

# Tension Voltage Detector

# INSTALLATION AND OPERATING INSTRUCTIONS

TensION Voltage Detector

5201166 Rev. A

# **1. DESCRIPTION**

The TensION Voltage Detector enables you to check both AC & DC ionizing and charging equipment. Without making contact with the actual equipment it gives you an easy and safe way to check if a high voltage is present. The tip of the TensION illuminates when a voltage is detected, providing an immediate indication the equipment is energized.

No contact required
Safe operation

### 2. OPERATION

To ensure correct operation before using the TensION, check on a known live condition first. Replace weak batteries immediately!

The Simco-Ion TensION can be used to check AC/DC Simco discharging and charging equipment. TensION indicates whether a high voltage is present on the ionising emitters or charging points. It is possible to test anti static bars as well as charging bars.



#### Test method

Hold the TensION at a distance from the ionizing points / emitters. If a high voltage is present, a red indicator in the plastic tip will illuminate. To get an indication of proper functioning of the Simco-Ion equipment all the emitters should be checked.

Minimum distance from the TensION to the ionizing emitters or charging points must be followed. Refer to the table below:

Operating Voltage	Minimum distance	
3.3 kV	5 mm (.2")	
4 kV	6 mm (.25")	
5 kV	10 mm (.4")	
7 kV	13 mm (.5")	
10 kV	20 mm (.8")	
30 kV	80 mm (3.15")	

148 mm (5.8")

Open this end to insert batteries

# NOTE:

- The Simco-Ion TensION only indicates if there is high voltage present on the ionizing emitters or charging points, it is not a performance test.
- For performance testing of Simco-Ion equipment an FMX-003 electrostatic fieldmeter can be used.
- Follow the instructions set out in this manual to ensure proper and safe operation of this product.

# **3. SPECIFICATIONS**

Power	2 size AAA replacable batteries 1.5 volts (included)
Weight	40 grams
Dimensions	Length 148 mm (5.8"), diameter maximum 17 mm (.7")
Material	Radilon-S HS(a), BE 170MO IP64
Operating temperature	-10°C - +50°C
Approval	CE
Dimensions Material Operating temperature	Length 148 mm (5.8"), diameter maximum 17 mm (.7") Radilon-S HS(a), BE 170MO IP64 -10°C - +50°C

# 4. WARRANTY AND SERVICE

This product has been carefully tested at the factory and is warranted to be free from any defects in materials or workmanship. Simco-Ion will, under this warranty, repair or replace any equipment that proves, upon our examination, to have become defective within one year from the date of purchase.

The equipment being returned under warranty should be shipped by the purchaser to Simco-Ion, 2257 North Penn Road, Hatfield PA 19440, transportation prepaid and insured for its replacement cost. Prior to returning any goods for any reason, contact Simco-Ion Customer Service at (215) 822-6401 for a Return Authorization Number. This number must accompany all returned items.

This warranty does not apply when the equipment has been tampered with, misused, improperly installed, altered, has received damage through abuse, carelessness, accident, connected to improper line voltage, or has been serviced anyone other than an authorized factory representative.

The warranty does not apply when Simco-Ion parts and equipment have been energized by other than the appropriate Simco-Ion power supply or generator, or when a Simco-Ion power supply or generator has been used to energize other than Simco-Ion parts and equipment. Simco-Ion makes no warranty, expressed or implied, nor accepts any obligation, liabilities, or responsibility in connection with the use of this product other than the repair or replacement of parts stated herein.

**Simco-Ion** 2257 North Penn Road Hatfield, PA 19440

(215) 822-6401 (800) 203-3419 www.simco-ion.com customerservice@simco-ion.com

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