

Inkbird INK-RD1-W

INKBIRD Portable Radon Detector User Manual

Model: INK-RD1-W | Brand: Inkbird

1. INTRODUCTION

The INKBIRD Portable Radon Detector (Model INK-RD1-W) is designed to help you understand and monitor indoor radon levels in your home. Radon is a naturally occurring radioactive gas that can accumulate indoors and is a significant cause of lung cancer. This device provides continuous monitoring with reliable readings, ensuring your environment stays safe.

Important Notes: This radon detector should not be exposed to direct sunshine or placed in an environment with humidity higher than 85% RH. The longer the measurement time, the more accurate the result. 7-day measurement accuracy is 90%; measurement accuracy over 2 months is 95%.

2. PRODUCT FEATURES

- **More Reliable with 3 Averages:** Radon is the second leading cause of lung cancer, and the INKBIRD radon monitor helps us understand the level of indoor radon. We can read three measurements on the screen—long-time average (up to 1 year), last-day average (updated hourly), and last 7-day average.
- **Low Battery Prompt:** This indoor radon meter has a measurement indicator on the screen, which will blink when the detector is on working status. When the battery power is too low, a low battery prompt will appear. Please NOTE that all data will be deleted after restarting the detector.
- **2-Year Battery Life:** This home radon detector is battery-operated and will continuously work for up to 2 years on 3 AAA batteries, which are included in the package. Easy to use with low power consumption.
- **Flexible Placement:** We can place this radon detector for home, on a flat surface with its foldable stand or hang it on the wall through the hanging hole on its back. It is ideal for any place close to the ground, such as a garage, basement, cellar, and living room, continuously monitoring the radon level in the house.

3. PACKAGE CONTENTS

- 1 x INKBIRD Portable Radon Detector (INK-RD1-W)
- 3 x AAA Batteries
- 1 x User Manual (digital version available via [PDF link](#))

4. SETUP

1. **Install Batteries:** Open the battery compartment on the back of the device. Insert the 3 AAA batteries, ensuring correct polarity. Close the battery compartment.
2. **Initial Calibration:** Upon battery installation, the device will begin calibration. It needs to wait for 6-24 hours before displaying data. For first-time use, it may take up to 24 hours for initial readings to appear.
3. **Placement:** Place the detector in the desired monitoring location. For accurate long-term readings, it is recommended to monitor in one place for at least 30 days.

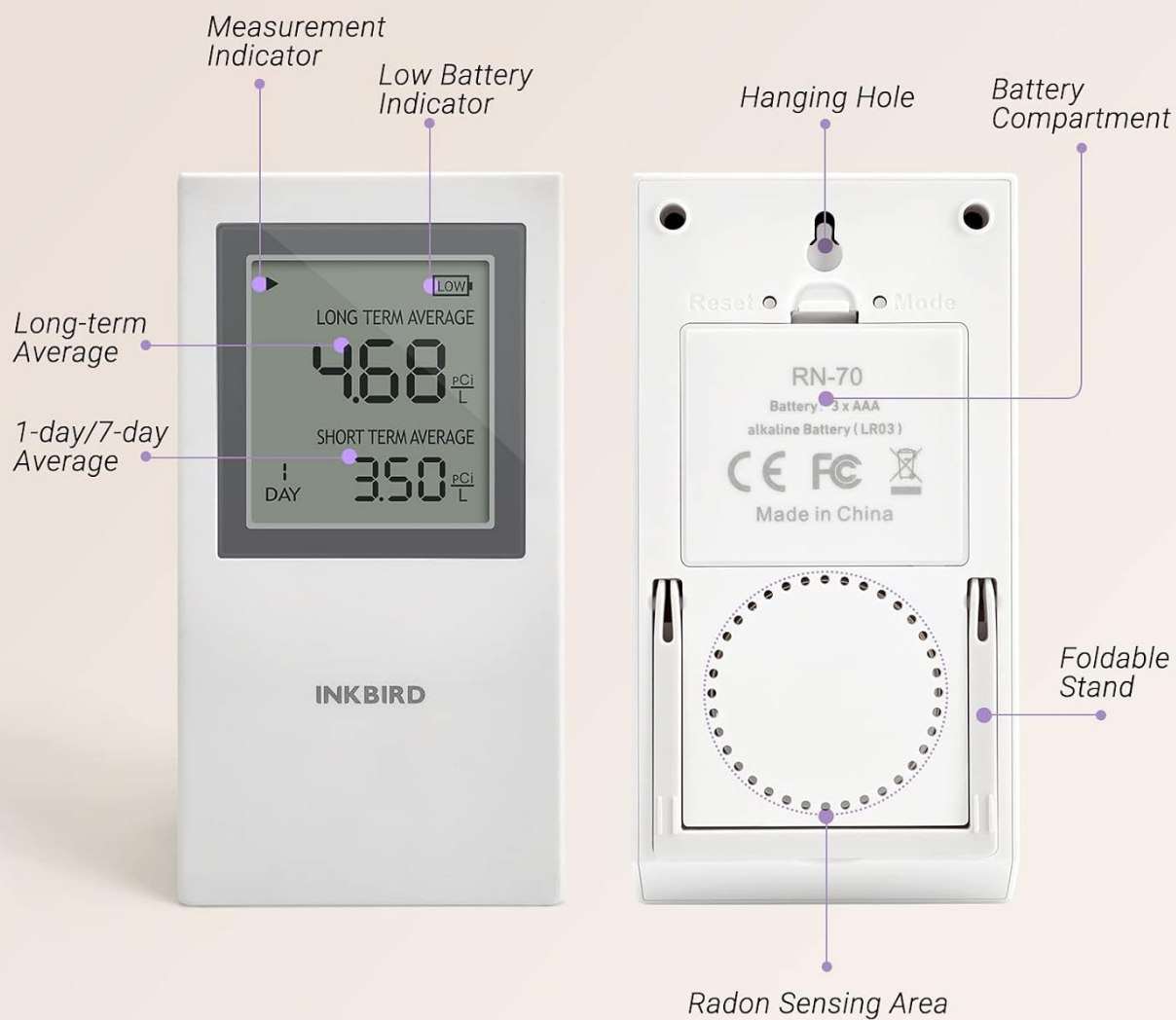


Figure 1: Front and back view of the INKBIRD Radon Detector, highlighting key components.

2 Years of Continuous Use On 3 AAA Batteries



Figure 2: Inserting AAA batteries into the detector's battery compartment.

5. OPERATING INSTRUCTIONS

The device operates continuously once batteries are installed. The display cycles through the long-term average, last-day average, and last 7-day average.

- **Long-Term Average:** Represents the average radon value for the ongoing measurement, updated once every 24 hours (maximum one year).
- **Short-Term Average:** Alternates between showing the radon value over the last 24 hours and over the last 7 days (updated once every 24 hours). This is useful for seeing the effect of ventilation changes.
- **Measurement Indicator:** A blinking indicator on the screen confirms the detector is actively working.



Figure 3: The detector's display showing long-term and short-term radon averages.

Continuous Monitoring, Accurate Detection

Knowing the indoor radon concentration based on three measurement values, a more accurate and reliable result



Figure 4: The device provides continuous monitoring for accurate detection.

6. UNDERSTANDING RADON READINGS

The radon gas standard in the United States is 150 Bq/m³. For reference, 1 pCi/L = 37 Bq/m³.

Radon Level (pCi/L)	Radon Level (Bq/m ³)	Interpretation & Action
More than 4 pCi/L	More than 148 Bq/m ³	Poor: Air quality is poor. If levels remain for more than 1 month, contact a radon professional for repairs or other steps to reduce your home's radon levels.
Between 2.7 – 4 pCi/L	100 – 148 Bq/m ³	Fair: Still need to continue monitoring. If levels remain for more than 3 months, contact a radon professional for repairs or other steps to reduce your home's radon levels.

Radon Level (pCi/L)	Radon Level (Bq/m ³)	Interpretation & Action
Less than 2.7 pCi/L	Less than 100 Bq/m ³	Good: The air quality is good, please keep it up.

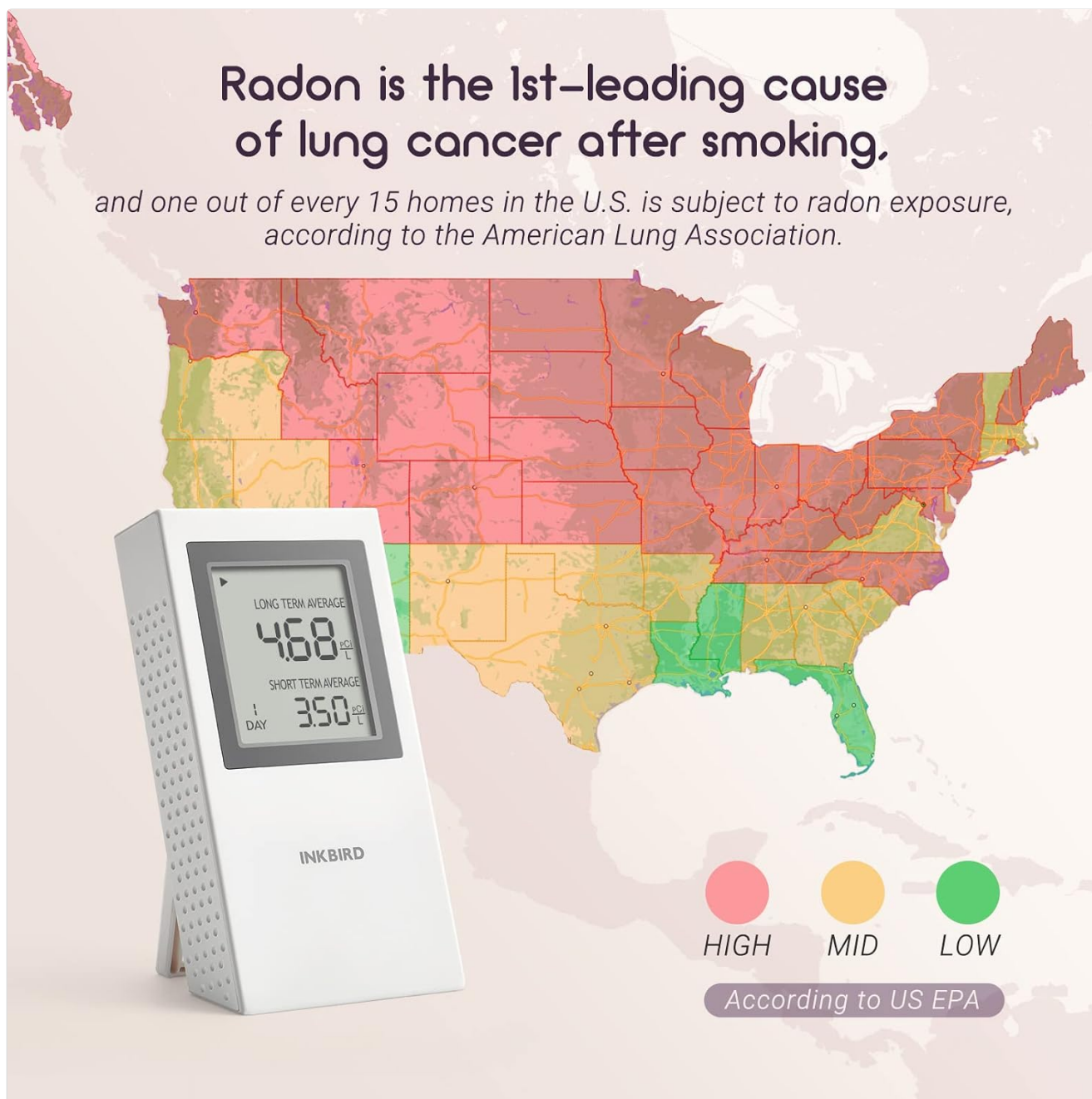


Figure 5: Radon is the leading cause of lung cancer after smoking. One out of every 15 homes in the U.S. is subject to radon exposure, according to the American Lung Association.

7. MAINTENANCE

- **Environmental Conditions:** Keep the device away from direct sunlight and environments with humidity higher than 85% RH.
- **Battery Replacement:** When the low battery prompt appears, replace the 3 AAA batteries. To avoid potential errors, remove the batteries and wait for at least 15 minutes before reinstalling new ones. All data will be cleared upon battery replacement.

- **Cleaning:** Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or immerse in water.

8. TROUBLESHOOTING

- **Display shows 'Err' or incorrect readings after battery replacement:** Remove batteries, wait for at least 15 minutes, then reinstall. This allows the device to reset properly.
- **No readings displayed after initial setup:** The device requires 6-24 hours for initial calibration before displaying data. Ensure sufficient time has passed.
- **Readings seem inconsistent:** Radon levels can fluctuate. Longer measurement times provide more accurate results (e.g., 7-day accuracy is 90%, over 2 months is 95%). Ensure the device is placed in an appropriate location away from drafts or direct air currents.
- **Low Battery Indicator:** Replace the 3 AAA batteries promptly.

9. SPECIFICATIONS

- **Product Dimensions:** 4.72 x 2.76 x 0.94 inches
- **Item Weight:** 5.92 ounces
- **Item Model Number:** INK-RD1-US-WHITE
- **Batteries:** 3 AAA batteries required (included)
- **Power Source:** Battery Powered
- **Color:** White
- **Alarm:** Visual
- **Operating Humidity:** Up to 85% RH
- **Manufacturer:** Inkbird
- **Date First Available:** January 4, 2023

10. WARRANTY AND SUPPORT

Warranty: The manufacturer provides a 1-year warranty for the device from the date of purchase.

Support: For further assistance, please refer to the official user manual PDF available at: [INKBIRD Radon Detector User Manual PDF](#) or visit the Inkbird support website for contact information.