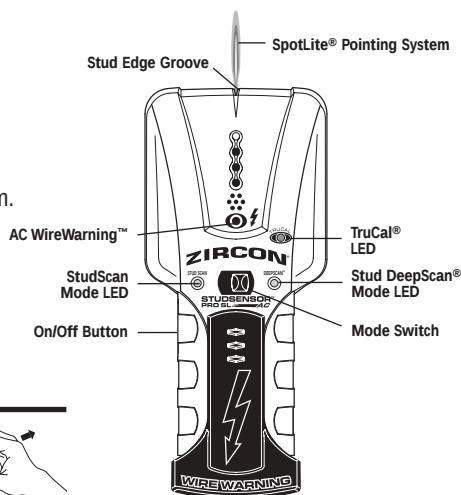


StudSensor™ Pro SL-AC Stud Finder with AC WireWarning™ and SpotLite® Pointing System

The Zircon StudSensor™ Pro SL-AC detects wood and metal studs and joists in walls, floors, and ceilings. It features two scanning modes, recessed LEDs, a durable high-impact case, and the patented SpotLite® Pointing System. It also has WireWarning™ to continuously detect hot AC voltage in both modes.

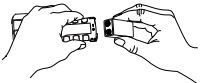


INSTALLING THE BATTERY

1 Squeeze sides of clip to help release clip end.



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



3 Replace the clip. Battery will last approximately two years under normal conditions.



CALIBRATION AND SCANNING IN STUD SCAN OR DEEPSCAN® MODES

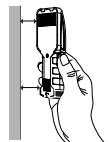
Note: Unit calibrates on each use.

Use Stud Scan Mode for depths to about $\frac{3}{4}$ in. (19 mm) and DeepScan for depths up to $1\frac{1}{2}$ in. (38 mm) or double layers.

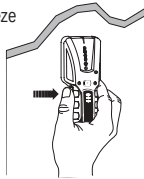
Note: Keep unit flat against wall. Do not lift or tilt unit during calibration or scanning.

4 Slide the Mode Selector switch to the desired scanning mode. The mode can be selected with the unit on or off.

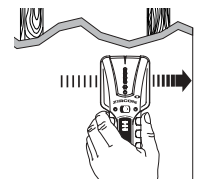
5 With StudSensor Pro SL-AC turned off, position the unit flat against the wall.



6 Without moving unit, squeeze and hold On/Off button. TruCal® LED should be lit.



7 Continue to hold in the On/Off button then slowly slide unit horizontally across the wall, right or left.

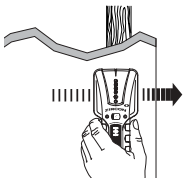


8 As you begin to approach a stud, the red LEDs will light successively, from bottom to top.

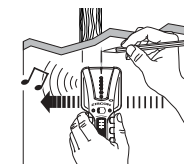
9 When the top green LED is lit, a steady tone sounds, and the SpotLite® shines, you have located the edge of the stud. Mark this spot.



10 Continue scanning beyond marked spot until green LED goes out. Slide unit in reverse direction to locate other edge of stud.

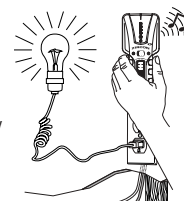


11 Mark this second spot. Middle of stud is centered between the two marks.



CONTINUOUS AC VOLTAGE DETECTION (WireWarning™)

12 The StudSensor Pro SL-AC detects from 90 to 250 V at 50 to 60 Hz AC in a hot electrical wire. The voltage detection feature works continuously in both Stud Scan and DeepScan modes. When sensing voltage, the small AC light comes on.



Caution: The StudSensor Pro SL-AC will not detect hot wires inside metal pipe or conduit, behind metallic wall covering, or behind some plywood or other dense materials. Use extra caution in these situations. Always turn the power off when nailing, cutting, or drilling near electrical wires.

OPERATING CAUTIONS

13 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. (406 mm) or 24 in. (610 mm) apart and are $1\frac{1}{2}$ in. (38 mm) in width. Anything closer together or a different width may not be a stud, joist, or firebreak. 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. Although StudSensor Pro SL-AC can scan through up to $1\frac{1}{2}$ in. (38 mm) of common construction materials in DeepScan mode, three primary factors can affect sensing depth: thickness, density, and moisture content. 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 through it to avoid damage to texturing.)

StudSensor Pro SL-AC is not designed to scan materials with inconsistent density such as:

- Ceramic floor tile
- Carpeting and padding
- Wallpaper with metallic fibers
- Freshly painted walls that are still damp (must dry at least a week)
- Lath and plaster walls
- Foil covered insulation board

FCC Part 15 Class B Registration Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that

interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- (1) Reorient or relocate the receiving antenna.
- (2) Increase the separation between the equipment and receiver.
- (3) Connect the equipment into an outlet on a circuit, different from that which the receiver is connected (if applicable).
- (4) Consult the dealer or an experienced radio/TV technician for help.

HELPFUL HINTS

Situation	Probable Causes	Solutions
Lights start flashing and unit starts beeping.	• Scan began on dense part of wall or over a stud. • Unit not flat against wall. • Unit tilted or lifted during scan. (All these factors affect proper calibration.)	• Turn unit off, move over a few inches, press On/Off button, and start again. • On rough surfaces, place piece of paper on wall, scanning through it to help slide unit more smoothly. • Keep hand at least 6 in. (152 mm) from StudSensor Pro SL-AC 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. • Always hold unit parallel to and move perpendicular to object you're trying to locate.
Center green LED doesn't light in Stud Scan mode.	• Wall is particularly thick or dense.	• Interpret red LED closest to center as stud edge. • Switch to DeepScan to locate the stud.
The green TruCal LED lights but, when scanning, unit doesn't do anything else.	• Unit may not be flat against the wall. • If it is in the DeepScan mode (the DeepScan LED is lit), you may have calibrated over a stud.	• Hold unit so two Velcro™ strips on the back make contact with wall. • Recalibrate unit in a different place and rescan area.
All three red LEDs and green LED light at the same time and unit beeps continuously.	• Scanning surface is too dense or too wet for unit to operate.	• If you are using unit on a recently taped, painted, or wallpapered wall, allow time to dry and try again.
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.) • You may be holding the unit like a TV remote, aiming it at the wall.	• Move StudSensor Pro SL-AC over a few inches and recalibrate. • 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.	• Remember that studs or joists are normally spaced 16 in. (406 mm) or 24 in. (610 mm) apart and are $1\frac{1}{2}$ in. (38 mm) wide. • Always turn off power when cutting, nailing, or drilling near electrical wires.
You suspect electrical wires, but do not detect any.	• Wires may be shielded behind metallic wall coverings, plywood sheathwall or other dense material, or in conduit; StudSensor Pro SL-AC may not be able to find them. • The wires may not be hot. • Wires may be too deep to sense.	• See above solution. • Use extra caution if the area has plywood, thick wood backing behind drywall, or thicker-than-normal walls. • If a switch controls an outlet, make sure it is ON for detection, but turned off when working near electrical wires.
Area of voltage detection is too large.	• Static charge may develop on drywall, spreading voltage detection as much as 12 in. (305 mm) 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.

Questions? Check our Web site at www.zircon.com and click "Support."