ecoblu™

Digital Radon Gas Monitor

User Guide

Ecosense®

EcoBlu™ Introduction

Digital Radon Gas Monitor
Fast, accurate results on a display for
short-term and long-term radon monitoring

Our real-time radon detection and
monitoring device, EcoBlu™, integrates the
latest patented radon sensor technology. It
delivers an easy to use, fast, highly accurate,
compact, and affordable solution for
continuous radon monitoring. EcoBlu™ is a
plug-and-play radon detector that provides
the first radon result in minutes, not days. It
also gives daily, weekly, monthly, and yearly
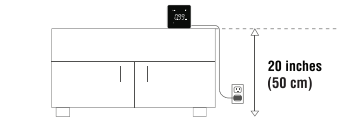average radon levels, and thus peace of
mind all year round.

EcoBlu™ Set Up Guidelines
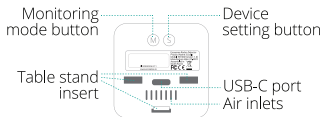
20 inches (50 cm)

1. Place EcoBlu at least 20 inches (50 cm)
above the floor and from the wall. Do not
place EcoBlu close to open windows or
vents and keep it away from high heat and
high humidity. Install at least 2 feet (61 cm)
away from Wi-Fi routers and hotspot devices
that may affect electromagnetic interference
(EMI) on your device.
2. Connect the power adapter to the EcoBlu.
3. You will get your first radon reading within
10 minutes of booting up.

In The Box

EcoBlu

Table Stand

Power Cable

Power Adapter

EcoBlu™

Audio alarm

Radon
monitoring
mode

Radon level
reading

Front View

Monitoring
mode button

Device
setting button

Table stand
insert

USB-C port
Air inlets

Back View

EcoBlu™ Operation Guideline

Select measurement mode

Real-time mode (R) is set by default. You can select average radon measurement mode between real-time (R), daily (D), weekly (W), monthly (M), long-term monitoring (L) by clicking the M (Monitoring Mode) button on the back of the device.

• **R (Real-time monitoring mode):** Default mode when the device is first powered on and radon readings update every 10 minutes with an hourly moving average. If the device powers off, reading will be automatically reset.

• **D (Daily monitoring mode):** Radon reading updates every hour with the last 24 hours of moving average. First data is available after 24 hours of data points have been collected. If the device powers off, reading will be automatically reset.

• **W (Weekly monitoring mode):** Radon reading updates every 24 hours with the last 7 days of moving average. First data is available after 7 days of data points have been collected. If the device powers off, reading will be automatically reset.

• **M (Monthly monitoring mode):** Radon reading updates every 24 hours with the last 30 days of moving average.

First data is available after 30 days of data points have been collected. If the device powers off, reading will be automatically reset.

• **L (Long-term monitoring mode):** Radon reading updates every 24 hours with total days averaged since monitoring began. First data is available after 24 hours of data points have been collected. If the device powers off and on, the last reading will be displayed and radon readings will not be deleted until the device is manually reset.

Change Settings

• **Measurement units**
(1) You can change the measurement units to Bq/m³ or pCi/L by clicking the S (Settings) button on the back of the device.
(2) Press S button for 3 seconds to enter settings mode, then click M button to select Bq/m³ or pCL.
(3) After selecting the units, press the S button again for 3 seconds to complete the setting.

• **Dim the LED light**
(1) Press the S button for 3 seconds to enter the setting mode, then click the S button again to select D (Dimming).
(2) After selecting the dimming mode, click the M button to select dim level from 0 to 4.
(3) Press the S button again for 3 seconds to complete the setting.

• Alarm level threshold

(1) You can turn on or off the alarm by clicking the S button on the back of the device.
(2) Press the S button for 3 seconds to enter the settings mode, then click the S button again to select alarm level.
(3) After selecting the alarm level setting, click the M button to select the desired alarm level.
* From 2.0 pCi/L to 5.0 pCi/L
* From 100 Bq/m³ to 400 Bq/m³
(4) Press the S button for 3 seconds to complete the setting.

• Factory reset

(1) A factory reset will erase all data from your device and reset device settings to its original system state.
(2) Press the M button for 10 seconds to enter the factory reset mode.
(3) A countdown appears: REST 9->8->..... 2->1

LED Display Information

LED Display	EcoBlu status	Meaning of status	How to operate
– – – –	Ready	Prepare for the first radon reading after turning on	Immediately when device is plugged in
R	Real-time monitoring	Hourly moving average (Update every 10 minutes)	Default mode, to change radon monitoring mode, click M button
D	Daily monitoring mode	Last 24 hours of average (Update every hour), first data available after 24 hrs	To change radon monitoring mode, click M button
W	Weekly monitoring mode	Last 7 days of average (Update every 24 hours), first data available after 7 days	To change radon monitoring mode, click M button
M	Monthly monitoring mode	Last 30 days of average (Update every 24 hours), first data available after 30 days	To change radon monitoring mode, click M button

L	Long-term monitoring mode	Average of total measurements since monitoring began(Update every 24 hours), first data available after 24 hours	To change radon monitoring mode, click M button
Days	Radon measurement period (Days)	Total days of measurement (Applicable only in LONG-TERM MONITORING mode)	To view measurement periods, click M button
▬	Action required	When the detected radon level is above the alarm level threshold	To change the alarm level threshold, click S button for 3 seconds
r5t9	Reset(clear) data	To clear saved long term monitoring data in the device	Click M button for 10 seconds on the back of the device
$\frac{pCi}{L}$	Measurement units - pCi/L	Selected measurement units are pCi/L	To change the measurement units, click S button for 3 seconds and click M button to select
$\frac{Bq}{m^3}$	Measurement units - Bq/m³	Selected measurement units are Bq/m³	To change the measurement units, click S button for 3 seconds and click M button to select
d 0	Dimmer	Adjust brightness of the LED display	Press and hold the setting S button for 3 seconds

For more details, please visit us at **https://ecosense.io/user-guides**

We are happy to help, please visit us at **https://ecosense.io/support**

Technical Specifications

Radon Sensor: Pulsed ionization chamber
Radon Sensitivity: 18 CPH (Counts Per Hour) per 1 pCi/L (Picocuries Per Liter)
Radon Accuracy/Precision: < ±14% at 10 pCi/L after 10 hours
(minimum uncertainty: ± 0.7 pCi/l)
Radon Measurement Rate: Every 10 minutes
Radon Measurement Results: 1 hour / 1 day / 1 week / 1 month moving averages
Radon Measurement Range: 0.2 ~ 99.9 pCi/L (7~3,700 Bq/m³)
Radon Alarm: Integrated audio alarm (configurable to set radon level)
Radon Level Visual Indicator: LED display
Power Supply: 5V, 1A
Weight: 0.341 lb (155 g)
Operating Temp Range: 32~104°F (0~40°C)

Learn About Risk From Radon

You can't see, smell or taste radon, but it could be present at a dangerous level in your home. Radon is the leading cause of lung cancer deaths among nonsmokers in America and claims the lives of about 21,000 Americans each year. In fact, the EPA and the U.S. Surgeon General urge all Americans to protect their health by testing their homes, schools and other buildings for radon.

Exposure to radon is a preventable health risk. Testing radon levels in your home can help prevent unnecessary exposure. Radon gas levels fluctuate by the hour, day, month, and year. That is why long-term continuous monitoring is very critical. Just because your radon test results may currently be below acceptable levels, does not mean that they will always remain at those levels. If a high radon level is detected in your home, take steps to fix the problem to protect yourself and your family.

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Regulatory Guide

Ecosense®

Limited Warranty

Ecosense products are warranted to substantially conform to their product specifications and against original defects in design, materials, and workmanship for a period of twelve (12) months, calculated from the later of the date of purchase or delivery if ordered on the Internet, when used for normal domestic purposes in accordance with the Ecosense User Guide. Ecosense shall not be liable for damages related to failure or loss of data arising from incorrect operation and handling of the products. Please see www.ecosense.io/support for specific warranty and liability information relating to this Product.

Safety and Maintenance

The Ecosense EcoBlu ('Product' or 'product') is intended for indoor use only. Avoid direct exposure to sunlight for long periods of time. Avoid exposure to direct heat sources. For correct usage, make sure the Product is operating in the specified temperature range (see technical specifications in the User Guide or visit www.ecosense.io).

Exposure to high humidity may permanently alter the product sensitivity or damage the Product. Do not disassemble. If the Product does not work as specified, please contact your local dealer or visit us at www.eco-sense.io. Use a dry cloth to clean the Product. Disposal: electronic equipment.

Regulatory Compliance USA

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the Product.

This Product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This Product may not cause harmful interference, and (2) this Product must accept any interference received, including interference that may cause undesired operation.

This Product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This Product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this Product does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.
—Increase the separation between the Product and receiver.
—Connect the Product into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

EU Declaration of Conformity

Hereby, Ecosense Inc., 1777 Hamilton Avenue, Suite 2180, San Jose, CA 95125, USA, declares that this Product is following the provisions of CE. The full text of the EU declaration of conformity is available by contacting Ecosense support at support@e-cosense.io.

Power Supply

The Product (Model EB100) contains a power supply tested according to the following standards: UL62368-1 (for US adapter), EN62368-1 (for EU adapter)

Model Description

EcoBlu (Model: EB100)