



Model: GM3120

## Electromagnetic Radiation Tester Instruction manual



Version: GM3120-EN-00

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## I. Introduction

Radiation survey meter can test electric field radiation and magnetic field emission to reach the optimal test result. It is used to test and learn electromagnetic radiation situation indoor and outdoor. It is equipped with a built-in electromagnetic radiation sensor, which can display the radiation value on LCD digital display after processing by the control micro-chip. You can make reasonable processing or taking effective prevention measures toward the electromagnetic radiation according to the test result.

Influence and harms of electromagnetic radiation on human body:

1. Being one of the causes of leukemia for children;
2. Can cause cancer and accelerate proliferation of cancer cells;
3. Can cause direct harm to human genital system, nervous system and immune system;
4. Can cause mental disabilities of children and diminution of vision, affect tissue development and skeletal development of children;
5. Can cause diminution of hematopoietic function of livers and even cause amotio retinae;
6. Being one of the main causes of cardiovascular disease and diabetes;
7. Having bad influence on human visual system.

Moreover, strong electromagnetic radiation may influence and destroy original bioelectric current and biomagnetic field in human body and cause abnormality of the original electromagnetic field in human body. The elderly, children and the pregnant are susceptible to electromagnetic radiation.

Artificial electromagnetic radiation sources include all kinds of electric appliances and devices. By fair use of household appliances and taking reasonable precautions measures, electromagnetic radiation can be effectively prevented and reduced.

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## II. Functions and features

This radiation survey meter has the following features :

- ▶ One instrument with two uses, It can test the electric field and the magnetic field radiation at the same time;
- ▶ Sound-light alarm, when the test result exceeds the safe value, the instrument will alarm automatically;
- ▶ Data locking, one-key lock of the radiation value;
- ▶ LCD graphic display of the radiation value trend;
- ▶ Radiation assessment, remind you whether the radiation value is safe or not;
- ▶ Fashionable design, easy on-hand operation, it is easy to move or make field measurement.

## III. Range of application

- ▶ Electromagnetic radiation monitoring: House and apartment, office, outdoor and industrial site;
- ▶ Electromagnetic radiation test: Mobile phone, computer, TV set, refrigerator and high voltage cable radiation test;
- ▶ Radiation protection product test: Test effects of radiation-proof clothes, radiation-proof film and other prevention articles.

## VI. Radiation indexes

- X-ray radiation index: ★★★★★
- Electric hair drier radiation index: ★★★★★
- Electric blanket radiation index: ★★★★★
- Microwave oven radiation index: ★★★★★
- Computer monitor and host radiation index: ★★★
- Mobile phone radiation index: ★★
- TV set radiation index: ★★
- Keyboard and mouse radiation index: ★
- Copying machine and printer radiation index: ★
- Security check radiation index: ★

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## V. Operating instructions

1. Long press power to turn it on. After full screen display, the current electric field and magnetic field value will be displayed, press power to turn the backlight on. The screen will display "💡". Press it again to disable the backlight. If there is no key operation, the backlight will turn off automatically after 30 seconds. Long press power to shut it down. If there is no key operation, the instrument will shut down automatically after 5 minutes.

※Note: As there may be disturbance of electromagnetic field in the environment, when starting up, the instrument may give a small reading. It is a normal phenomenon.

2. Hold the instrument with hand to make the inductive zone at front end get closer to the electromagnetic radiation source to be tested slowly. If the actual radiation value is within the technical index of the instrument, there will be a value displayed; if the instrument has no reading, it indicates that the electromagnetic radiation value of the radiation source is smaller than the minimum reading of the instrument, namely 1V/m or 0.01 μT.

※Note: Distance measuring shall be made for high-voltage facilities. Remember: stay safe.

3. During measurement, press "HOLD" to lock the instrument reading. The "HOLD" will be displayed on the screen. In case of unlocking, press "HOLD" again. This instrument will produce a beep by default after turning on and "🔊" will be displayed on the screen. Long press the "BEEP" to turn on or off the beep.

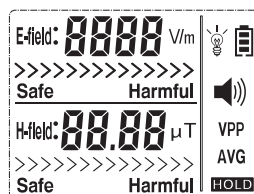
4. By pressing "AVG/VPP" during measurement under unlocking state, you can switch between the average and the peak value.

5. If the figure displayed is unclear or the figure flickers or the figure cannot be cleared, it indicates that the battery runs out of power. Please change the battery in time.

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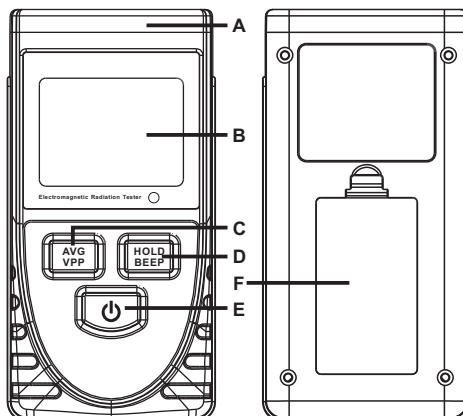
## VI. LCD display and key function

1. LCD full-screen display: see the following figure.



2. Names of components: see the following figure.

- A. Inductive zone at front end
- B. LCD display
- C. Average/peak value
- D. Data locking/beep
- E. Power
- F. Battery door



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## VII. Technical parameters

	Electric field	Magnetic field
Unit	V/m	μT
Precision	1V/m	0.01μT
Range	1V/m-1999V/m	0.01μT-19.99μT
Alarm threshold value	40V/m	0.4μT
Reading display	3-1/2-digit LCD	
Testing bandwidth	5Hz-3500MHz	
Sampling time	About 0.4 seconds	
Test mode	Bimodule synchronous test	
Over range indication	LCD displays "1"	
Operating temperature	0°C-50°C	
Operation humidity	relative humidity < 80%	
Operating voltage	9V	
Power supply	6F22 9V battery	
Size	63.6*31*125.8mm	
Weight	146g	

Reference standards:  
 GB8702-1988 Regulations for Electromagnetic Radiation Protection  
 HJ/T 10.3-1996 Environmental Impact Assessment Methods and standards on Electromagnetic Radiation  
 GB9175-88 Hygienic Standard for Environmental Electromagnetic Waves

Special declaration:  
 Our company reserves the right to modify the product design and the instruction. We will not give further notice for any changes!



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