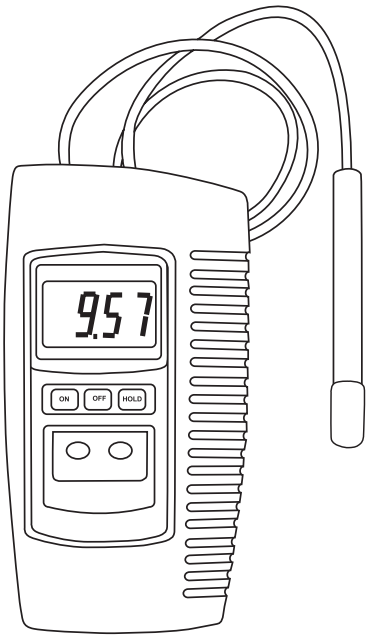
Camlab Water Model CW/6120

Conductivity Meter - Instruction Manual
Ref: CW/72.23.00



CONTENTS

1. GENERAL DESCRIPTION

* General purpose conductivity meter with broad application including AQUARIA & FISH HATCHERIES, FOOD & BEVERAGE PROCESSING, PHOTOGRAPHY, LABORATORY, PAPER INDUSTRY, PLATING INDUSTRY, QUALITY CONTROL, EDUCATION, SWIMMING POOLS & WATER CONDITIONING

* High quality, compact unit with a separate electrode that is designed for easy operation

* Water resistant front panel with easy to read LCD display and rubberised function keys

Unpacking

Please check that the shipment includes the following items:

- Camlab Water CW6120 Meter
- Conductivity Sensor
- 9V Battery
- Protective Cover
- 7 Screws
- Screwdriver
- Plastic Cover Calibration Screws
- Instruction Manual

2. SPECIFICATION

Display	LCD, 21.5 mm (0.7“) digit height
	Maximum display count no. 1999
Measurement Range	2 ranges: 0 - 1.999 mS/cm, 0 - 19.99 mS/cm
Resolution	0.001 mS/cm for 0 - 1.999 mS/cm range
	0.01 mS/cm for 0 - 19.99 mS/cm range
Accuracy (23 ± 5°C)	3% full scale + 1 digit
Sample Time	Approx. 0.4 seconds
Over Range Indicator	Display shows „1“
Data Hold	Freezes the conductivity value on the display
Temperature Compensation	Automatic, 0 - 50°C (32 - 122°F)
Operating Temperature	0 - 100°C (32 - 212°F)
Operating Humidity	Maximum 80% relative humidity

Power Supply	006P DC 9V battery (heavy-duty type), MN1604 (PP3) or equivalent
Power Current	Approx. DC 5 mA
Weight	380 g
Dimensions	Meter: 208 x 110 x 34 mm (L x W x H)
	Electrode: 22 mm diameter x 120 mm length

3. FUNCTIONAL DESCRIPTION

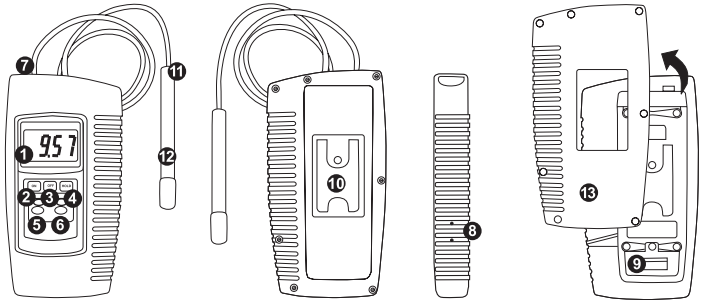


Figure 1

1 Display
2 Power ON Button
3 Power OFF Button
4 Data Hold Button
5 2 mS/cm Range Button
6 20 mS/cm Range Button
7 Electrode Input Socket
8 Calibration Adjust (HR, LR)
9 Battery compartment/cover
10 Stand
11 Electrode Handle
12 Conductivity Electrode
13 Protective Cover

4. TAKING MEASUREMENTS

Battery installation

Prior to first use take the instrument out of the protective cover open the battery compartment and insert the 9V battery.

Ensure polarity is correct.

Protective Cover

The instrument is equipped as standard with the protective

cover.

Prior to the first measurement please fix the cover by using the enclosed screws. The protective cover ensures reliable operation even in harsh environments.

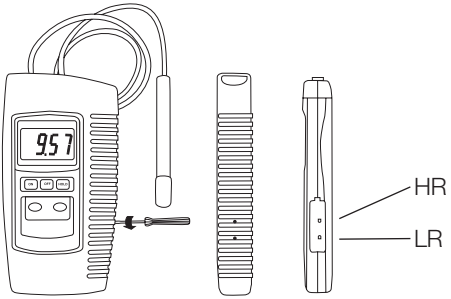
When the instrument is used without the protective cover please use the enclosed plastic cover to protect the calibration screws against dust and humidity.

1) Connect the Conductivity Electrode (Figure 1, 12) to the Electrode Input Socket (Figure 1, 7).
2) Power on the instrument by pressing the Power ON Button.
3) Select the 2 mS/cm or 20 mS/cm range by pressing the appropriate range button (Figure 1, 5 or 6).
4) Holding the electrode handle (Figure 1, 11), immerse the conductivity electrode completely in the sample.

   Shake the electrode several times to remove air bubbles from the electrode and therefore ensure stable readings. The instrument will display the conductivity value in mS/cm.

Note: „1“ in the display indicates an out-of-range measurement. When operating in the 20 mS/cm range, if the value obtained has one or more zeros after the decimal point, change to the 2 mS/cm range for improved accuracy.

5. CALIBRATION



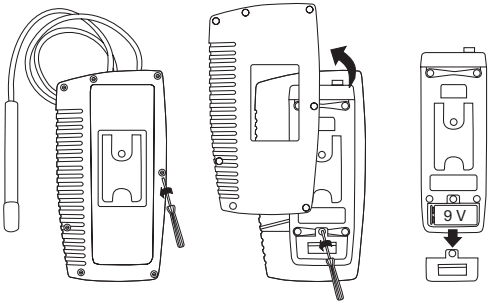
To calibrate the meter:

i) Prepare a 1.413 mS/cm calibration solution (Ref RN/CSKCL) or similar.

ii) Select the 2 mS/cm range (Figure 1, 5).

iii) Holding the conductivity electrode by its handle (Figure 1, 11), immerse it completely in the calibration solution. Shake the electrode to disperse air bubbles on it and allow measurements to stabilise. Adjust „Calibration Adjust LR“ (Figure 1, 8) until the display reads exactly 1.413 mS/cm.

6. CHANGING THE BATTERY



i) „ ⊞ “ in the left corner of the display indicates that it is necessary to replace the battery. However, accurate measurements may still be made for several hours after the “Low Battery” indicator first appears.

ii) Remove the protective cover before replacing the battery. To replace the battery, remove the Battery Compartment Cover (Figure 1, 9) on the rear of the meter.

iii) Remove the battery, install a replacement one (006P DC 9V battery (heavy duty type), MN1604 (PP3) or equivalent) and replace the battery compartment cover.

7. Replacement Parts

Calibration Solution 1413 µs/cm 500 ml
Ref: RN/CSKCL
Conductivity Measuring Cell
Ref: TT/72.22.25

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Camlab Limited , Camlab House, Norman Way, Over
Cambridge CB4 5WE
Tel: 01954 233110 • Fax: 01954 233101
www.camlab.co.uk