METERBOOST
BATTERY FOR LIFE

Quick Start Guide
Rev. 2024-1

MB48LI82.GW
MB48LI50.GW
&
MtB GateWay

Quick Start Guide

Inverter compability list

Victron Energy	All inverters compatible with a GX device
Deye	All single and three phase LV Hybrid inverters
Solis	RHI-(3-6)K-48ES-5G
	S5-EH1P(3-6)K-L

1. Pre-charge the inverter capacitors:

Based on your inverter, check the following table to determine which procedure to follow for the pre-charge.

Brand	Inverter Type	Procedure
Victron	Single-phase $\leq$ 5 kVA	Follow **procedure A**
	Single-phase >5 kVA	Follow **procedure B**
	Three-phase	
Deye	Single-phase	Follow **procedure A**
	Three-phase	
Solis	Single-phase	Follow **procedure A**

Procedure A

Start by waking up one and only one of the batteries (quick press the red switch) and then turn it ON (one sound signal while pressing the red switch). LED1 will turn yellow for some time and then change to green. When it becomes green, the battery is fully ON, and the MtB GateWay should also be ON (Power LED red).

Procedure B

Start by first supplying power to the DC bus bar, either with the MPPT or by starting up the inverters with the grid or the generator so that the inverters' internal capacitors are charged and the MtB GateWay should also be ON (Power LED red).

Warning: If you have a Victron system and you are using the MPPT to turn on the system then make sure to reduce the "Max charge current" to 5 A using VictronConnect before turning on any battery.

Now you can wake up one and only one of the batteries (quick press the red switch).

2. Pair batteries with the MtB GateWay:

Now that one battery is ON/awake (procedure A/procedure B) and the MtB GateWay is powered, it's time to pair the batteries with the MtB GateWay. Ensure that the Ethernet cable is not connected to the MtB GateWay, and connect your smartphone or computer to the Wi-Fi network whose name can be found on the MtB GateWay side sticker. Alternatively, you can scan the QR Code on the MtB GateWay. Go to the MtB GateWay web page at http://192.168.33.1 and enable the paring.

Once the paring is enabled, starting with the battery that is already ON/awake (procedure A/procedure B), press and hold the red switch until two sound signals are emitted. LED2 should become fixed magenta and then fast blinking magenta, and finally slow blinking magenta. This battery is now paired with the MtB GateWay.

Now wake up the rest of the batteries (quick press the red switch) and then press and hold the red switch until two sound signals are emitted on each of the remaining batteries.

3. Turn ON the rest of the batteries:

When all batteries have LED2 slowly blinking magenta, press the red switch on the batteries that are not yet ON until one sound signal is emitted to turn them ON.

4. Finishing the batteries installation:

If you followed procedure A, the process is now finished.

If procedure B was followed, and if you have changed the "Max charge current" for the MPPT in step 1 restore the default value using VictronConnect, with this the process is now finished.

**5. Now follow the instructions specific to your inverter.**

**Note: Venus OS 2.94 or newer must be used**

1. To connect the MtB GateWay to a Victron system, a Victron VE.Can to CAN-bus BMS cable should be used. Both type A and type B can be used. Please do not use handmade cables, both MeterBoost and Victron don't support installations with handmade cables.

2. The CAN port of the MtB GateWay should be connected to the Battery side of the cable and the Victron VE.Can side should be connected to the VE.Can port of the GX device. A CAN terminator must be used on the leftover port of the GX device. The MtB GateWay already includes a CAN terminator on its CAN port.

3. On the GX device go to Setting→DVCC and make sure DVCC and Shared Voltage Sense are ON while all the other options are OFF.

4. On the GX device go to Settings→Services→VE.Can port and change the CAN-bus profile to CAN-bus BMS (500 kbit/s).

5. If you have an ESS system, on the GX device go to Settings→ESS and change the mode to either Optimized (without BatteryLife) or Optimized (with BatteryLife)

6. On the GX device go to Settings→System Setup and make sure that the Battery monitor is either configured as automatic or MeterBoost on CAN-Bus.

7. After this, you should see a new device listed in the main GX device menu named MeterBoost.

8. Using VEConfigure, set the parameters presented in the figures below.
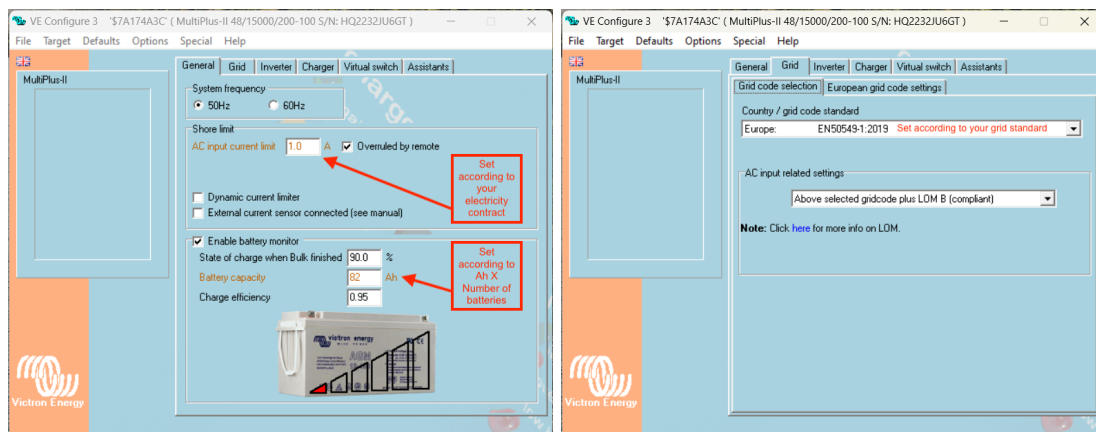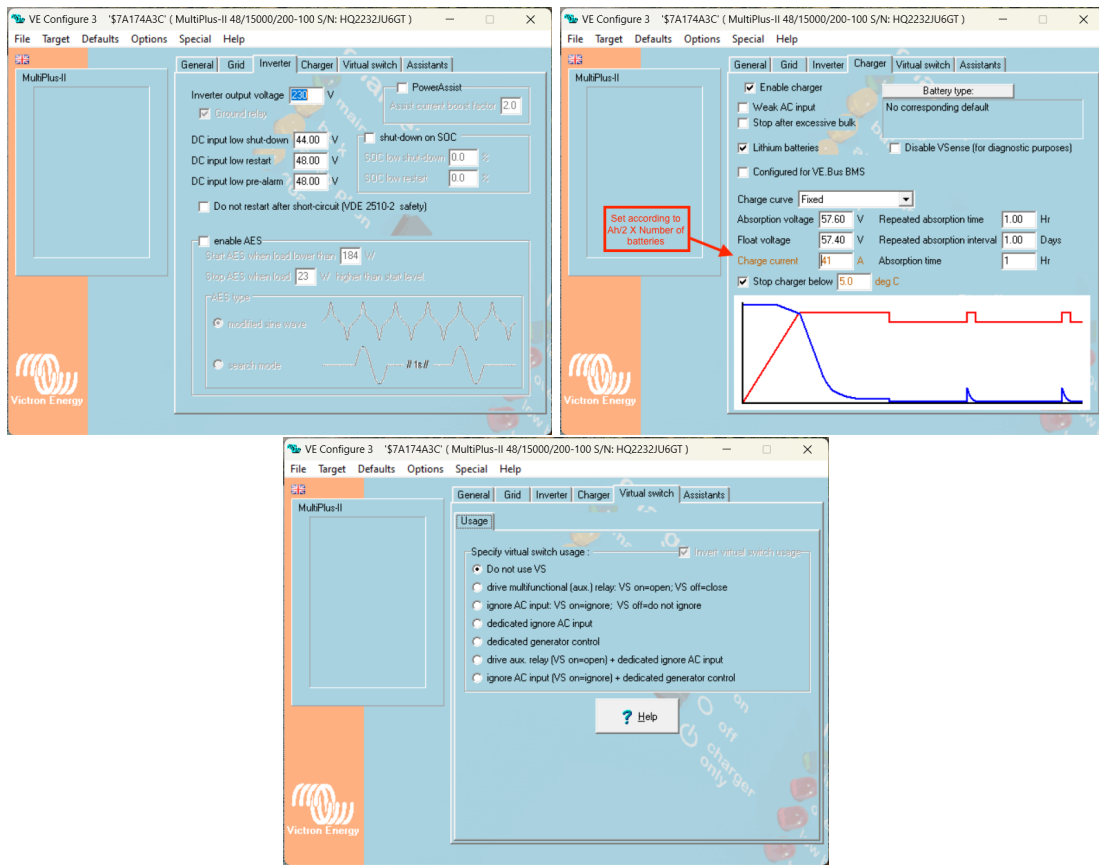
9. In case of the ESS system, configure also the following parameters.
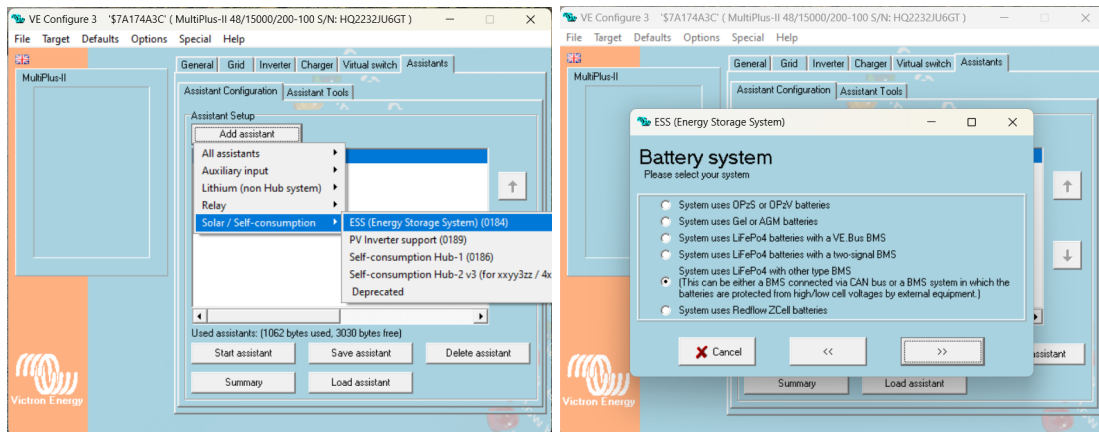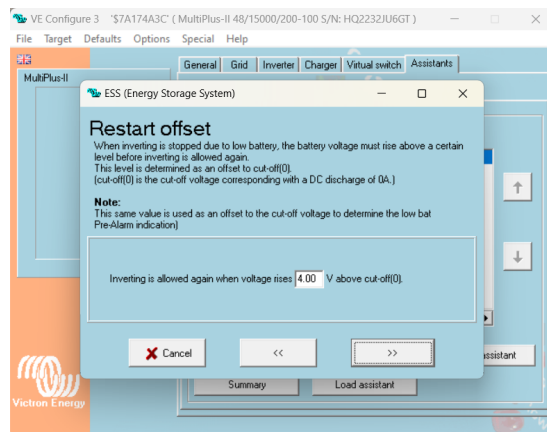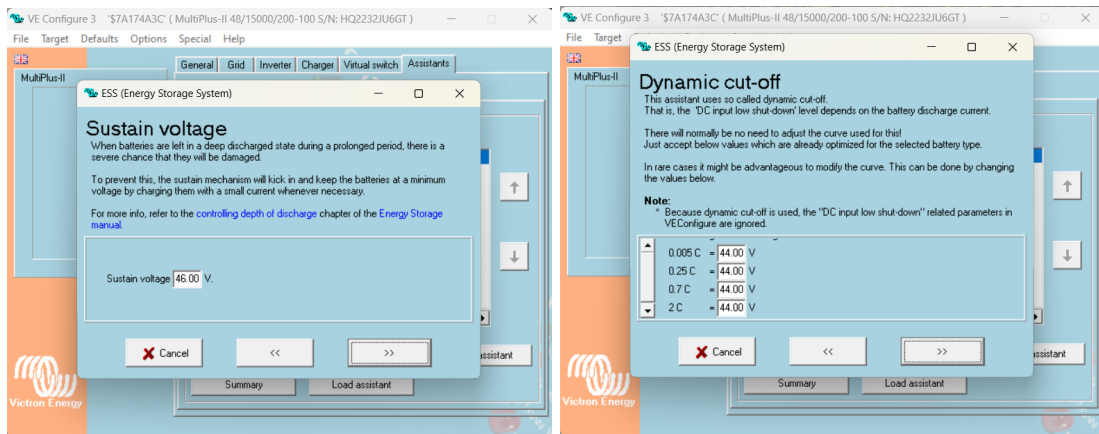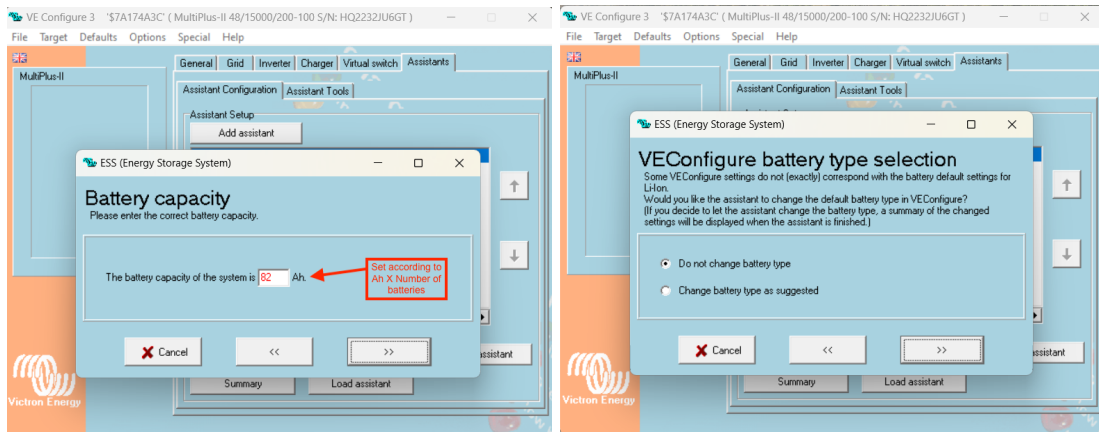
10. If Solar Chargers are on the system, set the following parameters using Victron Connect. The charge current should be set to the lowest value between $Ah/2 \times$ number of batteries or the maximum solar charger current.

Battery voltage	48V
Max charge current	100A
Charger enabled	🔵
Battery preset	User defined ▾
Remote Mode	Remote on/off ▾
Expert mode	⚪
BMS controlled	Yes ›
Charge voltages	
Absorption voltage	57.70V
Float voltage	57.50V
Equalization voltage	55.00V
Equalization	
Automatic equalization	Disabled
Manual equalization	START NOW
Voltage compensation	
Temperature compensation	Disabled
Battery limits	
Low temperature cut-off	5°C

**Note: HMI version 1001-C037 for three phase and C3FA for single phase inverters must be used**

1. The first step is to click on the gear in the top right corner of the display from the main screen and then click on Device Info. As shown in the image below, make sure that the HMI version matches the requirement above.
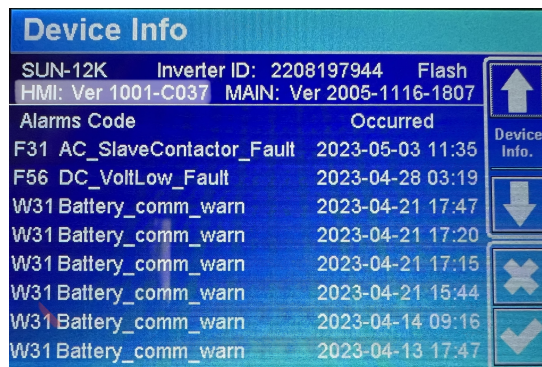

If your inverter does not respect the conditions mentioned above, please contact MeterBoost for support.

2. Connect the GateWay's CAN port to the inverter's BMS port using the yellow Ethernet cable provided with the inverter.

3. The next step is to click on the gear on the top right corner of the display from the main screen and then click on Battery Setting. The parameters should be set as shown in the images below. The **Batt Capacity, Max A Charge and the Max A Discharge** parameters should be multiplied by the number of batteries in the installation.
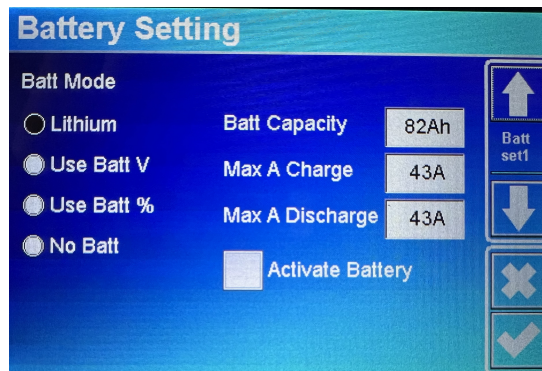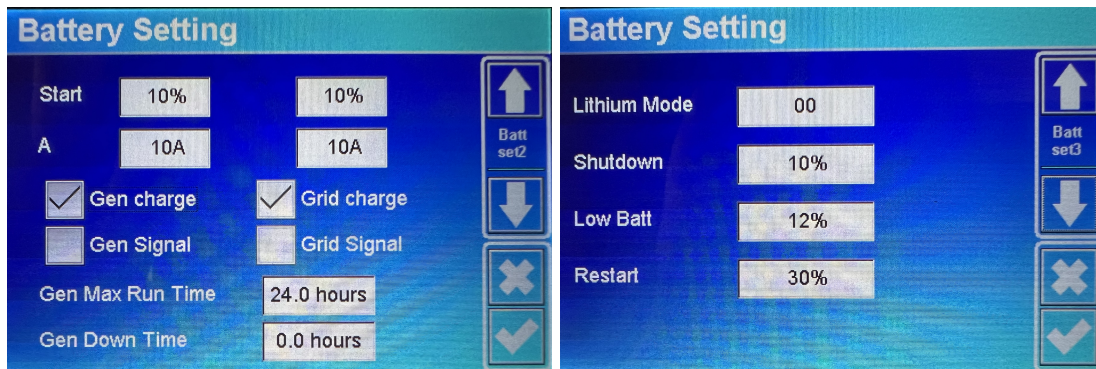
4. The following step is from the main screen to click on the gear located in the top right corner of the display and then click on System Work Mode. The parameters should be set as shown in the images below.
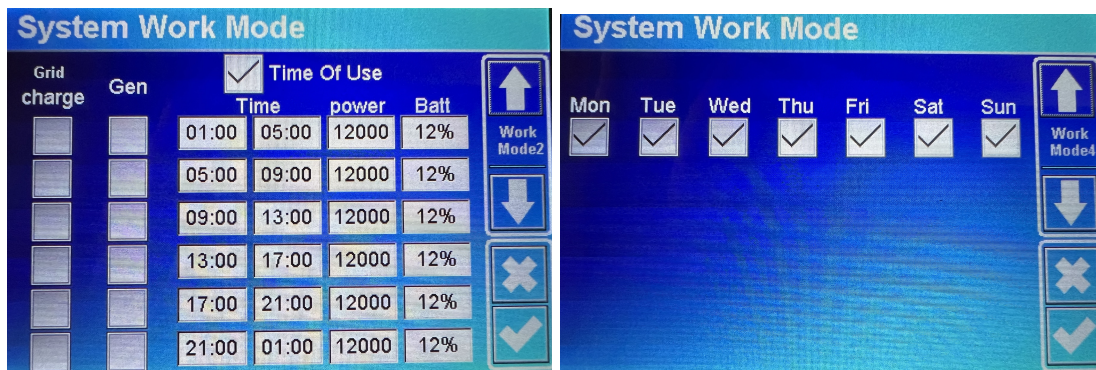
5. The final step is to click on Battery Icon from the main screen and then click on Li-BMS in the bottom right corner. Make sure that after **LiBms** field appears MeterBoost.