

Retevis HD2

Retevis Ailunce HD2 Ham Radio Instruction Manual

Model: HD2

1. INTRODUCTION

Thank you for choosing the Retevis Ailunce HD2 Ham Radio. This manual provides essential information for the safe and efficient operation of your device. Please read this manual thoroughly before use and retain it for future reference.

The Retevis Ailunce HD2 is a dual-band DMR amateur radio featuring GPS, Wireless 5.0 connectivity, a 3200mAh battery, and IP67 waterproof rating. It supports both digital and analog modes, offering high power and long-range communication capabilities.

2. PACKAGE CONTENTS

Before proceeding with setup, please verify that all items listed below are included in your package:

- HD2 Radio Body ×1
- Antenna ×1
- Type-C Charging Battery ×1
- Type-C Desktop Charger ×1
- USB Type-C Charging Cable ×1



PACKAGE INCLUDES



Figure 2.1: Contents of the Retevis Ailunce HD2 package.

3. SETUP GUIDE

3.1. Battery Installation and Charging

1. Ensure the radio is powered off.
2. Align the 3200mAh Li-ion battery with the battery compartment on the back of the radio.
3. Gently push the battery into place until it clicks securely.
4. To charge, connect the USB Type-C charging cable to the radio's Type-C port or use the desktop charger.
5. Connect the other end of the cable to a compatible USB power source. The charging indicator will show the charging status.



BUILT 3200MAH LI-ION BATTERY

USB-C charging with 3200mAh battery
long service life for long-term use



Standby time:
35 H



Work time:
21 H



Charging time:
8 H



Figure 3.1: Battery charging process and estimated times.

3.2. Antenna Attachment

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



Figure 3.2: Attaching the antenna to the radio.

3.3. Wireless Headset Connection

The HD2 supports Wireless 5.0 for hands-free communication.

1. Ensure your wireless headset is in pairing mode.
2. Navigate to the Bluetooth settings on your HD2 radio.
3. Select your headset from the list of available devices to pair.



Figure 3.3: Wireless headset connection for hands-free operation.

4. OPERATING INSTRUCTIONS

4.1. Power On/Off

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

4.2. VFO Mode Operation

The VFO (Variable Frequency Oscillator) mode allows direct frequency input and adjustment without requiring computer programming.

1. Press the **MENU** button to access the main menu.

2. Navigate to the VFO mode option and select it.
3. Use the keypad to input your desired frequency.
4. Adjust other parameters like channel, color code, or time slot as needed directly from the radio's interface.



Figure 4.1: VFO Mode interface for direct frequency and setting adjustments.

4.3. Digital and Analog Modes

The HD2 supports both digital (DMR) and analog communication modes. You can switch between these modes based on your communication requirements and the network you are operating on.

4.4. GPS Functionality

The integrated GPS allows you to locate your real-time position and share it with other users, which is crucial for coordination during outdoor activities or emergencies.

1. Access the GPS menu from the radio's main menu.
2. View your current coordinates (N/S, E/W) and altitude.
3. Use the sharing function to transmit your location data to designated partners.



Figure 4.2: GPS function displaying location data.

4.5. Power Levels

The radio offers 4 selectable power levels to optimize battery life and transmission range for different scenarios. Adjust the power level through the radio's menu settings.

4.6. Community Features

The HD2 supports up to 3000 channels and 500,000 contacts, facilitating extensive communication within amateur radio communities. Features include ID modification, call logs, and text messaging.



Figure 4.3: Overview of community features, including channels and contacts.

5. MAINTENANCE

5.1. General Care and Cleaning

Regularly clean the radio's exterior with a soft, damp cloth. Avoid using harsh chemicals or abrasive cleaners. Ensure all ports are dry before charging or connecting accessories.

5.2. Battery Care

To maximize battery life, fully charge the 3200mAh battery before initial 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.

5.3. Waterproofing (IP67)

The HD2 is IP67 rated, meaning it is protected against dust ingress and can withstand immersion in 1 meter of water for up to 30 minutes. Ensure all port covers are securely closed before exposing the radio to water or dusty environments.



Figure 5.1: The HD2's IP67 waterproof and dustproof design.

6. TROUBLESHOOTING

If you encounter issues with your Retevis Ailunce HD2, please 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 settings; antenna not connected; out of range	Verify frequency/channel; check antenna connection; move closer to other radios or repeater.
Poor audio quality	Low signal strength; incorrect squelch level; damaged speaker/microphone	Check signal strength; adjust squelch level; contact support if hardware is damaged.

Problem	Possible Cause	Solution
Difficulty with CPS programming	Driver issues; cable connection problems; software compatibility	Ensure correct drivers are installed; check USB cable connection; use the latest CPS software version.
GPS not acquiring signal	Operating indoors; obstructed view of sky	Move to an open outdoor area with a clear view of the sky.

7. SPECIFICATIONS

Feature	Detail
Brand	Retevis
Model Number	HD2
Color	Black
Number of Channels	3000
Special Features	GPS, Dual Band
Frequency Spectrum	144-146 MHz / 430-440 MHz
Maximum Talk Range	5 Kilometers
Voltage	7.4 Volts
Water Resistance Level	IP67 Waterproof
Product Dimensions (DxWxH)	3.5P x 6.5I x 15H cm
Number of Batteries	1 Lithium Ion battery required (included)
Noise Level	60 Decibels
Compatible Devices	Wireless headphones, USB-C devices, other DMR radios
Temperature Range	-10~+40 Degrees Celsius
Average Battery Life	19.5 Hours
Impedance	50 Ohm
Connectivity Protocol	Wi-Fi (likely refers to programming/data transfer, not voice)
International Protection Rating	IP67
Item Weight	620 Grams

8. WARRANTY AND SUPPORT

8.1. Product Warranty

Retevis provides a 2-year warranty for the radio body and a 1-year warranty for accessories. We offer a 30-day no-

reason return policy. For issues beyond the warranty period, maintenance services are still available, with buyers responsible for corresponding costs. We aim to process requests as simply as possible.

8.2. Customer Support

Should you require assistance or have any questions, please contact us through Amazon. We commit to responding within 12 hours.