Multifunctional Wall Detector

NF-518

User manual

Please read the manual carefully before use　　VER：V1

Welcome to use the multi-function measuring instrument. Please be sure to read this manual and operating instructions in detail, and be able to operate in accordance with manual method , so that the best functions of the instrument can be exerted. Please keep the operating manual properly.

探测区域

Note: The human body is a conductor, and touching the detection area with your hands will affect the detection depth of the instrument.For the best detection effect, please use the instrument according to the schematic diagram
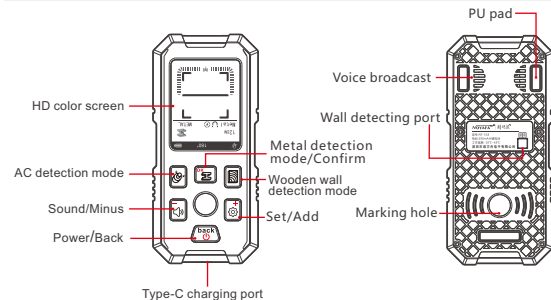
(1) Safety Warning

1. Before using this product, please be sure to carefully read all the safety matters and operating instructions . Failure to follow these safety matters and operating instructions may result in laser radiation injury, electric shock, or personal injury.

2. To repair the instrument without authorization, if the instrument is damaged, please contact your local dealer.

3. Electromagnetic radiation may cause interference to other equipment and devices. (Such as: pacemakers or hearing aids and other medical devices).

　✿ Do not use this instrument in a flammable or explosive environment.

　✿ Do not use this instrument near medical equipment.

　✿ Do not use this instrument on airplane.

4. Please dispose of discarded instruments in accordance with your local laws and regulations.
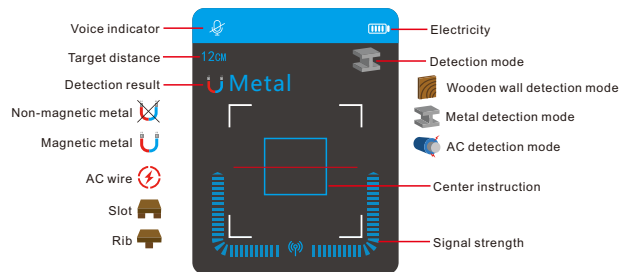
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(2) Product overview

This instrument can detect metals (rebars, copper pipes) hidden in walls, ceilings and floors, live wires, Rib and Slot position under wooden walls, etc. It is widely used in interior decoration, home installation and other industries, allowing various construction safely proceed.

(3) Button and function description

HD color screen

AC detection mode

Sound/Minus

Power/Back

Type-C charging port

PU pad

Voice broadcast

Wall detecting port

Metal detection mode/Confirm

Wooden wall detection mode

Set/Add

Marking hole

(4) Description of UI and icon

Voice indicator

Target distance

Detection result

Non-magnetic metal

Magnetic metal

AC wire

Slot

Rib

12cm

Metal

Electricity

Detection mode

Wooden wall detection mode

Metal detection mode

AC detection mode

Center instruction

Signal strength

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(5) Operating instructions

1. Power

Power on, when the instrument is off, press and hold for 1 second to power on.

Power off, when the instrument is turned on, press and hold for 1 second to turn off.

2. Metal detection mode

Boot into metal detection mode by default. In the non-metal detection mode, short press the to enter the metal detection mode; it has the functions of locating metal, depth indication, and identifying metal properties. It is used to detect magnetic and non-magnetic metal, and not affected by the characteristics of the wall.

Step 1: Properly hold the instrument close to the area to be measured, and move the instrument slowly in the area to be measured. When the instrument detects a magnetic metal or non-magnetic metal, the screen displays "metal", attribute icon, strength of the received signal, and target metal distance instrument depth information. When the sound is on, the instrument will make a "di" sound after it shows "metal". The closer the detected target metal is to the instrument, the stronger the signal, and the more rapid of the sound.

Step 2: Center judgment. Move the instrument slowly, when the signal is stronger, it means the detected target metal is closer to the sensing area of the instrument. When the signal reaches a certain intensity or the strongest, the center mark of the screen base lights up, and the target metal is positioned below the sensing area of the instrument.

*After detecting the metal, you can also move slowly through different directions and use the signal bar to become stronger to weaker to stronger to locate the target metal position.

3. AC detection mode

In the non-AC detection mode, short press the to enter the AC detection mode. This mode is only suitable for scanning live wires.

Properly hold the instrument close to the area to be tested. If found the wired wire, live icon and the received signal strength will appear on the display. When the sound is turned on, the "AC" will be broadcast followed by a "di" sound; there must be more detect the change location back and forth in order to determine the location of the live wire. The closer the instrument is to the live wire, the stronger the signal and the more rapid of the sound.

4. Wooden wall detection mode

In the non-wood wall detection mode, short press the [ ] to enter the wooden wall detection mode; the wooden wall detection mode is mainly used to detect the uniformity of the wood wall, such as identifying hidden rib and slot position. There are two operation modes for wooden wall detection: Automatic calibration detection mode and Manual calibration detection mode.

Automatic calibration detection mode

Step 1: Place the instrument close to the target surface to be detected according to the hand-held schematic diagram, and the instrument will perform automatic calibration. After the calibration of the instrument is completed, move the instrument slowly in the area to be measured. When the material change or others such as rib or slot position is detected, The screen displays information such as "RIB" or "SLOT" and the strength of the received signal. When the sound is turned on, the instrument will emit a "didi" sound after broadcasting "RIB" or "SLOT". when the sensing area of the instrument is closer to rib or slot position and material changes or others. The stronger the sound, the faster the "Didi" sound.

Step 2: Center judgment, Move the instrument slowly, when the signal reaches a certain intensity, it means it has reached the target center position, and the center mark of the screen lights up.

Step 3: Lift the instrument to terminate the scanning detection and enter the interface to be calibrated. Close to the surface of the detected target again, recalibration and detection can be performed.

Manual calibration detection mode

Enter the wooden wall detection mode, the default is the automatic calibration detection mode. After close to the surface of the detected target, if the color of the detected target surface is dark and cannot be calibrated, short press the [ ] to enter the manual calibration detection mode to force the instrument to calibrate. After the calibration is completed, slowly move the instrument in the area to be measured and scanning detection. In the manual calibration detection mode, short press the [ ] again to exit and return to the automatic calibration detection mode.

Note: 1. The principle of wooden wall detection is to distinguish the uniformity of the material between the calibration location area and other detection areas, which is presented in the form of rib and slot position, that is, solid and hollow.
2. If presses the "wood " to enter the manual calibration detection mode process, the hand leaves the sensing area of the instrument quickly.

5. System setting

Short press [ ] to enter the system setting interface, the system setting interface can set the detection sensitivity of the instrument, calibrate the metal detection mode and view the signal version information of the instrument.

Set sensitivity

Short press [ ] [ ] to select the sensitivity setting, short press [ ] to enter the sensitivity setting interface, you can set the sensitivity of the three detection modes separately, in the sensitivity setting [ ] [ ] interface, short press the [ ] to select the setting item, short press to adjust the sensitivity, short press [ ] to return.

Metal detection mode calibration

Large-scale changes in the temperature or humidity of the environment where the instrument is located will cause false alarms in metal detection or shorten the detection depth.

Short press [ ] [ ] to select metal detection mode calibration, short press [ ] to enter the calibration interface, short press [ ] to start calibration, and short press [ ] to exit the calibration interface after the calibration is completed.

Note: When calibrating, please make sure that there is no interference of metal and strong magnetic field around(such as lifting in the air) press the [ ] to calibration. If the calibration process fails, please recalibrate.

About this machine

Short press [ ] [ ] to select About , short press [ ] to enter, and then you can view the instrument model, software version, and hardware version information on this interface. Short press [ ] to exit.

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(6) Product technical parameters

Technical parameter	
Product model	NF-518
Product function	Wall detection function
Product appearance	Two-color mold, tough
Screen type	2.4-inch high-definition color screen, Resolution 240*320
Charging method	Support Type-C charging
Battery type	Polymer lithium battery (390mAh)
Voice broadcast	Live voice broadcast
Product size	63*25*139 （mm）
Product weight	200 （g）
Wall detection function	
Depth measurement	Magnetic metal: 12cm
	Non-magnetic metal: 10cm
	Live (AC) wire: 5cm
	Wood: 3.8cm
Metal detection	Depth value is based on the φ20mm standard steel pipe. Only for reference (Note: The error of the depth indication is for reference only)
Non-metal detection	√
AC detection	√
Automatic shutdown	5 minutes
Operating temperature	0℃~50℃
Storage temperature	-10℃~60℃

(7) Fault code description

Code	Reason	Solution
220	Low battery	Please charge
300	Hardware failure	The instrument still appears after turning off/on many times, please contact your dealer