

## radtel RT-880

# Radtel RT-880 10W Ham Radio User Manual

Your comprehensive guide to setting up, operating, and maintaining your Radtel RT-880 portable two-way radio.

## 1. INTRODUCTION

### 1.1 Product Overview

The Radtel RT-880 is a versatile 10W Ham Radio designed for long-range communication, featuring a cross-band repeater, a 2.4-inch color display, and extensive frequency reception capabilities. It supports a wide range of communication modes, making it suitable for various applications from commercial use to recreational activities.

- **Cross-Band Repeater:** Enables seamless communication between UHF and VHF frequencies for enhanced signal coverage.
- **Wide Frequency Range:** Supports full-band AM, FM, USB, LSB, CW, CB, LW, MW, SW SSB, and Air-Band Receive.
- **Customizable Functions:** Side keys and keyboard functions can be customized for quick access to essential features.
- **Dual-Band Support:** Offers versatile communication options across different environments.
- **Long-Lasting Battery:** Equipped with a 2400mAh battery and convenient USB-C charging.
- **Triple Standby and Display:** Monitor up to three frequencies simultaneously.
- **High-Definition Display:** 2.4-inch TFT HD color screen for clear readability and intuitive navigation.

### 1.2 Package Contents

Please verify that all items are present in your package:

- 1x RT-880 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 English User Manual
- 1x Short Wave Antenna

- 1x Middle Wave Antenna
- 1x Type C Programming Cable

## 2. SETUP

### 2.1 Battery Installation and Charging

To install the battery, align the battery pack with the compartment on the back of the RT-880 unit and slide it into place until it clicks securely. To charge the battery, connect the provided Type-C charging cable to the radio's Type-C port or place the radio in the charging dock. The charging indicator light will show the charging status.

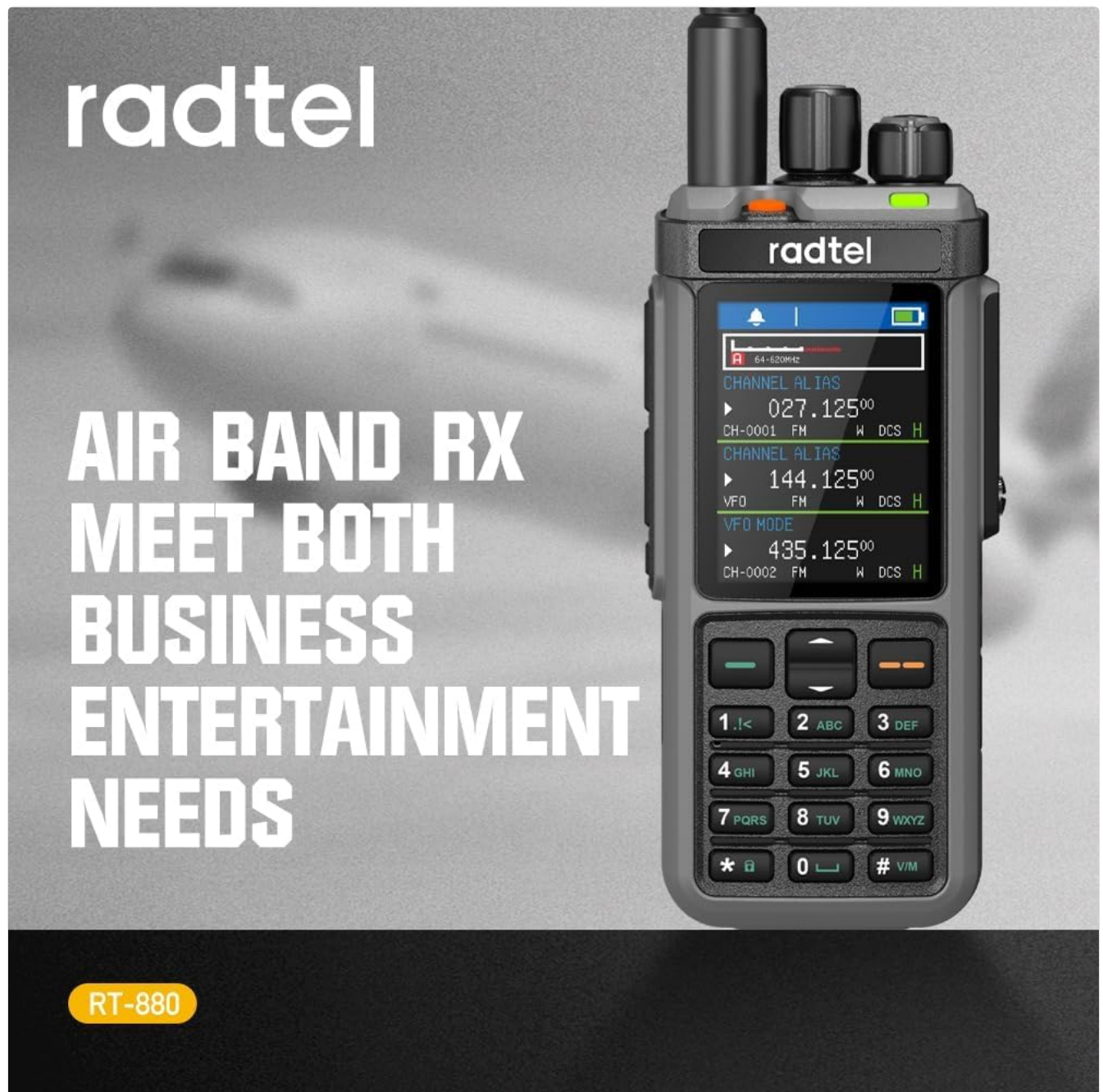


Image: Radtel RT-880 showing Type-C fast charging option.



Image: Radtel RT-880 illustrating dual charging options: Type-C direct connection and dock charging.

## 2.2 Antenna Attachment

Screw the dual-band antenna clockwise onto the antenna connector on top of the radio until it is finger-tight. For shortwave reception, connect the included shortwave antenna to the dedicated shortwave antenna port.



Image: The Radtel RT-880 main unit with its standard dual-band antenna, a shortwave antenna, and a USB-C charging cable.

## 2.3 Initial Power On

Press and hold the power button (usually located on the side or top) until the display illuminates. The radio will perform a self-check and then display the main operating screen.



### 3. OPERATING INSTRUCTIONS

#### 3.1 Display Overview

The RT-880 features a 2.4-inch TFT HD large color screen, providing clear and vivid information. The display shows active frequencies, channel aliases, signal strength, battery status, and various mode indicators. The triple standby feature allows monitoring of three frequencies simultaneously.



Image: Detailed view of the Radtel RT-880's 2.4-inch TFT HD color screen, highlighting its clarity and ability to display multiple frequencies.

#### 3.2 Basic Operation

- **Power On/Off:** Press and hold the power button.
- **Volume Control:** Rotate the top knob to adjust the audio volume.
- **Channel/Frequency Selection:** Use the keypad or rotary encoder to input or scroll through frequencies/channels. The radio supports 1024 channels and three VFO channels.

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

radtel

# TYPE-C FAST CHARGING OPTION



Image: The Radtel RT-880's display showing multiple active frequencies, demonstrating its 1024 memory channel capability for flexible communication.

### 3.3 Frequency Range and Modes

The RT-880 offers extensive frequency coverage and supports various modes:

- **Receive Modes:** AM, FM, USB, LSB, CW, CB, LW, MW, SW SSB, and Air-Band.
- **Transmit Frequencies:** 136-174MHz (TX/RX), 144-148MHz (TX/RX), 420-450MHz (TX/RX), 400-520MHz (TX/RX).
- **Cross-Band Repeater:** Activate this function to relay signals between different frequency bands (UHF/VHF).

# Customize Side Keys And Keyboard Functions (to your preferences.)



11 NOAA Channels



Receives aviation AM



Customize shortcut keys



VOX function



Type-C + Desk Charger



Spectrum scanning function

## One key Copy Frequency (Frequency Auto Capture)



Image: The Radtel RT-880 showcasing its CB/SSB/HF capabilities and supported transmit/receive frequency ranges.

### 3.4 Customizing Side Keys and Keyboard Functions

The RT-880 allows you to customize the functions of its side keys and keyboard for a more efficient user experience. This includes quick access to features like NOAA channels, aviation AM reception, VOX, and spectrum scanning.





Image: The Radtel RT-880's interface demonstrating the ability to customize side keys and keyboard functions, including one-key copy frequency.

### 3.5 One-Click Copying Frequency

The radio features a convenient one-click frequency copying function (Frequency Auto Capture). To use this:

1. Press the 'Menu' key to enter the Menu.
2. Select 'Key Define' and choose the desired key for this function (e.g., 'Freq Detect').
3. Press the custom key to enter frequency detection. During detection, press the 'Menu' or 'PTT' key to exit. Use '\*' to switch to Remote CTC/DCS and '#' to switch the detection band.





Image: Visual guide demonstrating the steps for one-click frequency copying on the Radtel RT-880.

## 4. MAINTENANCE

### 4.1 Cleaning

Wipe the radio's surface with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Ensure the radio is dry before use or storage.

### 4.2 Battery Care

To prolong battery life, avoid fully discharging the battery frequently. Charge the battery regularly, even if the radio is not in use. Store the battery in a cool, dry place when not in use for extended periods.

### 4.3 Storage

When storing the radio for a long time, remove the battery. Store the radio in a dry, dust-free environment away from direct sunlight and extreme temperatures.

## 5. TROUBLESHOOTING

This section addresses common issues you might encounter with your Radtel RT-880.

Problem	Possible Cause	Solution
Radio does not power on.	Battery is low or not installed correctly.	Charge the battery or re-install it correctly.
No audio or weak audio.	Volume is too low; antenna is loose; squelch level is too high.	Increase volume; check antenna connection; adjust squelch level.

Problem	Possible Cause	Solution
Cannot transmit or receive.	Incorrect frequency/channel; battery low; antenna issue.	Verify frequency/channel; charge battery; check antenna.
Display is blank or flickering.	Battery low; software issue.	Charge battery; try restarting the radio. If problem persists, contact support.
Radio asks for a password.	Password protection is enabled.	Enter the correct password. If forgotten, refer to the programming software manual or contact support.

## 6. SPECIFICATIONS

Feature	Detail
Model Number	RT-880
Item Weight	1.1 pounds
Product Dimensions	1.26 x 2.36 x 12.01 inches
Batteries	1 x 9V batteries required (included)
Number of Channels	1024
Frequency Range (TX/RX)	136-174MHz, 144-148MHz, 420-450MHz, 400-520MHz
Tuner Technology	AM/FM/SSB
Special Features	AM USB LSB CW CB LW MW SW SSB Reception, 10W Power, Cross Band Repeater Function
Talking Range Maximum	10 Kilometer
Voltage	7.38 Volts
Water Resistance Level	Not Water Resistant
Manufacturer	Xiamen Radtel Electronics Co.,Ltd

## 7. WARRANTY AND SUPPORT

### 7.1 Warranty Information

The Radtel RT-880 comes with a 1-year manufacturer's warranty from the date of purchase. This warranty covers defects in materials and workmanship under normal use. 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 through the retailer where you purchased the product or visit the official Radtel website for contact information.