

**Operation, Installation and Calibration Instructions
N.I.S.T. OHM-STAT™ CB-9500 Calibration Unit for Combination Wrist
Strap and Dual Footwear Testers, and Constant Monitors.**

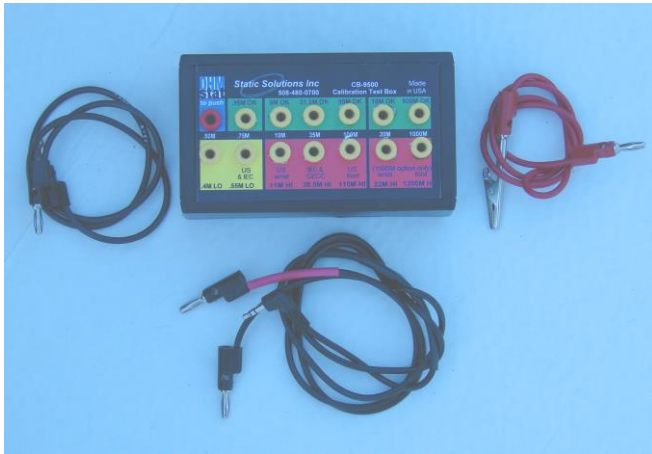


Figure 1. Ohm-Stat CB-9500 Calibration Unit

Description

The Static Solutions model CB-9500 calibration unit is designed to simplify the process of calibrating and certifying dual feet wrist strap and foot ground test equipment. The calibration unit allows the user to quickly and easily verify whether a tester is operating within specifications. This product can be used as one of the tools to comply with ANSI/ESD S20.20-2007 paragraph 6.1.3.2 “Compliance Verification Plan”. Verification should include routine checks of the Technical Requirements of the Plan. Per Table 1, the technical requirement test method for “Continuous Monitors” is to be “per the manufacturer specifications”. The Ohm-Stat CB-9500 is a passive device, and requires no battery or 110v/220 volt power source. The calibration unit is manufactured within industry accepted test ranges for both wrist straps and foot grounders. The wrist strap pass range is set at 750K - 10M, while the foot ground test range is set at 750K - 100M. The CB-9500 is supplied calibrated to NIST traceable standards. The unit can also check on European standards of 35 megohms, .550 megohms and also at the special 1000 megohm model.

The Ohm-Stat CB-9500 Calibration Unit is an important tool for optimization of an ESD control program. There is a \$100 to 1 return on every dollar invested in static control. The CB--9500 combination tester informs that the CM-1700, 1701, 1702, CT-8900 or CT-8700 must be working, so it is essential that testers are calibrated to verify the tolerances of wrist straps and foot grounders. The CB-9500 Calibration Unit saves time and easily justifies its purchase. Instead of returning to Static Solutions, or a Calibration company, the CT-8900/CT-8700 testers can be NIST calibrated where located and be out-of-service only a few hours. Calibration stickers must be used when doing in house. No need to have an extra replacement Tester.

Remove the Ohm-Stat CB-9500 calibration unit from the carton and inspect for shipping damage. Each unit should include the following:

- 1 – Calibration unit, item Ohm-Stat™ CB-9500
- 2 – Three test leads- one red cord for the power button, one for wrist strap calibration, one double cord for the foot calibration, one alligator clip and one piece of metal film electrode.

Calibration Test Procedures

The calibration unit was specifically designed for use in the calibration of Static Solutions Constant Monitors and Combination testers. For detailed information regarding specific Static Solutions brand testers please contact our Customer Service Department at 978.310.7252 (Hudson, MA.)

CALIBRATION PROCEDURE OF THE MODEL OHM-STAT™ CB-9500 WRIST STRAP UNIT

Step 1: WRIST STRAPS. Connect one of the test leads to the common point banana jack labeled "To push" on the CB-9500 calibration box. Connect the opposite end of test lead to the power button on the combotester using the alligator clip and a piece of aluminum tape. Attach one banana plug of the other double banana plug cord to the wrist strap jack in the CT-8900/8700 combination tester. Then insert other end of the wrist strap cord to the wrist strap jack located on the front of the calibration unit corresponding to the resistance value being tested. Wrist straps are tested in the .750 megohms to the 10 Megs range for US calibration and .750 megohms to 35 megohms for European testing. Switch the selector switch to “WRIST STRAP”.for the CT-8900/8700. PRESS the power button and then observe on both the meter and on the display if the CT-8900 is being used. Select off line testing in the software setup of the CT-8900.

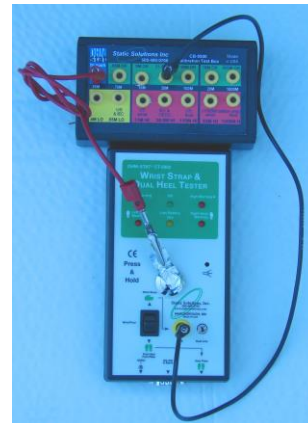


Figure 2. Connecting test lead common from CT-8900/8700 to CB-9500 PASS/FAIL for wrist strap calibration.

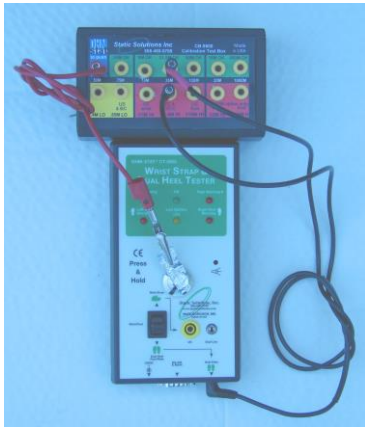


Figure 3. Testing Ohm-Stat CB-9500 for “PASS” and “FAIL” ranges for footwear circuit as indicated on calibration unit.

Step 2: FOOT WEAR Connect the stereo 3.5 mm lead into the foot plate jack on the bottom of the CT-8900/8700 combometer. Attach the other two ends into the test resistance test limits in the CB-9500. The ends can be inserted into different values in order to test each foot at different resistance values. Select on the selector “dual heel foot”. Touch the opposite end of the power “to push” test lead to the touch tester plate using an alligator clip and conductive foil. Press down on tester with enough pressure to activate the test circuit. Observe the LED's and monitor display (If the CT08900 is used) for the proper response as indicated below. Be sure to hold the cord at an insulated point, so that the resistance value is not affected by the body.

Specifications

Power Source: Passive device, no power source required

Resistance Ranges – Can test up to 1000 megohms.

Wrist straps: Low - 0 Kiloohm
 Pass - 35 Megohm
 Fail 40 Megohm
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Footwear: Low - 550 Kiloohm
 Pass - 825 Kiloohm
 Pass - 100 Megohm
 High - 110 Megohm

Calibration: NIST traceable

Calibration Interval: Recommended annually

Accuracy: ±10%

Weight: 10 ounces

Dimensions: 5.50" x 3.25" x 1.50"

Consider adding the CB-9500 to your list of “test equipment that shall be selected to make measurements of appropriate properties of the technical requirements that are incorporated into the ESD program plan” as required by paragraph 6.1.3.1 of ANSI/ESD S20.2

Limited Warranty

Static Solutions expressly warrants that for a period of one (1) year from the date of purchase, Static Solutions CB-9500 Calibration Units will be free of defects in material (parts) and workmanship (labor). Within the warranty period, the product will be tested, repaired, or replaced at Static Solution's option, free of charge. Call our Customer Service Department at 978.310.7251 (Hudson MA.) for a Return Material Authorization (RMA) and proper shipping instructions and address. Include a copy of your original packing slip, invoice, or other proof of purchase date. Any unit under warranty should be shipped prepaid to the Static Solutions factory. Warranty repairs will take approximately two weeks.

If your unit is out of warranty, call Customer Service at 978.310.7251- (Hudson, MA) for a Return Material Authorization (RMA) and proper shipping instructions and address. Static Solutions will quote repair charges necessary to bring your unit up to factory standards.

Warranty Exclusions

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

Limit of Liability

In no event will Static Solutions or any seller be responsible or liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.