

Radtel RT 590

Radtel RT-590 UHF/VHF Dual Band Walkie Talkie User Manual

Model: RT 590 | Brand: Radtel

1. INTRODUCTION

Thank you for choosing the Radtel RT-590 Dual Band Walkie Talkie. This device is a high-performance two-way radio designed for reliable communication across UHF and VHF bands, with additional capabilities for air band reception and FM radio. This manual provides detailed instructions for the proper setup, operation, and maintenance of your RT-590 to ensure optimal performance and longevity.

2. PRODUCT OVERVIEW

2.1 Key Features

- Dual Band UHF/VHF Transmit/Receive (144-146 MHz / 430-440 MHz)
- AM Air Band Receive (108-136 MHz)
- 200 Memory Channels for storing frequencies and CTCSS/DCS codes
- Type-C Charging Interface for convenient charging
- High/Medium/Low Power Output Settings
- VOX (Voice Operated Exchange) Function
- Built-in FM Radio
- CTCSS/DCS Codes for privacy
- DTMF Functionality
- Scan Function
- Dual Watch/Standby
- 1750 Hz Tone for repeater access
- Voice Alert
- Fast Frequency Copy Function
- Automatic/Manual Emergency Alert
- NOAA Weather Alert Support

2.2 Package Contents

- Radtel RT-590 Walkie Talkie Unit
- Rechargeable Lithium-ion Battery
- Antenna
- Type-C Charging Cable
- Charging Base
- Belt Clip
- High-visibility vest (as per product information)
- User Manual (this document)

2.3 Component Identification





Figure 2.3.1: Front view of the Raddtel RT-590 Walkie Talkie, showing the display, keypad, and main controls.



Figure 2.3.2: Detailed views highlighting various parts of the RT-590, including the belt clip, top knob, side buttons, and charging port.

3. SETUP

3.1 Battery Installation and Charging

To install the battery, align the battery pack with the grooves on the back of the radio and slide it upwards until it clicks into place. To remove, press the battery release latch and slide the battery downwards.

Before first use, fully charge the battery. Connect the Type-C charging cable to the radio's Type-C port or place the radio in the charging base. The charging indicator will show the charging status.



Figure 3.1.1: The Radel RT-590 featuring a convenient Type-C charging port for versatile power options.

3.2 Antenna Attachment

Screw the antenna clockwise into the connector on the top of the radio until it is firmly seated. Do not overtighten.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off and Volume Control

Rotate the power/volume knob clockwise to turn on the radio and increase the volume. Rotate counter-clockwise to decrease volume and turn off the radio.

4.2 Channel Selection

Use the UP/DOWN arrow keys to navigate through programmed channels. Alternatively, enter the desired channel number directly using the keypad.

4.3 Fast Frequency Copy Function

The RT-590 allows for quick copying of frequencies and CTCSS/DCS codes from another radio within a 1-meter distance. This feature simplifies setting up your radio to match existing communication systems.



Figure 4.3.1: The fast copy feature allows quick duplication of channel frequencies from another radio, similar to using a frequency meter.

4.4 Air Band Reception (AM)

The RT-590 can receive frequencies in the AM air band (108-136 MHz), allowing users to listen to aircraft communications and tower calls.



Figure 4.4.1: The RT-590's capability to receive AM/FM aviation band frequencies, useful for aviation enthusiasts.

4.5 Emergency Alert

The radio features an automatic/manual emergency alert function. Refer to the detailed menu settings for activation and configuration.



Figure 4.5.1: Illustration of the dedicated emergency alert button on the Radtel RT-590.

4.6 VOX Function

VOX (Voice Operated Exchange) allows for hands-free transmission. When enabled, the radio will transmit automatically when it detects your voice. Adjust VOX sensitivity in the menu.

4.7 FM Radio

To activate the FM radio, press the dedicated FM button. Use the arrow keys to tune to desired FM stations. Press the FM button again to exit FM mode.

4.8 NOAA Weather Alert

The RT-590 supports NOAA weather station channel reception, providing weather warnings. This feature is particularly useful for outdoor activities and work arrangements.



Figure 4.8.1: The NOAA Weather Alert feature helps outdoor staff receive timely weather warnings.

4.9 Cross-Band Intercom

The RT-590 supports cross-band intercom functionality, allowing communication between different frequency bands, either through a cross-band repeater or directly via the radio's internal capabilities.



Figure 4.9.1: Diagram illustrating the cross-band intercom capability of the RT-590.

4.10 Frog Sound Signal

After an intercom transmission is completed, the receiving radio can emit a distinctive 'frog sound' signal, indicating the end of the call. This provides clear communication cues.



Figure 4.10.1: Visual representation of the frog sound signal emitted by the radio after a call ends.

5. MAINTENANCE

5.1 Cleaning

Clean the radio's surface with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Ensure the charging port is free of dust and debris.

5.2 Storage

When not in use for extended periods, store the radio in a cool, dry place. Remove the battery if storing for more than a month to prevent discharge and damage. Avoid extreme temperatures and direct sunlight.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Radio does not power on	Low or dead battery; Incorrect battery installation	Charge the battery; Reinstall battery correctly
Cannot transmit or receive	Wrong frequency/channel; Antenna not attached; Low battery; Out of range	Verify frequency/channel; Attach antenna securely; Charge battery; Move closer to other radios
Poor audio quality	Low signal strength; Obstructions; Volume too low/high	Move to an open area; Adjust volume; Check antenna connection
Battery drains quickly	Frequent transmission; High power setting; Old battery	Reduce transmission time; Use lower power setting when possible; Replace battery if old

7. SPECIFICATIONS

Feature	Detail
Brand	Radtel
Model Number	RT 590
Color	Black
Number of Channels	200
Frequency Range	VHF: 144-146 MHz, UHF: 430-440 MHz (TX/RX); AM: 108-136 MHz (RX); FM: 50-76 MHz (RX), 76-108 MHz (RX)
Max Range	10 Kilometers (approximate, depends on terrain)
Tuning Technology	UHF, VHF
Voltage	7.4 Volts
Battery Type	Lithium-ion (Rechargeable)

Feature	Detail
Water Resistance Level	Not waterproof
Product Dimensions	3P x 6W x 28H centimeters



Figure 7.1.1: Dimensions of the Radtel RT-590 Walkie Talkie, showing height and width measurements.

8. WARRANTY AND SUPPORT

Radtel products are designed for reliability and performance. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Radtel website. If you encounter any issues or require technical assistance, please contact Radtel customer support through their official channels. Please have your model number (RT 590) and purchase information ready when contacting support.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question