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

radtel RT-880G

Radtel RT-880G User Manual

Model: RT-880G | Brand: Radtel

1. Introduction

This manual provides comprehensive instructions for the operation, maintenance, and troubleshooting of your Radtel RT-880G Ham Radio. Please read this manual thoroughly before using the device to ensure proper functionality and safety.

1.1 Product Overview

The Radtel RT-880G is a versatile 10W Ham Radio Walkie Talkie featuring GPS and APRS capabilities, 1024 channels, HF SSB reception, and a cross-band repeater function. It is equipped with a 2.4-inch color display and supports a wide range of frequencies for diverse communication needs.



Figure 1.1: Radtel RT-880G main unit with included dual-band antenna, USB-C charging cable, and SW/MW antennas.

1.2 What's in the Box

Verify that all items listed below are present in your package:

- 1x RT-880G Main Unit
- 1x 2400mAh Li-ion Battery
- 1x Dual Band Antenna
- 1x Belt Clip
- 1x Type-C Charging Cable
- 1x Power Supply with USB Port
- 1x MW Antenna
- 1x SW Antenna
- 1x English User Manual (this document)

2. Initial Setup

2.1 Battery Installation

1. Ensure the radio is powered off.
2. Align the battery pack with the grooves on the back of the radio.
3. Slide the battery pack upwards until it clicks securely into place.
4. To remove, press the battery release latch (if present) and slide the battery downwards.

2.2 Antenna Attachment

Carefully screw the desired antenna (Dual Band, MW, or SW) onto the antenna connector at the top of the radio. Do not overtighten.



Figure 2.1: Top view of the radio showing the antenna port and rotary knobs.



Figure 2.2: The dedicated shortwave antenna port for enhanced reception.

2.3 Charging the Battery

The RT-880G supports two charging methods: direct USB-C charging and dock charging.

- **USB-C Charging:** Connect the provided Type-C charging cable to the radio's USB-C port and the other end to the power supply with a USB port.
- **Dock Charging:** Place the radio into the charging dock (if included with your specific package). Ensure the charging contacts align.

The battery indicator on the display will show charging status. A full charge typically takes several hours.



Figure 2.3: USB-C charging port on the side of the radio.



Figure 2.4: Visual representation of both Type-C and dock charging methods.

3. Operating Instructions

3.1 Basic Operation

- **Power On/Off:** Rotate the power/volume knob clockwise to turn on and adjust volume. Rotate counter-clockwise until it clicks to power off.
- **Display:** The 2.4-inch TFT HD color screen provides clear information on channels, frequencies, and settings.



Figure 3.1: The high-definition color display showing channel and frequency information.

- **Channel/Frequency Selection:** Use the rotary encoder or the keypad to navigate through channels or input frequencies directly. The radio supports 1024 channels and three VFO channels.
- **Transmit (PTT):** Press and hold the Push-to-Talk (PTT) button on the side of the radio to transmit. Release to receive. The RT-880G supports triple PTT transmission.
- **Triple Frequency Standby:** The radio can monitor up to three frequencies simultaneously.



Figure 3.2: Display illustrating the triple-frequency standby capability.

3.2 Key Functions and Customization

The side keys and keyboard functions can be customized for quick access to frequently used features.

- **Customizable Side Keys:** Assign functions like NOAA channels, aviation AM reception, VOX, or spectrum scanning to the programmable side keys.
- **One-Key Copy Frequency:** This feature allows for automatic frequency capture.



Figure 3.3: Customization options for side keys and keyboard functions.



Figure 3.4: Instructions for using the one-click frequency copy feature.

3.3 Advanced Features

3.3.1 GPS Positioning & APRS Communication

The RT-880G integrates GPS for accurate positioning and APRS for real-time data encoding/decoding and tracking.

- **GPS Positioning:** Measure distance and direction from a set point. Ideal for outdoor navigation and recording tracks.
- **APRS Communication:** Supports real-time APRS data for seamless communication and location sharing between devices. Automatically calculates distance and direction with GPS coordinates.



Figure 3.5: Illustration of APRS and GPS functionality for location tracking and data exchange.

3.3.2 Cross-Band Repeater Function

The cross-band repeater allows communication between UHF and VHF frequencies, extending signal coverage.

- Enables seamless communication between different frequency bands (e.g., UHF to VHF).
- Enhances signal coverage and connectivity.



Figure 3.6: Diagram explaining the cross-band repeater capability.

3.3.3 Wide Frequency Reception

The RT-880G supports a broad range of reception frequencies, including AM, FM, USB, LSB, CW, CB, LW, MW, SW, and Air-Band RX.

- Connect a shortwave antenna to the dedicated port for improved signal reception on HF bands.
- Seamlessly switch between multiple bands for various communication scenarios.

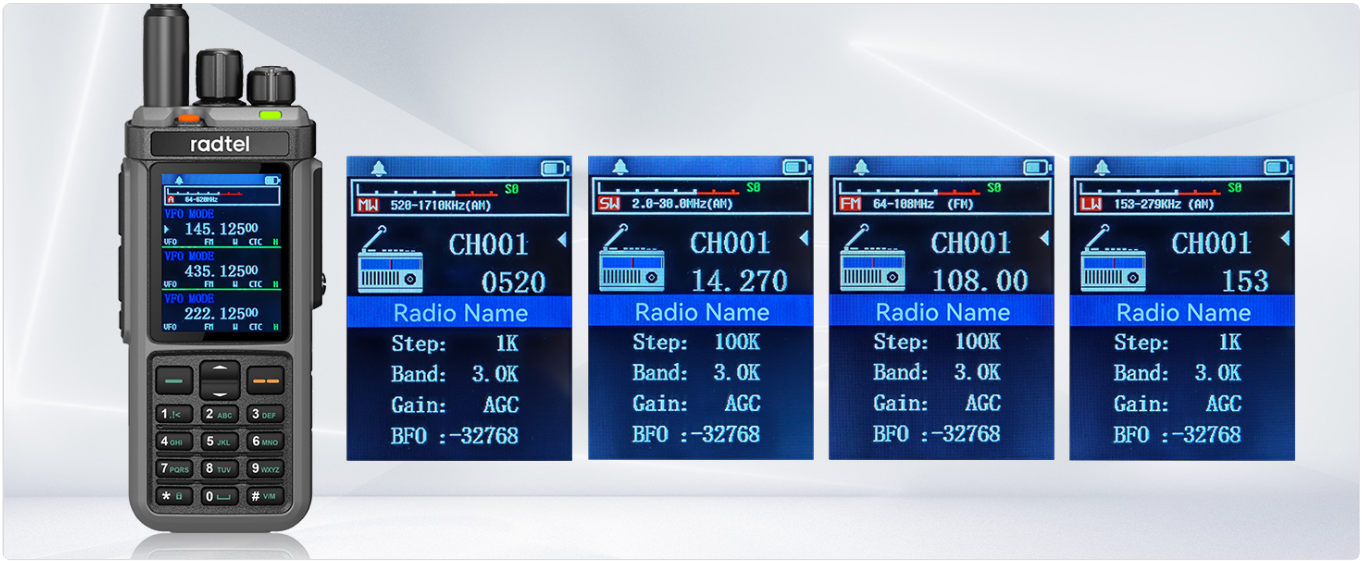


Figure 3.7: Overview of supported frequency ranges and features like 10W power and 1024 channels.



Figure 3.8: Spectrum display for analyzing frequency activity.



Figure 3.9: Access to 11 NOAA weather channels for important weather alerts.

4. Maintenance

4.1 Care and Cleaning

- Wipe the radio's surface with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- Keep the antenna and charging ports free from dust and debris.
- The device is not water resistant; avoid exposure to water or high humidity.

4.2 Battery Care

- Charge the battery fully before first use.

- Avoid completely discharging the battery to prolong its lifespan.
- Store the radio and battery in a cool, dry place when not in use for extended periods.

5. Troubleshooting

If you encounter issues with your Radtel RT-880G, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
Radio does not power on.	Battery is not installed correctly or is discharged.	Ensure battery is securely installed. Charge the battery fully.
Poor reception or transmission.	Antenna not properly attached, incorrect frequency, or environmental interference.	Check antenna connection. Verify frequency settings. Move to an open area away from obstructions.
Display is dim or unreadable.	Brightness settings too low or direct sunlight.	Adjust display brightness in settings. Move to a shaded area if in direct sunlight.
GPS/APRS not functioning.	GPS signal obstruction or feature not enabled.	Ensure clear line of sight to the sky. Check GPS/APRS settings in the menu to ensure they are enabled.

6. Technical Specifications

Feature	Specification
Model Number	RT-880G
Item Weight	1.32 pounds (approx. 0.6 kg)
Product Dimensions	1.38 x 2.36 x 11.5 inches (3.5 x 6 x 29.2 cm)
Battery	2400mAh Li-ion (included)
Number of Channels	1024
Frequency Range (TX/RX)	136-174MHz / 420-450MHz (VHF/UHF)
Frequency Range (RX Only)	Full-band AM, FM, USB, LSB, CW, CB, LW, MW, SW, Air-Band
RF Power Output	10W
Tuner Technology	AM/FM/SSB
Talking Range Maximum	10 Kilometer (approx. 6.2 miles)
Voltage	7.38 Volts
Display	2.4-inch TFT HD Color Screen
Special Features	GPS, APRS, Cross-Band Repeater, Customizable Keys, USB-C Charging
Water Resistance Level	Not Water Resistant
Country of Origin	China



Figure 6.1: The robust military-grade metal body designed for durability.

7. Warranty and Support

7.1 Product Warranty

The Radtel RT-880G comes with a **1-Year Warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or natural disasters.
Please retain your proof of purchase for warranty claims.

7.2 Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Radtel customer support. Refer to the contact information provided on the official Radtel website or your purchase documentation.
For more information, visit the Radtel Store on Amazon.

© 2025 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/B0F9LLKCKF

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