

EMF Meter

840045

SPER
SCIENTIFIC

Environmental Measurement Instruments

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INTRODUCTION

Your new meter measures electromagnetic emissions from power lines, computer monitors, television sets, video machinery and other electrical appliances. While the evidence of the carcinogenic effect of such electromagnetic emissions is still inconclusive, “prudent avoidance” of excessive exposure over long periods of time is recommended.

APPLICATION

This meter is designed to measure electromagnetic fields of extremely low frequency (ELF) between 30 to 300Hz. It is capable of measuring the electromagnetic field radiation intensity that is produced by electric transmission equipment, power lines, microwave ovens, air conditioners, refrigerators, computer monitors and video/ audio devices to name a few.

The magnetic field measurement unit is Tesla (T), Gauss (G), milli-Gauss (mG) or micro-Tesla (μ T).

FEATURES

- micro-Tesla and milli-Gauss Measurement unit display
- Data hold and maximum hold function
- Low battery indicator

PANEL DESCRIPTION







- | | |
|------------------------|-------------------------------|
| 1. Sensor | 6. mG unit select button |
| 2. LCD | 7. μ T unit select button |
| 3. Power on/off | 8. Range select button |
| 4. Maximum hold button | 9. Battery compartment |
| 5. Data hold button | |




BATTERY REPLACEMENT

Turn off the instrument. Remove the battery cover. Replace the battery. Install the battery cover.

MEASUREMENT PROCEDURES

1. Press  to turn on the unit.
2. Select  for mG or  for μT .
3. Position the front (page 6, Figure 1) of the meter to measure the electromagnetic waves. Change the measurement angle or position to obtain the highest reading value (page 6, Figure 2-6).
4. Read the measured value. The display of "OL" indicates an overload.
Press  to select a higher range and repeat the measurement.

Note... Due to normal environmental magnetic fields, the meter may display a reading below 0.5mG prior to measuring. This is not a malfunction of the device.

5. To freeze the current reading displayed on the LCD, press . Press  again to resume active measurement.
6. To retain the maximum value, press  and the reading value displayed on the LCD will continually update the maximum value.

MEASUREMENT PROCEDURES



Arrow pointing direction indicates the direction of electromagnetic waves.

Figure 1 and 2 indicates the correct measurement direction for electromagnetic waves. Figure 3, 4, 5 and 6 indicates the incorrect measurement direction for electromagnetic waves.

SPECIFICATIONS

Display:	3.5 digits LCD, maximum reading 1999
Range:	200/2000 mG, 20/200 μ T
Resolution:	0.1/1 mG or 0.01/0.1 μ T
Frequency response:	30Hz to 300Hz
Sensor:	Single Axis
Accuracy:	$\pm(2.5\% + 6 \text{ dgt})$ at 50Hz/60Hz
Over load:	LCD display "OL"
Sample rate:	2.5 times per second
Battery:	9V Battery
Battery life:	Approximate 100 hours
Operating temp. & humidity:	5°C to 40°C, below 80% RH
Storage temp. & humidity:	-10° C to 60°C, below 70% RH
Weight:	170 g
Dimensions:	130 x 56 x 38 mm
Accessories:	User's manual, 9V battery, Carrying case

NOTES & PRECAUTIONS

- Never touch the meter to electrical cables or other dangerous materials.
 - To clean the EMF Meter use a soft dry cloth. Never use a wet cloth, solvents or water, etc.
 - Operation Altitude: Up to 2000M.
 - Operating Environment: Indoor use.
- This instrument has been designed for use in a pollution environment of degree 2.

Sperr Scientific warrants this product against defects in materials and workmanship for a period of **five (5) years** from the date of purchase, and agrees to repair or replace any defective unit without charge. If your model has since been discontinued, an equivalent Sperr Scientific product will be substituted if available.

This warranty does not cover probes, batteries, or damage resulting from accident, misuse, or abuse of the product. In order to obtain warranty service, simply ship the unit postage prepaid to:

SPER SCIENTIFIC LTD.
8281 E. Evans Rd., Suite #103
Scottsdale, AZ 85260
(480) 948-4448

Be sure to include your name, address, phone number, and a detailed explanation of why you are returning the item. Register online at www.sperwarranty.com within 10 days of purchase.