

1. SAFETY INFORMATION

Important Safety Warnings

- This device is intended to monitor radon gas levels. It is not a life-saving device.
- Radon is a radioactive gas and the leading cause of lung cancer after smoking. This detector helps identify potential risks but does not mitigate them.
- Do not disassemble, modify, or attempt to repair the device.
- Keep the device away from open flames, extreme heat, and direct sunlight.
- Do not use the device in environments outside its specified operating conditions (32°F to 104°F, up to 85% humidity).

Intended Use

This portable radon meter is designed for long-term and short-term monitoring of radon gas concentrations in indoor air within homes, offices, schools, basements, and similar locations.

Safety Symbols and Definitions

Audible Alarm: Indicates the device has detected radon levels above a preset threshold.

2. PRODUCT OVERVIEW



Package Contents

- Elifecity Home Radon Detector (HRDM-01)
- User Manual (this document)
- **Note:** Batteries are not included.

Product Description and Features

The Elifecity Radon Detector is a battery-powered, portable monitor for measuring radon gas. It uses a passive radon diffusion chamber and alpha spectrometry detection. The LCD screen displays both short-term and long-term average concentrations.

Key Components Diagram



1. **LCD Display:** Shows radon concentration readings and device status.
2. **Case:** White, durable housing.
3. **Battery Compartment:** Located on the rear or bottom of the unit.
4. **Ventilation Grilles:** Allow air to flow into the detection chamber.

Specifications Table

- **Model Number:** HRDM-01
- **Brand:** Elifecity
- **Power Source:** Rechargeable Battery (Battery Powered)
- **Style:** Meter
- **Color:** White
- **Alarm:** Audible
- **Operating Humidity:** Up to 85 percent
- **Measurement Range:** 0 - 9999 pCi/L
- **Accuracy:** $\pm 5\% \pm 0.14$ pCi/L
- **Operation Environment Temperature:** 32°F to 104°F (0°C to 40°C)
- **Sampling Method:** Passive radon diffusion chamber
- **Detection Method:** Alpha spectrometry
- **Item Height:** 1 inch

3. GETTING STARTED

Inserting/Charging the Battery

1. Open the battery compartment on the back of the device.

2. Insert the recommended rechargeable battery (type not specified in source). Ensure correct polarity.
3. Close the compartment securely.
4. If the battery is rechargeable, use the appropriate charger to charge it fully before first use.

Initial Setup and Placement Guidelines

- Place the detector in the area you wish to monitor, such as a basement, bedroom, or living room.
- Position it on a stable surface, at least 20 inches off the floor and away from drafts, doors, windows, or HVAC vents.
- Keep it at least 3 feet from exterior walls.
- Do not place it in kitchens, bathrooms, or laundry rooms where humidity and aerosols may interfere.

First Use Instructions

Important: After powering on the device for the first time, you must wait **24 hours** to receive an initial accurate reading. Radon levels fluctuate, and the sensor requires this period to stabilize and begin calculating averages.

4. OPERATION

Powering On/Off

The device likely powers on automatically when batteries are inserted. If there is a power button, press and hold it to turn the device on or off. Refer to the device's physical interface.

Understanding the LCD Display



The screen displays radon concentration in picocuries per liter (pCi/L).

- **Short-term Readings:** Shows the average concentration over a recent period (e.g., the last few hours or days).
- **Long-term Readings:** Shows the average concentration over a longer period (e.g., weekly, monthly, or since reset).

- The device calculates and displays average daily, weekly, and long-term concentrations.

Taking Measurements

1. Place the detector in the desired location following the placement guidelines.
2. Leave the device undisturbed to collect air samples.
3. View the current short-term and long-term averages on the LCD screen.

Moving the Detector Between Rooms

The device is portable and battery-powered. To test another room:

1. Move the detector to the new location.
2. Allow at least 24 hours for the device to provide accurate readings for that new space, as readings are location-specific.

5. INTERPRETING RESULTS

Understanding Radon Levels (pCi/L)

Radon is measured in picocuries per liter (pCi/L). The higher the number, the greater the concentration of radon gas.

Recommended Action Levels

- **Below 2 pCi/L:** Considered a low level of risk.
- **2 pCi/L to 4 pCi/L:** The U.S. Environmental Protection Agency (EPA) recommends considering action to reduce radon levels.
- **4 pCi/L and above:** The EPA recommends taking action to reduce radon levels.

Note: There is no guaranteed safe level. The device is recommended for all homes, especially those with infants, the elderly, pregnant women, or sensitive individuals.

Alarm Indicators

If radon levels exceed a certain threshold (specific value not provided in source), the device will trigger an **audible alarm** to alert you. There may also be a visual indicator on the screen.

6. MAINTENANCE AND CARE

Battery Replacement/Recharging

Monitor the battery level indicator if present. Replace or recharge the battery when low to ensure continuous monitoring. Use the battery type specified for the device.

Cleaning Instructions

- Power off the device and remove batteries before cleaning.
- Wipe the exterior with a soft, dry, or slightly damp cloth.
- Do not use abrasive cleaners, solvents, or sprays.
- Ensure the ventilation grilles are free of dust and debris.

Storage Recommendations

If storing the device for an extended period, remove the batteries. Store in a cool, dry place within the specified temperature range.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display or device does not power on.	Dead or incorrectly inserted batteries.	Replace or recharge batteries. Ensure they are inserted with correct polarity.
Readings are zero or seem inaccurate.	Device placed in a poor location (draft, high humidity). First use period not observed.	Relocate device according to placement guidelines. Ensure 24 hours have passed since placement in a new location.
Audible alarm is sounding.	High radon levels detected.	Check the LCD reading. If levels are high (e.g., at or above 4 pCi/L), consider consulting a radon mitigation professional.
Readings fluctuate significantly.	Normal radon variation due to weather, ventilation, or soil conditions.	Rely on the long-term average reading, which is more indicative of your home's typical radon level.

8. APPENDICES

FAQ (Frequently Asked Questions)

Q: Can it detect radon in basements?

A: Yes, the detector is suitable for use in basements, which are common areas for radon accumulation.

Q: Does it need calibration?

A: The source material does not mention a need for user calibration.

Q: How often should readings be taken?

A: For accurate long-term assessment, continuous monitoring is recommended. Radon levels fluctuate daily, so long-term averages (over at least 90 days) are most reliable.

Q: What do I do if I get a high reading?

A: Confirm the reading with the long-term average. If levels remain at or above 4 pCi/L, contact a qualified radon mitigation professional to discuss reducing radon levels in your home.

Contact Information

For product support, contact the seller, Elifecity, through your point of purchase (e.g., Amazon seller messaging).

Product Identifiers

- **UPC:** 779288404847
- **ASIN:** B0948SM493

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.