3M

Shoes/Wrist Strap Tester 747
Data Logging Software 747DLS

Daily inspection and recording of wrist strap and shoe testing is very important as a fundamental countermeasure against static on personnel. A fully functional resistance tester, the new 3M™ Shoes/Wrist Strap Tester 747 makes it possible to control both in a single unit. Use of the external data port allows automatic recording of test results, eliminating manual recording and possible errors.

Features

Checks personnel wearing wrist straps, ESD shoes and heel straps against preset resistance limits

Actual measurement results are indicated on a $3\frac{1}{2}$ digit display and by LED lamps

Test results available on RS-232C Serial Port and output jack

Testing data automatically recorded when utilizing the 3M™ Data Logging Software 747DLS

ESD Shoes & Heel Strap Testing

- Electrical resistance of ESD shoes and heel straps is measured and compared to preset limits.
- Set value for the upper and lower resistance limits can be varied. Upper limit: 10M ohms, 35M ohms, or 100M ohms. Lower limit: 100k ohms (1.0M ohms).
- LCD display ($3\frac{1}{2}$ digit) indicates actual resistance measurement value.*
- LED's on the tester indicate Low, OK, and High test results.
- Measurement requires standing on the Shoe Testing Plate and pressing the touch panel.

*Includes body resistance

Wrist Strap Testing

- Electrical resistance of wrist straps is measured and compared to preset limits.
- Set value for an upper resistance limit can be varied. (5M ohms, 10M ohms and 35M ohms). Lower resistance limit 650K ohms preset internally.
- LCD display ($3\frac{1}{2}$ digit) indicates actual resistance measurement value.**
- LED's on the tester indicate (Low, OK and High) test results.
- The measurement requires inserting ground cord plugs into a test jack and pressing the touch panel.

**Includes arm to wrist band contact resistance

External Output Functions

- RS-232C Serial Data Port provides resistance value and pass/fail test result information for computer data logging. Used with 3M Data Logging Software 747DLS.
- Open collector output configuration provides High and Low signal levels for pass/fail test result indication. When used with an external relay door entries can be controlled.

3M™ Shoes/Wrist Strap Tester 747

Product Specifications

Environmental Operating Conditions	Temperature range 0° to 40°C 80% Relative Humidity
Power Supply	AA (LR6) alkaline battery (1.5 VDC x 6) or AC adapter (9 VDC, center positive)
Size	7.7"H x 4.7"W x 1.89"D (196 mm x 120 mm x 48 mm)
Weight	1.2 lb (550 g without batteries)

3M™ Data Logging Software 747DLS

Designed to work with the 3M Shoes/Wrist Strap Tester 747, the Data Logging Software 747DLS offers you a complete system of testing and recording results of your wrist straps and footwear. Our complete system performs an accurate resistance measurement of either or both your wrist straps and footwear. Once completed, the results will then be automatically saved on a PC which allows efficient data storage and faster data retrieval.

The software communicates via RS232 signal to a personal computer and can handle up to 8 stations using a single PC. Longer distances of up to 4000 ft. (1200 m) can also be accommodated.

Features	Benefits
Electronic data logging	Eliminates manual logging thus provides highly reliable record
Can accommodate up to 8 stations	Cost efficient
Identification card compatibility	Can be used with bar code, magnetic stripe or proximity card readers/identification cards
Can be used for up to 4000 ft. (1200m)	Can serve almost an entire facility
Incorporates a pilot lamp in monitoring	Identifies which testing stations are currently being used
Printable records	Hard copies can be kept for documentation

PC System Requirements

Windows™ 95, 98 2nd Edition, 2000 with Service Pack 2 and Millenium Edition. Pentium 133 MHz; 32 MB RAM; 26 MB Hard Disk Space; 800x600 True Color 32 Bit Display. Single Station Operation - Requires two communication ports available (COM1 & COM2) Multiple Station Operation - Requires one PCI available slot, two is recommended for full eight-station operation.

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Card Reader Technical Requirements

Serial Interface Specification:
Bit Rate - 110, 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 (selectable)
Word Length:
    Data Format - 4, 5, 6, 7, 8 (selectable)
    Parity Bit - Even, Odd, None, Mark, Space (selectable)
    Stop Bit - 1, 1.5, 2 (selectable)
Handshaking (Flow Control) - None, Xon/Xoff, RTS/CTS, RTS/XonXoff (selectable)

Magnetic Card Reader Data:
Message Indicator
    Start of Text - Single ASCII character
    End of Text - Single ASCII character
Track Framing Characters
    Track 1 Start - Single ASCII character
    Track 1 End - Single ASCII character
    Track 2 Start - Single ASCII character
    Track 2 End - Single ASCII character
    Track 3 Start - Single ASCII character
    Track 3 End - Single ASCII character

Barcode Reader Data:
Message Indicator
    Start of Text - Single ASCII character
    End of Text - Single ASCII character

Proximity Card Reader Data;
    Start of Text - Two ASCII character
    End of Text - CR, LF, CR/LF (selectable)

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.

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