

# Instruction Manual

## Surface Resistance Meter

(SRM1)



**Registered at Cardiff No. 2933918**

**Registered Office:** Bondline Electronics, Unit 4,  
Rivermead Industrial Estate, Rivermead Drive,  
Swindon, Wiltshire, SN5 7EX

## Introduction

Thank you for purchasing a Surface Resistance Meter. Please read this instruction manual in great detail before operating the device. Keep this manual readily accessible for later reference.

## Description

An easy to use, portable instrument for measuring both surface resistivity and resistance to ground (using 10 / 100 volts). Manufactured with soft probes for maximum and consistent surface contact to give more accurate readings. The battery is very easy to change. This product is CE approved.

## Packing List

Make sure each of the following items are included in the pack.

1) Meter.....	1
2) Required test leads.....	1
3) 9V battery.....	1
4) Carrying pouch.....	1
5) Instruction manual.....	1
6) Calibration certificate (valid for 1 year).....	1

## Specifications

<b>Method of Measurement</b>	Surface Resistivity ( $\Omega$ per square) Point to Point ( $\Omega$ )
<b>Indicators</b>	Conductive - Green LED $1K\Omega$ ( $10^3$ ) to $100K\Omega$ ( $10^5$ ) Dissipative - Yellow LED $1M\Omega$ ( $10^6$ ) to $100G\Omega$ ( $10^{11}$ ) Insulative - Red LED $1T\Omega$ ( $10^{12}$ ) to Insulative
<b>Accuracy</b>	+/- 0.5 Decade in Conductive Range +/- 0.25 Decade in Dissipative Range
<b>Temperature Range</b>	Operating $5^{\circ}\text{C}$ to $49^{\circ}$ ( $40^{\circ}\text{F}$ to $120^{\circ}\text{F}$ ) Storage $-15^{\circ}\text{C}$ to $+60^{\circ}\text{C}$
<b>Relative Humidity</b>	0% to 90% (non-condensing)
<b>Repeatability</b>	+/- 10%
<b>Weight</b>	150g
<b>Dimensions</b>	130mm x 70mm x 25mm
<b>Calibration</b>	Every 12 months by manufacturer
<b>Power Supply</b>	9 volt PP3 alkaline battery
<b>Test Voltage</b>	Nominal 9 volts-stepped to 100 volts
<b>Test Range</b>	$1K\Omega$ ( $10^3$ ) to $1T\Omega$ ( $10^{12}$ )

## Testing Guidance

Testing and auditing all elements within the EPA is essential to comply with industry standards. All test instruments are manufactured to the very highest quality allowing qualification to council directives 89/336/EEC.

The SRM1 has been designed specifically for the purpose of testing surfaces used in an EPA. It measures in Ohms per Square and meets the requirements of IEC 613340-5-1/2 and EN100 015/1 European standard. Automatic auto ranging 10v and 100v test voltages are incorporated into the tester, switching as you move from conductive, dissipative and insulative surfaces. The SRM100 is also capable of testing resistance to ground.

## Setup and Operation

- 1) Fit the supplied 9V battery; the battery compartment is located at the rear of the enclosure. The unit is now ready to use.
- 2) To test surface resistance, place the unit on the surface to be tested and press the test button.
- 3) To measure resistance to ground, insert one end of the supplied test lead into the 3.5mm socket located on the front panel of the meter and attach the other end to your ground point. Press the test button.
- 4) **GREEN LEDs** indicate a conductive reading. Measurements are taken at a test voltage of 10V.  
**YELLOW / ORANGE LEDs** indicate a dissipative reading. Measurements are taken automatically at a test voltage of 100 volts.  
**RED LEDs** indicate an insulative reading. Measurements are taken automatically at a test voltage of 100 volts.



Surface Resistance Meter



Rear Soft Probes