XEagle SPORT

Instructions Manual

⚠ XEagle is intended for use by adults above 18 years of age.

Online Tutorials

For instructions and more information on flight safety and operation of the XEagle, please visit www.flypro.com or scan the QR Code.

Flight Environment Precautions

Carefully read and follow the flight safety instructions and do not fly in the following environments. FLYPRO is not liable for damages due to flight in adverse conditions outlined below.

1. Do not fly in areas of low air density such as altitudes above 5 km.
2. Do not fly in unfavorable weather conditions including heavy winds, rain and snow.
3. Do not fly in areas with obstructions. Ensure that there are no large obstacles within 200-metre radius before takeoff and maintain a flight altitude higher than any surrounding obstacles.
4. Do not fly in areas containing sources of electromagnetic interference including airports, railways and high voltage power lines.
5. Do not fly within Earth's Polar Regions.
6. Do not use your XWatch to control the aircraft indoors.
7. Maintain visual sighting of the aircraft at all times during flight and ensure the aircraft is operating within 300 metres of the XWatch.

Pre–Flight Inspection

Check whether the gimbal cover has been removed:

⚠ Failure to remove the cover before flight may cause damage to the aircraft or the camera.

Check the battery level:

Press the smart battery power button once to display the current battery level. All green bars indicate full battery level and ready for flight.

Battery Level Indicator
25% 50% 75% 100%
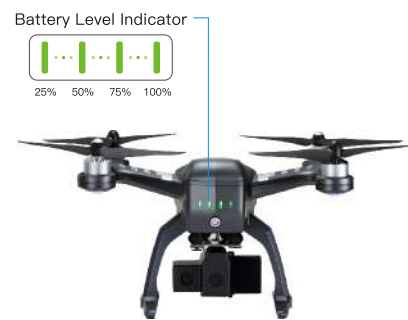
Installing the propellers:

Mount the propellers with black caps on the black motors and rotate them counterclockwise to tighten. Similarly, mount propellers with the silver caps on the silver motors and rotate them clockwise to tighten. Required direction to rotate for tightening and loosening is imprinted on each propeller for your reference.

⚠ Ensure the aircraft is turned off before installing the propellers.

Starting the aircraft:

Hold down the smart battery power button for 3 seconds to turn on the aircraft. Keep the aircraft horizontal as the aircraft systems are running a self-test and turning on power. Once the rear indicators flash blue or green, the aircraft is ready to fly; however, only operate the aircraft via the XWatch when the light is flashing green, indicating a successful GPS lock.

【Alternating red and blue lights】
Self-test of the aircraft systems

【Flashing blue light/Flashing green light】
Self-test complete

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1 The Aircraft

- Smart Battery
  - Battery Level Indicator
  - Power Button
- Propeller Installation Guide
- Propeller
- Motor
- Rear-Arm State Indicator
- Gimbal
- Front-Arm Direction Indicator
- Camera
- Gimbal Cover

Rear-Arm Indicator	Normal Status Indication
【Alternating red and blue lights】	Self-test of the aircraft systems
【Flashing blue light】	Aircraft propellers inactive and locating GPS signal
【Flashing green light】	Propellers inactive, GPS signal locked
【Constant green light】	Aircraft propellers active, GPS signal locked

Rear-Arm Indicator	Fault Status Indication
【Flashing yellow light】	Aircraft returns to home due to low battery level or aircraft fails to pass systems self-test. (If the latter occurs, restart the aircraft by turning off the smart battery, and turning the battery on after 5 seconds.)
【Constant red light】	Aircraft is damaged and its systems cannot function.

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2 Charging the Smart Battery

1. Remove the smart battery from the aircraft and connect to the XEagle charger provided.
2. Connect the other end of the charger to an AC power supply (100-240v, 50-60hz).

Battery Level Indicator
25% 50% 75% 100%
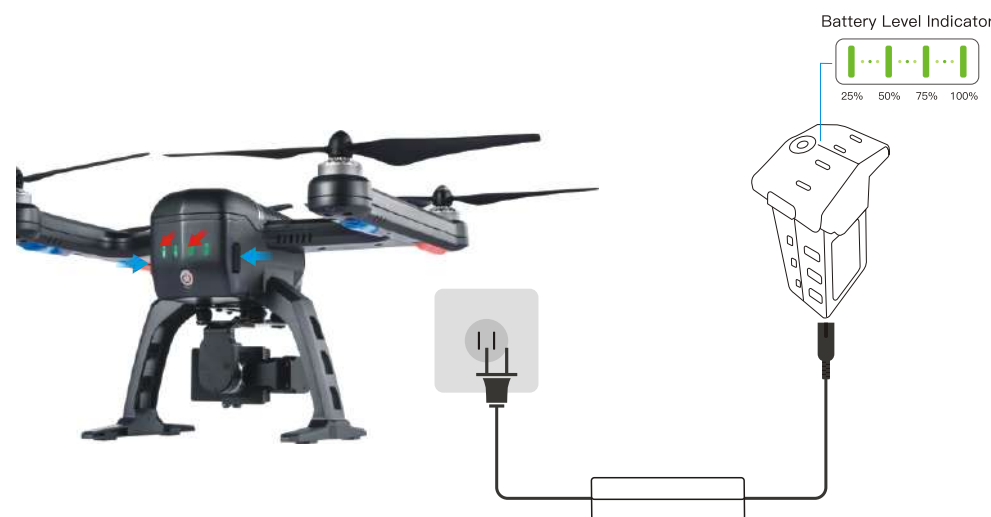
⚠ Please only charge the smart battery when switched off. When charging, the smart battery indicator will flash green. Once fully charged, the indicator will turn off.

💡 **Smart Battery Features:**

Self-discharge protection: If the battery level is greater than 65% and has not been used for 7 days, it will self-discharge to 65% to improve battery life. The self-discharge process lasts for 2 days when small amounts of normal heat discharge will occur.

Over-discharge protection: As over-discharge will damage the battery and reduce its overall performance, the smart battery will cut off output at 10V (approaching 0% battery level) to prevent further discharge.

Short-circuit protection: In the case of a short-circuit in the aircraft, the battery will cut power to the aircraft to prevent further damage.

Sleep protection: If battery is not connected to any electrical equipment and is left switch on, it will enter into dormant state after 10 minutes in order to conserve power.

Battery life check: Battery life describes the remaining service period of the battery. When the battery is off, press the smart battery power button 4 times consecutively to see the remaining battery life. After 10 seconds, all indicators will automatically turn off.

⚠ Please make sure to read the precautions and strictly comply with the instructions label on the battery surface.

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3 Camera
• Download the FlyproCam APP to view what the camera records and to download and share photos and videos.

- Photo or Video Capture /OK Button
- Page Up Button
- Page Down/WiFi Button
- Screen
- Power/Mode Button
- HDMI Slot
- USB Slot
- Memory Card Slot

FlyproCam App

1 Download the APP from the official website (www.flypro.com/en-appdownload.htm) or scan below:

iOS | Android

2 Turn on the camera and switch on the camera's WiFi by long pressing the forward arrow key.
3 Connect the camera's WiFi from your mobile phone by connecting to "flypro_xxxxxxxxx" with the default password "12345678".
4 Once connected, open the FlyproCam to operate the camera and download and share your photos and videos.

⚠ Maintain a distance within 5 metres from the camera to ensure a strong connection.

Camera Time

To synchronize the camera's clock to the mobile phone's clock, connect to the camera via the FlyproCam APP and then restart the camera. The camera's time will automatically update and match the mobile phone's clock.

Camera Power

When the aircraft is powered off with the camera connected, the camera will automatically recharge via the aircraft's battery.

File Transfer

There are two methods for transferring the camera's files to a chosen device:

1. With the mobile phone, use the FlyproCam APP whilst connected to the camera's WiFi to download and share photos and videos.
2. Remove the memory card from the camera and connect to the computer via microSD adaptor or a microSD card slot to transfer captured images and videos.

Camera Settings

Set Video Resolution	**Time Lapse** Off/3/5/10/30 seconds Captures an image periodically depending on the desired interval.
Wide Dynamic Range Balances brightness in dark and cloudy conditions to provide a clearer image. ⚠ Turn this feature off in bright and sunny conditions.	**Picture Resolution** 12MP/8MP/5MP ⚠ Use 12MP for high quality images.
Burst Mode The camera will capture 11 images in 1 second when taking photos.	**Delayed Shots** Off/3/5/10/30 seconds Captures an image periodically depending on the desired interval.
ISO Adjustment Auto/100/400/1600 ISO refers to the sensitivity of the image sensor within the camera.	**Sharpness Adjustment** High/Medium/Low Sharper images provide more details in their shots. Less sharp images keep the focus of the shot in one place and displays softer edges
Color Adjustment Standard/Vivid. Adjust this setting to vivid to produce a more vibrant footage. ⚠ If editing software will be used, use the standard setting.	**Angle Adjustment** Large/Middle. Adjust your field of view; middle FOV reduces the viewing angle, however, it also reduces picture distortion. ⚠ Large FOV is standard as it captures more in a standard shot.

Upgrading Camera Firmware

For details, refer to: http://www.flypro.com/en-camera-update-firmware.htm

4 The XWatch

• XWatch controls the XEagle with single press; provides useful real-time telemetry such as aircraft height, distance and remaining flight time with a maximum range of 300 metres.

Capture Key

1. To take a photo, press the capture key once and a camera icon will blink on the XWatch to indicate a photo has been taken.
2. To shoot a video, long press the capture key to begin recording. To stop recording, press the capture key again.

Circle Key

1. In hover state, press once to instruct the aircraft to begin a 360-degree circular pan centered on an arbitrary point 10 metres in front of the aircraft's head. Press again to stop the pan.
2. When following, press once to instruct the aircraft to begin a 360-degree circular pan centered on the XWatch. Press again to stop the pan.

⚠ Ensure the height of the aircraft is above surrounding obstacles before performing a circular pan.

Power Key

Hold down for 4 seconds to turn on the XWatch. Hold down again for 4 seconds to turn off the XWatch.

Takeoff Key

Once the aircraft status lights flash green and the GPS icon appears on the XWatch screen, press the takeoff key until the XWatch vibrates once, causing the aircraft to takeoff and hold at 8 metres above the watch.

Height Adjustment Knob

1. In circle mode or hover state, scroll and hold the knob up to raise the aircraft's height or scroll and hold the knob down to lower the aircraft's height.
2. In follow mode, scroll the knob up once and release to raise the height of the aircraft by 1 metre or scroll the knob down once and release to lower the height of the aircraft by 1 metre.

Annular Bearing Dial

Rotate the dial to change the orientation of the aircraft relative to you. The dial can be adjusted to one of eight positions.

Follow Key

Press once to instruct the aircraft to follow with the current set distance and height from the XWatch. Press again to instruct the aircraft to stop following. Ensure the height of the aircraft is above surrounding obstacles before following.

⚠ The maximum follow height is limited to 50 metres for safety reasons.
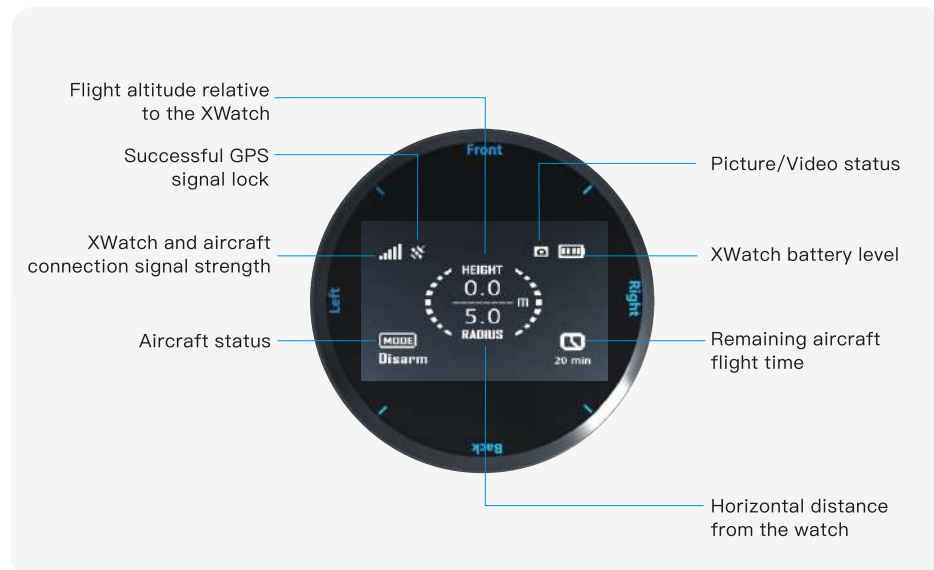
Landing/Return Key

1. To land immediately, press the landing key once. The aircraft will land on the spot directly below it. If the key is pressed again as the aircraft is landing, the aircraft will cease landing and hover on the spot.
2. To return to home, long press the landing key until the XWatch vibrates once. The aircraft will return to the spot it took off from.

⚠ When returning to home: If the current flight altitude is above 15 metres (with reference to its starting altitude), the aircraft will take a straight line path (maintaining constant altitude) to the point above where it took off and land vertically.
If the current flight altitude is below 15 metres (with reference to its starting altitude), the aircraft will rise to 15 metres before taking a straight line path to the point above where it took off and land vertically.

XWatch Display

- Flight altitude relative to the XWatch
- Successful GPS signal lock
- XWatch and aircraft connection signal strength
- Aircraft status
- Picture/Video status
- XWatch battery level
- Remaining aircraft flight time
- Horizontal distance from the watch

⚠ If the watch loses connection with the aircraft during flight, the signal strength will display a flashing "X" symbol until a successful reconnection is made. If no connection is made within 5 seconds, the aircraft will return to home.

Charging the XWatch

1. Insert the magnetic charging cable as illustrated. If attempted to insert the opposite orientation, the cable will not connect and be repelled from the XWatch charging port.
2. Once connected, the XWatch battery level icon will start flashing to indicate that it is charging. After 5 minutes, the XWatch will turn off automatically and will be fully charged in approximately 1 hour. To view the current battery level, press the power key once.
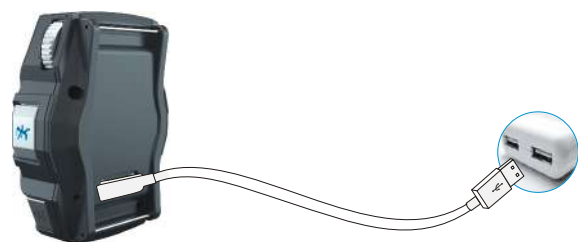
5 Standard Flight Procedure

Step 1
Perform pre-flight inspection (refer to Pre-Flight Inspection section).

Step 2
Place the aircraft in open space, with the aircraft head facing you, and hold down the smart battery power button to turn on the aircraft.

Aircraft Head

Step 3
Maintain a distance longer than 5 metres from the aircraft and long press the XWatch power key to turn on the XWatch.

>5M

Step 4
Wait for the aircraft status indicators to flash green, successful connection between the XWatch and the aircraft (indicated by a strong signal strength on the XWatch display until the XWatch vibrates once), and a successful GPS lock from the XWatch (indicated by the GPS signal on the XWatch display).

Step 5
Hold down the takeoff key until the propellers rotate to instruct the aircraft to take off. The aircraft will take off, climb to 8 metres and hover.

Step 6
Enjoy the full functionality of the XWatch including the follow mode and circle mode. Please follow the instructions provided on how to operate the aircraft using the XWatch.

Step 7
At the end of your session, select a safe spot for landing (a clear and level ground) and land the aircraft. The aircraft propellers will automatically stop rotating and enter "disarm" mode once landed.

Step 8
Long press the XWatch power key to turn off the XWatch and long press the smart battery power button to turn off the aircraft.

XEagle Sport Technical Specifications

Aircraft	Weight (Including Battery and Propellers)	1270g
	Max Dimension (Excluding Propellers)	290mm*290mm*180mm
	Max Dimension (Including Propellers)	490mm*490mm*185mm
	Diagonal Size	350mm
	Max Ascent Speed	3m/s
	Max Descent Speed	1.5m/s
	Hover Accuracy	Vertical: ±0.5m Horizontal: ±1m
	Max Follow Speed	17m/s
	Max Flight Altitude	5000m
	Flight Time	About 22 mins
	Operating Temperature	−10°C to 40°C
	GPS Mode	GPS/GLONASS Dual Mode
Camera	Sensor	1/2.3 CMOS
	Lens Angle	Horizontal: 105° Diagonal:140°
	Aperture	F2.8
	ISO Range	100−1600
	Max Image Size	4000*3000
	Still Photography Modes	Normal Recording, Normal Shooting, Time-lapse Video, Delayed Shooting, Burst Shots
	Video Recording Modes	4K@24fps, 2.5K@30fps, 1080P@60fps, 720P@120fps
	Supported File Formats	File System: FAT32 Video Format: MOV Image formats: JPG
Gimbal	Pitch Controllable Range	−90°to 0°
	Stabilization	Pitch and Roll
XWatch	Operating Frequency	430−460MHz/910−940MHz
	Max Control Distance	300m
	Operating Temperature	−10°C to 40°C
	Battery	3.7V, 400 mAh LiPo
	Working Voltage	0.2A@5V
XWatch Battery Charger	Input Voltage	100−240V 50/60Hz
	Output Voltage	5V
Intelligent Battery	Capacity	5200 mAh
	Voltage	11.1V
	Battery Type	LiPo 3S
	Energy	57.7 Wh
	Net Weight	370g
	Operating Temperature	0°C to 40°C
	Charging Time	60−90mins
Intelligent Battery Charger	Input Voltage	100−240V 50/60Hz
	Output Voltage	12.6 V
	Max Charging Power	50W