

# Resistivity Meter Model 291

## P/N 0910310

The resistivity Meter Model 291 measures both surface resistivity and resistance to ground, allowing simple repeatable measurements of conductive, static dissipative and insulative surfaces.

### Specifications:

Range:  $10^3$  to  $10^{12} \Omega/\square$

Accuracy:  $\pm \frac{1}{2}$  decade on a logarithmic scale

Test Voltage:

Test Voltage	Range	Standard
10 V	$<10^3 - 10^5 \Omega$	IEC 61340-5-3
100 V	$<10^6 - 10^{12} \Omega$	IEC 61340-5-3

Probes: Internal parallel probe  
Jacks for external probes (internal probes are switched off when using external probes.)

Power Supply: Battery operated with 9V alkaline battery  
Complies with CE

Low Battery Indicator: Red LED on the far right of display will flash when the battery is low.

### Checking surface resistivity ( $\Omega/\square$ )

Hold the meter away from any surface and press the test button, the insulative red LED should light. Place the meter onto any surface that requires testing, again press the test button and hold. The LED that illuminates constantly is the decade measured.

<	< 1 k $\Omega$	Green LED
$10^3$	1 k $\Omega$	Green LED
$10^4$	10 k $\Omega$	Green LED
$10^5$	100k $\Omega$	Yellow LED
$10^6$	1 M $\Omega$	Yellow LED
$10^7$	10 M $\Omega$	Yellow LED
$10^8$	100 M $\Omega$	Yellow LED
$10^9$	1 G $\Omega$	Yellow LED
$10^{10}$	10 G $\Omega$	Yellow LED
$10^{11}$	100 G $\Omega$	Red LED
$10^{12}$	1 T $\Omega$	Red LED
>	insulative	Red LED

green = conductive    yellow = dissipative    red = insulative

Checking resistance to ground ( $\Omega$ ): When one of the sockets of the external probes is grounded the measured decade is the resistance to ground.



# WARRANTY

Monroe Electronics, Inc., warrants to the Owners, this instrument to be free from defects in material and workmanship for a period of two years after shipment from the factory. This warranty is applicable to the original purchaser only.

Liability under this warranty is limited to service, adjustment or replacement of defective parts (other than tubes, fuses or batteries) on any instrument or sub-assembly returned to the factory for this purpose, transportation prepaid.

This warranty does not apply to instruments or sub-assemblies subjected to abuse, abnormal operating conditions, or unauthorized repair or modification.

Since Monroe Electronics, Inc. has no control over conditions of use, no warranty is made or implied as to the suitability of our product for the customer's intended use.

THIS WARRANTY SET FORTH IN THIS ARTICLE IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESS, IMPLIED OR STATUTORY INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. Except for obligations expressly undertaken by Monroe Electronics, in this Warranty, Owner hereby waives and releases all rights, claims and remedies with respect to any and all guarantees, express, implied, or statutory (including without limitation, the implied warranties of merchantability and fitness), and including but without being limited to any obligation of Monroe Electronics with respect to incidental or consequential damages, or damages for loss of use. No agreement or understanding varying or extending the warranty will be binding upon Monroe Electronics unless in writing signed by a duly authorized representative of Monroe Electronics.

In the event of a breach of the foregoing warranty, the liability of Monroe Electronics shall be limited to repairing or replacing the non-conforming goods and/or defective work, and in accordance with the foregoing, Monroe Electronics shall not be liable for any other damages, either direct or consequential.

## RETURN POLICIES AND PROCEDURES FACTORY REPAIR

Return authorization is required for factory repair work. Material being returned to the factory for repair must have a *Return Material Authorization* number. To obtain an RMA number, call 585-765-2254 and ask for Customer Service.

Material returned to the factory for warranty repair should be accompanied by a copy of a dated invoice or bill of sale, which serves as a proof of purchase for the material. Serial numbers and date codes on our products also serve to determine warranty status. Removal of these labels or tags may result in voiding a product's warranty.

Repairs will be returned promptly. Repairs are normally returned to the customer by UPS within 10 to 15 working days after receipt by Monroe Electronics, Inc. Return (to the customer) UPS charges will be paid by Monroe Electronics on warranty work. Return (to the customer) UPS charges will be prepaid and added to invoice for out-of-warranty repair work.

### **RETURN OF REPAIRED ITEMS:**

Factory repairs will be returned to the customer by the customer's choice of FedEx, DHL or UPS. Warranty repairs will be returned via UPS ground. The customer may request accelerated shipping via the previous mentioned carriers for both warranty and non-warranty repairs. **NOTE:** Accelerated transportation expenses for all factory repairs will always be at the expense of the customer despite the warranty status of the equipment.

### **FACTORY REPAIRS TO MODIFIED EQUIPMENT:**

Material returned to the factory for repair that has been modified will not be tested unless the nature and purpose of the modification is understood by us and does not render the equipment untestable at our repair facility. We will reserve the right to deny service to any modified equipment returned to the factory for repair regardless of the warranty status of the equipment.