



## Operating Instructions for the

### **Accurate pH 7 — Soil pH and Soil Moisture Meter**

**Specifications: Accurate pH 7**

**pH Range:** 3.0-8.0 pH.

**Moisture Range:** 1-8 degrees of moisture present. #1 representing wet, #8 representing dry.

**Resolution:** 0.2 pH.

**Accuracy:**  $\pm 0.2$  pH - Suitable for Agricultural Field and Classroom Experiments.

**Operating Temp:** 45-120 Degrees Fahrenheit.

**Calibration:** Remove oxidation and oils from the metal rings by light polishing.

**Power supply:** None – No batteries required

**Service:** No serviceable parts inside. Do not disassemble. Manufacturer repair only.

**Warranty:** Replacement or Repair Warranty: 6 months for defective parts and materials from date of manufacture. Proof of purchase required. Warranty does not cover submersion in liquids, storage in high humidity locations or abuse.

Waterproof to body only. Avoid splashing water or rainfall on or around the body and moisture button. Not for use in the rain.

#### **Operating Instructions**

1. Before using the meter you must lightly polish the entire electrode to remove any oxidation or oils present before first use or after storage. Use the enclosed polishing pad or a similar pad found at most department stores. Scouring powder may be used to clean the electrode should it become highly oxidized or oily. Filing or grinding is not needed and will void the warranty.
2. Make sure the soil has been moist for 25-30 minutes before testing. This will assure that the soil particles can transfer the proper electro conductivity charge to the meter and all soluble elements and compounds that could change the pH of the soil are present and in reaction with one another. Soil pH may change after the addition of fertilizer. When added, organic fertilizers have the tendency to create less pH change to the soil. Chemical fertilizers have the tendency to create more pH change to the soil when added. Wet and dry soils will make it harder to determine pH.





3. Insert the meter directly into the soil as pictured. Break up hard soils into small particles before attempting to use the meter, as the meter is not intended or manufactured to forcibly penetrate hard soils. Make sure that the soil is above the brass colored ring on the meter's electrode but below the meter's moisture button. Also, make sure that the soil is compacted around the rings to eliminate any air pockets and insure the meter's rings are in full contact with the soil. After about ten minutes of contact with the soil, the meter will show the soil's pH. You will notice that the soil's pH will change at different depths and this is normal and expected. The meter has 8 degrees of moisture. #1 representing wet and #8

representing dry. To best use this feature, first determine the ideal moisture content of your soil for the plant species you are growing. Insert the meter into the soil and make note of which number the meter is displaying. Press the button to measure the soil's moisture content. This number will represent your target's bull's eye and will help you determine future watering.

4. After each use wipe the meter down with a clean cloth to remove dirt, oil and moisture. Clean and store the meter in a low humidity environment. Gently remove all oxidization and oils from the metal rings before your next test.

