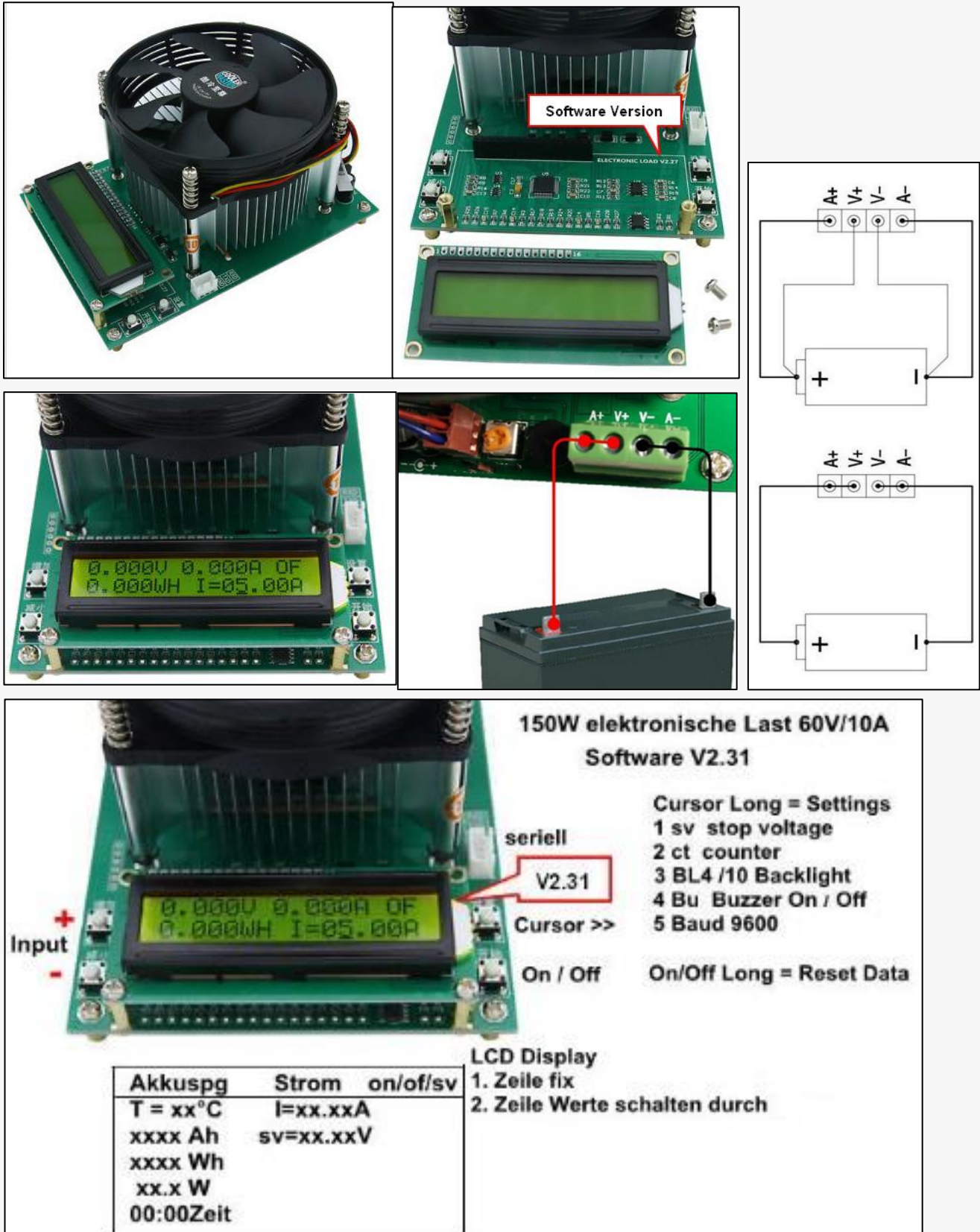


# 150W Elektronische Last 60V / 10A, Akku Kapazitätstester



**Das hier ist das Original und ein echt tolles Gerät. Preis ca 27-32€**

Aber im Internet gibt es leider auch Fake/Clone-Geräte die fehlerhaft sind, nicht richtig abschalten, falsch messen und echt gefährlich sind.

Erkennbar: keine serielle Schnittstelle, gar keine Softwarebezeichnung auf der Platine, keine Beschreibung dabei, 3-5€ billiger.

# 1602 CNC Electronic Load Owner's Manual

## I. The Choice and Power-on Testing of Power Adapter

1. Power Adapter Specifications: voltage:  $12 \pm 0.5V$ , electric current  $\geq 1A$ , interface  $5.5 \times 2.1$

most of the 12V adapters in the market are suitable.

2. Connect the Power Adapter, observe the screen is light up normally, and displays the letters "Welcome to use", the load testing should be carried out after the normal testing.

**Attention:** If use the other power supply ways to replace the Power Adapter, please make sure the power supply and tested power supply do not on the common-ground, or else the machine will be damaged.

## II. Wiring Diagram

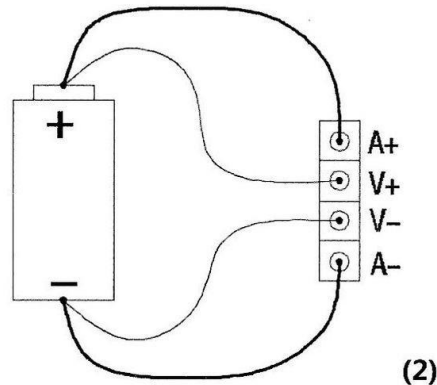
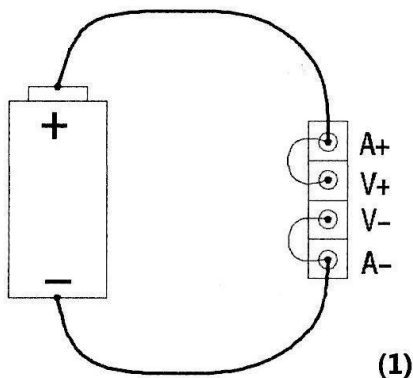


Diagram (1) is the wiring method of two-wire system, this method is simple and convenient (**Attention:** Must be connected to two terminals [A+] and [A-]).

Diagram (2) is the wiring method of four-wire system, voltage measurement is not affected by wire voltage drop, so as to let the voltage measurement more be accurate.

**Attention:** Incorrect connection may damage electronic load

## III. Electronic Load Parameters

1. Testing voltage: 1-60V
2. Working current: 0.01-10A
3. Maximum power: 150W

The actual working current is affected by the maximum power, it will make the adjustment automatically, for example, the testing voltage is 30V, at this moment, the maximum current is  $150W/30V=5A$ , if the current is set to

10A, the actual electronic load will run with 5A current, if the voltage is reduced, it will increase the current automatically until reach to 10A.

## IV. Basic Operation

1. Set the current value (**you can adjust the current value while the load is running**)

Press the "Setting" Key, move the underline in the screen. For example, when "I=00.00A", press the "Plus" or "Minus" current to increase or decrease 1A.

For example, when "I=00.00A", press the "Plus" or "Minus" current to increase or decrease 0.1A.

The stepping values of current are separately 1A, 0.1A, 0.01A.

2. Open and close the load

After setting the current value and the cut-off voltage, press "Start" to launch the load, and press again to close the load, and at the same time the upper right side of screen will display "ON" or "OF".

3. Measurement data zero clearing

The time, AH and WH will be accumulative total (save and not clear to zero in the power-off status), before measure any battery, first to make the zero clearing by manual operation, press the "Start" key for around 2 seconds, when hear a long sound of buzzer prompt (the lower left side shows RESET), which shows the zero clearing is finished, at this moment the time, AH and WH are all zero, if the load is opening, it will be closed at the same time.

4. Screen display switching

The lower left of screen will display the power, AH, WH, temperature and time in turn, if you want to fix one display, can hold press the "Setting" key, and at the same time

press the "Plus" key, when press once the display will be cut once, after the switching is completed the display will be fixed, and the screen will not display in turn, if need to open the automatic alternate display again, can hold press the "Setting" key, and at the same time press the "Minus" key, the screen will display "Auto", which shows the automatic alternate display is opened again.

## V. Setting up electronic load

1. Press the "Setting" key around 2 seconds to get into the setup interface, where you can set the following:

(1). Cut-off voltage value:

for example,  $sv=10.00V$ , when the discharge voltage is below 10V, the load stops automatically and at the same time the screen will display "sv"

(2). Discharge timer:

for example,  $ct=01:00:00$  (one hour), when the power is aged for 1 hour, the load stops automatically and at the same time the screen will display "ct"

(3). Screen backlight: 0-10 level brightness adjustable (the original factory setting is 4 level, when set to level 0 can close screen backlight)

(4). Buzzer switch: ON/OFF

(5). UART Baud Rate: 9600/38400/115200

2. In the setup interface, press the "Setting" key to switch the underline; press the "Plus" or "Minus" key to modify the settings; and short press the "Start" key to switch to the next item's setting.

3. After all the setting are complete, press the "Start" key around 2 seconds, save all parameters and exit the settings interface.