

# UD24 Tester User Manual



**UD24 Tester**

It can be used as a USB tester or as a DC voltmeter. It is a high-end product created by the wisdom of the industry!

UD24 2.4"inch USB tester DC5.5 Type-C digital voltmeter ammeter power bank voltage detector volt QC PD electric meter for APP

## Product description

Voltage measurement range: 5V~32.0V

Current measurement range: 0.00~ 5.10A

Timing time: 999 hours 59 minutes 59 seconds

Input interface: Type-C/Micro USB/USB

Output interface: Type-C/USB

Timing charging reminder setting: countdown 24 hours any set value

USB D+ voltage range: 0V~2.99V

USB D- voltage range: 0V~2.99V

Refresh time:> 500mS/ times> 500mS/ times

Measurement rate: about 0.5 times/sec

Alarm mode: siren sound + display prompt double warning

Display type: large screen with true color digital display with heavy cost 2.4 Chinese and English measurement interface

Self-consumption current: <0.02A

Working temperature: -10~+60°C -10~+60°C

Working humidity: 10~80 (no doubt) 10~80 (no doubt)

Working pressure: 80~106kPa

# UD24 Startup screen and function test interface

1.6-digit high-precision interface

2.USB Meter Display

3.DC Meter Display

4.DC Percentage Display

UD24 startup screen



6-digit high-precision interface



USB Meter Display



DC Meter Display



DC Percentage Display



# Qualcomm QC3.0/2.0 Quick charge protocol triggers automatic detection of multiple quick charge protocols

QC2.0 Quick Charge Reminder Display

```

USB TRIGGER
QC2.0
High Voltage!!!
D+:0.63V 005.085V
D-:0.36V 000.363A
Time:021:38:49 T(Out):028.5°C T(In):028.5°C
    
```

QC2.0 Quick Charge Trigger Test

```

USB TRIGGER
QC2.0
5V 9V 12V 20V
D+:0.63V 009.035V
D-:0.36V 001.363A
Time:021:38:49 T(Out):---.°C T(In):028.5°C
    
```

QC3.0 Quick Charge Reminder Display

```

USB TRIGGER
QC3.0
High Voltage!!!
D+:0.65V 005.085V
D-:2.98V 000.363A
Time:021:38:49 T(Out):028.5°C T(In):028.5°C
    
```

QC3.0 Quick Charge Trigger Test

```

USB TRIGGER
QC3.0
-0.2V +0.2V
D+:0.65V 008.225V
D-:2.98V 001.283A
Time:021:38:49 T(Out):---.°C T(In):028.5°C
    
```

USB Quick Charge Automatic Detection Reminder Display

```

USB QUICK CHARGE
High Voltage!!!
Output Voltage:005.052V
    
```

USB Quick Charging Protocol Automatically Test

```

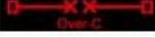
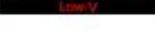
USB QUICK CHARGE
APPLE OK
BC1.2 NG
BC2.0 OK
BC3.0 OK
Output Voltage:005.052V
    
```

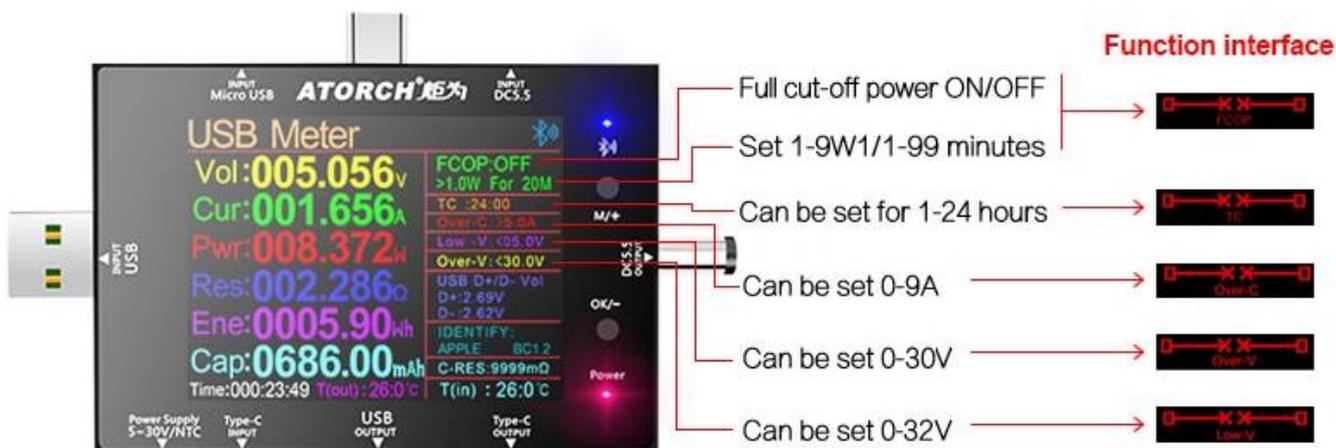
## Five-fold intelligent protection, safe charging and double safety

According to their actual needs, the user can set the full power-off switch, full power-off parameter conditions, timing charging time, and over-current, over-voltage, low-voltage and other parameters, so that this equipment can be fully automated and unattended according to your needs. The set parameters run automatically, and the real-time monitoring well automatically cuts off the power according to the corresponding settings to protect your charging equipment in all aspects. From then on, your charging becomes more safe, interesting and playable!

1. FCOP: Full power Cut off (ON/OFF), you can set it yourself when the power is  $< 1W$  for 1 minute, it will power cut off
2. TC: Timed charging (ON/OFF), you can set the time period of 01:00-24:00 to charge regularly, when it reaches the setting, it will automatically power cut off
3. Overcurrent protection: you can set the range of 0.0A-5.1A by yourself
4. Over voltage protection: 01V-36V range can be set by yourself
5. Low voltage protection: 00V-35V range can be set by yourself

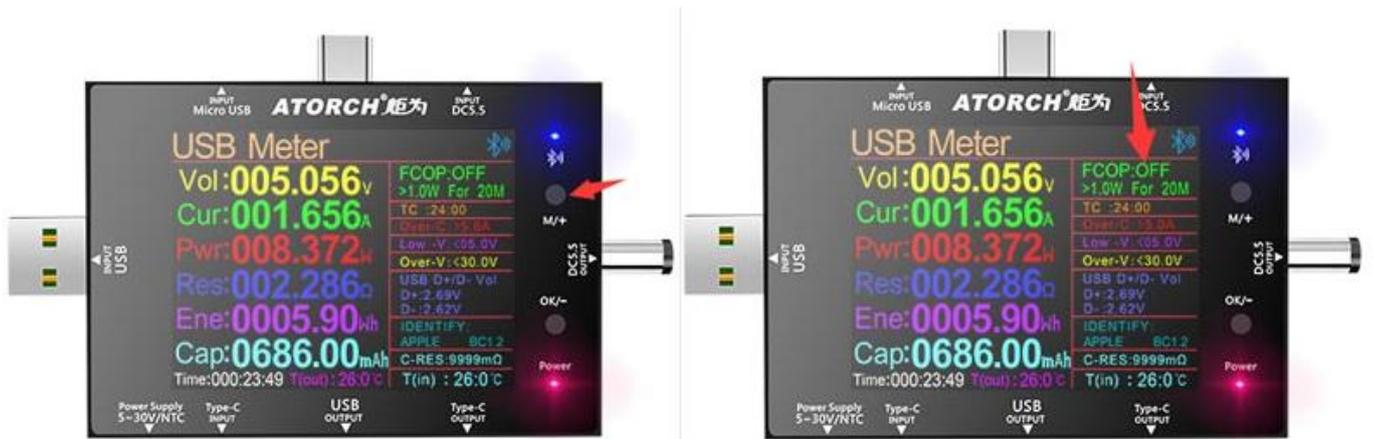
## About FCOP, TC, Over-C, Over-V, Low-V Function Settings

1. **FCOP: OFF** **FCOP** Means Device charging Full power Cut OFF(ON/OFF)  
**< 1W For 20M** **FCOP: OFF < 1W For 20M** Means FCOP Means Device charging Full power function is invalid  
**FCOP: ON < 1W For 20M** Means you can set it yourself when the power is  $< 1W$  for 1 minute, it will Power Supply Cut OFF! 
2. **TC: 01:00** **TC: Timed charging (ON/OFF)**, you can set the time period of 01:00-24:00 to charge regularly when it reaches the setting, it will automatically power cut off! 
3. **Over-C > 5A** **Overcurrent protection** : 0.0A-5.1A range can be set by yourself 
4. **Over-V > 30V** **Over voltage protection**: 01V-32.0V range can be set by yourself 
5. **Over-V > 30V** **Low voltage protection** : 00V-30.0V range can be set by yourself 



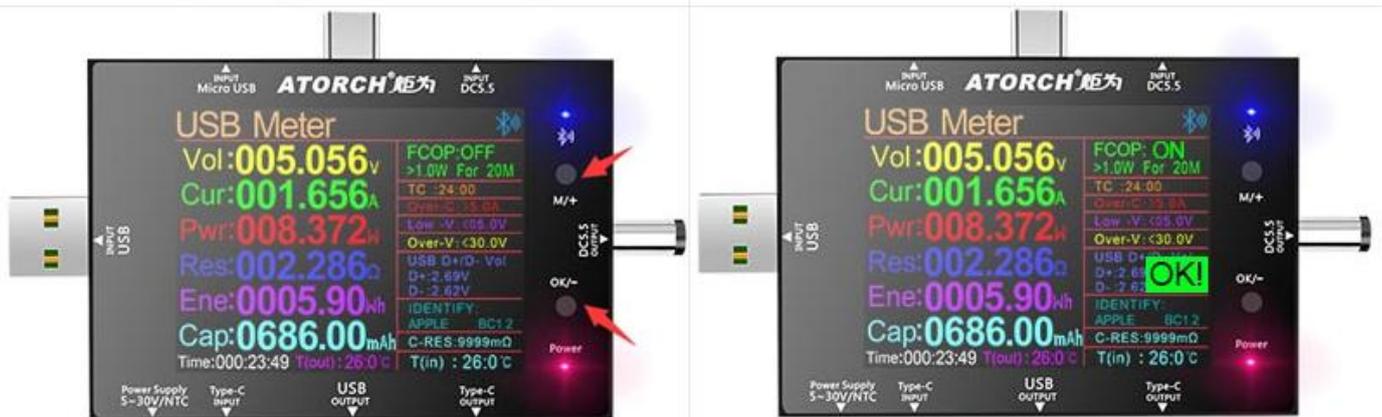
# Key button operation

1. Long time press the **"M"** key, the **OFF** on the screen will flash, click the button **"-"** or **"+"**, set **FCOP: ON or OFF**, Long time press the **"OK!"** key again, the screen will appear: **"OK!"**, the setting is complete!
2. Press this operation to set other parameters, wait a few seconds, the screen will appear: **"OK!"**, the setting is complete!
3. Or long time press the **"M"** key, the numbers on the screen will flash, you can freely choose to set the parameters!



Long time press the **"M"** key

the **OFF** on the screen will flash



click the button **"-"** or **"+"**, set **FCOP: ON or OFF**

Long time press the **"OK!"** key again, the screen will appear: **"OK!"**

**This setting is complete, follow this operation to set other parameters!**

360° rotating screen on all sides satisfies reading at any angle



## UD24 USB tester use function



6-digit high-precision interface



USB Meter Display



# Qualcomm QC3.0/2.0 fast charge protocol trigger Automatic detection off multiple fast charging protocols

## Qualcomm QC3.0/2.0 fast charge protocol trigger Automatic detection of multiple fast charging protocols



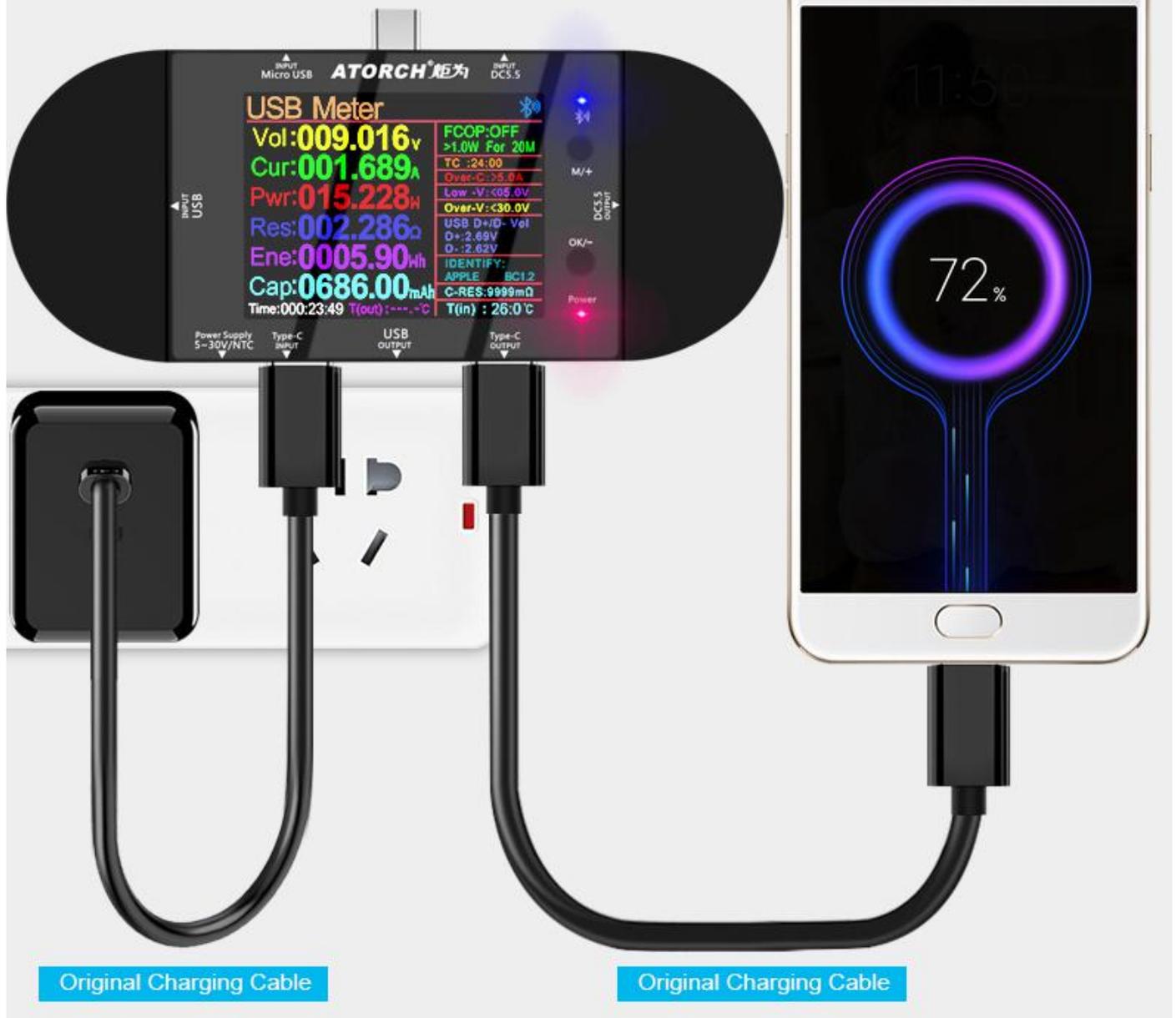
QC2.0 Quick charge trigger detection

QC3.0 Quick charge trigger detection

Fast charge protocol automatic detection

## Support PD fast charge

### Support PD fast charge



# UD24 line resistance measurement function Support Android/Type-C

## cable resistance detection

According to the connection method shown below, first measure the current battery no-load voltage, and then add the output load. At this time, you can read the current battery internal resistance

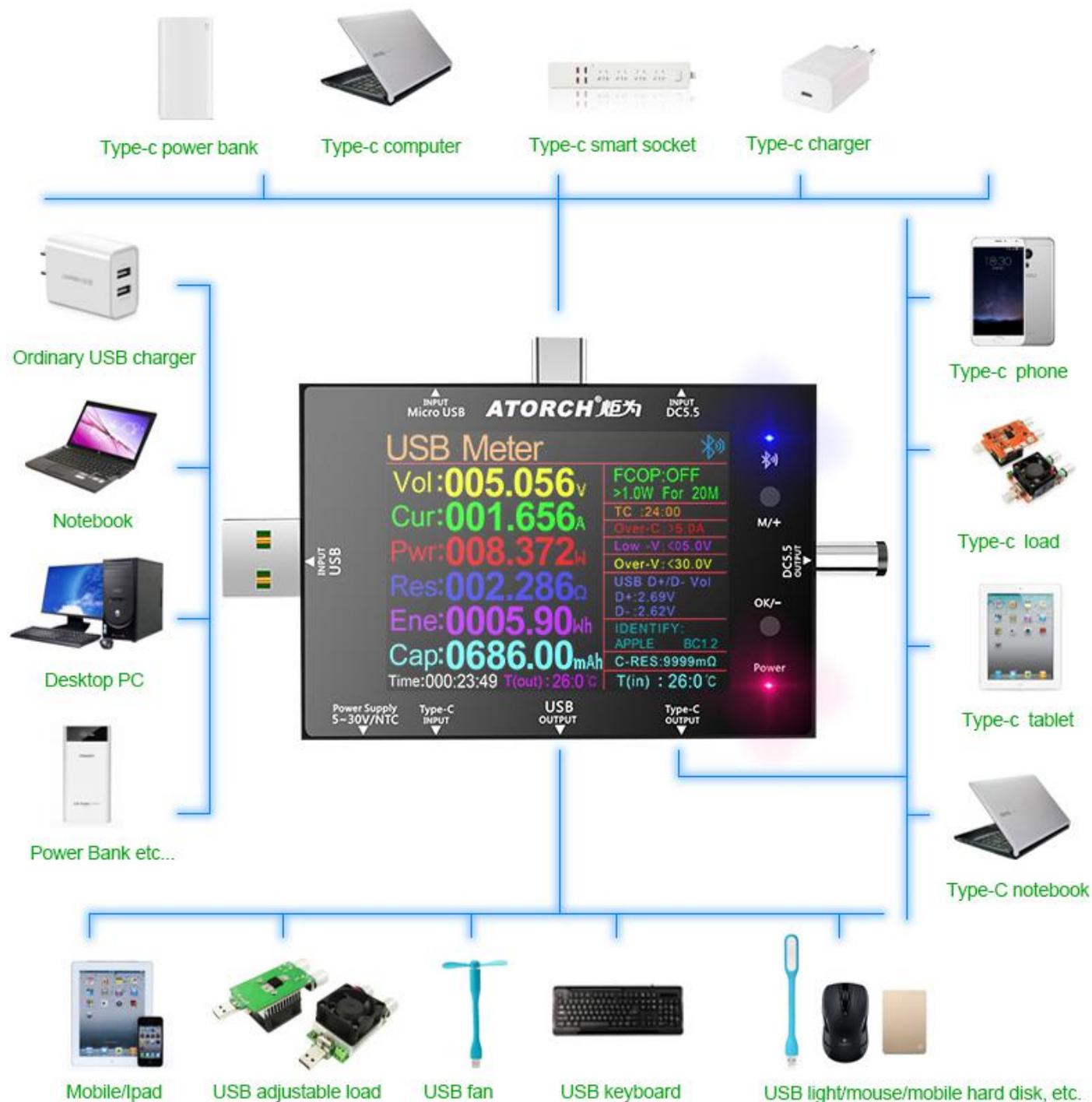
The internal resistance calculation formula of this table: (no-load voltage-loaded voltage) / current current = battery internal resistance

## UD24 Line Resistance Measurement Function Support Android/Type-C cable resistance detection



# USB and Type-C Test Application Range

Connect and test various USB and Type-C interfaces and various battery devices Multi-port design-multi-use and multi-play!



# UD24 DC voltmeter use function



DC Meter Display



DC Percentage Display



## Battery power percentage

The meter can freely set the battery type according to the user in the background, the corresponding full voltage value and discharge voltage

If there is no low value, the system calculates the percentage according to the threshold set by the user, and then changes the color of the percentage through the battery symbol

Display (more than 30% green, less than 30% yellow, less than 10% red);

When the display range is between 1% and 100%, the POWER red light on the panel lights up, and the relay output interface outputs at this time

The level is used to control the relay to connect the current path. When it exceeds the range of 1%~100%, the red light goes out at the same time

The plug electric appliance outputs a low level to disconnect the current path to ensure the safety protection of the battery for charging and discharging.

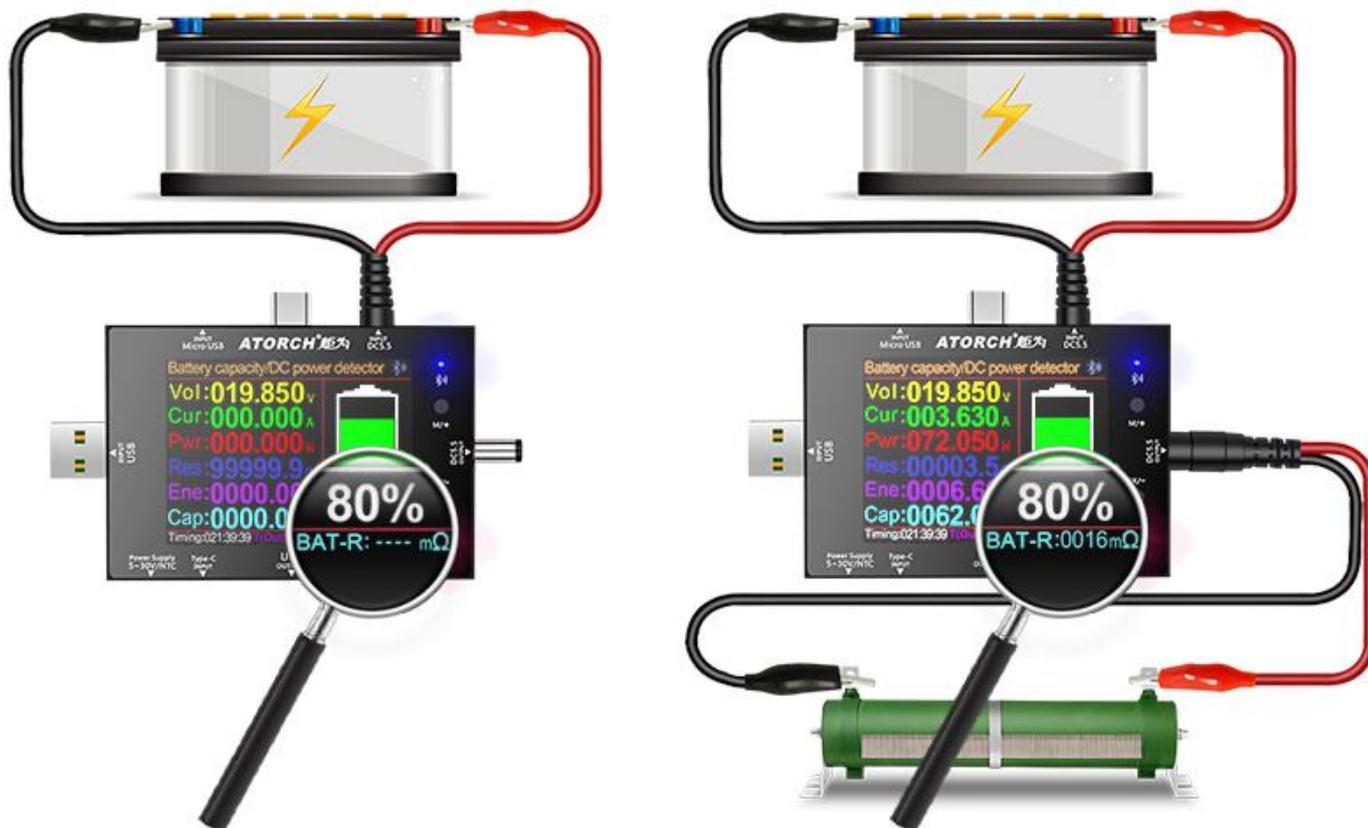
People avoid the risk of damaging the battery due to overcharge and overdischarge, and it can also be used for other purposes of overvoltage and low voltage disconnect protection.



## Battery internal resistance detection function

According to the connection method shown below, first measure the current battery no-load voltage, and then add the output load. At this time, you can read the current battery internal resistance

The internal resistance calculation formula of this table: (no-load voltage-loaded voltage) / current  
current = battery internal resistance



# DC Power Supply Test Application Range

Connect and test various DC power supplies and equipment Multi-portion design, one thing, multi-use, multiple play



# 1) Apple Mobile APP:

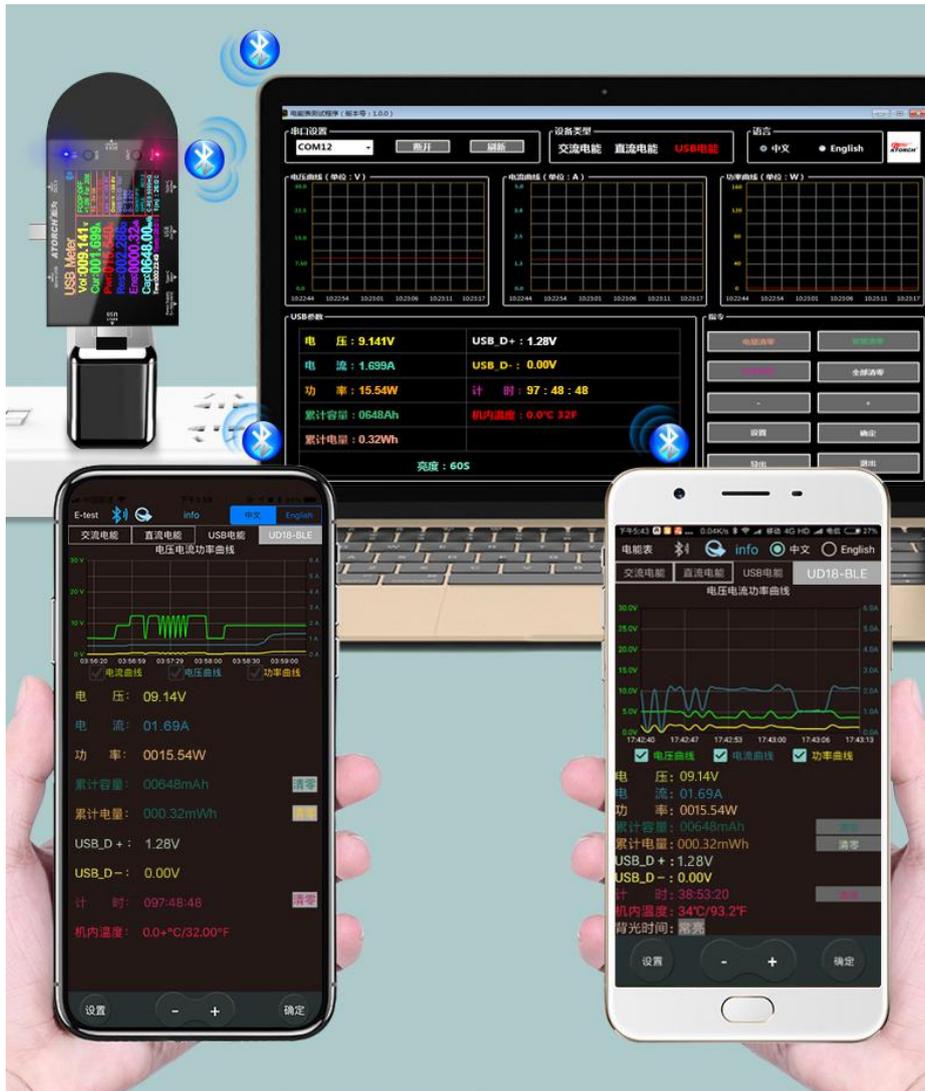
Please search for E\_test in the application store to download and install, then click the Bluetooth APP icon to open the software, and then click the Bluetooth icon above the software to enter the selection DL24-BLE to connect, you can achieve mobile phone remote wireless remote control settings and Measurement function, the discharge status can be viewed at any time on the mobile phone, various data cleaning is visible, the voltage and current power curve of the discharge, etc.

# 2) Android phone APP:

Scan the QR code on the back of the host to download the corresponding APP software or Android APP: search E-test at Google play to down load . After the installation is complete, open the software and click the Bluetooth icon to enter the direct selection of DL24-BLE to successfully use it online. (No need for Bluetooth pairing, the software Bluetooth icon directly selects DL24. can)

# 3) Computer Bluetooth wireless online APP:

First add the Bluetooth device to the serial port device of DL24-SPP on the computer, then scan the QR code on the back of the host to download the corresponding APP software and store it. Open the software without installing and select the Bluetooth serial port model just added. You can successfully use online



# File Download Way

1, User manual, PC software installation instruction and PC software and Android APP download link : <http://www.mediafire.com/folder/9r973dly7uvui/UD24>

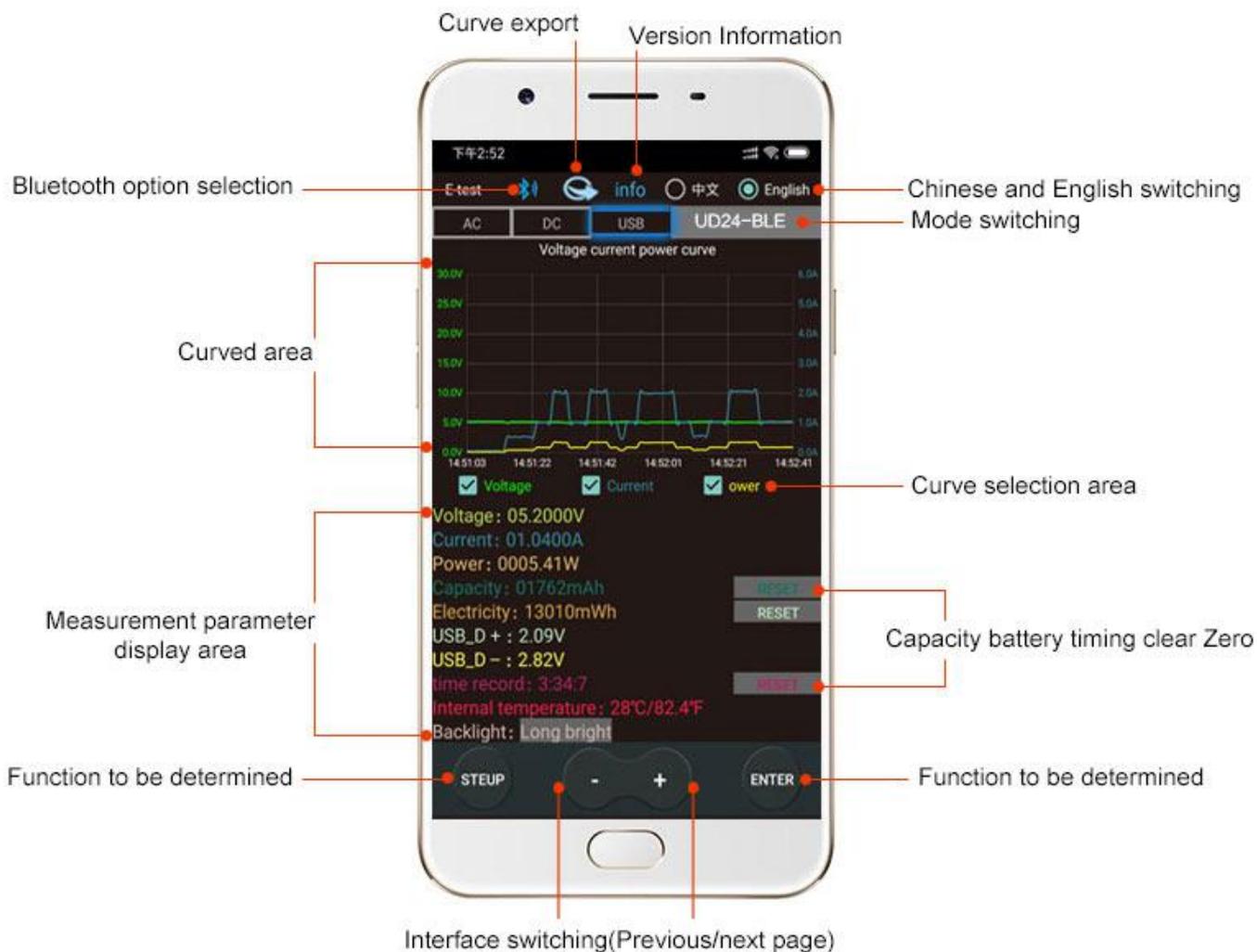
2, IOS APP: search E\_test on iphone APP store to download

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

## Mobile APP interface function introduction

Use the mobile phone Bluetooth function to wirelessly connect the product, with the included mobile APP software, Achieve more measurement and control details, leaving measurement technology without boundaries

We have adopted the bluetooth CSR4.1, compatible with 4 g networks, using more advanced technology of bluetooth 4.1, improved the old bluetooth protocol and 4 g networks interfere with each other, New bluetooth 4.1.1 technology have automatic noise reduction function, and make the bluetooth headset can connect two phones at the same time. And bluetooth CSR4.1 is big, stable performance, good compatibility, low power consumption is more save electricity



# UD24 Tester Bluetooth connection method

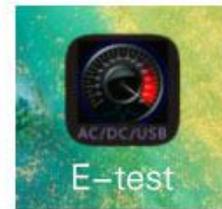
1. Please connect the product as shown on the right.



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 software 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, UD24-BLE return to the main APP interface.



3

During the measurement, the upper right corner shows the model currently online, UD24-BLE. The bluetooth icon in the upper left corner turns blue, indicating that the measurement is in online communication.

# How to find the Bluetooth symbol in E-Test APP

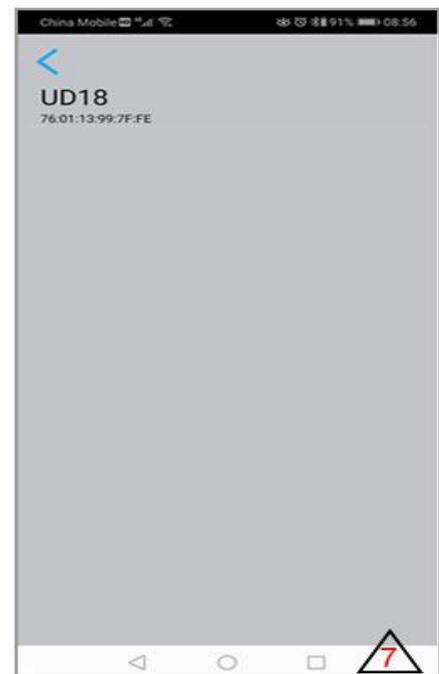
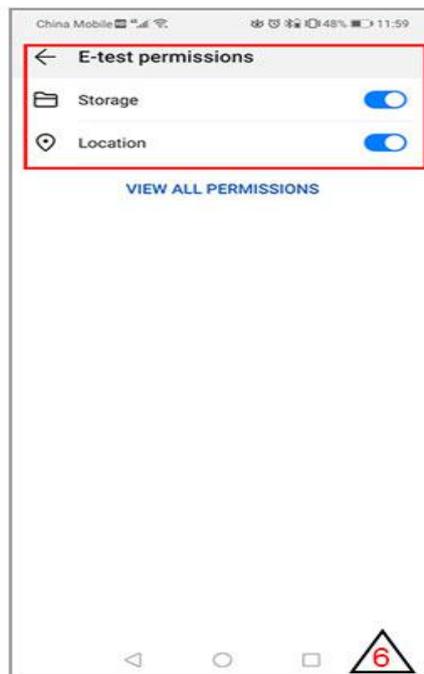
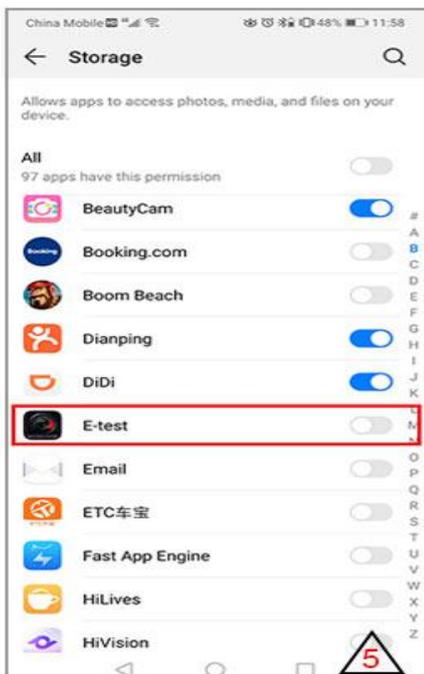
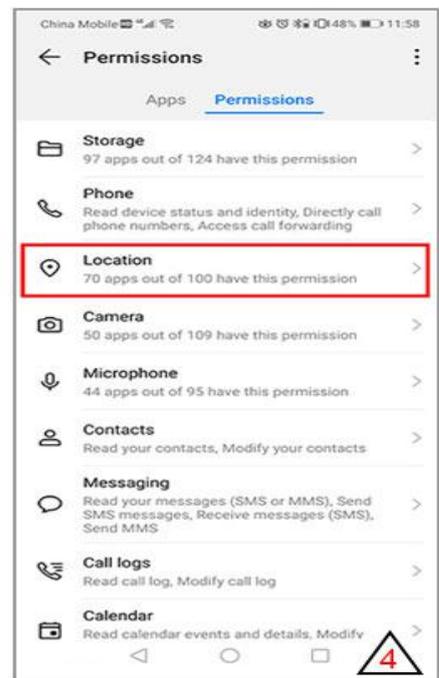
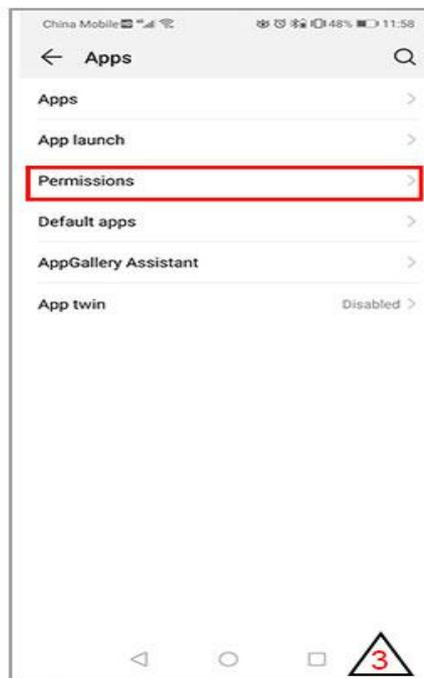
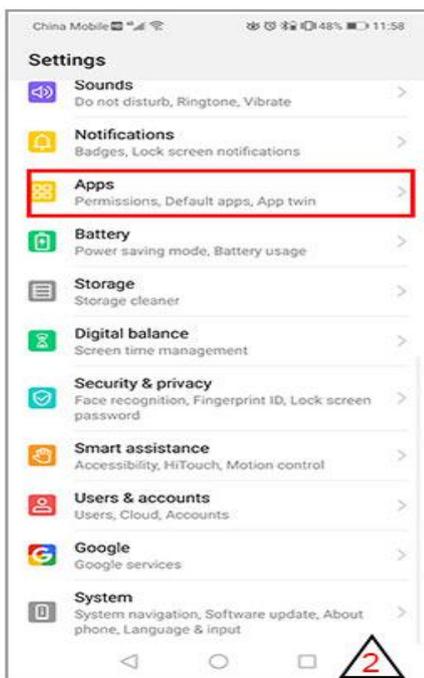
This operating instruction applies to all the company's Bluetooth products (UD18/DT24/DL24/AT3010/DPT3010/T18... etc.)

Please open your phone, **Setting**>>find the **Apps**>>manage the **Permissions**>>**Location**>>find our **E-test app**>>find the **storage information** and **location information**>>open the permissions **allow**, you can find us bluetooth symbol In the E-test list.



1 Please open your phone settings

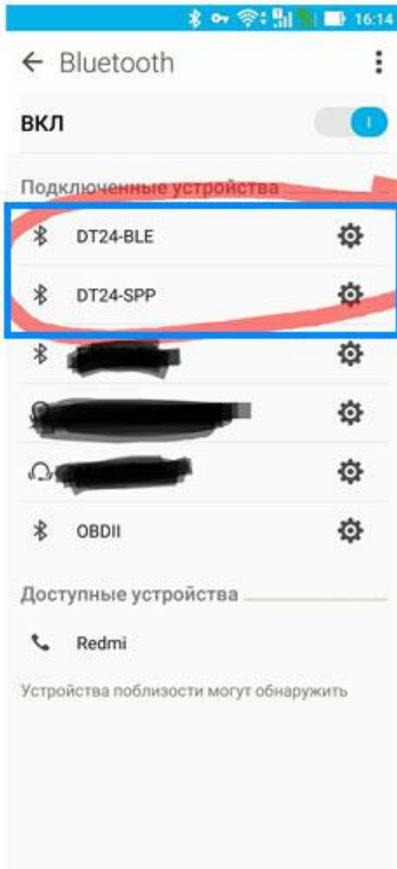
Click settings



## Warm tips:

Please pay attention to this detail. Do not connect in Bluetooth mode. Do not need password pairing. Please connect in our E-test app.

### Can not connect here



### Please connect on the E-test APP

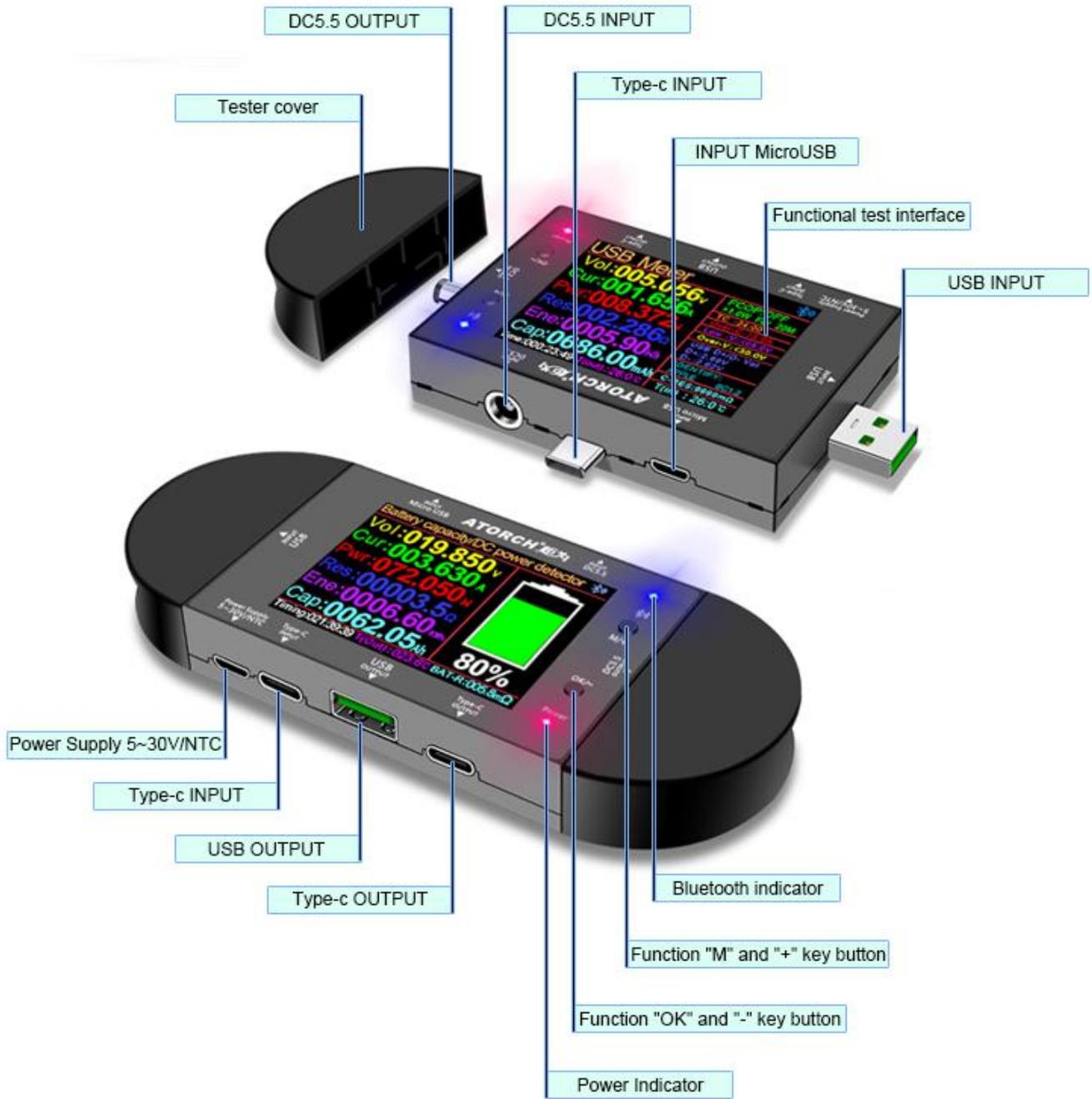


## Product background parameter setting

- UD 24 Menu V5.7
- 01:Chinese English
- 02:Clear cumulative data
- 03: Voltage calibration :005.110V
- 04: Current calibration : 000.000A
- 05: Display Brightness :9
- 06: Standby Brightness :9
- 07: Enter Standby Time :60S
- 08: Temp Correction (In) :026.9
- 09: Temp Correction ou) :035.6C
- 10: BAT Vol percentage (Low): 08.00V
- 11: BAT Yol percentage (Ful): 16.60V
- 12: Over-Power : 100W
- 13: Default Setlings
- 14: Exit



# Introduction to each part of the product



## Product Size



## Product packaging

