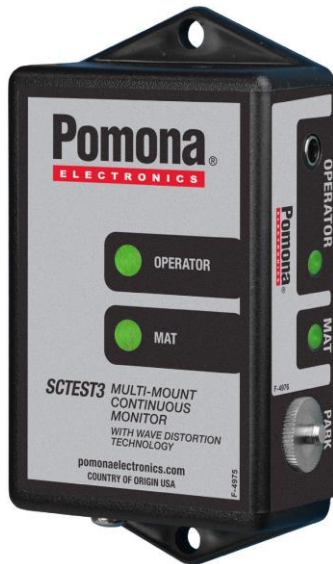


Model SCTEST3 Multi-Mount Continuous Monitor (NA Plug)



Features

- Continuously monitors the path-to-ground integrity of one operator and one ESD work surface
- Monitors for a worksurface path-to-ground of less than 10 MΩ
- Mounting tabs make it suitable to install in workbench or equipment settings
- Alarms when the operator unintentionally disconnects from the monitor or the connection between the banana plug and monitor's jack is intermittent
- Mat monitor switch disables the worksurface monitor circuit when used in areas where there is no ESD worksurface
- Audible alarm adjustment sets the audible alarm volume from loud to louder
- Wave Distortion Technology provides stable continuous monitoring (versus pulse or intermittent) of the the wrist strap's path-to-ground and the presence of its 1 MΩ safety resistor
- Disconnect (and park) a wrist strap when leaving the workstation without creating a false alarm
- Meets ANSI/ESD S20.20 in accordance with ESD TR1.0-01-0
- 1.2V operator test voltage reduces the risk of electrical overstress (EOS) for the handling of sensitive components
- <50 millisecond alarm response time identifies failures and intermittencies that inferior technologies miss
- Continuous visual and audible alarms by illuminating green to indicate proper grounding; illuminates red and sounds audible alarm when intermittent or failed connection occurs
- National Institute of Standards and Technology calibrated with certificate included
- Includes 100-240VAC safety certified power adapter with North American Plug

Includes	1 Multi-Mount Monitor	2 Pan-Head Screws, #6 x 3/8"
	1 Mat Monitor Cord (White)	1 Dual Lock Fastener Set, 2" Length
	1 Countersunk Washer	1 Power Adapter, 24 VDC, North America Plug
	1 Flat Head Screw, 6-23 x 1/4"	1 Certificate of Calibration

USA: Sales: 800-490-2361
Technical Support: technicalsupport@pomonatest.com
Europe: 31-(0) 40 2675 150 **International:** 425-446-5500

All dimensions are in inches. Tolerances (except noted): .xx = ±.02" (.51 mm), .xxx = ±.005" (.127 mm). All specifications are to the latest revisions. Specifications are subject to change without notice. Registered trademarks are the property of their respective companies.

Model SCTEST3
Multi-Mount Continuous Monitor (NA Plug)**Specifications**

Multi-Mount Monitor	
Input Voltage and Frequency (External Adapter)	AC/DC Power Adapter Power Input: 100-240VAC, 50/60 Hz Power Output: 24VDC @ 150mA Cable Length: 5 ft. (1.5m)
Operating Temperature	50°F to 95°F (10°C 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% @ +95°F (+35°C)
Dimensions	3.87" L x 2.09" W x 0.90" H (98 mm x 53 mm x 23 mm)
Weight	0.14 lbs (0.06 kg)
Operator Test Range*	500 kΩ to 10 MΩ impedance
Worksurface Test Limit**	10 MΩ (±20%)
Operator Test Voltage	1.2V peak-to-peak @ 1.2μA
Worksurface Test Voltage	5 to 7.5V, open circuit
Alarm Response Time	<50 ms

*This cannot be verified with standard DC test equipment. The continuous monitor is an impedance sensing device, and the limits are determined by the magnitude and angle of the impedance.

**The worksurface mat must have a conductive layer such as Dual Layer Rubber or Dissipative 3-Layer Vinyl with conductive buried layers. This workstation monitor is not recommended for use with homogeneous matting.

ANSI/ESD S20.20 requires the use of a surface resistance meter for periodic verification of a worksurface's resistance-to-ground (RTG). Constant monitors may not be used as a substitute for this requirement.

Model SCTEST3 Multi-Mount Continuous Monitor (NA Plug)

Features and Components



Figure 1. Multi-Mount Monitor features and components

A. Mat Monitor Switch: Use a probe to access the mini slide switch. Slide the switch to the right to enable the mat monitor circuit. Slide the switch to the left to disable the mat monitor circuit. This switch is enabled as default.

B. Buzzer Volume Adjustment: Turn the trimpot clockwise to increase the buzzer volume. Turn the trimpot counter-clockwise to decrease the buzzer volume.

C. Monitored Operator Jack: Insert the single-wire wrist cord here to monitor the operator's connection to ground.

D. Operator LEDs: Illuminates green when the operator is properly grounded. Illuminates red and audible alarm sounds when the operator is not properly grounded.

E. Mat LEDs: Illuminates green when the worksurface is properly grounded. Illuminates red and audible alarm sounds when the worksurface is not properly grounded.

F. Park Snap: Allows the operator to disconnect (and park) a wrist strap when leaving the workstation, without creating a false alarm. Touch the park snap and the monitor's audible alarm will disable for approximately 10 seconds. Use this time to disconnect the wrist cord from the wristband, and attach it to the park snap or remove the banana plug from the jack. Upon returning to the workstation and disconnecting the wrist cord from the park snap, the operator has approximately 10 seconds to reconnect the wrist cord to a worn wristband before activating the alarm.

G. Mat Monitor Screw Terminal: Verifies that the worksurface's path-to-ground is $<10\text{ M}\Omega$. Connect the white mat monitor cord here.

H. Power Jack: Connect the included 24VDC power adapter here.

I. Remote Alarm Jack: Connects to a Remote Alarm* accessory.

*Please contact Pomona Technical Support for Remote Alarm recommendations

Model SCTEST3 Multi-Mount Continuous Monitor (NA Plug)

Installation

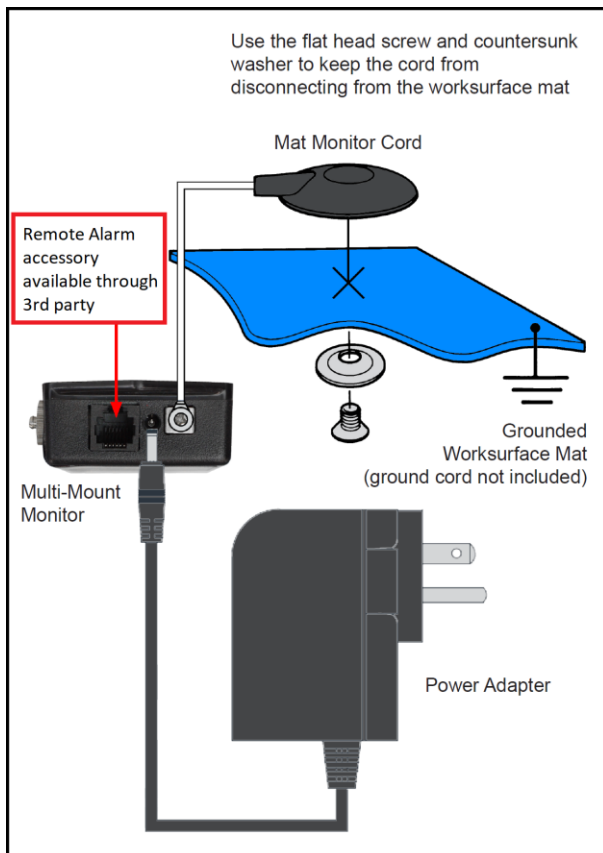


Figure 2. Installing the Multi-Mount Monitor

1. Remove the Multi-Mount Monitor from the carton, and inspect for damage.
2. Locate an appropriate AC outlet near the Multi-Mount Monitor, and test it for proper wiring and grounding prior to use.
3. Determine the mounting location of the Multi-Mount Monitor. Its LEDs should be visible to the operator. Secure the Multi-Mount Monitor to a surface using its mounting tabs and the included pan-head screws or dual lock fasteners.
4. Secure the ring termination of the white mat monitor cord to the mat monitor screw terminal on the side of the Multi-Mount Monitor. Ensure that

the mat monitor switch is enabled if using this monitored circuit.

5. Connect the mat monitor cord from the side of the Multi-Mount Monitor to a grounded worksurface mat. Use the included countersunk washer and flat head screw to secure the cord to the grounded mat.
6. Connect the power adapter to the power jack located on the side of the Multi-Mount Monitor, and plug the power supply into the tested AC outlet.

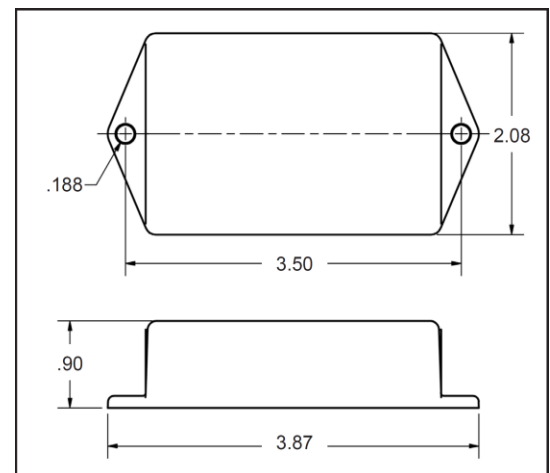


Figure 3. Mounting hole locations on the Multi-Mount Monitor (all dimensions are in inches)

10mm Park Snap and 10mm Operator Jack Adapter

The Multi-Mount Monitor includes an interchangeable 10mm park snap and 10mm banana jack adapter for operators who use wrist cords with 10mm terminations. Use the park snaps' knurled rims to unscrew the 4mm park snap from the monitor and install the 10mm park snap to the monitor. Plug the 10mm operator jack adapter into the monitor's operator jack.

Model SCTEST3

Multi-Mount Continuous Monitor (NA Plug)

Operation

1. Fit the wristband snugly onto the wrist.
2. Snap the wrist cord to the wristband.
3. Plug the wrist cord into the operator jack. The green operator LED will illuminate. 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.
5. When leaving the workstation, first touch the monitor's park snap. The monitor's audible alarm will disable for approximately 10 seconds. Use this time to disconnect the wrist cord from the wristband and attach it to the park snap without sounding a false alarm.
6. Upon returning to the workstation and disconnecting the wrist cord from the park snap, the monitor will provide approximately 10 seconds for the operator to reconnect the wrist cord to a worn wristband before sounding the monitor's alarm.

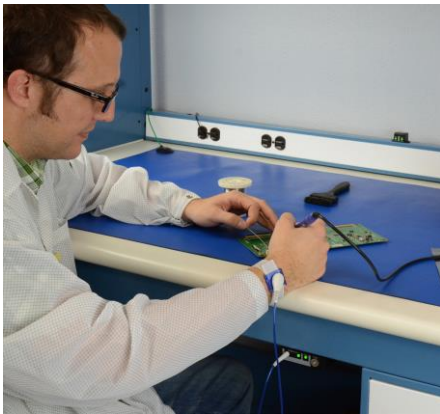


Figure 4. Using the Multi-Mount Monitor in a workbench setting



Figure 5. Using the Multi-Mount Monitor at a machine station

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, Pomona recommends that calibration be performed annually.

Periodic verification (once every 6-12 months) of the Multi-Mount Monitor is also recommended. A verification tester can be used to check the test limits of the Multi-Mount Monitor without removing it from the workstation. Please contact Pomona Technical Support for recommended verification tester options.

Ordering Information

Model: SCTEST3
MULTI-MOUNT CONTINUOUS MONITOR (NA PLUG)

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Technical Support: technicalsupport@pomonatest.com
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