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› Retevis Ailunce HD2 DMR Radio User Manual

## Retevis HD2

# Retevis Ailunce HD2 DMR Radio User Manual

Model: HD2

## 1. INTRODUCTION

The Retevis Ailunce HD2 is a versatile dual-band handheld ham radio designed for reliable communication in various environments. It supports both digital (DMR Tier 1 & 2, MOTOTRBO compatible) and analog modes, offering a wide range of features including GPS, Bluetooth connectivity, IP67 waterproofing, and advanced security with AES256 encryption. This manual provides essential information for setting up, operating, and maintaining your HD2 radio.

## 2. SAFETY INFORMATION

Always observe the following safety precautions to reduce the risk of fire, electric shock, or personal injury:

- Do not disassemble or modify the radio. Unauthorized modifications can void your warranty and may be dangerous.
- Keep the radio away from extreme temperatures, direct sunlight, and moisture.
- Use only Retevis-approved accessories and chargers.
- Do not operate the radio while driving or performing tasks that require full attention.
- Avoid prolonged exposure to the antenna when transmitting, as it may cause minor burns.

## 3. PACKAGE CONTENTS

Verify that all items are present in your package:

- Retevis Ailunce HD2 Radio Body
- USB Type-C Charging Cable
- Battery
- Type-C Desktop Charger
- Antenna
- User's Manual
- Belt Clip
- Sling

- Bluetooth Earpiece



# PACKAGE INCLUDES

			
<b>HD2 DMR ham radio</b>	<b>Belt clip</b>	<b>Charging base</b>	<b>Hand strap</b>
			
	<b>Wireless headphone</b>	<b>Adapter</b>	<b>Data cable</b>
			
	<b>Battery</b>	<b>User manual</b>	<b>Type-C charging cable</b>

The package includes the HD2 radio, charging accessories, antenna, belt clip, sling, Bluetooth earpiece, and user manual.

## 4. PRODUCT OVERVIEW

Familiarize yourself with the main components of your Retevis Ailunce HD2 radio.



The Retevis Ailunce HD2 radio, shown in its charging cradle, features a clear display, numeric keypad, and rotary knobs for channel and volume control. A Bluetooth earpiece and USB-C charger are also visible.



# VFO MODE

No need for a computer, easy to set and save the needed settings



The rear of the Ailunce HD2 radio displays the model number, frequency ranges, input voltage, and regulatory certifications such as CE, UKCA, and RoHS.

## 5. SETUP

### 5.1 Battery Installation and Charging

The HD2 radio comes with a 3200mAh Li-ion battery. Ensure it is fully charged before first use.

1. Align the battery with the battery compartment on the back of the radio and slide it into place until it clicks securely.
2. Connect the USB Type-C charging cable to the radio or place the radio in the Type-C desktop charger.
3. Connect the charger to a power source. The charging indicator will show the charging status. A full charge typically takes about 8 hours.



# 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**



The Ailunce HD2 features a 3200mAh battery with USB-C charging, providing up to 21 hours of work time in digital mode and 35 hours of standby time.

## 5.2 Antenna Installation

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



# HIGH GAIN ANTENNA

Long antenna and strong penetration ensure stable signal at the edge of the distance



The high gain antenna ensures stable signal transmission and reception, even at long distances.

## 5.3 Powering 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.

## 5.4 Initial Configuration (VFO Mode and CPS)

The Ailunce HD2 supports VFO (Variable Frequency Oscillator) mode for direct frequency input and CPS (Customer Programming Software) for advanced configuration via computer.

This video demonstrates how to adjust frequencies on the Retevis Ailunce HD2 radio.

This video highlights the VFO mode and SUB-PTT function of the Retevis Ailunce HD2 radio, showing its solid build and ease of use.

## 6. OPERATING INSTRUCTIONS

### 6.1 Basic Operation

The HD2 features a Push-to-Talk (PTT) button on the side for transmitting. Adjust volume using the top rotary knob. Channels can be selected using the keypad or the selector knob.

This video demonstrates the wireless function of the Retevis Ailunce HD2 two-way radio.

## 6.2 DMR and Analog Modes

The radio supports both digital and analog communication. You can switch between modes as needed for compatibility with different radio systems.

This video provides an introduction to the various functions of the Retevis Ailunce HD2 DMR Radio.

## 6.3 GPS Function

The integrated GPS function allows you to locate your real-time position and share it with others, crucial for outdoor activities or emergency situations.



The GPS function on the Ailunce HD2 allows you to view and share your precise location coordinates.

## 6.4 Bluetooth Connectivity

Connect a wireless headset for hands-free communication, ideal for amateur radio events or when mobility is required.



The radio supports wireless connection to a Bluetooth headset, allowing for hands-free operation up to 10 meters away.

This video demonstrates how to connect an EZTalk 3A to the HD2 via Bluetooth.

### 6.5 NOAA Weather Alert

Stay informed about severe weather conditions by tuning into NOAA weather channels. The radio can provide early warnings for hurricanes, typhoons, heavy rains, and other disasters.

This video showcases the alarm function and 11 NOAA channels available on the Retevis Ailunce HD2 radio.

### 6.6 Emergency Alarm

Press the orange alarm button on the top of the radio to activate an SOS signal light and alarm, quickly notifying rescue teams in emergencies.

### 6.7 Unmatched Security with AES256

The HD2 offers military-grade AES256 encryption to safeguard your communications, ensuring privacy and protection

from eavesdropping, essential for professional and sensitive environments.

## 6.8 Channel Management

The upgraded HD2 supports 3000 channels and 500,000 contacts, facilitating extensive community communication. Features like ID edit, call records, and text messages are also supported.



The Ailunce HD2 boasts a large contact capacity, supporting 3000 channels and 500,000 contacts.

## 6.9 FM Radio

The HD2 includes an FM radio function for listening to broadcast stations.

This video demonstrates the FM radio functionality of the Retevis Ailunce HD2.

# 7. MAINTENANCE

## 7.1 Cleaning

Wipe the radio body with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Ensure all port covers are securely closed to maintain waterproofing.

## 7.2 Battery Care

To maximize 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.

## 7.3 Waterproof Care (IP67)

The HD2 is IP67 rated, meaning it is protected from dust and can withstand immersion in 1 meter of water for up to 30 minutes. Always ensure the battery cover and all port seals are properly closed before exposing the radio to water or dusty environments. After exposure to water, dry the radio thoroughly before charging or opening any compartments.



# IP67 WATERPROOF AND DUSTPROOF

Withstand 1-meter water up to 30 minutes and other harsh conditions

The IP67 waterproof and dustproof design allows the HD2 to withstand immersion in 1 meter of water for up to 30 minutes, making it suitable for harsh conditions.

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Radio does not power on.	Battery is low or not installed correctly.	Charge the battery fully. Ensure the battery is securely installed.
No audio from speaker.	Volume too low; squelch level too high; speaker damaged.	Increase volume. Adjust squelch level. If problem persists, contact support.

Problem	Possible Cause	Solution
Cannot transmit or receive.	Incorrect frequency/channel; antenna not connected; radio in wrong mode (digital/analog).	Verify frequency and channel settings. Ensure antenna is securely attached. Check and switch modes as needed.
Programming cable not working.	Driver issues; defective cable.	Ensure correct drivers are installed for your operating system. Try a different USB port or computer. Contact Retevis support for a replacement cable if necessary.
Bluetooth earpiece not connecting.	Earpiece not in pairing mode; radio Bluetooth off.	Put earpiece in pairing mode. Enable Bluetooth on the radio and attempt to re-pair.

## 9. SPECIFICATIONS

Feature	Specification
Model Number	HD2
Item Weight	12.9 ounces
Product Dimensions	2.56 x 5.91 x 1.38 inches
Batteries	1 C batteries required (included)
Number of Channels	3000
Frequency Range	VHF 136-174Mhz, UHF 400-520Mhz
Talking Range Maximum	4 Mile
Water Resistance Level	IP67 Waterproof
Voltage	7.4 Volts
Special Features	VFO Mode, Analog & Digital Mode, GPS, 3200mAh Battery & Type-C Charging

## 10. WARRANTY AND SUPPORT

Retevis provides a 2-year warranty for the radio body and a 1-year warranty for accessories. You are eligible for a 30-day no-reason return period. Beyond the warranty period, maintenance services are still offered, with buyers responsible for associated costs.

For any inquiries or support, please contact Retevis customer service on Amazon. They aim to reply within 12 hours.

For more information and resources, visit the official Retevis Store: [Retevis Store on Amazon](#)