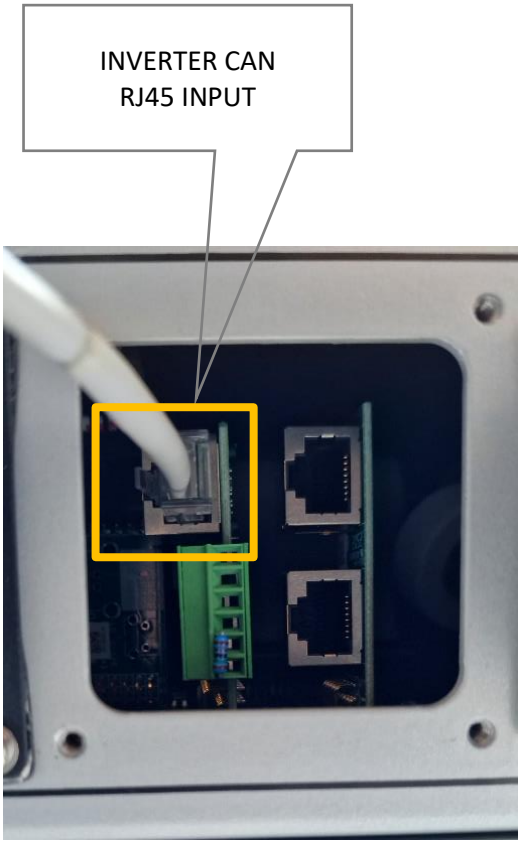
Goodwe
HYBRID INVERTER
ES single Phase
Whole Power Range

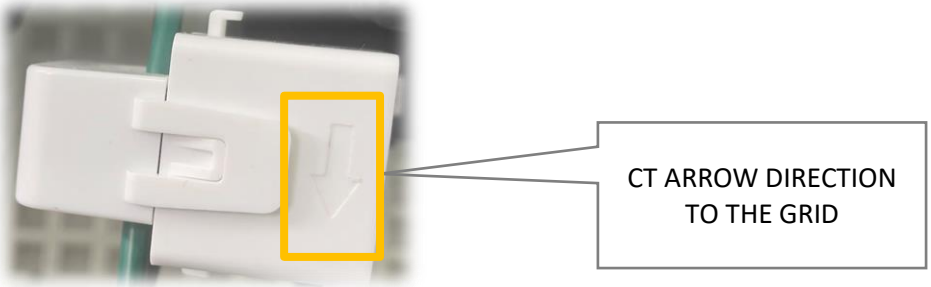
Goodwe ES Hybrid 230Vac Single Phase Inverter Quick Configuration Guide

Preparations:

Open the covers underneath the inverter to access all the connection boards, CAN port, CT terminal and Battery Power Connection Terminal are all located here.





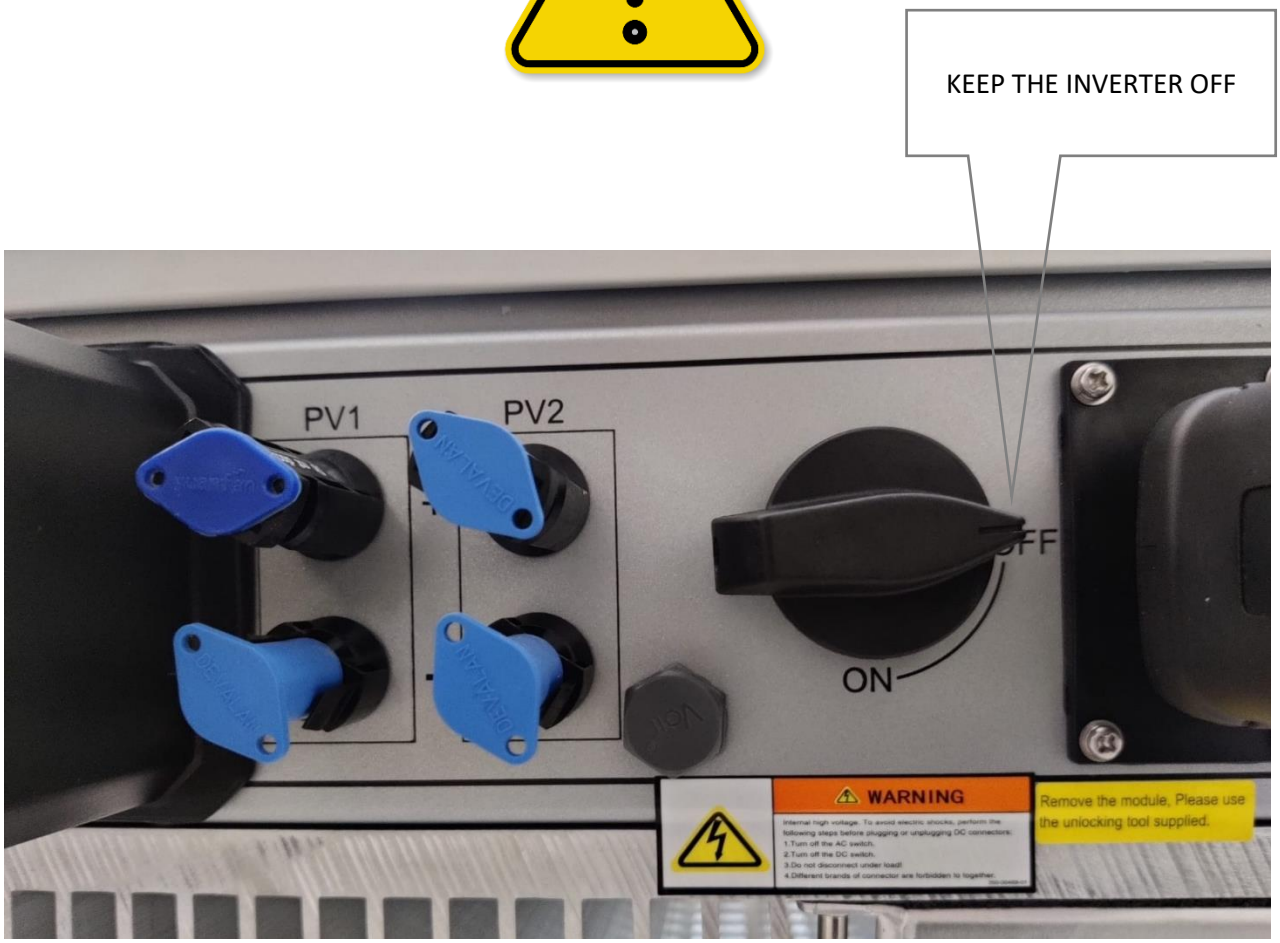


Step 1. Safety Preparation

For Safety reason it is forbidden to install any power inputs such as PV, GRID or BATTERY before having completed all the data wiring connection as explained below.

- The PV cables cannot be conneted at this stage
- Grid and Generator wires cannot be conencted at this stage
- Battery must kept OFF while performing the connection operations, power cables to be connected at last.
- Ground the Inverter immediately after fixing it on the wall





Step 2. Battery Preparation

Keep the BMS switch on “0” OFF.
Set the DIP Switch of the battery in accordance with the relevant manual.
Connect the provided CAN cable RJ45 to the CAN A port.
The RJ45 Terminal on the other side needs to be crimped to match inverter PIN OUT.
Do not connect the power cables at this stage.

5K3 XP EXAMPLE
DIP switched are set all OFF (00000000). Only DIP of last slave must be set differently (00000100).



4K4 LT EXAMPLE
DIP switched are set all OFF (00000000). Only DIP of last slave must be set differently (00000100).



Step 2.1. Can Connection

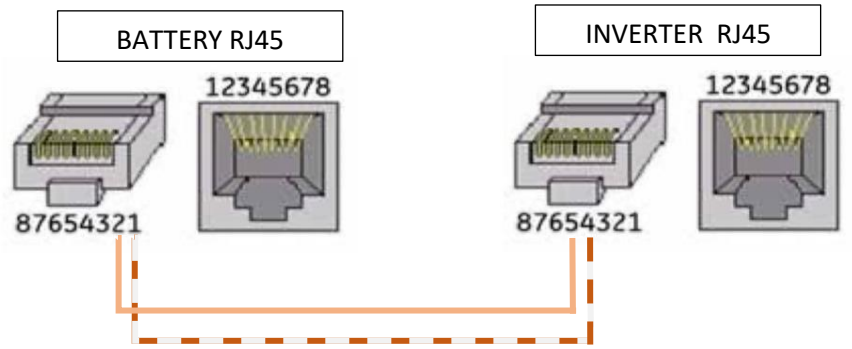
WeCo Provides an RJ45 cable Type T568B with any battery Kit.

BMS CAN PIN OUT at battery side is the same for any WeCo battery.

The RJ45 Terminal on the inverter side needs to be crimped to match inverter PIN OUT

Terminal	Battery Side RJ45	GOODWE Side RJ45
GND	PIN 3	---
CAN -L-	PIN 2	PIN 5
CAN -H-	PIN 1	PIN 4

ATTENTION GOODWE CAN BMS CABLE TO BE MODIFIED LOCALLY



BATTERY SIDE KEEP THE ORIGINAL RJ45 TERMINAL



INVERTER SIDE MAKE A NEW TERMINAL PIN OUT



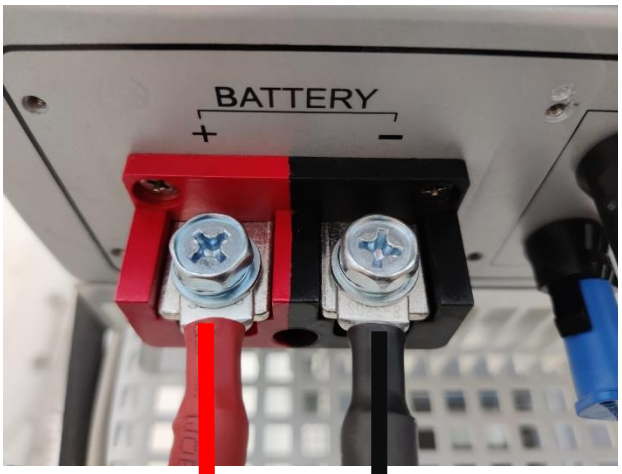
Step 3. Battery Power Connection

Keep Inverter and Battery OFF.
Open the lid and connect the power Cables from the battery to the Inverter.
Use a Torque Wrench to secure the cables bolt.



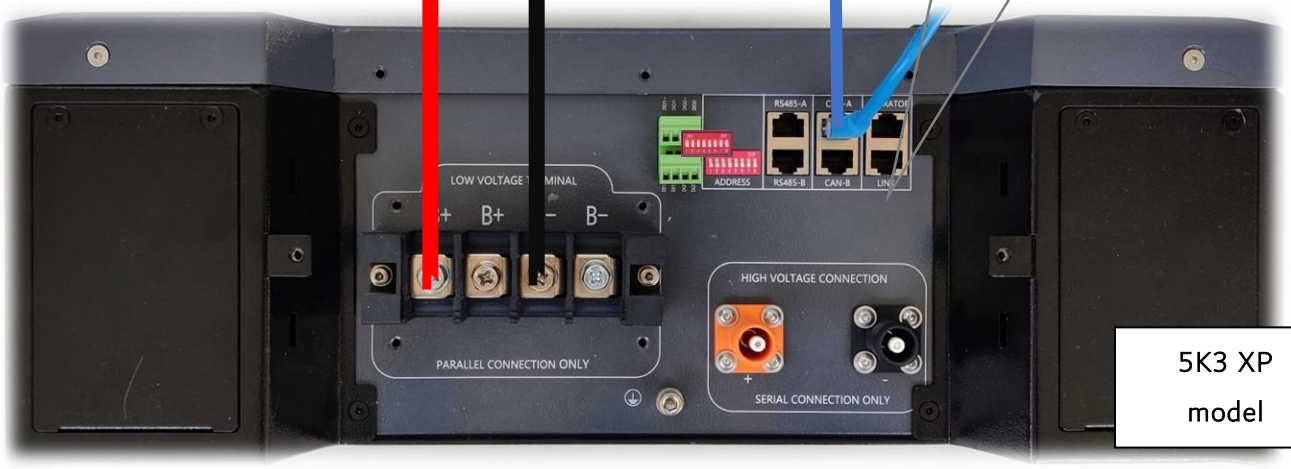
INVERTER OFF
BATTERY OFF

Battery Torque: 9.5 Nm
Inverter Torque: 11 Nm





KEEP THE BATTERY OFF



5K3 XP model

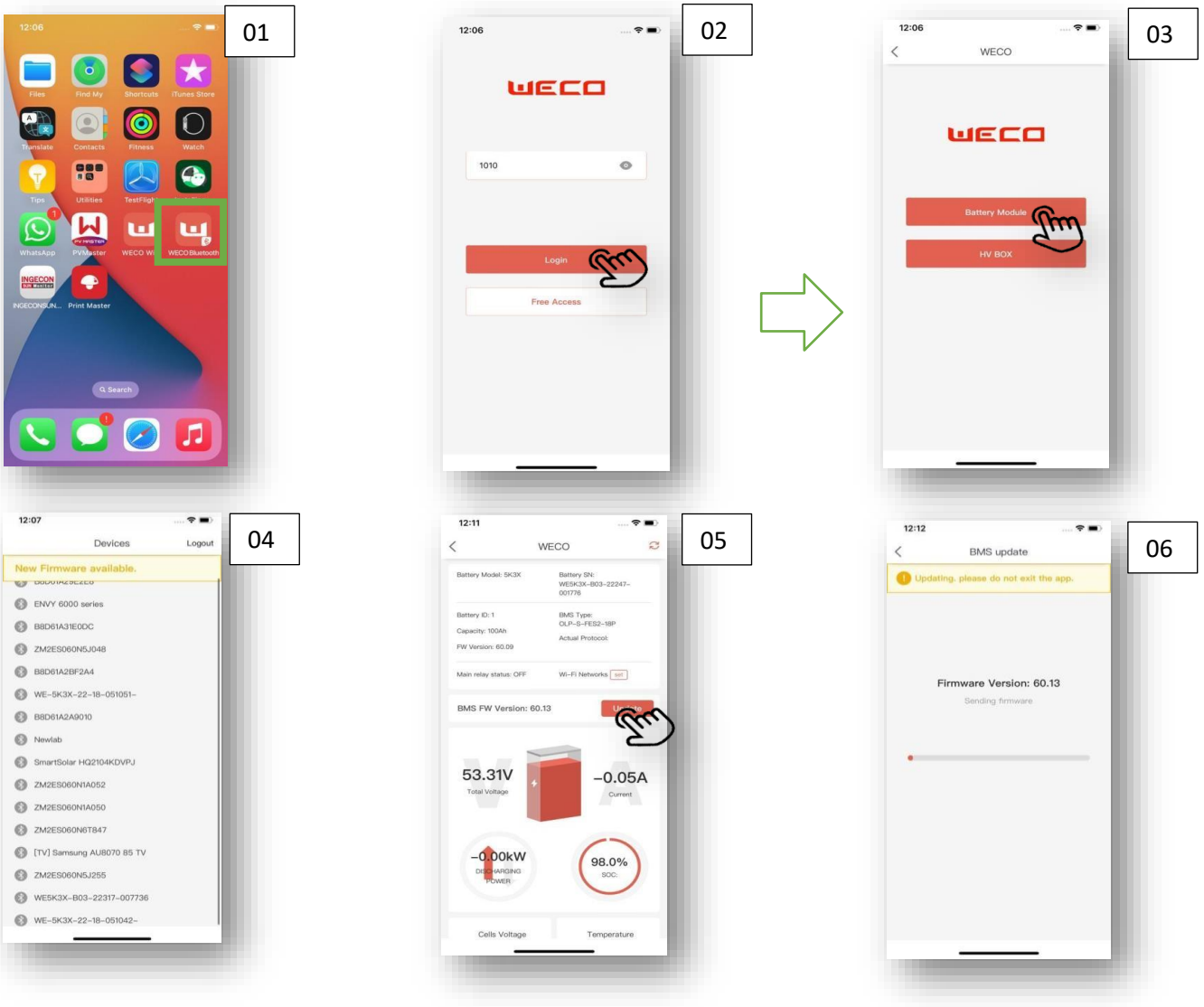
Same configuration applies to the 4k4 LT model.

Step 4. Battery FW Upgrade and Protocol Set

Download the WeCo Bluetooth APP from Google Play of from APP Store.
The Bluetooth APP will allow you to inspect the battery, set the battery and monitor the BMS functions during the commissioning phase.
As good practice, it is always required to search for the latest FW for the battery.
The 5K3 XP Model has a built in WiFi/BT device and it is possible to find the battery Bluetooth Signal (in the form of battery Serial Number) directly from the in-APP list.

- Open the BT APP
- Turn On the Battery
- Access the APP using the password **1010**.
- Select **Battery Module**.
- Scroll Down and tap on the Serial Number of your battery.
- Once the main page will display your battery info, scroll down and tap on the FW upgrade button if available (if not displayed means the battery is UP to Date).

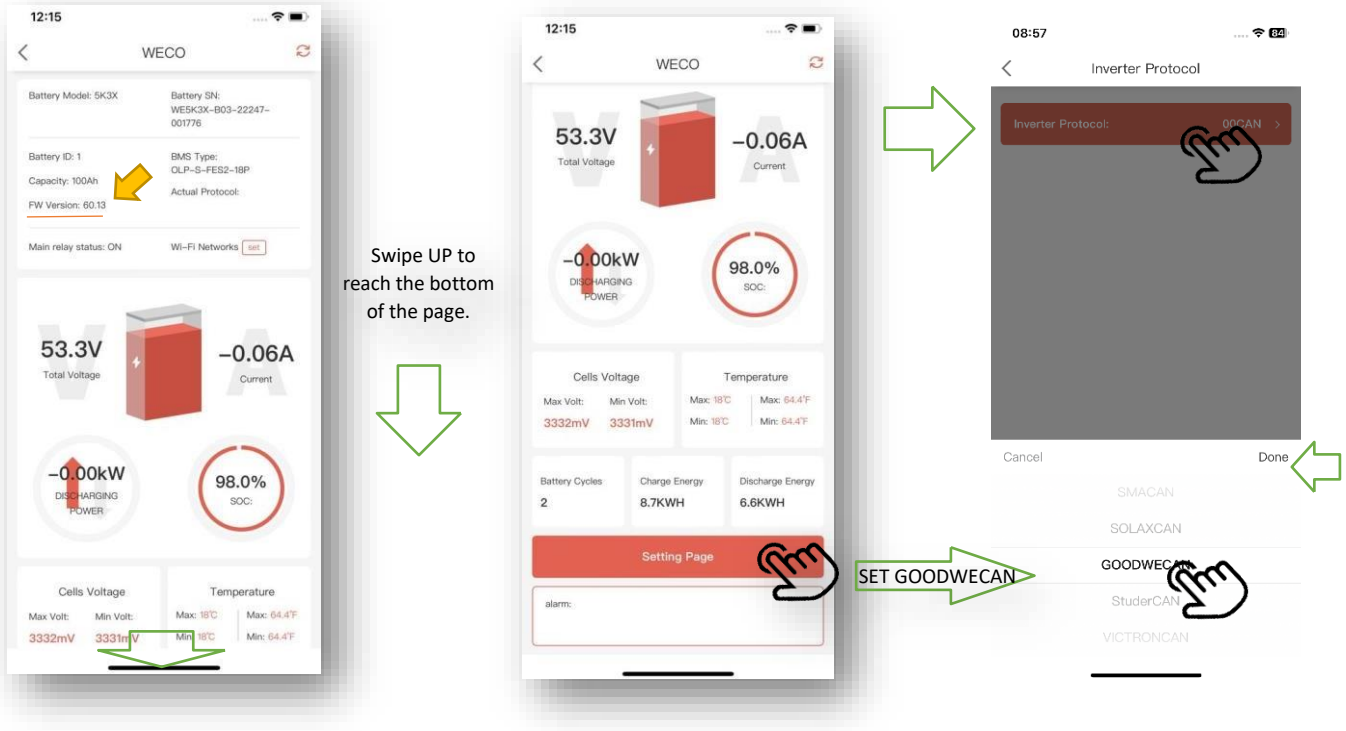
APP STEPS



Same procedure applies to the 4k4 LT model, with the exception that an external WiFi/BT dongle is needed. In this case, in the step of screen 04 you will have to select the dongle's MAC Address.

Protocol Set Up

Wait until pop up confirms that the update process is successful, then proceed to set the inverter protocol.



ATTENTION

Turn Off the battery to proceed with the remaining operations.

Keeping the battery ON will damage the BMS an potentially the inverter power protection circuit.

Step 5. Inverter Wiring

Now it is possible to wire the GRID and PV cables into the inverter.

Then press the battery ON/OFF button and turn on the PV Switch to enable the PV.

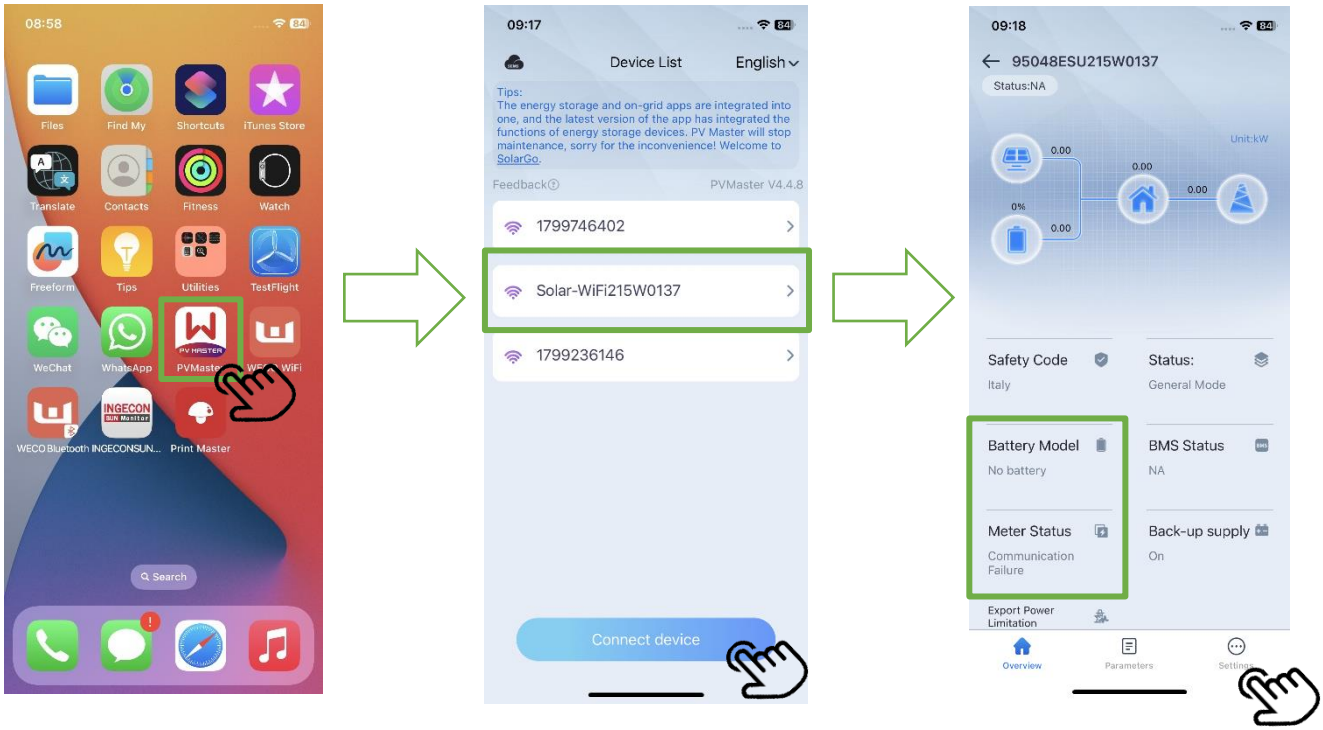




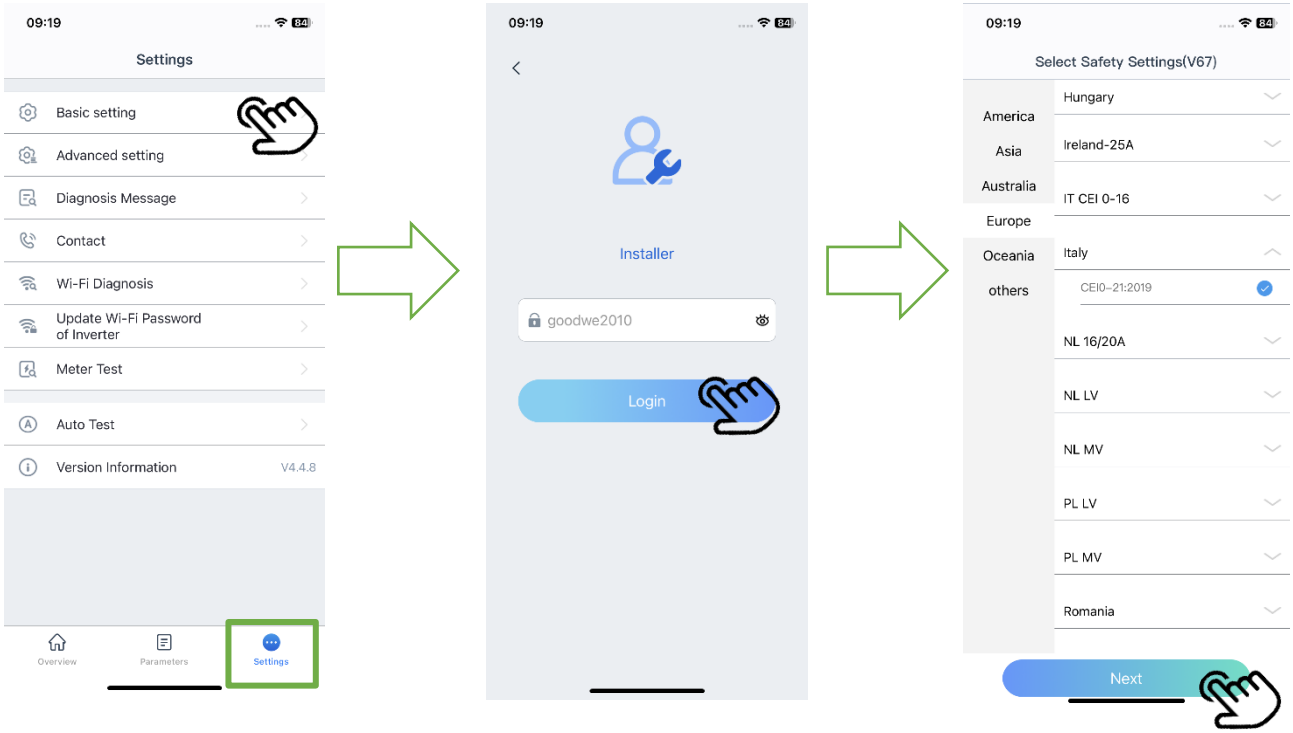
Now the inverter will Initiate the Start Up process and the **Battery can be turned ON**.

Step 6. Inverter Protocol Set up

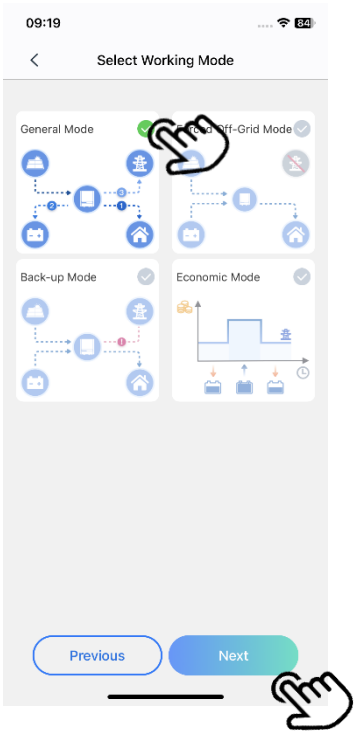
Open the pv master app and connect to the inverter.

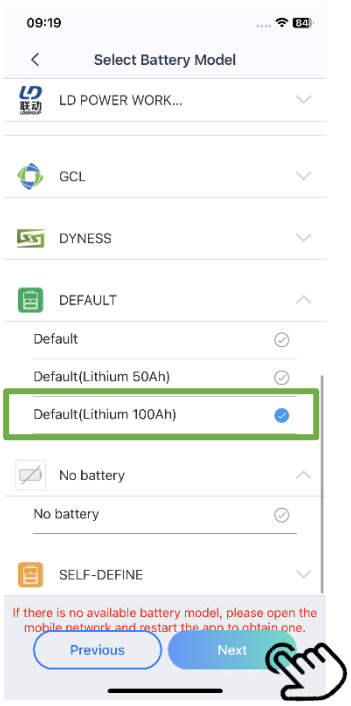


On the first startup, “communication error” may be displayed. This is normal as it necessary to set the right battery settings to start communication.
Go on Settings, then Basic settings and select the Safety Settings for your country.

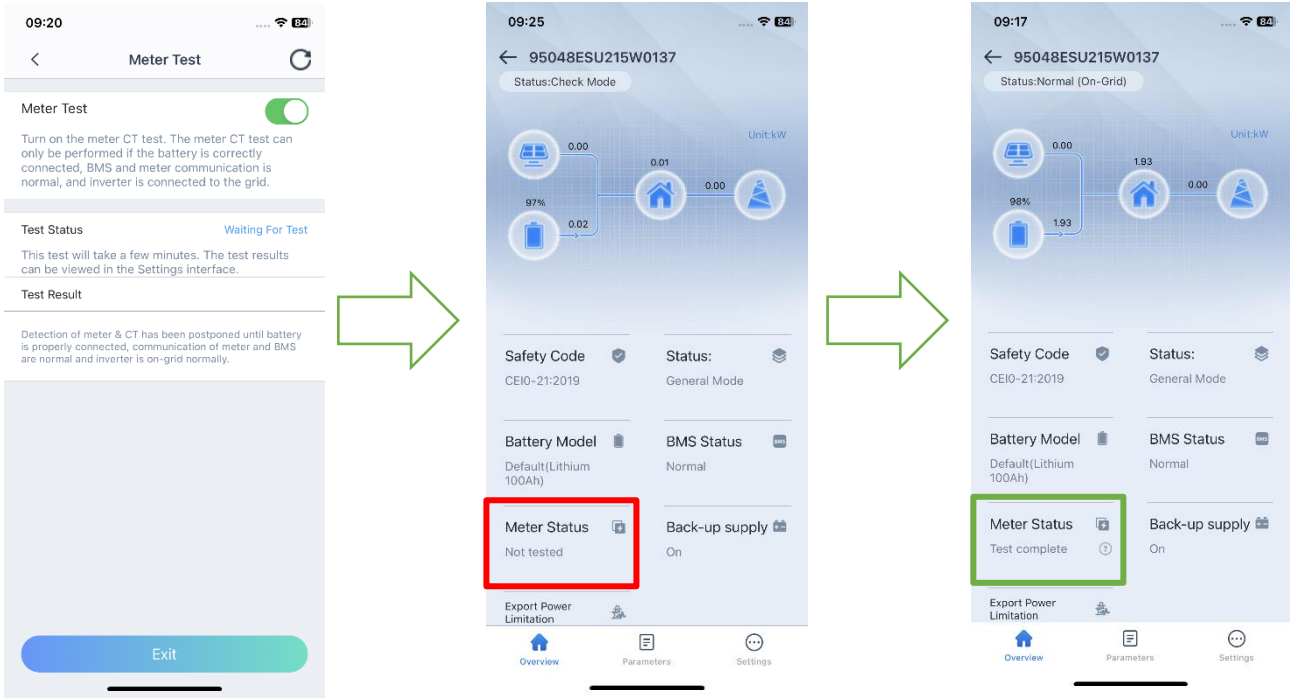


Now press Next, select General mode, then **Default (Lithium 100Ah).**



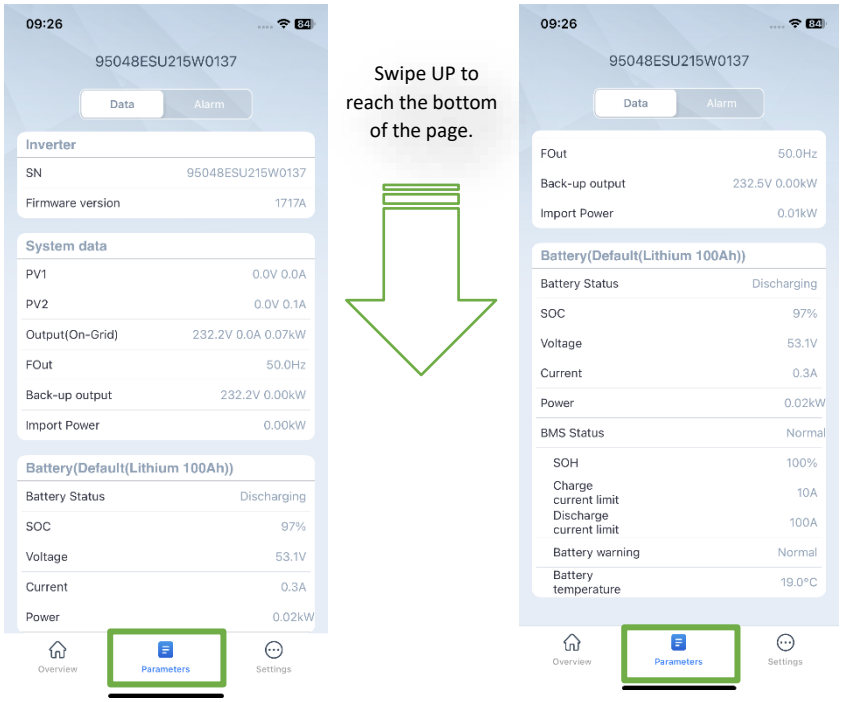


Now activate **Meter Test**, exit and wait until the test is completed.



Now the battery is recognized by the inverter and the parameters are visible.

ATTENTION, IMPORTANT
To ensure that all the information are properly displayed and received by the inverter it is necessary to make a double control by tapping Parameters.

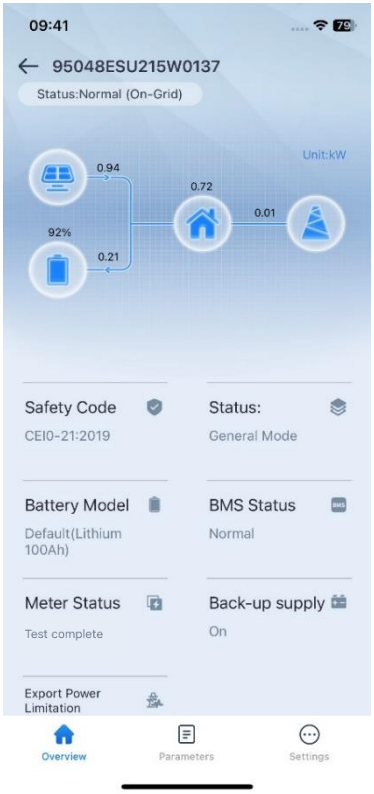


In the Screen it Is possible to see the correct information received by the inverter from the Battery BMS, such AS: (Image A)

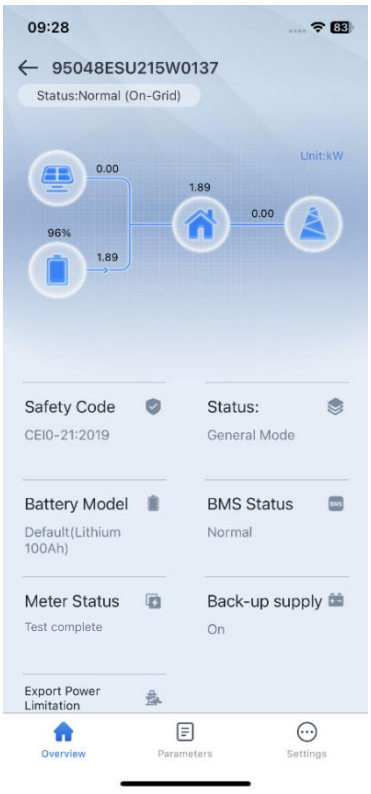
- SOC %
- Voltage
- Current
- Power
- Status

Now the whole system is ready to work:

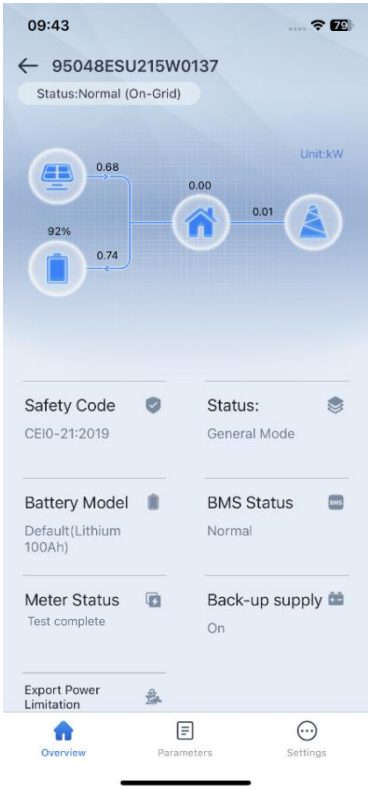
PV POWERS THE LOAD AND CHARGES THE BATTERIES



NO PV - BATTERIES POWER THE LOAD



NO LOAD – PV CHARGES THE BATTERIES



To enable the WeCo WiFi Monitoring App, please follow the relevant manual available on our Web Site

https://wecobatteries.com/download-area/