BAOFENG UV-5RM Plus

BAOFENG UV-5RM Plus 10W Ham Radio User Manual

Model: UV-5RM Plus | Brand: BAOFENG

1. Introduction and Overview

The BAOFENG UV-5RM Plus is an advanced 10W dual-band two-way radio designed for reliable and versatile communication. This upgraded version of the UV-5R series offers enhanced features including expanded frequency coverage, increased battery capacity with convenient USB-C charging, and improved user functionality. It is suitable for a wide range of applications, from amateur radio enthusiasts to professional use requiring robust and clear communication.

Key enhancements of the UV-5RM Plus include:

- Expanded receiving frequency bands, now covering aviation and police bands.
- Extended battery capacity from 1800mAh to 2500mAh with integrated USB-C charging.
- New one-key frequency copy function for quick setup.
- Higher output power, upgraded from 5W to 10W.
- DTMF manual dial function for advanced signaling.
- A larger 1.77-inch color display for improved visibility.





Figure 1.1: The BAOFENG UV-5RM Plus 10W Ham Radio, showcasing its compact design and color display.



Figure 1.2: A visual comparison highlighting the upgrades of the UV-5RM Plus over the standard UV-5R, including display size, battery, charging, and frequency range.

2. What's in the Box

Upon opening the package, please verify that all the following components are included:

- UV-5RM Plus Radio x 1
- 2500mAh Battery x 1
- Type-C Charging Cable x 1
- Standard Antenna x 1
- Belt Clip x 1



Figure 2.1: All components included in the BAOFENG UV-5RM Plus package, laid out for inspection.

3. Setup

3.1 Battery Installation and Charging

The UV-5RM Plus comes with a 2500mAh Lithium-Ion battery. Before initial use, ensure the battery is fully charged.

1. Align the battery pack with the grooves on the back of the radio and slide it upwards until it clicks into place.
2. To charge, connect the provided USB-C charging cable to the USB-C port on the side of the radio.
3. Plug the other end of the USB-C cable into a compatible USB power source (e.g., wall adapter, power bank, car charger, laptop USB port).
4. The charging indicator light on the radio will illuminate during charging and turn off when fully charged.



Figure 3.1: Various convenient methods for charging the UV-5RM Plus using its USB-C port, including wall, power bank, car, and laptop connections.

3.2 Antenna Attachment

Carefully screw the standard antenna clockwise onto the antenna connector at the top of the radio until it is finger-tight. Do not overtighten.

4. Operating Instructions

4.1 Power On/Off

To power on the radio, rotate the volume knob clockwise until you hear a click. To power off, rotate it counter-clockwise until it

clicks.

4.2 Wide Frequency Coverage

The UV-5RM Plus offers extensive frequency coverage for both transmission and reception, allowing you to explore various airwaves with confidence.

- **Transmit (TX):** UHF, VHF
- **Receive (RX):**
  - FM: 76-108 MHz
  - AM (Airband): 108-136 MHz
  - VHF: 136-174 MHz & 220-260 MHz
  - UHF: 350-390 MHz & 400-520 MHz
  - NOAA Weather Bands: 10 channels



Figure 4.1: Visual representation of the expanded frequency bands supported by the UV-5RM Plus, including AM (Airband), UHF, VHF, and FM.



Figure 4.2: The UV-5RM Plus demonstrating its capability to receive aviation band frequencies, indicated by the airplane graphic.

4.3 10W Powerful Performance and Selectable Power Modes

The UV-5RM Plus delivers a robust 10 Watts of power, ensuring strong and clear signal transmission over long distances. It also features three selectable power modes (High, Medium, Low) to optimize battery life and transmission range based on your communication needs and environment.

4.4 One-Key Frequency Copy Function

This intuitive feature allows for quick and efficient frequency replication. Simply activate the frequency scan and copy key to instantly acquire and store frequencies from another radio, streamlining your communication setup.



Figure 4.3: Demonstration of the one-key frequency copy function, allowing users to quickly replicate frequencies between two radios.

4.5 DTMF Manual Dial Function

The radio supports DTMF (Dual-Tone Multi-Frequency) manual dialing, enabling advanced signaling capabilities for various applications.

4.6 NOAA Weather Bands

Stay informed about weather conditions with access to 10 NOAA Weather Bands. This feature provides real-time weather alerts and forecasts, crucial for outdoor activities and emergency preparedness.



Figure 4.4: The radio's display showing the NOAA Weather Alert feature, indicating its capability to receive weather broadcasts.

4.7 Channel Management and Features

The UV-5RM Plus offers extensive channel management with 999 available channels. It supports 104 CDCSS (Continuous Tone-Coded Squelch System) and 50 CTCSS (Continuous Tone-Coded Squelch System) options for enhanced privacy and selective calling. Users can also effortlessly adjust VOX (Voice Operated Exchange) and squelch levels for optimal audio performance. The radio is compatible with Chirp programming software for advanced customization.



Figure 4.5: The enhanced 1.77-inch color display of the UV-5RM Plus, offering improved readability and visual information, alongside its physical dimensions.

5. Maintenance

5.1 Battery Care

To maximize battery life and performance:

- Charge the battery fully before first use.
- Avoid overcharging or completely draining the battery.
- Store the radio and battery in a cool, dry place when not in use for extended periods.

5.2 Cleaning

Wipe the radio with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Ensure the USB-C port cover is securely closed to prevent dust and moisture ingress.

5.3 Storage

When storing the radio for long periods, remove the battery and store it separately. Keep the radio away from extreme temperatures, direct sunlight, and high humidity.

6. Troubleshooting

If you encounter issues with your UV-5RM Plus, please refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Radio does not power on	Low or dead battery; improperly installed battery	Charge the battery; ensure battery is correctly installed.
Poor reception or transmission	Antenna not properly attached; out of range; interference; incorrect frequency/settings	Check antenna connection; move closer to other radios; check for local interference; verify frequency and CTCSS/CDCSS settings.
Cannot transmit (PTT button unresponsive)	Incorrect frequency mode (e.g., receive-only band); radio locked	Ensure you are on a transmit-enabled frequency; check for keypad lock or other transmit restrictions.
Display is blank or dim	Low battery; display settings	Charge the battery; adjust backlight or contrast settings if available.

If the problem persists after attempting these solutions, please contact BAOFENG customer support for further assistance.

7. Specifications

Feature	Detail
Model Number	UV-5RM Plus
Brand	BAOFENG
Item Weight	1.12 pounds
Package Dimensions	8.15 x 7.24 x 2.52 inches
Country of Origin	China
Batteries	1 Lithium Ion battery required (included)
Color	Black
Number of Channels	999
Special Features	Long Range, Digital Display, Rechargeable, Multiple Band, Scan & one key frequency copy
Frequency Range	TX: UHF VHF; RX: VHF 136-174 MHz, 220-260 MHz, UHF 350-390 MHz, 400-520 MHz, FM 76-108 MHz, AM 108-136 MHz
Talking Range Maximum	5 Mile

Feature	Detail
Tuner Technology	UHF VHF NOAA FM AM Airband
Voltage	3.7 Volts
Water Resistance Level	Not Water Resistant

8. Warranty and Support

The BAOFENG UV-5RM Plus comes with an 18-month warranty from the date of purchase. Additionally, lifetime support is provided for any technical assistance or inquiries you may have regarding your radio.

For warranty claims, technical support, or any other questions, please contact BAOFENG customer service through their official channels or the retailer from whom you purchased the product.

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