

Drone

User's Guide V1.0



Before using the product, please read this instruction manual carefully and try to fly in an environment with good air quality and lighting.

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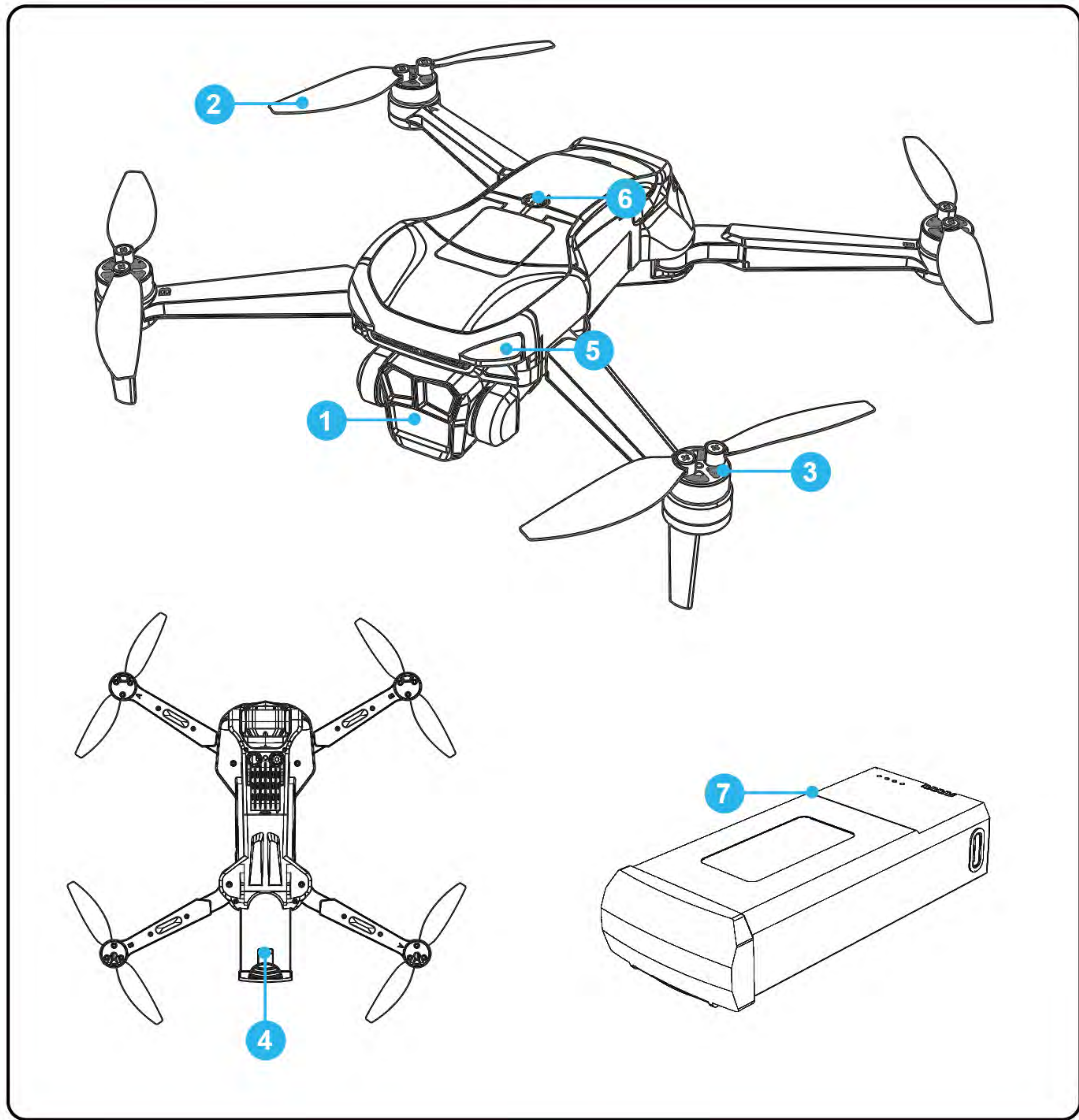
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3. PRODUCT FUNCTIONS

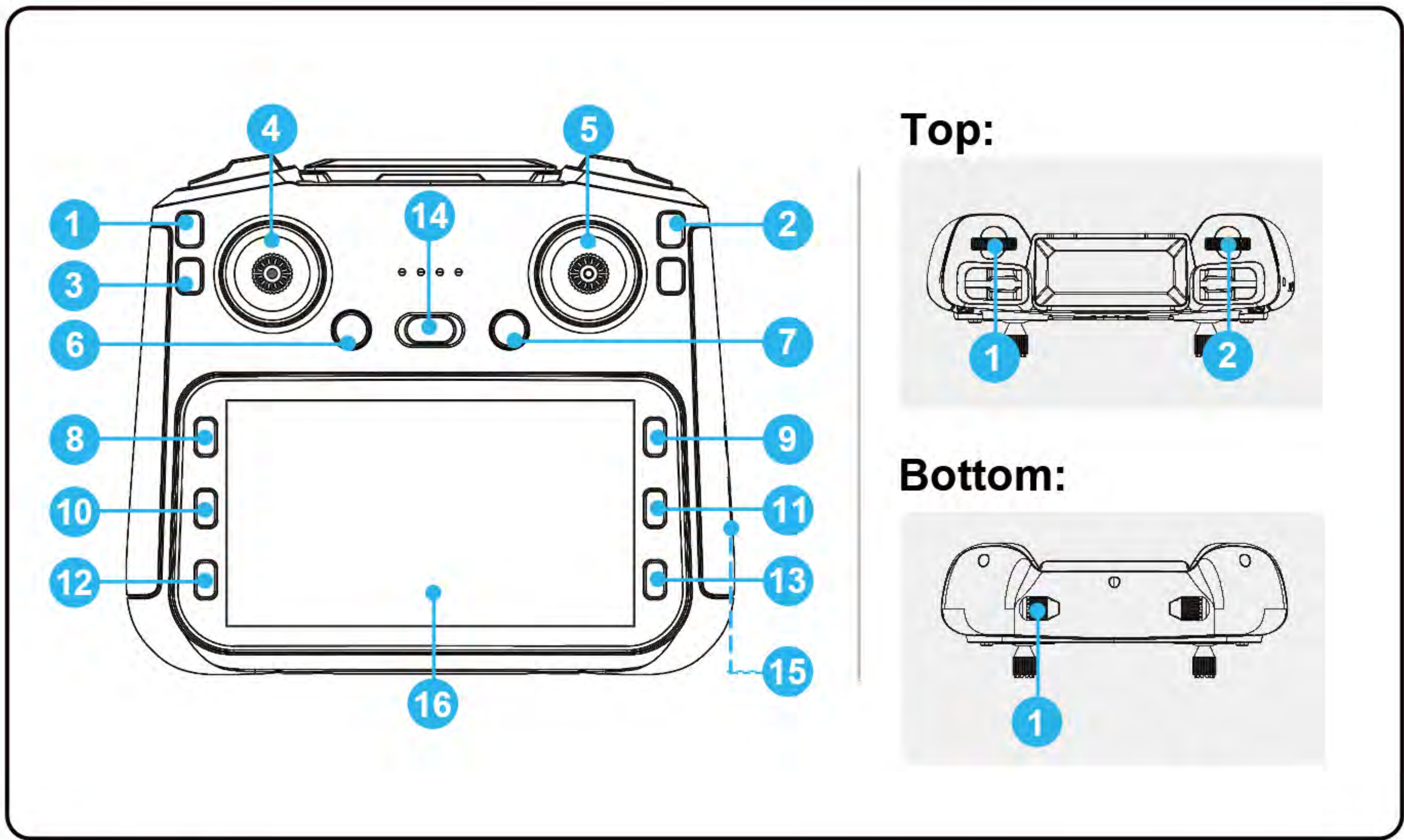
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1.1 Diagram of the Drone



- 1 HD Camera
- 2 Propeller
- 3 Motor
- 4 Drone Battery
- 5 LED Indicator
- 6 Power Switch
- 7 Drone Battery

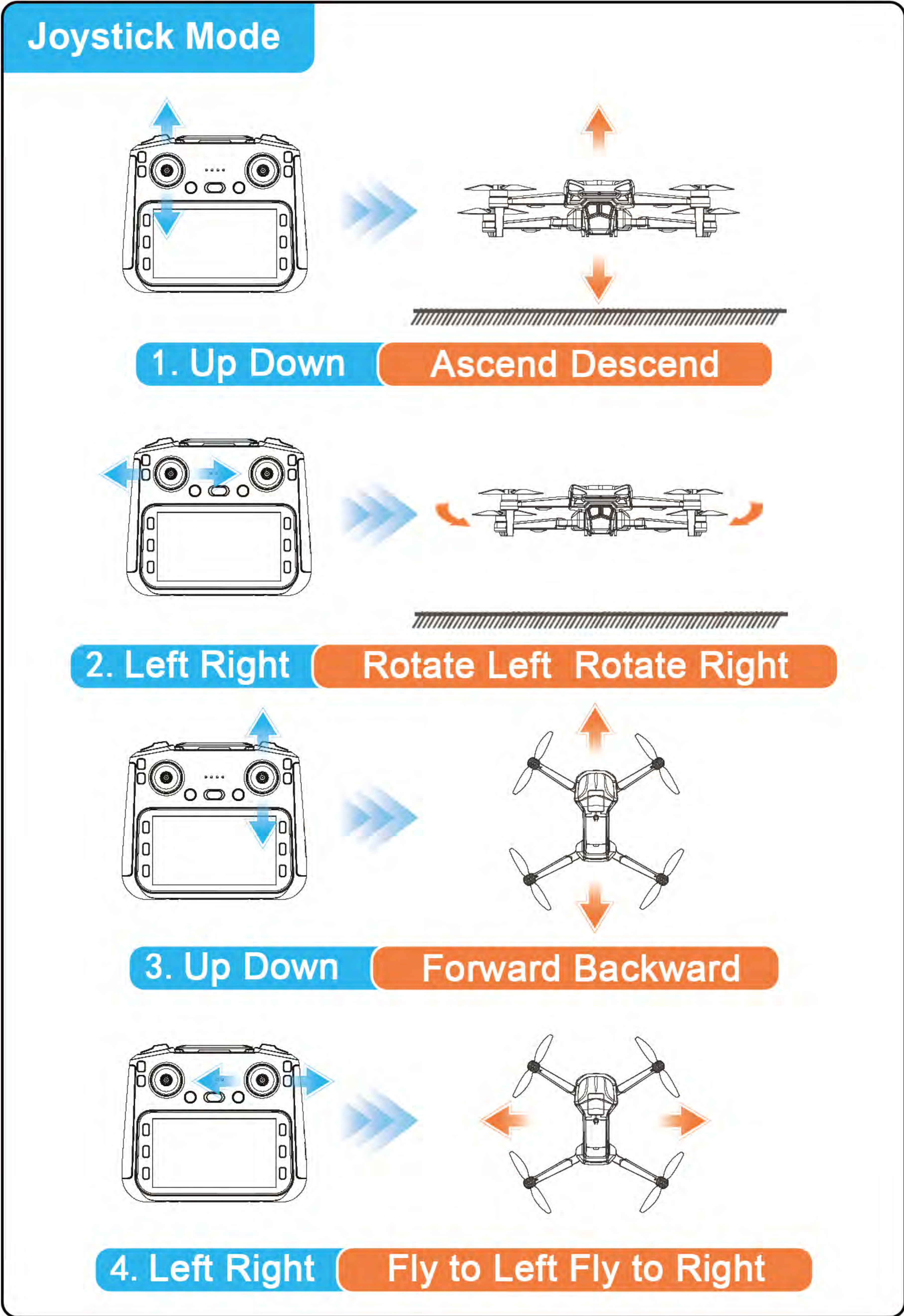
1.2 Diagram of the Transmitter



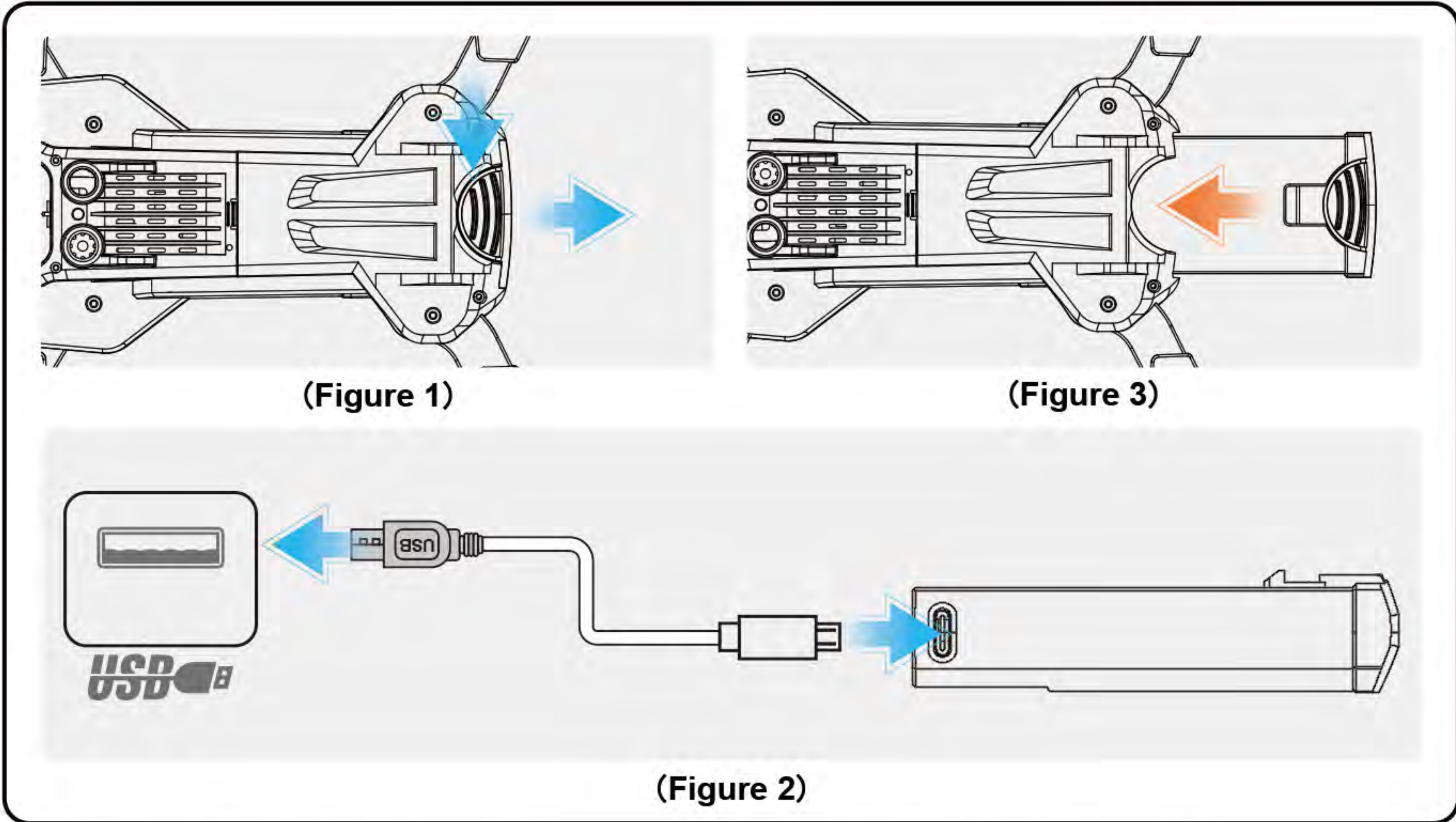
- Front:**
- 1 Compass Calibration
 - 2 Headless Mode (Short Press) / GPS Mode Switch (Long Press)
 - 3 Gyro Calibration
 - 4 Left Joysticks
 - 5 Right Joysticks
 - 6 One-Key Unlock/One-Key Takeoff/Landing (Short Press) / Emergency Stop (Long Press)
 - 7 One-Key Return
 - 8 Photograph (transmission status), Page Up (Playback Mode)
 - 9 Exit Playback Mode
 - 10 Video (transmission status), Page Down (Playback Mode)
 - 11 Confirm
 - 12 Screen Switch
 - 13 Enter Playback Mode
 - 14 Power Switch
 - 15 Type-C Charging Port
 - 16 Display Screen

- Top:**
- 1 Speed Adjustment Dial
 - 2 Camera Angle Adjustment Dial
- Bottom:**
- 1 Storage Slots for Joysticks

1.2 Diagram of the Transmitter



2.1 Charging



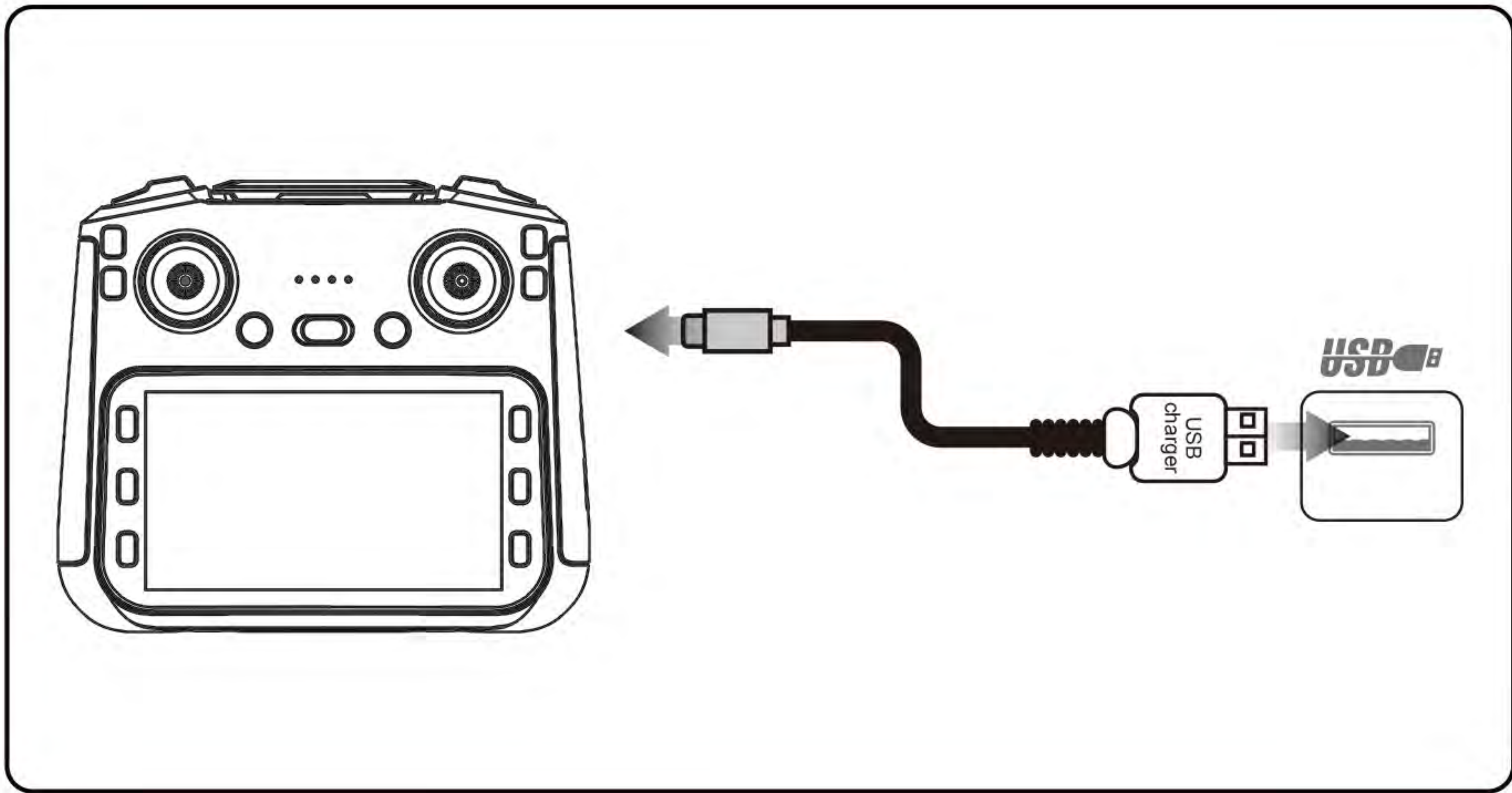
Lithium Battery Charging Instructions:

1. Press the battery release button at the rear of the drone and remove the battery from its compartment. (Figure 1)
2. Insert the USB charging cable into a power source and connect the other end to the battery's charging port. The red LED will illuminate during charging and turn off when fully charged. (Figure 2)
3. Reinstall the battery into the drone after charging. (Figure 3)

Important Notes:

1. Fully charge the battery before flight.
2. Allow the battery to cool to room temperature before charging.

2.1 Charging



Transmitter Charging:

- 1. When the transmitter battery is low, the drone screen will flash black and gray upon startup.
- 2. Charge via the USB cable. The red LED near the charging port will blink during charging.
- 3. When the LED turns off, charging is complete. The battery level will display on the transmitter screen.

2.2 Two Drone Pairing Methods



WiFi Pairing with Mobile Phone (APP Mode)

- 1. Download & Installation:
 - Download the App: Scan the QR code for iOS/Android.
 - Compatible operating systems: iOS 8.0 or later, Android 5.0 or later.

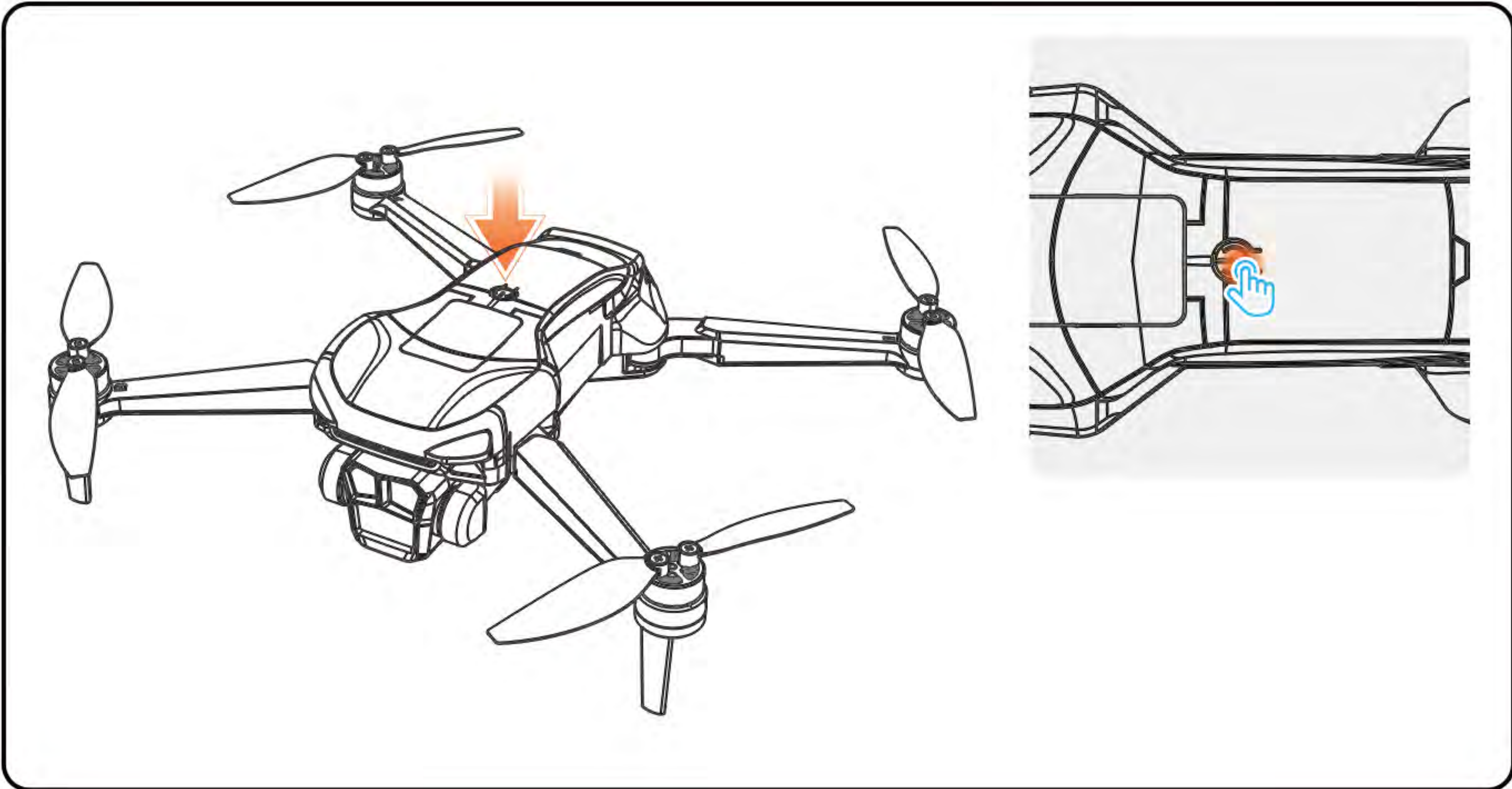
Note:

Required operating systems:

- iOS 8.0 or later
- Android 5.0 or later

When the drone is connected to a mobile phone, control via the transmitter is disabled.

2.2 Two Drone Pairing Methods

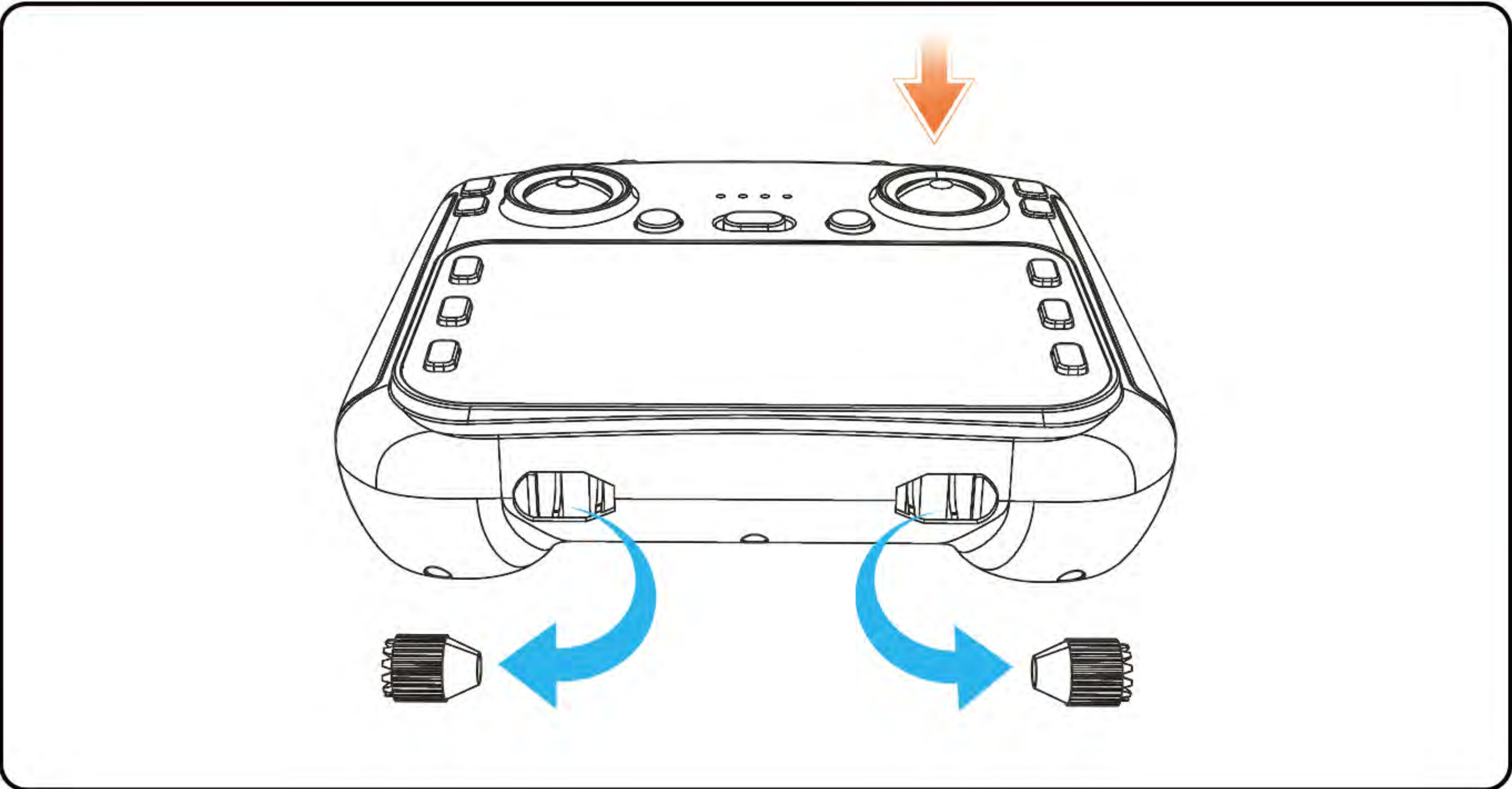


• 2.Wi-Fi Pairing (App Mode):

- 1. Turn on the drone: Long-press the drone's power button to activate it.
- 2. Connect to the drone's network:
Open your phone's Wi-Fi settings.
Select the drone's network from the list. No password is required.

Note: Switching between indoor (optical flow) mode and GPS mode can only be done via the transmitter, not through the app.

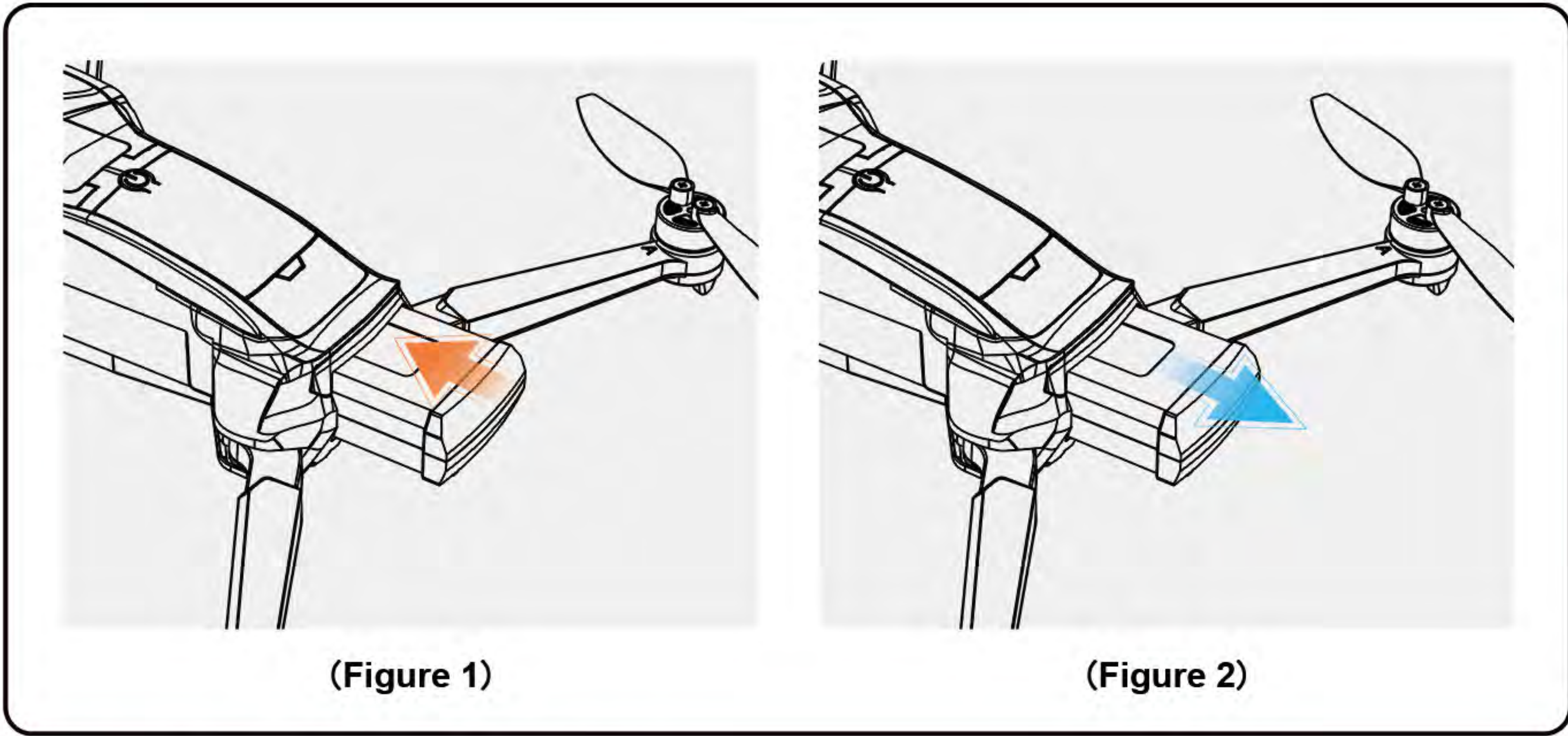
2.2 Two Drone Pairing Methods



Remote Controller Pairing (Manual Mode):

- 1. Attach joysticks to the transmitter and charge it fully.
- 2. Turn on the drone and transmitter. Pairing completes in ~40 seconds (LED turns solid, and a beep sounds).

2.3 Pre-Flight Preparation



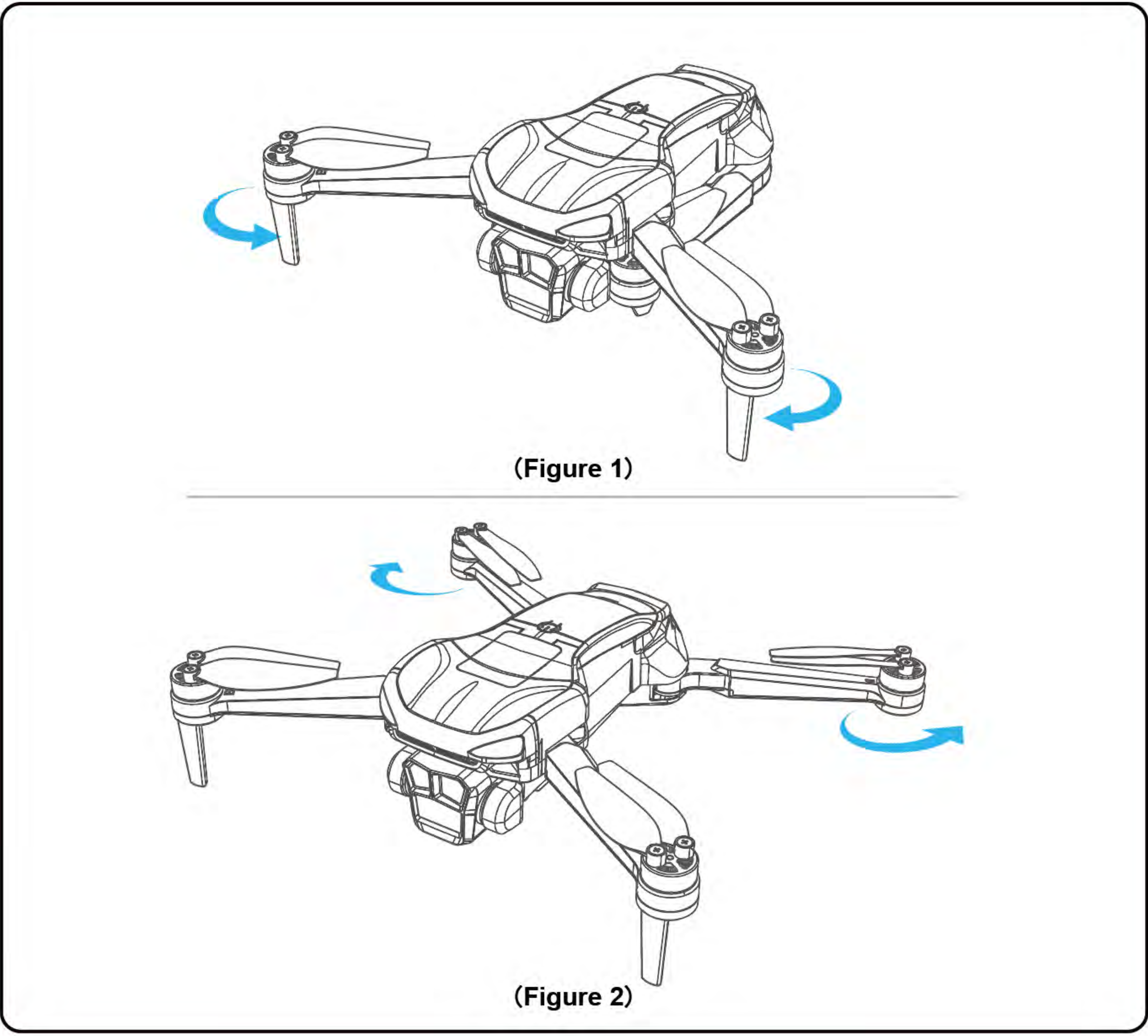
• 1. Battery Installation:

Insert the battery until it clicks.(Figure 1)
Remove by pressing the release button. (Figure 2)

 WARNING:

Always power off the drone before installing or removing the battery. Ensure the battery is securely installed and locked in place. A loose battery may cause mid-flight power failure, leading to loss of control or crash. Never use damaged, low-charge, or unapproved batteries.

2.3 Pre-Flight Preparation



• 2. Arm Deployment:

Unfold front arms first, then rear arms. (Figure 1)(Figure 2)

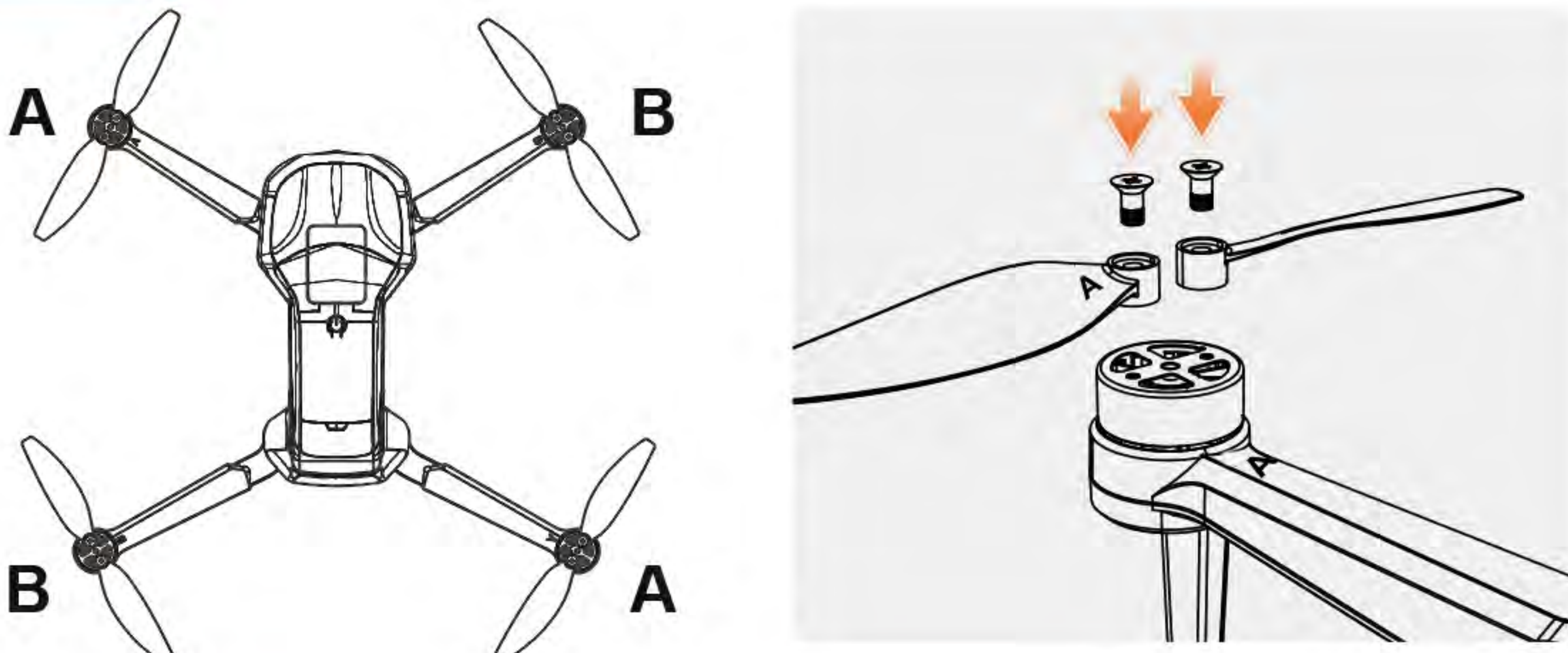
 Note: The drone's arms are folded when packaged.

To prepare for flight, first unfold the front arms, then unfold the rear arms

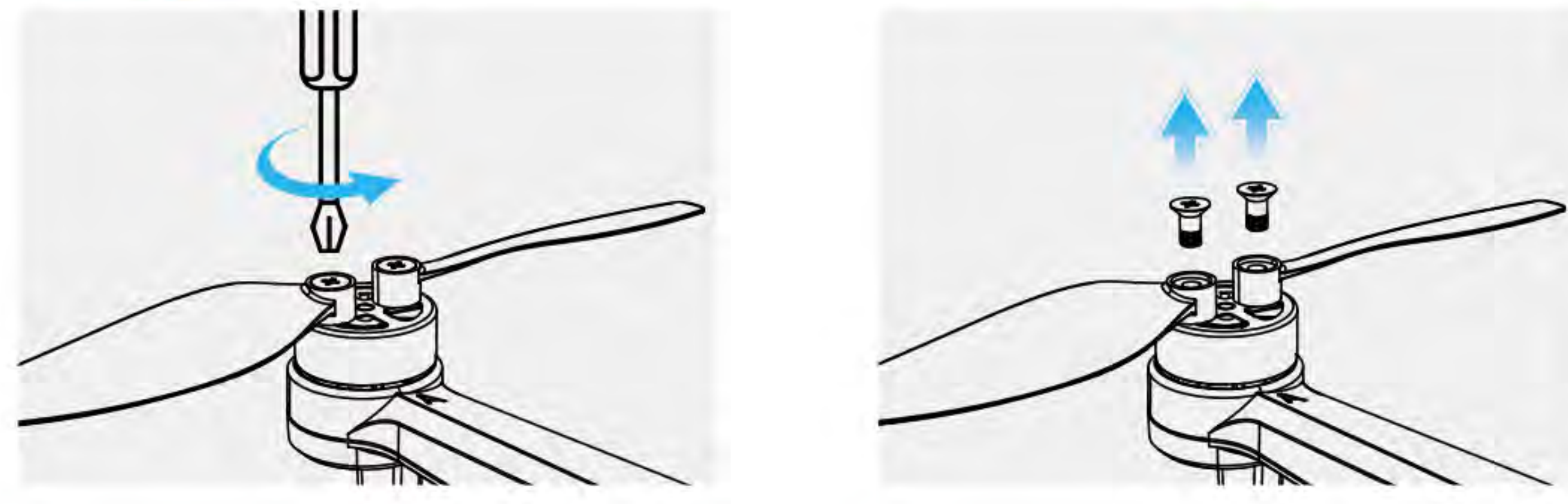
2.3 Pre-Flight Preparation



Installation:



Removal:



• 3.Propellers

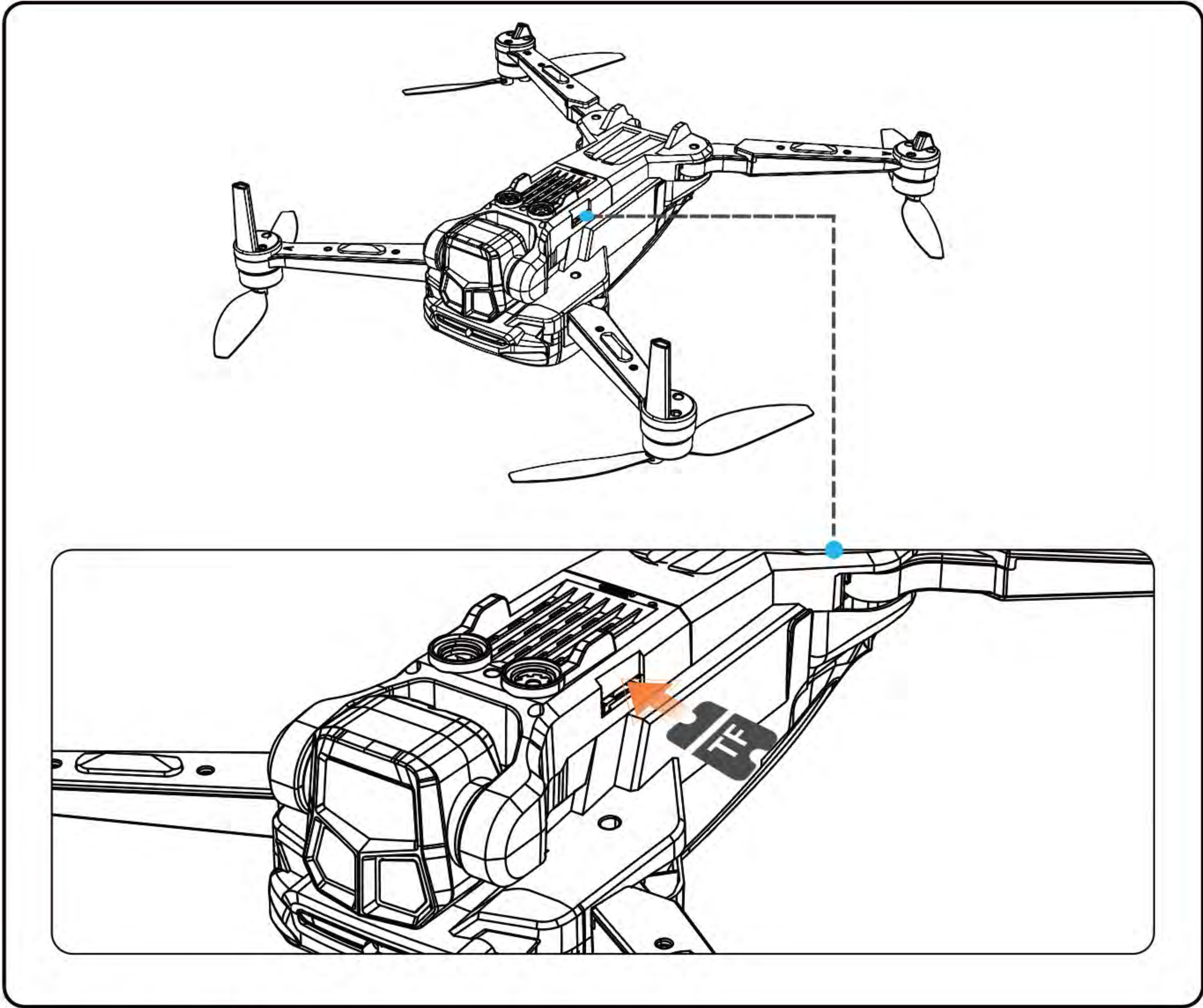
• Installation:

1. Identify the propellers labeled A and B, and match them with the corresponding A and B markings on the drone’s motor shafts.
2. Align each propeller correctly with its designated motor shaft.
3. Use a screwdriver to securely tighten the screws, ensuring the propellers are firmly in place.

• Removal:

1. Use a screwdriver to carefully loosen the screws by turning them counterclockwise.
2. Once loosened, gently pull the propellers off the motor shafts.

 **Note:** Before each flight, check if the propellers are secure and tightly attached. If the propellers are deformed or damaged, replace them before flying.

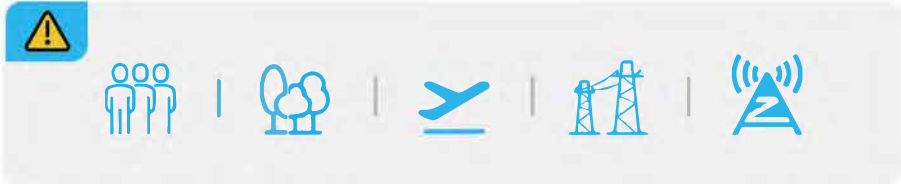
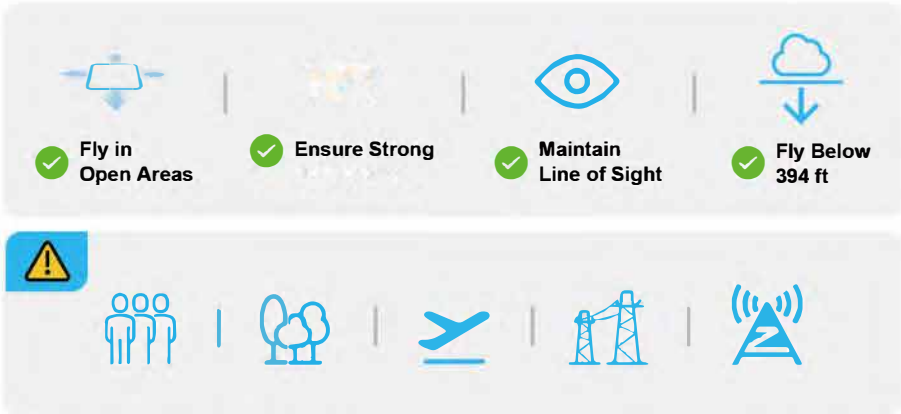


• 4.TF Card

Insert a TF card into the TF card slot before turning on the drone. Both the drone and the transmitter have TF card slots. While video can be recorded with the TF card inserted in either device, we recommend inserting it into the drone for optimal image quality.

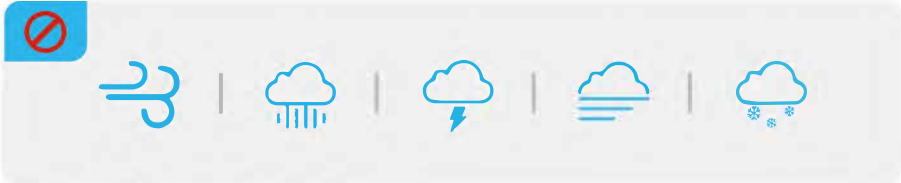
 **Note:** When connected to the drone, the transmitter can be used to view photos taken by the drone. If not connected, insert the TF card into the transmitter to access photos and videos.

2.4 Drone Flight Safety Guidelines



⚠️ Important Symbols:

- Avoid flying over or near obstacles, crowds, high-voltage power lines, trees, airports, or bodies of water.
- Avoid flying near areas with magnetic or radio interference, such as power lines, mobile base stations, radar stations, and broadcasting towers.

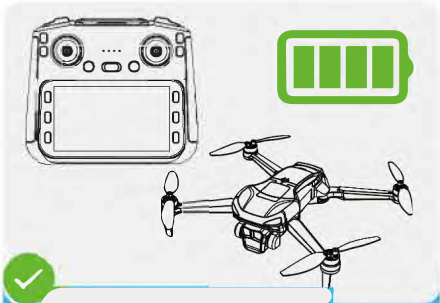


🚫 Prohibited Symbols:

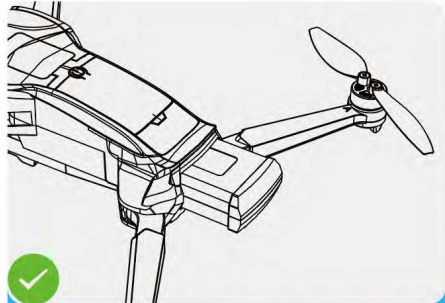
- DO NOT use this drone in severe weather conditions, including heavy wind, rain, snow, fog, hail, or lightning.
- Keep a safe distance from the rotating blades and motors.
- DO NOT fly in restricted drone zones.

💡 **Reminder:** It's important to understand basic flight guidelines for the safety of yourself and those around you. Be sure to read the Safety Guidelines before flying.

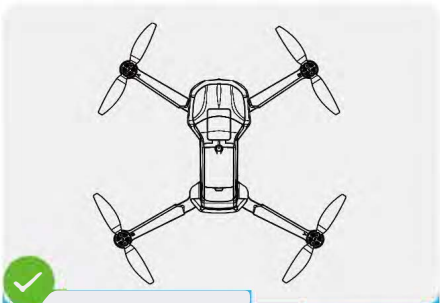
2.5 Pre-Flight Checklist



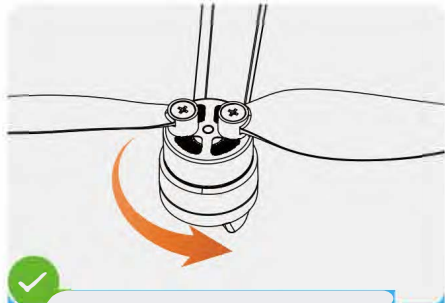
Make sure the transmitter, cellphone, and drone battery are fully charged.



Ensure the drone battery and propellers are securely installed.



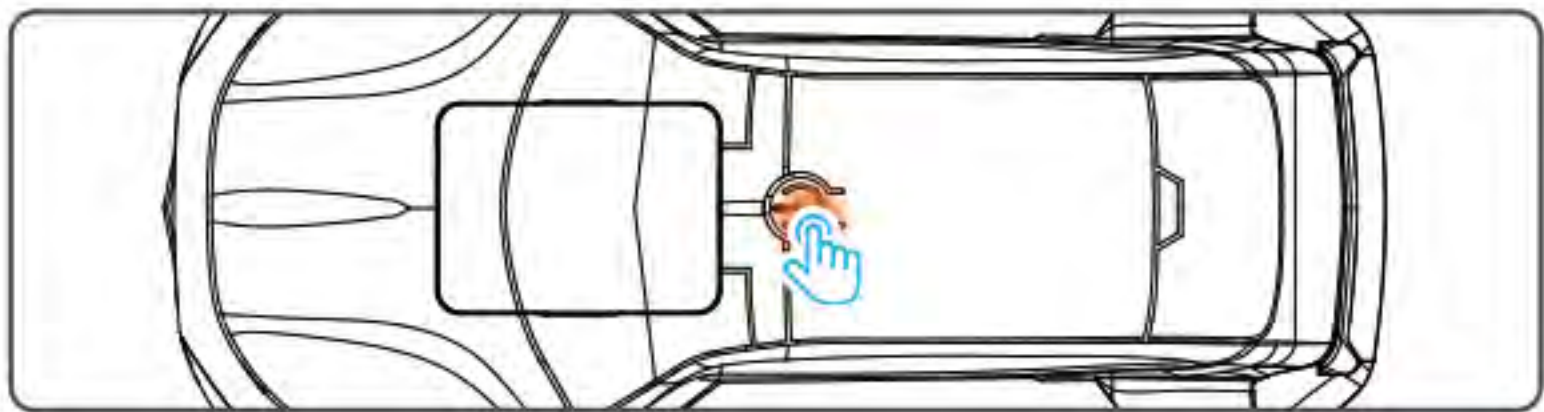
Make sure the drone arms are fully extended.



Ensure nothing is obstructing the motors.

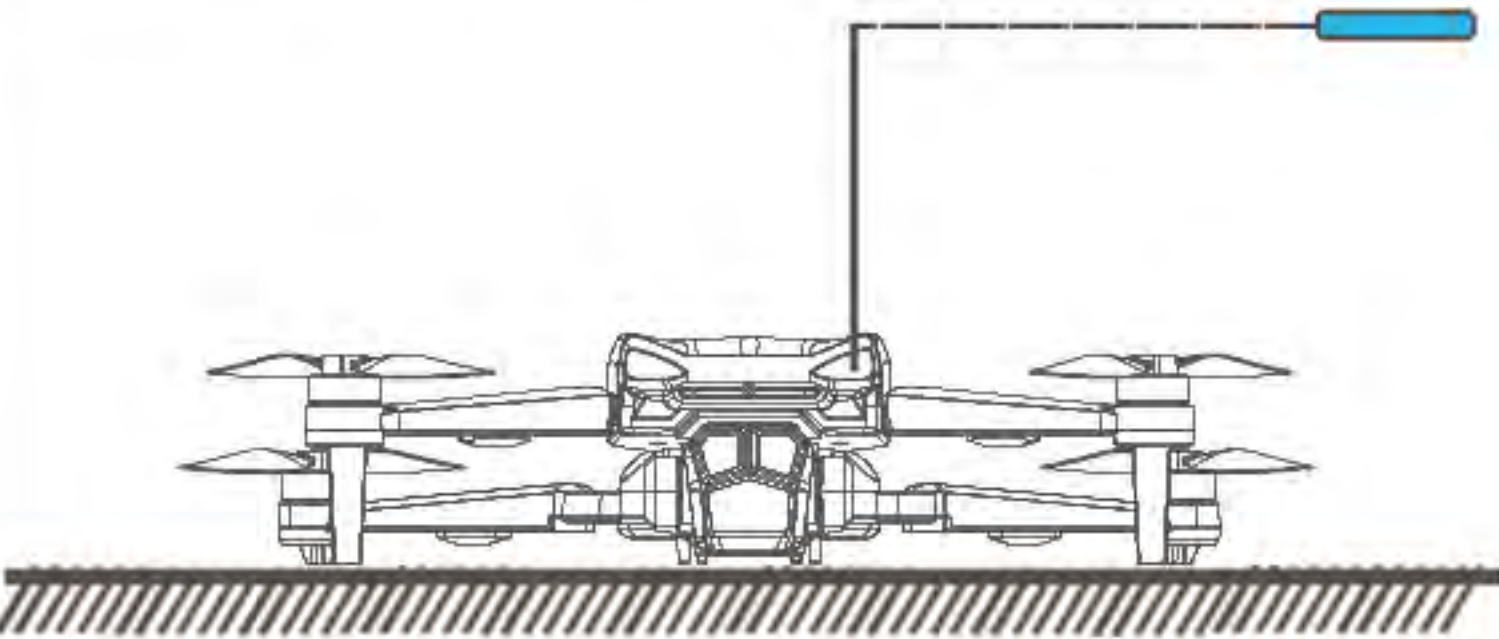
1. Pairing Guide

 **Tip:** To prevent unnecessary loss or damage, always fly the drone in an open outdoor area.



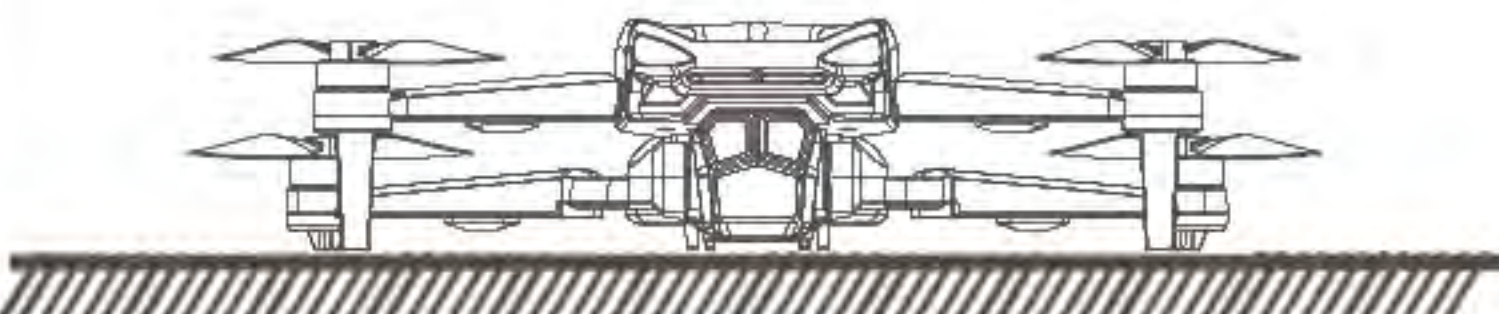
1.Turning on the Drone

Long press the power switch to turn on the drone.
Place the drone on a level surface, ensuring the front is facing forward. The drone's status indicator will blink blue, indicating it is ready for pairing.



2.Turning on the Transmitter

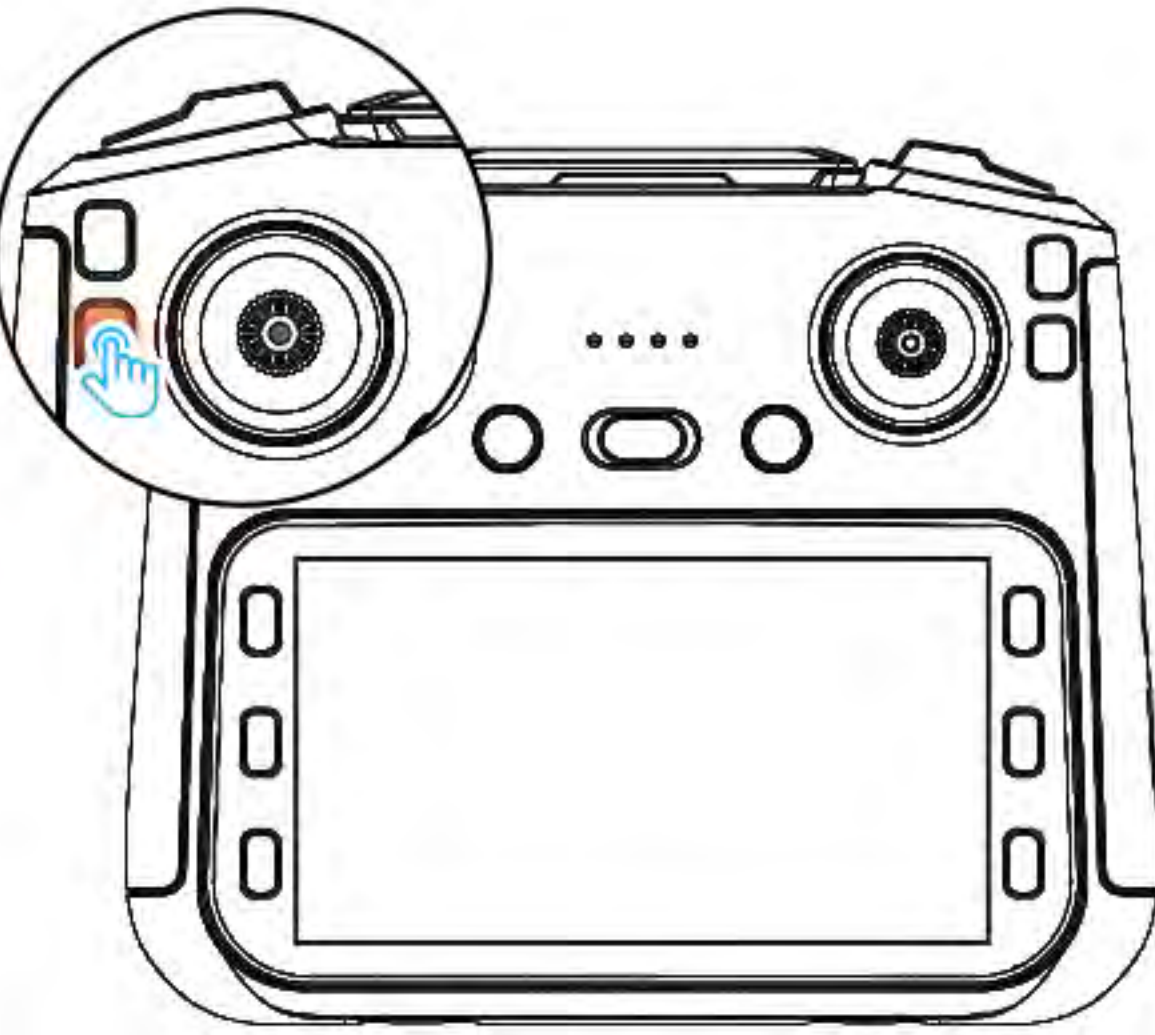
Power on the transmitter.
The transmitter's screen will display the startup interface and initiate the pairing process automatically.



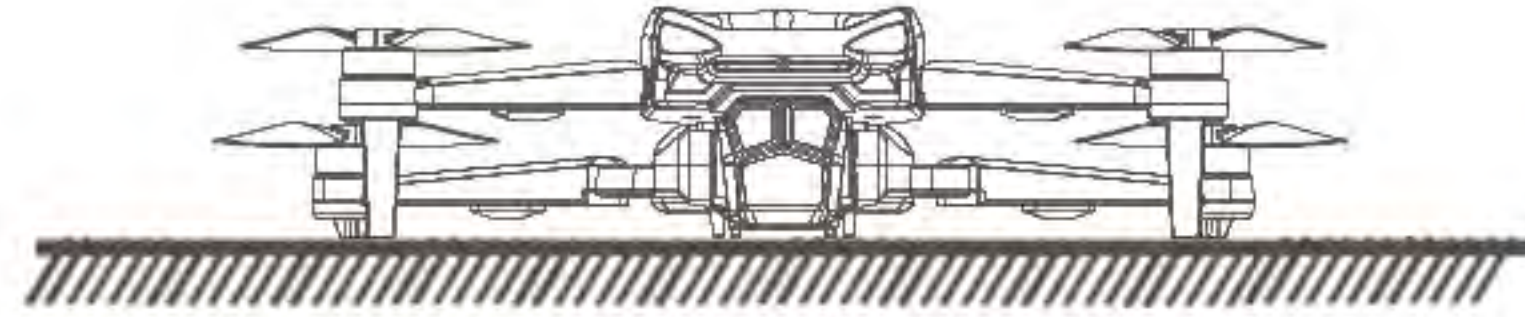
3.Pairing

Outdoors (GPS mode): After about 40 seconds, the transmitter will automatically connect to the drone, which starts in GPS mode by default. Once pairing is complete, the transmitter will emit a long beep, and the drone's status indicator will turn solid blue.

Indoors (Optical Flow mode):
After about 40 seconds, press and hold the GPS switch button to switch to Optical Flow mode. The drone's status indicator will turn off, indicating successful pairing.



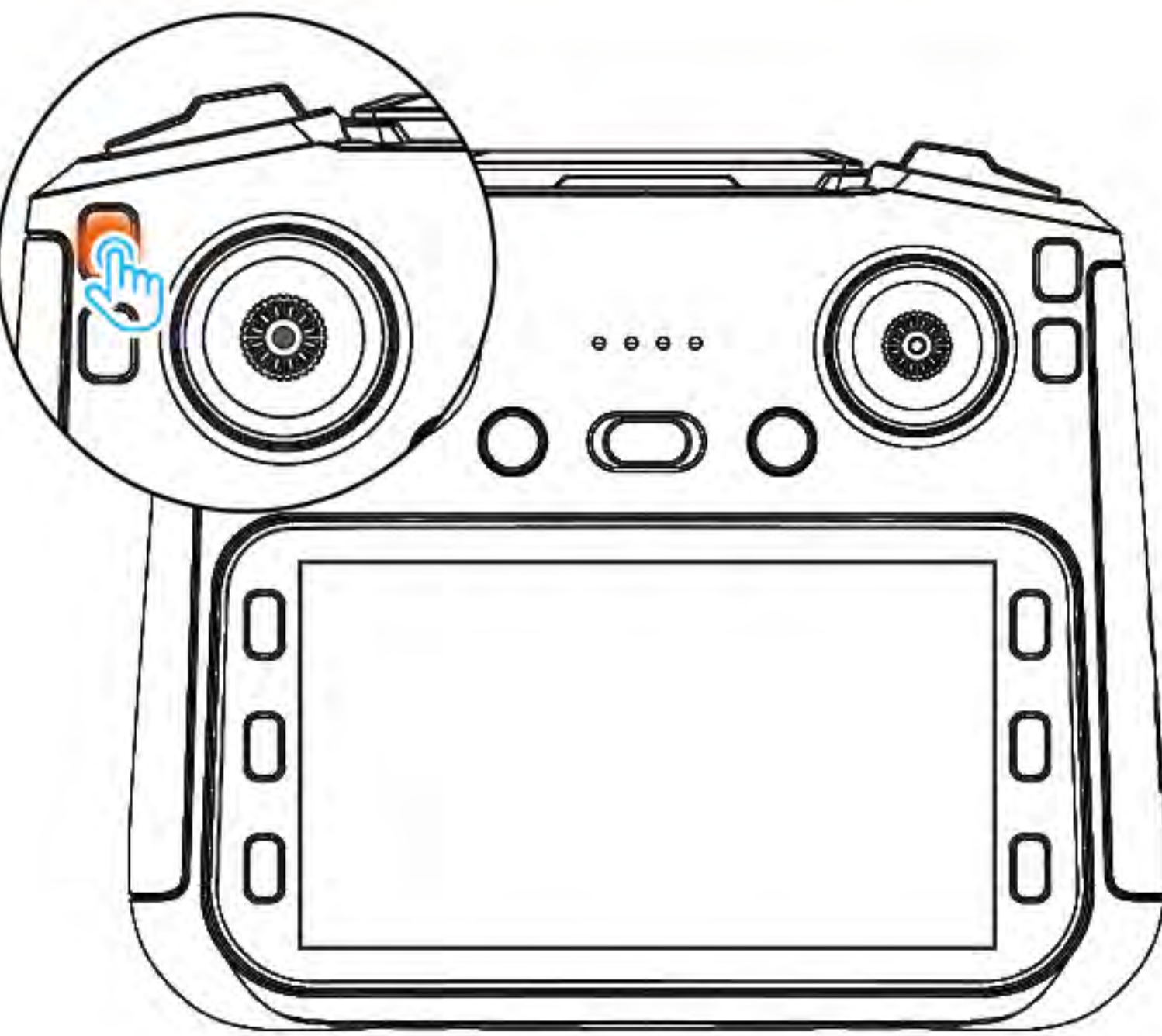
2.Gyro Calibration



1. Place the drone on a level surface to ensure accurate calibration.
2. Press the gyro calibration button on the remote control.
3. The remote will emit a "beep" sound, and the drone's lights will flash for 3 seconds.
4. Once the lights stop flashing, the calibration is complete.

 **Note:** Always calibrate the gyro before each flight for optimal stability.

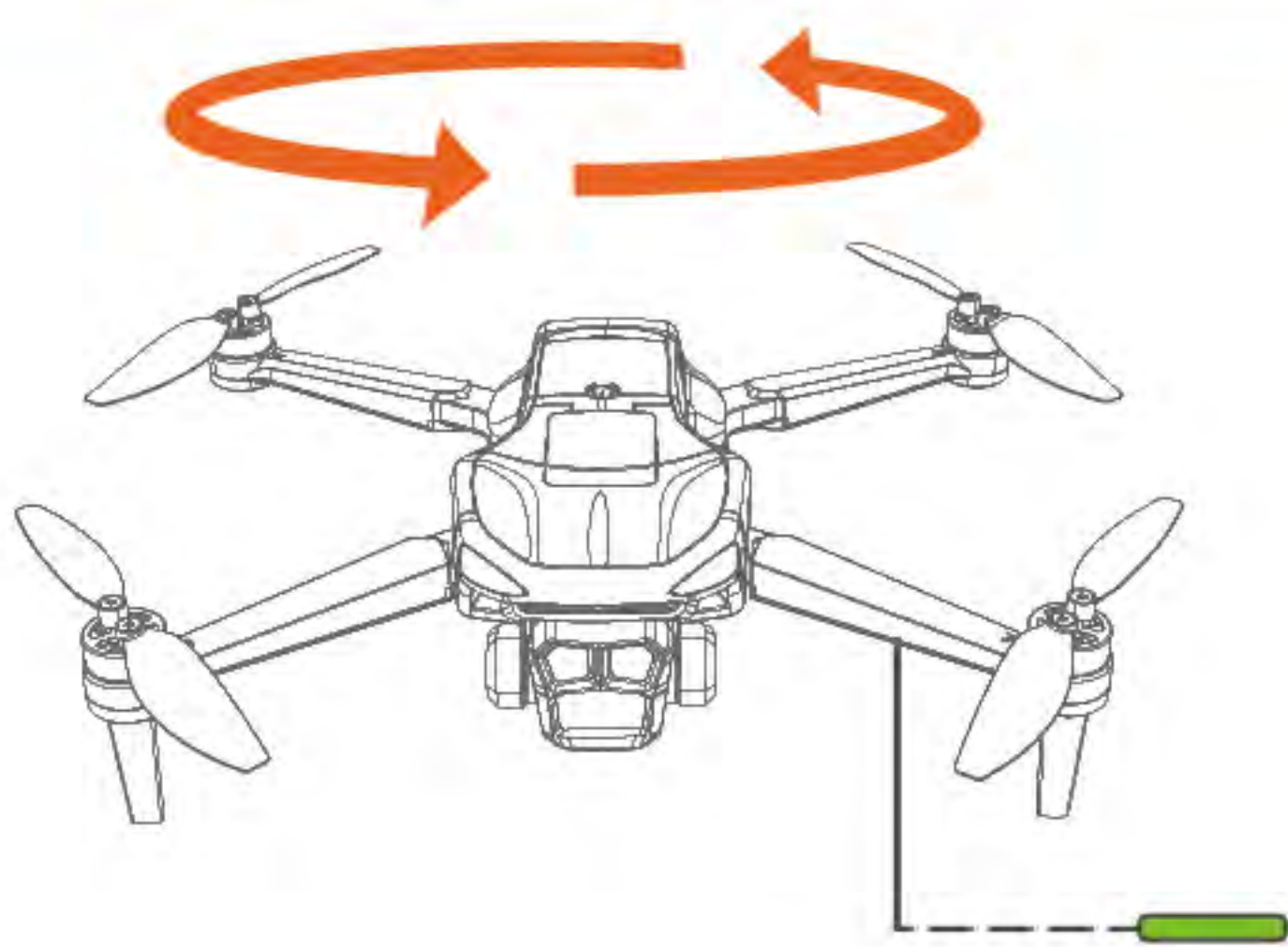
3.Compass Calibration



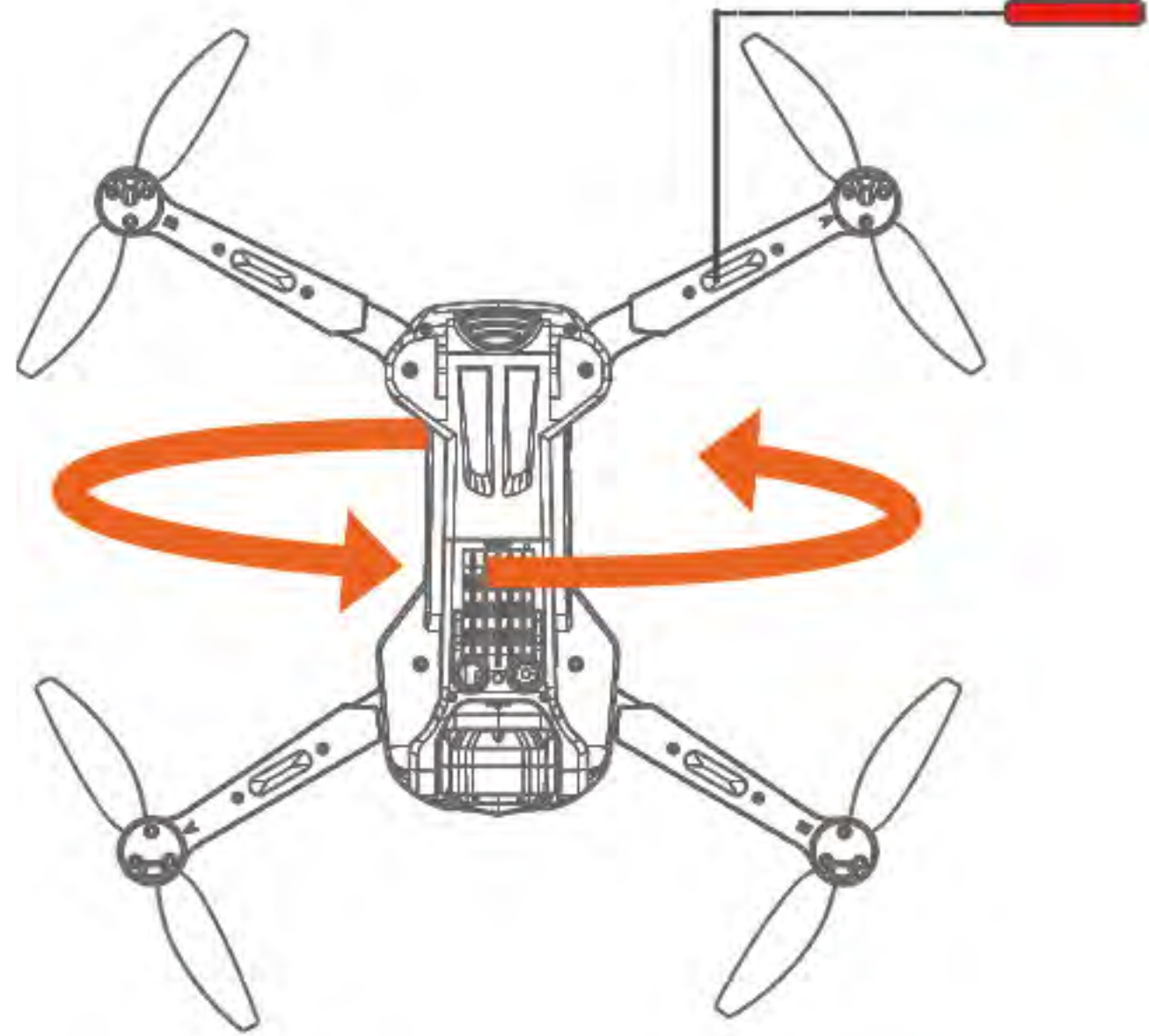
1. Press the "Compass Calibration" button on the transmitter.
2. The transmitter will emit a "beep" sound, signaling the start of calibration.
3. The drone's front and rear lights will turn off, indicating that it has entered geomagnetic calibration mode.



3.Compass Calibration



1. Horizontal Calibration:
Rotate the drone counterclockwise several times(keep it parallel to the floor).
The front light will turn on, and the transmitter will emit a single beep, indicating successful horizontal calibration.



2. Vertical Calibration:
Point the drone's nose downward and rotate it counterclockwise several times.
The rear light will turn on, and the transmitter will emit two beeps, signaling that the calibration is complete.

4.GPS Star Searching

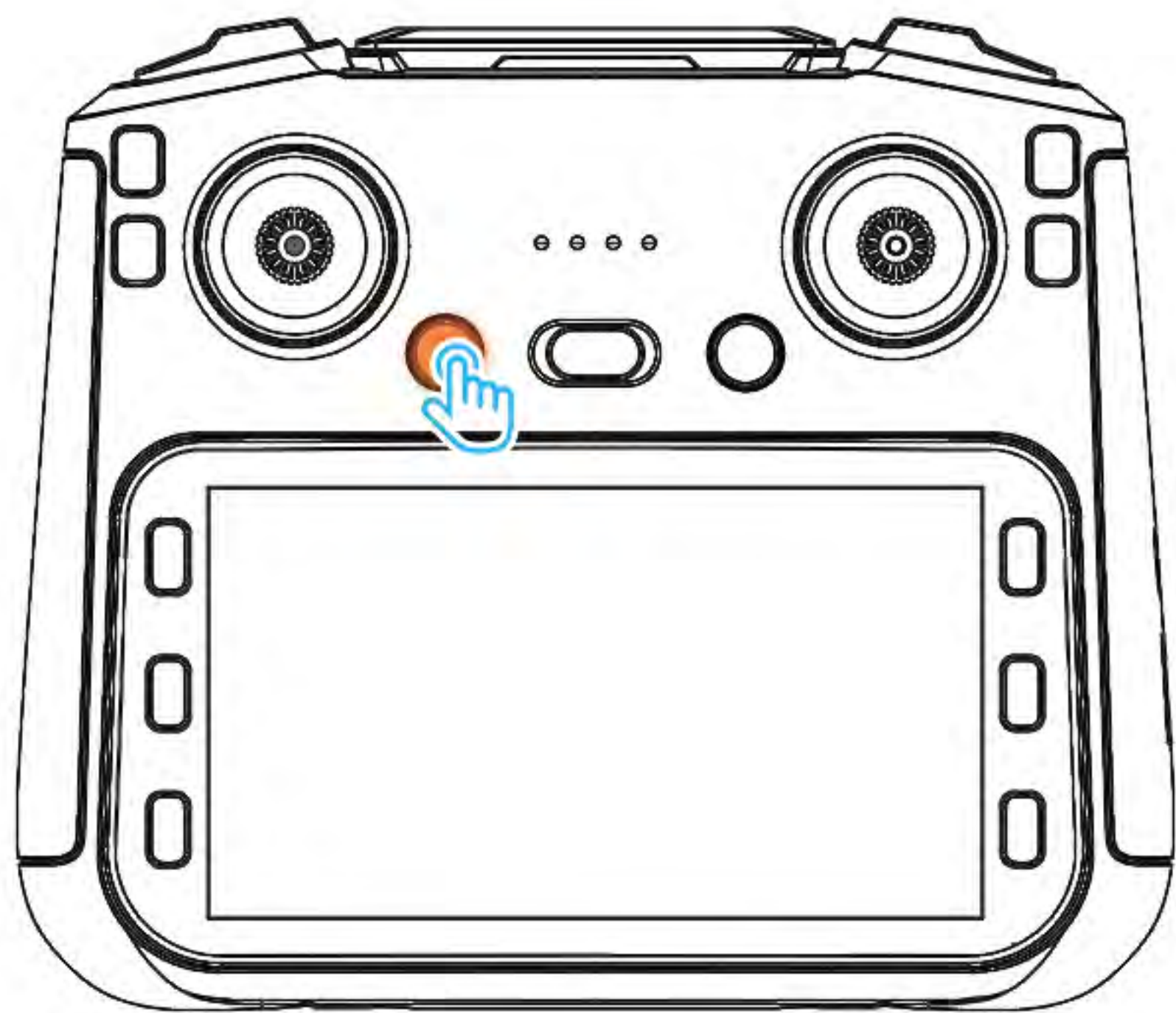


After the gyro and compass calibration are successfully completed, the front lights will remain steady, indicating that the drone is in GPS mode. The number of stars can be seen on the remote controller, and the more stars there are, the stronger the GPS signal.

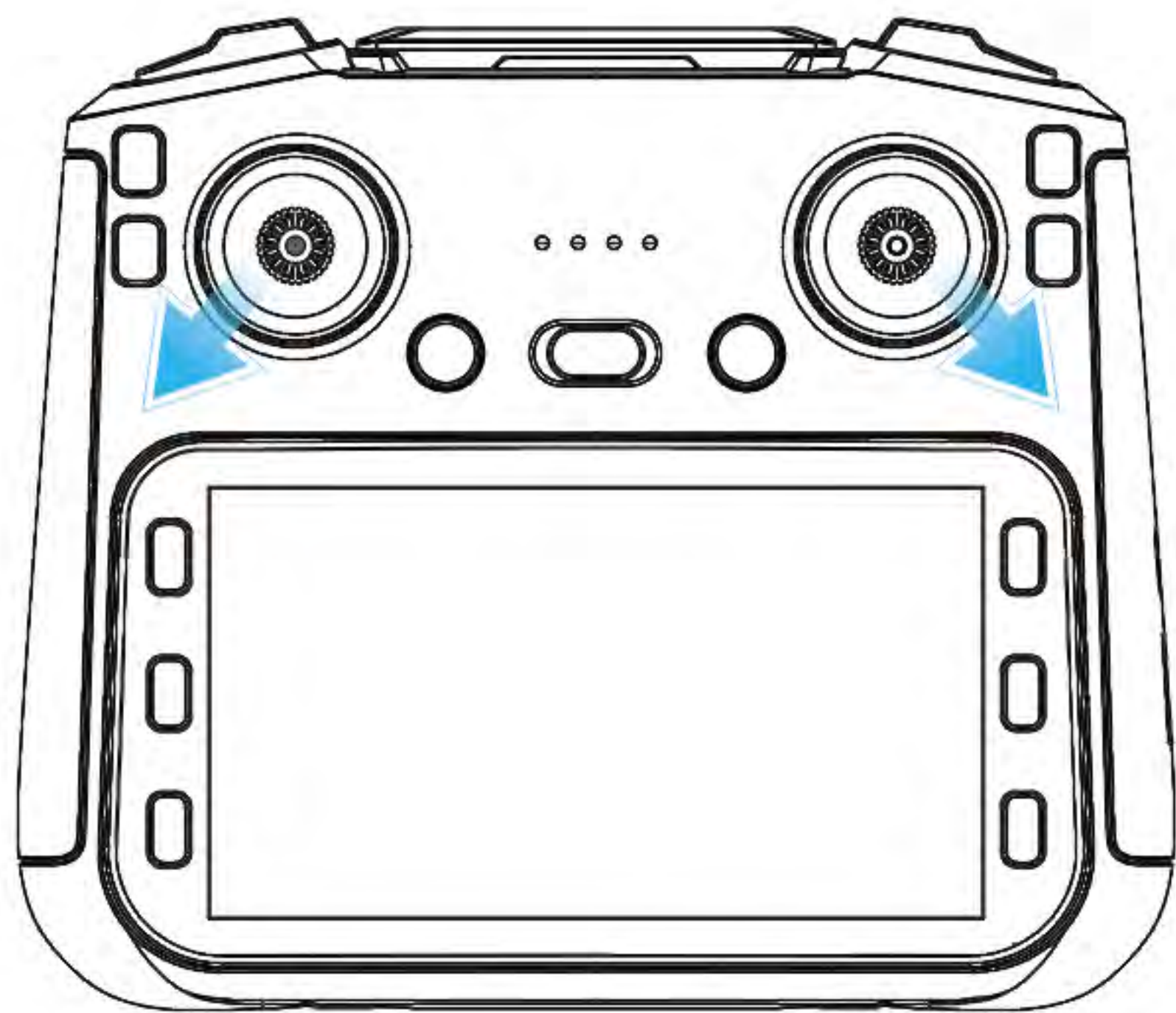
Special Reminder: If the star search is unsuccessful (the headlights do not turn on), it means the drone is still in optical flow mode. In this case, it is not recommended to take off outdoors, as optical flow mode is intended for indoor use.



5.Unlocking the Motors



(Figure 1)



(Figure 2)

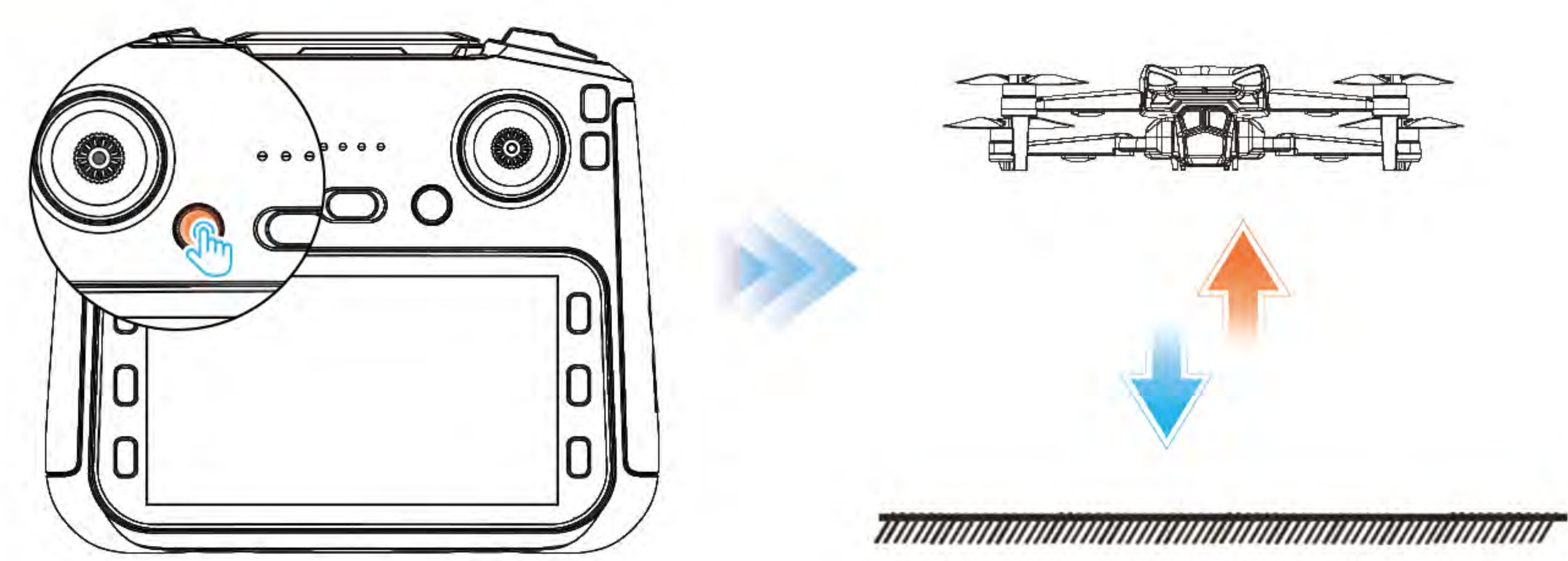
Before taking off, the drone must be unlocked.
You can unlock it using either of the following methods:

- 1.Press the "Unlock" button on the transmitter.(Figure 1)
- 2. Manual Unlock: Push both the left and right joysticks outward, then return them to the center position.(Figure 2)

Once the four propellers start spinning, the drone is successfully unlocked and ready for operation.

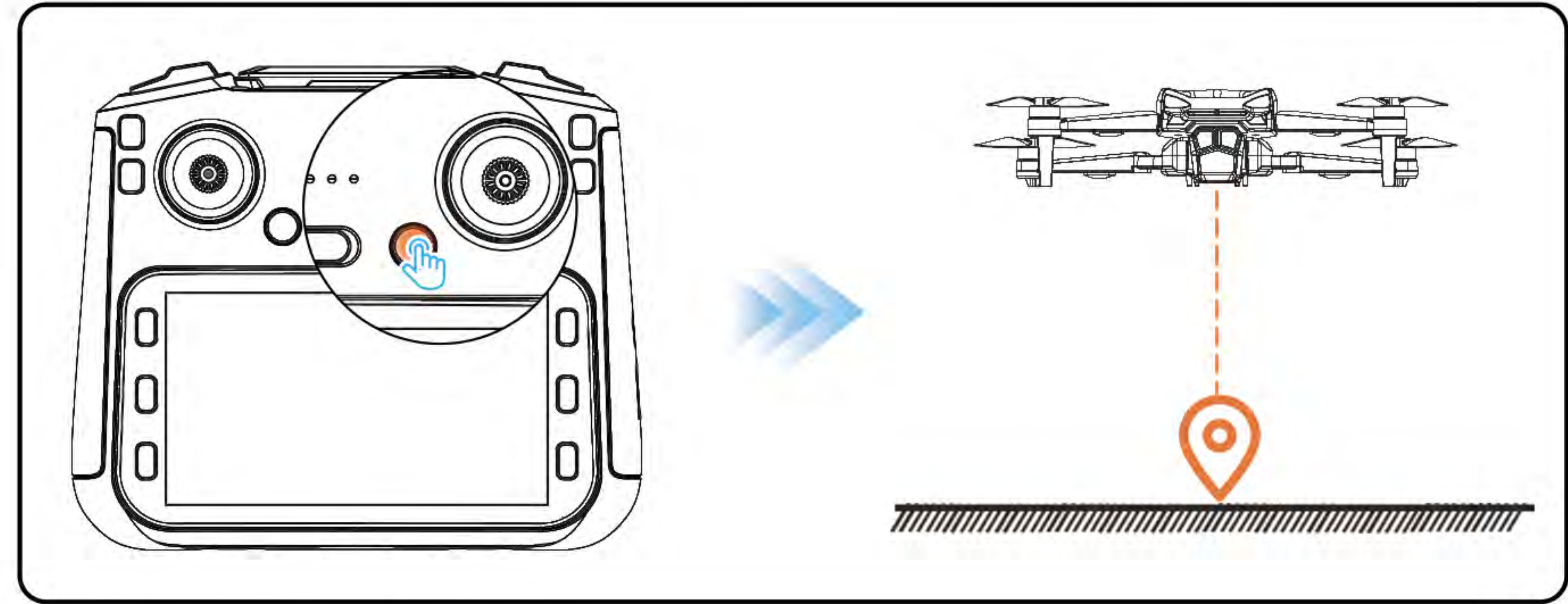


6.One-Key Takeoff and Landing



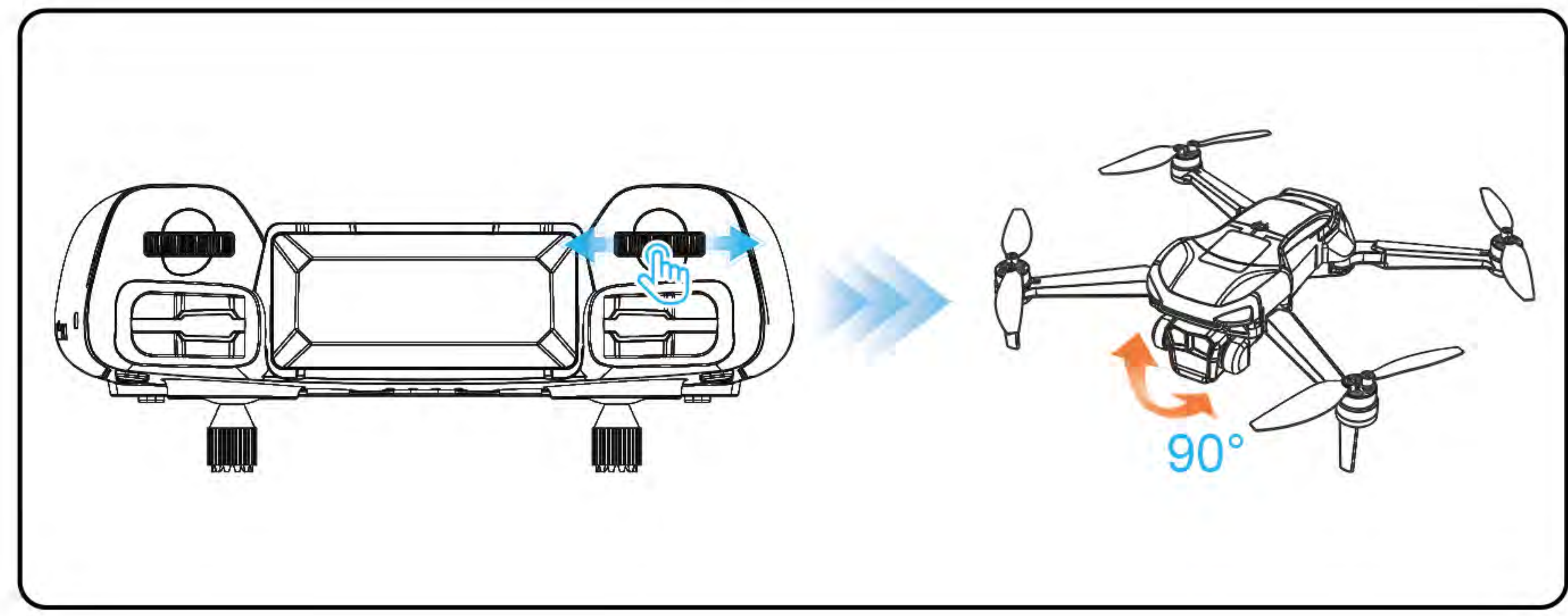
Takeoff:
Press the One-Key Takeoff button once, and the drone will slowly lift off into the air.
Once in the air, you can control the drone using the joysticks.

Landing:
While the drone is flying, press the same button.
The drone will slowly descend to the ground.



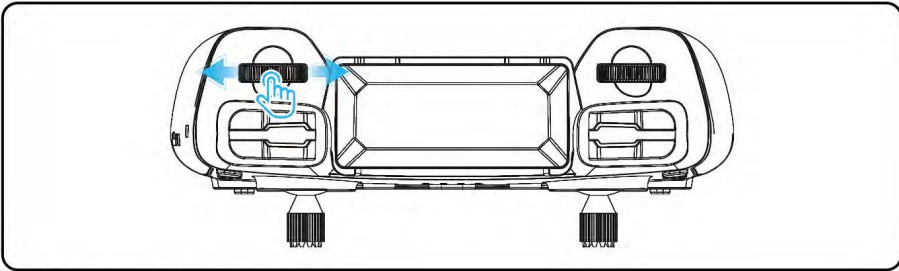
• **1.One-Key Return**
Press the One-Key Return button to activate Auto Return, and the drone will automatically fly back to the last recorded Home Point while the transmitter emits a beeping sound. To cancel Auto Return, press the One-Key Landing button.

 **Note:** During its return, the drone may ascend to a higher altitude to ensure a safe flight path.



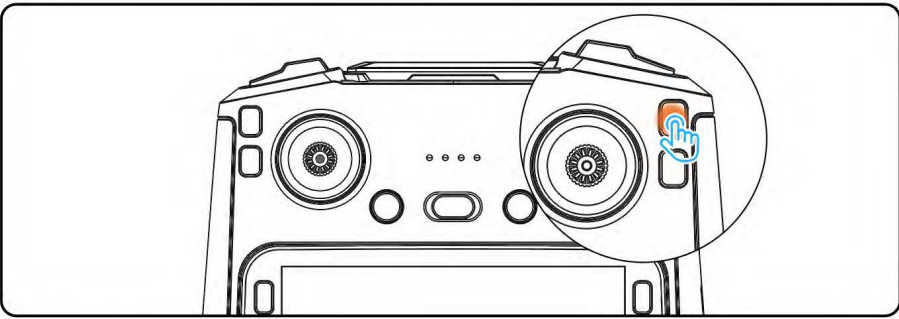
• **2.Camera Adjustment**
Adjust the camera angle by rotating the camera adjustment dial.

3.1Flight Functions



• **3.Speed Switch**
Change the drone's flight speed by rotating the speed adjustment dial.

Tip: By default, the initial speed is set to normal



• **4.Headless Mode**
Press the Headless Mode button once, and the drone will emit a series of beeps (“beep beep”), indicating it has entered Headless Mode. In this mode, the drone moves relative to your position, regardless of which direction its front is facing. This means pushing the joystick forward, backward, left, or right will move the drone in those directions based on your perspective, not the drone's orientation.

Headless Mode simplifies control, making it easier to fly without worrying about the drone's heading.

3.2 APP Functions

The interface

1 WiFi

2 Mode: Displays mode / Optical flow mode

3 Satellite: Represents the number of satellites connected.

4 Displays the drone's battery.

5 signal: Displays the height, distance, and corresponding longitude and latitude of the drone from the return-to-home point;

6 VR Mode: Click to enter VR mode.

7 Rotate lens

8 Album

GPS 模式 0.0V A:0.0m H:0.0m/s S:0.000000 D:0.0m V:0.0m/s W:0.000000

MV

50%

Map

3.2 APP Functions

The interface

1 Take photos

2 Record video

3 Rocker on/off: Click this switch to control the drone with your phone.

4 Speed

5 Take-off/Landing: After calibration, place the drone horizontally and click the unlock button to start the flight operation

6 Unlock: After unlocking, one key can be used for takeoff or landing

7 MV mode

8 50x Zoom

1 Waypoint flight: In GPS mode, the drone will fly according to the location selected on the map

2 GPS tracking: In GPS mode, click this button, and the drone will follow the phone

3 Rocker on/off: Click this switch to control the drone with your phone.

4 One-click return

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PRODUCT FUNCTIONS / 3

3.2 APP Functions

Additional Information

Camera Angle Adjustment

After takeoff, the holder will be displayed at the bottom left corner of the screen.
Move the slider up to tilt the front lens upward at a certain angle.
Move the slider down to tilt the front lens downward at a certain angle.

Joystick

The left joystick controls the drone's up/down movement and left/right turning.(Figure 1)
The right joystick controls the drone's forward/backward movement and also left/right movement.(Figure 2)

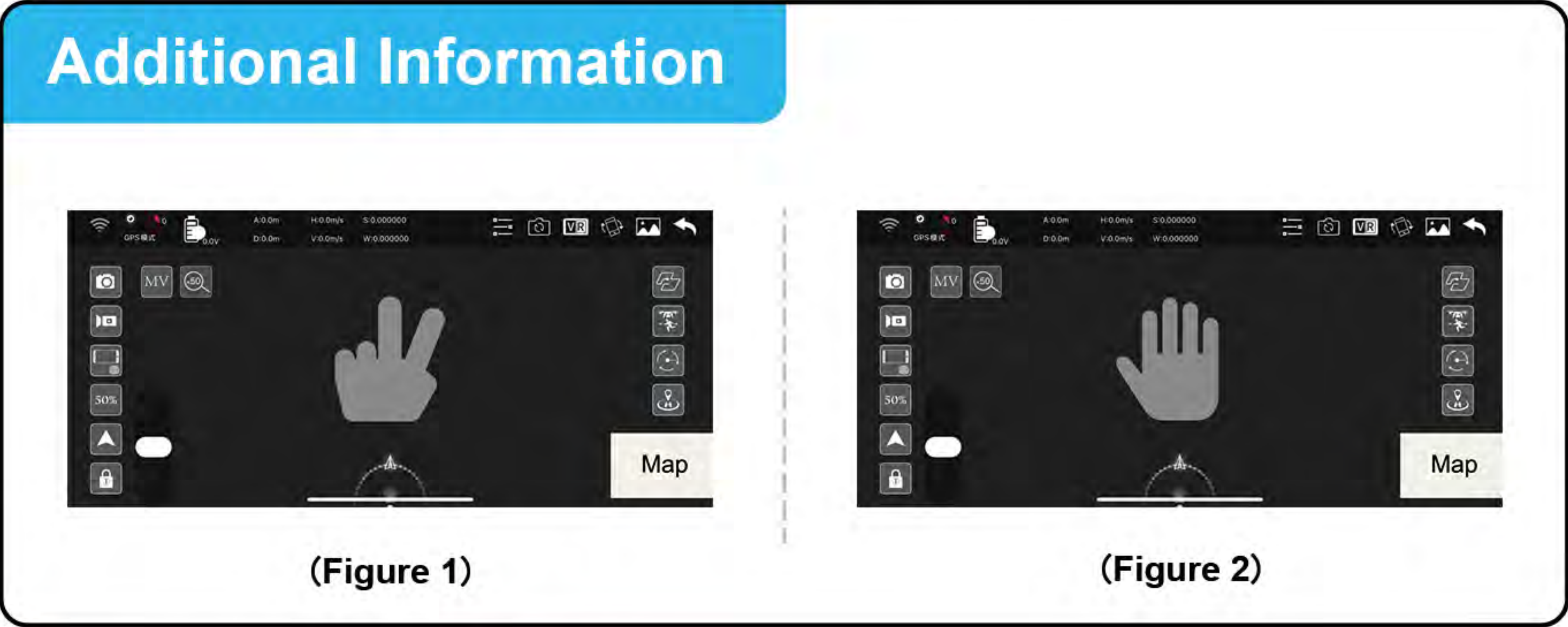
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3.2 APP Functions



Album Interface

Click the upper left corner of the control page to enter the album interface. You can browse the captured photos and videos.



Gesture Recognition

Facing the front lens of the camera, the following gestures can trigger the drone's automatic camera functions:

3.2 APP Functions

Take Photos with "V" Sign Gesture

About 2 meters in front of the drone, make a peace sign gesture in front of the lens. After the gesture is recognized, a 3-second countdown will begin, and the photo will be taken.(Figure 1)

Record Video with Palm Gesture

About 2 meters in front of the drone, stretch out your palm toward the lens. Once the gesture is recognized, video recording will start. When the gesture is recognized again, recording will stop (there should be more than 3 seconds between the two gestures).(Figure 2)

Special Instructions:

- To ensure a higher recognition rate for the lens:**
- 1.Please aim your hand directly at the camera lens.
 - 2.Please fly in a well-lit environment.
 - 3.Please perform gesture recognition at a distance of about 2 meters from the lens.
- The following conditions may result in a low recognition rate for the lens:**
- 1.Weak lighting or backlighting.
 - 2.Weak Wi-Fi signal or signal interference.

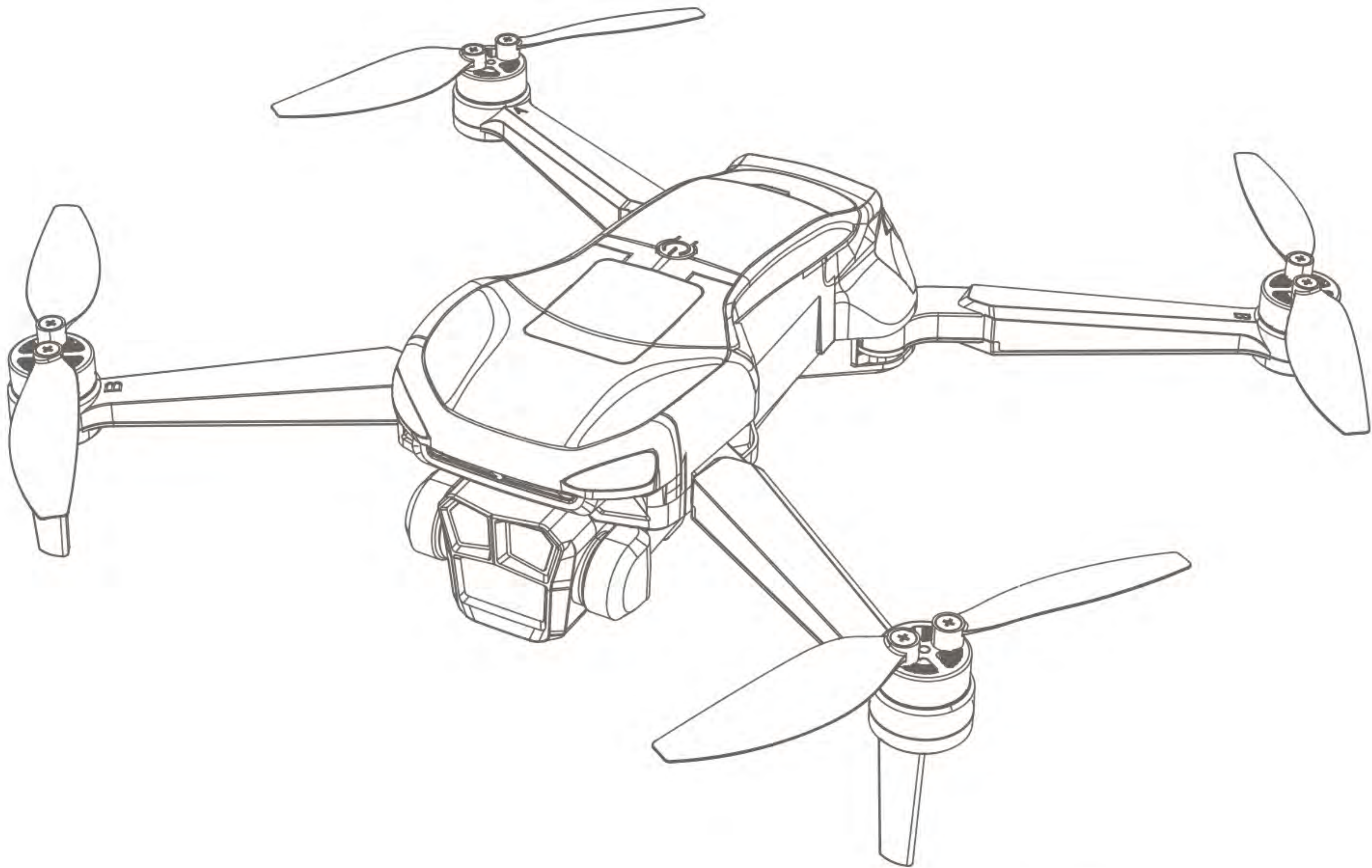
3.2 APP Functions

⚠ Warnings

When the drone is within 100 cm from the ground, it may become unstable due to the influence of its own blade vortex. This is called the “Ground Effect.” The lower the altitude of the drone, the greater the ground effect.

Solving Guidelines for Common Problems

Problem	Possible Causes	Solution
Drone indicator flashing, but it does not respond to operations	1. GPS star searching failure. 2. Low battery charge.	1. Move the drone to an open area and try GPS star searching again. 2. Charge the battery.
Drone blades rotate but it cannot take off	1. Low battery charge. 2. Blade deformation.	1. Charge the battery. 2. Replace the blades.
Drone shakes badly	Blade deformation	Replace the blade.
Fine tuning complete, but drone still can't fly smoothly	1. Blade deformation. 2. Motor failure.	1. Replace the blade. 2. Replace the motor.
Drone is controllable after restarting following an impact	Tri-axial acceleration sensor loses balance due to impact	Place the drone down for 5-10 seconds, or correct the gyroscope.



FCC Warning

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.

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