

# Clarke®



## 6 - 1 SUPER DETECTOR WITH LCD

MODEL No: CDM75

Part No: 4500145

## OPERATING & MAINTENANCE INSTRUCTIONS



## INTRODUCTION

Thank you for purchasing your new CLARKE 6 - 1 SUPER DETECTOR WITH LCD. Before use, please read this instruction manual thoroughly and follow all directions carefully.

The CLARKE 6 - 1 SUPER DETECTOR WITH LCD is ideal for DIY and Trade use.

## GUARANTEE

- This product is guaranteed against manufacturing faults for a period of 12 months from the date of purchase.
- Keep your receipt as proof of purchase.
- This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it is intended. The reason for return must be clearly stated.
- This guarantee does not affect your statutory rights.

## DECLARATION OF CONFORMITY

We declare that this unit conforms to the following standards and directives.

■ 89/336/EEC

Date: 05/12/07

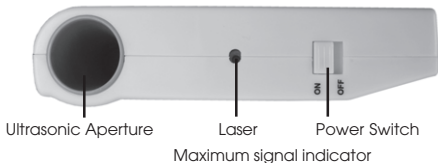
Signed:



D. Kemp

Title: Engineering manager

# PARTS IDENTIFICATION



SET	Set the measurement starting point
SELECT	Press to cycle through the 4 modes
MODE	Press to display the values in Feet or Meters Imperial or Metric)
READ	Press to take a measurement or Scan for stud/ac wire/metal
x	Press to multiply two measurements (for area and volume calculations)
+	Press to add distance values together
-	Press to subtract distance values
M+	Used to store the value of distance, area or volume.
M-	Press to display the stored data
CLR	Clears all data, press and hold to delete data stored in the memory.




Do not dispose of this product with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic equipment, at a recognised disposal facility.

## INSERTING THE BATTERY

1. Remove the battery door on the rear of the unit.
2. Connect a 9V PP3 battery to the battery clip.
3. Place the battery into the compartment.
4. Replace the battery door.

## AC VOLTAGE DETECTION

1. Set the power switch to the ON position.
2. Repeatedly press the **SELECT** button until  is displayed.

## Calibration

3. Hold the unit in the air away from any metal objects.
4. Press and hold the **READ** button.
  - The unit will beep three times when calibration is complete. Do not release the **READ** button.

## Using

5. Keep holding the **READ** button and place the unit on the wall, slowly move the unit sideways across the wall.
  - When the maximum signal indicator on the LCD lights up and the buzzer sounds, mark the point by placing a pencil mark in the groove on top of the unit.


## AC VOLTAGE DETECTION

6. Continue to move the unit in the same direction until the maximum signal indicator on the LCD goes out, then move the unit in the reverse direction.
  - Once again, mark the point at which the buzzer sounds by placing a pencil mark in the groove on top of the unit.
  - The centre of the live wire is located mid way between the two pencil marks.

### Notes

- Some walls containing metal fibres (used in fireproofing) will cause the detector to register a voltage over a wider area.
- Rubbing or banging the wall may generate static electricity, causing a false reading.
- Touching a damp wall being tested may also cause a false reading.
- The unit will not detect wire inside metal shielding or trunking.

# METAL DETECTION

1. Set the power switch to the ON position.
2. Repeatedly press the SELECT button until  is displayed.

## Calibration

3. Hold the unit in the air away from any metal objects.
4. Press and hold the **READ** button.
  - The unit will beep three times when calibration is complete. Do not release the **READ** button.


## Using

5. Keep holding the **READ** button and place the unit on the wall, slowly move the unit sideways across the wall.
  - When the maximum signal indicator on the LCD lights up and the buzzer sounds, mark the point by placing a pencil mark in the groove on top of the unit.
6. Continue to move the unit in the same direction until the maximum signal indicator on the LCD goes out, then move the unit in the reverse direction.
  - Once again, mark the point at which the buzzer sounds by placing a pencil mark in the groove on top of the unit.
  - The centre of the metal object is located mid way between the two pencil marks.

## Notes

- Wearing rings or other hand jewellery may cause a false reading.

## STUD DETECTION

1. Set the power switch to the ON position.
2. Repeatedly press the **SELECT** button until  is displayed.

### Calibration

3. Place the unit against the wall, press and hold the TEST button.
  - The unit will beep twice when calibration is complete. Do not release the **READ** button.

### Using

4. Keep holding the **READ** button and slowly move the unit sideways across the wall.
  - When the maximum signal indicator on the LCD lights up and the buzzer sounds, mark the point by placing a pencil mark in the groove on top of the unit.
5. Continue to move the unit in the same direction until the maximum signal indicator on the LCD goes out, then move the unit in the reverse direction.
  - Once again, mark the point at which the buzzer sounds by placing a pencil mark in the groove on top of the unit.
  - The middle of the studding is located mid way between the two pencil marks.

**Always check that the “STUDDING” you have detected is not a metal pipe, see page 6.**


# STUD DETECTION

## Notes

- You can use the detector on wallpaper, however it may not be effective on some types of foil backed wallpapers or plasterboard.
- If the unit is placed over studding during the calibration, the unit will not work, simply re-calibrate the unit 150 mm away from the last place.
- The surface of the wall should be dry and flat.
- Always keep your free hand away from the wall during detection.
- If you release the **READ** button at any time during detection, you will need to carry out the calibration procedure again.
- Knots in wood may cause false readings to occur.
- Normally, studding is placed at intervals of 40 - 60 cm.



## DISTANCE MEASUREMENT

1. Set the power switch to the ON position.
2. Repeatedly press the **SELECT** button until  is displayed.

### Using

Make sure there is a clear path between the unit and the point you wish to measure.

3. Hold the bottom of the unit flat against a wall, approximately halfway between the floor and the ceiling.
4. Press the **READ** button once.
  - The unit will beep and display the distance between the two points. 'E' (error) will appear on the display if you attempt to measure a distance longer than 18 metres.

### Calculating area

1. Measure the width of the room.
2. Press the **X** button.
3. Measure the length of the room.
4. Press the **X** button again.
  - The resulting area measurement is shown on the display.
5. The measured distance can be switched between square feet and square metres by pressing the **MODE** button.

# DISTANCE MEASUREMENT

## Calculating room volume

To determine the approximate volume of a room:

- 1 Measure the width of the room.
- 2 Press the **X** button.
- 3 Measure the length of the room.
- 4 Press the **X** button again.
- 5 Measure the height of the room.
- 6 Press the **X** button again.
  - The resulting volume measurement is shown on the display.
- 7 The measured distance can be switched between square feet and square metres by pressing the **MODE** button.

## Adding or subtracting distances

- 1 Measure the first distance.
- 2 Press the **+** or **-** button.
- 3 Measure second distance.
- 2 Press the **+** or **-** button again.
  - The result is shown on the display.
  - You can repeat the process, adding or subtracting measurements indefinitely

## TIPS

- Re-calibrate the unit frequently to avoid inaccurate readings.
- Take several readings vertically above, below, to the left and right to confirm the reading.
- When taking measurements, make sure that there is nothing in the way of the ultrasonic beam such as curtains, desks etc.

## Detection Depths

Metal .....	Copper 38 mm
.....	Rebar 76 mm
Studding (30 x 30mm) .....	19 mm
AC Voltage (90-250V @50/60 Hz) .....	50 mm

Detection depth can vary due to moisture content and texture of the wall, paint etc.

## SPECIFICATIONS

Model: .....	CDM75
Part No: .....	4500145
Battery .....	9V, PP3 or Equivalent
Weight: .....	180 g
Dimensions: .....	(H x W x D) 140 x 30 x 70 mm

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**020 8988 7400**

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