DL24/DL24P User Manual

2.4-inch HD color screen Bluetooth transmission curve version

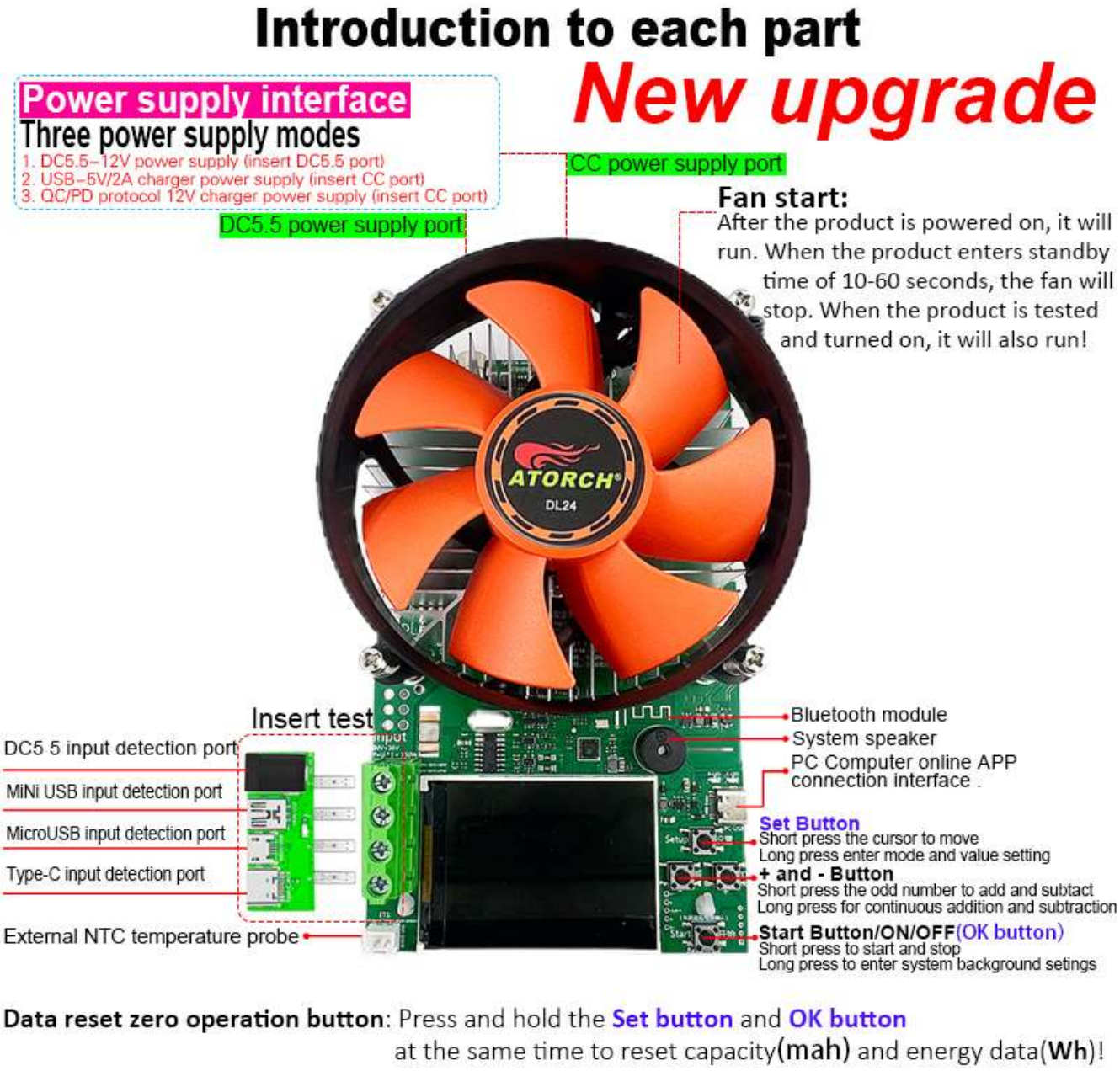
Battery capacity / DC power multi-function tester

☐ DL24 150W ☐ DL24P 180W

DL24P 180W

(This product will be updated at any time, please pay attention to the web page description for detailed update details)

1.DL24/DL24P Electronic Load Structure Description



2. Electronic Load Power Supply Instructions

This product does not provide a power adapter, but can be powered by three self provided methods

1.DC5.5-12V power supply (insert device DC5.5 interface)

2.USB-5V/2A charger power supply (insert into device CC port)

3. QC/PD protocol 12V charger power supply (insert into device CC port)

Attention: Need DC12V power supply to Working.

NOTES:

Load power-W:U×I≤150W/180W(max)

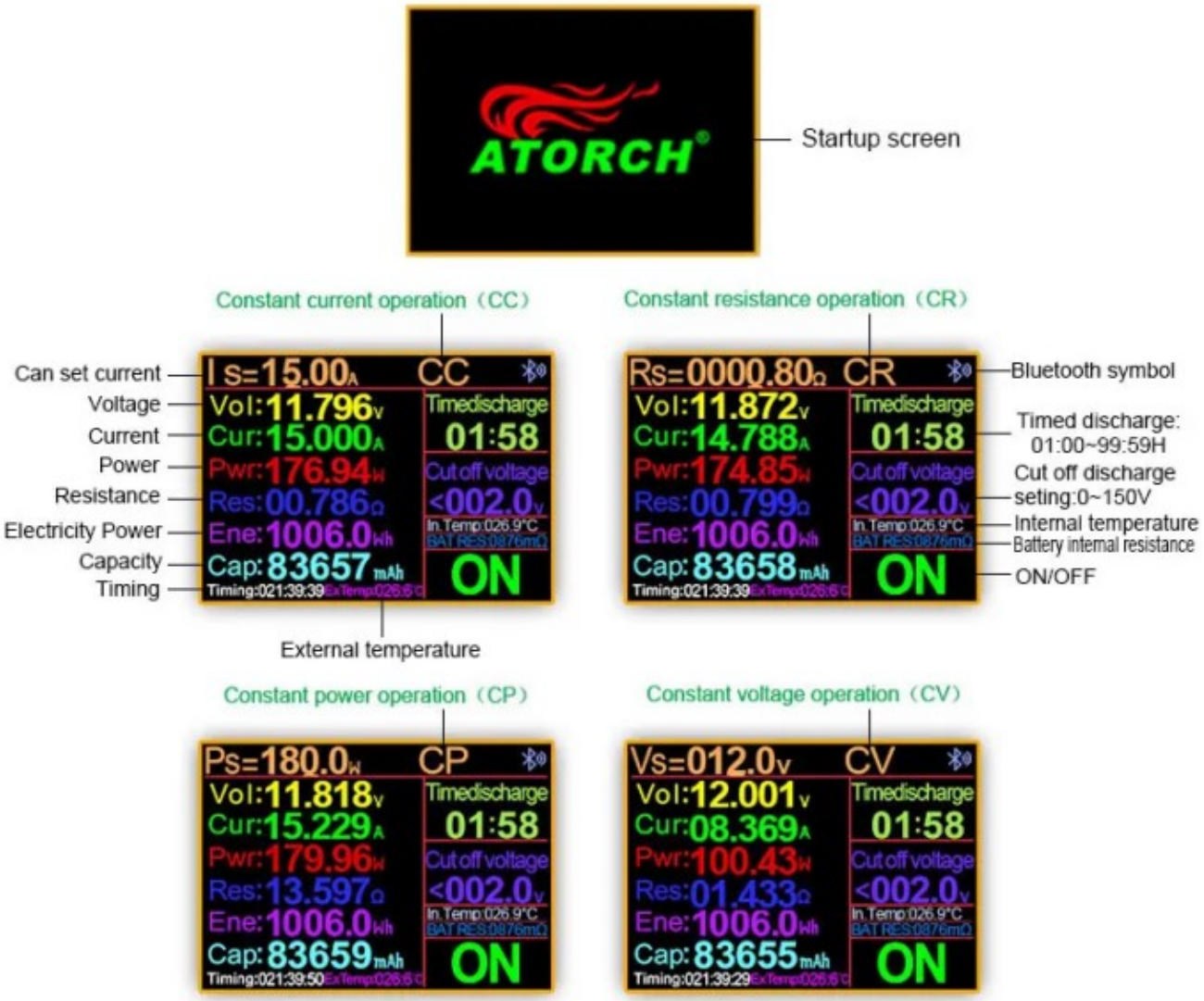
Power testing range, to avoid product damage!

1. Voltage < 36V, maximum testable power of 150W

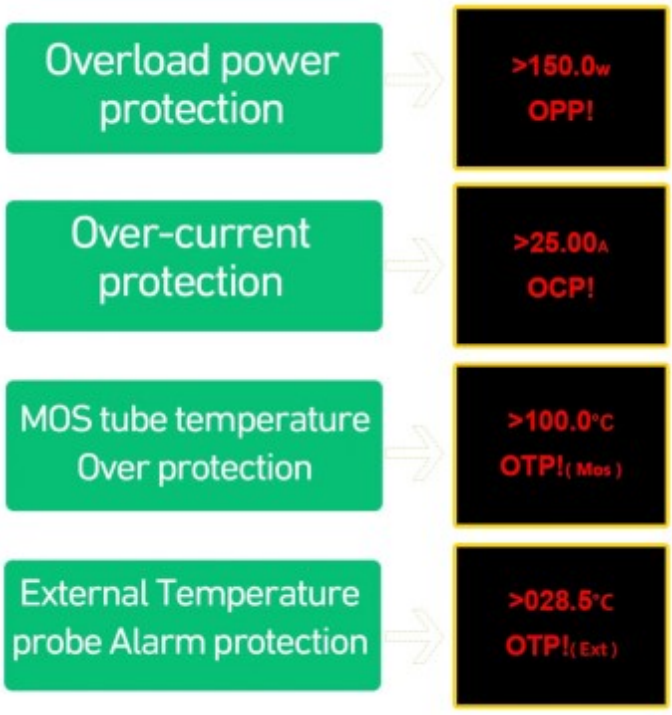
2. Voltage>36V,<80V, maximum testable power of 60W

3. Voltage>80V,<200V, maximum testable power of 45W

3. Main functional testing interface

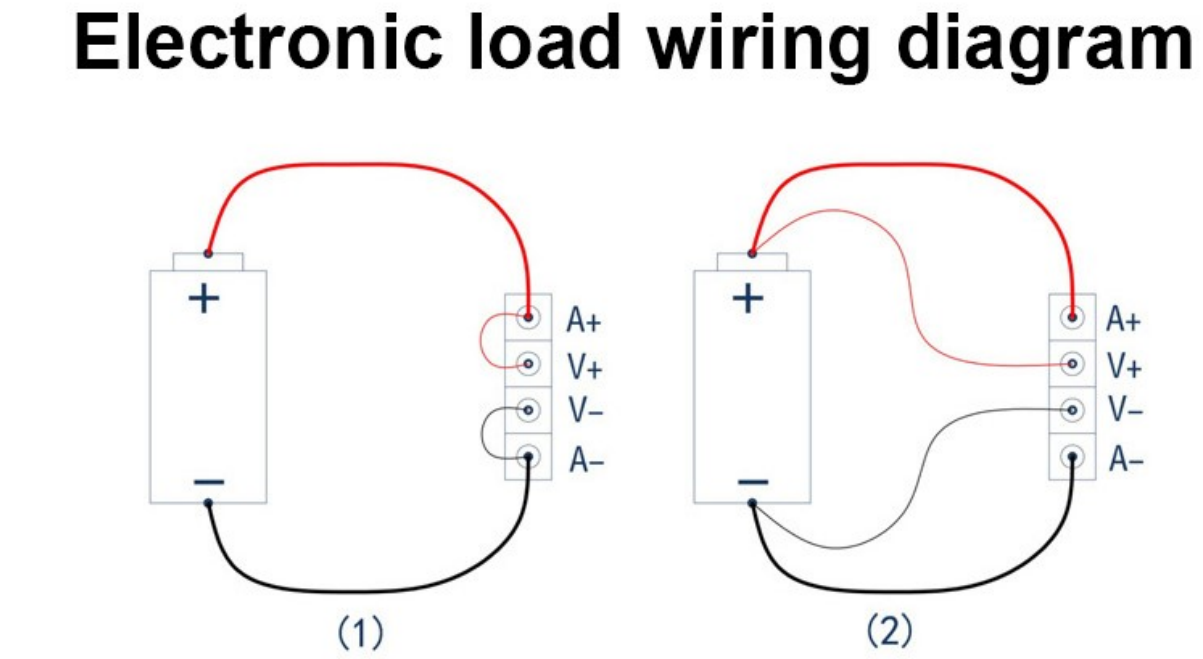


4. Four major alarm functions



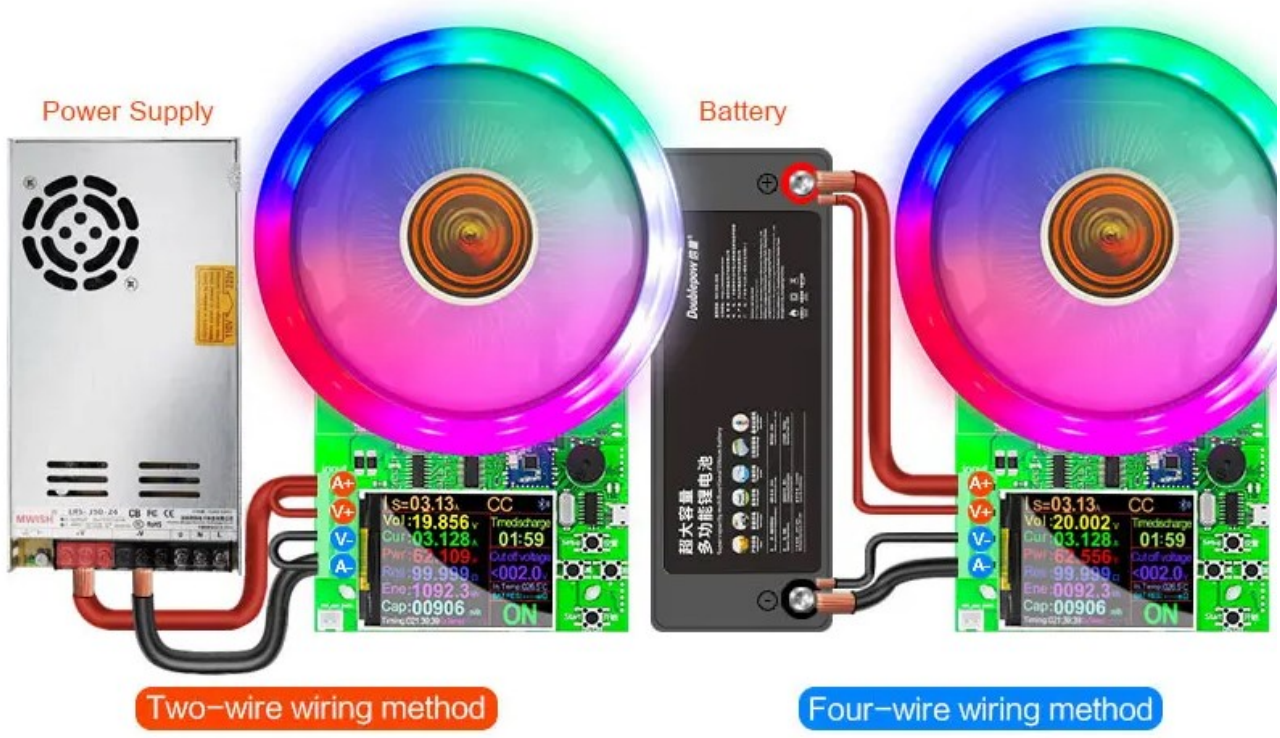
5. Product wiring method

This electronic load supports 2-wire and 4-wire wiring methods testing



(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!



6. Test Instructions

Test mode	Operation instructions
CC Mode	**Constant current test mode**
	**Operation method:** When selecting the"CC" constant current discharge mode in the menu, regardless of the input voltage No change, set the cut-off voltage and discharge parameters of the battery, press the "OK/Start" button, and will work at the set current value for constant discharge!
CV Mode	**Constant Voltage test mode**
	**Operation method:** When the menu is set to work in the constant voltage discharge mode of "CV", the tested power supply needs to be Constant current power supply, at which point will operate at the set voltage value Constant voltage discharge! **(Constant Voltage mode cannot test the battery)**
CP Mode	**Constant Power test mode**
	When menu is set to work in "CP" constant power discharge mode, regardless of whether the input voltage changes, BW150 automatically calculates the current to voltage ratio and works at set power value for constant power discharge! Combined with a high-voltage trigger, the maximum power of the charger can be tested. **(Constant power mode cannot test the battery)**
CR Mode	**Constant resistance test mode**
	When the menu is set to work in "CR" constant resistance discharge mode, regardless of the input voltage Whether the current has changed or not, will automatically calculate according to the set resistance value The ratio of voltage to current equals a constant resistance value for discharging!

7. Online Instructions

1. PC computer upper online functions(Connect through HID data cable)

The PC computers can read device current, voltage, power, capacity and other data, and export XLS table data.

Download link:http://en.atorch.cn/upload/file/20241217/638700451476558441126215.zip

2. Bluetooth APP functions（Support Android 5.0 and above versions）

The Bluetooth app can read device current, voltage, power, capacity and other data, and export XLS table data.

Note:This version of the APP is only used to control switches and may have compatibility issues. It is not intended for primary testing. Please use PC software for testing!

Important note: When online, be sure to turn on GPS positioning permission

Note:Some phones have incompatible apps (Samsung), please switch to another phone for pairing and online connection!

Download link:http://en.atorch.cn/upload/20220611142210.apk

Android APP: search E-test at Google play to down load

IOS APP: search E_test on iphone APP store to download

2.Please download the mobile app software,only support Android 5.0 and above.

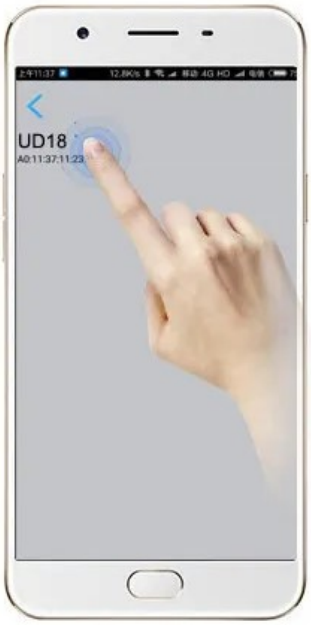
https://www.mediafire.com/folder/31bc15uhq8odb/E-meter

Then install the E-meter APP software on the phone.

3.Bluetooth on the phone needs to be turned on,Then open E-test APP on the phone

1

When the USB tester is powered on, the Bluetooth indicator is flashing, turn on the E-test App softare icon , and allow Bluetooth to turn on.



2

Click the Bluetooth icon in the upper left corner of the APP to pop up the menu for selecting the USB tester model,DL24-BLE, return to the main APP interface.

3

During the measurement, the upper right corner shows the model currently online.DL24-BLE The bluetooth icon in the upper left corner turns blue, indicating that the measurement is in online communication.

About SOFTWARE QUESTIONS:

The APP crashes on my PC, what is the problem ?

A: For PC software, because there may be incompatibilities problems, please download first before buying , if you can download and install, you can place order, or else do not buying. If you don't test the PC software and APP function before buying and find that the products works fine except the PC software, we refuse to refund.For PC software, it only support win 7 and Win 10 above for now.

2. Why are there _BLE and _SPP modes and which one to choose?

A：Our APP adopts the latest connection technology, please do not pair in Bluetooth mode, directly click on the E-test (Android APP name) APP provided by us, click the Bluetooth symbol, E_test (Apple APP) select the _BLE Bluetooth name to proceed connect, that's it ok!

_BLE:is connected in mobile mode _SPP:is connected in PC computer mode

3.What is the computer pairing password?

A：Password is "0000" or "1234"

8. Product background introduction

Operation method:

Press and hold the "OK/Start" button on the measurement interface to return to menu options interface,

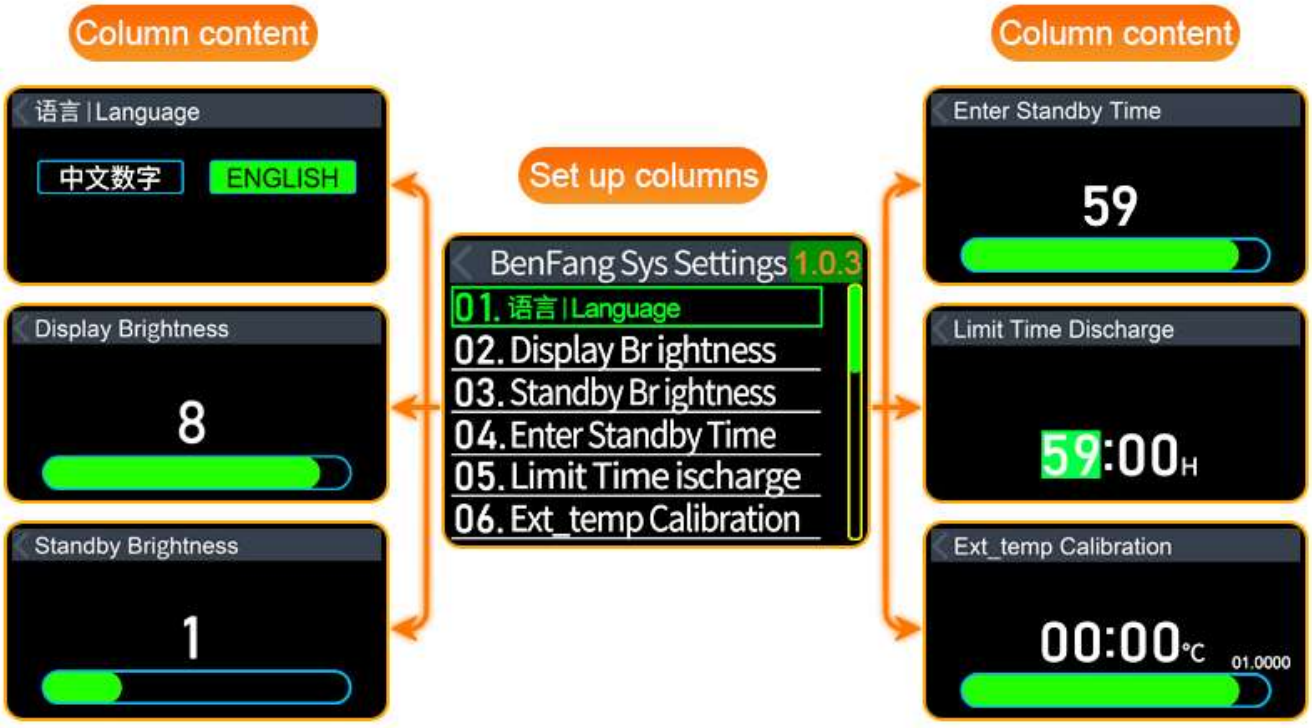
Short press the "+"/"-" button to jump to the "System Settings" icon when it turns green

Short press the"OK/Start" button again to enter the following system settings interface,

Short press the "+"/"-" buttons again to select the column and enter the parameters under the corresponding function settings.

Short press the"OK/Start" button again Exit

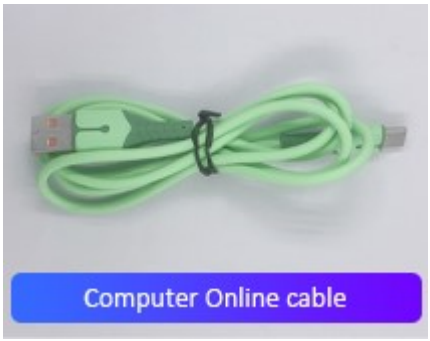
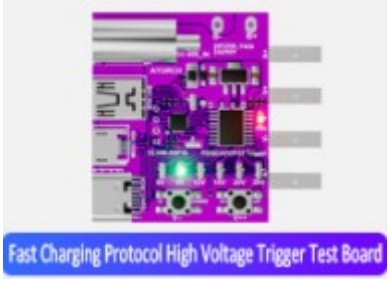
(The background interface may change, please receive the physical item as the main item)




Voltage Calibrate Ref
0.0000V
00.9955
Current Calibrate Ref
0.0000A
00.9752
Current Calibrate Ref
0.0000A
00.9752
BenFang Sys Settings 1.0.3
07. Voltage Calibrate Ref
08. Current Calibrate Ref
09. Discharge Cutoff Volt
10. Over_Current Protect
11. Over_Power Protect
12. Over_Temp Ext.T
Over_Current Protect
25:00A
Over_Power Protect
0150W
Over_Temp Ext.T
075°C
Over_Temp MOS
100°C
Zero No-Load Current
0.0000A
OFF
ON
Zero All Data
OFF
ON
BenFang Sys Settings 1.0.3
13. Over_Temp MOS
14. Zero NO-Load Current
15. Zero All Data
16. Default Setting
17. Mini discharge Amp
18. Prompt-Info Switch
Default Setting
OFF
ON
Mini discharge Amp
03mA
Prompt-Info Switch
ON
OFF
BenFang Sys Settings 1.0.3
19. Exit

9. Accessory usage instructions diagram

The following accessories are default package accessories and can be used directly according to the instructions

Accessory Name	Application Description
	Can test DC power supply, MINI USB, Type-C, Android USB all kinds of data cables
	Measure battery temperature, and can also detect the temperature of various devices and temperature etc...
	Detect battery or other 10A with two-wire wiring equipment in range
	Connect the computer to a USB serial port and use the computer software online, which can upgrade firmware and read data
The following accessories need to be ordered separately!	
	**Load Fast Charging Protocol High Voltage Trigger Test Board** This load test board can support PD3.1 compatible with PD3.0 protocol, QC, AFC, FCP and other protocols. By sending fast charging protocol chargers or power banks, it can triggered 5V/9V/12V/15V/20V/28V fast charging voltage for various aging and testing, as well as quality identification, voltage, current and power identification.

	**20A large battery four wire battery activity testing fixture** Using a 4-wire wiring system for more accurate testing! Adapt to battery model testing: [1].18650,26650,14500,16340,26850,18350,32650, 46950 and all other lithium batteries; [2].All dry batteries, including A, AA, AAA, etc [3].All button batteries such as 2032, GPA76,LR44, etc.
	Using 4-wire wiring system for more accurate testing Adapt to battery model testing: 18650、26650、14505、14340、14250 Battery Test

10. DL24/DL24P Difference

DL24 150W	DL24P 180W
Load power-W:U×I≤150W(max) Load voltage: U:2-200V Load Current: I:0-20A Power testing range, to avoid product damage! 1. Voltage < 36V, maximum testable power of 150W 2. Voltage>36V,<80V, maximum testable power of 60W 3. Voltage>80V,<200V, maximum testable power of 45W	**Load power-W:U×I≤180W(max)** Load voltage: U:2-200V Load Current: I:0-20A Power testing range, to avoid product damage! 1. Voltage < 36V, maximum testable power of 150W 2. Voltage>36V,<80V, maximum testable power of 60W 3. Voltage>80V,<200V, maximum testable power of 45W
	

11. Continuously update information details