EN

# StudSensor™ Pro SL-AC

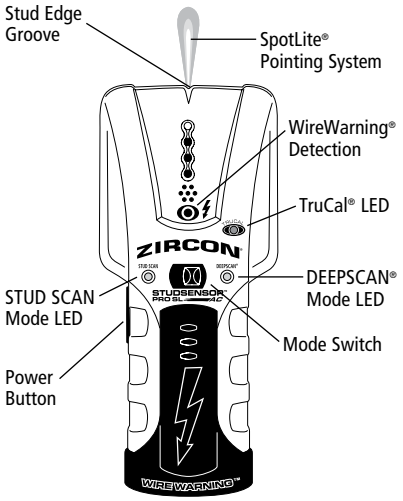
## Stud Finder with WireWarning® Detection

The StudSensor™ Pro SL-AC features two scanning modes:

- STUD SCAN: Locates the edges of wood and metal studs up to ¾ in. (19 mm) deep
- DEEPSCAN®: Locates the edges of wood and metal studs up to 1½ in. (38 mm) deep

WireWarning® detection automatically detects and alerts the user to live AC wires in STUD SCAN and DEEPSCAN® modes. When AC voltage is detected, the AC WireWarning® detection light will come on.

**Note: This product is intended only for use with an optimum voltage range of 110–127 V.**

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**Visit www.zircon.com/support for the most current instructions.** ZIRCON

LIMITED 1 YEAR WARRANTY

Zircon Corporation, ("Zircon") warrants this product to be free from defects in materials and workmanship for one years from the date of purchase. Any in-warranty defective product returned to Zircon*, freight prepaid with proof of purchase date and $5.00 to cover postage and handling, will be repaired or replaced at Zircon's option. This warranty is limited to the electronic circuitry and original case of the product and specifically excludes damage caused by abuse, unreasonable use or neglect. This warranty is in lieu of all other warranties, express or implied, and no other representations or claims of any nature shall bind or obligate Zircon. Any implied warranties applicable to this product are limited to the one year period following its purchase. IN NO EVENT WILL ZIRCON BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM POSSESSION, USE OR MALFUNCTION OF THIS PRODUCT.

In accordance with government regulations, you are advised that: (i) some states do not allow limitations on how long an implied warranty lasts and/or the exclusion or limitation of incidental or consequential damages, so the above limitations and/or exclusions may not apply to you, and further (ii) this warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Return product freight prepaid with proof of purchase date (dated sales receipt) and $5.00 to cover postage and handling, to:

Zircon Corporation
*Attn: Returns Department
1580 Dell Avenue
Campbell, CA 95008-6992 USA

Be sure to include your name and return address. Out of warranty service and repair, where proof of purchase is not provided, shall be returned with repairs charged C.O.D. Allow 4 to 6 weeks for delivery.

Customer Service, 1-800-245-9265 or 1-408-963-4550
Monday–Friday, 8:00 a.m. to 5:00 p.m. PDT
www.zircon.com • info@zircon.com

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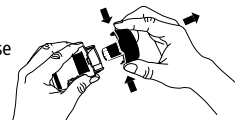
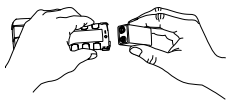
## 1. INSTALLING THE BATTERY

**NOTE: DO NOT LOOSEN OR REMOVE SCREW ON THE BACK OF THE UNIT.**

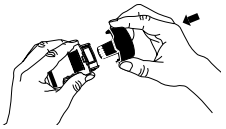
Squeeze sides of clip to help release clip end.



Slide a new 9-volt battery into compartment, terminal side first, matching (+) and (–) terminals from battery to case.



Replace the clip.



## 2. OPERATING TIPS

For optimum scanning results:

- Hold the tool straight up and down, parallel to the studs, and do not rotate the tool.
- Keep tool flat against the wall and do not rock, tilt, or press hard when slowly sliding across the surface being scanned.
- Avoid placing your other hand, or any other part of your body, on the surface being scanned.
- 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.
- To avoid surprises, remember that studs or joists are normally spaced 16 in. (41 cm) or 24 in. (61 cm) apart and are 1½ in. (38 mm) in width. **Anything closer together or a different width may not be a stud, joist, or firebreak.**

If you're 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 hasn't 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.

**⚠ 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.**

***Always turn off the power when working near electrical wires.***

**WORKING WITH DIFFERENT MATERIALS**

StudSensor™ Pro SL-AC is for use on dry interior walls only.

StudSensor™ Pro SL-AC can scan effectively through most sheet materials, including:

- Bare wood flooring (in DEEPSCAN® mode)
- Linoleum on wood base
- Gypsum drywall over plywood sheathing
- Wallpapered walls (if dry)
- Textured ceilings if uniform thickness (place a thin piece of cardboard on ceiling and scan over it to avoid damage to texturing)

StudSensor™ Pro SL-AC is not designed to scan materials such as:

- Ceramic floor tile
- Carpeting and padding
- Wallpaper with metallic fibers
- Freshly painted walls that are still damp (may take one week or longer to dry after application)
- Lath and plaster walls
- Foil covered insulation board
- Glass or any other dense material

*Note: Sensing depth and accuracy can vary due to moisture, content of materials, wall texture, and paint.*

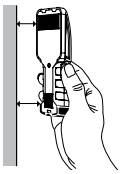
## 3. SELECTING THE MODE

Move selector switch to the desired mode: STUD SCAN for finding wood or metal studs or DEEPSCAN® for finding studs behind walls more than ¾ in. (19 mm) thick.

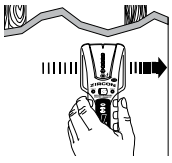
Unit will remain off if Power button is not depressed.

## 4. FINDING A STUD

Always scan for studs with the scanner placed flat against the wall. Move the mode switch to STUD SCAN, place the tool flat against the wall, then press and hold the Power button. Wait for beep to confirm calibration has completed before moving scanner.

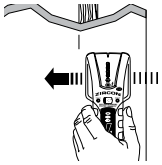


Continue to hold in the Power button then slowly slide unit horizontally across the wall, left or right. As you begin to approach a stud, the red LED segments will begin to turn on.



When the top green LED is first lit, the SpotLite® beam shines, and a steady tone sounds, you have located the edge of the stud. Mark this spot.

Without releasing Power button, continue scanning beyond marked spot until some segments of the LEDs turn off. Slide unit in reverse direction to locate other edge of stud.



Mark this second spot. Middle of stud is centered between the two marks.

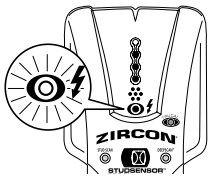
## 5. WIREWARNING® DETECTION

WireWarning® detection works continuously in STUD SCAN and DEEPSCAN® modes. When live AC voltage is detected, the WireWarning® light comes on. If scanning begins over a live AC wire, the WireWarning® indicator will flash continuously. Use extreme caution in these circumstances or whenever live AC 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, encased in conduit, present behind a plywood shear wall or metallic wall covering, or if moisture is present in the environment or scanned surface.**

**⚠ WARNING DO NOT ASSUME THERE ARE NO LIVE ELECTRICAL WIRES IN THE WALL. DO NOT TAKE ACTIONS THAT COULD BE DANGEROUS IF THE WALL CONTAINS A LIVE ELECTRICAL WIRE. ALWAYS TURN OFF THE ELECTRICAL POWER, GAS, AND WATER SUPPLIES BEFORE PENETRATING A SURFACE. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN ELECTRIC SHOCK, FIRE, AND/OR SERIOUS INJURY OR PROPERTY DAMAGE.**

***Always turn off the power when working near electrical wires.***



## 6. HELPFUL HINTS (See also number 2, Operating Tips)

| Situation | Probable Causes | Solutions |
|---|---|---|
| Lights start flashing and unit starts beeping. | • Scan began on dense part of wall or over a stud.<br>• Unit not flat against wall.<br>• Unit tilted or lifted during scan. (All these factors affect proper calibration.)<br>• Scanning surface is too dense or too wet for unit to operate. | • Turn unit off, move over a few inches (5–8 cm), press Power button, and start again.<br>• On rough surfaces, place a thin piece of cardboard on wall, scanning over it to help slide unit more smoothly.<br>• Keep hand at least 6 in. (15 cm) from unit while you calibrate and scan. Hold unit with thumb and index finger no higher than handgrips. Be careful not to move your fingers after calibration.<br>• Always hold unit parallel to the stud and move it perpendicular to the stud you're trying to locate.<br>• If you are using unit on a recently taped, painted, or wallpapered wall, allow time to dry and try again. |
| Unable to detect studs in STUD SCAN mode.<br>Top green LED doesn't turn on or flash in STUD SCAN mode. | • Wall is particularly thick or dense. | • Switch to DEEPSCAN® mode to locate the stud.<br>• Interpret the highest LED obtained as the stud edge. |
| The TruCal® icon turns on but, when scanning, unit doesn't do anything else. | • Unit may not be flat against the wall.<br>• If it is in the DEEPSCAN® mode (DEEPSCAN® is lit), you may have calibrated over a stud. | • Hold unit so two Velcro® strips on the back make contact with wall.<br>• Recalibrate unit in a different place and re-scan area. |
| Working in DEEPSCAN® mode and can't detect studs. | • You may have calibrated over a stud. (The error condition is disabled in DEEPSCAN® mode because it is twice as sensitive as STUD SCAN.)<br>• You may be holding the unit like a TV remote, aiming it at the wall. | • Move unit over a few inches (5–8 cm) and recalibrate.<br>• Hold unit so two Velcro® strips on the back make contact with wall. |
| Detects other objects besides studs. | • Electrical wiring and metal or plastic pipes may be near or touching back surface of wall. | • Check for other studs equally spaced to either side 12, 16, or 24 in. (30, 41, or 61 cm) apart or for the same stud at several places directly above or below the first scan area. |
| You suspect electrical wires, but do not detect any. | • Wires may be shielded behind metallic wall coverings, plywood shearwall, or other dense material, or in conduit.<br>• The wires may not be live.<br>• Wires deeper than 2 in. (51 mm) from surface may not be detected. | • Use extra caution if the area has plywood, thick wood backing behind drywall, or thicker-than-normal walls.<br>• If a switch controls an outlet, make sure it is ON for detection, but turned off when working near electrical wires.<br>***Always turn off power when cutting, nailing, or drilling near electrical wires.*** |
| Area of voltage detection appears much larger than actual wire (AC only). | • Voltage detection can spread on drywall as much as 12 in. (30 cm) from each side of an actual electrical wire. | • To narrow detection, turn unit off and on again at the edge of where wire was detected and scan again.<br>***Always turn off power when cutting, nailing, or drilling near electrical wires.*** |

**FCC Part 15 Class B Registration Warning**

This device complies with Part 15 of FCC Rules. Operations subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.