

# SURFACE RESISTANCE PROBE MODEL 850



## OPERATING INSTRUCTIONS

6/08



**electro-tech systems, inc.**

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## 1.0 GENERAL

The Model 850 Surface Resistance Probe is used wherever a 5.0 lb. probe with 2.5" (63.5mm) diameter electrode is required to make resistance measurements. The contact electrode is a conductive silicone elastomer with a hardness of 65 durometer and contact resistance less than 100 ohms.

The Model 850 can be used either singularly for measuring resistance to ground (RTG) or in pairs for measuring point-to-point (pt-pt) resistance. It can be used with any resistance meter (ohmmeter) having the required test voltage and range requirements. The Probe meets the current requirements of ANSI/ESDA Std. 4, NFPA 99, ASTM F150 as well as DOD and other standards to which the probe is referenced.

## 2.0 SET UP

The Model 850 Probe has a standard 0.162' (4mm) banana jack in the top for connection with a standard banana plug. The Probe is connected to the resistance meter as shown in Figure 1 for resistance to ground measurements (RTG) and in Figure 2 for point-to-point resistance (pt-pt) measurements.

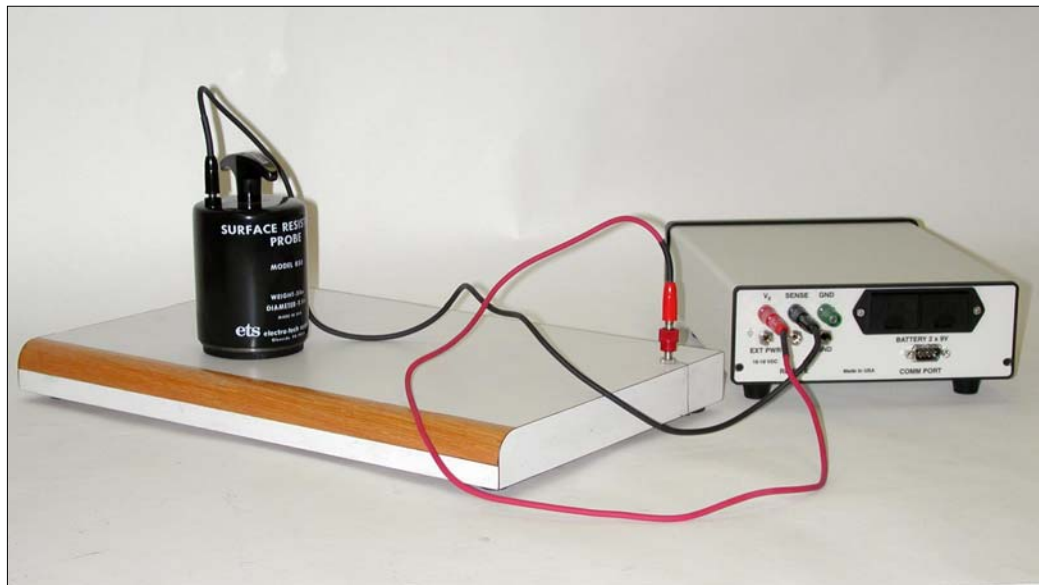


Figure 2: Resistance-to-Ground meter connection

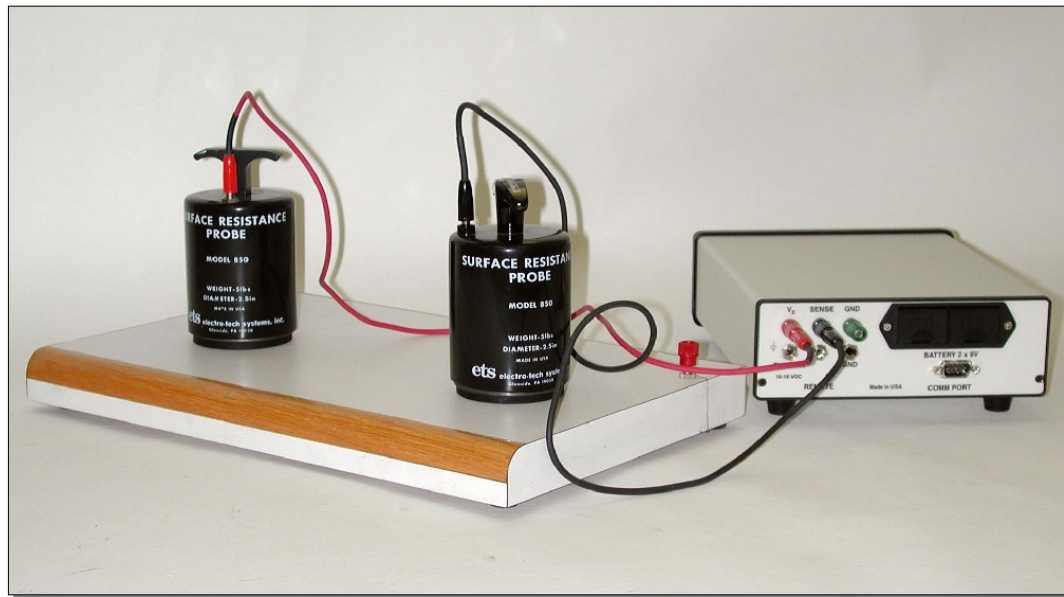


Figure 3: Point-Point meter connection

The Probe can only be used on smooth, flat surfaces. To make a measurement, place the Probe(s) on the surface in accordance with the layout or spacing specified in the standard being used. Apply the test voltage for several seconds and then take a reading. If the measured resistance is greater than  $10^{10}$  ohms then a longer electrification time may be required before taking a reading. Do not touch the Probe(s) while the test voltage is applied. A shock hazard is present when test voltages of 100 volts or more are used. If the rubber electrode becomes dirty, it can be cleaned by with isopropyl alcohol. Allow the electrode to dry prior to placing it on the test surface.

**CAUTION:**  
**Do Not Touch Electrode At Voltages 100 Volts and Above.**

### **3.0 WARRANTY**

Electro-Tech Systems, Inc. warrants its equipment, accessories and parts of its manufacture to be and remain free from defects in material and workmanship for a period of one (1) year from date of invoice and will, at the discretion of Seller, either replace or repair without charge, F.O.B. Glenside, similar equipment or a similar part to replace any equipment or part of its manufacture which, within the above stated time, is proved to have been defective at the time it was sold. All equipment claimed defective must be returned properly identified to the Seller (or presented to one of its agents for inspection). This warranty only applies to equipment operated in accordance with Seller's operating instructions.

The Seller's liability hereunder is expressly limited to repairing or replacing any parts of the equipment manufactured by the manufacturer and found to have been defective. The Seller shall not be liable for damage resulting or claimed to result from any cause whatsoever.

This warranty becomes null and void should the equipment, or any part thereof, be abused or modified by the customer or if used in any application other than that for which it was intended. This warranty to replace or repair is the only warranty, either expressed or implied or provided by law, and is in lieu of all other warranties and the Seller denies any other promise, guarantee, or warranty with respect to the equipment or accessories and, in particular, as to its or their suitability for the purposes of the buyer or its or their performance, either quantitatively or qualitatively or as to the products which it may produce and the buyer is expected to expressly waive rights to any warranty other than that stated herein.

ETS must be notified before any equipment is returned for repair. ETS will issue an RMA (Return Material Authorization) number for return of equipment.

Equipment should be shipped prepaid and insured in the original packaging. If the original packaging is not available, the equipment must be packed in a sufficiently large box (or boxes if applicable) of double wall construction with substantial packing around all sides. The RMA number, description of the problem along with the contact name and telephone number must be included in formal paperwork and enclosed with the instrument. Round trip freight and related charges are the owner's responsibility.