

SplashDrone 4⁺

User Manual



SwellPro

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SplashDrone 4+

Model: SD4+

V1.0.0 – 2025.06

Thank You

Thank you for purchasing the SplashDrone 4+. We have designed and manufactured it to the highest quality standards.

Like any marine equipment, long-life and trouble-free operation depend on correct care and maintenance. With proper care and maintenance, you could enjoy your drone for many years.

It is essential to familiarize yourself with the features of this unique drone by carefully studying this manual and particularly the priority sections indicated in the Table of Contents.

Visit store.swellpro.com for the latest manuals, software, and tips. The Version Information section at the end of this manual details additions and corrections to this manual.

Using Manual

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This document is designed to be printed or viewed on a computer or mobile device. You can search directly for terms like "Propeller" to find references if used electronically. Additionally, you can click on any topic in the Table of Contents to navigate directly to that topic.

Swellpro provides users with tutorial videos and the following documents:

- User Manual
- Quick Start Guide

It is recommended that you watch all tutorial videos. Prepare for your first flight by reviewing the Quick Start Guide and referring to this User Manual for more information.

Legend

 Important

 Hints And Tips

 Reference

Video Tutorials

Visit and subscribe to the SwellPro YouTube channel for tutorial videos and product information. Scan this QR code with your camera phone to go to our channel.



Social Media

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Using for the first time

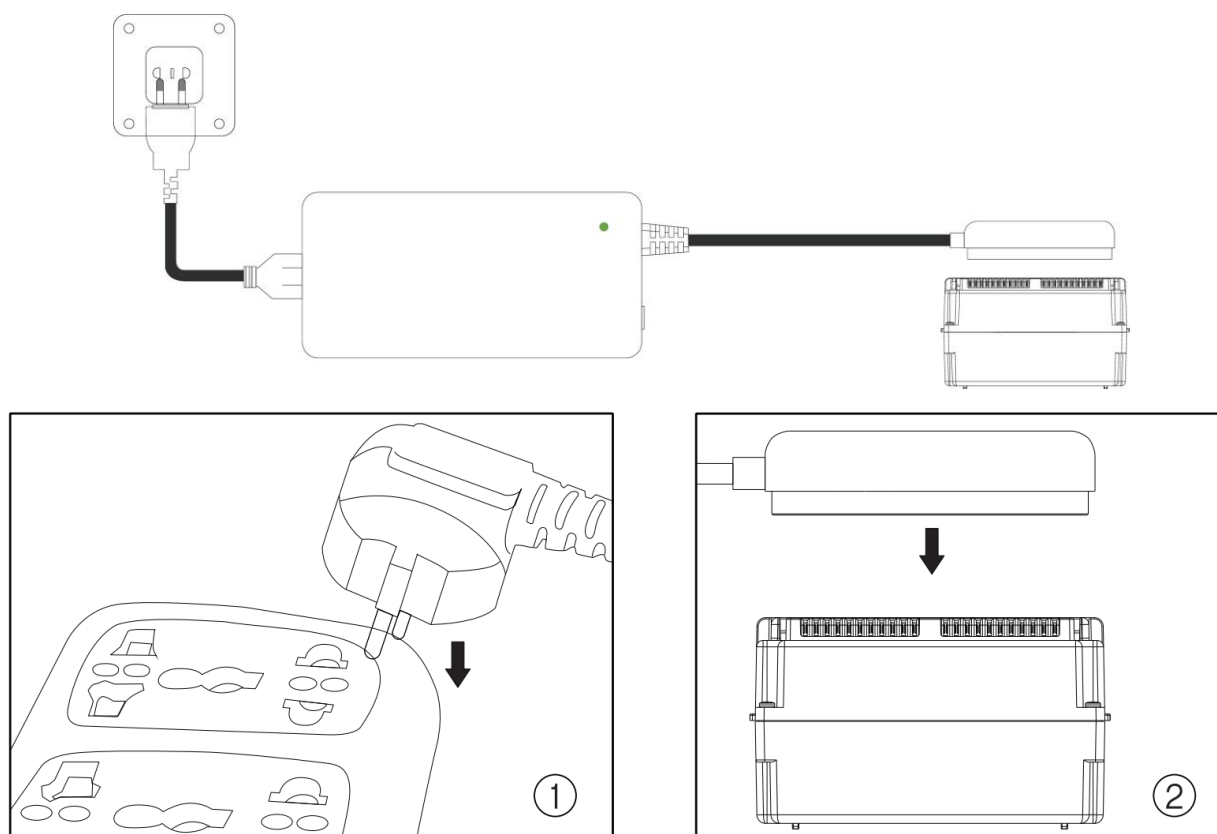
The SplashDrone 4+ is shipped in a dedicated carrying case. Upon first use, **remove the aircraft body and all accessories** from the case.

During installation, carefully read and strictly follow all operational steps and safety guidelines in this manual to ensure proper aircraft functionality and your safety.

Users must fully comply with all operational steps and safety warnings in this manual when installing and operating the drone. The user assumes full responsibility for any issues arising from non-compliance, including, but not limited to, equipment damage, flight accidents, and other similar incidents.

Charging

⚠ 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: $65\pm 20\%$.
- 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.



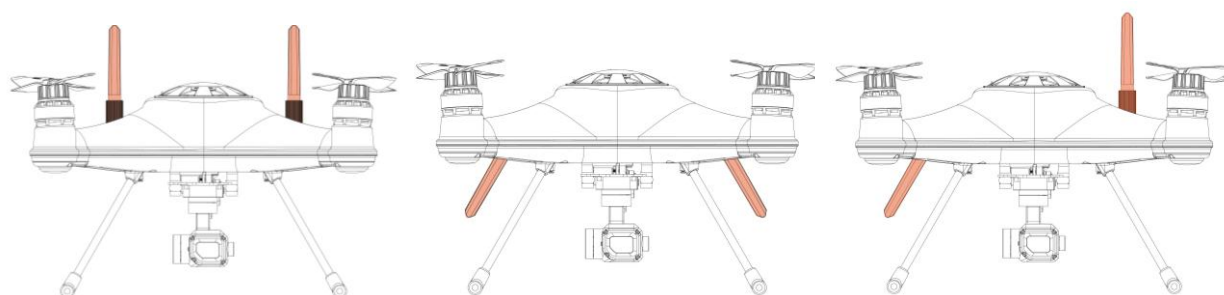
Install the Aircraft

Adjust Aircraft Antenna Position

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

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

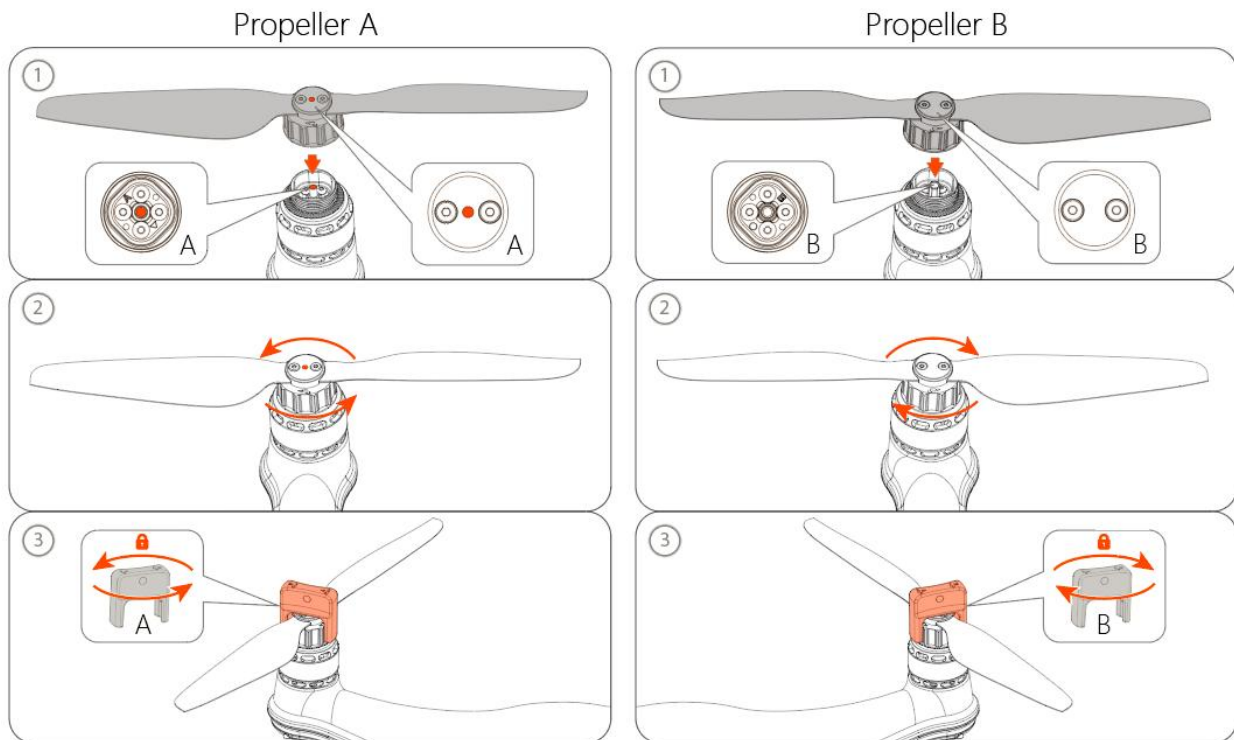
💡 To adjust the antenna position, loosen the antenna nut, adjust the antenna as needed, and retighten the nut.



Antenna oriented upward:	Antenna oriented downwards:	Antenna up and down:
Improves reception when the aircraft flies close to the water surface.	Improves reception when the aircraft is flying high.	When the aircraft needs to activate power-flip.

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.



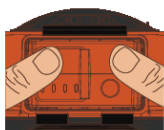
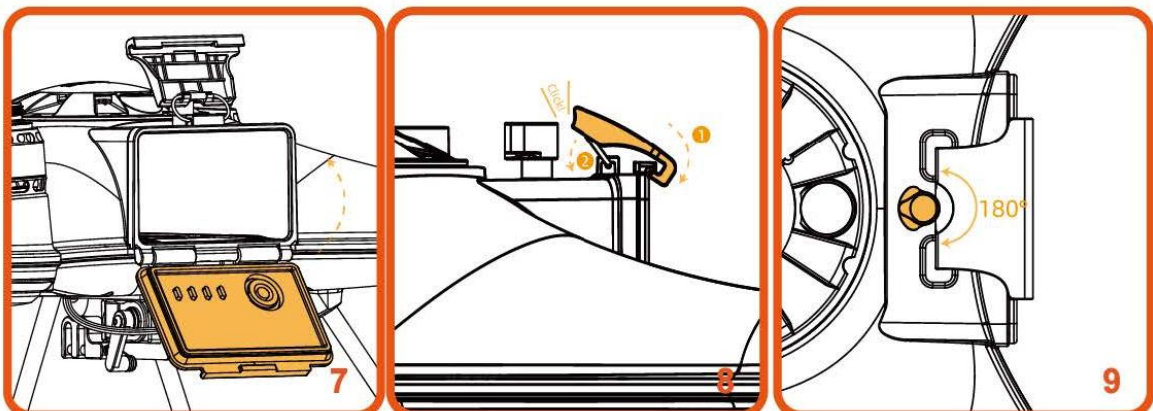
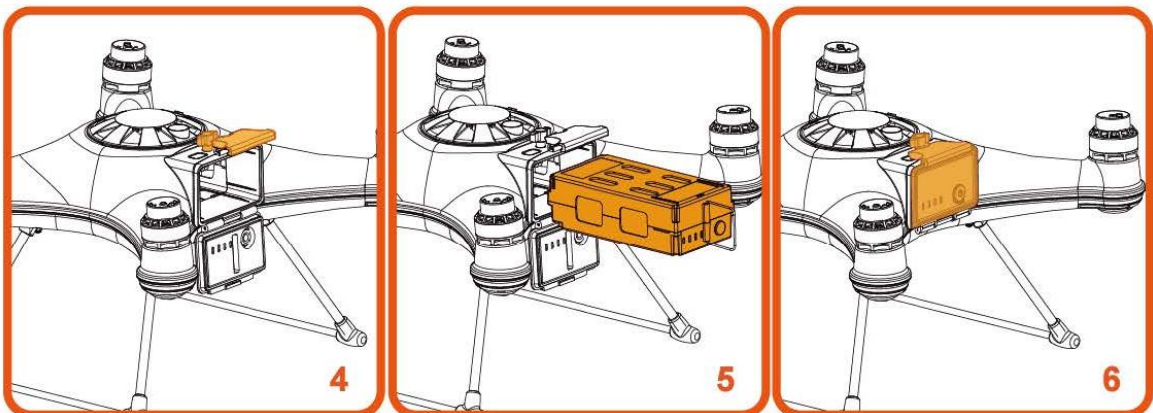
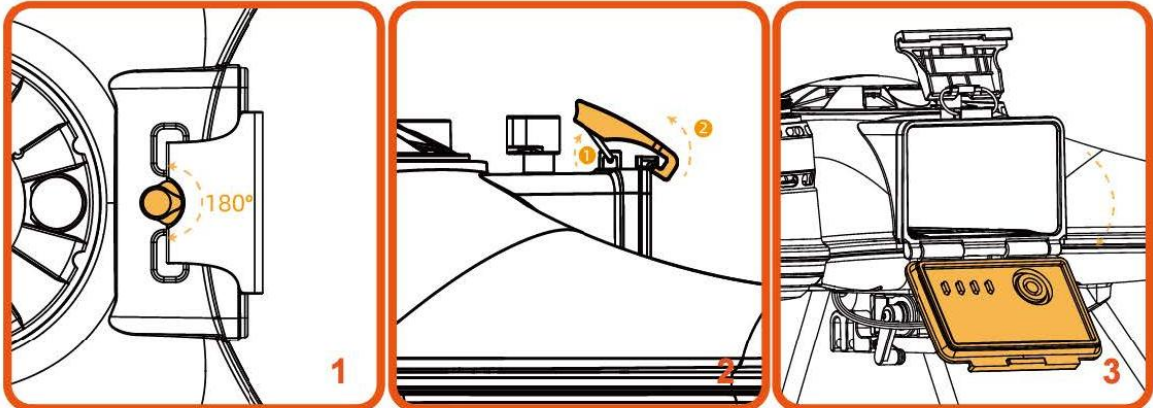
1. Place propeller A on motor A/Place propeller B on motor B.
2. Hold the motor firmly and use your other hand to rotate the propeller nut.
3. Lock the propeller nut with the in-the-box tool shown above(as figure ③)
(When disassembling, please use the tool to loosen the nut first).



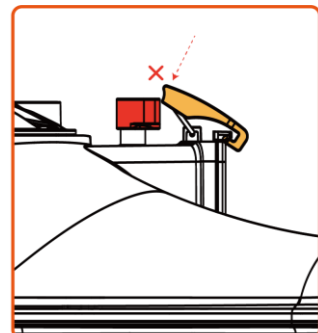
- Always place one hand under the motor to support it when installing or removing propellers. Failure to provide this support could result in the landing gear bending or breaking.
- The propellers are sharp. Please do not touch the blades with your hands when they are rotating to avoid cuts. Please be 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 smooth, 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.

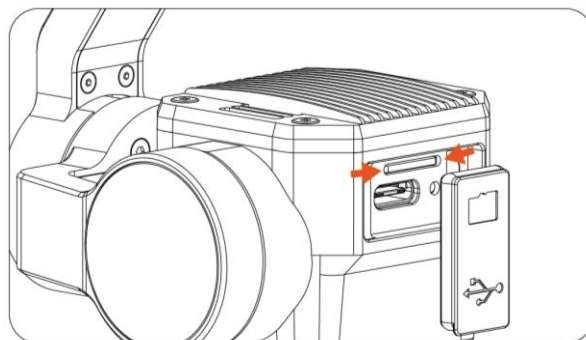
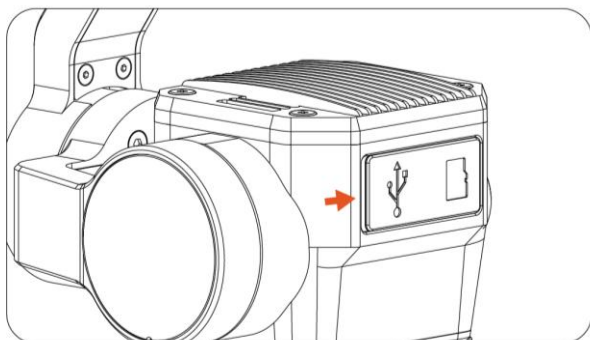




- When sliding the battery into place, please ensure that you firmly press it into the battery slot to prevent poor battery contact during flight.
 - Always ensure that the hatch door's waterproof seal is clean and lightly lubricated.
 - The drone is no longer waterproof when the battery hatch is open.
 - **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 MicroSD Card

1. Open the rubber seal at the top of the camera, insert the microSD card in the correct direction, and press the microSD card with your thumbnail. You should hear a "click" sound, indicating that 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.

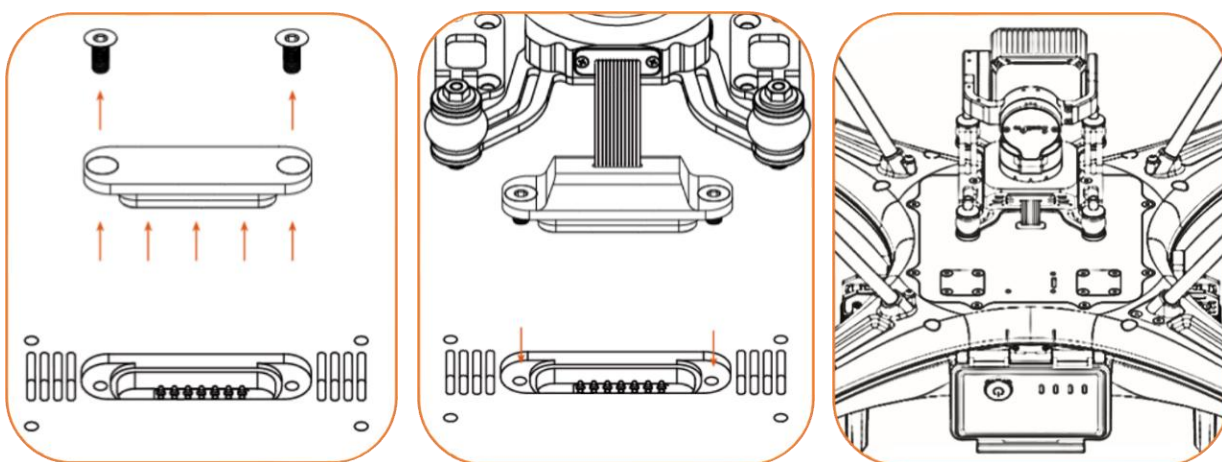


- Do not insert or remove the SD card while shooting. Inserting or removing the SD card during shooting or removing the battery while the power is on may damage the SD card and cause loss of stored data.
 - After finishing the recording, please stop and save the file first. The recording file may be 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.
-

Install the Camera/Accessories



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

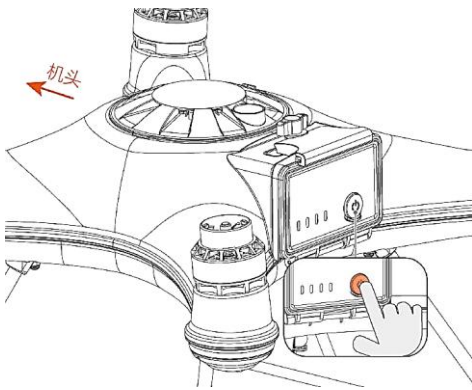
Plug the gimbal connector into the drone's gimbal port and screw it in place with a screwdriver.

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

Ensure the camera is positioned to face forward.

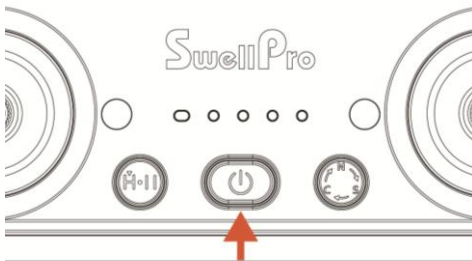
💡 Other accessories can be replaced or installed in the same way.

Power On/Off



AIRCRAFT POWER ON/OFF

- **Power on/off:** Press the power button 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.



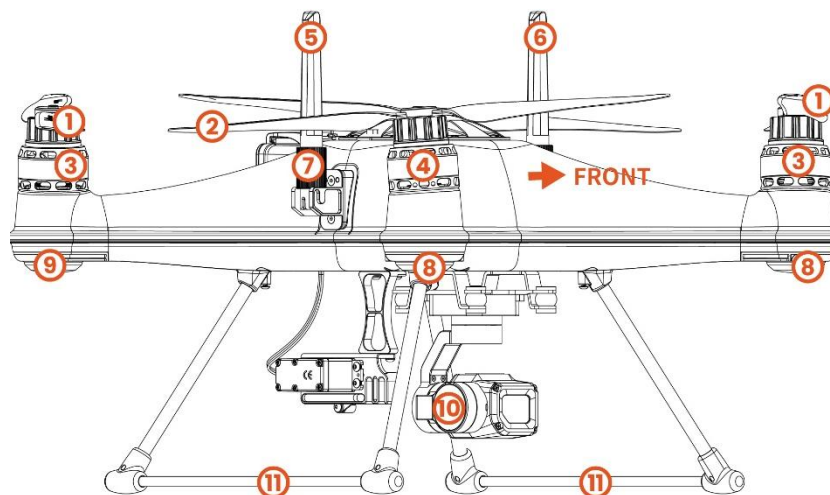
Remote controller

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

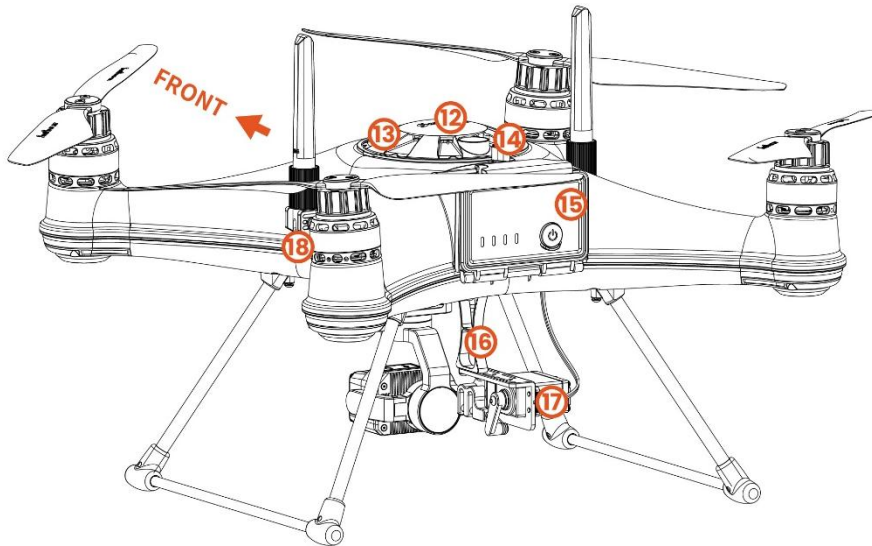
⚠ Please turn on the remote control first, followed by the aircraft. To turn off the device, switch off the aircraft first, then the remote control.

Product Overview

Aircraft Diagram

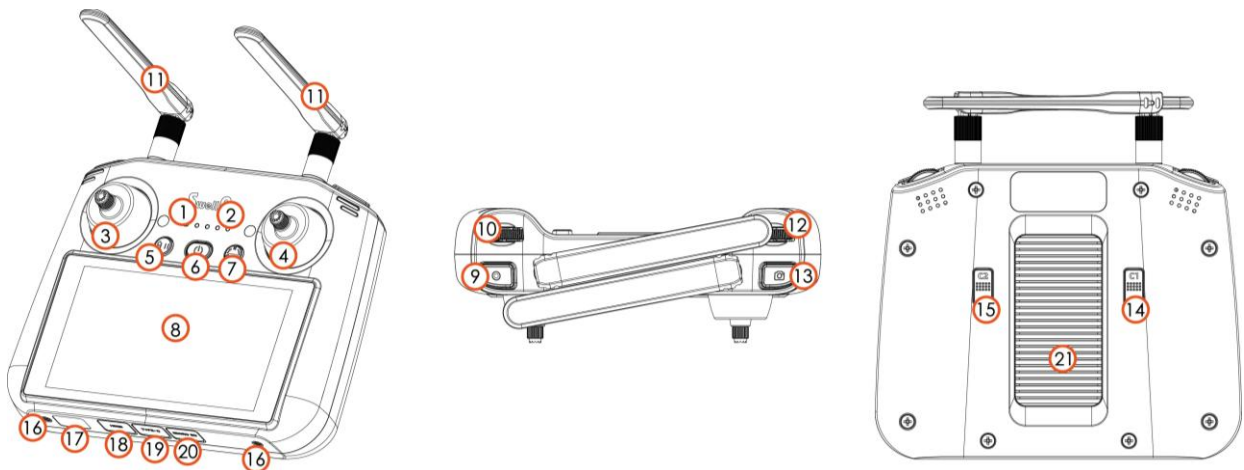


- | | |
|----------------------------------|-----------------------------------|
| 01 Cw Propeller | 02 Ccw Propeller |
| 03 Cw Motor | 04 Ccw Motor |
| 05 Left Antenna | 06 Right Antenna |
| 07 Antennas Knob | 08 Front Aircraft Indicator Light |
| 09 Rear Aircraft Indicator Light | 10 Gimbal Camera |
| 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 Compass | |

Remote Controller Diagram



- | | |
|----|--|
| 01 | Status LED |
| | Indicates the status of the remote controller. |
| 02 | 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.

03 Left Joystick

Control to change the altitude and orientation of the aircraft.

04 Right Joystick

Control to change the pitch and roll of the aircraft.

05 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.

06 Power Button

Press once to check the current battery level. Press and hold to power the remote controller on or off. Press once when the remote controller is powered on to turn the touchscreen on or off.

07 Flight Mode Switch

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

08 5.5inch Touchscreen

Touch the screen to operate the remote controller.

09 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 default function when

using SDFly3. You can set the function in SDFly3 by navigating to Camera View > Settings > Safety Settings > Button Customization.

15 **Customizable C2 Button**

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

16 **Fixed Extension Nuts**

It can be used as an accessory, such as straps or brackets.

17 **Speaker**

18 **Mini HDMI Port**

For outputting an HDMI signal to an external monitor.

19 **USB-C Port**

This is for charging and connecting the remote controller to the computer.

20 **MicroSD Card Slot /Pairing Button**

For inserting a microSD card. **Pairing** Button: If the remote cannot pair, press the pairing button to reset and complete the pairing process.

21 **Heat Sink**

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

Flight

The SplashDrone 4+ is flight-tested before shipment, so you don't need to calibrate it when using it for the first time.

After completing the installation preparation, please undergo flight training first. Before flying, select a suitable flight environment that meets the following flight requirements and restrictions, and ensure you do not exceed the safe flight altitude stipulated by local laws and regulations. During flight, strictly adhere to local laws and regulations, including but not limited to registration, permits, and no-fly zones.

Flight Safety and Environment

- Please ensure you comprehensively understand the SplashDrone 4+ and all the necessary measures to implement a successful return-home function in an emergency.

- If this is your first time flying a drone, please read this manual thoroughly and watch the tutorial videos available on our website at store.swellpro.com or on our YouTube channels.
- We recommend taking professional training and guidance. When flying, choose an appropriate environment that suits your skills. Check all calibrations and choose a large, open area to practice.
- Please be well prepared before each flight, and avoid violent or excessive operations.
- Please strictly comply with local laws; flying in NO-FLY ZONES is prohibited.
- Any illegal & improper use or operation of this product is prohibited.
- Any invasion or violation of another person's right to privacy is prohibited. Before using this product, it is the drone pilot's duty to comply with local laws regarding privacy protection.
- Any invasion of privacy or flying over another person's property is prohibited. Please agree with any person regarding any potential breach of confidentiality before the proposed flight.
- DO NOT fly the SplashDrone 4+ under the influence of alcohol, drugs, or any other physical or mental impediment.
- Do not fly the drone with a malfunctioning remote controller.
- Please fly the drone away from crowds.

Flight environment requirement

- Always choose the open space as an ideal flying environment.
- Flying between or near tall buildings could affect the compass's functioning and block GPS and transmission signals.
- During the flight, try to maintain the line of sight with the drone and avoid obstacles and people.
- Avoid flying near areas with high electromagnetic interference, such as power lines or signal towers, to minimize the risk of interfering with the drone's remote controller.
- Fly below 4000 m above sea level as environmental factors, including air density and wind shear, reduce the aircraft's and battery's performance.
- Before flying in low temperatures, warm the battery to ~25°C to maximize flight time.
- Although the SplashDrone 4+ is waterproof, do not fly in fog or strong wind. (For wind speed exceeding 12 m/s)

Restricted Area



Airport



Crowds

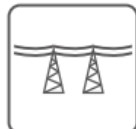
Threats to Flight Safety Scenarios



Radio signal tower



Radar



High voltage power lines



Trees



Tall buildings

Flight Restrictions

According to the regulations of the International Civil Aviation Organization and national air traffic control on airspace control, as well as the management regulations for aircraft, aircraft must fly within designated airspace. By default, altitude restrictions are enabled, and the flight altitude for SD4+ is limited to no more than 120 m. Users must confirm that the flight area complies with local laws and regulations before flying, including but not limited to registration, permits, no-fly zones, etc., and strictly adhere to relevant regulations.

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.

Basic Flight

Starting/Stopping Motors (Arming the Drone)

Before beginning the drone, take the following precautions:

Place the aircraft in an open area 3 m 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

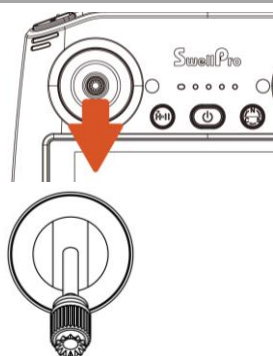
Pull the left and right joysticks simultaneously down and inwards and maintain this position for 3 seconds. The motors will be unlocked and start rotating.

Stopping Motors

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

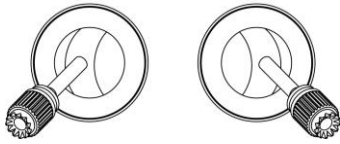
Remote controller operation

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)

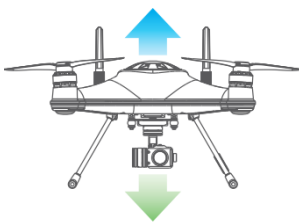
Joystick Controls

💡 LEFT JOYSTICK controls Throttle & Yaw;

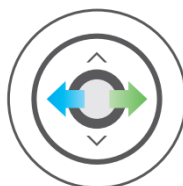
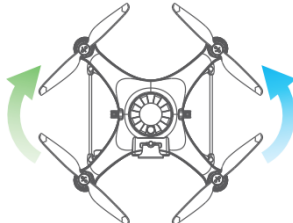
💡 RIGHT JOYSTICK controls Pitch & Roll. YAW controls the direction; THROTTLE controls the ascent or descent of the drone; PITCH controls the drone to fly forward or backward; ROLL controls the drone to fly left or right.

Left Joystick

Throttle

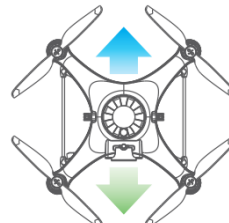


Yaw

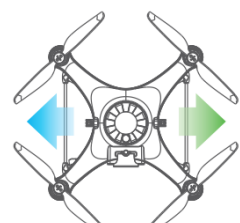


Right Joystick

Pitch



Roll



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 m, 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, please wait for the motor to stop automatically.**

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 (there is no need to calibrate the aircraft before flight).
6. Stand upwind of the aircraft, at least 3 m away for your safety.
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 m, release the throttle and let the plane hover for a short period to observe if the flight is stable. You can continue the flight operation once the aircraft's status is stable.
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 over 3 seconds until the motor stops.**
12. Stop recording before turning off the aircraft. Otherwise, the video file may be corrupted.
13. Turn off the aircraft and remote controller power in sequence after the motor stops. 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.** Prevent water residue from accumulating on the battery or device components. Water ingress may cause short-circuiting, leading to malfunction, thermal runaway, or explosion.

Flight Modes

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

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

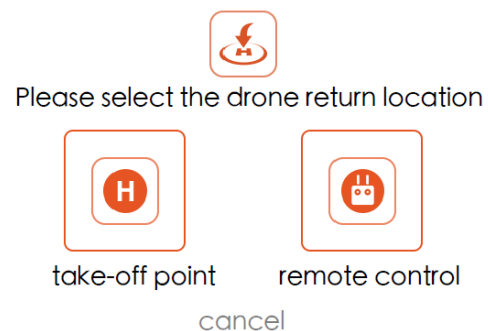
Flight Modes	Letter	Description
Normal	N	In this mode, the drone maintains a fixed position and height while hovering (with no input from the remote controller). When controlling the aircraft forward, the aircraft can move straight forward. When the joystick is released, it brakes to hover at a fixed point and height. The maximum flight speed is 10 m/s.
Cine	C	In this mode, the drone maintains a fixed position and height while hovering (with no input from the remote controller). The maximum flight speed is 3 m/s.
Sport	S	In Sport mode, the drone will fly extremely fast and responsively. When the remote controller is not used, the drone returns to Normal mode, which maintains its height and position. It is excellent for extreme operations requiring fast and responsive flight. 💡 As the drone becomes extremely fast and responsive in Sport mode, it is recommended for more experienced and skilled users.

Dynamic Return To Home (RTH)

The SplashDrone 4+ has an automatic return-to-home function, including one-touch, low battery, and failsafe returns. When the aircraft records the return point and has more than 20 GPS satellites count, if the user enables one-click return, low battery return, or if the remote controller loses communication or video transmission for over 4 seconds. it will automatically return and land.

Return point

The return point location can be set on the remote controller and selected as either the takeoff point or the remote controller location.



To start Return-to-Home:

- When you long-press the Return Home button, the remote controller will beep and vibrate twice to indicate that the drone starts the RTH process. The flight mode indicator on the remote controller status bar will change to the letter "R" to indicate that the drone is in the RTH process.
- Return-to-Home can also be initiated on the App.
- The RTH height can be set on the App.



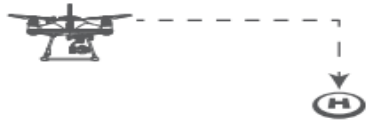
- Press and hold the return-to-home button on the remote control or tap the SD FLY3 App  icon to activate the return-to-home function. The flight mode on the remote display will change to the letter "R" to indicate that the aircraft is in the Return to Home (RTH) process.
- During the return, a short press of the return button can exit the return, and the aircraft's brakes maintain hover. The user can regain control of the aircraft.
- During the return, the nose points towards the return point. During the execution of the return, controlling any joystick cannot exit the return.



- If the aircraft's GPS signal is too weak (, red), the aircraft will be unable to initiate RTH.
- During the execution of the return, the aircraft must constantly monitor whether there are obstacles on the return route and make control to avoid

potential obstacles when necessary.

Return Home Process



If the aircraft's height exceeds 20m, the drone will maintain its height and return to its home point before landing.



If the aircraft's height is lower than 20m and the distance from Home Point is greater than 15m, the drone will ascend to Return-to-Home Height and then return to its Home Point before landing.

💡 Return-to-Home Height can be set in the App.

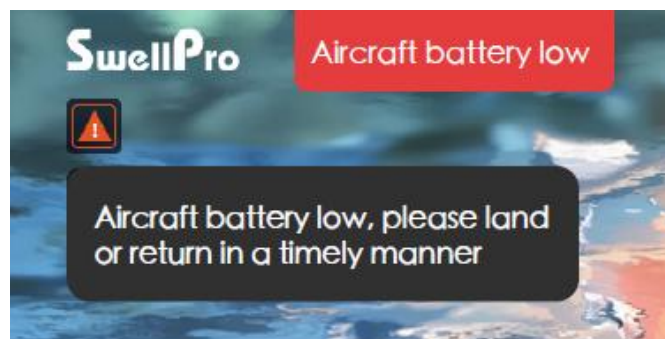
Low Battery Return to Home

Low battery auto Return-to-Home can be turned on or off through the App, depending on your preference. By default, it is on.

Low battery auto RTH will initiate when the drone's intelligent battery reaches the Level 1 low battery warning.

Level 1 alarm: The drone's battery level has reached 19.2 V. The remote controller screen will prompt, **"Aircraft battery low, please land or return promptly."**

💡 During the return process, you can short-press the RTH button on the remote controller to cancel the return. Automatic return due to low battery can only occur once per flight. Suppose the user cancels the low battery automatic return reminder and continues to fly. In that case, it may result in insufficient battery power for the aircraft upon return, leading to a forced landing and potentially causing the aircraft to be lost or crash.

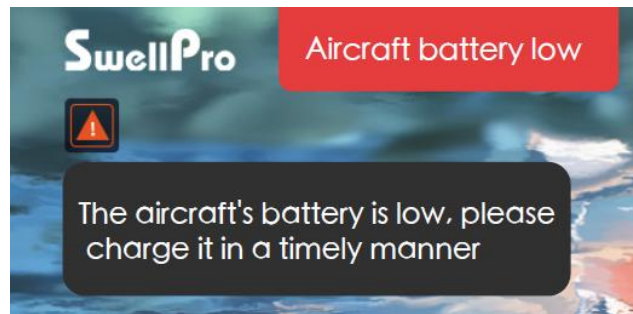


Level 2 alarm: The drone's battery level has reached 18.0 V. The remote controller screen will prompt, **"The aircraft's battery is low. Please charge it promptly."**

After 10 seconds, the drone will initiate an in-place auto-landing to protect itself and its

battery.

💡 If the aircraft continues to fly on low battery, when the battery is only sufficient to perform a landing, the aircraft will forcibly descend and cannot be canceled. During the forced descent, if the remote control signal is standard, the aircraft's horizontal movement can be controlled using the pitch and roll, and the descent speed can be controlled using the throttle. Pushing the throttle up to keep the aircraft airborne for an extended period will cause it to fall directly after the battery is completely depleted.

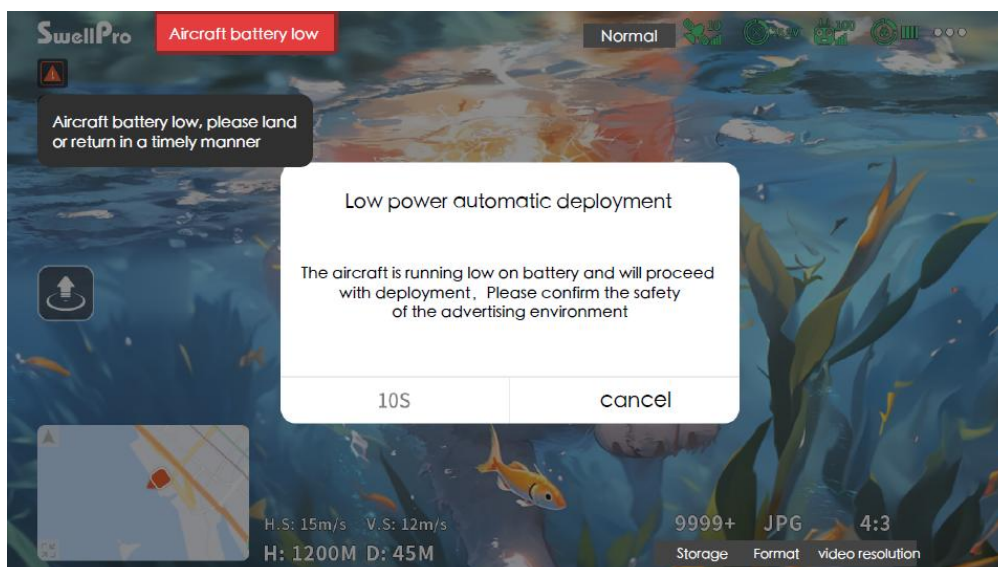


Low Battery Auto Payload Release

💡 Low-battery auto payload release enhances safe Return-to-Home (RTH) when the aircraft is attached to a heavy load. It can be turned on or off via the SD Fly3 App > Security Settings > Low Battery Delivery Settings. By default, it is off.

⚠️ When it is on, the low battery auto payload release will be initiated when the drone reaches the level 1 low battery warning. When the drone's battery reaches level1, a low battery warning will be displayed, and the drone will automatically release the payload before initiating the low battery auto Return-to-Home process.

⚠️ The low-battery auto payload release entails certain risks, and Swellpro disclaims any responsibility for losses arising from such deployments.



Failsafe RTH

💡 In the SD Fly3 APP > Settings > Safety, the aircraft's action when the remote controller signal is lost can be set to RTH, land, or hover.

⚠️ If the Home Point is successfully recorded and the compass is functioning normally (GPS satellites count > 20), Failsafe RTH automatically activates when the remote controller signal is lost for over 4 seconds. The aircraft will remain in RTH even if the remote controller signal is restored.

Advanced Flight

Power Flip

If the drone becomes inverted on the water, the Power-Flip feature enables it to flip back to its upright position.



When the drone is floating upside-down on the water, pull both the left and right joysticks simultaneously down and inward and maintain the control until the drone flips to its upright position.

Water Takeoff and Landing

1. When taking off from choppy water, ascend quickly from the surface to prevent the drone from being affected by a passing wave.
2. When landing on water, descend vertically to the surface. If the drone lands with horizontal speed, it may flip and be inverted. The flight controller will shut down the motors if the drone becomes inverted on the water.

⚠️ Do not leave the drone floating inverted for more than a few minutes. Flip the drone using the Power-Flip command or recover the drone as soon as possible to avoid water saturating the waterproof barometric membrane.

Boat Takeoff and Landing

When taking off or landing from the boat/kayak, **PAY EXTRA ATTENTION** to the operation, as it can be challenging and dangerous to operate the aircraft.

- There should be enough space for the drone to take off or land on the boat.
- If there is not enough space on the boat, taking off and landing on the water can be a safer alternative, as there is sufficient space for the drone to operate.
- Always be aware of the direction of the wind relative to the boat when taking off and landing. When taking off or landing in windy conditions, stand in the upwind position relative to the aircraft to prevent it from drifting toward you.

- For your safety, launching or landing the SplashDrone 4+ from your hands is not recommended.
- After initiating return-to-home on the boat, always regain control and land manually when the aircraft approaches you.

Circle Mode

In circle mode, the drone will proceed to a circular flight around the point of interest, with a default radius of 15 m. The orbit radius can be set through the App.

- The default loop height is the current altitude of the aircraft. The loop height can be set from 10 m to 500 m. Adjusting the throttle joystick cannot increase or decrease the loop height.
- The default radius is 20 m. The minimum radius is 10 m. The max radius can be set to 120 m. The radius cannot be shortened or increased by adjusting the right joystick
- Direction: circling left or right
- Number of loops: According to requirements.
- Latitude and longitude settings: To confirm, you can manually enter latitude and longitude coordinates.
- The default loop speed is 2 m/second, and can be set to 1 to 10 m/second

Cruise Mode

In Cruise mode, the drone will maintain the direction and speed of your input after you release the remote controller.

- Tap the cruise function on the SDFly3 app. The cruising speed can be as high as 10 m/s.
- After activating the function, controlling the pitch lever can accelerate or decelerate in a certain direction, accelerate up to a maximum of 10 m per second, decelerate to 0, then accelerate in the opposite direction. Releasing the lever maintains the current speed. The throttle lever controls the aircraft's ascent or descent, and releasing the lever maintains the current altitude. The yaw lever controls the aircraft's steering. •
- Using the RTH/emergency button exits the constant speed cruise function. Then, the aircraft hovers.

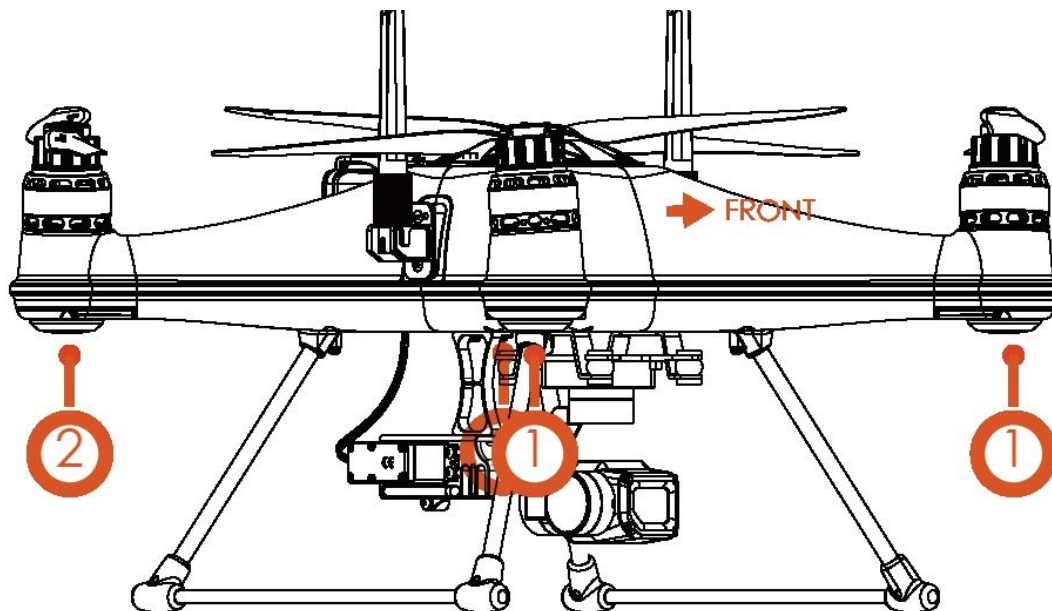
Aircraft

Aircraft Status Indicator

There are two types of aircraft status indicators:

1. Front status indicators (Red).
2. Rear status indicators (Green).

- 💡 The red status indicators are used to identify the head of the drone.
- 💡 All aircraft status indicators can be turned on or off in the App settings.
- 💡 All the status indicator messages will be displayed on the remote controller screen.



1. Front	2. Rear		
		Solid Red	Front of aircraft
		Red/Green Flash Alternately	Perform self-diagnostic test
		Solid Red/Green Flash Quickly	Remote controller disconnected
		Red/Green Flash Quickly	Critical error (e.g. overload)
		Flash Red Quickly	Low battery warning (level 2)
		Flash Red Slowly	Low battery warning (level 1)
		Solid Red/Flash Green Slowly	No GPS signal
		Solid Green	Ready to fly

Intelligent Battery

Each slide-in SplashDrone 4+ battery has its battery management system, teamed with high-performance lithium cells to provide up to 28 minutes of flight time.

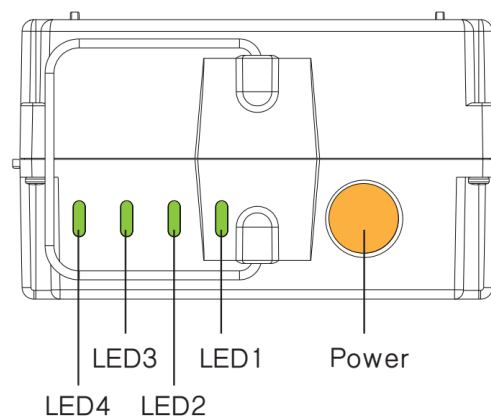
The SplashDrone 4+ intelligent battery provides:

- Integrated balance charging to ensure battery health, safety, and long life by monitoring battery health, state-of-charge, and temperature.
- Fast slide-in battery replacement. Integrated connectors allow for wire-free installation and replacement.
- Battery charging and usage data logging to allow for better battery management and event recording.
- Battery self-discharge storage function, ensuring battery safety during storage.

⚠ To preserve battery health and ensure optimal activity during a storage period of three months, please fully charge and discharge the battery once before its subsequent storage.

Powering On/Off the Battery

Press the power button once (the battery will beep once), then long-press the power button for three seconds. The battery will beep twice to indicate that it is turned on. The same applies to powering off the battery.



Battery Level

Press the power button once to check the battery level.

The battery level LEDs display the power level of the battery during discharge. The statuses of the LEDs are defined below:

LED1	LED2	LED3	LED4	Battery Level
				88~100%
				76~87%
				63~75%
				51~62%
				38~50%
				25~45%
				13~25%
				0~12%

 Solid
  Flashing

Battery Warning Signs

LED1	LED2	LED3	LED4	Alarm Type
				Battery undervoltage alarm
				Battery overcurrent alarm
				Battery high-temperature alarm
				Battery low-temperature alarm

 blinks

Waterproof Barometric Membrane

The waterproof barometric membrane is a featured technology of SwellPro. It allows air to pass through the internal chamber of the aircraft to ensure the barometer's proper functioning, while keeping water out to maintain the SplashDrone 4+'s all-waterproof design. The waterproof barometric membrane is delicate yet essential to proper flying and waterproofing. Therefore, you should pay special attention to properly using it during your operation.

- ⚠ Always check the barometric membrane to ensure no damage is observed before flying.
- Rinse the barometric membrane thoroughly with freshwater every time after flying.
- If you constantly fly your drone in saltwater (sea), it is recommended that you change the barometric membrane once every two months, since salt particles can clog the tiny holes on the membrane.
- If the aircraft is not flying stably during hovering or is not flying normally during ascent or descent, the barometric membrane might be damaged. Please

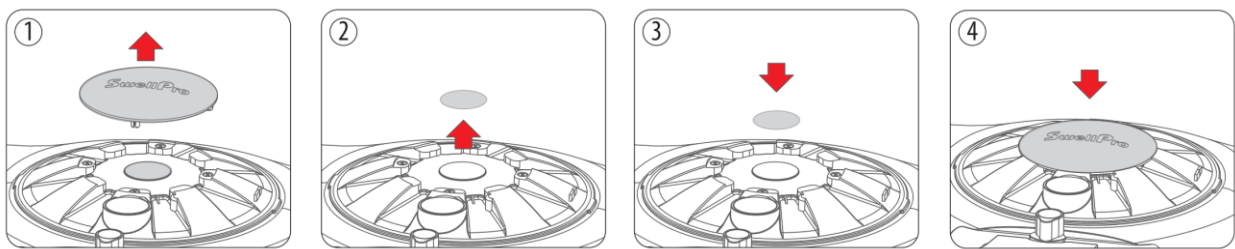
replace the barometric membrane.



- **If the barometric membrane is damaged or shows signs of wear and tear, replacement of the waterproof barometric membrane is required.**

To replace the barometric membrane:

- Take out the top cover.
- Peel off the old waterproof barometric membrane. Clean the surface barometric vent and ensure no residue on the surface.
- Remove the 3M paper from the waterproof barometric membrane and press it firmly on the barometric vent to ensure a tight seal.
- Put the top cover back.



Gimbal camera

Gimbal Operation Modes

Two gimbal operation modes are available. Switch between the operation modes in Settings Control in SDFly3.

Follow Mode: The angle of the gimbal remains stable relative to the horizontal plane. Users can adjust the gimbal tilt. This mode is suitable for shooting stills.

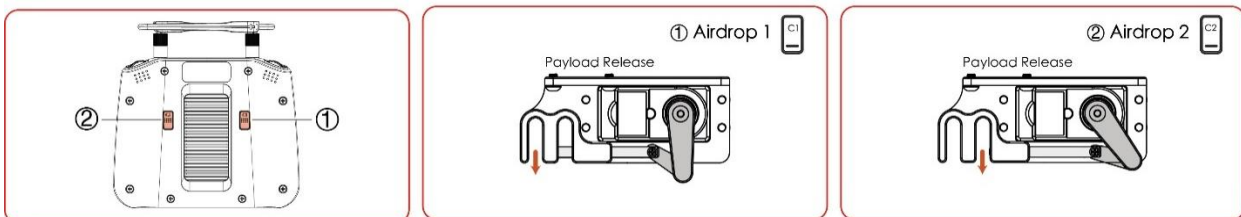
FPV Mode: When the aircraft is flying forward, the gimbal synchronizes with the movement of the aircraft to provide a first-person flying experience.



- DO NOT tap or knock the gimbal after the aircraft is powered on. Launch the aircraft from open and flat ground to protect the gimbal during takeoff.
- The gimbal will be level when the aircraft is powered on, if the gimbal rotates, recenter the gimbal using the remote controller or SDFly3 as follows:
 - A. Click "Pan/Tilt Center/Down" in the System Settings > Control Settings of the SDFly3 camera interface.
 - B. Press the Customizable C2 Button on the remote controller (the default function recenters the gimbal and points the gimbal downward, this can be customized).
- Precision elements in the gimbal may be damaged by a collision or impact, which may cause the gimbal to function abnormally.
- Avoid getting dust or sand on the gimbal, especially in the gimbal motors.

- DO NOT apply external force to the gimbal after the gimbal is powered on.
- DO NOT add any extra payload other than an official accessory to the gimbal, as this may cause the gimbal to function abnormally or lead to permanent motor damage.
- **Remove the gimbal protector before powering on the aircraft.** Attach the gimbal retractor when the aircraft is not in use.
- 💡 • **Ensure the temperature and humidity (- 20 °C to 60 °C) are within suitable ranges for the camera during use and storage.**
- The cameras may not focus correctly in the following situations:
 - A. Shooting dark objects far away.
 - B. Shooting objects with repeating identical patterns and textures or without clear patterns and textures.
 - C. Shooting shiny or reflective objects (such as street lighting and glass).
 - D. Shooting flashing objects.
 - E. Shooting fast-moving objects.
 - F. When the aircraft/gimbal is moving fast.
 - G. Shooting objects with varying distances in the focus range.

Payload release



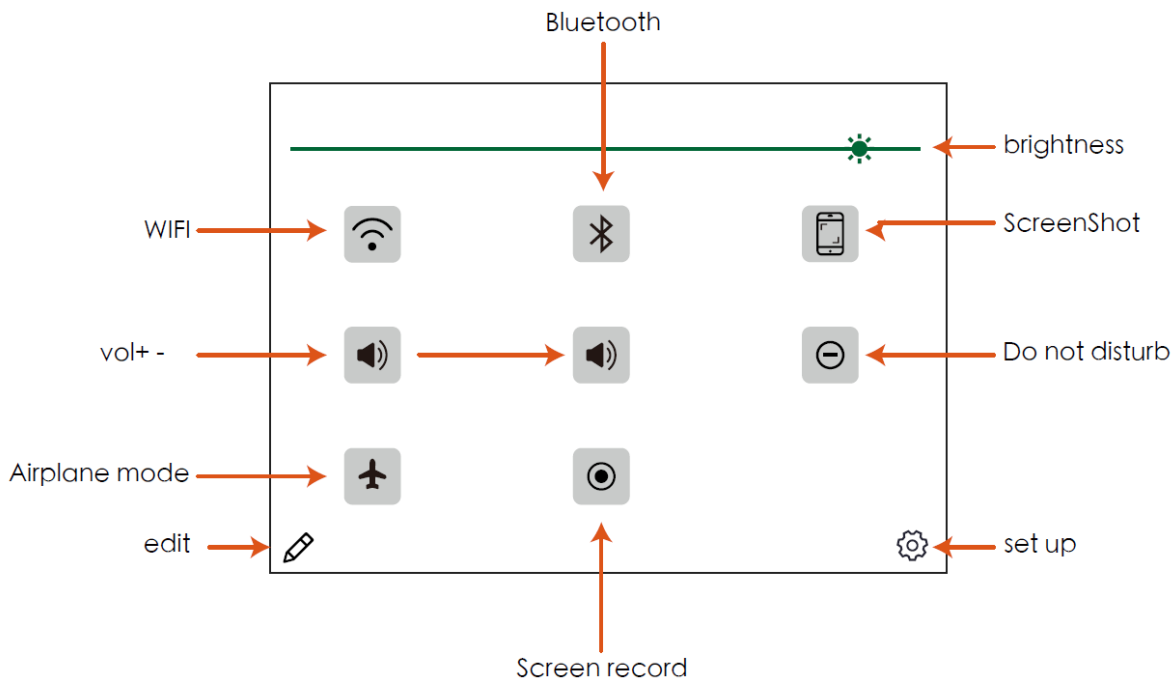
Remote Controller

The Splashdrone 4+ remote controller utilizes digital video transmission, operating on the 5.8 GHz communication frequency band, and supports the real-time transmission of 720p at 30fps high-definition images. With comprehensive functional buttons, it can complete the operation and settings of the aircraft and camera within a maximum communication range of 5km (FCC compliant version, in an unobstructed and interference-free environment). It features a built-in 5.5-inch 1920×1080p high-brightness touch screen, with a maximum brightness of up to 700cd/m². Powered by the Android 10 system, it features a tri-mode satellite positioning module that supports GPS, Galileo, and BeiDou. It supports connecting to the internet via Wi-Fi.

The remote controller has a built-in speaker and supports extended display via an HDMI interface. It supports microSD card expansion for storage capacity, allowing you to save required files and captured images to the microSD card for easy transfer to computers.

and other devices. The remote controller battery has a capacity of 3000mAh and offers a maximum operating time of approximately 2 hours.

Operation

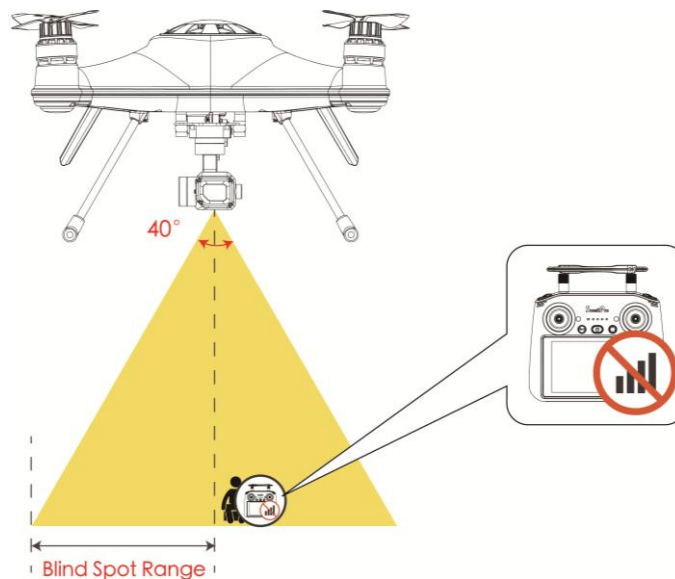


1. **WIFI**: Tap to turn Wi-Fi on or off. Hold to enter settings and connect to or add a Wi-Fi network.
2. **Bluetooth**: Tap to turn Bluetooth on or off. Hold to enter settings and connect with nearby Bluetooth devices.
3. **VOL+-**: Adjusting Volume
4. **Airplane mode**: Tap to enable Airplane mode. Wi-Fi, Bluetooth, and mobile data will be disabled.
5. **Brightness**: When the icon is highlighted, the screen is in auto brightness mode. Tap or slide the bar to switch to manual brightness mode.
6. **Screenshot**: Tap to screenshot the screen.
7. **Screen record**: Tap to start recording the screen. The screen displays the recording time while recording. Tap Stop to stop recording.
8. **DO NOT DISTURB**: To enable Do Not Disturb mode. In this mode, system prompts will be disabled.
9. **Set up**: Tap to access system settings.
10. **Edit**: Tap to move icon.

Remote Control Antenna

RC Antenna Blind Spot

Due to the nature of the antenna radiation pattern, there is a blind spot about **40°** under the aircraft. When positioned under the blind spot area, the remote controller will experience signal loss. If you encounter a signal loss issue near the aircraft, you might be in the blind spot area.



⚠ Please avoid being in the blind spot zone to prevent the signal loss issue.

- During take-off, try to fly the aircraft away from you instead of quickly ascending the aircraft into the overhead area near you.
- The same goes for Return-to-Home/Landing. Land the aircraft safely before you to avoid being in the blind spot area.

💡 If you want to estimate the safe distance, use this equation $\tan(20^\circ) \times \text{Height}$ to calculate. (Height is the height of the aircraft, which can be obtained from the remote controller or the App)

Here is the estimated safe distance from the aircraft to prevent signal loss due to being in the blind spot area.

Aircraft Height	10 m	30 m	50 m	80 m	100 m	120 m
Safe Distance	4 m	11 m	18 m	30 m	37 m	44 m

Optimal Signal Transmission



Position the antenna parallel to the aircraft for **optimal signal transmission**.



DO NOT point the tip of the antenna to the aircraft. Otherwise, it would result in **signal lost**.

Pairing The Remote Controller

About Pairing

The remote controller and the aircraft are paired at the factory before shipping. There is **NO NEED** to pair them for your first use. After turning on, the aircraft and the remote controller will pair in **1 minute**. It might take extra time to pair, depending on the signal interference of the environment.

⚠ ONLY pair the remote controller under the following conditions: After turning on the aircraft and the remote controller for more than 5 minutes, the remote controller signal status bar still shows the Unpair sign.

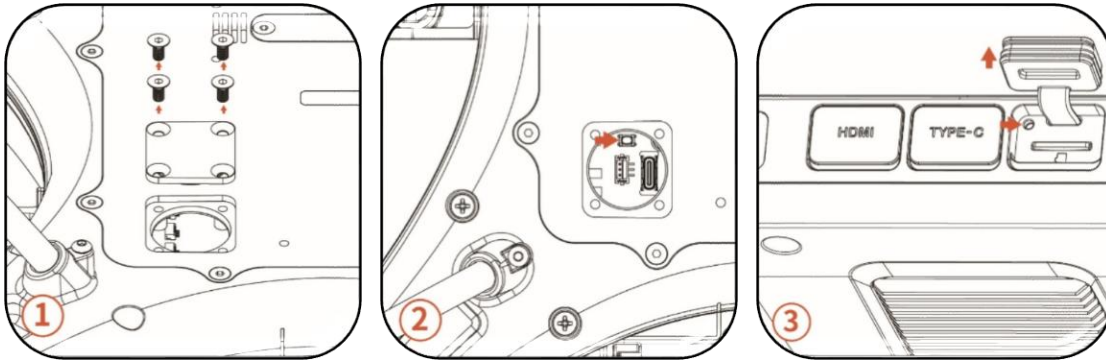
Please strictly follow the steps to pair.

1. Keep the aircraft powered on, remove the waterproof cover at the bottom of the aircraft (Figure 1), and press the pairing button once (Figure 1). The right side of the indicator light at the bottom of the aircraft will start flashing.
2. Keep the remote control powered on, open the waterproof plug at the bottom of the remote control, and press the pairing button once with a sharp object (Figure 3).
3. Wait patiently for the pairing to complete. Once pairing is complete, the left side of the indicator light at the bottom of the aircraft will flash, while the right side remains constantly on.

💡 To ensure the pairing process is successful:

- Please ensure you can see the light indicator at the bottom of the aircraft. If you can't see the light indicator, please take off the bottom plate so that you can see it.

- Please use a timer to count the time needed to press the pair button.

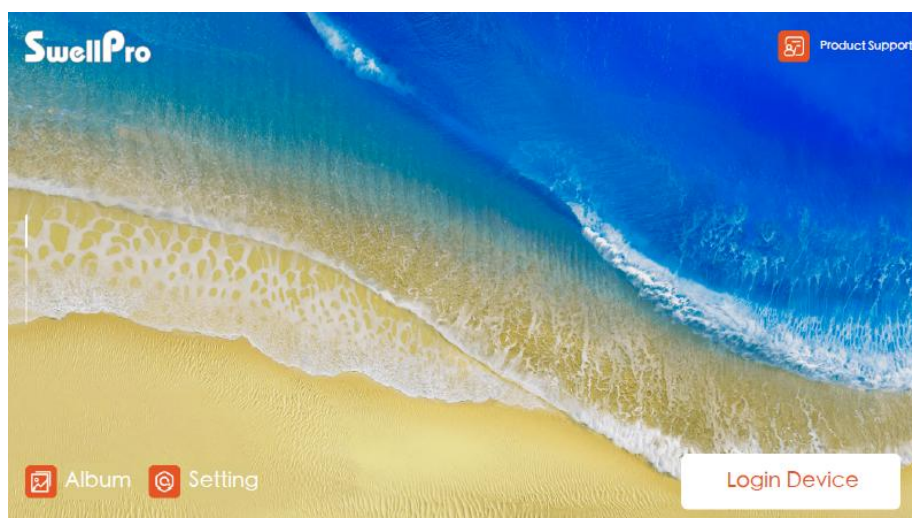


⚠ The pair button is delicate. Press the pair button gently to prevent unexpected damage to the button.

SDFly3 App

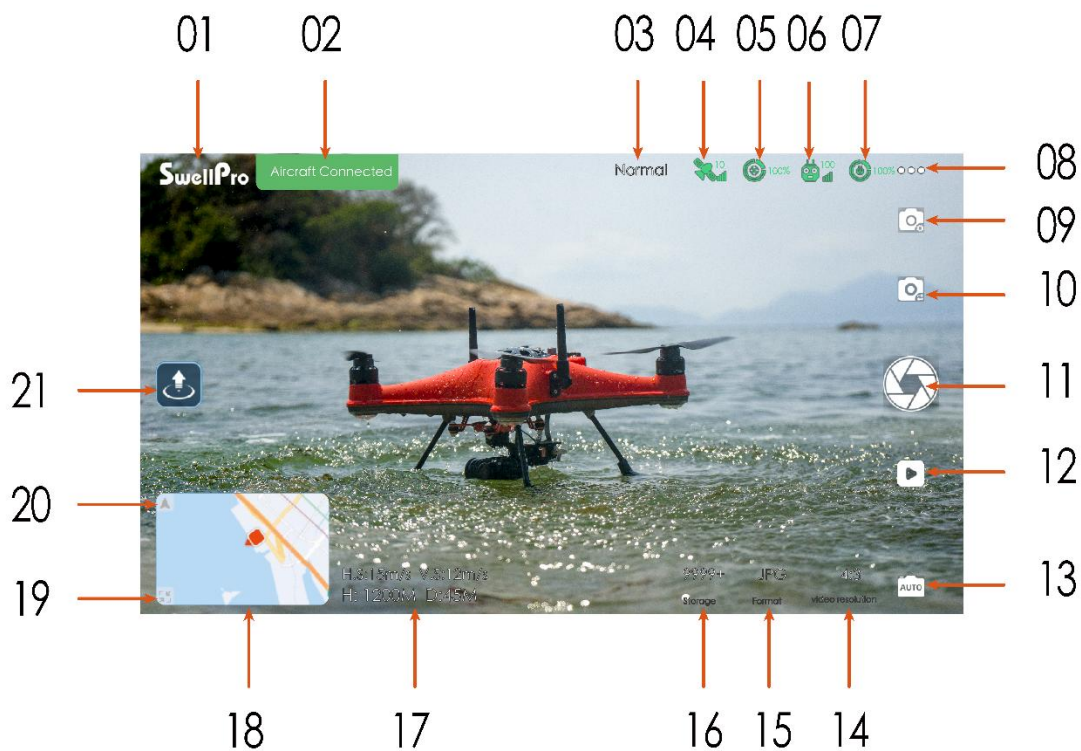
SDFly3 is a brand-new flight App designed by SwellPro. It marks the company's new era. SDFly allows SwellPro pilots to view live HD video, adjust aircraft and camera settings, proceed with mission planning (including waypoints and mapping), and easily browse, download, and share aerial footage. This app currently only supports the SplashDrone 4+, which was built into the SplashDrone 4+ remote controller.

Home Screen



- 01 **Product support**
View product user manuals, tutorial videos.
- 02 **Album**
Browse the photos/videos taken from the camera.
- 03 **Setting**
APP basic settings.
- 04 **Login device**
Tap to enter the main interface.
 - Orange - connected to aircraft.
 - Gray - disconnected from aircraft.

Main Interface



01 Home Screen



Return to the main interface.

02 Aircraft Status

Displays the status of the aircraft.

03 Flight Mode

Display current flight mode. Tap to switch flight mode.

04 GPS Signal Level.



GPS signal quality

05 Aircraft Battery Level



Real-time display of the aircraft battery voltage.

06 Remote Controller Signal Level



The signal quality between the remote controller and the aircraft.

07 Remote Controller Battery Level

Real-time display of the battery voltage..

08 Flight Settings

● ● ● Set the drone flight settings and configure flight parameters.

09 **Camera Settings**

 Set camera parameters and settings

10 **Video**

 Tap to record video and set the video.

11 **Shutter/Record Button**

 Tap to take a photo/recording. Long press to slide and adjust the camera zoom level.

12 **Playback**

 Tap to enter playback and preview photos and videos as soon as they are captured.

13 **Camera Modes Switch**

 Tap to switch between Auto and Pro mode. Different parameters can be set in different modes.

14 **Photo size**

15 **Photo format**

16 **Storage Information**

Displays the remaining number of photos or videos recording time of the current storage. Tap to view the available capacity of the microSD card or the aircraft's internal storage.

17 **Flight Parameters**

D: Distance between the aircraft and the home point | H: Aircraft height from Home Point | HS: Aircraft horizontal speed | VS: Aircraft vertical speed

18 **Thumbnail map**

Tap to switch to the map interface quickly.

19 **Smart Scale**

Tap the +/-icon to zoom in or out slightly.

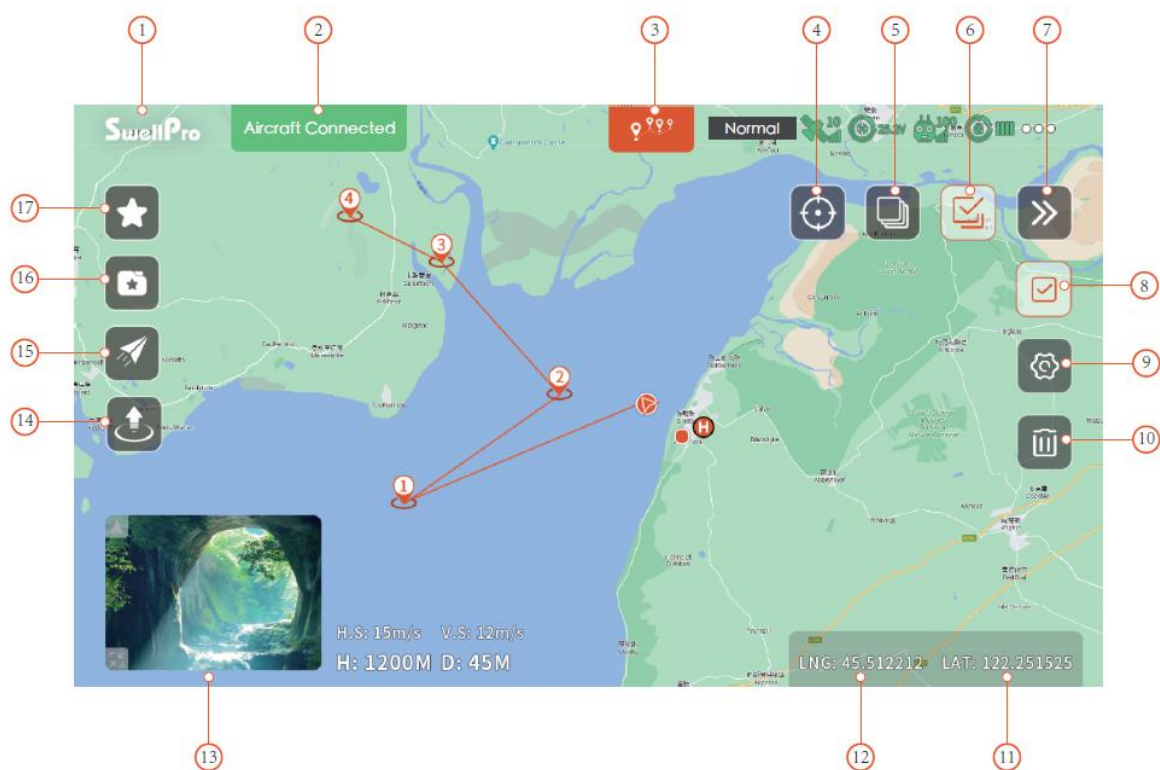
20 **Locked to North**

North is locked on the map, pointing upward in the map view. Tap to switch from Lock to North to the remote controller orientation, where the map rotates when the remote controller changes the orientation.

21 **Tap to take off**

Tap to auto take off and hover at a height of 3 m.

Map Interface



01 **Home Screen**
Return to the main interface.

02 **Aircraft Status**
Displays the status of the aircraft.

03 **Task mode**
Displays the current flight task. Tap to switch flight tasks (Waypoint flight, Mapping flight, Circle mode).

Tap to fly	Tap where you want to fly to on the map, and the SplashDrone 4+ will automatically fly to the location and hover. You can also manually enter longitude and latitude and set altitude and speed.
Waypoint flight	Select several waypoints on the map; the SplashDrone 4+ will fly in a route through the series of waypoints. The height, speed, and hover time can also be set for each waypoint.
Circle mode	Orbit combines orbit mode with Tap to Fly. Pilots can set a point on the map and its radius. The drone will fly to the point and start orbiting. The orbit radius, speed, and laps can be set

	on the App.
04	Location Tap to quickly identify the location of the remote controller, take-off point, and aircraft on the map.
05	Map Layer Pilots can choose from 3 map layers: Standard, Satellite, and Dark.
06	Interest management
07	Hide icons
08	Select/multiple-select
09	Point of interest setting Setting height, speed, and Longitude and Latitude of the points.
10	Delete Tap to delete the set point on the map.
11	Longitude of the aircraft
12	Latitude of the aircraft
13	Thumbnail Screen: Tap to switch between camera and map views.
14	Tap to take off
15	Execute: Tap to execute mission planning (Tap to fly, Waypoints, circling).
16	Route Saved Access and perform the saved points.
17	Save Save the points on the map for later use (recurring tasks).

Setting

Safety

Fight setting

- Return to Home (RTH): tap to set Advanced RTH, Auto RTH Altitude, and to update the Home Point.
- Failsafe measures: RTH, hover, landing.

Assistance

- Data display and shutdown
- Flight indicator LEDS control
- Remote controller custom buttons. C1 (Single release), C2 (Full release)

Control

- Toggle units between metric/imperial
- PTZ settings include PTZ mode (tracking mode, FPV mode), PTZ tilt speed, PTZ return to center/down, and PTZ reset.
- Remote control: including joystick calibration entry, aircraft voice toggle, and voice volume adjustment.

Camera

- Camera Parameter Settings: displays different settings according to the shooting mode.

The thermal mode is only for the G04 camera.

Shooting mode	Settings
Photo mode	Format, Aspect Ratio
Record mode	Format, Aspect Ratio
Thermal mode	Temperature OSD, temperature unit, IR color, palette, crosshair, temperature alarm switch

- General Settings: EIS Electronic Shake Reduction, Image Watermark, Scene Mode, Special Effects Mode, Format Memory Card

Other

- Device Information: Device name, product name, APP version, firmware version, aircraft SN code, black box data viewing and management.
- Remote Identification: Information entry (using aircraft type, registration ID, operator ID, Self ID)

Appendix

Specifications

Aircraft	
Waterproof Rating:	IP67
Weight:	2430g(include battery and propellers)
Axis Diameter:	450 mm
Size:	372.2*372.2*230.6mm
Max Ascend Speed:	3 m/s
Max Descend Speed:	2 m/s
Max Flight Speed:	18 m/s(Sport), 10 m/s(Normal); 3 m/s(Cine)
Max Tilt Angle:	30°
Max Altitude from Takeoff Point:	120m
Max Wind Speed Resistance:	61.9 km/h 17m/s 33.4 knots
Max Flight Time:	28 mins (no wind & no load); This endurance time was measured under controlled test conditions. (Hover at sea level in a windless environment, recording turned off.)
Hovering Precision:	±0.5 m (vertical); ±0.5 m (horizontal)
Max Flight Distance:	7.0 km
Max Payload Capacity:	2000g (Include payload accessories)
Max Take-off Weight	4180g
Motors:	#3510 - 740Kv (special coated)
ESC:	20A
Propellers:	#1242 carbon fiber quick-release propellers
Operating Frequency:	5180 - 5875 MHz; 5745 - 5825 MHz

	The 5180 MHz to 5240 MHz range is only used in some countries and regions where regulations permit.
Transmitter Power (EIRP):	5.1 GHz: <23 dBm (CE) 5.8 GHz: <33 dBm (FCC); <30 dBm (SRRC); <14 dBm (CE)
Working Temperature:	-10°C ~ 60°C
Satellite Positioning Systems:	GPS+Galileo+BeiDou
UART (SDK):	Allows for a TTL serial port to TCP, with the baud rate of 115200

Remote Controller

Waterproof Rating:	IP67
Operating Frequency:	5180 - 5875 MHz; 5745 - 5825 MHz 5180 MHz to 5240 MHz are only used in some countries and regions where regulations permit.
Transmitter Power (EIRP)	5.1 GHz: <23 dBm (CE) 5.8 GHz: <33 dBm (FCC); <30 dBm (SRRC); <14 dBm (CE)
Real-time Video Transmission:	720P@30fps
Battery:	2S 3000mAh
Working Time:	150 mins
Working Voltage:	7.4V
HDMI Port:	1080P high-definition video output
Type-C Port:	Firmware upgrade / Flight Log data read/charging
Screen:	5.5 inch, 1920*1080

System:	Android
Working temperature:	-10°C - 40°C
Remote Charging time:	150 mins
Power Input:	5V/3A Type-C

Intelligent battery(IB4+)

Voltage:	25.2V
Nominal Capacity:	4500mAh
Type:	Intelligent 6S
Watt Hours:	99.9Wh
Size:	154.8*80*49.5mm
Weight:	820g
Working Temperature:	-10°C - 60°C (discharge); 0°C - 45°C (charge)
Storage Temperature:	0°C - 25°C
Charging Time:	120mins
Max Charging Current:	8A

Charger

Input	220V, 50/60Hz
Output:	25.2V 5.9A
Rated Power:	150W

App

Mobile App Name	SDFly3
Live View Quality	720p@30fps

FCC Caution

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.

Any 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.

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

Warranty Information

Please visit the SwellPro support website store.swellpro.com. Search "After-sales Policy" for warranty information.

Battery Care and Maintenance

- Do not allow the batteries to come into contact with any liquid.
- Do not drop the battery into the water.
- Do not leave batteries out in the rain or near any sources of moisture. If the inside of the battery comes into contact with water, chemical decomposition may occur, potentially resulting in the battery catching on fire and even leading to an explosion.
- Never use or charge swollen, leaky, or damaged batteries. If your batteries are abnormal, please contact SwellPro or a SwellPro authorized dealer for further assistance.
- The battery can be used at temperatures -10°C to 40°C. Using the battery in environments above 60°C can lead to a fire or explosion. Using the battery below -10°C can lead to permanent damage.
- Never disassemble or penetrate the batteries with sharp objects; otherwise, the battery may catch fire or even explode.
- The battery's electrolytes are highly corrosive. If any electrolytes contact your skin or eyes, immediately wash the affected area with fresh running water for at least 15 minutes and then see a doctor immediately.

- If the battery falls into water, pick it up immediately and put it in a safe and open area. Maintain a safe distance from the battery until it is scorched. Never use the battery again, and dispose of the battery correctly as described in the Battery Disposal section below.
- Do not heat batteries. A battery fire can be extinguished using sand, or a dry powder fire extinguisher.
- Do not put batteries in a microwave oven or a pressurized container.
- Do not put the loose battery cells onto any conductive surface, such as a metal table.
- Do not put any conductive cables or metal objects together with batteries, where they may short-circuit against each other.
- Do not drop or strike batteries.
- Do not place heavy objects on the batteries or the battery charger.
- Clean battery terminals with a clean, dry cloth. Failure to do so may result in poor electrical contact, reduced battery capacity, or damage to the charger.
- Do not continue to fly the drone after the low battery alarm has been activated; this will result in over-discharging the battery, and potentially could damage the battery cells.

Precautions for low-temperature use

- When the battery is used in a low-temperature environment (-10°C to 5°C), its capacity and flight time will be drastically reduced. It is recommended that it be taken off when the battery is fully charged. Please fully charge and keep the battery warm before use.
- **In a low-temperature environment, it is recommended that the battery be preheated to above 5°C before flying, and it is better to preheat to above 20°C.**
- Before flying in a cold environment, insert the battery into the aircraft to warm up for 1 to 2 minutes, and take off after the battery is fully warmed up.

Battery Charging

- Always use a SwellPro-approved charger to charge the drone and radio controller batteries. SwellPro is not responsible if the battery is charged using a non-SwellPro charger.
- To avoid potential accidents, please do not leave the battery charging unattended.
- Do not charge the battery near flammable materials, or on flammable surfaces, such as carpet or wood.
- Disconnect the charger when not in use.
- Do not clean the charger with denatured alcohol or other flammable solvents.
- Never use a damaged charger.

Battery Storage and Transportation

- **If the device is not used for a long time, please charge the flight battery to 22.8V ~ 23.2V.**
- **To prevent the battery from over-discharging, recharge the battery every 3 months.**

- **Do not leave the intelligent flight and remote controller batteries unattended for an excessive period (longer than 3 months).**
- Given that batteries undergo self-discharge over time, allowing them to remain uncharged for extended periods can result in irreversible damage due to deep discharge. It is advisable to conduct a charge-discharge cycle with the charger every three months to preserve the flight battery's functionality and prevent over discharge.
- As the battery discharges over time, prolonged storage without recharging would result in over-discharge and cause permanent damage to the battery.
- It is recommended that the battery be fully charged before being stored, as the higher the battery level, the longer it can be stored.
- Keep batteries out of the reach of children and pets.
- Do not leave the battery near heat sources, such as a furnace or heater, or exposure to strong direct sunlight, such as in cars.
- The ideal storage temperature is 20°C to 28°C.
- Store the battery in a dry, well-ventilated environment.
- Never drop the battery into water or store it in places where water may leak.
- Do not drop, strike, impale, pierce, or manually short-circuit the battery.
- Protect the battery from metal objects, such as watches, jewelry, and hairpins.

Battery Disposal

- Dispose of the battery in specific recycling boxes after a complete discharge.
- DO NOT place the battery in regular trash containers. Strictly follow your local regulations regarding the disposal and recycling of batteries.

Inspection

Fuselage

- Check the exterior, especially for the gaps and screws.
- Make sure that the arm and landing gear are not damaged.
- Make sure the battery cover is tightly sealed to prevent the battery from falling off or water from getting in during the flight.
- Make sure that all connectors at the bottom of the aircraft are tightly sealed to prevent falling off or water getting in during the flight.
- Keep the fuselage and battery sealing clean and dust-free. Sand or other mid-size particles might affect proper waterproof sealing.
- Make sure that the sealings have no defects or breaks. If required, light lubricant (Vaseline or silicone oil) can be applied to the sealing ring area.

Battery

- Check the exterior of the battery. If the battery is swollen, leaked, or cracked, replace the battery, and dispose of the damaged battery properly in a proper battery disposal manner.
- Make sure the battery does not move or come off after installation.

- Before each flight, fully charge the battery.
- During the flight, make sure the battery level is sufficient to complete the flight.
- Make sure that the battery plug is not bent, cracked, or blocked.
- Make sure the battery connector is clean. If the pins appear to be oxidated (look greenish or rusty), replace the battery.

Motor

- Check the exterior of the motor to see if there are any damages.
- Rotate the motor to check if there is any obvious resistance to turning the motor.
- Start the motor without installing the propeller, and check if there are any abnormal noises.
- Make sure that the motor and the arm screws are securely installed.
- Check the motor gap for any salt or other residuals. Rinse and clean thoroughly with water.
- Check the propeller mount on the motor to see if it is loosened or damaged. Fasten the screws if the propeller mount is loosened. Replace the propeller mount if it is damaged.

Propeller

- Check the exterior of the propeller. If there are breakages, cracks, or creases, replace the propeller.
- Be aware of the A/B mark both on the propellers and the motors and make sure that the propellers are installed correctly accordingly.
- Check the symmetry of the propellers. Start the motor and observe the propeller's rotation. If the propellers on the diagonal sides rotate in a different direction and are accompanied by severe vibrations, replace the propellers.

Maintenance

- Before storing and transporting the aircraft, turn off the power, remove the battery, and clean the drone.
- After flying over the sea, sand, or water, the SplashDrone 4+ and modules must be thoroughly washed with fresh water within 2 hours and dried, especially the motors, gimbals, and camera.
- It is strongly advised to rinse the drone before any salt crystallizes. If crystals have already formed, they should be soaked thoroughly (15-30 minutes) and cleaned.
- Motors are best rinsed by removing the propellers and immersing the motors one at a time into a bucket of warm, fresh water.
- If the SplashDrone 4+ is not used for an extended period, please store the drone and batteries in a dry, ventilated environment at 20 °C to 28 °C, with a humidity range of 40% to 60%.

Disclaimer and Warning

This product is not a toy and should only be operated by persons over 18. Please keep it out of reach of children, and pay particular attention to the possible scenarios of children unexpectedly appearing during flight operations.

Read this document carefully before using the product to fully understand your legal rights, responsibilities, and safety instructions. Failure to do so may cause property damage, accidents, and personal injury. Once this product is used, it is deemed that you have understood, recognized, and accepted all the terms and conditions of this statement.

The user is responsible for all the consequences of their actions and the use of the product. The user agrees to use the product for their sole and legal purpose and agrees with the terms and conditions of this agreement and other relevant policies and guidelines that may be specified by SwellPro.

Under the maximum permitted by law and Approved circumstances, SwellPro accepts no liability for any indirect, punitive, consequential, special, or criminal damages, including the purchase cost or loss of income due to the drone's loss of use.

SwellPro is exempt from the user's liabilities for damage(s) to person/s or property, or injuries incurred directly or indirectly from the use of this product in the following conditions:

- Damage or injuries incurred when the user/s are under the influence of alcohol, drugs, or medication.
- Any malfunction caused by operators' failure to follow the guidance of the manual to assemble, set up, or operate the drone as described and designed.
- Damage or injuries may occur due to failure to study the tutorial videos and the user manual before flying the drone.
- Damage or injuries caused to a person/s or property due to failure in correctly calibrating the drone as outlined in the manual before the flight.
- Damage or injuries incurred due to the use or installation of any unauthorized third-party accessories or counterfeit parts, which were not provided and approved by SwellPro.
- Damage or injuries from flying the drone out of eyesight range, or more than 300m away from the controller.
- Damage or injuries caused by flying the drone in areas of magnetic fields & radio interference.
- Damage or injuries caused by flying in a NO-FLY ZONE regulated by local laws & rules.
- Damage or injuries, including crashes, loss of control, or water ingress, caused by abusing or modifying the original drone structure,
- Damage or injuries caused by using broken & aging components.
- Damage or injuries caused by continuing to fly the drone even if the low battery alarm is activated.
- Damage or injuries caused by failure to wash the components with fresh water after flying over or near the sea & corrosive waters.
- Damage or injuries occurred when the drone was subjected to the following conditions or situations: collision, fire, explosion, floods, tsunamis, ice, snow, avalanche, landslide, earthquake, etc.

- Damage or injuries incurred by intentionally dropping or crashing the SplashDrone into the water from a high altitude, especially water ingress into the drone fuselage and gimbal malfunction.
- Damage or injuries incurred by intentionally dropping or crashing the SplashDrone to the ground or water from a high altitude, especially water leakage into the drone fuselage and gimbal frame due to this collision.
- Damage due to not following the user manual and maintenance manual properly.
- Damage caused by operating the product at a weight greater than the safe takeoff weight, as specified by the instruction manuals.
- For any reason, the user cannot retrieve the drone for further diagnosis and examination.
- The user is unwilling to provide the flight log to SwellPro for diagnosis and examination.
- SwellPro notices any attempt to modify flight log data.
- Other Damage(s) or injuries that are not SwellPro's liability.

Version Information

SwellPro products and user manuals are constantly improving.

Visit support.swellpro.com to check and download the latest user manual.

Version

1.0 SplashDrone 4+ User Manual 1.0 Edition