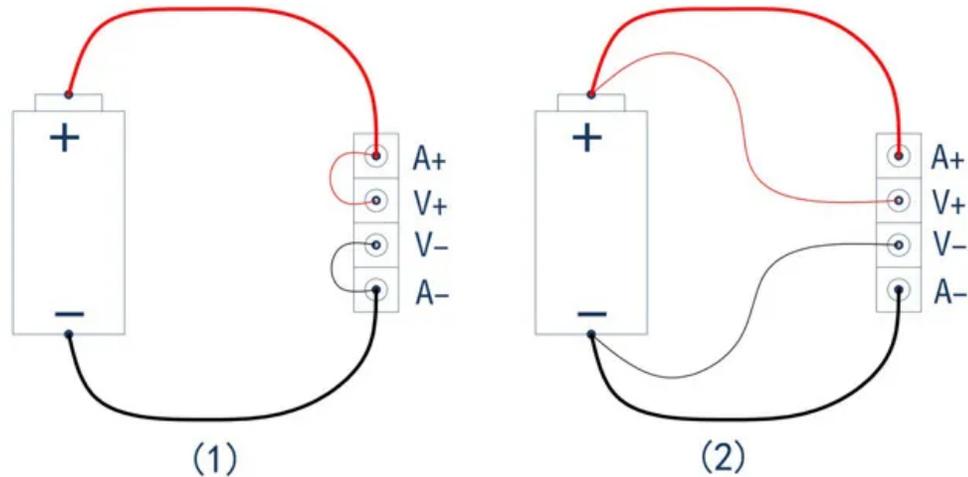# Electronic load wiring diagram
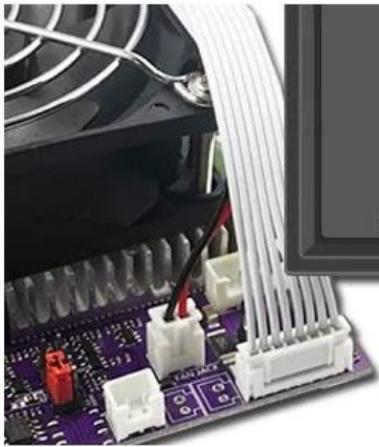

(1)   (2)

(1) **Two-wire wiring method:** this method is relatively simple and convenient.
Note: It must be connected to the 2 terminals [A+] and [A-].

(2) **The four-wire wiring method:** the voltage measurement is not affected
by the voltage drop of the wire, so that the voltage measurement.
The quantity is more accurate, and it is recommended that buyers with a
certain circuit basis use this method!

Intelligent temperature control fan

This electronic load adopts an intelligent temperature control fan, which needs to
reach a certain temperature before starting. If the starting temperature is not
reached, it will not start working

You can set the temperature range in the system background. The default startup
temperature is 52 ° C, and you can adjust it within the range of 40 ° C to 80 ° C!
The fan stop working temperature will be reduced by 10 ° C, which means that
you set the fan start temperature to 40 ° C. When the temperature is 30 ° C, the
fan will stop!

Fan temperature display

System Background Fan Start Temperature Settings

ATORCH DL24M Menu
01. 中文 English
02. Display Brightness   :9
03. Standby Brightness   :5
04. Enter Standby Time   :60S
05. Precision of current   :●Auto ○10mA▨1mA(<2A)
06. Temp Correction Exter :---.-°C
07. Time Discharge   :00:02
08. Low-voltage   :00.08V
09. Over-Voltage   :210.00V
10. Over-Current   :025.00A
11. Over-Power   :0150W Over-Temp:100°C
12. F an control temperature: >52°C ON
13. When no load current is zero
    Data Zero   Default Settings   EXIT

Can adjust it within the range of 40°Cto 80°C!

Note: There may be changes in the system backend, please prioritize the actual product received

If you set the starting temperature of the fan to 52 ° C, when the fan temperature reaches 52 ° C, the fan will start working, and when the temperature reaches (52 ° C-10 °C=42 ° C), the fan will stop!

Product jumper position and Setting method(150W~600W)

(DIY 150W / DIY 300W / DIY 450W / DIY 600W)

When product leave the factory, the default is: 150W (the jumper has been set to 150W)

When this product is at different powers, you need to set the jumper, please follow the following method to set！
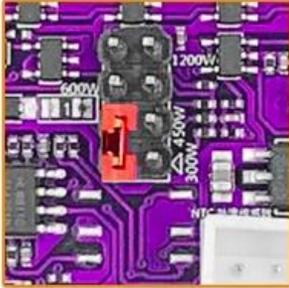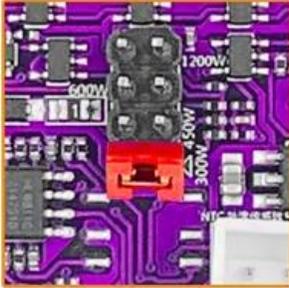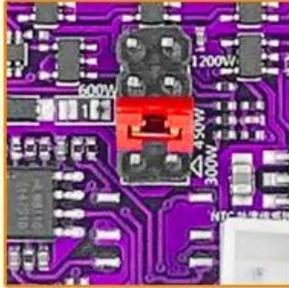
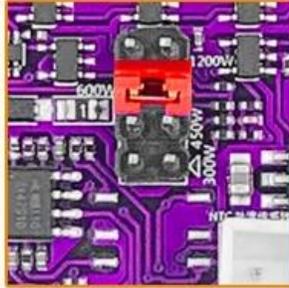@150W 3mA~25A (V*A<150W)

@300W 3mA~30A (V*A<300W)

@450W 3mA~35A (V*A<450W)

@600W 3mA~40A (V*A<600W)

Software and hardware setting methods for splicing different powers

■150W ■300W ■450W ■600W ☐1200W

Note: splicing is not recommended above 1200W, please do not buy!

150W Jump Cap	300W Jump Cap	450W Jump Cap	600W Jump Cap

150W	25A		150W	25A		150W	25A		150W	25A
300W	30A		300W	30A		300W	30A		300W	30A
450W	35A		450W	35A		450W	35A		450W	35A
600W	40A		600W	40A		600W	40A		600W	40A
1200W	40A		1200W	40A		1200W	40A		1200W	40A
1800W	40A		1800W	40A		1800W	40A		1800W	40A
2400W	40A		2400W	40A		2400W	40A		2400W	40A
3000W	40A		3000W	40A		3000W	40A		3000W	40A

Tip:Please Keep the same with the hardware version	Tip:Please Keep the same with the hardware version	Tip:Please Keep the same with the hardware version	Tip:Please Keep the same with the hardware version
150W software selection	300W software selection	450W software selection	600W software selection

Two kinds of 1mA or 10mA current test gear

Operation method: Long press the "ON/OFF" Button to enter the background, press the "M" Button, select 05 item: Precision of current: O10mA ●1mA, set by "+" or "-"

(Tips: Start the test with a minimum of 3mA)

Measurement of small capacity batteries

Increase the thickness and automatic current constant current gear settings

1mA measurement	10mA measurement	Automatic gear measurement
Test the capacity of <2A small batteries Simple, convenient and more accurate	This gear is used to measure large-capacity batteries The current range can measure the corresponding current value of the host	When the measurement is greater than 2A, it will automatically jump to the 10mA block When the measurement is less than 2A, it automatically jumps to 1mA block

Introduction to the key operation of frequently used functions

1) Short press the "ON/OFF" button to start and stop, short press the upper left corner of the "M" button to move the cursor and then adjust the corresponding value with the "+/- " button

2) Long press the "+/- " button at the same time to clear all accumulated data such as the current capacity, battery time, etc. (Long press the "ON/OFF" button to enter the background , also can be cleared in the background menu)

3) Long press the "M" button and the function mode starts to flash, then short press the "+/-" button to select the function (CC/CV/CR/CP/BRT/PT)

4) In OFF mode, long press the "ON/OFF" button to enter the background interface, then short press the "M" button to switch the setting column, and the "+/-" button to adjust the number

5) Short press the "+/-" button in the constant current accuracy column of the background setting interface to switch the constant current accuracy (10mA Or 1mA)

6) When the system is not supplying power, press and hold the "M" button and do not let go. Then power on again.

Enter the splicing power option and jump to the actual power value before let go

7) Long press the "M" button the function mode starts to flash, short press the "M" button again to enter the setting adjustment value of the time-limited discharge and Cut off voltage column value

Panel Main buttons and description

Ⅰ：Bluetooth indicator（Flashing waiting for Bluetooth connection，Long light indicates successful connection）

Ⅱ："+" Vave Increase Button（Short press the button to increase the number, long press the button to increase continuously,When the mode is flashing, short press the button to cycle backwards）

Ⅲ："M" Set Buton（Long press "M" key to start function mode, press "+" or "-" key to switch CC/CV/CP/CR/BRT/PT mode, long press "M" key to start function mode, short press "M" again Key to switch between Time Discharge and Cut off voltage. Press the "+" or "-" key to set the value, the default is OFF）

Ⅳ："-" Value Reduce Buton（Short press the button to decrease the number and long press the button to decrease continuously. When the mode is flashing, short press to cycle forward）

Ⅴ："ON/OFF" Run ON/OFF Button(Short press the button, it is ON or OFF

Long press the button to enter the product background settings, and use the "M" button and "+" or "-" button to set the parameters）
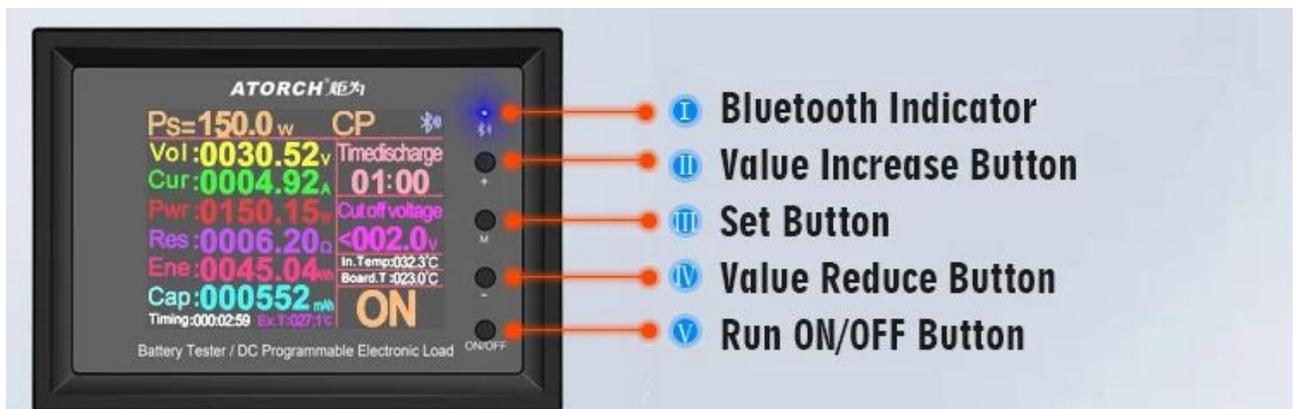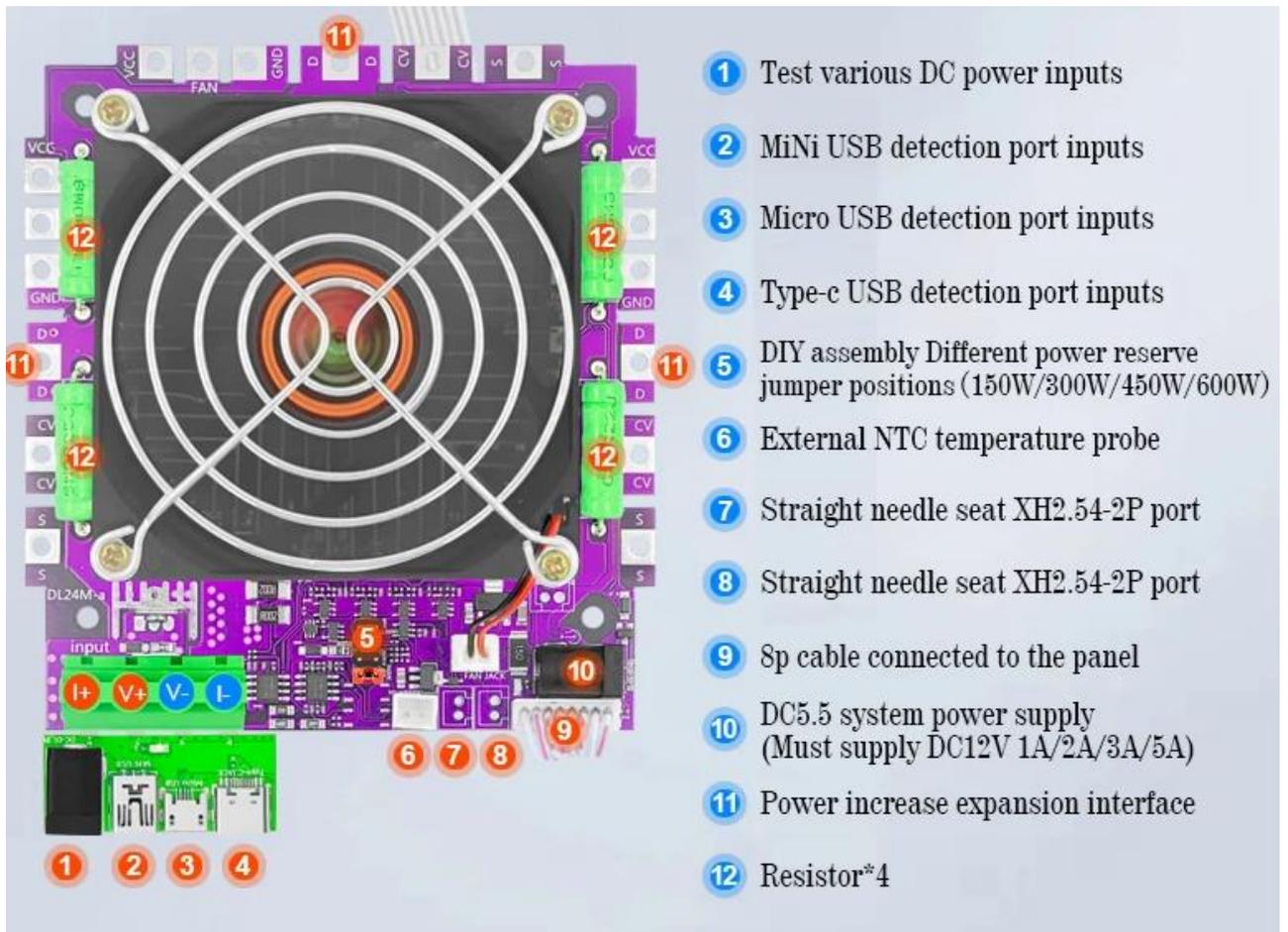
1. Test various DC power inputs
2. MiNi USB detection port inputs
3. Micro USB detection port inputs
4. Type-c USB detection port inputs
5. DIY assembly Different power reserve jumper positions (150W/300W/450W/600W)
6. External NTC temperature probe
7. Straight needle seat XH2.54-2P port
8. Straight needle seat XH2.54-2P port
9. 8p cable connected to the panel
10. DC5.5 system power supply (Must supply DC12V 1A/2A/3A/5A)
11. Power increase expansion interface
12. Resistor*4

Host Parameters and description

1.Test various DC power inputs
2.MiNi USB detection port inputs
3.Micro USB detection port inputs
4.Type-c USB detection port inputs
5.DIY assembly Different power reserve jumper positions （150W/300W/450W/600W）
6.External NTC temperature probe
7.Straight needle seat XH2.54-2P port
8.Straight needle seat XH2.54-2P port
9.8p cable connected to the panel
10.DC5.5 system power supply (must supply DC12V 1A)
11.Increase the power and expand the interface
12.Resistor*4

Seven operating modes of operation

1.Constant current operation （CC）
2.Constant resistance operation （CR）
3.Constant power operation （CP）
4.Constant voltage operation （CV）

5.Battery Internal Resistance Test Mode (BRT)

6.PT electrical parameters automatic test mode (PT)

7.CT Cable resistance test mode(CT)