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> AOTULIGHT V168 Pro GPS Drone with 4K HDR Camera, 5GHz WiFi, 90 Mins Flight Time, Black, Beginner User Manual

## AOTULIGHT V168-001

# AOTULIGHT V168 Pro GPS Drone User Manual

Model: V168-001

## 1. INTRODUCTION

Thank you for choosing the AOTULIGHT V168 Pro GPS Drone. This manual provides essential information for safe operation, setup, maintenance, and troubleshooting. Please read it thoroughly before operating your drone to ensure optimal performance and safety.



The AOTULIGHT V168 Pro GPS Drone, its remote control, and included accessories.



The V168 Pro drone ready for flight, showcasing its compact design.

## 2. WHAT'S IN THE BOX

Verify that all components are present in your package:

- V168 Pro GPS Drone
- Remote Control
- Battery (3 Lithium Ion batteries included)
- Camera
- Blades (Spare set)
- Micro-USB Cable
- Handbag

# v168 Drone

System

**GPS return**

Performance

**Obstacle avoidance  
/brushless**

**ESC dual camera  
HD pixels**



8K high-definition  
dual camera



Remote control  
camera



GPS return



Low battery/over  
distance return



Micro film



Intelligent Follow



5G high-definition  
image transmission

**50x**

50x zoom



Gesture  
photography



3000 meter  
flight



Surround  
shooting



Custom  
waypoint



Optical flow  
positioning hovering



28 minute  
range



Brushless wind  
resistance



An overview of the V168 Pro drone and its complete set of accessories.

## 3. SETUP GUIDE

### 3.1 Drone Preparation

1. **Unfold the Fuselage:** Gently unfold the drone arms until they click into place.
2. **Install Battery:** Insert the fully charged drone battery into the designated compartment until it is secure.
3. **Attach Obstacle Avoidance Module:** If not pre-installed, securely attach the obstacle avoidance module to the top of the drone.

## 3.2 Remote Control Setup

1. **Charge Remote Control:** Connect the Micro-USB cable to the remote control's USB interface to charge its built-in lithium battery.
2. **Attach Mobile Device:** Extend the phone holder on the remote control and securely place your smartphone.
3. **Install App:** Scan the QR code in the quick start guide (not provided in this manual) to download and install the official AOTULIGHT drone control application on your mobile device.



The remote control features a USB smart charging port and a foldable handle for convenience.

## 4. OPERATING INSTRUCTIONS

### 4.1 Basic Flight Operations

- **Power On:** Place the drone on a flat, open surface. Power on the drone, then the remote control. Wait for the drone and remote to pair (indicated by solid lights).
- **One-Click Take-off:** Press the designated one-click take-off button on the remote control or within the app. The drone will automatically ascend to a safe hovering altitude.
- **GPS Positioning:** The V168 Pro features a powerful GPS positioning system for stable flight and accurate return-to-home functions. Ensure a clear sky view for optimal GPS signal acquisition.

Brushless and powerful power  
Level 6 wind resistance, increased  
stability flight



The drone's brushless motors provide powerful and stable flight, offering Level 6 wind resistance.



The V168 Pro is designed for robust flight performance, even in windy conditions.

## 4.2 Intelligent Flight Modes

- **Obstacle Avoidance:** The drone is equipped with a four-way detection and perception system to automatically sense and avoid surrounding obstacles, reducing the risk of collisions.
- **Surround Mode:** The drone can orbit a designated point or subject, capturing dynamic 360-degree footage.
- **Intelligent Follow (Follow Me):** The drone can automatically follow a moving subject, keeping it centered in the frame.
- **Waypoint Planning:** Plan a custom flight path by setting multiple waypoints on the map within the app. The drone will then fly along the specified route.
- **Gesture Photography:** Perform specific hand gestures to trigger photo or video capture.

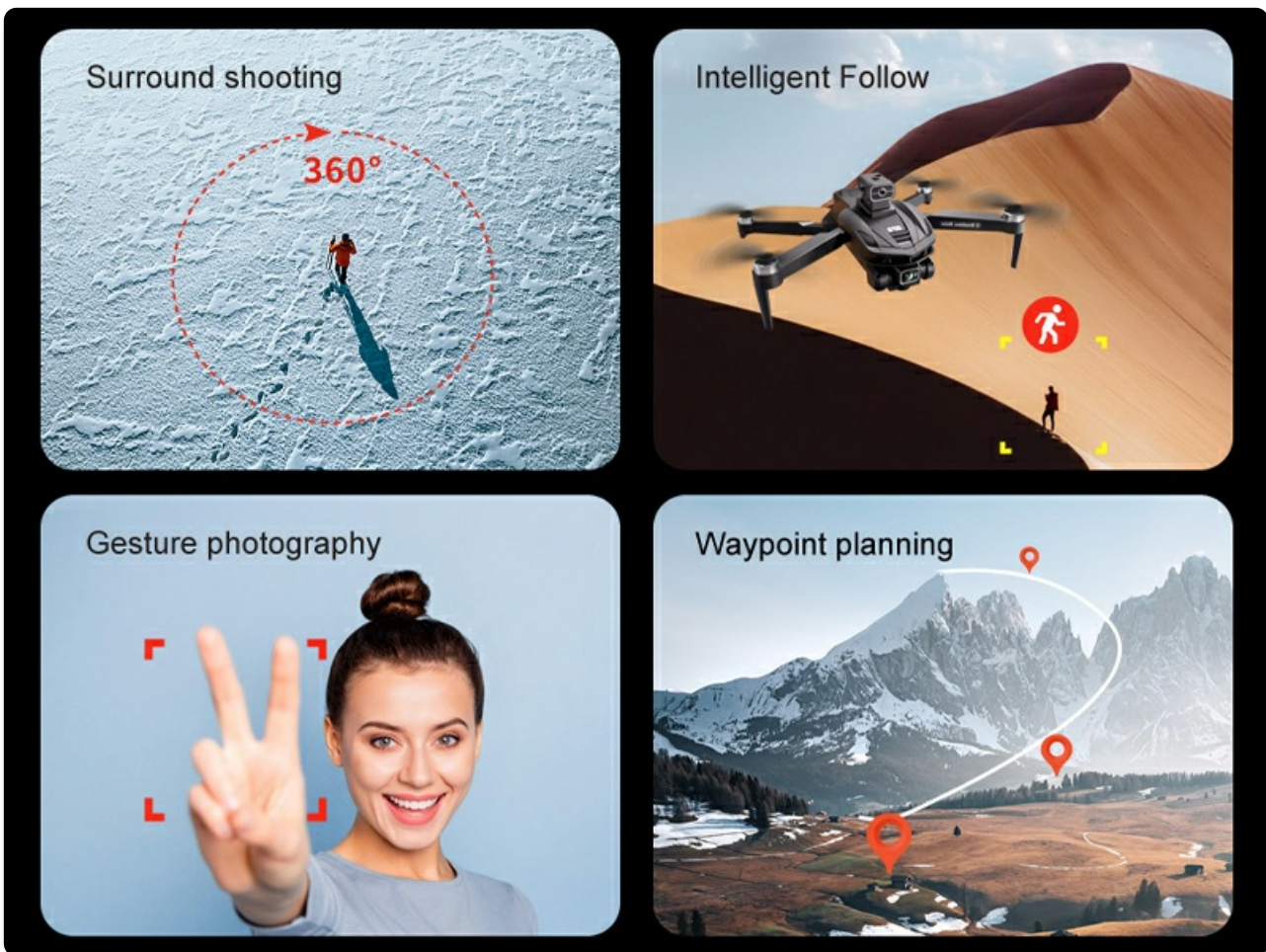
Avoiding obstacles and exploring  
the world with intelligence Explore  
your flight path.



The drone's obstacle avoidance system helps navigate complex environments safely.



The drone intelligently avoids obstacles during flight, exploring your path safely.



Visual representation of the drone's intelligent flight modes.

### 4.3 Camera Features and Image Transmission

- **4K HDR Camera:** Capture stunning high-resolution photos and videos with the integrated 4K HDR camera.
- **8K Electric Condenser Lens:** The main camera features an 8K electric tuning lens with a 90-degree remote control angle and a 120-degree native wide angle for versatile shooting.
- **HD Optical Flow Lens:** Provides stable hovering and improved image quality.
- **5G Real-time Image Transmission:** Experience smooth, high-definition live video feed from the drone to your mobile device with minimal delay, up to 3KM range.
- **0-50x Zoom:** Digitally zoom in on subjects for detailed shots.

## 8K electric condenser

Flat shot, oblique shot,  
overhead shot

90 ° remote  
control angle

120 ° native wide angle



Detailed view of the drone's advanced camera system.

## 8K ESC camera

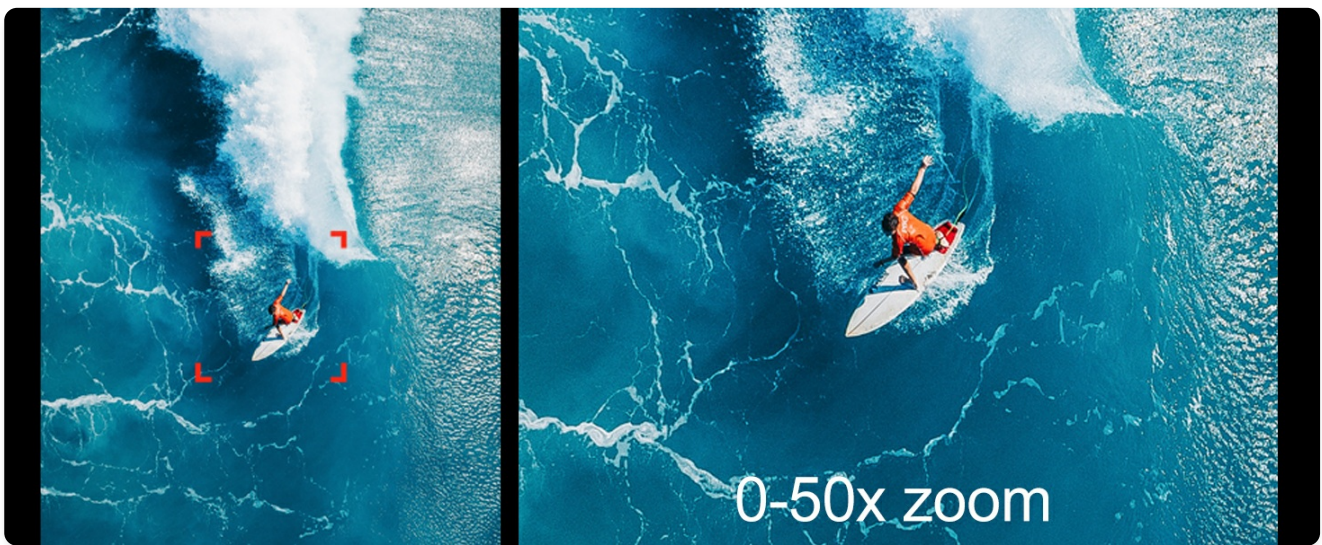
Flat shot, oblique shot,  
overhead shot

90 ° remote  
control angle

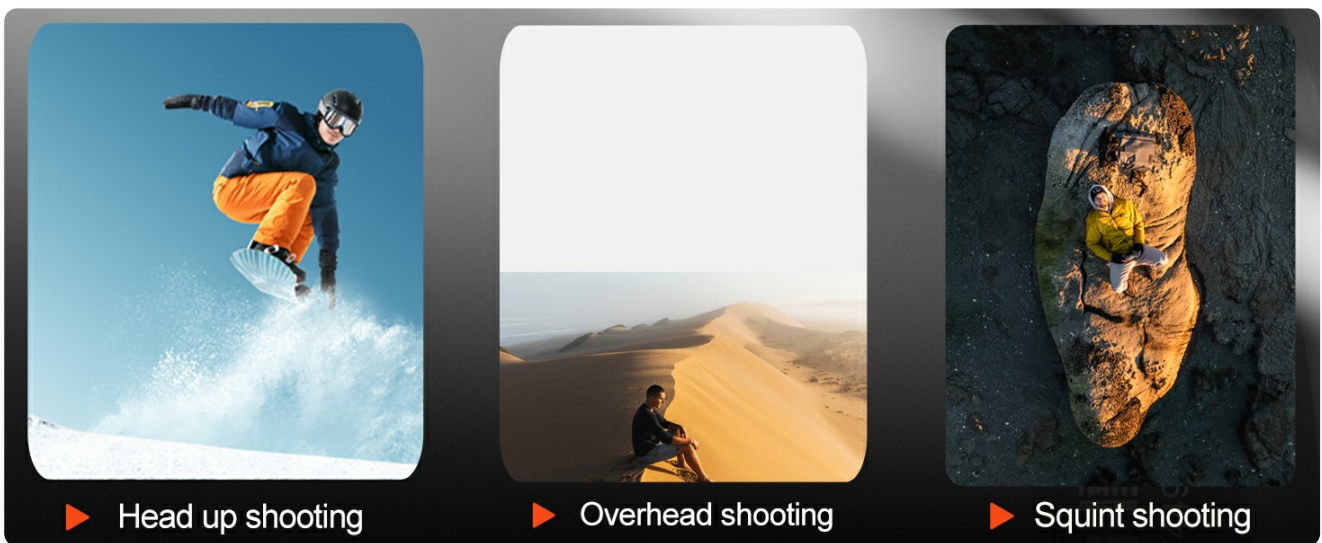
120 ° native wide angle



The 8K ESC camera offers versatile shooting angles and high-quality capture.



The camera's 0-50x zoom allows for detailed capture from a distance.



Explore various shooting perspectives with the drone's flexible camera.

#### 4.4 Automatic Return Functions

The V168 Pro is equipped with intelligent return-to-home features for enhanced safety:

- **Low Power Return:** The drone will automatically return to its take-off point when the battery level is critically low.
- **Out of Control Return:** If the drone loses connection with the remote control, it will automatically return to its take-off point.
- **Over Distance Return:** If the drone flies beyond its effective control range, it will initiate an automatic return.
- **One-Click Return:** You can manually initiate a return to home at any time by pressing the dedicated button on the remote control.

# GPS return

Safeguarding flight



Low power return



Out of Control Return



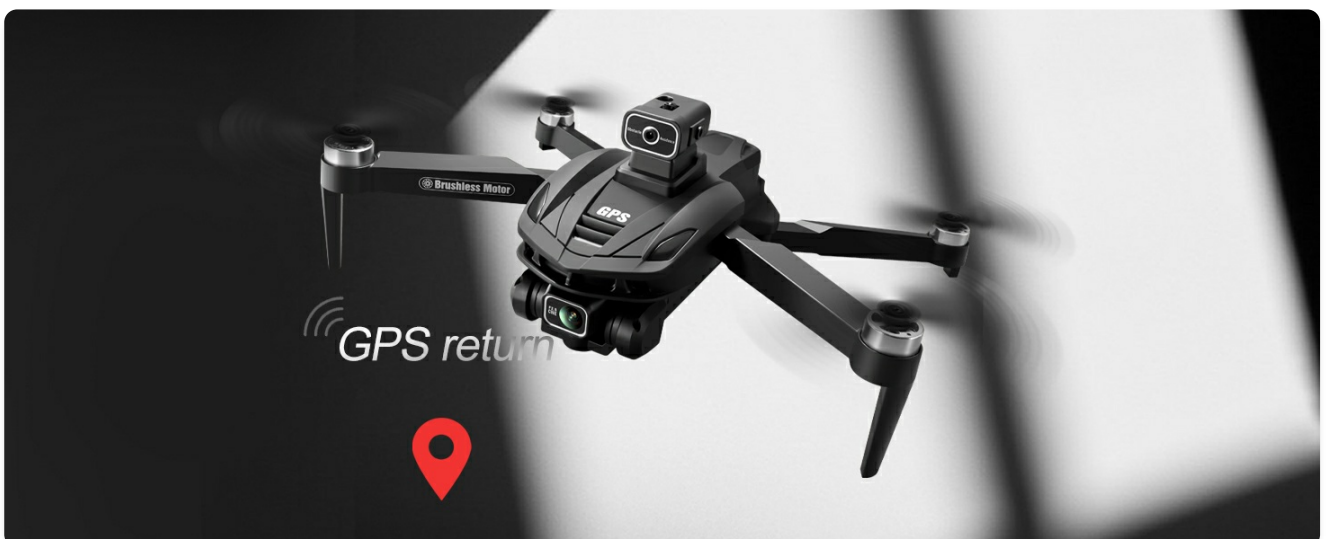
Over distance return



One click return



The drone's GPS return features ensure safe recovery in various situations.



GPS return functionality provides an added layer of safety for your drone.

## 4.5 Official Product Videos

## AOTULIGHT V168 Pro Overview

Your browser does not support the video tag.

This video provides a comprehensive overview of the AOTULIGHT V168 Pro drone, showcasing its features, design, and flight capabilities. It demonstrates key functions like folding fuselage, battery installation, obstacle avoidance module, one-click take-off, GPS positioning, high-definition recording, brushless motors, electric modulation camera, flight time, image transmission range, obstacle avoidance mode, surround mode, fixed point flight, intelligent following, and automatic return functions. The video is 59 seconds long.

## AOTULIGHT Drone Aerial Video Display

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This video displays aerial footage captured by the AOTULIGHT drone, showcasing its camera quality and stability during flight in various natural environments. It highlights the drone's ability to capture stunning landscapes and dynamic scenes. The video is 14 seconds long.

## 5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your AOTULIGHT V168 Pro drone.

- **Battery Care:**
  - Always use the provided charger and cable.
  - Do not overcharge or completely drain the batteries.
  - Store batteries in a cool, dry place away from direct sunlight and extreme temperatures.
  - If storing for extended periods, charge batteries to approximately 50-60%.
- **Blade Inspection:** Regularly check the propeller blades for any signs of damage, cracks, or bends. Replace damaged blades immediately using the spare set provided.
- **Cleaning:** Use a soft, dry cloth to clean the drone body and camera lenses. Avoid using harsh chemicals or abrasive materials. Ensure no dust or debris obstructs the camera or sensors.
- **Motor Check:** Periodically check the brushless motors for any obstructions or unusual noises.

## 6. TROUBLESHOOTING

If you encounter issues with your V168 Pro drone, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Drone does not power on	Low battery; Incorrect battery installation	Charge battery fully; Reinstall battery correctly

Problem	Possible Cause	Solution
Drone does not respond to remote	Not paired; Out of range; Interference	Re-pair drone and remote; Fly within range; Avoid areas with strong interference
Camera footage freezes or app unresponsive	Weak Wi-Fi signal (5GHz required); App glitch; Phone compatibility	Ensure 5GHz Wi-Fi is active on phone; Restart app and drone; Check app for updates; Try a different compatible phone if available. Ensure no other 5GHz devices are causing interference.
Unstable flight/Drifting	Improper calibration; Wind interference; Damaged propellers	Perform gyroscope and geomagnetic calibration; Fly in calm conditions; Replace damaged blades.
GPS signal weak/lost	Flying indoors or near tall structures; Magnetic interference	Fly in open outdoor areas with clear sky view; Avoid areas with strong magnetic fields.

If the problem persists after trying these solutions, please contact AOTULIGHT customer support for further assistance.

## 7. SPECIFICATIONS

Detailed technical specifications for the AOTULIGHT V168 Pro GPS Drone:

### Product parameter



Product dimensions and remote control interface details.

Feature	Detail
Brand	AOTULIGHT
Model Name	V168 Pro
Model Number	V168-001

Feature	Detail
Special Features	Extended Flight Time, Auto Follow, Auto-Orientation, Auto-Landing, Obstacle Avoidance
Age Range (Description)	Adult
Color	Black
Video Capture Resolution	2160P (4K HDR)
Video Output Resolution	3840x2160
Connectivity Technology	Wi-Fi (5GHz for image transmission)
Included Components	Micro-USB Cable, Battery, Handbag, Camera, Blade
Skill Level	Beginner
Item Weight	925 Grams (2.04 pounds)
Battery Capacity	3000 Milliamp Hours
Video Capture Format	MP4
Remote Control Technology	IR
Control Type	Remote Control
Media Type	SD (for storage, not included)
Material	Plastic
Wireless Communication Technology	Wi-Fi
Battery Cell Composition	Lithium
Are Batteries Included	Yes (3 Lithium Ion batteries required, included)
Operating Temperature	32 Degrees Fahrenheit (0 Celsius)
Supported Image Format	JPEG, DNG (or other RAW formats)
Remote Control Included?	Yes
Optical Sensor Technology	CMOS, CCD
Rechargeable Battery Included	Yes
Product Dimensions	10.75"L x 8.36"W x 3.46"H
Country of Origin	China
Date First Available	March 22, 2024

## 8. WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your AOTULIGHT V168 Pro GPS Drone, please refer to the contact information provided with your product packaging or visit the official AOTULIGHT website. Keep your proof of purchase for warranty claims.