

# FRANKLIN SENSORS

ProSensor™ M90, M92, M150 & X990

## PROFESSIONAL STUD FINDER

### QUICK START

- Requires 2 AAA batteries.
- Find the trapezoid on the battery cover
- Push the battery cover to the right to open
- 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

### WATCH THE VIDEO



Franklinsensors.com/instructions

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6675 N Pollard Lane  
Meridian ID 83646  
Hours of Operation: Monday-Friday,  
8 AM to 5 PM, Mountain Time Zone

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

### Operating/Safety Instructions

**FRANKLIN SENSORS PROSENSOR M90, M92, M150 & X990**  
Congratulations on selecting a Franklin Sensors stud finder – the most advanced wall sensing technology on the market. Your ProSensor incorporates advanced technology that precisely senses the surface in multiple locations simultaneously, then instantly identifies the location(s) of hidden object(s). It is quick, easy and accurate.

## OPERATING INSTRUCTIONS

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

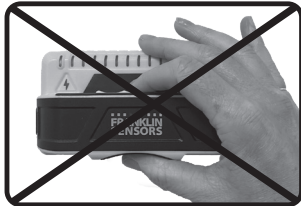
### SAFETY RULES FOR THE PROSENSOR M90, M92, M150 & X990

**WARNING:** Read all instructions before use. Failure to follow safety instructions may result in electric shock, fire, and/or serious injury and death.  
**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. The stud finder is designed to detect any change in density but does not identify what type of 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 the wall.

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

### TO OPERATE:

- Hold the stud finder by the handle. Do not touch the detector outside of the handle area while scanning.
- In certain models, 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.



• LEDs track the center and edges of studs simultaneously. In certain models, the center LED will turn green once the precise center of the stud has been reached.



### HEAVY TEXTURE OR IRREGULARITIES:

Franklin Sensors stud finders identify the location of studs by identifying differences in the density of the material in the wall. Consequently, areas of heavy texture and/or irregularities in the wall, can also cause the LEDs to illuminate. When this happens, you know your stud finder is doing its job. To help determine if you have actually found a stud, continue to press and hold the button and then scan the wall up and down. The LED lights will normally remain constant on a stud, whereas the LEDs will only display sporadically on a wall's irregularity.

### FINDING PIPES AND WIRES:

Franklin Sensors stud finders identify the location of studs by identify differences in the density of the material in the wall. Consequently, wires or pipes that are near the surface, can also cause the LEDs to illuminate. When this happens, you know your stud finder is doing its job. To help determine if you have found a stud, continue to press and hold the button and then scan the wall up and down. The LED lights will normally remain constant on a stud, whereas wires may only make contact in a small area and pipes may have elbows and branch off which may cause LEDs to only illuminate sporadically. ALWAYS TAKE THE NECESSARY SAFETY PRECAUTIONS AND TURN OFF all gas, water and electric power before penetrating the wall.

### LATH AND PLASTER

The ProSensor can see up to 1.5 inches 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

Due to the variability in thickness and density in tile, roofing and exterior materials, detection is not guaranteed.

### FIRE BLOCK OR HORIZONTAL STUDS

When searching for fire blocks or horizontal studs, turn the stud finder vertically and scan up and down the wall so the sensors can find the density differences in the wall.



### BATTERIES

#### DO NOT USE RECHARGEABLE BATTERIES ON THE M90/M92.

The ProSensor uses 2 AAA batteries.  
Do not mix old and new batteries.

Do not mix alkaline, standard or rechargeable batteries.  
**Use 1.5 volt alkaline batteries only.**

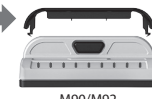
In select units, when the battery voltage is low, the second LED from the right will flash. Replace with 2 new batteries.



### REPLACING THE BATTERIES

Remove the battery cover:

- M150 & X990: by gently pushing on the right side and then lifting.
- M90 & M92: by gently depressing on each side and then lifting.
- Remove both batteries and dispose of them properly. Please recycle.
- Replace with new AAA batteries.
- Close the battery cover by inserting the clip into the battery cavity, gently push the other side of the battery cover inserting the other clip into the battery cavity until it clicks closed.



### LIVE ELECTRICAL WARNING™ – M150 & X990 ONLY

The ProSensor 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 uses Active Learning Technology™. When detecting live electrical wires, scan in both directions, passing over the same location multiple times, for a more accurate reading.

### 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.

#### Metallic Content in Wallpaper

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

#### 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.

#### 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.

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

### DISPOSAL

Stud finders and packaging should be sorted for recycling.

### 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.

US Patents	8,476,912	8,669,772
8,736,283	8,791,708	8,836,347
8,884,633	10,613,243	10,663,613
10,895,657	12,174,333	

US and Foreign Patents Pending.

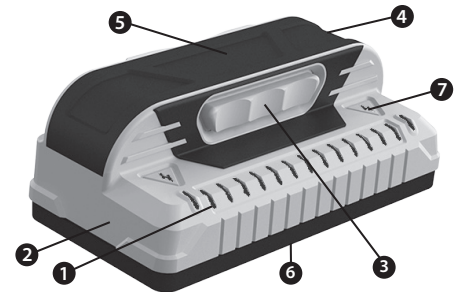


ProSensor M150

ProSensor M90/M92

ProSensor X990

M90\_M92\_M150\_X990.E (07/25)



- LED Lights
- Detector Housing
- "On" Button
- Battery Cover
- Ergonomic Handle
- Sensor Board
- Live Electrical Warning™

## TROUBLESHOOTING

CONDITION	PROBABLE CAUSE	SOLUTION
No LED lights come on.	Weak or Rechargeable Batteries.	DO NOT USE RECHARGEABLE BATTERIES IN SELECT UNITS. Replace with 2 new AAA 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.