Surface Resistivity/Surface Resistance Test Kit
Installation, Operation, and Maintenance

The override switch on the 41145 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 $10^{13}$.

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 $10^3$ and $10^5$ ohms.

2. YELLOW segment indicates a DISSIPATIVE range between $10^6$ and $10^{11}$ ohms.

3. RED segment indicates an INSULATIVE range of $10^{12}$ ohms.

Description
The 41145 Surface Resistivity/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.

Figure 1. 41145 Surface Resistivity/Surface Resistance Test Kit
Calibration
The 41145 Test Kit is calibrated to manufacturer’s specifications. Calibration is recommended every 12 months once the unit is placed into service.

Maintenance
Your 41145 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: 10³ - 10¹² ohms
Accuracy: +/- 10%
Power: 9V battery operated
Connection: 2 x 4mm jack plug
Method of Operation: Push button
Test Probes:
Weight: 2 5.51 lb.
Diameter: 2.96"

Limited Warranty
ESD Systems.com expressly warrants that for a period of one (1) year from the date of purchase, Wescorp Surface Resistance/Surface Resistivity Test Kits will be free of defects in material (parts) and workmanship (labor). Within the warranty period, a component will be repaired or replaced at ESD Systems.com option, free of charge. Call Customer Service at 508-485-7390 for a Return Material Authorization (RMA), and proper shipping instructions and address. Include a copy of your original packing slip, invoice, or other proof of date of purchase. Any unit under warranty should be shipped to the ESD Systems.com factory. Warranty replacements will take approximately one week.

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 ESD Systems.com 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.

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Limit of Liability
In no event will ESD Systems.com 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.

ESD SYSTEMS.com
432 NORTHBORO ROAD CENTRAL
MARLBORO, MA 01752-3170
PHONE (508) 485-7390
FAX (508) 480-0257

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