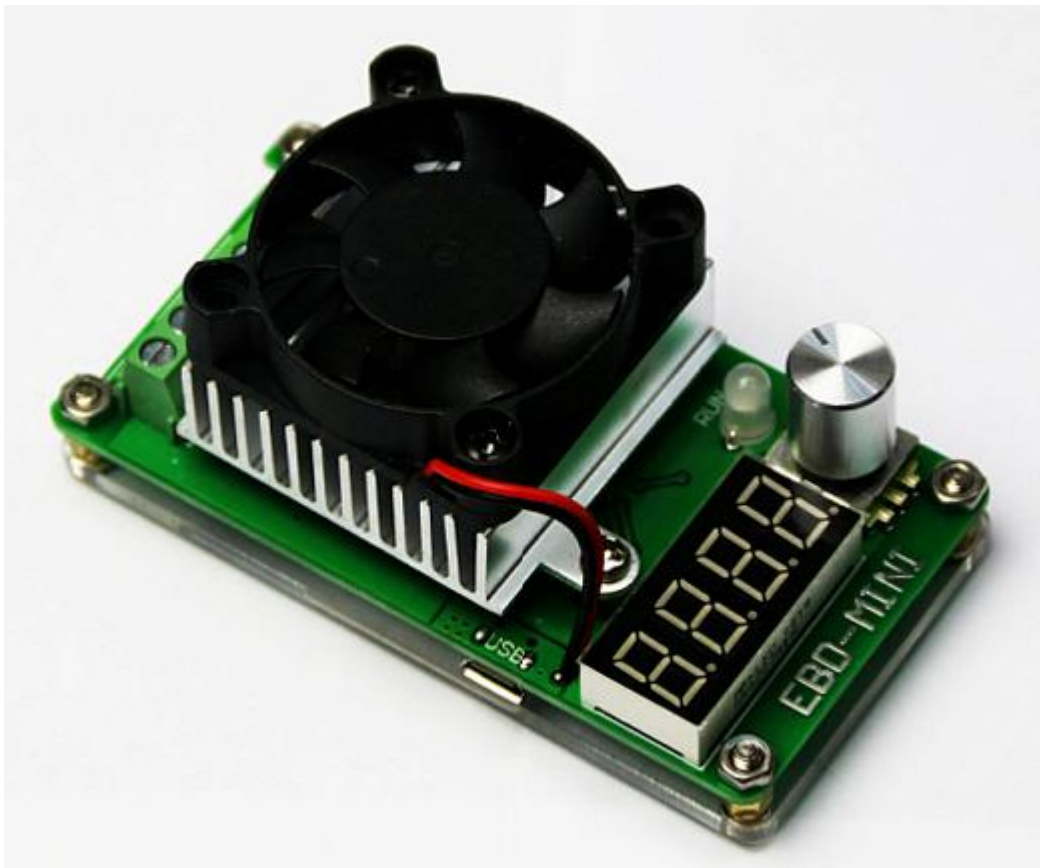


EBD M03+ Mini Electronic Load (User Manual)



Release Date 2017-01-01

1. Features

1.1 Battery Capacity Test

This tester is designed for discharging of a wide range of batteries, including NiMH, NiCd, LiPo, LiFe and Pb, as well as the capacity test.

1.2 Portable Power Bank Test

This tester supports charging and discharging of portable power banks, as well as capacity test.

1.3 Power Performance Test

This tester supports performance and aging tests of various kinds of DC power supplies.

2. Specifications

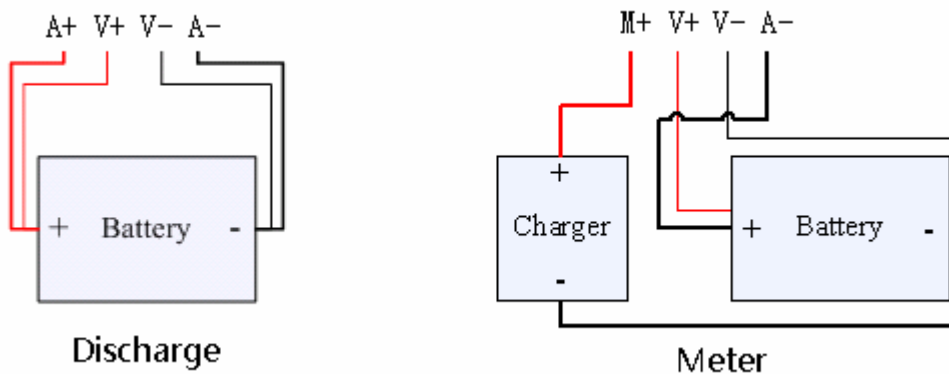
- 1) Power Supply: DC 5V/0.3A (power supply connected by Micro USB)
- 2) Voltage Range: 0.1-19.50V (cut-off voltage can be set according to specific needs)
- 3) Current Range: 0.05-3.50A (maximum power is 30W, current will be restricted when the power reach over 30W), discharging current can be set according to specific needs
- 4) Test Modes:
 - 2 Constant Current Discharging (CC), testing will automatically stop when voltage reaches the set cut-off value.
 - 2 Meter function: the tester can be used to measure voltage and current. M+/A- is current meter, and V+/V- is voltage meter.
- 5) Data Display: Four digital tube which can show testing data such as voltage, current capacity, and energy. You can switch to different data by pressing on buttons.
- 6) PC Connection: Micro USB cable.

3. Connecting Pattern

3.1 Testing Ports



The tester has four jacks which connect with M+/A+/A-/V+/V-. A+ and A- ports are connected with the positive and negative poles of the test objects, working as the current channel in discharging. V+ and V- ports are connected with the positive and negative poles of the test objects, working as the voltage channel in voltage tests. This way of using four individual cables will help eliminate the effect of wires on the test result and improve the test precision.



3.2 PC Connection

The tester can be connected with a computer through a Micro USB cable.

3.3 Input Power:

The tester will work on the power supplied through Micro USB port.

4. Display and Setting

4.1 Buttons

There is a setting knob (rotate to left/right and press) on the tester.

4.2 Operation Display

The tester can show voltage, current, capacity (led display red) and energy (led display green)

during working. You can switch to different data by rotate knob.

- 2 Voltage display: Automatically switch between 0.00V to 00.0V
- 2 Current display: 0.00A
- 2 Capacity display: Auto switch between 0000 and 00.00. The unit of measurement is mAh in 0000 mode, and Ah in 00.00 mode.
- 2 Energy display: Auto switch between 0000 and 00.00. The unit of measurement is mWh in 0000 mode, and Wh in 00.00 mode.

Press knob to start test under testing mode and press again to stop test.

You can open setting mode by pressing knob for 2 seconds in the stop state (This function is invalid when the tester being connected with the PC software).

4.3 Setting Display

In setting mode, the value to be set will shine. Press knob to switch to the value you want to change and rotate knob to set the value.

First set the discharging current: you can set the value of every digital.

Second set the cut-off voltage: testing will automatically stop when the testing voltage reaches below this value.

It will go back to the limit value if your setting exceeds the allowed range.

After finishing setting, press knob for several seconds to return to testing mode.

5. Precautions

- 1) Positive and negative connections should not be reversed.
- 2) Always use the tester within the allowed range.
- 3) PC connection software: EB Tester Software, download it from www.zketech.com.
- 4) PC connection: follow EB Tester Software User Manual.
- 5) Technical support: zke2006@163.com
- 6) Taobao store: zke2006.taobao.com

We always focus on innovation and improvement and will keep upgrading the software. Please frequently visit www.zketech.com to download the latest manuals.