

VOLTCRAFT RM-400

VOLTCRAFT RM-400 Geiger Counter User Manual

Model: RM-400 (VC-12822170)

1. INTRODUCTION

This manual provides essential instructions for the safe and effective operation of your VOLTCRAFT RM-400 Geiger Counter. The RM-400 is designed for detecting Alpha, Beta, Gamma, and X-ray radiation, featuring high measurement accuracy, an internal memory for 4000 readings, a large LCD display, and Bluetooth connectivity for data evaluation. Please read this manual thoroughly before using the device.

2. SAFETY INFORMATION

WARNING: To reduce the risk of injury, always read and understand the operator's manual before using this device.

- Ensure batteries are correctly installed before operation.
- Do not attempt to open or modify the device, as this may compromise its accuracy and safety features.
- Keep the device away from extreme temperatures, moisture, and strong magnetic fields.
- This device is for informational and detection purposes. It is not a substitute for professional radiation safety equipment or expert advice.
- Dispose of batteries and the device according to local regulations.

3. PRODUCT OVERVIEW

The VOLTCRAFT RM-400 is a handheld Geiger counter designed for comprehensive radiation detection.



Figure 3.1: Angled view of the VOLTcraft RM-400 Geiger Counter, highlighting the display and control buttons.

3.1 Device Components

- **Geiger-Müller Tube:** Located at the top, responsible for detecting radiation.
- **LCD Display:** Large screen for displaying measurement data, time, and settings.
- **Control Buttons:** For navigation, settings, saving data, and power.
- **Battery Compartment:** Located at the rear for 4x 1.5V AA batteries.
- **Bluetooth Module:** For wireless data transfer to evaluation software.



Figure 3.2: Front view of the RM-400, showing the layout of the control buttons: SETUP, SAVE, SV/h R/h, Power, GPS/CAL/ML, ESC, and navigation arrows.



Figure 3.3: Rear view of the RM-400, indicating the battery compartment and safety warnings, including the requirement for 4x 1.5V AA batteries.

4. SETUP

4.1 Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Slide or unclip the cover to open it.
3. Insert 4x 1.5V AA batteries, ensuring correct polarity (+/-) as indicated inside the compartment.
4. Replace the battery compartment cover securely.

4.2 Initial Power-On

- Press and hold the **Power** button until the display illuminates.
- The device will perform a self-test and then display the current radiation level.
- Adjust date, time, and other settings via the **SETUP** menu if prompted or desired.

5. OPERATING INSTRUCTIONS

5.1 Taking Measurements

Once powered on, the RM-400 continuously monitors radiation levels.

- **Real-time Display:** The large LCD shows the current radiation dose rate (e.g., $\mu\text{Sv/h}$).
- **Radiation Types:** The device detects Alpha, Beta, Gamma, and X-ray radiation. The specific detection mode or sensitivity may be adjustable in the SETUP menu.
- **Acoustic Warning:** The device emits an audible click for each detected radiation particle. An adjustable alarm threshold can be set to trigger a continuous warning sound when radiation levels exceed a predefined limit.



Figure 5.1: A user operating the RM-400 Geiger Counter, demonstrating its handheld use for radiation measurement in a controlled environment.

5.2 Data Logging and Storage

- The RM-400 has an internal memory capable of storing up to 4000 readings.
- Press the **SAVE** button to manually record the current measurement.
- Automatic logging intervals may be configured in the SETUP menu.

5.3 Bluetooth Connectivity

The device supports Bluetooth for transferring stored data to a computer or compatible mobile device for further analysis using the included evaluation software.

1. Ensure Bluetooth is enabled on your RM-400 (check SETUP menu).
2. Activate Bluetooth on your receiving device (computer/smartphone).
3. Open the VOLTcraft evaluation software.
4. Follow the software's instructions to pair with the RM-400 and download data.

6. MAINTENANCE

6.1 Cleaning

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

6.2 Storage

- Store the device in a cool, dry place away from direct sunlight.
- Remove batteries if the device will not be used for an extended period to prevent leakage.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Low or dead batteries; incorrect battery installation.	Replace batteries; check battery polarity.
Inaccurate readings.	Interference from other electronic devices; device malfunction.	Move away from potential interference sources; contact support if problem persists.
Bluetooth connection fails.	Bluetooth not enabled on device or receiving unit; out of range.	Ensure Bluetooth is active on both devices; move closer; restart devices.
No acoustic warning.	Acoustic warning disabled; volume too low; alarm threshold not met.	Check settings in SETUP menu; adjust volume; verify radiation levels exceed threshold.

8. SPECIFICATIONS

Model Name	VOLTCRAFT RM-400 Geiger Counter
Item Model Number	VC-12822170
Radiation Detection	Alpha, Beta, Gamma, X-rays
Internal Memory	4000 readings
Display	Large LCD
Connectivity	Bluetooth
Power Source	4x 1.5V AA Batteries
Product Dimensions	14 x 18 x 31 cm
Item Weight	226 Grams
Included Components	Butter Paper (Note: This might be a translation error or packaging material. Refer to product packaging for exact contents.)
Specific Uses	Radiation measurement, radiation detection, research, industrial, educational purposes

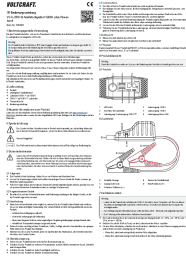
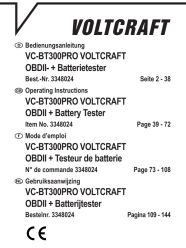
9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the documentation included with your product or visit the official VOLT CRAFT website. Keep your purchase receipt as proof of purchase.



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Related Documents - RM-400

	VOLT CRAFT Digital Multimeters VC-7060BT & VC-7200BT User Manual Comprehensive user manual for VOLT CRAFT VC-7060BT and VC-7200BT digital multimeters, covering safety, operation, functions, measurement tutorials, troubleshooting, and technical specifications.
	VOLT CRAFT VC-CJS10 1200A Jump Starter and Power Bank User Manual User manual for the VOLT CRAFT VC-CJS10 1200A jump starter and power bank. Learn about its features, intended use, safety instructions, operation, and technical specifications for jump-starting vehicles and charging devices.
	VOLT CRAFT VC-7060BT & VC-7200BT Digital Multimeter Quick Guide Comprehensive quick guide for VOLT CRAFT VC-7060BT and VC-7200BT digital multimeters. Learn about safety, operation, measurements, and troubleshooting.
	VOLT CRAFT VC-BT300PRO OBDII + Batterietester Bedienungsanleitung Umfassende Bedienungsanleitung für den VOLT CRAFT VC-BT300PRO, ein Diagnosewerkzeug für OBD-II und Batterietests. Enthält Funktionen, Sicherheitshinweise und technische Daten.
	Instrukcja obsługi VOLT CRAFT VC-102E: Monitorowanie Akumulatora 12V Szczegółowa instrukcja obsługi urządzenia VOLT CRAFT VC-102E do monitorowania stanu akumulatora 12V, zabezpieczającego przed głębokim rozładowaniem. Zawiera informacje o instalacji, użytkowaniu, bezpieczeństwie i danych technicznych.

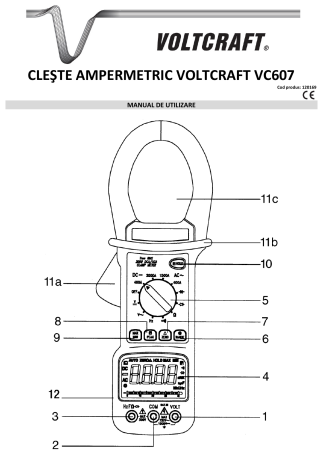


[pdf] Specifications

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VOLT CRAFT - TOP PERFORMANCE IN EVERY WAY For more than 40 years, our product range has been dynamica ... excellent cost-performance ratio. This philosophy remains the cornerstone of Voltcraft s success. **RM-400 RADIATION SCANNER** Item no: 2564434 The product is a radiation meter. Use the product to dete...

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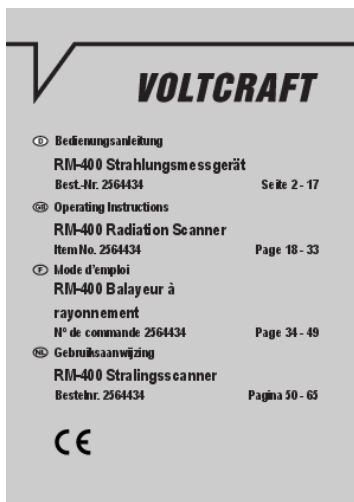
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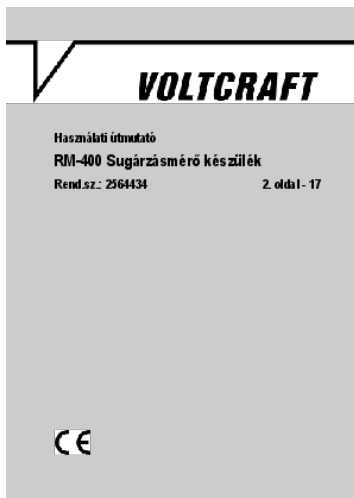
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[\[pdf\]](#) Instructions

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Bedienungsanleitung **RM-400** Strahlungsmessgert Best.-Nr. 2564434 Seite 2 - 17
Operating Instructions **RM-400** Radiation Scanner Item No. 2564434 Mode d emploi
RM-400 Balayeur Page 18 - 33 rayonnement N de commande 2564434
Gebruiksaanwijzing Page 34 - 49 **RM-400** Stralingsscanner Bestelnr. 25644...
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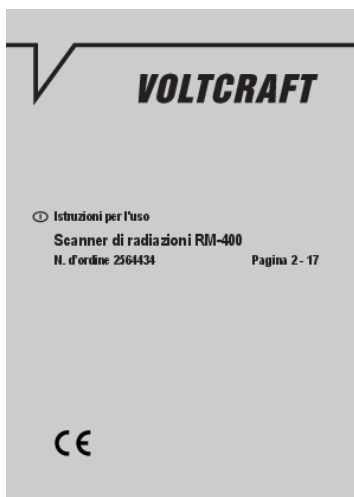


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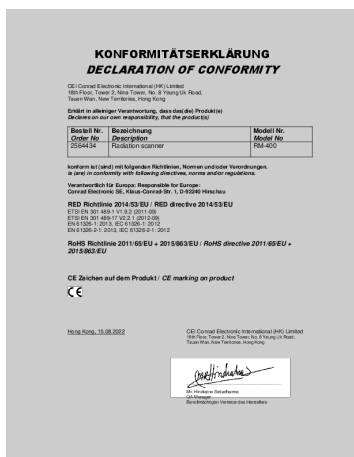
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X ray Acoustic signal Incl data analysis software Dat Conrad conformity certificate 2564434 voltcraft rm geiger radiation alpha beta gamma x acoustic incl analys asset conrad media10 add 160267 c1 gl dat |||

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