

BAOFENG 5RM

BAOFENG AR-5RM 10W Ham Radio Handheld Two-Way Radio User Manual

Model: AR-5RM

This manual provides detailed instructions for the safe and efficient operation of your BAOFENG AR-5RM radio.

1. INTRODUCTION

The BAOFENG AR-5RM is a high-performance 10W ham radio designed for reliable long-range communication. It features a 1.77-inch LED color screen, 999 channels, tri-power levels (High/Mid/Low), VOX, DTMF, and a robust 3800mAh battery. This model supports VHF, VHF2, UHF, FM, and AM frequencies, and includes a NOAA weather radio function for emergency alerts. Its versatile charging options, including USB-C and base charging, enhance convenience for various applications such as hiking, camping, hunting, and professional team coordination. This manual will guide you through the setup, operation, and maintenance of your AR-5RM radio to ensure optimal performance and longevity.

2. PACKAGE CONTENTS

Please check the package carefully to ensure all items are present:

- 2 x BAOFENG AR-5RM Radio Unit
- 2 x Antenna
- 2 x 3800mAh Li-ion Battery
- 2 x USB-C Cable
- 2 x Desktop Charger Base
- 2 x Headset
- 2 x Belt Clip

3. PRODUCT OVERVIEW AND FEATURES

The BAOFENG AR-5RM radio offers a range of features for enhanced communication:

- **Tri-Power Output:** Adjustable High, Mid, and Low power levels for varied communication needs.
- **Extensive Channel Capacity:** 999 programmable channels.
- **Clear Display:** 1.77-inch LED color screen for easy readability.
- **Voice Operated Transmission (VOX):** Hands-free operation.
- **DTMF Functionality:** Dual-Tone Multi-Frequency signaling.
- **High Capacity Battery:** 3800mAh battery for extended use.
- **Multi-Band Support:** Operates on VHF, VHF2, UHF, FM, and AM frequencies.
- **NOAA Weather Radio:** Access to 10 NOAA channels for weather alerts.
- **Quick Frequency Copy:** Rapidly copy frequencies from other radios.
- **Multiple Charging Methods:** Supports USB-C and desktop base charging.
- **LED Flashlight:** Integrated for convenience in low-light conditions.

3.1 Key Components



This image displays the key components and ports of the BAOFENG AR-5RM radio.

Antenna: For transmitting and receiving signals.

SK1 Key: Programmable key, often used for Broadcast FM and Alarm functions.

PTT Key: Push-To-Talk button for transmitting.

SK2 Key: Programmable key, often used for Flashlight and Monitor functions.

A/B Select Key: Switches between upper and lower frequency displays.

VFO/MR Mode Key: Toggles between Frequency Mode (VFO) and Channel Mode (MR).

One-Touch Search Key: Initiates frequency scanning.

2 Pin K Port: Standard port for accessories like headsets and programming cables.

Type-C Port: For direct USB-C charging.

4. SETUP

4.1 Attaching the Antenna

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

4.2 Installing the Battery



Align the battery pack with the grooves on the back of the radio. Slide the battery upwards until it clicks into place.

To remove, press the battery release latch and slide the battery downwards.

The BAOFENG AR-5RM comes with a 3800mAh high-capacity battery, providing longer standby time compared to standard 1800mAh batteries.

4.3 Initial Charging

Before first use, fully charge the battery. Refer to the "Charging the Battery" section for detailed instructions.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off and Volume Control

- **Power On:** Rotate the power/volume knob clockwise until you hear a click.
- **Power Off:** Rotate the power/volume knob counter-clockwise until you hear a click.
- **Volume Adjustment:** Rotate the knob clockwise to increase volume, counter-clockwise to decrease.

5.2 Mode Selection (VFO/MR)

Press the **VFO/MR** button to switch between:

- **Frequency Mode (VFO):** Allows direct frequency input and scanning.
- **Channel Mode (MR):** Accesses pre-programmed channels.

5.3 Transmitting and Receiving

- **Receiving:** The radio will automatically receive signals on the selected frequency/channel.
- **Transmitting:** Press and hold the **PTT** button on the side of the radio. Speak clearly into the microphone. Release the PTT button to stop transmitting and return to receive mode.

5.4 Quick Frequency Copy Function

The AR-5RM features a quick frequency copy function, allowing you to easily match frequencies with another radio without manual programming.

1. **Step 1:** Power on your AR-5RM radio. Press the **"#"** key. The display will show "SEARCH UHF" or "SEARCH VHF".
2. **Step 2:** Press and hold the PTT button on the other radio you wish to copy the frequency from. Your AR-5RM will search for the transmitting frequency. Once found, press the **"MENU"** key to confirm and save the frequency.
3. **Step 3:** Switch your AR-5RM to channel mode (MR) using the VFO/MR button. The display will show the other person's frequency, and you can now communicate.

Quick Copy Frequency
No programming Required

Step 1: Power on walkie talkie and press " #" you can see the display show Search.

Step 2: Press and hold the other Walkie Talkie transmitting frequency and when it searches for another frequency, press "MENU" to confirm.

Step 3: Switch to channel mode and the display will show the other person's frequency. Then you can start communicating.

Visual guide for the Quick Frequency Copy process.

Your browser does not support the video tag.

Official video demonstrating the one-click frequency matching function of the BAOFENG AR-5RM radio.

5.5 NOAA Weather Radio

The BAOFENG AR-5RM includes 10 NOAA weather channels to receive emergency weather information and alerts. This feature is crucial for outdoor activities, allowing users to anticipate and react to severe weather conditions.



The NOAA Weather Radio feature provides access to 10 channels for critical weather alerts.

5.6 Programming with CHIRP

For advanced programming and channel management, the BAOFENG AR-5RM supports CHIRP software. Connect your radio to a computer using a compatible programming cable (not included) and select "AR-5RM" as the model in CHIRP. This allows for easy customization of frequencies, tones, and other settings.



The radio can be programmed using CHIRP software for advanced customization.

6. CHARGING THE BATTERY

The BAOFENG AR-5RM offers multiple convenient charging methods:

- **Desktop Charger Base:** Place the radio (with battery installed) into the desktop charging cradle. Ensure the charging contacts align. The indicator light will show charging status.
- **USB-C Direct Charging:** Connect the provided USB-C cable directly to the Type-C port on the side of the radio and to a USB power source (e.g., USB wall adapter, vehicle charger, PC, power bank).



The radio supports both desktop base charging and direct USB-C charging from various power sources.

7. MAINTENANCE

- **Cleaning:** Use a soft, damp cloth to clean the radio's exterior. Do not use harsh chemicals or solvents.
- **Battery Care:** Avoid fully discharging the battery frequently. Store the radio and battery in a cool, dry place when not in use for extended periods.
- **Antenna:** Ensure the antenna is securely attached. Do not operate the radio without an antenna.
- **Storage:** Store the radio in a dry environment, away from extreme temperatures and direct sunlight.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Radio does not power on.	Battery is low or not installed correctly.	Charge the battery or re-install it securely.
Cannot transmit or receive.	Incorrect frequency/channel, antenna not connected, or out of range.	Verify frequency/channel, ensure antenna is attached, move closer to other radio.
Poor audio quality.	Low battery, weak signal, or incorrect squelch setting.	Charge battery, adjust squelch level, or move to an area with better signal.
Frequency copy not working.	Other radio not transmitting, or too far away.	Ensure the other radio is transmitting and within close range. Follow steps precisely.

9. SPECIFICATIONS

Feature	Detail
Brand	BAOFENG
Model Number	5RM (AR-5RM)
Number of Channels	999
Frequency Range	VHF 1.25M UHF (VHF/VHF2/UHF, FM, AM)
Talking Range Maximum	5 Mile (approx. 8 km)
Battery Capacity	3800mAh Lithium Ion
Display	1.77" LED Color Screen
Special Features	Long Range, Multi Band, Rechargeable, VOX, NOAA Weather, Quick Frequency Copy, DTMF, LED Flashlight
Charging Methods	USB-C, Desktop Base Charger
Water Resistance Level	Not Water Resistant
FCC ID	2AJGM-5RM



Overview of the BAOFENG AR-5RM's main features.

What's the difference?

VS

AR-5RM

UV-5R



VHF/ 1.25M/UHF	Frequency (TX)	VHF/UHF
999CH	Channels	128CH
3800mAh	Battery	1800mAh
10W	Power	5W
✓	Type-C Charger	✗
✓	Copy Frequency	✗
✓	NOAA Weather Receiver	✗



Comparison of BAOFENG AR-5RM with the older UV-5R model, showcasing enhanced features.

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the contact details provided with your purchase or visit the official BAOFENG website. Keep your purchase receipt as proof of purchase.