

# DESCO INDUSTRIES INCORPORATED

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## Analog Surface Resistance Meter Calibration Procedure



1. Place the meter flat on a grounded worksurface. Do not hold the meter in your hand during calibration.
2. Insert the shielded test leads to the meter and connect the other end to a Fluke Meter.
3. Select the 10V HOLD test voltage on the meter by making sure that the black button is pushed down. Press and hold the red test button. The Fluke Meter should read  $10V \pm 1V$ .
4. Select the AUTO test voltage on the meter by making sure that the black button is NOT pushed down. Press and hold the red test button. The Fluke Meter should read  $100V \pm 5V$ .
5. Disconnect the test leads from the Fluke Meter, and connect them to a 1K ohm resistance box. Leave the meter's test voltage setting at AUTO.



Figure 2. Potentiometers RV1 and RV2

6. Set the Resistance Box to 1K ohms, and press and hold the red test button. Use the potentiometer tool to adjust RV2 so the dial on the meter points to 3.
7. Apply 10G ohms to the meter. Press and hold the red test button. Use the potentiometer tool to adjust RV1 so the dial on the meter points to 10.

### FINAL TESTING

Set the meter to AUTO test voltage, and use the Resistance Box to test values  $10E3 - 10E12$ . Make sure that the dial points to

the correct value when the corresponding resistance is applied.

Resistance	Meter Value
1K	3
10K	4
100K	5
1M	6
10M	7
100M	8
1G	9
10G	10
100G	11
1T	12

There is a  $\pm 1/2$  decade tolerance on values 10E11 and above.

#### **LOW BATTERY LED**

Apply 5.5V input voltage to the meter. The LOW BATTERY LED should illuminate yellow when the red test button is pressed.