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**740 POLARIS**  
SURFACE RESISTANCE METER





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## 1. Operating Instructions

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The meter measures both surface resistance and resistance to ground.



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## 1. Operating Instructions

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To measure surface resistance, simply place the meter on the surface of the material that requires measuring, and press the green test button. The meter will then light the appropriate LED from  $10^3$  -  $10^{12}$  Ohms per square. To measure resistance to ground, repeat this process and insert the earth leakage lead in the earth socket attaching the croc clip to your ground point.

1. Remove the battery compartment end panel and check that a good quality PP3 alkaline battery has been fitted. Hold the checker away from any surface and press the test button, the red insulative LED should light.
2. Place the checker onto the surface that requires testing, again press the test button and hold.

The LED that illuminates constantly is the decade measured.

**$10^3$  = 1 kilohm Green LED**

**$10^4$  = 10 Kilohms Green LED**

**$10^5$  = 100 Kilohms Green LED**

**$10^6$  = 1 meg ohm Yellow LED**

**$10^7$  = 10 meg ohms Yellow LED**

**$10^8$  = 100 meg ohms Yellow LED**

**$10^9$  = 1,000 meg ohms Yellow LED**

**$10^{10}$  = 10,000 meg ohms Yellow LED**

**$10^{11}$  = 100,000 meg ohms Yellow LED**

**$10^{12}$  = 1,000,000 meg ohms Red LED  
Insulative**

3. Checking resistance to ground/Earth leakage lead into the ground/Earth leakage socket. This isolates the test probe on the right side of the meter (the same side as the socket). Connect the croc clip to your ground connection.
4. Place the checker onto the surface to be tested, press and hold the test button. The LED that illuminates constantly is the decade measured. The measurement will be resistance to ground in ohms instead of ohms per square.

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## 2. Specification

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<b>Range:</b>	10 <sup>3</sup> -10 <sup>12</sup> + Ohms per Square.
<b>Resolution:</b>	One order of magnitude.
<b>Changeover Point:</b>	½ decade on logarithmic scale (3.15 x 10n).
<b>Accuracy of changeover point:</b>	+/- ½ decade.
<b>Accuracy:</b>	+/- 10%. Repeatability: +/- 5%
<b>Test Operation:</b>	Test battery - press button when holding in free air - the red Insulative LED should illuminate.
<b>Battery:</b>	9V PP3 alkaline.
<b>Size, Weight:</b>	130mm x 70mm x 35mm, 103g.
<b>Operating Conditions:</b>	Temperature 5° - 50°C. Humidity 0-90% rH (non-condensing).

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## 3. Declaration of Conformity

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We declare that this equipment conforms to the following EC Directives:

89/336/EEC (Electromagnetic Compatibility) EN 50081-1 EN 50081-2 EN  
50082-1 EN 50082-2

And is entitled to display the CE Mark



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Scotts Business Park, Bampton, Devon, GB, EX16 9DN  
T + 44 (0) 1398 331114 F + 44 (0) 1398 331411  
E [sales@fraser-antistatic.co.uk](mailto:sales@fraser-antistatic.co.uk) W [www.fraser-antistatic.co.uk](http://www.fraser-antistatic.co.uk)