

# Multifunctional Wall Scanner TH510

Multifunctional wall scanner TH510 features five scanning modes:

- Stud 1/2 in. Scan Mode: Locates the center and edges of wood and metal studs up to 1/2 in. (12 mm) deep
- Stud 1 in. Scan Mode: Locates the center and edges of wood and metal studs up to 1 in. (25 mm) deep
- Stud 1 1/2 in. Scan Mode: Locates the center and edges of wood and metal studs up to 1 1/2 in. (38 mm) deep
- Metal Scan Mode: Detects metal up to 2.36 in. (60 mm) deep
- AC Scan Mode: Detects live unshielded AC wires up to 2 in. (51mm) deep

## Parameter of TH510 wall scanner:

- Green LED light Indication
- Battery Type: 9V battery(6F22)
- Working consumption: <60ma
- Working current: <60ma
- Standby current: <1ua

## 1. INSTALLING THE BATTERY

Push in the battery door tab at the bottom of the tool and open the door. Insert a new 9-volt battery, matching the positive (+) and negative (-) terminals to the battery wire.

Snap the battery into place and replace the door.

**Low Battery Indicator:** The Low Battery Indicator icon displays when the battery level is getting low. It's not sufficient to power the tool for proper operation. Please replace the 9-volt battery with a brand new battery immediately.

## 2. OPERATING TIPS

### 1. Turn the tools on and choose the mode

Press "Mode button" to turn on the tool. Then press it again to choose the Stud 1/2 in mode/ Stud 1 in mode/ Stud 1 1/2 in mode / Metal / AC Mode in sequence.

(Press the power button for more than 5s to to turn it off ).

### 2. Calibrate the tool before every scan

After choose the mode, press and hold the scan button( on the side of the tool) to calibrate this tool. Wait for the reducing bars disappeared and beep to confirm calibration has completed.

For stud/deep mode, put it on the wall where you want to detect to calibrate it ; For the AC/Metal mode, put it in the air to calibrate it.

Note: It is important to wait for the calibration to complete (2-3 seconds) every time before moving the scanner. Please be sure to calibrate before every scanning, or it will cause the inaccurate results

### 3. Scan the wall to locate the stud/metal/ac wires

Hold this tool properly and move it slowly in one direction to obtain the optimum scanning results.

Note:

1. Make sure that the surfaces you scan are flat and have been fully dried out. Humidity, moisture wall or wallpaper will lead to erratic scanning results.

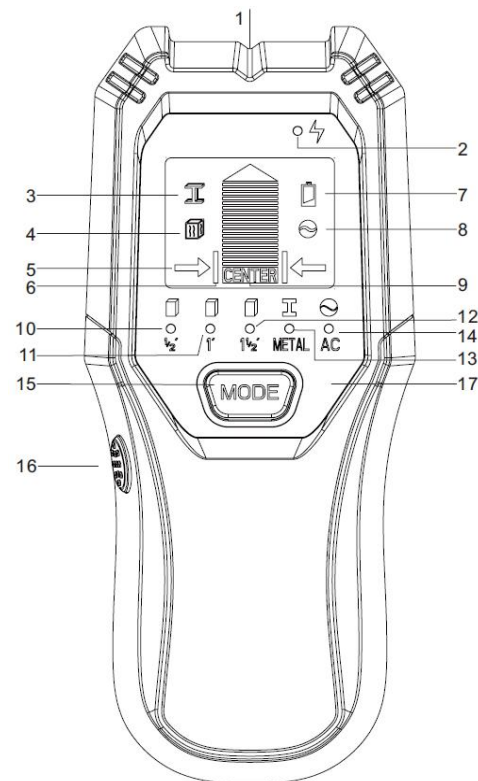
2. Avoid placing your other hand, or any other part of your body on the surface being scanned, which will interfere with the performance of the scanner.

3. Do not rock or tilt or rotate, also avoid pressing too hard when slowly sliding across the surface being scanned.

**NOTE: If the tool didn't work as expected or any other questions, please be sure to contact us at support@tavool.com. We prepared the unboxing/operation video and new replacements for you.**

**We always stand behind our products to offer proper solutions for any problems. And your contacting us is highly appreciated!**

1. The Center Pointing System
2. AC Wire Warning
3. Metal Mode Indication
4. Stud Mode Indication
5. Direction indicator
6. Stud edge indicator
7. Low Battery Indication
8. AC Mode Indication
9. Stud center indicator
10. Stud 1/2 in. Scan mode
11. Stud 1 in. Scan mode
12. Stud 1 1/2 in. Scan mode
13. Metal Scan mode
14. AC Scan mode
15. Power Button & Mode Switch Button
16. Scan Button
17. Battery case (Back of unit)



- Avoid placing your other hand, or any other part of your body, on the surface being scanned. This will interfere with the tool's performance.
- If you're receiving erratic scanning results, it may be a result of humidity, moisture within the wall cavity or drywall, or recently applied paint or wallpaper that hasn't fully dried. While the moisture may not always be visible, it will interfere with the tool's sensors. Please allow a few days for the wall to dry out.
- Depending on the proximity of electrical wiring or pipes to the wall surface, the scanner may detect them in the same manner as studs. Caution should always be used when nailing, cutting, or drilling in walls, floors, and ceilings that may contain these items.
- Please note that studs or joists are normally spaced 16 or 24 in. (41 or 61 cm) apart and are 1 1/2 in. (38 mm) in width. **Anything closer together or a different width may not be a stud, joist, or firebreak.**

**Always turn off power when working near electrical wires.**

## SCANNING DIFFERENT SURFACES

**Wallpaper:** Multifunctional wall scanner TH510 functions normally on walls covered with wallpaper or fabric, unless the materials are metallic foil, contain metallic fibers, or are still wet after application. *Wallpaper may need to dry for several weeks after application.*

**Freshly painted walls:** May take one week or longer to dry after application.

**Lath & plaster:** Due to irregularities in plaster thickness, it is difficult for Multifunctional wall scanner TH510 to locate studs in Stud modes. Change to Metal Scan mode to locate the nail heads holding wood lath to the studs. If the plaster has metal mesh reinforcement, Multifunctional wall scanner TH510 may be unable to detect through that material.

### Extremely textured walls or acoustic ceilings:

When scanning a ceiling or wall with an uneven surface, place thin cardboard on the surface to be scanned and scan over the cardboard in Stud 1 1/2 in. scan mode. If irregular scanning results are received, switch to Metal Scan mode to locate nails or drywall screws that line up vertically where a stud or joist is positioned.

**Wood flooring, subflooring, or gypsum drywall over plywood sheathing:** Use Stud 1 1/2 in. scan mode and move the tool slowly. The Signal Strength Indicator may only display limited bars when the tool locates a stud through thick surfaces.

Multifunctional wall scanner TH510 cannot scan for wood studs and joists through concrete or carpet and padding. In problematic situations, try using Metal Scan to locate nails or screws that may line up vertically where a stud or joist is positioned.

*Note: Sensing depth and accuracy can vary due to moisture, content of materials, wall texture, and paint.*

## WARNING

**Do not rely exclusively on the detector to locate items behind the scanned surface. Use other information sources to help locate items before penetrating the surface. Such additional sources include construction plans, visible points of entry of pipes and wiring into walls, such as in a basement, and in standard 16 and 24 in. (41 and 61 cm) stud spacing practices.**

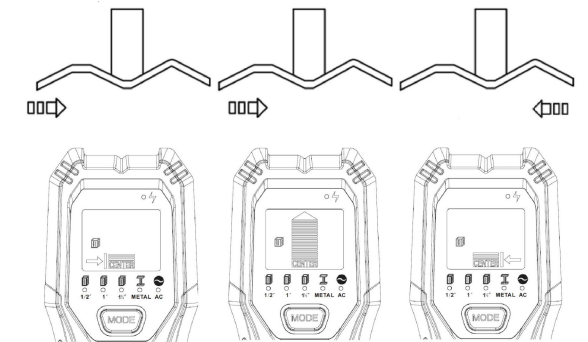
## 3. FINDING A STUD

Press the Mode Switch Button to the desired mode, place the tool flat against the wall. Wait for the reducing bars disappeared and beep to confirm calibration has completed before moving scanner.

Slowly slide tool across surface. A bottom pointed arrow and EDGE indication will illuminate, indicating location of the stud edge.

Continue sliding tool. When the center of a stud is located, the full bars on the Signal Strength Indicator, the pointed arrow on the top of the bars, the CENTER indication will all show and the buzzer will sound.

In cases of deeper studs (thicker walls), when the center of the stud is located, not full bars will show on the screen. If you still cannot locate a stud, try Stud 1 in. Or Stud 1 1/2 in. Scan mode (图片上显示木格刚好是产品上半部分的宽度)



## 4. AC WIRE WARNING

AC WARNING detection feature works continuously in Stud 1/2 in., Stud 1 in., Stud 1 1/2 in. Scan modes, and Metal Scan Mode. When live AC voltage is detected, the AC detection warning indicator will appear in the display. If scanning begins over a live AC wire, the AC Wire Warning will show continuously. Use extreme caution under these circumstances or whenever live AC wiring is present.

## WARNING

**Electrical field locators may not detect live AC wires if wires are more than 2 in. (51 mm) from the scanned surface, in concrete, encased in conduit, present behind a plywood shear wall or metallic wall covering, or if moisture is present in the environment or scanned surface.**