WSMONITOR2 Plus Verification Tester Operation Instructions

Made in the
United States of America

Figure 1. SCS 770076 WSMONITOR2 Plus Verification Tester

Description

The SCS 770076 WSMONITOR2 Plus Verification Tester is used to perform periodic test limit verification of the SCS 770075 WSMONITOR2 Plus Workstation Monitor. Verification may be accomplished without removing the monitor from its workstation. The WSMONITOR2 Plus Verification Tester is National Institute of Standards and Technology (NIST) traceable. Frequency of verification is based on the critical nature of the ESD susceptible items handled. SCS recommends annual calibration of workstation monitors and the WSMONITOR2 Plus Verification Tester.

Packaging

1 WSMONITOR2 Plus Verification Tester
1 Alligator Clip
1 10mm Stacking Snap
1 Ground Plug Adapter
1 Ground Extension Cord, 5'
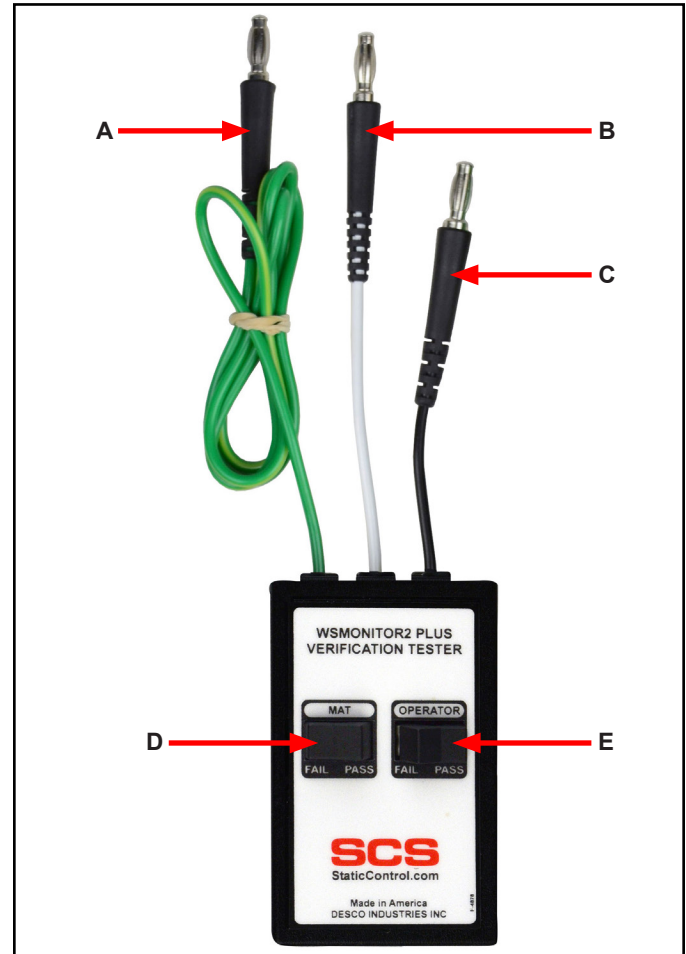1 Certificate of Calibration

Features and Components

Figure 2. WSMONITOR2 Plus Verification Tester features and components

A. Ground Lead: Connect to equipment ground to provide a ground reference for the WSMONITOR2 Plus Verification Tester.

B. Mat Test Lead: Connect to the monitor's mat terminal to verify its mat test circuit.

C. Operator Test Lead: Insert into the monitor's operator jack to verify its operator test circuit.

D. Mat Test Switch: Toggle the rocker switch to the left to force the monitor's mat circuit to fail. Toggle the rocker switch to the right to force the monitor's mat circuit to pass.

E. Operator Test Switch: Toggle the rocker switch to the left to force the monitor's operator circuit to fail. Toggle the rocker switch to the right to force the monitor's operator circuit to pass.

Operation

VERIFYING THE OPERATOR CIRCUIT

1. Connect the WSMONITOR2 Plus Verification Tester's green ground lead to equipment ground. This may be done using the included Ground Plug Adapter or alligator clip. See Figure 3.
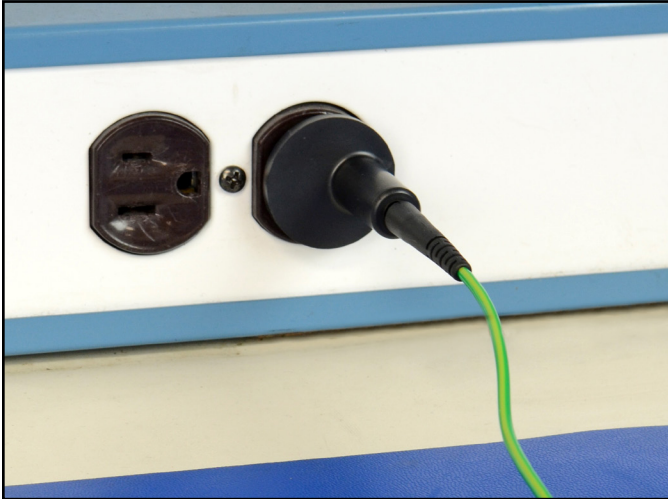

Figure 3. Using the Ground Plug Adapter to ground the WSMONITOR2 Plus Verification Tester

2. Insert the verification tester's black operator test lead into the operator 1 jack of the WSMONITOR2 Plus Workstation Monitor.
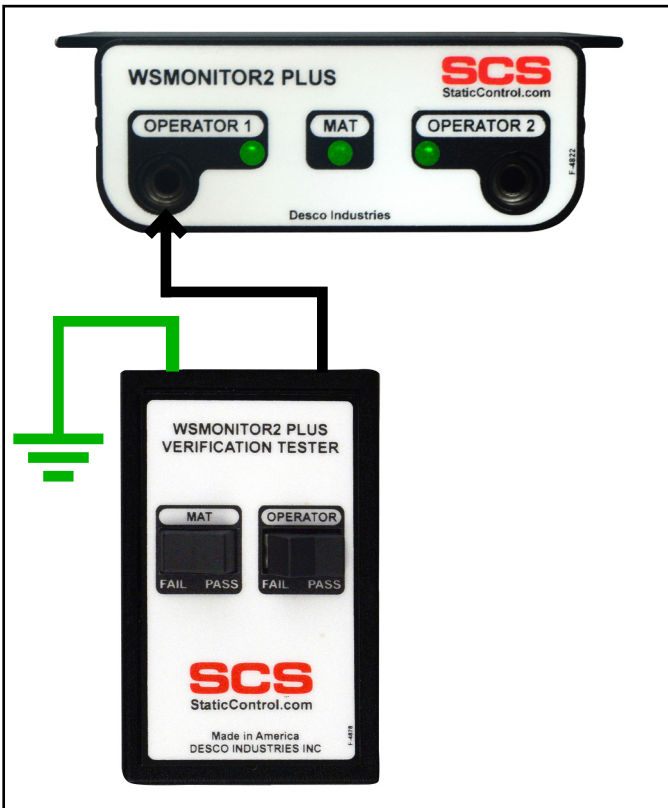

Figure 4. Connecting the WSMONITOR2 Plus Verification Tester to the operator jack of the WSMONTIOR2 Plus Workstation Monitor

3. Set the operator test switch to FAIL. The monitor's red operator 1 LED should illuminate, and its audible alarm should sound.

4. Set the operator test switch to PASS. The monitor's green operator 1 LED should illuminate.

5. Insert the verification tester's black operator test lead into the operator 2 jack of the WSMONITOR2 Plus Workstation Monitor.

6. Set the operator test switch to FAIL. The monitor's red operator 2 LED should illuminate, and its audible alarm should sound.

7. Set the operator test switch to PASS. The monitor's green operator 2 LED should illuminate.

8. Disconnect the operator test lead from the monitor.

VERIFYING THE MAT CIRCUIT

9. Connect the included stacking snap to the verification tester's white mat test lead.

10. Disconnect the monitor's black mat monitor cord from its worksurface mat and turn it over to expose its 10mm snap.

11. Connect the verification tester's white mat test lead to the mat monitor cord's 10mm snap.
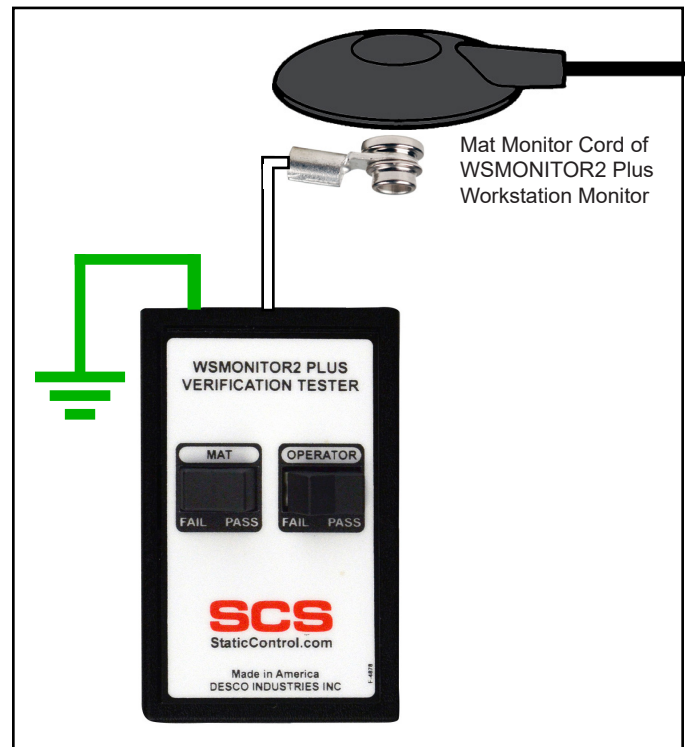

Mat Monitor Cord of WSMONITOR2 Plus Workstation Monitor

Figure 5. Connecting the WSMONITOR2 Plus Verification Tester to the mat monitor cord of the WSMONITOR2 Plus Workstation Monitor

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12. Set the mat test switch to FAIL. The monitor's red mat LED should illuminate, and its audible alarm should sound.

13. Set the mat test switch to PASS. The monitor's green mat LED should illuminate.

Calibration

Frequency of recalibration should be based on the critical nature of those ESD sensitive items handled and the risk of failure for the ESD protective equipment and materials. In general, SCS recommends that calibration be performed annually.

Use the information below to verify if the WSMONITOR2 Plus Verification Tester operates within its specifications.

EQUIPMENT NEEDED
- RLC Bridge for testing operator circuit
- Digital Multimeter with 50-100V power supply for testing mat circuit

SETTINGS
- @ 50 Hz
  Frequency = 1,000 Hz (20 x 50), 20th harmonic
- @ 60 Hz
  Frequency = 1,020 Hz (17 x 60), 17th harmonic
- Set function switch to read "Equivalent Parallel Circuit"

RECORD THE FOLLOWING DATA

Operator Switch Setting	Resistance @ 50V	Targeted Specification (±10%)
Pass		1.0 megohms
Fail		6.6 megohms

Operator Switch Setting	Equivalent Parallel Capacitance	Targeted Specification (±20%)
Pass		0.180 nF
Fail		0.0046 nF

Mat Switch Setting	Resistance @ 50V	Targeted Specification (±10%)
Pass		< 1 kilohms
Fail		6.04 megohms

Specifications

Operating Temperature	50 to 95°F (10 to 35°C)
Environmental Requirements	Indoor use only at altitudes less than 6500 ft. (2 km)
	Maximum relative humidity of 80% up to 85°F (30°C) decreasing linearly to 50% @ 85°F (30°C)
Dimensions	3.8" L x 2.4" W x .9" H (97 mm x 61 mm x 23 mm)
Weight	0.2 lbs. (0.1 kg)
Country of Origin	United States of America

The SCS WSMONITOR2 Plus Verification Tester may also be used with the following discontinued items:

- WSMONITOR1
- WSMONITOR1-230VAC
- WSMONITOR2
- WSMONITOR2-230VAC
- WSMONITOR3
- WSMONITOR3-230VAC

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

See the SCS Warranty - StaticControl.com/Limited-Warranty.aspx

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