

## YAMRON CTY

# YAMRON 4-in-1 Soil Moisture Meter

Digital Plant Temperature/Soil Moisture/PH Meter/Sunlight Intensity

## 1. INTRODUCTION

The YAMRON 4-in-1 Soil Moisture Meter is a versatile tool designed to help you monitor the health of your plants by providing accurate readings of key soil and environmental parameters. This device integrates four essential functions: soil moisture, soil pH, soil temperature, and sunlight intensity, all displayed on a clear, backlit LCD screen.

Understanding these factors is crucial for successful plant cultivation, whether in gardens, farms, potted plants, or orchards. This manual provides detailed instructions on how to set up, operate, and maintain your soil tester to ensure optimal performance and longevity.

## 2. SAFETY INFORMATION

- Do not use this device to test pure water or other liquids. It is designed specifically for soil.
- Do not force the probe into dry, hard soil or touch hard objects, as this may damage the probe.
- Ensure the probe is inserted into the soil at a depth of more than 4 inches (10 cm) for accurate readings.
- Do not leave the meter in the soil for extended periods. Remove and clean after each use.
- Keep the device away from children.
- Store in a cool, dry place when not in use.

## 3. PACKAGE CONTENTS

- 1 x YAMRON 4-in-1 Soil Moisture Meter
- 1 x User Manual

*Note: AAA 1.5V batteries (4 required) are not included and must be purchased separately.*

## 4. PRODUCT OVERVIEW

The YAMRON Soil Moisture Meter features a robust design with a long probe for deep soil penetration and a clear LCD display for easy reading.



Figure 4.1: Front view of the YAMRON 4-in-1 Soil Moisture Meter, highlighting its digital display and probe.



Figure 4.2: Overview of the meter's four primary functions: Light, Soil pH, Temperature, and Soil Moisture, with corresponding icons.

### Key Components:

- **LCD Display:** Large, backlit screen for clear readings in various lighting conditions.
- **Probe:** Long, durable metal probe for insertion into soil.
- **PH Button:** Used to switch to pH measurement mode.
- **°C/°F Button:** Used to switch between Celsius and Fahrenheit temperature units, and also for powering off the device (long press).
- **Light Sensor:** Located on the top of the device, measures ambient light intensity.

## 5. SETUP

### Battery Installation:

1. Locate the battery compartment on the back of the device.
2. Open the battery compartment cover.
3. Insert 4 x AAA 1.5V batteries, ensuring correct polarity (+/-).

4. Close the battery compartment cover securely.

The device will alert you when the battery is low.

## 6. OPERATING INSTRUCTIONS

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Follow these steps for accurate measurements:

1. Remove the red protective cap from the end of the probe.
2. If the soil is very dry, water the soil test area and wait for 10 minutes before testing. This prevents damage to the probe and ensures accurate readings.
3. Insert the probe into the soil vertically, ensuring it is buried about 4 inches (10 cm) deep. Make sure the probe is in full contact with the soil.
4. Wait approximately 10 seconds for the readings to stabilize on the LCD display.
5. Read the displayed data for moisture, temperature, and sunlight intensity.
6. To measure pH, press the "PH" button. The display will switch to show the pH value.
7. To switch between Celsius (°C) and Fahrenheit (°F) for temperature, press the "°C/°F" button.
8. For soil pH and moisture, it is recommended to take readings from at least 5 different locations in the soil and calculate the average for a more representative result.
9. After use, gently remove the probe from the soil.



Figure 6.1: Visual guide demonstrating the four steps for using the soil tester: remove cap, insert probe, read data, and clean.

**Understanding Readings:**

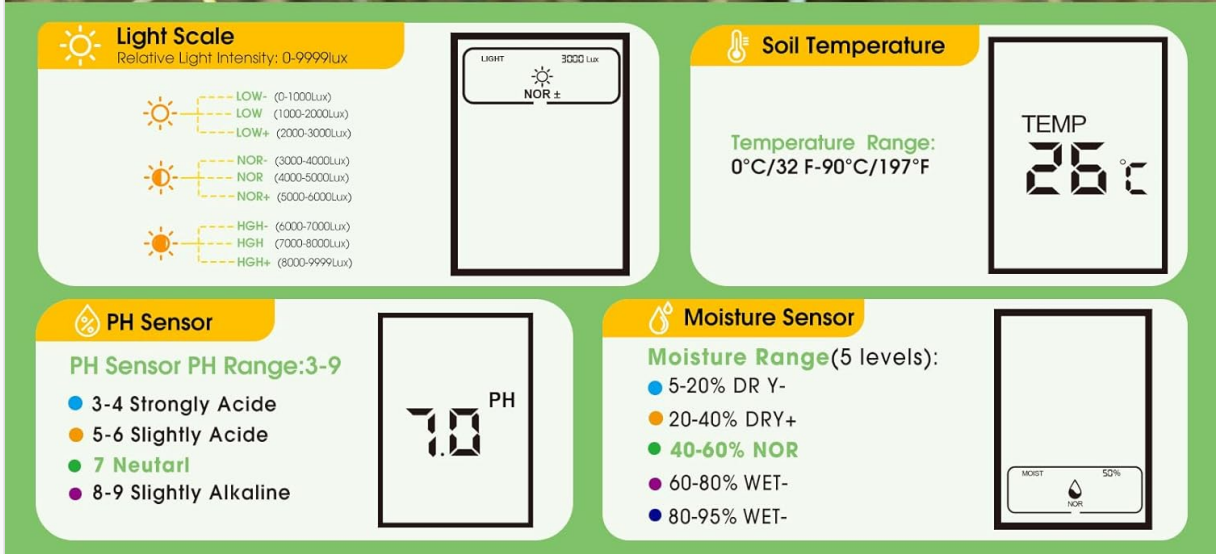


Figure 6.2: Explanation of the different measurement scales for light intensity, soil temperature, pH, and moisture levels.

- **Light Intensity (0-9999 Lux):** Indicates the amount of sunlight.
- **Soil Temperature (0°C/32°F to 97°C/197°F):** Optimal temperature ranges vary by plant type.
- **Soil pH (Range 3-9):**
  - 3-4: Strongly Acidic
  - 5-6: Slightly Acidic
  - 7: Neutral
  - 8-9: Slightly Alkaline
- **Soil Moisture (5 levels):**
  - 5-20%: DRY- (Very Dry)
  - 20-40%: DRY+ (Dry)
  - 40-60%: NOR (Normal)
  - 60-80%: WET- (Wet)
  - 80-95%: WET+ (Very Wet)

**Power Off:**

Long press the "°C/°F" button to power off the device.

## 7. MAINTENANCE

- **Cleaning:** After each use, wipe the probe clean with a soft, dry cloth. Do not use abrasive cleaners or immerse the main unit in water.
- **Storage:** Store the meter in a dry place, away from direct sunlight and extreme temperatures. Replace the protective cap on the probe when not in use.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display. Remove batteries if the device will not be used for an extended period to prevent leakage.



Figure 7.1: Important usage and maintenance notes for the soil tester.

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display or dim display	Low batteries or incorrect battery installation.	Replace batteries with 4 new AAA 1.5V batteries, ensuring correct polarity.
Inaccurate readings (Moisture/pH)	Soil is too dry; probe not fully inserted; probe is dirty; testing liquid directly.	Water soil and wait 10 mins; ensure probe is 4 inches deep; clean probe thoroughly; do not test liquids.
Device not turning on	Batteries are dead or not installed; device malfunction.	Check and replace batteries; if problem persists, contact customer support.
Display shows 'L' for Light	Insufficient light detected.	Ensure the light sensor on top of the device is not obstructed and is exposed to light.

## 9. SPECIFICATIONS

Feature	Detail
Model Number	CTY
Functions	Soil Moisture, Soil pH, Soil Temperature, Sunlight Intensity
pH Range	3.0 - 9.0
Temperature Range	0°C to 97°C (32°F to 197°F)
Light Intensity Range	0 - 9999 Lux
Power Source	4 x AAA 1.5V Batteries (not included)
Product Dimensions	Approximately 2.36"W x 12.6"H (6cm W x 32cm H)
Item Weight	120 Grams (4.23 ounces)
Color	White
Manufacturer	cytotech

## 10. WARRANTY AND SUPPORT

YAMRON products are designed for reliability and performance. For warranty information or technical support, please refer to the contact details provided with your purchase or visit the official YAMRON store on Amazon.

For further assistance, you may contact the seller, Cytotech, through the Amazon platform.

We are committed to providing customers with satisfactory service. If you have any dissatisfaction with the product, please contact us.