

radtel RT-860

Radtel RT-860 Multi Band Ham Radio User Manual

Model: RT-860 | Brand: radtel

INTRODUCTION

The Radtel RT-860 is a versatile multi-band ham radio designed for robust performance across various frequencies. Its durable metal construction ensures resilience in challenging environments, while its ergonomic design provides comfortable handling. This manual provides essential information for setting up, operating, maintaining, and troubleshooting your RT-860 radio.



Figure 1: Radtel RT-860 Multi Band Ham Radio






CB/SSB/HF

CB:27Mhz RX	144-148Mhz TX/RX
FM:64-108Mhz RX	420-450Mhz TX/RX
SW:2.3-30Mhz RX	18-520 AM/FM RX
MW:520-1710Khz RX	1024 Channels
LW:153-279Khz RX	2000mAh Battery
	Dual Antenna Interface


AI ANTI-NOISE


Copy Frequency


Type-c


Robustness

Figure 2: The RT-860 is a U/V Full Band Handheld Two-Way Radio.

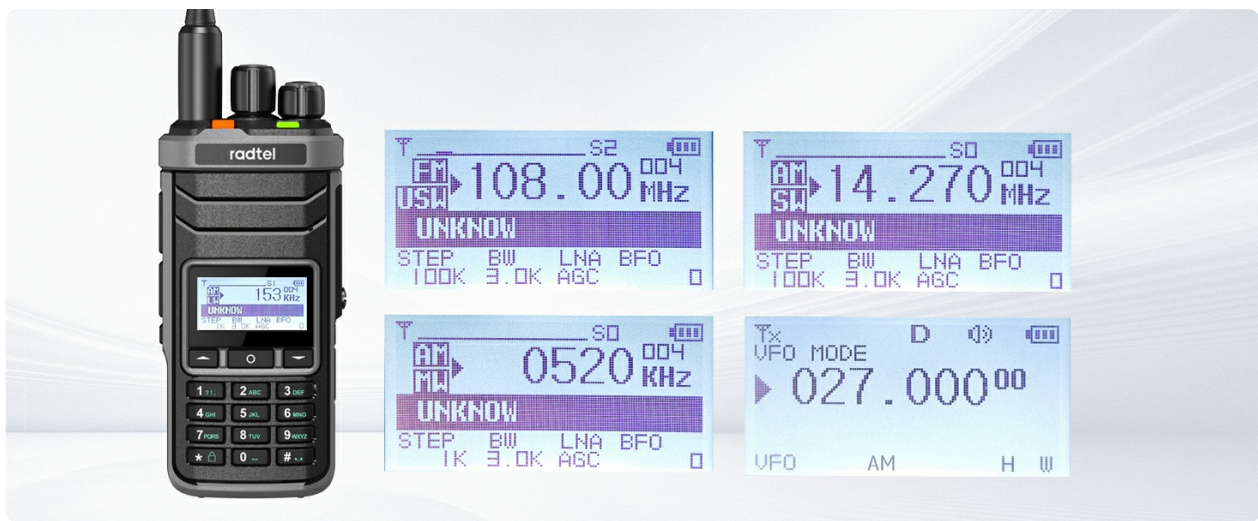


Figure 3: The RT-860 features a thin and ergonomic design for comfortable use.



Figure 4: Built with durable metal material, the RT-860 is dust-proof and crush-resistant.

What's in the Box

Verify that all items are present in the package:

- 1x RT-860 Main unit
- 1x 2000mAh Li-ion Battery
- 1x Dual band antenna
- 1x Desktop charger
- 1x Lanyard
- 1x Belt Clip
- 1x Type C charging Cable
- 1x Power supply with USB port
- 1x English User Manual

SETUP

1. Battery Installation

Align the 2000mAh Li-ion battery with the battery compartment on the back of the radio. Gently push the battery into place until it clicks securely. To remove, slide the battery release latch and pull the battery away from the unit.

2. Antenna Connection

Screw the dual-band antenna clockwise onto the antenna connector on top of the radio until it is finger-tight. Do not overtighten. The RT-860 also features a dedicated port for connecting a shortwave antenna to enhance signal reception.



Figure 5: The RT-860 features two antenna ports for versatile connectivity and 5W output power.



Figure 6: The radio supports a dual antenna interface for improved performance.

3. Charging the Battery

Connect the Type-C charging cable to the radio or place the radio in the desktop charger. The charging indicator will show the charging status. Ensure the radio is fully charged before first use.



Figure 7: The RT-860 offers convenient dual charging options: Type-C fast charging and dock charging.

OPERATING INSTRUCTIONS

Basic Operation

To power on the radio, rotate the power/volume knob clockwise. Adjust the knob to set the desired volume level. To power off, rotate the knob counter-clockwise until it clicks.

Frequency and Channel Modes

The RT-860 supports both VFO (Variable Frequency Oscillator) mode for direct frequency input and Channel mode for pre-programmed channels. Use the V/M button to switch between these modes.



Figure 8: The radio display showing various modes like FM, AM, SW, and VFO.

Band Support

The RT-860 supports a wide range of frequencies and modulation types, including full-band AM, FM, USB, LSB, CW, CB, LW, MW, SW SSB, and Air-Band RX. This allows for versatile communication and reception across different scenarios.

Key Features

- **Instant Communication:** Two independent channels allow for simultaneous management of group chats and private calls.
- **Dual Standby:** The radio supports dual standby, allowing monitoring of two frequencies simultaneously.
- **VOX Function:** Voice-operated transmit (VOX) allows for hands-free operation.
- **NOAA Weather Channels:** Access 11 NOAA weather channels for important weather alerts.
- **Spectrum Display:** Activate the spectrum function to visualize signal activity.



Figure 9: The RT-860 enables instant communication and double control with two independent channels.



Figure 10: The radio supports dual standby for monitoring two frequencies simultaneously.



Figure 11: The VOX function allows for voice-activated transmission.

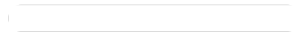


Figure 12: Access 11 NOAA weather channels for important weather information.

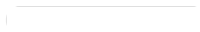


Figure 13: The spectrum display provides a visual representation of signal activity.

Video Guides

For detailed visual instructions on specific operations, please refer to the following official product videos:

- **How to switch shortwave mode and SSB modulation:**

This video demonstrates the process of switching between shortwave mode and SSB modulation on your RT-860 radio.

- **How to edit a channel name:**

Learn how to customize and edit channel names directly on your radio's interface.

- **How to copy a frequency:**

This guide shows you how to quickly copy a frequency for easy saving or use.

- **How to activate spectrum:**

Discover how to activate and utilize the spectrum display feature on your radio.

- **How to fastly set up repeater frequency:**

A quick tutorial on setting up repeater frequencies for extended communication range.

- **RT-860 main video:**

An overview of the Radel RT-860's main features and functionalities.

- **How to switch channel, VFO, zone:**

This video demonstrates how to switch between channel mode, VFO mode, and different zones on your radio.

Cleaning

Regularly clean the radio's exterior with a soft, damp cloth. Avoid using harsh chemicals or abrasive cleaners, as these can damage the casing and display. Ensure all ports are free from dust and debris.

Battery Care

To prolong battery life, avoid fully discharging the battery frequently. Recharge the battery using the provided Type-C cable or desktop charger. Store the radio and battery in a cool, dry place when not in use for extended periods.

TROUBLESHOOTING

If you encounter issues with your Radtel RT-860, consider the following common solutions:

- **No Power:** Ensure the battery is properly installed and fully charged. Check the power/volume knob is rotated clockwise to the 'on' position.
- **Poor Reception:** Verify the antenna is securely attached. Ensure you are within range of the transmitting station or repeater. Consider using an external shortwave antenna for improved SW/MW reception.
- **No Audio:** Check the volume level. Ensure the squelch setting is not too high, which might block weak signals.
- **Programming Difficulties:** Refer to the video guides in the Operating section for step-by-step instructions on programming features like channel names and repeater frequencies.

If the problem persists, contact customer support for further assistance.

SPECIFICATIONS

Feature	Detail
Model Number	RT-860
Item Weight	1.12 pounds
Product Dimensions	1.18 x 2.36 x 4.72 inches
Batteries	1 Lithium Ion battery required (included)
Battery Capacity	2000mAh
Number of Channels	1024
Frequency Range	144-148Mhz/420-450Mhz (TX), Full-band AM FM USB LSB CW CB LW MW SW SSB and Air-Band (RX)
Talking Range Maximum	5 Kilometer
Voltage	7.4 Volts
Water Resistance Level	Not Water Resistant
Manufacturer	Xiamen Radtel Electronics Co.,Ltd
Date First Available	January 14, 2025



Figure 14: Detailed product dimensions and parameter specifications.

WARRANTY AND SUPPORT

The Radtel RT-860 comes with a **1-Year Warranty** from the manufacturer, Xiamen Radtel Electronics Co.,Ltd. For any product inquiries, technical support, or warranty claims, please contact the seller, **Radtel Direct**,

through the platform where you purchased the product. They will be able to provide assistance and guide you through the necessary steps.