# imall

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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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## ESD SYSTEMS.com-TECHNICAL BULLETIN TB-5543

# Ground Gard 4.5 & 5 Calibration Tester Routine Test and Calibration Instructions



Figure 1. SPI 94371 Ground Gard Calibration Tester

### Description

The SPI 94371 Ground Gard Calibration Tester can be used to calibrate the following SPI items:

Item	Description
94390	Ground Gard 4.5
94391	Ground Gard 5

### **Test Procedure**

- I. Connect the Calibration Tester's alligator clip to the Ground Gard Monitor's ground lead wire.
- II. Connect a male-male banana plug to the ground jack of the Calibration Tester. Insert the other end of the banana plug into the OPERATOR jack of the Ground Gard Monitor's remote module.
- III. Set the right-hand switch of the Calibration Tester to "CHECK."
- IV. Alternately switch the left hand "FAIL PASS" switch between the "FAIL" and "PASS" positions. The LEDs on the Ground Gard Monitor should correspond to the Calibration Tester's settings. If the LEDs on the monitor do not duplicate the switch positions, the monitor's remote modules should be re-calibrated.

### **Calibration Procedure**

**NOTE:** Calibration of the Ground Gard remote modules is only necessary when they fail the test procedure described above.

An adjustment trimpot can be found through a small access hole located on the remote module. Use a proper tool to adjust this trim pot. This adjustment resets the gain in the negative loop of the sensor oscillator.

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- I. Connect the Calibration Tester's alligator clip to the Ground Gard Monitor's ground lead wire.
- II. Insert the Calibration Tester's banana plug into the OPERATOR jack located on the remote module.
- III. Set the right-hand switch on the Calibration Tester to "CALIBRATE."
- IV. Set the left-hand switch on the Calibration Tester to "FAIL." Carefully adjust the remote module's trim pot in a counter-clockwise direction until the Ground Gard Monitor indicates a FAIL condition. If properly calibrated, the monitor should now indicate a FAIL condition when the Calibration Tester's left-hand switch is set to "FAIL" and a PASS condition when the Tester is set to "PASS."

#### Limited Warranty

SPI expressly warrants that for a period of one (1) year from the date of purchase, SPI Calibratrion Testers will be free of defects in material (parts) and workmanship (labor). Within the warranty period, the product will be tested, repaired, or replaced at our option, free of charge. Call our Customer Service Department at 909-664-9986 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 purchase date. Any unit under warranty should be shipped prepaid to the SPI Westek factory. Warranty repairs will take approximately two weeks.

If your unit is out of warranty, call Customer Service at 909-664-9986 for a Return Material Authorization (RMA) and proper shipping instructions and address. SPI 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 SPI 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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