XPECE

XPECE-ONE

User Manual

V1.1- EN

Thank You

Dear Xpece-ONE users:

Thank you sincerely for purchasing the Xpece-ONE waterproof drone. We designed and manufactured the Xpece-ONE waterproof drone with high quality standards.

Like any marine equipment, long life and trouble-free operation of the drone depends on proper care and maintenance. With proper care and maintenance, you should enjoy the drone for many years.

It is recommended to read safety guidelines before using for the first time. Prepare for your first flight by reviewing the quick start guide and refer to this user manual for more informationespecially the highlighted content. Familiarize yourself with the drone's functional features, operating precautions and usage tips.

For theuser manual in electronic edition, teaching videos and other services, please visit the Xpece official website **https://xpece.com/**

Sincerely hope that you can experience the ultimate fun of drone-flying with Xpece-ONE!

Contents

XPECE-ONE

Flight Safety

Flight Environment Requirements

We recommend that you take professional training and instruction. When flying, choose an appropriate environment based on your skills, such as a large open water area for practice.

- Please maintain strict compliance with the local laws, any flying in **NO-FLY ZONES** is prohibited.
- Please make adequate preparations before each flight and avoid any violent or excessive operations.
- Flying **between ornear tall buildings** could adversely affect the functioning of the compass and adversely affect or block GPS and transmission signals.
- Avoid flying near areas with **high electromagnetic interference** such as power lines or signal towers to minimize the risk of interfering with the remotecontroller of the aircraft.
- Please fly the aircraft away from crowds.
- Before flying in low temperatures, warm the battery to **25**℃ to maximize flight time.
- Any illegal & improper use or operation of this product is prohibited.
- Any invasion & violation of another person's right to privacy is not allowed. Beforeusing 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 otherphysical or mental impediment.
- Do NOT fly the aircraft with a malfunctioning remote controller.
- Environmental factors including air density and wind shear could reduce theperformance of the aircraft and battery when flying 4000 meter above sealevel.
- Although Xpece ONE is waterproof, do not fly in fog or strong wind conditions. (For wind speed exceeding 13 m/s)

Flight Limits

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 Xpece ONE is configured to not exceed an altitude of 120m from the Home Point altitude.

FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment. 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 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.
(2) this device must accept any interference received, including interference that may cause undesired operation.

Aerocraft RF Exposure Statement：
To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 20cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

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

Takeoff and Landing Procedures

Takeoff

1. Place the aircraft on a flat, open, and unobstructed surface.
2. Complete all the pre-flight checklist items.
3. Power on the remote controller and then the aircraft wait till they are connected automatically.
4. Start motors.
5. Slowly push the left (throttle) control stick up to allow the aircraft to take off smoothly. When the drone reaches a height of 2m high, release the throttle and let the drone hover for a short while to observe whether the drone is stable and in good condition. After confirmation, you can continue the flight operation.

Landing

1. Check the condition for a safe landing.
2. Slowly pull the left (throttle) control stick down to allow 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.

Stopping Motors Mid-flight

Stopping motorsmid-flight will cause the drone to crash. It can only be operated in an emergency to minimize unnecessary damage.

Such as: Being hit in the air, the aircraft rising or falling rapidly without control, the aircraft attitude rolling continuously without control,

Low Battery Auto-Landing

When the voltage of the drone reaches **Level 2 low battery alarm (20 V)**, the drone will automatically land on the spot. At this time, the remote controller will vibrate and voice prompt **"Aircraft severely low battery,landing in 10 seconds".** After 10 seconds, the drone will land on the spot to ensure the safety of the drone.

Drone Care and Maintenance

1.Flight Battery Safety and Maintenance

⚠If the flight battery is not being used for a long period, ensure to set the battery to store voltage (22.8V~23.0V) , which is full charging to 3 bars or above for storage; and recharge it every 3 months to maintain battery activity and prevent over-discharge. Over-discharge will cause permanent damage to the battery. Same precaution for the remote control's battery.

- 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 the battery has any of the above problems, please dispose of it properly according to the disposal methods in this article.
- The battery can be used in temperatures ranging from -10°C to 40°C. Using the battery in environments above 40°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, thismay result in the battery catching fire, or even lead to an explosion.
- Electrolytes in the battery are highly corrosive. If any electrolytes make contactwith your skin or eyes, immediately wash the affected area with fresh runningwater 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 according to the disposal methods in this article.
- Do not heat batteries. A battery fire can be extinguished using sand, or a drypowder 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.

2.Change Nano Membrane

Nano membrane ensure air circulation while preventing water from entering the the internal chamber of the aircraft. It is very important for flight and waterproofing. Special attention should be paid in the use of drones.

⚠ If you constantly fly your aircraft in a saltwater environment (sea), it is recommended to change the Nano 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 Nano membrane might be damaged.
⚠ If the Nano membrane is damaged or shows signs of wear and tear, replacement of the waterproof Nano membrane is required.

To replace the Nano membrane:

Figure1

Figure2

Figure3

1. Unscrew the fixing screw and remove top protective cover. (Figure1&2)

⚠**Make sure the waterproof sealing ring stays on the screw always. (Figure1)**

2. Remove the previous nano membrane and clean all the residue on the surface. (Figure2)

3. Paste the new Nano membrane.

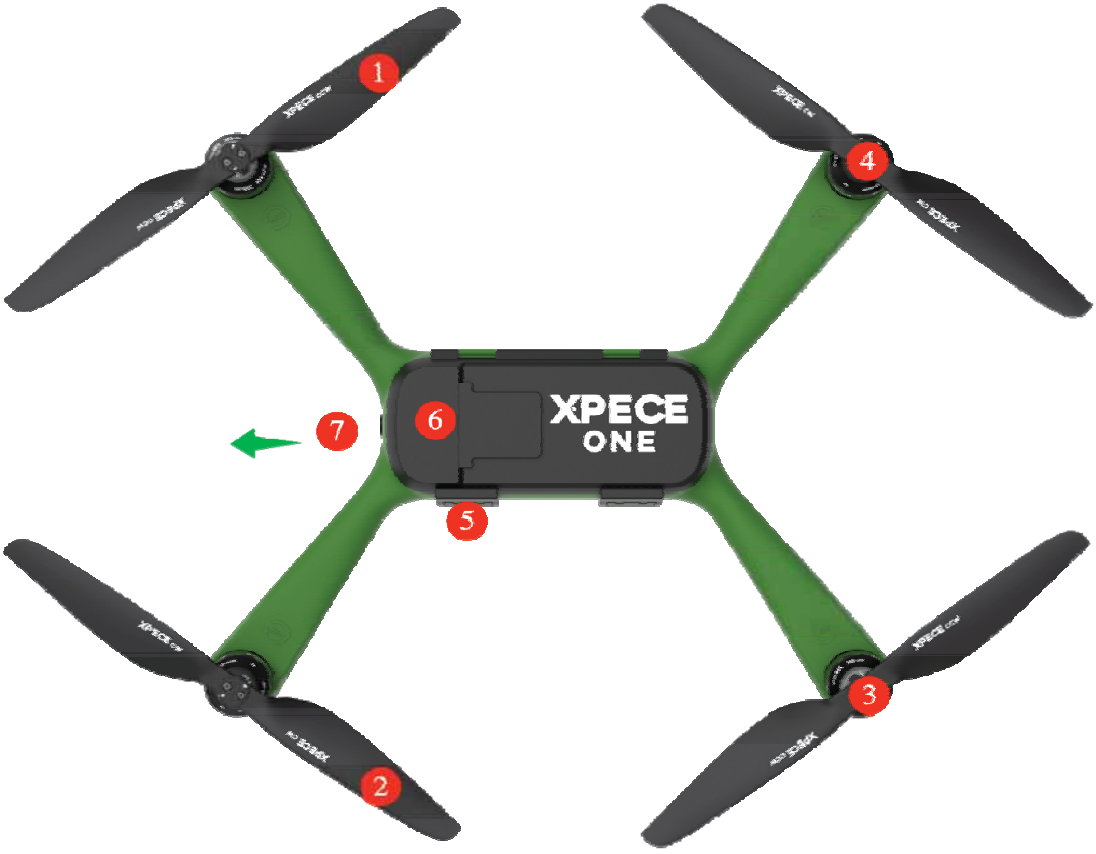
4. Put the top cover back and fix it with screws. (Figure3)

3.Rinse Drone after Sea Flight

- **After flying over the sea or sand, thoroughly rinse the drone, motors, gimbal camerawith fresh water and then dry them.**
- **Make sure you rinse the aircraft before any salt crystallizes formation.**
- **Make sure the battery compartment buckle, camera memory card slot, etc. are sealed before washing.**

Quick Start Guide

1. Aircraft Diagram



① CCW Propeller
② CW Propeller
③ CCW Motor
④ CW Motor
⑤ Battery Compartment Buckle
⑥ Nano Membrane
⑦ Aircraft Head

① Gimbal Camera
② Payload Release
③ Front Arm Light
④ Rear Arm Light

① 2.4G Antenna
② 5.8G Antenna

2. Remote Controller Diagram

① 2.4G Antenna
② 5.8G Antenna
③ Left Joystick(Throttle/Yaw)
④ Right Joystick(Pitch/Roll)
⑤ Connection Status Indicator
⑥ Battery Level Status Indicator
⑦ Button-Come Home
⑧ Button-Improved Video
⑨ Button-Power
⑩ Button-Mark Waypoint
11 Button-Video|Photo
12 Screen

① Payload Release Switch
② Laser Light Switch（Undeveloped）
③ Gimbal Up&Down Toggle
④ Flight Speed Adjustment Toggle
⑤ USB-C Port
⑥ TF Card Port（Undeveloped）
⑦ SIM Card Port（Undeveloped）
⑧ HDMI Connection Port（Undeveloped）

3. Charging

Ensure to charge the battery right after you receive the product to prevent the possible battery over-discharge during shipping.

How to charge：