GoolRC S68

GoolRC S68 RC Drone User Manual
Model: S68

1. INTRODUCTION

Thank you for choosing the GoolRC S68 RC Drone. This mini, foldable quadcopter is designed for ease of use, making it ideal for kids and beginners. It features a durable, anti-drop body and functions such as altitude hold, headless mode, 3D flips, and one-key take-off/landing/return. Please read this manual thoroughly before operating the drone to ensure safe and optimal performance.

Figure 1.1: GoolRC S68 RC Drone and included accessories.

This image displays the GoolRC S68 RC Drone in its unfolded state, alongside its remote controller, a compact storage bag, and two drone batteries. It provides a visual overview of the main components included with the product.

2. PACKAGE CONTENTS

Please check the package contents carefully upon unboxing. If any items are missing or damaged, contact customer support.

- 1 x GoolRC S68 RC Drone
- 1 x Remote Controller
- 2 x Drone Battery (3.7V 650mAh Lithium)
- 1 x USB Charging Cable
- 1 x Screwdriver
- 4 x Spare Propellers
- 4 x Protective Covers
- 1 x Storage Bag
- 1 x User Manual (this document)

Figure 2.1: All components included in the GoolRC S68 RC Drone package.

This image displays the GoolRC S68 RC Drone along with all its accessories, including the remote controller, two batteries, a storage bag, four propellers, a screwdriver, four protective covers, a USB charging cable, and the user manual. This visual aid helps users verify that all parts are present.

3. PRODUCT OVERVIEW

3.1 Drone Features

- Foldable arms for easy portability.
- Compact mini body, approximately 9cm when folded.
- Integrated LED lights for visibility.
- Durable ABS plastic construction.

MINI BODY

Portable design--easy to carry

9cm

Easy to hold with one hand
Take it wherever you go!

Figure 3.1: The GoolRC S68 RC Drone in a user's hand, demonstrating its compact, folded size of approximately 9cm. This illustrates its portability and ease of carrying.

Folding body
Easy to carry

3.5cm

9cm

5.5cm

2.6cm

11cm

12.3cm

Figure 3.2: Visual representation of the GoolRC S68 RC Drone in both its folded and unfolded configurations, with precise dimensions indicated for each state. This helps users understand its compact storage and operational size.

3.2 Remote Controller

The remote controller operates on a 2.4GHz frequency, providing a stable connection up to 100 meters. It requires 2 x 1.5V AAA batteries (not included).

Figure 3.3: Remote Controller Layout and Functions.

This diagram provides a clear overview of the GoolRC S68 RC Drone's remote controller, labeling each button and joystick with its corresponding function, such as headless mode, speed gear, one key return, stunt rolling, trimming controls, and power switch. This is essential for understanding how to operate the drone.

4. SETUP

4.1 Charging the Drone Battery

1. Connect the drone battery to the USB charging cable.
2. Plug the USB cable into a 5V/1A USB power adapter (e.g., computer USB port, phone charger).
3. The charging indicator light will show the charging status. Charging time is approximately 40 minutes.
4. Disconnect the battery once fully charged. Do not overcharge.

4.2 Installing Drone Battery

1. Ensure the drone is powered off.
2. Locate the battery compartment on the drone's underside.
3. Insert the charged battery into the compartment, ensuring correct polarity.
4. Close the battery compartment cover securely.

4.3 Installing Remote Controller Batteries

1. Open the battery cover on the back of the remote controller.
2. Insert 2 x 1.5V AAA batteries, observing the correct polarity (+/-).
3. Close the battery cover.

4.4 Propeller and Protective Cover Installation

1. Identify the 'A' and 'B' markings on the propellers and drone arms.
2. Attach the corresponding propellers to the correct motor shafts. Ensure they are firmly seated.
3. Snap the protective covers onto the drone's arms, around the propellers, for added safety.

4.5 Unfolding the Drone

Gently unfold the drone's arms until they lock into place. Ensure all four arms are fully extended before flight.

5. OPERATING INSTRUCTIONS

5.1 Pairing the Drone and Remote

1. Place the drone on a flat, level surface.
2. Turn on the drone's power switch. The drone's LED lights will flash.
3. Turn on the remote controller's power switch.
4. Push the left joystick (throttle) all the way up, then pull it all the way down. The drone's LED lights will stop flashing and become solid, indicating successful pairing.

5.2 One Key Take-off/Landing

- **Take-off:** After pairing, press the One Key Take-off/Landing button (refer to Figure 3.3). The drone will automatically ascend to a certain altitude and hover.
- **Landing:** During flight, press the One Key Take-off/Landing button again. The drone will automatically descend and land gently.

5.3 Basic Flight Controls

- **Throttle (Left Joystick Up/Down):** Controls altitude (ascend/descend).
- **Yaw (Left Joystick Left/Right):** Controls rotation (turn left/right).
- **Forward/Backward (Right Joystick Up/Down):** Controls forward/backward movement.
- **Sideward Flight (Right Joystick Left/Right):** Controls sideward movement (left/right).

5.4 Altitude Hold Mode

The drone is equipped with an air pressure sensor that allows it to maintain a stable altitude automatically. Once the drone reaches a desired height, release the throttle joystick, and the drone will hover at that position.

Air pressure hover

Hovering outdoors and indoors

No worry about losing your drone

Figure 5.1: Air Pressure Hover Function.

This image illustrates the GoolRC S68 RC Drone utilizing its air pressure hover feature, maintaining a stable position in the air. The accompanying text highlights its ability to hover both outdoors and indoors, reducing the risk of losing the drone.

5.5 Headless Mode

In Headless Mode, the drone's orientation is irrelevant. The drone will move forward, backward, left, or right relative to the pilot's position, regardless of which way the drone's front is facing. This simplifies control for beginners.

- **Activate:** Press the Headless Mode button on the remote controller (refer to Figure 3.3). The drone's lights will flash rapidly.
- **Deactivate:** Press the Headless Mode button again.

5.6 3D Flips

The drone can perform 360-degree flips for an exciting flight experience.

- Ensure the drone is at a sufficient height (at least 3 meters).
- Press the 3D Flip button (Stunt Rolling on Figure 3.3).
- Immediately push the right joystick in the desired flip direction (forward, backward, left, or right). The

drone will perform a flip in that direction.

5.7 Speed Control

The drone has multiple speed modes to accommodate different skill levels.

- Press the Speed Gear button (refer to Figure 3.3) to cycle through low, medium, and high speeds.
- A beep from the remote will indicate the current speed setting (e.g., one beep for low, two for medium, three for high).

5.8 One Key Return

This function allows the drone to automatically return towards the take-off point.

- Press the One Key Return button (refer to Figure 3.3). The drone will fly backward towards its original take-off position.
- To exit One Key Return, push any joystick or press the button again.

Figure 5.2: Key Features of the S68 RC Drone.

This image highlights the core functionalities of the GoolRC S68 RC Drone, including One Key Return, One Click Take-off and Landing, Air Pressure Hover, 360-degree Roll, Speed Control, and Headless Mode. It visually summarizes the drone's user-

6. MAINTENANCE

6.1 Battery Care

- Always use the provided charging cable.
- Do not overcharge or over-discharge the battery.
- Store batteries in a cool, dry place away from direct sunlight and heat.
- If the drone will not be used for an extended period, charge the battery to about 50% before storage.
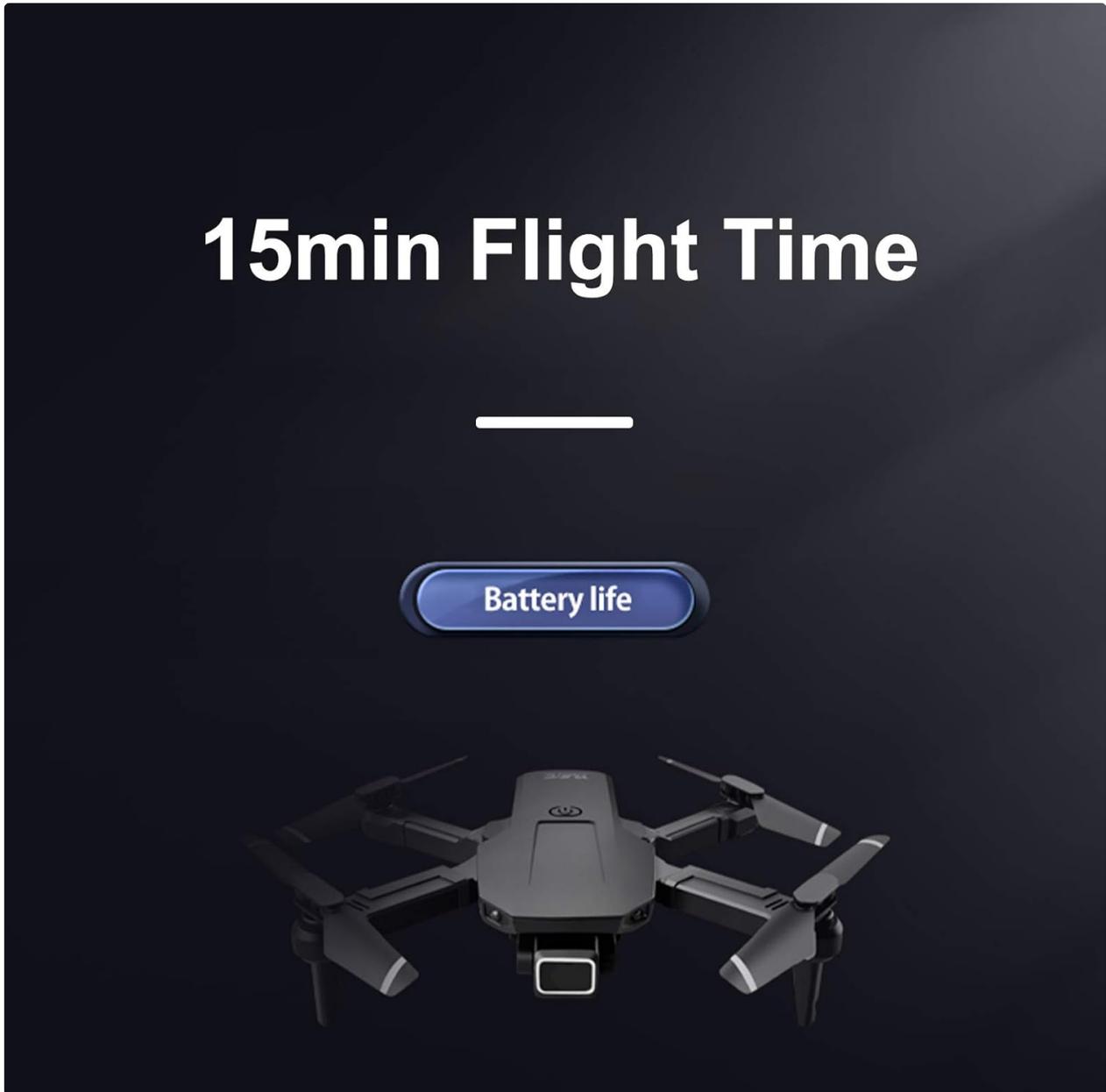

Figure 6.1: Drone Flight Time and Battery Life.

This image emphasizes the GoolRC S68 RC Drone's approximate 15-minute flight time, directly related to its battery life. Proper battery care is crucial to achieve and maintain this performance.

6.2 Cleaning

- Use a soft, dry cloth to clean the drone and remote controller.
- Do not use chemical solvents or abrasive cleaners.
- Remove any debris from the propellers and motors regularly.

6.3 Propeller Replacement

If a propeller is damaged, replace it with a spare one from the package. Use the included screwdriver to remove the old propeller and install the new one, ensuring the correct 'A' or 'B' marking matches the motor arm.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Drone does not respond to remote.	Not paired; low battery; interference.	Re-pair drone and remote; charge batteries; move to an area with less interference.
Drone drifts during flight.	Not calibrated; uneven surface at take-off; wind.	Ensure drone is on a flat surface for pairing; use trimming buttons (Figure 3.3) to adjust; avoid strong winds.
Propellers do not spin.	Obstruction; damaged motor/propeller; low battery.	Check for obstructions; replace damaged parts; charge battery.
Short flight time.	Battery not fully charged; old battery.	Ensure battery is fully charged; consider replacing old batteries.

8. SPECIFICATIONS

Parameter	Value
Model	S68
Main Material	ABS plastic & electronic components
Color	Black
Motor	Brushed motor
Max. Flight Time	15 min
Max. Remote Distance	About 100m
Max. Advance Speed	10Km/h
Max. Lifting Speed	3Km/h
Operating Frequency	2.4GHz
Gyro	6-axis
Channel	4CH
Charging Time	40 min
Drone's Battery	3.7V 650mAh Lithium battery
Remote Controller Battery	2*1.5V AAA battery (not included)

Parameter	Value
Unfolded Size	12.3*11*2.6cm (4.84"L x 4.33"W x 1.02"H)
Folded Size	9*5.5*3.5cm
Item Weight	11.4 ounces
Recommended Age	14 years and up

9. Safety Guidelines

- Always operate the drone in open areas, away from people, animals, buildings, and trees.
- Do not fly the drone in strong winds or adverse weather conditions.
- Maintain a safe distance from the drone during operation.
- Never fly the drone near airports or restricted airspace.
- Adult supervision is recommended for younger users.
- Turn off the drone and remote controller when not in use.
- Do not touch the propellers when they are spinning.

10. Warranty and Support

GoolRC products come with a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the warranty card included in your package or visit the official GoolRC website.
If you encounter any problems or have questions regarding your GoolRC S68 RC Drone, please do not hesitate to contact GoolRC customer support. Our team is ready to assist you.
You can visit the GoolRC Store for more information:GoolRC Official Store