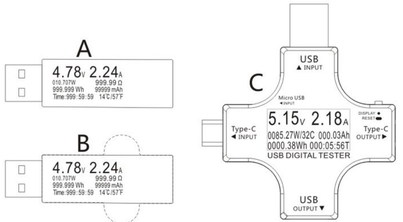
USB Power Tester

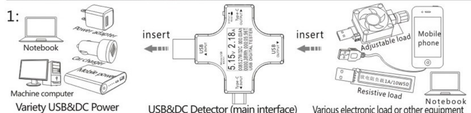
(User manual-General version)



This product is used to charge their phone when parameter monitoring, according to and play all kinds of charger, mobile power supply capacity measurement and other USB devices

Products connecting applications:

1:



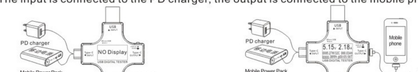
The keys operation introduction:

1. Click the key to switch the screen function
2. Quick double-click capacity reset zero (mAh)
3. Quick three-click power reset to zero (Wh)
4. Quick Four-click is timing reset to zero the current group (00:00:00)
5. Quick Five-click is to change the cumulative data storage group number (NO.X)
6.The key is long press capacity, electricity, time all reset zero current group (mAh, Wh, 00:00:00)
7. When pressing the System Settings interface, press and hold the key to enter setting. Press again to switch the setting column.Press and hold again when you are in a certain column Is to execute this column. When the number of the execution column jumps and flickers, double click is to adjust the addition, click is to adjust the subtraction, and the duration of addition or subtraction adjustment is Continuous addition or subtraction. After adjustment, the system will automatically save the value after a moment, and then continue to wait for a moment and automatically exit the setting interface
8. When short press to the curve interface, long press the button to switch to refresh the curve update speed 0.5S 1S 2S 5S several gears, the button is fast Double - click to stop and continue
9. In the Display off screen interface, long press the key to enter the background mode
10. When in the background mode, press the button short to the second item and then long press it to clear the current to zero for calibration in no-load.

Tips: When the ambient temperature changes or the outside heat conduction to tester causes the current to not return to zero and the display shows 0.01A or 0.02A or otherwise,Please when operating at close to the screen, then long button press is to enter the background model, and then short button press into the second section, the output does not connect any load, and then put the reset button long-press is current, to ensure that can in no-load current in 0.00 A more precise measurement

How to test PD charger(Why Type-C input instrument does not display):

Because PD charger (USB-C) has its own PD protocol, if you don't connect a mobile phone with PD protocol, the PD protocol cannot be triggered, and the PD charger cannot work normally, so you need to connect the mobile phone to test, and its protocol works normally !
So:The input is connected to the PD charger, the output is connected to the mobile phone



TYPE-C output is not connected, Meter not display

Type-C ouput Correct connection, Meter display

Test of mobile power supply capacity of power method and skill:

The charging treasure the electricity first, and then plug in the table, the capacity of power through the button to reset, and then plug in the electronic load on the connection diagram or cell phone to charge treasure to discharge, until the rechargeable battery, it is again electrify can read into the total capacity and the power value, this is the charge of capacity and power about value, because it is the internal power off memory function, so it can be a complete discharge, discharge process can also be multiple discharge, check again until after the treasure to battery charging capacity value.

Test the charger of the maximum output current method:

Connected in figure 1, change the load size make current increase voltage is reduced to the charger nominal voltage instantaneous, when the current value is the charger can output the maximum current value; To change the load to the charger aged 2 ~ 6 hours, nominal current value of discharge current voltage stability in the process of aging, the temperature of the charger is less than 50 degrees or so, explain this charger nominal current realistic, no empty mark, can satisfy the charging speed, on the contrary, if the voltage is reduced, current value difference is too big or too hot, even U watch alarm flashing and no output, measured charger belong to the current standard, quality inferior performance, this method also adapt to all USB output current test methods.

Tips: some users of the failure to understand the current nominal value is the output of the charger when the maximum load of the maximum output current value, is not for mobile phone charging current value, so the different load current value, actual should follow ohm's law to calculate the current value, and in the devices such as mobile phone, mobile phone in different status and at different times of the charging electric current curve is fluctuation change, U table only show the actual flow of current value, is not part of the user see U table testing is not the same as the display value and the nominal current value will doubt U table shows the accuracy of current measurement.

Test of charging line and data line charging speed and quality

1)According to the above link, under the condition of constant power and load, change different cable, U table shows the better the quality, the greater the current cable charging speed is faster

2)According to the above link, under the condition of constant power and load, change different cable, U table shows that the higher the voltage data line pressure drop is smaller, the better the quality

The output current zero calibration, the button long-press said is the output Load current, when the item in color shown in Ref 2 A, output by constant current Load meter after 2 A constant current, long press again, said current calibrated once in 2 A, the last is Reset to restore factory Settings

Test the USB of voltage, current, power, power, current time

Connection after electrify to drawing, can be displayed real-time monitoring through the USB line power battery capacity and voltage current flows through the current accumulation of information such as time, in the process of electricity through the short button press screen switching, long press the screen rotation, rapid double-clicking capacity mAH, three quick blow power Wh, four quick blow zero time,five quick blow capacity battery time all reset at a time.
Warm prompt: this time show U table refers to > 0.5 W power do timing calculation, if < 0.5 Wthe system do not calculate time accumulated, only in this way can judge charging time, please know.

Performance parameters:

Voltage measuring range: 3.80 V to 32.00 V	USB D - voltage range: 0 V to 2.99 V
Current measuring range: 0.00 ~ 5.10 A Max:6.5A	Time to refresh: > 500 ms/times
Cumulative capacity range: 0 ~ 99999 mah	Measurement rate: 0.5/second
Power cumulative range: 0 ~ 999.99 Wh	Since the power flow: < 0.025 A
Power metering range: 000.00 ~ 163.00 W	Working temperature: - 10 ~ + 60 ℃
Temperature measurement range: 0 ~ 80 ℃	Working humidity: 10 ~ 80 (no doubt)
Timing maximum time: 999 hours, 59 M 59 S	The pressure of work: 80 ~ 106 kpa
USB D + voltage range: 0 V to 2.99 V	Product size: 67 mm * 24 mm * 15 mm

Bluetooth connection (this part is used for Bluetooth version):

Bluetooth version: Search for E_test in the Apple app or scan the Android code to download and install it, then click the icon to open the APP, then click the Bluetooth icon in the upper left corner of the interface to enter the list and display the E-test_BLE model, and then click the model toautomatically return to the main interface of the APP. At this time, the bluetooth icon of the host changes from the original gray to blue and you hear the beeping sound of the speaker, which means that the connection to the computeris successful, and the data starts to be transmitted and displayed synchronously.
Warning: If the model E-test_BLE cannot be displayed after clicking the Bluetooth icon in the upper left corner of the APP interface, please enter your mobile phone settings to open the storage permission and location information options of this APP! After these two items are fully turned on, return to the APP interface and then enter to display the model correctly.