

# **PS-HD100 Contact Resistance Tester**

## **User Manual**



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## Product introduction

PS-HD100 based on IEC Standard to design for high accurate and digital switches testing.

The instrument adopts high frequency superpower constant current switch power source technology, can test micro ohm contact resistance. Wildly use in varies switch and electric appliance contact resistance test loop resistance test cable wires test weld contact resistance test.

The machine has high accuracy and great stability, which can meet the requirement of electric power supplier department for high voltage switch maintaining and loop resistance tester.

## Features

1. The machine can be controlled by the phone using special software so that the test result can save the phone and queried.
2. The machine has multiple Protection function such as overhot of power protection disconnection protection and outage protection during the test.
3. Intelligent power management technology, save energy to avoid the machine become hot
4. High output voltage and wide measurement range
5. Quickly test, The test current is from high accuracy constant current, which don't need to regulate manually.
6. The four-terminal wiring method is used to effectively eliminate the influence of the resistance of the test line on the test results.
7. 7 inch color touch screen, English version
8. The instrument comes with a perpetual calendar clock and power-off storage, which can store 1000 sets of test data, which can be consulted at any time
9. The instrument has Bluetooth communication, RS232 communication and USB interface for computer communication and U disk data storage.
10. Micro printer to print the result

## Main specification:

Measuring current: : 50A, 100A

Measuring range: 0~100mΩ (50A)      0~50mΩ (100A)

Resolution: mini 0.1μΩ

Accuracy: ± (0.5%±2word)

Power: 1000W

Working method: continuous measurement

1. Power supply: AC100-240V 50/60HZ
2. Temperature: 0~40°C
3. Relative humidity:  $\leq 90\%$  no dew  
Volume: 360\*290\*170 (mm)  
Weight: Instrument 6.5kg wire box 9.0kg
- 4.

#### Interface instructions



1. Power switch: Press "I" to turn on the tester, press "O" to turn off the tester
2. AC220V: AC220V power supply
3. Output current terminal, which provides the constant current for the tested object.
4. V<sub>+</sub>、V<sub>-</sub> : To provide the input voltage terminal of the tested object
5. LCD: 320\*240 Color LCD screen
6. Serial port output terminal
7.  $\text{—}\text{—}\text{—}$  : ground terminal
8. USB : USB Flash disk
9. Printer: Microprinter is built-in

#### Operating instructions

- 1、System interface as below:



Fig 1

2、 Press “Data test”to enter the interface below, as the fig 2 showing

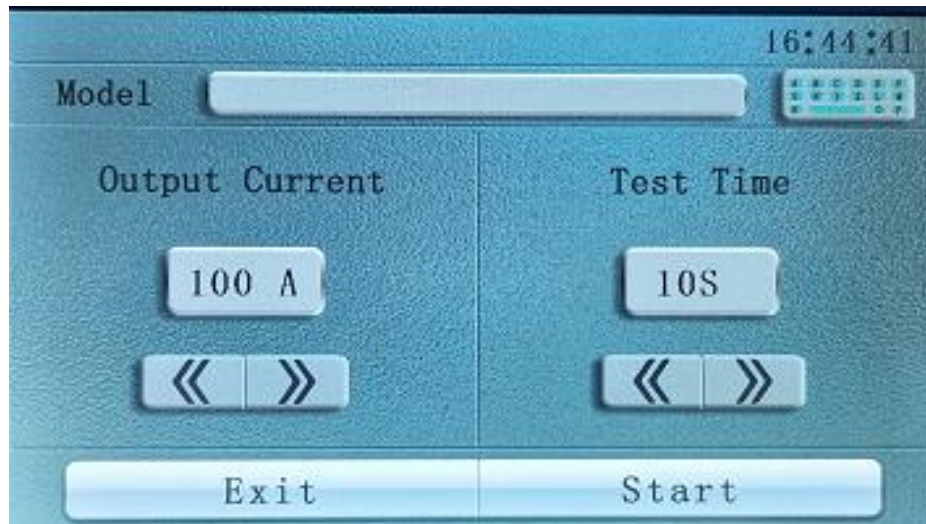




Fig 2

Test object model:click  to edit test object name(max input words 16)

Current test:click  select the current from 50A、 100A

Time test:Click  to select a time period from 10S、 30S、 45S、 60S、 300S、 600S、 999S

3、 Click “start” to test after selecting a current,the machine will display that “Charging,please waiting”,then enter test state, the test result will be got after a few seconds.

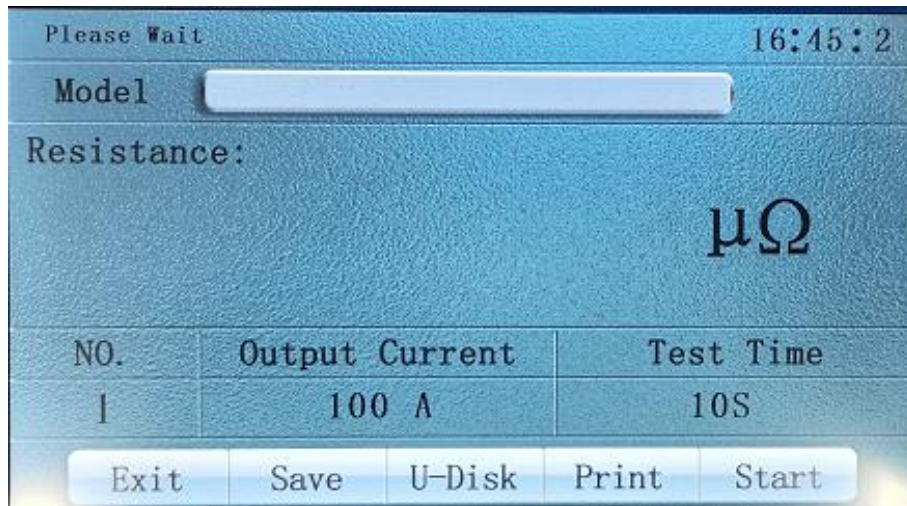


Fig 3

After the machine displays the test result, the next step is save the result in local storage. Click USB disk storage, print are available also. Click back to return the home.

4、Click data management to query data, as the fig 4

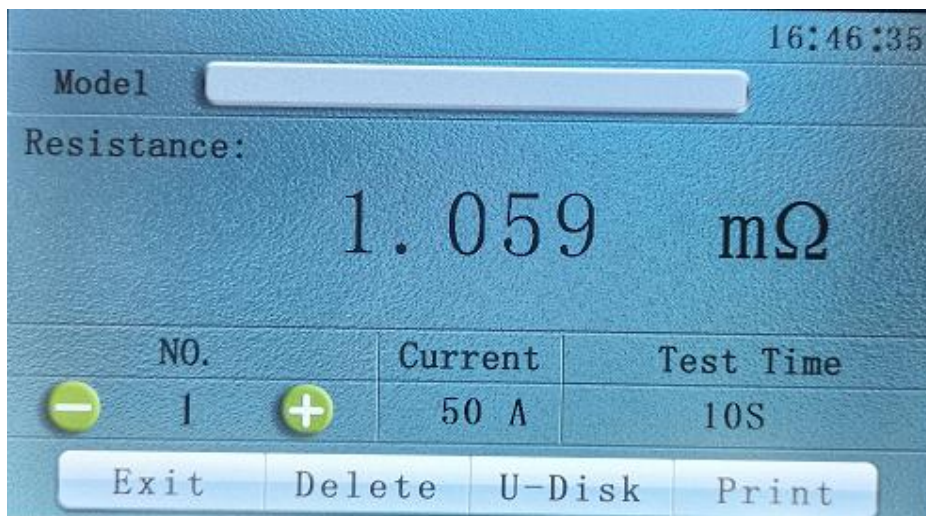




Fig 4

Click   to query test item, click “delete data” to delete last group data or all data, click “USB Disk storage” to save the data to USB Disk, click “print” to print data, click “return” to enter the home.

5、Click “Setting” to enter specification setting, as fig 5





Fig 5

Intensity control: Move intensity button to control it according the work environment

Bluetooth: click it to scan the phone and connect

Language: Click the button to switch the CN/EN language

Manufacturer setting: available for factory only

Click the “Return”to the home after setting

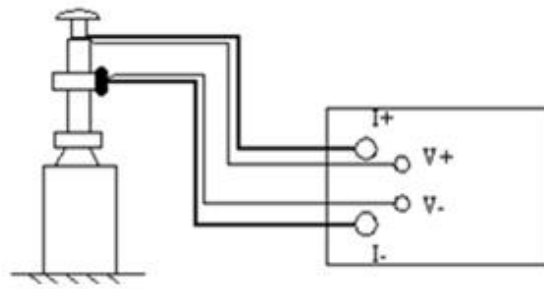
6.Click “Colok”to modify the time, as fig 6



Fig 6

Click  to set the date and time

## Wire connection



Test wiring diagram

Note: All the joint faces of the test tongs should be in reliable contact with the test piece. If the contact surface is found to be oxidized, the oxide layer on the contact surface should be removed first.

1. Wiring method: As shown in Figure 6, the special test line is red, black and black, and the thick current line is connected to the corresponding I+ and I- terminals, and the thin power cable is inserted into V+. Inside the V- socket, two clamps clamp the ends of the test object.

2. Measurement: After completing the wiring in Figure 6, turn on the power switch, select the test time for testing, and the instrument will automatically complete the charging, steady current and resistance measurement.

## Security measures

1. The operator should have common knowledge of the use of general electrical equipment or instruments.
2. After the test is finished, press the reset button to turn off the power switch. Note: It is strictly forbidden to disassemble and install each test cable.
3. The instrument is not normal. First press the reset button to reset the instrument.
4. The maintenance of the instrument must be carried out by a professional and must not be handled by itself.
5. This instrument is used for measuring loop resistance. It is not allowed to measure inductive loop.

## After sales service

The instrument is free of charge for repair and replacement of product quality problems within the next year from the date of purchase, providing warranty and technical services for life. If the instrument is found to be abnormal or malfunctioning, please contact the company in time to arrange the most convenient treatment plan for you.