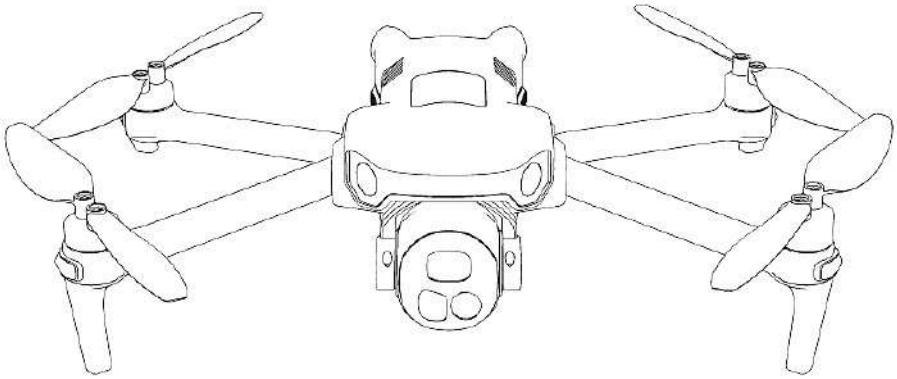
TODAMU

# WING LITE

GPS Folding Camera Drone

## USER MANUAL



PORTABLE ● FOLDABLE

APP

### Key Restrictions and Requirements

**1.Prohibition of Flying Near Airports**

To ensure compliance with the electromagnetic environment requirements for aviation radio stations, drone operation is strictly prohibited in the following areas:

- Within 10 kilometers (6.2 miles) on both sides of the runway centerline.
- Within 20 kilometers (12.4 miles) at both ends of the runway.
- Along civil aviation routes and flight paths.

**2.Compliance with No-Fly Zones**

The use of all types of drones is strictly prohibited in no-fly zones designated by relevant national authorities (e.g., FAA regulations). Always check local airspace restrictions before flying.

**3.Ban on Urban and Densely Populated Areas**

It is strictly forbidden to operate drones in urban areas or densely populated regions, including crowded events, stadiums, and public gatherings.

**4.Battery Charging Requirements**

After receiving the drone, the battery must be fully charged before its first use. Ensure proper charging practices to avoid damage or safety hazards

# PREFACE

Thank you for choosing Drone! This product is designed for users over the gae of 14 and is not intended as a toy. To ensure safe and enjoyable operation, please read this manual carefully before use. Keep this manual for future reference.

**Important Note :** This drone integrates advanced technologies such as mechanics, electronics, aerodynamics, and high-frequency transmission. It must be properly assembled, calibrated, and operated to avoid accidents. Improper use may result in serious injury or property damage. The user is responsible for any damages caused by improper operation.

For any questions regarding usage, operation, maintenance, or other issues, please contact your local distributor or our support team.

# SAFETY GUIDELINES

## When flying this drone, always prioritize safety:

1.Flight Environment
- Fly only in open outdoor areas and comply with FAA regulations.
- Do not fly over crowds, near airports, or in restricted zones.
- Maintain a safe distance of at least 50 meters (164 feet) from people, animals, and vehicles.

2.Weather and Battery
- Avoid flying in adverse weather conditions such as strong winds, rain, or lightning.
- Do not fly when the battery is low or GPS signal is weak.

3.Battery Usage
- Never expose the battery to direct sunlight, high temperatures, or attempt to disassemble it.
- Always charge the battery under adult supervision, away from flammable materials, and avoid short-circuiting or squeezing the battery.

4.Children and Small Parts
- This product is suitable for users over the gae of 14. Children under 14 must be supervised by an adult when operating the drone.
- The drone contains small parts. Keep them out of reach of children to prevent the risk of accidental ingestion.

5.Device Maintenance
- Use only the original charger provided by the manufacturer. Do not mix different types of lithium batteries.
- Do not modify or disassemble the drone, as this may cause malfunctions or safety hazards.

# OPERATION GUIDE

1.Environmental Requirements
- Avoid humid environments to prevent moisture damage.
- Keep the drone away from heat sources and direct sunlight.

2.Pre-Flight Check
- Ensure the battery is fully charged.
- Check that the propellers are securely installed and undamaged.
- Confirm that the flight area is clear of obstacles.

3.Flight Operation
- Before takeoff, calibrate the compass and gyroscope, and ensure GPS lock (minimum 8 satellites).
- Always keep the drone within visual line of sight.
- Use the Return-to-Home (RTH) function when needed, ensuring no obstacles are nearby.

4.Additional Notes
- Avoid flying near high-powered electrical equipment or magnetic objects to prevent interference.
- Stay clear of high-speed rotating motors to avoid the risk of cuts or burns.

# CATALOGUE


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LED indicator light ---------- 15

Troubleshooting and common problems ---------- 15

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# QUICK START GUIDE

## 1. What's in the Box



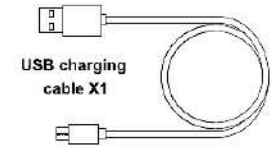
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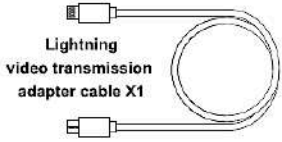


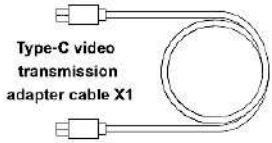
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instructions X1



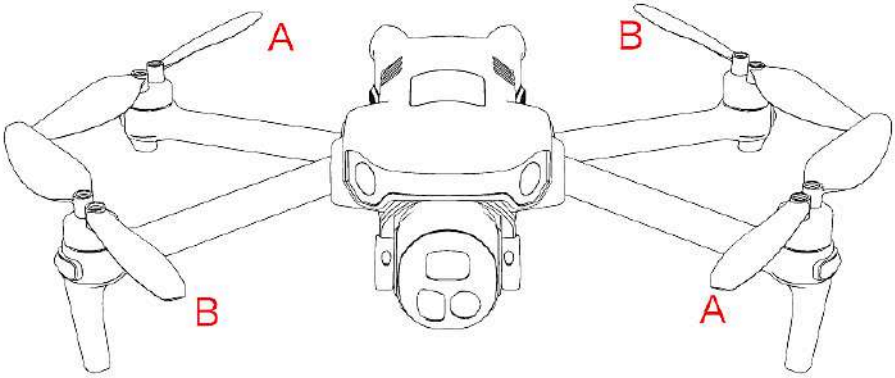






screwdriver X1

## 2. Setup Steps

**Attach Propellers**

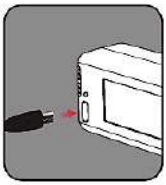



**•Match A to A, B to B**

# QUICK START GUIDE FOR DRONES

## 1.Indoor flight operation steps

### 1. Fully charge the drone and remote control.

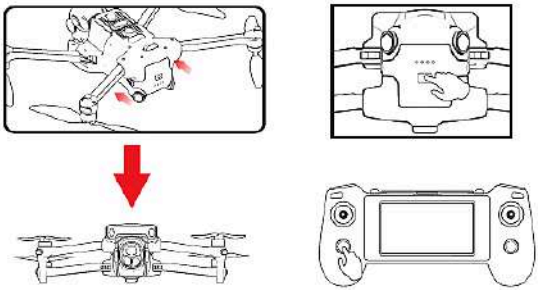


**Charging time: About 4 to 8 hours**
**(Depends on the battery capacity)**
**The light flashes slowly during charging and stays on when fully charged.**

**Drone battery and remote control charging**

### 2. Drone and remote control frequency synchronization (the remote control and drone will automatically synchronize frequencies)

**Install the battery into the drone, place it on a horizontal surface, turn on the drone, and then turn on the remote control switch. The drone's indicator light will flash rapidly, and after a frequency matching time of about 40 seconds, the remote control will emit two "DIDI" sounds to automatically synchronize the frequency. The drone's headlights will remain on, while the taillights will flash slowly, indicating successful synchronization**



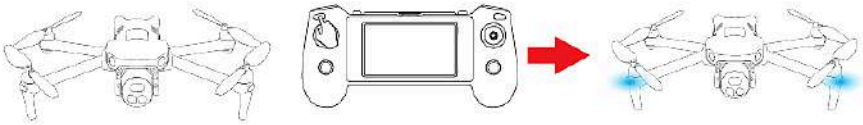
### 3. Turn off GPS.

**GPS must be turned off indoors. Press and hold the GPS switch, and the remote control will emit a "DI" sound. After 3 seconds, the remote control will display "Indoor Mode", indicating that GPS has been successfully turned off**



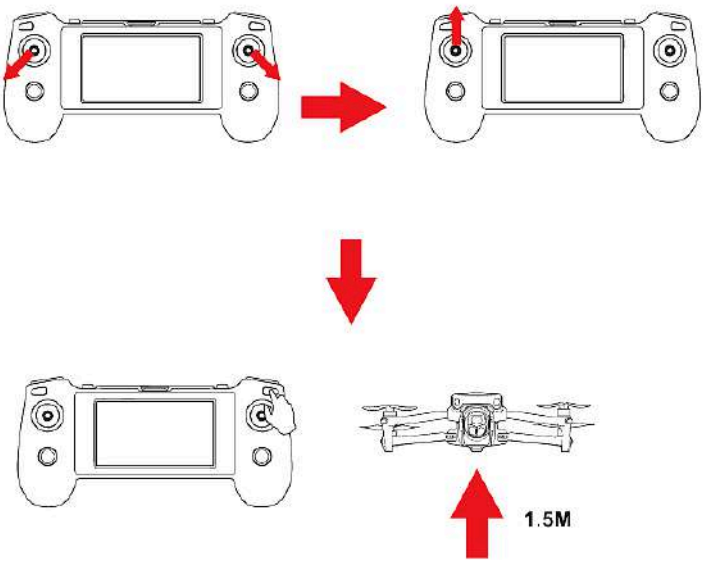
### 4. Calibrate the gyroscope (must be placed on a horizontal surface).

**Place the drone on a level surface, briefly press the calibration button, the remote control will emit a DI sound, the drone lights will flash rapidly, the remote control will emit another DI sound, the drone's front lights will remain on and the rear lights will flash slowly, indicating that the gyroscope calibration is complete**

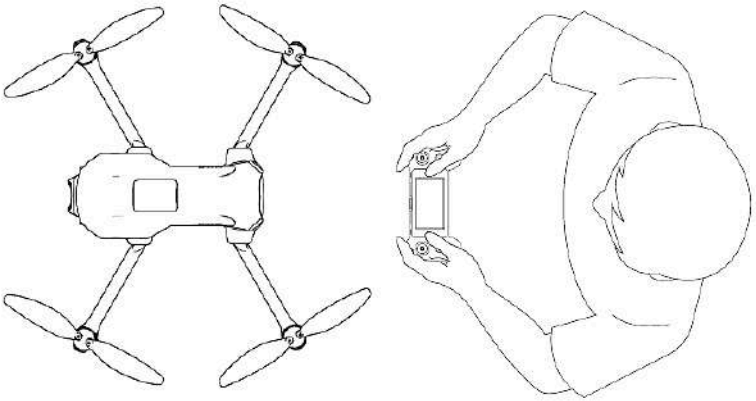


## 5. Unlock Takeoff

**Remote control outer eight unlocking: After the propellers start rotating, gently push the left throttle lever upward to take off, or press the one-button takeoff button to unlock. After the propellers start rotating, press the one-button takeoff button again, and the drone will automatically ascend to a height of approximately** 1.5 meters

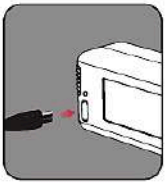



**Reminder: When operating a drone, keep the nose facing forward and the tail facing the operator to avoid confusion**



## 2.Outdoor flight operation steps

### 1. Fully charge the drone and remote control.

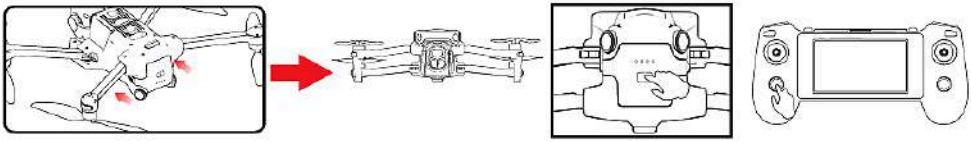


**Charging time: About 4 to 8 hours**
**(Depends on the battery capacity)**
**The light flashes slowly during charging and stays on when fully charged.**

**Drone battery and remote control charging**

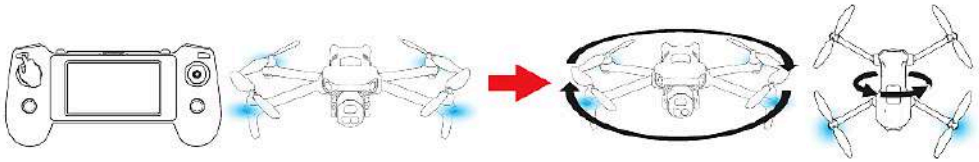
### 2. Drone and remote control frequency synchronization (the remote control and drone will automatically synchronize frequencies)

Install the battery into the drone, place it on a horizontal surface, turn on the drone, and then turn on the remote control switch. The drone's indicator light will flash rapidly, and after a frequency matching time of about 40 seconds, the remote control will emit two "DIDI" sounds to automatically synchronize the frequency. The drone's headlights will remain on, while the taillights will flash slowly, indicating successful synchronization



### 3. Calibrate the geomagnetic field (horizontal and vertical directions)

Press and hold the geomagnetic calibration button. The remote control will emit a "DI" sound, and the drone's lights will flash rapidly. Pick up the drone and rotate it clockwise. The remote control will emit a 'DI' sound. Then rotate the drone's camera downward in a clockwise direction. The remote control will emit a "DI" sound. When the drone's front lights remain steady and the rear lights flash slowly, this indicates that the geomagnetic calibration is complete



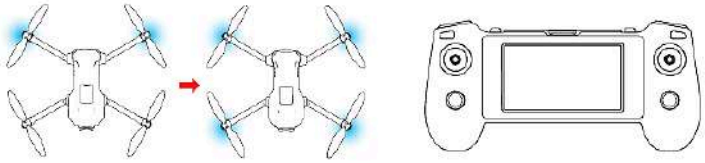
### 4. Calibrate the gyroscope (must be placed on a horizontal surface).

Place the drone on a level surface, briefly press the calibration button, the remote control will emit a DI sound, the drone lights will flash rapidly, the remote control will emit another DI sound, the drone's front lights will remain on and the rear lights will flash slowly, indicating that the gyroscope calibration is complete



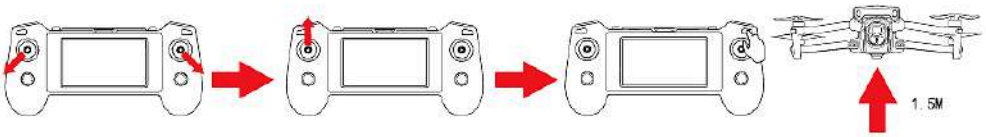
## 5. Satellite search (8 or more satellites)

Place the aircraft on a level surface. The front lights remain on, and the rear lights flash slowly. The GPS enters satellite search mode. The remote control emits a "DI" sound. The drone's rear lights remain on, and the remote control screen displays eight or more satellites, indicating successful satellite acquisition (this process may take 2–5 minutes depending on the environment and satellite signal strength)

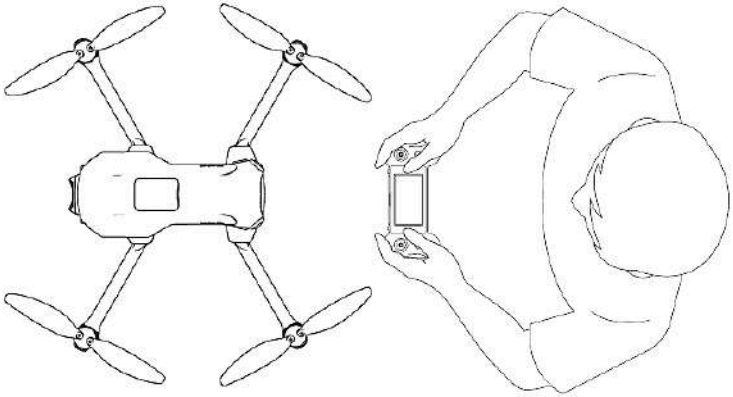


## 6. Unlock Takeoff

Remote control outer eight unlocking: After the propellers start rotating, gently push the left throttle lever upward to take off, or press the one-button takeoff button to unlock. After the propellers start rotating, press the one-button takeoff button again, and the drone will automatically ascend to a height of approximately 1.5 meters




**Reminder: When operating a drone, keep the nose facing forward and the tail facing the operator to avoid confusion**



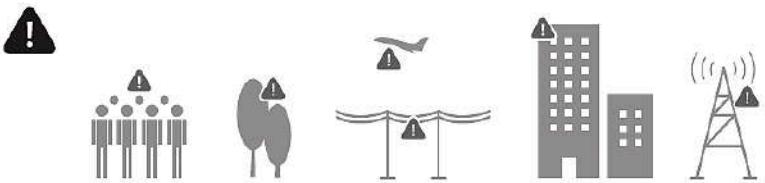
## PRE-FLIGHT CHECKLIST



| | |
|---|---|
| √ | Battery Fully Charged. |
| √ | Propellers Installed Correctly (A/B Match). |
| √ | Compass & Gyroscope Calibrated. |
| √ | GPS Locked (≥8 Satellites). |
| √ | Clear Flight Area. |
| √ | Good Weather, Clear Visibility. |

# SAFETY GUIDELINES

## 1. Flight Environment



•Fly only in open areas:
•Avoid flying over crowds, trees, buildings, or bodies of water.
•Stay clear of high-voltage power lines and cell towers, as they may interfere with the drone's compass.

## 2. Weather Conditions



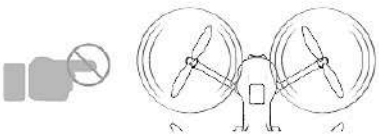

•Do not use this product in the following weather conditions:
•Rain, snow, or fog.
•Wind speeds exceeding 10 m/s (22 mph) .

## 3. Flight Altitude Limit



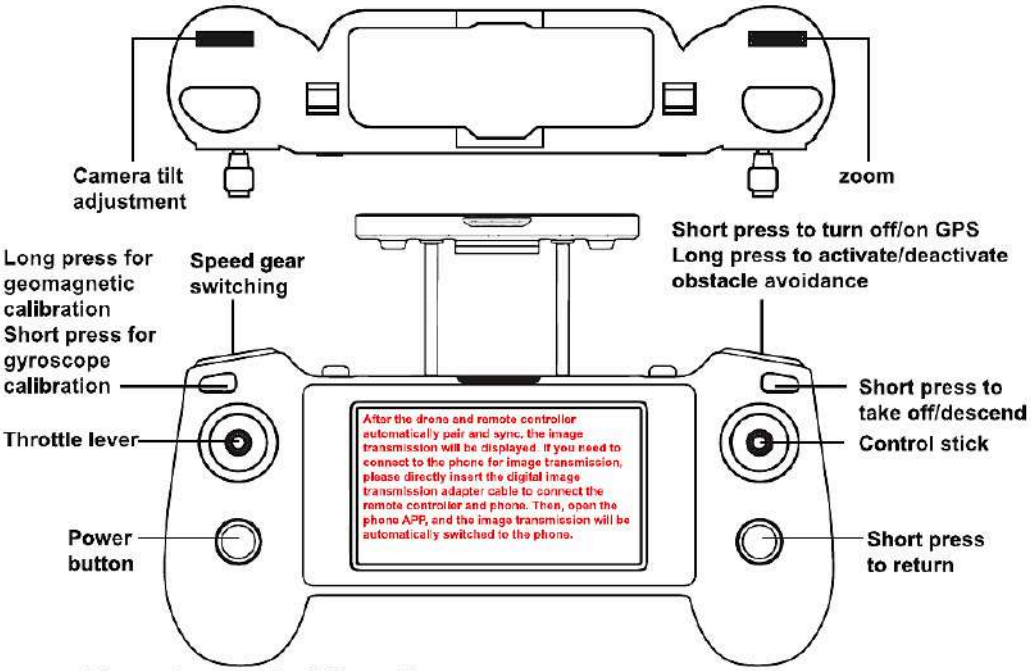

•According to the regulations of the National Aviation Administration, the flight height must not exceed 120 meters (400 feet).

## 4. Rotating Parts Warning



•Keep away from spinning propellers and motors to avoid injury.

# REMOTE CONTROLLER OVERVIEW




## Remote control function

****Main control device****

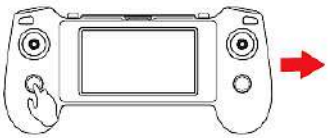
****Phone Holder (Pull Up)**: Activate the phone holder to mount a smartphone.**
****Power switch**: Turns the remote control on and off.**
****GPS Switch**: Activate or deactivate the GPS mode.**
****One-click Takeoff/Landing**: Press to automatically take off or land the drone.**
****Indicator light**: Displays the status of the remote control (e.g., charging, battery level).**
****Speed Switcher**: Adjust the speed of the drone.**
****Camera adjustment**: Fine-tune the camera angle and settings.**

****Charging Instructions****

****Mobile phone adapter**: Use a 5V/0.8A adapter (not included) to charge the remote control.**
****Charging port**: Plug the charger into this port.**
****Storage card slot**: Insert an SD card to save photos and videos.**
****Charging time**: Approximately 2 hours (depending on the charging power source).**

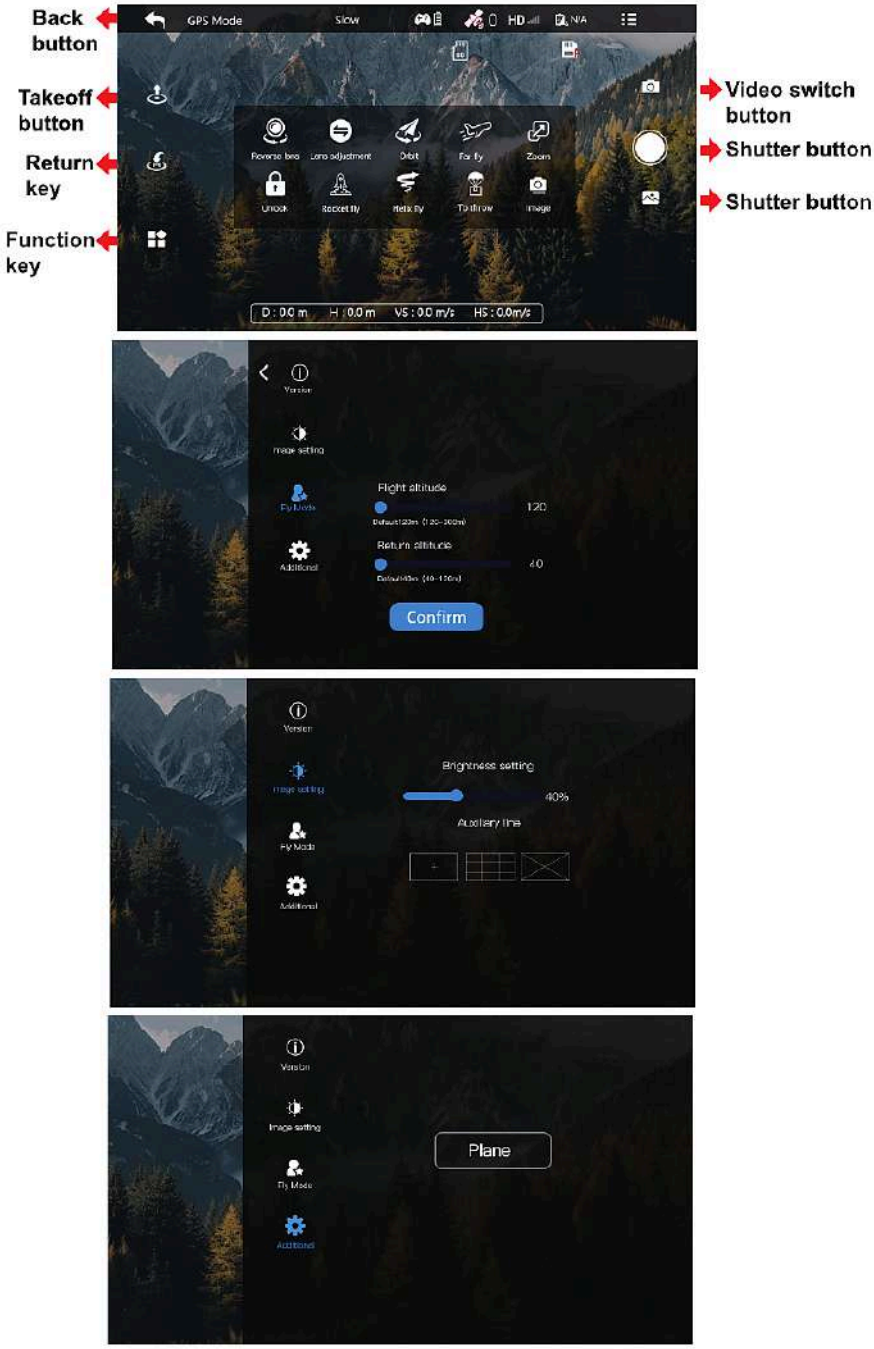
## Language selection interface

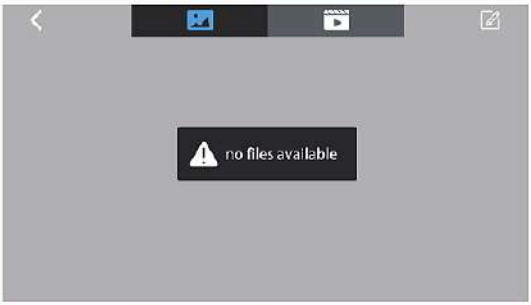
**Turn on the remote control switch, and after a brief wait, enter the language selection interface.**

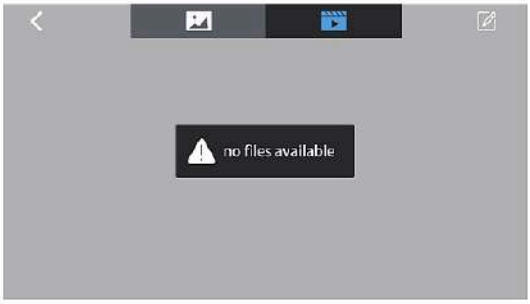




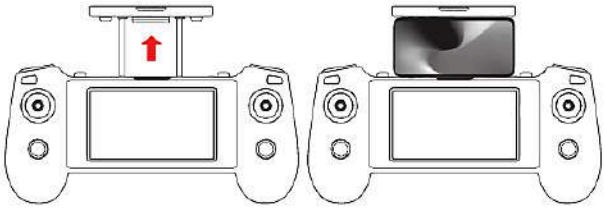
**Function Overview**






****Mobile phone holder****



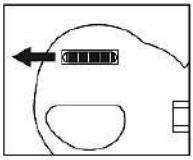
**Pull up to open the phone holder on the remote control.**
**Fix the smartphone on the bracket for hands-free operation.**

****Speed Regulation****

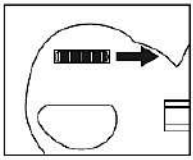
**The default flight speed is 25% when the drone is turned on. To adjust the speed:**
**1. First Gear (25%) : Default speed upon startup.**
**2.Second Gear (75%) : Press the speed switch once to increase the flight speed by 50% .**
**3. Third Gear (100%) : Press the speed switch again to increase the flight speed by 100% .**

## Camera Lens Up/Down Adjustment

To adjust the camera lens, use the following buttons:



**1. **Lens Up Button**: Press this button to move the lens upward.**



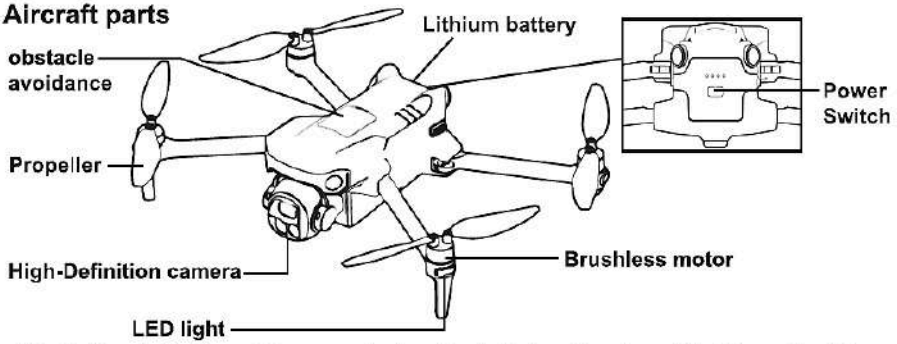
**2. **Lens Down Button**: Press the down arrow key on the lens to adjust it downward.**

## mportant Notes

**Always ensure the drone is stable before adjusting the camera lens.**
**Avoid rapid or excessive adjustments to prevent damage to the camera mechanism.**
**If the camera lens becomes stuck or does not respond, turn off and restart the drone.**

## DRONE ASSEMBLY AND PROPELLER INSTALLATION

### Aircraft parts




**By default, the obstacle avoidance mode is activated when the aircraft lights are flashing. The obstacle avoidance mode can only be used outdoors. The obstacle avoidance function is prohibited indoors.**

**Propellers**: The propellers are located on each arm of the drone. Ensure they are properly installed before flight.

**Lithium battery**: The lithium battery powers the drone. Make sure to fully charge it before use.

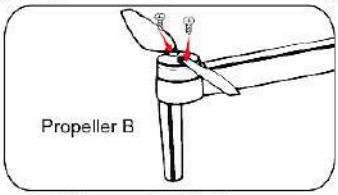
**Brushless motor**: The brushless motor drives the propeller. Handle with care to avoid damage.

**LED**: The LED indicator shows the status of the drone (such as charging, battery level).

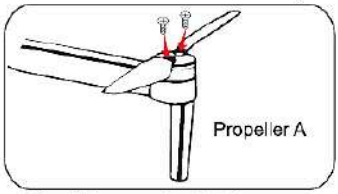
**High-definition camera**: The high-definition camera captures clear images and videos. Ensure it is clean and free from obstructions.

### Propeller Installation

**Please ensure that all propellers are installed in the correct orientation according to the following diagram. If installed incorrectly, the aircraft will not be able to fly normally.**




Lock the propeller into 2 screws



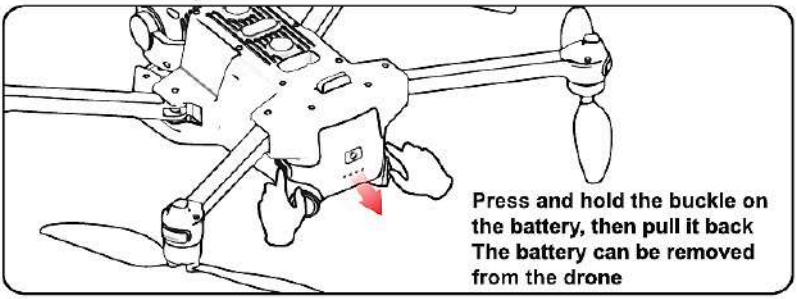

Lock the propeller into 2 screws

### **Important Note**:

- **Always double-check the installation to ensure the propellers are securely fastened.**
- **Avoid touching the propellers while the drone is powered on to prevent injury.**

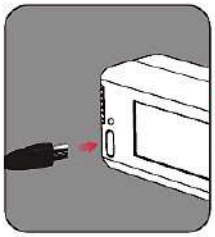
## BATTERY CHARGING FOR DRONE AND REMOTE CONTROLLER

### Lithium Battery for Aircraft





Mobile phone adapter:
5V⎓2A
(Not included)



**Charging time: About 4 to 8 hours (Depends on the battery capacity)**
**The light flashes slowly during charging and stays on when fully charged.**

****Charging Instructions****

1. ****USB Charging Interface**: Connect the USB cable to the charging port on the battery.**
2. ****Battery Power Indicator**: The indicator light will flash red while charging and turn green when fully charged.**

****Charging Time****

- **Charging time is approximately **4 to 8 hours**, depending on the power supply.**

****Important Notes****

****Do not use batteries for more than 5 days without charging.** Store them in a cool, dry place when not in use.**
****Always disconnect the battery from the aircraft before charging.** This prevents accidental activation during charging.**
****If the aircraft enters low-power alarm mode (the remote control will beep), stop using it immediately and charge the remote controller.****
****The remote control should be turned off when charging.****

****Cautions for Charging****

****Do not expose batteries to high temperatures**, such as open fires or electric heating devices, as they may be damaged or explode.**
****Do not immerse batteries in water.** Keep them away from moisture to prevent damage.**
****Never discharge batteries completely.** Store them at about 40-65% charge when not in use.**
****Do not leave batteries unattended while charging.** Ensure they are in a safe location.**

## Remote Controller Battery

****Charging Instructions****

1. ****Mobile Phone Adapter**: Use a 5V/3A adapter (not included) to charge the remote control.**
2. ****Charging Port**: Insert the charger into this port.**
3. ****Charging Time**: Approximately **2 hours**, depending on the charging power source.**



Mobile phone adapter:
5V⎓0.8A
(Not included)

****Important Notes****

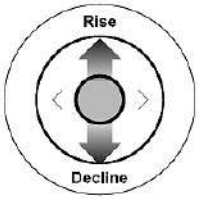
****Always disconnect the remote control from the drone before charging.** This prevents accidental activation during charging.**
****Do not overcharge the battery.** Disconnect it once fully charged to avoid damage.**
****Store the remote control in a cool, dry place** when not in use.**

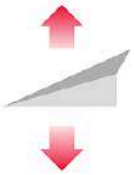
****Cautions for Charging****

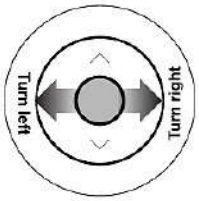
****Do not expose the remote control to high temperatures**, such as direct sunlight or heat sources.**
****Do not immerse the remote control in water.** Keep it away from moisture to prevent damage.**
****Never discharge the battery completely.** Store it at about 40-65% charge when not in use.**
****Do not leave the remote control unattended while charging.** Ensure it is in a safe location.**

## REMOTE CONTROL OPERATION METHOD

Power control lever

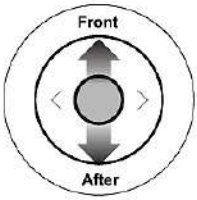


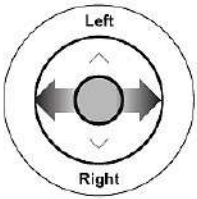





Direction control lever



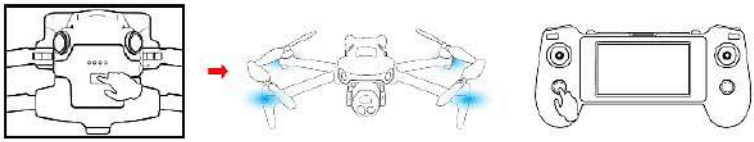





## POWER ON AND PAIRING

### Power On Sequence

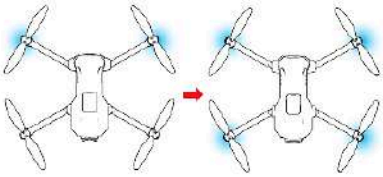


1.Drone Power button : Turn on the drone first.

2.Remote Controller Power Switch : Turn on the remote controller next.

### Pairing Process

•Pairing Indicators :



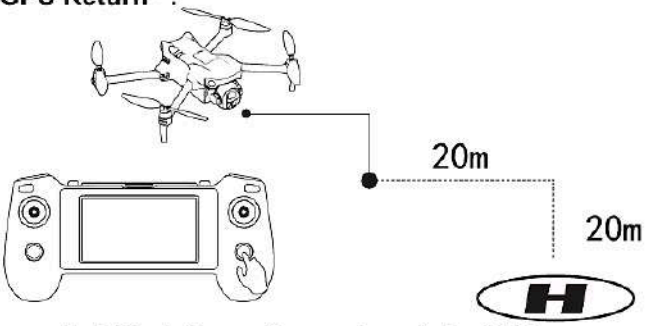
- When the pairing is successful, the green light will remain on.
- If pairing fails, restart both the drone and the remote controller.
- The duration of the pair frequency is approximately 40 seconds.

## FLIGHT MODES AND RETURN-TO-HOME (RTH) FUNCTION

### **GPS Return**

The GPS return function allows the aircraft to return to the takeoff point. This function can only be implemented in GPS mode. The drone has three RTH modes: one button return, low power return, and no signal return.

1. **GPS Return**:

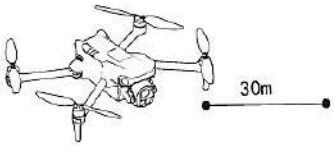


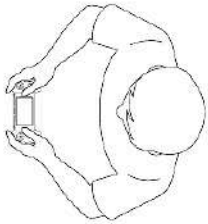

Press and hold the button on the remote control until it beeps.
The drone will automatically ascend vertically above the takeoff point and then slowly descend to land safely.
To stop the return flight, press the button again and pull down the joystick lower the aircraft to a safe area.

2. **Low Power Return**:

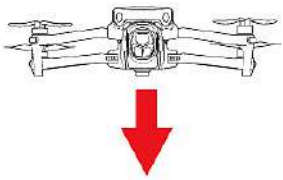
When the battery is low, the drone will trigger a low-power return. At this point, the drone will fly back to an altitude of about 30 meters away from the operator. The operator can still operate and control the drone.

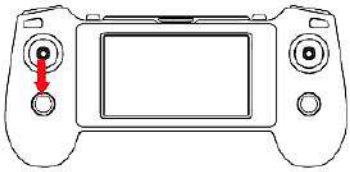




Pull down the joystick to land the aircraft in a safe area.



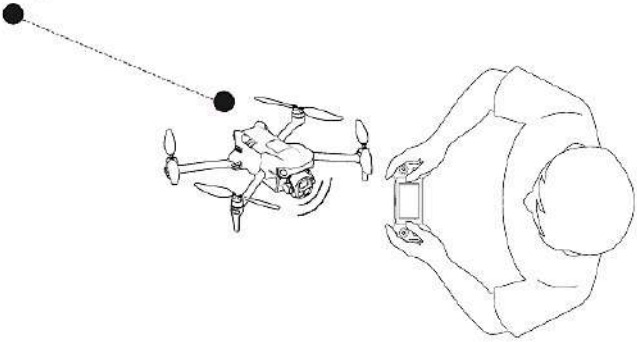


**Important Note**: Do not push the joystick forward during low-power return. Pushing forward may cause the return flight to fail and increase the risk of losing the aircraft.**

3. **Return without Signal**:




If the drone loses connection with the remote control, it will automatically enter return mode. The drone will return to the distance that the remote control can connect to.
At this point, the operator can regain control of the drone.



## Hint:

1. Noise

The noise measurement results of this product's rotary-wing unmanned aerial vehicle (UAV) at hover and typical flight speeds are normalized to the A-weighted sound pressure level at a distance of 1 meter from the aircraft. The noise test frequency range is 20Hz~20000Hz. Under flight conditions, the speed of the UAV during testing is 3m/s.

2. Lighting

The lighting purposes of this product are as follows: The front and rear arm lights serve to distinguish directions. The front arm light is (blue) indicating straight ahead. The rear arm light, in GPS mode, is (green) indicating straight behind, and in indoor mode, it is also (green) indicating straight behind.

Explanation of light language: None.

The lights of our product are solely used for decoration, beautification, and for identifying the direction of unmanned aerial vehicles.

| Noise test | | |
|---|---|---|
| observation point | hover | Flight 3m/s |
| ground observation point (Below vertically) | 78.5 dB(A) | 79.0 dB(A) |
| Side observation point (Contour plane) | 80.0 dB(A) | 75.5 dB(A) |
| Note: The measurement environment is a closed space. | | |

## LED LNDICATOR LIGHTS

**Indicator Light Guide**

**The LED lights on your drone provide important status information. Refer to the table below for detailed explanations:**

| Light Status | Meaning |
|---|---|
| Front Light: Steady White | Device is powered on. |
| Front Light: Blinking White | Calibration in progress or low battery. |
| Rear Light: Blinking Blue | Searching for GPS signal. |
| Rear Light: Steady Blue | GPS signal locked successfully. |

## TROUBLESHOOTING AND FAQS

### Common Issues and Solutions

**Below are some common issues you may encounter while using your drone, along with their solutions:**

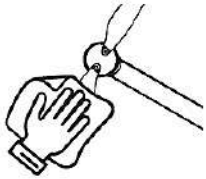
| Q: | Solution : |
|---|---|
| Why won't the drone take off? | Check if the battery is fully charged.<br>Ensure the propellers are securely installed.<br>Verify that the GPS signal is locked (at least 8 satellites). |
| Why is the APP video stream lagging? | Restart the APP.<br>Reconnect to the Wi-Fi network (name: Nexaero_XXXX).<br>Ensure the drone is within range and there is no interference from other devices. |
| What should I do if the drone loses GPS signal? | Move the drone to an open area away from buildings, trees, or other obstructions.<br>Wait for the rear light to turn solid green, indicating GPS lock. |
| Why does the drone land unexpectedly? | Check if the battery is low (front light will blink white).<br>Ensure the remote controller is not out of range. |
| How do I fix a calibration error? | Restart the drone and recalibrate the compass and gyroscope.<br>Perform horizontal and vertical rotations as instructed in the manual. |

## MAINTENANCE AND CARE

### Drone Maintenance

**To ensure the longevity and optimal performance of your Drone, follow these maintenance tips:**

### 1. Cleaning the Propellers



- **How to Clean :**
- **Use a soft cloth to wipe down the propellers.**
- **Avoid using sharp ⚠ tools to prevent damage.**

### 2. Storing the Battery

- **Proper Storage :**
- **Store the battery in a cool, dry place.**
- **Keep it away from high temperatures and direct sunlight.**
- **Do not squeeze or crush the battery.**

## LEGAL DISCLAIMER

### Important Legal Information

**To ensure safe and compliant operation of your Drone, please adhere to the following legal requirements:**

1. **Compliance with FAA Regulations**
- **Operate your drone in accordance with FAA Remote ID requirements and local laws.**
- **Always fly within visual line of sight and avoid restricted airspace (e.g., near airports or military zones).**

2. **User Responsibility**
- **Users are solely responsible for any damages or losses resulting from improper or non-compliant operation.**
- **Failure to comply with regulations may result in fines, penalties, or other legal consequences.**

3. **Prohibition of Modifications**
- **Do not disassemble, modify, or tamper with the drone. Unauthorized modifications may void warranties and cause safety hazards.**