Bluetooth Soil Multi-Parameter Tester

蓝牙土壤多参数检测仪

Soil Monitor

App guide for iPhone and Android

iPhone 与 Android 使用教程

User Manual | Bluetooth Version V2.0

1. Product Overview | 产品介绍

This Bluetooth soil tester works with the Soil Monitor app to read soil humidity, temperature, conductivity, pH, nitrogen, phosphorus, potassium and fertility.

Measured Data

Humidity 湿度	%	Temperature 温度	C
Conductivity 电导率	us/cm	pH 酸碱度	pH
N/P/K 氮磷钾	mg/kg	Fertility 肥力	mg/kg

Before Use | 使用前

Charge or install the battery according to the product model. Keep the probe clean and dry before storage. The app does not need account login.
请按产品型号安装电池或充电。收纳前保持探针清洁干燥。App 无需注册账号。

2. Quick Start | 快速开始

1. **Power on the tester | 打开设备**
   Install battery or turn on the power switch. Keep the tester close to the phone within 1-3 meters.

2. **Install Soil Monitor | 安装 App**
   iPhone: download from App Store. Android: install the seller-provided Soil Monitor APK or scan the package QR code.

3. **Allow Bluetooth | 允许蓝牙**
   When the permission dialog appears, tap Allow. The app uses Bluetooth only for connecting the tester.

4. **Insert probe | 插入土壤**
   Insert all five probes fully into soil. Avoid stones, plastic, roots and dry leaves.

5. **Connect and read | 连接读取**
   Open Soil Monitor, select the device, then tap Start Auto Read to view real-time data.

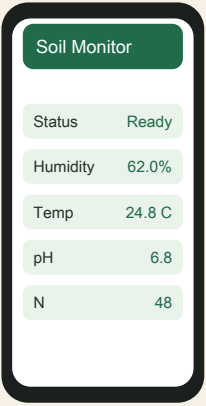
3. iPhone App Guide | iPhone 使用教程

1. **Install from App Store**
   Search Soil Monitor in App Store, then install it. If your seller provides a QR code, scan it to open the download page.

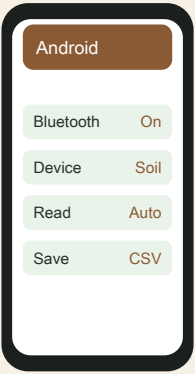
2. **Turn on Bluetooth**
   Enable Bluetooth in iPhone Settings. Open the app and allow Bluetooth permission when prompted.

3. **Select device**
   Tap Select. Choose a device named Soil, VG, VG7439 or the name shown on your product label.

4. **Read data**
   After Connected/Ready appears, tap Start Auto Read. Wait until the values become stable.



4. Android App Guide | Android 使用教程



1

Install APK or store app

Install Soil Monitor from the seller-provided APK, download page or official store link. If Android warns about unknown apps, allow this source only when the file is provided by your seller.

2

Grant permissions

Allow Bluetooth/Nearby Devices permission. Some Android versions may also ask for Location permission for BLE scanning.

3

Connect tester

Keep the tester near the phone. Open Soil Monitor, tap Select, then choose the detected soil tester.

4

Save or export

Tap Save after data is stable. Use History to view records and export the CSV file.

5. Soil Monitor Operation | App 操作

Select

Scan nearby Bluetooth soil testers and connect to the selected device.
扫描附近蓝牙土壤检测仪并连接。

Start Auto Read

Read data repeatedly after connection. Tap Stop Auto Read to pause.
连接后连续读取数据，可随时停止。

Save

Save the current reading to local history.
将当前数据保存到本机历史记录。

History

View saved records and export CSV for analysis.
查看历史记录并导出 CSV。

Tip: For the first test, compare the reading with known soil or repeat measurement 2-3 times to confirm stable data.
提示：首次使用可在同一土壤重复测量 2-3 次，确认数据稳定。

6. Measuring Method | 测量方法

1. Insert all probes fully into the soil. Do not shake the tester while reading.
2. Avoid stones, plastic bags, dry leaves and hard roots. Make sure soil contacts every probe.
3. For root-zone measurement, dig to the root depth and insert the probe sideways.
4. Wait 3-5 seconds for most values. pH may need 3-5 minutes to become stable.
5. For N/P/K and conductivity, soil moisture should preferably be above 40%. Very dry soil may produce low readings.
6. If soil is too dry, add a small amount of water, mix evenly, wait, then measure. Do not turn soil into mud.

7. Accuracy Notes | 准确测量注意事项

1. Before first use, gently rub the probes in soil several times to remove possible oil residue.

2. Do not measure immediately after fertilization. Many fertilizers need time to dissolve or decompose.

3. After rain or watering, nutrients may move with water. Surface soil readings can be higher or lower than root-zone readings.

4. Soil moisture here refers to mass water content. For example, 20% means 200 g water in 1000 g soil.

5. The reference table is for agricultural guidance only and cannot be used as a legal measurement basis.

8. Reference Data | 参考数据

Parameter 参数	Suitable Range 适宜范围
Conductivity 电导率	200-1500 us/cm
pH 酸碱度	5.0-7.8
Nitrogen 氮	25-100 mg/kg
Phosphorus 磷	30-90 mg/kg
Potassium 钾	40-150 mg/kg
Fertility 肥力	100-800 mg/kg

Temperature and humidity requirements vary greatly among crops. Please consult local agronomists or crop-specific planting standards.
不同作物对温度、湿度和养分要求差异较大，请结合当地种植标准或专家建议判断。

9. Troubleshooting | 故障排查

1. **No device found**
   Make sure the tester is powered on and close to the phone. Turn Bluetooth off and on, then scan again.

2. **Cannot connect**
   Disconnect from other phones first. Restart the tester and app, then reconnect.

3. **No data/timeout**
   Check battery power. Keep the phone within 1-3 meters. Reconnect and tap Start Auto Read again.

4. **Data is unstable**
   Insert the probes deeper, avoid hard objects, and wait until readings stop changing.

5. **Android cannot scan**
   Allow Nearby Devices/Bluetooth permission. Some phones also require Location permission for BLE scanning.

10. Care and Storage | 维护保养

1. Clean the probe with a soft damp cloth after use. Do not scrape the probe with hard tools.

2. Do not immerse the host body in water. Keep the connector, battery area and electronics dry.

3. Store the tester in a dry place away from strong sunlight, corrosive fertilizer and children.

4. Remove the battery if the tester will not be used for a long time.

5. Do not bend the probes or use the tester to pry hard soil or stones.

11. Support | 技术支持

Download / 下载

iPhone: Search Soil Monitor in App Store or scan the iOS QR code provided by your seller.

Android: Install Soil Monitor from the seller-provided APK/download QR code.

Please replace this page with your official QR codes before printing if needed.

Contact Us

If you encounter any problems during installation or use, please contact your purchase channel. We will provide technical support as soon as possible.

如安装或使用过程中遇到问题，请通过购买渠道联系我们，我们会尽快提供技术支持。

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure statement

The device has been evaluatec to meel general RF exposure requirement. The device can be used in portable exposure condition without restriction.