

# DESCO EMIT

## 50401

### Limit Comparator for Testers



### Installation Instructions

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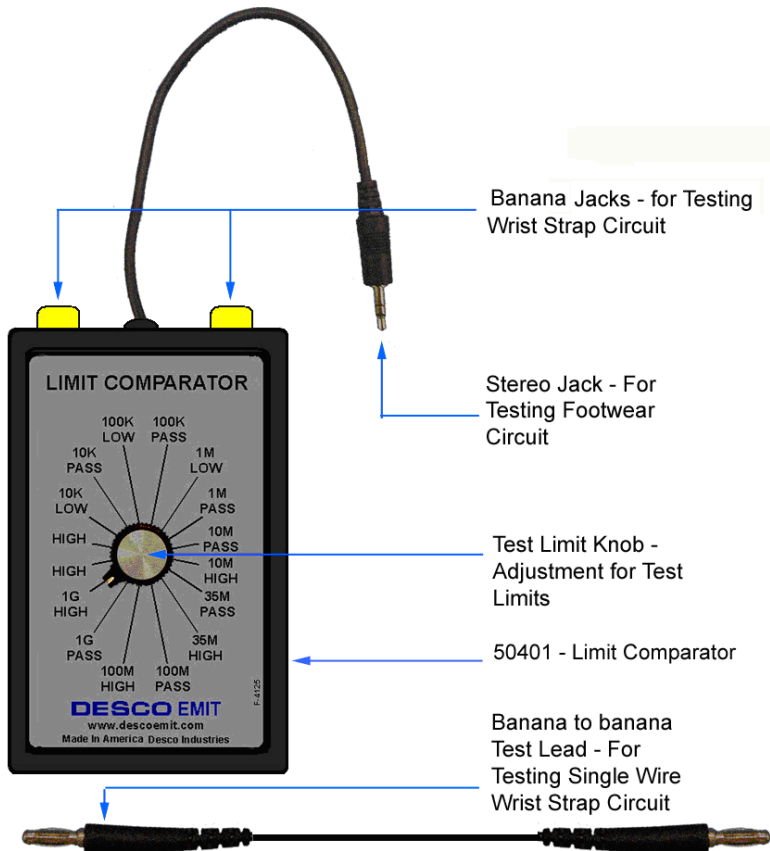
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# DESCO EMIT

## 50401

### Limit Comparator for Testers Installation and Operating Instructions

#### DESCRIPTION:



#### PACKAGING:

- 1 Limit Comparator
- 2 Test Leads, Banana to Banana
- 1 NIST, Certificate of Calibration



## Testing Wrist Strap Circuit, refer to figure 2

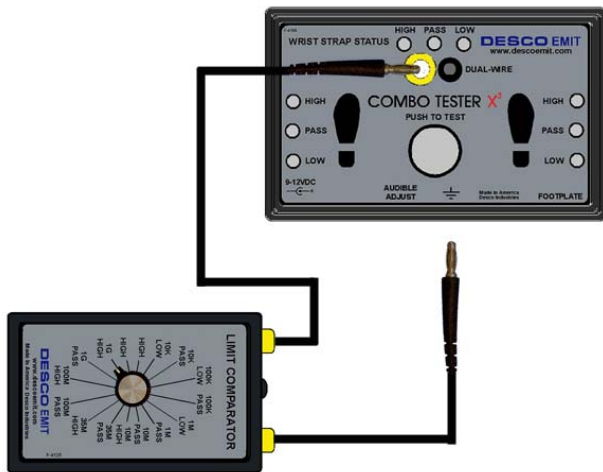


Figure 2. Wrist Strap Test Setup

To complete the wrist strap test, you will need to test the low and high limits. Refer to the dip setting on the left side of the testers for wrist strap test ranges. Manufacture suggested default test range is 1Meg low and 10Meg high for the US and 1Meg to 35Meg for Europe.

Do not power down the tester. Using the 2 banana leads included with model 50401. Attach 1 of the banana leads to the right side banana jack on model 50401 and connect the other end to the ground symbol jack on the tester. Connect the last banana jack to the left banana jack of model 50401 and the other end to the “SINGLE – WIRE” banana jack

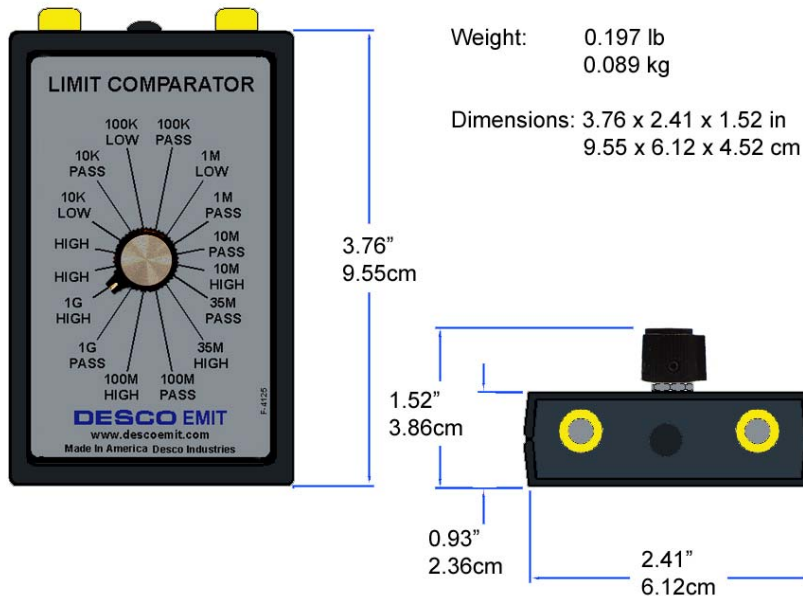
**Testing Low Circuit** - If the tester’s low range is set to 1Meg. Set the knob on model 50401 to the “1M LOW” position. Push the metal button down on the tester and you should get a red LED for the Wrist strap. Disregard the test result for the footwear. Set the knob on model 50401 to “1M Pass”, push the metal button on the tester and you should get a green LED for the wrist strap.

**Testing High Circuit** – If the tester’s high range is 10Meg. Set the knob on model 50401 to “10M PASS,” push the metal button on the tester and you should get a green LED for the wrist strap. Set the knob on model 50401 to “10M HIGH”, push the metal button on the tester and you should get a yellow LED for the wrist strap. If the limit is set to 35Meg on the tester, test at 35Meg on model 50401.



Figure 2a.

## SPECIFICATIONS AND DIMENSIONS:



Testers limit comparator will calibrate:

- 50404 - SmartLog X3 w/Dual Foot Plate, Keypad, & Barcode Reader, 120V
- 50441 - SmartLog X3 w/Dual Foot Plate, Keypad, & Barcode Reader, Euro Specs
- 50442 - SmartLog X3 w/Dual Foot Plate, Laser Scanner, Euro Specs, CE Approved
- 50407 - Dual Independent Footwear and Wrist Strap Tester, USA Standard
- 50413 - Dual Independent Footwear and Wrist Strap Tester, Euro Standard

## CALIBRATION:

There are no user adjustment on model 50401. Each value is a fixed resistor load, any model 50401 that falls out of specification will need to be sent to factory for repair. Using a DVM (digital voltage meter), set the meter to read ohms. The limit that the knob is set on can be measured using the DVM connected between Banana 1 to Banana 2 and connected between Conductor 1 and Conductor 2. Refer to figure 3.

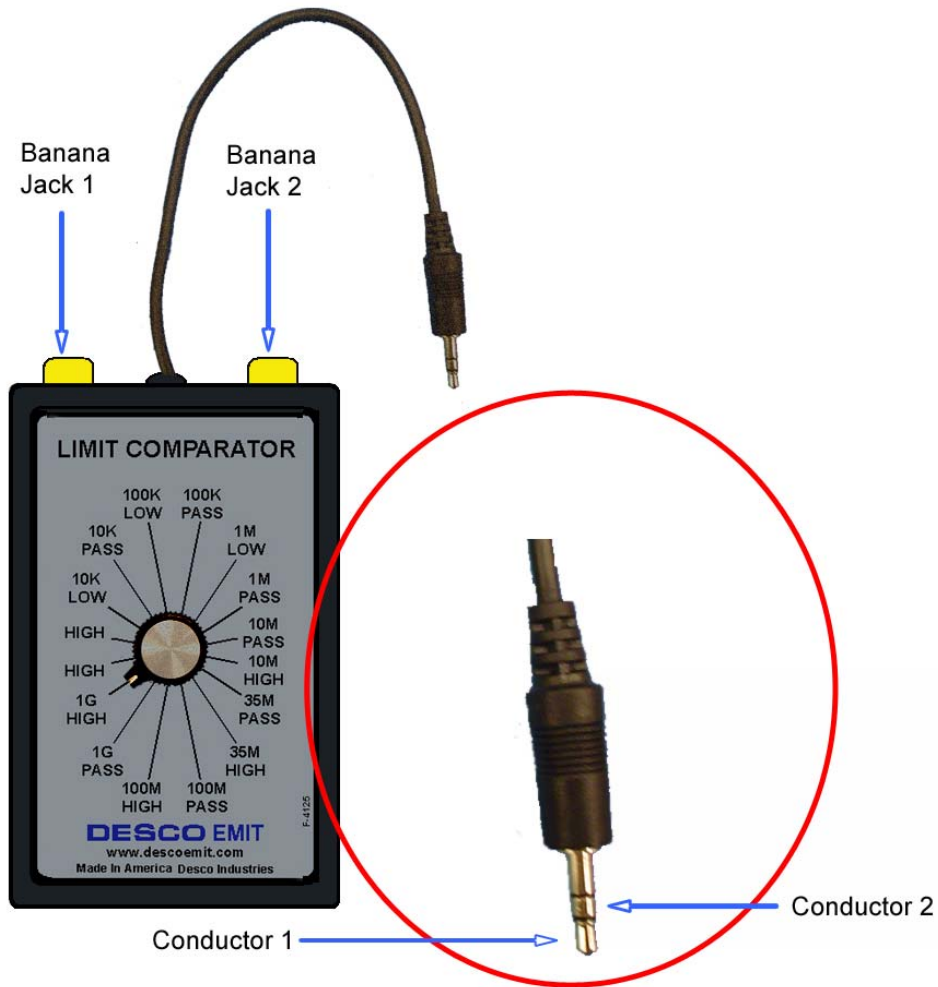


Figure 3. Test points

50401 Limits	NOMINAL RESISTANCE	% TOLERANCE OF NOMINAL RESISTANCE
10K FAIL LOW	9.5K	±2%
10K PASS	10.5K	±2%
100K FAIL LOW	95.0K	±2%
100K PASS	105K	±2%
1M FAIL LOW	950K	±2%
1M PASS	1.05M	±2%
10M PASS	9.09M	±2%
10M FAIL HIGH	11.09M	±2%
35M PASS	31.09M	±2%
35M FAIL HIGH	37.89M	±2%
100M PASS	90.9M	±2%
100M FAIL HIGH	112.9M	±2%
1G PASS	912.9M	±2%
1G FAIL HIGH	1.113G	±2%

## **CONTACT AND WARRANTY**

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### **Limited Warranty, Warranty Exclusions, Limit of Liability and RMA Request Instructions**

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