

# EMF TESTER

MODEL: EMF-822A



Your purchase of this EMF TESTER marks a step forward for you into the field of precision measurement. Although this EMF TESTER is a complex and delicate instrument, its ruggedness will allow many years of use if proper operating techniques are developed. Please read the following instructions carefully and always keep this manual within easy reach.

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## 1. FEATURES

- \* The EMF tester is designed to provide user a quick, reliable and easy way to measure electromagnetic field radiation levels around power lines, home appliances and industrial devices.
- \* The EMF tester is a cost effective, hand-held instrument designed and calibrated to measure electromagnetic field radiation at different bandwidths down to 50 Hz/60 Hz.
- \* Display micro Tesla & milli Gauss in the same tester.

## 2. APPLICATIONS

This EMF tester is specifically designed to determine the magnitude of electromagnetic field radiation generated by power lines, computer's monitor, TV sets, video machinery and many other similar devices.

## 3. CAUTION OF ELECTROMAGNETIC FIELD EXPOSURE

Claims by some scientists that long term exposure to electromagnetic field may be the cause of childhood leukemia & other forms of cancer.

Complete answers to any of these and related questions are not currently available. At the present time the most common practice is to avoid excess exposure over long period of time.

"Prudent Avoidance" as stated by the Environmental Protection Agency(EPA) USA is recommended.

## 4. SPECIFICATIONS

Display	13mm (0.5") LCD, 3 1/2 digits. Max. indication 199.9.
Range/Resolution	Two function : <i>micro Tesla &amp; milli Gauss :</i> 20 micro Tesla x 0.01 micro Tesla 200 milli Gauss x 0.1 milli Gauss <i>* 1 micro Tesla = 10 milli Gauss</i>
Band width	30 Hz to 300 Hz.
Number of Axes	Single axis.
Accuracy	$\pm ( 4 \% + 3 d )$ at 50 Hz or 60 Hz.
Over-input	Display shows " 1 " .
Sampling Time	Approx. 0.4 second.
Battery	DC 9 V battery (006P, 6F22).
Power Current	Approx. DC 3 mA.
Operating Temp.	0 to 50 °C ( 32 to 122 °F ).
Operating Humidity	Less than 80% R.H.
Weight	165 g/0.36 LB (including battery).
Dimension	H.W.D. - 131x70x25 mm (5.2x2.8x1.0 inch).
Accessories Included	Operation Manual..... 1 PC.

## 5. FRONT PANEL DESCRIPTION

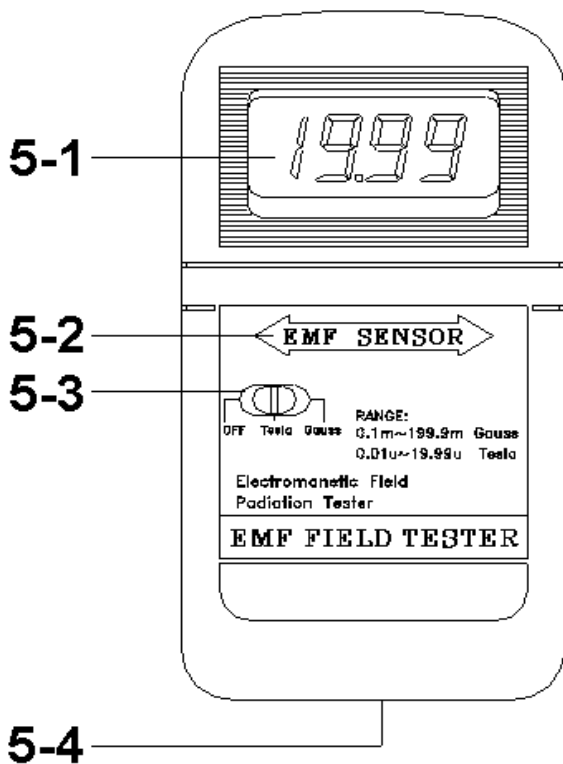


Fig. 1

- 5-1 Display
- 5-2 EMF Sensor Position
- 5-3 OFF/micro Tesla/milli Gauss Switch
- 5-4 Battery Cover/Compartment

## 6. MEASURING PROCEDURE

- 1) Place the " OFF/micro Tesla/milli Gauss Switch " ( 5-3, Fig. 1 ) to the " milli Gauss " or " micro Tesla " position according the measurement requirement. Tester is now ready to take the measurement.

***Due to the electromagnetic interference of the environment, the display reading may show small values before testing, for example less than 0.5 gauss. This is not malfunction of the tester.***

- 2) With the tester in hand, move slowly towards to the object under measurement until it is physically touched.  
\* Notice how the field intensity increases as you move closer to the object.
- 3) Position the EMF tester at different angles to the object under measurement and observe how this may affect your reading.
- 4) By trying different angles approaching the object under measurement, recorder the highest value shown on the display.

***If the object under measurement is turned off during the measurement, the EMF tester reading should then return to zero, unless a field from other sources are detected.***

## **7. RECOMMENDATION**

It is recommended to measure the presence of the electromagnetic field inside and outside of your home and business locations regularly.

As "hot spots" are detected by the EMF tester, re-arrangement of the living and working areas is lightly recommended. Always try the best to avoid long term exposure to strong electromagnetic field.

## **8. BATTERY REPLACEMENT**

- 1) When the left corner of the LCD display shows "LO BAT", Replacement of the battery is then needed. However measurement could still be taken for another few hours before the tester becomes inaccurate.
- 2) Open the Battery Cover (5-4, Fig 1) at the back of tester and remove the battery.
- 3) Replace with a 9V battery and reinstate the cover.