



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Combination Wrist Strap - Footwear Tester Installation, Operation and Maintenance



Made in the
United States of America



Figure 1. Combination Wrist Strap - Footwear Tester ([ComboTester](#)).

The SCS Combo Tester meets ANSI/ESD S20.20 and ESD TR53 Compliance Verification testing of personnel grounding wrist strap and footwear. The lower limit verifies the presence of current limiting resistance.

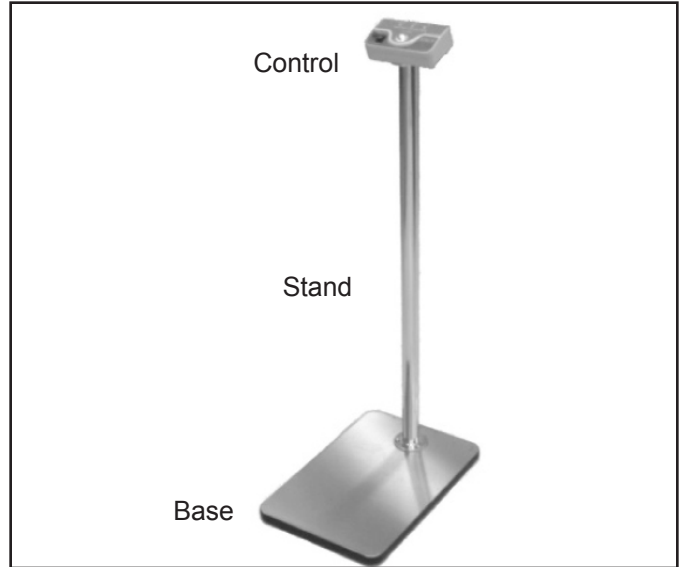


Figure 4. Combination Wrist Strap - Footwear Stand ([ComboTester](#)).

Combo Tester Parts Familiarization

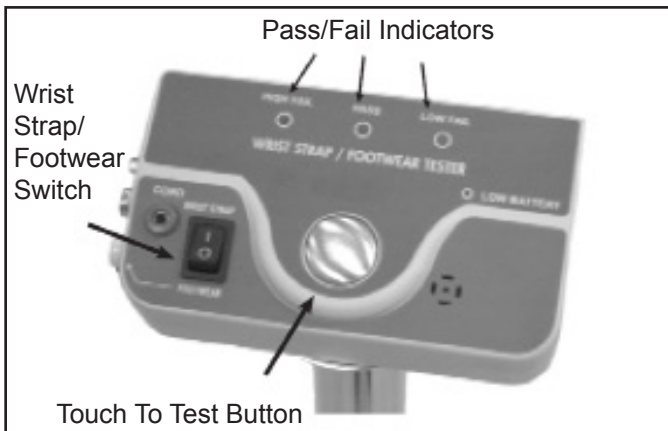


Figure 2. Combination Wrist Strap - Footwear Controls ([ComboTester](#)).

Assembly Instructions

1. Remove the parts from the packaging materials.
2. Place the base on the floor.
3. Remove the white cover plastic from the base.
4. Put the stand on the base, with the pins at the top.
5. Two pins should face the base.

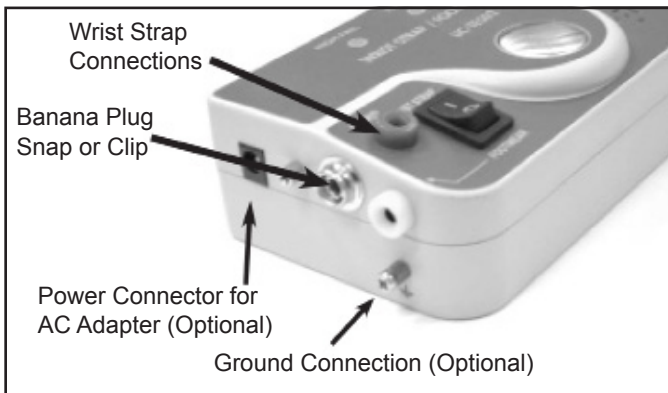
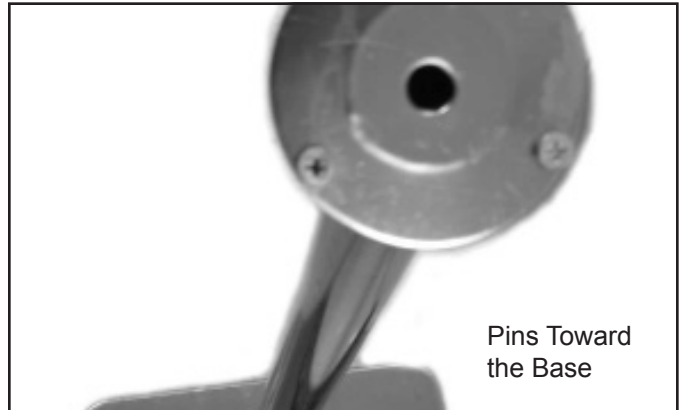


Figure 3. Combination Wrist Strap - Footwear, wrist strap connections ([ComboTester](#)).





6. Secure the Stand to the Base with three 10mm bolts.



7. Confirm that the battery is in the Control, or if using the AC adapter, remove the battery.
8. Align the slots on the Control with the pins on the Stand.
9. Slide the Control down onto the pins.



10. Connect the power adapter to the Control and 110 AC if not using the battery.

Grounding: If desired, the unit can be grounded by connecting the included wire from the ground point on the Control to a suitable ground.

Instructions for Use

Testing a Wrist Strap

1. Switch the Control to "Wrist Strap".

| Result | Indication | Range |
|-----------|--------------------|--------------------------|
| High Fail | Red Light | >10 megohms |
| Pass | Green Light + tone | 750 kilohms - 10 megohms |

| | | |
|----------|--------------|--------------|
| Low Fail | Yellow Light | <750 kilohms |
|----------|--------------|--------------|

2. While wearing the wrist strap, connect the cord to the Control by the banana plug, snap, or clip.
3. Touch the silver button.
4. The Control will test the wrist strap and report:

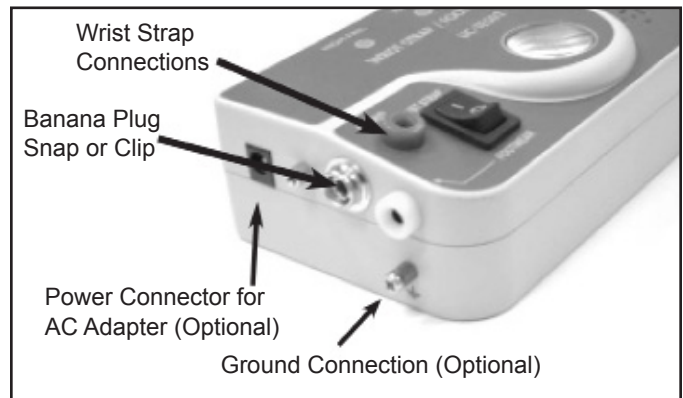


Figure 5. Testing Wrist Strap or Footwear.

Testing Foot Grounders to "Footwear"

1. Switch the Control to "Footwear".
2. While wearing the footwear, put one foot onto the Base.
3. Touch the silver button.
4. The Control will test the footwear and report:

| Result | Indication | Range |
|-----------|--------------------|--------------------------|
| High Fail | Red Light | >10 megohms |
| Pass | Green Light + tone | 750 kilohms - 10 megohms |

| | | |
|----------|--------------|--------------|
| Low Fail | Yellow Light | <750 kilohms |
|----------|--------------|--------------|

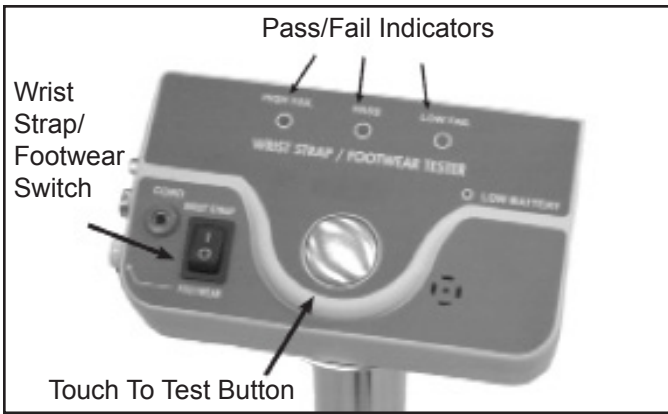


Figure 6. Testing Wrist Strap or Footwear.

Specifications

Resistance Ranges

| | |
|--------------|---------------------------------------|
| Wrist Strap | 750 kilohms to 10 megohms |
| Footwear | 750 kilohms to 100 megohms |
| Accuracy | ±20% |
| Power Supply | 9 volt alkaline battery or AC adapter |

Calibration Verification

This solid state unit is non-adjustable. However, correct operation may be checked using the following procedure:

Equipment

Resistance Substitution Box 700 kilohms to 110 megohms (Discrete resistors can be used in place of the substitution box.)

Procedure

Connect the leads of the substitution box to the wrist strap banana jack and to the Press to Test button. Press and hold the "Press to Test" button. Adjust the substitution box to each of the following resistance values. The Combo Tester should display the proper indication.

| 750 kilohm - 10 megohm range | Box | Combo Tester |
|---------------------------------|--------------|--------------|
| | <675 kilohms | Fail - Low |
| | 5 megohms | Pass |
| | >11 megohms | Fail - High |

Connect the leads of the substitution box to the Base and to the Press to Test button. Press and hold the "Press to Test" button. Adjust the substitution box to each of the following resistance values. The Combo Tester should display the proper indication.

| 750 kilohm - 100 megohm range | Box | Combo Tester |
|----------------------------------|--------------|--------------|
| | <675 kilohms | Fail - Low |
| | 5 megohms | Pass |
| | >110 megohms | Fail - High |

Values between these points can be checked at the user's discretion. Should the unit not display the proper value, increase (or decrease) the resistance by 10%. If the correct value is still not displayed, return the unit to the factory for service.

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

See the SCS Warranty -

<http://staticcontrol.descoindustries.com/warranty.aspx>