

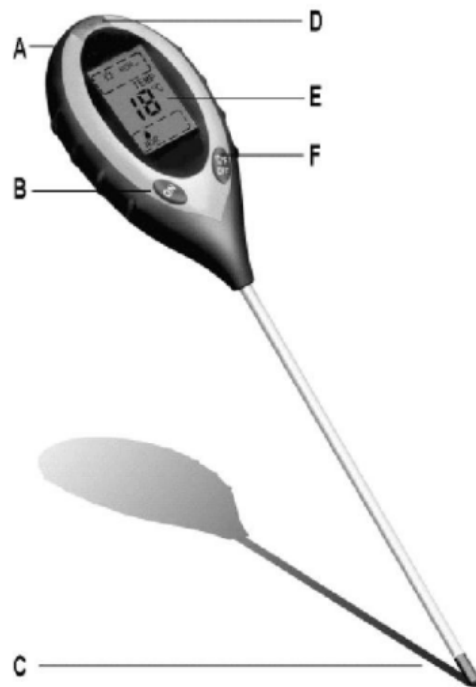
4-in-1 pH and Moisture Meter with LCD Display



Overview

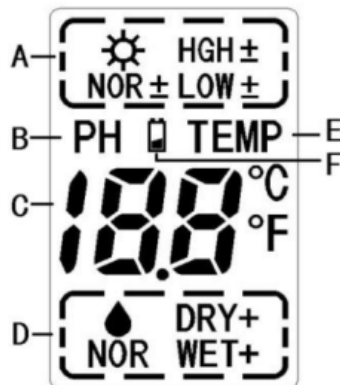
AMT-300 4 in 1 soil survey instrument can test moisture of soil, PH value, temperature and environment sunlight intensity using a probe with a length of 200mm. The unit can easily display various readings with an oversized LCD.

The unit also has low battery indication and auto power off function. It is saving time, energy, and high efficiency. The unit assures quality of flowers and grasses planting and garden virescence.



- A. PH/TEMP KEY-----mode switch: Set the mode for PH value, temperature or moisture.
- B. ON KEY-----press the key to start the unit.
- C. TEST PROBE-----can test PH value, moisture and temperature.
- D. LIGHT SENSOR WINDOW-----can induce sunlight intensity of measured environment.
- E. LCD DISPLAY SCREEN
- F. °C / °F OFF KEY-----temperature unit switch/power off key: under temperature mode, press the key to select temperature unit as °C or °F (original temperature unit: °C). Keep pressing the key for about 3 seconds to power off.
- G. PROTECTING BUSHING--- Please take the protecting bushing away when using the test probe. Put on the protecting bushing when it is not in use to protect the test probe.

Illustration of display screen



A. Sunlight intensity display area-----9 levels: LOW-, LOW, LOW+, NOR-, NOR, NOR+, HGH-, HGH, HGH+, each increasing in amount and quality. LOW- signifies an extremely dim environment. HGH+ signifies an extremely bright environment.

B. PH function display

C. PH or temperature value display-----It shows 3.5 to 9.0 for PH value and -9°C to +50°C(16°F to 122°F) for temperature. “Lo” or “HH” indicates the value is out of the measurable range.

D. Moisture display area-----5 levels: DRY+, DRY, NOR, WET, WET+, each increasing in wetness. WET+ signifies an extremely wet environment while DRY+ signifies an extremely dry environment.

E. Temperature function display.

F. Low battery display-----The symbol will display on the LCD continuously when the battery is low.

How to use

Please install one 9 volt battery before use.

Battery installation

Open the battery compartment door on the back of the tool and plug one 9 volt block battery onto the battery connector. Put the battery back to the compartment and close the door.

Operation guide

1. Operation for sunlight measurement:

- Press the ON button to start the unit.
- Point the light sensor window toward the max light source.
- The current light intensity will be shown on the LCD.

2. Operation for PH value:

- Switch the PH/TEMP button on the back of the unit to PH position.
- Push the probe down as vertically as possible into the soil which needed to be tested. Do not push the probe too near the stem to avoid damage to the plant's root.
- Press the ON button to start the unit.
- The PH value of the tested soil will be displayed on LCD.
- Take several readings to confirm your findings.

Tips:

1. Insert the probe straight up and down, about halfway between the plant stem and the edge of the pot. For pots over 12" in diameter, position the probe about a third of the way between the stem and the edge of the pot. For a deep pot, insert the probe more deeply aiming for where the heaviest root concentration is likely to be.
2. Please softly push the probe into soil to avoid damage to the probe.
3. If the tested soil is extremely dry or too nutrient and can't be tested for PH value, the user should sprinkle some water into the soil. Test again after half an hour.
4. Moisture measurement:
 - Switch the PH/TEMP button on the back of the unit to TEMP position.
 - Push the probe down as vertically as possible into the soil. Do not push the probe too near the stem to avoid damage to the plant's root.
 - Press the ON button to start the unit.
 - Moisture of the tested soil will be displayed on LCD.
 - Take several readings to confirm your findings.

Tips:

1. Insert the probe straight up and down, about halfway between the plant stem and the edge of the pot. For pots over 12" in diameter, position the probe about a third of the way between the stem and the edge of the pot. For a deep pot, insert the probe more deeply aiming for where the heaviest root concentration is likely to be.
2. Please softly push the probe into soil to avoid damage to the probe.


Temperature of the soil measurement

- a. While testing moisture, the temperature of the soil will be displayed on LCD at the same time.
- b. Press °C/°F OFF button to set the unit of temperature is °C or °F.

Tips: If the user doesn't push the probe into soil, the current environment temperature will be displayed on the LCD.

Interpret environment sunlight intensity reading:

Appropriate light does well in plant growth (Some plants need more light than others). The unit has graduated the environment light and display according to intensity, which can offer reference for your plant's growth. Here is the list:

								
Increase in amount and quality of light								
LOW-	LOW	LOW+	NOR-	NOR	NOR+	HGH-	HGH	HGH+
very	low	much	slightly	normal	slightly	much	high	very


Interpretation of ph values of the soil:

Extremely acid or alkaline is an important factor for restricting plant growth and features. Most plants can't grow in soil which is extremely acidic or alkaline. By testing your soil, the user can choose plants with the correct PH or adjust PH more accurately, effectively and economically.

Operation tips

- The unit will be automatically off after 5 minutes, disabling electricity.
- The unit only can be used in soil, please don't place the probe into water or other solutions.
- Don't leave the probe in the soil longer than necessary to avoid the possibility of damage to the probe.
- Don't bend the probe.
- Don't use the probe to break up the soil.
- Don't put the probe near metal objects and be sure to keep the probe away from metal objects.
- Wipe the probe clean and dry before taking another test reading and after use.
- Before testing, please lightly shine 4" - 5" (10-12cm) of the probe and any oxides that may have formed on the surface of the metal.
- Ensure that the probe is wiped clean and the protecting bushing is put on the test probe before storing in order to avoid the oxidation of the probe.
- When the unit is withdrawn from the soil, remember not to grasp the probe.

Troubleshooting

- A. Low battery: “” icon will be displayed on LCD, please replace the new battery.
- B. Out of range, the PH value of the unit is 3.5 to 9.0 and -9°C to +50°C for temperature.
- C. Stones, organic matter had touched the probe, please wipe again and test another place.
- D. There are other metal tablets that have formed on the surface of the metal after being wiped.
- E. Probe is too close to the side and/or the bottom of the pot.
- F. Haven't cleaned the probe before the test.
- G. The sample area is too dry.
- H. The soil around the probe isn't even.
- I. Soil or potting soil is tested too soon after re-potting.
- J. There is houseplant fertilizer or tablet stick near the probe.
- K. Damaged probe.

Cautions

- Handle with care and do not let the unit drop down.
- Do not disassemble the unit to avoid failure.
- Don't place the unit with the toolbox.
- Avoid dust and water, which may stain the unit.
- Do not store the unit above 50°C.
- Clean the unit with soft fabric.
- Remove the battery when not in use for an extended period of time.

Technical specifications

Name - 4 in 1 soil survey instrument

Test objects - Sunlight, moisture, PH value, temperature

Test range:

- sunlight (9 levels) - LOW-, LOW, LOW+, NOR-, NOR, NOR+, HGH-, HGH, HGH+
- moisture (5 levels) - DRY+, DRY, NOR, WET, WET+
- PH value (12 levels) - 3.5-9.0 (display resolution 0.5)
- temperature - -9°C~+50°C (16°F~122°F) (display resolution 1°C/1°F)

Power supply - One 9V block battery

Automatic off - The unit will be automatically off after 5 minutes disabling.

Operating temperature - +5°C~+40°C

Size:

- Main unit: 122mm×63mm×36mm
- Test probe: Φ5mm×200mm

Weight - About 70.5g (battery not included)