

Ecosense Inc. RD200

Ecosense RD200 RadonEye Digital Radon Detector User Manual

Model: RD200

		Introduction	Package Contents	Product		
Overview	Setup	Operation	Maintenance	Troubleshooting	Specifications	Warranty
			& Support			

1. INTRODUCTION

The Ecosense RD200 RadonEye is a digital radon detector designed for continuous monitoring of radon levels in indoor environments. This device provides fast and accurate measurements, allowing users to track fluctuating radon levels over short and long periods. Understanding and monitoring radon is crucial for maintaining a healthy indoor environment, as radon is a naturally occurring radioactive gas that can accumulate in homes and poses health risks.



Image 1.1: The Ecosense RD200 RadonEye detector and its accompanying smartphone application, illustrating how radon risks can be monitored and managed.

Important Safety Information

- This device is intended for indoor use only.
- Do not expose the device to extreme temperatures, humidity, or direct sunlight.
- Do not attempt to open or repair the device. Refer all servicing to qualified personnel.
- Keep the device away from water and other liquids.
- Use only the provided power cable.

2. PACKAGE CONTENTS

Verify that all items are present in the package:

- Ecosense RD200 RadonEye Digital Radon Detector
- User Guide (this document)
- Power Cable

3. PRODUCT OVERVIEW

The RD200 RadonEye features a compact design with an integrated OLED display and utilizes an ion chamber sensor for radon detection. It connects to a mobile application via Bluetooth for detailed data analysis.

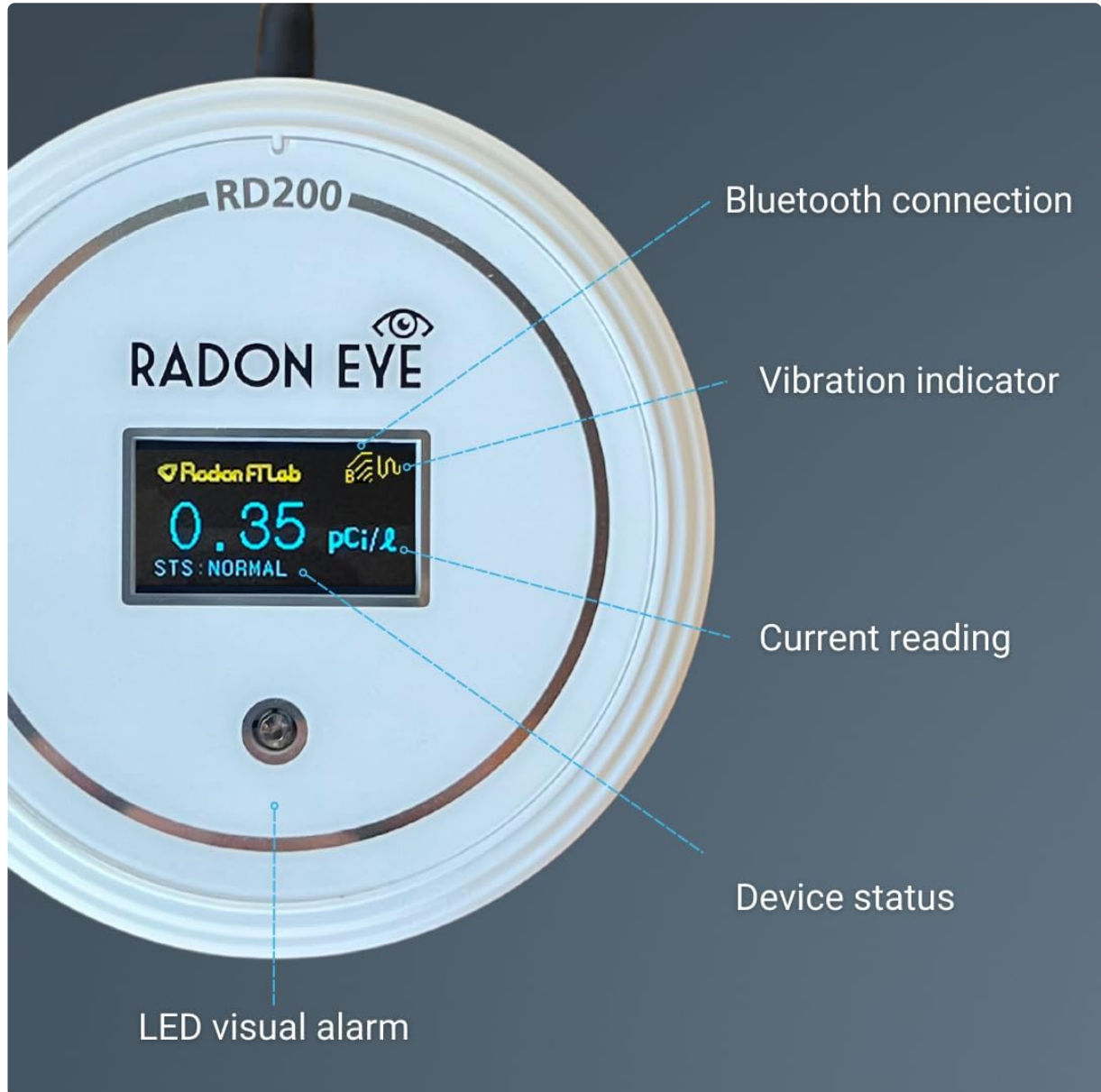


Image 3.1: Detailed view of the RD200 display, showing the Bluetooth connection indicator, vibration indicator, current radon reading, device status, and LED visual alarm.

Key Features:

- **Fast Results:** Initial reading available within 10 minutes.
- **High Accuracy:** Reliable measurements with over 90% accuracy after 10 hours of continuous operation.
- **OLED Display:** Provides instant radon level readings directly on the device.
- **Mobile App Connectivity:** Bluetooth enabled for detailed in-app data and trend charts.

- **Multi-Monitoring Modes:** Supports real-time, hourly, daily, monthly, and long-term monitoring.
- **Audible and Visual Alarm:** Alerts users to elevated radon levels.

RadonEye







-  Fast results
-  Highly accurate
-  Top LED display
-  Easy to use
-  Mobile app
-  Multi-monitoring modes



Image 3.2: The RD200 detector showcasing its primary features: fast results, high accuracy, top LED display, ease of use, mobile app compatibility, and multi-monitoring modes.

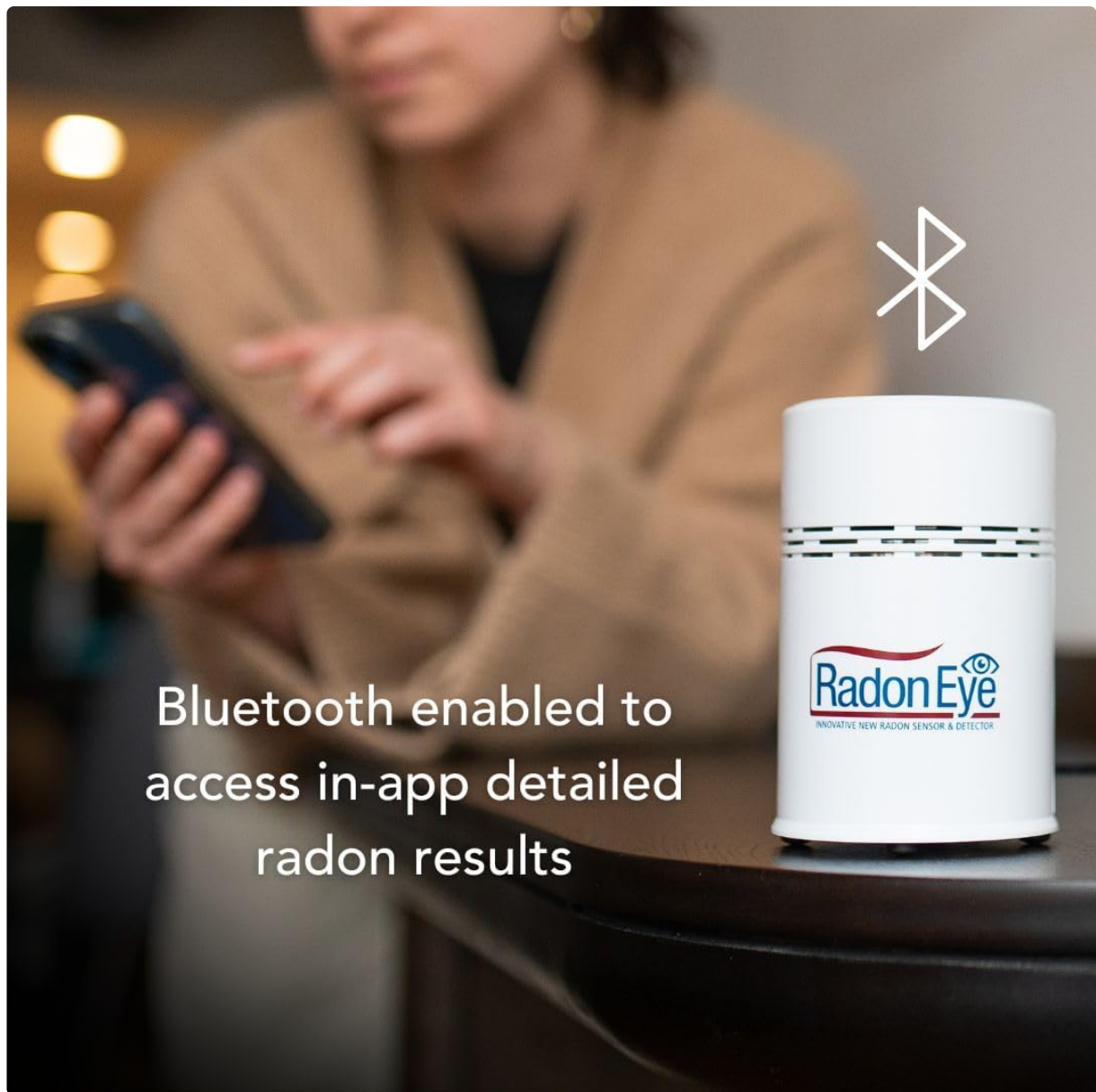
4. SETUP

4.1 Powering the Device

1. Connect the provided power cable to the RD200 detector.
2. Plug the power adapter into a standard electrical outlet.
3. The device will power on automatically, and the OLED display will activate.

4.2 Mobile App Installation and Connection

1. Download the RadonEye app from the Apple App Store or Google Play Store.
2. Enable Bluetooth on your mobile phone.
3. Open the RadonEye app and follow the on-screen instructions to pair with your RD200 device. The app will guide you through the connection process.



Bluetooth enabled to
access in-app detailed
radon results

Image 4.1: The RD200 detector connected via Bluetooth to a smartphone, enabling access to detailed radon results within the app.

4.3 Initial Placement

- Place the RD200 detector in the area you wish to monitor.
- Ensure the device is placed on a flat, stable surface, at least 20 inches (50 cm) from the floor and ceiling, and 8 inches (20 cm) from walls or other objects.
- Avoid placing the device near drafts, vents, windows, or doors that are frequently opened, as this can affect readings.
- For initial accurate readings, allow the device to operate for at least 10 hours in the chosen location.

5. OPERATING INSTRUCTIONS

5.1 Understanding Readings

The RD200 provides radon level readings on its OLED display and through the mobile app. Readings are typically displayed in picocuries per liter (pCi/L) or Becquerels per cubic meter (Bq/m³).



Image 5.1: The RD200 device alongside its mobile application, showing current radon levels and monitoring status.

Reading Interpretation:

- **Good (0 - 2.7 pCi/L):** Radon level is low. Continue monitoring.
- **Moderate (2.7 pCi/L - 4 pCi/L):** Radon level is moderately elevated. Track long-term readings.
- **High Risk (4 pCi/L and above):** Radon level is high. Take action and contact a radon professional.

Understand your radon level and take proper actions

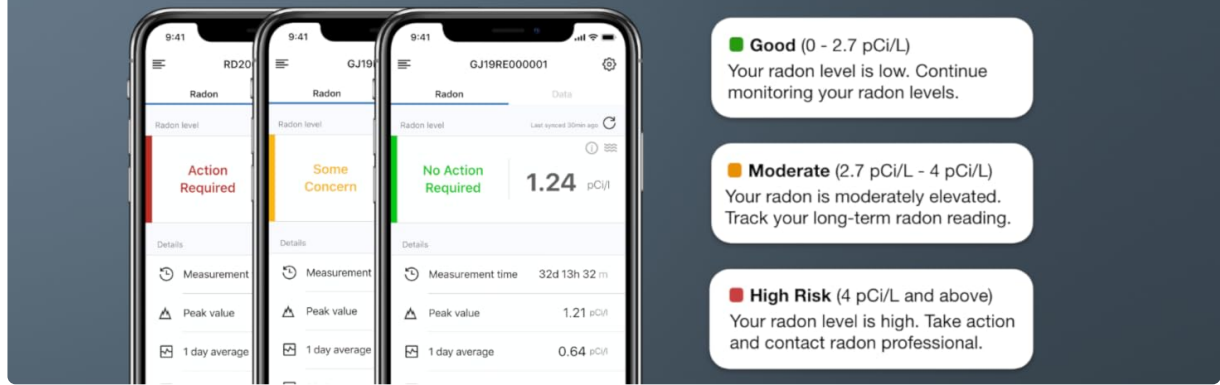


Image 5.2: Visual representation of radon risk levels (Good, Moderate, High Risk) as displayed in the RadonEye mobile application.

5.2 Monitoring Modes and Data Access

The RadonEye app provides various monitoring views:

- **Real-Time:** Current radon level with 10-minute live updates, providing a rolling hourly average.
- **Hourly Data:** Detailed data that can be exported for examining hourly logs of monitoring time.
- **Daily & Monthly Averages:** Hourly rolling averages for reliable short-term results, aiding timely decisions.
- **Long-Term Monitoring:** Gain insights into radon seasonality with up to 1-year data storage on the device.

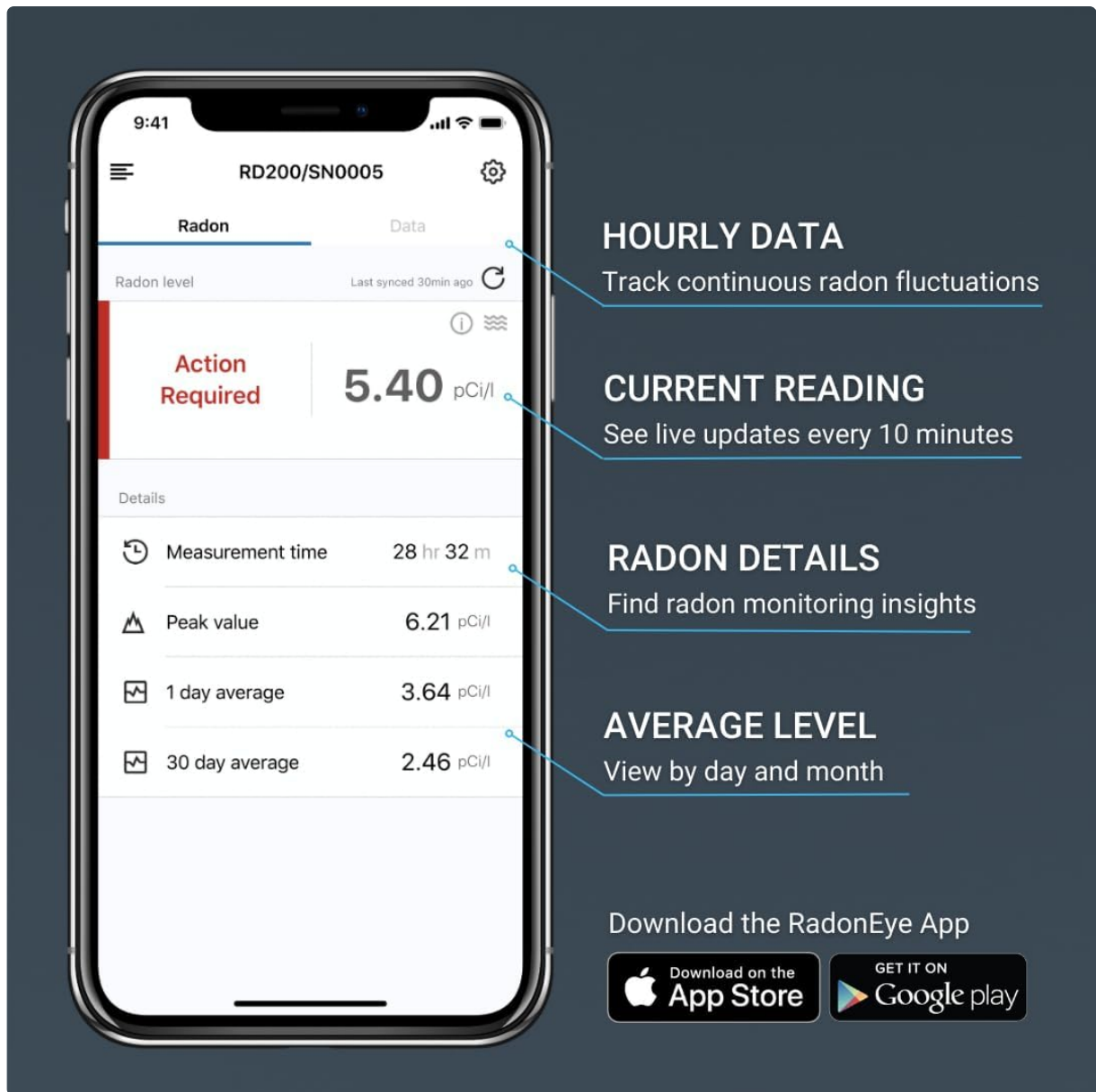


Image 5.3: The RadonEye app interface showing hourly data, current readings, radon details, and average levels, along with links to download the app.



Image 5.4: A graph within the RadonEye app showing fluctuations in radon levels over a period, with data details including file name, serial number, and number of data points.

5.3 Alarm Settings

The RD200 features an audible and visual alarm. You can configure the alarm threshold within the RadonEye mobile application. When radon levels exceed the set threshold, the device will emit an audible alert and/or display a visual warning on its OLED screen.

6. MAINTENANCE

6.1 Cleaning

- Wipe the exterior of the device with a soft, dry cloth.
- Do not use abrasive cleaners, solvents, or harsh chemicals.
- Ensure no liquids enter the device openings.

6.2 Calibration

The Ecosense RD200 RadonEye is factory-calibrated and generally does not require user calibration. If you suspect inaccurate readings or experience issues, contact customer support for assistance.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Power cable not connected properly or power outlet issue.	Ensure the power cable is securely connected to the device and the outlet. Test the outlet with another device.
Cannot connect to mobile app via Bluetooth.	Bluetooth is off on phone, device is out of range, or app issue.	Ensure Bluetooth is enabled on your phone. Bring the phone closer to the device. Restart the app and/or the device.
Inconsistent or unexpected radon readings.	Device placement, environmental factors, or initial measurement period.	Ensure proper placement away from drafts. Allow at least 10 hours for reliable readings. Radon levels naturally fluctuate; refer to long-term data.
Audible alarm sounds unexpectedly.	Radon level exceeded the set alarm threshold.	Check the current radon level on the device or app. Adjust alarm settings in the app if necessary. Investigate potential sources of elevated radon.

8. SPECIFICATIONS

Feature	Detail
Model	RD200
Brand	Ecosense Inc.
Power Source	Corded Electric (12 Volts, 1.2 Watts)
Sensor Type	Ion Chamber
Measurement Accuracy	30 counts per hour per pCi/L
Connectivity	Bluetooth (compatible with mobile phones)
Display	OLED
Alarm	Audible
Product Dimensions	3.15"D x 3.94"W x 4.72"H
Item Weight	8.5 ounces (240 Grams)
Operating Humidity	Up to 95%
Upper Temperature Rating	104 Degrees Fahrenheit
Material	Plastic
Special Features	Shock, Moving Alarm
Usage	Indoor use only

9. WARRANTY AND SUPPORT

9.1 Limited Warranty

The Ecosense RD200 RadonEye comes with a 12-month limited manufacturer's warranty. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims. The warranty does not cover damage caused by misuse, accidents, unauthorized repairs, or modifications.

9.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact Ecosense Inc. customer support via email. Refer to the official Ecosense website or the RadonEye app for the most current contact information.