

GoolRC S116

GoolRC S116 Drone User Manual

Model: S116

1. INTRODUCTION

Thank you for choosing the GoolRC S116 Drone with 4K Camera. This RC quadcopter is designed for adults, offering an exciting and stable flight experience with advanced features such as 360° obstacle avoidance, optical flow positioning, trajectory flight, headless mode, and gravity sensor control. Equipped with a powerful brushless motor and dual 4K cameras, it captures stunning aerial photos and videos. Please read this manual carefully before operating the drone to ensure safe and optimal performance.

2. SAFETY PRECAUTIONS

- **Flight Environment:** Fly in open areas, away from people, buildings, and obstacles. Avoid flying in strong winds, rain, or snow.
- **Battery Safety:** Use only the provided batteries and charging cable. Do not overcharge or short-circuit batteries. Store batteries in a cool, dry place.
- **Propeller Safety:** Keep hands, face, and loose clothing away from rotating propellers. Ensure propellers are correctly installed before flight.
- **Line of Sight:** Always maintain visual line of sight with the drone during flight.
- **Age Recommendation:** This drone is recommended for users aged 16 years and up.
- **Local Regulations:** Be aware of and comply with all local laws and regulations regarding drone operation.

3. WHAT'S IN THE BOX

The GoolRC S116 Drone package includes the following components:

- RC Drone
- Remote Controller
- Drone Battery (x2)
- Charging Cable
- Propeller (Spare, x4)
- Screwdriver
- Storage Bag
- User Manual
- APP Instruction

Brushless power
360 ° obstacle avoidance

Battery * 2



Spare blade * 4



Charging cable * 1



Screwdriver * 1



Dual camera



Remote control * 1



Instructions * 2



Storage bag * 1



Original battery * 2

Image: All components included in the GoolRC S116 Drone package.

4. PRODUCT OVERVIEW

4.1 Drone Components



Image: GoolRC S116 Drone and its main accessories.

The GoolRC S116 drone features a sleek design with four powerful brushless motors for stable flight. It is equipped with a dual 4K camera system, including a main camera for forward view and a bottom optical flow camera for stable hovering. An obstacle avoidance sensor is located on top for enhanced safety.

4.2 Remote Controller

Gravity induction Deep Flight Experience

Control by swinging the phone in the front, back, left, and right directions Flying, no buttons required, easier to control.



Image: Remote controller with a smartphone for FPV viewing.

The remote controller provides intuitive control over the drone's flight and camera functions. It includes joysticks for movement, buttons for one-key operations, and a phone holder for real-time video transmission via the companion app.

50x Zoom

Fearless High Altitude Vision



50x zoom

✔ 0-50 times zoom

✔ Clearer view

Image: Detailed diagram of the remote controller's operating instructions, showing Speed Switching, Photography/Video Recording, Return (Reverse), One Click Emergency Stop, Throttle, Power Switch, Camera Adjustment, Headless Mode, Obstacle Avoidance Switch, One Click Take off/Landing, Direction Lever, and One Click Calibration.

5. SETUP

5.1 Battery Installation

1. **Drone Battery:** Insert the fully charged drone battery into the battery compartment on the drone's rear until it clicks into place.
2. **Remote Controller Battery:** Open the battery cover on the back of the remote controller and insert the required batteries (refer to the remote controller diagram for type and polarity).

5.2 Propeller Installation

If propellers are not pre-installed, attach them according to the markings (A and B) on the propellers and motor arms. Ensure they are securely fastened.

5.3 App Download and Connection

1. Scan the QR code in the APP Instruction manual or search for the designated app in your smartphone's app store.
2. Turn on the drone and the remote controller.
3. On your smartphone, connect to the drone's Wi-Fi network (usually named 'GoolRC-S116' or similar).
4. Open the app to establish a connection and view the live feed from the drone's camera.

6. OPERATING INSTRUCTIONS

6.1 Basic Flight Operations

- **One-Key Take-off:** Press the one-key take-off button on the remote controller, and the drone will automatically ascend and hover at a certain altitude.
- **One-Key Landing:** Press the one-key landing button, and the drone will slowly descend and land automatically.
- **Throttle Control:** Use the left joystick to control the drone's altitude (up/down).
- **Directional Control:** Use the right joystick to control the drone's forward, backward, left, and right movement.

6.2 Advanced Features

- **4K Dual Camera:** Capture high-definition photos and videos with the dual 4K cameras. The dual camera design provides a wider field of view and more shooting angles.



electric condenser
High definition dual
camera switching

Image: The drone's electric adjustable dual camera system.

- **Electric Adjustable Camera Angle:** Adjust the camera angle remotely via the remote control to capture different perspectives during flight.
- **360° Obstacle Avoidance:** The drone is equipped with an obstacle avoidance system that automatically senses and evades surrounding obstacles, providing a safer flight.



Real time high-definition image transmission

Real time viewing of drone footage through mobile app Exciting images, high-definition transmission without delay.

Image: The drone's 360° obstacle avoidance system in action.

- **Optical Flow Positioning:** Achieve precise height determination and stable hovering by sensing ground textures and light changes. This ensures clearer and smoother shooting effects.

Optical flow hovering Flying, so stable

Maintain altitude and hover throughout the flight. It can be operated with one hand, making it easier to get started.



Image: Optical flow positioning for stable hovering.

- **Brushless Motor:** The brushless motor provides high efficiency, low noise, and a long service life, offering stronger power and longer flight times compared to traditional motors.

Brushless power More stable and wind resistant

Equipped with four efficient and energy-saving brushless motors, Strong output and better wind resistance.



Image: Brushless motor for enhanced stability and wind resistance.

- **Trajectory Flight:** Draw a desired flight path on the app interface, and the drone will automatically follow the specified trajectory.

Trajectory indication
No need for control,
more intelligent



Image: Trajectory flight feature, allowing the drone to follow a drawn path.

- **Headless Mode:** In headless mode, the drone's orientation is relative to the pilot, making it easier to control regardless of the drone's front direction.
- **Gravity Sensor:** Control the drone's movement by swinging your smartphone in the desired direction, offering an intuitive flight experience.
- **Gesture Control:** Use specific hand gestures to trigger photo taking or video recording without needing to touch the remote control.

6.3 Official Product Video

Your browser does not support the video tag.

Video: An official product video showcasing the GoolRC S116 Drone's features and flight capabilities, including optical flow localization, brushless motor, 360° obstacle avoidance, electric control gimbal, intelligent graph transfer, hand gesture recognition, high definition lens, headless mode, and one-click down function.

7. MAINTENANCE

- **Cleaning:** Regularly wipe the drone and remote controller with a soft, dry cloth. Avoid using harsh chemicals.
- **Propeller Inspection:** Check propellers for any damage or cracks before each flight. Replace damaged propellers immediately using the provided spares.
- **Battery Storage:** If storing the drone for an extended period, ensure batteries are charged to about 50% and stored in a cool, dry place.
- **Firmware Updates:** Check the official GoolRC website or app periodically for any available firmware updates to ensure optimal performance.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Drone does not power on	Low battery; Battery not properly installed	Charge drone battery; Reinstall battery securely
Cannot connect to app/Wi-Fi	Wi-Fi not enabled; Incorrect Wi-Fi network selected; App not open	Ensure drone Wi-Fi is on; Select correct network; Open app after connecting Wi-Fi
Unstable flight/Drifting	Drone not calibrated; Strong wind; Damaged propellers	Perform one-click calibration; Fly in calm conditions; Replace damaged propellers
Poor camera quality/No image	Weak Wi-Fi signal; Camera lens dirty; App issue	Fly closer to drone; Clean lens; Restart app/drone
Obstacle avoidance not working	Sensor blocked; Feature not enabled	Ensure sensors are clean and clear; Check app settings for feature activation

9. SPECIFICATIONS

Feature	Detail
Brand	GoolRC
Model Name	S116
Color	Black
Video Capture Resolution	4K

Feature	Detail
Connectivity Technology	Wi-Fi
Battery Capacity	2000 Milliamp Hours
Maximum Range	150 Meters
Material	Plastic
Item Weight	1.21 pounds
Product Dimensions	9.06"L x 9.06"W x 4.72"H
Manufacturer Recommended Age	16 years and up

10. WARRANTY AND SUPPORT

GoolRC products are manufactured to high quality standards. For warranty information, technical support, or any questions regarding your GoolRC S116 Drone, please refer to the contact information provided on the product packaging or visit the official GoolRC website. Please retain your proof of purchase for warranty claims.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question