

**Elcometer 900**

**Concrete Crack Microscope**

**Operating Instructions**



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A copy of this Instruction Manual is available for download on our Website via [www.elcometer.com](http://www.elcometer.com)

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**T**hank you for your purchase of this Elcometer 900 Concrete Crack Microscope. Welcome to Elcometer. Elcometer are world leaders in the design, manufacture and supply of inspection equipment for concrete and coatings.

Our concrete products include a comprehensive range of concrete, utilities and civil engineering inspection equipment. Our coatings products cover all aspects of coating inspection, from development through application to post application inspection.

The Elcometer 900 Concrete Crack Microscope is a world beating product. With the purchase of this product you now have access to the worldwide service and support network of Elcometer. For more information visit our website at [www.elcometer.com](http://www.elcometer.com)

## **1 ABOUT YOUR MICROSCOPE**

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The Elcometer 900 is a very simple gauge designed for measuring the width of cracks in concrete.

The illuminated graduated scale inside the 50x magnification microscope enables the user to quickly determine the crack width by counting the number of graduations.

The microscope is a dual scale microscope with both metric and imperial graduations.

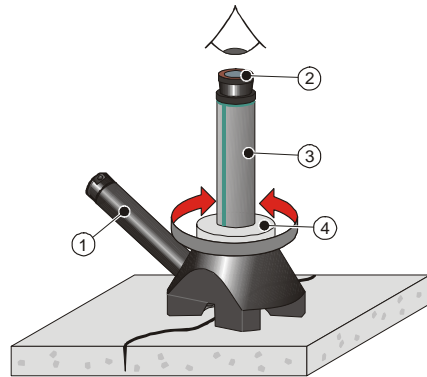
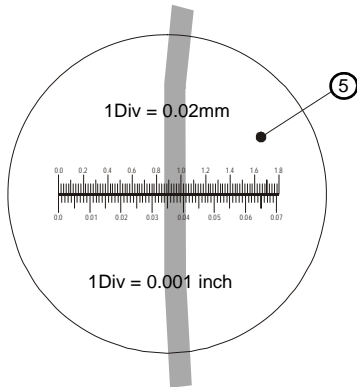
### **1.1 WHAT THE BOX CONTAINS**

- Elcometer 900 Concrete Crack Microscope
- Operating instructions

## 2 TAKING A MEASUREMENT

Referring to Figure 1:

1. Position microscope over crack.
2. Rotate lamp barrel (1) anticlockwise to switch on light.



**Figure 1. Taking a measurement**

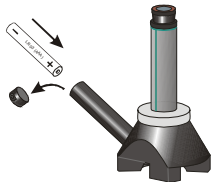
3. View crack through eyepiece (2).
4. To focus, hold microscope body (3) and rotate focus ring (4).

5. Use scale visible through eyepiece to measure crack width (5).
6. After measurement, rotate lamp barrel clockwise to switch off light.

### 3 FITTING BATTERY

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1. Unscrew lamp end-cap.
2. Insert 1x LR03 (AAA) alkaline dry battery taking care to ensure correct polarity.
3. Replace lamp end-cap.

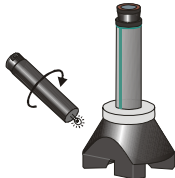


### 4 FITTING BULB

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A replacement bulb is stored inside lamp end-cap.

1. Unscrew lamp end-cap and remove spring and bulb.
2. Replace spring and lamp end-cap.
3. Rotate lamp barrel anticlockwise three complete turns until barrel is released from body of microscope.
4. Pull out bulb and push in replacement bulb.
5. Replace lamp barrel.



## 5 STORAGE

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If the microscope is to remain unused for long periods of time, remove the battery and store it separately. This will prevent damage to the microscope in the event of malfunction of the battery.

## 6 SPECIFICATIONS

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Magnification:	50x
Metric scale:	0 mm to 1.8 mm
Imperial scale:	0" to 0.07"
Metric resolution:	0.02 mm
Imperial resolution:	0.001"
Battery:	LR03 (AAA)

Alkaline batteries must be disposed of carefully to avoid environmental contamination. Please consult your local environmental authority for information on disposal in your region. **Do not dispose of any batteries in fire.**

The Elcometer 900 is packed in a cardboard and foam package. Please ensure that this packaging is disposed of in an environmentally sensitive manner. Please consult your Local Environmental Authority for further guidance.

## 7 RELATED EQUIPMENT

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Elcometer produces a wide range of surface inspection gauges and concrete inspection equipment. Users of the Elcometer 900 may also benefit from the following Elcometer products:

- Elcometer 106 Pull Off Adhesion Tester
- Elcometer 106/6 Coatings on Concrete Adhesion Tester
- Elcometer 108 Adhesion Tester
- Elcometer 1542 Cross Hatch Adhesion Tester
- Elcometer 1910 PAT*Handy*™ Adhesion Tester
- Elcometer 1940/1941 PAT™ Adhesion Tester
- Elcometer P100 Imp Rebar Locator
- Elcometer P120 Rebar Locator
- Elcometer P150 Rebar and Wall Tie Locator
- Elcometer 331 Concrete Covermeters

For further information contact your local Elcometer supplier or visit [www.elcometer.com](http://www.elcometer.com)