

## Retevis RB27

# Retevis RB27 GMRS Two Way Radio Instruction Manual

Model: RB27

Brand: Retevis

## 1. PRODUCT OVERVIEW

The Retevis RB27 is a high-power GMRS two-way radio designed for reliable long-range communication. It features NOAA weather channels, FM radio, USB-C charging, and a range of functions suitable for outdoor activities, hiking, camping, and emergency communications.



Image 1.1: Retevis RB27 GMRS Two Way Radio. This image shows the front view of the Retevis RB27 radio, highlighting its compact design and display.

## 2. PACKAGE CONTENTS

Before using your Retevis RB27 radio, please check the package contents to ensure all items are present:

- 2 x Retevis RB27 Two Way Radio
- 2 x 1500mAh Li-ion Battery
- 2 x Belt Clip
- 2 x Lanyard
- 2 x USB Charging Base
- 2 x USB Adapter
- 2 x English User Manual



Image 2.1: Retevis RB27 Package Contents. This image displays all the items included in the Retevis RB27 two-way radio package, such as the radios, batteries, charging accessories, and user manual.

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Video 2.1: What's in the RB27 GMRS radio box? This video provides a visual unboxing experience, showing each component included with the Retevis RB27 GMRS radio.

## 3. SETUP

### 3.1 Battery Installation and Charging

The RB27 radio uses a 1500mAh Li-ion battery. Ensure the battery is fully charged before first use.

- To install the battery: Align the battery with the back of the radio and slide it into place until it clicks securely.
- To charge the battery: You can charge the battery directly via the USB-C port on the battery itself, or by placing the radio with the battery installed into the USB charging base. Connect the USB adapter to the

charging base and a power source. The charging indicator will show the charging status.



Image 3.1: Retevis RB27 USB-C Charging. This image illustrates the USB-C charging port located on the battery of the Retevis RB27 radio, allowing for convenient direct charging.

### 3.2 Attaching the Belt Clip and Lanyard

- **Belt Clip:** Attach the belt clip to the designated slot on the back of the radio or battery. Ensure it is firmly secured.
- **Lanyard:** Thread the lanyard through the loop on the top side of the radio for easy carrying.

## 4. OPERATING INSTRUCTIONS

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### 4.1 Basic Controls and Display

Familiarize yourself with the radio's controls and LCD display for optimal use.



Image 4.1: Retevis RB27 Labeled Controls. This image provides a detailed diagram of the Retevis RB27 radio, labeling all buttons, ports, and the LCD display for easy identification.

## 4.2 Power On/Off and Volume Control

- To power on/off: Rotate the Power Switch/Volume Control knob clockwise to turn on the radio. Rotate counter-clockwise until a click is heard to turn off.
- To adjust volume: Rotate the same knob clockwise to increase volume and counter-clockwise to decrease volume.

## 4.3 Channel Selection and Transmission

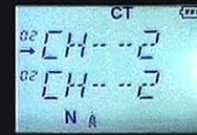
- **Channel Selection:** Use the Channel +/- buttons on the front panel to navigate through the available GMRS channels. The RB27 has 30 fixed channels.
- **Push-to-Talk (PTT):** Press and hold the PTT button on the side of the radio to transmit your voice. Release the button to listen.
- **CTCSS/DCS:** All channels are preset with CTCSS/DCS tones. These can be adjusted via the menu system to ensure compatibility with other radios.

## 4.4 Dual Watch Function

The RB27 features a dual watch function, allowing you to monitor two frequencies simultaneously. This ensures you do not miss any calls on either channel.



# Dual Watch



- Show the status of both channels at the same time, so you won't miss any calls.



Image 4.2: Retevis RB27 Dual Watch Feature. This image demonstrates the dual watch function of the radio, showing two channels being monitored simultaneously on the display.

## 4.5 NOAA Weather Radio

The RB27 can receive NOAA alerts from NOAA stations, providing crucial weather information. Use the MONI/NOAA Weather button to access these channels.



Image 4.3: Retevis RB27 NOAA Weather Radio. This image highlights the NOAA Weather Radio feature, indicating its ability to receive weather alerts.

## 4.6 Additional Features

- **Flashlight:** The radio includes a built-in LED flashlight for convenience in low-light conditions.



Image 4.4: Retevis RB27 Flashlight. This image shows the top of the radio with the flashlight illuminated, useful for dark environments.

- **VOX Function:** Voice-activated transmission allows for hands-free operation. Adjust the VOX level through the menu.



Image 4.5: Retevis RB27 VOX Feature. This image displays the radio's screen indicating the VOX function is active, enabling voice-activated transmission.

- **Keypad Lock:** Prevent accidental button presses by activating the keypad lock feature.



Image 4.6: Retevis RB27 Keypad Lock. This image shows the radio's display with a lock icon, indicating that the keypad is locked to prevent unintended operations.

- **Emergency Alarm:** Activate the emergency alarm function for urgent situations.



Image 4.7: Retevis RB27 Emergency Alert. This image illustrates the emergency alert feature, showing a visual representation of the alarm being activated on the radio.

- **Squelch Level:** Adjust the squelch level to filter out weak signals and background noise.
- **Scanning:** The radio supports scanning through channels to find active transmissions.

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Video 4.8: Features of RB27. This video demonstrates various features of the Retevis RB27 radio, including its display, buttons, and functions like NOAA weather and FM radio.

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Video 4.9: How about RB27 GMRS 2 way radio? This video provides an in-depth look at the Retevis RB27 GMRS radio, discussing its capabilities and ease of use.

## 5. RANGE AND REPEATER USAGE

The Retevis RB27 offers long-range communication capabilities, enhanced by its high power output and high-gain antenna. For extended range, especially in challenging terrain, repeaters can be utilized.

- **Repeater Compatibility:** RB27 GMRS radios with channels 23-30 can be connected to a repeater.
- **Range Factors:** Radio range is affected by factors such as radio power, signal type, horizon distance, atmospheric conditions, antenna quality, and terrain/obstacles.





# Long Range

- High power
- Long antenna
- Connecting a Repeater

Image 5.1: Retevis RB27 Long Range Communication. This image illustrates the long-range capability of the Retevis RB27 radio in an outdoor, mountainous environment.

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Video 5.2: Do you know the truth about two way radio range? This video explains the factors affecting two-way radio range, providing valuable context for understanding the RB27's performance.

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Video 5.3: Why choose Retevis RB27 GMRS Radio for outdoor? This video highlights the benefits and features of the Retevis RB27 GMRS radio for outdoor use, emphasizing its reliability and functionality.

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Video 5.4: How About RB27 GMRS Long Range Radio. This video discusses the long-range capabilities of the Retevis RB27 GMRS radio, providing insights into its performance.

## 6. MAINTENANCE

To ensure the longevity and optimal performance of your Retevis RB27 radio, follow these maintenance guidelines:

- **Battery Care:** Regularly charge the 1500mAh Li-ion battery. Avoid overcharging or completely draining the battery to prolong its lifespan. Store the battery in a cool, dry place when not in use.
- **Cleaning:** Use a soft, damp cloth to clean the radio's exterior. Avoid using harsh chemicals or abrasive cleaners.
- **Storage:** Store the radio in a dry, dust-free environment away from extreme temperatures and direct sunlight.
- **Antenna:** The high-gain long antenna is not removable. Handle the radio carefully to avoid damaging the antenna.

## 7. TROUBLESHOOTING

If you encounter issues with your Retevis RB27 radio, refer to the following common troubleshooting tips:

- **No Power:** Ensure the battery is fully charged and correctly installed. Check the power switch.
- **Cannot Transmit/Receive:** Verify that you are on the correct channel and that the volume is adjusted appropriately. Check CTCSS/DCS settings for compatibility with other radios. Ensure the PTT button is functioning correctly.
- **Poor Audio Quality:** Adjust the squelch level. Ensure the microphone and speaker are clear of obstructions.
- **Limited Range:** Radio range is affected by terrain, obstacles, and atmospheric conditions. Ensure you are in an open area or utilizing a repeater if necessary.
- **Programming Issues:** While basic settings can be adjusted via the keypad, advanced programming (e.g., wide/narrow band, high/low power) may require programming software like CHIRP and a compatible USB cable.

## 8. SPECIFICATIONS

Feature	Specification
Item Weight	3.52 ounces
Product Dimensions	9.92 x 8.18 x 2.36 inches
Item Model Number	RB27
Batteries	1 Lithium Ion batteries required. (included)
Display Type	LCD
Number of Channels	30

Feature	Specification
Special Features	NOAA; Flashlight; USB-C charging; 1500mAh battery; VOX; SOS; Keypad lock
Frequency Range	GMRS
Voltage	7.4 Volts (DC)
Water Resistance Level	Not Water Resistant

## 9. WARRANTY AND SUPPORT

Retevis provides a 2-year warranty for the radio body and a 1-year warranty for accessories. We also offer a 30-day no-reason return policy.

Beyond the warranty period, maintenance services are available, with buyers responsible for associated costs.

For any support inquiries, please contact Retevis via Amazon, and we will respond within 12 hours.