



SPEEDBIRD I63E

User Guide



3 Axis Gimbal

Table of Contents

Product Description	
Introduction	1
Prepare the Drone	1
Prepare the Controller	2
Parts Name	2
Drone	
Flight Mode	4
The Status Indicator Light of Drone	5
Return Home Automatically	6
Optical Flow System	7
Gimbal Camera	9
Power Switch of the Drone	9
Drone Battery	10
Assemble & Disassemble the Propellers	11
Controller	
Function&Situation of Controller	12
Controller Joystick Mode	15
Assemble Phone Holder	16
M RC PRO App	
FPV Real Time Transmission Software	17
Flight	
Surrounding Requirements of the Flight	18
Pre-Flight Inspection	18
The Operation of Drone	18
Basic Flight	22
Appendix	
Drone Specification	23
Packing List	25
Important Statement	26
Safety Precautions	26

IMPORTANT: Check your license requirements with the FAA before you fly.
https://www.faa.gov/uas/getting_started/register_drone/

Product Description

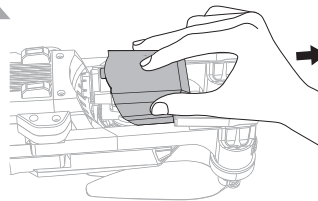
Introduction

SPEEDBIRD I63E is equipped with optical flow and GPS and is capable of hovering and flying steadily indoors and outdoors. It is equipped with automatic return home and easy-to-use intelligent flight, such as Orbit Flight, Follow-Me and Waypoint Flight. It can shoot 4K HD video with a high precision 3 axis anti-shake gimbal. The drone has functional buttons that can control various operations and settings of the drone and camera. The App will display real time HD images and flight information. Always put safety first when flying. Enjoy your ING SPEEDBIRD I63E.

Prepare the Drone

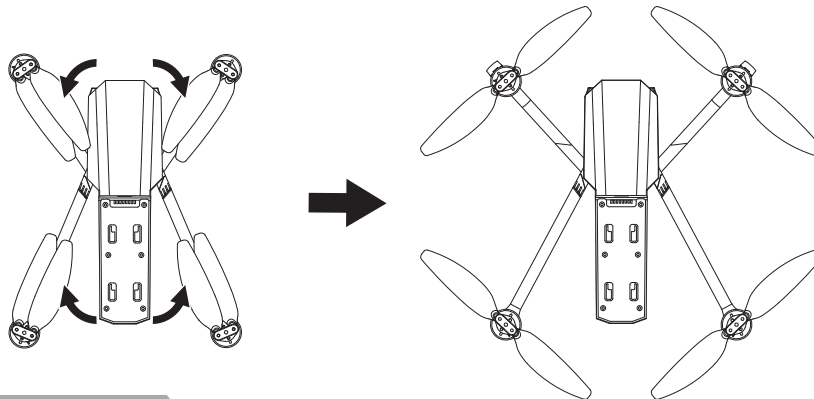
Disassemble the gimbal protection lock

Pull out the protective cover of gimbal camera.



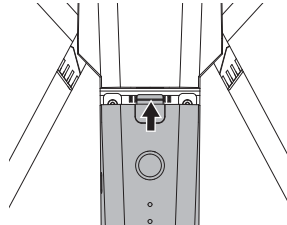
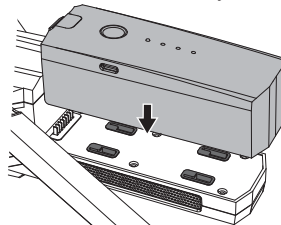
Expand the Arms

Carefully unfold the arms in the motion of the arrows below.



Install Drone's Battery

Before installing the battery for flight, make certain it is fully charged. Press straight down and push into the drone, make sure the battery install correctly.

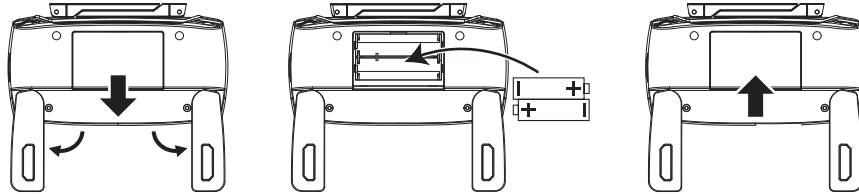


Reminder: If the battery is not installed properly, it may cause the drone to fall down due to power failure.

Prepare the Controller

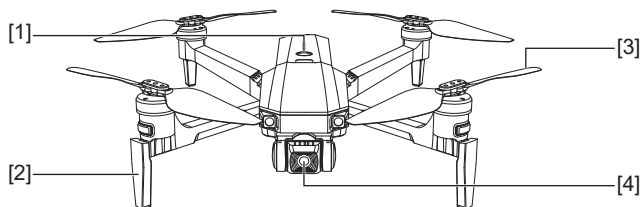
Install the Controller's Battery

Open the battery box, insert 2*AA batteries correctly according to the polarity in controller , then close the battery box.

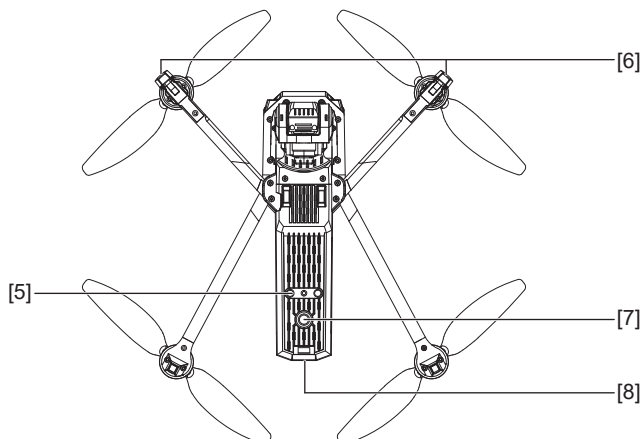


- The controller use 2*AA Non-chargeable batteries or AA chargeable batteries. (Please purchase)
- Please insure the polarity of the batteries is correct with the symbols inside the battery cavity of the Controller.
- Rechargeable batteries cannot be charged while inside the controller. Please remove them and charge in an appropriate battery charger.
- Warning: do not use batteries that have higher power ratings than the required 1.5 V as they may harm the Controller.
- Remove batteries if you do not plan on flying for an extended time to avoid battery leakage.

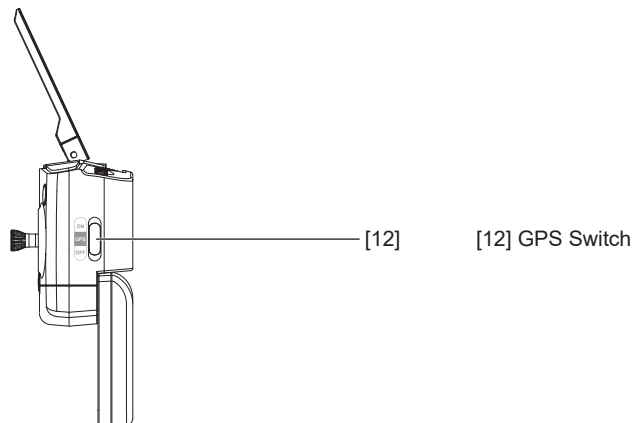
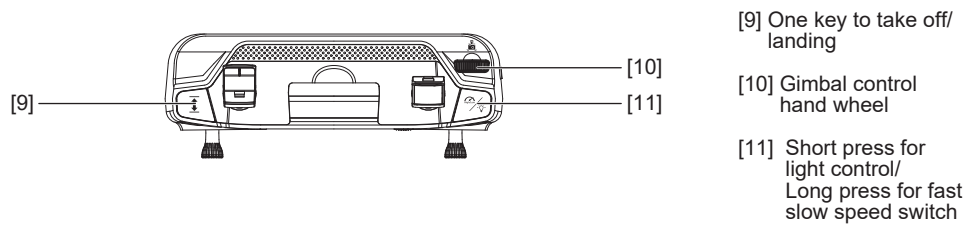
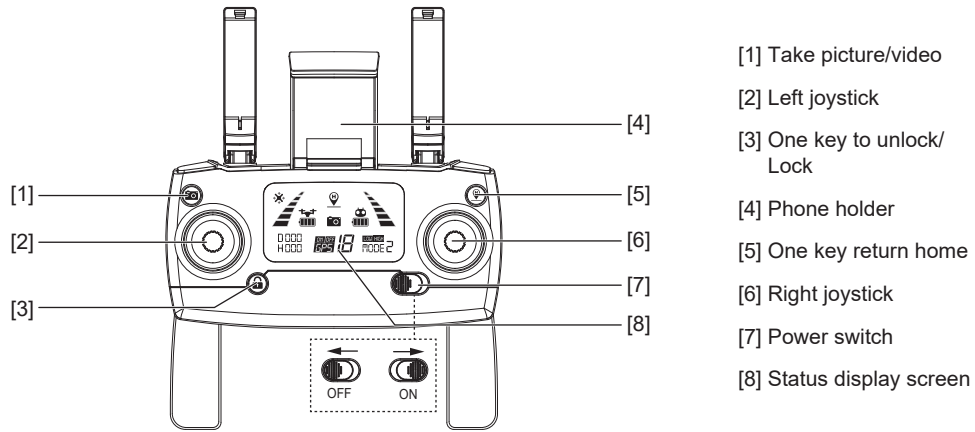
Parts Names



- [1] Power switch
- [2] Landing gear
- [3] Propeller
- [4] Gimbal camera



- [5] Optical flow system
- [6] Front light
- [7] Fill light
- [8] Rear light



Drone

Flight Mode

The following flight modes are available in I63E.

GPS Mode

In GPS mode, the drone achieves precise hovering by receiving GPS signals. If the GPS signal is weak, the drone will enter Fix-Altitude Mode or Optical Flow Position mode.(Please refer to the status bar for specific status in App.)

When the GPS signal is weak, please land to safe place immediately avoiding any accidents. At the same time, please avoid flying in a weak GPS signal or a narrow space to avoid accidents.

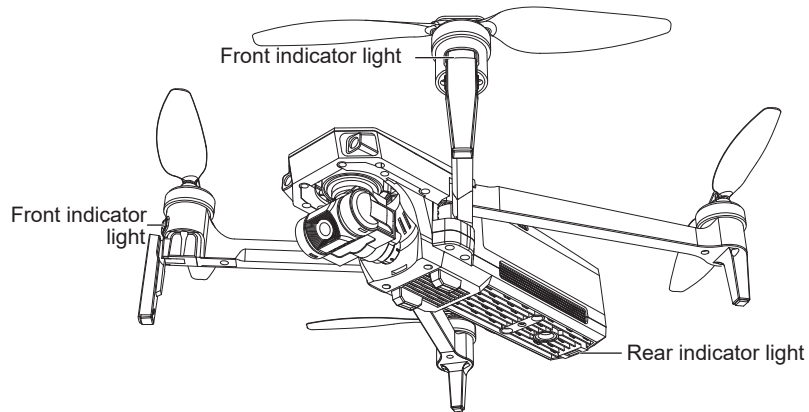
If you cannot receive the GPS signal or if the GPS is turned off, the drone will enter the Optical Flow Position mode

Optical Flow Position Mode

If you cannot receive the GPS signal or if the GPS is turned off, the drone will enter the Optical Flow Position mode. In this mode, the drone can hover stably by optical flow system.

Optical Flow Position height is 3m. If you exceed this height, the drone will lose control.

Status Indicator Lights on Drone



Status Indicator Light Definitions

No.	Indicator light status	Meanings
1	Front and rear indicator light flash yellow quickly.	Drone and controller have not connected.
2	Front and rear indicator light flash yellow green red in turns.	Drone is in the initialization detection state.
3	Front indicator light stays in red, the rear indicator light stays in yellow.	No GPS signal.
4	Front indicator light stays in red, the rear indicator light stays in green.	Good GPS signal, available to enter into GPS mode.
5	Front and rear light flash green quickly.	Drone is in gyroscope calibration.
6	Front and rear light flash yellow in turns.	Drone is in geomagnetic horizontal calibration.
7	The front and rear light flash green in turns.	Drone is in geomagnetic vertical calibration.
8	Front light stays red, the rear light flashes red slowly.	Drone is close to low battery, only 16% power left.
9	Front light stays red, the rear light flashes red quickly.	Drone is in low battery, only 12% power left.
10	Front and rear light flash red once, stop about 1.5s.	Gyroscope has a malfunction.
11	Front and rear light flash red twice, stop about 1.5s.	Barometer has a malfunction.
12	Front and rear light flash red three times, stop about 1.5s.	Compass has a malfunction.
13	Front and rear light flash red four times, stop about 1.5s.	GPS has a malfunction.

Return Home Automatically

I63E is equipped with auto Return home function. It include One key to Return Home , Return Home in low battery power and Return Home in lost control signal. Under good GPS signal, I63E will automatic fly back to home position and land automatically once pressing Return Home key / Low battery and lost control signal condition.

	GPS	Description
Home Point		In taking-off or flight, when the GPS signal reaches more than 7 for the first time, the current position of the drone will be recorded as the home point. When this occurs all indicator lights change from yellow to green.

One Key to Return Home

When the GPS signal is good (the No. of satellites is more than 7), you can press “” button to start the return home. To cancel return-home, press “” again and the drone will return to flight control mode.

Return Home in Low Power

1. When the Red indicator lights flash slowly, the Power icon in the controller shows “” and a continuous beeping sound is emitted; if the flight altitude is between 30 and 100 meters, the drone will return to the home point automatically.
2. When the Red indicator lights flash quickly, the Power icon in the controller shows “” and a continuous beeping sound is emitted; if the flight altitude or distance is greater than 15 meters , the drone will return to the home point automatically.

Return Home Beyond Control Distance

When the GPS signal is good (the No. of satellites is more than 7), the compass situation is good, if the signal of controller is interrupted for more than 6 seconds without APP control, the flight control will take over the control of the drone and control the drone fly back to the home point. If the controller signal is restored during flight, the return home will continue, while the user can cancel it by the return home button on controller , get back the drone's control flight.

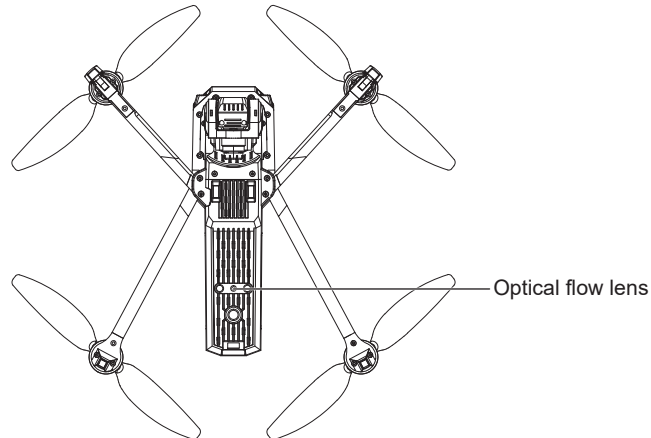


Notes on Return Home:

- Please be aware that when the drone is in Return Home mode, it will fly straight to the home point and will not be able to avoid obstacles.
- In return home, if the flight altitude is higher than 15 meters, the drone will perform the return home immediately, otherwise, the drone will raise up to 15 meters, then perform the return home (In APP, the return altitude can be set 15~120m)
- When the GPS signal is weak or not working, or has been interrupted for more than 6 seconds, the drone will not be able to return to the home point. It will descend slowly until landing, then it will lock.

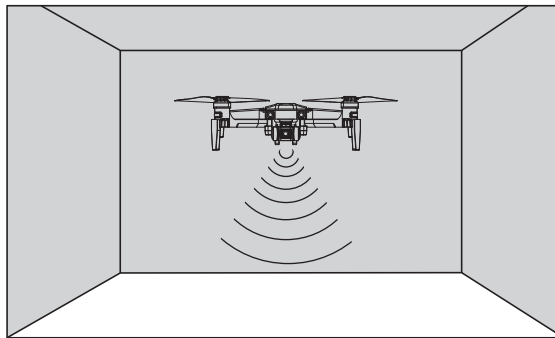
Optical Flow System

The optical flow system is composed of optical flow lens modules. It is an image positioning system that locating the drone by optical flow images. It ensures the accurate positioning and safe flight of the drone.



Usage requirements of Optical Flow Positioning

Please note, Optical Flow Positioning works when flying at altitude below 3 meters.



Measurement accuracy to the Optical Flow System (OPS) is easily affected by light intensity and texture of the surface. If the OPS fails the drone will automatically switch to fixed altitude mode. Below is a list of conditions that can cause failure to the OPS:

1. Flying fast at low altitude (below 0.5 meters).
2. Flying over monochrome surfaces such as pure black, pure white, pure red etc.
3. Flying over surfaces with strong reflections.
4. Flying over water or transparent surfaces.



5. Flying over moving objects such as upside of clouds, swaying trees or grasses, etc.
6. Flying over surfaces with rapid light changes.
7. Flying over extremely dark surfaces (Lux<10) or extremely bright surfaces (Lux>10,000).
8. Flying over very smooth surfaces.
9. Flying over surfaces with significant repeated textures such as same color brick.
10. Surfaces that are angled over 30 degrees.

For best results with OPS, maintain moderate drone flying speed without rapid changes.

Recommended speeds:

Altitude	Max speed
1	<5m/s
2	<8m/s

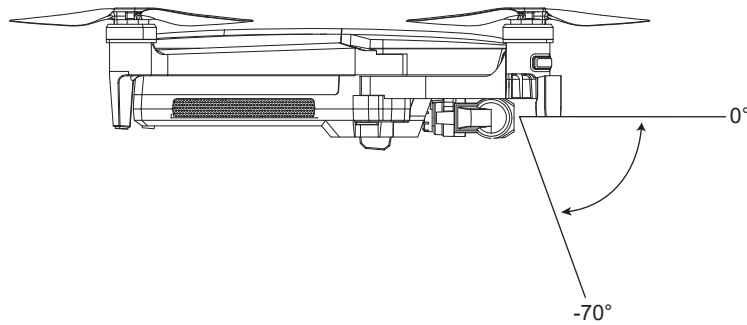
OPS Check List & Requirements

- Insure the OPS lens is clear.
- The OPS is only effective in altitude less than 3 meters.
- The surface area must have sufficient light source and rich textured ground.
- In dim light conditions, turn on the Optical Flow Fill Light.

Gimbal Camera

Gimbal Description

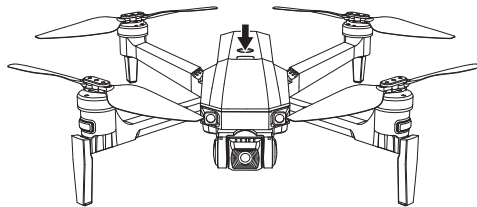
The 3-axis gimbal provides a stable platform for the camera insuring the camera can shoot clear images even at high speeds. The default shooting angle is -70° to 0° . The angel can be adjusted through the drone handwheel or through APP camera interface.



- Please place drone on flat open ground for takeoff. Do not touch the gimbal after the power is turned on.
- The gimbal contains precision parts which may be easily damaged. Please handle with care.
- Please keep the gimbal clean and away from sand, rocks and similar contaminants to keep it moving smoothly.
- Avoid landing in rough areas to protect the gimbal.
- Do not add or attach anything to the gimbal.
- Unlock gimbal protection lock before flying and lock it to protect it when storing and carrying.
- Flying in heavy fog or clouds may cause condensation on the gimbal. Please dry lens with soft cloth suitable for cleaning camera lens.

Drone Power Switch

Long-press the power button for 3 seconds to turn the drone on or off. In the same time, the drone will have power-on sound and indicator light stays on. Long-press the power button for 3 seconds again, the drone will turn off and indicator light will turn off.



Drone Battery

Drone No.	Rated Voltage	Battery Capacity
I63E	11.4V	3200mAh

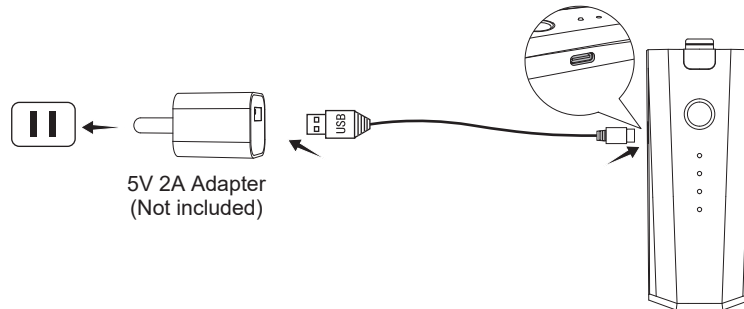
Charging

① USB to Type C charging cable

Please charge the battery fully before using it. Be sure you use the officially supplied USB charging cable to charge. The charging time is about 5.5 hours.

- Power off: The battery indicator light will flash.
- Charging: The battery indicator light will flash in turns.
- Fully charge: The battery indicator will stay on.

*The above charging data is based on 5V 2A adapter. Using the different adapter will affect the charging data. Recommend using 5V 2A-2.1A adapter to charge.

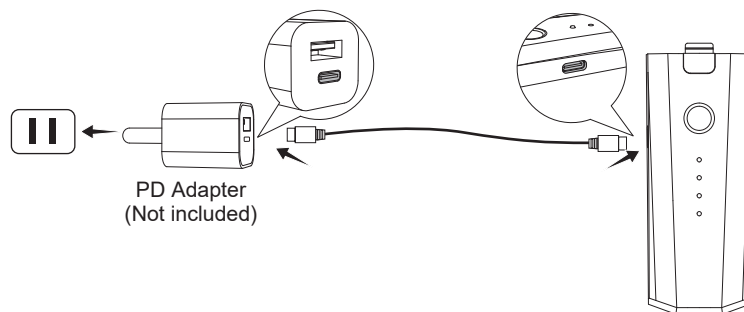


② PD Fast charging cable (PD fast charging only applies to I63E batteries)

Please charge the battery fully before using it. Be sure you use the officially supplied USB charging cable to charge. The charging time is about 70 minutes.

- Power off: The battery indicator light will flash.
- Charging: The battery indicator light will flash in turns.
- Fully charge: The battery indicator will stay on.

*The above charging time data is based on an adapter with 45W Up. Using the different adapter will affect the charging data. Recommend to use a PD charger with 45W Up, for faster charging experience.





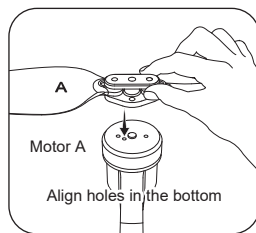
- Please charge the battery under adult supervision.
- Prevent explosions by not squeezing or short-circuiting the battery.
- Do not remove the power cord from drone to prevent battery from short-circuiting. Do not disassemble battery or place near high temperatures or heated areas such as fires or electric heating devices.
- Check the power cord, shell and other parts regularly. If any damage occurs, repair damage before using.
- Charger is meant for indoor use only.
- After each flight, the battery should be charged halfway and then stored until used again. For long term non-usage, it is recommended to use the battery complete and charge it once a month to prevent damage from overcharging.

Assemble & Disassemble the Propellers

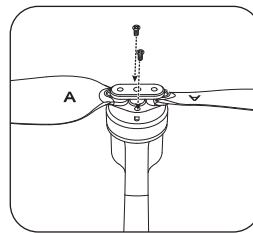
Assemble/disassemble the propellers

●Assemble

Match corresponding propellers (A with A and B with B), then turn screws clockwise to tighten them. (as pic 1-2).



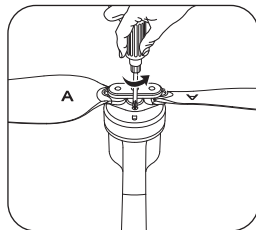
Pic. 1



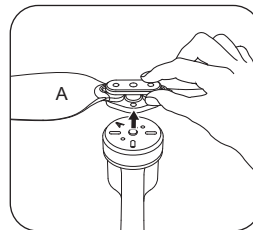
Pic. 2

●Disassemble

Turn screwdriver counterclockwise to remove the 2 screws and propellers. (as pic.3-4).



Pic. 3



Pic. 4



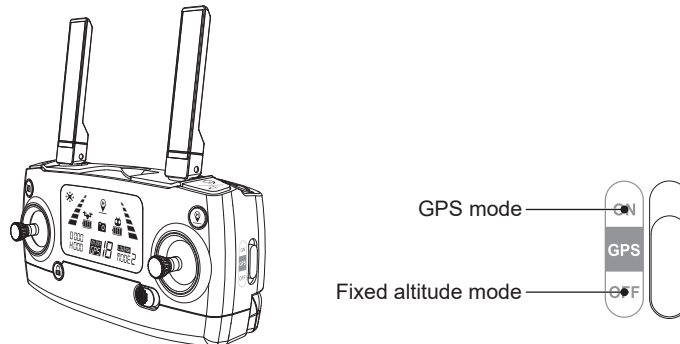
- Drone will not fly if propellers are installed incorrectly.
- Handle propeller blades carefully to prevent scratches.
- To ensure optimal safety and performance, only use the official ING propeller blades.

Controller

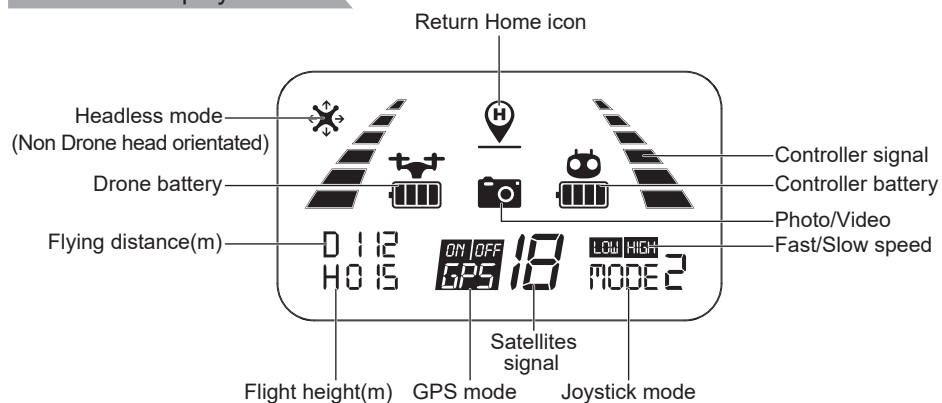
Controller Functions

Flight Mode Switch

Use the button on the right side of the controller to control GPS and flight mode.
The "ON/OFF GPS" on controller screen displays the current flight mode

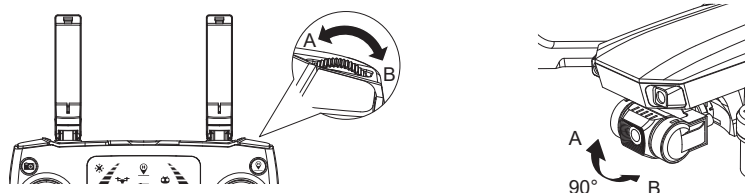


Controller Display Screen



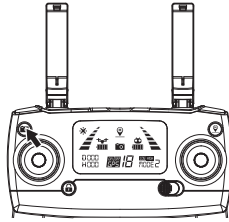
Gimbal Control Wheel

Adjust the camera angle by moving the wheel on the drone to get a better photography experience.
When the wheel is turned counterclockwise, the camera angle will be adjusted upward; when the wheel is moved clockwise, the camera angle will be moved downward.



Photo/Video Mode

Press the “” on the controller screen to take a photo and the “” will flash once.
Press the “” on the controller screen for 3 seconds to take a video and the “” will flash slowly continuously. Hold the controller “” for "2 seconds" again to stop shooting video.



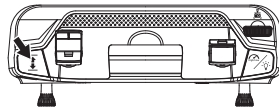
Notes: 4K HD photos and videos cannot be saved without a Micro Memory Card (Class 10-UHS-II).
If the Micro Memory Card is inserted incorrectly, the drone won't be able to take photos or video.

One-Key Takeoff/Landing

After unlocking the I63E, press the “” button once and the drone will takeoff automatically and hover at an altitude of 1.5m.

When the drone is hovering, hold the “” button and the drone will automatically land.

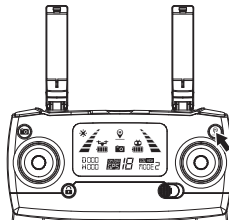
Remark: During one-key take out progress, user can press joystick to cancel auto takeoff command immediately.



One-Key Return to Home

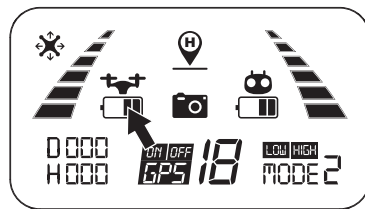
Press the “” button until a beep sound occurs, to turn Auto-Return Home on. The drone will return to the last saved home point.

Press the “” button again to stop Auto-Return Home.

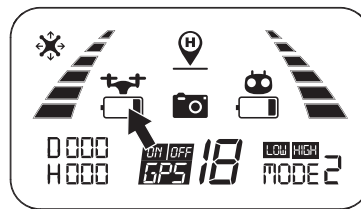


Drone Low Battery Warning

1. During battery level drop to level 2, the indicator light on the drone will quickly flash red and the battery icon on the controller screen will show "🔋" while playing a continuous beeping sound. If the drone is flying at an altitude higher than 30 meters or a distance further than 100 meters, it will automatically return to the last saved home point.
2. During battery level drop to level 1, the indicator light on the drone will quickly flash red and the battery icon on the controller screen will show "🔋", while playing a continuous beeping sound. If the drone is flying at an altitude higher than 15 meters or at a distance further than 15 meters, it will automatically return to the last saved home point. If the altitude is lower than 15 meters or the distance is less than 15 meters, the drone will land directly where it is flying.



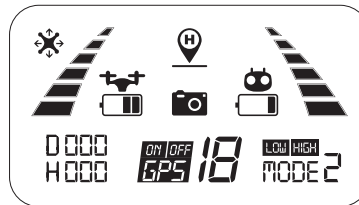
Pic. 1



Pic. 2

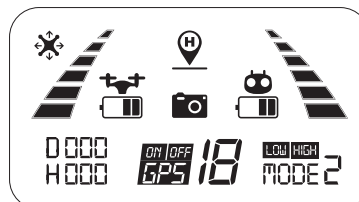
Controller Low Battery Warning

When the controller battery is low, the "🔋" icon will appear on the controller screen and it will play a continuous beep sound. When this occurs, replace the batteries.



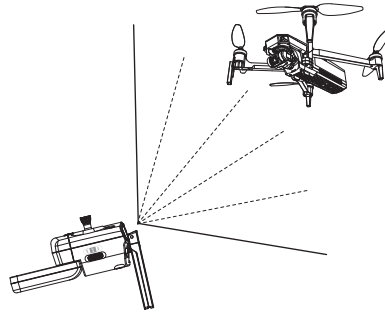
Signal Strength

- The "📶" icon displays signal strength and the higher the bars, the stronger the signal is and the lower the bars are, the weaker the signal is.
- If the "📶" icon regularly changes from weak to strong, that means the drone is signal matching.
- If the "📶" icon shows less than 2 or no bars at all:
 - 1) The distance between the controller and the drone is too far for the signal to reach.
 - 2) The drone battery icon has been empty "🔋" after signal matching has happened.



Drone Communication Range

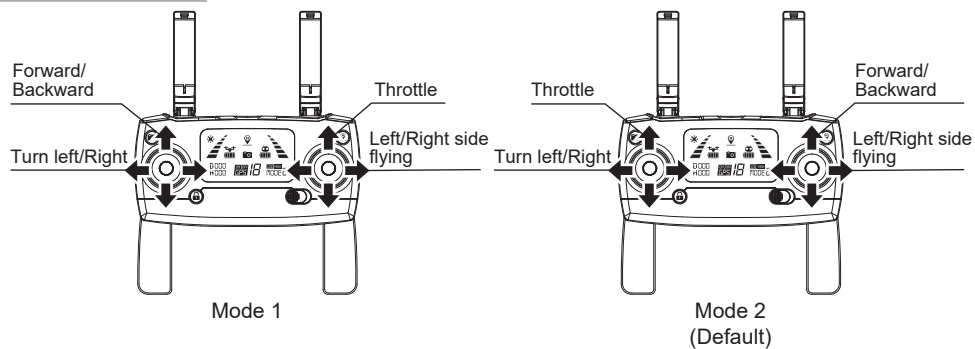
Keep the drone in front of the controller and prevent any obstacles from appearing between them.



Best communication range

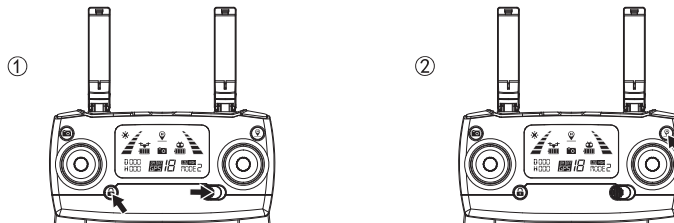
Controller Joystick Mode

Joystick mode



Joystick Mode Switch

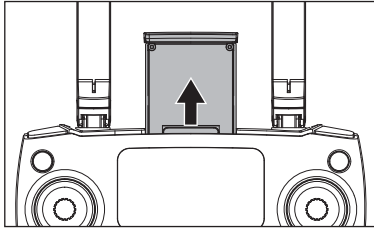
1. Press and hold the unlock button on the controller, then turn it on to activate signal matching mode.
2. Hold the "⏻" button for 3 seconds and the controller will switch to the other mode. The current controller will be displayed on the screen with Mode 2 being the default mode.



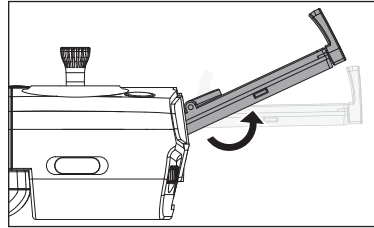
Reminder: Make sure the controller is in signal matching mode in order to switch modes, if not, mode switching will not occur.

Assemble Phone Holder

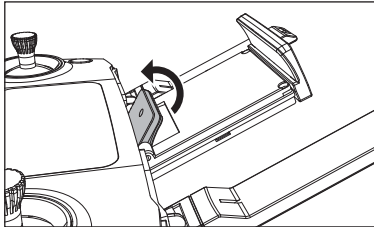
1. Pull the phone holder up completely (Pic.1);
2. Rotate the phone holder up 30°(Pic.2);
3. Rotate and fix support board in to place (Pic.3);
4. Move components up and down to adjust the size to fit your phone. (Pic.4).



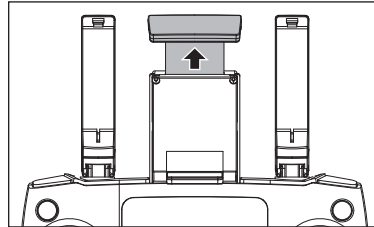
Pic. 1



Pic. 2



Pic. 3



Pic. 4

M RC PRO App

FPV Real Time Transmission Software

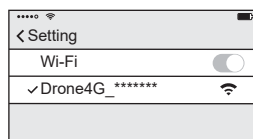
Scan Code To Download APP

- Search M RC PRO in the Apple App Store or scan the QR code to download and install it.
- For Android users, scan the QR code to download and install it.



Connection Instructions

Go to the Settings App on your phone, then turn on the WiFi and connect to Drone4G_**** and wait for the word "Connected" to appear. Once connected, the App can be opened.



Connect WIFI

Saving Photos and Videos

1. Without a memory card, photos and videos will be saved to the album in the App. (These photos and videos will only have the quality that the phone provides)
2. With a memory card installed, photos and videos will be saved to it.
3. Photos and videos saved to the memory card can be downloaded to the App.



Reminder: Only mobile phones that support 5G WIFI (802.11.ac) can connect to FPV.

Flight

Flight Requirements

1. Do not fly in bad weather, such as strong wind, snow, rain, fog, etc.
2. Choose an open place without tall buildings around to fly. Buildings that use a lot of steel bars will affect the work of the compass and block the GPS signal, causing poor positioning of the drone or even an inability to locate the drone.
3. When flying, keep the drone in sight, stay away from obstacles such as crowds, water, etc."
4. Do not fly in areas with high-voltage lines, communication base stations or controller towers, to avoid interference with the drone."
5. When flying at the place whose altitude is above 6000m, the performance of the drone battery and power system will decrease, and the flight performance will be affected correspondingly. Please fly with caution.
6. The drone cannot use GPS to fly in the north and south poles.

Flight Restrictions and Special Area Restrictions

According to the regulations of the International Civil Aviation Organization and Air Traffic Control regulations about airspace control and drone management of various countries, drones must fly in their specified airspace. For flight safety, the flight restriction function is turned on by default, including altitude and distance restrictions and special area flight restrictions, to help users fly the drone safely and legally.

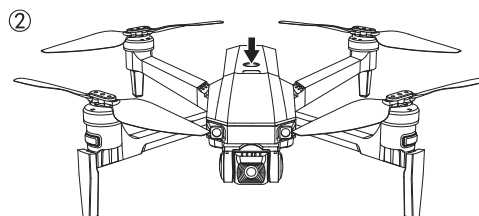
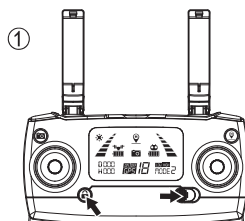
Pre-Flight Inspection

1. Check that the controller, controller battery and phone are all fully charged.
2. Check that the propellers have been installed correctly.
3. Check that the front and rear arms of the drone and propellers have been fully unfolded.
4. After turning the power on, check to see that the camera and gimbal are working.
5. Make sure the camera lens is clean.
6. Only use official or officially certified accessories. The use of unofficial accessories may damage the drone.

Drone Operation

Controller and Drone Signal Matching

- ① Press and hold the lock button and turn on the controller. Once it begins to beep, release the lock button. The signal strength icon will begin changing from weak to strong while the drone signal matches.
- ② Install the drone battery, press and hold the power button for 3 seconds to turn on the drone. The drone will play a power-on sound and the indicator light will then turn on. After signal matching, the drone will play a long beep sound and the signal icon will display the current signal strength after successfully signal matching.

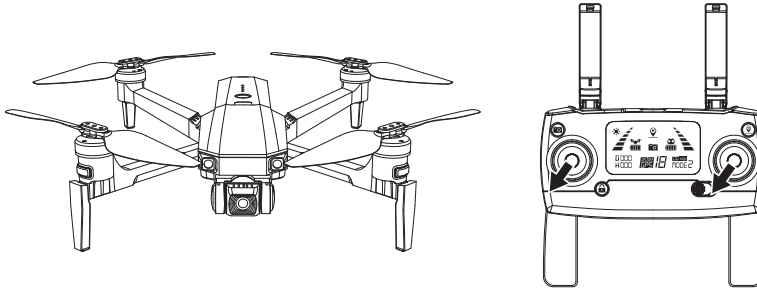




- As long as the controller and drone have been successfully matched, there is no need to rematch the signal after each use unless you have matched with another controller and/or drone.
- When matching the signal, make sure no other controller or drones have been turned on nearby, this will interfere with signal matching.

Gyroscope Calibration

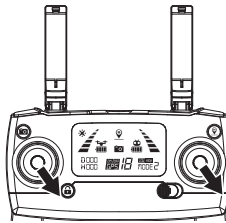
After successfully signal matching, place the drone horizontally on the ground. Push the left and right joysticks to the bottom left at the same time. The front and rear lights on the drone will flash quickly as the gyroscope begins to calibrate. Once the indicator lights stay on, calibration has been completed.



- During gyroscope calibration, the drone should be placed horizontally on the ground, otherwise flight performance will be affected.
- As the gyroscope has been calibrated before shipping, only recalibrate it if flight performance is poor.

Geomagnetic Calibration

Before unlocking the drone, move the left and right joysticks to the bottom right at the same time to start geomagnetic calibration.

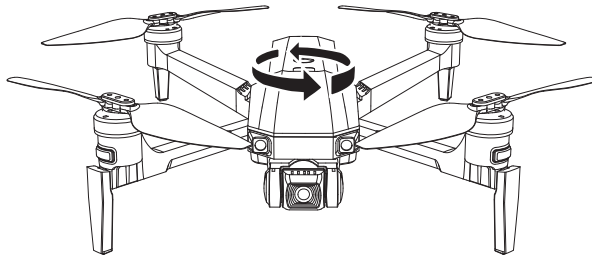


Two Steps Of Geomagnetic Calibration

Step 1: Horizontal Calibration

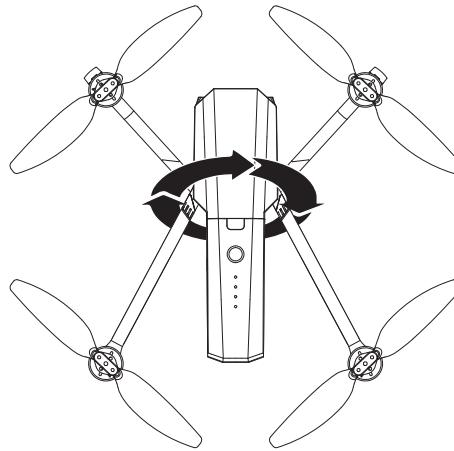
Once horizontal calibration begins, the front and rear indicator lights will flash yellow.

Place the drone as shown below and rotate it 3 times horizontally until the front and rear indicator lights turn green flashing. Once this happens, horizontal calibration will be complete.



Step 2: Vertical Calibration

Place the drone as shown below, rotate it 3 times vertically, until the front and rear indicator lights (Red) stay on. Once this happens, vertical calibration will be complete.



Reminder:

- Ensure that the flight place is open and the satellite signal is greater than 7 Satellites before take-off.
- In GPS mode, if the drone cannot hover at a fixed point or the flight performance is poor, re-calibrate the geomagnetic sensor, to improve such as: the flight performance.



- Do not calibrate in areas with strong magnetic fields , such as : magnetic mines, parking or building areas with steel bars under ground., etc.
- Do not carry ferromagnetic materials, such as keys, phones, etc. with you during calibration.
- Do not calibrate near large pieces of metal.

Unlock/Lock the Drone

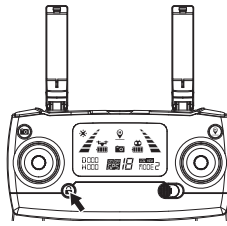
Unlock the Drone

Press the lock button, once the motor starts, the drone will be unlocked.

Lock the Drone

Method 1: After the drone has landed, move the throttle to the bottom for 3 seconds to stop the motor and lock the drone.

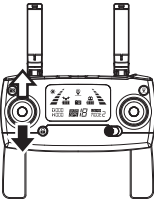
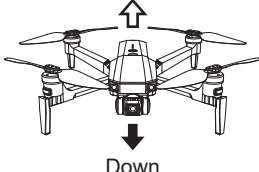
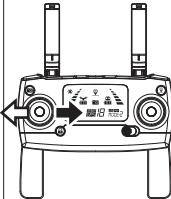
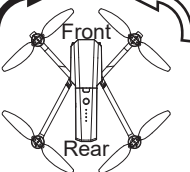
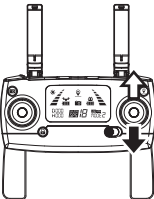
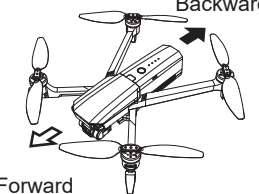
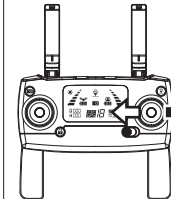
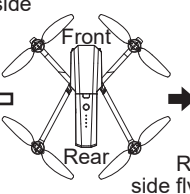
Method 2: The drone will lock automatically after 15 seconds of non-use.



Emergency stop:

- When the drone is flying at a distance/altitude within 5 meters, press the lock button “

Operate The Drone

Controller	Drone	Controller	Drone
	 Up Down		 Turn right Turn left
	 Backward Forward		 Left side flying Right side flying

Basic Flight

The Steps of Basic Flight

1. Place the drone on a flat and open space with the user facing the rear of the drone.
2. Turn on the controller and the drone.
3. Match the signal of the controller and drone, and complete the initialization of the drone.
4. Open the M RC PRO APP, connect the phone to the I63E, and enter into the camera interface.
5. Unlock the drone.
6. Slowly move the throttle stick up and the drone will take off smoothly. Use the left and right joysticks to control the drone.
7. Pull down the throttle stick to lower the drone.
8. After landing, pull the throttle stick to the lowest position and hold it for more than 3 seconds until the motor stops.
9. After stopping, turn off the drone and the controller.

Tips

1. Perform a pre-flight inspection.
2. Select the appropriate gimbal camera angle.
3. Fly and take photo in a good weather without wind.
4. Perform a test flight to create a planned route and find a place to take a view of.
5. Push the joystick as smoothly as possible to ensure the drone flies smoothly.



As flight safety is very important to you, those around you and the environment, please read the user guide carefully.

Appendix

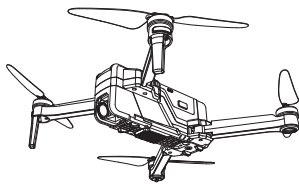
Drone Specification

Drone		
Weight (The Battery and Propellers Included)	I63E: about 612g	
Dimension	Fold: 295*80*87mm (L*W*H) Unfold: 395*395*87mm (L*W*H)	
Maximum Ascent Speed	3m/s	
Maximum Descent Speed	2m/s	
Maximum Speed	40km/h	
Flight Height Limitation	120m(393.6 feet)	
Maximum Tilt Angle	35°	
Maximum Rotational Angular Speed	45°/s	
Operating Temperature Range	0℃-40℃	
GNSS	GPS	
Hovering Accuracy Range	Indoor: ±0.3m Vertical Outdoor: ±0.5m Vertical	±0.3m Horizontal ±1.5m Horizontal
Frequency	2.4GHz	
Gimbal		
Gimbal Type	3 axis	
Gimbal Adjust Range	0℃ to -70℃ (Manual Adjust in Transmitter)	
Roll Servo Range	-30℃ to 30℃ (Auto)	
Heading Servo Range	-30℃ to 30℃ (Auto)	
Controller		
Frequency	2.4GHz	
Max Transmission Distance	≥600m(≥1968 feet)	
Working Temperature Range	0℃-40℃	
Battery	AA*2 Not include	
Working Current/Voltage	200mA@3V	
APP/FPV Real Time Transmission		
APP Name	M RC PRO	
Transmission System	5G WIFI (802.11.a/n)	
Real Time Transmission	720p@30fps	
Delay Time	200-300ms	
The System Version Requirements of the Phone	iOS 9.0 or Higher Android4.4 or Higher	

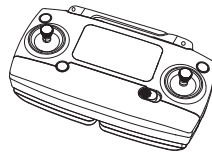
Camera	
Basic Information	4K EIS 5G WIFI Camera
Image Sensor	1/3 inch CMOS
Lens	View Angle: approx.120° Aperture: f/2.0 Focal Length: 2.96mm
ISO Range	Photo: 100-3200 (Auto) Video: 100-3200 (Auto)
Electronic Shutter Speed	1/30s-1/10000s
Maximum Photo Size	3840x2160
Photo Shooting Mode	Single Shot
Video Resolution	3840x2160
Color Mode	RGB
Maximum Video Stream	Video 50Mbit Transmission 2Mbit
Support File System	FAT32
Local Video Frame Rate	3840x2160@30FPS 1080P@60FPS
Maximum Transmission Frame Rate	720P@30FPS
Image Format	JPEG
Video Format	MP4, Compressed Format H.264
SD Cards Not include	Micro SD Maximum Support 128GB Capacity Expansion, Class10--UHS-II
Working Temperature	0°C-40°C
Aircraft Battery	
Capacity	3200mAh
Voltage	11.4V
Battery Type	Li-po
Power	36.48Wh
Weight	about 208g
Charging Temperature Range	5°C-40°C
Charger Input	5V/2-2.1A 15V 3A (PD)
Charger Power	45W (Max)
Charging Time	330 minutes (5V 2A Adapter) 70 minutes (45W PD Adapter)
Charging Method	USB to Type C Charging Cable PD Charging Cable

Packing List

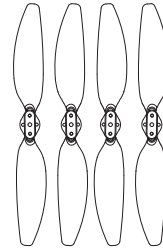
The full package contains the following items.



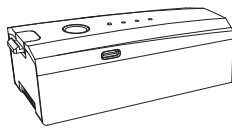
Drone *1



Controller *1



Propellers *4



Drone Battery *1



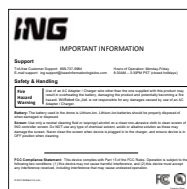
USB to Type C
Charging Cable *1



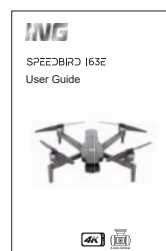
PD Charging Cable *1



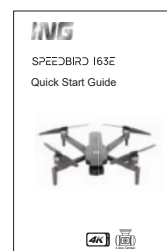
Screwdriver *1



Warranty card *1



User Guide *1



Quick Start Guide *1

Important Statement

- This product is not a toy, but a precision device that integrates professional knowledge of machinery, electronics, aerodynamics, and high-frequency emission. It requires proper installation and debugging to avoid accidents. The product holder must use a safe way to operate and control. Otherwise, it may cause serious personal injury or property damage.
- This product is suitable for people who have experience in operating model drone and at least 14 years old.
- If any problems with use, operation, maintenance, etc., please contact your local dealer or relevant personnel of our company. Our company and the seller are not responsible for any loss and damage caused by improper use or operation, as well as human injury.
- The product contains small parts, please keep it out of the reach of children to avoid the risk of ingestion or suffocation.

Safety Precautions

The remote control model aircraft is the most dangerous commodity, please keep it away from the crowd when flying. Improper assembly or damage to the drone body, poor electronic control, and unfamiliar operation may cause unpredictable accidents such as drone damage or personal injury. Operators must pay attention to flight safety and understand their responsibility for accidents caused by their own negligence.

• Stay away from obstacles and people

The remote control drone has an uncertain flight speed and state during flight, is potentially dangerous. When flying, please stay away from crowds, high-rise buildings, high-voltage power lines, etc., and avoid flying in bad weather such as wind, rain, and lightning. Debugging and installing the aircraft must strictly follow the operating instructions. Pay attention to keeping the drone at a distance of 1-2 meters away from the user or other people during flight, to avoid the drone from crashing into the head, face and body of the person when flying or landing, causing injury.

• Keep away from humid environment

The inside of the drone is composed of many precision electronic components and mechanical parts. Therefore, it is necessary to prevent the drone from getting wet or moisture into the body, avoiding accidents caused by mechanical and electronic component failure. Please wipe the surface stains with a clean cloth during maintenance.

• Practice flying together with skillful pilot

There is a certain degree of difficulty in the early learning of remote control drone control skills. It is necessary to avoid flying alone, be guided by an experienced person.

• Use this product properly

Please use MJX original parts for installation or maintenance to ensure flight safety. Operate and use within the scope permitted by the product function, and must not be used for other illegal purposes.

• Safe Operation

1. Please operate the remote control drone according to your own flying skills. Fatigue, poor spirits or improper operation will increase the probability of accident risk.
2. Do not use it near your ears! Misuse may cause hearing hurt.

• Keep away from high-speed rotating parts

When the drone propellers are rotating at high speed, please keep the pilot, surrounding people and objects away from the rotating parts to avoid danger and damage.

- **Keep away from heat source**

The remote control drone is composed of metal, fiber, plastic, electronic components and other materials. Therefore, it is necessary to keep away from heat sources, avoid deformation or even damage due to high temperature.

- **Environmental protection requirements**

Discard the product at will, which may affect the environment. Please recycle it properly according to local laws and regulations.

FCC compliance statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This controller must not be co-located or operating in conjunction with any other antenna or controller.

