



**GPS SHADOW** DRONE

INSTRUCTION MANUAL

### CONTENTS PRECISION HOLD INTRODUCTION. WARNING... FOLLOW ME .. MAINTINENCE. HEADLESS MODE DRONE PARTS .. PROMARK GPS APF REMOTE CONTROL . APP INTRODUCTION QUADROTOR LI-POLYMER. VIRTUAL REALITY MODE LITHIUM BATTERY CHARGING INSTRUCTIONS.... CAMERA CONFIGURATION . PREPATATION FOR FLIGHT/GPS CALIBRATION ... TAKING PICTURE & VIDEO-RECORDING KEY FEATURES OF QUADCOPTER ... COMMON PROBLEMS AND SOLUTIONS .. INSUFFICIENT POWER PARTS LIST. BE AWARE OF YOUR SURROUNDINGS



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

- 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 flving 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 iis 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. 3. 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 4. 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. 5. 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.
- 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 equipmen 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.

-- Screw driver (1 PCS)

restart and re-cambrate the drone.

2. Replace the motor

I. Replace the blades

7. Replace the blades

Recharge the battery

Recharge the battery

re-sync the drone.

When you press the power button on the remote control, the red light will flash once, that means the quad-cop-

1. Refer to the Quick Start guide and

COUNTERMEASURES

Replace the blades

• 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.

• Please note that changes or modifications not expressly approved by the party responsible for compliance could void the use's authority to operate the equipmen

loses its balance after crashing

I DI'REE-AXIS ACCEIETALION SENSOF

The blades distorted.

The blades distorted

Insufficient battery power

2. Insufficient battery power

NOSA3A

2. The motor doesn't work properly.



(bebulonl) TSIJ STAA9

Drone is unstable atter

The quadcopter shakes

rone cannot takeott.

hen operating.

The blades spin, but the

no response from the drone

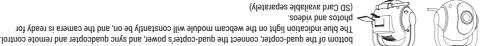
Drone cannot stay balanced | 1. The blades distorted

Drone lights flashing and I. Remote is not synced to the

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

SUPERVISED AT ALL TIMES BY AN ADULT. UNPLUG THE BATTERY

Tested according to international standards | MADE IN CHINA



# CAMERA CONFIGURATION

of the goggle. You are now ready to enjoy the full-immersive VR experience. center the screen. Close the front cover and focus the picture by adjust the width and depth toggles on the top a split screen. Once the screen is split, place your smartphone into the Promark VR Goggles (included), and he Promark GPS app is equipped with a Virtual Reality mode. When initiated, the app will convert the video into

There is important information contained in this package and instruction manual, please keep it for future reference

Playing on the road or near high traffic areas is strictly FORBIDDEN so as not to cause an accident.

10. Please DO NOT disassemble or re-equip the aircraft as it may cause a breakdown of the aircraft during flying.

Please dispose of the packing material timely so as not to cause injury to children

12. Built-in rechargeable 3.7V lithium polymer battery included in the transmitter.

22. Engine will heat up. Please DO NOT touch it to avoid being burned or injured.

26. Fly at or below 400 feet and stay away from surrounding obstacles.

23. Please DO NOT close this product to your ear as it may cause injury to your hearing.

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

where having the magnetic object nearby as they may cause interference with each other.

. Mini USB 5V wall charger recommended for charging. DO NOT use any charger stronger than 5V

18. Intelligent lithium battery is loaded in the Quad-rotor. Both built-in or external can be used for charging.

near the high temperature or heated area (such as near the fire or near the electric heating device)

13. Only the original charger made from our factory can be used.

17. DO NOT mix the Li-ion battery with a different type of battery.

assembled by an adult.

mistakenly swallowed.

Charger is not a toy.

28. Never fly over groups of people.

⚠ WARNING:

CHOKING HAZARD -Small parts.

Not for children under 3 years.

PROMARK

Never fly over stadiums or sports events.

Understand airspace restrictions and requiremen

FACTORY USB CHARGING

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

4. Our company and distributors won't be responsible for any incorrect operation, which may cause loss or damage or injury to the body.

7. Small parts are included with this product. Please place it beyond the reach of the children to avoid a CHOKING HAZARD or parts being

11. Batteries in the battery compartment of the charger should be inserted into the designated power source which has the same logo as

15. When charging the battery, please conduct it under the surveillance of an adult. Please also keep it far away from any combustible

19. Please DO NOT make the battery short-circuited or decompose the battery or throw the battery into the fire; DO NOT place the batteries

Please keep the safe distance from the high-speed rotating rotor so as not to cause twisted or danger of being wounded or being cut.

25. To 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.

FAA REGISTRATION: PLEASE FOLLOW ALL FEDERAL. STATE AND LOCAL FAA LAWS. YOU MAY BE REQUIRED TO REGISTER YOURSELF AND YOUR DRONE WITH THE FAA. MORE

ccessible and maintained in a condition that is readable and legible upon close visual inspection

WARNING: CHARGE ONLY USING WARNING: CHARGING OF THE DRONE BATTERY MUST BE

CABLE & UP TO 5V WALL PLUG WHEN FULLY CHARGED. DO NOT OVER-CHARGE THE BATTERY.

NUMBLE INSULED REASON BOTTOM TO THE CONTROLL OF THE CONTROLL O

WARNING: Product should only be used by adults and children 14 years and older.

D CAN BE FOUND AT: HTTPS://WWW.FAA.GOV/UAS/GETTING\_STARTED/ r receiving the certificate of registration, you must mark your unique FAA registration number on the Drone by any means, such as permanent marker, label, engraving. This

20. Aircraft should be kept far away from any other electric compliance or equipment as far as possible or kept far away from the place

5. Children ages 14 and up should use this product under the guidance of an adult. This product is FORBIDDEN to be used by children

6. Please correctly assemble and use this product as shown on the instruction manual or packing instruction. Some parts should be

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,





Headless Mode. less Mode. Press it once again to exit on the remote control and to enter Headtake-off, press the Headless Mode buton ing position. After syncing, but before Please put the quadcopter in a forward-fac-

## **HEADLESS MODE**

responsible for damage to persons or property due to operator error, or when drone is in Follow Me mode. \*Use in open area and be mindful of your surroundings. Drone is NOT equipped with obstacleavoidance. Promark is not the signal loss from surrounding buildings, trees, or congestion from too many mobile phones in the area. 1. "Phone signal too weak": This means that the phone's GPS signal is too weak to connect to the drone. This could be due to Common problems:

4. To disable Follow Me mode, simply click the "Follow Me" button on the remote control or app interface 3. Wait for the Promark GPS app Drone Status to read "Follow Me ready" – the drone will now follow the phones coordinates. 2. Click the "Follow Me" button on the remote control or app interface. L. Set drone to desired height and position. Note: make sure camera is pointed in desired direction and angle

To enable Follow Me mode: (smartphone and Promark GPS app required, not included).\*

# When the Follow Me function is enabled, the drone will sync to the GPS in your smartphone to follow you wherever you go

set the new drone height.

**LOTTOM WE** 

the current height. Push the throttle lever up and down, to increase or decrease the height accordingly. Release the throttle to After syncing your quadcopter, press the One-key Take-off to begin your flight. The quadcopter will lift off and stay steadily at

# \*WARNING: This drone is NOT equipped with obstacleavoidance.

- 4. When initiating the Return Home or Follow Me functions, surrounding the Quadcopter. Be aware of your surroundings.\* Be ready any time for manual control the Quadcopter or click the "STOP" on the screen in case of any Emergency Condition. avoid any accident (such as colliding accident) through manual operation.
- 2. Pay more attention to the surrounding object of the Quadcopter (especially the backward or the left or right direction) and branch or electric wire etc.) or the transparent object (such as the glass or water). 1. Please avoid the following objects on the track of the Quadcopter for example, the people, animal, tiny things (such as the

# BE AWARE OF YOUR SURROUNDINGS

other Quadcopter, people or animal after losing power.

2. Please make sure the Quadcopter can return and make landing in order to prevent the Quadcopter from causing danger to steering direction of the Quadcopter so as to fly it to the appropriate area for landing. operate the transmitter any more. If it is not safe, you can push the throttle lever to raise the flying height and control the

1. When there is insufficient power, the Quadcopter will start Auto-Return. When safe return is confirmed, please DO NOT :NOITUA3

INSUFFICIENT POWER

### UADROTOR LI-POLYMER



Press the battery shortly to switch on, hold for 2 seconds to switch it off.

### LITHIUM BATTERY CHARGING INSTRUCTIONS

- 1. 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.
- 2. Quad-copter can be charged by the mobile power or car-loaded power. 3. Full charging time takes about 6 hours, Flight time about 12 minutes.

### CAUTIONS WHEN CHARGING:

- 1. When charging, please put this product in a dry ventilated area and keep it far away from heat sources or flammable products.
- 2. 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.
- 3. 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.
- 5. A battery when not in use for a long time will lose its charge automatically. Charging or discharging too often may reduce

Step 1: Turn on drone and set down on a level surface\*

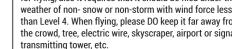
- \*The drone will auto-trim to this level surface.

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

Please choose the spacious indoor or outside environment for flying, also it requires that it should be flied 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

PREPATATION FOR FLIGHT/GPS CALIBRATION



 $\Diamond \Box 0$ 

transmitting tower, etc. 9. Click once to toggle headless/normal mode. Hold the button for 3 seconds

to turn off GPS mode. 10. Adjust the angle of camera: Spin button down: camera down. Spin button up: camera up.

@- **-**

. Battery power indicato

2. USB charging port

Battery switch

. Click the button to take photo . Click the button to take video; Click the button again to cancel video mode.

3. Press for one button RETURN HOME; press again to cancel Return Home

8. Click once, enter Follow-me mode; Click again, cancel the follow-me mode.

Hold the button for 3 seconds, enter Trim mode. Click the button, cancel

5. One button take off with auto hover, one button landing

Note: No need to trim under the GPS mode.

Hold 3 secs for Emergency stop.

14. Power

Blade Protecto

LED indicator

. Throttle joystick

USB charging port.

Speed+/Speed-

Trim mode.

ON / OFF.

Direction joystick

**MAINTENANCE** 

DRONE PARTS

1. HD Camera

REMOTE CONTROL

**19 15 16 17** 

18 19 20 21

PROMARK GPS SHADOW DRONE

Landing Rack

until it is repaired completely

Use a clean soft cloth to clean this product frequently.

Motor

Don't put the product in water. It will damage electronic parts.

Avoid heating or prolonged exposure to the sun.

15. Speed 16. Video

4. Please check the plug and other accessories atregular intervals. If there is any damage, please stop using it immediately

- 17. Return Home
- Charging
- Headless Mode
- Follow-me
- 21. Trim-See #8 above for access to trim mode

 Press Up, then Down on the left joystick Lights flashing blue (back) and white (front)

All lights blinking red

Step 2: Turn on remote

- 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.



# PROMARK

?: Jake photos and video by the transmitter Easily to replace the battery

6. With colorful flashing lights 5. With 2.46Hz Radio Control Technology

 With blade protector 3. With Headless Mode

ORYO sixA-6 dfiW .2 1. Intelligent Tracing

KEY FEATURES OF QUADCOPTER

- App Drone Status: "Ready to tly" - Rine (back) and white (front) lights are all solid (no blinking) Once the lights have switched to all solid, you are ready to fly!

· Remote Battery: 3.7V 300mAh Lithium-ion

Control Distance: Up to 1,640' (500 meters)

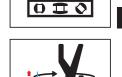
Flight time: about 12 mins

• Quadcopter Battery: 7.4V 2,500mAh Lithium-ion

Video Transmission Distance: Up to 490' (150 meters)

- App Drone Status: "Waiting for GPS signal" - \* I nis process can take a tew minutes. finalizing its GPS calibration\*.

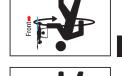
Fights return to rapid-blinking blue (back) and white (front) - This means the drone is - Set drone back down to level surface. Step 7: Finalize GPS Calibration



- App Drone Status: "Compass calibration okay" - Front lights will turn to a solid white  $(390^{\circ})$ - From the bottom, hold the drone face-down and rotate the your body in one full circle

Step 6: GPS Compass Calibration Part 2

Step 5: GPS Compass Calibration Part 1



- Back lights will turn to a solid blue circle (360°) - Keeping the drone level, pick up the drone from the back and rotate your body in one full



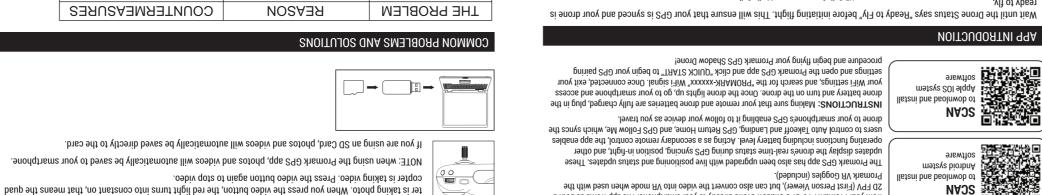
 App Drone Status: "Compass calibration" Lights rapid-alternate between blue/red (back) and white/red (front) Joysticks at the 1 & 11 o'clock positions Step 4: Initiate GPS Compass Calibration



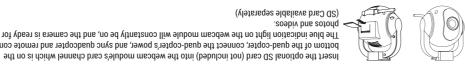
- App Drone Status: "Gyroscope is being calibrated" "Gyroscope okay" – ridyts rapid-blinking blue (back) and white (front) Press the Joysticks into the 11 & 1 o'clock positions Step 3: Reset to Factory Setting / Calibrate Gyroscope



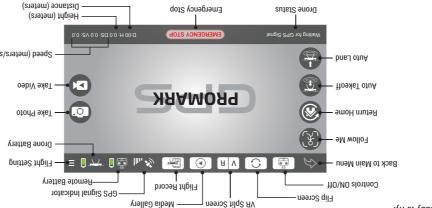
3PS САLІВВАТІОИ (СОИТІИИЕD)



РІСТИВЕ & VIDEO-RECORDING



VIRTUAL REALITY MODE



eady to fly.

2D FPV (First Person Viewer), but can also convert the video into VR mode when used with the from your Promark P70-GPS Shadow Drone directly to your smartphone. The app works as both a

a cottware

to download and in

CCAN

Download the upgraded Promark GPS drone app to save pictures, videos and stream live video

РВОМАВК СРЅ АРР