

**radtel RT-4D**

# Radtel RT-4D DMR Radio User Manual

Model: RT-4D | Brand: Radtel

## 1. INTRODUCTION

The Radtel RT-4D is a versatile dual-band UHF/VHF walkie-talkie designed for reliable communication. It supports both analog and digital modes, offering 1024 channels and dual time slot functionality for efficient operation in Tier 1 and Tier 2 modes. This radio is equipped with advanced features such as 256 voice encryption keys, NOAA weather forecast reception, SMS text messaging, and one-key frequency measurement. Its user-friendly design includes intuitive controls and a clear display, making it suitable for various applications.





Figure 1: Front view of the Radtel RT-4D DMR Radio, showcasing its display and keypad.

## 2. WHAT'S IN THE BOX

Upon unboxing your Radtel RT-4D DMR Radio, please ensure all the following components are present:

- 1x Radtel RT-4D Radio
- 1x 3500mAh Li-ion battery
- 1x Desktop charger
- 1x USB-C cable
- 1x Dual band antenna
- 1x Belt clip
- 1x English user manual (this document)

## 3. SETUP GUIDE

### 3.1. Battery Installation

Align the battery with the back of the radio and slide it into place until it clicks securely. To remove, press the release latch (if present) and slide the battery off.

### 3.2. Antenna Attachment

Screw the dual-band antenna clockwise into the antenna connector on top of the radio until it is finger-tight. Do not overtighten.

### 3.3. Charging the Radio

The Radtel RT-4D can be charged using the included desktop charger or directly via its USB-C port.

*Video 1: Demonstrates the use of the desktop charger for the Radtel RT-4D. Place the radio into the charging cradle to begin charging.*

*Video 2: Illustrates how to connect the USB-C cable directly to the radio for charging. This provides a convenient charging option on the go.*

## 4. OPERATING MODES

The RT-4D supports both analog and digital communication modes, offering flexibility for various radio systems. It also features dual time slot functionality for efficient digital communication.

# DMR+ANALOG DUAL MODE RADIO

DMR Digital + Analog Handheld Radio

RT-4D



Figure 2: The Radtel RT-4D supports both DMR Digital and Analog modes, providing broad compatibility.

## 4.1. Switching Between Channel, Frequency, and Zone Modes

The radio allows users to easily switch between different operational modes: Channel Mode, Frequency Mode (VFO), and Zone Mode. This flexibility enables quick adaptation to different communication environments and channel configurations.

*Video 3: Demonstrates the process of switching between channel, frequency (VFO), and zone modes on the RT-4D radio.*

*Video 4: Shows how the display changes to reflect the current channel, frequency, or zone mode, providing clear visual feedback to the user.*

## 5. KEY FEATURES

### 5.1. Single, Group, and All Call Options

The RT-4D offers flexible calling options, including individual calls, group calls, and all calls, to suit various communication

needs within a network.



Figure 3: Illustration of the single, group, and all call functionalities available on the radio, allowing for versatile communication.

## 5.2. Digital Encryption Safety

The radio supports 256 voice encryption keys, including ARC/AES-128/AES-256 methods, to ensure secure and private communications, preventing unauthorized interception.



Figure 4: Visual representation of the digital encryption feature, highlighting its role in securing communications.

### 5.3. NOAA Weather Forecast

Stay informed with integrated NOAA weather forecast reception, providing timely weather alerts and information directly on your radio.

*Video 5: Demonstrates how to access and utilize the NOAA weather forecast feature on the Radtel RT-4D.*

### 5.4. SMS Text Messaging

The RT-4D allows sending SMS text messages to other compatible RT-4D radios, providing an alternative communication method when voice calls are not feasible or preferred.

*Video 6: Shows the functionality of sending and receiving SMS messages on the radio's display.*

### 5.5. One-Key Frequency Measurement (Analog) / Frequency Detective

Quickly detect and copy frequencies and sub-tones from nearby analog radios with the one-key frequency measurement feature, simplifying channel setup.

# ONE-CLICK DETECTING REMOTE SUB-TONE DECODING

Quick Matching,  
Quick Decoding



Figure 5: The radio's capability for one-click detecting and decoding remote sub-tones for quick matching.

Video 7: Demonstrates how to copy a frequency and sub-tone from another radio in the vicinity, streamlining the setup process.

Video 8: Shows the frequency detective function in action, identifying active frequencies.

## 5.6. Spectrum Functions (TX Test)

Utilize the spectrum functions for TX testing, allowing you to analyze and test signal strength across different frequencies.

# SPECTRUM FUNCTIONS

## TX TEST

### Testing Signal of Different Frequencies



Figure 6: Depicts the radio's display showing spectrum analysis during a TX test, useful for signal evaluation.

#### 5.7. PC Programming

For advanced configuration and customization, the RT-4D can be programmed via PC using dedicated software. This allows for detailed management of channels, contacts, and other radio settings.

*Video 9: Illustrates the process of connecting the radio to a computer for programming, showing the software interface.*

#### 5.8. Customizable Side Key and Keypad Functions

The radio features customizable side keys and keypad functions, allowing users to assign frequently used features for quick access and enhanced operational efficiency.

*Video 10: Demonstrates how to define and customize the functions of the side keys and keypad buttons on the radio.*

## 6. SPECIFICATIONS

Feature	Detail
Item Weight	1.04 pounds
Product Dimensions	1.18 x 2.48 x 12.28 inches
Country of Origin	China
Item Model Number	RT-4D
Batteries	Lithium Ion batteries required.
Number of Channels	1024
Frequency Range	144-148MHz / 420-450MHz
Talking Range Maximum	5 Kilometer
Tuner Technology	UHF/VHF
Voltage	7.4 Volts
Water Resistance Level	Not Water Resistant

## 7. TROUBLESHOOTING

- **Radio not powering on:** Ensure the battery is fully charged and correctly installed. Check the power button for proper function.
- **No signal reception:** Verify the antenna is securely attached. Check if the radio is in the correct channel, frequency, or zone mode. Ensure you are within range of a compatible transmission.
- **Poor audio quality:** Adjust the volume. Check for obstructions around the microphone and speaker. Ensure the frequency or channel is clear of interference.
- **Charging issues:** Confirm the desktop charger or USB-C cable is properly connected and receiving power. Check the charging indicator light.
- **Programming difficulties:** Refer to the PC programming section (5.7) and ensure the correct software and drivers are installed on your computer.

## 8. WARRANTY AND SUPPORT

### 8.1. Warranty Information

The Radtel RT-4D DMR Radio comes with a **1-year warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use. Please retain your proof of purchase for warranty claims.

### 8.2. Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact Radtel customer support through their official website or the contact information provided with your product packaging. Please have your model number and purchase details ready when contacting support.

## Related Documents - RT-4D

	<p><a href="#"><u>Radtel RT-910/RT-910B Dual Band Two-Way Radio User Manual</u></a></p> <p>Comprehensive user manual for the Radtel RT-910 and RT-910B dual band two-way radios, detailing features, operations, button functions, display indicators, menu system, technical specifications, and safety information.</p>
	<p><a href="#"><u>Radtel RT-751 VHF UHF Walkie-Talkie User Manual</u></a></p> <p>Comprehensive user manual for the Radtel RT-751 VHF UHF Walkie-Talkie, covering installation, operation, features, technical specifications, and warranty information.</p>
	<p><a href="#"><u>radtel RT-910/RT-910B Zweiwegradio Bedienungsanleitung</u></a></p> <p>Umfassende Bedienungsanleitung für das radtel RT-910/RT-910B Zweiwegradio. Enthält Informationen zu Funktionen, Tastenbelegung, Menüführung, Sicherheitshinweisen und technischen Spezifikationen.</p>
	<p><a href="#"><u>Manual de Usuario Radio Bidireccional Radtel RT-910/RT-910B</u></a></p> <p>Guía completa del usuario para la radio bidireccional Radtel RT-910 y RT-910B. Aprenda sobre sus funciones, operaciones, especificaciones técnicas y seguridad.</p>
	<p><a href="#"><u>Manuale d'Uso Ricetrasmettitore Radtel RT-860</u></a></p> <p>Manuale d'uso completo per il ricetrasmettitore Radtel RT-860, con istruzioni dettagliate su precauzioni, funzioni della tastiera, impostazioni, gestione dei canali e specifiche tecniche.</p>
	<p><a href="#"><u>Radtel RT-752 Dual Band Two-Way Radio User Manual</u></a></p> <p>This user manual provides comprehensive instructions for operating the Radtel RT-752 dual band two-way radio, covering its features, menu functions, technical specifications, and safety guidelines.</p>