

Dear Client,

Thank you for Purchasing our product. Please read the manual in detail prior to first use, which will help you operate the equipment skillfully.



Our aim is to continually improve and perfect the company's products, so there may be slight differences between your purchase equipment and its instruction manual. You can find the changes in the appendix. Sorry for the inconvenience. If you have further questions, welcome to contact with our service department.



The input/output terminals and the test column may bring voltage, when you plug in/pull out test line or power outlet, they will cause electric spark. PLEASE CAUTION RISK OF ELECTRIC SHOCK! To avoid risk of electric shock, be sure to follow the operating instructions!

◆ SAFETY REQUIREMENTS

Please read the following safety precautions carefully to avoid personal injury and to prevent the product or any other attached products being damaged. In order to avoid possible danger, this product can only be used within the scope of the provision..

Only qualified technician can carry out maintenance or repair work.

--To avoid fire hazard or personal injury:

Use Proper Power Cord

Only use the power wire supplied by the product or meet the specifications of this product.

Connect and Disconnect Correctly

When the test wire is connected to the charged terminal, please do not connect or disconnect the test wire at will.

Grounding

The product is grounded through the power cord; besides, the ground pole of the shell must be grounded. To prevent electric shock, the grounding conductor must be connected to earth ground. Before making connections to the input or output terminals of the product, please do check that the product is properly grounded.

Pay Attention to the Ratings of All Terminals

To prevent the fire hazard or electric shock, please be care of all ratings and

labels/marks of this product. Before connecting, please read the instruction manual to acquire information about the ratings.

Do Not Operate without Covers

Do not operate this product when covers or panels removed.

Use Proper Fuse

Only use the fuse with type and rating specified for the product.

Avoid Touching Bare Wire and Charged Conductor

Do not touch the bare connection points and parts of energized equipment.

Do Not Operate with Suspicious Faults

If you encounter operating faults/suspect there is damage to this product, do not continue. Please contact with our maintenance staff.

Do Not Operate in Wet/Damp Conditions.

Do Not Operate in Explosive Atmospheres.

Ensure Product Surfaces Clean and Dry.

—**Security Terms**

Warning: indicates that death or severe personal injury may result if proper precautions are not taken

Caution: indicates that property damage may result if proper precautions are not taken.

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I、 overview

The instrument adopts new power supply technology, which has the characteristics of small volume, light weight, large output current, good repeatability, strong anti-interference ability and perfect protection function. The whole machine is controlled by high speed single chip microcomputer, with high degree of automation, automatic discharge and discharge alarm function. It has high precision and easy operation, which can realize the rapid measurement of direct resistance of transformer

II、 Safety precautions

- 1、 Please read this manual carefully before using
- 2、 can be used indoors and outdoors, but should avoid rain, corrosive gas and other places to use.
- 3、 should avoid violent vibration。
- 4、 The maintenance, care and adjustment of instruments shall be carried out by professionals
- 5、 After the test, make sure to reset the instrument and turn off the power before removing the test line。
- 6、 During the test, do not move the test clamp or shut off the power supply line.

III Features

- 1、 The whole machine is controlled by high speed single chip microcomputer, with high degree of automation and easy operation.
- 2、 Adopts a new power supply technology and has a wide measuring range.
- 3、 Perfect protection function, can reliably protect the impact of the counter potential on the instrument, the performance is more reliable.
- 4、 The response speed is fast, the instrument measurement data is stable, the instrument test process automatically refreshes the data.
- 5、 Intelligent power management technology, the instrument always work in the minimum power state, effectively reduce the internal heat of the instrument, save energy.
- 6、 has an internal non-dropping electric memory, which can store data permanently

IV Parameters

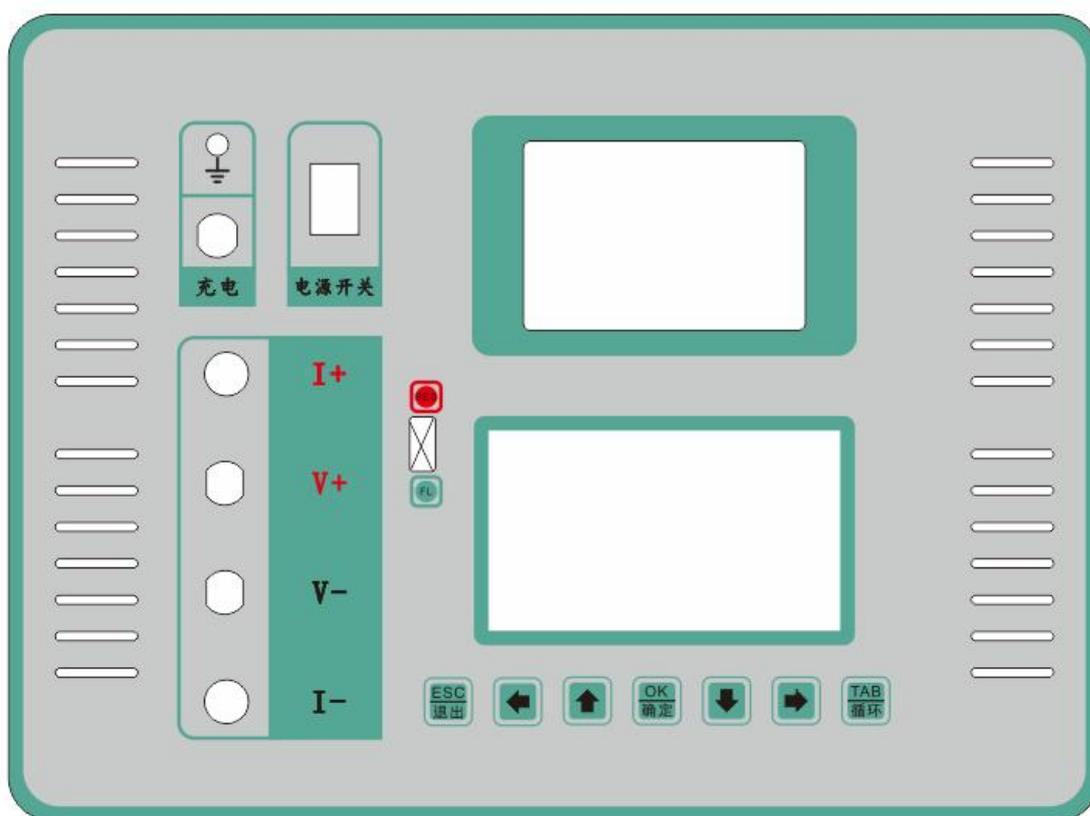
- 1、 Output current: auto、 10A、 5A、 1A、 300mA、 100mA、 <5mA
- 2、 resolution: $0.1 \mu \Omega$
- 3、 range:

$30 \Omega - 50K \Omega$	(<5mA gear)
$500m \Omega - 80 \Omega$	(100mA gear)
$100m \Omega - 25 \Omega$	(300mA gear)
$50m \Omega - 8 \Omega$	(1A gear)
$1m \Omega - 1.5 \Omega$	(5A gear)
$0.0005 - 0.5 \Omega$	(10A gear)

- 4、 accuracy: 0.2%
- 5、 operating temperature: 0~40°C
- 6、 humidity: <90%RH, No condensation
- 7、 dimension: 320mmX270mmX150mm

V system

Panel



Power switch Instrument power supply, built-in rechargeable lithium battery.

the function keys Seven function keys, Display the current key function according to the running interface of the instrument.

RES and FL Key Use keys for instrument update programs.



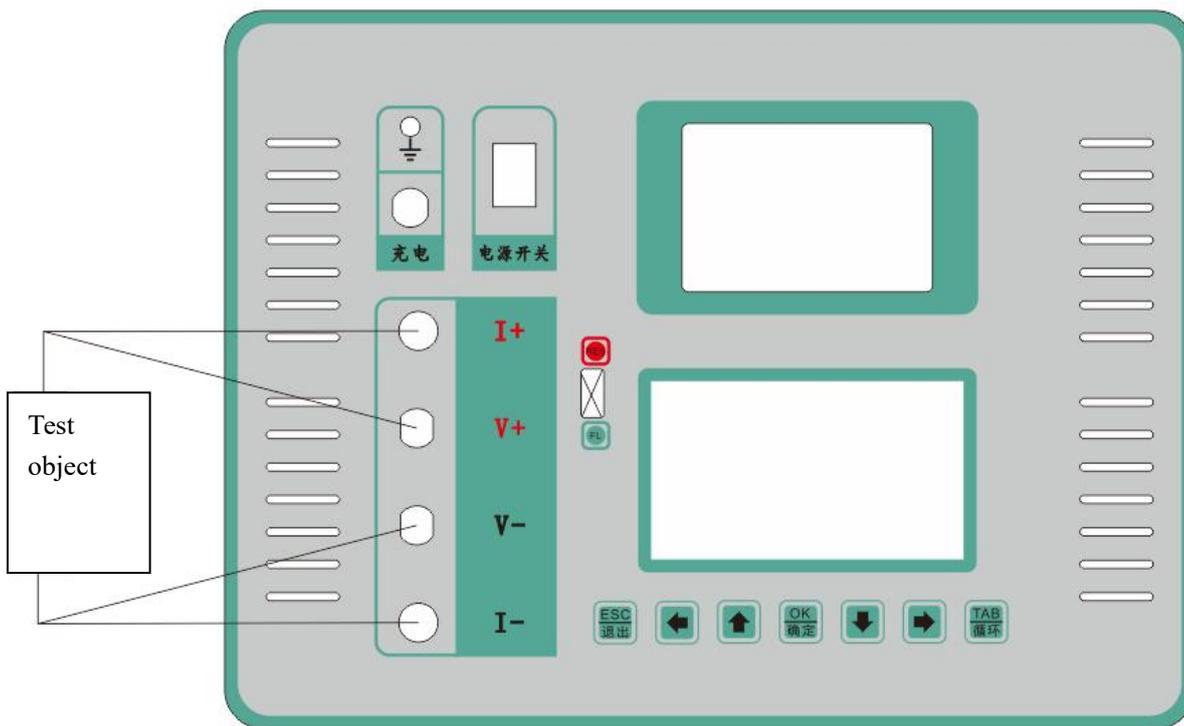
Earth

I+, I- Output current terminal, I+ positive, I- negative

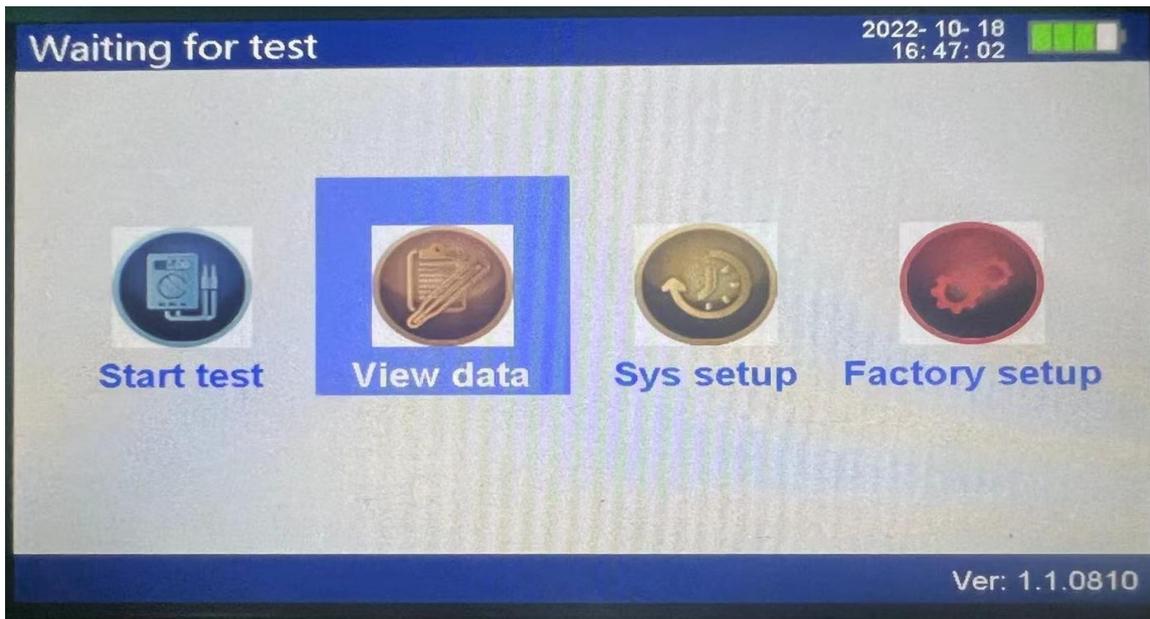
V+, V- V+ positive end of the voltage line, V- negative end of the voltage line

VI Operation

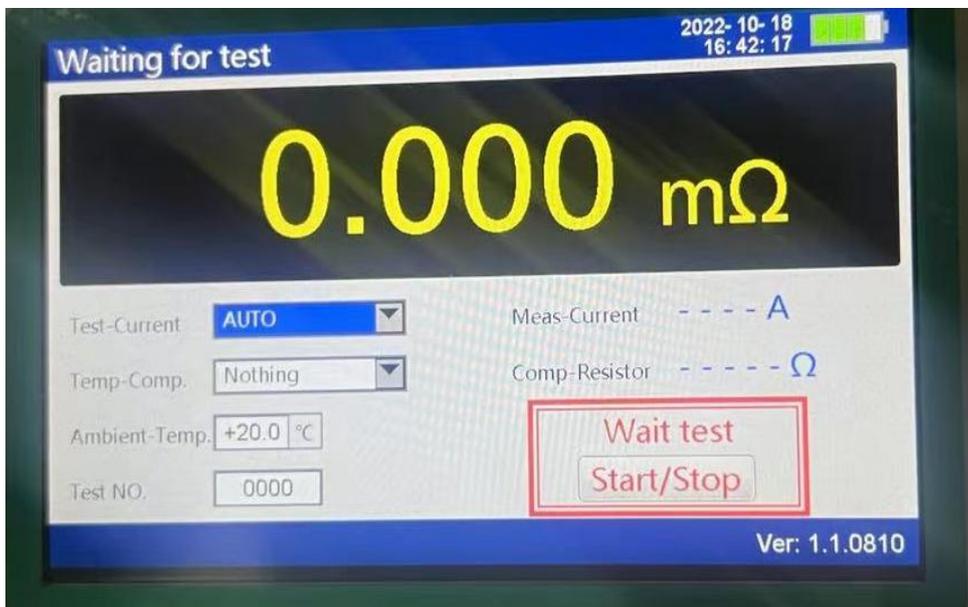
connection: red test line connect with I+ and V+, test clamp connects with test object,
black test line connects with I- and V-, test clamp connects with test object



1. Start interface as following



press **【OK】** enter setting interface , can select **test current,setting temp comp , Ambient-Temp**, press **【TAB】** the cursor can be toggled between functions。 Press the up and down key to select number



Test current: press【TAB】Place the cursor above the current option, by pressing**【UP】**,
【Down】to select current, after done, press **【TAB】** move to **【start /stop】**,

press **【OK】** to start test, Press **【OK】** to stop

Compensation materials: press **【TAB】** Select the cursor above the Compensation temperature option, by **【up】**、**【down】** to select, after done, press **【TAB】**
Can leave the current location

Ambient-Temp: press **【TAB】** move the cursor on it, by **【up】**、**【down】** to set it, after done, press **【TAB】** can leave.

2. Start the test interface

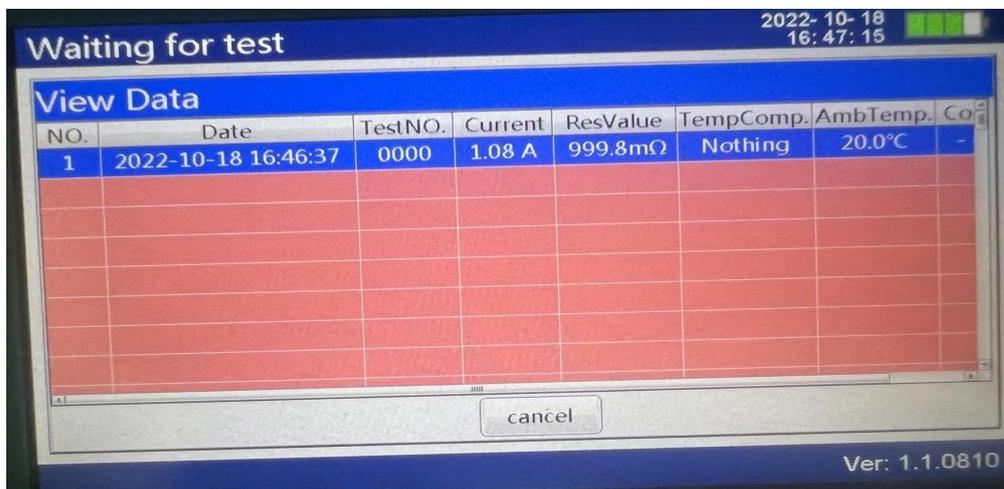
In the main interface of the test, you can check whether the test current and other information are set correctly, and then press the [OK] key to enter the data measurement

After starting the measurement, the display "charging..." After a few seconds, the message "Testing..." is displayed. This means the charge is complete, Enter the test state, after a few seconds, the measured resistance value will be displayed, as the diagram below. When selecting automatic test, the instrument will automatically select the appropriate current to test according to the condition of the sample. Press the [right arrow] key to print the current data during the test, and press the [Down arrow] key to save the current data.



3. After the test, press the "stop" button, the instrument power off, LCD screen restore the initial state, rewire for the next measurement, or turn off the power supply and remove the test line and power cord to end the measurement.

4. In the stopped state, press **【exit】** to main interface press **【TAB】** move to “view data” press **【OK】** to view data



5. Can save max 99 group test result, over 99 group, and will cover previous data. In the view interface, you can view data through the [up arrow] key and the [down arrow] key. You can also press the [OK] key to bring up the dialog box of printing and deleting data

for corresponding data operation, and press the [Exit] key to return to the test interface

VII、 Note

1、 Connect ground wire connection test clips and, attention should be paid to contact end exposed for a long time in the air, the surface covered with a layer of oxide film, the oxide film may cause unstable measurements or inaccurate, so when wiring should pay attention to clean oxide film, or test clips connected to the terminal, hard twist a few test clips to cut oxide film to ensure good connection.

2、 Before removing the wires, wait for the instrument to reset and no current output. After discharging, turn off the power before removing the wires.

3、 When choosing the current, please refer to the range in the technical index column. Do not exceed the range and underrange. ◦