



Made in America

# Surface Resistance Test Kit Operation and Maintenance



Figure 1. 19650 Surface Resistance Test Kit

## Description

The 19650 Surface Resistance Test Kit is designed to measure the resistance of work surfaces, flooring materials, packaging materials, etc. Measurements such as surface resistance point to point (RTT) as well as point to ground (RTG) are easily performed according to ESD S4.1 for worksurface measurements and ANSI/ESD S7.1 for flooring materials. The range of measurements is color coded. There are also color LED displays for easy and quick reference and measurement identification. The Test Kit includes the meter, two 5 lb. (2.27kg) electrodes, and two 42" leads, all packed in a protective carrying case.

The override switch on the 19650 Test Kit will automatically change voltage if the surface resistance measured is either conductive or dissipative. A test voltage of 10 volts will apply throughout the conductive range and 100 volts throughout the dissipative and insulative ranges.

## Features

- Easy to read analog display
- Easy to read color coded ranges of conductive, static dissipative and insulative
- LED displays for quick and easy identification of material ranges

- Voltage range switch to measure at 10V for conductive materials and 100V for dissipative and insulative materials
- User friendly
- Protective carrying case

## Operation

1. Check battery. To ensure proper connection, open battery compartment on the back of the unit. A separate Low Battery Indicator (Yellow LED) will light if battery voltage drops below 6.5 volts
2. Connect the corresponding leads to the red banana receptacles and the black banana receptacles on electrodes and meter. Press green button for functional test. Needle should move from left to right at the insulative range at 10E13.
3. Place electrodes on the surface to be measured. The resistance will show by the analog display as well as the color LED's on the surface of the unit.

The measurement range is as follows:

1. GREEN segment indicates a CONDUCTIVE range between 10E3 and 10E5 ohms.
2. YELLOW segment indicates a DISSIPATIVE range between 10E6 and 10E11 ohms.
3. RED segment indicates an INSULATIVE range of 10E12 ohms.

## Calibration

The 91650 Test Kit is calibrated to manufacturer's specifications. Calibration is recommended every 12 months once the unit is placed into service.

## Maintenance

Your 91650 Test Kit will require little maintenance, and there are no user serviceable parts. If your meter requires service beyond replacing or recharging the battery, please contact the factory.

## Specifications

Dimensions (approx.): 18.12" x 13.00" x 6.11"  
Weight (approx.): 19.84 lb.  
Test Range: 10E3 - 10E12 ohms  
Accuracy: ±10%  
Power: 9V battery operated  
Connection: 2 x 4mm jack plug  
Method of Operation: Push button  
Test Probes: 2  
Weight: 5.51 lb.  
Diameter: 2.96"

### Limited Warranty

Desco expressly warrants that for a period of one (1) year from the date of purchase, Desco Surface Resistance Test Kit will be free of defects in material (parts) and workmanship (labor). Within the warranty period, a unit will be tested, repaired or replaced at Desco's option, free of charge. Call our Customer Service Department at 909-627-8178 (Chino, CA) or 781-821-8370 (Canton, MA) for a Return Material Authorization (RMA) and proper shipping instructions and address. Please include a copy of your original packing slip, invoice, or other proof of date of purchase. Any unit under warranty should be shipped prepaid to the Desco factory. Warranty replacements will take approximately two weeks.

If your unit is out of warranty, call our Customer Service Department at 909-627-8178 (Chino, CA) or 781-821-8370 (Canton, MA) for a Return Material Authorization (RMA) and proper shipping instructions and address. Desco will quote repair charges necessary to bring your unit up to factory standards.

### Warranty Exclusions

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

### Limit of Liability

In no event will Desco or any seller be responsible or liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.