

[Manuals.plus](#) /

› [SEEIRIR](#) /

› SEEIRIR S450 Digital Multimeter User Manual

SEEIRIR S450

SEEIRIR S450 Digital Multimeter

User Manual

1. INTRODUCTION

The SEEIRIR S450 is a high-performance digital multimeter designed for precise electrical measurements. It features a 20000-count display, real-time waveform recording, and capabilities for measuring voltage, current, resistance, capacitance, and temperature. This manual provides essential information for safe and effective operation of your S450 multimeter.



Image 1.1: Front view of the SEEIRIR S450 Digital Multimeter, showing the display, rotary dial, and input jacks.

2. SAFETY INFORMATION

Always observe safety precautions when using the multimeter to prevent electric shock or personal injury. Read all safety information before operating the device.

- Do not exceed the maximum input limits for any measurement function.
- Ensure test leads are in good condition and properly connected before making measurements.
- Do not use the multimeter if it appears damaged or is not operating correctly.
- Exercise extreme caution when working with voltages above 30V AC RMS, 42V peak, or 60V DC.
- Replace the battery when the low battery indicator appears to ensure accurate readings.

3. PRODUCT FEATURES

The S450 Digital Multimeter offers a range of features designed for versatility and safety:

- Supports multiple measurements including voltage, current, resistance, capacitance, and temperature.
- High-resolution screen for clear display and accurate readings.
- Overload protection and anti-burn design for enhanced safety.
- Robust construction, anti-fall and earthquake-resistant, suitable for various working environments.
- One-click switching function and automatic shutdown for power saving.

4. PACKAGE CONTENTS

Verify that all items are present in your package:

- SEEIRIR S450 Digital Multimeter
- Test Leads (Red and Black)
- Temperature Probe (K-type thermocouple)
- User Manual
- Storage Pouch (optional, may vary by package)

5. SETUP

5.1 Battery Installation

The S450 multimeter operates on a lithium battery. To install or replace the battery:

1. Ensure the multimeter is powered off and test leads are disconnected.
2. Locate the battery compartment cover on the back of the device.
3. Use a screwdriver to open the battery compartment.
4. Insert the lithium battery, observing correct polarity (+ and -).
5. Replace the cover and secure it with the screw.

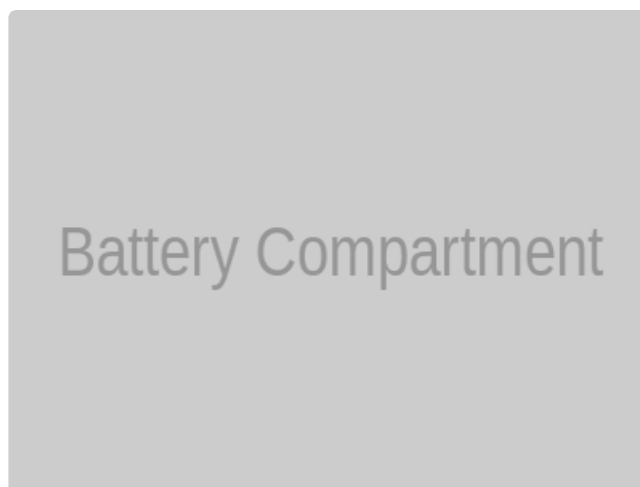


Image 5.1: Diagram showing the location and opening of the battery compartment.

5.2 Powering On/Off

To power on the multimeter, rotate the function dial from the OFF position to any desired measurement function. To power off, rotate the dial back to the OFF position. The device features an automatic shutdown function to conserve battery life after a period of inactivity.

6. OPERATING INSTRUCTIONS

Before making any measurement, ensure the test leads are correctly inserted into the appropriate input jacks.

6.1 Measuring DC/AC Voltage

1. Insert the red test lead into the 'VΩmA' jack and the black test lead into the 'COM' jack.
2. Rotate the function dial to the 'V~' (AC Voltage) or 'V=' (DC Voltage) position.
3. Connect the test leads in parallel across the circuit or component to be measured.
4. Read the voltage value on the display.

6.2 Measuring DC/AC Current

Caution: Never connect the multimeter in parallel with a voltage source when measuring current. Always connect in series with the load.

1. For current up to 200mA, insert the red test lead into the 'VΩmA' jack. For higher currents, consult the manual for specific high current jacks (if available). Insert the black test lead into the 'COM' jack.
2. Rotate the function dial to the 'A~' (AC Current) or 'A=' (DC Current) position.
3. Open the circuit and connect the multimeter in series with the load.
4. Read the current value on the display.

6.3 Measuring Resistance

1. Insert the red test lead into the 'VΩmA' jack and the black test lead into the 'COM' jack.
2. Rotate the function dial to the 'Ω' (Resistance) position.
3. Ensure the circuit or component is de-energized before measuring resistance.
4. Connect the test leads across the component.
5. Read the resistance value on the display.

6.4 Measuring Capacitance

1. Insert the red test lead into the 'VΩmA' jack and the black test lead into the 'COM' jack.
2. Rotate the function dial to the 'F' (Capacitance) position.
3. Ensure the capacitor is fully discharged before measurement to prevent damage to the multimeter.
4. Connect the test leads across the capacitor terminals.
5. Read the capacitance value on the display.

6.5 Measuring Temperature

1. Insert the temperature probe (K-type thermocouple) into the designated input jacks (usually marked 'TEMP' or with a thermometer symbol).
2. Rotate the function dial to the '°C/°F' (Temperature) position.
3. Place the tip of the temperature probe on or near the object whose temperature is to be measured.
4. Read the temperature value on the display.

6.6 Waveform Recording

The S450 features real-time waveform recording. Refer to the on-screen menu or specific button functions for activating

and configuring this mode. This function allows for capturing and analyzing transient signals over time. Detailed instructions for waveform recording are typically accessed via the multimeter's menu system.



Image 6.1: Example of a waveform displayed on the S450 multimeter screen during recording mode.

7. MAINTENANCE

7.1 Cleaning

Wipe the case with a damp cloth and mild detergent. Do not use abrasives or solvents. Ensure the device is powered off and disconnected from all circuits before cleaning.

7.2 Battery Replacement

Refer to Section 5.1 for instructions on replacing the lithium battery. Always use the specified battery type.

7.3 Fuse Replacement

If the current measurement function stops working, the fuse may need replacement. Fuse replacement should only be performed by qualified personnel. Refer to the specifications for the correct fuse type and rating. Always disconnect test leads and power off the device before opening the fuse compartment.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display or dim display	Low battery; Device off	Replace battery; Turn function dial to an ON position
Inaccurate readings	Incorrect function selected; Poor test lead connection; External interference	Select correct function; Ensure secure connections; Move away from strong electromagnetic fields
Current measurement not working	Blown fuse	Replace fuse (refer to Section 7.3)
Temperature reading incorrect	Probe not properly connected; Damaged probe	Check probe connection; Replace probe if damaged

9. SPECIFICATIONS

Parameter	Value
Model Number	S450
Display Type	Digital (20000 Counts)
DC Voltage Range	Up to 1000V
AC Voltage Range	Up to 1000V
Resistance Range	Up to 200MΩ
Capacitance Range	Up to 100mF
Operating Temperature	0 - 40 °C
Dimensions	108 x 69.5 x 33 mm
Item Weight	300 g
Certifications	CE, FCC, RoHS
Power Source	Lithium Battery

10. WARRANTY AND SUPPORT

The SEEIRIR S450 Digital Multimeter comes with a standard manufacturer's warranty. Please refer to the warranty card included in your package for specific terms and conditions. For technical support, troubleshooting assistance, or warranty claims, please contact SEEIRIR customer service or visit our official website.
Official Website: [www.seeirir.com](#) (Placeholder link, please refer to actual product documentation for correct URL)

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B0DZNXJNLC>

More documents and user manuals: <https://manuals.plus/>