FisherMan FD1+

User Manual

SwellPro

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Fisherman FD1+

Model: FD1+

v1.0.6 – 2025.02

Thank You

Thank you for purchasing the Fisherman FD1+. We have designed and manufactured the Fisherman FD1+ to the highest quality standards.

Like any marine equipment, long-life and trouble-free operation rely on correct care and maintenance. With proper care and maintenance, you should enjoy your aircraft for many years. After flying in salt or contaminated water, always thoroughly rinse your Fisherman FD1+ in fresh water immediately after use or before salt and sediment can dry inside moving parts.

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

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

Suggestions for use

SwellPro provides users with tutorial videos and the following documents:

1. Quick Start Guide
2. User Manual

Watching tutorial video and reading the Quick Start Guide before using it for the first time is recommended. Refer to the User manual for more information.

Using Manual

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

FAQ

The user manual is the best companion while using the product. For the specific problem using the product, the FAQ can be another great resource for you to look at. Go to the SwellPro website, look for support >product support > the product > FAQ to find the FAQ page.

support.swellpro.com

SwellPro Community

Join our exclusive SwellPro Community to post feedback and share your experience with SwellPro products with other users like you.

https://support.swellpro.com/hc/en-us/community/topics

Social Media

Join our Facebook page to meet other people who share their adventures with SwellPro.
www.facebook.com/SwellPro/

facebook

Warranty Information

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

Tutorial video

Please Scan the QR code to view the FD1+ first flight tutorial video.

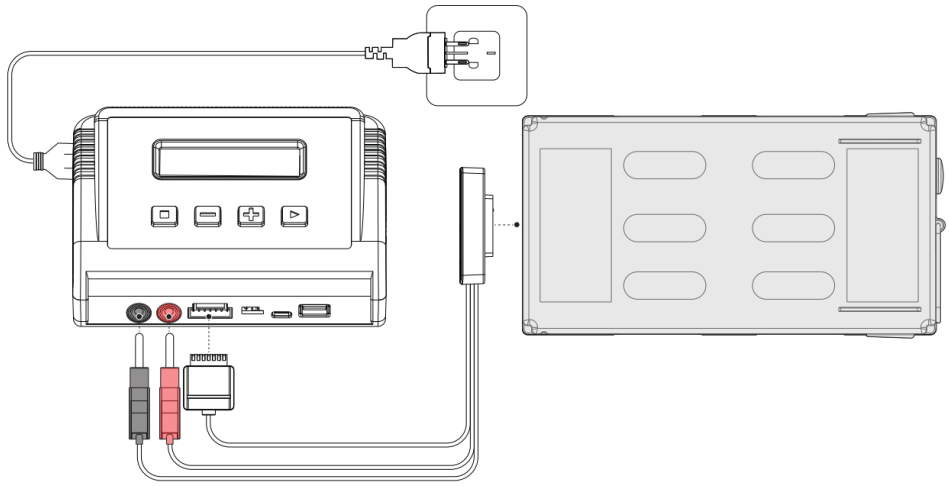
YouTube

Content

Using For The First Time

Charging

Before using the aircraft, it is necessary to charge the aircraft battery. The remote controller used four 1.5V AA dry batteries for power supply, which do not require charging.



⚠ This charger is suitable for FD3 and FD1+! Do Not charge Fisherman Max battery!

The charger and charging cable of Fisherman MAX and Fisherman FD3/FD1+ has same apperance, they cannot mix and use. Because the Fisherman FD3 charger is a high-voltage charger, when use a high-voltage charger to charge the low-voltage Fisherman MAX battery, it can cause the Fisherman MAX battery to overcharge or even explode.

The manufacturer is not responsible for the consequences caused by mixing

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1. Connect the balance charger to a power outlet. Plug the balance cable (white) and the charging cables (black and red) into the balance charger. Then connect the charging pad to the battery slot.
2. Turn on the power switch on the back of the charger.
3. Press ▶ to enter.
4. Press ▶ again to charge the battery.

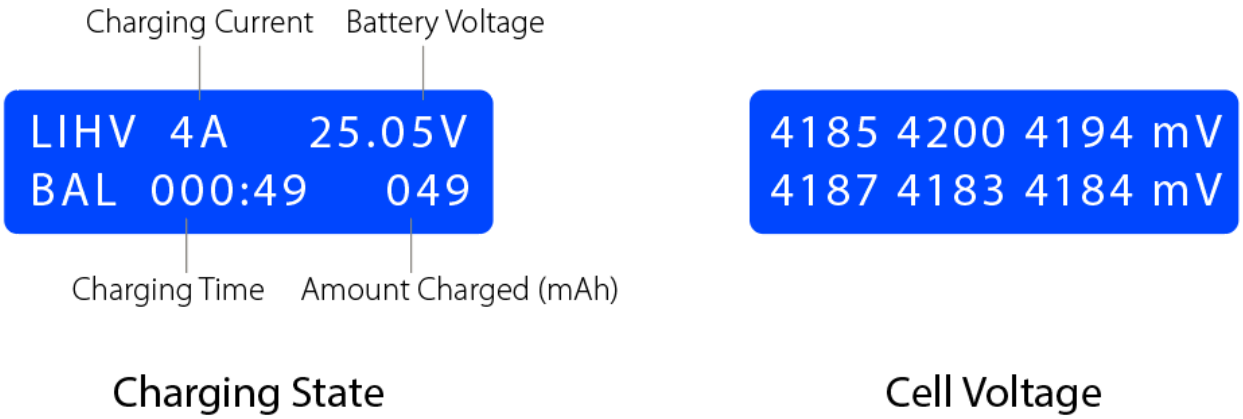
To stop charging: Press ■ .

When charging is completed (battery voltage about 26.4V), the charger would beep and stop charging. Please unplug the battery as soon as possible.

Charging State

💡 While charging, press ▶ to check cell voltage.

The charger would stop charging when the Battery voltage reaches **26.4V (26.2~26.4)**.



Adjust Charging Current

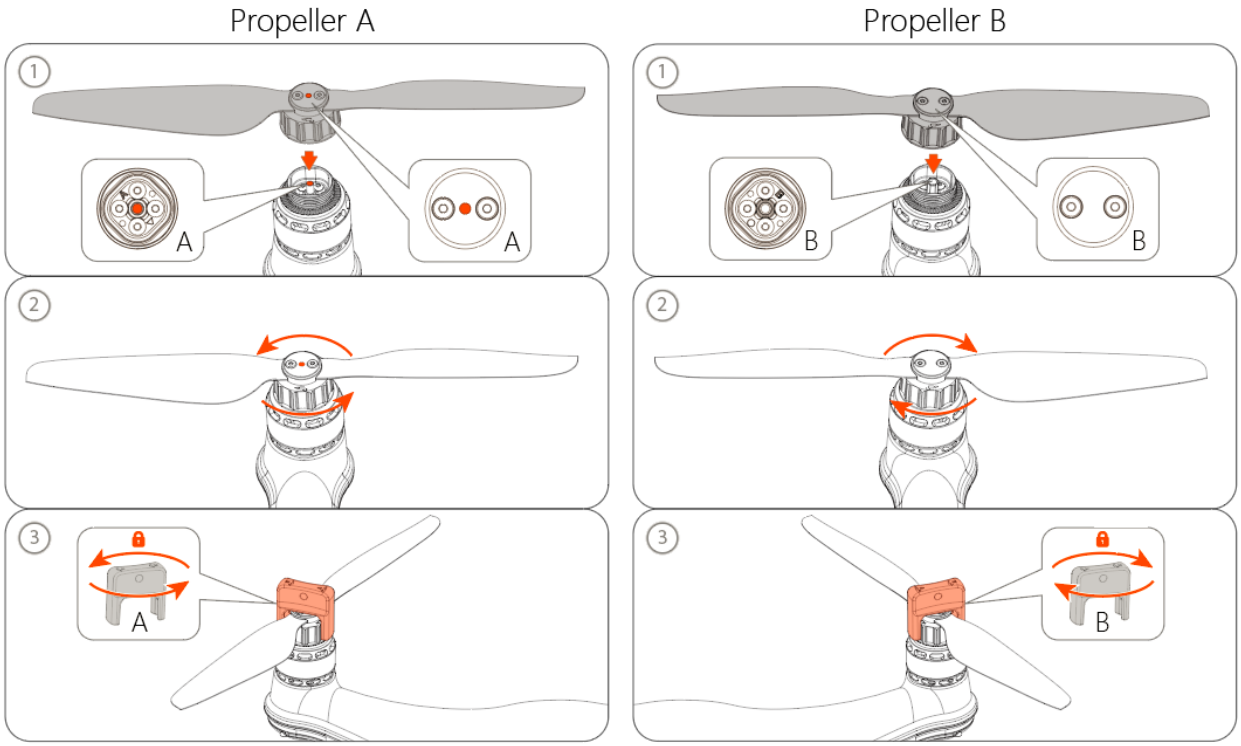
💡 Before entering charging, you can adjust the charging current by pressing − and +. The charging current can be set between 0.5A to 6A.

💡 **Lower the charging current to extend battery health. Increase the charging current to increase the charging speed. It is recommended to charge with the current set by default(6A).**

Installation

Install Propeller

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



1. Place propeller A on motor A/Place propeller B on motor B.
2. Hold the motor firmly with one hand and rotate the propeller nut with the other hand.
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).

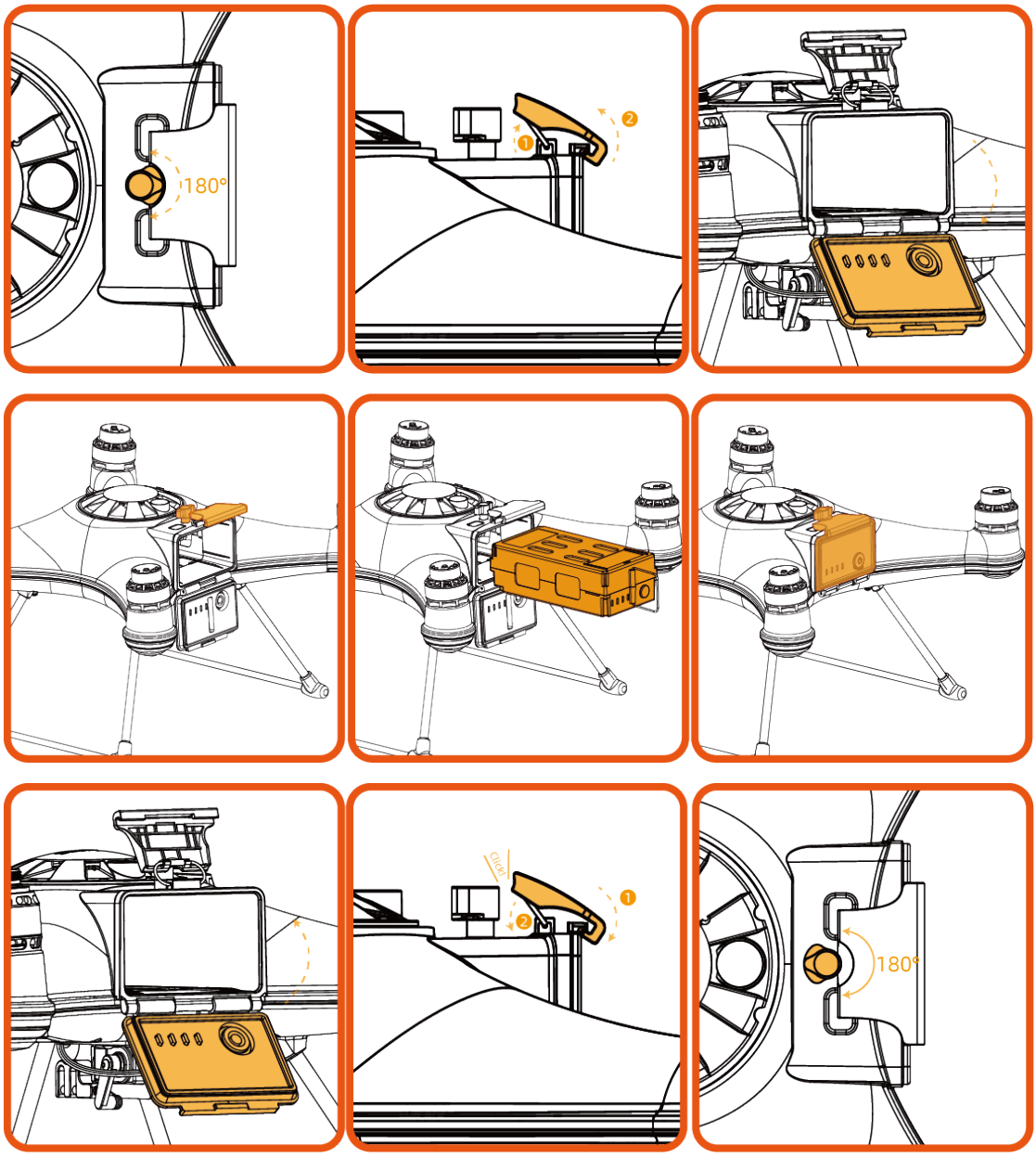
- Always place one hand under the motor to support it when installing or removing propellers. Failure to provide this support could result in bending or breaking the landing gear.
- The propellers are sharp, please be careful to avoid injury.
- **Do not** use broken propellers. Replace the propeller before flight if there is any damage or wear to the propeller.
- Ensure there is no wobble on the propeller after you install it. If you correctly install the propeller, the propeller still wabbles, you might need to tighten the

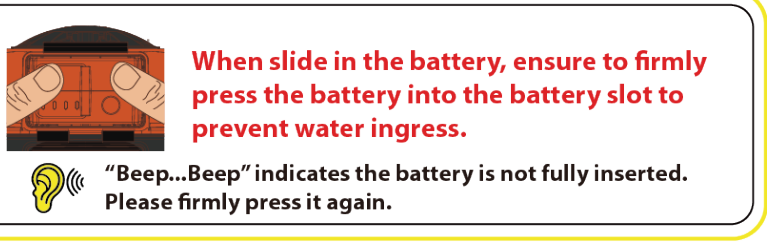
screws on the propeller base.

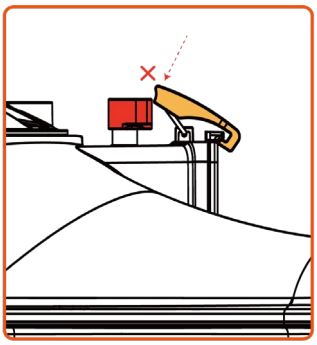
- Before each flight, please check that the propellers are smooth all over and are correctly installed and securely fastened. Spin each propeller by hand to check that the motors are free of sand or salt and spin freely.

Install/Remove Flight Battery

The flight battery is quick and easy to change.



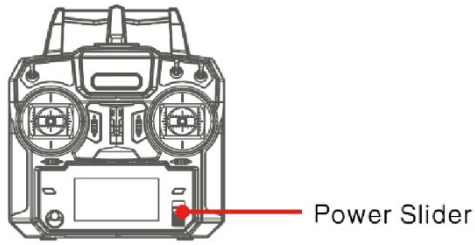




⚠
- When sliding in the battery, please ensure to firmly press the battery into the battery slot to prevent the problem of poor battery contact when the aircraft is flying.
- Always check to ensure that the waterproof seal on the hatch door is clean and lightly lubricated.
- The drone is no longer waterproof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

Power ON/OFF

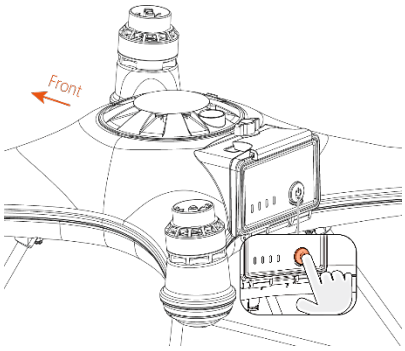
Remote Controller Power On/Off



Power On: Slide up

Power Off: Slide down

⚠ **Power on the remote controller, followed by the aircraft. Power off the aircraft first, then the controller.**

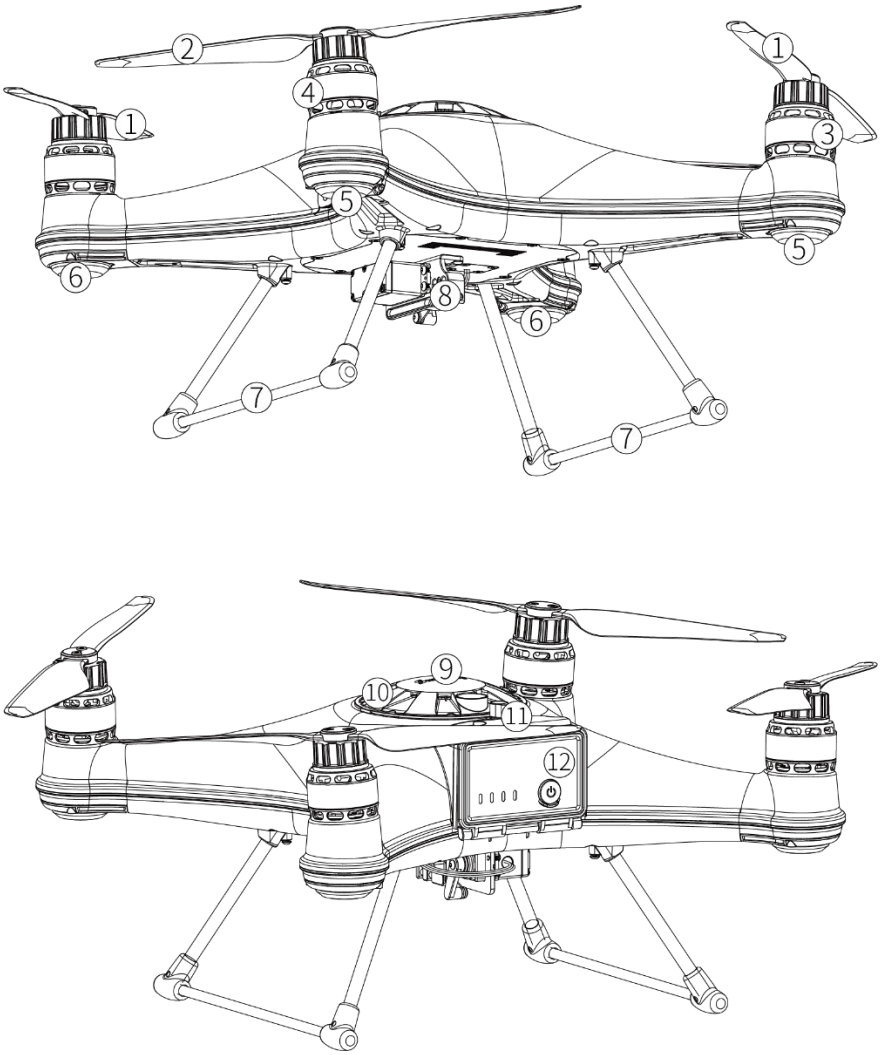


Aircraft Power On/Off

Power on/Power off: Shortly press the power button once then long press the power button for two seconds. Same for powering off the battery.

Overview

Aircraft Diagram



[01] Propeller A

[02] Propeller B

[03] Motor A

[04] Motor B

[05] Front Arm Light

[06] Back Arm Light

[07] Landing Gear

[08] Payload Release Mechanism

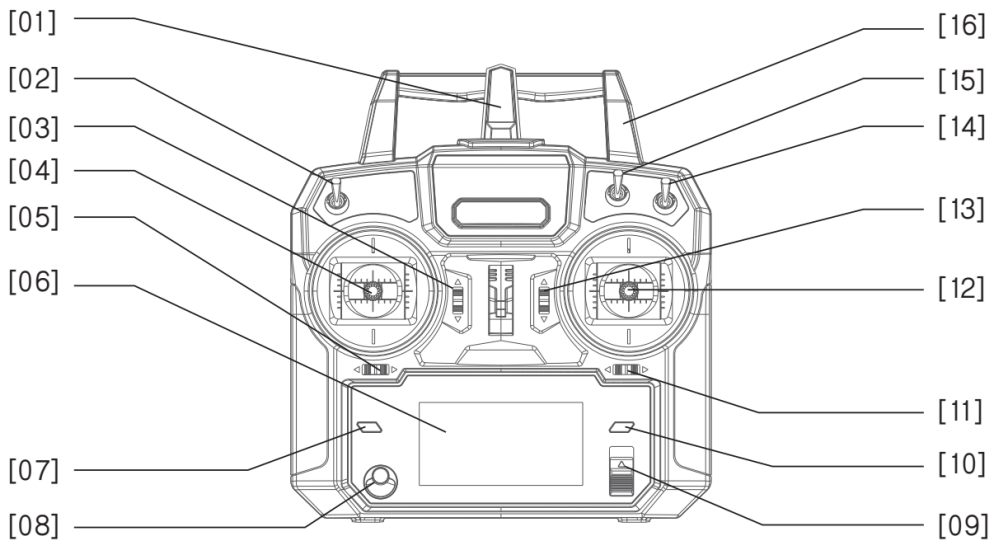
[09] Barometric Membrane cover

[10] GPS Cover

[11] Battery Hatch Lock

[12] Battery Hatch

Remote Controller Diagram



[01] Antenna

[02] Payload Release Toggle

[03] [13] Throttle Rudder Adjustment

[04] Left Joystick (Throttle/Yaw)

[05] Yaw Calibration Adjustment

[06] Display

[07] Display Page Up

[08] Pairing Button

[09] Power Slider

[10] Display Page Down

[11] Roll Calibration Adjustment

[12] Right Joystick (Pitch/Roll)

[13] Pitch Calibration Adjustment

[14] Flight Mode Toggle

[15] Return-to-Home Toggle

[16] Handle

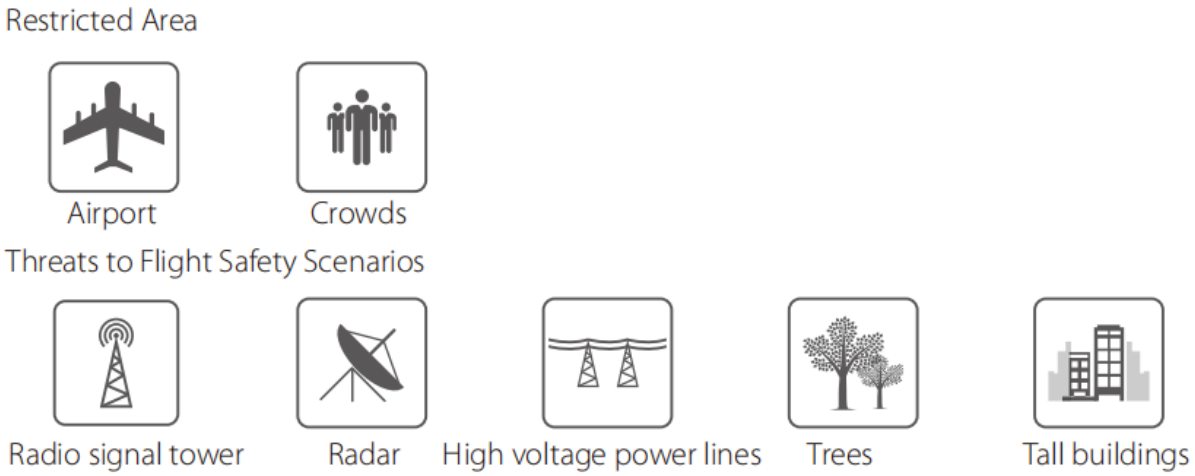
Flight

Flight Safety and Environment

- Please make sure you have a comprehensive understanding of the Fisherman FD1+, and all the necessary measures required to implement a successful return home function in the event of an emergency.
- If this is your first time flying an aircraft, please read this manual thoroughly and watch the tutorial videos on our website support.swellpro.com, or our YouTube channels.
- We recommend taking professional training and guidance. When flying, choose an Appropriate environment according to your skills. Check all calibrations and choose a large open area to practice.
- **It is strongly recommended that all aircraft pilots become familiar with flying in ATTI mode in case of GPS or magnetic interference, which may result in malfunction when flying in GPS mode.**
- **When experiencing GPS and magnetic interference during the flight, switch to ATTI mode to gain full control and safely return the aircraft manually. Failure to do so and result in the aircraft crashing, and the pilot takes full responsibility**.
- Please be well prepared before each flight and avoid any violent or excessive operations.
- Please maintain strict compliance with the local laws, any flying in NO-FLY ZONES is prohibited.
- Any illegal & improper use or operation of this product is prohibited.
- Any invasion & violation of another person's right to privacy is not allowed. Before using this product, it remains the duty of the aircraft pilot to comply with the local laws regarding privacy protection.
- Any invasion or flying over another person/s property is not allowed, please agree with any persons regarding any potential breach of privacy before the proposed flight.
- DO NOT fly the aircraft under the influence of alcohol, drugs, or any other physical or mental impediment.
- Do not fly the aircraft with a malfunctioning remote controller.
- Please fly the aircraft away from crowds.

Flight environment requirement

- Always choose the open space as an ideal flying environment.
- **Flying between or near tall buildings could adversely affect the functioning of the compass and adversely affect or block GPS and transmission signals.**
- During the flight, try to maintain a line of sight with the aircraft, and keep away from 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 remote controller of the aircraft.**
- Environmental factors including air density and wind shear could reduce the performance of the aircraft and battery when flying 4000 meter above sea leavel.
- **Before flying in low temperatures, warm the battery to 25℃ to maximize flight time.**
- Although the Fisherman FD1+ is waterproof, do not fly in fog or strong wind conditions. (For wind speed exceeding 14 m/s)



Flight Restrictions

According to provisions of the International Civil Aviation Organization and many national air traffic regulations, aircraft must be operated in specified airspaces. By default, the Fisherman FD1+ is configured to not exceed an altitude of 120m from the Home Point altitude.

Pre-Flight Checklist

- ✓ Flight batteries, the remote controller, and your mobile devices are fully charged.
- ✓ Check all propellers are in good condition and correctly installed.

- **Ensure there is no wobble on the propeller after you install it. If you correctly install the propeller, the propeller still wabbles, you might need to tighten the screws on the propeller base.**

✓ Manually rotate the 4 motors to ensure they can spin smoothly.

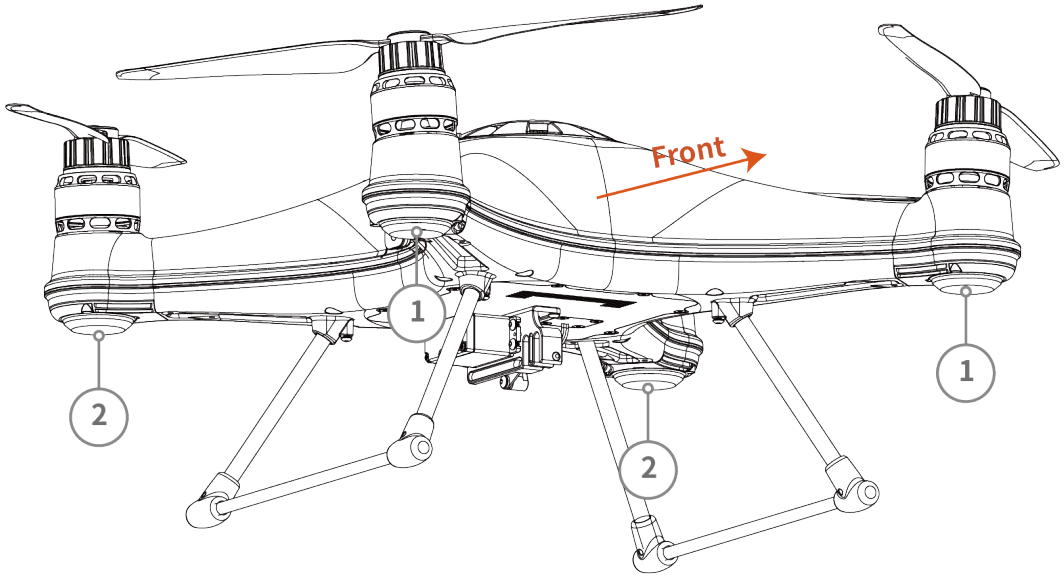
✓ Ensure all the connector sealings are tightly sealed with the rubber rings attached, including the battery sealing, and all the base connector ports. Ensure the sealings are free of dirt, sand, and other debris.

✓ Ensure the waterproof barometric membrane is not damaged.

✓ Ensure payload release modules are tightly mounted to the aircraft.

✓ Check the following flight data: **Flight Battery Level > 24.0V; Remote Controller Battery Level > 4.5V; GPS Signal > 9.**

Aircraft Status Lights

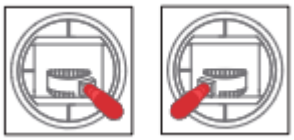


1. Front	2. Rear		
		Solid Red	Front of aircraft
		Red/Green Flash Alternatively	Perform self-diagnostic test
		Solid Red/Green light is not on	Remote controller disconnected
		Red/Green Flash Quickly	Critical error (e.g. overload)
		Flash Red Quickly	Low battery warning (level 2)
		Flash Red Slowly	Low battery warning (level 1)
		Solid Red/Flash Green Slowly	No GPS signal
		Solid Green	Ready to fly

Basic Flight

Starting and Stopping the Motors (Arming)

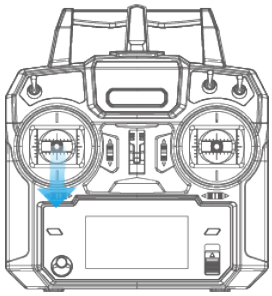
Starting (Arming) Motors



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

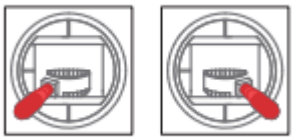
💡 The motor can be unlocked and started only after the drone has completed the GPS star search and positioning successfully.

Stopping Motors



Method 1: After the aircraft has landed, pull the left stick down and hold for 3 seconds. The motor would stop rotating and lock.

💡 This method is recommended.



Method 2: After the aircraft has landed, pull both the left and the right control sticks down and outward.

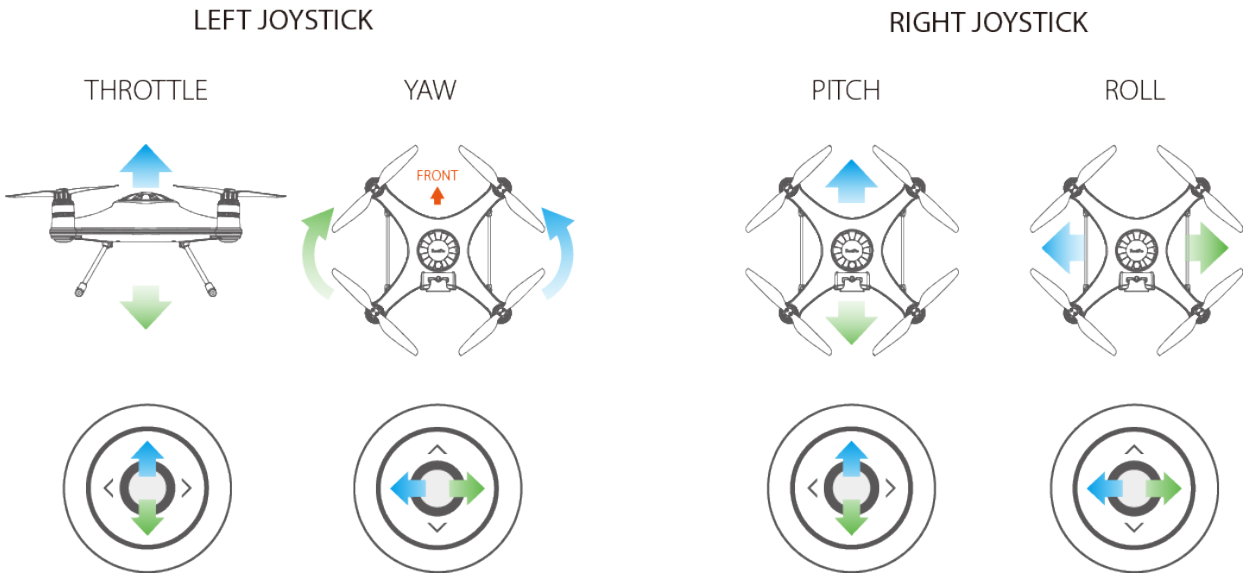
Stopping Motors Mid-flight

Stopping motors mid-flight will cause the aircraft to crash. Stopping aircraft motors while flying should only be carried out in an emergency when stopping the motors will minimize potential damage. For example, when the aircraft is out of control, there is a risk that the aircraft may hit the surrounding people. To stop motors mid-flight, pull both the left and the right control sticks down and outward (Stopping Motors - Method 2).

Control the Aircraft

The left control stick controls Throttle & Yaw; the right control stick controls Pitch & Roll.

- Throttle controls the ascend or descend of the aircraft.
- Pitch controls the aircraft to fly forward or backward.
- Yaw controls the direction;
- Roll controls the aircraft to fly left or right.



Takeoff and Landing

Takeoff

1. Place the aircraft on a flat, open, and unobstructed surface.

2. Complete all the pre-flight checklist items.

2. Power on the remote controller, followed by the aircraft.

4. Start motors.

5. Gently push the left (throttle) control stick up slowly, allowing the aircraft to take off smoothly. Release the throttle when the aircraft is approximately 1.5 m high. Allow the aircraft to hover for a moment to ensure flight stability.

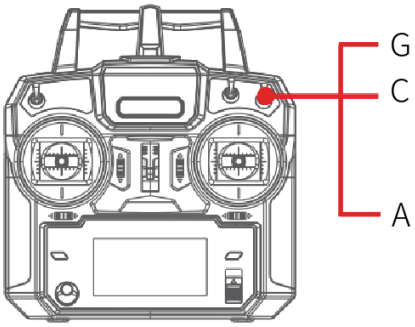
Landing

1. Check the condition for a safe landing.

2. Gently pull the left (throttle) control stick down, allowing the aircraft to descend and land on a flat surface.

3. After landing, keep the left (throttle) control stick down for 3 seconds until the motors stop.

Flight Modes



Switch the flight mode toggle to switch the flight mode of the aircraft.

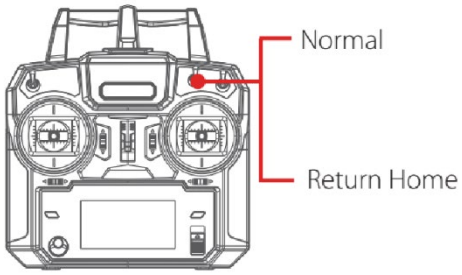
Flight Modes	Description
G-GPS	In GPS mode, the aircraft maintains a fixed position and height while hovering.
A-ATTI	In ATTI mode, the aircraft maintains a fixed height but not a fixed position. Therefore, when there is no input to the remote controller, the aircraft is going to drift with the wind while maintaining its height.
C-Cruise	In Cruise mode, the aircraft is going to maintain the direction and speed of your input after you release the remote controller. To **pause or exit** cruise mode， you can operate the remote controller joysticks to respond 5s in the opposite direction of the current direction, or by switching the flight mode remote control to GPS mode.

⚠
- **When flying the aircraft in ATTI mode with payload attached, avoid controlling or braking the aircraft abruptly. Failure to do so may result in the excess movement of the payload and the attachment wire causing the aircraft to crash. SwellPro is not responsible for the incident if users do not follow the proper instructions.**
- **Please be aware that the aircraft can be fly past the distance limit in ATTI mode.**

Basic Flight Steps

1. Check the pre-flight checklist.
2. Install the propellers.
3. Install the flight battery.
4. Place the aircraft on a flat, open, and unobstructive surface.
5. Power on the remote controller, followed by the aircraft. (Aircraft calibration free)
6. For your safety, stand upwind and at least 3 meters away from the aircraft.
7. Novice pilots should always take off in GPS mode.
8. Start motors.
9. Push the left (throttle) control stick up slowly, allowing the aircraft to take off smoothly. Release the throttle when the aircraft is approximately 1.5 m high. Allow the aircraft to hover for a moment to ensure flight stability. The flight operation can be continued after the aircraft is confirmed to be in good condition.
10. When you need to descend, gently pull down the left (throttle) control stick, allowing the aircraft to descend and land on a flat surface.
11. After landing, keep the left (throttle) control stick down for 3 seconds until the motors stop, or you can also pull both control sticks downward and outward to stop the motors.

Return to Home

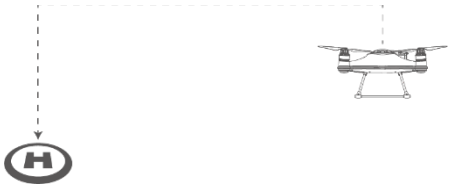


Switch the Return to Home toggle down to “Return Home”. The remote controller would prompt “Return to Home” and shows signal **R**. The aircraft would start to return to the take-off location.

Switch the Return to Home toggle up to “Normal” to exit Return to Home.

Return Home Process

If the aircraft's height is higher than RTH Height (default 20 m), the aircraft will maintain its height and return to its home point.

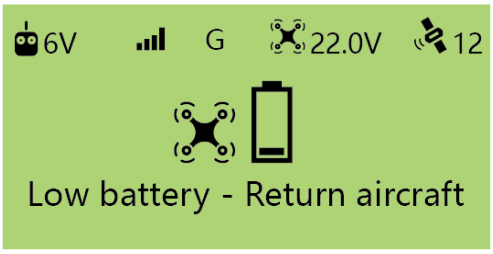


If the aircraft's height is lower than RTH Height (default 20 m), the aircraft will ascend to RTH Height and then return to the home point.

- **RTH Height can NOT BE CHANGED.**

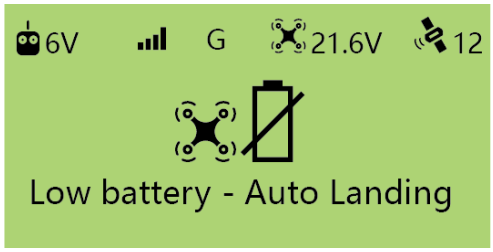
- The aircraft may not be able to return home if the aircraft's GPS signal is too weak (GPS signal shows 0).
- Always keep an eye on the aircraft during the RTH process, and watch out for any obstacles on the flight path.
- **During the return to home process, you can fine-tune the flight to avoid obstacles by controlling the control sticks, when the remote control stick released, the aircraft will continue the return mission.**
- **Do not** operate the remote controller when it is close to the ground, avoiding the damage caused by the blade hitting the ground.
- **However, flying the aircraft below 21.6 V is highly dangerous since the battery will not be able to maintain the flight and would cause damage to the battery and the aircraft.**

Low Battery RTH



Level 1 Low Battery Warning: Low Battery RTH activates when the flight battery voltage reaches **Level 1 Low Battery Voltage (22.2V)**. The remote controller would vibrate, beep, and prompt **"Aircraft Low Battery - Please return to home"**. The aircraft would initiate Low Battery Return to Home. It's ON by default.

Low Battery Landing



Level 2 Low Battery Warning: Low Battery Landing automatically activates when the flight battery voltage reaches **Level 2 Low Battery Voltage (21.6 V)**. The remote controller would vibrate, beep, and prompt **"Aircraft Battery Level Critical - Land in 10 seconds"**. After 10 seconds, the aircraft would start landing to protect the aircraft and battery.

⚠️ **During auto landing, you can regain control of the aircraft by controlling the control sticks to avoid obstacles while landing. However, flying the aircraft below 21.6 V is highly dangerous since the battery will not be able to maintain the flight and would cause damage to the battery and the aircraft.**

Failsafe RTH

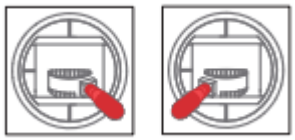
Failsafe RTH automatically activates when there is a **signal loss** between the remote controller and the aircraft. The aircraft would initiate RTH when activated. During the Failsafe RTH process, if the remote controller reconnects to the aircraft, the aircraft will still return home. If you want to stop the RTH process, switch the Return to Home toggle down and up again to exit RTH.

Advanced Flight

PowerFlip

⚠ **If the aircraft turn over the water**, ensure to use PowerFlip to turn the aircraft to the upright position as soon as possible to prevent the risk of the barometric membrane getting damaged.

⚠ **If the aircraft turn over on the water,** the PowerFlip feature enables the aircraft to flip back to its upright position.



When the aircraft floats upside-down on the water, pull both the left and right joysticks simultaneously down and inwards and maintain the control until the aircraft flips over to its upright position.

💡 When operating the PowerFlip, the remote controller will prompt " Initiate Power-Flip ". When the aircraft flips, the remote controller will prompt " Power-Flip Succeed ". At this time, unlock the motor again and you can control the aircraft to take off from the water.

Water Takeoff and Landing

⚠ Before landing on the water, watch out the water area for weeds or other debris to prevent the landing gear, attached accessories, and payload from getting tangled by them, which can cause the aircraft not able to take off.

Water Takeoff: Ascend quickly from the surface to prevent the aircraft from being affected by a passing wave.

Water Landing: Descend vertically to the surface, otherwise, it may flip and turn over. The flight controller will shut down the motors if the aircraft becomes inverted on the water.

Boat Takeoff and Landing

When takeoff or landing on the boat/kayak, **PAY EXTRA ATTENTION** to the operation, as it can be very difficult and dangerous to operate the aircraft in this environment.

⚠
- There should be enough space for the aircraft 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 otherwise be a safer, alternative option, as there is sufficient space for the aircraft to operate.
- Always be aware of the direction of the wind relative to the boat for take-off

or landing. Stand in the upwind position relative to the aircraft to prevent the aircraft from drifting toward you when take-off or landing in windy conditions.

- For your safety, it is not recommended to launch or land the Fisherman FD1+ on your hands.
- After initiating return-to-home on the boat, always regain control and land manually when the aircraft is approaching the boat or there are obstacles.

Aircraft

Flight Battery

Please charge the battery immediately after receiving the product to prevent the battery from being too low during transportation or overdischarge caused by long-term storage.

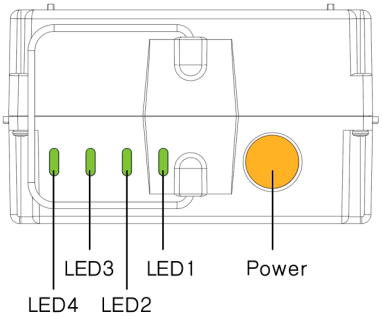
WARNING

- **Keep batteries AWAY FROM WATER AND DUST.**
- **Store batteries in a DRY, COOL place.**
- **DO NOT use swollen, leaking, damaged, batteries.**
- **STOP USING the battery when the battery slots show any signs of burn (blackening) or corrosiveness.**
- **DO NOT charge the battery in any area with a potentially explosive atmosphere, including fueling areas or areas that contain chemicals or particles such as grain, dust, or metal powders.**

Battery Capacity

The battery level LEDs on the battery pack allow you to check the state of charge of the battery quickly and accurately (As in the picture)

Operation method: Short press the power button and the LED light will light up to indicate the battery level (After about 3 seconds, the indicator lights will automatically go off one by one).



LED4	LED3	LED2	LED1	Battery Level
▮	▮	▮	▮	75~100%
▮	▮	▮	▯	50~75%
▮	▮	▯	▯	20~50%
▮	▯	▯	▯	<20%

▮ Solid

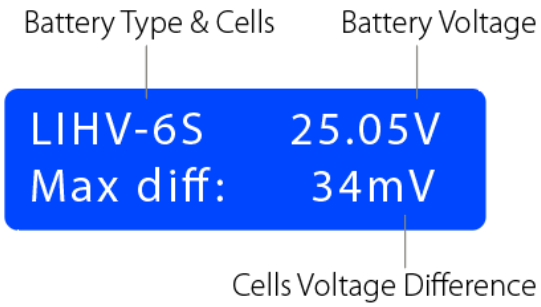
⚠ **When the battery level indicates <20%, please charge the battery as soon as possible.**

Battery Check

Check the battery status by switching to the battery check function.

1. Connect the charger and battery, then turn on the charger.
2. Press ■ to switch to the battery check function.
3. Press ▶ to perform battery check. Press ▶ to view cell voltage.

Exit: Press ■ .



Battery Check

Cell Voltage

Battery Repair

Repair the battery if:

- The charger indicates the battery needs to be repaired.
- Battery voltage is lower than 19.2V.
- Cell voltage is lower than 3200mV.
- The cell voltage difference is higher than 60mV.

1. Connect the charger and battery, and turn on the charger.

2. Press ■ to switch to the repair function" LiHV Repair".

3. Press ▶ to enter the battery repair function.

4. Press ▶ again to repair.

To stop repairing: Press ■ .

When completed, the charger would beep and stop. Please unplug the battery as soon as possible.

Battery Storage

Before putting the battery in storage, you should always set the battery to the stored voltage. Stored voltage allows the battery to keep healthy while not used.

If the flight battery is not being used for a long period, ensure to set the battery to store voltage **(22.8V~23.2V)** using the method described below. **To prevent the battery from over-discharge, set the flight battery to store voltage every 3 months. For other battery maintenance guides, please check the Appendix Battery Care and Maintenance part.**

To set the battery to storage voltage:

1. Connect the charger and battery, and turn on the charger.

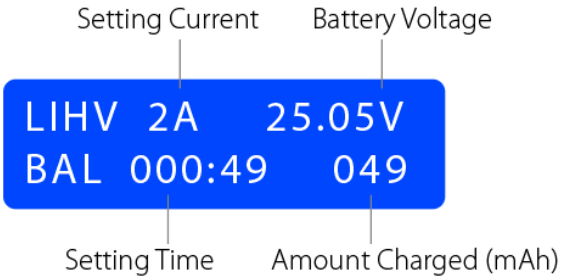
2. Press ■ to switch to the storage function "LiHV Storage".

3. Press ▶ to enter the storage function.

4. Press ▶ again to start.

To stop: Press ■ .

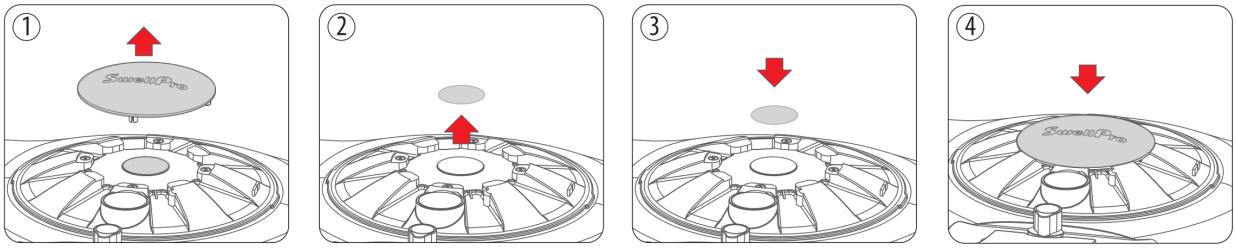
When completed, the charger would beep and stop. Please unplug the battery as soon as possible.



Barometric Membrane

The waterproof barometric membrane is SwellPro's featured technology. It allows air to pass through the internal chamber of the aircraft to ensure the barometer's proper functioning yet keeps the water from getting in to ensure the Fisherman FD1+'s all-waterproof design. The barometric membrane is delicate yet an extremely important part of proper flying and waterproofing. Therefore, you should pay special attention to the proper use of barometric membranes during your operation.

- Always check the barometric membrane to ensure no damage is observed before flying.
- Rinse the barometric membrane thoroughly with fresh water every time after flying near the water environment.
- **If you constantly fly your aircraft in a saltwater environment (sea), it is recommended to change the barometric membrane once every 3 months, since the salt particles can clog the tiny holes on the membrane.**
- If the aircraft is not flying stably during hovering, or the aircraft is not flying normally during ascending or descending, 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:

1. Take out the top cover.
2. Remove the old waterproof and breathable membrane and clean all residues on the surface.
3. Paste the new breathable membrane.

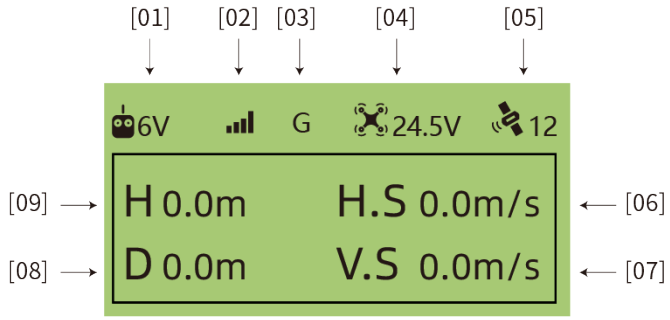
Make sure there is a tight seal around the waterproof barometric membrane when applying.

4. Put the top cover back.

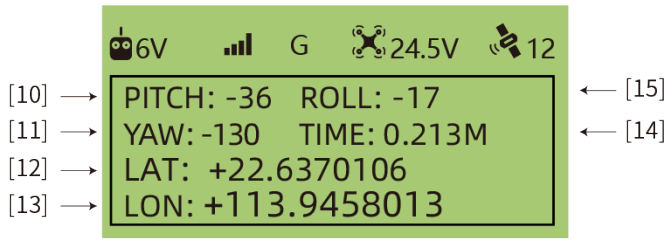
Remote Controller

Remote Controller Screen

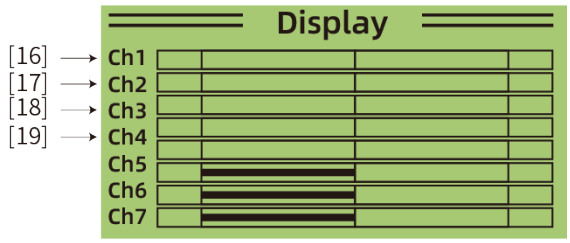
⚠ **The FD1+ remote controller is not fully waterproof. Please do not let the remote controller meet water when using it.**



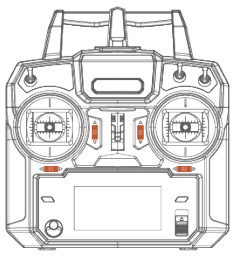
[01] Remote Controller Battery Voltage
[02] Remote Controller Signal
[03] Flight Mode(G: GPS/ C: Cruise/ A: ATTI)
[04] Drone Battery Voltage
[05] Satellite Signal
[06] Horizontal Speed
[07] Vertical Speed
[08] Drone Distance
[09] Drone Height



[10] Pitch Angle
[11] Yaw Angle
[12] Latitude
[13] Longitude
[14] Flight Time
[15] Roll Angle



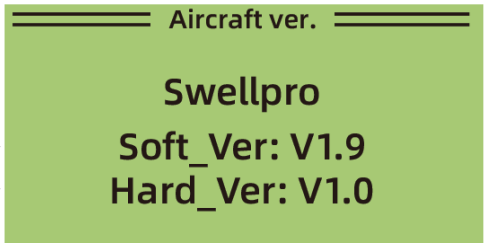
[16] Roll Channel
[17] Pitch Channel
[18] Throttle Channel
[19] Pan Channel



If Ch1-Ch4 shows any volume (indicate by the black bar) when you are not controlling the joystick. You need to calibrate the channel accordingly. Use the calibration adjustment slider by the joystick to calibrate the joystick input.

[20] → [20] Controller FirmwareVersion

[21] → [21] Controller Hardware Version



[22] → [22] Aircraft Firmware Version

[23] → [23] Aircraft Hardware Version

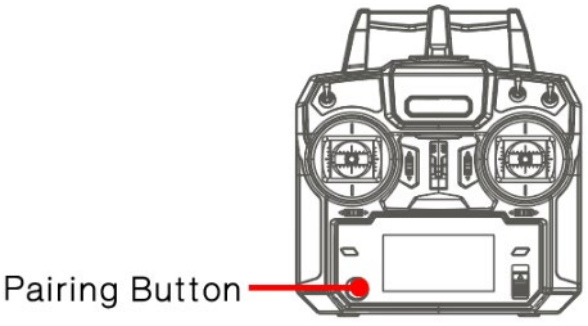
Pairing

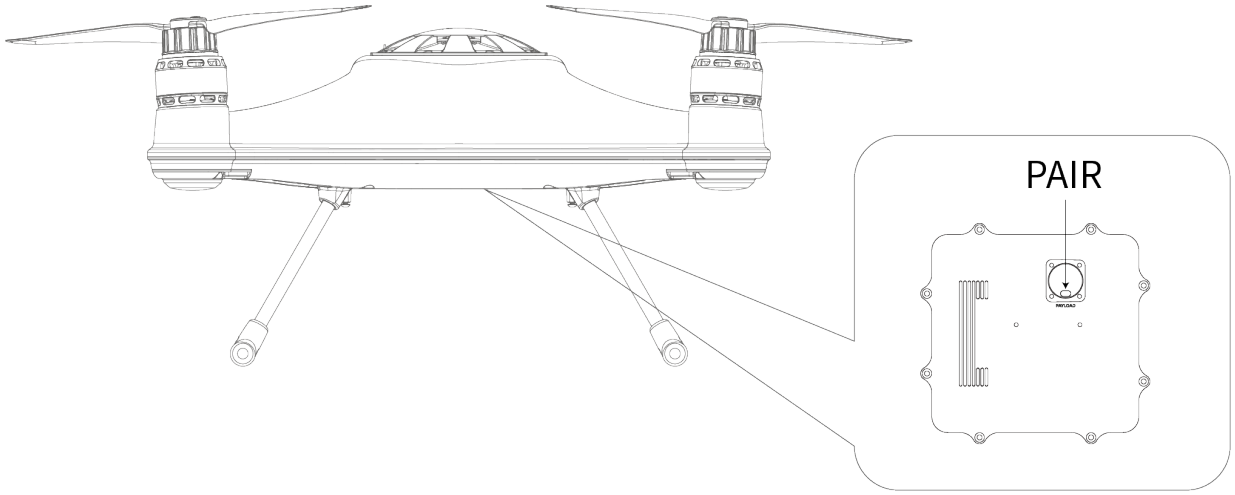
The remote controller and the aircraft are paired at the factory before shipping. There is no need to pair them for your first use. If the aircraft and the remote controller are not able to connect, please try the following steps to pair the aircraft and the remote controller:

1. There is a pairing button next to the USB interface at the bottom of the aircraft. After holding down the pairing button of the aircraft, power on the aircraft at the same time, then the aircraft enters the pairing mode.

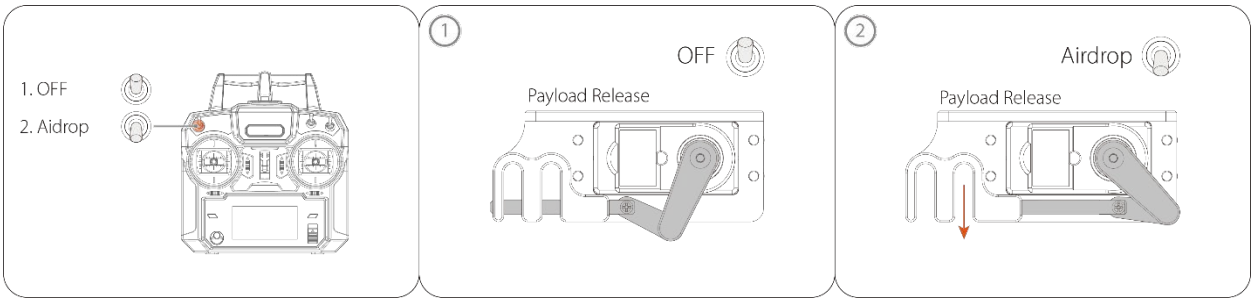
2. Holding down the pairing button of the remote controller, power on the remote controller at the same time, and then the remote controller enters the pairing mode.

3. The remote controller would pair automatically with the aircraft, just wait for seconds.





Payload Release



Appendix

Specification

Aircraft	
Waterproof Rating:	IP67
Weight:	1578g (Without battery); 2291g (With Battery)
Max Take-Off Weight:	4491g
Size (W/O Propeller):	628*628*218mm (With propellers) 372*372*202mm (Without propellers)
Max Ascent Speed:	3m/s
Max Descent Speed:	2m/s
Max Flight Speed:	GPS:10m/s; ATTI:18m/s（Without payload）， 14m/s（With max payload）
Max Tilt Angle:	30°
Max Altitude From Takeoff Point:	120m default
Max Flight Distance:	1600m[1]
Max Image Transmission Distance:	1600m[2]
Max Payload Capacity:	2200g(4.8lb)
Max Wind Speed Resistance:	18m/s
Max Flight Time(Hovering):	27 mins (no wind & no load)
Hovering Precision:	±0.5m
Working Temperature:	-10°C~40°C
Satellite Positioning Systems:	GPS + Galileo + BeiDou

Remote Controller	
Size:	174*89*190mm
Waterproof **Rating**	Non-waterproof
Weight:	378g(Without battery)
Operating Frequency:	2.402-2.478GHM

[1] [2] **Measured in an open environment, without interference. It does not reflect the actual distance. Use as reference during the flight.**

Bandwidth:	500KHz
Modulation Type:	GFSK
Sensitivity:	-92dB
Transmitter Power:	< 20dB
Battery:	6V (1.5V AA*4)
Channel:	6

Flight Battery	
Nominal Capacity:	4200mAh
Nominal Voltage:	23.1V
Max Charging Voltage:	26.4V
Type:	6S LIHV
Size:	153.6*82.4*48.3mm
Weight:	716g
Working Temperature:	0°C - 40°C
Charging Time:	120 mins
Max Charging Current:	5A

Charger	
Input	100~240V
Output:	22.2V-6A
Max Charging Power:	150W
Supported Battery Types and Cells:	6S LIHV
Size:	143*100*60mm
Weight:	454.6g
Working Temperature:	0°C ~60°C
Storage Temperature:	0°C ~60°C

Dual Payload Release	
Waterproof Rating:	IP67
Max Payload Capacity:	2200g
Size:	75*50*37.5 mm
Weight:	100g

Battery Care and Maintenance

- Do not allow the batteries to come into contact with any kind of 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 may even lead 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 in temperatures ranging from -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, this may result in the battery catching fire, or even lead to an explosion.
- Electrolytes in the battery are highly corrosive. If any electrolytes make contact with 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 the water, pick it up immediately and put it in a safe and open area. Maintain a safe distance from the battery until it is completely dry. Never use the battery again and dispose of the battery properly 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, which could reduce the battery capacity, or damage the charger.
- Do not continue to fly the aircraft after the low battery alarm has been activated; this will result in over-discharging the battery, and potentially could damage the battery cells.

Battery Charging

- Always use a SwellPro-approved charger to charge the battery of the aircraft. SwellPro takes no responsibility if the battery is charged using a non-SwellPro charger.
- To avoid any potential accidents happening, please do not leave the battery charging unattended.
- Do not charge the battery near flammable materials, or on flammable surfaces, such as carpets 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.

Precautions for low-temperature use

- When the battery is used in a low-temperature environment (-10°C to 5°C), the battery capacity and flight time will be drastically reduced. It is recommended to take 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 to preheat the battery to above 5°C before flying, and it is better to preheat it to above 25°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 Storage and Transportation

- If the flight battery is not being used for a long period, ensure to set the battery to store voltage (**22.8V~23.2V**). The remote control is charged to **3 bars or above** and saved. And use the "battery storage" function of the charger to perform maintenance on the flight battery every 3 months. At the same time, charge the remote control to **3 bars or more** to maintain battery activity and prevent over-discharge.
- **Please do not leave the flight battery and remote control unattended for a long time (more than 3 months)**. Since the battery will slowly self-discharge, not charging it for a long time will cause the battery to over-discharge and cause permanent damage.
- Keep batteries out of the reach of children and pets.
- Do not leave the battery near heat sources, such as a furnace, heater, or exposure to strong direct sunshine, for example: in cars.
- The ideal storage temperature is 20°C ~ 28°C.

- Keep the battery in a dry and ventilated environment.
- Never drop the battery into the water or store it in places where there is a possibility of water leakage.
- Do not drop, strike, impale, pierce, or manually short-circuit the battery.
- Keep the battery away from metal objects, such as watches, jewelry, and hairpins.

Battery Disposal

- Dispose of the battery in specific recycling boxes only 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 And Store

Daily Maintenance

- After flying the aircraft out to the ocean, please rinse the aircraft with clean fresh water right away, especially for the motor to prevent the formation of salt and other residuals.
- If salt and other residuals are being observed, soak the part in clean freshwater thoroughly (under 20mins) and clear out the residuals.
- If the aircraft is wet, wipe away the water before you open it and take off the battery to avoid water dripping into the battery compartment.

- Keep the aircraft clean, especially the lens. Recommend using a soft cloth and fresh water to clean the aircraft. Do not use any corrosive cleaning solution.
- Keep water, dust, or other particles from entering the aircraft.
- Avoid prolonged exposure to the sun.
- When not in use for a long period, store the aircraft in a cool, dry, and ventilated environment, best at a temperature between 20°C - 28°C, and humidity between 40%-60%.

Store and Transport

- Before putting the aircraft into storage, turn off the power, take off the battery, and clean the aircraft.
- Store all the aircraft parts and accessories together.
- Store the aircraft in a dry, ventilated, cool temperature (20°C - 28°C).
- **If the flight battery is not being used for a long period, ensure to set the battery to store voltage (22.8V~23.2V). To prevent the battery from over-discharge, charge the flight battery to store voltage every 3 months.**
- **If the remote controller is not being used for a long period, ensure to fully charge the remote controller (battery level on the top right of the screen) for storage. To prevent the battery from over-discharge, fully recharge the remote controller every 3 months.**
- **Do not leave both the flight battery and remote controller battery unattended for a long period (longer than 3 months).** As the battery discharges over time, long storage time without recharge would result in battery over-discharge and permanent damage to the battery.

Disclaimer and Warning

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

Be sure to 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 his actions and the use of the product. The user agrees to use the product for his sole & legal purpose and agrees with the terms

& conditions of this agreement, and other relevant policies & 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 loss of use of the aircraft.

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 and set up or operate the aircraft as described and designed.
- Damage or injuries may occur due to failure to study the tutorial videos and the user manual before flying the aircraft.
- Damage or injuries incurred as a result of the use or installation of any unauthorized third-party accessories or counterfeit parts - which were not provided and Approved by SwellPro.
- Damage or injuries as a result of flying the aircraft out of eyesight range, or more than 300m away from the controller.
- Damage or injuries caused by flying the aircraft in areas of magnetic fields & radio interference.
- Damage or injuries caused by flying in a NO-FLY ZONE that is regulated by local laws & rules.
- Damage or injuries including crashes, loss of control, or water ingress caused by abusing or modifying the original aircraft structure,
- Damage or injuries caused by using broken & aging components.
- Damage or injuries caused by continuing to fly the aircraft 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 that have occurred when the aircraft has been subjected to the following conditions or situations: collision, fire, explosion, floods, tsunamis, ice, snow, avalanche, flooding, landslide, earthquake, etc.
- Damage or injuries incurred by intentionally dropping or crashing the Splash Aircraft into the water from a high altitude, especially water ingress into the aircraft fuselage and gimbal malfunction.
- 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 instruction manuals.
- For any reason, the user cannot retrieve the aircraft for further diagnosis and examination.
- The user is not able or unwilling to provide the flight log to SwellPro for diagnosis and examination.
- Any attempt to modify flight log data noticed by SwellPro.
- not charging it for a long time will cause the battery to over-discharge and cause permanent damage.
- Damage caused by no charging battery for a long time due to not following the user manual and maintenance manual properly.
- Other Damage(s) or injuries that are not SwellPro's liability.

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.

Version Information

SwellPro products are constantly improving, as the product user guides. It is recommended to visit www.swellpro.com to check and download the latest user guide.

Version

1. 0 Fisherman FD1+ User Manual 1.0 Edition

1.0.1 Fisherman FD1+ User Manual 1.0.1 Edition

- Update on Specification.

1.0.2 Fisherman FD1+ User Manual 1.0.2 Edition

- Update on Specification.

1.0.3 Fisherman FD1+ User Manual 1.0.3 Edition

- Update on Tutorial video.

1.0.4 Fisherman FD1+ User Manual 1.0.4 Edition

- Update on Remote controller.

1.0.5 Fisherman FD1+ User Manual 1.0.5 Edition

- Update on FCC caution.

1.0.6 Fisherman FD1+ User Manual 1.0.6 Edition

- Update on Daily Maintenance and Specification – Remote Controller waterproof rating.

