Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

radtel RT 890

Radtel RT-890 Ham Radio Instruction Manual

Model: RT-890 | Brand: Radtel

1. Introduction

The Radtel RT-890 is a versatile full-band handheld transceiver designed for ham radio enthusiasts and outdoor activities. It features dual-band transmit/receive capabilities, full-band scanning reception, and a robust set of functions including NOAA weather alerts and a unique frequency copy function. This manual provides essential information for setting up, operating, and maintaining your RT-890 radio.

2. What's in the Box

- RT-890 Radio
- Li-ion Battery (1100mAh)
- Dual Band Flex Antenna
- Desktop Charger
- Belt Clip
- Lanyard
- User Manual



Image: Contents of the Radtel RT-890 package.

3. Product Overview

The Radtel RT-890 offers a comprehensive range of features for effective communication and monitoring:

- **Dual Band TX/RX:** Operates on 144-148Mhz and 420-450Mhz for transmitting and receiving.
- **Full Band RX:** Capable of scanning and receiving frequencies from 136-520Mhz, including AM Air Band (108-136Mhz) and FM Broadcast (64-108Mhz).
- **999 Channels:** Ample storage for various frequencies and settings.
- **Air Copy Frequency:** A unique one-key function to quickly copy frequency and CTCSS/DCS tones from another radio for immediate communication (within 1 meter distance).
- **NOAA Weather Alert:** Supports NOAA U.S. Weather Channel reception for timely alerts.
- **Type-C Charging:** Convenient charging via a Type-C port (USB-C cable not included).
- **Color LCD Display:** Provides clear information with dual band, dual display, and dual standby modes.

Visual Features



Image: Multi-band capabilities of the RT-890, showing various frequency ranges for TX/RX and RX.



Image: The wireless copy frequency feature, allowing quick seeking and communication.



Image: The NOAA weather alert function, useful for outdoor activities.



Image: A summary of key features including NOAA, AM reception, multi-band TX/RX, scan frequency, fast copy frequency, 999 channels, Type-C charger, and Emergency SOS.

Product Videos

▶ **Watch video online**
rt890 v2 video

Video: An overview of the Radtel RT-890's features and display. This video demonstrates the radio's interface and general appearance.

▶ **Watch video online**
Radtel RT-890 Multi-Band Ham Two-Way Radio

Video: A vertical format video showcasing the Radtel RT-890's multi-band capabilities and user interface. It highlights the radio's compact design.

▶ **Watch video online**
Radtle RT-890 Radio 240512

Video: This video provides a brief demonstration of the Radtel RT-890 in use, focusing on its display and button functions.

▶ **Watch video online**
Radtel RT-890 Full Band Ham Two-Way Radio

Video: A detailed look at the Radtel RT-890's full band capabilities and its suitability for ham radio operations. It shows various angles of the device.

▶ **Watch video online**
RT890 Show Video

Video: A short demonstration video highlighting the key features and compact size of the RT-890 radio.

4. Setup

4.1 Battery Installation

1. Align the Li-ion battery pack with the battery compartment on the back of the radio.
2. Gently push the battery into place until it clicks securely.

4.2 Antenna Attachment

1. Screw the dual band flex antenna clockwise onto the antenna connector at the top of the radio until it is finger-tight. Do not overtighten.

4.3 Charging the Battery

The RT-890 can be charged using the included desktop charger or directly via its Type-C port.

- **Using Desktop Charger:** Place the radio into the desktop charger. Ensure the charging indicator light illuminates, indicating proper connection.
- **Using Type-C Port:** Connect a standard USB-C cable (not included) to the Type-C port on the side of the radio and to a compatible power source.

4.4 Initial Power On

1. Rotate the power/volume knob clockwise to turn on the radio.
2. Adjust the volume to a comfortable listening level.

5. Operating Instructions

5.1 Basic Operation

- **Power On/Off:** Rotate the top knob.
- **Volume Control:** Adjust the same top knob.
- **Frequency/Channel Selection:** Use the up/down arrow keys or the numeric keypad to enter frequencies or select channels.

- **Transmit (PTT):** Press and hold the Push-To-Talk (PTT) button on the left side of the radio to transmit. Release to receive.

5.2 Frequency and Band Operation

The RT-890 supports a wide range of frequencies:

- **TX/RX:** 144-148Mhz (VHF) and 420-450Mhz (UHF).
- **Full Band Scanning Receive:** 136-520Mhz.
- **AM Air Band Receive:** 108-136Mhz.
- **FM Broadcast Receive:** 64-108Mhz.

5.3 Air Copy Frequency (One-Key Copy)

This feature allows the RT-890 to quickly copy frequencies and CTCSS/DCS tones from another radio. This is particularly useful for establishing quick communication without manual programming.

1. Ensure the two radios are within approximately 1 meter distance.
2. Activate the Air Copy Frequency function on the RT-890 (refer to the specific button assignment in your user manual or programmable side keys).
3. The RT-890 will scan and capture the frequency and tone from the other radio, enabling immediate communication.

5.4 NOAA Weather Alert

To receive NOAA weather alerts, tune the radio to the designated NOAA U.S. Weather Channels. The radio can be set to monitor these channels for severe weather broadcasts, providing critical information during outdoor activities or power outages.

5.5 Programming Modes

The Radtel RT-890 offers multiple methods for programming channels and settings:

- **Keypad Programming:** Direct entry of frequencies and settings using the radio's numeric keypad.
- **CPS Programming:** Using dedicated Computer Programming Software (CPS) for more advanced and efficient programming via a PC.
- **Chirp Programming:** Compatibility with Chirp software for programming, offering flexibility and community support for various radio models.

6. Maintenance

- **Cleaning:** Use a soft, damp cloth to clean the radio's surface. Avoid harsh chemicals or abrasive cleaners.
- **Battery Care:** To prolong battery life, avoid overcharging or completely draining the battery. Store the battery in a cool, dry place when not in use.
- **Storage:** When storing the radio for extended periods, remove the battery and store the radio in a dry, dust-free environment.

7. Troubleshooting

Problem	Possible Cause	Solution
Radio does not power on	Low or dead battery; improperly installed battery	Charge the battery; ensure battery is correctly installed.
No signal reception	Antenna not attached; incorrect frequency/channel; weak signal area	Attach antenna securely; verify frequency/channel; move to an area with better signal.
Cannot transmit	Incorrect frequency/offset; microphone issue (if using external mic)	Check transmit frequency and offset settings; test with/without external microphone.
Poor VHF sensitivity	Firmware issue; antenna quality	Check for available firmware updates from Radtel; consider trying a different antenna.
Programming difficulties	Software incompatibility; incorrect cable/drivers	Ensure correct CPS/Chirp version and drivers; use a compatible programming cable.

8. Specifications

Feature	Detail
Model Number	RT-890
Item Weight	6.7 ounces
Product Dimensions	12.2 x 2.36 x 1.38 inches
Batteries	1 Lithium Ion batteries required (included)
Display Type	LCD
Number of Channels	999
Frequency Range	144-148Mhz/420-450Mhz TX/RX, 108-520Mhz Scanning Receiving
Talking Range Maximum	5 Kilometer
Tuner Technology	AM/FM
Voltage	7.4 Volts
Water Resistance Level	Not Water Resistant
Manufacturer	Xiamen Radtel Electronics Co.,Ltd
Country of Origin	China
First Available Date	May 13, 2023

9. Warranty and Support

The Radtel RT-890 comes with a **1-year warranty** from the manufacturer, Xiamen Radtel Electronics Co.,Ltd. For technical support, warranty claims, or further assistance, please refer to the contact information provided in the physical user manual included with your product or visit the official Radtel website.

© 2024 Radtel. All rights reserved.

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

Email

you@example.com

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

Open the live page

https://manuals.plus/asin/B0C557GYVC

More documents and user manuals: **https://manuals.plus/**