





TRIPLETT SFM500 Static Field Meter User Manual

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TRIPLETT SFM500 Static Field Meter



Introduction

This contactless precise electrostatic field meter can immediately sensor the static voltage on a charged body without contact. The measuring range is 0.010kV ~ 20.000kV with a sensing distance of 1 inch (2.54cm). The meter provides an alarm function for prompt.

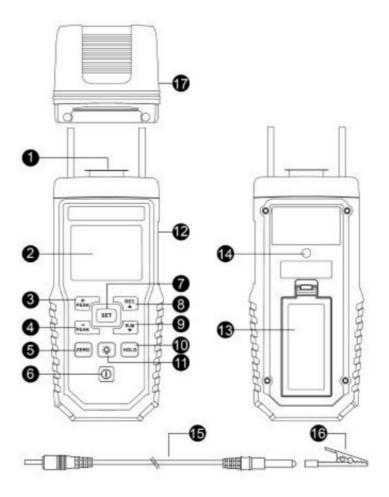
Accessories

- 1 Meter
- 1 User's Manual
- 1 9V alkaline battery
- 1 Carrying case

Safety Precaution

- Caution! Please refer to this manual. Improper use may damage the meter and its components.
- · Complies with European Directive.
- Do not operate in environments with flammable gas or humid environments.
- Operating altitude: up to 2000M.
- Operating environment: Indoor use; Pollution degree 2.
- Clean with soft cloth when dirty, such as glasses cloth. Do not clean with chemicals and other solvents.
- EMC: EN61326-1:CISPR 11:Group 1, Class B
 - Class B Equipment for use in all establishments other than domestic.
 - Group 1 RF energy generated is needed for internal functioning.

Instrument Description



- 1. Sensor
- 2. LCD display
- 3. +peak value (max. value)
- 4. -peak value (min. value)
- 5. Zero setting button
- 6. Power button
- 7. Function Setting button
- 8. Record readings / up button
- 9. Display logs / down button
- 10. Data hold
- 11. Backlight button
- 12. Grounding socket
- 13. Tripod nut
- 14. battery cover
- 15. Grounding wire
- 16. Crocodile clip
- 17. Protection cap

Operation

Warning

The meter must be securely grounded during measuring, and the holding position not close to the sensor so to avoid the risk of electric shock.

- Before use, the meter must be grounded. Please choose one of the following two methods to ground the meter:
 - 1. The first method is connecting the meter's ground socket with one end of the grounding wire of accessory and connecting to the earth end of the building with another end of the grounding wire, or connecting to the electrical socket for earthing, or clamping the earth end with a crocodile clip.
 - 2. The second method is the operator wears the anti-static wrist strap and connects to the earth end of the building with another end of the anti-static wrist strap. Note that the anti-static wrist strap is not an accessory and should be prepared by yourself.
- During the measuring for static voltage, please fasten ceramic spacers on the fix-threads beside the sensor. Keep the sensor from the area under test for 1 inch (2.54 cm).



- Make sure the meter is grounded before operating.
- Aim the sensor point to the area under test, keeping your fingers away from the area under test as possible.
- Read the value (static voltage value) on the LCD.
- As completing a measurement, click the button to lock the reading permanently to hold the reading on the LCD for a long time; click the button again to unlock the reading.
- Click the button to continuously update the maximum measuring value on the LCD to keep the +peak value (max. value), and click the button again to cancel.
- Click the button to continuously update the minimum measuring value on the LCD to keep the -peak value (min. value), and click the button again to cancel.

Disable Auto Power Off Mode

The meter will automatically power off after powering on for about 15 minutes. The LCD displays symbol at the mode. If to disable the function, press and hold the button for more than 2 seconds.

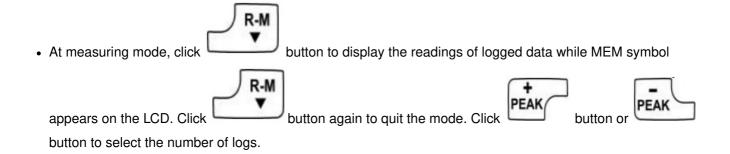
Zeroing

• Prior to measuring the static voltage, click the button for more than 2 seconds to clear the reading if an old reading survived on the LCD. (Note: Set the static voltage of the surrounding environment to be 0, if not, the measuring may be biased.)

Manual record mode

At measuring mode, click
button to record the present reading, the records can be logged up to 99.

Display logs mode



Backlight Mode

During measuring, click the button to turn on the backlight of the LCD for 15 seconds and then turn off automatically.

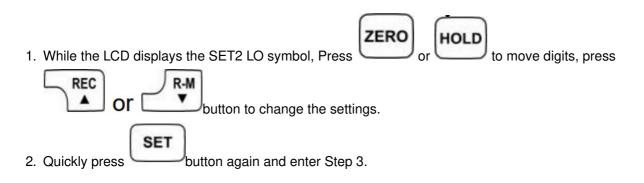
Setting mode

Press button repeatedly and enter the settings of Step 1 to 4 sequentially.

Step 1. Set (HI) + alarm

- 1. While the LCD displays the SET1 HI symbol, Press or to move digits, press or button to change the settings.
- 2. Quickly press button again and enter Step 2.

Step 2. Set (LO)- alarm



Step 3. Set the alarm on or off

1. While the LCD displays SET3 and symbols, press or button to change it as ON or OFF.

2. Quickly press button again and enter Step 4.

Step 4. Clear memory

1. While the LCD displays the SET4 dEL symbol, press or button to change as **YES** or

ON . As **YES** is chosen, press the button to get the memory cleared.

2. Quickly press the button to quit the settings status.

PS: If to quit the settings status, press the button in any step

Specifications

- Display for readings: Liquid crystal display (LCD) of 4 1/2 digits with the displaying value up to 19999.
- Resolution: 0.001KV.
- Measuring range -19.999KV +19.999KV
- Accuracy: ±(5%+10dgt).
- Overloading indication: OL.
- Sampling period: 2 times per second.
- Battery: 9V NEDA 1604 IEC 6F22 or JIS 006P.
- Battery life: Approximately 100 hours.
- Operation temperature and humidity: 5 to 40oC (41 to 104oF); < 80%RH.
- Storage temperature and humidity: -10°C to 60°C (14 to 140 oF), < 70%RH.
- Weight: Approximately 210g.
- Dimension: 148(L)x65(W)x37.5(H)mm.
- Professional and precise static voltmeter with resolution of 0.001kV.
- Function including Data lock (HOLD), Max. value (+PEAK) lock, Min. value (-PEAK) lock, Record (REC) the displayed value, Display the logged data (R-M), Zeroing (ZERO)
- High voltage alarm:+/- 18.000KV
- Alarm setting:0.001KV 18.000KV
- Auto power off (for about 15 minutes).
- Battery low display
- · Overload display OL.

Maintenance or Repair

1. When the When symbol is displayed on the LCD, it means that there is insufficient power; please

change the battery immediately in order to ensure its accuracy.

- 2. Do not place the meter in locations that have high temperature, humidity or that are exposed to direct sunlight.
- 3. Remember to turn off the power after usage; remove the battery if not used for a long period of time in order to prevent battery leakage and causing damage to internal components.
- 4. When the instrument failure, only by the authorized service provider or return the original repair.

Battery Replacement

- 1. Turn off the power.
- 2. Open the battery cover at the back of the meter, remove the batteries.
- 3. Please insert six new 9V batteries according to the polarities.
- 4. Put the battery cover back in place.

Product Disposal

X

 Note: This symbol indicates that the meter and its accessories must be separated and processed properly.

TRIPLETT SFM500 Static Field Meter

Test Equipment Depot – 800.517.8431 – 5 Commonwealth Ave, MA 01801 – TestEquipmentDepot.com

Specifications

• Model: SFM500

• Type: Static Field Meter

• Measuring Range: 0.010kV ~ 20.000kV

• Sensing Distance: 1 inch (2.54cm)

• Alarm Function: Yes

FAQS

Q: How do I disable the Auto Power Off Mode?

A: Press and hold the designated button for more than 2 seconds to disable the function.

Q: How do I zero the reading?

A: Press a specific button for more than 2 seconds to clear the reading if an old reading persists on the LCD.

Documents / Resources



TRIPLETT SFM500 Static Field Meter [pdf] User Manual SFM500, SFM500 Static Field Meter, SFM500, Static Field Meter, Meter

References

User Manual

Manuals+, Privacy Policy

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