GoolRC E88

GoolRC E88 RC Drone User Manual

Model: E88

1. Introduction

This manual provides detailed instructions for the safe operation and maintenance of your GoolRC E88 RC Drone. The E88 is a foldable quadcopter equipped with a 720P camera, offering features such as 3D flips, trajectory flight, headless mode, altitude hold, gesture control, and one-key take-off/landing. Please read this manual thoroughly before operating the drone to ensure proper usage and to prevent damage or injury.

Image 1.1: GoolRC E88 RC Drone with remote control and carrying case.

2. Package Contents

Ensure all items listed below are present in your package:

- 1 * RC Drone
- 1 * Remote Controller
- 2 * Drone Battery (3.7V 1800mAh)
- 1 * USB Charging Cable
- 4 * Spare Propellers
- 1 * Screwdriver
- 1 * User Manual
- 1 * Storage Bag

Image 2.1: All components included in the GoolRC E88 RC Drone package.

3. Specifications

Feature	Specification
Motor Type	Brushed Motor
Drone Battery	3.7V 1800mAh (Included)
Charging Time	Approximately 60 minutes
Flying Time	Approximately 13-15 minutes per battery
Drone Weight	105g
Drone Size (Folded)	12.5 x 8.1 x 5.3 cm
Drone Size (Unfolded)	25 x 25 x 5.5 cm
Camera Resolution	720P
Photo Resolution	1280*720P

Video Resolution	640*480P
APP/Image Transmission System	Android 5.0 or above, iOS 8.0 or above
Max Image Transmission Distance	50m
Remote Control Frequency	2.4G
Control Distance	Approximately 150m (Free Interference and no Occlusion)
Remote Controller Battery	3*AAA battery (not Included)

4. Setup

4.1. Battery Charging

Before flying, ensure the drone battery is fully charged.**Do not use fast charging chargers for charging.**

1. Press and hold the buckle on the drone to remove the battery.
2. Connect one end of the charging cable to the battery.
3. Insert the other USB end into a standard 5V USB power supply for charging.
4. The red light on the charging cable stays on during charging. The green light indicates a full charge.

4.2. Remote Control Battery Installation

1. Open the battery cover on the back of the remote control.
2. Install 3 AAA batteries, ensuring correct polarity according to the electrode instructions inside the battery box.
3. Close the battery cover securely.

4.3. Propeller Replacement

If propellers are damaged, replace them as follows:

1. Use the provided screwdriver to unscrew the old fan blade screws and remove the old fan blade.
2. Pay attention to distinguishing between A and B blades. Ensure you install the correct type of blade (A or B) in the corresponding position.
3. Tighten the screws to secure the new fan blade. The replaced fan blade screws should be tightened in place, and the fan blades should be flexible.

Image 4.1: The GoolRC E88 drone and its remote control, highlighting key features.

5. Operating Instructions

5.1. Pre-Flight Checklist & Environment Requirements

- Choose to fly in an open outdoor environment without wind or snow, with low wind speed.
- During flight, keep the aircraft within line of sight and fly below a range of 150 meters.
- Environmental temperature: Remote controlled aircraft should be used within the temperature range of 0°C to 40°C to ensure normal operation.
- Stay away from crowds, trees, power lines, tall buildings, airports, and signal towers, as these may affect the drone's compass and signal.

5.2. Power On & Frequency Matching

1. Place the drone on a level surface, ensuring its head is facing forward.
2. Press and hold the power button on the drone for one second to turn it on. The drone lights will flash, indicating it's entering frequency matching state.
3. Open the remote control by pressing its power button. The remote control will beep, and the drone light will stay on, indicating successful frequency matching.

5.3. Gyroscope Calibration

Calibrate the gyroscope before takeoff for stable flight:

- Move both control levers on the remote control to the bottom-right corner simultaneously.
- Alternatively, short press the dedicated calibration button on the remote control (refer to Image 5.1 for button layout).
- The remote control will beep, and the drone light will flash rapidly then turn to constant brightness, indicating successful calibration.

5.4. Takeoff and Landing

Reminder: Be sure to calibrate the gyroscope before takeoff.

- **One-Key Takeoff:** Long press the one-key takeoff button on the remote control.
- **Manual Takeoff:** Unlock the joysticks by pulling them outward, then push the left joystick upwards.
- **One-Key Landing:** Long press the one-key descent button on the remote control.

5.5. Basic Flight Controls

- **Rise:** Push the left control lever upwards.
- **Decline:** Pull the left control lever downwards.
- **Left Rotation:** Push the left control lever to the left.
- **Right Rotation:** Push the left control lever to the right.
- **Forward:** Push the right control lever upwards.
- **Backward:** Pull the right control lever downwards.
- **Fly Right Side:** Push the right control lever to the right.
- **Fly Left Side:** Push the right control lever to the left.

5.6. Speed Adjustment

The drone has three speed gears:

- **Low Speed:** Default gear for startup.
- **Medium Speed:** Press the speed switch button once. The remote control will emit a single "beep" sound.
- **High Speed:** Press the speed switch button again. The remote control will emit three "beep" sounds.

5.7. Camera Operation

- **Adjust Camera Angle:** Press the right joystick to adjust the camera electrically downwards. Press the left joystick to adjust the camera electrically upwards.
- **Take Photo:** Short press the camera button on the remote control. The drone light will flash briefly.
- **Record Video:** Long press the recording button on the remote control. The drone lights will flash continuously.

5.8. Special Flight Modes

- **3D Flips:** Press the 360° stunt roll button on the remote control to perform a 360° stunt roll.
- **Headless Mode:** Press the headless mode button to activate. When activated, the drone lights flash rapidly. In headless mode, the drone will move forward, back, left, or right relative to the remote control's orientation, regardless of the drone's actual front direction. Press the headless mode button again to turn it off.

- **Trajectory Flight:** With this function, draw a trajectory on the screen of the connected app, and the aircraft will fly according to this trajectory.
- **Gesture Control:** Allows you to command the camera to take a photo or record a video by performing specific hand gestures.

Image 5.1: Remote control function keys and layout.

6. App Installation and Connection

6.1. Mobile Phone Holder Installation

1. Pull out the phone holder outward from the remote control.
2. Insert your smartphone into the phone clip.

6.2. App Download and Connection

1. Scan the QR code in the manual or search for "Mirason" in your app store to download and install the app.
2. After installation, ensure the aircraft is turned on.
3. On your phone, go to WLAN settings and find the corresponding Wi-Fi signal (e.g., "Mirason-JY06PRO-161219") and connect to it.
4. Open the Mirason app. The app needs to display "WiFi" to show the transmission screen. Click "Start" or "Enter Device" to view the live feed from the drone's camera.

7. Troubleshooting

7.1. Restore Factory Settings

1. If the drone and remote control cannot be synchronized properly when turned on, you need to reset the factory manual frequency matching for the drone and remote control (follow the instructions in the manual).
2. When the aircraft is turned on, the lights are in a slow flashing state. After the frequency is up, the aircraft lights remain on. When the calibration button is pressed briefly, the airplane's lights will flash rapidly, as shown in the operation video. Calibration is complete and the airplane lights will turn on.
3. After resetting the frequency, please add an instruction to continue using the drone according to the tutorial.

8. Important Information & Safety Guidelines

8.1. Compliance with Regulations

- **Legitimacy:** Users must comply with local laws and regulations and fly within permitted areas.
- **Legal area flight:** Users should first understand and confirm that their flight location is within the legal allowed range.

8.2. Exceeding High Risk

- If the drone flies at an unauthorized altitude, it may encounter problems such as control failure and signal loss, increasing the possibility of flight loss.
- **Exemption from liability:** If the flight altitude exceeds the specified distance and the drone is lost as a result, the seller will not be held responsible. Users are responsible for any losses caused by non-compliance with regulations.

8.3. Equipment Inspection and Maintenance

- **Equipment power:** Ensure that the battery is fully charged before takeoff to avoid loss of control or emergency landing due to insufficient power.
- **Propeller condition:** Check if the propeller is intact and securely installed to prevent detachment during flight.
- **Motor and gimbal:** Ensure that the motor and gimbal of the aircraft are clean and undamaged, guaranteeing flight performance and shooting quality.

8.4. Operator Responsibilities

- **Proficiency in operation:** Users should not attempt to fly before fully understanding the operating methods. Recommend completing relevant training or reading the operation manual.
- **Direct control:** The aircraft should be directly controlled by the operator to avoid relying on autonomous flight mode, to reduce the risk of control errors.

8.5. Consequences of Product Use

- **Consequences of improper use:** Such as equipment damage or personal injury caused by not following the instructions, the manufacturer is not responsible.
- **Liability Limitation:** In any case, the liability of the seller is limited to replacing or repairing defective products.

9. Instructional Video

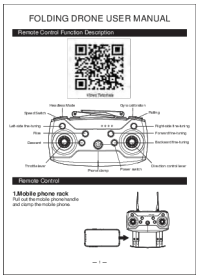
For a visual guide on setting up and operating your GoolRC E88 RC Drone, please watch the comprehensive video below:

Video 9.1: Detailed setup and operation guide for the GoolRC E88 RC Drone.

10. Warranty and Support

For warranty information, technical support, or any inquiries regarding your GoolRC E88 RC Drone, please refer to the contact details provided in your product packaging or visit the official GoolRC website. Keep your purchase receipt as proof of purchase for warranty claims.

Related Documents - E88

	[E88 Drone: 4K HD Dual Camera WiFi FPV RC Quadcopter] Explore the E88 Drone, a foldable RC quadcopter featuring a 4K HD dual camera, WiFi FPV, headless mode, and altitude hold for stable flight and high-quality aerial photography. With a 15-minute flight time and 150m control range, it's ideal for hobbyists.
	[Foldable Drone User Manual - E88 Pro / E99 Pro] Comprehensive user manual for the Foldable Drone, covering remote control functions, setup, flight operations, battery management, and troubleshooting for models like E88 Pro and E99 Pro.
	[E88 Collapsible Aircraft User Manual - Dunn Solutions] Comprehensive user manual for the Dunn Solutions E88 collapsible aircraft (drone), covering setup, operation, safety, and troubleshooting.
	[E88 Drone User Manual: Setup, Operation, and Safety Guide] Comprehensive user manual for the E88 drone, detailing setup, charging, flight controls, safety precautions, and troubleshooting. Learn how to operate your drone safely and effectively.

 Manual E88 PRO	[E88 PRO Drone User Manual and Safety Guide] Comprehensive user manual for the E88 PRO drone, covering safety guidelines, remote control operation, battery charging, propeller replacement, flight preparation, 360-degree stunts, headless mode, and smartphone connectivity. Essential guide for safe and effective drone use.
 Инструкция E88 PRO	[Eachine E88 PRO Drone User Manual] User manual for the Eachine E88 PRO drone, covering safety, controller operation, battery charging, flight preparation, headless mode, 360 flips, and smartphone connectivity.