



Instruction Manual

IM-194

Microwave Leakage Detector

EN





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Introduction:

Detector measures electromagnetic field value of the radio frequency. The meter is calibrated precisely on the frequency value 2.45 GHZ (Microwave Oven).

Features:

- Switch between 2.45 GHZ (microwave frequency) or normal (50MHZ~3.5 GHZ).
- Data hold (HOLD), Maximum (MAX) Hold, Minimum (MIN) Hold and Zero function.
- Measurement range of RF power density : 0.01~2.700m W/cm².
- Built in alarm setting, the buzzer sounds when the measurement value is more than 1m W/cm².
- Auto power OFF function.
- Low battery indication.
- Over load indication.

General specification:

- Display: LCD display with maximum reading of 3999.
- Sampling Rate: 2.5 times per second.
- Sensor: Single axis.
- Frequency response: 50MHz to 3.5 GHz.
- Measuring Range: 0.01~2.700m W/cm²
- Accuracy: ± 2 dB at 2.45 GHz ± 50 MHz.
- Power Supply: 9V NEDA 1604, IEC 6F22, JIS 006 P. battery x 1pc.
- Battery life: Approx. 100 hours
- Dimension: (LxWXH): 130mm x 56mm x 38mm.

- Weight: Approx. 170g with battery
- Accessories: Manual, 9V battery and carrying bag.

Instrument description:




- | | |
|--------------------------|---------------------------------|
| 1. Sensor. | 6. Frequency Team select button |
| 2. LCD | 7. Data hold button |
| 3. Zero button | 8. Tripod mounting screw |
| 4. Power on/off. | 9. Battery cover. |
| 5. Max. Hold / Min. Hold | |

Safety:





CAUTION

Be extremely careful for the following conditions while measuring.

- Do not operate the meter in any environment with explosive gas (material), combustible gas (material) steam or filled with dust.
- In order to avoid reading incorrect data, please replace the battery immediately when the symbol  appears on the LCD.

- In order to avoid the damage caused by contamination or static electricity, do not touch the circuit board before you take any adequate action.
- Operating Environment - indoors use only. The meter was designed for being used in an environment of pollution degree 2.
- Operation Altitude: Up to 2000M.
- Operating Temperature & Humidity: 5°C ~ 40°C, 0%~80%RH.
- Storage Temperature & Humidity: -10°C ~ 60°C, 0%~70%RH.

Operation:

1. Press  to turn the power on or off.
2. Turn the meter on, press  to select the frequency of 2.45 GHz or normal (50MHz to 3.5 GHz).
3. Position the front (see Figure 1) of the meter to measure the electromagnetic waves. Change the measurement angle or position to obtain the highest reading value (see Figure 2 through Figure 6).

MEASUREMENT PROCESURES:





Arrow pointing direction indicates the direction of electromagnetic waves.

4. The LCD displays the measured value.



NOTE: Due to the environmental magnetic field factors, this magnetic field meter may display a reading value that is lower than 0.002 m W/cm^2 prior to measuring. This is not a malfunction of the device.

5. After testing, turn the power off.



Hold


Freezes the reading present on the LCD at the moment when  is pressed. Press  again to disable data hold.

MAX/MIN

Press  repeatedly to select the displayed reading from MAX to MIN to MAX/MIN and back to MAX. Press  for more than 2 seconds to disable these functions.

AUTO POWER OFF


When the meter is power on, it is automatically set to auto power-off after 30 minutes of non-use. To disable this function, please turn the power off, press and hold  and  Together until the meter is power on.

Turn the power off and turn it on to restore this function, the symbol  is displayed.

Battery Replacement:

The meter is powered by 9V battery x 1pc.

Use the following procedure to replace the battery:

1. Replace battery immediately when the LCD displays  .
2. Turn the meter off and remove the battery cover.
3. Replace with the new battery; take care to note the correct polarity.
4. Re-install the battery cover.

Limited Warranty:

This meter is warranted to the original purchaser against defects in material and workmanship for 3 year from the date of purchase. During this warranty period, RS Components will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction. This warranty does not cover fuses, disposable batteries, or damage from abuse, neglect, accident, unauthorized repair, alteration, contamination, or abnormal conditions of operation or handling.

Any implied warranties arising out of the sale of this product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. RS Components shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expense or economic loss. Some states or countries laws vary, so the above limitations or exclusions may not apply to you. For full terms and conditions, refer to the RS website.



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