4 in 1 Digital Soil Meter User Manual



Instructions:

Install the battery before use, remove the probe protective sleeve

1, Light measurement

- A. Press the [ON] button to turn on the instrument
- B. Alignment highest point source light sensor window.
- C. The current intensity of the light will be displayed on the LCD monitor.

Note: Please do not block light or create a shadow to the light sensor

2, PH measurement range

- A. The back of [the PH / deg. C] buttons to push PH position.
- B. Probe vertically into the soil that needs to be tested as soon as possible.
- C. Press the [ON] button to start the measurement.
- D. PH value test will be displayed on the LCD
- E. Multi-measurement needs time to draw firm value.

Note:

- 1. Vertically insert probe edge in the middle of the plant stems.
- 2. Gently push into the soil, to avoid damage to the probe.

3. If the soil is too dry or fertile measurement cannot be done accurately, the user can sprinkle a little water, half an hour before measuring again.

3, Moisture measurement

- A. On the back of [the PH / °C] push button to position the °C.
- B. Insert vertically into the soil.
- C. Press [ON] key to start the measurement.
- D. tested soil moisture values will be displayed on the LCD screen.
- E. Multi-measurement needs time to draw firm value.

4, Temperature measurement

A. When measuring humidity at the same time, soil temperature will be simultaneously displayed on the LCD screen.

B. Press [°C / °F OFF] button to set the humidity display mode °C or °F.

<u>Note:</u> If the user does not put the probe into the soil, it shows the exact temperature of the external space environment.

Light Intensity Table

LOW -	LOW	LOW +	NOR -	NOR	NOR +	HIGH -	HIGH	HIGH +
Slightly Low	Low	Very Low	Slightly Normal	Ordinary	Very Normal	Slightly High	High	Vey High

pH Value Table

Increased acidity						Neutral		Increased alkalinity					
LOW	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	HIGH

Humidity Table

DRY +	DRY	NOR	WET	WET +
Very Dry	Dry	Ordinary	Wet	Very Wet



Soil pH

Soil pH is also known as "soil reaction." It is acid-base reaction of the soil solution depending on the concentration of hydrogen ions in the soil solution to pH values. A solution of pH = 7 is neutral; pH of less than 7, the reaction is acidic; pH greater than 7 is alkaline reaction. Soil pH can generally be divided into several stages:

<4.5 highly acidic 4.5-5.5 strongly acidic 5.5-6.5 acidic 6.5-7.5 neutral 7.5-8.5 alkaline 8.5-9.5 strongly basic > 9.5 strong alkaline

Soil pH has a great effect on soil fertility and plant growth. Effect of pH on the effectiveness of soil nutrients is also great; for example, a neutral soil is rich in phosphorous while an alkaline soil is rich in trace elements such as manganese, copper, zinc, etc. In agricultural production, should pay attention to soil pH, and actively take measures to adjust.

Soil pH adjustment:

1, To improve acidic soil

often use lime. Achieve active acid, latent acid, and the purpose of improving soil structure; also available in purple shale powder, fly ash, ash and so on.

2, neutral and calcareous soil acidification Artificial

Flowers and Plants available sulfur powder (50g / m^2) or ferrous sulfate (150 g / m^2), can reduce the pH by 0.5 - 1 pH unit. Alum fertilizer can also be irrigated system.

3, alkaline soil

applied plaster, but also with phosphogypsum, ferrous sulfate, sulfur powder, acidic weathering coal.