

S1S

SG901 MAX Drone User Manual

Model: S1S | Brand: Generic

1. INTRODUCTION

Thank you for choosing the SG901 MAX Drone. This advanced GPS quadcopter is equipped with dual cameras, intelligent obstacle avoidance technology, and a 4.5-inch mapping screen control interface, designed to provide a superior aerial photography and flight experience. Featuring efficient brushless motors and three 1800mAh batteries, it offers extended flight sessions and reliable performance. This manual provides essential information for safe operation, setup, maintenance, and troubleshooting to ensure you get the most out of your drone.

2. SAFETY PRECAUTIONS

To ensure safe operation and prevent damage or injury, please read and adhere to the following safety guidelines:

- **Read the Manual:** Fully understand all instructions before operating the drone.
- **Environmental Conditions:** Fly in open areas, away from people, buildings, and obstacles. Avoid flying in strong winds, rain, or fog.
- **Line of Sight:** Always maintain visual line of sight with the drone during flight.
- **Battery Safety:** Use only original batteries and chargers. Do not overcharge or short-circuit batteries. Discontinue use if batteries are damaged or swollen.
- **Propeller Safety:** Keep hands, face, and loose clothing away from rotating propellers. Ensure propellers are correctly installed before flight.
- **Respect Privacy:** Be mindful of privacy laws when capturing aerial footage.
- **Age Restriction:** This product is not suitable for children under 14 years old.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- SG901 MAX Drone (x1)
- Remote Controller with 4.5-inch Mapping Screen (x1)
- 1800mAh Drone Battery (x3)
- USB Charging Cable (x1)
- Spare Propellers (set)
- Screwdriver (x1)
- User Manual (x1)

4. PRODUCT OVERVIEW

4.1 Drone Components

The SG901 MAX drone features a foldable design for portability and is equipped with advanced flight systems.



Figure 4.1: SG901 MAX Drone in unfolded flight-ready configuration, showing the dual camera system and obstacle avoidance sensor at the front.



Figure 4.2: SG901 MAX Drone in its folded, compact state, ideal for transport and storage.

- **Foldable Arms:** For compact storage and transport.
- **Brushless Motors:** Provide powerful and efficient flight.
- **Dual Cameras:** Front-facing main camera and bottom optical flow camera for stable hovering and diverse shooting angles.
- **Obstacle Avoidance Sensor:** Detects obstacles to prevent collisions.
- **GPS Module:** Enables precise positioning, stable hovering, and intelligent return-to-home functions.
- **LED Indicators:** Provide status information during flight.

4.2 Remote Controller

The remote controller features a built-in 4.5-inch mapping screen for real-time flight data and FPV view.



Figure 4.3: Remote controller with its integrated 4.5-inch display, showing a live feed or mapping data.

- **Control Sticks:** Left stick for throttle/yaw, right stick for forward/backward/left/right movement.
- **4.5-inch Mapping Screen:** Displays real-time video feed, flight parameters, and map data.
- **Function Buttons:** Dedicated buttons for one-key takeoff/landing, return-to-home, photo/video capture, speed mode, and more.
- **Battery Indicator:** Shows the remaining power of the controller.

5. SETUP

5.1 Battery Charging

1. Connect the drone battery to the USB charging cable.
2. Plug the USB cable into a 5V/2A USB power adapter (not included).
3. The indicator light on the battery will show charging status (e.g., red for charging, green for fully charged).
4. Charging time is approximately 120-150 minutes per battery. Ensure all three batteries are fully charged before flight.

5.2 Propeller Installation

The propellers are marked with 'A' or 'B'. Match them to the corresponding motor arms as indicated on the drone.

1. Unfold the drone arms carefully.
2. Identify the 'A' and 'B' markings on the propellers and motor bases.
3. Attach the propellers to the correct motor shafts and secure them with the provided screws using the screwdriver. Ensure they are firmly attached but not overtightened.

5.3 Controller Preparation

1. Ensure the remote controller is fully charged.
2. Extend the antenna (if applicable) and any phone holder.

5.4 Power On/Off

- **Power On Drone:** Insert a charged battery into the drone. Press and hold the power button on the drone until the indicator lights turn on.
- **Power On Controller:** Press and hold the power button on the remote controller until the screen lights up.
- **Power Off:** Reverse the power-on steps, ensuring both drone and controller are powered off after use.

6. OPERATING INSTRUCTIONS

6.1 Pairing the Drone and Controller

1. Place the drone on a flat, level surface.
2. Power on the drone, then power on the remote controller.
3. Push the left joystick (throttle) all the way up, then all the way down. The drone's indicator lights will stop flashing and become solid, indicating successful pairing.
4. Wait for GPS signal acquisition. The drone's lights will flash slowly once GPS is locked. This may take a few minutes outdoors.

6.2 Basic Flight Controls

| Control Stick | Movement | Action |
|-----------------------|------------|---------------------------|
| Left Stick (Throttle) | Up | Ascend |
| Left Stick (Throttle) | Down | Descend |
| Left Stick (Yaw) | Left/Right | Rotate Left/Right |
| Right Stick (Pitch) | Up/Down | Fly Forward/Backward |
| Right Stick (Roll) | Left/Right | Fly Left/Right (Sideways) |

Use the one-key takeoff/landing button for easy automated flight initiation and termination.

6.3 GPS Functionality

The built-in GPS system provides precise positioning and stable hovering. Once GPS is locked, the drone will maintain its position even in light winds. The Return-to-Home (RTH) function allows the drone to automatically return to its takeoff point when activated or in case of low battery/signal loss.

6.4 Obstacle Avoidance

The drone is equipped with intelligent obstacle avoidance sensors. When activated, the drone will automatically detect and maneuver around obstacles in its path, enhancing flight safety. Always monitor the drone's surroundings, as obstacle avoidance may have limitations in certain conditions (e.g., very thin objects, reflective surfaces, or extreme lighting).

6.5 Dual Camera Operation

The drone features a main front camera for high-resolution aerial photography and video, and a bottom optical flow camera for improved stability at lower altitudes.

- **Photo Capture:** Press the dedicated photo button on the remote controller to take a still image.
- **Video Recording:** Press the dedicated video button to start recording. Press again to stop.
- **Camera Angle Adjustment:** Use the designated button or dial on the controller to adjust the main camera's tilt angle.
- **Viewing Footage:** Footage is saved to an inserted SD card (not included) or can be viewed live on the controller's screen.

6.6 Special Features

The SG901 MAX drone can perform exciting aerial maneuvers, such as tumbling. Refer to the controller's specific button layout for activating these features. Ensure sufficient altitude and clear surroundings before attempting any special maneuvers.

7. MAINTENANCE

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

- **Battery Care:** Store batteries in a cool, dry place. Do not fully discharge batteries for extended periods. Charge them to

about 50-60% for long-term storage.

- **Cleaning:** Use a soft, dry cloth to clean the drone body and camera lens. Avoid using harsh chemicals.
- **Propeller Inspection:** Regularly check propellers for cracks, bends, or damage. Replace damaged propellers immediately using the spare parts provided.
- **Motor Inspection:** Ensure motors are free from debris and spin smoothly.
- **Storage:** When not in use, fold the drone arms and store it in a protective case or its original packaging to prevent damage.

8. TROUBLESHOOTING

If you encounter issues with your SG901 MAX Drone, refer to the table below for common problems and solutions.

| Problem | Possible Cause | Solution |
|--------------------------------------|--|---|
| Drone does not power on. | Battery not charged or not inserted correctly. | Ensure battery is fully charged and properly inserted. |
| Drone does not pair with controller. | Incorrect pairing sequence or interference. | Repeat pairing steps (Section 6.1). Ensure no strong interference sources nearby. |
| Unstable flight or drifting. | Drone not calibrated or GPS signal weak. | Perform gyroscope calibration (refer to quick start guide for specific steps). Ensure strong GPS signal outdoors. |
| Poor camera image/video quality. | Camera lens dirty or insufficient lighting. | Clean the camera lens with a soft cloth. Ensure adequate lighting conditions. |
| Short flight time. | Battery not fully charged or aged battery. | Ensure batteries are fully charged. Consider replacing old batteries if performance degrades significantly. |

9. SPECIFICATIONS

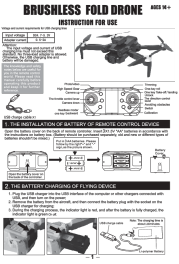
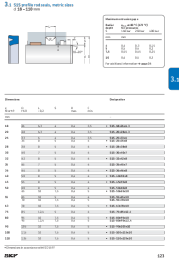


Key technical specifications for the SG901 MAX Drone (Model S1S):

| Feature | Detail |
|--------------------------|---|
| Model | S1S |
| Product Dimensions | 10 x 6 x 13 cm (folded) |
| Item Weight | 250 g |
| Batteries | 3 x 1800mAh Nonstandard Battery (included) |
| Video Capture Resolution | 4K |
| Special Features | Rechargeable, Dual Camera, GPS, Obstacle Avoidance, 4.5-inch Mapping Screen |
| Control Method | Remote Control |

10. WARRANTY AND SUPPORT

This product is manufactured by Generic. For any warranty claims, technical support, or inquiries regarding your SG901 MAX Drone, please contact the seller or manufacturer directly through the platform where the product was purchased. Please retain your proof of purchase for any warranty-related services.

Related Documents - S1S

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|---|---|
|  | <p>S1S Brushless Fold Drone: User Manual and Operating Instructions</p> <p>Comprehensive user manual for the S1S Brushless Fold Drone, covering setup, operation, safety, troubleshooting, and features like headless mode and obstacle avoidance. Suitable for ages 14+.</p> |
|  | <p>S1S Profile Rod Seals: Metric Sizes and Specifications</p> <p>Detailed specifications and dimensions for S1S profile rod seals in metric sizes, including extrusion gap limits and material compatibility information.</p> |
|  | <p>Honeywell OmniPoint Universal Transmitter User Manual</p> <p>Comprehensive user manual for the Honeywell OmniPoint Universal Transmitter, detailing installation, operation, maintenance, and technical specifications for advanced gas detection in hazardous environments.</p> |
|  | <p>Sliding Door Assembly Guide - S6 Model Installation</p> <p>Comprehensive step-by-step assembly guide for the S6 Sliding Door, detailing parts, tools, and installation procedures for a secure and functional shower enclosure.</p> |