R9260

REED INSTRUMENTS

Radiation Dose Meter

WARRANTY 1 YEAR WARRANTY

Instruction Manual

REED Instruments

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Introduction

Thank you for purchasing your REED R9260 Radiation Dose Meter. Please read the following instructions carefully before using your instrument. By following the steps outlined in this manual your meter will provide years of reliable service.

Product Quality

This product has been manufactured in an ISO9001 facility and has been calibrated during the manufacturing process to meet the stated product specifications.

Safety

- Do not leave the meter in temperatures over 100°F (38°C) or in direct sunlight for an extended period of time.
- This meter may be sensitive to and may not operate properly in radio frequency, microwave, electrostatic, and electromagnetic fields.
- Never attempt to repair or modify the instrument. Dismantling the product, other than for the purpose of replacing batteries, may cause damage that will not be covered under the manufacturer's warranty. Servicing should only be provided by an authorized service center.

Features

- Detects Beta, Gamma, and X radiation
- Measures dose rate in real-time and records total doses
- Automatic selection of measurement range
- User-adjustable alarms (audio/visual indicators)
- Internal memory stores up to 10 groups of data internally
- Auto shut-off and low battery indicator

Included

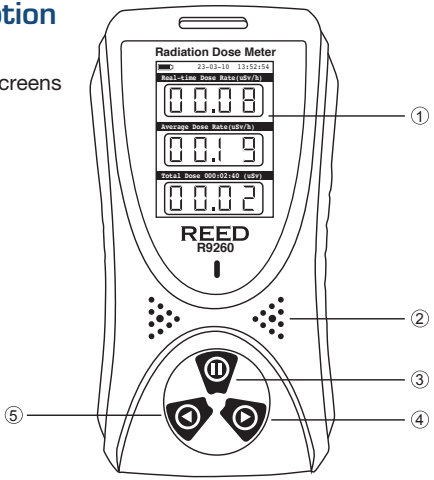
- Radiation Dose Meter
- USB Cable
- Lanyard
- Carrying Case

Specifications

Sensor Type:	G-M Counter Tube
Measured Rays:	Beta, Gamma, X
Radiation Dose Range:	0.05µSv/h to 50mSv/h
Accumulated Radiation Dose Value:	0.1µSv to 9999mSv
Accuracy:	≤25%
Energy Range:	80keV to 1.5MeV
Source:	Cs-137
Response Time:	≤10 seconds
Display:	2" Color TFT LCD Display
Backlit Display:	Yes
Adjustable Alarms:	Yes (Audible/Visual Indicators)
Natural Environment Reading:	0 to 0.2µSv/h
Datalogging Capabilities:	Yes
Real-Time Clock and Date Stamp:	Yes
Internal Memory:	Yes (up to 10 groups of data)
Power Supply:	Built-in lithium battery (3.7V 1800mAh)
Battery life:	Approx. 20 days (Fully Charged)
Product Certifications:	CE, UKCA, RoHS
Operating Temperature:	32 to 104°F (0 to 40°C)
Operating Humidity Range:	20 to 80%
Storage Temperature:	14 to 122°F (-10 to 50°C)
Storage Humidity Range:	20 to 70%
Dimensions:	4.7 x 2.6 x 1.0" (120 x 65 x 25mm)
Weight:	4.48oz (127g)

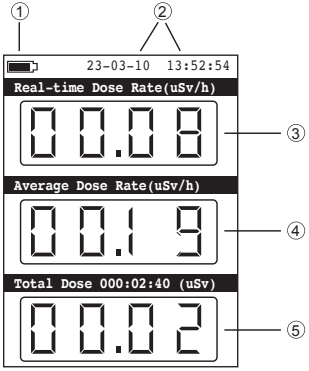
Instrument Description

1. LCD Display
2. Geiger-Mueller Tube Screens
3. Power/Select Button
4. Right/Add Button
5. Left/Subtract Button



Display Description

1. Battery Status Indicator
2. Date and Time Stamp
3. Real-Time Dose Rate Measurement Value
4. Average Dose Rate Measurement Value
5. Total Dose Measurement Value



Operating Instructions

The R9260 is intended to detect the radiation dose rate of β+γ and X-rays radiated from an object and not the physical quantit describing the radioactivity of an object/area.

How the Meter Detects Radiation

The meter uses a Geiger-Mueller counter tube to detect radiation. The Geiger tube generates a pulse of electrical current each time radiation passes through the halogen quenched tube. Each pulse is electronically detected and registers as a count. The unit displays the counts in the selected mode.

The number of counts detected by the unit varies from moment to moment due to the random nature of radioactivity. A reading is expressed more accurately as an average over time, and the average is more accurate over a longer time period.

Power ON/OFF

To turn the meter ON or OFF, press and hold the ⏻ button for approximately 3 seconds.

Measurement Interface Screen

When the meter is powered on, the measurement interface screen automatically appears which displays the real-time dose rate (0.05uSv-50mSv), average dose rate (0.05uSv-50mSv) and total dose (0.1uSv-9999mSv) of the test source/area.

Setup Mode

1. While in the measurement interface screen, press the ⏸ button to enter Setup Mode.
2. Use the ◀ or ▶ buttons to scroll through the following parameters:

Parameter	Description
Measure	Measurement Interface Screen
Schedule	Set delayed start/measurement times
Records	View recorded logs
Delete	Delete recorded data
Alarm	Set alarm values
Unit	Select unit of measure
Sound	Set alarm frequency and volume
Clock	Set the date and time
Sleep	Set auto power off, sleep settings and screen brightness

3. Once the appropriate parameter has been selected, follow the instructions below.

Measurement Interface Screen (Measure)

Press the ⏸ button when "Measure" is highlighted to return to the measurement interface screen.

Set Delayed Start/Measurement Time (Schedule)

1. Press the ⏸ button when "Schedule" is highlighted to set the delayed start/measurement times.
2. While in this mode, press the ◀ or ▶ buttons to toggle through the adjustable parameters for "Start Delay" and "Measurement Time".
3. Press the ⏸ button to activate the desired parameter (i.e. Hour/Minute/Second).
4. Press the ◀ and ▶ buttons to adjust the applicable value.

5. Press the ⏸ button to confirm selection and move on to the next parameter, if required.
6. Once all parameters have been adjusted, select "Start Timing" and press the ⏸ button.
7. Press the ◀ button to confirm the scheduled delayed start/measurement times or press the ▶ button to cancel, when the "Yes" or "No" dialog box appears.

Note: The test will not start until the programmed delayed time has elapsed (if applicable).

8. At any time, select "stop timing" to the end and press the ⏸ button to manually stop the measurement time.
9. When done, select "Return" and press the ⏸ button to exit the "Setting the Delayed Start/Measurement Times" screen and return to the setup mode screen.

View the Recorded Logs

1. Press the ⏸ button when "Records" is highlighted to view the recorded logs.
2. Press the ◀ and ▶ buttons to scroll through the list of recorded log files (if applicable).
3. Press the ⏸ button to exit the "Viewing the Recorded Logs" screen and return to the setup mode screen.

Delete the Recorded Data

1. Press the ⏸ button when "Delete" is highlighted to delete any stored data.
2. Press the ◀ and ▶ buttons to select between "Delete Current Data" and "Delete History Data".
3. Press the ⏸ button to activate the desired parameter.
4. Press the ◀ button to confirm deletion or press the ▶ button to cancel, when the "Yes" or "No" dialog box appears.
5. When done, select "Return" and press the ⏸ button to exit the "Deleting the Recorded Data" screen recording time screen and return to the setup mode screen.

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Set Alarm Values

1. Press the ⏸ button when "Alarm" is highlighted to set the alarm values.
2. While in this mode, press the ◀ or ▶ buttons to toggle through the adjustable parameters for "Dose Rate" and "Total Dose".
3. Press the ⏸ button to activate the desired parameter.
4. Press the ◀ and ▶ buttons to adjust the applicable value within the meters limit range.
5. Press the ⏸ button to confirm selection and move on to the next parameter if required.
6. When done, select "Return" and press the ⏸ button to exit the "Setting Alarm Values" screen and return to the setup mode screen.

Select Unit of Measure

1. Press the ⏸ button when "Unit" is highlighted to set the measurement unit.
2. While in this mode, press the ◀ or ▶ buttons to toggle to the adjustable parameter for "Unit".
3. Press the ⏸ button to activate the desired parameter.
4. Press the ◀ and ▶ buttons to toggle between the applicable measurement unit.
5. Press the ⏸ button to confirm selection and move on to the next parameter if required.
6. When done, select "Return" and press the ⏸ button to exit the "Selecting Unit of Measure" screen and return to the setup mode screen.

Set Alarm Frequency and Volume

1. Press the ⏸ button when "Sound" is highlighted to set the alarm frequency and volume.
2. While in this mode, press the ◀ or ▶ buttons to toggle through the adjustable parameters for "Alarm Volume", "Alarm Times" and "Particle Sounds".
3. Press the ⏸ button to activate the desired parameter.

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4. For alarm volume, press the ◀ or ▶ buttons to toggle up and down the alarm volume range between 0 and 9.
5. Press the ⏸ button to confirm selection and move on to the next parameter if required.
6. For alarm frequency, press the ◀ or ▶ buttons to toggle up and down the frequency range between 1 and 10.
7. Press the ⏸ button to confirm selection and move on to the next parameter if required.
8. For particle sounds, press the ◀ or ▶ buttons to toggle between ON or OFF.
9. Press the ⏸ button to confirm selection.
10. When done, select "Return" and press the ⏸ button to exit the "Setting Alarm Frequency and Volume" screen and return to the setup mode screen.

Set the Date and time

1. Press the ⏸ button when "Clock" is highlighted to set the delayed start/measurement times.
2. While in this mode, press the ◀ or ▶ buttons to toggle through the adjustable parameters for "Date" and "Time".
3. Press the ⏸ button to activate the desired parameter (i.e. Year/Month/Day/Hour/Minute/Second).
4. Press the ◀ and ▶ buttons to adjust the applicable value.
5. Press the ⏸ button to confirm selection and move on to the next parameter if required.
6. When done, select "Return" and press the ⏸ button to exit the "Setting the Date and Time" screen and return to the setup mode screen.

Set Auto Power Off/Sleep Settings and Screen Brightness

1. Press the ⏸ button when "Sleep" is highlighted to set the Auto Power Off/sleep settings and screen brightness.
2. While in this mode, press the ◀ or ▶ buttons to toggle through the adjustable parameters for "Screen Sleep", "Auto Shutdown" and "Screen Brightness".
3. Press the ⏸ button to activate the desired parameter.
4. For screen sleep timer, press the ◀ or ▶ buttons to toggle up and down the sleep timer range between 1 and 9 minutes.
5. To disable this feature, select the 🔒 icon located on the sleep timer range.
6. Press the ⏸ button to confirm selection and move on to the next parameter if required.
7. For auto power off, press the ◀ or ▶ buttons to toggle up and down the auto power off timer range between 1 and 9 hours.
8. To disable this feature, select the 🔒 icon located on the auto power off timer range.
9. Press the ⏸ button to confirm selection and move on to the next parameter if required.
10. For screen brightness, press the ◀ or ▶ buttons to toggle between the brightness range between 1 and 10.
11. Press the ⏸ button to confirm selection.
12. When done, select "Return" and press the ⏸ button to exit the "Auto Power Off/sleep settings and screen brightness" screen and return to the setup mode screen.

Charging the Battery

1. Connect the R9260 via the included cable to a USB port on your PC or into a wall outlet using a USB Power Adapter (not included) to charge the Li-ion battery.
2. Charge the meter until the battery indicator appears full and remove the charging cable when done.

Applications

- Measure and monitor exposure to ionizing radiation

Accessories and Replacement Parts

CA-05A Medium Soft Carrying Case

Don't see your part listed here? For a complete list of all accessories and replacement parts visit your product page on www.REEDInstruments.com.

Product Care

To keep your instrument in good working order we recommend the following:

- Store your product in a clean, dry place.
- Clean your product and accessories with biodegradable cleaner. Do not spray the cleaner directly on the instrument. Use on external parts only.

Product Warranty

REED Instruments guarantees this instrument to be free of defects in material or workmanship for a period of one (1) year from date of shipment. During the warranty period, REED Instruments will repair or replace, at no charge, products or parts of a product that proves to be defective because of improper material or workmanship, under normal use and maintenance. REED Instruments total liability is limited to repair or replacement of the product. REED Instruments shall not be liable for damages to goods, property, or persons due to improper use or through attempts to utilize the instrument under conditions which exceed the designed capabilities. In order to begin the warranty service process, please contact us by phone at 1-877-849-2127 or by email at info@reedinstruments.com to discuss the claim and determine the appropriate steps to process the warranty.

Product Disposal and Recycling

Please follow local laws and regulations when disposing or recycling your instrument. Your product contains electronic components and must be disposed of separately from standard waste products.

Product Support

If you have any questions on your product, please contact your authorized REED distributor or REED Instruments Customer Service by phone at 1-877-849-2127 or by email at info@reedinstruments.com.

Please visit **www.REEDInstruments.com** for the most up-to-date manuals, datasheets, product guides and software.

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