



Part# 902-592

Metal/Voltage/Stud Detector

Owner's Manual



 **Please read the instruction manual carefully before use.**

Know Your Apparatus

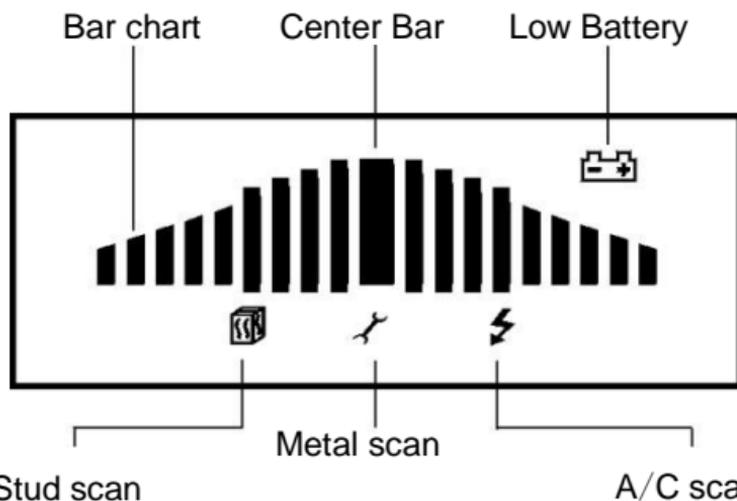
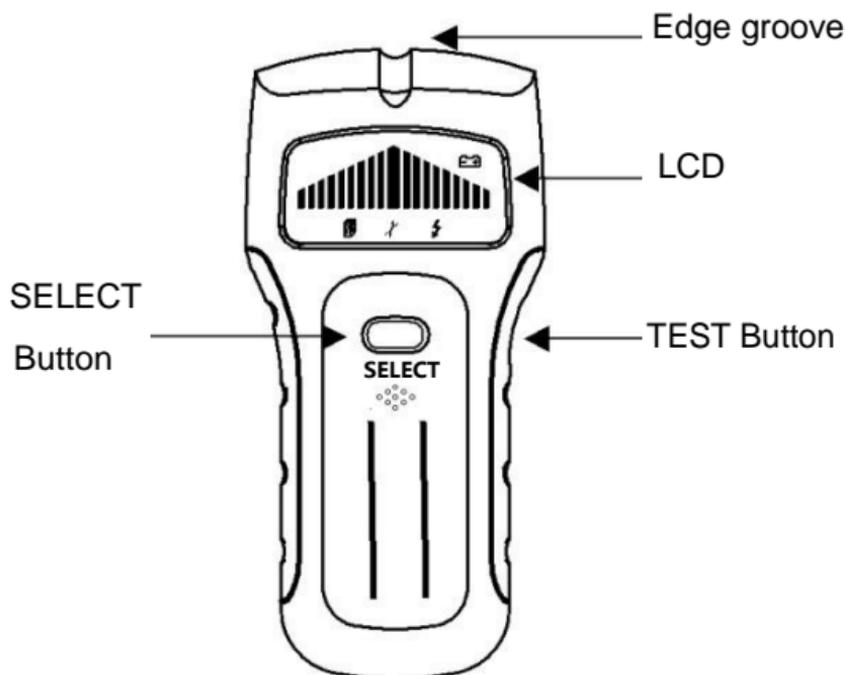
This unit is a 3 in 1 Metal/Voltage/Stud Detector. It uses electronic signals to locate the exact position of studs, ceiling joists, AC wires and metal through drywall, concrete and other common wall materials. Once the edge of a stud has been detected, it emits audio and visual signals (LCD Display) that allow you to easily pinpoint its center position.

This unit is an ideal tool for DIY users, professional electricians and users in home decor fields.

Function Description

1. Detect STUD
2. Detect metal
3. Detect AC Live wires
4. Use metal detect function to find hidden metal pipes, rivets or fixtures in the wall
5. Auto power off

Panel Description



Note: Center bar is the longest central one in bar chart.

Operation instruction

I Install battery

- (1) Open battery door at the back of the unit.
- (2) Attach a 9 Volt battery to the connector.
- (3) Put the battery into the compartment
- (4) Close battery compartment door.

II Calibration & Detection:

- (1) After installing battery, the unit will sound a long beep. When unit auto powers off, press the TEST button for two seconds to turn on again.
- (2) Press the SELECT button to select stud() , AC live wire() , or metal() detect function.
- (3) Place detector bottom flat against the wall surface, with firm contact. The function symbol does not flash at this time. Touch TEST measure button on the right, sampling the surface to be tested. After sampling, the function symbol will flash. When the detector continuously beeps twice, the unit is now calibrated.
- (4)
- (5) Release TEST button and move the unit slowly along the wall.

- (6) When the center bars on the LCD, it means you have found the edge of the hidden object. Stop moving and mark this spot at the edge groove. Please hold the TEST button at this time to eliminate the Beep sound while you are marking the location.
- (7) Release the TEST button when you finish the marking and continue moving the device until Center Bar disappears. Turn the unit in reverse direction to locate other edge of stud. Mark the second spot as the first one.



⚠ WARNING

STUD mode; sampling of wall materials must be uniform, otherwise possible measurement errors may occur. Metal and AC live wire modes; can be sampled in the open surrounding environments. Shielded wires or live wires in metal conduits, casings, metalized walls or thick/dense walls will not be detected. Always turn AC power off when working near wiring.

The unit is designed to detect 110 and 220 volts AC in live electrical wires. It will also detect the presence of live wires having greater than 220 volts.

Cautions on Operating

You should always use caution when nailing, cutting or drilling in walls, ceilings and floors that may contain wiring or pipes near the surface.

Shielded, dead, telephone, TV cable or non-powered wiring will not be detected as live wires.

Always remember that studs or joists are normally spaced 16 inches or 24 inches apart and are typically $1\frac{1}{2}$ inches in width. To avoid surprises, be aware that anything closer together or of a different width may be an additional stud, ceiling joist, pipe or fire break. **When working near AC electrical wires, always turn off the power.**

Prevent Interference

To ensure best performance, the device should be held properly with the hand on the lower portion. Keep your free hand at least 6 inches away from the device while testing or scanning surfaces.

Conventional Construction

Doors and windows are commonly constructed with additional studs and headers for added

stability. The device detects the edge of these double studs and solid headers, emits and holds an audio signal when completely across them.

Surface Differences

Wallpaper-There is no difference in the function on surfaces covered with wallpaper or fabric, unless the covering contains metallic foil or fibers.

Concrete-Metal up to 3/4 inches deep can be detected. If surface is rough, suggest using a piece of cardboard between surface and tester.

Ceilings-When dealing with a rough surface, such as a sprayed ceiling, utilize a piece of cardboard when scanning the surface. Run through the calibration technique (described earlier) WITH a piece of cardboard in place to assure best performance. Also, it is particularly important to keep your free hand away from the unit.

Specification

Battery power: 9V battery

Stud Detecting depth: wood 1-1/8"X1-1/8": $\leq 3/4$ "

Metal Detecting depth: Iron pipe Φ 1.0": $\leq 1-1/8$ "

AC Live Wires: AC 90~250V live wire (2.0"),
frequency at 50~60 Hz

Operating temp & humidity: -7°C ~ 40°C, <75%

Storage temp & humidity: -20°C ~ 50°C, <85%

Size: 6.1"(L)*3"(W)*1.1"(H)

Weight: about .38 lb (including battery)



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