Electromagnetic Radiation Detector

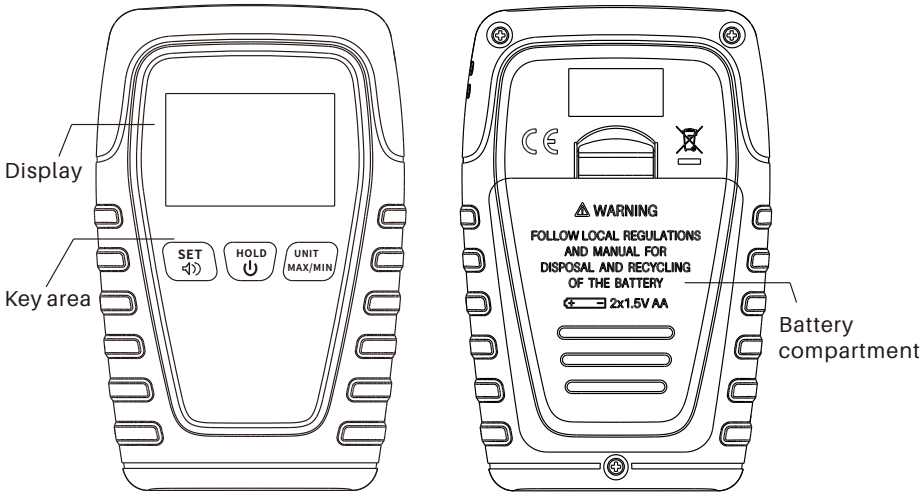
User Manual v1.0.7

1. Introduction

The electromagnetic radiation detector is an instrument that measures the intensity of electromagnetic radiation in the environment. It is widely used in electronic products, household appliances, signal base stations and other fields, and has become an indispensable protective equipment in life.

2. Product Description Diagram

2.1 Exterior



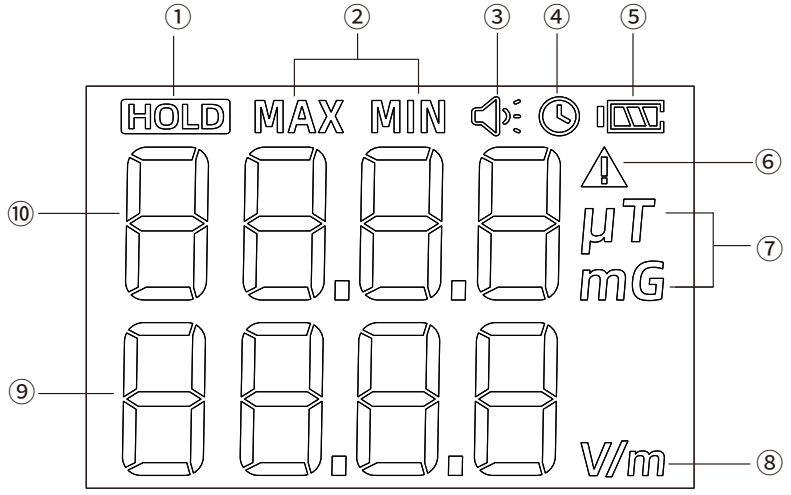
Key Function

"SET 🔊" key: Enter menu selection, buzzer switch, digital movement

"HOLD ⏻" key: Power on/off, data hold, menu selection

"UNIT MAX/MIN" key: Magnetic field radiation unit switching, numerical addition, maximum/minimum mode

2.2 LCD display



①Data retention
②Maximum value, minimum value mode
③Buzzer alarm switch status
④Automatic shutdown switch status
⑤Battery power prompt
⑥Alarm status
⑦Magnetic field radiation unit
⑧Unit of electric field strength
⑨Electric field radiation numerical display
⑩Magnetic field radiation numerical display

3. Battery Installation Instructions

(1) Insert the battery according to the positive and negative polarity indicators inside the battery compartment.
(2) After installing the battery, please fasten the battery cover to prevent the battery from being ejected.
(3) When the instrument is not used for a long time, be sure to remove the battery and place it properly.

4. Power on and off

(1) Power on: Press and hold the"HOLD ⏻" button to power on, the buzzer will sound for a long time, and the device screen will be fully displayed for about 3 seconds.
(2) Power off: Press and hold the"HOLD ⏻" button to shut down.

5. Backlight

The backlight lights up simultaneously when the button is pressed, and turns off after 15 seconds of no operation.

6. Alarm Sound

Short press the"SET 🔊" key to turn on or off the beep. When the beep is turned on, the status bar will display the beep symbol.

7. Switch Magnetic Field Radiation Unit/Data Refresh Mode

(1) Short press the "UNIT MAX/MIN" key to switch the magnetic field radiation unit, that is, switch between μT and mG.

(2) Long press the "UNIT MAX/MIN" key to switch between maximum value mode, minimum value mode and real-time measurement value mode.

8. Alarm Value Setting

In the main measurement interface, long press the "SET 🔊"key to enter the menu selection interface. You can select ALA1 settings, ALA2 settings, magnetic field radiation clearing (ZER1), electric field radiation clearing (ZER2) settings and OFF settings by short pressing the"HOLD ⏻"key. First, you will enter ALA1 to set the magnetic field radiation alarm value. After saving the settings, you will enter the next setting ALA2, and so on. After the OFF setting is completed, you will return to the measurement interface.

The steps to set the alarm value are as follows:

Step 1: "ALA1 (ALARM1)" magnetic field radiation alarm value setting, long press the"SET 🔊" key to enter the setting, short press the"SET 🔊"key to move the selected digit, the selected digit will flash; short press "UNIT MAX/MIN " key can adjust the size of the flashing digits, and set it from 0 to 9 according to the selected number;

Step 2: Set the ALA1 alarm value, short press the"HOLD ⏻"key to save the settings and enter the "ALA2 (ALARM2)" electric field radiation alarm value setting. The setting operation is the same as the first step;

Step 3: After completing the settings, you can short press the"HOLD ⏻ "key to enter the next option setting or long press the"SET 🔊"key to return to the main measurement interface.

Note: The setting range of the magnetic field radiation alarm value is 0.0~200.0μT, and the default magnetic field radiation alarm value is 0.4μT; the setting range of the electric field radiation alarm value is 0~2000V/m, and the default electric field radiation alarm value is 40V/m.

9. Clear Settings

Clearing conditions: The clearing setting needs to be set in an environment where the influence of magnetic field radiation/electric field radiation is small, that is: the surrounding magnetic field radiation value is not greater than 0.1μT, and the electric field radiation value is not greater than 10V/m.

(1) Magnetic field radiation clearing setting

After entering this setting, the real-time value of magnetic field radiation is displayed at the top of the screen, and ZEr1 is displayed at the bottom. When short pressing the "SET 🔊 "or"UNITMAX/MIN" key, the value status switches to the selected state and flashes. Short press the"HOLD ⏻ "key to save the settings after meeting the conditions and switch to the next setting.

(2) Electric field radiation clearing setting

After entering this setting, the real-time value of the electric field is displayed at the top of the screen and ZEr2 is displayed at the bottom. The setting method is the same as the magnetic field radiation clearing setting.

Note: When entering the settings, the settings are not selected by default, and the values do not flash. When you short press the"HOLD ⏻"key, no modifications are made, and the next menu jumps.

10. Auto Power off Setting

The instrument will automatically shut down after 5 minutes without any key operation. The instrument can set the

automatic shutdown time from 0 to 99 minutes. The setting operation is the same as step 1 of setting the magnetic field radiation and electric field radiation alarm values. After the setting is completed, press"HOLD ⏻"briefly to save the setting value and return to the main measurement interface. When the instrument setting value is 0, the interface displays OFF, and the instrument will not shut down automatically at this time.

11. View Instrument Version Number

When turning on the full LCD display, short press the"SET 🔊" key and the "UNIT MAX/MIN" key at the same time to display the instrument version number.

12. Battery Status

When the instrument's battery level displays" ▭ ", please replace the battery in time.

13. Reset

When the instrument version number is displayed on the screen, press and hold the "UNIT MAX/MIN" key and the interface will display "----" to restore the factory settings.

14. Technical Parameters

Measuring range	Magnetic field: 0.00~200.0μT; Electric field: 0~2000V/m
Resolution	Magnetic field: 0~19 (0.01μT) 20~200 (0.1μT); Electric field: 1V/m
Test bandwidth	Magnetic field: 30Hz~300Hz; Electric field: 5Hz~3500MHz
Accuracy	Magnetic field: ±5% (50μT~200μT)
Sampling time	About 0.2 seconds
Alarm mode	Sound/Light alarm
Power supply type	2 AA dry batteries
Working environment	Temperature: 0~50℃; Humidity: <80%RH
Protection level	IP40
Dimensions	104*67*31mm
Material	ABS