







5K 3XP

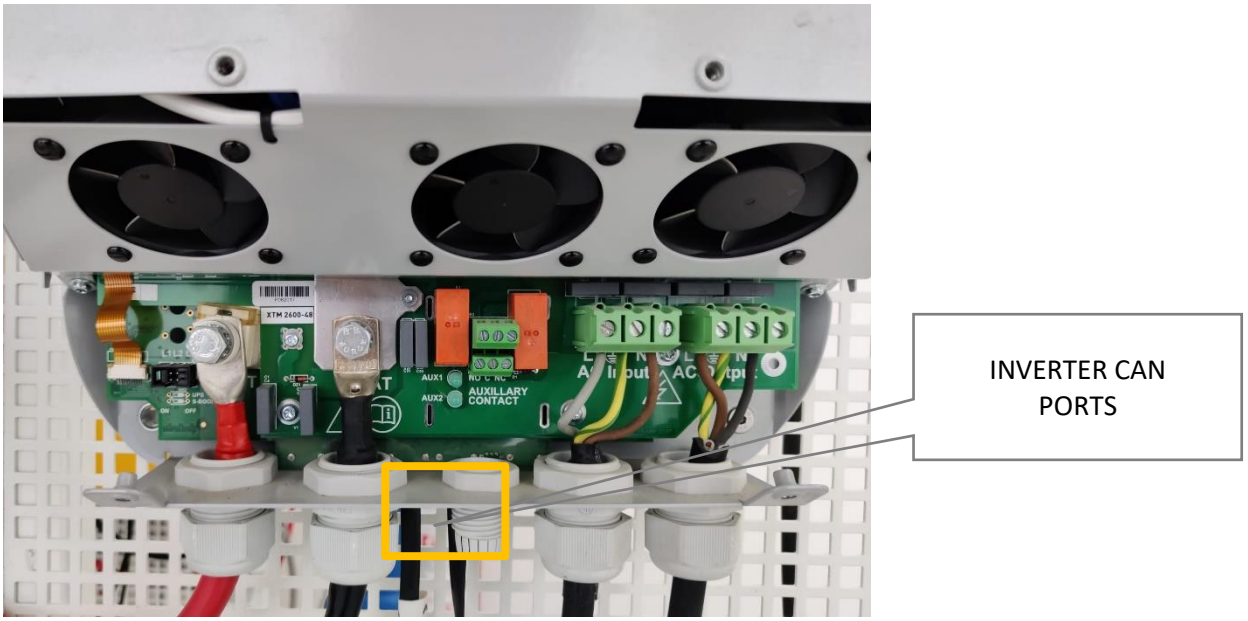
4 to 4K

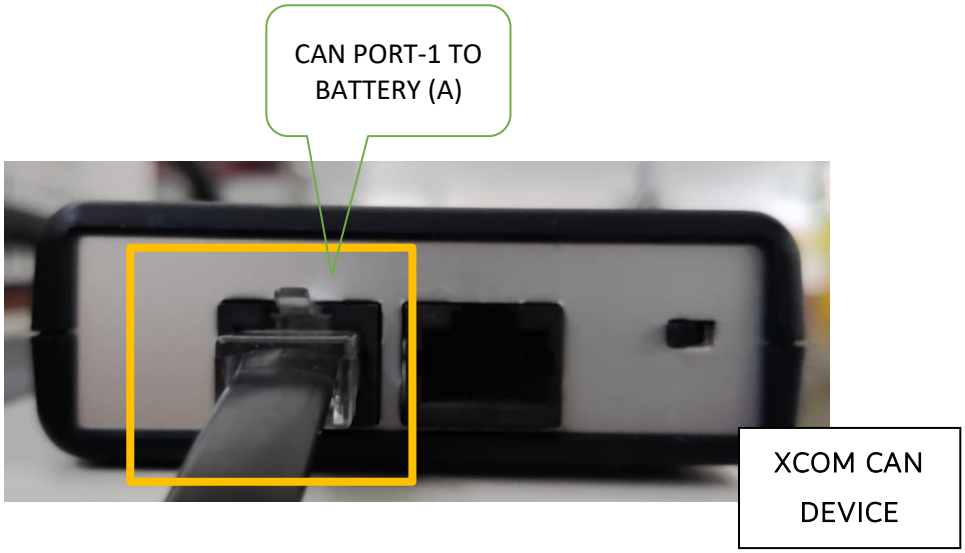
STUDER
XTENDER INVERTER
+ XCOM & RCC-02
Whole Power Range

Studer Xtender Hybrid 220Vac Single Phase Inverter Quick Configuration Guide

Preparations:

Open the connection lid to access the connection board of the inverter, CAN port, Grid and Battery Power Connection Terminal are all located here.

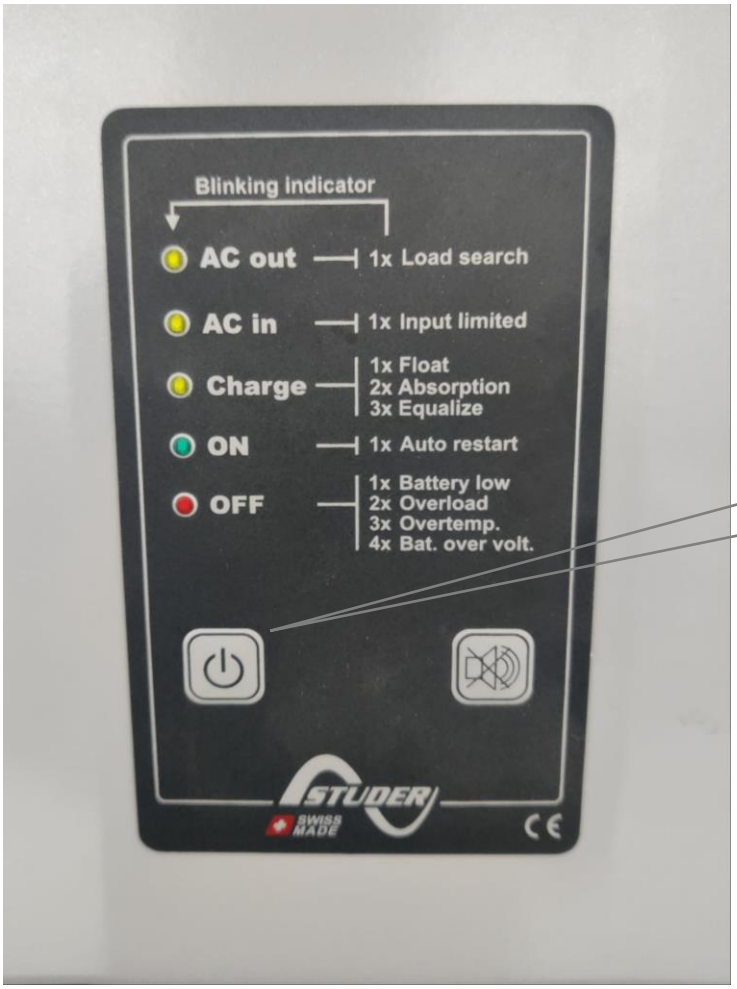




Step 1. Safety Preparation

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



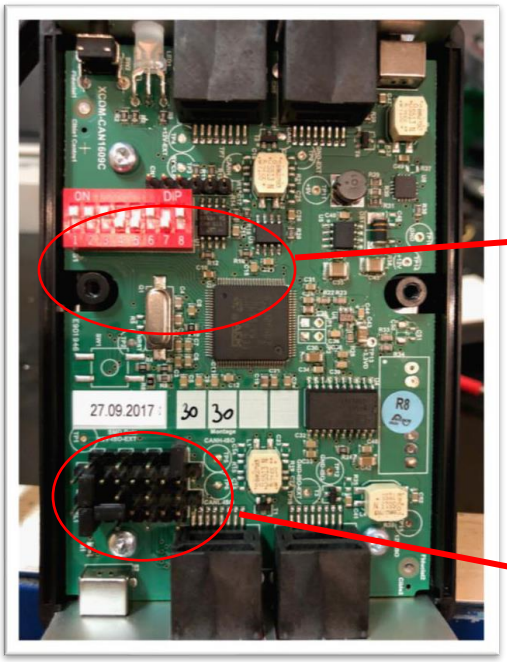


KEEP THE INVERTER OFF

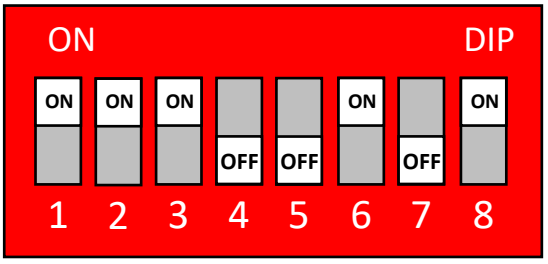
Step 2. Communication Settings

Before connecting the battery to the Xcom-CAN, you need to set the terminations of the communication devices.

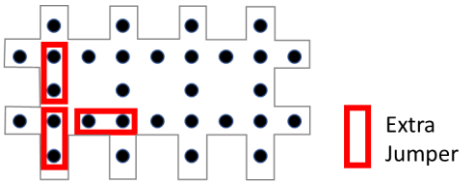
Xcom-CAN internal:



Change the DIP switch settings match the picture and the image below



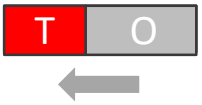
Jumper position as per below scheme (3 are used on a total of 4 jumpers kit)



Xcom-CAN external:



Termination Switch to the right of the two RJ45 Ports



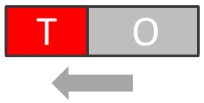
Set Switch to the left.

LED GREEN

- Make sure the LED blinks 2 times- interval and repeats.
- If the LED blinks Green + RED check the connection again because the communication is not correct.
- If the LED is RED the connection is wrong.

RCC-02 internal:

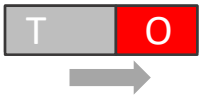




Termination switches are set to the left

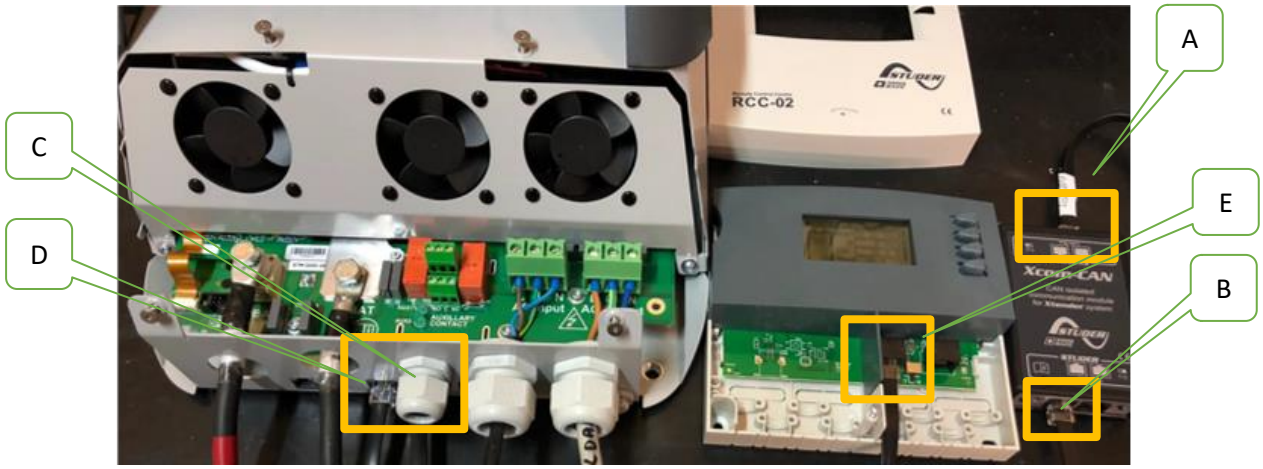
Xtender external:





Termination Switch to the right of the two RJ45 Ports

The battery Can Port-A connect to the CAN PORT-1 of the XCom device.
Then XCom-CAN Com Port-1 (B) connect to the Inverter CAN Port 2 (C), and CAN Port 1 (D) of the inverter connect to RCC-02 Port-1 (E).



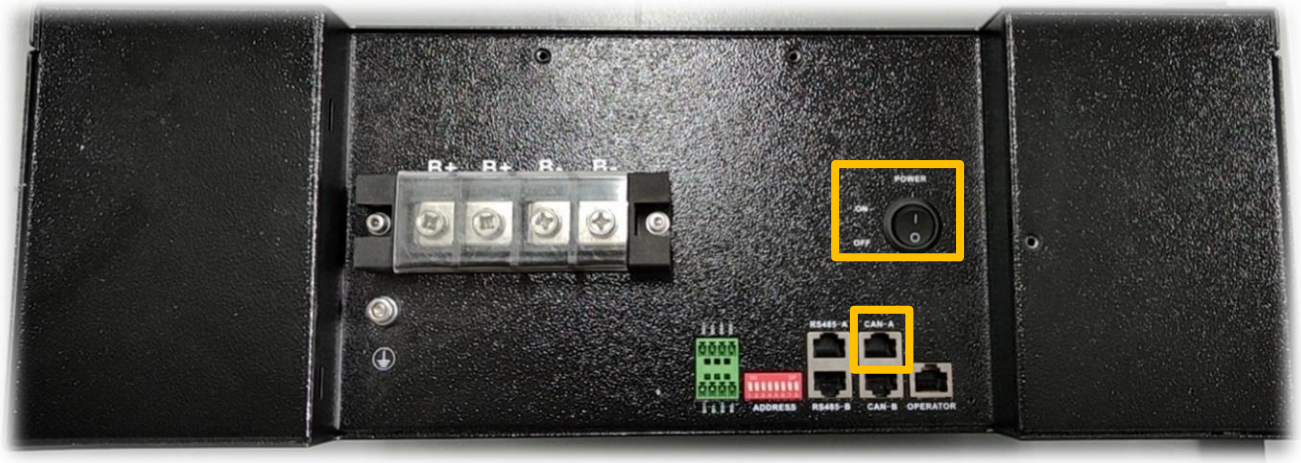
Step 3. Battery Preparation

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).

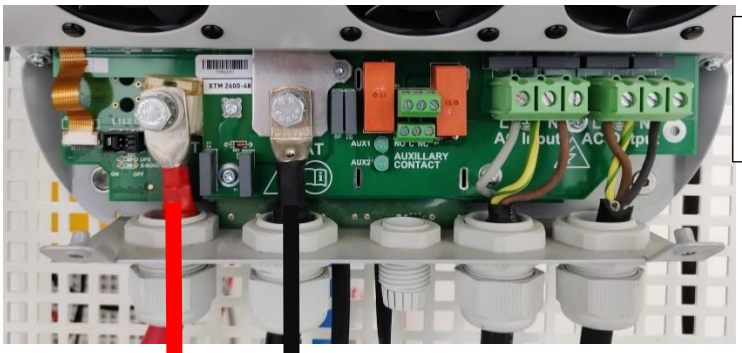


4K4 LT EXAMPLE
DIP switched are set all OFF (00000000). Only DIP of last slave must be set differently (00000100).



Step 4. Battery Power Connection

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

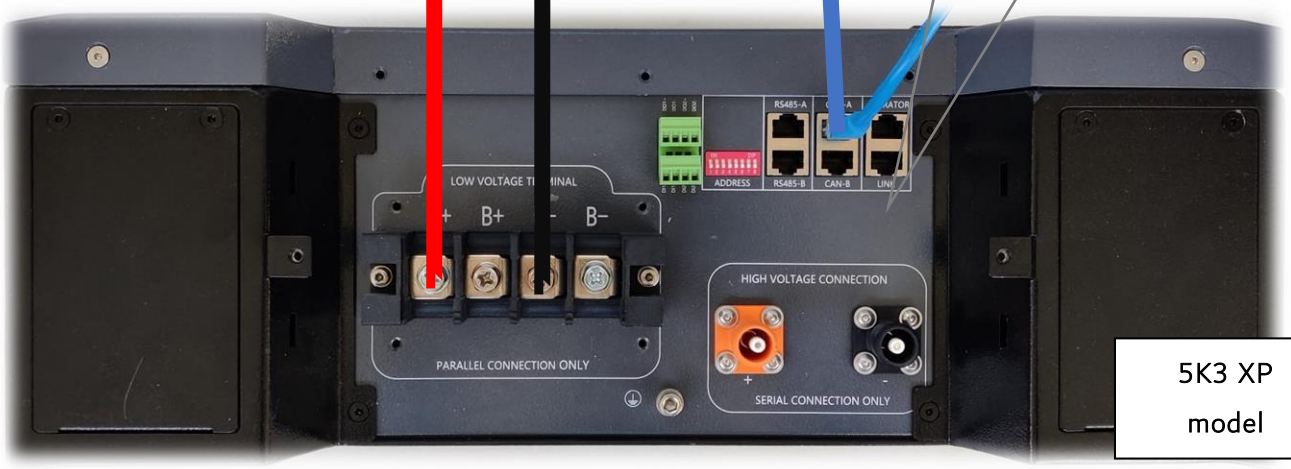


INVERTER OFF
BATTERY OFF

Battery Torque: 9.5 Nm
Inverter Torque: 11 Nm



KEEP THE BATTERY OFF



5K3 XP
model

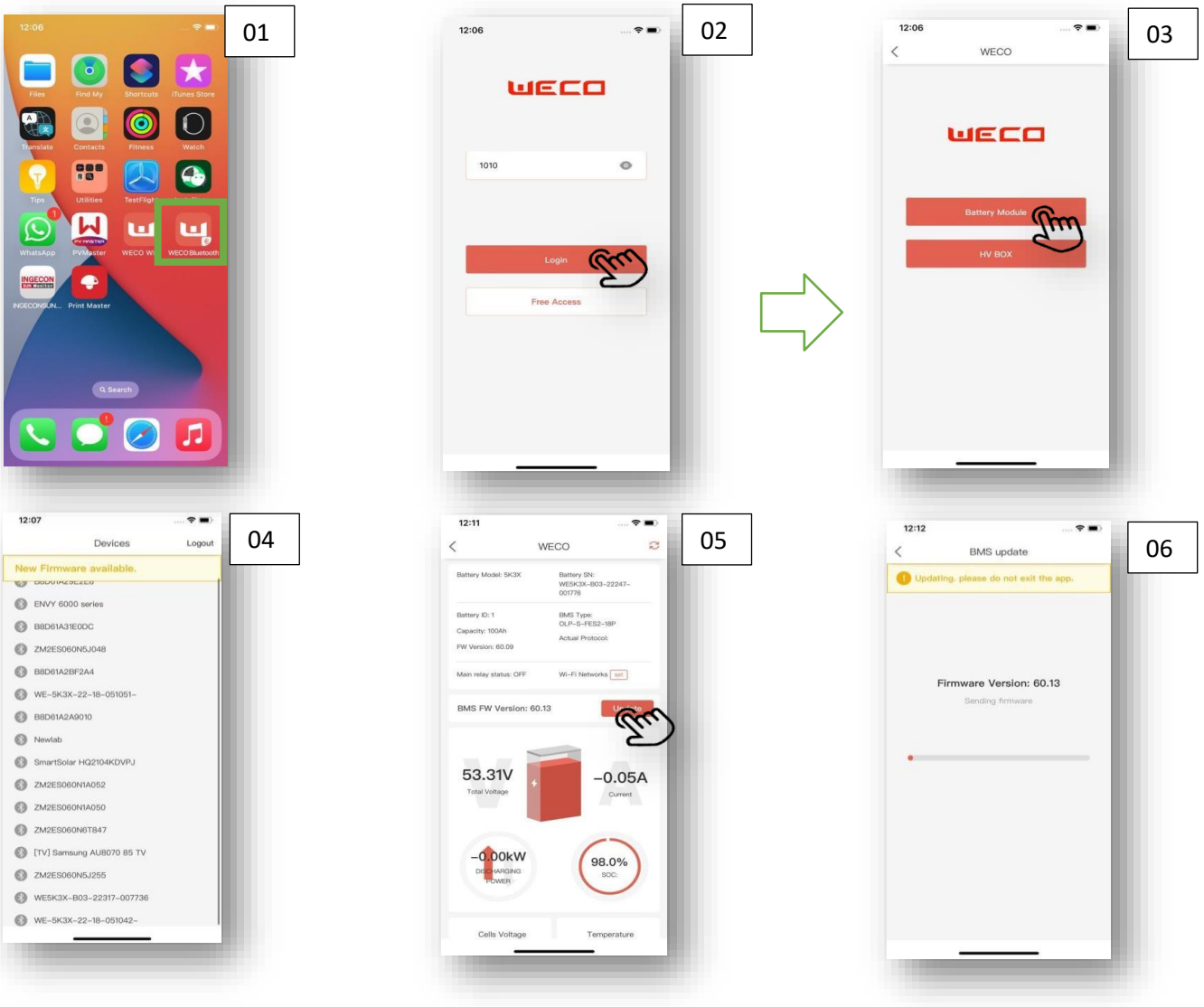
Same configuration applies to the 4k4 LT model.

Step 5. 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).

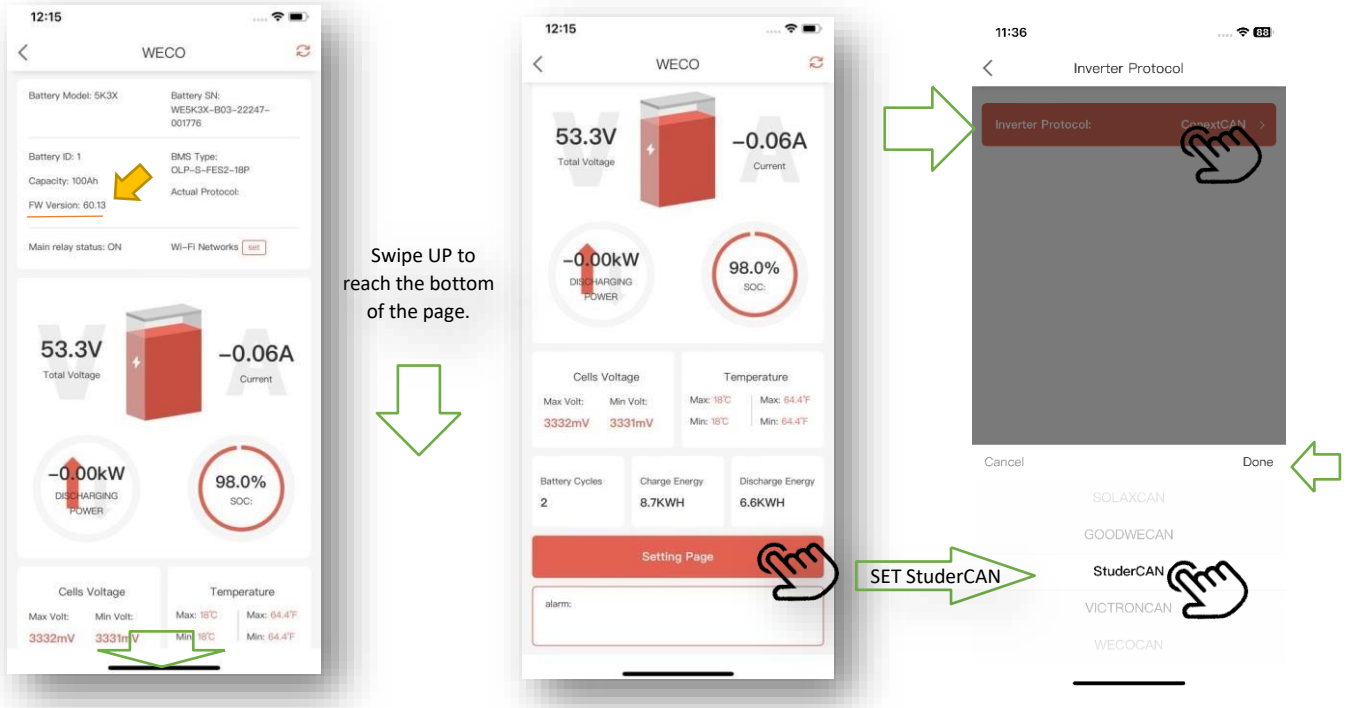
APP STEPS



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

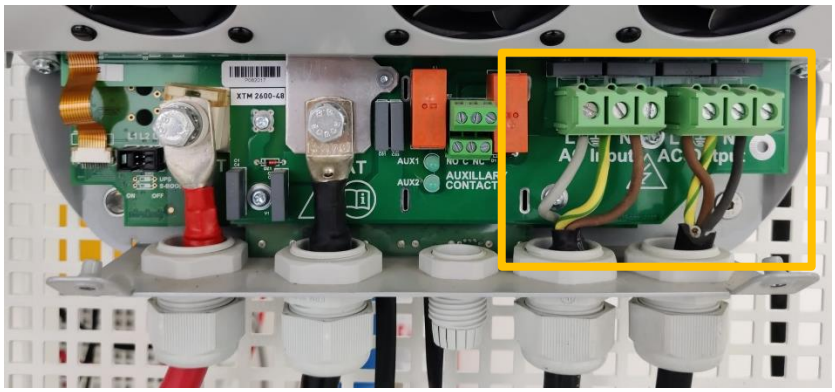
Turn Off the battery to proceed with the remaining operations.

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 cables into the inverter and reinstall the protection cover.

Then press the battery ON/OFF button to start the inverter.

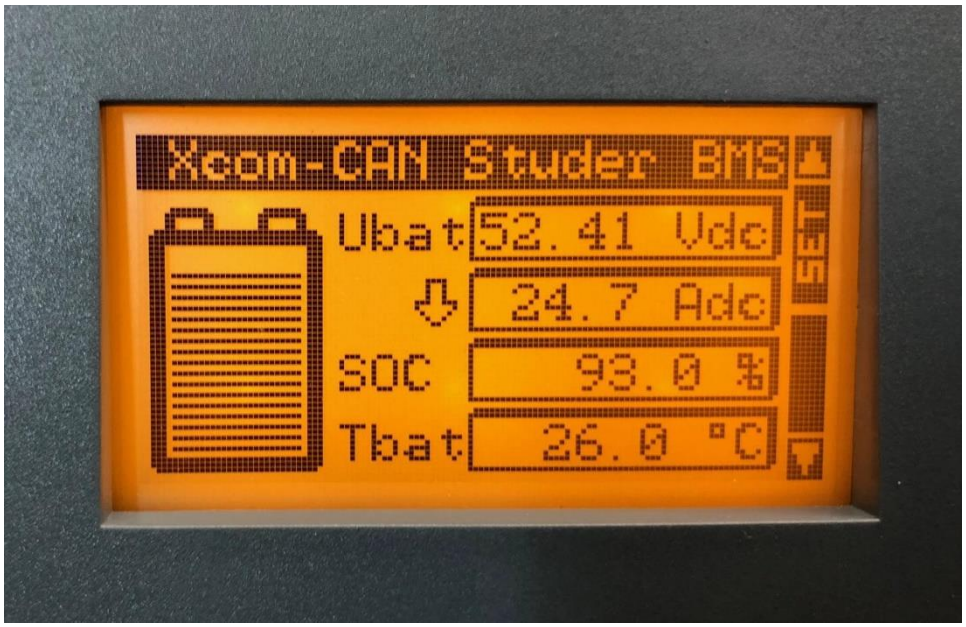




Now the inverter will Initiate the Start Up process and the **Battery can be turned ON**.

Step 6. Inverter Protocol Set up

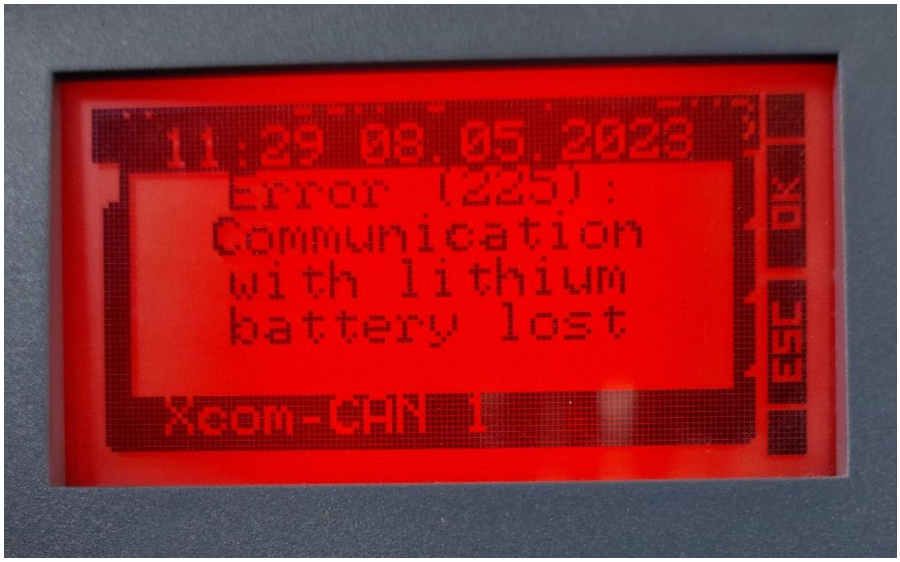
If all the previous steps have been done correctly, the RCC-02 Device must show the information as per picture below.



ATTENTION, IMPORTANT

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

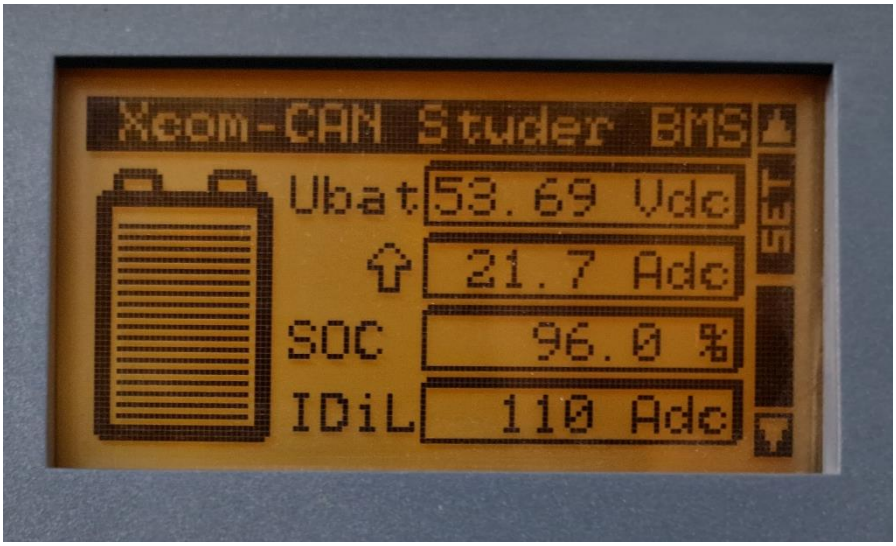
In case of wrong terminations or connections the RCC-02 will show partial to no battery info and the Error (225) may be displayed.



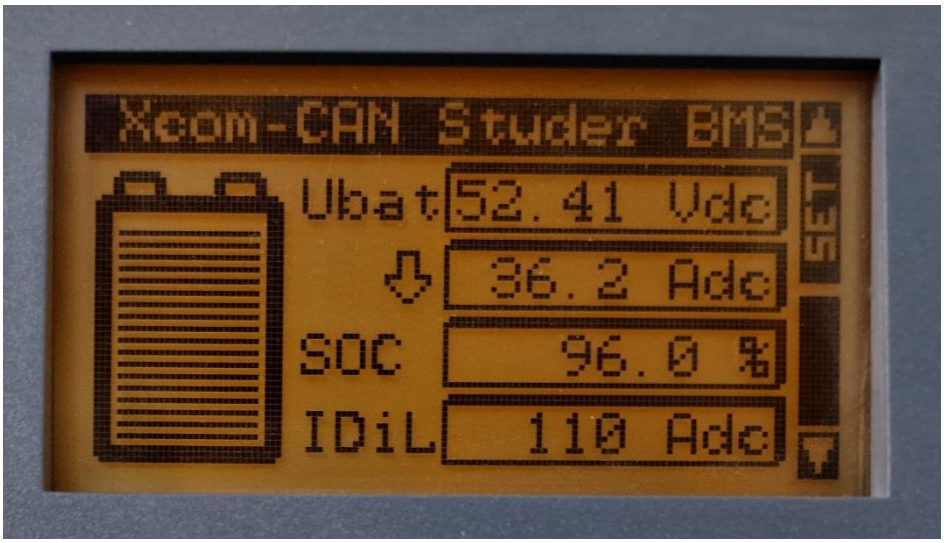
Please check all settings and once the communication is correct try to disconnect the CAN cable from the battery to the XCom, then reconnect the CAN cable and the RCC-02 Display must show the info (226): Communication restored.

The whole system is ready to work:

BATTERY CHARGE



BATTERY DISCHARGE



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

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