

# FRANKLIN SENSORS

## ProSensor™ M50 PROFESSIONAL STUD FINDER

### QUICK START

Requires 2 AA batteries

Open battery cover  
(See instructions for details)

Install batteries according to polarity and replace the battery cover

Keep your fingers on the handle. Do not touch the edges of the stud finder while scanning

### QUICK TEST

- Press and HOLD the button
- Pass your finger behind the unit
- See LEDs track your finger

Please give us a call, if you are not 100% satisfied.

**208-918-2403**

Please call before you return.

### WATCH THE VIDEO:



[franklinsensors.com/instructions](http://franklinsensors.com/instructions)

### IMPORTANT: READ BEFORE USING. SAVE THESE INSTRUCTIONS.

#### Operating/Safety Instructions

##### FRANKLIN SENSORS PROSENSOR M50

Congratulations on selecting a Franklin Sensors stud finder – the most advanced wall sensing technology on the market. Your ProSensor M50 incorporates advanced technology that precisely senses the surface in 5 locations simultaneously, then instantly identifies the location(s) of hidden object(s). It is quick, easy and accurate.



- |                             |                     |
|-----------------------------|---------------------|
| 1. LED Lights               | 4. "On" Button      |
| 2. Live Electrical Warning™ | 5. Battery Cover    |
| 3. Ergonomic Handle         | 6. Detector Housing |
|                             | 7. Sensor Board     |

## OPERATING INSTRUCTIONS

Para instrucciones en español, visite <https://franklinsensors.com/support/instruction-manuals/>

### SAFETY RULES FOR THE PROSENSOR M50

**WARNING:** It is possible that there may be wood, metal, wiring, or other objects behind the surface that are not detected. The stud finder may also detect pipes, wires, or other objects that the user may not want it to detect. The stud finder is designed to detect any inconsistency but does not identify what type of inconsistency or object it detects. The illuminated LEDs may indicate the location of many different features including, but not limited to, studs, beams, water pipes, gas pipes, wires, an inconsistency in the surface material or paint, etc.

**WARNING:** TURN OFF all gas, water, and electric power before using any drilling or penetrating devices or equipment including drills, saws, routers, hammers, nails, screws, etc.

**WARNING:** The stud finder alone should not be relied upon exclusively to locate objects behind a scanned surface. Use other sources of information to help locate objects. Other sources of information may include, but are not limited to, construction plans, visible points of entry of pipes, location of switches and outlets, and standard stud spacing practices.

### FAILURE TO TAKE THESE AND OTHER NECESSARY PRECAUTIONS COULD RESULT IN ELECTRIC SHOCK, FIRE, AND/OR SERIOUS INJURY AND DEATH.

#### Clean

Before turning on, ensure that the stud finder is clean and dry. If necessary, wipe the stud finder dry using a clean cloth. If the detector is wet or dirty it may not operate properly.

#### Temperature

If the stud finder is subject to a significant temperature change, allow it to adjust to the ambient temperature before using. The entire area of the sensor board should be at a similar temperature for best operation.

#### TO OPERATE:

Hold the stud finder by the handle. Do not touch the detector outside of the handle area while scanning.

- Press and hold the "on" button.

- With the button held down, the LEDs will quickly flow to the center, indicating that the unit has power. You may immediately begin scanning the wall. You may press the button on or off the wall. No calibration is required. As you scan, LED lights will illuminate to display the location of any hidden object.

- The ProSensor M50 uses Active Learning Technology™. With Active Learning Technology™, the readings become more accurate the longer you hold the button while scanning the wall.

- On some surfaces, it may be helpful to slide the stud finder up and down to confirm the location of a stud.



### Handle Hold

When operating the ProSensor M50 the hand should remain on the handle. Holding the M50 on the sides may cause the unit to work inaccurately.

### LIVE ELECTRICAL WARNING™

The ProSensor M50 Live Electrical Warning™ works continually while the button is depressed. When a live electrical wire is detected, the yellow lightning bolt symbol may illuminate to indicate the presence of live wires.

The ProSensor M50 uses Active Learning Technology™. To best detect the presence of live electrical wires, slowly scan in both directions, passing over the same location multiple times, for a more accurate reading.

**NOTE:** The ProSensor M50 Live Electrical Warning™ is optimized for finding live wires near studs.

**WARNING:** Use extreme caution under these circumstances or whenever live wiring is present. Always turn off the electrical power, gas and water supplies before penetrating a surface.

### SENSING THROUGH DIFFERENT MATERIALS:

#### Moisture

The scanned surface should be clean and dry. Paint and wallpaper need to be completely dry before scanning for studs. It may take up to 2 weeks for wallpaper to dry enough to detect studs.

#### Foil-Backed Insulation

Although not common, foil-backed insulation can cause inconsistent readings with all electronic stud finders, including the ProSensor M50.

#### Metallic Content in Wallpaper

Wallpaper with metallic content can block the detector's signals.

#### Textured Walls and Acoustic Ceilings

The ProSensor M50 is capable of detecting studs through many textures and surfaces. The unit will however work most accurately if placed firmly against the flattest portions of the wall. For the best results, prior to beginning your scan, identify a horizontal area that is consistently the flattest.

#### Lath and Plaster

The ProSensor can see up to 1.5", and thus can see through most lath and plaster walls. When irregularities in plaster thickness and variations in construction materials exceed this depth, detection is not guaranteed. Also, the stud finder may not be able to detect if the plaster uses metal mesh reinforcement.

#### Tile, Flooring, Roofing, and Exteriors

The ProSensor M50 works by measuring the density of material behind the sensors to determine the location of studs. Due to the variability of density in tile flooring, roofing and exterior materials, we do not recommend the ProSensor M50 for use in these applications.

#### STICKERS / DECALS

Do not place decals or stickers, especially those containing metal, on the sensor board, or on the stud finder in any place.



### DISASSEMBLY / TEFLON PADS

Do not disassemble the stud finder or remove the Teflon pads on the bottom. The stud finder will not operate correctly without the Teflon pads properly in place.

### REPLACING THE BATTERIES

- Remove the battery cover by gently depressing the back of the battery cover and lifting.
- Remove both batteries and dispose of them properly. Please recycle.
- Replace with AA batteries.
- Close the battery cover by gently depressing the back of the battery until it clicks closed.



### BATTERIES

The ProSensor M50 uses AA batteries. Do not mix old and new batteries. Don't intermix alkaline or standard batteries.

### DISPOSAL

Stud finders and packaging should be sorted for recycling.

### ENVIRONMENTAL CONDITIONS

Franklin Sensors stud finders will work best when maintained in the following environmental conditions:

Storage Temperature	(0°F to 120°F) (-18°C to 50°C)
Storage Humidity	0% to 90% Relative humidity (non-condensing)
Operating Temperature	(32°F to 110°F) (0°C to 43°C)
Operating Humidity	0% to 90% Relative humidity (non-condensing)

### FCC PART 15 CLASS B REGISTRATION WARNING

This device complies with Part 15 of FCC rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### LIMITED LIFETIME WARRANTY

Franklin Sensors Inc. offers a Limited Lifetime Warranty on all its products. The products are warranted to be free from defects in materials and workmanship for the life of the product. If a defect is found, at Franklin Sensors' discretion, Franklin Sensors will either repair or replace the unit with an equivalent product.

The function of the products is not guaranteed. For example, for stud finders it is possible that there may be wood, metal, wiring, or other objects behind the surface that are not detected. It is also possible that stud finders may detect pipes, wires, or other objects that the user may not want to detect. The stud finders do not identify what type of object they detect. Illuminated LEDs may indicate the location of many different features including, but not limited to, studs, beams, water pipes, gas pipes, wires, an inconsistency in the surface material or paint, etc. This warranty does not cover incidental or consequential damage such as physical injuries, property damage, loss of time, loss of use of the product, inconveniences, or accommodations resulting from failure of the products.

Franklin Sensors shall not be liable for any special, indirect, incidental, or consequential damages or losses, whether arising from breach of warranty or based on contract, tort, reliance or any other theory. Since some countries or states do not allow limitation of the term of an implied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warranty may not apply to every buyer. In the event of a product defect, please return the product postage paid with proof of purchase to:

In the event of a product defect, please return the product postage paid with proof of purchase to:

Franklin Sensors Inc.  
Attn: Returns Department  
6675 N Pollard Ln  
Meridian, ID 83646  
(208) 918-2403  
[returns@franklinsensors.com](mailto:returns@franklinsensors.com)  
Hours of Operation: Monday-Friday,  
8 AM to 5 PM,  
Mountain Time Zone

US Patents 8,476,912 8,791,708  
8,884,633 10,663,613 10,895,657  
US and Foreign Patents Pending.



M50

M50.E (02/25)

## TROUBLESHOOTING

CONDITION	PROBABLE CAUSE	SOLUTION
No LED lights come on.	Weak Batteries.	Replace with 2 new AA, 1.5-volt alkaline batteries. Do not mix old and new batteries.
Stud finder only works momentarily.	The "on" button isn't being held down.	Hold the "on" button down until you have completed your scan.
Difficulty starting a scan near doors and windows.	Solid headers and triple studs are often present around doors and windows. The ProSensor indicates the change in density. If all the sensors sense the same density, the LEDs will not illuminate.	Begin the scan away from the window or door, then move the stud finder to the area around the window or door. For best results, keep stud finder 3"/7cm away from wood trim, outlets, switches, etc.
The LED lights sometimes seem to light up sporadically or inconsistently.	Operator is holding the unit near the base rather than on the handle.	Only hold the unit by the handle with a finger continually pressing the button.
	Franklin Sensors stud finders find any change in density. The sensor's job is to identify any changes in density. In the case of heavy texture, pipes and wires close to the surface of the wall or other irregularities in the wall, the LEDs may illuminate. When this happens, you know your stud finder is doing its job!	When you get a reading, continue to press and hold the button and then scan the wall up and down. The LED lights will remain constant on a stud, while irregularities will only display temporarily.