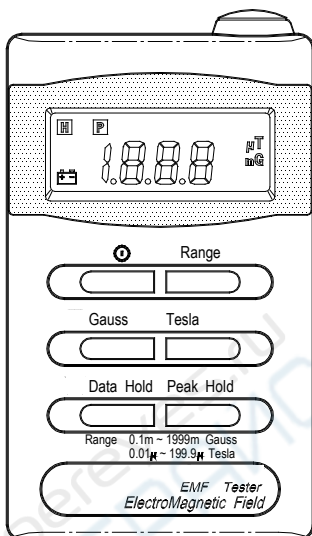


TES ElectroMagnetic Field Tester (EMF Tester) & RS-232 Interface

TES-1390 **INSTRUCTION MANUAL**

※ Enclosed CD : Software & Protocol Inside.



TES ELECTRICAL ELECTRONIC CORP.

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 that was designed and calibrated to measure electromagnetic field radiation at different bandwidths down to 50Hz/60Hz.
- ◆ Display micro Tesla & milli Gauss in the same tester.
- ◆ Data hold / Peak hold / on-line computer function.
- ◆ Comply with CE.

2. APPLICATIONS

- ◆ This EMF tester is specifically designed to determine the magnitude of electromagnetic filed 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.

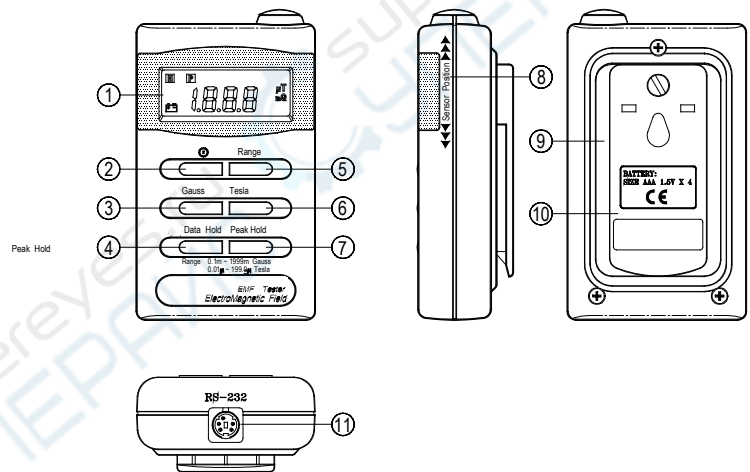
Complete answers to any of these and related questions are not currently available. At the present time, the most common practice is to avoid excess exposure over long period of time.

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

4. SPECIFICATIONS

Display :	3-1/2 digits. Max. indication 1999
Range :	200/2000 milli Gauss 20/200 micro Tesla
Resolution :	0.1/1 milli Gauss 0.01/0.1 micro Tesla
Number of Axis :	Single axis
Band Width :	30 Hz to 300 Hz
Accuracy :	±(3%+3d) at 50Hz or 60HZ
Over-Input :	Display shows "OL"
Sampling Time :	Approx. 0.4 second
Battery :	4 pcs size AAA (Only Use Alkaline Battery)
Battery Life :	Approx. 60 hours.
Operating Temp and Humidity :	0°C to 40°C (32°F to 104°F) below 80%RH
Storage Temp and Humidity :	-10°C to 60°C below 70%RH
Weight :	Approx. 165g
Dimension :	111(L) × 64 (W) × 34(H) mm

5. NAME OF PARTS AND POSITIONS



1). Display panel	7). Peak Hold function
2). Power button	8). Sensor position
3). Milli Gauss button	9). Battery cover
4). Data Hold function	10). Carrying clip
5). Range selector button	11). RS-232
6). Micro Tesla button	

6. MEASURING PROCEDURE

- 1). Press the button of power and set the "Range", "Gauss", "Tesla" by pressing the buttons according to the measuring requirements. Tester is now ready to take the measurement.

Due to the electromagnetic interference of the environment, the display reading may show the reading before testing, for example the reading would lower than 0.5m 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 while measuring. Users would observe how this may affect your reading.
- 4). By trying different angles approaching the object while measuring to get Max.


If the power of object was turned off during the measurement, the reading of EMF tester should return to zero, unless there is the electromagnetic 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 in the strong electromagnetic field.

8. BATTERY REPLACEMENT

- 1). When the left corner of the LCD display shows "  ", it indicates the output of battery is less than 4.0V ~ 4.5V.

Replacement of the battery is then needed. However, measurement could still be taken for next few hours before the tester is unavailable.

- 2). Open the battery cover at the back of tester and remove the battery.
- 3). Replace with four AAA-size alkaline batteries and reinstate the cover.

9. RS-232 INTERFACE, SOFTWARE INSTALLATION and OPERATION

- ❑ For the detailed instruction, please refer to the content of attached CD-ROM, which has the complete instruction of RS-232 interface, software operation and relevant information.
- ❑ RS-232 protocol: are enclosed within the content of CD-ROM, please open the CD-ROM for details.

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