

**EN**

Original Instructions  
Version 3  
May 2024



# COMBINED **LIVE WIRE, METAL & STUD DETECTOR**

**22230**



**User Manual for:** Combined Live Wire, Metal & Stud Detector

**Stock No:** 22230

**Part No:** D389

Read this manual in full before using this product and retain it for future use. Always use the latest version of the manual. Please visit [drapertools.com/manuals](http://drapertools.com/manuals) for the latest version.

## **1. Intended Use**

This detector is designed to find hidden live AC wires, metal, wooden studs through common wall materials. Suitable for use indoors and outdoors.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

This product is suitable for use by enthusiasts and tradespersons alike.



## 1.1 Specification

Stock No.	22230
Part No.	D389
Detection distance:	
Stud	19mm
Metal	60mm
AC Voltage	51mm
Power Supply:	1 X 9V/PP3 battery (not supplied)
Dimensions:	L 160 X W 69 X H 31mm
Net Weight:	196g

## 2. Health and Safety Information

**Important:** Read all the Health and Safety instructions before attempting to operate, maintain or repair this product. Failure to follow these instructions may result in injury or damage to the user or the product.

- Use this product **ONLY** as instructed in this manual.

**CAUTION!** Depending on the proximity of electrical wiring or pipes to the wall surface, the sensor may detect them as studs. Always take care when nailing, cutting or drilling into walls, floors and ceilings as they may contain these items.

- Always turn off the power when nailing, cutting or drilling near electrical wires.

**CAUTION!**

- The unit will not detect live wires inside metal pipes or conduits, behind metallic wall coverings or other dense materials. Use extra care in these situations.
- Items that are shielded in some way or more than 38mm from the surface will not be detected.

- DO NOT** use this device if the tester is damaged in any way or if there is evidence of battery leakage.
- The battery must be replaced with one with the same specification.

- When replacing the battery check that it is fitted in the correct +/- orientation.
- DO NOT** dismantle or attempt to repair this unit.

## 3. Explanation of Symbols



Read the instruction manual



European conformity



**Caution!**



UK Conformity Assessed



Do not incinerate or throw onto fire

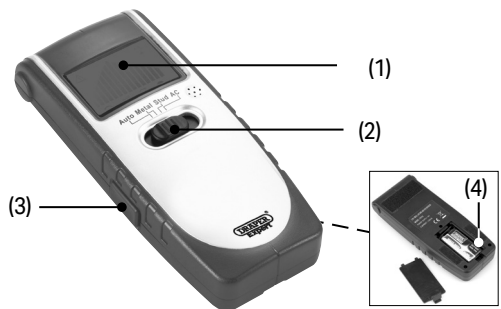


WEEE – Waste Electrical & Electronic Equipment  
Do not dispose of this product with domestic waste

## 4. Identification

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment. If any part is damaged or missing, do not attempt to use the product.

Please contact the Draper Helpline; contact details can be found at the back of this manual.



- (1) LCD display screen
- (2) Mode switch
- (3) ON/OFF button
- (4) Battery compartment (back of detector)

1. Unclip the battery compartment cover (4).
2. Insert a 9V battery and replace the cover.
- Check the battery is fitted in the correct +/- orientation.
- Replace the battery when the low battery icon is displayed on the screen.

## 6. Operation Instructions

### 6.1 Stud Mode Scanning

- Use stud mode for depths up to 19mm.
1. Position the back of the detector flat against the wall.
  2. Select **'STUD'** mode. Then press and hold the **'ON/OFF'** button (3).
  3. Keep the detector in contact with the wall and slide slowly across the surface in a horizontal direction.
  4. When the screen shows full bars and a steady audible tone is heard, the edge of the stud has been located. Mark this spot.
  5. Continue to hold the **'ON/OFF'** button and scan beyond the marked spot until the bars disappear. Then slide in the reverse direction to locate the other edge of the stud. Mark this spot. The stud position is between the two marks.
  6. To check the stud position, turn off and place the detector as close to the presumed position of the stud. Turn on and repeat the process.

### 6.2 Metal Mode Scanning

- Metal pipes can be detected up to a depth of 60mm.
1. Select **'METAL'** mode.
  2. Position the back of the detector flat against the wall and press and hold the **'ON/OFF'** button.
  3. Keep the detector in contact with the wall and slide slowly across the surface in a horizontal direction. The centre bar will be displayed on the screen when metal is detected. Mark the spot.

4. Continue to hold the **'ON/OFF'** button (3) and scan beyond the marked spot until the bars disappear. Then slide in the reverse direction to locate the other edge of the metal. Mark this spot. The position of the metal is between the two marks.
5. To check the metal position, turn off and place the detector as close to the presumed position of the stud. Turn on and repeat the process.

### 6.3 AC Mode Scanning

- **Continuous AC voltage detection** – the unit can detect 90 to 250V (50 to 60Hz) in a LIVE unshielded electrical wire at a depth of up to 51mm. For safety the voltage detection feature works continuously in all modes.
1. Select **'AC'** mode.
  2. Position the back of the detector flat against the wall and press and hold the **'ON/OFF'** button.
  3. Keep the detector in contact with the wall and slide slowly across the surface in a horizontal direction. The **'AC'** indicator and all the bars will be displayed on the screen if a hot wire is detected. Mark the spot.

### 6.4 Automatic Scan Mode

- In **'AUTO'** scan mode the detector will search for studs, metal and live wires simultaneously.
  - The screen will show which material has been detected.
1. Select **'AUTO'** mode.
  2. Position the detector flat against the wall and press and hold the **'ON/OFF'** button.
  3. Keep the detector in contact with the wall and slide slowly across the surface in a horizontal direction. The icon for the material with the strongest signal detected will be displayed on the screen and the icon for any other material detected will flash.

## 6. Maintenance, Storage and Disposal

- Remove the battery when storing the tester for extended periods.
- Store in a clean and dry place.
- At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.
- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.
- **DO NOT** burn or mutilate batteries; this may release toxic or corrosive substances.



## 7. Warranty

12 months

Visit [drapertools.com/warranty](https://drapertools.com/warranty) for full details.

## Contact Details

### Draper Tools

Draper Tools Limited  
Hursley Road  
Chandler's Ford  
Eastleigh  
Hampshire  
SO53 1YF  
UK

**Website:** [drapertools.com](https://drapertools.com)

**Email:** [sales@drapertools.com](mailto:sales@drapertools.com)

**Product Helpline:** +44 (0) 23 8049 4344

**Telephone Sales Desk:** +44 (0) 23 8049 4333

**General Enquiries:** +44 (0) 23 8026 6355

### Delta International

Delta International BV  
Oude Graaf 8  
6002 NL  
Weert  
Netherlands

Please contact the Draper Tools Product Helpline for repair and servicing enquiries.