

3M™ Wrist Strap and Footwear Tester 740

The prevention of static discharge to sensitive electronic parts from human contact is one of the most important components of a static control program. Properly designed personnel grounding devices such as wrist straps and conductive footwear help guard against voltage build-up on the human body by helping remove electrostatic charge as it is generated.

Frequent testing of wrist straps and footwear is necessary to ensure that these products remain effective, and continue to perform their critical function of protecting sensitive electronic components. It is important to determine that wrist straps and footwear meet specified resistance ranges, and equally important to test them at least once a day and record the results. Daily or periodic testing of wrist straps and conductive footwear is an essential part of an effective ESD program.

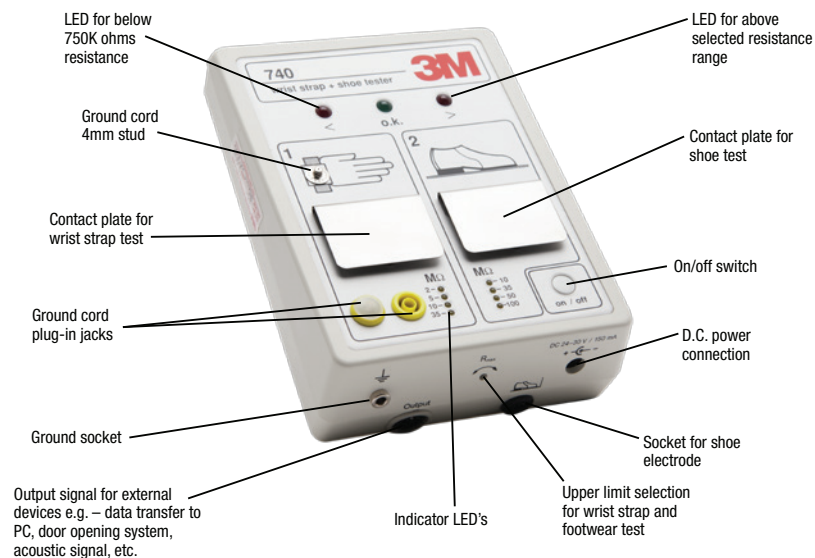
Testing the reliability of a wrist strap or footwear system is simple with the Wrist Strap and Footwear Tester 740. A stationary unit designed to be wall-mounted in a work area, the Wrist Strap and Footwear Tester 740 tests wrist straps, conductive shoes, heel grounding straps and toe grounding straps. Four different resistance levels can be selected for testing wrist strap and conductive footwear, making the Wrist Strap and Footwear Tester 740 a versatile product.

To help facilitate a company's static control program, the Wrist Strap and Footwear Tester 740 is designed for easy use by most personnel. By simply pressing on a metal contact plate, the wearer can quickly see whether the resistance of the strap system is within acceptable limits. A green LED will light to indicate that the strap system is "o.k.," and a red LED will indicate if it is above the selected resistance range. The Wrist Strap and Footwear Tester 740 also has a red LED that indicates if the resistance of wrist straps or footwear is below 750K ohms. The Wrist Strap and Footwear Tester 740 can test the condition of wrist bands and ground cords, allowing the user to isolate a faulty component in the wrist strap system.

The tester comes with a base unit, output connector, 3M™ Dual Lock™ Wall Mounting System and template, cover for wrist strap plug-in jack and an AC/DC transformer.

The Wrist Strap and Footwear Tester 740 is comprised of two measurement circuits with an open test voltage of 14 volts for both wrist strap and shoe test applications. The desired maximum allowable resistance level can be selected separately for both the wrist strap or footwear testing circuit.

The Wrist Strap and Footwear Tester 740 is microprocessor-controlled and has a digital open collector output that can be used to interface with a computer or other controlling device such as an audible alarm or electronic door opening system. This useful feature can be adapted to a variety of applications.



3M™ Wrist Strap and Footwear Tester 740

3M™ Wrist Strap and Footwear Tester 740 (230 Volts)

The Wrist Strap and Footwear Tester 740 (230 volts) features a DIN-style connector that works with the 3M™ Dual Shoe Electrode 741D. The unit includes a power supply with the Shuko plug style that can be used in the European Union.

3M™ Shoe Electrode 741

To test footwear with the Wrist Strap and Footwear Tester 740, the Shoe Electrode 741 accessory is required. The Shoe Electrode 741 is a stainless steel plate with a molded plastic base. The rugged construction of the Shoe Electrode 741 makes it ideal for everyday testing. It has been specifically designed to be used with the Wrist Strap and Footwear Tester 740. **NOTE:** The Shoe Electrode 741 must be ordered separately from the Wrist Strap and Footwear Tester 740.

The 3M™ Dual Shoe Electrode 741D allows differentiation between the right and left shoe.

Note: The Wrist Strap and Footwear Tester 740 is for use only with the Dual Shoe Electrode 741. The Wrist Strap and Footwear Tester 740 (230V) is for use only with the Dual Shoe Electrode 741D.

3M is a trademark of 3M Company.

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.



Electronics Materials Solutions Division Static Control Products

926 JR Industrial Drive
Sanford, NC 27332-9733
Toll-Free: 866-722-3736
International: 919-718-0000
Email: 3mstaticinfo@mmm.com
www.3Mstatic.com

Please recycle. Printed in USA.
© 3M 2014. All rights reserved.
78-9102-1669-2 JHA

3M Wrist Strap and Footwear Tester 740

Product Specifications

Dimensions	5.5" W x 2.14" H x 7.5" L (14 cm W x 5.5 cm H x 19 cm L)
Weight	15.5 ozs. (438 g)
Power Supply	external AC/DC - transformer, 24-30VDC/150mA
Test Voltage	14VDC \pm 1 volt (open circuit)
Resistance Ranges	Lower limit: 750K ohms Upper limits (wrist strap): 2, 5, 10 and 35M ohms Upper limits (footwear): 10, 35, 50 and 100M ohms
Accuracy	+ 20% for 750K ohms lower limit \pm 10% for 2M, 5M, 10M, 35M and 50M ohms \pm 20% for 100M ohms
Output	Open collector at pins 1, 2, 4 and 5 DC return at pin 6 + 5V at pin 3
Wall Mounting	3M™ Dual Lock™ System

3M Shoe Electrode 741

Product Specifications

Dimensions	20 x 16 in. (508 x 406 mm)
Weight	3 lbs. (1.4 kg)
Construction	1mm stainless steel plate and molded plastic base

NOTE: The Shoe Electrode 741 is not included with the Wrist Strap and Footwear Tester 740 and must be ordered separately.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for one year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

SCS:

741