



# Clarke®



## 3 - 1 SUPER DETECTOR

MODEL No: CDM65

Part No: 4500135

OPERATING & MAINTENANCE  
INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC1120





## INTRODUCTION

Thank you for purchasing your new CLARKE 3 - 1 SUPER DETECTOR. Before use, please read this instruction manual thoroughly and follow all directions carefully.

The CLARKE 3 - 1 super detector 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.



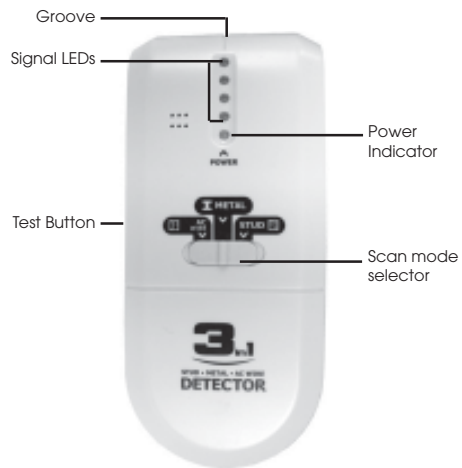
## FEATURES

- Detects metal, studding and AC voltages
- Visual and audible warning
- Low power consumption
- Easy to use





### PARTS IDENTIFICATION



### 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 selector switch to the AC WIRE position.

### Calibration

2. Hold the unit in the air away from any metal objects.
3. Press and hold the TEST button.
  - The unit will beep twice when calibration is complete. Do not release the TEST button.

### Using

4. Keep holding the TEST button and place the unit on the wall, slowly move the unit sideways across the wall.
  - As you approach a live wire, the signal lights will light up sequentially, the buzzer will sound when you reach the edge of the live wire, when this happens mark the point by placing a pencil mark in the groove on top of the unit.
5. Carry on moving the unit in the same direction until all of the signal LEDs go out and then reverse direction.
  - Once again, mark the point at which the top LED lights up and 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.





## AC VOLTAGE DETECTION

### 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 positive reading.
- The unit will not detect wire inside metal shielding or trunking.





## METAL DETECTION

1. Set the selector switch to the METAL position.

### Calibration

2. Hold the unit in the air away from any metal objects.
3. Press and hold the TEST button.
  - The unit will beep twice when calibration is complete. Do not release the TEST button.

### Using

4. Keep holding the TEST button and place the unit on the wall, slowly move the unit sideways across the wall.
  - As you approach a metal object, the signal lights will light up sequentially, the buzzer will sound when you reach the edge of the metal object, when this happens mark the point by placing a pencil mark in the groove on top of the unit.
5. Carry on moving the unit in the same direction until all of the signal LEDs go out and then reverse direction.
  - Once again, mark the point at which the top LED lights up and 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.





## METAL DETECTION

### Notes

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





## STUD DETECTION

1. Set the selector switch to the STUD position.

### Calibration

2. 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 TEST button.

### Using

3. Keep holding the TEST button and slowly move the unit sideways across the wall.
  - The buzzer will sound when you reach the edge of the studding, when this happens mark the point by placing a pencil mark in the groove on top of the unit.
4. Carry on moving the unit in the same direction until all of the signal LEDES go out and then reverse direction.
  - Once again, mark the point at which the top LED lights up and 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" that 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.
- 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 test button at any time during detection, you will need to carry out the calibration procedure again.
- Knots in wood can cause false readings to occur.
- Normally, studding is placed at intervals of 40 - 60 cm.





### 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.

### Detection Depths

Iron Pipe (25mm) .....	30 mm
Studding (30 x 30mm) .....	18 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: .....	CDM65
Part No: .....	4500135
Battery .....	9V, PP3 or Equivalent
Weight: .....	164g
Dimensions: .....	(H x W x D) 151 x 65 x 31 mm
Storage Temperature .....	-20°C To 50°C
Operating Temperature .....	-7°C To 40°C





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.

### DECLARATION OF CONFORMITY

**CE**

**Clarke**  
INTERNATIONAL  
Harwood Street, Lymington, Hampshire, UK

**DECLARATION OF CONFORMITY**  
This is an important document and should be retained.

We hereby declare that this product(s) complies with the following standard(s):  
EMC 2002/95/EC Electromagnetic Compatibility Directive,  
RoHS 2002/95/EC Restriction of Hazardous Substances (amended by 2005/618/EC)

The following standards have been applied to the product(s):  
BS EN 55022:2005, BS EN 55024:2005

The technical documentation required to demonstrate that the product(s) meets the requirements of the above-mentioned standard(s) has been compiled and is available for inspection by the relevant enforcement authorities.  
The CE mark was first signed in 2009

Product Description: 75in F Triple Channel  
Model number(s): CRN90  
Serial/lot(s) number: N/A  
Date of issue: 10/11/2009

Signature:   
J.A. Clarke  
Director

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