# STANLEY

# IntelliSensor<sup>™</sup> Pro Multi-depth Stud Finder





# IntelliSensor™ Pro (77-255)



The Stanley® IntelliSensor™ Pro uses electronic signals to locate the position of studs, joists or live AC wires through drywall and other common wall materials. Once the edge of the stud has been detected, the IntelliSensor™ Pro LCD display gives visual and audio indications that allow you to easily pinpoint the stud's edge position. A pencil line allows you to quickly note the location of the stud edges.

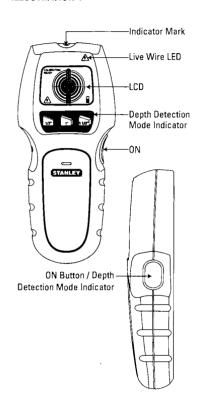
The IntelliSensor™ Pro allows the user to locate wood and metal studs up to 38 mm (1-1/2").

The IntelliSensor™ Pro provides automatic calibration, auto shut off and heavy duty ABS construction.

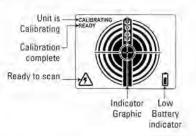
Depth detection selected by side button for 1/2" (12 mm), 1" (25 mm) and 1-1/2" (38 mm).

Important: Read all instructions prior to operating the IntelliSensor™ Pro and DO NOT remove any labels from the tool.

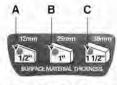
### **ILLUSTRATION 1**



### **ILLUSTRATION 2**



### **ILLUSTRATION 3**



- A = Wood or metal stud depth detection up to 1/2" (12 mm)
- B = Wood or metal stud depth detection up to 1\* (25 mm)
- C = Wood or metal stud depth detection up to 1-1/2" (38 mm)

# **Operating Instructions**

### **Battery Replacement**

Open the battery door on back of unit and connect a 9-volt battery (not included) to clip. Place battery back into case and snap battery door on. Recommend to replace a new 9 volt battery when low battery Baindicator is on.

V 9 Battery Door

#### Calibration

Calibrate the unit on wall before scanning for wood or metal stud.

Note: While calibrating, the IntelliSensor™ Pro must <u>not</u> be placed directly over a stud, dense material such as metal, wet or newly painted areas as this will prevent the unit from calibrating properly. If this is done over a wood or metal stud the unit will give no indication when moved away from the area. Move to a different location and try again.

### Calibrating

Hold the IntelliSensor™ Pro flat against the surface, making firm contact. Press and hold the "ON" button. All indicators on the LCD are displayed while the unit goes through its 1 to 3 second calibration cycle. The word "CALIBRATING" will appear on the LCD (illustration 2) while the unit is calibrating to surface. Following the completion of calibration the unit will beep, and the word "READY" will be

shown on the LCD (illustration 5). The LED light will then illuminate the keypad depth mode (1/2" [12 mm] depth default).

IMPORTANT: The unit cannot be moved before calibration is complete and "READY" appears on the LCD and LED illuminates.

## **USAGE**

## **Selecting Depth Detection**

- Depress and hold "ON" button once (1x) to select 1/2" (12 mm) read depth detection. The 1/2" (12 mm) mode LED will illuminate (illustration 3). The unit will then calibrate, followed by a beep and a "READY" displayed on the LCD.
- "Double-click" / Depress and hold ON button twice (2x) to select 1" (25 mm) read depth detection. The 1" (25 mm) mode LED will illuminate (illustration 3). The unit will then calibrate, followed by a beep and a "READY" displayed on the LCD.
- 3. "Triple-click"/ Depress "ON" button three times (3x) to select 1-1/2" (38 mm) read depth detection. The 1-1/2" (38 mm) mode LED will illuminate (illustration 3). The unit will then calibrate, followed by a beep and a "READY" displayed on the LCD.

IMPORTANT: The unit cannot be moved before calibration is complete and "READY"

# Detecting Wood Studs

- Slide the unit across the surface in a straight line. The closer the unit is to the stud, the more bars will be shown as illustration 6. When the stud edge is detected, the Wood indicator and the edge bar will be shown as illustration 7 and the unit will sound a continuous beep.
- 2. Use indicator graphic (illustration 2&7) and indicator mark (illustration 1) to locate and define stud edge.
- Continue sliding past the stud. When the indicator turns off and the unit stops beeping the other edge has been detected.
- 4. Double check stud location by coming back from the other direction. Make additional markings.
- 5. The midpoint of the marks indicates the stud centre.





### **Detecting Live Wires**

The live wire red LED lens (illustration 1) will illuminate, warning when in the proximity (typically within 10-46 cm [4-18"] distance) of a live wire. The LCD screen will then display a live wire icon (illustration 2) on the LCD defining full detection. Maximum depth detection of 5 cm (2").

Static electricity charges that can develop on drywall and other surfaces will spread the voltage detection area many inches to each side of the actual electrical wire. To aid in locating the wire position, scan holding the unit 12 mm (1/2") away from the wall surface or place other hand on surface approximately 30 cm (12") from sensor.

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

The IntelliSensor™ Pro is designed to detect 110 volts (for USA version) and 230 volts (for European version) AC in live electrical wires. It will also detect the presence of live wires exceeding 230 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 to the surface.

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

Always remember that studs or joists are normally spaced 41 cm (16") or 61 cm (24") apart and are 38 mm (1-1/2") in width. To avoid surprises, be aware that anything closer together or of a different width may be an additional stud, or joist fire break.

When working near AC electrical wires, always turn off the power.

# Operating Tips IMPORTANT SAFETY NOTICE

To ensure proper detection of live wires, ALWAYS hold the IntelliSensor™ Pro in the handle area only. Grasp between fingers and thumb while maintaining contact with your palm.

### Conventional Construction

Doors and windows are commonly constructed with additional studs and headers for added stability. The IntelliSensor™ Pro detects the edge of these double studs and solid headers and emits and holds an audio signal as it crosses over them.

## **Surface Differences**

Wallpaper — There will be no difference in the function of the stud sensor on surfaces covered with wallpaper or fabric unless the coverings contain metallic foil or fibres.

Plaster and Lath — Unless the plaster and lath is exceptionally thick or has metal mesh in it there will be no problem with the unit functioning properly.

Ceiling or Textured Surfaces — When dealing with a rough surface such as a sprayed ceiling, use a piece of cardboard when scanning the surface. Run through the calibration technique described earlier WITH the piece of cardboard between the stud sensor and the surface. Also, it is particularly important in this application to remember to keep your free hand away from the unit.

# **Specifications**

Utilising the procedure of scanning and marking from two sides, IntelliSensor™ Pro will find the stud centre typically within 0.3 cm (1/8") accuracy for wood and 0.6 cm (1/4") accuracy for metal.

When measuring a wood or metal stud, it is recommended the IntelliSensor™ Pro be used at 30-50% relative humidity.

Battery: 9 volt (not included)

Shock Resistance: up to 183 cm (6')
Operating Temperature: 0°C to +49°C
(+32°F to +120°F)

Storage Temperature : -20°C to +66°C (-4°F to +150°F)

#### WARRANTY- UK

#### One Year Warranty ( GW )

Stanley Tools warrants its electronic measuring tools against deficiencies in materials or workmanship for one year from date of purchase.

Deficient products will be repaired or replaced, at Stanley Tools' option, if sent together with proof of purchase to:-

#### Stanley UK Sales Limited, Gowerton Road, Brackmills, Northampton

NN4 7RW

This Warranty does not cover deficiencies caused by accidental damage, wear and tear, use other than in accordance with the manufacturer's instructions or repair or alteration of this product not authorised by Stanley Tools.

Repair or replacement under this Warranty does not affect the expiry date of the Warranty.

To the extent permitted by law, Stanley Tools shall not be liable under this Warranty for indirect or consequential loss resulting from deficiencies in this product.

This Warranty may not be varied without the authorisation of Stanley Tools.

This Warranty does not affect the statutory rights of consumer purchasers of this product.

This Warranty shall be governed by and construed in accordance with the laws of England and Stanley Tools and the purchaser each irrevocably agrees to submit to the exclusive jurisdiction of the courts of England over any claim or matter arising under or in connection with this Warranty.



WARNING: Protect Your Eyes Wear Safety Goggles

Warranty

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