
LSLD-100A

**Handheld Loop Resistance
Tester**

Operation Instructions

Manual Description

Dear customer, hello! First of all, we sincerely thank you for choosing our company's series of circuit resistance testers. To help you become proficient in using the instrument as soon as possible, please read this user manual carefully.

This manual mainly introduces the usage method of the circuit resistance tester. Please follow and use this product according to regulations to ensure the safe and good operation of the instrument.



- **Please comply with the safety regulations for preventive testing of safety tools and instruments in the national power industry, and do not operate in harsh environments such as flammable, explosive, and humid environments;**
- **This instrument is equipped with a large capacity lithium battery. When the instrument is not in use for a long time, it is recommended to charge and maintain it every other month to avoid battery self discharge and damage;**



- **Do not disassemble the instrument without permission from our company. If the function of the instrument fails due to unauthorized disassembly, it will not be guaranteed or returned. If personal or property damage is caused as a result, our company will not be responsible.**



- **To ensure continuous improvement and perfection of product functions, the specifications of this instrument may be updated periodically. Therefore, the instrument you use may differ slightly from the manual without prior notice. If you have any questions, please call our after-sales department or visit our website for more information.**

Contents

1、 Overview	4
2、 Safety measures	4
3、 Functional characteristics	5
4、 Technical indicators	6
5、 Operating instructions	6
6、 Note	15
7、 Supporting List	15
8、 After-sale service	16

Before using this instrument, please read the operating manual carefully, ensuring safety is the responsibility of the user

1、 Overview

The LSLD-100A handheld circuit tester (hereinafter referred to as the instrument) is powered by a high capacity and high magnification lithium battery, with a compact design and handheld operation, making it easy to carry. A specialized testing equipment mainly used for measuring the contact resistance, loop resistance, and other micro ohmic resistance of switches, circuit breakers, and other equipment.

2、 Safety measures

1 、 Be sure to read this manual carefully before using this instrument。

2、 This instrument can be used both indoors and outdoors, but it should be avoided in places such as rain and corrosive gases。

3、 Instruments should avoid severe vibration。

4、 The maintenance, care, and adjustment of instruments should be carried out by professional personnel。

5 、 After the test is completed, it is necessary to reset the instrument and turn off the power before removing the test wire。

6 、 During the testing process, it is prohibited to move the test clamp and turn off the power supply line。

3、 Functional characteristics

- 1、 Adopting a 7-inch full color high-definition touch screen;
- 2、 Large output current, wide testing range, multiple current options, maximum support for 100A current output;
- 3、 The maximum testing time for full gear can reach 60 seconds, which meets the requirements of national standards and meets the requirements of on-site use;
- 4、 Wide range (up to 50m Ω at 30A), high resolution of 0.01u Ω , and accuracy of 0.5%;
- 5、 Equipped with complete protection functions such as open circuit protection and overheat protection;
- 6、 Equipped with test data storage function, capable of storing 1000 pieces of test data;
- 7、 High capacity lithium battery power supply, can use ≥ 600 tests per charge (1 second test duration);
- 8、 Equipped with power management function, effectively reducing internal heating of the instrument and improving its service life.
- 9、 Equipped with Bluetooth function and can be configured with a Bluetooth printer (optional)。

4、 Technical indicators

1、 Measuring range:

Output current	Measuring range
100A	0~5mΩ
80A	0~10mΩ
50A	0~20mΩ
30A	0~50mΩ

2、 Output current: 30A, 50A, 80A, 100A optional

3、 Test time: 1s, 5s, 10s, 30s, 60s optional

4、 Resolution ratio: 0.01uΩ

5、 Accuracy: 0.5%±1uΩ

6、 Maximum power: 200W

7、 Charging Voltage: DC12.6V

8、 Number of tests: More than 600 times (fully charged, test time 1 second)

9、 Test Line: resistance≤10mΩ

5、 Operating instructions

1、 Function Introduction

1) Panel Introduction:



a. LCD display window : Using a 7-inch industrial grade LCD display screen to display relevant information and button operations;

b. Switch button: The round button on the right side is the on/off button;

c. (I+): Connect the red current output line (thick);

d. (I-): Connect the black current output line (thick);

e. (U+): Connect the red voltage sampling line (thin);

f. (U-): Connect the black voltage sampling line (thin);

g. Charging port: Use a compatible 12.6V2A charger;

h. USB drive socket: Use matching large capacity USB flash drives;

i. Display Area Eyebrow : Real time clock display, instrument core

component temperature value, USB drive connection status, Bluetooth connection status, and remaining battery display;

j.Left menu bar: Click "Test", "Record", "Settings" to switch to the corresponding functional interface;

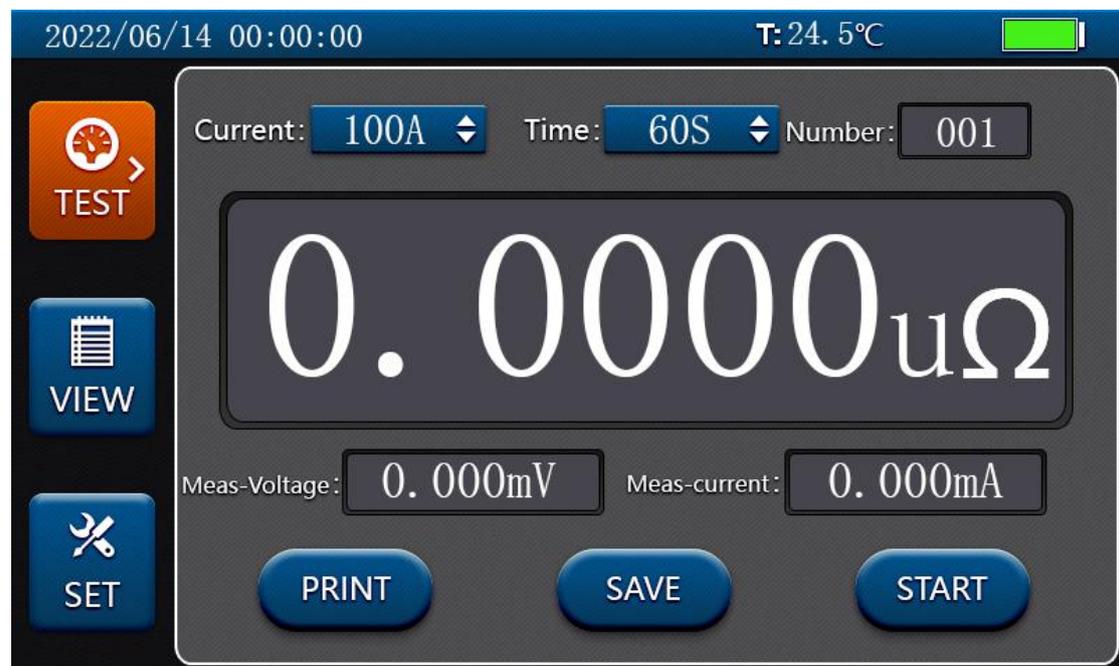
Test page: A page for conducting sample testing, displaying measured values and setting relevant measurement parameters;

Record page: View saved measurement information and view corresponding records based on time;

Settings page: Mainly used for viewing user settings such as time, language, backlight, and version information.

2) Display descriptions:

➤ Test interface



a.Current setting: Click on the current drop-down box and select the

measurement current to be set;

b. Duration setting: Click on the duration drop-down box and select the measurement duration to be set;

c.Number : The current number value to be saved will be automatically added after saving the data;

d.Test resistance: Resistance value of the tested object;

e.Measured voltage: The terminal voltage value of the tested object;

f. Measured current: The circuit current value of the tested object;

g.Print this button : After connecting to the Bluetooth printer, the Bluetooth icon on the brow changes from white to blue, and you can click to print the measurement data for this time;

h. Save Data: After the test is completed, you can click this button to save the new measurement data;

i. Start Measurement : Click this button to measure, then press 'Cancel Measurement ';

➤ Recording interface

2022/06/14 00:00:00 T: 24.5°C 

Number	Date	Res-Value	Voltage	Current	Time
003	2022/06/14 00:00:00	501.3uΩ	50.23mV	100.2A	60S
002	2022/05/03 08:04:53	1001.0uΩ	100.2mV	100.1A	60S
001	2022/04/23 07:09:55	499.2uΩ	50.02mV	100.2A	60S

TEST VIEW SET PRINT EXPORT DELETE

a.Data Frame: Each page displays 10 pieces of data, arranged in a new to old manner. The first piece, numbered 003, represents the most recent measurement data, and each piece contains information such as "number", "time", "resistance", "voltage", "current", and "duration".

b.Left arrow: Click to page forward;

c. Right arrow: Click to page back;

d. Delete: Click to pop up the delete pop-up window, which includes the following buttons:

Delete this clause: After selecting a data entry, click this button to delete the selected data entry;

Delete all: Clicking this button will delete all saved data;

Return : Clicking this button will cancel the deletion pop-up window;

e. Print : After connecting to the Bluetooth printer, the white Bluetooth icon on the eyebrows will turn blue. Clicking this button will print the record data of the selected bar;

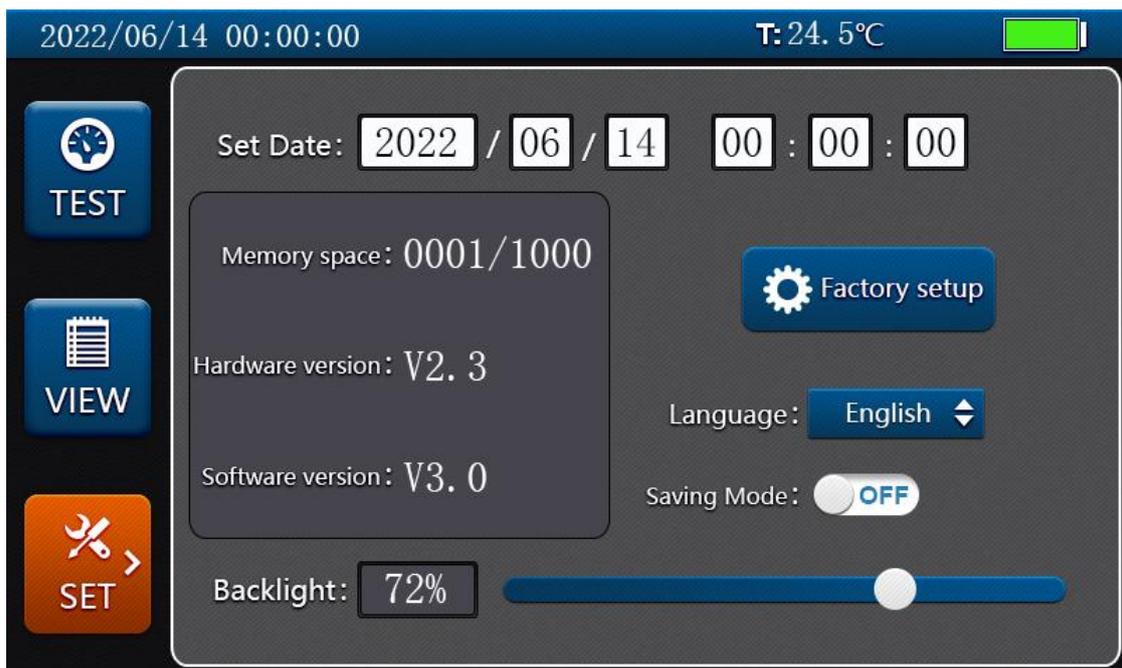
f. Export: After inserting the USB drive, the white icon on the brow of the USB drive will turn blue. Clicking this button will pop up an export pop-up window, including the following buttons:

Export this item: After selecting the data entry, click this button to export the selected data entry to the USB drive;

Export All: Click this button to export all data entries to the USB drive;

Return : Clicking this button will cancel the export pop-up window;

➤ Setting interface



a. **Time setting:** The white display boxes are year, month, day, hour, minute, and second respectively. Clicking on the white display box will pop up the input keyboard;

b. **Manufacturer settings:** Click this button to pop up the password input keyboard;

c. **Language settings:** Click on the pop-up dropdown box to set the switch between Chinese and English;

d. **Energy saving mode:** Click to turn energy-saving mode on or off;

e. **Backlight adjustment :** Drag the slider to adjust the backlight brightness;

f. **Memory space:** The memory space occupied by saving records;

g. **Hardware version :** The hardware version number of this instrument;

h. **Software version:** The software version number of this instrument;

2、 Instructions for use

1) Instrument wiring: Connect the specialized testing wire according to the color, connect the thick current wire to the corresponding I+and I - terminals, and tighten it. Insert the thin voltage sampling wire into the U+and U - sockets, and clamp both ends of the tested object with two clamps.

2) Loop resistance test:

- a. Select 'Test Page';
- b. Select the appropriate test current (30A, 50A, 80A, 100A) based on the resistance range of the tested object,
- c. Select the duration to be tested (1 second to 60 seconds);
- d. Press the "Start Measurement" button to enter the test;
- e. After the test is completed, the instrument displays the voltage, current, and resistance values of the tested object and records the current test duration (recorded when saving). During the measurement process, the "Cancel Measurement" button can be pressed to cancel the measurement, and the test duration is the actual test duration;;
- f. After the measurement is completed, you can press the "Save Data" button to save the data;
- g. After connecting to the Bluetooth printer, the Bluetooth icon on the brow changes from white to blue, and then clicking the "Print this item" button will print the measurement data for this time.

3) Record Query:

- a. Select 'Record Page';
- b. Click the "left and right" button to flip the record page, with each page providing a display of 10 records;

c. Click on "Data Entry" to display an orange background check box;

d. When performing the "delete" operation, a pop-up box will be prompted to delete the data. Then, press "delete this item" or "delete all" to delete the data. Press the "return" button to cancel the deletion operation.

e. After inserting the USB drive, the icon on the brow of the USB drive changes from white to blue, and then executing the "Export" operation will prompt an export pop-up box. Then, press "Export this item" or "Export all" to export the data, and press the "Return" button to cancel the export operation.

f. After connecting to the printer with Bluetooth, the Bluetooth icon on the eyebrow changes from white to blue. Clicking the "Print" button will print the recorded data of the selected bar.

4) Parameter settings:

a. Time setting: Click on the white display boxes for year, month, day, hour, minute, and second, and the corresponding input keyboard will pop up. Enter the corresponding time value, and finally press the keyboard confirm button to set the time and update the eyebrow time.

b. Manufacturer settings: This setting is set by the manufacturer and is not given to users for operation.

c. Language settings: Click on the pop-up dropdown box to switch between the Chinese and English interfaces.

d. Energy saving mode: Click to turn on or off the energy saving mode and display the corresponding "ON" and "OFF" icons.

e. Backlight adjustment: Drag the white slider to adjust the brightness of the screen backlight. The corresponding brightness percentage is displayed in the left display box.

6、 Note

1、 When the instrument is not in use for a long time, it should be fully charged before being boxed and stored.

2、 This product should not be stored in damp, high temperature, or dusty environments.

3、 Low voltage use is strictly prohibited. Low voltage testing will seriously shorten the battery life. When the instrument voltage is low, it should be charged in a timely manner.

4、 The instrument is dedicated to measuring the contact resistance of the circuit, and it is strictly prohibited to measure inductive circuits.

7、 Supporting List

ITEM NAME	number
Handheld circuit resistance tester	1

host	
Test cable clamp (2 red and black)	1
Standard resistance	1
Charger DC12.6V2A	1
Protective backpack	1
Operation instructions	1
Factory calibration table	1
Certificate of conformity	1

8、 After-sale service

1、 Within one month from the date of sale, if there are any quality issues with the instrument, it will be replaced with a new one free of charge;

2、 Any quality issues with the instrument within one year will be repaired free of charge by our company;

3、 If the instrument exceeds one year, our company is responsible for long-term maintenance and charges appropriate material fees;

4、 The instrument has malfunctioned, please send it back to our company for repair. Do not disassemble the instrument by yourself, otherwise our company will not be responsible for any self damage caused.