

radtel RT-470X GMRS

Radtel RT-470X GMRS Handheld Radio User Manual

Model: RT-470X GMRS | Brand: Radtel

1. INTRODUCTION

This user manual provides detailed instructions for the safe and effective operation of your Radtel RT-470X GMRS Handheld Radio. Please read this manual thoroughly before using the device to ensure optimal performance and to prevent damage. The Radtel RT-470X is a 5W long-range two-way radio equipped with an SOS emergency alarm, 256 programmable channels, and NOAA weather alerts. It features a USB-C rechargeable 2800mAh battery and is designed for reliable communication in various scenarios.

2. WHAT'S IN THE BOX

Upon opening the package, verify that all items listed below are present and in good condition:

- 1x Radtel RT-470X GMRS Radio
- 1x 2800mAh Type-C Battery
- 1x 7.87-inch Dual Band 145/435 Antenna
- 1x 39-inch USB-C Charger Cable
- 1x Belt Clip with Metal Piece
- 1x English User Manual
- 1x AC Power Adapter with USB Port



Figure 2.1: Contents of the Radtel RT-470X GMRS Radio package, showing the radio, battery, charger, USB-C cable, and belt clip.

3. SETUP

3.1 Battery Installation and Charging

1. **Install the Battery:** Align the 2800mAh lithium battery with the battery compartment on the back of the radio. Slide the battery into place until it clicks securely.
2. **Charge the Battery:** Connect the USB-C charger cable to the radio's USB-C port and the other end to the AC power adapter. Plug the adapter into a standard wall outlet. The charging indicator on the radio will show charging status. A full charge typically takes approximately 4-5 hours.



Figure 3.1: The 2800mAh battery and USB-C charging components for the Radtel RT-470X radio.

3.2 Antenna Attachment

Screw the dual-band 145/435MHz antenna clockwise onto the antenna connector at the top of the radio until it is finger-tight. Do not overtighten.

3.3 Belt Clip Attachment

Attach the metal-reinforced belt clip to the designated slot on the back of the radio. Ensure it is securely fastened for convenient carrying.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off and Volume Control

Rotate the power/volume knob located at the top of the radio clockwise to power on the device. Continue rotating clockwise to increase the volume. Rotate counter-clockwise to decrease volume and power off.

4.2 Channel Selection and Frequency Mode (VFO/MR)

The RT-470X supports both Channel Mode (MR) and Frequency Mode (VFO). Press the **A/B VFO/MR** button to switch between these modes. In Channel Mode, use the up/down arrow keys to select from the 256 programmable channels. In Frequency Mode, you can directly input frequencies using the keypad.



Video 4.1: Demonstration of VFO mode switching and channel storage on the Radtel RT-470X radio. This video illustrates how to navigate between frequency and memory modes and save channels.



Figure 4.2: The radio's display showing multi-band capabilities, including GMRS frequencies and FCC certification details.

4.3 Transmitting and Receiving

To transmit, press and hold the **PTT (Push-To-Talk)** button on the side of the radio. Speak clearly into the microphone. Release the PTT button to receive. The RT-470X features a dual-band PTT button (UHF/VHF) for rapid response.



Figure 4.3: Illustration of the dual PTT buttons and their function for transmitting on different frequencies.

4.4 SOS Emergency Alarm

The radio is equipped with an SOS emergency alarm function. Refer to the full manual for specific button assignments and activation procedures for the SOS feature. This function is designed for critical situations and complies with FCC emergency communication standards.

4.5 NOAA Weather Alerts

The built-in NOAA weather receiving module allows for real-time monitoring of extreme weather conditions. Activate this feature to receive alerts and stay informed about local weather forecasts.



Figure 4.4: The radio's NOAA Weather Alert feature, useful for outdoor activities.

4.6 Wireless Frequency Copying

The RT-470X features a wireless frequency copying function with an effective range of 1 meter. This allows for rapid synchronization of CTC/DCS coding across different-brand devices, simplifying programming operations.

RT-470X Ham Radio



Figure 4.5: Wireless frequency copying in action, showing two radios synchronizing settings.

4.7 Programming Modes

The Radtel RT-470X radio supports three programming methods:

- **CPS Programming:** Computer Programming Software for advanced configuration.
- **Chirp Programming:** Compatible with Chirp software for channel management.
- **Keypad Programming:** Direct programming via the radio's keypad.



Figure 4.6: The three programming methods available for the RT-470X radio.

5. MAINTENANCE

5.1 Cleaning

Wipe the radio's surface with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Ensure the USB-C port is free of dust and debris.

5.2 Battery Care

To prolong battery life, avoid fully discharging the battery frequently. Store the radio and battery in a cool, dry place when not in use for extended periods. Recharge the battery at least once every three months if stored.

5.3 Storage

When storing the radio, remove the battery if it will be unused for a long time. Store in a dry environment away from direct sunlight and extreme temperatures.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
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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.
Cannot transmit or receive.	Incorrect frequency/channel, antenna not attached, or low battery.	Verify frequency/channel settings. Ensure antenna is securely attached. Recharge battery.
Poor audio quality.	Weak signal, interference, or incorrect squelch setting.	Move to an area with better signal. Adjust squelch level. Check for local interference sources.
Wireless copy function not working.	Radios are too far apart (beyond 1 meter) or interference.	Ensure radios are within 1 meter. Try again in an area with less electronic interference.

7. SPECIFICATIONS

Feature	Detail
Model Number	RT-470X GMRS
Brand	Radtel
Item Weight	15.8 ounces
Product Dimensions	0.13 x 0.2 x 0.38 inches
Battery	1 Lithium Ion (2800mAh), included
Number of Channels	256
Frequency Range	462/467MHz (GMRS)
Talking Range Maximum	5 Kilometers (approx. 3-5 miles obstacle-free)
Special Features	GMRS 462/467Mhz, Type-C charging, SOS Emergency Alarm, NOAA Weather Alerts, Wireless Frequency Copying
FCC ID	2AZSA-RT470X
Water Resistance Level	Not Water Resistant

8. WARRANTY AND SUPPORT

The Radtel RT-470X GMRS Handheld Radio comes with a **1-Year Warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use.

For technical support, warranty claims, or further inquiries, please contact Radtel customer service through the official channels provided at the point of purchase or visit the [Radtel Store on Amazon](#).
Please retain your proof of purchase for warranty validation.

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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

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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