



TRANSFORMING TECHNOLOGIES

OUTSTANDING ALTERNATIVES IN STATIC CONTROL

Ohm Metrics™

Dual Footwear/Wrist Strap Tester
Model GTS900K



Instruction Manual

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Description

Ohm Metrics Duel Footwear/Wrist Strap Tester: Model GTS 900

The GTS 900 combo tester is a three-state touch tester designed for fast and accurate testing of ESD ground devices. The GTS 900 incorporates a unique dual test circuit which eliminates the need for separate wrist-strap and foot grounder testers which saves money and space. This tester fully supports the "Compliance Verification Plan" requirements as stated in the ANSI ESD S20.20.

Reliable, Repeatable Results

Accuracy and reliability are key strengths of the GTS 900. Test parameters are standard but can be adjusted to match your own specifications. Wrist-strap testing is set with the ideal 750 kilohm-10 megohm circuit and a 750 kilohm-100 megohm circuit for accurate testing of foot grounders. False alarms disappear and adjustments are not necessary.

Features include:

- Combination Wrist Strap/footwear testing
- Wrist Strap Range 750 kilohm –10 megohm
- Footwear Range 750 kilohm - 100 megohm*
- Low and High failure alarm modes
- Split footplate design

Battery Installation

The GTS 900 monitor requires 1(one) 9volt battery. The battery housing is found on the back of unit. Slide battery cover off and insert only a 9volt battery.

- Only new and valid batteries can be used.
- AC adapter available

Assembly

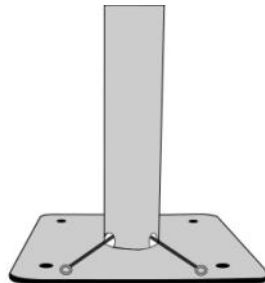
The GTS 900 has two options for installation: Free-standing installation with footplate and pedestal or wall mounting. The most common is the free standing option.

Free Standing Installation

1. Remove all items from carton and confirm you have received all items contained in the "Parts Included List."
2. Choose a location in the work area that is easily accessible and safe for both test equipment and users.

Pedestal Assembly

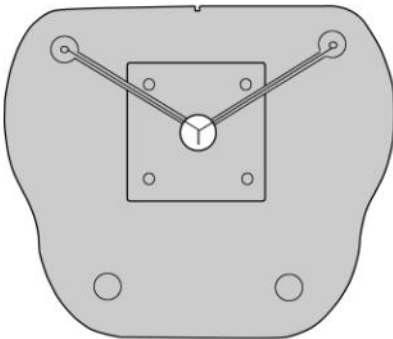
1. Locate the pedestal and the connection wire with banana clips on one end and eye bolts on the other.
2. String the connection wire through the pedestal so that the banana clips extend out the top of the pedestal and the eye bolts end extend out of the two holes at the bottom of the pedestal.



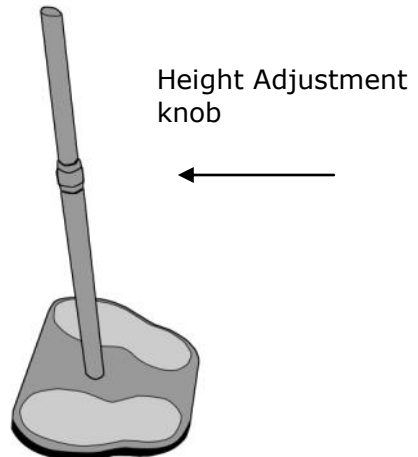
Installation Cont.

Pedestal and platform assembly

1. Locate the platform and unscrew and remove the four (4) screws located on the underside of the platform.
2. Unscrew the height adjustment knob and remove.
3. Slide the platform over pedestal taking special care to leave 12" of connection wire extending from the bottom.
4. String one line of connection wire along wire groove in the platform and connect the eye bolt to connection point with a nut.
6. Repeat with remaining line of connection wire.
7. Line up the base of the pedestal with the depression in the platform and return the screws.



Wire Connection
under Platform



Installation Cont.

Monitor Receptacle Assembly

1. Remove the two(2) screws from the top of pedestal.
2. Mount the monitor receptacle on pedestal with the banana plugs extending through the receptacle holes. See figure 1.
3. Return screws to securely fasten receptacle to pedestal.
4. Plug the banana plugs into the corresponding jacks on the back of the monitor.
5. Carefully insert monitor into receptacle.

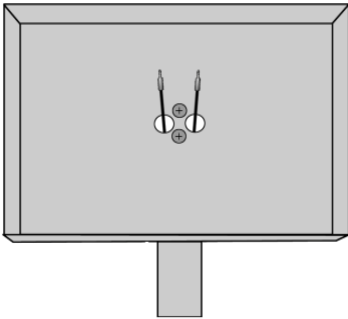
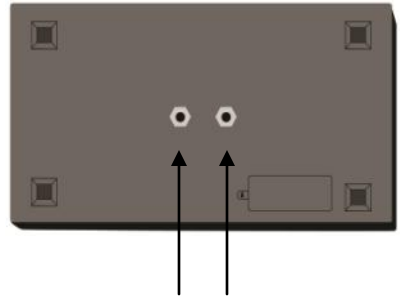
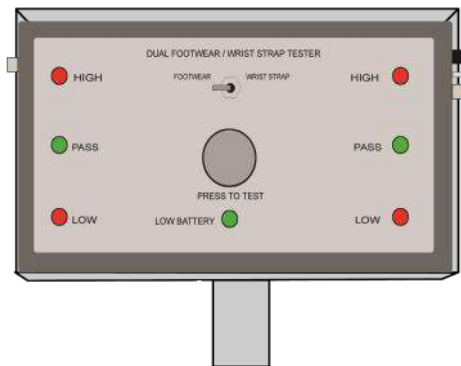


Figure 1



Banana Jacks



Height adjustment

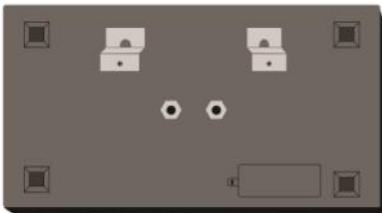
The GTS 900 monitor can be raised or lowered by adjusting the length of the pedestal.

1. To do so, unscrew the height adjustment knob until the top portion of the pedestal is free moving.
2. Choose desired height of the monitor and tighten height adjustment knob.

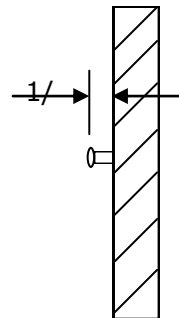
Wall Mount

The GTS 900 can be mounted on to any flat, stationary surface. Frequently, the unit is mounted on a table or wall

1. Attach two (2) mounting clips to the back of unit .
2. Install two(2) screws 1 1/2" apart, leaving 1/4" of screw head from mounting surface.
3. Mount the tester on the screws, pulling gently down to lock into place.
4. Place Footwear platform tester under the mounted unit and connect the eye blots of the connection wire to the footplate and insert banana plugs in to jacks on the back of monitor.



Monitor with Mounting Brackets



Mounting Screw

Testing

The GTS900 safely tests footwear and wrist straps for proper ESD protection.

Wrist Strap Testing

1. While wearing wrist strap, plug banana plug end of cord in the jack labeled "RIGHT WRIST STRAP"
2. Turn the selective switch located in the top center of the monitor to the right labeled "WRIST STRAP".
3. Press the test button and hold for 2-3 seconds.
4. The green LED labeled "PASS" indicates that the wrist strap and cord are functioning properly.
5. If either the red LED "LOW" or the red LED "HIGH" light and audible alarm sound, then check the wrist strap and cord set immediately.

Footwear Testing

For the following testing, one must be wearing foot grounding ESD protection. The GTS 900's dual footwear sensors allows for testing of each foot independently. The left foot ESD protection is indicated with the LED lights on the left side and the right foot is indicated on the right side of the monitor.

1. Turn the selective switch located in the top center of the monitor to left labeled "FOOTWEAR"
2. Place feet onto silver sensors of platform.

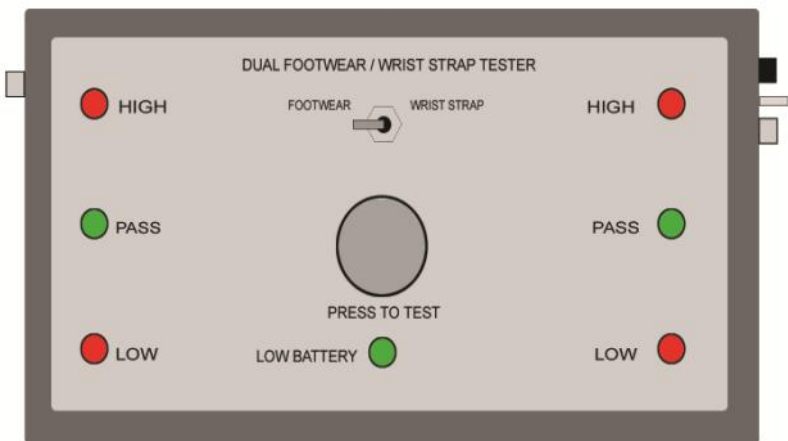
NOTE: No cord should be plugged into "WRIST Strap" jack.

Footwear Testing Cont.

3. Press the test button and hold for 2-3 seconds

NOTE: Testing of footwear on both feet happen simultaneously.

4. The green LED located on the **LEFT** side of monitor labeled "PASS" indicates that the **LEFT** foot ground is functioning properly.
5. The green LED located on the **RIGHT** side of monitor labeled "PASS" indicates that the **RIGHT** foot ground is functioning properly.
6. If either the red LED "LOW" or the red LED "HIGH" light on the **LEFT** side of monitor and audible alarm sound, then check the **LEFT** foot ground set immediately.
7. If either the red LED "LOW" or the red LED "HIGH" light on the **RIGHT** side of monitor and audible alarm sound, then check the **RIGHT** foot ground set immediately.



Product Specifications

General

Power	9v Battery or AC adapter
Operation	Resistance Bridge
Output	Six LED indicators and audio signal
Accuracy	$\pm 15\%$ for wrist strap tester $\pm 15\%$ for anti-static footwear tester

GST900

Weight	0.44lbs
Dimensions	5.5" × 3.1" × 1.5"

Testing Range and Indication:

INDICATION	FOOT WEAR	WRIST STRAP	ALARM
HIGH	$R > 100M\Omega$	$R > 10M\Omega$	YES
PASS	$R \geq 750K\Omega$ $R \leq 100M\Omega$	$R \geq 750K\Omega$ $R \leq 10M\Omega$	NO
LOW	$R < 750K\Omega$	$R < 750K\Omega$	YES
LOW BATTERY	Voltage < 7V, change battery.		

Parts Included List

GTS900

1. GTS 900 tester.
2. Foot plate.
3. AC adapter
4. 2 piece pedestal.
5. Connection cord for Foot plate.

Service and Warranty

Transforming Technologies, LLC provides a limited warranty for the Model GTS 900. All new products are guaranteed to be free from defects in material and workmanship for a period of one (1) year from the date of shipment. Liability is limited to servicing (after evaluating, repairing or replacing) any product returned to Transforming Technologies. The company does not warrant damage due to misuse, neglect, alteration or accident. In no event shall Transforming Technologies be liable for collateral or consequential damages.

To receive service under warranty, please contact Transforming Technologies Technical Support.

About Transforming Technologies

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.



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