4DRC 4D-F3

4DRC F3 GPS Drone with 4K HD Camera User Manual

Model: 4D-F3 | Brand: 4DRC

1. Introduction

Thank you for purchasing the 4DRC F3 GPS Drone. This manual provides essential information for safe operation, setup, and maintenance of your drone. Please read it thoroughly before first use to ensure optimal performance and to prevent damage.

2. Safety Guidelines

- Always operate the drone in open areas, away from people, animals, buildings, and obstacles.
- Maintain a safe distance from the drone during flight.
- Do not fly in strong winds, rain, or other adverse weather conditions.
- Ensure batteries are fully charged before each flight.
- Keep propellers clear of obstructions and body parts.
- Adhere to all local regulations and laws regarding drone operation.
- Adult supervision is recommended for younger users.

3. Package Contents

Verify that all items are present in your package:

- 4DRC F3 GPS Drone
- Remote Control
- Storage Case
- Batteries (Lithium-ion)
- Spare Propellers
- USB Charging Cable

- Screwdriver
- User Manual

Image: The complete package contents of the 4DRC F3 GPS Drone, neatly arranged with the drone, remote, batteries, and accessories.

4. Product Overview

4.1 Drone Components

The 4DRC F3 drone features a foldable design for portability, equipped with a 4K HD camera and a secondary bottom camera for enhanced aerial photography and stable flight.

Image: A close-up of the 4DRC F3 drone, showcasing its 4K camera lens and the two modular batteries.

4.2 Remote Control

The remote control provides intuitive operation with dedicated buttons for GPS functions, automatic return, and one-key takeoff/landing. It includes a holder for your smartphone to view real-time FPV footage.

Image: The remote control with a smartphone attached, showing the live camera feed from the drone.

5. Setup

5.1 Battery Charging and Installation

1. Charge the drone's Lithium-ion batteries using the provided USB charging cable. The smart battery features LED indicators for remaining power.
2. Once fully charged, insert the battery securely into the drone's battery compartment.
3. Install 3 AA batteries (not included) into the remote control.

5.2 Propeller Installation

Ensure propellers are correctly installed according to the markings (A and B) on both the propellers and the motor arms. Incorrect installation will prevent proper flight.

5.3 App Installation

Download the official 4DRC F3 app from your device's app store. For iOS devices, iOS 7.0 or higher with 1GB RAM is required. For Android devices, ensure dual-frequency parameters are checked for connection stability.

6. Operating Instructions

6.1 Pairing the Drone and Remote

1. Place the drone on a flat, level surface.
2. Turn on the drone, then turn on the remote control.
3. Push the left joystick up and then down to pair. The drone's indicator lights will become solid when paired successfully.

6.2 Takeoff and Landing

- **One-Key Takeoff:** Press the one-key takeoff button on the remote control. The drone will automatically ascend to a stable altitude.
- **One-Key Landing:** Press the one-key landing button. The drone will slowly descend and land.
- **Manual Control:** Use the left joystick to control altitude and rotation, and the right joystick for forward/backward and left/right movement.

6.3 Altitude Hold Mode

The drone features an altitude hold function, allowing it to maintain a stable height for easier control and clearer photography.

6.4 Camera Operation

The 4K HD camera captures high-resolution photos (3840 x 2160) and videos. The camera angle is 90° adjustable, providing a wider field of view. Real-time transmission allows you to view the footage directly on your smartphone via the app.

7. Advanced Features

7.1 GPS Automatic Return

The drone is equipped with GPS positioning for automatic return functions. It will automatically return to its takeoff point if the signal is lost, the battery is low, or if you press the one-key return button.

Image: The drone demonstrating its GPS auto-return feature, flying back to its original position.

7.2 Follow Me Mode

In Follow Me mode, the drone will automatically track and follow the pilot, capturing dynamic footage without manual control.

Image: A drone actively following a person, illustrating the 'Follow Me' function.

7.3 Custom Flight Path (Waypoint Flight)

Design your flight route by tapping multiple points on the app screen. The drone will then fly along the specified path, allowing you to focus on capturing creative shots.

Image: The drone executing a pre-programmed flight path over a mountainous landscape.

7.4 Gesture Control

Perform specific hand gestures to trigger photo or video recording, making it easier to capture moments hands-free.

Image: Individuals using hand gestures to command the drone for photo capture.

7.5 360° Circle Flight

The drone can perform a 360° circle flight around a designated point, with adjustable flight direction and diameter, offering unique panoramic views.

Image: The drone circling around a subject, demonstrating its 360-degree flight capability.

7.6 Optical Flow Positioning

In addition to GPS, the drone utilizes optical flow positioning for enhanced stability, especially in indoor environments or areas with weak GPS signals, ensuring a safer and more stable flight experience.

Image: Visual representation of the drone's optical flow sensor providing stable flight indoors and outdoors.

8. Maintenance

- Regularly inspect propellers for damage. Replace any bent or broken propellers immediately using the provided spares.
- Clean the drone body and camera lens with a soft, dry cloth. Avoid using harsh chemicals.
- Store the drone and batteries in a cool, dry place, away from direct sunlight and extreme temperatures.
- Do not overcharge or completely discharge the batteries to prolong their lifespan.

9. Troubleshooting

Problem	Possible Cause	Solution
Drone does not pair with remote.	Incorrect pairing sequence; low battery in remote or drone.	Ensure drone and remote are fully charged. Follow pairing steps (Section 6.1).
Drone drifts during flight.	Uncalibrated gyroscope; strong wind.	Calibrate the drone before flight. Avoid flying in strong winds.
Poor camera image quality or no real-time feed.	Weak Wi-Fi signal; app not connected; dirty lens.	Ensure strong Wi-Fi connection. Reconnect app. Clean camera lens.
GPS functions not working.	Insufficient GPS satellites; indoor flight.	Fly outdoors in an open area. Wait for sufficient GPS satellite lock.
Propellers stop suddenly during flight.	Motor malfunction; battery issue; impact.	Check for propeller damage and replace if necessary. Ensure battery is fully charged and securely connected. If issue persists, contact support.

10. Specifications

Feature	Detail
Brand	4DRC
Model	4D-F3
Camera Resolution	4K HD (3840 x 2160 photos)
Camera Adjustment	90° adjustable dual camera
Flight Time	Up to 30 minutes
Control Range	Max 1968 Ft (approx. 600 meters)
FPV Transmission Range	Max 1300 Ft (approx. 400 meters)
Battery Type	Lithium-ion
Drone Weight	0.95 kg
Unfolded Dimensions (L x W x H)	32.8 x 32.8 x 21 cm
Folded Dimensions (L x W x H)	7.0 x 4.7 x 2.3 inches (approx. 17.8 x 11.9 x 5.8 cm)
Wireless Method	GPS Automatic Return

Feature	Detail
Control Type	Remote Control + GPS Automatic Return
Special Features	GPS Auto Return, Follow Me, Custom Flight Path, Dual Camera, Real-time Transmission, 4K HD Camera, Altitude Hold, Headless Mode, Optical Flow Positioning

11. Warranty and Support

For warranty information and technical support, please refer to the contact details provided with your purchase documentation or visit the official 4DRC website. Keep your proof of purchase for any warranty claims.