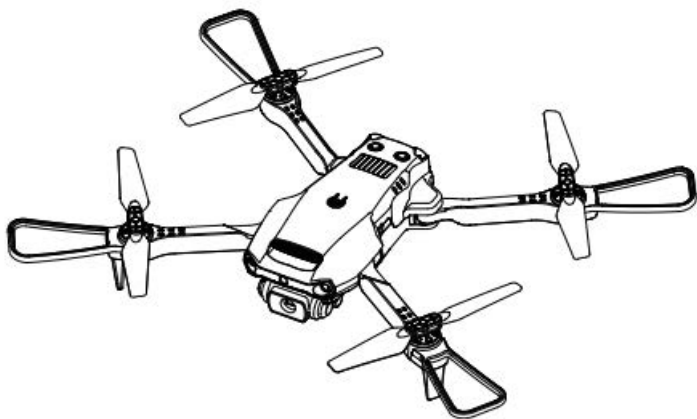


INSTRUCTION MANUAL

S60 Drone

FOR 14+ AGES



✉ support@rovprotech.com

Thank you for your purchase of this product. Please read the Operation Instruction carefully and conduct operation and usage according to the Operation Instruction. Please keep this User Manual for your reference when conducting daily maintenance and adjustment.

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Warning

1. The packaging and instructions contain important information and should be retained.
2. It is your responsibility to ensure that this aircraft does not cause injury to the person or property of others.
3. When setting up the flying machine, you should follow the operating instructions strictly and pay attention to keeping a distance of 2-3 metres from the user or other people when the flying machine is in flight, so as to avoid the flying machine hitting people's head, face and body when flying or landing and causing injury.
4. Our company and the seller are not responsible for any loss or damage caused by improper use or operation and for any injury to the human body.
5. Children should be guided by adults when operating the aircraft.
6. Please follow the instructions or package directions for proper installation and use.
7. The product contains small parts, please keep them out of the reach of children to prevent accidental ingestion or choking hazards.
8. Do not play on the road or in waterlogged areas to avoid accidents.
9. Please put the packaging materials away in time to avoid injury to the children.
10. Do not disassemble or modify the flying machine, disassembly or modification may cause the machine to malfunction.
11. The charging cable must be plugged into the same 5V= 2A power supply as indicated on the product.
12. Using other charging cables may cause damage to the battery and may lead to accidental danger.
13. The charging cable is not a toy.
14. When charging the rechargeable battery, it must be supervised by an adult and must be kept away from flammable materials.
15. Do not short-circuit or squeeze the battery to avoid explosion.
16. Do not mix different types of lithium batteries.
17. When using a rechargeable lithium battery, the aircraft must be unplugged and charged.
18. Do not short-circuit, disassemble or put the battery into the fire; do not put the battery in a hot or heated place (e.g. in fire or near electric heaters).
19. Use the aircraft as far away as possible from other electrical equipment and magnetic objects, which may cause interference with each other.
20. Keep a safe distance from spinning spirals at high speeds to avoid the risk of strangulation and cuts.
21. The motor is a hot part, do not touch it to avoid burns.
22. Light emitting diode laser radiation, do not shoot the beam directly.
23. Do not use the model close to your ear! Misuse may lead to hearing damage.
24. The USB charging cable must be used to charge the battery with the data cable provided by the company, otherwise it will cause battery damage can cause serious danger of accident.
25. To ensure the requirements of the magnetic environment of aviation radio stations. During radio control orders issued by the national authorities The use of model remote controls should be discontinued during the period of radio control orders issued by the national authorities.
26. When the battery of the aircraft runs out of power, it is important to turn off the switch and unplug the battery and leave it for 30 minutes before charging. Otherwise, the battery may be damaged.

1. Items List



Drone v1



Propeller Guard v1



Charging cable v1



Propeller Blade v1
Q: Type A and propeller to the left
and 2: Type B propeller to the right



Protection Bracket v1



LiPo Battery v2

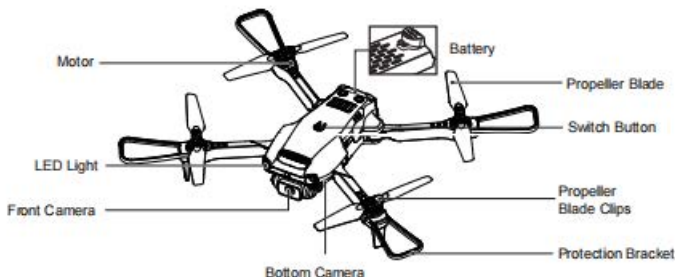


Screwdriver v1

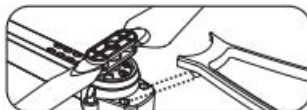


Motor v1

2. Know Your Drone



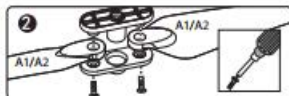
3. Installing Protection Brackets



Align the protection bracket components with the arm apertures according to the diagram to make sure they are in place before flying to avoid dropping during the flight.

⚠ Note: Make sure that the protective ring is before flying!

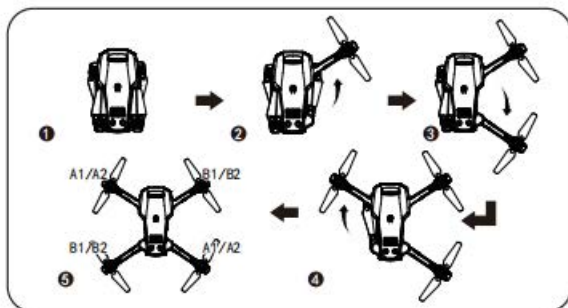
4. Propellers Installation Diagram



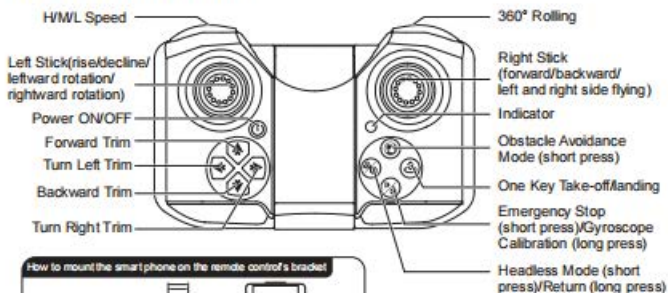
4.1 Remove the airfoil by unscrewing the screws. 4.2 Open the two airfoils and the connecting parts by unscrewing the screws and removing the airfoil for replacement.

Note: The airfoil is stamped with the letters A1, A2, B1, B2, A1=A2, B1=B2, please install it correctly according to the diagram, otherwise it will not take off.

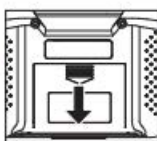
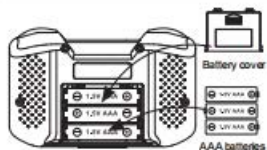
5. How to Unfold Drone



6. Know the Remote Control



7. Remote Control Battery Installation (Batteries are not included)



Battery Installation

7.1 Remove the battery cover

7.2 Inserting the batteries, you need to buy 3 "AAA" batteries.

Charging precautions:

- Do not place the charged battery in a hot or heated area, such as fire or an electric heater, as this may cause damage or explosion.
- Do not hit hard surfaces with battery.
- Do not immerse the battery in water and store it in a dry place.
- Do not leave the battery while it is being charged.
- Do not disassemble the battery.

Cautions:

1. Always take out the batteries when not playing with the drone!
2. Do not mix old and new batteries!
3. Do not mix different types of batteries!

⚠ Load the batteries with reference to the positive and negative terminals of the batteries. Do not load the batteries with the positive and negative poles reversed!

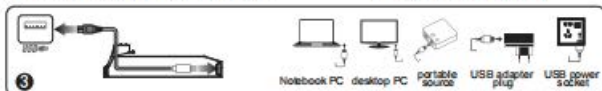
8. Instructions For Charging The Lithium Battery:



8.1 Pull the battery latch of the drone.



8.2 Remove the battery



8.3 Charging: Plug the USB charging connector into the USB port of your computer (or use a power adapter with an output of 5V,2A) and connect the other end to the battery. When charging, the USB indicator light does not light up, when the battery is fully charged, the indicator light will light up red to indicate that charging is complete.

9. Pre-flight Environmental Requirements:



Please choose an outdoor environment with no rain or snow, wind less than level 4. Please stay away from people, trees, power lines, tall buildings, airports and signal towers.

10. Preparation Before Flying:



Warning!

The drone and remote control must be kept fully charged or they can't take off!

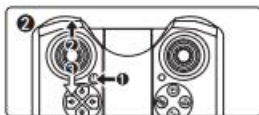
10.1 Match the Frequency

Turn on the power of the drone and place it on a horizontal surface, at this time the aircraft placed on a horizontal surface automatically enters the frequency alignment state, the front baliden and rear tail red light flashes.



⚠ Note: Place the drone's direction correctly, with the nose to the front, and make sure to place it on a horizontal surface.

Turn on the power switch of the remote control (step 1), the power indicator of the remote control flashes, the throttle lever is pushed up to the top (step 2) and then down to the bottom (step 3), the flight light changes from flashing to constant light to indicate successful frequency pairing.



10.2 Horizontal Calibration Operation

Press and hold the calibration button on the remote control and the LED on the drone will flash. When the LED on the drone stops flashing, the calibration is complete and the remote control emits a "Di" sound (Figure 1).

⚠ Note: Calibration can only be completed if the aircraft is placed on a level surface. Position the aircraft in the right direction (the direction with the camera) and operate the remote control in the position of the battery in the rear of the aircraft.

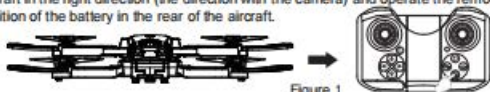


Figure 1

11. Introduction To The Operation Of The Remote Control Functions:

11.1 One Key Take-off and Landing

When the frequency alignment is completed, press the remote control "one button take-off/landing" function button (Figure 2), the drone will automatically rise to an altitude of about 1 meter and keep flying stably at this altitude; when you press this function button again, the drone will automatically land slowly.



Figure 2

11.2 Headless Mode

When headless mode is not activated, the forward direction of the drone during flight defaults to the camera direction.

When the headless mode button is pressed (Figure 3), the remote control will emit a "Di" sound, and the front and rear lights of the drone will flash. Whatever the direction of the drone is at this point, the front of the remote control will be used as the front of the drone. When the left stick of the drone is pushed upwards, the drone moves forward, away from the operator; when the left stick is pushed downwards, the drone moves backwards, closer to the operator.



Figure 3

11.3 One Key Return

When the flight is too far away, you can use the return function to recall the drone. During flight, the remote control must be facing the rear of the aircraft, long press the one-key return button (Figure 4), the remote control will emit a "Di" sound and the drone will enter return mode, automatically backing up in a straight line; when any joystick is used, the return function is released.



Figure 4

11.4 High/Middle/Low Speed Switching

When the drone takes off, the default is low speed mode, lightly press the button (Figure 5), the remote control will emit a "Di" sound for low speed, "Di" "Di" two times for medium speed, "Di" "Di" "Di" three times for high speed.



Figure 5

11.5 360° Rolling

Press the 360° roll button briefly, then push the right joystick to the left and the drone will flip 360° to the left accordingly.

11.5.1 Rolling 360° to the left

Press the 360° roll button briefly, then push the right joystick to the left and the drone will flip 360° to the left accordingly.



11.5.2 Roll 360° to the right

Press the 360° roll button briefly, then push the right joystick to the right and the drone will flip 360° to the right accordingly.



11.5.3 Roll Forward 360°

Press the 360° roll button briefly, then push the right joystick forward and the drone will flip forward by 360° accordingly.



11.5.4 Rolling Backwards 360°

Press the 360° roll button briefly and then push the right joystick backwards, the drone will flip backwards by 360° accordingly.



11.6 Obstacle Avoidance Mode

During flight, press the obstacle avoidance button briefly to open the obstacle avoidance mode (Figure 6), the front and rear lights of the drone flash rapidly.

If the drone is close to a wall or other obstacle in the front/left/right direction, it will automatically evade to a safe area, because the drone has the obstacle avoidance function enabled. To switch to normal mode, press this button again.

 **Note:** In sunlight or bright light, under transparent and reflective objects such as glass, and under black objects, the avoidance effect will deteriorate or even be lost.



Figure 6



12. Control Method:

As the remote control is very sensitive, for beginners it is recommended to operate the joystick slowly. If the drone drops slightly during steering, you can slowly push up the left stick and fly to a certain altitude. During operation, avoid pushing the throttle too much.



When the left stick (throttle) is pushed upwards, the main airfoil rotation speed increases and the aircraft rises.
When the left stick (throttle) is pushed downwards, the main airfoil rotation slows down and the aircraft descends.



When the left joystick is pushed to the left, the aircraft nose turns to the left. Push to the right and the nose of the aircraft turns right.



When the right joystick is pushed upwards, the aircraft moves forward. When the right stick is pushed down, the aircraft moves backwards.



When the right stick is pushed to the right, the aircraft fuselage is shifted to the right.

When the right stick is pushed to the left, the aircraft fuselage flies to the left.

13. Fine-Tuning Methods



1. Forward/Backward Fine Adjustment

When the drone leaves the ground and it is offset towards the rear, press and hold ① forward trim button to adjust; when the drone is offset towards the front, press and hold ② backward trim button to make fine adjustments.



2. Left/Right Flying Fine Adjustment

When the drone leaves the ground and the drone is offset towards the right, press and hold ③ left fly trim key to adjust; when the drone is offset towards the left, press and hold ④ right fly trim key to make fine adjustment.

14. Common Problems Solving Guidelines:

Problems	Reasons	Solutions
No WiFi signal of the drone	Signal source wire connection to the main board is loose	Open the drone's motherboard to reconnect the signal cable
Drone lights flashing and no response to remote control operation	Low battery level of the drone	Charge the battery; replace battery
One or more propellers of the drone do not rotate	Deformed propeller blades or foreign objects entangled in the propeller; One or more motors damaged	Replace propellers or clean foreign objects; Replace the motor
Drone blades rotate but cannot take off	Low battery level of the drone; AB propellers incorrectly installed; Deformed propellers	Charge the battery; replace battery; Correct installation of the corresponding propellers (see section 4)
The drone does not fly stably even after several fine adjustments	Propellers distorted or entangled in foreign objects; Motor damaged	Replace paddles or clean foreign objects; Replace motor
Drone vibrates badly	Propellers deformed	Correct installation of the corresponding propellers (see section 4)
Drone restarts after hit but goes off course when taking off	Sensor out of balance due to impact	After leaving the drone stationary for 30 seconds, or Calibrating gyroscopes (10.3 Horizontal Calibration Operation)

VS FPV PRO USER MANUAL

1.Install App on Your Smartphone to Control the Drone

a. Please scan the QR code below to download and install "VS FPV PRO" on your smartphone.

b. Go to Apple Appstore or Google Play and search for "VS FPV PRO" directly to download and install.



IOS Version



Android(Google Play)



Android (China)

2.Connect to Wi-Fi

Connect your smart phone to the Wi-Fi network created by the drone.
Check the drone's status in "VS FPV PRO" app.

a.Power on the drone

b.Open your phone's settings button, your smartphone will launch a search of the available Wi-Fi networks, find "VSLCAM_****" and connect to it, as shown in Figure 1.

3.Run the app "VS FPV PRO", you will see the interface as shown in Figure 2

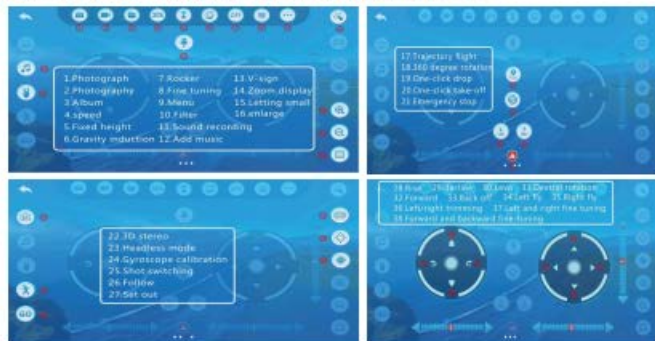


Fig1



Fig2


4. Click on "Introduction" to see the introduction of APP features, as shown in the following pictures



5. Return to the main interface and click "Start" to enter the drone operation interface

Start

- Click to open the control interface as shown in Figure 4.
- Click the Height Fix button to open the function buttons related to Height Fix. As shown in Figure 5.
- Click the menu button to open the hidden button. As shown in Figure 6.
- Click the follow button to enter the follow function as shown in Figure 7.
- Click to hide the control interface as shown in Figure 8, generate a green rectangle in the yellow dotted box to select a target, click the button to start following, the drone will follow the target's movement and fly as shown in Figure 9.
- When not in follow mode, press the button and hold the victory gesture with your right hand as shown in Figure 10, the APP will automatically take a photo after 3 seconds, and hold the palm gesture as shown in Figure 11, the APP will automatically start or stop recording.
- Click the music button to enter the interface and then press "click to select music >>" to select the one you want, the video recording function can be turned on, as shown in Figure 12.

h. Click the filter button  to select the filter color you want to take photos and videos as shown in Figure 13.

i. Click  to switch the front camera and bottom camera.



Fig4



Fig5



Fig6



Fig7



Fig8



Fig9



Fig10



Fig11



Fig12



Fig13

FCC 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.

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.