



14+

F11 4K PRO

FOLDING DRONE



— ULTRAPORTABLE AND FOLDABLE —

In order to make sure that it meets the requirement of the electromagnetic environment of the aviation radio station, flying within the scope of 10 kilometers on each side by taking the airport runway center line as the middle line is **PROHIBITED** or flying within the scope of 20 kilometers by taking both ends of the runway as the center is **PROHIBITED**. Flying on the route of the pipeline is also **PROHIBITED**. Stop using all kinds of flying models or unmanned Quad-copters in the AHA that prohibited by related authority or department of our country.

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PREFACE

Thank you for purchasing the S1-Series GPS aircraft. Please read all instructions and warnings carefully before operating. Please also keep this instruction manual for future reference and maintenance.

IMPORTANT:

1. This product should be operated by the people who are over 14 years old. 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.
2. This product is suitable for experienced UAV pilots no less than 14 years of age.
3. 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 aircraft can be dangerous when in use, please make sure you keep it far away from any persons or operators when flying. In correct 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.

1. 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.

2. 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 S1-Series 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 RC aircraft according to your own state and flying skill. Any fatigue, bad mental state, or incorrect operation may increase the probability of accidental risk.

6. Please keep a safe range 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.

7. Store it in a cool, dry place.

The RC 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 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 user's authority to operate the equipment.

WARNING

1. There is important information contained in this package and instruction manual, please keep it for future reference.
2. 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.
3. 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.
4. Our company and distributors won't be responsible for any incorrect operation, which may cause loss or damage or injury to the body.
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 under 14 years old.
6. Please correctly assemble and use this product as shown on the instruction manual or packing instruction. Some parts should be assembled by an adult.
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 mistakenly swallowed.
8. Playing on the road or near high traffic areas is strictly **FORBIDDEN** so as not to cause an accident.
9. Please dispose of the packing material timely so as not to cause injury to children.
10. Please **DO NOT** disassemble or re-equip the aircraft as it may cause a breakdown of the aircraft during flying.
11. Batteries in the battery compartment of the charger should be inserted into the designated power source which has the same logo as the product.
12. Built-in rechargeable 3.7V lithium polymer battery included in the transmitter.
13. Only the original charger made from our factory can be used.
14. Charger is not a toy.
15. 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.
16. Please **DO NOT** make it short-circuited or squeeze the battery so as not to cause an explosion.
17. **DO NOT** mix the Li-ion battery with a different type of battery.
18. Intelligent lithium battery is loaded in the Quad-rotor. Both built-in or external can be used for charging.
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 near the high temperature or heated area (such as near the fire or near the electric heating device).

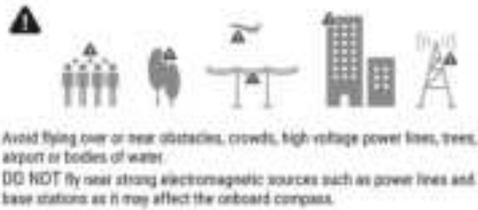
20. The aircraft should be kept far away from any other electric compliance or equipment as far as possible or kept far away from the place where having the magnetic object nearby as they may cause interference with each other.
21. Please keep the safe distance from the high-speed rotating rotor so as not to cause twisted or danger of being wounded or being cut.
22. Engine will heat up. Please DO NOT touch it to avoid being burned or injured.
23. Please DO NOT close this product to your ear as it may cause injury to your hearing.
24. Use USB 5V wall charger recommended for charging. DO NOT use any charger stronger than 5V.
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.
26. Keep your UAV within sight.
27. Never fly over groups of people.
28. Never fly over stadiums or sports events.
29. Understand airspace restrictions and requirements.



WARNING: Product should only be used by adults and children 14 years and older. Adult supervision required for children under 14 years of age.

WARNING: CHARGING OF THE AIRCRAFT BATTERY MUST BE SUPERVISED AT ALL TIMES BY AN ADULT. UNPLUG THE BATTERY WHEN FULLY CHARGED. DO NOT OVER CHARGE THE BATTERY.

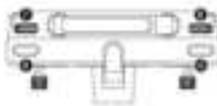
FLY SAFETY



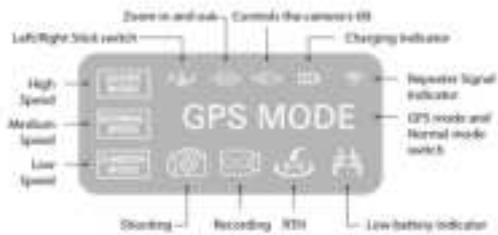
TRANSMITTER FUNCTIONS



1. Throttle stick
2. Direction stick
3. Click once speed switch
4. Click once then keep pressing for 3 seconds to emergency stop
5. Click once power on; Click once then keep pressing for 2 seconds power off
6. Click once to RTM mode; Keep pressing for 3 seconds switch to normal mode, GPS mode

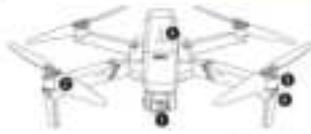


7. Zoom in and out
8. Girder Dial Controls the camera's tilt
9. Shooting
10. Recording



Tip: When the transmitter is in low power, the power indicator light on the transmitter will keep flashing, now you need to charge the transmitter.

AIRCRAFT DIAGRAM



1. 2-Axis stable Gimbal
2. 4K WIFI camera
3. Propeller
4. LED indicator
5. Intelligent battery

- A. Open the gimbal cover buckle.
B. Pull the gimbal cover up then gently take it off.



1. ASSEMBLE THE PROPELLER

Please note that the letter "A" or "B" is printed on each propeller, and make sure all the propellers are attached in the correct motor position.



2. INTELLIGENT FLIGHT BATTERY



1. Battery switch
2. Battery power indicator
3. USB charging port



- Hold the switch button for 3 sec. power on, then press the button for 3 sec. power off.
- When the battery is low voltage, blue indicators will be blinking, now please charge the battery.

3. CHARGE THE BATTERY



Power adapter:
5V - 2A
(Not included)



Charging time:
About 4.5 hours
(Depending on
Charging adapter)



Remote control
charging method.

4. LITHIUM BATTERY CHARGING INSTRUCTIONS

1. Either power on or power off, the aircraft can be charged. Connect the USB charger to an DC power supply(4.5V-5.5V,2A-2A), and then connect with the charging port of the aircraft, when is charging, the indicator on the aircraft will become Blue blinking; when fully charged, the indicator on the aircraft will turn to solid blue.
2. Quad-copter can be charged by the mobile power or car-loaded power.
3. Charging time takes about 4.5 hours, operating time takes about 28min.
4. Remote control is built-in 3.7V 300mAh lithium polymer battery, charging time takes about 25min. (Battery indicators turn RED during charging; indicators turn to SOLID BLUE when fully charged).

(When is charging, the indicator on the transmitter become red; when fully charged, the indicator on the transmitter will turn to solid Green).

REMOTE CONTROL OPERATING METHOD



FLIGHT

Step 1: Turn on the aircraft and set down on a level surface

- The aircraft will activate on this level surface.
- Four aircraft arms - Blinking led.



Step 2: Power on the remote control

- Power on the remote control and link the aircraft automatically.
- Lights flashing blue (back) and white (front).
- NOTE: You connect to the WiFi at this time to view the current drone on the SJ F PRO App, or wait until after GPS is calibrated.

Step 3: Connect APP

- Connect your smart phone to the WiFi of aircraft and check the aircraft's status on the "SJ F PRO" APP.

Step 4: Compass Calibration

1. Compass Calibration Part 1
 - Push the joysticks into the 1 & 11 o'clock position.
 - Lights rapid-blinking Blue/red (back) and White/red (front).
 - App aircraft status: "Compass calibration".



Remark: The compass will be calibrated automatically when the magnetic interference occur, it is not necessary to calibrate the compass by manually.



2. Compass Calibration Part 2

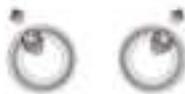
- Keeping the drone level, pick up the aircraft from the back and rotate your body in one full circle (360°).
- Back lights will turn to solid blue.



3. Compass Calibration Part 3

- From the bottom, hold the aircraft vertically and camera is facing to the ground, rotating your body in one full circle(360°).
- Front lights will turn to solid white.
- App aircraft status: "Compass calibration okay".

Step 5: Reset to factory setting/Calibrate Gyroscope



- Push the joysticks into the 11 & 1 o'clock position.
- Lights rapid-blinking blue (back) and white (front).
- App Drone Status: "Gyroscope is being calibrated" "Gyroscope okay".

NOTICE: Make sure the aircraft on a flat surface to calibrate gyroscope.

Step 6: GPS Searching (DO NOT use GPS Mode Indoor)



- Set the aircraft back down to level surface.
- Lights return to rapid-blinking blue (back) and white (front) - This means the drone is searching the GPS signal.
- This process can take a few minutes.
- App aircraft status: "Waiting for GPS signal".

NOTICE: Fly in open areas, tall structures and large metal structures may affect the accuracy of the onboard compass and GPS system.
Please search the GPS signal in the open areas.



Starting/Stopping motors

- Push the joysticks into 5 & 7 o'clock position.
- Motors automatically to start, push the left joystick to take off the aircraft. (Starting the motors before the aircraft taking off).

NOTE: Starting the motors should be set before the aircraft take off.

- Stopping Motors:

1. Pushing the joysticks into 5 & 7 o'clock position again, motors stop working.
2. The motors will stop working if the motors starting are not operated after 20 seconds.

All LEDs on the front arms and rear arms, you are ready to fly!

- Blue (back) and white (front) lights are all solid (no blinking).
- App aircraft status: "Ready to fly".

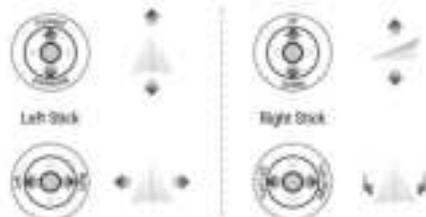
Dual Remote Controller Mode



- Power off the remote control.

- Keep pressing the  , clicking the  synchronously, the remote control beeps twice indicating the right joystick change to the throttle stick, the LED indicator  OFF.

Turn off the remote control, then Keep pressing the  , clicking the  synchronously the remote control beeps twice indicating the left joystick change to the throttle stick, the LED indicator  OFF.



NOTICE: The LED indicators on the front arms (white) and rear arms (blue) keep flashing if the GPS signal is weak; Keep pressing  for 5 seconds on the remote control to turn off GPS mode, aircraft can be took off.

WAY POINT FLIGHT

- Make sure the mobile internet connected, enter in the APP, catch the map data of the area when you intend to fly in your mobile device, then connect your mobile device with your aircraft, you can view the map from in the APP.
- Successfully connect the aircraft WIFI with your smart phone, click on the App, then you can find a RED CIRCLE(LIMITED FLIGHT RANGE)/TAKE-OFF POSITION/AIRCRAFT CURRENT POSITION on the map, mark the points (16 points at most) you plan to fly within the RED CIRCLE range on the map. If you would like to reset the points or flight route, click or . Click to confirm to start Way Point Flight. Pushing the Flight Joystick to cancel the Way Point Flight Function.



POINT OF INTEREST

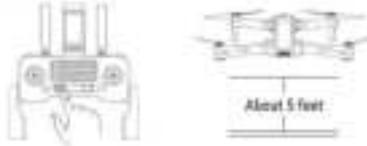


1. Hovering the aircraft around the center point.
2. Press + on the transmitter at the same time.
3. Moving and setting the aircraft surround radius range (within 2 meters-100 meters) by the Direction Joystick.
4. Press + on the transmitter at the same time again, then the aircraft starts to fly around according to the radius range you set in STEP 2 (Note: If the surround radius range less than 2 meters, the aircraft will fly to 2 meters automatically). Move the Direction Joystick to cancel the Point of Interest mode.

NOTE: Press + on the transmitter at the same time, Point of Interest Function can be activated if the aircraft and transmitter successfully paired and the aircraft flies up.

PRODUCT FUNCTION PROFILE

1. EMERGENCY STOP



- ▲** Clicking once and keep pressing the **STOP** for 3 seconds to enter into Emergency Stop mode. It is activated if the flight height of aircraft within 10 meters; otherwise, it is not activated.

Only stop motors mid-flight in emergency when doing so can reduce the risk of damage or injury.

2. GPS FOLLOW-ME

When the Follow Me function activated, the aircraft will follow the GPS in your smart phone to follow you wherever you go.

(Make sure the smart phone connect with the aircraft successfully, turn on APP on your smart phone.)

1. Make sure the flight scope is within 10-100 meters.
2. Click  on the APP interface.
3. Waiting for APP aircraft Status to display "Follow Me ready" — Now the aircraft is moving along with the positioning coordinate on the APP.
4. Click the  on the APP interface again to exit the Follow Me mode.

Common Issues:

GPS Followme function will be affected by the tall structures, trees and the living areas with WIFI signal interference.

GPS Follow me function is not activated if the GPS signal weak or GPS positioning OFF in the mobile device.

* Use in open area and be mindful of your surroundings. Aircraft is NOT equipped with obstacle avoidance.

3. IMAGE RECOGNITION FOLLOW ME/GESTURE CONTROL

Click , choose , tap on the object or person you want to track, and tap to confirm your selection.

(NOTE: Make sure the size of the frame you mark is the same as the object or person you tap, the frame should not be too large.)

4. HAND GESTURE

Click  on the APP, count down 3 seconds to 0 seconds with the hand motion to take photos or record the video, please follow the tips from the (PIC. 1).



5. RETURN-TO-HOME (RTH)

The Return to Home (RTH) function bring the aircraft back to the Take Off Point. This function only can be achieved under GPS mode.

There are 3 types of RTH: Smart RTH/Low battery RTH/Fail connection RTH

①. Smart Return To Home



Press the Return to Home button on your Transmitter or tap on the App of your smart phone, and the transmitter will start beeping. Your aircraft will return to the TAKE OFF Point. Press the button again to stop RTH procedure, or alter the left and right joysticks to make the aircraft landing in the safe area.



RTH Button



The app's RTH Button

②. Low Battery return to home

Low Battery RTH is triggered when the Flight Battery level is low. When low battery RTH activated, aircraft ascends or descends automatically at the height altitude of 30 meters, then you can alter the left and right joysticks to make it landing in the safe area. Aircraft returns to the take-off point if the current battery level can only support the aircraft long enough to descend from the current altitude.

③. Fail connection RETURN-TO-HOME (RTH)

Aircraft will enter Return to Home Mode if the signal to the transmitter is lost. The aircraft will return to the take-off point. The aircraft may link the remote control automatically during the RTH activated. If links successfully, you can re-operate the aircraft.



WARNING:

This aircraft is NOT equipped with obstacle-avoidance.

6. TRIM UNDER NO GPS MODE

If the aircraft flies under NO GPS Mode, you can trim the aircraft to obtain more balanced flight. Keep pressing [Q] beep once, and you will enter the trim mode. Push the direction joystick to the opposite side that the aircraft drifts to rebalance the aircraft. For example, if the aircraft drifts to the left, push the direction joystick to the right to make the aircraft balanced. Release the [Q], exit the Trim Mode.

DOWNLOAD THE SJ GPS PRO APP



QR code of "SJ F PRO" software for Apple IOS system (Please scan this QR code to install this software).



QR code of "SJ F PRO" software for Android system (Please scan this QR code to install this software).

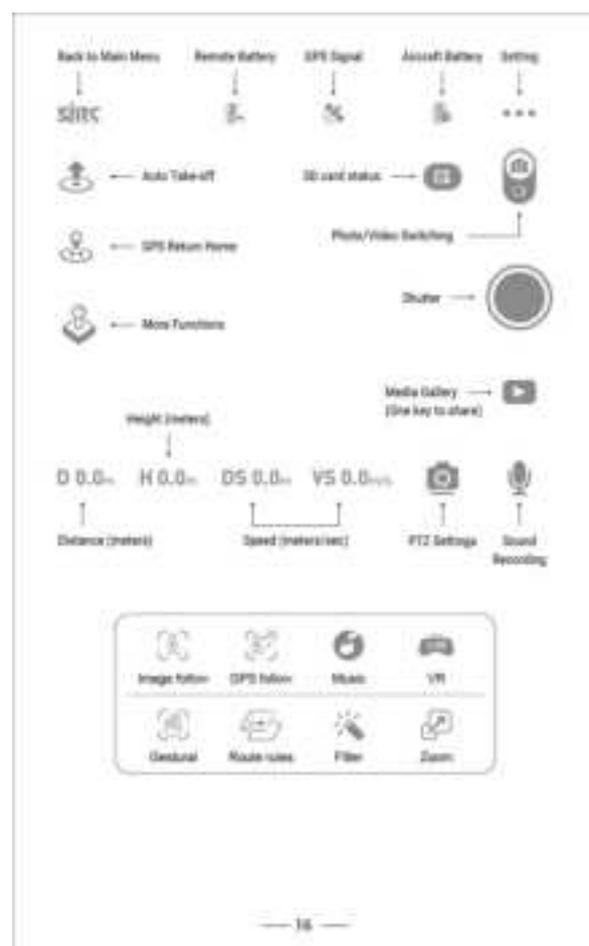
- Connect the power of this model, and then access into "SETTING" in the smart phone, open the "WiFi" and find the "SJ F PRO_XXXX". When the link is successfully connected, please exit the "Setting" option.
- Open "SJ F PRO" software in the smart phone to access into the control interface.

APP FUNCTIONS

1. APP INTRODUCTION

Wait until the aircraft Status says "Ready to Fly" before initiating flight. This will ensure that your GPS is synced and your aircraft is ready to fly.





2. APP ONE KEY SHARE FUNCTION



1. Open the APP, click , enter into the file (Pic. 1.)
2. Click once or press  to choose the photos which will be shared, click , choose the platforms that need to be shared (Pic. 3).

Reminder: You can share 1 picture or 8 pictures at the same time. But Only one video can be shared each time.

3. HOW TO SEARCH THE LOST DRONE

① Continue to click  to open the MAP surface to search the aircraft.



② The last position of lost aircraft will be appeared on the MAP.



Current position of the mobile phone

4. FLIGHT

The Default GPS Mode is BEGINNER MODE.

1. Flight Distance is between 0-30 M.

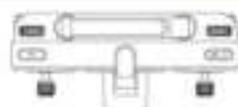
2. Flight Altitude is between 0-30 M.

3. RTH Altitude is under 20 M.

You can Turn-off the BEGINNER MODE to set the parameters in the APP from the smart phone.



CAMERA FUNCTIONS



 Take Photo

 Take Video

ICON ON APP

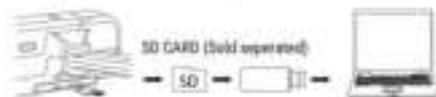
Click  on the remote control, or click  on the APP, the indicator  will flash once, means the camera takes one photo.

Click  on the remote control, or click  on the APP, the indicator  will keep flashing, means the camera is recording.

Press  again to save the video.

DO NOT take photo during recording.

NOTE: When using the "SJ F PRO" app, the original photos and videos will be compressed and saved to smartphone.



The Original images and videos are saved in the TF card. Press the SD card slightly to take it out, then insert the card into the card reader and insert into the USB outlet of a computer to read the data from SD card.

The images can be also viewed in the App.

SPECIFICATIONS

● Drone

MODEL: F114K PRO
Weight (Including Battery): 590g/20.6oz
Flight Time: About 25 min
WiFi real-time transmission distance: about 1200m (Depends on the environment and the mobile device).
Motor Model: 1806
Operating Temperature Range:
32° to 104° F (0° to 40° C)
Satellite System: GPS/GLONASS
Dimensions (LxWxH): Unfolded: 433x430x306mm
Folded: 176x160x106mm

● Gimbal Stabilization: 2-axis (Roll/Pitch)

Mechanical Range: Tilt About -100°TD+10°
Roll About -35°TD+35°
Controllable Range: Adjusted angle of camera (up and down):
About -60°TD+0°

● Camera

Lens FOV: 100°
Equivalent Focal Length: 600M
Focus range: Fixed focus
Resolution of photo: Phone 3840X2160P
SD card 3840X2160P
Resolution of video: Phone 1280X720P
SD card 3840X2160P
Photo Format: JPEG
Video Format: MP4
Supported SD Cards: Micro SD card (Class
10/U1 or later) 32G-128G
Supported File Systems: FAT32



● 5G Transmission

Supported Transmission Protocol: 802.11a, 802.11n20, 802.11n40
Max Transmission Distance (unobstructed and free of interference):
1200m (depend on the mobile device)
Video Transmission Frame Rate: 30FPS

● APP / Live View

Mobile App: S/F PRO

Live View Quality:

CONFIGURATION	STORAGE METHOD	RESOLUTION	Frame Rate (FPS)
4K	Phone	Photo	3840X2160P
		Video	1080P/30P
	SD card	Photo	3840X2160P
		Video	3840X2160P

Required Operating System: iOS 9.0 or later/Android 5.0 or later

● Transmitter

Operating Frequency: 2.4 GHz
 Capacity: 300 mAh
 Operating Voltage: 3.7V
 Max transmission distance: Up to 1000m (Outdoor and unobstructed)
 Max Charging Time: 25 min
 Operating Time: About 71 Hours
 Mobile Device Holder: 4.7" to 6.5" Smart Phones
 Operating Temperature: 32° to 104° F (0° to 40° C)

● Intelligent Flight Battery

Capacity: 2500 mAh
 Voltage: 11.1V
 Battery Type: Li-polymer
 Energy: 27.75Wh
 Net Weight: 195 g / 6.9 oz
 Max Charging Power: 15W
 Max Charging Time: About 4.5 hours (Depending on Charging Power)
 Charging Temperature Range: 32° to 104° F (0° to 40° C)

● USB Cable

Voltage: 5V -- 5A
 Rated Power: $\leq 15 W$



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 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

Changes or modifications not expressly approved by the party responsible for

compliance could void the user's authority to operate the equipment.

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.

The following description is for the aircraft section, not the remote control:

RF Exposure Warning Statements:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 20cm between the radiator & body.