=SCS USER GUIDE TB-9063 —

EOS/ESD Audit Kit Operation and Maintenance





Figure 1. SCS 751 EOS/ESD Audit Kit, Standard



Figure 2. SCS 752 EOS/ESD Audit Kit, Premium

Description

The SCS EOS/ESD Audit Kits offer an effective way to detect ESD events, troubleshoot, and verify that the ESD control processes are working properly. These tools help reduce losses due to ESD (electrostatic discharge) and EOS (electrical overstress). ANSI/ESD S20.20 requirements include a Product Qualification Plan to select EPA ESD control items to be used in the program, and a Compliance Verification Plan to periodically check that the items meet S20.20 required limits. Use the SCS EOS/ESD Audit Kit as "The test equipment selected shall be capable of making the measurements defined in the Compliance Verification Plan" (ANSI/ESD S20.20 section 7.4 Compliance Verification Plan).

ANSI/ESD S20.20 is available as a complimentary PDF download from <u>www.ESDA.org</u>.

The SCS EOS/ESD Audit Kits provide some of the most comprehensive portable instruments available. Use the test equipment to measure the required limits specified in ANSI/ESD S20.20 and detecting harmful energy/EOS levels identified by IPC-A-610E.

The kits include the following instruments:

- Analog Surface Resistance Megohmmeter to measure resistance point-to-point (Rtt) or surface to ground (Rtg) in accordance with ESD Association Standards ANSI/ESD S4.1, ANSI/ESD STM7.1, and Compliance Verification ESD TR53.
- Static Sensor with Isolated Conductive Plate and Charger to measure static fields and the offset voltage (balance) and discharge times of ionizers.
- Ground Pro Meter to confirm that an AC electrical outlet's wiring is correct and the path to equipment ground conductor (the green wire) is intact and to measure ground impedence in accordance with ANSI/ESD S6.1 and ANSI/ESD S20.20 required limits.
- **ESD Pro Indicator** to detect and count ESD events that can damage ESD sensitive items and cause tool lock-ups, erratic behavior and parametric errors (751 Kit only).
- EM Eye Meter with ESD Sensor to detect, count and measure ESD events that can damage ESD items and cause tool lock-ups, erratic behavior and parametric errors (752 Kit only).
- Iron Man Plus[™] Workstation Monitor to provide complete coverage of an entire workbench for ESD and EOS.

The EOS/ESD Audit Kit is available in two models:

Item	Package	
<u>751</u>	Standard	
<u>752</u>	Premium	

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Product Qualification Plan

"A Product Qualification Plan shall be established to ensure that the ESD control items that have been selected meet the requirements in the plan. The test methods and required limits are located in the product qualification columns in Tables 2 and 3. Product qualification is normally conducted during the initial selection of ESD control items. Any of the following methods can be used: product specification review, independent laboratory evaluation or internal laboratory evaluation. For ESD control items that were installed by the Organization before the adoption of this standard, on-going compliance verification records can be used as evidence of product qualification." (ANSI/ESD S20.20 section 7.3 Product Qualification Plan)

Compliance Verification Plan

"A Compliance Verification Plan shall be established to ensure the Organization's fulfillment of the technical requirements of the ESD Control Program Plan. Measurements shall be conducted in accordance with a Compliance Verification Plan that identifies the technical requirements to be verified, the measurement limits and the frequency at which those verifications occur. The Compliance Verification Plan shall document the test methods and equipment used for making the measurements. If the test methods used by the Organization differ from any of the standards referenced in this document, then there must be a tailoring statement that is documented as part of the ESD Control Program Plan. Compliance verification records shall be established and maintained to provide evidence of conformity to the technical requirements. The test equipment selected shall be capable of making the measurements defined in the Compliance Verification Plan." (ANSI/ESD S20.20 section 7.4 Compliance Verification Plan)

Packaging 751 EOS/ESD AUDIT KIT, STANDARD

Qty	ltem	Description	User Guide
1	<u>701</u>	Analog Surface Resistance Megohmmeter Kit	<u>TB-9017</u>
1	<u>718</u>	Static Sensor	<u>TB-9016</u>
1	<u>718A</u>	Air Ionizer Test Kit	<u>TB-9016</u>
1	<u>CTM051</u>	Ground Pro Ground Integrity Meter	<u>TB-9024</u>
1	<u>CTM082</u>	ESD Pro ESD Event Indicator	<u>TB-9034</u>
1	CTC331-WW	Iron Man Plus™ Workstation Monitor	<u>TB-9022</u>
1	<u>2382</u>	Dual-Wire Metal Wrist Strap, Medium	<u>2382</u>
1	<u>2214</u>	Single-Wire Adjustable Fabric Wrist Strap	<u>2214</u>
1	-	Heavy Duty Carrying Case	-

752 EOS/ESD AUDIT KIT, PREMIUM

Qty	ltem	Description	User Guide
1	<u>701</u>	Analog Surface Resistance Megohmmeter Kit	<u>TB-9017</u>
1	<u>718</u>	Static Sensor	<u>TB-9016</u>
1	<u>718A</u>	Air Ionizer Test Kit	<u>TB-9016</u>
1	<u>CTM051</u>	Ground Pro Ground Integrity Meter	<u>TB-9024</u>
1	<u>CTM048-21</u>	EM Eye Meter with ESD Sensor	<u>TB-9023</u>
1	<u>CTC331-WW</u>	Iron Man Plus™ Workstation Monitor	<u>TB-9022</u>
1	<u>2382</u>	Dual-Wire Metal Wrist Strap, Medium	<u>2382</u>
1	<u>2214</u>	Single-Wire Adjustable Fabric Wrist Strap	<u>2214</u>
1	-	Heavy Duty Carrying Case	-



Figure 3. Extendable handle on the carrying case

Specifications

Weight	28 lbs (13 kg)
Dimensions	22.0" x 13.8" x 9.0" (56 cm x 35 cm x 23 cm)

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Figure 4. Item compartments

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

See the SCS Warranty http://staticcontrol.descoindustries.com/warranty.aspx

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