Notice To Users

- This manual provides detailed instructions on how to use the product, along with important precautions and relevant matters. Please read the manual thoroughly before using the product to ensure optimal performance.
- Do not use the instrument in flammable or explosive environments.
- Used batteries and discarded instruments should not be disposed of with household waste. Please dispose of them in accordance with national or local laws and regulations.
- If you encounter any quality issues with the instrument or have any questions about its use, you can contact "FNIRSI" online customer service or the manufacturer. We will address your concerns as quickly as possible.

1.Product Introduction

The DMC-100 is FNIRSI's latest 10,000-count intelligent clamp digital multimeter, offering a wider measurement range and higher resolution to help you achieve more accurate measurements. It can precisely measure AC/DC voltage, AC/DC current, and is also capable of testing continuity, capacitance, frequency, resistance, diodes, temperature, NCV (Non-Contact Voltage), and live wires. This device is suitable for use in engineering, laboratories, vehicle maintenance, and household electrical repairs across various electronic fields.

The DMC-100 is equipped with a 2.0-inch full-color TFT display with a high resolution of 240*320. The new UI interface design, along with features such as data curves, data storage, and power measurement mode, enrich your user experience, making it easier to read and operate in various scenarios.

2.Panel Introduction

3.Buttons & Functions Introduction

Button	Operation	Function
⏻	Short Press	Data Reset (DC Current Only)
	Long Press	Power On/Off
SAVE MENU	Short Press	**Main Interface:** Save Data **Settings Interface:** Return to the Previous Menu
	Long Press	Enter/Exit Settings
◀ HOLD	Short Press	**Main Interface:** Switch Range to the Left **Settings Interface:** Select Left/Up
	Long Press	**Main Interface:** Data Hold
⇌ MODE	Short Press	**Main Interface:** Switch Test Function **Settings Interface:** Confirm Selection
	Long Press	**Main Interface:** Enter/Exit Waveform Display
▶ V-A	Short Press	**Main Interface:** Switch Range to the Right **Settings Interface:** Select Right/Down
	Long Press	**Main Interface:** Enter/Exit Power Measurement Page
	Long Press	Turn Flashlight On/Off

4.Parameter Introduction

4.1 Performance Specifications

Function	Range	Accuracy
DC Voltage	9.999V/99.99V/999.9V	±(0.5%+3)
AC Voltage	9.999V/99.99V/750.0V	±(1%+3)
DC Current	99.99A/600.0A	±(2.5%+10)
AC Current		
Resistance	9.999MΩ/999.9KΩ/ 99.99KΩ/9.999KΩ/999.9Ω	±(1.5%+3)
	99.99MΩ	±(1.5%+3)
Capacitance	999.9μF/99.99μF/9.999μF/ 999.9nF/99.99nF/9.999nF	±(2.0%+5)
	9.999mF/99.99mF	±(5.0%+20)
Frequency	9.999MHz/999.9KHz/ 99.99KHz/9.999KHz/ 999.99Hz/99.99Hz/9.999Hz	±(0.1%+2)
Temperature	(-55~1300°C)/(-67~2372°F)	±(2.5%+5)
Diode	✓	
Continuity	✓	
NCV	✓	
LIVE	✓	

4.2 Main Specifications of the Device

Product Model	DMC-100
Display Screen	2.0-inch
Power Supply	3.7V Lithium Battery
Charging Specifications	USBType-C, 5V/1A
Maximum Jaw Size	25mm
Dimensions	193x74x32mm
Product Weight	194g

5.Operating Instructions

5.1 Main Interface

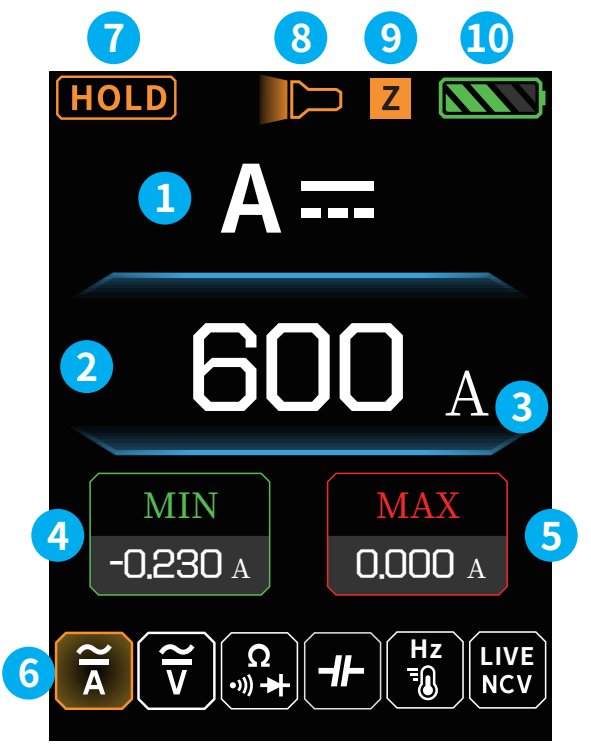
①Measurement Range

②Measurement Parameter

③Unit

④Minimum Value

⑤Maximum Value



⑥**Range Switching:** Short press the “ ◀ HOLD ” and “ ▶ V-A ” buttons to switch measurement ranges: DC Current, DC Voltage, Resistance, Capacitance, Frequency, and Live/Neutral Line Detection. Short press the “ ⇌ MODE ” button to switch between other test functions within the current range, such as DC Current/AC Current.

⑦**Data Hold:** Long press the "◀ HOLD" button to hold the current test data. When the data is held, "HOLD" will be displayed; when not held, "HOLD" will be shown.

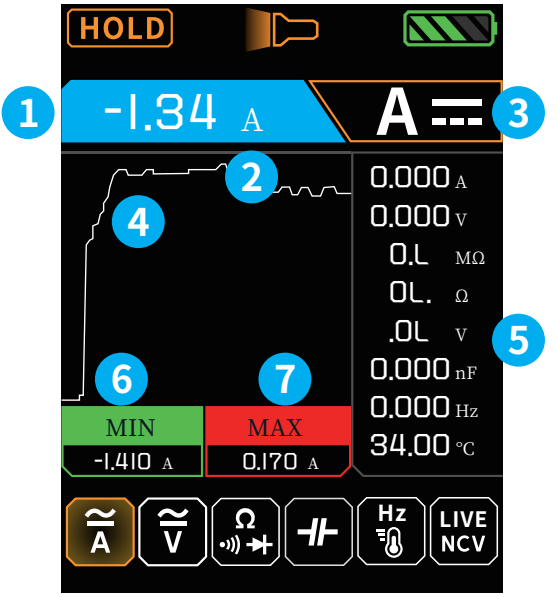
⑧**Flashlight:** Long press to turn the flashlight on or off. When the flashlight is on, will be displayed; when it is off, will be shown.

⑨**Data Reset:** For DC Current measurements only, short press to ⏻ reset the data. Z will be displayed when the data is reset.

⑩**Battery Level:** When the battery is full, will be displayed; when the battery is low, will be shown. If the battery level becomes critically low, a popup alert will appear, and the device will automatically start a countdown to shut down.

5.2 Waveform Display Interface

Long press " ⇌ MODE " to enter the waveform display interface



①**Measurement Parameter**

②**Unit**

③**Measurement Range**

④**Waveform Display:**

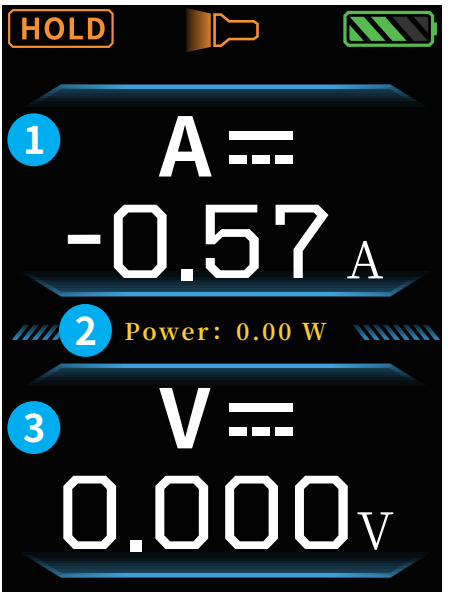
Shows the waveform of measurement data changes

⑤**Data Saving:** Short press SAVE MENU to save data. This section can store up to 8 sets of data. For more data, please check the historical records in the settings interface.

⑥**Minimum Value** ⑦**Maximum Value**

5.3 Power Measurement Interface

Long press ▶ V-A to enter the power measurement interface. In this mode, AC and DC are automatically recognized.



①**Current Data**

②**Power Calculation**

③**Voltage Data**

5.4 Settings Interface

Long press SAVE MENU to enter the settings interface.

①Settings Options:

History Records;

System Settings;

Factory Reset;

About.

②Specific Settings:

【History Records】:

Short press SAVE MENU to save data during measurements. Up to 30 sets of data can be saved in history records.

【System Settings】:

Language: Simplified Chinese / English

Brightness: 10 levels adjustment

Temperature Unit: °C / °F

Auto Power Off: OFF / 5 min / 15 min / 30 min

【Factory Reset】: Restore factory settings

【About】: Brand information, version number

6.Firmware Upgrade

- With the device powered off, press and hold the "◀ HOLD" and "SAVE MENU" buttons, then press the "⏻" button to turn it on. The screen will display “Firmware Upgrade.”
- Connect the device to a computer using a data cable. The computer will detect a "BOOT" disk.
- Copy the "firmware" or startup image to the disk.
- Press the "SAVE MENU" button to start the upgrade process.

7.Precautions

- Before using the product, check if the insulation near the casing and interfaces is damaged.
- Hold the probes by the protective grips.
- Do not touch any of the input ports when measuring a circuit.
- Disconnect the test probes from the circuit before changing the measurement range.
- When measuring DC voltages above 36V or AC voltages above 25V, exercise caution to avoid electric shock.
- Select the correct range for measurement to avoid damaging the instrument. The screen will display "OL" when the measurement exceeds the range.
- When the battery level is critically low, a popup will alert you. Charge the battery promptly to avoid affecting measurement performance. Do not use the device while it is charging.

8.Production Information

Any FNlRSl's users with any questions who comes to contact us will have our promise to get a satisfactory solution +an extra 6 months warranty to thanks for your support!

By the way, we have created an interesting community, welcome to contact FNiRSl staff to join our community.

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