

FINOTI RG806 MAX

FINOTI RG806 MAX GPS Drone User Manual

Model: RG806 MAX

1. INTRODUCTION

This manual provides essential information for the safe operation and maintenance of your FINOTI RG806 MAX GPS Drone. Please read it thoroughly before operating the drone to ensure proper function and to prevent damage or injury. The RG806 MAX features a 5.6-inch integrated screen, GPS, three-sided obstacle avoidance, optical flow positioning, and a 4K camera for high-quality aerial photography and videography.

2. SAFETY GUIDELINES

- **Pre-Flight Check:** Always inspect the drone, propellers, and battery before each flight. Ensure all components are securely attached and undamaged.
- **Environmental Conditions:** Do not fly in strong winds (above 10 km/h), rain, snow, or fog. Maintain a clear line of sight to the drone at all times.
- **Flight Area:** Operate the drone in open areas, away from people, animals, buildings, and power lines. Avoid flying over private property without permission.
- **Battery Safety:** Keep batteries away from naked flames or direct heat sources. Use only the provided charging cable and charger. Do not overcharge or puncture batteries.
- **Obstacle Avoidance:** While the drone features three-sided visual obstacle avoidance, it is not foolproof. Always exercise caution and maintain manual control.
- **Age Restriction:** This product is not suitable for children under 14 years old. Adult supervision is recommended for all users.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

8K ESC dual camera/GPS return/5G video transmission

Intelligent obstacle avoidance, optical flow hovering, brushless power



Figure 3.1: Package Contents. This image displays the drone, remote control with screen, screwdriver, one battery (for this variant), memory card, card reader, eight propellers, charging cable, storage bag, and gift box.

- Drone (x1)
- Remote Control with Integrated Screen (x1)
- Flight Battery (x1)
- Propellers (x8)
- Charging Cable (x1)
- Screwdriver (x1)
- 64GB High-Speed Memory Card (x1)
- Card Reader (x1)
- Storage Bag (x1)

4. PRODUCT OVERVIEW

4.1 Drone Components

Obstacle avoidance 3 way intelligent perception



Figure 4.1: Drone with Obstacle Avoidance. This image shows the drone's design and the location of its three-way intelligent perception obstacle avoidance sensors.

Electric camera 90° remote control



Figure 4.2: Electric Camera. This image highlights the drone's electric camera, which can be adjusted 90 degrees via remote control.

The RG806 MAX drone features a foldable design for portability. Key components include:

- **4K HD Camera:** Located at the front, capable of 90-degree remote adjustment.
- **Obstacle Avoidance Sensors:** Integrated for three-sided intelligent perception.
- **Brushless Motors:** Provide stable and powerful flight.
- **GPS Module:** For precise positioning and return-to-home functions.
- **LED Lights:** Indicate drone status and aid visibility.

4.2 Remote Control Layout



Figure 4.3: Remote Control Layout. This diagram illustrates the functions of each button and joystick on the remote control, including the integrated 5.6-inch display.

The remote control features an integrated 5.6-inch screen for real-time flight data and video feed. Key controls include:

- **Left Joystick:** Throttle lever (up/down), Yaw (left/right).
- **Right Joystick:** Direction bar (forward/backward, left/right).
- **Buttons:** Speed, Reset, Return flight, GPS switch, LCD screen, Return, Menu, Screen switch, Unlock, Power switch, Photograph, Videotape, Confirm.
- **Fine Tuning:** For servo motor, geomagnetic field, and obstacle avoidance adjustments.

5. SETUP

5.1 Battery Charging and Installation

1. **Drone Battery:** Connect the drone battery to the charging cable and a suitable USB power adapter (not included). Charge until the indicator light shows full. Insert the charged battery into the drone's battery compartment, ensuring it clicks into place.
2. **Remote Control Battery:** The remote control has a built-in rechargeable battery. Connect the remote control to the charging cable and a USB power adapter. Charge until fully indicated.

5.2 Propeller Installation

Attach the propellers to the corresponding motor shafts. Ensure the correct propeller type (A or B) is matched with

the correct motor. Use the provided screwdriver to secure them firmly.

5.3 Drone and Remote Control Pairing

1. Power on the drone by pressing and holding the power button.
2. Power on the remote control.
3. The drone and remote control will automatically attempt to pair. Wait for the indicator lights on both devices to stabilize, indicating a successful connection.

5.4 GPS Calibration

For optimal GPS performance, perform a calibration before the first flight in a new location:

1. Place the drone on a flat, open surface.
2. Follow the on-screen prompts on the remote control or refer to the specific calibration sequence in the included manual. This typically involves rotating the drone horizontally and vertically.

6. OPERATING INSTRUCTIONS

6.1 Basic Flight Controls

Familiarize yourself with the remote control layout (Figure 4.3) before attempting flight.

- **Takeoff/Landing:** Use the dedicated one-key takeoff/landing button or manually control with the throttle lever.
- **Altitude Control:** Push the left joystick up to ascend, pull down to descend.
- **Directional Control:** Push the right joystick forward/backward to move the drone forward/backward. Push left/right to move left/right.
- **Yaw Control:** Push the left joystick left/right to rotate the drone left/right.

6.2 GPS and Optical Flow Positioning

GPS Smart Return to Home



Figure 6.1: GPS Smart Return to Home. This image details the various return-to-home functions enabled by GPS, including low-power, over-the-top, out-of-control, and one-click return.

The drone utilizes GPS for outdoor stability and optical flow sensors for indoor hovering. Ensure GPS signal is strong before outdoor flights.

- **GPS Mode:** Provides precise positioning, altitude hold, and enables features like Return to Home and Custom Course.
- **Optical Flow Positioning:** Automatically engages in indoor environments or when GPS signal is weak, using downward-facing sensors for stable hovering.
- **Return to Home (RTH):** Press the RTH button on the remote control, or the drone will automatically return if battery is low or connection is lost (if GPS signal is available).
- **Custom Course:** Plan flight paths directly on the remote control's screen for automated flight.

6.3 Obstacle Avoidance System

The RG806 MAX is equipped with three-sided visual obstacle avoidance. This system helps the drone detect and avoid obstacles in its path, enhancing flight safety. However, it is crucial to remain vigilant and not solely rely on this feature, especially in complex environments or at high speeds.

6.4 Camera Operation

The integrated 4K camera allows for high-resolution photo and video capture.

- **Take Photo:** Press the 'Photograph' button on the remote control.
- **Record Video:** Press the 'Videotape' button to start recording, press again to stop.
- **Camera Angle Adjustment:** Use the dedicated buttons or fine-tuning controls on the remote to adjust the camera's 90-degree tilt.
- **Media Storage:** Photos and videos are saved to the installed 64GB memory card.

6.5 Smart Features

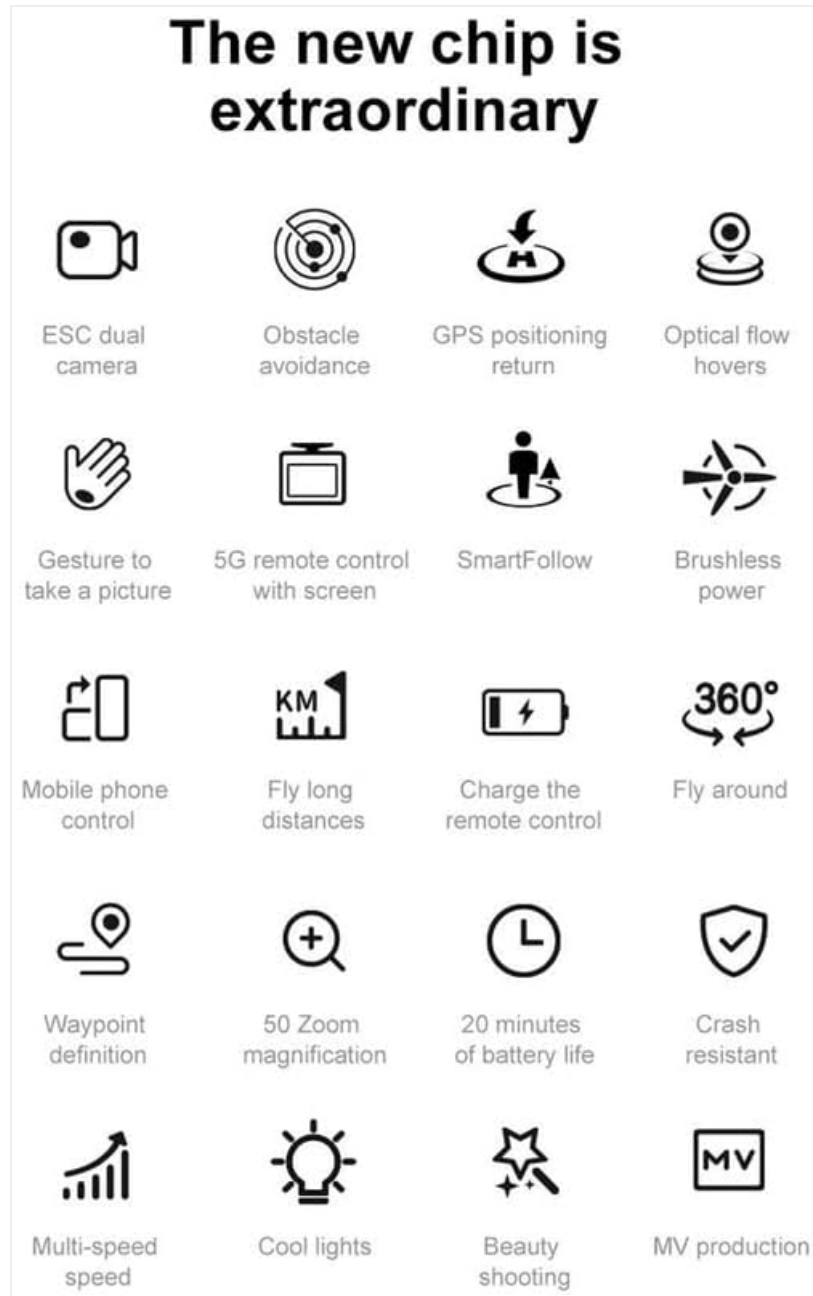


Figure 6.2: Drone Features Overview. This image displays icons representing various intelligent features of the drone, such as gesture control, SmartFollow, and waypoint definition.

- **Gesture Control:** Perform specific hand gestures to trigger photo or video capture. Refer to the detailed manual for specific gestures.
- **SmartFollow:** The drone can automatically follow a designated subject.
- **Fly Around:** Program the drone to orbit a point of interest.
- **Waypoint Definition:** Set multiple waypoints for the drone to follow a pre-defined flight path.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the drone and remote control. Avoid using liquids or solvents. Ensure camera lens and sensors are free of dust and debris.
- **Propeller Replacement:** If propellers are damaged or bent, replace them immediately using the provided spares and screwdriver. Ensure correct A/B propeller types are installed.
- **Battery Care:** Store batteries in a cool, dry place. Do not fully discharge batteries for extended periods. Charge them to approximately 50-60% for long-term storage.
- **Storage:** When not in use, store the drone and remote control in the provided storage bag in a dry environment, away from direct sunlight and extreme temperatures.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Drone does not power on	Low battery; Battery not installed correctly	Charge drone battery; Reinstall battery securely
Remote control does not connect	Low remote battery; Pairing failed	Charge remote control; Re-attempt pairing process
Unstable flight/Drifting	No GPS signal (outdoor); No optical flow (indoor); Calibration needed; Damaged propellers	Fly in open area with clear GPS; Ensure good lighting for optical flow; Perform GPS calibration; Replace damaged propellers
Camera not recording/taking photos	Memory card full/not inserted; Camera not activated	Insert/replace memory card; Ensure camera is powered on and connected
Obstacle avoidance not working	Sensors blocked/dirty; System error	Clean sensors; Restart drone and remote; Avoid flying in complex environments

9. SPECIFICATIONS



Figure 9.1: Product Dimensions. This image provides the folded and unfolded dimensions of the drone.

- **Model:** RG806 MAX
- **Drone Weight:** 190g
- **Flight Time:** Approximately 20 minutes
- **Remote Distance:** Up to 250m
- **Camera:** 4K HD Video Recording, 1/1.28 Inches Sensor Size
- **Camera Adjustment:** 90-degree remote control electric adjustment
- **Operating Frequency:** 5GHz
- **Max Wind Speed Resistance:** <10 KM/H
- **Motor Type:** Brushless Motor
- **Obstacle Avoidance:** Three-sided Visual Avoidance
- **Positioning:** GPS, Optical Flow Positioning
- **Connectivity:** WiFi
- **Remote Control Display:** Integrated 5.6-inch screen
- **Folded Dimensions:** 16cm (Length) x 8cm (Width) x 4.5cm (Height)
- **Unfolded Dimensions:** 32cm (with blades) x 40.8cm (with blades)

- **Arm Length (unfolded):** 23.5cm
- **Arm Width (unfolded):** 19.5cm

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the contact details provided with your purchase documentation or contact the manufacturer directly. Keep your proof of purchase for warranty claims.