SplashDrone 4+

Quick guide

SwellPro

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SplashDrone 4+

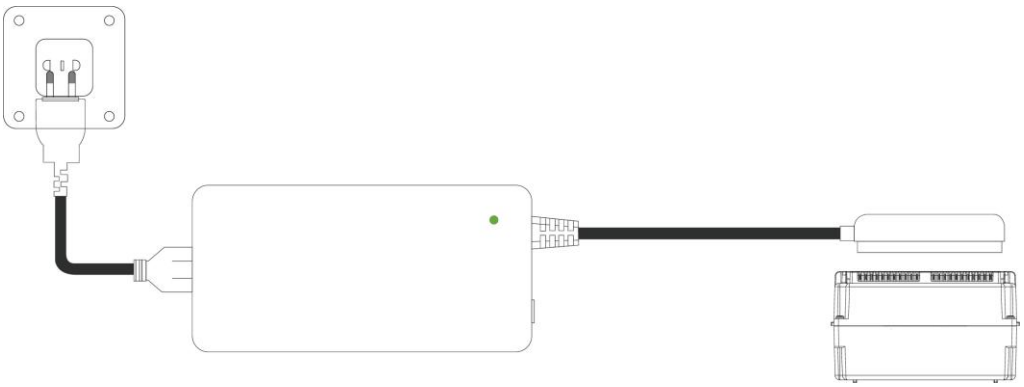
Model：SD4+

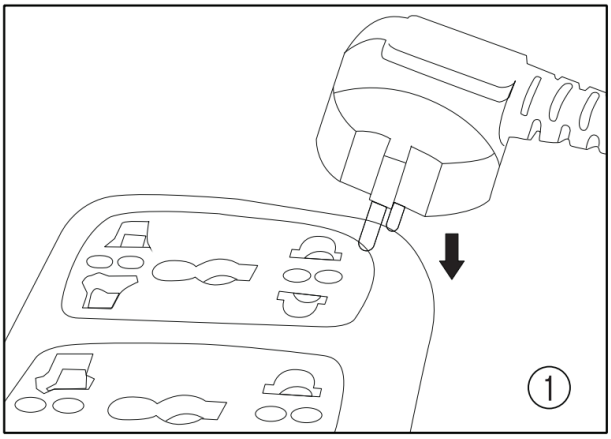
V1.0.0 – 2025.06

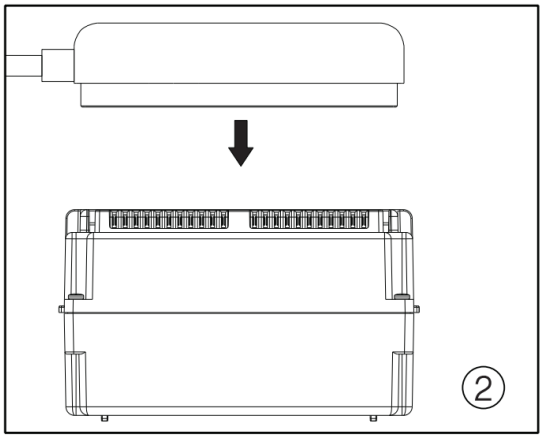
1-Charging

Charge Battery

⚠️ The SplashDrone 4+ is shipped with partially charged batteries. Ensure the drone and remote controller batteries are fully charged before use.







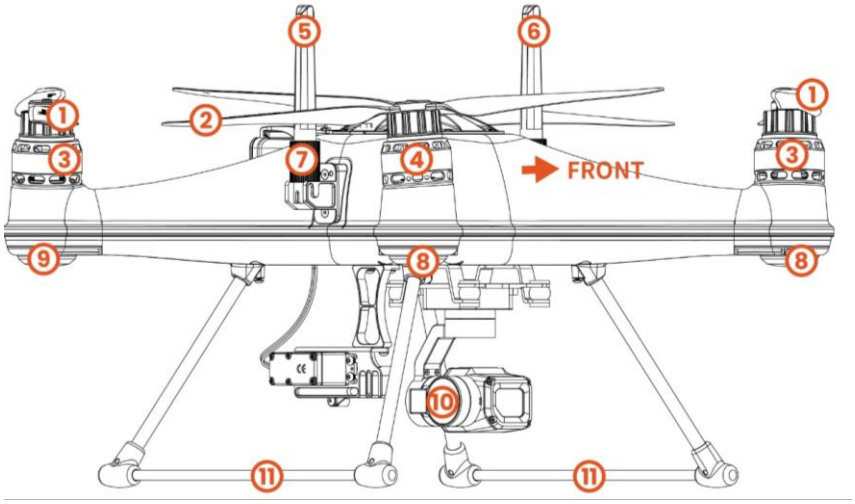
💡 **1** Refer to the above figures to charge the flight battery. **Once fully charged (about 25.2 volts), the flight battery will stop charging, and the LED will light solid green. Please remove the battery promptly.**

2 The remote controller can be charged from a standard 5V USB adapter. Recommend using a 5V/3A USB adapter. The LED light on the remote controller will flash while charging. The LED light will turn solid green when the remote controller is fully charged.

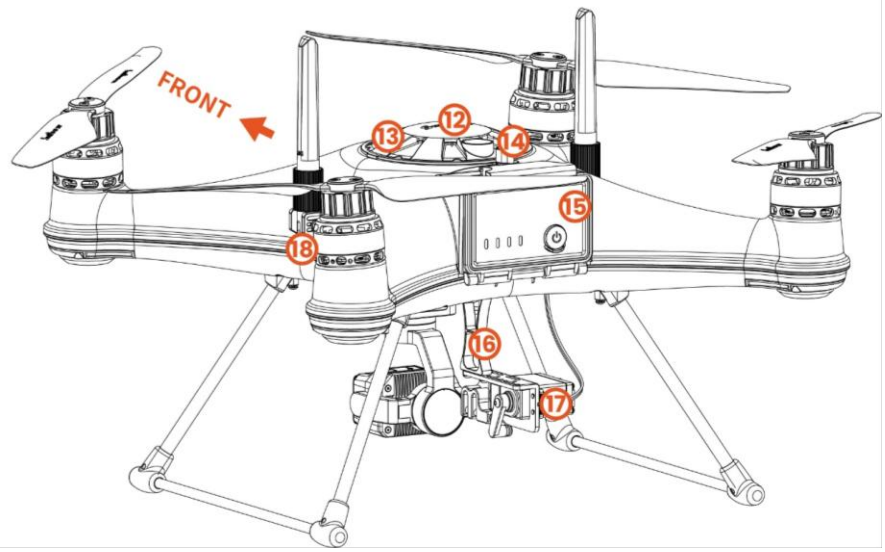
⚠️
- Keep the battery slot AWAY FROM WATER. Store the battery in a cool, dry place.
- Long-term storage humidity: 65±20%.
- Do not fly the drone with a battery voltage below 18.0 volts.
- The SplashDrone 4+ battery has a storage mode for self-discharging to the appropriate voltage. To maintain it, fully charge and discharge every 3 months during storage.

2-Product Overview

Aircraft Diagram



01 CW Propeller
02 CCW Propeller
03 CW Motor
04 CCW Motor
05 Left Antenna
06 Right Antenna
07 Antennas Knob
08 Front Aircraft Indicator Light
09 Rear Aircraft Indicator Light
10 Gimbal Camera
11 Landing Gear



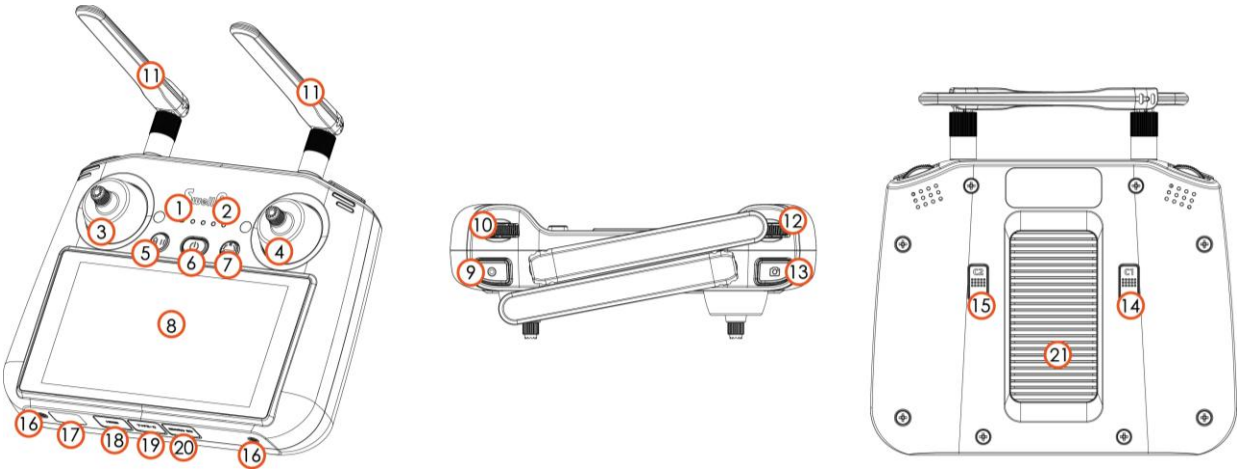
12 Waterproof membrane cover
13 Top cover
14 Battery hatch cover latch
15 Battery hatch cover

16 Payload release bracket

17 Payload release

18 Compas

Remote Controller Diagram



1. **Status LED**

   Indicates the status of the remote controller.

2. **Battery level LEDS**

   Display the battery level of the remote controller.

   - Solid red: Time available is less than 30 minutes.
   - Blinks red: The battery level of the aircraft is too low.
   - Solid green: Connected with the aircraft.

3. **Left joystick**

   Control to change the altitude and orientation of the aircraft.

4. **Right joystick**

   Control to change the pitch and roll of the aircraft.

5. **Return to Launch / Emergency Stop Button**

   Short press for emergency braking and hover in place. Long press for 2 seconds to activate the return-to-home function. Then briefly press the button again to cancel the return-to-home, and the drone hovers to wait for control commands. When initiating the return-to-home, the nose points towards the return point, and during the return process, controlling any joystick cannot exit the return-to-home.

6. **Power Button**

   Press once to check the current battery level.Press,and then press and hold to

power the remote controller on or off.When the remote controller is powered on,press once to turn the touchscreen on or off.

7. **Flight Mode Switch**

   For switching between three flight modes: Switch between Cine, Normal, and Sport.

8. **5.5inch Touchscreen**

   Touch the screen to operate the remote controller.

9. **Record Button**

   Press once to start or stop recording.

10. **Gimbal Dial**

    Controls the tilt of the camera.

11. **Antennas**

    Transmit control and video wireless signals between the remote controller and the aircraft.

12. **Camera Control Dial**

    Control zoom in/out.

13. **Shutter Button**

    Press down to take a photo. Press once to switch to photo mode when in record mode.

14. **Customizable C1 Button**

    Press once to confirm a selection. The button does not have a function by default when using SDFly3. Set the function in SDFly3 by entering Camera View > Settings > Safety Settings> Button Customization.

15. **Customizable C2 Button**

    Press once to confirm a selection. The button does not have a function by default when using SDFly3. Set the function in SDFly3 by entering Camera View > Settings > Safety Settings> Button Customization.

16. **Fixed extension nuts**

    can be used as accessories, such as straps, brackets, etc.

17. **Speaker**

18. **Mini HDMI Port /Pairing button**

    For outputting an HDMI signal to an external monitor.

19. **USB-C Port**

For charging and connecting the remote controller to the computer.

20. **microSD Card Slot**

    For inserting a microSD card.

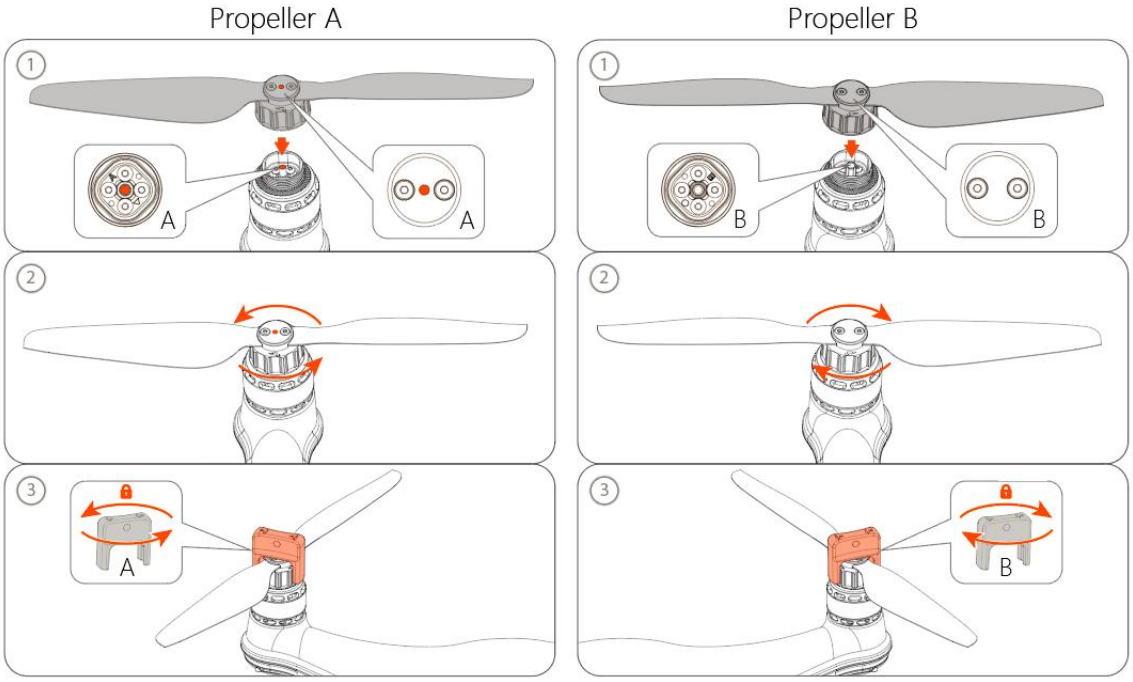
21. **Heat Sink**

    Used for cooling the remote controller. **When used, the temperature of the heatsink is high, do not touch.**

3-Preparing For Flight

Install Propellers

There are two pairs of propellers, A/B. Propeller A has orange dots, and Motor A has the same dots. The Motor and propeller can be identified by letters. To install the propeller, please follow the A-A/B-B corresponding relationship.

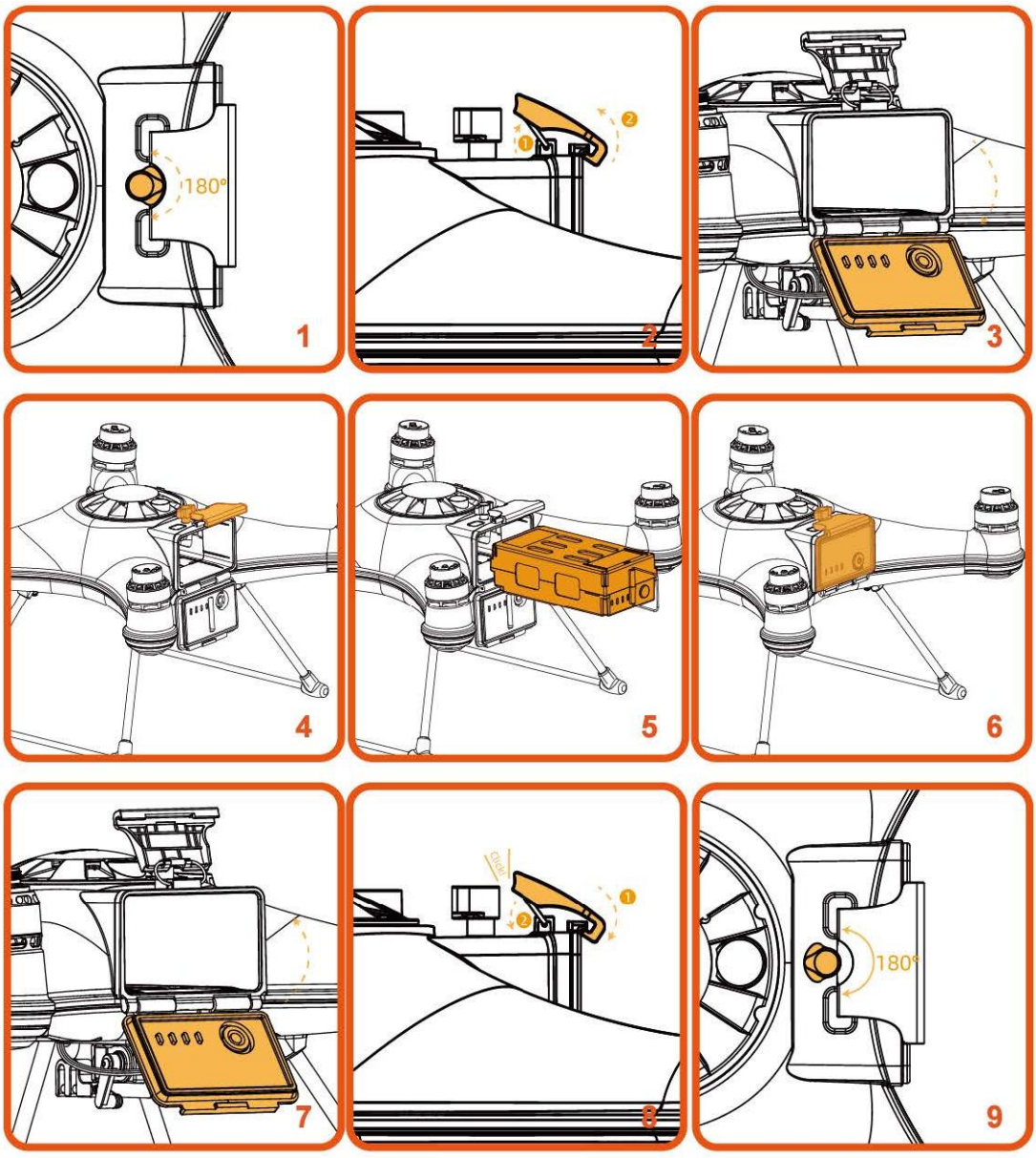


Place propeller A on motor A/Place propeller B on motor B.
Hold the motor firmly and rotate the propeller nut with the other hand.
Lock the propeller nut with the in-the-box tool shown above(as figure ③) (When disassembling, please use the tool to loosen the nut first).

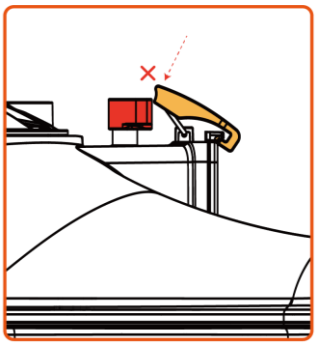
- Always place one hand under the motor to support it when installing or removing propellers. Failure to provide this support could result in the landing gear bending or breaking.
- The propellers are sharp. Please do not touch the blades with your hands when they are rotating to avoid cuts. Please be careful to avoid injury.
- **Do not** use broken propellers. Replace the propeller before flight if there is any damage or wear to the propeller.
- Ensure the propeller does not wobble after you install it. If you correctly install the propeller but it still wobbles and unusual noise, you might need to tighten the screws on the propeller base.
- Before each flight, please ensure the propellers are smoothly, correctly installed, and securely fastened. Spin each propeller by hand to check that the motors are free of sand or salt and spin freely.

Install/Remove Flight Battery

The flight battery is quick and easy to install.

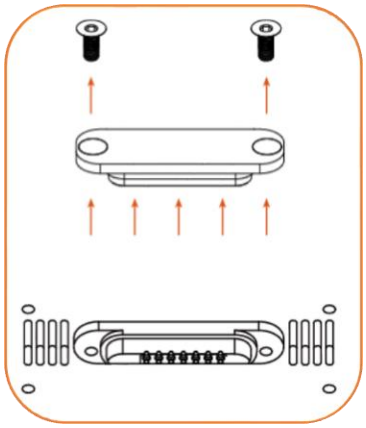


When slide in the battery, ensure to firmly press the battery into the battery slot to prevent water ingress.

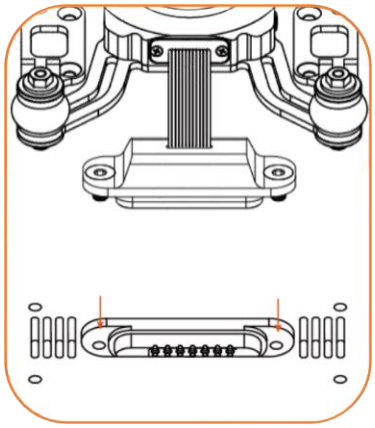


⚠️
- When sliding in the battery, please ensure that you firmly press the battery into the battery slot to prevent poor battery contact when the aircraft is flying.
- Always ensure that the hatch door's waterproof seal is clean and lightly lubricated.
- The drone is no longer waterproof when the battery hatch is open.
- **Do not allow water or sand to enter the drone while the battery hatch is open.**'
- The manual's Appendix contains additional warnings and precautions regarding the batteries, safety, charging, and maintenance. Please familiarize yourself with all the information.

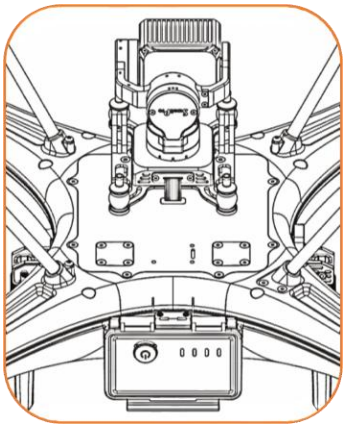
Install the Camera/Accessories



Using a hex screwdriver, remove the gimbal port cover plate. (Equipped with SplashDrone 4+)



Plug the gimbal connector into the drone's gimbal port and screw it in place with a screwdriver.



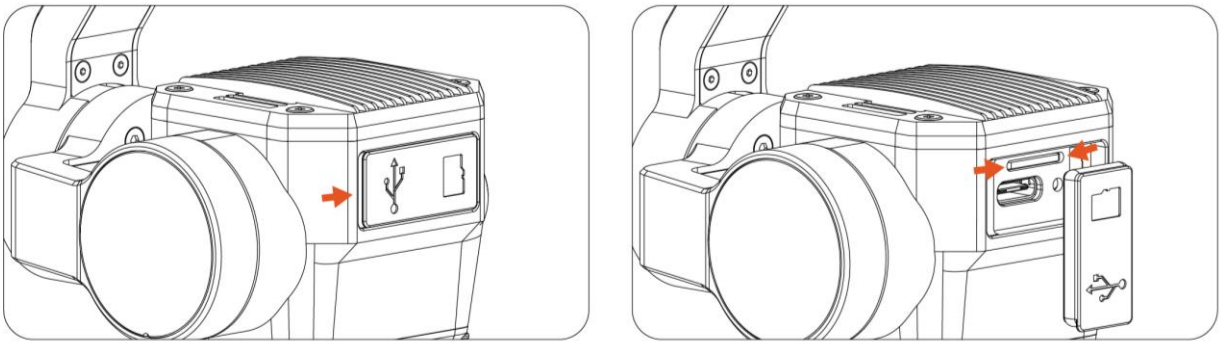
Ensure the camera is pointing forwarde.

💡 Other accessories can be replaced or installed in the same way.

⚠️ Make sure the rubber ring is attached to the gimbal connector before you screw the connector.

Install The MicroSD Card

1 Open the rubber seal at the top of the camera, insert the microSD card in the correct direction, press the microSD card with your thumbnail, and hear a "click" sound, indicating it is installed correctly.
2 After installing the microSD card, please re-secure the rubber seal to ensure a tight seal.



⚠ **Make sure the rubber plug and sealing surface are free of dust, sand, and other impurities. Press the rubber plug tightly to prevent the camera from getting wet.**

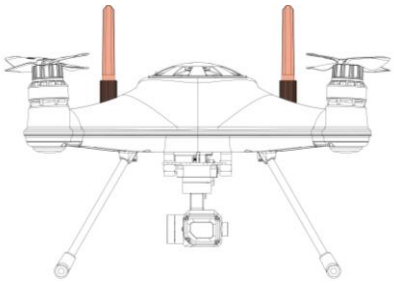
⚠
- Do not insert or remove the SD card while shooting. Inserting or removing the SD card during shooting or removing the battery while the power is on may damage the SD card and cause loss of stored data.
- After finishing the recording, please stop and save the file first. The recording file may be damaged or lost if the power is cut off.
- Check camera settings before use to ensure they are configured correctly. Before shooting essential photos or videos, shoot a few images to test whether the camera is operating correctly.
- Photos and videos cannot be transmitted or copied from the camera if the aircraft is powered off.
- Make sure to power off the aircraft correctly. Otherwise, the camera parameters will not be saved, and any recorded videos may be affected. Swellpro is not responsible for any loss caused by an image or video recorded in a way that is not machine-readable.
- The recording time per session is limited to 30 minutes to ensure the stability of the camera system. The camera supports micro-SD cards with a maximum capacity of 256 GB.
- Since the camera requires fast reading/writing of high-bitrate video data, please use microSD cards with U3 or higher specifications.

Adjust Aircraft Antenna position

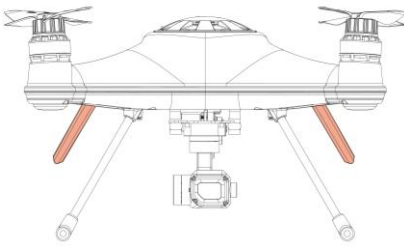
The antennas of the aircraft can be oriented either upwards or downwards to maximize reception in different situations. The SplashDrone 4+ has an effective range of 5 km. Due to the way radio frequency travels, when flying 0.5 meters above the water, the transmission range reduces to 2.8 kilometers. For the drone floating on the water surface, the transmission range reduces to 500 meters.

Adjust the antennas' orientation to ensure a stable connection for your flight.

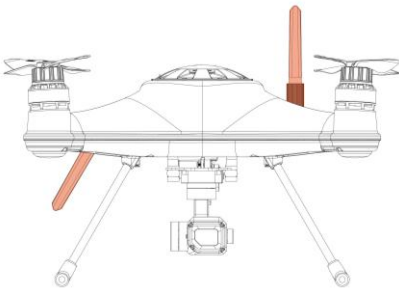
💡 To adjust the antenna position, loosen the antenna nut, adjust the antenna as needed, and retighten the nut.



Antenna oriented upward: Improves reception when the aircraft flies close to the water surface.



Antenna oriented downwards: Improves reception when the aircraft is flying high.



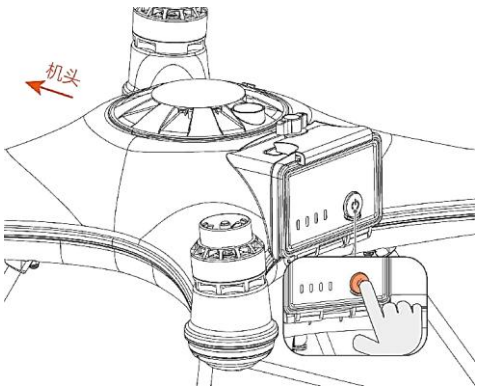
Antenna up and down: When the aircraft needs to activate the **power-flip**

4-Flight

Pre-Flight Checklist

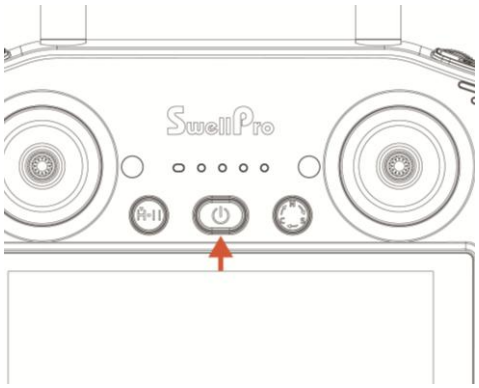
- ✓ Ensure the remote controller and Intelligent Flight Battery are fully charged.
- ✓ Ensure the Intelligent Flight Battery and propellers are securely mounted, and there is no wobble on the propeller after you install it. If you correctly install the propeller but it still wobbles, you might need to tighten the screws on the propeller base.
- ✓ Make sure the waterproof barometric membrane is not damaged.
- ✓ Ensure the gimbal and camera are functioning correctly.
- ✓ Ensure that nothing obstructs the motors and that they operate correctly.
- ✓ Ensure the antenna fixing nut is tightened securely and the antenna is correctly positioned.
- ✓ Ensure that all the connector sealings are tightly sealed with the rubber rings attached, including the battery sealing and all the base connector ports. Also, ensure that the sealings are free of dirt, sand, and other debris.
- ✓ Ensure the Micro SD card is inserted and securely sealed.
- ✓ Make sure that the SDFly3 is successfully connected to the aircraft.
- ✓ Make sure all camera lenses and sensors are clean.
- ✓ Only use genuine SwellPro parts or SwellPro authorized parts. Unauthorized parts may cause system malfunctions and compromise flight safety.
- ✓ Check the following flight data: flight battery> 24.0V; remote controller battery> 1 bar; GPS Satellite count>20.

Power on/off



AIRCRAFT POWER ON/OFF

- **Power on/off: Press the power button once briefly, then hold it down for 2 seconds.**
- Power on: The arm light will turn on, and the motor will emit a "beep beep beep" self-check sound to complete the power-on.
- Power off: The arm light will turn off, and after about 3 seconds, the battery level indicator light will turn off one by one to complete the power-off.



Remote controller

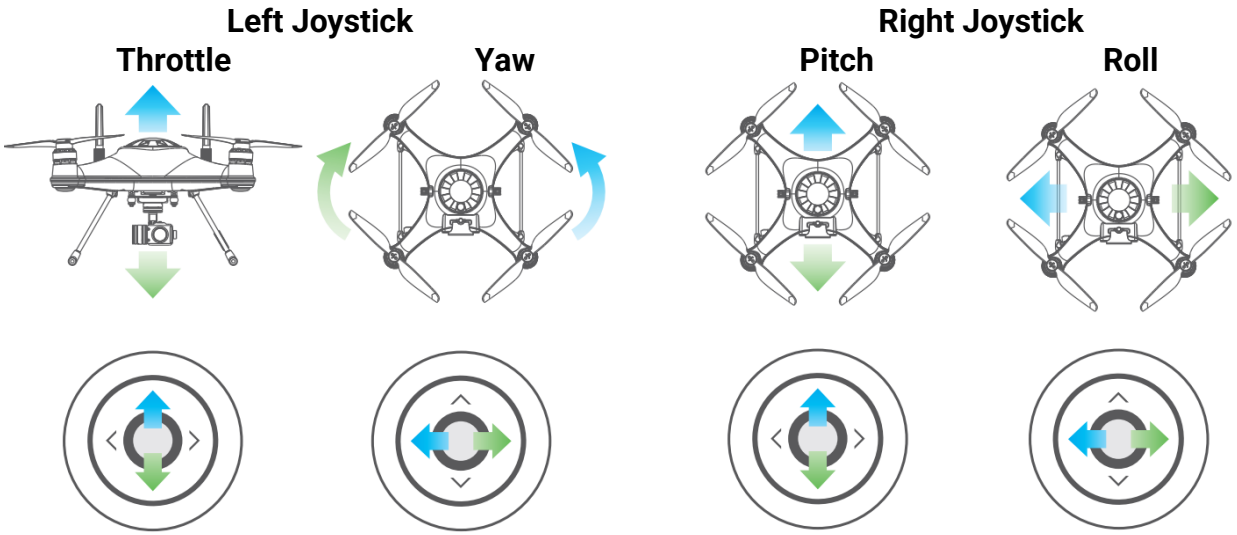
Power on/off: Press the power button once briefly, then hold it down for 2 seconds.

⚠️Please turn on the remote control first, followed by the aircraft. To turn off the device, switch off the aircraft first, then the remote control.

Joystick Controls

💡 LEFT JOYSTICK controls Throttle & Yaw;

💡 RIGHT JOYSTICK controls Pitch & Roll. YAW controls the direction; THROTTLE controls the ascent or descent of the drone; PITCH controls the drone to fly forward or backward; ROLL controls the drone to fly left or right.



Starting/Stopping Motors (Arming the Drone)

Before beginning the drone, take the following precautions:

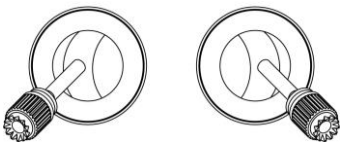
Place the aircraft in an open area 3 meters away from yourself and others. After the aircraft is powered on, the system will conduct a self-check. After the self-check is completed, a confirmation tone will sound.

Starting (Arming) Motors

Remote controller operation	Description
	💡 Check GPS satellite count > 20, location positioning is successful Pull the left and right joysticks simultaneously down and inwards and maintain this position for 3 seconds. The motors will be unlocked and start rotating.

Stopping Motors

⚠ **After landing, the motor must be locked. There are two locking modes:**

Remote controller operation	Description
 	**Method 1: Pull the throttle to the lowest position and hold for 3 seconds after landing on the ground or water surface. The motor will be locked and stop rotating.** 💡 The recommended method for stopping motors.
	**Method 2: After the aircraft lands, wait until the motor slows down to idle speed, then pull both the left and the right joysticks downwards and outwards. This method can be used as an emergency stop.** ⚠ Stopping the motors in flight may cause the drone to crash and should only be carried out in an emergency when stopping the motors will minimize potential damage. (For example, there is a risk that the drone may hit people or crowds)

Take off and landing

Manually take-off

1. Place the aircraft on a flat and open ground.
2. Complete all pre-flight checks.
3. Turn on the remote controller, then turn on the aircraft.

4. Start the aircraft motor.
5. Slowly push the throttle upward to allow the aircraft to take off smoothly. When the aircraft reaches a height of 1.5 meters, release the throttle and let the aircraft hover for a short period to observe whether the flight is stable and in good condition. After confirming that the aircraft is in good condition, you may continue with the flight operation

Manually landing

1. Check the conditions for a safe landing.
2. Slowly pull the throttle down to make the aircraft descend and land on a flat surface or water.
3. **After landing, pull the throttle down to the lowest position and hold it for 3 seconds until the motor stops.**

Auto Takeoff

Use the Auto Takeoff function:

1. Launch the SD Fly3 App and enter the camera view.
2. Complete all steps in the pre-flight checklist.
3. Tap  If conditions are safe for takeoff, press and hold the button to confirm.
4. The aircraft will take off and hover approximately 2m above the ground.

Auto Landing

Use the Auto Landing function:

1. Tap  , If conditions are safe for landing, press and hold the button to confirm.
2. **After landing, pull the throttle down to the lowest position and hold it for 3 seconds until the motor stops.**

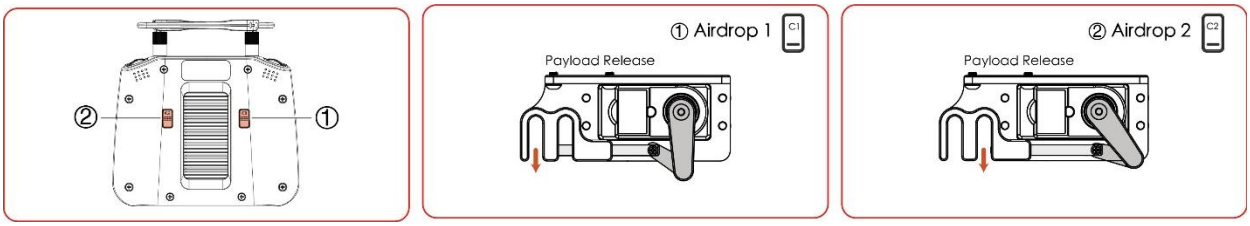
Flight Modes

The SplashDrone 4+ supports the following flight modes: Normal mode, Cine mode, and Sport mode.

💡You can switch between Normal mode > Smooth mode > Sport mode using the buttons  on the remote control.

For specific descriptions of flight mode, refer to the "User Manual."

Payload release



5-Basic Flight Steps

1. Complete the pre-flight check.
2. Install the propellers and the flight battery.
3. Position the antenna correctly and tighten the nuts.
4. Place the aircraft on a flat, open surface or water.
5. Always turn on the remote controller power before turning on the aircraft, and wait for the aircraft to complete its self-check (no need to calibrate the aircraft before flight).
6. For your safety, stand upwind of the aircraft, at least 3 meters away.
7. Beginners should take off in normal mode.
8. Start the aircraft motor.
9. Gently and slowly push the throttle upwards to allow the aircraft to take off smoothly. When the aircraft reaches a height of 1.5 meters, release the throttle and let the aircraft hover for a short period to observe if the flight is stable. Once the aircraft's status is stable, you can continue the flight operation.
10. When it's time to descend, slowly pull down the left control stick (throttle) to allow the aircraft to descend slowly to a flat surface or water.
11. After landing, **pull the throttle stick to the lowest position and hold it for more than 3 seconds until the motor stops.**
12. Stop recording before turning off the aircraft. Otherwise, the video file may be corrupted.
13. After the motor stops, turn off the aircraft and remote controller power in sequence. Remove the battery from the battery compartment.
14. **Thoroughly wipe down the drone and all accessories with a dry cloth to remove debris or moisture, then return them to the carrying case.** Avoid allowing water residue to remain on the battery or device components. Water ingress may cause short-circuiting, leading to malfunction, thermal runaway, or explosion.

ENJOY YOUR FLIGHT!

For more advanced functions and details, please refer to the User Manual.

Online Technical Support

Swellpro Support

SwellPro
PIONEERS OF THE WATERPROOF DRONE

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