

Operations

Auto-mode (simple, suggested mode)

This mode is easy for everyone, we suggest customers use the monitor in this mode.

1.Wire and check the current

Thread all the wires from the battery's positive (or negative) pole through the sensor ring (check the wiring diagram below) and check the amperage on the monitor. When the wirings are correctly done, the amperage should be positive when charging and negative when discharging. If the monitor shows the opposite, turn the sensor ring front side back.

2.Zero the battery capacity

The battery capacity shown on the monitor is not the real capacity when you first use this meter. To measure the battery accurately, the capacity needs to be zeroed. Discharge your battery till empty and press the "▼" button for 3s to zero the capacity. Then charge you battery till it's full. Normally when the batteries are full, the capacity should be 100% on the monitor. If not, press the "▲" button for 3s to fill the capacity (with the battery charger attaching).

Manual-mode (complex, for professional)

This mode is for people who know their batteries very well and need to monitor the battery status at the best accuracy. This mode involves accurate value setting, only for professional.

1.Wire and check the current

Thread all the wires from the battery's positive (or negative) pole through the sensor ring (check the wiring diagram below) and check the amperage on the monitor. When the wirings are correctly done, the amperage should be positive when charging and negative when discharging. If the monitor shows the opposite, turn the sensor ring front side back.

2.Value setting

In manual-mode, the "11CA (Battery Actual Capacity)" and "12FV (Full Capacity Voltage)" must be set to a accurate value. The setting method is as below:

Press the "⊙" button for 3s to enter setting menu. Press "▼" or "▲" to move the cursor to "11CA" and "12FV" for battery capacity setting. Press "⊙" to select and press "▼" or "▲" to change the values. When the values are set, press "⊙" again to confirm.

Notice: "12FV (Full Capacity Voltage)" is suggested to set to the voltage when the battery is full and the battery charger is still attached on the battery.

3.Charge the battery to full

After the wiring and setting values, the monitor will not show the battery's capacity immediately. The battery needs to be charged to full for the monitor to work as setting.

Parameter Chart

Compatible Battery Type	Lead-acid; Lithium-iron; Lithium iron phosphate;Ni-MH
Test Voltage Range	9-100V
Test Current Range	0-150A(optional)
Test Capacity Range	0-99.9KAH
Test Power Range	0-999999W
Time Recording	00:00:00-999:59:59
Temperature Display	-7~99℃
Working Current	Backlight on≈10mA Backlight off≈5mA
Accuracy	0.5%
Voltage dpi	0.1V
Current dpi	0.1A
Voltage Display	0.0-99.9-100V
Capacity Display	0-999mAH-1.00AH-9.99AH-10.0AH-99.9AH-100AH-999AH -1.00KAH-9.99KAH-10.0KAH-99.9KAH
Power Display	0.0-99.9W-100W-999W-1.00KW-9.99KW-10.0KW-99.9KW -100KW-999KW

FAQ

Q: Do i need to set anything before using this battery monitor?

A: Normally you don't. For the first time you use it, all you need to do is to correct all the wirings, empty your battery and then recharge to full again. All the calculation would be done by the monitor itself. But you can adjust the settings if you are professional.

Q: Does it requires an on/off switch?

A: No, it doesn't. When there is no charge or discharge current, the backlight of the monitor would turn off itself.

Q: Do i need to place the sensor to a right direction?

A: Yes, if the monitor is not showing positive current when charging and negative current when discharging, it means the sensor is wired in the wrong direction. Turn the sensor front side back if so.

Q: The capacity drops when discharging but not rises when charging, what's wrong?

A: In this case, it means you didn't thread the main positive or negative wire through the sensor ring. Both charge and discharge circuits should go through the sensor.

Q: Why is there a little amps when the battery is not charging and discharging?

A: It could be the components got aged or effected by temperature. If the amperage is not at 0 when the battery is empty, you need to adjust that manually. (Check "09CZ" in the setting detail chart).

Q: My battery has been used for a long time and i don't know its actual capacity. What should i do?

A: Empty your battery and zero the monitor by pressing the "▼" button for 3s. Then recharge the battery till full and press the "▲" button for 3s to fill the capacity if it's not filled automatically.

Q: Can i set the battery capacity manually?

A: Yes, you can set it at "11CA" in the setting menu. But normally we don't suggest customer to do so.

Precautions

The monitor CAN NOT be exposed in strong sunlight or extreme environment where the temperature is below -10℃ (14℉). Otherwise the lifespan of the monitor would be greatly decreased.

The monitor and the sensor ring are strictly matched. Do not change any of them in order to remain high accuracy.

The monitor is covered by a 1-year-warranty by ECO-WORTHY. Contact us for any question or technical support.

ECO-WORTHY reserve the right to change the product or this user manual without prior notice

Support

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