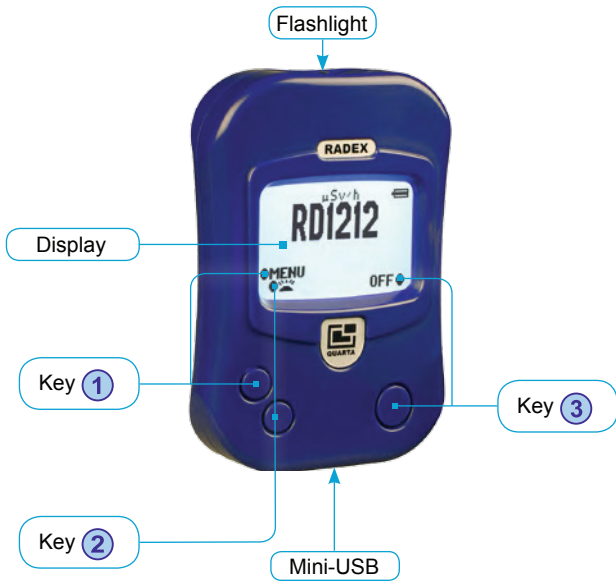


This device is intended to measure the background radiation of the environment as well as products and materials.

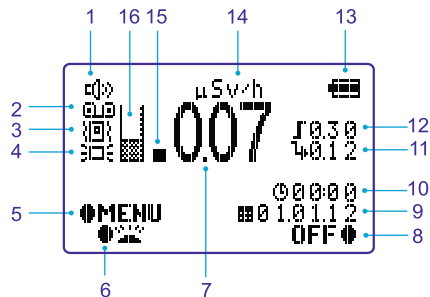
## APPEARANCE



①, ②, ③ functions can be changed depending on application.  
1

## DISPLAY LAYOUT

Icons 1- 4, 11, 12 are displayed when the device is turned on.

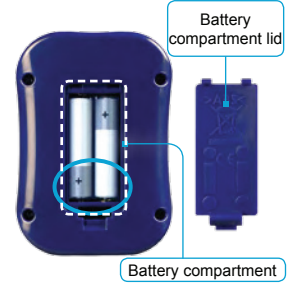


- |                                |                                                 |
|--------------------------------|-------------------------------------------------|
| 1. Audible alarm               | 13. Power battery charge level                  |
| 2. Measuring Cycle in progress | - high                                          |
| 3. Vibration On/Off            | - low (battery to be replaced).                 |
| 4. Backlighting                | 14. Unit of measurement: micro Sievert per hour |
| 5. Key function ①              | 15. Indicates that a quantum was detected       |
| 6. Key function ②              | 16. Number of measurement cycles performed      |
| 7. Measurement result          |                                                 |
| 8. Key function ③              |                                                 |
| 9. Date                        |                                                 |
| 10. Time                       |                                                 |
| 11. Background Radiation       |                                                 |
| 12. Alarm threshold            |                                                 |

## PREPARATION FOR OPERATION

### Fitting power elements

1. Open the battery compartment lid.
2. Insert two batteries ("AAA")
3. Close the battery compartment.



### Switching on

Press ③.



### Result

The first measurement result will appear on display after about 10 seconds.



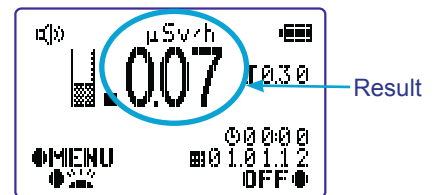
### Switching off

Press and hold ③ for a few seconds.  
2

## DEVICE OPERATION

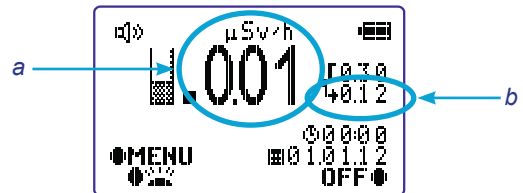
### Measurement

Measurements begin when the device is turned on.



### Measurement with Background value

When making measurements with Background Value, two results are displayed simultaneously:



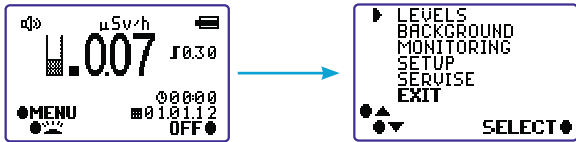
- a - excess over (b)
- b - background radiation

### Self-Test

During operation of the device, Self-Testing is performed on continuous basis. If a malfunction is detected, an **ERROR** message will be displayed on screen.

## MENU

- to enter the menu press ①, main menu will appear on display



- use buttons ① or ② to move the cursor. Use button ③ to select
- moving the cursor to choose the desired function and ③ to select it. Symbol ✓ will appear/disappear next to the desired function to indicate that it has been selected/deselected.
- After 30 seconds of inactivity the device will exit to main menu.
- when batteries are removed, the date and time will reset after 40 hours

## DATA TRANSFER TO PC

- You can upload the measured data to PC using RadexRead software (included on the CD).
- Connect the device to PC using USB cable (included).
- Start RadexRead software. Now, the device is ready to sync with PC.

NOTE: Radexread software should be installed on your computer prior to use.

## FLASHLIGHT

To switch the flashlight, press and hold ② for a few seconds.

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## What is included

RADEX RD1212



USB cable



The RadexRead Free Software has been updated!

- Read data from RD1212 and see it on your PC.
- Store the readings you took on your PC or share it on a server.
- With one click – Assign Location to your data on the World Map.
- See data from other users on the World Map.
- Save your data for personal use only.
- Chart your data for specific location vs specified time period.
- Save your data for the world to see in International Database.
- Quick and easy access with a Customizable Interface.

Download the latest version from our website:

[www.QuartaRad.com](http://www.QuartaRad.com)

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## TECHNICAL SPECIFICATION

Range of Indications	µSv/h	0,05 to 999
Energy range of registered:		
Gamma radiation	MeV	0,1 to 1,25
X-radiation		0,03 to 3,0
Beta-radiation		0,4 to 3,5
Error, where $P$ – dose power in µSv/h	%	± (15+6/P)
Alarm threshold (increments of 0.05)	µSv/h	0,05 to 1,2
Measurement time	s	10
Measurement		permanently
Batteries ("AAA")	pcs	2
Uninterrupted operation time	h	300
Temperature range (humidity should not exceed 85% at 25C)	°C	-18 to +45
Device dimensions	mm	97x68x24
Weight (without batteries)	kg	0,08

\* At factory settings, with natural background conditions, without use of flashlight.

### Factory settings

Threshold	- 0,30 µSv/h
Audible alarm	- on
Date collection	- off
Vibrato signal	- off
Backlighting	- off

**Please be advised that the measurement results obtained with the use of this device should NOT be relied upon as official and conclusive. No official government body has approved the use of this device.**

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## How much is dangerous?

Not all radiation is the same, so scientists use the 'sievert' to measure the health risks of radiation.

A one-sievert dose of radiation would cause immediate radiation sickness. But most radiation doses are much smaller, so you'll see them measured in millisieverts or even smaller microsieverts.

1 sievert = 1000 millisieverts

1 millisievert = 1000 microsieverts

**µSv/h micro Sieverts per hour.**

0.10	This is low, it does not get any lower.
0.21	Pretty normal. Depends on local geology.
0.42	Happens occasionally with no real reason. Just keep an eye on it.
0.83	ALERT - No need to panic, but try to figure out what is going on, stay out of the rain and avoid unnecessary trips.
1.25	Real risk of cancer if exposed for a year.
4.17	Real risk of cancer if exposed for 90 days.

20,000	Annual limit for Nuclear Plant Workers.
100,000	Annual limit for Fukushima workers.

Sievert calculations based on Cesium-137 isotope.