

[Manuals.plus](#) /

> [FNIRSI](#) /

> FNIRSI DMC-100 Digital Clamp Meter Multimeter Instruction Manual

FNIRSI FNIRSI-DMC-100

FNIRSI DMC-100 Digital Clamp Meter Multimeter Instruction Manual

Brand: FNIRSI | Model: FNIRSI-DMC-100



Figure 1: FNIRSI DMC-100 Digital Clamp Meter Multimeter with accessories.

1. INTRODUCTION

The FNIRSI DMC-100 is a versatile digital clamp meter multimeter designed for accurate measurement of various electrical parameters. It features a high 9999-count display, 600A current capability, and a rechargeable battery, making it an ideal tool for professionals and home electricians. This manual provides detailed instructions for safe and effective use of your device.

2. WHAT'S IN THE BOX

The FNIRSI DMC-100 package includes the following items:

- Clamp Meter*1
- Multimeter Pen*2
- Temperature Probe*1
- Type-C Charging Cable*1



Figure 2: Labeled components of the DMC-100.

3. SETUP

3.1 Charging the Device

The FNIRSI DMC-100 features a built-in 1500 mAh lithium battery. To charge, connect the provided Type-C charging cable to the device's charging/data transfer port and a compatible USB power source (5V/1A). The battery indicator on the screen will show charging progress.

RECHARGEABLE BATTERY AUTO POWER OFF

Built-in 1500mAh Li-ion battery,
Type-C charging, Auto sleep mode
for long time working



Figure 3: Charging the DMC-100 via Type-C USB.

3.2 Connecting Probes

For voltage, resistance, capacitance, continuity, diode, and temperature measurements, insert the multimeter pens (red and black) into the appropriate input jacks at the bottom of the device. The red probe connects to the 'INPUT' jack, and the black probe connects to the 'COM' jack. For temperature measurements, connect the K-Type Thermocouple Sensor to the same jacks.

3.3 Initial Language Selection

Upon first power-on, the device may prompt you to select a language. Use the navigation buttons to choose 'English' and confirm your selection.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off

To power on or off the device, long press the Power On/Off Button (refer to Figure 2 for location).

4.2 Measurement Modes

The DMC-100 supports a wide range of measurements. Use the 'MODE' button to cycle through different measurement functions. The display will show the active mode.

- **AC/DC Current:** Use the clamp head to measure current up to 600A. The 25mm wide jaw accommodates various wire sizes.
- **AC/DC Voltage:** Measure voltage using the multimeter pens.
- **Resistance:** Measure resistance in Ohms.
- **Continuity:** Test for circuit continuity with an audible beep.
- **Diode:** Test diode functionality.
- **Capacitance:** Measure capacitance in Farads.
- **Frequency:** Measure frequency in Hertz.
- **Temperature:** Measure temperature using the K-Type Thermocouple Sensor.
- **NCV (Non-Contact Voltage):** Detect AC voltage without direct contact.
- **Live Wire Detection:** Identify live wires for safety.



Figure 4: Various measurement capabilities of the DMC-100.

4.3 Data Analysis and Storage

The DMC-100 offers advanced data features:

- **Data Curve:** Track measurement trends and view minimum/maximum values over time.
- **Power Mode:** Simultaneously displays voltage and current, automatically calculating power.
- **Built-in Storage:** Supports saving up to 8 sets of real-time data and 30 sets of historical records.

V&A MEASUREMENT WAVEFORM DISPLAY



Figure 5: Waveform Display and Power Measurement Interface.

4.4 Display and Flashlight

The device features a 2-inch 240x320 TFT full-color backlit display for clear data visibility. Brightness is adjustable (10 levels). The 'HOLD' key can freeze data on the screen. It also has a flashlight function for use in low-light conditions.

Video 1: A brief demonstration of the FNIRSI DMC-100's display and various modes, including the flashlight function.

5. MAINTENANCE

- Keep the device clean and free from dust and moisture. Use a soft, dry cloth for cleaning.
- Store the multimeter in a cool, dry place away from direct sunlight and extreme temperatures.
- Regularly charge the built-in lithium battery to maintain its lifespan, even if not in frequent use.
- The device has an automatic shutdown feature to conserve battery life.

6. TROUBLESHOOTING

If you encounter any issues with your FNIRSI DMC-100, please consider the following general troubleshooting steps:

- **Device not powering on:** Ensure the battery is sufficiently charged. Connect the Type-C cable and allow it to charge for a period.
- **Inaccurate readings:** Check that probes are correctly inserted and that you are in the appropriate measurement mode for the parameter being tested. Ensure good contact with the circuit.
- **Display issues:** Adjust the brightness settings. If the screen is unresponsive, try powering the device off and on again.
- **No NCV/Live Wire detection:** Ensure the sensor area (top of the clamp head) is clear and in close proximity to the live source.

For more detailed troubleshooting or persistent issues, please refer to the comprehensive user manual or contact customer support.

7. SPECIFICATIONS

Feature	Value
Product Dimensions	7.7 x 2.91 x 1.14 inches; 6.72 ounces
Item model number	FNIRSI-DMC-100
Batteries	1 CR5 batteries required. (included)
Date First Available	November 26, 2024
Manufacturer	FNIRSI
ASIN	B0DP2L9CFR
Country of Origin	China
Brand	FNIRSI

Feature	Value
Power Source	Battery Powered
Style	10000 Counts AC Current
Color	Black
Item Weight	6.72 ounces

8. WARRANTY AND SUPPORT

For detailed warranty information, product registration, and technical support, please visit the official FNIRSI website or contact their customer service department. Keep your purchase receipt for any warranty claims.