



# P70-GPS GPS SHADOW DRONE INSTRUCTION MANUAL

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## INTRODUCTION

Thank you for purchasing the P70-GPS Shadow Drone. Please read all instructions and warnings carefully before operating. Please also keep this instruction manual for future reference and maintenance.

- IMPORTANT:**
- This product is not a toy. It is a precision device, integrating machinery and electronics with air mechanics and high frequency transmission. It requires correct assembly and debugging to avoid any accident. The user should operate and control this product in a safe manner. In case of incorrect operation, it may cause serious injury or damage property. It can also be lost due to incorrect operation.
  - This product is suitable for experienced UAV pilots no less than 14 years of age.
  - In the event of a problem during using, operating, or maintenance, please contact the local sales agent or retailer or keep in touch with the responsible staff of our company.

### SAFETY PRECAUTIONS:

- This R/C flying model can be dangerous when in use, please make sure you keep it far away from any persons or spectators when flying. Incorrect installation, poor conditions, or users not familiar with operation may cause damage to the aircraft or injure people or may cause an unexpected accident. Please pay close attention to flying safety and learn to recognize more dangerous conditions which may cause an accident due to your own negligence.
- Keep it far away from any structures or crowds.**  
This R/C aircraft may vary slightly in speed or sensitivity while flying and can cause potential danger. Therefore, please keep it far away from crowds, buildings, trees, structures, high-voltage wire, etc. Please also avoid flying in adverse weather conditions such as rain, electrical storms, and high winds to ensure safety of the user, any spectators, and surrounding property.
  - Keep it away from any moist environment.**  
The inside of the aircraft is composed of many precision electronic and mechanical parts. Therefore, please try to avoid any moisture or water content from entering the main body of the aircraft as it may cause a breakdown of the mechanical and electronic parts and thus cause an accident.
  - Only operate with included parts for intended use.**  
Please use the original parts made by Promark for any re-equipping or maintenance to ensure flying safety. Please operate and use only under the scope of the product function permitted. Using un-approved parts will void warranty.  
DO NOT use for any illegal purpose or use beyond the scope of which your local laws and regulations have stipulated.
  - Avoid controlling it independently.**  
New users may have certain difficulties during the early stages of learning to operate this aircraft. Please try to avoid operating the aircraft alone. When available, always operate this aircraft under the guidance of a more experienced user.
  - Do not operate under the influence of drugs or alcohol.**  
Please operate this R/C aircraft according to your own state and flying skill. Any fatigue, bad mental state, or incorrect operation may increase the probability of accidental risk.
  - Please keep a safe distance from aircraft when using top speed.**  
When the operator is flying in high speed, please keep the aircraft far from the pilot and any surrounding persons or objects so as not to cause danger or damage.
  - Store it in a cool, dry place.**  
The R/C aircraft is composed of material such as metal, fiber, plastic, electronics, etc. Therefore, please keep it away from any heat source and avoid prolonged exposure to direct sunlight. Excessive heat exposure can cause distortion and damage.

**NOTE:** 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 to a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## WARNING

- There is important information contained in this package and instruction manual, please keep it for future reference.
- You have the responsibility to make sure that this model of aircraft won't cause injury to others' body or cause any damage to property.
- Please operate strictly as shown on the instruction manual when debugging or assembling this aircraft. During the process of flying or landing, please pay more attention to keep 1-2 meters between the user and the aircraft to avoid colliding to the head or face or body, which may cause injury.
- Our company and distributors won't be responsible for any incorrect operation, which may cause loss or damage or injury to the body.
- Children ages 14 and up should use this product under the guidance of an adult. This product is FORBIDDEN to be used by children under 14 years old.
- Please correctly assemble and use this product as shown on the instruction manual or packing instruction. Some parts should be assembled by an adult.
- Small parts are included with this product. Please place it beyond the reach of the children to avoid a CHOKING HAZARD or parts being mistakenly swallowed.
- Playing on the road or near high traffic areas is strictly FORBIDDEN so as not to cause an accident.
- Please dispose of the packing material timely so as not to cause injury to children.
- Please DO NOT disassemble or re-equip the aircraft as it may cause a breakdown of the aircraft during flying.
- Batteries in the battery compartment of the charger should be inserted into the designated power source which has the same logo as the product.
- Built-in rechargeable 3.7V lithium polymer battery included in the transmitter.
- Only the original charger made from our factory can be used.
- Charger is not a toy.
- When charging the battery, please conduct it under the surveillance of an adult. Please also keep it far away from any combustible object when charging. Please keep this aircraft within eyesight when charging.
- Please DO NOT make it short-circuited or squeeze the battery so as not to cause an explosion.
- DO NOT mix the Li-ion battery with a different type of battery.
- Intelligent lithium battery is loaded in the Quad-rotor. Both built-in or external can be used for charging.
- Please DO NOT make the battery short-circuited or decompose the battery or throw the battery into the fire. DO NOT place the batteries near the high temperature or heated area (such as near the fire or near the electric heating device).
- DO NOT touch it to avoid being burned or injured.
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Please DO NOT touch it to avoid being burned or injured.
- Please DO NOT use this product to your ear as it may cause injury to your hearing.
- Mini USB 5V wall charger recommended for charging. DO NOT use any charger stronger than 5V.
- Comply with the command of the magnetic environment requirement formulated by the Aviation Radio Bureau and the related authority, during the regulated period in certain areas, please stop using the transmitter of this model when such regulation command is issued.
- Fly at or below 400 feet and stay away from surrounding obstacles.
- Keep your UAV within sight.
- Never fly over groups of people.
- Never fly over stadiums or sports events.
- Understand airspace restrictions and requirements.

**WARNING: CHOKING HAZARD** Small parts. Not for children under 3 years.

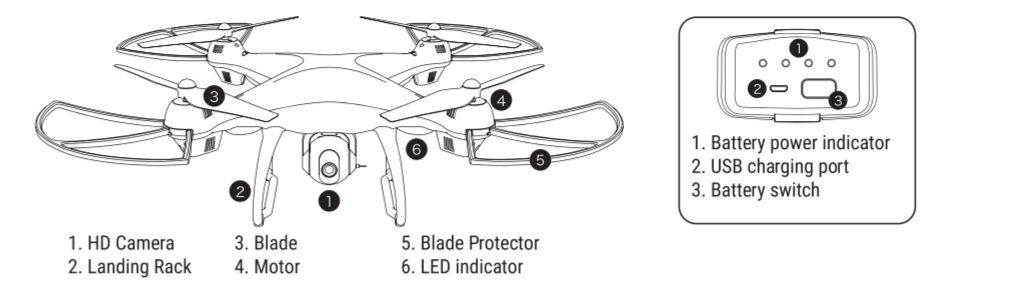
MADE IN CHINA

FCC RF Radiation Exposure Statement Caution: This Transmitter must be installed to provide a separation distance of at least 20 cm from all persons.

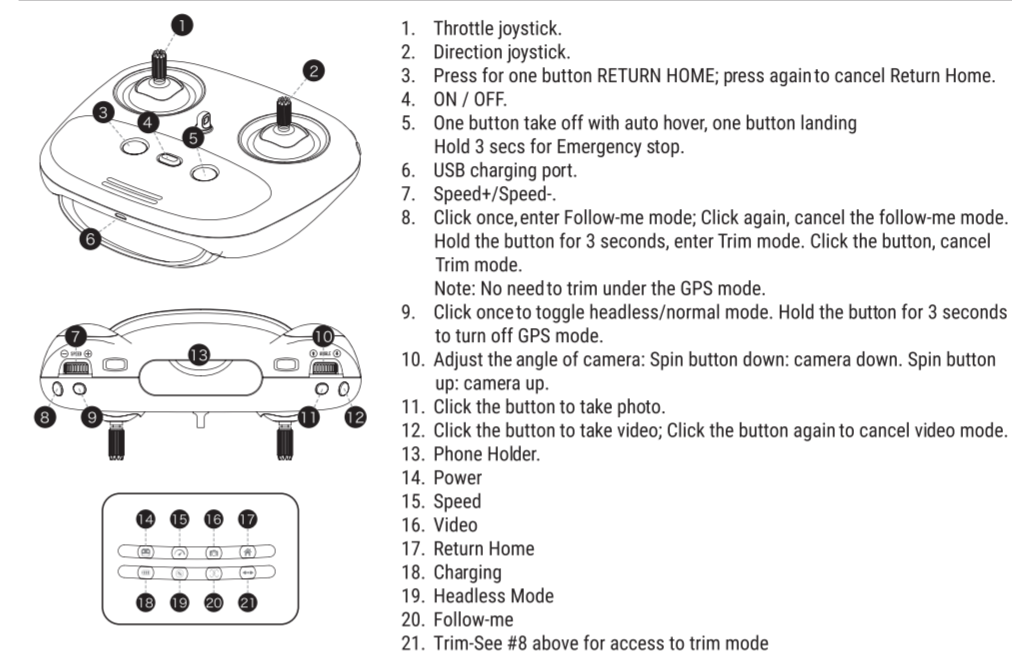
## MAINTENANCE

- Use a clean soft cloth to clean this product frequently.
- Avoid heating or prolonged exposure to the sun.
- Don't put the product in water. It will damage electronic parts.
- Please check the plug and other accessories regularly. If there is any damage, please stop using it immediately until it is repaired completely.

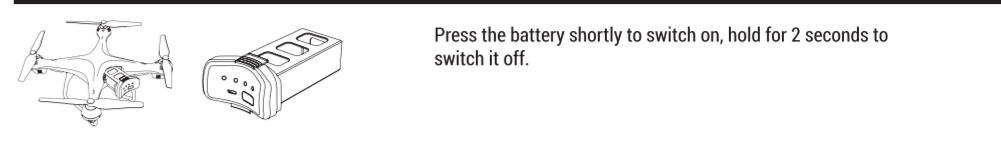
## DRONE PARTS



## REMOTE CONTROL



## QUADROTOR LI-POLYMER



## LITHIUM BATTERY CHARGING INSTRUCTIONS

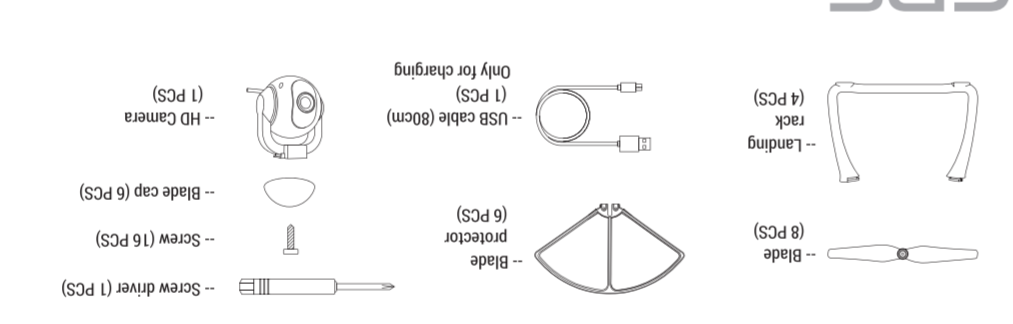
- Balanced charging: If the power switch of the quad-copter is on the state ON/OFF, the Quad-copter can be charged. Insert the USB cable into the USB port of a computer, and then connect with the charging port of the drone. When charging, the indicator on the power switch will turn red; when fully charged, the indicator on the power switch is OFF.
  - Quad-copter can be charged by the mobile power or car-loaded power.
  - Full charging time takes about 6 hours, Flight time about 12 minutes.
- CAUTIONS WHEN CHARGING:**
- When charging, please put this product in a dry ventilated area and keep it far away from heat sources or flammable products.
  - When charging, it is recommended to remove the batteries from the quadcopter. Charging process should be supervised by an adult so as not to cause an accident. The battery can also be charged while in the quadcopter.
  - After flying, please do not charge the battery if the surface temperature is still warm. If the battery has been used for a long time, or appears to be swollen, please replace them.
  - Please make sure that you use the original USB charging cable provided.
  - A battery when not in use for a long time will lose its charge automatically. Charging or discharging too often may reduce the life of the battery.
- DISCLAIMER:** You must use the original USB cable and standard 5V wall charger.  
**WARNING:** Never charge with an input stronger than 5V. This can cause the battery to overheat.

## PREPARATION FOR FLIGHT/GPS CALIBRATION

Please choose the spacious indoor or outdoor environment for flying, also it requires that it should be outside under the weather of non-snow or non-storm with wind force less than Level 4. When flying, please DO keep it far away from the crowd, tree, electric wire, skyscraper, airport or signal transmitting tower, etc.

- Turn on drone and set down on a level surface\*  
-The drone will auto-trim to this level surface.  
-All lights blinking red
- Turn on remote  
-Press Up, then Down on the left joystick  
-Lights blink (back and forth flashing lights)  
-NOTE: \*You can connect to the WiFi at this time to view the current drone status on the Promark GPS App, or wait until after GPS is calibrated.

## QUADROTOR LI-POLYMER



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## KEY FEATURES OF QUADROPTER

- Intelligent Tracking
- 6-axis Gyro
- With Headless Mode
- Video Transmission Distance: Up to 1000' (300 meters)
- Control Distance: Up to 1,640' (500 meters)
- 1AH 2.6Ah 3.7Ah 5.2Ah 7.4Ah 9.5Ah 11.1Ah 13.2Ah 15.8Ah 18.5Ah 21.2Ah 23.8Ah 26.4Ah 29.0Ah 31.6Ah 34.2Ah 36.8Ah 39.4Ah 42.0Ah 44.6Ah 47.2Ah 49.8Ah 52.4Ah 55.0Ah 57.6Ah 60.2Ah 62.8Ah 65.4Ah 68.0Ah 70.6Ah 73.2Ah 75.8Ah 78.4Ah 81.0Ah 83.6Ah 86.2Ah 88.8Ah 91.4Ah 94.0Ah 96.6Ah 99.2Ah 101.8Ah 104.4Ah 107.0Ah 109.6Ah 112.2Ah 114.8Ah 117.4Ah 120.0Ah
- Take photos and videos by the transmitter
- Easily to replace the battery
- With color LED flashing lights
- With 2.4GHz radio control technology
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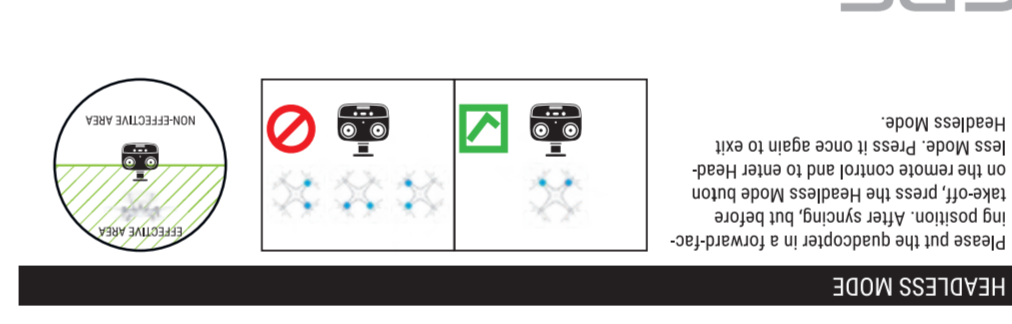
## HEADLESS MODE

- When the Follow Me mode is enabled, the drone will sync to the GPS via smartphone to follow you wherever you go (smartphone and Promark GPS app required, not included).
- Set drone to desired height and position. Note: make sure camera is pointed in desired direction and angle.
  - Click the "Follow Me" button on the remote control or app interface.
  - Wait for the Promark GPS app status read "Follow Me ready" - the drone will now follow the phone's coordinates.
  - To disable Follow Me mode, simply click the "Follow Me" button on the remote control or app interface.
  1. "The signal is too weak." This means that the phone's GPS signal is too weak to connect to the drone. This could be due to the signal loss from being surrounded by buildings, trees, or congestion from too many mobile phones in the area.
  2. "Use in open area and be mindful of your surroundings." Promark is NOT equipped with obstacle avoidance. Promark is not responsible for damage to property due to operator error, or when drone is in Follow Me mode.

## FOLLOW ME

- After starting your quadcopter, press the OneKey Take-off to begin your flight. The quadcopter will lift off and stay steady at the current height. Push the throttle lever up and down, to increase or decrease the height accordingly. Release the throttle to set the new drone height.
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## APP INTRODUCTION



## BE AWARE OF YOUR SURROUNDINGS

- Download the updated Promark GPS app to capture pictures, videos and stream the video.
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## COMMON PROBLEMS AND SOLUTIONS

- | THE PROBLEM  | REASON  | COUNTERMEASURES   |
|--|---|---|
| Drone is unstable after crashing                     | Three-axis acceleration sensor loses its balance after crashing       | Restart and re-calibrate the drone.   |
| Drone cannot stay balanced in flight                 | 1. The blades distorted<br>2. The motor doesn't work properly         | 1. Replace the blades<br>2. Replace the motor                                       |
| The quadcopter shakes heavily                        | 1. Insufficient battery power<br>2. The blades distorted              | 1. Recharge the battery<br>2. Replace the blades                                    |
| The blades spin, but the drone cannot take-off       | 1. Insufficient battery power<br>2. The blades distorted              | 1. Recharge the battery<br>2. Replace the blades                                    |
| Drone lights flashing and no response from the drone | 1. Remote is not synced to the drone<br>2. Insufficient battery power | 1. Refer to the Quick Start guide and re-sync the drone.<br>2. Recharge the battery |

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