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MULTI PURPOSE STUD FINDER



FIVE SCANNING MODES

- 1. Stud 1/2in. scan: Locates the center and edges of wood and metal studs up to 1/2 in.(13mm) deep
- 2. Stud 1 in. scan: Locates the center and edges of wood and metal studs up to 1in. (25 mm) deep
- 3. Stud 1 1/2 in. scan: Locates the center and edges of wood and metal studs up to 1 1/2 in. (38 mm) deep
- 4. Metal Scan: Detects metal up to 2.36 in. (60 mm) deep
- 5. AC Scan: Detects live unshielded AC wires up to 2 in. (50mm) deep

NEED ASSISTANCE?

Call us on our toll-free customer support line:

1-866-349-8665 (Monday through Friday 9am – 5pm Eastern Standard Time)

- Technical questions
- Replacement parts
- Parts missing from package

KNOW YOUR MULTI PURPOSE STUD FINDER

PART#	DESCRIPTION	PART#	DESCRIPTION
1	Stud/Metal edge groove	8	Stud 1 1-2" in. Scan
2	Stud Mode Indication	9	ON/OFF Button
3	Metal Mode Indication	10	Mode Switch Button
4	AC Mode Indication	11	Scan Button/Signal strength
5	AC Wire Warning	12	Battery (Back of unit)
6	Stud 1/2 in. Scan	13	Stud direction indication
7	Stud 1in. scan	14	Low Battery Indication

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WARNING:

The Multi-Purpose Stud Finder cannot be used as a depth gauge. The detector will not detect water or gas pipes shielded by metal materials; it may detect them in the same manner as metal only.

The detector is not suitable for use on objects insulated with foil

Sensing depth and edge detection can vary due to moisture content of materials, wall texture and paint, etc.

OPERATING

INSTALLING THE BATTERY

- Push the clip at the bottom of the battery door to open.
- Insert a 9v battery (not included) matching the positive (+) and negative (-) terminals to the battery.
- 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 and there is insufficient battery power to operate the tool properly. Please replace the 9-volt battery with a brandnew battery immediately

GENERAL SCANNING

For optimum scanning results, it is important to properly hold the MULTI PURPOSE STUD FINDER and move slowly when scanning. The following tips will provide more accurate scanning results:

- 6. Grasp the handle with your thumb on one side and your fingers on the other side. Ensure fingertips are resting on the handle and not touching the surface being scanned or the scanning head of the tool
- 7. Hold the tool straight up and down, parallel to the studs, and do not rotate the tool.
- 8. Keep tool flat against the wall and do not rock, tilt, or press hard when slowly sliding across the surface being scanned.
- 9. 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.
- 10. If you are 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 has not 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.

- 11. 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
- 12. To avoid surprises, remember 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

- 1. Wallpaper: MULTI PURPOSE STUD FINDER 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.
- 2. Freshly painted walls: May take one week or longer to dry after application
- 3. Lath & plaster: Due to irregularities in plaster thickness, it is difficult for the MULTI PURPOSE STUD FINDER 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 the MULTI PURPOSE STUD FINDER may be unable to detect through that material.
- 4. 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.
- 5. 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 the MULTI PURPOSE STUD FINDER 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.

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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.

TURNING ON / CALBRATNG THE TOOL

The MULTI PURPOSE STUD FINDER can be calibrated anywhere on the wall.

- Place MULTI PURPOSE STUD FINDER against the wall before pressing the ON / OFF button.
- Press the ON / OFF button., the LCD always displays in Stud 1/2 in. scan mode.
- Press the Scan button to start calibration, the bars will decrease and then disappear, and the buzzer will beep one time to indicate calibration is completed.
- Continue to press Scan button and keep the tool flat against the wall, select appropriate mode and begin scanning.

IMPORTANT: Wait for calibration to compete (2-3 seconds) every time before moving the scanner.

SELECTING THE MODE

Press the mode button to select the desired mode as follows:

- Stud 1/2in. scan: Locates the center and edges of wood and metal studs up to 1/2 in.(13mm) deep.
- Stud 1 in. scan: Locates the center and edges of wood and metal studs up to 1in. (25 mm) deep.
- Stud 1 1/2 in. scan: Locates the center and edges of wood and metal studs up to 1 1/2 in. (38 mm) deep.
- Metal Scan: Detects metal up to 2.36 in. (60 mm) deep.
- AC Scan: Detects live unshielded AC wires up to 2 in. (50mm) deep.

FINDING A STUD

Always scan with the scanner placed flat against the wall.

- Select appropriate mode, then press the Scan Button.
- Slowly slide tool across the surface When the edge of a stud is located, an arrow and stud direction indicator (showing edge either on the right, or left side) will illuminate.
- To locate the center of a stud, continue to slide the tool. When the center of a stud is located, full bars and both Stud direction indicators along with the word "center" will be illuminated and the tool will beep.

If you are unable to locate a stud or the center of a stud, try scanning with a deeper mode (1" or 1-1/2")



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AC WIRE WARNING

The AC WARNING detection feature works continuously in Stud 1/2 in., Stud 1 in. Stud 1 1 / 2 in scan, and Metal Scan modes. When live AC voltage is detected, the AC detection warning indicator will appear on 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.

SCANNING IN METAL MODE

Note: When scanning for studs, use Stud 1/2 in. scan mode (or Stud 1 in., Stud 11/2 in. scan mode on thicker walls) to quickly locate the center and edges. Use Metal Scan to determine if the previous reading in Stud scan was a wood stud, metal stud, or pipe. In Metal Scan, only metal drywall screws will be found in wood studs, while metal will be indicated everywhere on a metal stud or pipe.

Metal Scan has interactive calibration to adjust to its sensitivity to metal, which can be used to find the precise location of metal objects in walls, floors, and ceilings. Maximum sensitivity is ideal for quickly finding the approximate location of metal. However, sensitivity can be reduced by calibrating the tool closer to metal. With reduced sensitivity, the area where metal is indicated will be smaller. But in both cases, the metal target is in the center of the area where the tool indicates metal is present.

 Press mode switch button to Metal Scan mode. For maximum metal sensitivity, turn the tool on in the air by pressing and holding the Scan button.
This will ensure that it calibrates away from any metal objects. (Figure A) While holding the Scan button, press the tool flat against the wall and slowly slide the scanner across 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 3 and 4 below.
(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 a lower sensitivity and narrow the scan area.

4. (Figure C) To continue to reduce sensitivity and further refine the scanning area, repeat step 3. This procedure can be repeated multiple times to narrow the field even further.

Figure A

Figure B

Figure C



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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.

As with Metal Scan Mode, AC Scan Mode has interactive calibration and works in the same manner.

SCANNING IN AC MODE

1. (Figure A) Press mode switch button to AC Scan mode. Press the tool flat against the wall, then press and hold the Scan button. Wait for the beep to confirm calibration has completed before moving the tool. Once calibration has completed, 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 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 a 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. **Note: AC Scan will only detect live (hot) unshielded AC wiring. Please refer to the WARNING statement , AC WARNING Detection, for more important details and warnings about AC detection.**

BENCHMARK WARRANTY

If this Benchmark tool fails due to a defect in material or workmanship within five years from the date of purchase, return it to any Home Hardware store with the original bill of sale for exchange. 3-year warranty for the battery and charger. This warranty does not include expendable parts including but not limited to blades, brushes, belts, light bulbs. This warranty covers defects in material or workmanship only. It does not cover normal wear and tear, failure due to abuse/misuse, or defects caused by careless or accidental mishandling. If this Benchmark product is used for commercial or rental purposes, this warranty does not apply.

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BENCHMARK TOOLS CANADA

ST. JACOBS, ONTARIO NOB 2N0 © 2022 Home Hardware Stores Limited

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