

JJRC H20

JJRC H20 Nano Hexacopter Instruction Manual

Model: H20

1. INTRODUCTION

The JJRC H20 Nano Hexacopter is a compact and agile remote-controlled aircraft designed for both beginners and experienced pilots. Featuring a 6-axis gyro for stable flight, 2.4G 4-channel control, and special functions like headless mode and 3D tumbling, it offers an engaging flying experience. This manual provides essential information for safe operation, setup, and maintenance of your hexacopter.



Figure 1.1: The JJRC H20 Nano Hexacopter. This image shows the hexacopter from a top-down perspective, highlighting its red body, six black propeller arms, and a mix of black and white propellers.

2. SAFETY PRECAUTIONS

To ensure safe operation and prevent damage to the product or injury, please observe the following

precautions:

- **Battery Safety:** Do not over-charge or over-discharge batteries. Do not expose batteries to high temperatures. Do not throw batteries into fire or water.
- **Flight Environment:** Fly in open areas, away from people, animals, obstacles, and power lines. Avoid flying in strong winds or adverse weather conditions.
- **Age Recommendation:** This product is suitable for users aged 14 years and above.
- **Supervision:** Adult supervision is recommended for younger users.
- **Pre-Flight Check:** Always ensure the hexacopter and transmitter batteries are fully charged and all propellers are securely attached before each flight.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x JJRC H20 RC Quadcopter
- 1 x Transmitter (Mode 2)
- 1 x 3.7V 150mAh Li-po Battery
- 3 x Pair of Spare Propellers
- 1 x USB Charging Cable
- 1 x Mini Screwdriver
- 1 x English User Manual (This document)

4. SETUP

4.1 Charging the Hexacopter Battery

1. Connect the 3.7V 150mAh Li-po battery to the provided USB charging cable.
2. Plug the USB charging cable into a USB power source (e.g., computer USB port, USB wall adapter).
3. The charging indicator light on the USB cable will illuminate during charging and turn off when charging is complete.
4. Charging time is approximately 45 minutes. Do not leave the battery unattended during charging.

4.2 Installing the Hexacopter Battery

1. Carefully insert the charged battery into the battery compartment located on the underside of the hexacopter.
2. Connect the battery connector to the hexacopter's power port. Ensure the connection is secure.

4.3 Installing Transmitter Batteries

1. Open the battery compartment on the back of the transmitter using the mini screwdriver.
 2. Insert 3 x AAA dry batteries (not included) into the compartment, observing the correct polarity (+/-).
 3. Close the battery compartment and secure it with the screw.
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5. OPERATING INSTRUCTIONS

5.1 Pairing the Hexacopter with the Transmitter

1. Place the hexacopter on a flat, level surface.
2. Turn on the hexacopter by connecting its battery. The LED lights on the hexacopter will flash.
3. Turn on the transmitter. The transmitter's indicator light will flash.
4. Push the left throttle stick (Mode 2) fully up, then pull it fully down. The hexacopter's and transmitter's lights will become solid, indicating successful pairing.

5.2 Basic Flight Controls (Mode 2)

- **Left Stick (Throttle/Yaw):**
 - Up/Down: Ascend/Descend
 - Left/Right: Rotate Left/Right (Yaw)
- **Right Stick (Pitch/Roll):**
 - Up/Down: Fly Forward/Backward (Pitch)
 - Left/Right: Fly Left/Right Sideward (Roll)

5.3 Special Functions



Figure 5.1: Key features of the JJRC H20 Nano Hexacopter, including 360-degree roll, one-key return, and headless mode.

- **Headless Mode (CF Mode):** Press the Headless Mode button on the transmitter. In this mode, the hexacopter's orientation is relative to the pilot, regardless of its actual front direction. Press the button again to exit.
- **3D Tumbling (Roll-over):** Fly the hexacopter to a height of at least 3 meters. Press the 3D Roll button, then quickly push the right stick in the desired direction (forward, backward, left, or right) to perform a 360-degree flip.

- **One Key Automatic Return:** Press the One Key Return button. The hexacopter will attempt to fly back towards its take-off point. This function is most effective when the hexacopter is within close range and the initial calibration was accurate. Press any control stick to cancel the return.
- **Gyro Calibration:** If the hexacopter exhibits unstable flight, place it on a flat surface and push both control sticks to the bottom-left corner simultaneously until the lights flash, indicating calibration is complete.

6. MAINTENANCE

6.1 Cleaning

Regularly clean the hexacopter with a soft, dry cloth to remove dust and debris. Avoid using water or solvents.

6.2 Propeller Replacement

If a propeller is damaged or bent, replace it with a spare propeller from the package. Ensure the correct propeller type (A or B) is installed on the corresponding motor arm. Gently pull off the old propeller and push on the new one, ensuring it is seated firmly.

6.3 Battery Care

Store batteries in a cool, dry place. Do not store fully charged or fully discharged for extended periods. Always allow batteries to cool down before recharging.

7. TROUBLESHOOTING

- **Hexacopter not responding:**
 - Ensure both hexacopter and transmitter batteries are charged.
 - Re-pair the hexacopter and transmitter following the steps in Section 5.1.
- **Unstable flight / Drifting:**
 - Perform a gyro calibration (Section 5.3).
 - Adjust the trim buttons on the transmitter to correct any drifting.
 - Check for damaged or bent propellers and replace if necessary.
- **Propellers not spinning:**
 - Check for any obstructions around the motors or propellers.
 - Ensure propellers are securely attached.
- **Short flight time:**
 - Ensure the battery is fully charged.
 - Battery performance may degrade over time; consider replacing the battery if flight times remain consistently low.

8. SPECIFICATIONS

Brand	JJRC
Model	H20
Frequency	2.4G
Gyro	6-axis
Channels	4CH
Functions	Ascend, Descend, Forward, Backward, Left/Right Sideward Fly, Turn Left/Right, Hover, 3D Roll-over, Headless Mode, One Key Automatic Return, LED Lights
Flying Distance	Approximately 30 meters
Hexacopter Battery	3.7V 150mAh Li-po (included)
Charging Time	Approximately 45 minutes
Flying Time	5-7 minutes
Remote Control Battery	3 x AAA dry battery (not included)
Material	ABS
Hexacopter Dimensions	110 x 100 x 25 mm (4.33"L x 3.94"W x 0.98"H)
Hexacopter Weight	22g (0.78 oz) / 5.6 ounces (with packaging)

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your JJRC H20 Nano Hexacopter, please refer to the official JJRC website or contact the retailer from whom you purchased the product. Keep your proof of purchase for warranty claims.