

BAOFENG UV-20R

BAOFENG UV-20R Two-Way Radio User Manual

Model: UV-20R

1. INTRODUCTION

The BAOFENG UV-20R is a versatile dual-band handheld transceiver designed for reliable communication. It features a 1.77-inch LCD screen, a full keyboard for easy operation, and supports 999 memory channels across 4 frequency bands. Key functionalities include wireless frequency copy, NOAA weather alerts, and convenient USB-C charging. This manual provides detailed instructions for setup, operation, and maintenance of your UV-20R radio.

2. PACKAGE CONTENTS

Verify that all items are present in your package:

- BAOFENG UV-20R Radio
- Antenna
- Lithium-Ion Battery
- USB-C Cable
- US Adapter
- Strap
- User's Manual (this document)
- Programming Cable
- Earpiece

3. PRODUCT OVERVIEW

Familiarize yourself with the main components and controls of your UV-20R radio.



Figure 3.1: Front and side view of the BAOFENG UV-20R radio with key components labeled. This includes the antenna, power/volume knob, pilot lamp, color LCD, MENU key, EXIT key, keypad, speaker, MIC/SP port, lamp switch, and PTT (Push-To-Talk) key.

3.1. Key Components

- **Antenna:** For transmitting and receiving radio signals.
- **Power/Volume Knob:** Rotate to turn the radio on/off and adjust volume.
- **Pilot Lamp:** Indicates radio status (e.g., transmission, reception).
- **Color LCD:** 1.77-inch display showing frequency, channel, and menu options.
- **MENU Key:** Accesses the radio's menu system.
- **EXIT Key:** Exits menu or cancels current operation.
- **Keypad:** For entering frequencies, channel numbers, and menu selections.
- **Speaker:** Outputs received audio.
- **MIC/SP Port:** Connects external microphone/speaker or earpiece.
- **Lamp Switch:** Activates the built-in LED flashlight.

- **PTT (Push-To-Talk) Key:** Press and hold to transmit, release to receive.

4. SETUP

4.1. Battery Installation

1. Align the battery pack with the grooves on the back of the radio.
2. Slide the battery pack upwards until it clicks into place.
3. To remove, press the battery release latch and slide the battery downwards.

4.2. Antenna Attachment

Screw the antenna clockwise into the connector on the top of the radio until it is finger-tight. Do not overtighten.

4.3. Charging the Battery

The UV-20R supports two charging methods:

- **USB-C Direct Charging:** Connect the provided USB-C cable to the radio's USB-C port and to a power source (e.g., USB adapter, power bank, PC, car charger).
- **Charging Stand:** Place the radio into the charging stand. Connect the US adapter to the charging stand and a power outlet.

The charging indicator light will show the charging status. Ensure the battery is fully charged before first use.

Type-C Charging

You can charge your walkie talkie anywhere, very convenient.
Charge your radio from power bank PC, car and any type C Port.



CAR



PC



CHARGER



POWER BANK



Figure 4.1: The BAOFENG UV-20R radio highlighting its USB-C charging capability. The image illustrates charging from a car, PC, dedicated charger, or power bank.

5. OPERATING INSTRUCTIONS

5.1. Power On/Off and Volume

Rotate the Power/Volume knob clockwise to turn the radio on. Continue rotating to increase volume. Rotate counter-clockwise to decrease volume and turn off the radio.

5.2. Channel and Frequency Mode

The UV-20R operates in both Channel Mode and Frequency (VFO) Mode. Use the MENU key and keypad to switch between modes and select desired frequencies or channels.

5.3. Transmitting and Receiving

- **Receiving:** Ensure the radio is powered on and tuned to the desired frequency/channel. The pilot lamp will illuminate when a signal is received.
- **Transmitting:** Press and hold the PTT key on the side of the radio. Speak clearly into the microphone. Release the PTT key to return to receive mode.

5.4. Wireless Frequency Copy

The wireless frequency copy function allows you to quickly copy frequencies from another radio. Refer to the menu options for detailed steps on initiating and completing a wireless frequency copy.

6. ADVANCED FEATURES



Figure 6.1: Visual representation of the BAOFENG UV-20R's key features, including 999 channels, FM radio, CTCSS/DCS, SOS function, VOX, scan function, large screen, long standby, Type-C charger, power save, and squelch adjustment.

6.1. Scanner Function

The UV-20R includes a comprehensive scanner function:

- **VFO Scan:** Scans within a defined frequency range.
- **Channel Scan:** Scans through programmed memory channels.
- **CTC/DCS Scan:** Detects CTCSS/DCS tones/codes on a received signal.
- **Scan Recovery Methods:** Configurable options for how the scanner resumes after detecting a signal.

6.2. NOAA Weather Radio

Access NOAA weather alerts to stay informed about local weather conditions. Consult the menu for NOAA channel selection.

6.3. DTMF Encoder and Manual Dial

The radio supports DTMF (Dual-Tone Multi-Frequency) encoding for various applications, including repeater access. DTMF tones can be manually dialed using the keypad.

6.4. VOX Function

VOX (Voice Operated Transmit) allows hands-free operation. When activated, the radio will automatically transmit when it detects your voice, eliminating the need to press the PTT key.

6.5. FM Radio Receiver

The UV-20R includes a built-in FM radio receiver for entertainment. Tune to your favorite FM broadcast stations.

6.6. CTCSS/DCS Tones

The radio supports 50 CTCSS tones and 105 DCS codes for selective signaling, allowing you to filter out unwanted conversations or access repeaters requiring specific tones.

6.7. PC Programmable

The UV-20R can be programmed via a computer using the included programming cable and compatible software. This allows for advanced channel management and customization of radio settings.

7. MAINTENANCE

7.1. General Care

- Clean the radio's surface with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- Keep the radio dry. Although it is water repellent (IP54), it is not fully waterproof.
- Avoid exposing the radio to extreme temperatures or direct sunlight for extended periods.
- Ensure the antenna is securely attached but not overtightened.

7.2. Battery Care

- Charge the battery fully before first use.
- Do not overcharge or deep discharge the battery.
- If the radio will not be used for an extended period, remove the battery and store it in a cool, dry place.



Figure 7.1: The BAOFENG UV-20R radio demonstrating its IP54 life waterproof rating, indicating splash protection.

8. TROUBLESHOOTING

If you encounter issues with your UV-20R radio, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Radio does not power on.	Battery is low or not installed correctly.	Charge the battery. Ensure the battery is securely installed.
Cannot transmit or receive.	Incorrect frequency/channel, antenna not attached, low battery, or squelch set too high.	Verify frequency/channel. Attach antenna. Charge battery. Adjust squelch level.
Poor audio quality.	Low signal strength, incorrect squelch setting, or external interference.	Move to an area with better signal. Adjust squelch. Check for sources of interference.

Problem	Possible Cause	Solution
Keypad is unresponsive.	Keypad lock is active.	Refer to the manual for instructions on how to unlock the keypad.

9. SPECIFICATIONS

Technical specifications for the BAOFENG UV-20R radio:

Feature	Detail
Model Number	UV-20R
Brand	BAOFENG
Number of Channels	999
Frequency Range	1.25M, 144-148MHz, 420-450MHz, FM
Special Features	1.77-inch LCD Screen, 4 Band, NOAA, Type-C Charger, Wireless Frequency Copy
Talking Range Maximum	3.1 Miles
Voltage	7.4 Volts (DC)
Water Resistance Level	Water Repellent (IP54)
Product Dimensions (D x W x H)	1.37"D x 2.24"W x 4.8"H
Impedance	50 Ohms
Tuner Type	UHF/VHF
Battery Type	Lithium Ion

Product Size



Figure 9.1: Dimensions of the BAOFENG UV-20R radio, showing a height of 4.8 inches, width of 2.24 inches, and depth of 1.37 inches.

10. WARRANTY AND SUPPORT

10.1. Warranty Information

The BAOFENG UV-20R radio comes with a 1-year warranty. This warranty is provided exclusively through "Shiqun Electronics Co., Ltd". Please retain your proof of purchase for warranty claims.

10.2. Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact the seller or manufacturer directly. Refer to your purchase documentation for specific contact details.

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

Open the live page

<https://manuals.plus/asin/B0CXD2YQZ8>

More documents and user manuals: <https://manuals.plus/>