HUBSAN ZINO 2 Plus

Hubsan ZINO 2 Plus Drone User Manual

Model: ZINO 2 Plus | Brand: HUBSAN

1. INTRODUCTION

This manual provides essential information for the safe and effective operation of your Hubsan ZINO 2 Plus Drone. Please read this manual thoroughly before operating the aircraft and retain it for future reference. Proper understanding of the drone's features and safety guidelines is crucial for an optimal flight experience.

2. WHAT'S IN THE BOX

Verify that all components are present upon unboxing:

- ZINO 2 RC Drone
- Remote Control
- Blades (set)
- Blade Screws (set)
- Charger
- Screwdriver
- Remote Control USB Charging Cable
- Battery
- English Manual

Image: All components of the Hubsan ZINO 2 Plus Drone package.

3. PRODUCT OVERVIEW

The Hubsan ZINO 2 Plus is a portable GPS drone designed for adults and beginners, featuring a 4K camera and advanced flight capabilities.

Key Features:

- **Intelligent Battery & FPV Distance:** Equipped with a 3800mAh 4s battery, supporting approximately 33 minutes of cruising at 25km/h or 31 minutes of hovering. The upgraded SmartFC V2.0 extends remote control and image transmission distance up to 10 km.
- **Detachable Three-axis Gimbal:** Ensures stable camera positioning across lateral, pitch, and heading angles for high-quality shooting.
- **4K Camera:** Features a 4k Sony 1/2.3 inch CMOS Sensor for enhanced dynamic range and low-light performance. Max Bitrate: 60Mbps. Resolution: 3840*2160.
- **Protection & Care:** Includes a low power failsafe mode and flight control failsafe mode, which automatically returns the drone to its home point and lands if connection is lost.
- **Functions:** Foldable design, GPS+GLONASS+OPTICAL positioning, Low light Capture, Vision Auxiliary Landing, Orbiting, Headless mode, Image Tracking, Automatic Takeoff/Landing, Automatic Return Home, Hovering precision, APP Online Update, Creative video modes (Orbiting, Panorama, Hyperlapse).
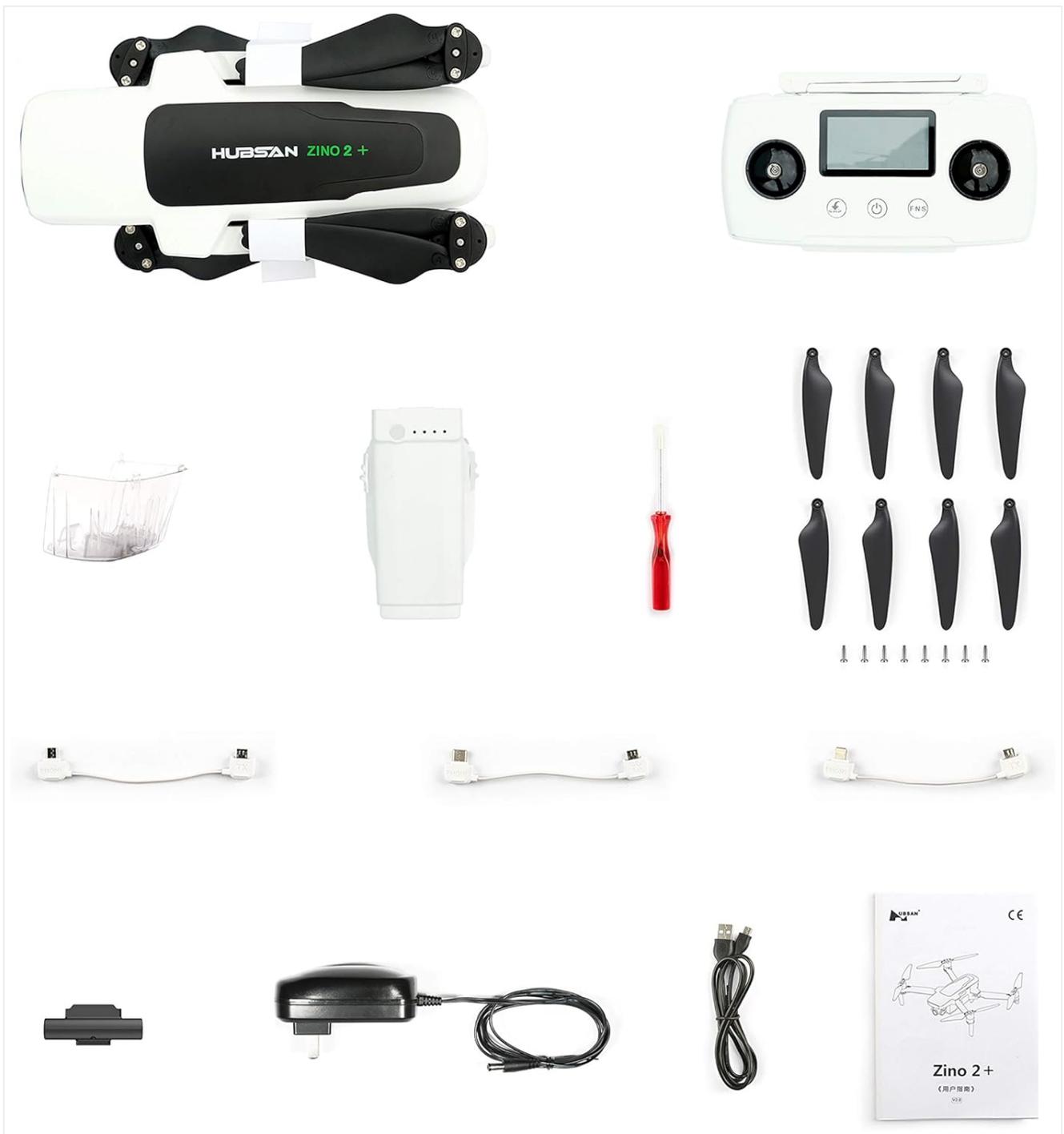
Visual Features:

Image: The drone features a detachable gimbal and is equipped with ND filters (ND8/16/32) and a CPL polarizer for enhanced camera performance. The camera uses a Sony 1/2.3 inch sensor, capable of 4K video at 30/60fps with a highest bit rate of 100Mbps.

Image: The remote control and drone highlighting a 9KM image transmission range, utilizing SyncLeas, the latest high-definition digital image transmission technology.

Image: The drone's intelligent flight battery (3800mAh) provides 35 minutes of flight endurance at slow speed (25km/h) and 36 minutes of windless hover. It also indicates a maximum speed of 20 meters/second in Sport mode and Level 6 wind resistance.

Image: The drone supports GPS Mode, Optical Flow Mode, and Attitude Mode for steady hovering both outdoors and indoors. The transmitter has a built-in 3350mAh battery with a high brightness display for real-time flight telemetry, visible clearly in outdoor sunlight.

Image: The drone utilizes Visual Landing Support for easy and precise landing with one click, featuring precise AI vision landing support and automatic search for the apron when landing.

Image: The dimensions of the Hubsan ZINO 2 Plus drone are shown: 260.05mm length, 325.98mm width (with propellers extended), and 94.93mm height. When folded, the dimensions are 129mm x 216.5mm x 94.93mm.

Official Product Video:

Video: A sample video showcasing 4K 60fps footage captured by the Hubsan ZINO 2 Plus drone. This video demonstrates the camera's capabilities in various outdoor settings.

4. SETUP

1. **Charge Batteries:** Fully charge the drone battery and the remote control battery using the provided charger and cables. Ensure the drone battery is securely inserted into the aircraft.

2. **Install Propellers:** Attach the propellers to the motor shafts according to the markings (e.g., A and B). Ensure they are securely fastened.

3. **Unlock Gimbal:** Before powering on, carefully remove the gimbal protector and unlock the gimbal if it is locked.

4. **Power On:** Press and hold the power button on the drone until it powers on. Repeat for the remote control.

5. **Connect to App:** Download and install the official Hubsan flight application on your mobile device. Connect your mobile device to the remote control via the USB cable. Follow the in-app instructions to connect to the drone.

6. **Calibrate Compass:** Perform compass calibration as instructed by the app or remote control. This is crucial for accurate GPS positioning.

5. OPERATING INSTRUCTIONS

Always operate the drone in an open area, away from obstacles, people, and animals. Ensure you have a clear line of sight to the drone.

Basic Flight:

- **Takeoff:** Use the automatic takeoff function via the app or remote control. The drone will ascend to a safe hovering altitude.
- **Controls:** Use the joysticks on the remote control to maneuver the drone. The left joystick typically controls altitude and yaw (rotation), while the right joystick controls forward/backward and left/right movement.
- **Landing:** Use the automatic landing function. The drone will descend and land at its takeoff point. Manual landing is also possible by slowly lowering the left joystick.

Intelligent Flight Modes:

- **GPS Mode:** Provides stable hovering and precise positioning using GPS and GLONASS satellites. Recommended for outdoor flight.
- **Optical Flow Mode:** Utilizes downward-facing sensors for stable hovering in indoor environments or areas with weak GPS signals.
- **Return to Home (RTH):** Initiates an automatic return to the recorded home point and lands. This can be triggered manually or automatically in case of low battery or signal loss.
- **Image Tracking:** Allows the drone to follow a selected subject.
- **Orbiting:** The drone flies in a circular path around a designated point.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your drone.

- **Battery Care:** Store batteries at approximately 50-60% charge if not used for extended periods. Avoid overcharging or over-discharging. Do not expose batteries to extreme temperatures.
- **Propeller Inspection:** Regularly check propellers for cracks, bends, or damage. Replace damaged propellers immediately.
- **Cleaning:** Use a soft, dry cloth to clean the drone body, camera lens, and sensors. Avoid using harsh chemicals.
- **Gimbal Protection:** Always reattach the gimbal protector when transporting or storing the drone to prevent damage.
- **Firmware Updates:** Periodically check for and install firmware updates via the official app to ensure optimal performance and access to new features.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Drone does not power on	Low battery; Battery not properly inserted	Charge battery fully; Reinsert battery securely

Problem	Possible Cause	Solution
No GPS signal	Flying indoors; Obstructions; Insufficient satellites	Fly in an open outdoor area; Wait for more satellites (at least 7-8 for stable flight)
Unstable flight/Drifting	Improper calibration; Strong winds; Gimbal not unlocked	Recalibrate compass and IMU; Avoid flying in strong winds; Ensure gimbal is unlocked
No FPV (First Person View) feed	Loose cable connection; App issue; Camera malfunction	Check USB cable connection between phone and remote; Restart app and drone; Contact support if issue persists
Remote control not binding	Incorrect binding procedure; Interference	Follow binding instructions in the manual; Move to an area with less interference

8. SPECIFICATIONS

- **Brand:** HUBSAN
- **Model Name:** ZINO 2 Plus
- **Age Range (Description):** Adult
- **Video Capture Resolution:** 1080p (Output), 4K (Recording)
- **Effective Still Resolution:** 8.3 MP
- **Connectivity Technology:** USB
- **Skill Level:** Beginner
- **Item Weight:** 910 Grams (2.01 pounds)
- **Battery Capacity:** 3800 Milliamp Hours (Li-Ion)
- **Control Type:** Remote Control
- **Maximum Range:** 8000 Meters (Image Transmission 9 Km)
- **Material:** Nylon, Plastic
- **Wireless Communication Technology:** Wi-Fi
- **Optical Sensor Technology:** CMOS
- **Manufacturer Recommended Age:** 14 months - 14 years (Note: Product description states 'for Adults')
- **Package Dimensions:** 11.4 x 11 x 5.3 inches

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official HUBSAN website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims. HUBSAN aims to provide backup and free accessories, often facilitated through regional warehouses.