

STANLEY[®]

S100



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Stanley Stud Sensor 100

The Stud Sensor 100 uses electronic signals to locate the edges of studs, joists or live AC wires through drywall or other common building materials. Once the edge of a stud has been detected, the Stud Sensor 100 displays red LED's and sounds an audible tone. A marking channel allows you to easily note the stud edges on the wall.

Note: Read all instructions prior to operating the Stud Sensor 100 and DO NOT remove any labels from the tool.

OPERATING INSTRUCTIONS

Battery

1 Open door on back of unit and connect a 9 volt battery (not included) to clip. Put battery back into case and close back battery door.

Note: Recommend to replace a new 9 volt battery when low battery - flashing green LED.



Usage

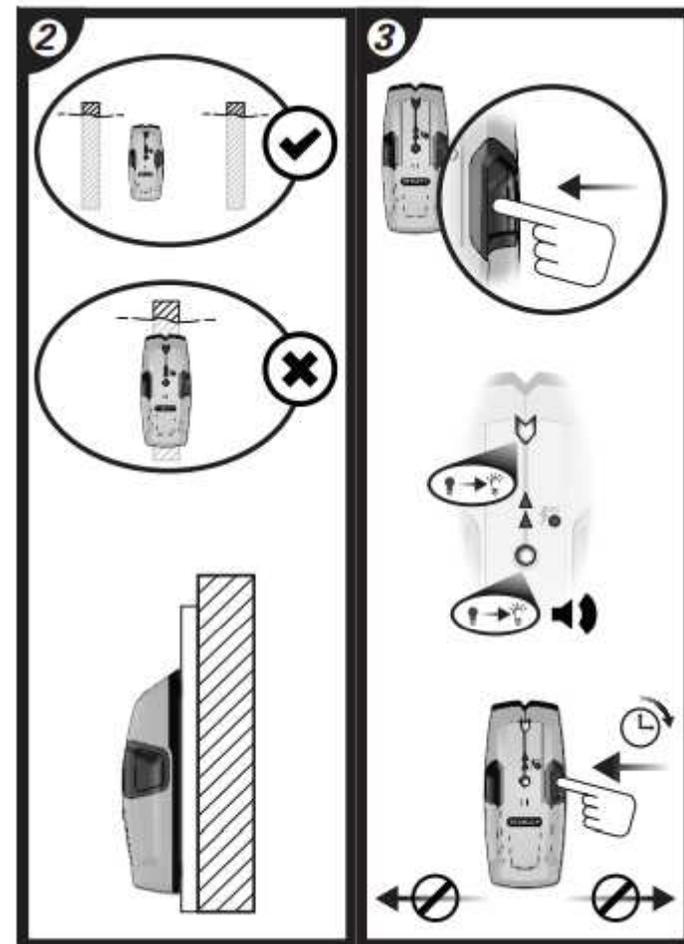
Detecting Wood / Metal Studs

2 Hold the Stud Sensor 100 flat against the surface, making firm contact.

Note: While calibrating, the Stud Sensor 100 must not be placed directly over a stud, dense material such as metal, or over a wet or newly painted area, or it will not properly calibrate.

3 Press in and hold the activation button. The green and top red LED will Light.

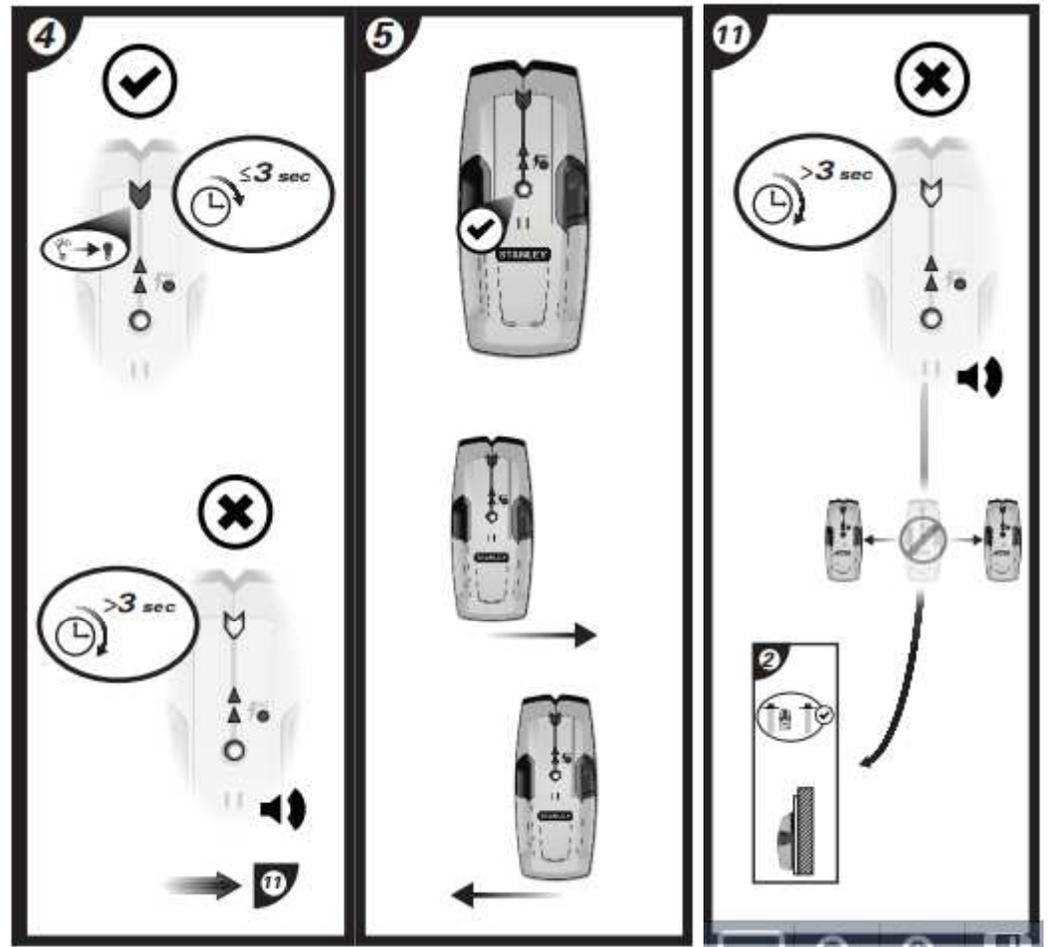
Note: The unit cannot be moved before calibration is complete.



4 When the red LED goes off, the unit is calibrated.

5 Keep holding the activation button during all of the following procedures.

11 *If the red LED stays lit, move the Stud Sensor 100 to a different location and try again. Releasing the activation button will turn off the sensor.*



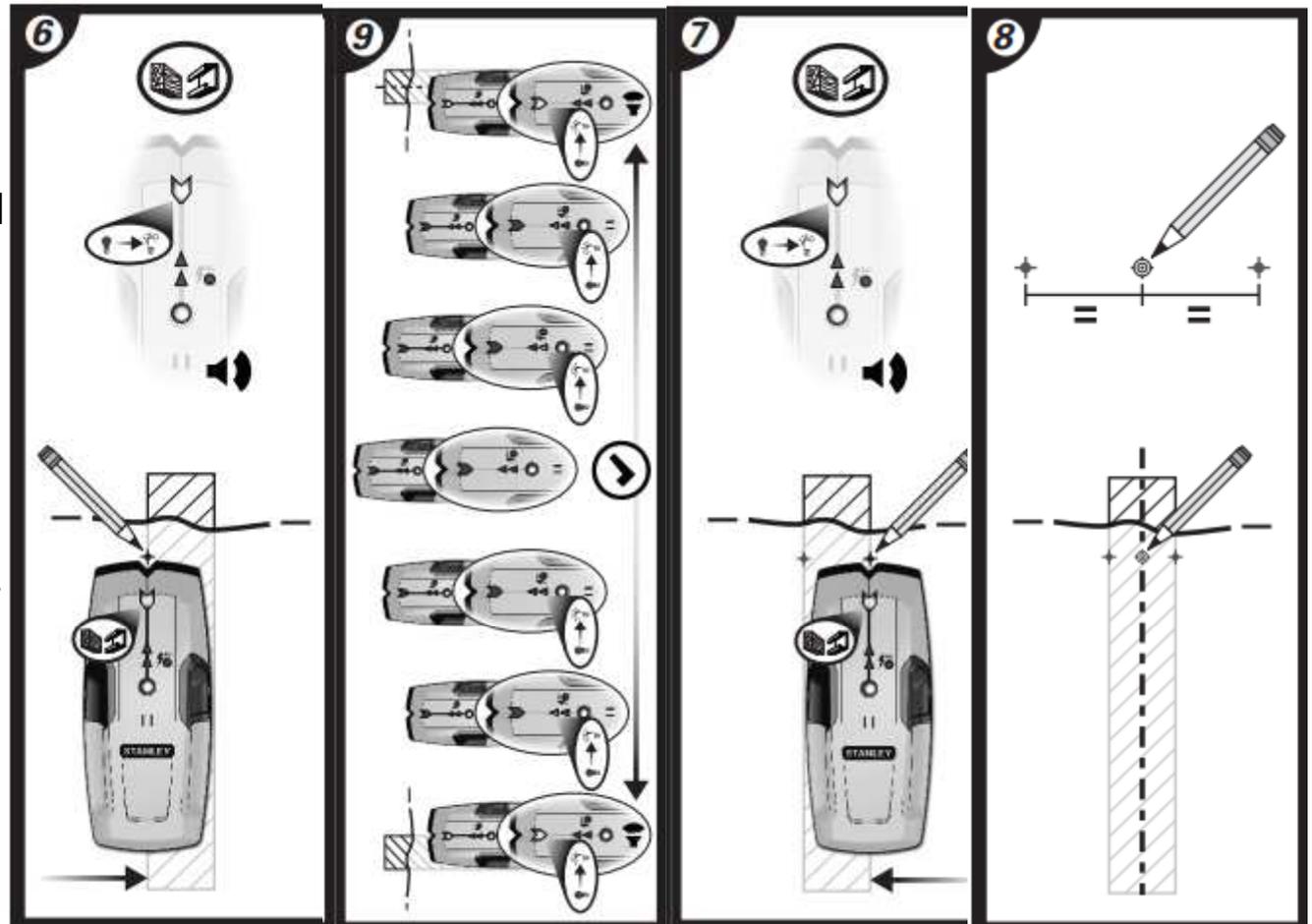
6 Slide the Stud Sensor 100 slowly across the surface in a straight line.

9 As it detects a stud, the red LED's will go on.

6 When it detects the stud edge, the top LED will go on and an audible tone will sound. Use the marking channel located at the top of the unit to mark the stud edge.

7 Repeat the above steps from the other side of the stud. Coming from the opposite direction, mark the other edge of the stud.

8 The midpoint of the two marks indicates the stud center.

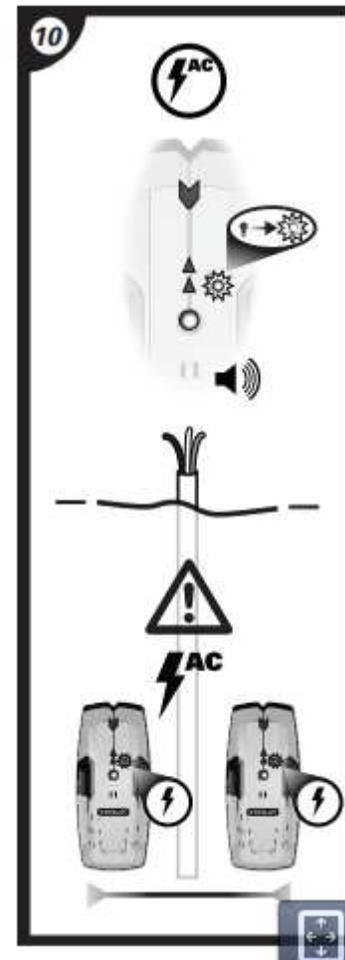


Detecting Live AC Wires

10 The live wire red LED will illuminate and the Stud Sensor 100 sounds an audible tone, warning when in the proximity (typically within 4" to 18" along the surface) from a live wire.

Note: *Static electrical charges that can develop on drywall and other surfaces will spread the voltage detection area many inches on each side of the actual electrical wire. To aid in locating the wire position, scan holding the unit ½" away from the wall surface or place your other hand on the surface approximately 12" from sensor.*

Warning: *Shielded wires or wires in metal conduits, casings, metallized walls or thick, dense walls will not be detected. Always turn off AC power when working near wiring.*



Cautions on Operating

You should always use caution when nailing, cutting and drilling in walls, ceilings and floor that may contain wiring and pipes near the surface. Always remember that studs or joists are normally spaced 16 inches or 24 inches apart and are 1½ inches in width. To avoid surprises, be aware that anything closer together or of a different width may not be a stud.

OPERATING TIPS

The Stud Sensor 100 is designed for use only on interior surfaces.

Prevent Interference

To ensure best performance from the Stud Sensor 100, keep your free hand at least 6 inches away from the unit and wall surface while testing or scanning surfaces.

Conventional Construction

Doors and windows are commonly constructed with additional studs and headers for added stability. The Stud Sensor 100 detects the edge of these double studs and solid headers as a single, wide stud.

Surface Differences

The Stud Sensor 100 will scan through common building materials, Including:

- Gypsum drywall
- Plywood sheathing
- Hardwood floors
- Linoleum over wood
- Wallpaper

The scanner cannot scan through:

- Carpeting
- Foil faced materials
- Ceramic tile
- Cement or concrete
- Metal & plaster walls

Wallpaper

There will be no difference in the function of the Stud Sensor 100 on surfaces covered with wallpaper or fabric unless the coverings used contain metallic foil or fibers.

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 the piece of cardboard too, to assure best performance of the unit. Also, it is particularly important in this application to remember to keep your free hand away from the unit.

Note: *The thickness, density and moisture content of the surface material will affect the sensing depth.*

IMPORTANT SAFETY NOTICE

Insure proper detection of live wires. Always hold the Stud Sensor 100 in the handle area only. Grasp between fingers and thumb while making contact with your palm.

SPECIFICATIONS

(At 35-55% relative humidity)

Battery 9 volt (not included)

- Depth Range
 - Wood or Metal Studs Up to $\frac{3}{4}$ " (19 mm) through drywall
 - Live AC Wires (120 volts AC) Up to 2" (50 mm) through drywall
- Accuracy - Stud Center (Scanning and marking the stud from two sides stud center)
 - Wood $\pm 1/8$ " (3 mm)
 - Metal $\pm 1/4$ " (6 mm)
- Operating Temperature +32°F to +120°F (-0°C to +49°C)
- Surface Temperature -4°F to +150°F (-20°C to +66°C)

WARRANTY

Stanley Tools warrants the Stud Sensor 100 against defects in material and workmanship for one year from the date of purchase.

Stanley's liability under this warranty is limited to the replacement of the unit. Any attempt to repair the product by other than factory authorized personnel will void this warranty. Calibration, batteries and maintenance are the responsibility of the user. Where permitted by law, Stanley is not responsible for incidental or consequential damages. Agents of Stanley cannot change this warranty. Stanley is not responsible for damage resulting from wear, abuse or alteration of this product. The user is expected to follow ALL operating instructions. This warranty may provide you with additional rights that vary by state, province or nation.

WARNING:

Protect Your Eyes, Wear Safety Goggles