

radtel UV-98PLUS

radtel UV-98 Plus 10W Multi-Band Ham Radio User Manual

Model: UV-98PLUS

INTRODUCTION

This manual provides detailed instructions for the operation and maintenance of your radtel UV-98 Plus 10W Multi-Band Ham Radio. The UV-98 Plus is a versatile two-way radio designed for reliable communication across various frequency bands, including VHF, UHF, GMRS, FRS, and shortwave. It features a robust design, rapid USB-C charging, and advanced functions such as cross-band repeater capability and NOAA weather alerts. Please read this manual thoroughly to ensure proper use and to maximize the performance and longevity of your device.

WHAT'S IN THE BOX

Carefully unpack your radtel UV-98 Plus and verify that all items listed below are present and in good condition. If any items are missing or damaged, please contact customer support.

- 1x Iradio UV-98 PLUS Main unit
- 1x 2400mAh Li-ion Battery
- 1x Dual band antenna
- 1x Belt Clip
- 1x Type C charging Cable
- 1x Power supply with USB port
- 1x MW Antenna
- 1x SW Antenna
- 1x English User Manual (this document)

PRODUCT OVERVIEW

The rattel UV-98 Plus is engineered for reliable communication with a focus on versatility and durability. Key features include:

- **Ultra Long-Range Communication:** Engineered for reliable connectivity up to 10 miles, delivering clear voice in various terrains.
- **Rapid Type-C Fast Charging:** Recharge from 0–100% in approximately 2 hours using the modern USB-C port.
- **Dual-Band Versatility:** Supports VHF/UHF frequencies, GMRS, and FRS networks.
- **Rugged, Portable Design:** Built to military standards with IP54 dust/water resistance for outdoor use.
- **User-Friendly Features:** Includes VOX hands-free capability, 1024 programmable channels, NOAA weather alerts, and programmable CTCSS/DCS tones.
- **Multi-Segment Three-Display:** Provides clear information across multiple frequency segments.
- **Air Band RX:** Capable of receiving air band frequencies.
- **Six-Segment RX/TX Compatibility:** Enhanced receive and transmit capabilities across multiple segments.



Image: The Iridio UV-98 Plus radio unit, showcasing its multi-segment three-display interface.

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AIR BAND RX MEET BOTH BUSINESS ENTERTAINMENT NEEDS



UV-98Plus

Image: The Irado UV-98 Plus radio unit, highlighting its Air Band RX capability.



Image: The Iridio UV-98 Plus radio unit, illustrating its six-segment RX/TX compatibility.

SETUP

1. Battery Installation

1. Ensure the radio is powered off.
2. Locate the battery compartment on the back of the radio.
3. Align the 2400mAh Li-ion battery with the compartment contacts.
4. Gently push the battery into place until it clicks securely.
5. Close the battery compartment cover, if applicable.

2. Antenna Attachment

The UV-98 Plus comes with a dual-band antenna, a MW antenna, and a SW antenna. Select the appropriate antenna for your desired frequency range.

1. Locate the antenna connector on the top of the radio.
2. Screw the chosen antenna clockwise onto the connector until it is finger-tight. Do not overtighten.



Image: Close-up of the Iridio UV-98 Plus radio's top, showing the antenna connector and a shortwave antenna.

3. Charging the Battery

Before first use, fully charge the battery. The UV-98 Plus supports rapid Type-C fast charging.

1. Connect the Type-C charging cable to the USB-C port on the side of the radio.
2. Connect the other end of the cable to the provided power supply with a USB port, or a compatible USB power source.
3. The charging indicator on the radio will illuminate, typically red during charging and green when fully charged.
4. A full charge from 0% to 100% typically takes approximately 2 hours.

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TYPE-C FAST CHARGING OPTION



Image: The Irado UV-98 Plus radio connected to a USB-C charging cable.

OPERATING INSTRUCTIONS

1. Power On/Off

- To power on: Rotate the power/volume knob clockwise until you hear a click and the display illuminates.
- To power off: Rotate the power/volume knob counter-clockwise until you hear a click and the display turns off.

2. Volume Adjustment

Rotate the power/volume knob to adjust the audio output level to a comfortable listening volume.

3. Frequency/Channel Selection

The UV-98 Plus supports 1024 programmable channels and direct frequency input.

- **Channel Mode:** Use the UP/DOWN arrow keys or the keypad to select a pre-programmed channel.
- **Frequency Mode (VFO):** Enter the desired frequency directly using the numeric keypad. The radio operates within FCC-authorized bands 144-148Mhz and 420-450Mhz for transmission.

- Press the **V/M** key to switch between Channel Mode and Frequency Mode.

4. Transmission and Reception

- **Reception:** When a signal is received on the selected frequency/channel, the radio will automatically output the audio.
- **Transmission:** Press and hold the **PTT (Push-To-Talk)** button on the side of the radio to transmit. Speak clearly into the microphone. Release the PTT button to return to receive mode.

5. VOX Function (Voice Operated Transmit)

The VOX function allows for hands-free transmission. When enabled, the radio will automatically transmit when it detects your voice.

- Access the menu to enable/disable VOX and adjust its sensitivity level.
- Refer to the on-screen menu for specific steps to configure VOX.

6. NOAA Weather Alerts

The UV-98 Plus can receive NOAA weather alerts to keep you informed of severe weather conditions.

- Access the menu to enable the NOAA weather alert function.
- The radio will monitor designated NOAA weather channels and alert you to warnings.

7. Cross-Band Repeater Function

This feature allows the radio to act as a temporary repeater, relaying signals between different frequency bands (e.g., VHF to UHF).

- Configuration of the cross-band repeater function is an advanced feature. Consult the detailed programming guide or online resources for specific setup instructions.
- Ensure compliance with local regulations when operating a repeater.

8. AM/FM/SSB Reception

The radio supports reception of AM, FM, and SSB signals, including shortwave frequencies.

- Switch to the appropriate mode (AM/FM/SSB) via the menu or dedicated function keys.
- Use the MW or SW antennas for optimal reception on those bands.

MAINTENANCE

1. Cleaning

- Wipe the radio's exterior with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- Ensure the USB-C port and antenna connector are free from dust and debris.

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.
- If the radio will not be used for a long time, remove the battery.

TROUBLESHOOTING

If you encounter issues with your UV-98 Plus, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Radio does not power on	Low or dead battery; improperly installed battery	Charge the battery; ensure battery is correctly installed.
Cannot transmit or receive	Incorrect frequency/channel; antenna not attached; low battery; squelch too high	Verify frequency/channel; attach antenna securely; charge battery; adjust squelch level.
Poor audio quality	Weak signal; incorrect squelch setting; antenna issue	Move to an area with better signal; adjust squelch; check antenna connection.
Battery drains quickly	Frequent transmission; high power setting; aging battery	Reduce transmission time; use lower power settings when possible; consider replacing battery if old.

If the problem persists after attempting these solutions, please contact customer support.

SPECIFICATIONS

Below are the technical specifications for the radtel UV-98 Plus:

- **Brand:** radtel
- **Model Number:** UV-98PLUS
- **Color:** Black
- **Number of Channels:** 1024
- **Frequency Range (TX):** 144-148Mhz / 420-450Mhz (FCC Authorized Bands)
- **Frequency Range (RX):** 18-1000 MHz (HF/VHF/UHF, FM/AM/SSB, NOAA Shortwave)
- **Talking Range Maximum:** 10 Kilometers (approx. 6.2 miles)
- **Voltage:** 7.4 Volts
- **Water Resistance Level:** Water Resistant (IP54)
- **Product Dimensions:** 1.26"D x 1.18"W x 12"H
- **Number of Batteries:** 1 (9V Li-ion battery included)
- **Impedance:** 50 Ohms
- **Tuner Type:** AM/FM/SSB
- **Connectivity Protocol:** PMR446, P25, DMR (compatible)
- **Manufacturer:** Xiamen Radtel Electronics Co.,Ltd

WARRANTY INFORMATION

The radtel UV-98 Plus comes with a **1 Year Warranty** from the date of purchase. This warranty covers manufacturing defects under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or natural disasters. Please retain your proof of purchase for warranty claims.

SUPPORT

For further assistance, technical support, or warranty inquiries, please contact the manufacturer, Xiamen Radtel Electronics Co.,Ltd, or your authorized dealer. Refer to the contact information provided with your purchase or visit the official radtel website.

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