Manual of Portable Soil Detector

JXBS-3001-SCY-PT2

Ver1.0

Chapter 1 Product Introduction

1.1 product description

The portable soil detector developed and designed by our company adopts the latest digital integrated circuit technology and international detection technology to design a brand new intelligent handheld detector.

The detector uses a digital tube backlight display, which can display the readings in real time, and can still read clearly under low light conditions. The detection circuit designed with the digital chip of an international manufacturer can achieve very high sensitivity and excellent repeatability. The shell is made of industrial-specific high-strength composite plastic, which has high strength and good hand feeling, and has the functions of waterproof, dustproof and explosion-proof.

Improve the soil through the detected data, so that the crops are in the best living environment, thereby increasing the yield, and greatly facilitating the customer's systematic assessment of the soil condition.

1.2 Features

➢ Plug and measure, no reagents required
➢ Backlit display, easy to operate
➢ Multi-data measurement to accurately grasp soil fertility
➢ 3 inch TN LCD display, with backlight, can be read clearly in low light

1.3 Product parameter

parameter	Technical index
Power supply	3 section 7# battery power supply
Display method	3 inch TN LCD display
Moisture measurement range	0-100%
Moisture accuracy	0-53% (±3%)/53-100% (±5%)
Moisture resolution	0.1%
Temperature measurement range	-20℃-60℃
Temperature accuracy	±0.5℃
Temperature resolution	0.1℃
pH measurement range	3-9pH
NPK range	0-1999mg/kg (mg/L)
NPK accuracy	±2%FS
NPK resolution	1mg/kg (mg/L)
Conductivity measurement range	0-10000us/cm
Operating temperature	-20℃~50℃
Working humidity	0~90% (relative humidity), non-condensing

Note: This is the details of all the measurable parameters of this series of products, please refer to the actual purchased product.

Chapter 2 product description

2.1 Product List

name	Quantity
Soil detector	1 set
Certificate/Warranty Card	1 serving

2.2 Dimensions and operation panel

As shown in the figure below, the external dimension of the equipment is 170*78*29mm (length, width and height), and the dimension of the external soil equipment is 142*45*15mm. The length of the steel needle is 70mm.

There is a 3-inch TN LCD display on the front of the device, as well as 6 operation buttons, namely, the on button, the Menu button, the up button, the down button, the SCAN (OK) button and the HOLD(return) button.

Chapter 3 System menu and settings

3.1 Button function description

button	Description	Operation method
power button	Used to turn on and off	Long press
menu	Used to call up the system configuration menu, or return to the main interface in the system configuration menu.	Long press
Up key	In the menu, it is used to page up, or to decrease the value, and to switch the soil parameters displayed in the main interface.	Short press
	When inputting a value, switch to input one, ten, hundred thousand digits, and switch the soil parameters displayed on the main interface	Long press
Down key	Used in the menu to scroll down or increase the value.	Short press
	Switch to input one, ten, hundred thousand place when inputting value	Long press
SCAN (OK) button	Used to save the modified value, or enter the next level of configuration menu	Short press
HOLD (return) key	Used to return to the previous configuration menu without saving the modified value	Short press
	Turn on the backlight	Long press

3.2 Switch machine

Press and hold the power button for 1 second, the light on the upper right corner of the button board will flash 2 times, the device is turned on, and there is probe warm-up time when the device is turned on, the screen will display 0, and the gas value will be displayed after the warm-up;

When the device is turned on, press and hold the power button for 3 seconds, the light on the upper right corner of the keypad will be on and the device will shut down.

3.3 Turn on the backlight

Long press the HOLD (return) key to turn on the backlight, and then long press again to turn it off.

3.4 Switch display parameters

In the main interface, short press the up or down key to switch the displayed soil parameters, the order is generally PH, conductivity, nitrogen, phosphorus, potassium.

3.5 Configuration menu introduction

Long press the menu button to enter the configuration menu. At this time, the interface no longer displays the value, but the words ConF 001. At this time, enter the configuration menu. Press the up or down key to select different configuration sub-menus.

Configuration menu	Introduction	Set function
ConF 000	Automatic shutdown time	Modify the time of automatic shutdown, in seconds

3.5.1 Auto shutdown setting

In the ConF 000 page, short press the SCAN (OK) key to enter

The option parameters are shown in the following table:

Configuration submenu	Introduction	range
ConF 000	Automatic shutdown time setting	Adjustable