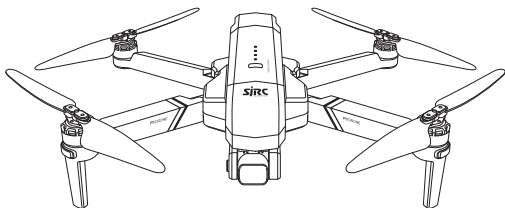


# F11 4K PRO

## FOLDING AIRCRAFT



— 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 **HIGHLY FORBIDDEN** or flying within the scope of 20 kilometers by taking both ends of the runway as the center is **HIGHLY FORBIDDEN**. Flying on the route of the airline is also **PROHIBITED**. Stop using all kinds of flying models or unmanned Quad-rotors in the AREA that prohibited by related authority or department of our country.

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## PREFACE

Thank you for purchasing the SJ-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 spectators 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 SJ-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 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.

**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 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 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 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. Mini 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 UAS 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.

Maximum transmit power: -0.2dBm

Frequency band: 2405-2477MHz

For EU Compliance

## ● USB Cable

Voltage: 5V  $\overline{\text{---}}$  3A

Rated Power:  $\leq 15$  W

## FLY SAFETY



+



+



+



Fly in Open  
Areas

Strong GPS  
Signal

Maintain Line  
of Sight

Maximum flight  
altitude height is  
about 120 meters.



Avoid flying over or near obstacles, crowds, high voltage power lines, trees, airport or bodies of water.

**DO NOT** fly near strong electromagnetic sources such as power lines and base stations as it may affect the onboard compass.



**DO NOT** use the drone in adverse weather conditions such as rain, snow, fog and wind speeds exceeding 7 m/s or 16 mph.



Stay away from the rotating  
propellers and motors.

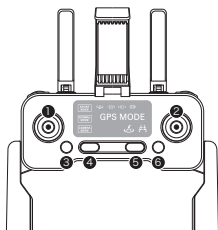


No Fly Zone

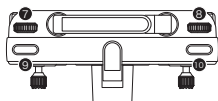


It's important to understand basic flight guidelines, for the safety of both you and those around you. Don't forget to read the Safety Guidelines before flight.

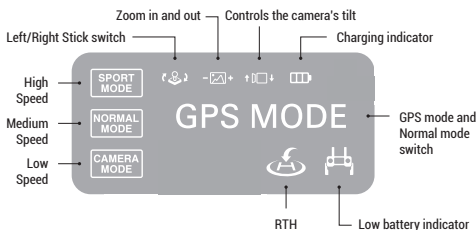
## TRANSMITTER FUNCTIONS



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 3 seconds power off
6. Click once to RTH mode; Keep pressing for 5 seconds switch to normal mode, GPS mode



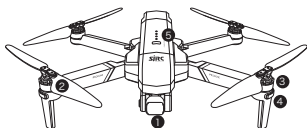
7. Zoom in and out
8. Gimbal Dial: Controls the camera's tilt
9. Shooting
10. Recording



**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.

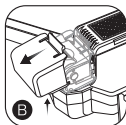
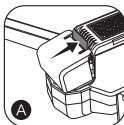


## AIRCRAFT DIAGRAM



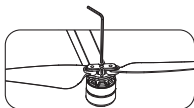
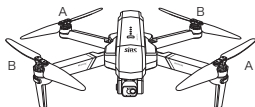
1. 2 axis mechanical gimbal with 4K electronic image stabilization camera
2. Propeller
3. Motor
4. LED indicator
5. Intelligent battery

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

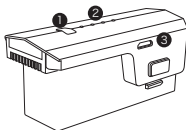


### 1. ASSEMBLE THE PROPELLER

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



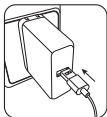
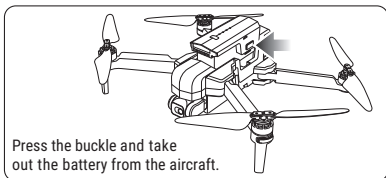
1. Battery switch
2. Battery power indicator
3. USB charging port

Low — Electricity — High



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

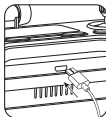
### 3. CHARGE THE BATTERY



Phone adapter:  
5V = 3A  
(Not included)



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



Remote control  
charging method

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### 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-3A), and then connect with the charging port of the aircraft, when in 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 26min.
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 in 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

Throttle Joystick



Direction Joystick



## FLIGHT

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

- The aircraft will auto-trim to this level surface.
- Four aircraft arms – Blinking Red.



#### FCC Compliance Statements

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.

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.

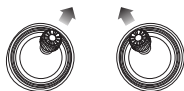
Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### 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.

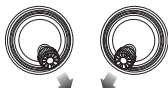
## Step 6: GPS Searching (DO NOT use GPS Mode indoor)



- 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).