

Draper 13818

Draper 13818 Combined Metal, Voltage, and Stud Detector User Manual

Model: 13818 | Brand: Draper

INTRODUCTION

The Draper 13818 Combined Metal, Voltage, and Stud Detector is designed to assist users in safely locating various hidden elements within partition walls. This device can detect live or dead electricity cables, metallic water pipes, nails, other metal objects, and wood studs without causing surface damage. Please read this manual thoroughly before use to ensure safe and effective operation.

PRODUCT OVERVIEW

Familiarize yourself with the components of your Draper 13818 detector.



Image 1: Front view of the Draper 13818 detector, showing the control panel and ergonomic handle. The device is black with a silver label detailing its functions and manufacturer information. Indicators for Stud, Metal, and AC Voltage detection are visible, along with adjustment dials and an ON/OFF switch.

Key Components:

- **Stud Indicator:** (Green/Red LED) Illuminates to indicate the presence of a stud.
- **Set Dial (Stud Detector):** Used to calibrate the stud detection sensitivity.
- **Stud Detector ON/OFF Switch:** Activates or deactivates the stud detection function.
- **AC Voltage/Metal Detector ON/OFF Switch:** Activates or deactivates the AC voltage and

metal detection functions.

- **Voltage Metal Indicator:** (Green/Red LED) Illuminates to indicate the presence of metal or AC voltage.
 - **Set Dial (AC Voltage/Metal Detector):** Used to calibrate the AC voltage and metal detection sensitivity.
 - **Ergonomic Handle:** Provides a secure grip during operation.
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SETUP

Battery Installation

1. Locate the battery compartment cover on the back of the unit.
 2. Slide or unclip the cover to open.
 3. Insert one PP3 size 9V battery, ensuring correct polarity (+/-).
 4. Replace the battery compartment cover securely.
 5. *Note:* Always use a fresh battery for optimal performance and accurate readings.
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OPERATING INSTRUCTIONS

Before scanning, ensure the battery is correctly installed. Hold the detector flat against the wall surface.

1. Stud Detection

1. Switch the "Stud Detector" to the ON position.
2. Place the detector flat against the wall where you intend to scan.
3. Adjust the "Set Dial (Stud Detector)" until the green "Stud" indicator light just turns off. This calibrates the device to the wall's density.
4. Slowly slide the detector horizontally across the wall surface.
5. When a stud is detected, the red "Stud" indicator light will illuminate, and an audible tone may sound. Mark the location.
6. Continue scanning to find the edges of the stud and its center.

2. Metal and AC Voltage Detection

1. Switch the "AC Voltage/Metal Detector" to the ON position.
2. Place the detector flat against the wall.
3. Adjust the "Set Dial (AC Voltage/Metal Detector)" until the green "Voltage Metal" indicator light just turns off. This calibrates the device.
4. Slowly slide the detector horizontally across the wall surface.
5. When metal or live AC voltage is detected, the red "Voltage Metal" indicator light will illuminate, and an audible tone may sound.
6. *Caution:* Always exercise extreme care when detecting AC voltage. Do not drill or cut into areas where live wires are indicated.

Important: For best results, scan the area multiple times from different directions. The maximum depth penetration for detection is approximately 27mm.

MAINTENANCE

- Keep the detector clean and dry. Wipe with a soft, damp cloth if necessary. Do not use abrasive cleaners or solvents.
- Remove the battery if the unit will not be used for an extended period to prevent leakage.
- Store the detector in a cool, dry place, away from direct sunlight and extreme temperatures.
- Do not attempt to open or repair the unit yourself. Refer to qualified service personnel.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No power/Unit does not turn on.	Dead or incorrectly installed battery.	Check battery polarity; replace with a fresh PP3 9V battery.
Inaccurate or inconsistent readings.	Improper calibration; presence of moisture; interference from other electronics.	Recalibrate the device on a clear section of the wall. Ensure the wall is dry. Move away from other electronic devices.
Detector constantly indicates a stud/metal/voltage.	Over-sensitivity; calibration issue.	Adjust the "Set Dial" to reduce sensitivity until the indicator light just turns off before scanning.

SPECIFICATIONS

Model: Draper 13818

Functions: Stud Detection, Metal Detection, AC Voltage Detection

Maximum Depth Penetration: Approximately 27mm

Power Source: 1 x PP3 Size 9V Battery

Product Dimensions: 29cm x 20cm x 4cm (11.42 x 7.87 x 1.57 inches)

Item Weight: 209 g (7.4 ounces)

Manufacturer: Draper Tools Limited

SAFETY INFORMATION

- Always test the detector on a known object (e.g., a piece of wood or metal) before use to

confirm proper operation.

- Do not rely solely on the detector for safety. Always use caution when drilling or cutting into walls.
- Be aware that environmental factors such as moisture, wall texture, and nearby electrical fields can affect detection accuracy.
- This device is intended for detecting objects behind common wall materials. It may not be effective through ceramic tile, carpeting, or metallic wall coverings.
- Keep out of reach of children.

WARRANTY AND SUPPORT

For warranty information or technical support regarding your Draper 13818 detector, please refer to the official Draper Tools website or contact their customer service department. Keep your purchase receipt as proof of purchase.

Draper Tools Limited

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