

# Retevis RT3S DMR Radio User Manual

Model: RT3S | Brand: Retevis

## 1. INTRODUCTION

The Retevis RT3S is a versatile dual-band Digital Mobile Radio (DMR) designed for reliable two-way communication. It supports both digital and analog modes, offering flexibility for various communication environments. With features like dual display, dual standby, dual reception, and a 1.7-inch LCD screen, it provides efficient operation. The RT3S is equipped with a 2000mAh battery for extended use and supports up to 3000 channels and 120,000 contacts, making it suitable for a wide range of applications, including emergency preparedness and amateur radio use.



Figure 1.1: Retevis RT3S DMR Radio on its charging dock.



Figure 1.2: Key features of the Retevis RT3S, including rechargeable battery, dual band operation, compatibility, text messaging, 3000 channels, and digital/analog modes.



Figure 1.3: Overview of the Retevis RT3S capabilities, highlighting its compatibility, dual-band functionality, text messaging,

rechargeable battery, emergency alarm, and digital DMR support.

## 2. WHAT'S IN THE BOX

Upon unboxing your Retevis RT3S DMR Radio, please ensure all the following items are present:

- 1 x RT3S DMR Radio
- 1 x 2000mAh Li-ion Battery
- 1 x Antenna
- 1 x Charger Dock & Belt Clip
- 1 x User Manual



Figure 2.1: All components included in the Retevis RT3S package.

## 3. SETUP

### 3.1. Attaching the Battery

To attach the 2000mAh Li-ion battery, align the battery with the back of the radio and slide it into place until it clicks securely. To remove, locate the release catch at the top of the battery compartment, press it, and slide the battery off.

## 2000MAH RECHARGEABLE BATTERY



**Rechargeable  
Battery**

**Working  
16 hours**

**Standby  
48 hours**

Figure 3.1: The 2000mAh rechargeable battery provides approximately 16 hours of working time and 48 hours of standby time.

### 3.2. Attaching the Antenna

Screw the antenna onto the SMA connector located at the top of the radio, next to the knobs, until it is finger-tight. Do not overtighten.

### 3.3. Attaching the Belt Clip

The belt clip can be screwed into the designated holes on the back of the radio for convenient carrying.



Figure 3.2: Labeled diagram showing the various parts of the Retevis RT3S radio.

## 4. OPERATING INSTRUCTIONS

### 4.1. Power On/Off and Volume Control

To power on the radio, rotate the Power/Volume knob clockwise. Continue rotating to adjust the volume. To power off, rotate the knob counter-clockwise until it clicks.

### 4.2. Channel and Zone Selection

Use the Channel-selecting knob to navigate through available channels. The radio supports zones, which are groups of channels. You can select zones via the menu.

### 4.3. Keypad and Menu Navigation

The front panel features a numeric keypad for direct input and navigation. The green button typically confirms selections or enters the menu, while the red button acts as a back or exit function. Use the up/down arrow keys for menu navigation.

Video 4.1: Retevis RT3S Dual Band DMR Radio Function Introduction. This video demonstrates the physical components, basic assembly, and an overview of the radio's menu system and features.

#### 4.4. Digital and Analog Modes

The RT3S supports both digital (DMR) and analog communication modes. This allows for compatibility with a wider range of radio systems. You can switch between these modes via the radio's settings.



Figure 4.2: The Retevis RT3S seamlessly combines digital and analog communication capabilities.

#### 4.5. VFO Mode Operation

To enter VFO (Variable Frequency Oscillator) mode, long press the red button for approximately 5 seconds. This allows for direct frequency input and adjustment.

Video 4.3: Retevis RT3S - How to operate into VFO MODE. This video demonstrates the process of switching the radio into VFO mode for direct frequency tuning.

#### 4.6. Contacts and Channels

The radio supports up to 3000 channels and 120,000 contacts. You can manage your contact list and channel settings through the menu. The radio also features a call log to view missed, answered, and outgoing calls, along

with a recording function for conversations.



Figure 4.4: The Retevis RT3S supports a large number of channels and contacts for extensive communication networks.

## 5. MAINTENANCE

To ensure the longevity and optimal performance of your Retevis RT3S radio, follow these maintenance guidelines:

- **Cleaning:** Use a soft, damp cloth to clean the radio's exterior. Avoid harsh chemicals or abrasive cleaners.
- **Battery Care:** Charge the battery fully before first use. For long-term storage, charge the battery to about 50% and store it in a cool, dry place. Avoid extreme temperatures.
- **Storage:** Store the radio in a dry, dust-free environment when not in use.
- **Antenna:** Ensure the antenna is securely attached but do not overtighten. Inspect for any damage regularly.

## 6. TROUBLESHOOTING

This section addresses common issues you might encounter with your Retevis RT3S radio.

## 6.1. Programming Difficulties (Windows 10/11)

Some users have reported issues with programming the radio, particularly with Windows 10 and 11 drivers. If you experience this, consider the following steps:

1. Download the latest Retevis CPS (Customer Programming Software) and Windows 10 drivers from the official Retevis website.
2. Disconnect your computer from the internet before installing drivers. Windows may automatically update drivers, causing conflicts.
3. Install the Windows 10 driver for the programming cable.
4. Install the Retevis CPS software.
5. Connect the programming cable to your computer and the radio. Turn on the radio.
6. You should now be able to read and program the radio.

For Windows 11, ensure that "core isolation" settings are not interfering with driver installation. If issues persist, consult the official Retevis support or community forums for updated driver information.

## 6.2. Radio Not Transmitting/Receiving

- Check that the antenna is securely attached.
- Verify that you are on the correct channel and zone.
- Ensure the volume is turned up.
- Confirm that the battery is charged.
- If using DMR, check that the correct talk group and color code are selected.

## 7. SPECIFICATIONS

Feature	Specification
Item Weight	9.7 ounces
Product Dimensions	2.09 x 1.42 x 10.94 inches
Item Model Number	RT3S
Batteries	1 Lithium Ion battery required (included)
Display Type	LCD
Color	Black
Number of Channels	3000
Special Feature	Digital/analog radio, support OpenGD77, 120k contacts, dual time slot
Frequency Range	136-174 & 400-480 MHz
Talking Range Maximum	5 Kilometer
Tuner Technology	DMR Dual Band
Voltage	7.4 Volts
Water Resistance Level	Not Water Resistant

PUSH

**RETEVIS**

Digital Two Way Radio

Model: RT3S

Output Power: 5W  

Frequency: 136-174MHz

400-480MHz

Voltage: 7.4V

FCC ID:2AAR8RETEVISRT3S



S/N:1806R03S1101178

Shenzhen Retevis Technology Co.,Ltd

MADE IN CHINA



Figure 7.1: Rear view of the Retevis RT3S radio, displaying product information and certifications.

## 8. WARRANTY AND SUPPORT

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### 8.1. Warranty Information

Retevis provides a 2-year warranty for the radio body and a 1-year warranty for accessories. Additionally, there is a 30-day no-reason return policy. Beyond the warranty period, maintenance services are still offered, with buyers responsible for associated costs.

### 8.2. Customer Support

For any inquiries or support needs, please contact Retevis customer service through Amazon. They aim to respond within 17 hours.

An official User Manual in PDF format is also available for download:[Download User Manual \(PDF\)](#)