



Smart Radon Detector User Manual

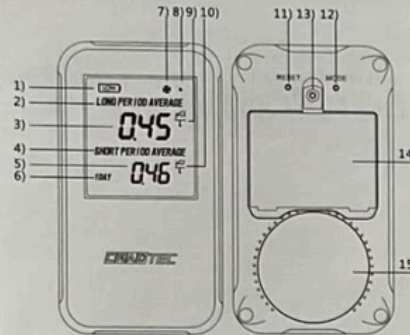
Note:

- After the battery is installed, the short dash line will keep flashing when the Detector is turned on for the first time, and the Radon Level will be displayed on meter 24 hours later. During this period, please keep the Detector still, wait patiently, and do not turn it off;
- When the radon concentration $>2.7\text{pCi/L}$ (100Bq/m^3), the Radon concentration value will display on meter after 4 hours.
- All Radon data is cleaned after turning off, and the radon concentration will display within 4-24 hours after restarting;
- Tap on button MODE once for unit switch between pCi/L and Bq/m^3 . The Detector default unit is pCi/L ;
- Tap on button MODE twice for the time of continuous measurement of radon.

1. Overview

Smart Radon Detector (Model: PRM-02H) is a new type of portable and smart radon detector in small size, based on the advanced room temperature semiconductor detector with high sensitivity and wide detection range.

2. Product Appearance



- Low-battery warning.
- "LONG PERIOD AVERAGE"
- "LONG PERIOD AVERAGE" measured value.
- "SHORT PERIOD AVERAGE"
- "SHORT PERIOD AVERAGE" measured value.
- Unit of "SHORT PERIOD AVERAGE" time.
- Fan indicator. When it appears, it means the radon level is high and you need to take action.
- Measuring indicator. Blinks when it working.
- Unit of the long period average value.
- Unit of the short period average value.
- Reset button. It is to start a new test period and remove all the data before.
- Mode button. It is to switch the unit between pCi/L and Bq/m^3 , and to display the continuous measurement time.
- Screw hole to keep the battery cover locked.
- Battery cover.
- Air holes. Do not block up the hole.

The LONG PERIOD AVERAGE reflects the long-term average of indoor radon concentration. The longer the measurement, the higher the accuracy of the measured result. The value is updated once a day, and the continuous measurement can exceed 365 days until you turn off or reset the detector.

The SHORT PERIOD AVERAGE reflects the average indoor radon concentration in the last 24 hours. When the radon concentration suddenly rises, the value will be updated once every 4 hours. This value is mainly for quick response. When indoor radon concentration is high, it will remind users to take measures to deal with it.

3. Technical Parameters

Content	Index	Content	Index
Power Supply	3 AAA Batteries	Measuring Object	Radon
Operation Time	More than One Year	Operation Temperature	$14^{\circ}\text{F} - 122^{\circ}\text{F}$
Dimension	$121\text{mm} \times 67\text{mm} \times 26\text{mm}$	Measurement Range	$0\text{pCi/L (Bq/m}^3) - 270\text{pCi/L (9999 Bq/m}^3)$
Weight	150g	Accuracy	$\pm 10\% @ 5.4\text{pCi/L (200 Bq/m}^3)$ (24 Hours)

4. Operation Instructions

4.1 ON/OFF

ON: Push the Switch on the right side of the Detector to ON with the normal measurement interface as shown in Figure 4-1. At this time, four short dash lines keep flashing, indicating that the Detector is taking measurement and collecting data of radon concentration. Due to different radon concentrations, it usually takes 4-24 hours for the Detector to collect and calculate and then display the value. During this period, please wait patiently and do not turn off the Detector to avoid data loss.

OFF: Push the Switch on the right side of the Detector to OFF. There is no display on the LCD screen, and the Detector is powered off.

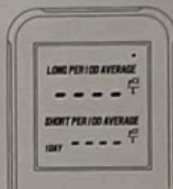


Figure 4-1 Measurement Interface at ON

4.2 Measurement/Alarm

After the Detector is turned on, the short dash line flashes and the radon concentration measurement begins. When the radon concentration $<2.7\text{pCi/L}$ (100Bq/m^3), the Detector will update every 24 hours. In this stage, the short dash line keeps flashing. Please keep the Detector still, wait patiently, and do not turn it off to avoid loss of measured data. When the radon concentration $>2.7\text{pCi/L}$ (100Bq/m^3), the data on the Detector will display 4 hours later, and the measured value and the "fan" symbol on the top of the display screen will flash automatically to prompt the user to ventilate or take some necessary measures to reduce the radon concentration.

4.3 Parameters Viewing and Setting

When the Detector is placed in a new environment, it needs to be restarted or reset to ensure the accuracy of measurement. You can reset the Detector by restarting it with the ON/OFF on the right side, or by tapping on the "RESET" button as shown in Figure 4-2.

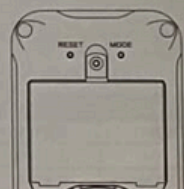


Figure 4-2 Setting Buttons

Tap on button MODE once for unit switch between pCi/L and Bq/m^3 (Note: After resetting or restarting, the default unit is pCi/L).

To view the continuous measurement time of the Detector, tap on the button MODE in Figure 4-2 twice to view the continuous measurement days as shown in Figure 4-3.



Figure 4-3 Continuous Measurement Time Viewing

If "LOW" is displayed in the upper left corner of the Detector, the battery is low and needs to be replaced.

5. Precautions

- Avoid to place the Detector in direct sunlight, high temperature, or high humidity;
- After removed from the humidity environment, to guarantee the accuracy of measurement, the Detector should be put in dry environment for at least 2 hours;
- The Detector should be placed at least 50cm above the ground, being at least 150cm from the nearest door, window, or vent;
- Do not move or shake the Detector during measurement;
- The Detector should be far away from strong electromagnet or magnet;

6. Technical Support

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Please feel free to contact us if you have any question. It will be replied within 48 hours.

