Huazheng®

HZ-3510
Grounding Continuity Tester

User Manual

Huazheng Electric Manufacturing (Baoding) Co., Ltd

Dear user:

Thank you for choosing HZ-3510Grounding Continuity Tester.

We hope that this instrument can make your work easier and more enjoyable, so that you can get the feeling of office automation in the test and analysis work.

Before using the instrument, please read this manual, and operate and maintain the instrument according to the manual to prolong its service life. "Just a light press, the test will be completed automatically" is the operating characteristics of this instrument.

If you are satisfied with this instrument, please tell your colleagues; if you are not satisfied with this instrument, please call (0312) 6775656 to tell you to serve you at all times-Baoding Huazheng Electric Manufacturing Co., Ltd., our company will definitely make you satisfied !

Contents

I.Uses and characteristics of the instrument

The reliable and effective connection between the grounding down conductor of the power equipment and the ground network is the fundamental guarantee for the safe operation of the equipment. The grounding down conductor is the connection part of the power equipment and the grounding grid. During the long-term operation of the power equipment, the connection may be affected by damp and other factors, and the contacts may be corroded or even broken. The resistance of the connection point of the grounding grid is increased, which cannot meet the requirements of the electric power regulations, so that there are hidden dangers in the operation of the equipment, and in serious cases, the equipment will lose ground. Therefore, in the "Twenty-Five Key Requirements to Prevent Major Accidents in Electric Power Production", it is clearly stated that the conduction test of the down conductor of the grounding device should be carried out once a year.

The HZ-3510 grounding continuity tester is a portable tester with a high degree of automation developed by our company. It is used to measure the continuity resistance between the ground conductors of various power equipment in the substation. The instrument is controlled by a high-performance single-chip microcomputer, which can realize the intelligent test process. It has small size, convenient carrying, simple operation, high precision, fast test speed, good retestability, and intuitive reading. It is an ideal special instrument that meets the requirements of regulations.

II.Main Specifications

Item	Technical indicators and parameters	Remark
Test current	AUTO、1A、3A、5A、10A	
Measuring range	0.8mΩ-0.8Ω (10A) 1mΩ-2Ω (5A) 5mΩ-3Ω (3A) 10mΩ-10Ω (1A)	
Min resolution	0.1μΩ	
Accuracy	±(0.5%±2dgt)	
Display	LCD	Resistance display effective digits are 4 digits

Data storage	1000 groups	
Working environment	Ambient temperature: 0℃ ～ 40℃ Relative humidity: <90%RH, no condensation	
Power supply	Built-in lithium battery AC 220V±10V，50Hz±1 Hz	Fuse 2A
Max power consumption	100W	
Dimensions	360*290*170 （mm）	
Weight	Instrument：4.85Kg Wire box:9.5Kg	

III.Main features

1. The whole machine is controlled by high-speed single-chip microcomputer, with high degree of automation and easy operation.

2. The instrument adopts brand new power supply technology, with many current gears and wide measuring range.

3. Intelligent power management technology, the instrument always works in the minimum power state, effectively reducing the internal heating of the instrument and saving energy.

4. Seven-inch high-brightness touch color LCD, clear display under strong light, full touch screen operation

5. The instrument has its own power-down storage, which can store 1000 sets of test data, which can be consulted at any time

6. The instrument comes with lithium battery, built-in charger, integrated design, easy to operate

IV.System introduction

The panel of the instrument is shown below

Grounding post: the grounding point of the whole instrument for safety protection

I+, I-: Output current binding posts, I+ is the output current is positive, I- is the output current is negative.

V+, V-: Voltage sampling terminal, V+ is the positive terminal of the voltage line, and V- is the negative terminal of the voltage line.

RS232: Universal serial interface, the instrument can be controlled by a computer.

USB: Test results can be output to U disk.

Charging socket: AC 220V power supply, the battery can be charged after plugging in the charger

Charging indication: The green indicator light indicates the charging is complete, and the red indicator indicates the charging process.

V.Test and operation method

Take out and connect the special test leads provided with the machine. The red and black test pliers are respectively clamped to two of the down conductors of the grounding grid, and rub the contact points hard to ensure good contact. The other end of the test line Correspond to the wiring terminal of the instrument. After confirming that the test line is connected correctly, connect the power line and prepare for measurement. At this time, turn on the power switch and the following interface is displayed:

1. The boot interface is shown in Figure 1:

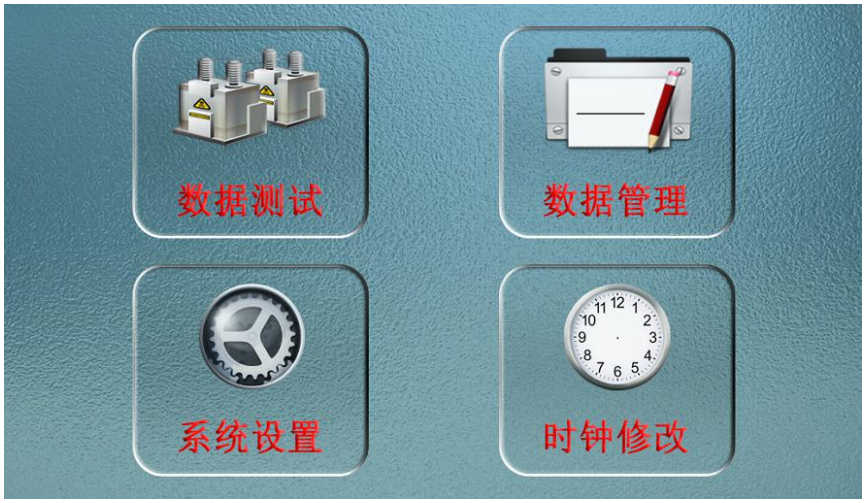

Figure 1

2.Press the data test to enter the following interface, as shown in Figure 2

Figure 2

Click  and the current will cycle between AUTO, 1A, 3A, 5A, 10A;

2. After the current is selected, click to start the test, it will display "Charging, please wait" to enter the test state, a few seconds later, the test result will be displayed, as shown in Figure 3.

Figure 3

After the test result is displayed, click local storage to save the test result, or click U disk to store and print; click Exit to exit the test interface;

3. Click Data Management in Figure 1 to enter the data query interface, as shown in Figure 4:

Figure 4

4. In Figure 1, press the cycle key to move the cursor to the clock modification, press the select key to enter the clock modification interface,
As shown in Figure 5

Figure 5

Click  to set the date and time;

5. Click System Settings in Figure 1 to enter the parameter setting interface, as shown in Figure 6:

Figure 6

Brightness adjustment: According to the scene environment, move the button to adjust the screen brightness

Language setting: click the button to switch between Chinese/English interface

Factory setting: only the manufacturer can set

After setting, click to return to the home page and return to the main interface

VI.Four terminal wiring method

As shown in Figure 7

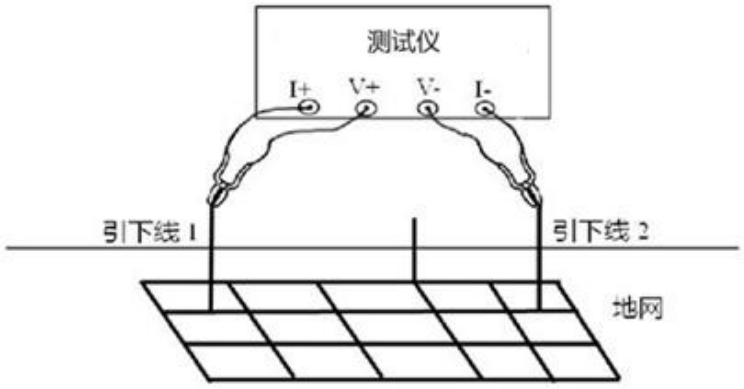

Figure 7

VII.Precautions

1. When selecting the current, please refer to the range in the technical index column. When the range is exceeded, the instrument is always in the "charging" state because the current does not reach the preset value. At this time, press to exit and reselect a smaller current range. .

2. After the test is completed, press Exit, the power supply of the instrument will be disconnected from the unit under test, and the display screen will return to the initial state,

and then you can re-wire to perform the next measurement or remove the test wire and shut down to end the measurement.

VIII.After-sales service

The instrument will be repaired free of charge for product quality problems belonging to the company within one year from the date of purchase, and lifetime warranty and technical services will be provided. If you find that the instrument is abnormal or malfunctions, please contact the company in time to arrange the most convenient solution for you and provide you with the fastest on-site service.