

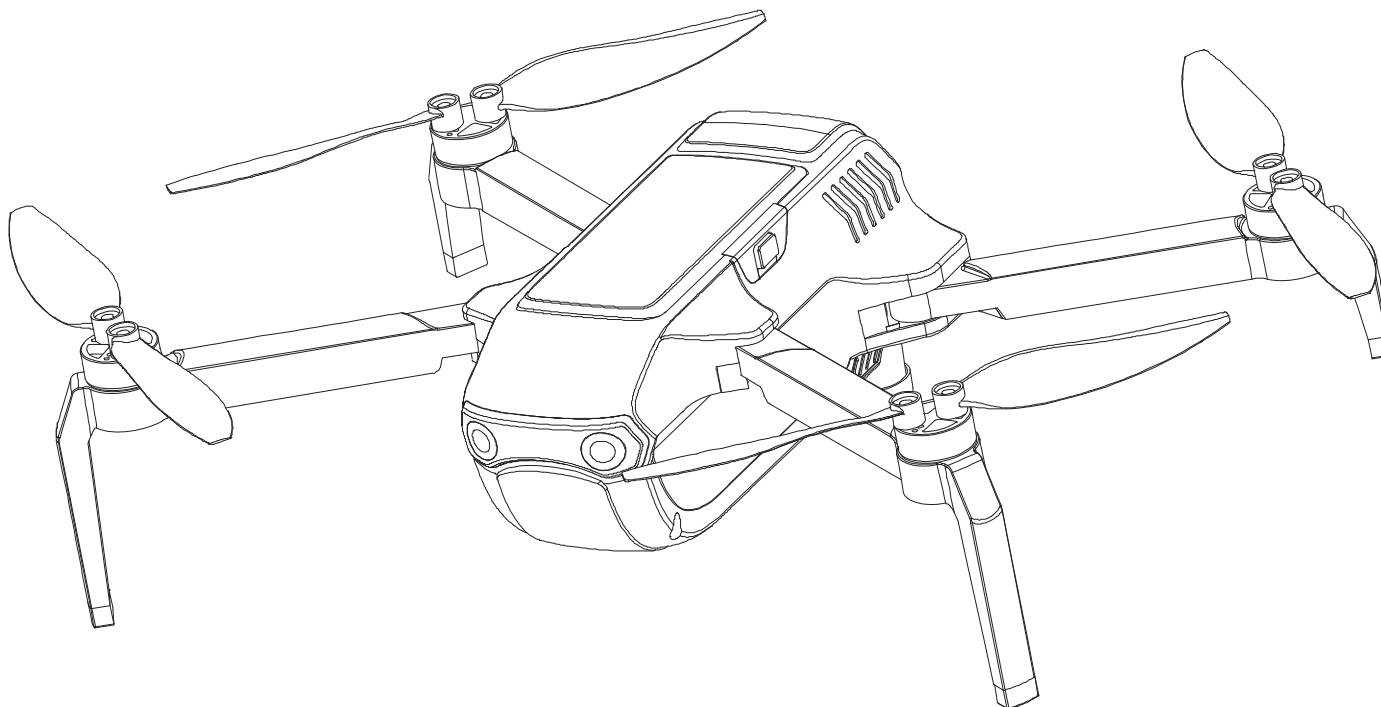


HS320 RC quadcopter

User Manual

V1.0

取扱説明書



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EN

01-38

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Reading Guidance

Icon

“” essential precautions.

“” tips for operation and usage.

Recommended Steps

Our product offers both tutorial videos and the following resources:

- Disclaimer and Safety Guidelines
- Quick Start Guide
- User Manual

For a smooth start, we suggest watching the tutorial videos and reviewing the "Safety Guidelines & Specifications" first. Then, familiarize yourself with the basics through the "Quick Start Guide". For a comprehensive understanding, delve into the "User Manual".

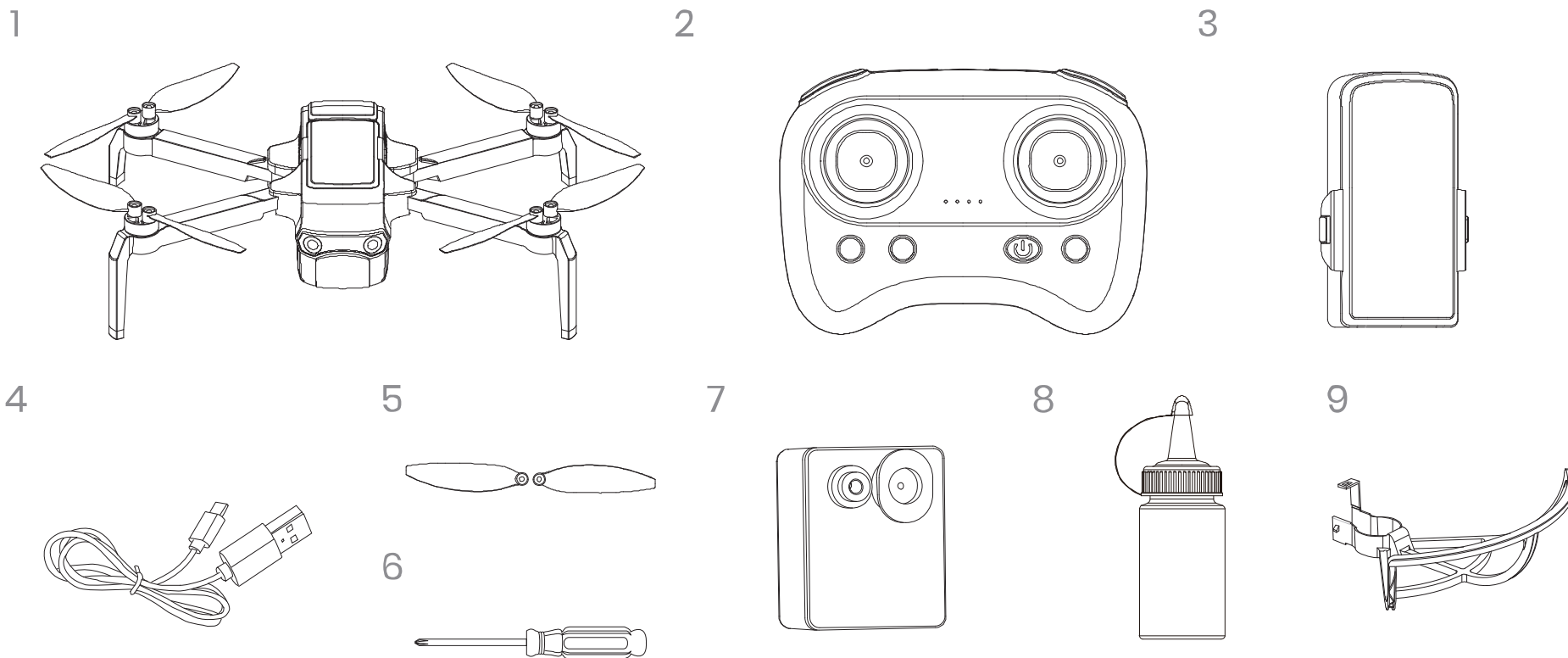
Access Instructional Videos

To ensure you're using the product safely and correctly, scan the QR code below to view our tutorial videos.



 We are committed to continuously improving user experience and reserve the right to update products. This manual may be revised without prior notice. Scan the QR code to access the latest electronic version. In case of discrepancies between digital and printed editions, the electronic version shall prevail.

1.1 Package Contents >>



1 Drone

2 Transmitter

3 Drone Battery

4 USB Charging Cable

5 Propellers

6 Screwdriver

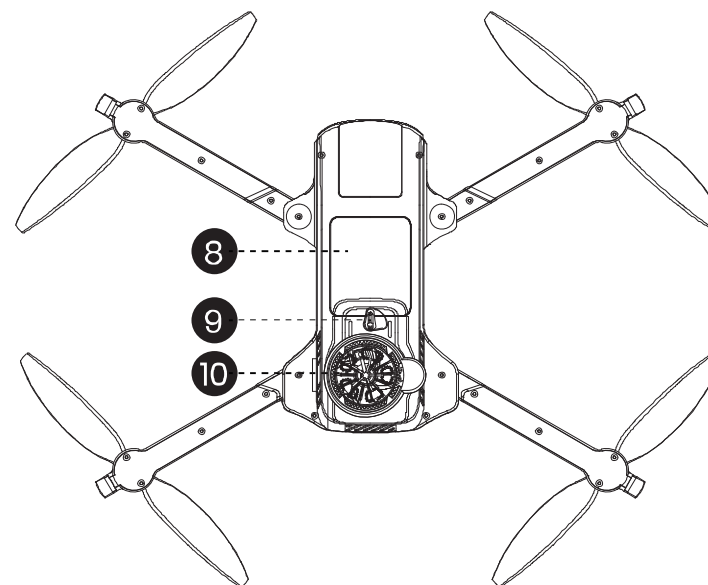
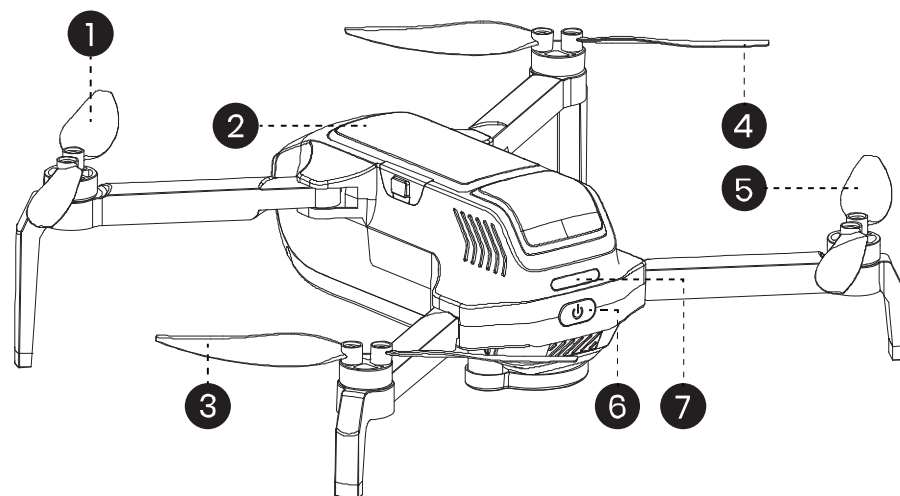
7 Bubble Solution

8 Bottle

9 Propellers Guard

1.2 Diagram of the Drone >>

Drone



1 Propeller A

2 Drone Battery

3 Propeller B

4 Propeller B

5 Propeller A

6 Power Switch

7 Indicator Light

8 Bubble Solution Container

9 Latch

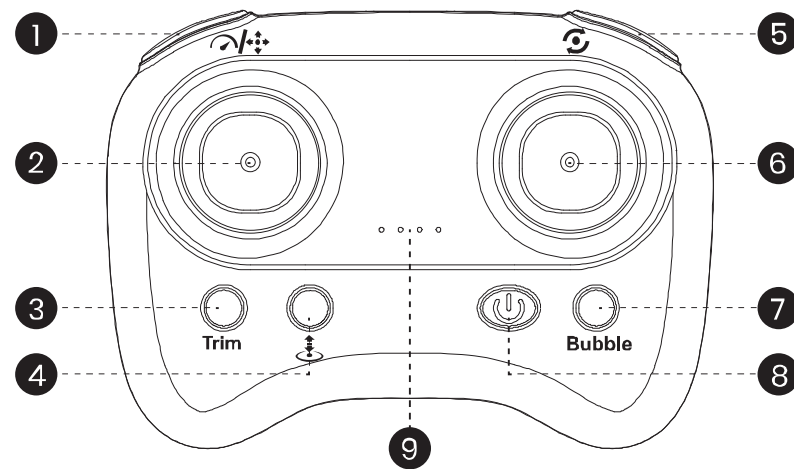
10 Bubble Outlet

💡 Turning on/off: Long press the power switch () on the drone to turn it on/off.

1.3 Diagram of the Transmitter >>

The Transmitter

- Front:



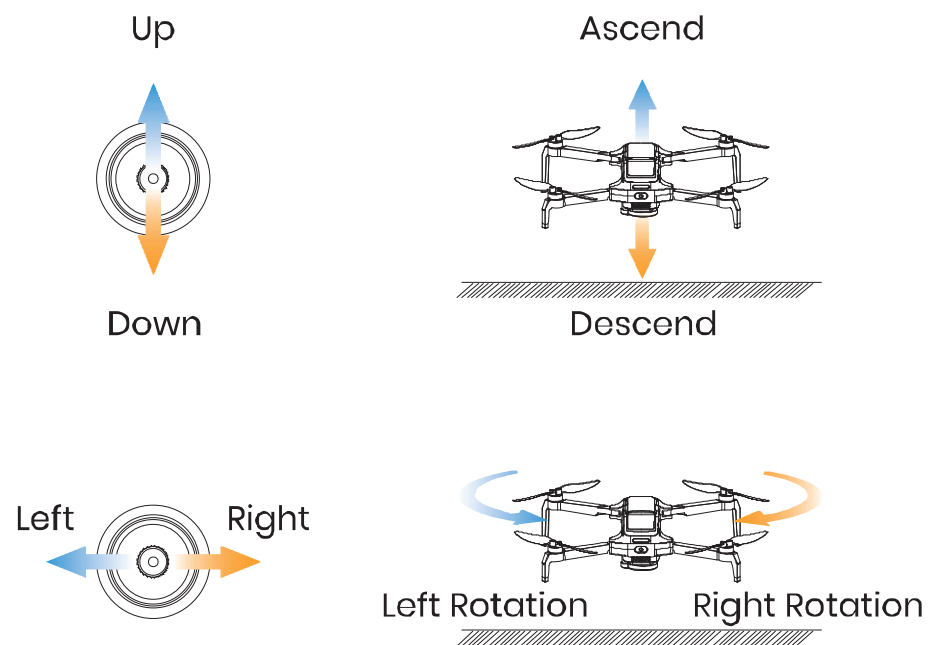
- 1 Speed Switch: Short Press
Headless Mode: Long Press
- 2 Left Joystick
- 3 Trimmer: Long Press
- 4 Takeoff/Landing: Long Press
- 5 Rotation: Short Press
- 6 Right Joystick
- 7 Power Switch
- 8 Bubble Switch: Short Press
Bubble Speed Switch: Long Press
- 9 Power Indicator

💡 Turning on/off: Long press the power switch () on the transmitter to turn it on/off.

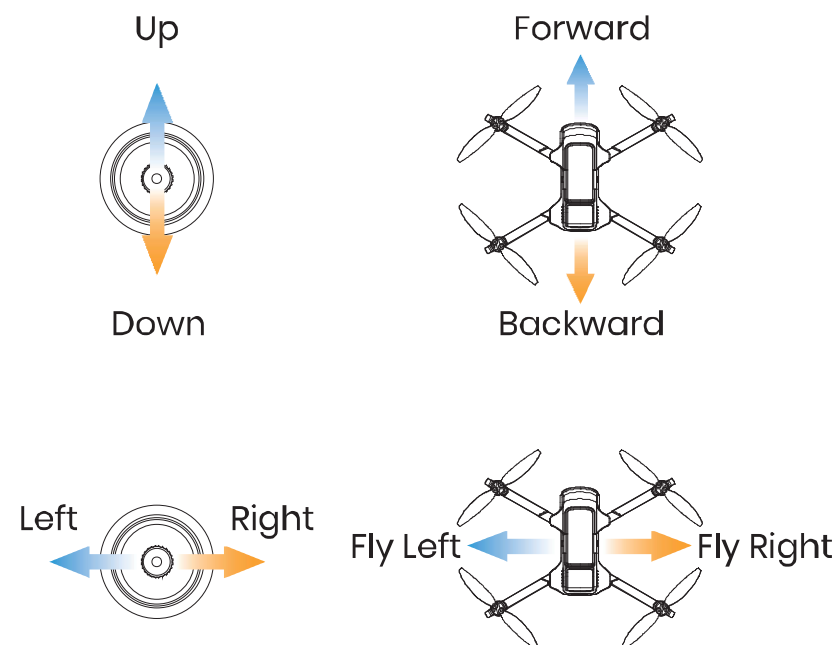
1.3 Diagram of the Transmitter >>

Joystick Mode

- **MODE 2 :** (The default setting)



Left Joystick

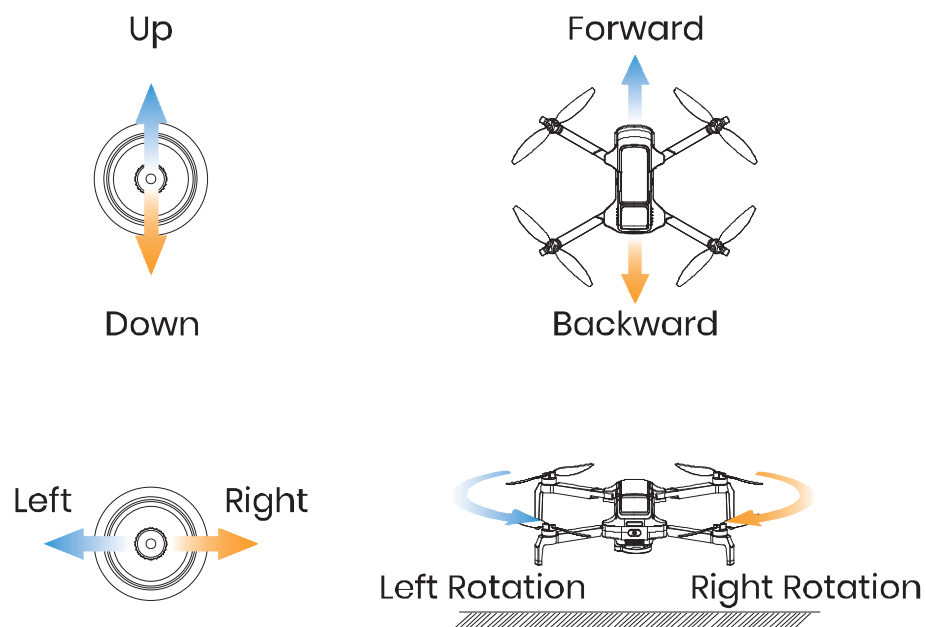


Right Joystick

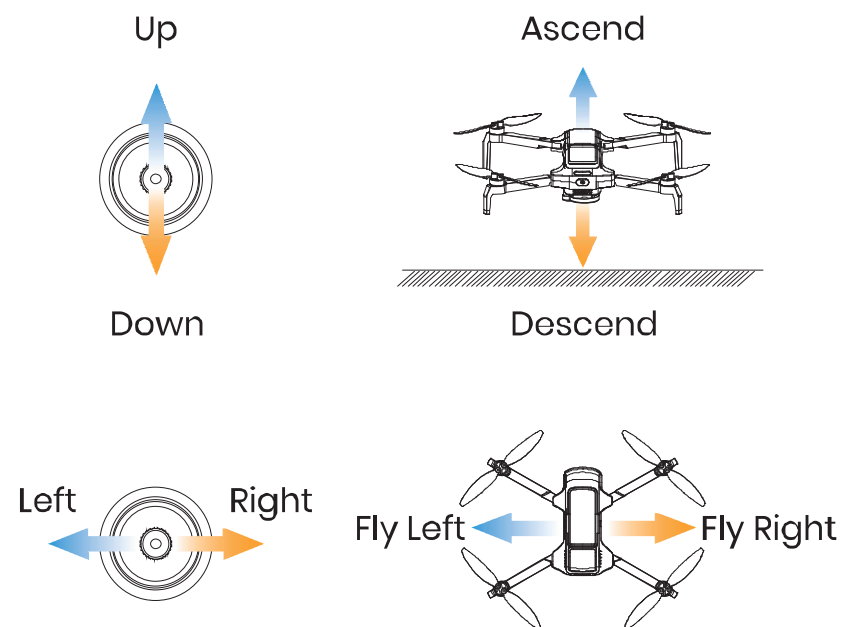
1.3 Diagram of the Transmitter >>

Joystick Mode

- **MODE 1:** To enter Mode 1, long press the  button while turning on the transmitter. (Please do not release the  button until the transmitter is powered on.)



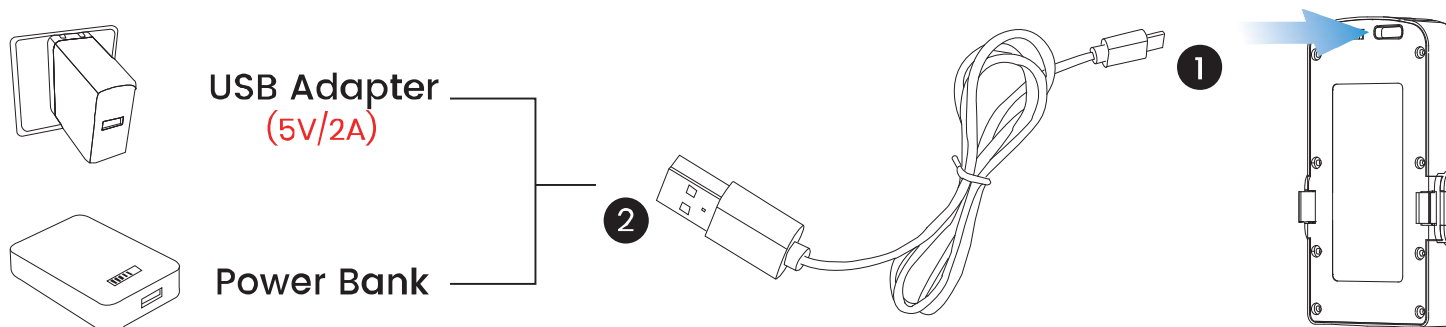
Left Joystick



Right Joystick

2.1 Battery Preparation >>

Drone Battery



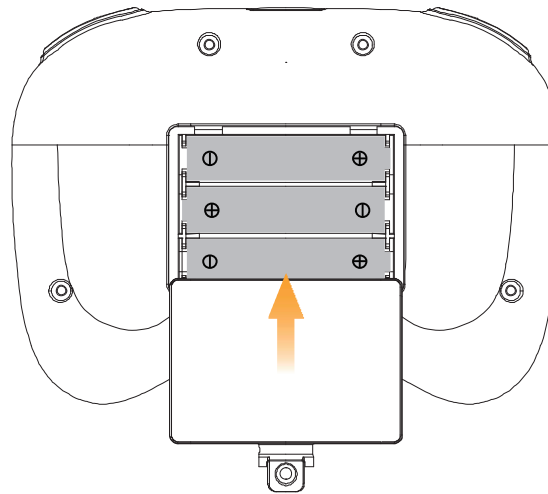
- 1 Remove the battery from the drone and connect it to a USB charging cable.
- 2 Plug the USB charging cable into a USB charging port on a power bank or a USB adapter (**5V/2A**).
- 3 The red light on the battery illuminates during charging and goes off once the battery is fully charged.
- 4 Charging time: about **110 minutes**.

* **Low Battery Signal:** The lights on the drone keep flashing and the transmitter keeps beeping.

- ! Before charging, please read the instructions in the "Battery Safety" section of the "Disclaimer and Safety Guidelines" carefully!
- DO NOT charge a battery immediately after a flight as the temperature may be too high. Please wait until it cools down to room temperature before charging again.
- Please use the original charging cable to charge the battery.

2.1 Battery Preparation >>

Changing Transmitter Batteries



Remove the battery cover on the back of the transmitter. Put in three AAA batteries (not included). Then, put the cover back on.

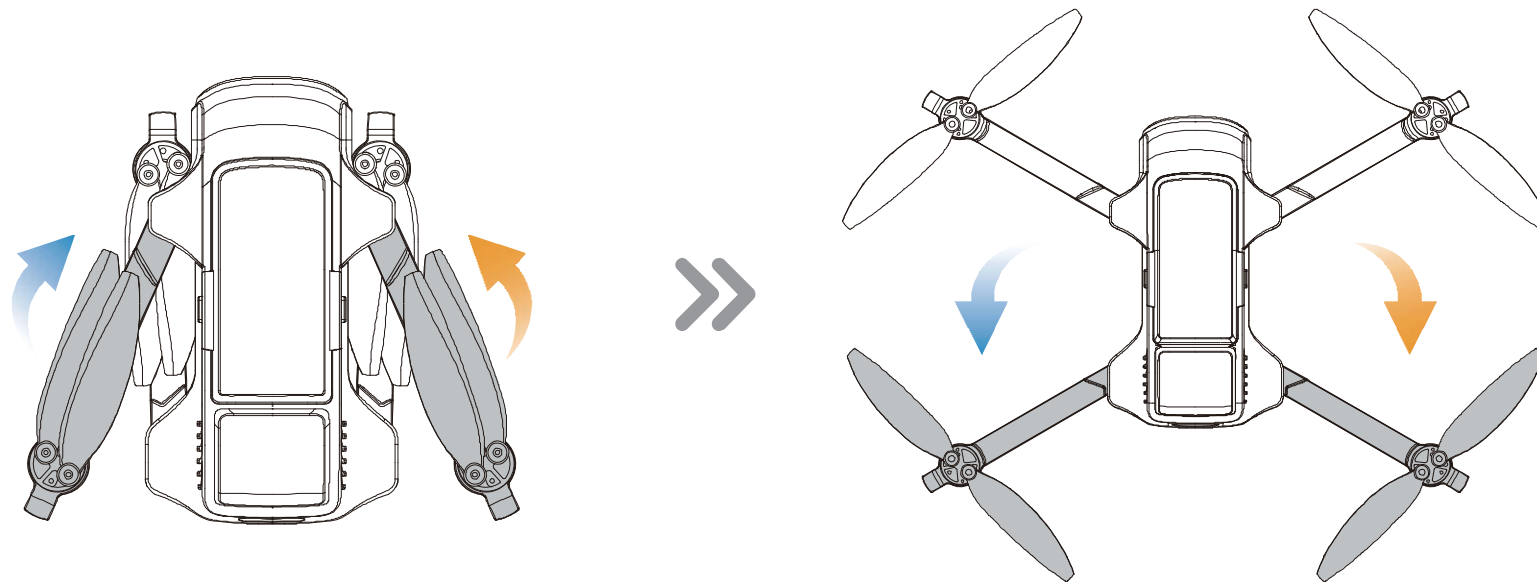
* **Low Battery Signal:** The power indicator on the transmitter is down to one light and keeps flashing.



- Install batteries carefully.
- Do not mix old and new batteries.
- Do not mix different types of batteries.

2.2 Pre-Flight Preparations >>

Arms

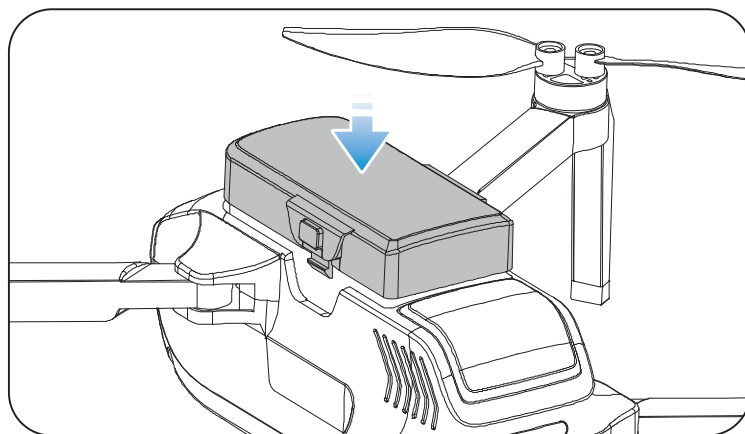


All arms of the drone are folded when it is packaged at the factory. First, unfold the front arms, then unfold the rear arms.

2.2 Pre-Flight Preparations >>

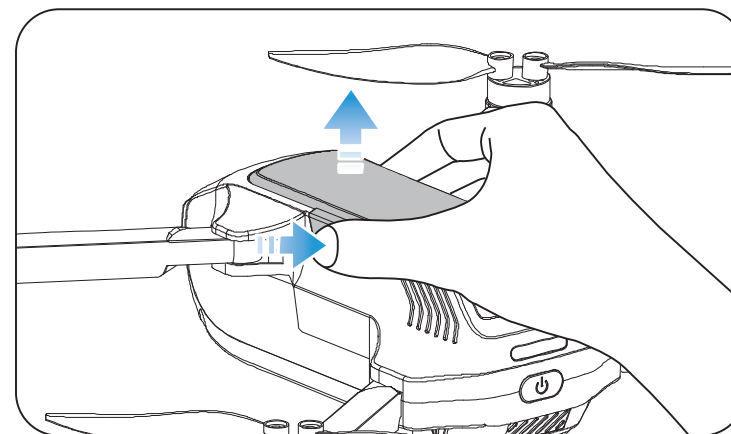
Drone Battery

- Installation:



Press and hold the sides of the battery, then insert it into the battery compartment. A clicking sound indicates that the battery has been securely installed.

- Removal:



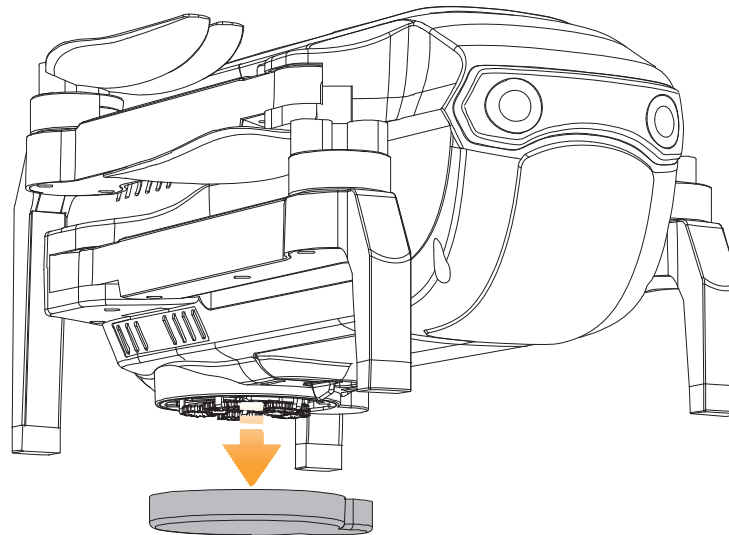
Press and hold the sides of the battery, then lift it up to remove it from the compartment.

 The battery should be installed firmly. Otherwise, the flight safety of your drone may be affected. The drone may crash due to a power-cut during the flight.

2.2 Pre-Flight Preparations >>

Bubble Outlet Cover

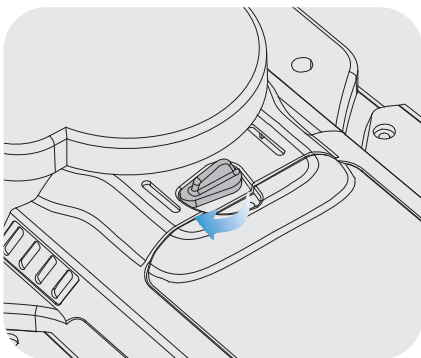
Gently remove the cover from the drone's bubble outlet.



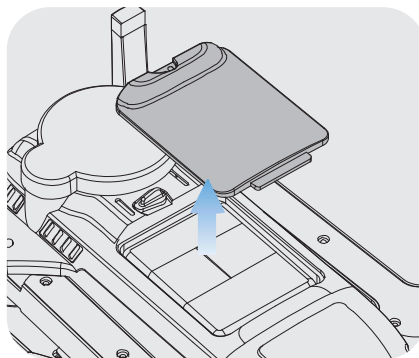
- ⚠ · Please remove the bubble outlet cover before you use the drone.
- Put the bubble outlet cover back in place when the drone is not in use.

2.2 Pre-Flight Preparations >>

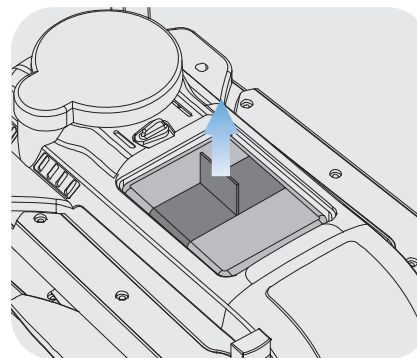
Filling Bubble Solution



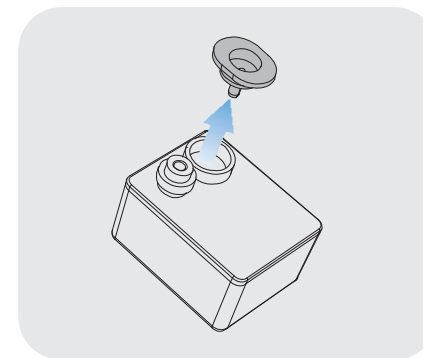
1. Turn the latch clockwise to unlock it.



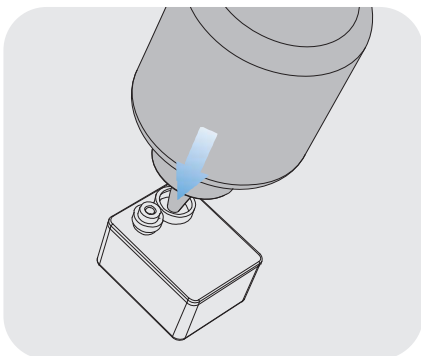
2. Remove the outer cover of the bubble solution container.



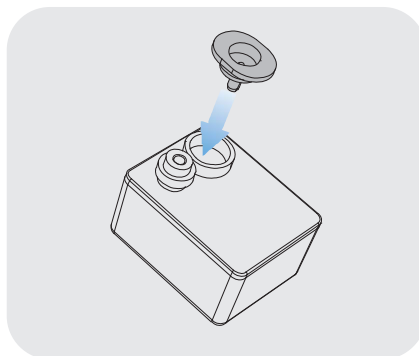
3. Pull the strap to lift out the container.



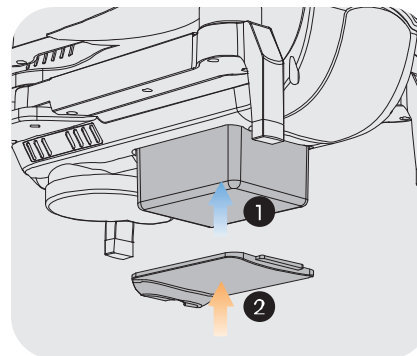
4. Take off the cap from the container.



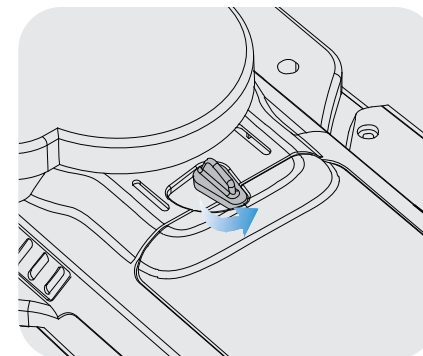
5. Carefully pour in the bubble solution—don't overfill.



6. Secure the cap back on, making sure it's tightly sealed.



7. Keeping the drone body level, insert the container **from the bottom up**. Put the outer cover back on.

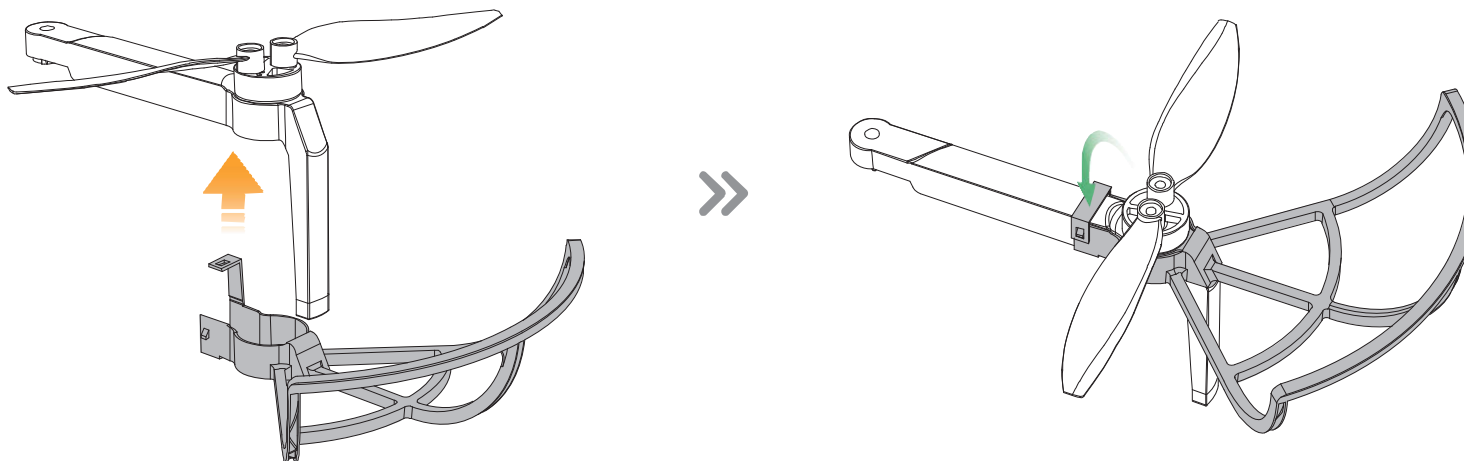


8. Turn the latch counterclockwise to lock everything into place.

2.2 Pre-Flight Preparations >>

Propellers Guard

Install the guard onto the drone arm, ensuring a snug fit against the arm surface. Securely fasten the clips to lock the guard in position, verifying its stable and reliable installation.

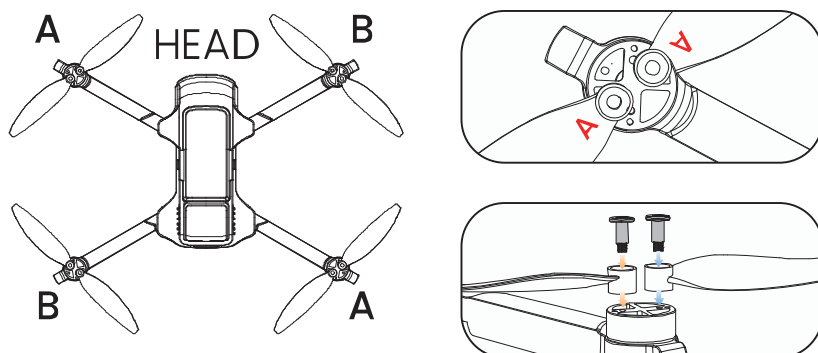


Propeller guards minimize damage caused by propeller contact with people or objects. At the same time, it also makes the drone more cumbersome.

2.2 Pre-Flight Preparations >>

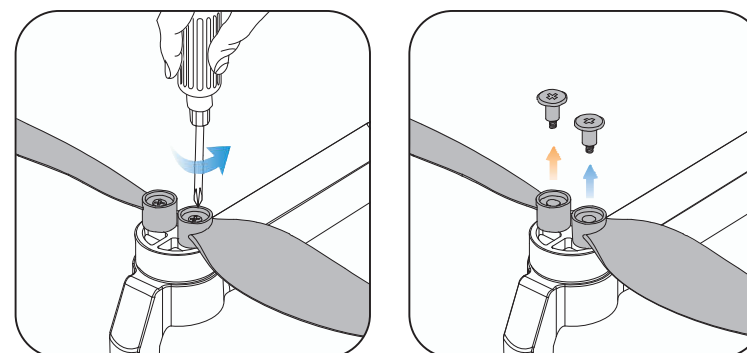
Propellers

● Installation:



The drone will not fly unless the correct propeller is installed on the correct motor shaft. Each propeller is labeled with either an "A" or "B" on it. Secure the propeller onto the motor shaft using screws, turning each screw clockwise.

● Removal:

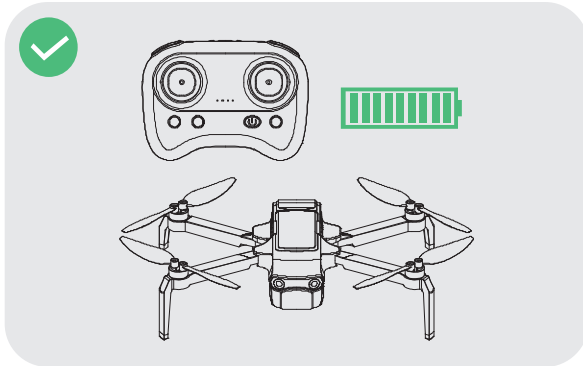


For propeller removal, use a screwdriver (provided) to rotate the screws counter-clockwise and remove the propellers. Be sure to hold the motor while detaching the propeller.

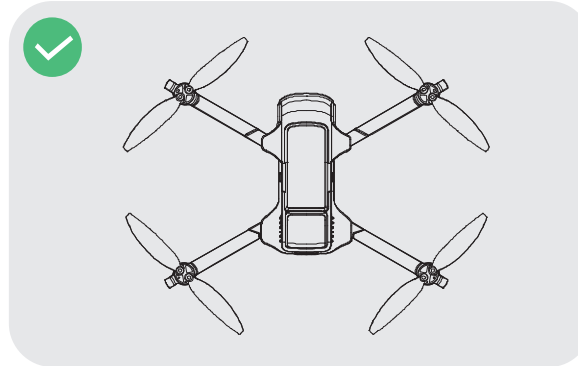


- The propellers are installed before the drone is packaged at the factory.
- Please check that the propellers are properly installed and tightened before each flight.
- Exercise caution when attaching/detaching the propellers to prevent any cuts or injuries.

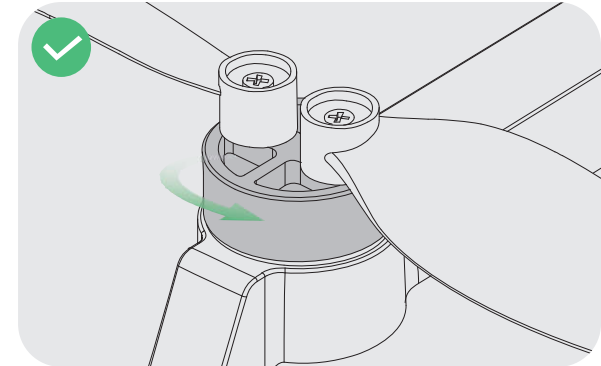
2.3 Pre-Flight Checklist >>



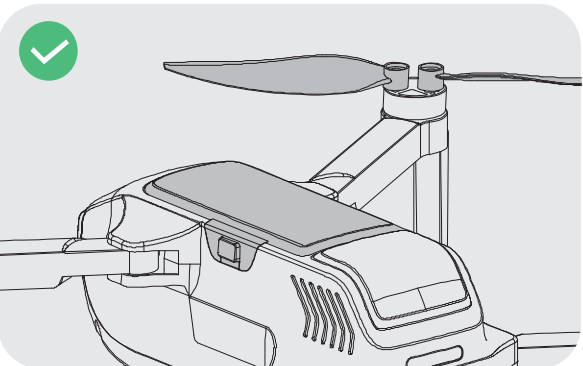
Make sure the transmitter and the drone battery are fully charged.



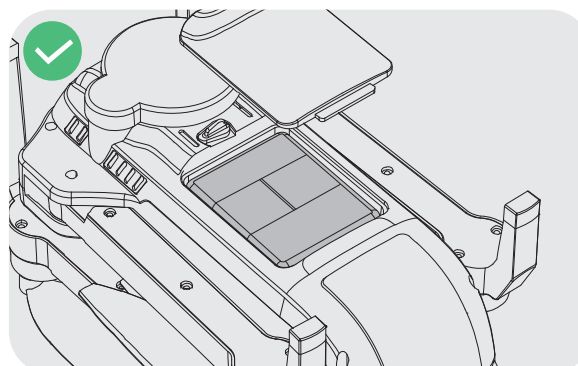
Make sure the drone arms are unfolded.



Make sure that there is nothing obstructing the motors.



Make sure the drone battery and the propellers are mounted securely.



Make sure the bubble solution container is securely installed.



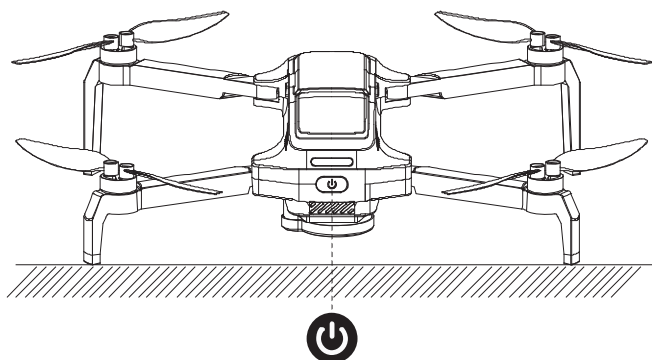
Make sure you use accessories provided by this company.

2.4 Flight >>

Pairing



- All of the operations shown in this manual are demonstrated using MODE 2.
- You must keep your drone in visual line of sight all the time. If you can't see it, you can't control it.

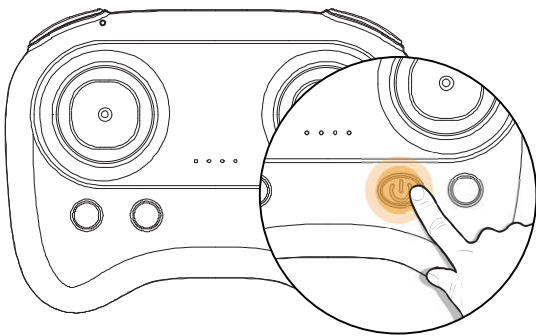


1 Turning on the drone

Place the drone on a flat, level surface with its head facing forward and the tail facing the operator. Long press the  button to turn on the drone.

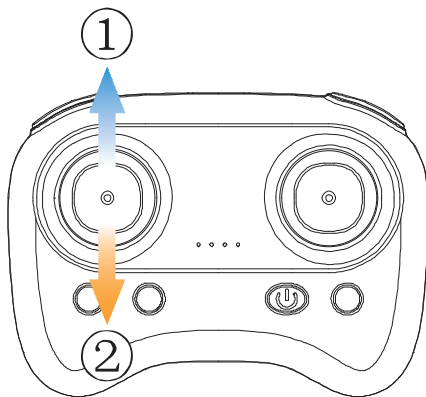
2.4 Flight >>

Pairing



2 Turning on the transmitter

Long press the  button on the transmitter to turn it on; its indicator light will start to flash.

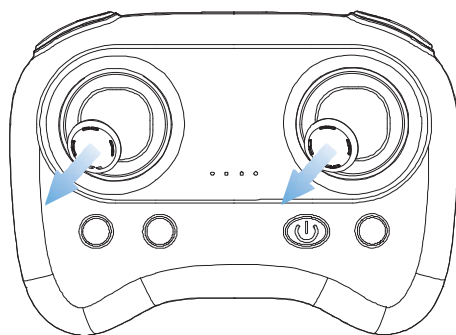


3 Pairing

Move the left joystick up and then back-down to pair the drone with the transmitter. Successful pairing is confirmed when the indicator lights on both the drone and the transmitter become steady and the transmitter produces a prolonged beep.

2.4 Flight >>

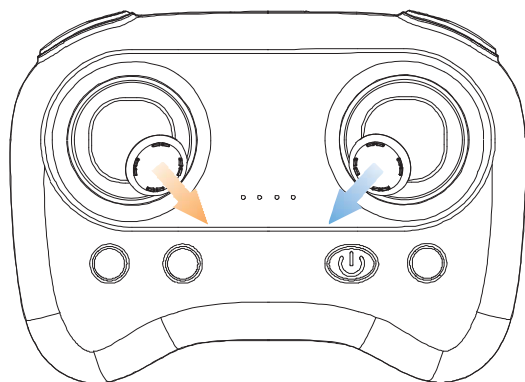
Gyroscope Calibration



Push both control sticks to the lower left at the same time to perform the gyroscope calibration.

 The drone needs to be placed on a level surface. Calibration is not required before every flight; it is only necessary after the drone has crashed or suffered an impact.

Unlocking the Motors

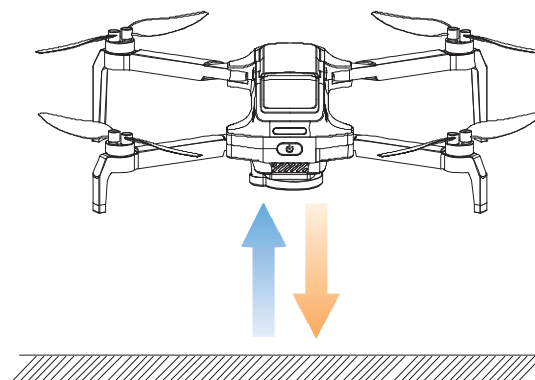
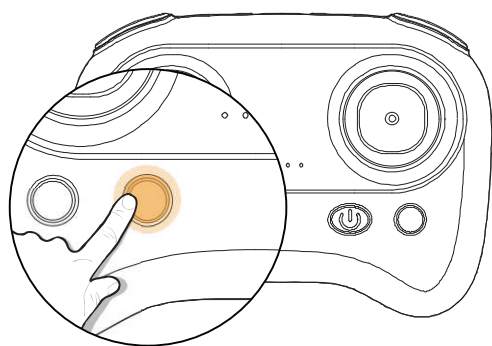


Push both of the joysticks simultaneously toward the inner, lower corners. The motors start to spin, the drone is unlocked.

 **Locking:** If no command is given, the motors will lock themselves automatically 5s after the they are unlocked, You can also push both of the joysticks to the inner corners to manually lock them.

2.4 Flight >>

Takeoff/Landing



Takeoff

Long press the  button, the drone will take off automatically and hover at **5 ft**. Now you can control the drone by using the joysticks.

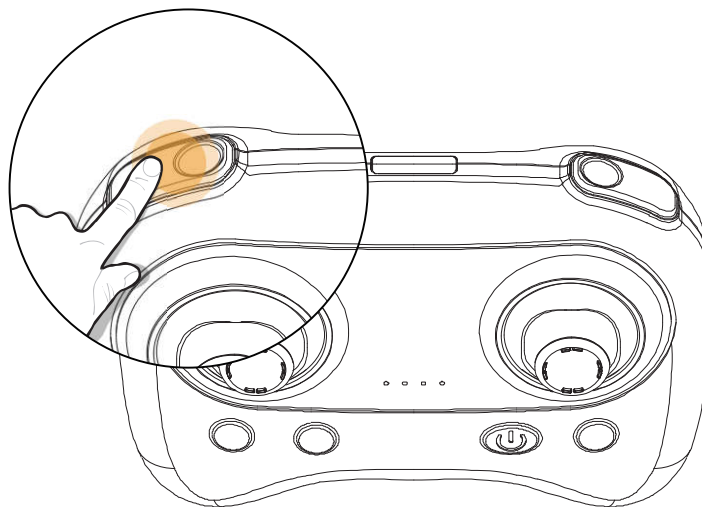


Landing

During the flight, long press the  button, the drone will land on the ground automatically.

3.1 Flight Functions >>

Speed Switch



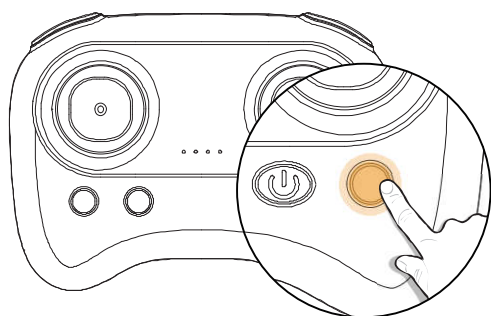
This drone offers three speed modes: **Low, Medium and High**. By default, it's set to Low

This drone offers three speed modes: Low, Medium and High. By default, it's set to Low speed. (The low speed is 12.4ft/s. The medium speed is 15.4ft/s. The high speed is 18ft/s.)

To toggle between the modes, give the  button a short press. The transmitter beeps once to indicate low speed, beeps twice to indicate Medium Speed and beeps three times to indicate High Speed.

3.1 Flight Functions >>

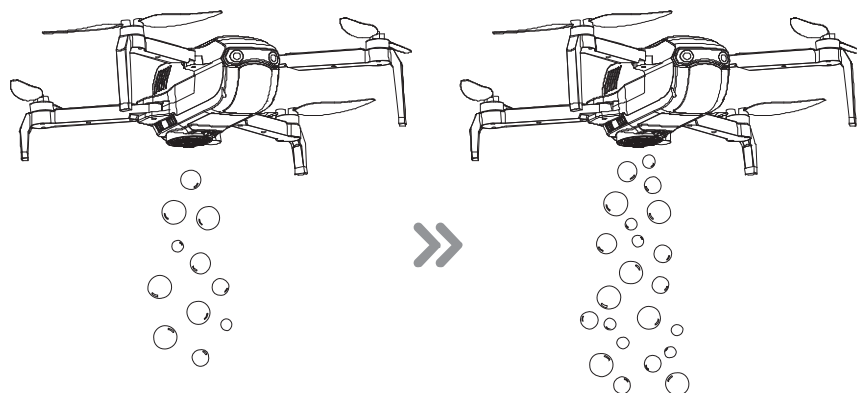
Bubble Mode



1 Launch Bubbles

Short press the bubble button, the drone will enter the bubble mode. Press again to stop blowing bubbles.

- Please ensure the aircraft lands on a flat surface to avoid foreign objects being drawn into the bubble outlet, which may cause internal damage.



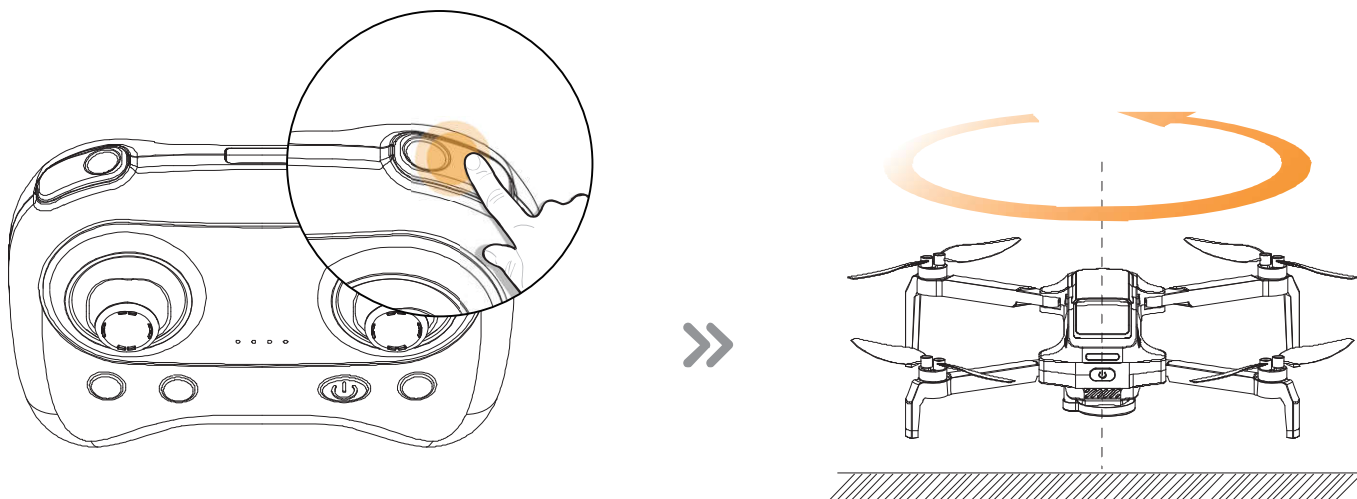
2 Bubble Speed Switch

Bubble generation supports two speed modes: Slow and Fast. By default, it operates at Slow speed. Toggle between speeds by long press the bubble button – higher speed produces more bubbles.

- Wipe off any remaining bubble solution from the device after use.
- If not in use for an extended period, empty the container and keep the device dry.

3.1 Flight Functions >>

High Speed Rotation

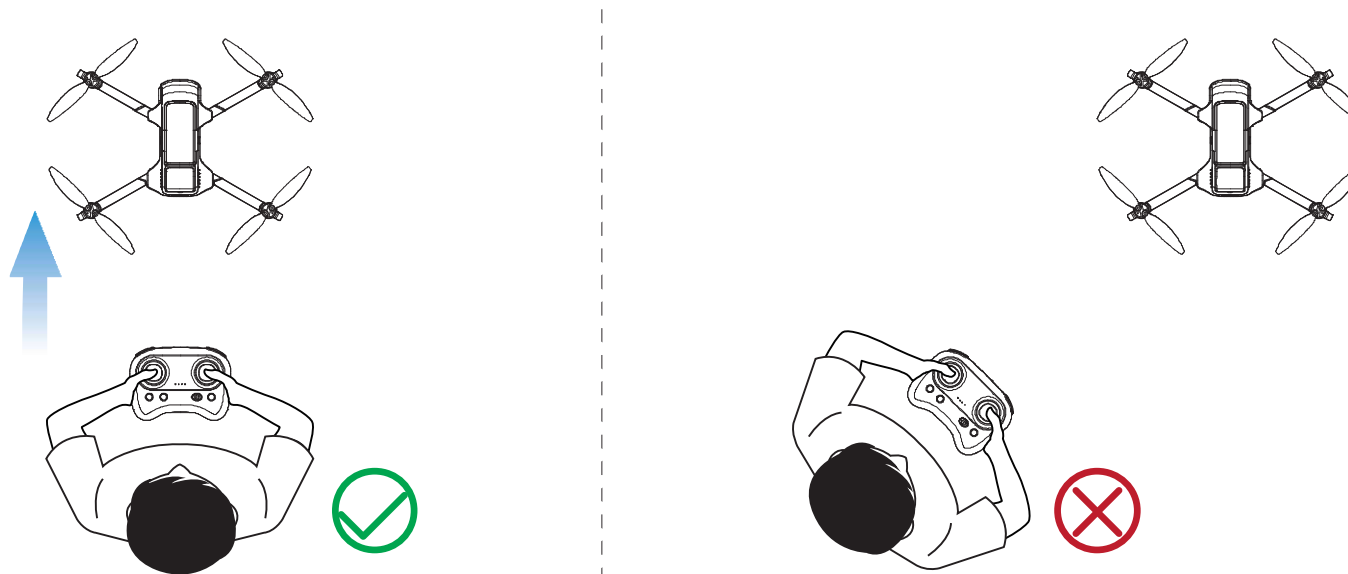


Short press the  button, the drone will enter the High Speed Rotation mode. The drone will exit the High-Speed Rotation function automatically after 5 seconds, or you can also push the right joystick to any direction to stop the rotation.

3.1 Flight Functions >>

Headless Mode

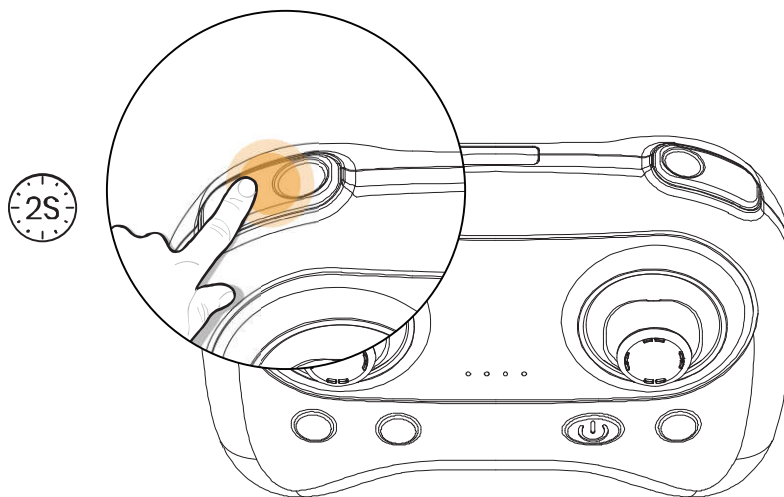
The Headless Mode is a great training tool for beginner pilots. It is also useful when the drone is too far from the pilot (**which makes it difficult to tell its orientation**). It keeps the drone traveling forward, backward, left, or right when you move the right joystick in those directions, regardless of which way the front of the drone is pointed.



The pilot should stay facing the same direction that the drone's head points to when it takes off.

3.1 Flight Functions >>

Headless Mode



- 1 **ACTIVATING:** Long press the  button to activate this mode. While in Headless Mode, the indicator light will flash continuously.
- 2 **DEACTIVATING:** Long press the  button once more. The indicator light will return to a steady glow, indicating the drone has successfully exited Headless Mode.

3.1 Flight Functions >>

Headless Mode

* Why is the orientation of the drone important?

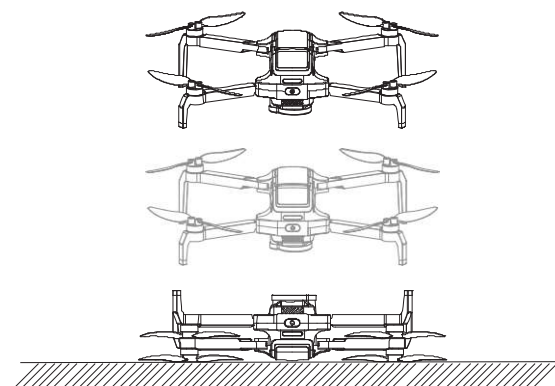
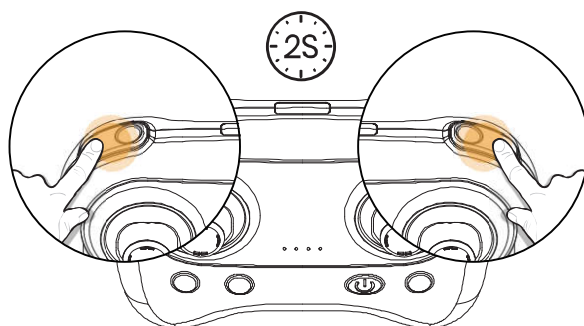
In normal flying mode, the control of the drone movement can sometimes be counter-intuitive for beginners. For instance, when the drone is in the air with its head pointing to your right, if you push the right joystick forward, the drone will fly to your right, instead of flying forward.

With the headless mode, the drone has a fixed "head." In Headless Mode, the drone always remembers the side its head points to during takeoff as the front side. This means that if the drone takes off with its head pointing forward, it doesn't matter how the drone is oriented in the air, when you push the right joystick forward, the drone will fly forward. Or, when its head is pointing to you, if you push the right joystick to the left, the drone will fly to your left.

3.1 Flight Functions >>

Emergency Stop

- 1 The Emergency Stop function should only be used in an emergency during the flight to avoid any damage or injury. Long Press the  button and the  button simultaneously. The transmitter will beep continuously. The drone will descend quickly to the ground.



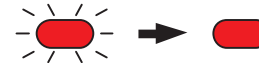
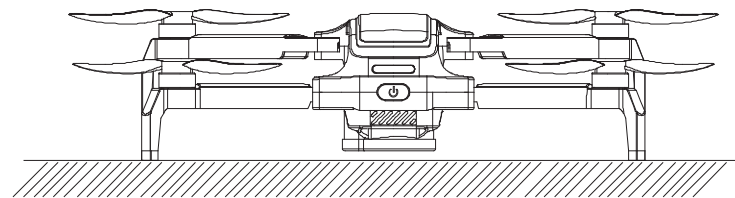
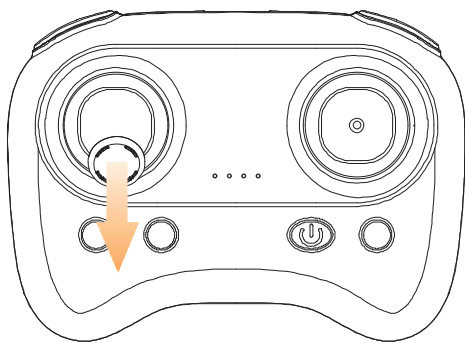
! When the Emergency Stop is triggered, the propellers will immediately stop spinning, and the drone will lose control, falling freely from its current height. This could potentially hit people or anything in surrounding, leading to injury or damage to valuable items.

The Emergency Stop should only be triggered in emergency situations to minimize risk and reduce damage. Emergency situations include, but are not limited to: the drone losing control and colliding with people or animals or items, hair or other objects becoming entangled in the propellers, or the drone posing a threat to the safety of other aircraft, where immediate flight cessation or an immediate stop of the propellers is required.

3.2 Attitude Adjustment >>

Gyro-Calibration

- 2 After the drone hits the ground, the drone indicator lights will flash quickly. Please put the drone on a level surface again, and push the left joystick downward. The indicator lights then turn from flashing to solid, which indicates that you can use the drone now.



3.2 Attitude Adjustment >>

Trimming

 Trim adjustments are designed to counter drifts not caused by airflow.

1 Initiate Trim Mode: Long press the trim button to access this function.

2 L/R Sideward Trim:

- If the drone drifts to the left, push the right joystick to the right.
- If the drone drifts to the right, push the right joystick to the left.

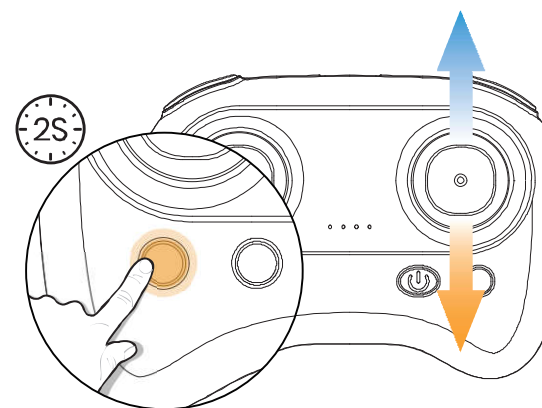
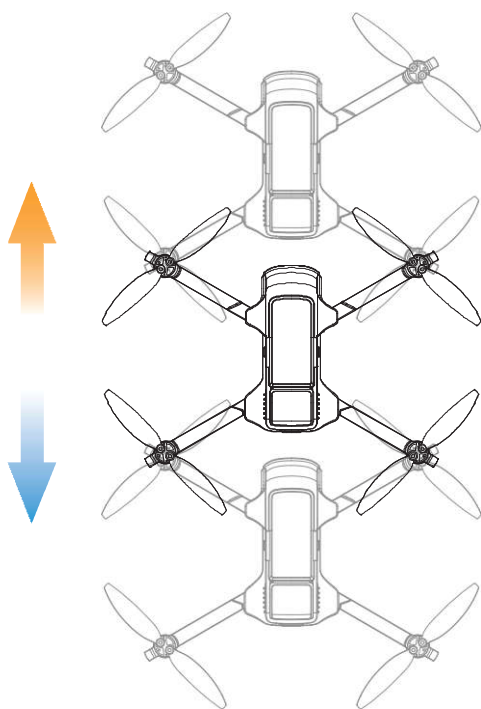


3.2 Attitude Adjustment >>

Trimming

3 F/B Sideward Trim:

- If the drone drifts forward, push the right joystick downward.
- If the drone drifts backward, push the right joystick upward.



- #### 4 Deactivate Trim Mode:
- Once adjustments are complete, long press the trim button again or wait 2 seconds without any operation to exit trim mode.

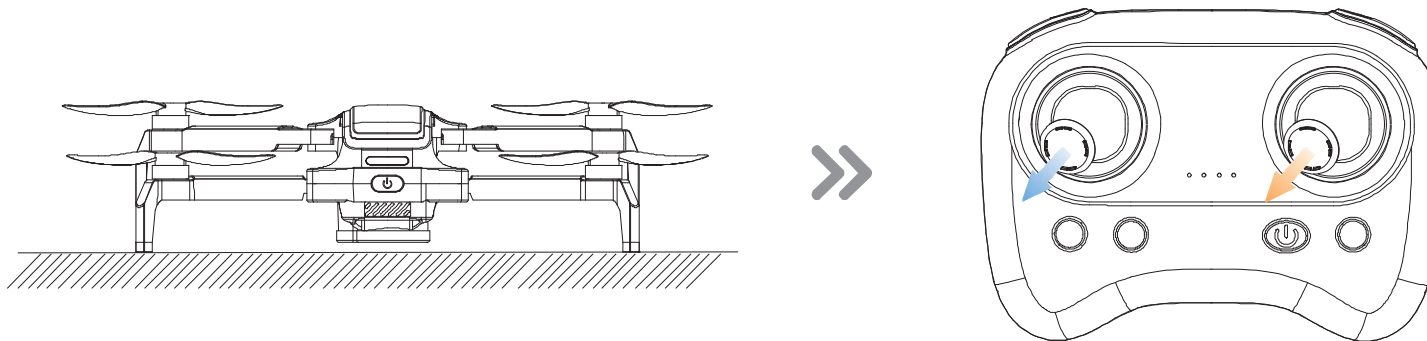
3.2 Attitude Adjustment >>

Gyro-Calibration



Please perform gyro-calibration in the following scenarios:

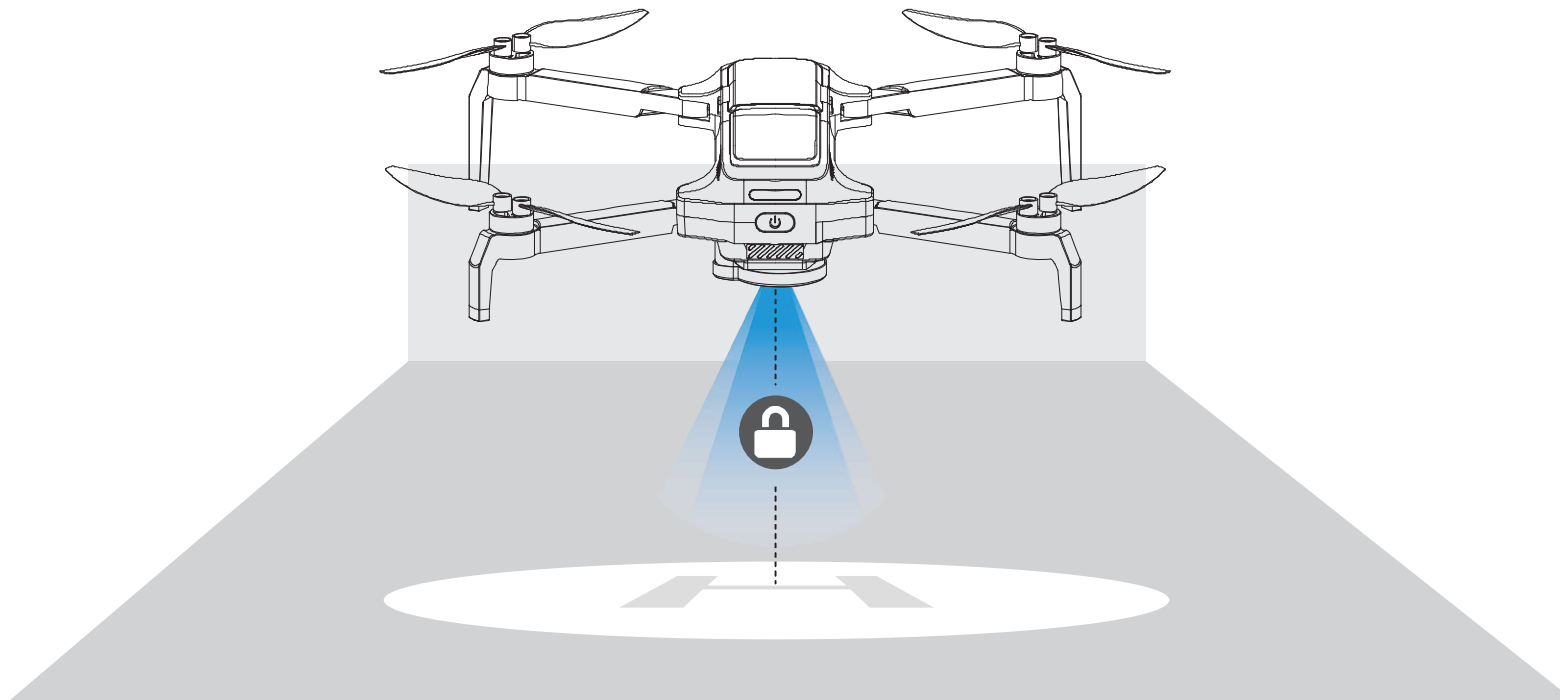
1. After a collision or fall.
2. When the drone exhibits abnormal behavior.



Make sure to place the drone on a level surface before calibrating the gyro. Simultaneously push the left joystick and the right joystick to the bottom right corner to calibrate the gyro. The indicator lights on the drone will blink, then turn solid, which indicates that the calibration is completed.

3.3 Stabilization Functions >>

Altitude-Hold Function



The drone is designed with an **altitude-hold** function to maintain its altitude after releasing the left joystick. (The left joystick will automatically spring back to the middle)

4.1 Specifications >>

• DRONE :

Model: HS320	Weight: 209 g/ 7.4 oz
Max Flight Height: 164 ft/ 50 m	Max Flight Speed: 18 ft/s
Max Flight Time: 18 minutes (in a windless environment)	Max Wind Speed Resistance: 10.8 ft/s
Size: 180 * 250 * 70 mm (unfolded) 145* 95 * 70 mm (folded)	Operating Temperature Range: 32° to 104°F (0° to 40°C)

• DRONE BATTERY :

Model: 1103060	Capacity: 1800 mAh
Voltage: 3.7 V	Max Charging Voltage: 4.25 V
Battery Type: Lithium-ion Polymer Battery	Energy: 7.22 Wh
Charging Temperature Range: 41° to 104°F (5° to 40°C)	Charging Time: about 110 minutes

• USB CHARGING CABLE :

Input: 5V/2A	Rated Power: ≤10 W
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4.1 Specifications >>

• TRANSMITTER:

Operating Frequency: 2.4G

Max Flight Distance: 262 ft/ 80 m
(outdoor and unobstructed)

Battery Type: 3 × AAA Battery (not included)

Operating Temperature Range: 32° to 104°F (0° to 40°C)

4.2 Contact Us >>

Please do not hesitate to contact us if you need further support.



eu@holystone.com (Europe)
usa@holystone.com (America)
jp@holystone.com (Japan)
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4.3 Troubleshooting >>

ISSUES	POSSIBLE CAUSES	SUGGESTED SOLUTIONS
Drift	There is wind during flight.	This drone cannot hover in a fixed position. Avoid flying in windy conditions.
	The drone is in an abnormal state.	Place the drone on a flat surface to calibrate the gyroscope. Use the trim function to make adjustments.
Cannot blow bubbles	Issue with the bubble solution.	Ensure the water tank is properly installed. The tank must contain a sufficient amount of bubble solution. The concentration of the bubble solution should not be too diluted.
	There is a problem with the internal bubble blower.	Turn on the bubble motor. If the motor does not operate, inspect the interior for any foreign objects or damaged components.
Out of control	Weak RC signal	Make sure the remote controller has sufficient battery power. Keep the remote control within a reasonable distance. Avoid areas with strong signal interference.
	Drone component abnormality	Ensure the propellers are undamaged and firmly locked in place. The drone arms must remain free from damage, deformation, or excessive vibration.

4.4 Compliance Information >>

FCC Notice :

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.

The Supplier's Declaration of Conformity is available at the following address:

https://www.holystone.com/Download/US/HS320_FCC_sDoC.pdf

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

4.4 Compliance Information >>

RF Exposure:

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

IC Statement:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L' émetteur /récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d' Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L' exploitation est autorisée aux deux conditions suivantes :

- (1) L' appareil ne doit pas produire de brouillage;
- (2) L' appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' en compromettre le fonctionnement.

4.4 Compliance Information >>

CAN NMB-003 (B):

RF Exposure

Radiation Exposure: This equipment complies with Canada radiation Exposure limits set forth for an uncontrolled environment to maintain compliance with IC's RF Exposure guidelines. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

Exposition au rayonnement: cet équipement est conforme au rayonnement Canada Les limites d' exposition fixées pour un environnement non contrôlé afin de maintenir la conformité avec les lignes directrices d' exposition aux RF d' IC. Ce dispositif et ses antennes ne doivent pas être co-localisés ni fonctionner en conjonction avec une autre antenne ou un autre émetteur.

EU RF Power(EIRP): <10 dBm (2405MHz-2475 MHz)

Caution

1. The max operating of the EUT is 40°C, and shouldn't be lower than 0°C.
2. The device complies with RF specifications when the device used at 0mm from your body.
3. Declaration of Conformity.

We, Xiamen HolyOcean Trading Co., Ltd hereby, declare that the UAS HS320 is of class C0, and in compliance with the RED Directive 2014/53/EU, the RoHS Directive 2011/65/EU, Toy Directive 2009/48/EC and UAS Delegated Regulation 2019/945/EU amended by Delegated Regulation 2020/1058/EU.

4.4 Compliance Information >>

The full EU declaration of conformity is accessible at the following website:

http://www.holystone.com/Download/CE/HS320_EU_DOC.pdf

This product can be used among EU member states.

MANUFACTURER INFORMATION:

Manufactured by

Xiamen HolyOcean Trading Co., Ltd

Address: Unit H, unit 431, floor 4, building C, Xiamen International Shipping Center, No. 93

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+1 (833) 766-4733

MTOM Statement:

HS320 is a quadrotor drone. The MTOM of HS320 is 209 g, including the propellers, the Flight Battery, which is compliant with C0 requirements.

Users must follow the instructions below to comply with the MTOM C0 requirements. Otherwise, the drone cannot be used as a C0 aircraft:

1. DO NOT add any payload to the aircraft except the items listed in the List of Items including qualified accessories section.
2. DO NOT use any non-qualified replacement parts, such as flight batteries or propellers, etc.
3. DO NOT retrofit the aircraft.

List of Items including qualified accessories

1. HS320 Propellers (Model: HS320-FY, 0.9 g each propeller, 20000 RPM)
2. HS320 Flight Battery (approx. 49.9 g)

4.4 Compliance Information >>

List of Spare and Replacement Parts

1. HS320 Propellers (0.9 g each propeller)
2. HS320 Flight Battery (approx. 49.9 g)

List of Safe Guards

Below is the list of the mechanical safeguards and operation safeguards for HS320.

1. Emergency Stop function can be performed to stop the motors in case of an emergency. Refer to the Emergency Stop section for details.
2. Prevent the drone from flying in restricted airspace. Refer to the Flight Environment Requirements section for details.

Similar products produced by the same manufacturer are electrically identical. Distinguish them based on product model and appearance color.

The firmware of toy product cannot be upgraded.

