

Landtek MILA41600

Landtek Digital Soil EC and Temperature Meter (MILA41600) Instruction Manual

Model: MILA41600 | Brand: Landtek

1. INTRODUCTION

The Landtek Digital Soil EC and Temperature Meter is a precision instrument designed for measuring the electrical conductivity (EC) and temperature of soil. This 2-in-1 device provides quick and accurate readings, essential for optimizing plant health and growth in various agricultural and gardening applications. Its portable design, corded sensor electrode, and backlit LCD display ensure ease of use and clear data visualization.

2. PRODUCT FEATURES

- **2-in-1 Soil Tester:** Measures both Electrical Conductivity (EC) and Temperature, providing crucial insights into soil salt content and thermal conditions.
- **Quick and Accurate Measurement:** Utilizes advanced probe detection technology for rapid and precise readings. EC measuring range of 0-4.00 mS/cm with +/- 2% F.S accuracy.
- **High Definition Green Backlit LCD Display:** Offers clear and intuitive digital display of measured values, enhancing readability and reducing data errors.
- **IP67 Waterproof Electrode:** The soil tester probe is rated IP67, ensuring robust protection against water and dust ingress, suitable for outdoor and challenging weather conditions.
- **Ready-to-Use Design:** Simple operation requires inserting the probe into the soil and waiting 10-15 seconds for accurate readings.

3. COMPONENTS OVERVIEW

Familiarize yourself with the main components of your Landtek Digital Soil EC and Temperature Meter:



Figure 1: Key components of the Landtek Digital Soil EC and Temperature Meter, including the LCD screen, EC button, temperature unit switch, calibration/power button, electrode, lanyard hole, and battery compartment.

- **LCD Screen:** Displays EC, temperature, and other indicators.
- **EC Button:** Toggles the display to show Electrical Conductivity.
- **Temperature Unit Switch (C/F Button):** Switches between Celsius and Fahrenheit temperature units.
- **Calibration / Power Button:** Used to power the device on/off and initiate calibration.
- **Electrode:** The corded sensor probe for insertion into the soil.
- **Lanyard Hole:** For attaching a lanyard for portability.
- **Battery Compartment:** Houses 3 AAA 1.5V batteries.

4. SETUP

4.1 Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Open the cover and insert 3 AAA 1.5V batteries, ensuring correct polarity.
3. Securely close the battery compartment cover.

4.2 Initial Power On

Press the **Calibration / Power Button** to turn on the device. The backlit LCD display will illuminate.

5. OPERATING INSTRUCTIONS

5.1 Preparing for Measurement

1. Ensure the sensor electrode is clean. Wipe it with a clean cloth or rinse with distilled water if necessary.
2. For optimal accuracy, ensure the soil is moist. If the soil is dry, water it thoroughly and wait 10-15 minutes before testing.

5.2 Taking a Measurement

1. Gently insert the sensor electrode into the soil to the desired depth (typically 3-5 inches or 2/3 of its length), avoiding hard objects that could damage the probe.
2. Wait approximately 10-15 seconds for the readings to stabilize on the LCD display.
3. The display will show the Electrical Conductivity (EC) and Temperature simultaneously.

5.3 Interpreting Readings



Figure 2: The backlit LCD display provides clear readings of soil EC and temperature.

- **EC Value:** Displayed in mS/cm. This indicates the concentration of soluble salts in the soil. Optimal EC levels vary by plant type.
- **Temperature Value:** Displayed in Celsius (°C) or Fahrenheit (°F).

5.4 Switching Temperature Units

TEMPERATURE SWITCH

Temp: 0°C~50°C / 32°F~122°F



Figure 3: The device allows switching between Celsius and Fahrenheit temperature units.

Press the **Temperature Unit Switch (C/F Button)** to toggle between Celsius (°C) and Fahrenheit (°F) temperature readings.

5.5 Calibration

The device features Automatic Temperature Compensation (ATC) for accurate readings. For manual calibration, refer to the detailed instructions provided in the full product manual. Regular calibration ensures the long-term accuracy of your meter.

6. MAINTENANCE

6.1 Cleaning the Electrode

After each use, clean the sensor electrode thoroughly with distilled water to prevent contamination from previous readings and ensure optimal performance. Wipe it dry with a soft cloth.

6.2 Storage

Store the meter in a cool, dry place away from direct sunlight and extreme temperatures. Ensure the electrode is clean and dry

before storage.

6.3 Battery Replacement

Replace the AAA batteries when the low battery indicator appears on the display to maintain accurate operation.

7. TROUBLESHOOTING

- **No Display/Faint Display:** Check battery installation and replace batteries if necessary.
- **Inaccurate Readings:** Ensure the electrode is clean. Calibrate the device if readings remain inconsistent. Ensure soil is adequately moist for testing.
- **Slow Response:** Ensure the electrode is fully inserted into moist soil and allow sufficient time for stabilization.

8. SPECIFICATIONS

SPECIFICATIONS

Range:
EC: 0~4.00mS/cm
Temp: 0°C~50°C
32°F~122°F

Resolution
EC: 0.01mS/cm
Temp: 0.1°C

Accuracy:
EC: ±2%F.S
Temp: ±°C (±2°F)

Calibration:
1 point



Figure 4: Detailed specifications for the Landtek Digital Soil EC and Temperature Meter.

Parameter	Range	Resolution	Accuracy
EC	0 - 4.00 mS/cm	0.01 mS/cm	±2% F.S
Temperature	0°C - 50°C (32°F - 122°F)	0.1°C	±1°C (±2°F)

- **Power Supply:** 3 x AAA 1.5V Batteries
- **Product Dimensions:** 20.68 x 3.18 x 3.58 cm
- **Weight:** 80 g

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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