**Stanley Stud Sensor 300**

The Stud Sensor 300 uses electronic signals to locate the center of studs, joists or live AC wires through drywall or other common building materials. Once the center of a stud has been detected in one pass across the surface, the Stud Sensor 300 gives a visual display and sounds an audible tone. A marking channel allows you to easily note the stud center and edges on the wall.

The Stud Sensor 300 will not detect objects in concrete, mortar, block or brick work, carpeting, foil faced materials, metallic surfaces or ceramic tiles. The Stud Sensor 300 is not designed to locate non-ferrous or plastic objects such as pipes.

**Note:** Read all instructions prior to operating the Stud Sensor 300 and DO NOT remove any labels from the tool.

**WARNING:**
Protect Your Eyes, Wear Safety Goggles.

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**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 - "Low Battery" will appear on the LCD.

**Usage**

**Detecting Wood / Metal Studs**
1. Hold the Stud Sensor 300 flat against the surface, making firm contact.
2. Press in and hold the activation button. A series of tones will sound.

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

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**When the unit is calibrated the “Ready” icon will appear on the LCD.**

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

**Note:** Once the Activation button is released, the unit shuts off.

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**If all segments of the LCD flash on and off when the activation button is pressed, move the Stud Sensor 300 to a different location and try again. Releasing the activation button will turn off the sensor.**

**Note:** While calibrating, the Stud Sensor 300 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.

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**Slide the Stud Sensor 300 slowly across the surface in a straight line. As it detects a stud, the unit will display the relative position of the stud on the screen.**

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**When it detects the stud center, the “Center” icon will appear on the LCD and an audible tone will sound. Use the marking channel located at the top of the unit to mark the stud center.**

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Automatic Sensitivity Selection

The unit is initially set at its highest sensitivity for stud detection. To get the most accurate readings from the unit, slide it past the first stud that is detected. The unit will beep and the sensitivity will automatically self correct to the best level for the wall and stud materials found during the first pass. This will give the best stud center and edge detection accuracy.

Detecting Live AC Wires

1. The live wire red LED will illuminate, the “AC” icon will appear on the LCD, and the Stud Sensor 300 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, metalized walls or thick, dense walls will not be detected. Always turn off AC power when working near wiring.

METAL SCAN / AC TRACKING Mode

METAL SCAN Mode

Depress the AC / METAL button once (1x). The “METAL SCAN” icon will be illuminated on the LCD.

AC TRACKING Mode

“Double click” (depress two times - 2x) the AC / METAL button. The “AC TRACKING” icon will be illuminated on the LCD.

With the “METAL SCAN” or “AC SCAN” icon illuminated, hold the Stud Sensor 300 flat against the surface, making firm contact.

Press in and hold the activation button. A series of tones will sound.

When the unit is calibrated the “Ready” icon will appear on the LCD.

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

Slide the Stud Sensor 300 slowly across the surface. As it detects metal (METAL SCAN mode) or a live AC wire (AC TRACKING mode), the unit will display the relative intensity of the position of the metallic object / live wire on the screen as shown below.

Cautions on Operating

You should always use caution when nailing, cutting and drilling in walls, ceilings and floor that may contain wiring, 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 300 is designed for use only on interior surfaces.

Prevent Interference

To ensure best performance from the Stud Sensor 300, 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 300 detects the edge of these double studs and solid headers as a single, wide stud.

Surface Differences

The Stud Sensor 300 will scan through common building materials, including:

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

The sensor 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 300 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 300 in the handle area only. Grasp between fingers and thumb while making contact with your palm.

SPECIFICATIONS

(At 35-55% relative humidity)

<table>
<thead>
<tr>
<th>Battery</th>
<th>9 volt (not included)</th>
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</thead>
<tbody>
<tr>
<td>Depth Range</td>
<td>Wood or Metal Studs: Up to 1-1/2” (38 mm) through drywall</td>
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<tr>
<td></td>
<td>Live AC Wires: (120 volts AC) Up to 2” (50 mm) through drywall</td>
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<tr>
<td></td>
<td>METAL SCAN Mode: Up to 3” (76 mm) through drywall</td>
</tr>
<tr>
<td>Accuracy - Stud Center</td>
<td>Wood: ±1/8” (3 mm)</td>
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<tr>
<td></td>
<td>Metal: ±1/4” (6 mm)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>+32°F to +120°F (-0°C to +49°C)</td>
</tr>
<tr>
<td>Surface Temperature</td>
<td>-4°F to +150°F (-20°C to +66°C)</td>
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WARRANTY

Stanley Tools warrants the Stud Sensor 300 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.