BAOFENG UV-22R

BAOFENG UV-22R Two-Way Radio User Manual

Model: UV-22R

1. Product Overview

The BAOFENG UV-22R is a versatile and powerful two-way radio designed for reliable communication. It features a 1.77-inch large LCD screen, a full keypad for easy operation, and supports 999 memory channels. This device is equipped with USB-C charging for convenience and offers a range of functions including NOAA weather alerts, frequency scanning, and DTMF signaling.



Image: BAOFENG UV-22R radio with its accessories, including the main unit, antenna, USB-C charging cable, and programming cable.

Key Features:

- **Display:** 1.77-inch large LCD screen with full keypad.
- **Channels:** Up to 999 named memory channels with 10 zones storage.
- **Charging:** USB-C charging for convenient power options.
- **Frequency Range:** Four-band handheld transceiver supporting FM, VHF (144-148MHz), and UHF (420-450MHz).
- **Scanning:** VFO scan, channel scan, CTC/DCS scan, and one-step frequency scan.
- **Signaling:** DTMF encoder and manual dial, 50 CTCSS tones and 105 DCS codes.
- **Voice Activation:** VOX (voice activated transmit) function.
- **Power:** High or low power selectable.
- **Additional Functions:** Dual watch/Dual reception, programmable repeater offset, battery saving, transmission time-out timer, busy channel lock out, alarm function, keypad lock.

2. Package Contents

Verify that all items are present in your package:

- 1 x Portable Radio (BAOFENG UV-22R)
- 1 x Original High Gain Antenna
- 1 x Type-C Charger Cable
- 1 x 2500mAh Li-ion Battery
- 1 x Belt Clip
- 1 x Sling
- 1 x Charger (Desktop Charging Cradle)
- 1 x User's Manual
- 1 x 771 Antenna
- 1 x Programming Cable

3. Setup

3.1 Battery Installation and Charging

Before first use, fully charge the battery. Insert the 2500mAh Li-ion battery into the compartment on the back of the radio, ensuring it clicks securely into place. The UV-22R supports both desktop charging via the included cradle and direct USB-C charging.

- **Desktop Charging:** Place the radio in the charging cradle. Ensure the charging indicator light illuminates.
- **USB-C Charging:** Connect the Type-C charger cable to the USB-C port on the side of the radio and to a compatible USB power source (e.g., wall adapter, power bank, car charger).

A full charge typically takes several hours. The charging indicator will change color or turn off when charging is complete.

3.2 Antenna Attachment

Screw the included antenna clockwise onto the antenna connector at the top of the radio until it is finger-tight. Do not overtighten.

3.3 Initial Power On

To power on the radio, rotate the volume/power knob clockwise. The LCD screen will illuminate, and you will hear a power-on tone. Adjust the volume to a comfortable level.

4. Operating Instructions

4.1 Basic Operation

- **Power On/Off:** Rotate the top knob.
- **Volume Adjustment:** Rotate the top knob.
- **Channel/Frequency Selection:** Use the UP/DOWN arrow keys or the keypad to input frequencies or select channels.

- **Transmit (PTT):** Press and hold the Push-To-Talk (PTT) button on the side of the radio to transmit. Release to receive.

4.2 Display and Keypad



Image: Close-up view of the BAOFENG UV-22R's 1.77-inch color LCD screen, showing frequency and channel information.

The 1.77-inch LCD screen provides clear display of frequencies, channel numbers, battery status, signal strength, and various function indicators. The full keypad allows for direct frequency input, menu navigation, and access to advanced features.

4.3 Channel Management

The radio supports up to 999 named memory channels. Channels can be programmed via PC or directly through the radio's menu. The built-in input method allows for editing channel names directly on the device.

- **Channel Scan:** Initiates scanning through programmed memory channels.
- **VFO Scan:** Scans within a defined frequency range.
- **Scan Recovery Methods:** Three methods available for resuming scanning after a signal is detected.



Image: The BAOFENG UV-22R radio in frequency scan mode, illustrating its one-step frequency scan capability for easy contact with other radios.

4.4 Frequency and Mode Settings

- **Frequency Step:** Selectable steps include 2.5K, 5.0K, 6.25K, 10.0K, 12.5K, 20.0K, 25.0K, and 50.0K.
- **Four-Band Transceiver:** Operates on FM broadcast, VHF (144-148MHz), and UHF (420-450MHz) bands.

4.5 Advanced Features

- **DTMF (Dual-Tone Multi-Frequency):** Supports DTMF encoding and manual dialing for various signaling applications, including single call, group call, and all call.



Image: The BAOFENG UV-22R radio demonstrating its DTMF function, which enables analog signaling for single, group, and all calls.

- **VOX (Voice Activated Transmit):** Allows hands-free operation by transmitting when voice is detected.
- **CTCSS/DCS Tones:** Use 50 CTCSS tones and 105 DCS codes for selective calling and interference reduction.
- **Dual Watch/Dual Reception:** Monitor two different frequencies simultaneously.
- **Programmable Repeater Offset:** Configure offset for repeater use.
- **NOAA Weather Radio:** Access NOAA weather alerts for critical information.
- **Squelch Adjustment:** Ten (10) levels of squelch adjustment to filter out weak signals or noise.
- **Cross Band Reception:** Receive signals across different frequency bands.
- **ANI (Automatic Number Identification):** Transmit your radio's identification code.

5. Maintenance

- **Cleaning:** Use a soft, damp cloth to clean the radio's surface. Do not use harsh chemicals or abrasive cleaners.
- **Battery Care:** To prolong battery life, avoid overcharging or completely draining the battery. Store the radio and battery in a cool, dry place when not in use for extended periods.
- **Antenna:** Ensure the antenna is securely attached but do not force it. Inspect for damage periodically.

- **Storage:** Store the radio in a dry environment, away from direct sunlight and extreme temperatures.

6. Troubleshooting

Problem	Possible Cause	Solution
Radio does not power on.	Battery is low or not installed correctly.	Charge the battery or re-install it correctly.
Cannot transmit or receive.	Incorrect frequency/channel, squelch too high, or antenna not connected.	Verify frequency/channel, adjust squelch, ensure antenna is secure.
Poor audio quality.	Low battery, weak signal, or interference.	Charge battery, move to an area with better signal, check for interference sources.
Keypad is unresponsive.	Keypad lock is active.	Unlock the keypad (refer to the radio's specific keypad lock/unlock procedure).

7. Technical Specifications



Image: Dimensional overview of the BAOFENG UV-22R radio, indicating its compact size and weight.

Feature	Specification
Model Number	UV-22R
Item Weight	1.34 pounds (approx. 608 grams)
Product Dimensions (H x W x D)	5 x 2.4 x 1.5 inches (117 x 56 x 34 mm)
Batteries	1 Lithium Ion battery required (included)
Number of Channels	999
Frequency Range	VHF: 144-148MHz, UHF: 420-450MHz
Talking Range Maximum	3.1 Miles (approx. 5 km)
Tuner Technology	UHF/VHF

Feature	Specification
Voltage	7.4 Volts (DC)
Water Resistance Level	Not Water Resistant
Special Features	1.77in LCD Screen, Long Range, NOAA, One Key Match Frequency, USB-C Charging

8. Warranty and Support

8.1 Warranty Information

This product comes with a **1-year warranty** provided only through "Shiqun Electronics Co., Ltd". Please retain your proof of purchase for warranty claims.

8.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact the seller or manufacturer directly. Refer to the contact information provided with your purchase documentation.

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