

[Manuals.plus](#) /

› [radtel](#) /

› Radtel RT-4D DMR Radio – Digital Walkie Talkie, Dual Mode Analog/Digital, 1024 Channels, Dual Time Slot, Amateur Radio Communication

radtel RT-4D

Radtel RT-4D DMR Radio User Manual

Model: RT-4D | Brand: Radtel

INTRODUCTION

Thank you for choosing the Radtel RT-4D DMR Radio. This digital walkie-talkie is designed for reliable and efficient amateur radio communication, supporting both digital and analog modes. With 1024 channels and dual time slot functionality, the RT-4D offers advanced features for a wide range of communication needs. Please read this manual thoroughly to understand the operation and maintenance of your device.

PACKAGE CONTENTS

Before you begin, please verify that all items are present in your package:

- Radtel RT-4D DMR Radio Unit
- Rechargeable Battery (12V)
- Antenna
- Belt Clip
- Charging Base
- Power Adapter
- User Manual (this document)

SETUP

1. Battery Installation

To install the battery:

1. Align the battery pack with the grooves on the back of the radio.
2. Slide the battery upwards until it clicks into place.
3. Ensure the battery release latch is securely engaged.

2. Charging the Battery

For optimal performance, fully charge the battery before first use.

1. Connect the power adapter to the charging base.
2. Place the radio with the installed battery into the charging base.
3. The charging indicator light will show the charging status (e.g., red for charging, green for fully charged).

3. Attaching the Antenna

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

4. Initial Power On

Rotate the Power/Volume knob clockwise to turn on the radio. Adjust the knob to your desired listening volume.





Figure 1: Front view of the Radtel RT-4D DMR Radio, showing the display, keypad, and top controls.

OPERATING INSTRUCTIONS

Basic Controls

- **Power/Volume Knob:** Turns the radio on/off and adjusts volume.
- **Channel/Menu Knob:** Navigates through channels or menu options.
- **PTT (Push-to-Talk) Button:** Press and hold to transmit, release to receive.
- **Keypad:** Used for direct frequency input, channel selection, and menu navigation.
- **Display Screen:** Shows current frequency, channel, mode, battery status, and other indicators.

Channel Selection and Mode Switching

The RT-4D supports 1024 channels and operates in both Analog and Digital (DMR) modes. You can switch between VFO (Variable Frequency Oscillator) mode for direct frequency input and Channel mode for pre-programmed channels.

- Press the **V/M** button on the keypad to toggle between VFO and Channel modes.
- In Channel mode, use the Channel/Menu knob or the up/down arrow keys on the keypad to select a channel.
- The radio automatically detects and switches between Analog and Digital modes based on the received signal or programmed channel settings.



DMR+ANALOG DUAL MODE RADIO

DMR Digital + Analog Handheld Radio

RT-4D

Figure 2: The Radtel RT-4D displaying its capability for both DMR Digital and Analog handheld radio operation.

Making Calls (Digital Mode)

The RT-4D supports Single Call, Group Call, and All Call functions in DMR mode.

- **Single Call:** For direct communication with a specific contact. Select the desired contact from your contact list.
- **Group Call:** To communicate with a predefined group of users. Select the group from your group list.
- **All Call:** To broadcast a message to all users within range on the current channel.

Press the PTT button to initiate the call after selecting the desired call type and contact/group.

SINGLE/GROUP/ALL CALL MULTIPLE CALLING CHOICES



Single call group call group call communication function can be set according to their own needs

SINGLE CALL

Add Friend, Call Alone



GROUP CALL

Create Calling Group for All Member



ALL CALL

Up to 500 Contacts



Figure 3: Illustration of the multiple calling choices available on the Radtel RT-4D, including Single Call, Group Call, and All Call.

Dual Time Slot Operation

The RT-4D utilizes 2-Time Slot TDMA (Time Division Multiple Access) technology, allowing two simultaneous conversations on a single frequency. This enhances spectrum efficiency.

2 TIME-SLOT DIGITAL/ANALOG SIGNAL COMPATIBLE

High/Low Power Switching
Strong Penetration

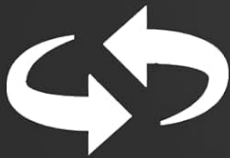


Figure 4: The Radtel RT-4D demonstrating its 2-Time Slot Digital/Analog Signal Compatibility, indicating high/low power switching and strong penetration.

Advanced Functions

- **Spectrum Functions:** The radio can perform a TX test to analyze and test signals across different frequencies. Access this feature through the radio's menu.

SPECTRUM FUNCTIONS

TX TEST

Testing Signal of Different Frequencies



Figure 5: The Radtel RT-4D displaying its Spectrum Functions, including the TX Test for analyzing signals of different frequencies.

- **One-Click Remote Sub-Tone Decoding:** This feature allows for quick matching and decoding of remote sub-tones, simplifying communication setup.

ONE-CLICK DETECTING REMOTE SUB-TONE DECODING

Quick Matching,
Quick Decoding



Figure 6: The Radtel RT-4D demonstrating its One-Click Detecting Remote Sub-Tone Decoding capability for quick matching and decoding.

- **Digital Encryption:** For enhanced communication security, the RT-4D supports digital encryption to prevent cross-interference and unauthorized listening.



Figure 7: The Radtel RT-4D highlighting its Digital Encryption Safety feature, designed to avoid cross-interference of frequency and channels, and provide anti-spy protection.

MAINTENANCE

Cleaning the Radio

Use a soft, damp cloth to clean the radio's surface. Do not use harsh chemicals or abrasive cleaners. Ensure the radio is powered off and the battery is removed before cleaning.

Battery Care

- Avoid fully discharging the battery frequently.
- Store the battery in a cool, dry place when not in use for extended periods.
- Do not expose the battery to extreme temperatures.

Storage

When storing the radio for a long time, remove the battery and store the radio in a dry, dust-free environment.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Radio does not power on.	Battery is not installed correctly or is discharged.	Ensure battery is properly seated. Charge the battery fully.
No signal reception.	Incorrect frequency/channel, antenna not attached, or out of range.	Verify frequency/channel settings. Ensure antenna is securely attached. Move closer to the transmitting radio or repeater.
Radio freezes or becomes unresponsive.	Temporary software glitch.	Perform a hard reset by removing and reinserting the battery. If the issue persists, contact support.
Poor audio quality.	Low battery, weak signal, or incorrect squelch setting.	Charge the battery. Adjust squelch level. Ensure good signal strength.

SPECIFICATIONS

Feature	Detail
Brand	Radtel
Model	RT-4D
Dimensions	3 x 6.3 x 31.19 cm
Weight	500 grams
Battery	1 x 12V (included, rechargeable)
Voltage	7.4 Volts
Number of Channels	1024
Maximum Talk Range	5 Kilometers
Compatible Devices	Two-way radios with 144-146 MHz and 430-440 MHz frequency bands, DMR digital mode, and standard two-way accessories supporting UHF/VHF.
Connection Protocol	DMR
UPC	016392405514

WARRANTY AND SUPPORT

Radtel products are designed for durability and performance. For information regarding warranty coverage, returns, or technical support, please refer to the official Radtel website or contact your point of purchase. Keep your proof of purchase for any warranty claims.

Software updates are not guaranteed beyond the initial purchase date, as indicated by "unknown" for guaranteed updates.

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