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LNL-200A  
Loop Resistance Tester  
User Manual

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## 1.Brief Introduction

The operation panel of this instrument adopts an ergonomic design that conforms to operating habits. It adopts high-frequency switching power supply and digital circuit technology, and is suitable for measuring the circuit resistance of switch control equipment. The testing current adopts the DC 200A recommended by the national standard. The circuit resistance can be directly measured under DC 200A, and the test results are displayed on a large LCD TFT color screen, with functions such as data storage, output printing, and time setting. There are 50A, 100A, 150A, and 200A gears for users to choose from; Customized testing time, with a maximum set time of 60S, it is a very stable contact resistance tester with performance exceeding that of imported high current micro ohmmeters. Meet the requirements of on-site high-voltage switch maintenance and high-voltage switch factory circuit resistance testing by the

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power and power supply departments.

## 2. Technical Parameter

**Measurement range:** 0-80m  $\Omega$

**Minimum resolution:** 0.001  $\mu \Omega$

**Measurement accuracy:**  $\pm (\text{reading} \times 0.5\% + 1 \mu \Omega)$

**Test power supply:** constant current and voltage limiting,  
approximately 8.0V

**Test current:** DC 50/100/150/200A

**Test current accuracy:**  $\pm 5\%$

**Measurement time:** fast, optional from 10 to 60 seconds

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**Special testing line:** resistance<20m  $\Omega$

**Charging power supply:** Input 180V~240VAC,  
50Hz/60Hz,

**Data storage:** Store 100 sets of measurement data

**Working environment:** temperature -10~50 °C, humidity  
 $\leq 90\%$

**Host weight:** approximately 7kg (excluding cables)

**Host volume:** 420mm × 340mm × 200mm

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## 3.Measurement Instructions

### (1).Host

Figure 1 shows the host, with a 7-inch TFT LCD screen and a button operation area on the right side of the host.

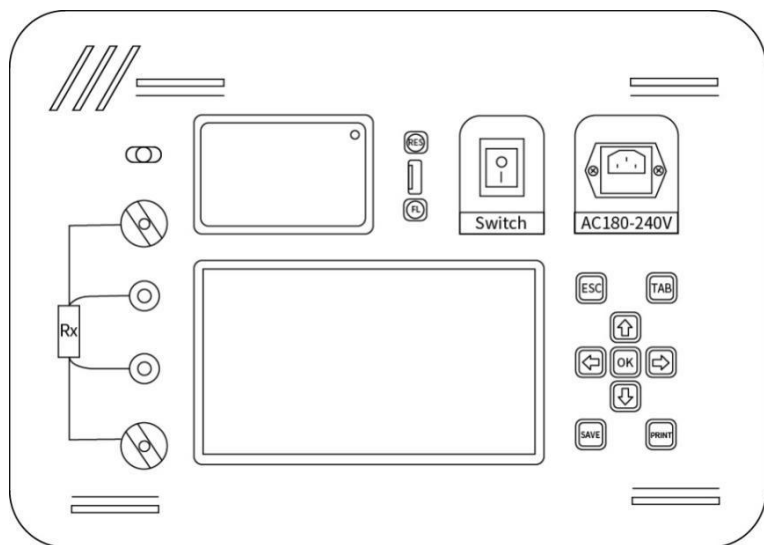





Figure 1 --- Host

### (2).Test Interface


Turn on the instrument to enter the testing interface,

press  key, move the cursor to select the test current, test time, and test number. When the cursor enters the test current, press the up and down keys to select the current. Move the cursor back to the [Start/Stop] button, press the  key to start testing. During the testing process, press the button  to stop the testing.

Testing		2023-06-21 15:44:45
<div>375.0 <math>\mu\Omega</math></div> <div>U<sub>x</sub> = 0.0155 V    I<sub>x</sub> = 200.8 A    T = 7s</div>		
Test-Current	<input type="text" value="200A (0-20mΩ)"/>	▼
Test-Time	<input type="text" value="FAST"/>	▼
Test-Number	<input type="text" value="9999"/>	
		<div>Testing</div> <div>Start/Stop</div>
Ver:1.0.0710		


Figure 2 --- Test Interface



After the test is completed, press the , the instrument will store the current measured data.

### **(3).Main Interface**



In the testing interface of the instrument, press  return



to the main interface, press   key selection



menu, press  enter the function interface with the key.



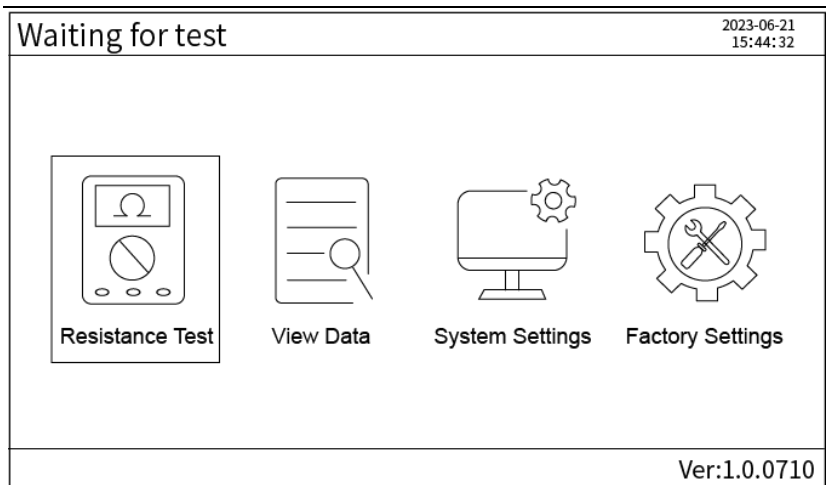


Figure 3 --- Main Interface

#### **(4).View Data**

The instrument enters the data viewing interface, as shown in the figure:

Waiting for test

2023-06-21  
15:44:56




### View Data

NO.	Data	TestNO.	Current	ResValue
1	2023-06-16 11:14:01	9999	0.000A	>100.0mΩ
2	2023-06-16 11:21:36	9999	200.4A	375.0uΩ
3	2023-06-16 11:45:39	9999	150.3A	374.4uΩ
4	2023-06-16 11:45:56	9999	101.4A	373.9uΩ
5	2023-06-16 11:46:11	9999	199.8A	374.7uΩ
6	2023-06-16 11:46:26	9999	199.6A	374.5uΩ
7	2023-06-16 16:18:02	9999	199.5A	374.3uΩ
8	2023-06-16 16:18:16	9999	200.8A	374.9uΩ
9	2023-06-16 16:21:58	9999	200.8A	374.9uΩ

Cancel

Ver:1.0.0710

Figure 4 --- View Data Interface

press   key to select data, then press  key  
enter the data processing interface as shown in the  
following figure:

Waiting for test				2023-06-21 15:44:56											
<div style="display: flex; justify-content: space-between;"> <span>View Data</span> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 15%;">NO.</th> <th style="width: 25%;">Data</th> <th style="width: 25%;">TestNO.</th> <th style="width: 20%;">Current</th> <th style="width: 15%;">ResValue</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="height: 150px; vertical-align: top; padding: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">Delete data</div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Printing</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Deleta Clause</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Delete All</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Cancel</div> </div> </td> </tr> </tbody> </table> <div style="text-align: center; margin-top: 20px;"> <div style="border: 1px solid black; padding: 5px 20px; border-radius: 5px; display: inline-block;">Cancel</div> </div>						NO.	Data	TestNO.	Current	ResValue	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">Delete data</div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Printing</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Deleta Clause</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Delete All</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Cancel</div> </div>				
NO.	Data	TestNO.	Current	ResValue											
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">Delete data</div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Printing</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Deleta Clause</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Delete All</div> <div style="border: 1px solid black; padding: 5px 10px; border-radius: 5px;">Cancel</div> </div>															
Ver:1.0.0710															

Figure 5 --- Data Processing

This interface allows for printing and deleting data.



## (5) .System Settings



Enter the system settings interface as shown in the following:

Waiting for test	2023-06-21 15:45:07
<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 80%;"> <div style="border-bottom: 1px solid black; padding-bottom: 5px; margin-bottom: 10px;">SysSetup</div> <div style="margin-bottom: 10px;">           Setup Time            20 <span style="border: 1px solid black; padding: 0 5px;">23</span> Y <span style="border: 1px solid black; padding: 0 5px;">06</span> M <span style="border: 1px solid black; padding: 0 5px;">21</span> D <span style="border: 1px solid black; padding: 0 5px;">15</span> H <span style="border: 1px solid black; padding: 0 5px;">45</span> M <span style="border: 1px solid black; padding: 0 5px;">07</span> S         </div> <div style="margin-bottom: 10px;">           Language  <div style="border: 1px solid black; padding: 2px; display: inline-block;">English</div> ▼         </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px 20px;">Save</div> <div style="border: 1px solid black; padding: 5px 20px;">Cancel</div> </div> </div>	
Ver:1.0.0710	


Figure 6 --- System Settings

Press the [Cycle Key]  Instrument cursor

move,press   key to adjust the time, move the

cursor to the language setting,press   keySelect  
the setting language,After setting, move the cursor to

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[Save]. Press  key save to take effect and exit. If the language is modified, the instrument will automatically shut down and restart effectively.

## **(6).Data Export**

Turn off the instrument, plug one end of the data cable into the USB port, and the other end into the computer USB jack. The instrument will automatically turn on, and wait for the instrument to enter the testing interface. The computer will pop up an external storage disk for recognition. Clicking on the storage disk can copy or open a txt text file.

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## 4.Accessories

Name	Quantity
Host	1pcs
Test Line	2pcs
Data Cable	1pcs
Power Line	1pcs
Certificate of Conformity	1pcs
User Manual	1pcs
Factory Inspection Report	1pcs