WSMONITOR2 Plus Workstation Monitor
Installation, Operation and Maintenance

Figure 1. SCS 770075 WSMONITOR2 Plus Workstation Monitor

Description

The SCS 770075 WSMONITOR2 Plus Workstation Monitor eliminates the need for periodic testing and uses a solid state capacitance design to continuously test the ground integrity of two operators and one worksurface. The monitor will issue both audible and visual alarms should the wrist straps or worksurface fail. It is cost effective and designed to monitor any conventional single-wire wrist strap system. Its mounting tabs make it highly suitable to install underneath table tops and save work space.

The WSMONITOR2 Plus Workstation Monitor meets the Continuous Monitor requirements of ANSI/ESD S20.20 in accordance with ESD TR1.0-01 and ANSI/ESD STM3.1. It meets the recommendations of ESD Handbook ESD TR20.20 which includes "if the products that are being produced are of such value that knowledge of a continuous, reliable ground is needed, and then continuous monitoring should be considered or even required".

Packaging

1 WSMONITOR2 Plus Workstation Monitor
1 Mat Monitor Cord (Black)
1 Monitor Ground Cord (Green and Yellow)
1 Push and Clinch Snap
1 Power Adapter, 9VDC, with interchangeable plugs (North America, UK/Asia, Europe)
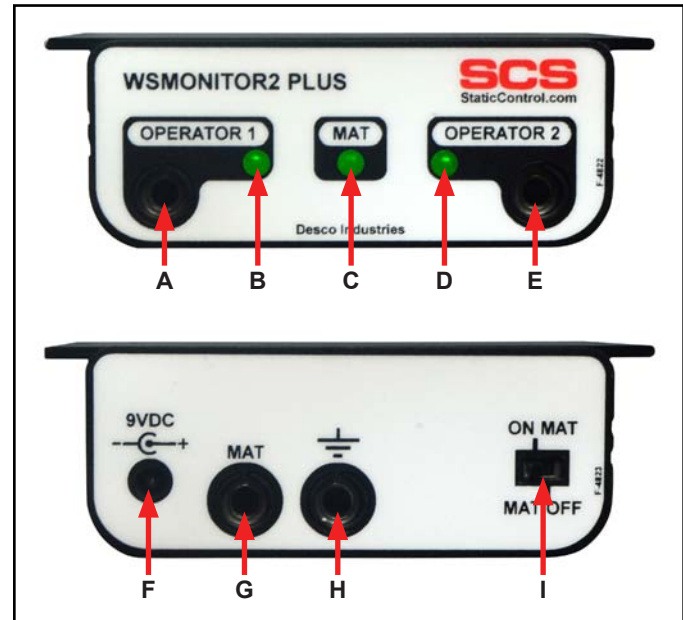1 Certificate of Calibration

Features and Components

Figure 2. WSMONITOR2 Plus Workstation Monitor features and components

A. Monitored Operator 1 Jack: Connect the single-wire wrist cord of operator 1 here to monitor his/her connection to ground.

B. Operator 1 LED: Blinks red without an audible alarm when in standby mode. Illuminates green when operator 1 is properly grounded. Blinks red and audible alarm sounds when operator 1 is not properly grounded.

C. Mat LED: Illuminates green when the worksurface mat is properly grounded or the mat monitor switch is set to OFF. Blinks red and audible alarm sounds when the worksurface mat is not properly grounded.

D. Operator 2 LED: Illuminates red without an audible alarm when in standby mode. Illuminates green when operator 2 is properly grounded. Illuminates red and audible alarm sounds when operator 2 is not properly grounded.

E. Monitored Operator 2 Jack: Connect the single-wire wrist cord of operator 2 here to monitor his/her connection to ground.

F. 9VDC Power Jack: Connect the included power adapter here to power the WSMONITOR2 Plus Workstation Monitor.

G. Monitored Mat Jack: Monitors a worksurface mat for proper dissipative resistance. Connect the black mat monitor cord here.

H. Ground Jack: Common point ground for the monitor. Connect the green and yellow monitor ground cord here.

I. Mat Monitor Switch: Slide the switch to the MAT ON position to enable the mat monitor circuit. Slide the switch to the MAT OFF position to disable the mat monitor circuit.
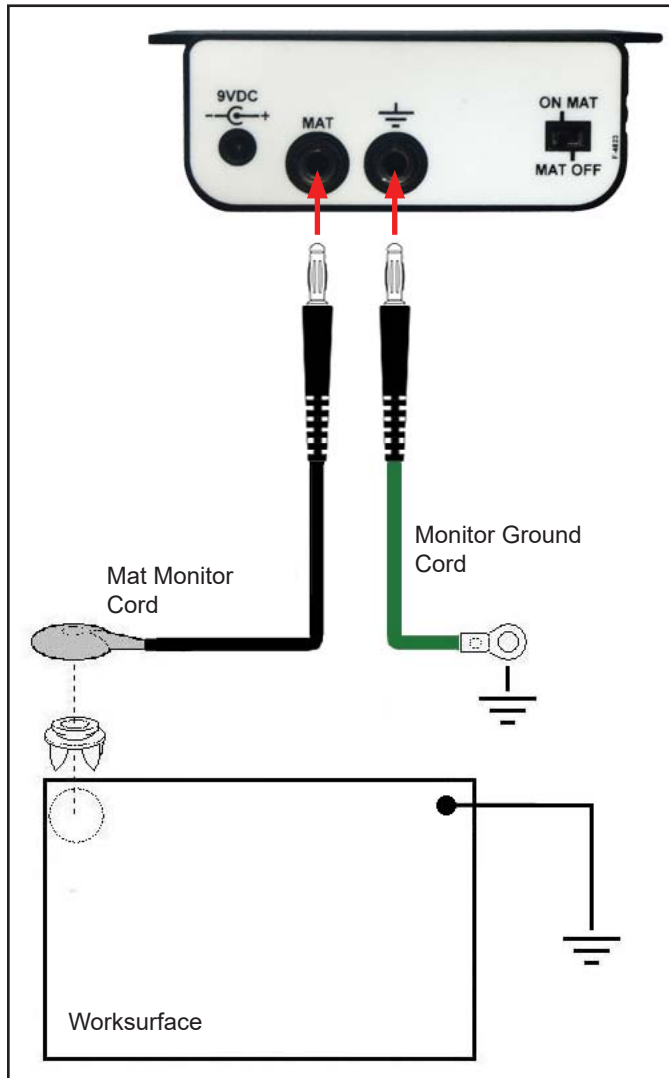
Installation

Figure 3. Installing the WSMONITOR2 Plus Workstation Monitor

1. Remove the WSMONITOR2 Plus Workstation Monitor from the carton and inspect for damage.

2. Determine the mounting location of the monitor. The front panel should be visible to the operator(s).

3. Insert the banana plug termination of the mat monitor cord into the mat jack located on the back of the monitor. Ensure that the mat monitor switch is set to the ON position.

4. Route the mat monitor cord from the back of the monitor to the worksurface mat. Use the included push and clinch snap to secure the cord to the grounded mat.

5. Insert the banana plug termination of the monitor ground cord into the ground jack located on the back of the monitor. Connect the ring terminal termination of the cord to equipment ground. It is important that this ground cord is attached to a different ground point than that of the worksurface mat. The face plate screw of a grounded AC wall outlet may provide a convenient connection point.

7. Connect the power adapter to the power jack located on the back of the monitor. Route the wire from the supply to a nearby electrical outlet, and plug it into the outlet. The monitor is now powered.

NOTE: Worksurface must have a conductive layer such as Dual Layer Rubber or Dissipative 3-Layer Vinyl with conductive buried layers. SCS workstation monitors are not recommended for use with homogeneous matting.

Operation

1. Fit the wristband snugly onto the wrist.

2. Snap the wrist cord to the wristband.

3. Plug the wrist cord into the monitored jack labeled "OPERATOR 1". The corresponding operator LED will illuminate solid green. This indicates that the operator is properly grounded.

4. If this does not happen, examine the wrist cord for continuity or damage and the wristband to ensure that it fits securely. If you have dry skin, apply an approved dissipative hand lotion such as Menda Reztore™ ESD Hand Lotion.
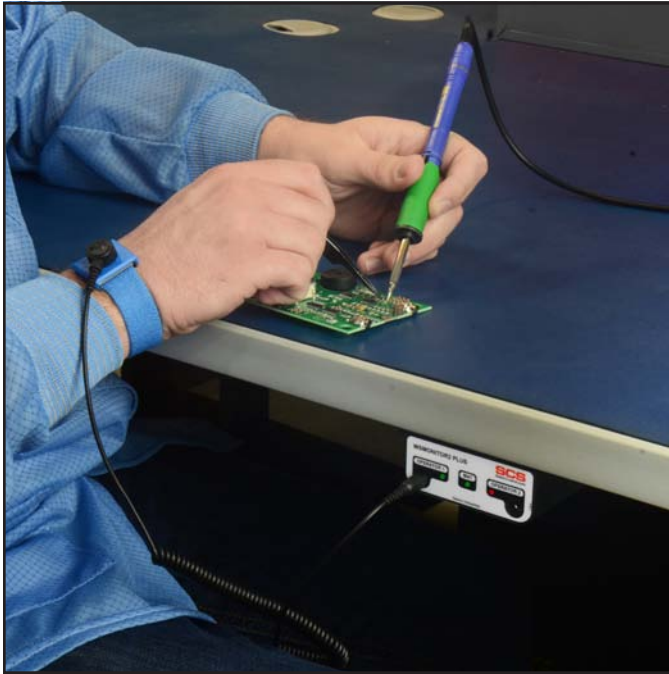
Figure 4. Using the WSMONITOR2 Plus Workstation Monitor

Calibration

The WSMONITOR2 Plus Workstation Monitor is solid-state and designed to be maintenance free. It is calibrated to NIST traceable standards. There are no user adjustments necessary.

Specifications

Input Voltage and Frequency (External Adapter)	AC/DC Power Adapter Power Input: 100-240VAC, 50/60 Hz Power Output: 9VDC @ 0.5A Cable Length: 5 ft. (1.5 m)
Operating Temperature	41 to 85°F (5 to 30°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	1.3" x 3.7" x 3.0" (33 mm x 94 mm x 76 mm)
Weight	0.3 lbs. (0.14 kg)
Operator Test Range	Pass: 0 to 10 megohms Fail: > 12 megohms
Worksurface Test Range	Pass: 0 to 6 megohms Fail: > 8 megohms
Operator Test Voltage	3.5VDC @ open circuit
Country of Origin	China