



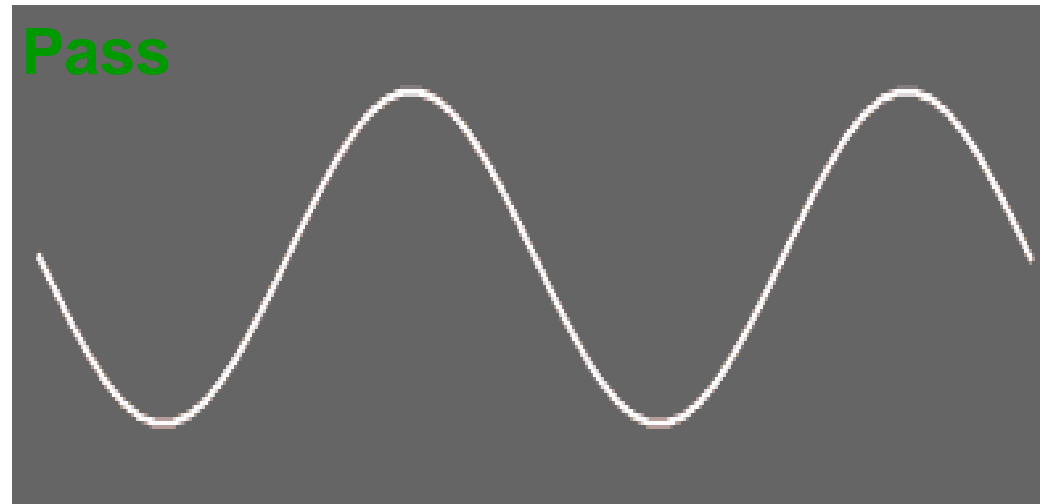
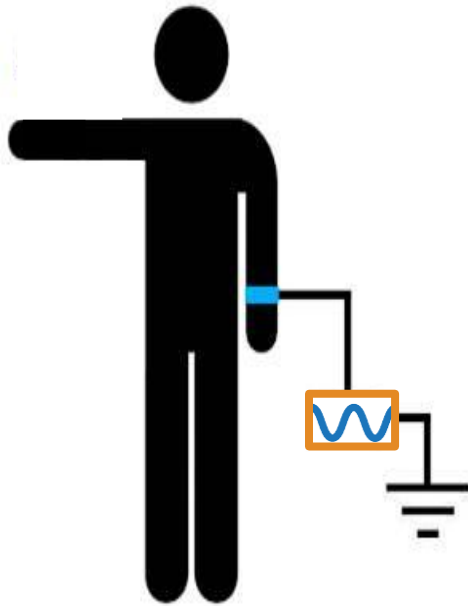
WAVE DISTORTION

Technology from Desco

DESCO

WAVE DISTORTION

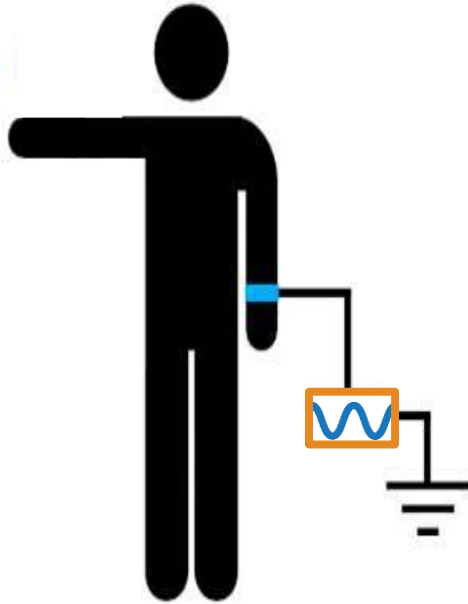
How it works:



1. Applies a continuous test voltage (1.2 volts peak-to-peak at 1-2 Micro Amps).
2. The connection to the human body (HBM) creates a sine wave that the monitor circuit compares to the total impedance to established patterns.

WAVE DISTORTION

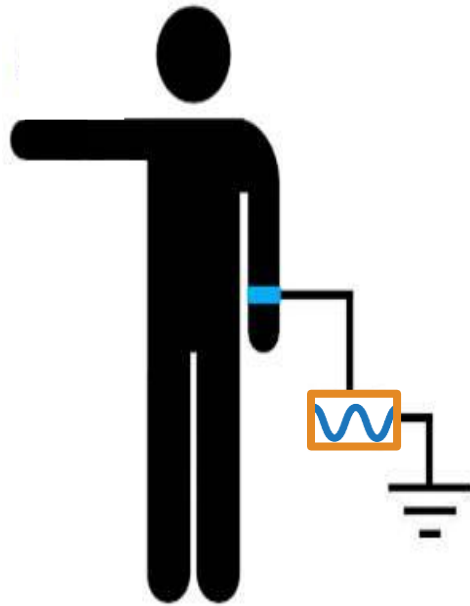
How it works:



By monitoring the “distortions”, or shape of the sine wave, Wave Distortion Technology determines if operator is grounded properly.

WAVE DISTORTION

How it works:



Different “distortions” represent different parameters of the monitor.

WAVE DISTORTION

Comparative Features:

Basic Capacitance/ Impedance	Resistance	 Capacitance/Impedance
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WAVE DISTORTION

Comparative Features:

1 Megohm Safety Resistor Monitoring

Basic Capacitance/ Impedance	Resistance	WAVE DISTORTION Capacitance/Impedance
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Some

Yes

Yes

ANSI/ESD S1.1-2013

Table 1. Product Qualification

Required Limit	Test Section
1 megohm \pm 20%, or user defined value	6.1

Demo with:



Desco monitors the required lower and upper limits for wrist straps from the ANSI/ESD S20.20-2104

WAVE DISTORTION

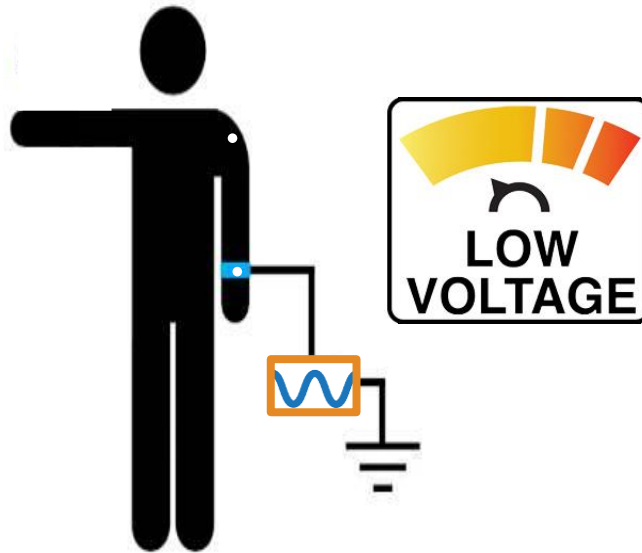
Comparative Features:

Test Voltage

Basic Capacitance/ Impedance	Resistance	WAVE DISTORTION Capacitance/Impedance
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3.5v

up to 16v



1.2v

Lower voltage reduces the risk of damage when handling ESD susceptible devices.

WAVE DISTORTION

Comparative Features:

Banana Jack Monitoring

Basic Capacitance/ Impedance	Resistance	WAVE DISTORTION Capacitance/Impedance
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Yes

No

Yes



Alarms when the connection between the banana plug and monitor's jack is intermittent or fails.

WAVE DISTORTION

Comparative Features:

Response Time

Basic Capacitance/ Impedance	Resistance	WAVE DISTORTION Capacitance/Impedance
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~1 sec

up to 2 sec

<50 Milliseconds



Instantaneous detection of an intermittent or failure in the path-to-ground of the operator or worksurface.

WAVE DISTORTION

Comparative Features:

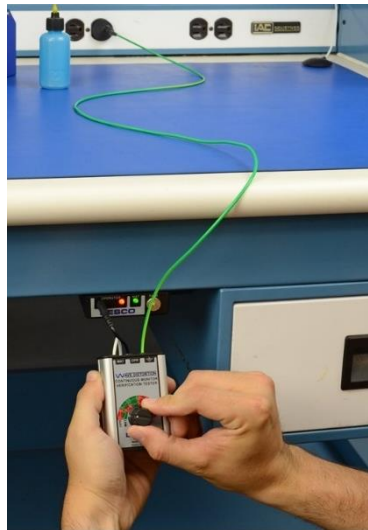
In-Use Verification

Basic Capacitance/ Impedance	Resistance	 WAVE DISTORTION Capacitance/Impedance
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No

Some

Yes



**Verify test limits of
Wave Distortion
Monitors without
removing from
workstations.**

WAVE DISTORTION

Unique Features (Multi-Mount and Mini):

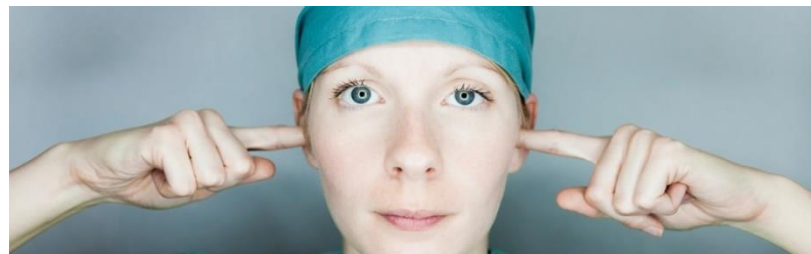
Park Snap



1. Allows the operator to disconnect (and park) a wrist strap cord when leaving the workstation without creating a false alarm (alarm fatigue).

2. Reduces wear on banana jacks/plugs.

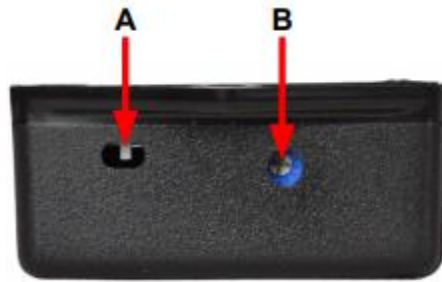
3. Limits lost cords.



WAVE DISTORTION

Unique Features (Multi-Mount Only):

Mat Monitor Switch(A)



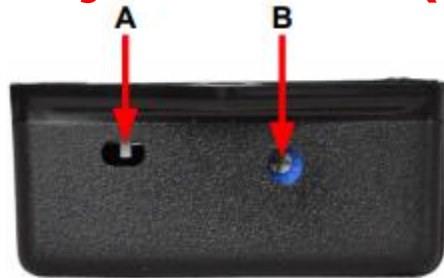
Disables the worksurface monitor circuit when used in areas where there is no ESD worksurface



WAVE DISTORTION

Unique Features (Multi-Mount Only):

Buzzer Volume Adjustment (B)



Sets the audible alarm volume from loud to louder



WAVE DISTORTION

Unique Features (Multi-Mount Only):

Remote Alarm Accessory

Locate in the field of view of the operator and/or supervisors for alarm notification



WAVE DISTORTION

Recap:

Comparative Features:

- 1 megohm Safety Resistor **Monitoring**
- **Lowest** Test Voltage
- Banana Jack **Monitoring**
- **Fastest** Response Time
- **In-Use** Verification



Unique Features:

- Park Snap (Both)
- Alarm Volume Adjustment (Multi Only)
- Remote Alarm Accessory (Multi Only)

WAVE DISTORTION

Recap:



19651/19652 Multi-Mount

List Price: See website for current price



19239/19241 /19243 Mini Monitor

List Price: See website for current price



19653 Remote Alarm for Multi-Mount

List Price: See website for current price