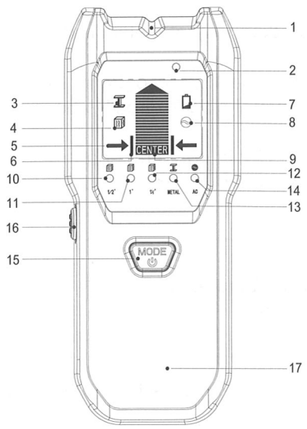
Stud Finder Wall Scanner - 5 in 1 Multi-Mode Detection Operating Instructions

BEFORE USE

Optimal operation of the detector is possible only when the operating instructions and information are read completely, and the instructions contained therein are strictly followed.

If you have any questions, please contact us by email: **aftersale6866@outlook.com** we will send you more use methods or videos and try our best to help you solve the problem.

Functional Description



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)

Multifunctional Wall Scanner TH530

Multifunctional wall scanner TH530 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. (12mm) deep
- Stud 1 in. Scan Mode: Locates the center and edges of wood and metal studs up to 1 in. (25mm) deep
- Stud 11/2 in. Scan Mode: Locates the center and edges of wood and metal studs up to 11/2 in. (38mm) deep
- Metal Scan Mode: Detects metal up to 2.36 in. (60mm) deep
- AC Scan Mode: Detects live unshielded AC wires up to 2 in. (51mm) deep

Parameter of TH530 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 of the battery shrapnel.

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 new one immediately.

2. OPERATING TIPS

1.SELECTING THE MODE

Press the "Mode button" to turn on the tool. Then press it again to choose five different modes of finding the Stud 1⁄2 in. mode(12mm)/ Stud 1 in. mode(25mm) / Stud 1½ in. mode(38mm)/ Metal / AC Mode. (Press the power button for more than 3s to turn it off).

2.CALIBRATING THE TOOL

• Place the TH530 against the wall (Stud /Metal mode)or air(AC mode) first.
• Press the Scan button(on the side of the tool) to start calibration this tool but do not move and try to scan at this moment, Wait for the reducing bars to disappear and the buzzer will beep one time and the calibration is completed.
• Then you can release the scan button and begin scanning.

⚠ Note:

1. In the Stud /Metal mode, you need to put the whole tool on the wall to calibrate it.
2. In AC scan mode, you just need to put the tool in the air to calibrate it.
3. Please be sure to calibrate before every scanning, or it will cause inaccurate results.

3.Scan the wall to locate the stud/metal/AC wires

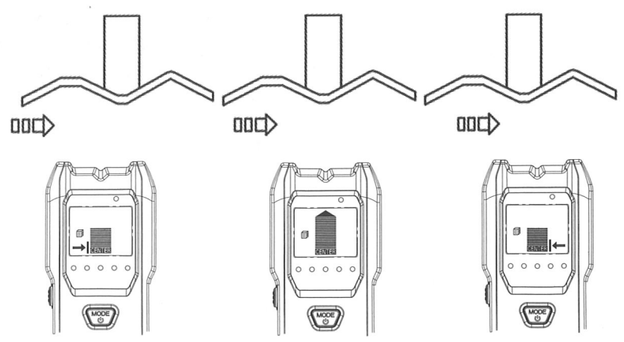
3.1 FINDING A STUD

• Slowly slide the tool across the surface. A bottom pointed arrow and EDGE indication will illuminate, indicating the 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.

⚠ Note:

1. 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 can't locate a stud, try Stud 1 in. Or Stud 1 1/2 in.

2. Scan mode(the wood width is just the upper part of the product)



3.2 SCANNING IN METAL MODE

1. (Figure A) Slide the scanner slowly over the surface. Mark the point where you get the highest metal indication (the most middle bars on the screen). If it is a strong target, the top indicated arrow will show, and a steady beep will sound. Continue in the same direction until display bars reduce. Reverse direction and mark the spot where the display bars peak from the reversed direction.
The midpoint of the two marks is the location of the center of the metal object.
If the unit indicates metal over a large area, you can refine the scanning area to more accurately locate the metal target by following steps 2 and 3 below.

2. (Figure B) To further pinpoint the location of the metal target, scan the area again. Release the Scan button and then turn the unit back on, this time starting on the wall over one of the previous marks. This will reset the tool to lower sensitivity and narrow the scan area.

3. (Figure C) To continue to reduce sensitivity and further refine the scanning area, repeat step 2. This procedure can be repeated multiple times to narrow the field even further.
Note: If any bars display on the screen, metal is present. Small targets or targets deep within the surface may only illuminate some of the bars and not the centerline or audio tone. In this case, use the highest indication to determine the metal position.

3.3 SCANNING IN AC MODE

1. (Figure A) slowly slide the scanner across the surface. Mark the location where you get the highest AC indication (the most Middle bars on the screen). If it is a strong target, the top indicated arrow will show, and a steady beep will sound. Continue in the same direction until display bars reduce. Reverse direction and mark the spot where the display bars peak from the reversed direction. The midpoint of the two marks is the location of the center of the live AC wiring.

If the unit indicates live electricity over a large area, you can reduce the sensitivity of the tool to refine the scanning area and more accurately locate the live AC wiring by following steps 2 and 3 below.

2. (Figure B) To further pinpoint the location of the live AC wiring, scan the area again. Release the Scan button and then turn the unit back on, this time starting on the wall over one of the previous marks. This will reset the tool to lower sensitivity and narrow the scan area.

3. (Figure C) Scan in both directions as in Step 2. The area indicated should become smaller so you can more precisely identify the location of live AC wires. This procedure can be repeated to narrow the field even further.

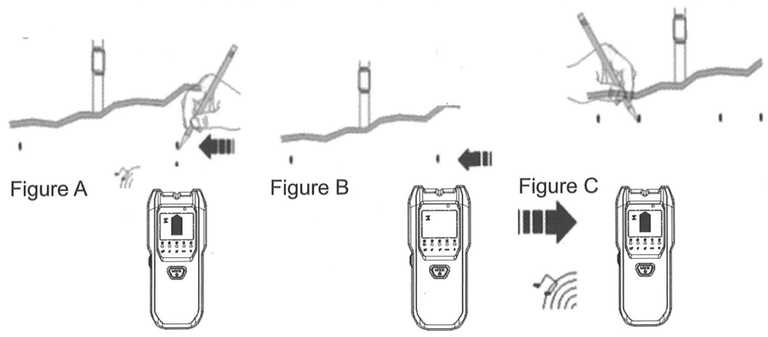


Figure A Figure B Figure C

⚠ 3. 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.
• Electrical field locators may not detect live AC wires if wires are more than 2 in. (51mm) from the scanned surface, in concrete, encased in a conduit, present behind a plywood shear wall or metallic wall covering, or if moisture is present in the environment or the scanned surface.

DO NOT ASSUME THERE ARE NO LIVE ELECTRICAL WIRES IN THE WALL. DO NOT TAKE ACTIONS THAT COULD BE DANGEROUS!
IF THE WALL CONTAINS A LIVE ELECTRICAL WIRE. ALWAYS TURN OFF THE ELECTRICAL POWER, GAS, AND WATER SUPPLIES BEFORE PENETRATING A SURFACE. FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN ELECTRIC SHOCK, FIRE, AND/OR SERIOUS INJURY OR PROPERTY DAMAGE.

4. NOTE

1. Always turn off the power when working near electrical wires.

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 shake, tilt or rotate, and avoid using too much force when the scanning surface slides slowly.

4. Ensure that the scanned surface is flat and completely dry. 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.

5. 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.

6. Please note that studs or joists are normally spaced 16 or 24 in. (41 or 61cm) apart and are 11/2 in. (38mm) in width. Anything closer together or a different width may not be a stud, joist, or firebreak.

7. Multifunctional wall scanner TH530 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.

8. 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.

5. SCANNING DIFFERENT SURFACES

Wallpaper: Multifunctional wall scanner TH530 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 takes one week or longer to dry after application.

Lath & plaster: Due to irregularities in plaster thickness, it is difficult for Multifunctional wall scanner TH530 to locate studs in Stud modes. Change to Metal Scan mode to locate the nail head holing wood lath to the studs. If the plaster has metal mesh reinforcement, a Multifunctional wall scanner TH530 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 1½ 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 1½ 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.

Situation	Problem	How to resolve
Detects other objects besides studs in Stud Scan mode. Finds more targets than there should be.	• Electrical wiring and metal/plastic pipe maybe near or touching back surface of wall.	• Scan the area in Metal Scan and AC Scan to determine if metal or hot AC is present. • Check for other studs equally spaced to either side 12, 16, or 24 in. (31, 41, or 61 cm) apart or for the same stud at several places directly above or below the first scan area. A stud reading would measure approximately 1½ in. (38 mm) apart from each edge; anything larger or smaller is most likely not a stud if not near a door or window.
Area of voltage appears much larger than actual wire (AC only).	• Voltage detection can spread on drywall as much as 12 in. (31cm) laterally from each side of an actual electrical wire.	• To narrow detection, turn unit off and on again at the edge of where wire was first detected and scan again.
Difficulty detecting metal.	• Tool calibrated over metal object. • Metal targets too deep or too small.	• The scanner may have been calibrated over a metal object, reducing sensitivity. Try calibrating in another location. • Scan in both horizontal and vertical directions. Metal sensitivity is increased when metal object is parallel to sensor,located under the top side of the back.
Image of metal object appears wider than actual size.	• Metal has greater density than wood.	• To reduce sensitivity, recalibrate the tool over either of first two marks (Metal mode only).
Constant readings of studs near windows and doors.	• Double and triple studs are usually found around doors and windows. Solid headers are above them.	• Detect the outer edges where you know.
Suspect there are electrical wires, but do not detect any.	• Wires are shielded by metal conduit, a braided wire layer, metallic wall covering, plywood shear wall, or other dense material. Wires deeper than 2 in. (51 mm) from surface might not be detected. Wires may not be live.	• Try Metal Scan mode to check whether there are metal, wire, or metal conduit. Be caution if the area has plywood, thick wood backing behind drywall, or thicker than normal walls. If a switch controls an outlet, make sure it is ON for detection, but turned off when working near electrical wires. ***CAUTION when nailing, sawing, or drilling into walls, floors, and ceilings where these items may exist.***
Low Battery Indicator and tool not operating.	• Battery level low for proper operation.	• Replace with brand new 9 V battery.
No bars shown on the screen, during scanning	• The calibration is not correct • The stud is deeper beyond the scan mode	• Select the deeper scan mode to scan again. • Move and calibrate the tool again on a different place.