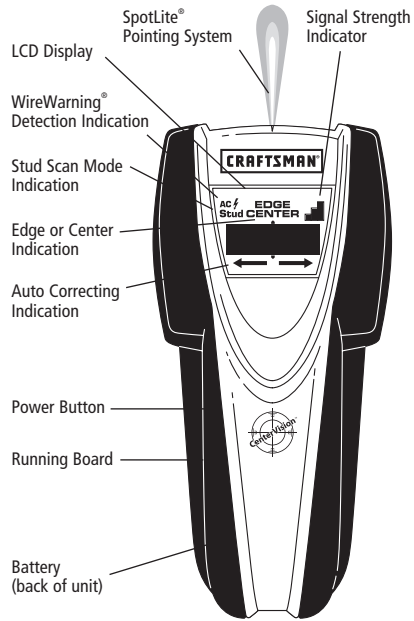


# Craftsman® Stud Finder



This Craftsman® stud finder detects both the center and edges of wood and metal studs and joists in walls, floors, and ceilings in one step. It features a durable high-impact case and the patented SpotLite® Pointing System. It also has WireWarning® detection to continually detect hot AC voltage when scanning for studs.

## 1. INSTALLING THE BATTERY

Press battery door release in with your finger or a coin and lift up to remove door.

Place 9-volt battery into the compartment and press into place.

Replace battery door and snap shut.

## 2. OPERATING TIPS

For optimum scanning results, it is important to properly hold the stud finder and move slowly when scanning. The following tips will provide more accurate scanning results:

- Grasp the handle with your thumb on one side and your fingers on the other side. Make sure your fingertips are resting on or above the running board and not touching the surface being scanned or the scanning head of the tool.
- Hold the tool straight up and down, parallel to the studs, and do not rotate the tool.



- Keep the tool flat against the wall and do not rock or tilt the tool 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. This will interfere with the tool's performance.

## 3. TURNING ON/CALIBRATING THE TOOL

- Place stud finder flat against the wall, then press and hold the Power button. The LCD will display all icons until calibration is complete. Upon completion of calibration, the SpotLite® Pointing System and buzzer will momentarily activate and the tool will begin continuous measurements.

*Note: It is important to wait for calibration to complete (1-2 seconds) before moving the scanner.*

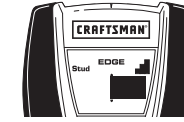
- ACT™ (Auto Correcting Technology) — The tool will automatically recalibrate itself when needed during scanning. This recalibration is usually transparent and no indication is made. If an arrow icon illuminates, the tool was calibrated near or over a stud and then moved away. The arrow indicates the direction of the missed stud.



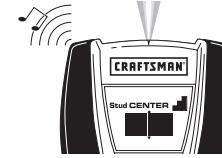
## 4. FINDING A STUD

Always start with the scanner placed flat against the wall, then press the Power button. Wait for beep to confirm calibration has completed before moving tool.

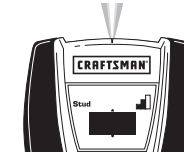
Slowly slide tool across surface. EDGE display will illuminate, indicating location of the stud edge.



Continue sliding tool. When the center of stud is located with three bars on the Signal Strength Indicator, the buzzer will sound, and the four middle bars, CENTER display, and SpotLite® Pointing System will illuminate.



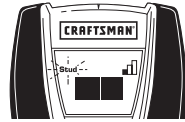
In cases of deeper studs (or thicker walls) when the center of the stud is located, only two bars will show on the Signal Strength Indicator and only the SpotLite® beam and four middle bars will illuminate. If you still can't locate a stud, try the next step.



**CAUTION** The tool may detect other objects behind the wall such as pipes and conduit. See Section 8: Operating Cautions for ways to confirm that you found a stud.

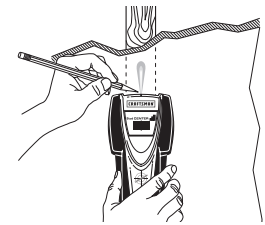
## 5. DIFFICULTY LOCATING A STUD? TRY HIGH SENSITIVITY MODE

If you have difficulty locating a stud after following Step 4, it could be that the stud is deep or the walls are thick. With the unit still placed flat against the wall and turned on, quickly (within one second) release and re-press the Power button. The Stud Scan mode indication will flash continuously, indicating that the tool has entered High Sensitivity mode. The center of a very deep stud will be indicated by the four middle bars illuminating.



## 6. MARKING THE CENTER OF THE STUD

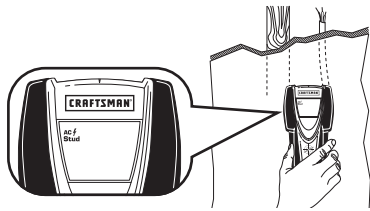
Once an object is located, mark the location where the SpotLite® Pointing System illuminates. This is the center of the stud.



## 7. WIREWARNING® DETECTION

The WireWarning® detection works continuously. When live AC voltage is detected, the WireWarning® detection indicator will appear in the display.

If scanning begins over a live AC wire, the WireWarning® detection indicator will flash continuously.



**WARNING** Electrical field locators may not detect live AC wires if moisture is present in the wall, or if wires are more than 51 mm from the scanned surface, in plastic conduit or behind a plywood shear wall or metallic wall covering. 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" stud spacing practices.

**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.

## 8. OPERATING CAUTIONS

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 1½ 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.**

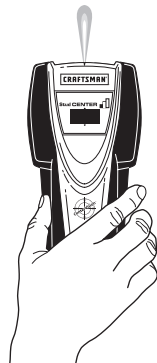
## 9. SCANNING DIFFERENT SURFACES

**Freshly painted walls:** Must dry a minimum of one week after application.

**Wallpaper:** Stud finder functions normally on walls covered with wallpaper or fabric, unless the materials are metallic foil, contain metallic fibers, or are still wet after application. *Wallpaper may need to dry for several weeks after application.*

**Textured walls or acoustic ceilings:** When scanning a ceiling or wall with an uneven surface, place thin cardboard on the surface to be scanned and scan over the cardboard. Calibrate with cardboard in place.

**Wood flooring, subflooring, or gypsum drywall over plywood sheathing:** Use the High Sensitivity mode and move the tool slowly. The Signal Strength Indicator may only display 1 or 2 bars when the tool locates a stud through thick surfaces.



**Lath & Plaster:** Due to irregularities in plaster thickness, this tool is not recommended for use on lath & plaster.

Stud finder cannot scan for wood studs and joists through carpeting and pad. In Stud Scan mode, the stud finder will NOT be able to scan through dense materials such as glass, ceramic tile, and foil.

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

## 10. HELPFUL HINTS

Situation	Probable Cause	Solution
All LCD segments turn on at the same time and the unit beeps continuously.	<ul style="list-style-type: none"> <li>Unit not flat against wall.</li> <li>Unit tilted or lifted during scan. (All these factors affect proper calibration.)</li> <li>Scanning surface is too dense or too wet for unit to operate.</li> </ul>	<ul style="list-style-type: none"> <li>On rough surfaces, place piece of paper on wall, scanning through it to help slide unit more smoothly.</li> <li>Keep hand at least 6 in. (152 mm) from the stud finder 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.</li> <li>Always hold unit parallel to and move perpendicular to object you're trying to locate.</li> <li>If you are using unit on a recently taped, painted, or wallpapered wall, allow time to dry and try again.</li> <li>While unit is still on, quickly release and re-press the Power button to enter High Sensitivity mode.</li> </ul>
Detects other objects besides studs.	<ul style="list-style-type: none"> <li>Electrical wiring and metal or plastic pipes may be near or touching back surface of wall.</li> </ul>	<ul style="list-style-type: none"> <li>Check for other studs equally spaced to either side 12, 16, or 24 in. (305, 406 mm, or 610 mm) apart, or check for the same stud at several places directly above or below the first finding. Studs will run straight up and down from floor to ceiling, while pipes may change direction.</li> </ul>
You suspect electrical wires, but do not detect any.	<ul style="list-style-type: none"> <li>Wires are shielded by metal conduit, a braided wire layer, behind metallic wall coverings, plywood shear wall, or other dense material.</li> <li>Wires may not be live.</li> <li>Wires deeper than 2 in. (51 mm) from surface might not be detected.</li> </ul>	<ul style="list-style-type: none"> <li>See above solution.</li> <li>Use extra caution if the area has plywood, thick wood backing behind drywall, or thicker-than-normal walls.</li> <li>If a switch controls an outlet, make sure it is ON for detection, but turned off when working near electrical wires.</li> </ul> <p><i>Always turn off the power when working near electrical wires.</i></p>
Area of voltage detection is too large.	<ul style="list-style-type: none"> <li>Voltage detection can spread on drywall as much as 12 in. (305 mm) from each side of an actual electrical wire.</li> </ul>	<ul style="list-style-type: none"> <li>To narrow detection, turn unit off and on again at the edge of where wire was detected and scan again.</li> </ul>

### FCC Part 15 Class B Registration Warning

This device complies with Part 15 of FCC Rules. Operation is 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.