

# USB color tester instructions

Model: A3/A3-B



## Feature:

**Bluetooth: Support for A3-B/ Unsupport for A3**

Model: A3-B/A3

Product weight: 18g

Input voltage: 4.5-24V

Capacity measurement range: 0-99999mAh

Input current: 0-3A

Energy measurement range: 0-99999mWh

Load impedance measurement range: 1.5  $\Omega$  -9999.9  $\Omega$

Temperature Measurement Range: -10° C to 100° C/0° F to 200° F

Screen brightness setting: 0-5

Voltage curve range: 4.5V-24V

Voltage measurement resolution: 0.01V

Current measurement resolution: 0.001A

Voltage measurement accuracy:  $\pm 0.2\%$

Current measurement accuracy:  $\pm 0.8\%$

Time measurement range: 0-99 hours 59 minutes 59 seconds

Temperature measurement error:  $\pm 3^\circ$  C/ $\pm 6^\circ$  F

Delay off screen time: 0-9 minutes

Current curve range: 0-3A

Fast charge recognition mode: QC2.0, QC3.0

Refresh rate: 2Hz

Product Size: 71.2 x 31.8 x 12.4mm

Display screen: 1.44 inch color LCD display



## Panel description:

- 1: Multi-function buttons (4 in total)
- 2: Type-C interface (supports PD fast charging)
- 3: Micro USB interface
- 4: USB male interface
- 5: USB female interface
- 6: 1.44 inch color LCD display
- 7: Bluetooth indicator (A3-B version only): waiting for pairing - fast blinking, paired connection succeeds from blinking to long bright, after connection the display shows the Bluetooth logo

## Three operating modes:

Direct use with USB power supply



PC software control download link:

<http://files.banggood.com/2018/05/PC-softwareV1.2.zip>

Mobile APP online control download link:

<http://files.banggood.com/2018/05/Android-APP.apk>

# Wireless operation

Support win7 and above systems



Currently only support Android mobile phone download and install APP (Android 5.0 and later)



Bluetooth wireless



Mobile APP supports multiple languages (currently supports 14 languages) Chinese, English, Russian, German, Polish, Hindi... . More languages are continuously updated...

Bluetooth indicator blue light



## Instructions:

Hide the interface: long press and hold any key and then power on will display three options(as the following picture show). The first item is to set the Chinese language, the second item is to set the English language, and the third item is the current zero calibration (when the function is performed, no load access must be guaranteed). Keep pressing and holding the key to move shadow in turn. Release the key at the selected item to execute the setting. If the button is still not released after three items are displayed, it means that no function is performed and will exit the hidden option interface.



## Main interface I : (main measurement interface)

- 1: Voltage measurement
- 2: Current measurement
- 3: Cumulative capacity value
- 4: Cumulative energy value
- 5: Temperature display
- 6: Data group number
- 7: Load equivalent impedance
- 8: Power measurement



Short press "help" button, the interface is as shown above:

Long press the "Next" button to switch the data group. The meter can provide 0-9 total 10 groups of data to save and view. When the data group is group 1-9, the current capacity is stored when the power is turned off, and will continue to accumulate when the power is turned on next time. When the data group is group 0, the current capacity is temporarily saved when the power is dropped. The next time the power is switched on, it will flash to remind the last capacity. When the accumulative capacity exceeds 1mAh, the last data will be erased automatically, and the accumulations will start again.

Under the selected condition of the data group number, long press the "Help" key to clear the accumulated capacity value and accumulated energy value in the data group of this group.

Short press "Next" button to switch to the main interface II (fast charge identification interface):

### Main interface II (fast charge identification interface):



D+: DP, positive data signal

D-: DM, negative data signal

Mode display: The product will automatically recognize the fast charge mode, temporarily identifying only the QC2.0 and CQ3.0 modes. Other mode recognition is temporarily not supported.

Short press "Next" button to switch to the main interface III (data record interface):

### Main interface III (data record interface):



Accumulated capacity

Cumulative energy value

Time display: cumulative time of current load

Stop current

REC: indicates the recording status, red REC means stop, and green REC means recording.

After power-on, when the current is greater than the stop current, the system begins to record capacity and energy, the time increases, and the REC changes from red to green. Press and hold the “Next Page” button

to select the stop current. Short press the button to adjust the value in turn, and the stop current can be set between 0.01 and 0.30A.

Short press the "Next" button to switch to the main interface IV (wire group measurement interface):

### Main interface IV (wire group measurement interface):



1. The voltage current value of the tester directly connected to the power supply.
2. The test instrument is connected to the voltage current value when the data line is connected to the power supply.

R: DATA wire resistance

This product's interface can be used to measure the data line resistance value, the operation steps:

The first step: the tester directly connect the power supply, adjusts the appropriate load current (Recommendation 1A), long press the "Next" button to record the data, and the right indicator icon stops flashing.

Step 2: Unplug the tester and connect the tester to the power supply

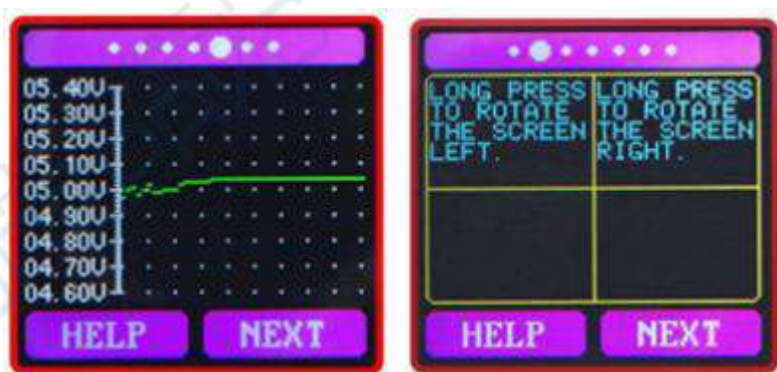


through the Micro USB data cable. The load current is adjusted to the same current as the first step. Long press the "Next Page" button to record the data, and the right indicator icon will stop blinking. After the resistance test is completed, the data line resistance value is displayed.

Note: If the tester screen turns black after inserting the data cable in the second step, it means that the pressure difference is too large, the tester enters the 4.5V power-down state, and the load current needs to be reduced, need to measurement from the first step. After the wire resistance measurement is completed, the measurement is restarted after the tester is powered on the next time.

Short press the "Next" button to switch to the main interface  $V$  (voltage curve interface):

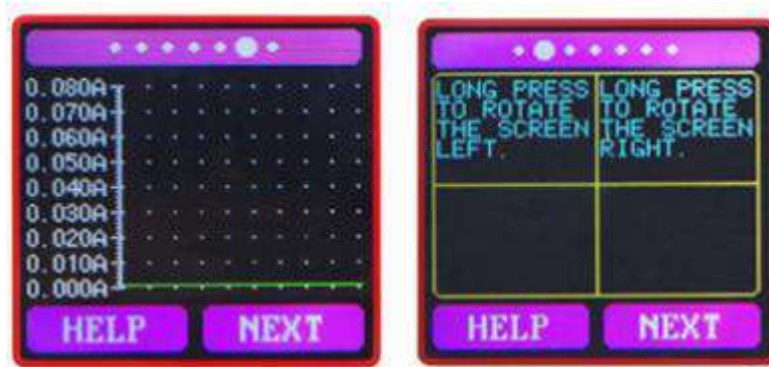
### Main interface $V$ (voltage curve interface):



This interface is voltage measurement waveform diagram. It automatically changes the range within the range of 4.5-24V measurement and displays voltage fluctuations in real time.

Short press "Next" button to switch to the main interface VI (current curve interface):

### Main interface VI (current curve interface):



This interface is the current measurement waveform diagram. It automatically changes the range within 0.00A-3.00A measurement range and displays current fluctuations in real time.

Short press "Next" button to switch to the main interface VII (setting interface):

### Main interface VII (setting interface):



Delay off screen time

Screen brightness

Temperature unit switching

Long press the "next page" button to select the delay screen time, brightness level, temperature unit switch. Long press the "Next" button to enter the off screen time setting, select corresponding number, short press to cycle through the value changes, the value of a total of 10 values in the 0-9 cycle change, in which 0 is the long bright.

Long press "Next" button to enter the screen brightness settings, select corresponding number, short press to change the size of the number, the greater the number, the brighter the screen, a total of 6 settings.

Long press the "Next" button to enter the temperature unit switch, select corresponding number, short press to switch between 0 and 1. 0 is Celsius and 1 is Fahrenheit.

Long press the "Next" button to exit the modification settings.