USER MANUAL

RADIATION DETECTOR

PCE-RAM 7

ENGLISH



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski) can be found via our product search on:
www.pce-instruments.com

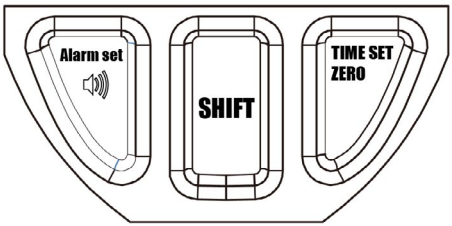
OVERVIEW

- This dosimeter uses a Geiger Miller counter tube to measure the radiation. When each ray passes through the GM tube and causes ionization, the GM tube will generate a detection current pulse. Each pulse is detected by the electronic tube circuit and recorded as a count. The displayed value of the dosimeter is the count value in the selected mode.
- Due to the random characteristics of radioactivity, the count value detected by the dosimeter changes every minute. When the average reading is taken for a period of time, it is more accurate. When the time interval is longer, the average value is more accurate.
- The tester is used for measuring β , γ
  It is most suitable for measuring small changes in radiation levels, and has high sensitivity for most commonly used nuclides.

APPLICATIONS

- Safety organizations, such as police stations and fire brigades, emergency response organizations, environmental protection organizations, hazardous materials disposal, metal recycling companies, mines, etc., are more likely to be exposed to various types of radioactivity
- Ports, wharves, airports, etc., because of the large flow of people and all kinds of import and export goods, especially those involving entry-exit personnel, have a high probability of being contaminated by radiation.
- Hardware factories, ceramic factories, hospitals, research institutions, laboratories, drug administration bureaus, universities, etc., have a high probability of being exposed to low intensity or leaking radiation.
- Private individuals who pay attention to the quality of living environment and personal safety, such as someone who wants to look for environmental pollution (various emergencies or terrorist attacks) at home, food, water, etc.

BUTTON FUNCTION



On/off button: press and hold to turn on or off Short press to switch uSV/h → CPS under startup status

Alarm set button: short press to turn the alarm tone on or off Long press to enter the alarm value setting (long press the power on/off button to exit the setting)

SHIFT button: can be used in alarm setting and date time setting (long press the power on/off button to exit the setting)

ZERO/TIME SET button: short press to clear the maximum value data. Long press the entry date and time to modify (long press the power on/off button to exit the setting)

TECHNICAL SPECIFICATIONS

Detector:	Energy compensated GM tube
Detection ray:	Beta(β) Gamma(γ) X-rays
Energy range:	20kev ... 3.0mev ≤ ±30% (137 Cs-)
Sensitivity:	80cpm / μSV / (Co-60)
CPS measurement range:	9999
Resolving power:	0.01 μSV/h
Measuring range:	0 ... 9999 μSV/h
Real time error:	≤3%
Supply battery:	5V / USB 3.7V lithium battery
Charging time:	1-2 hours
Weight:	416 g
Size:	187*92*60mm

COMMON PROBLEM ANALYSIS

1. Inaccurate data

- The battery power is too low to start the core components
- Core component Geiger tube has been damaged
- Long time working can cause inaccurate data

2. No startup

- The battery is dead or damaged, and the USB socket is used for power supply. If the power can be turned on and the power grid in the upper right corner changes, the battery is dead. If there is no change, only the OK icon is displayed, indicating that the battery is damaged.

DISPOSAL

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose. In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law. For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations. If you have any questions, please contact PCE Instruments.

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