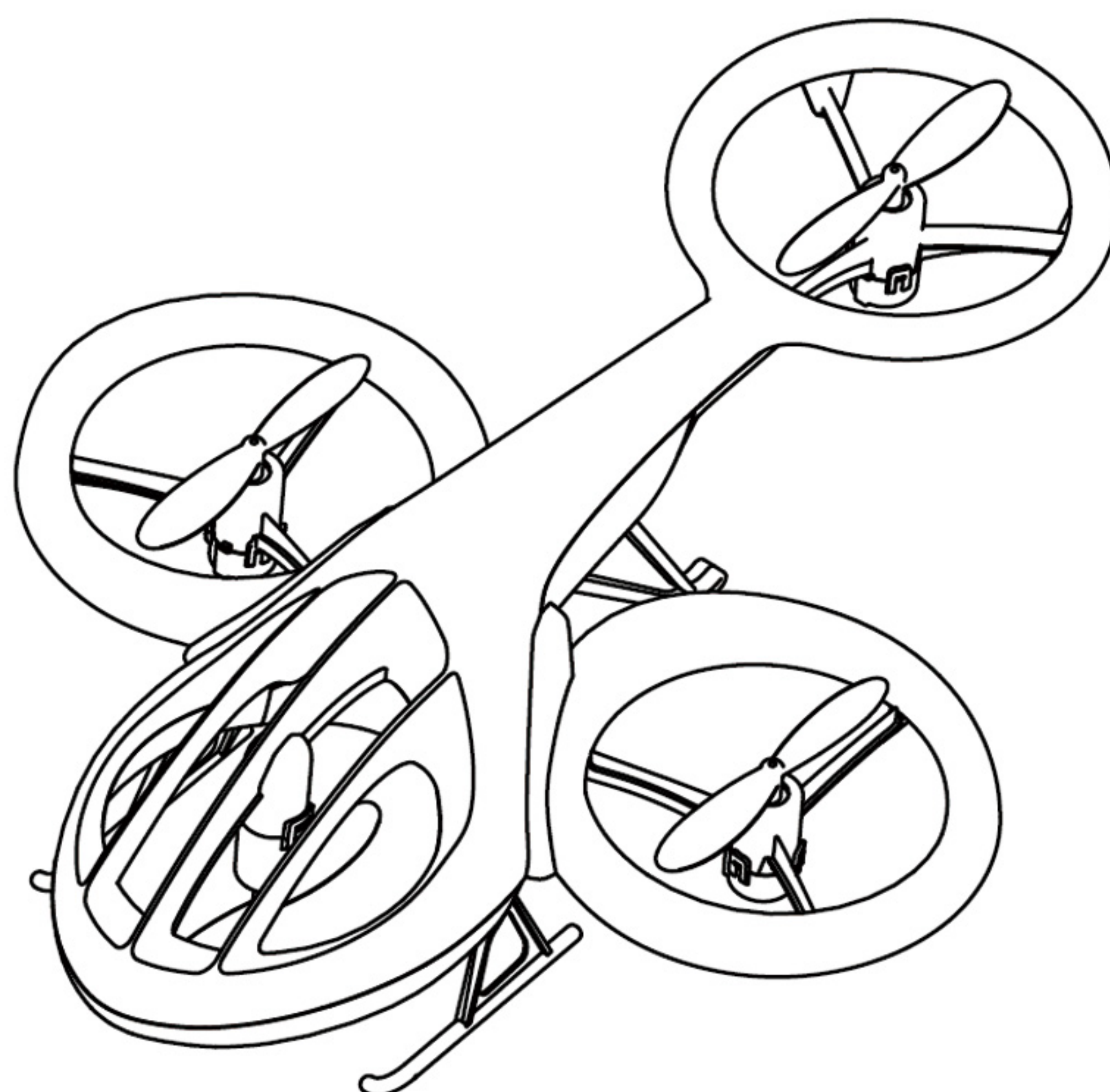


Gyroscope Remote Control Series **2.4G** 

TF1001

*Remote-controlled, four-axis quadcopter
with four channels*



BC

1

User Manual

Main features

- Four-axis structure for agile performance; suitable for indoor use.
- Built-in six-axis gyro stabiliser for accurate in-flight positioning.
- Modular design for easy installation and maintenance.
- 360° 3D stunt flip function.
- Hover function.
- One-touch take-off and landing.

The materials, specifications, parts and packaging mentioned in this manual are for reference purposes only. We are not responsible for any changes made to this printed material, nor are we able to inform customers of any updates or changes. Please refer to the SYMA Toys website for the latest information.

WARNING: CHOKING HAZZARD – Small parts. Not for children under 3 years.

Safety information

1. Keep the smaller-sized aircraft accessories out of the reach of children.
2. This aircraft is very powerful. When flying for the first time, push the left joystick up slowly to prevent the aircraft from ascending too rapidly and causing damage or collisions.
3. When the flight has ended, switch off the remote control before switching off the power on the aircraft.
4. Do not store the battery in a hot environment (e.g. near open flames or a heating device).
5. When the aircraft is airborne, it should be kept at least 2-3m away from the pilot and other people to avoid the risk of a collision.
6. Children must be supervised by an adult when operating the aircraft. The aircraft should always remain within the line of sight of the pilot (or instructor).
7. When installing or changing the batteries in the remote control, ensure that they are connected in the correct polarity. Do not mix old and new batteries or different types of batteries.
8. After use, ensure that the aircraft and remote control are switched off and remove the batteries in the remote control.
9. If you do not plan to use the aircraft for at least 10 days, discharge the battery to 40%-50% (i.e. if the battery is fully charged, fly the aircraft for half of the total flight time). This helps to prolong the lifespan of the battery.
10. Maintain a safe distance from the spinning propellers to avoid the risk of injury.
11. In order to prevent interference with air traffic control systems, it is forbidden to use remote controls within a 5000 m radius of an airport runway (calculated from the centre of the runway). Remote controls must not be used when wireless device restriction orders are issued by national authorities.
12. You must only use the recommended transformer for this model. The transformer is not a model. Disconnect the model from the transformer or charger before cleaning with cleaning fluid. Regularly inspect the transformer's wires, plug socket, outer casing and other accessories to ensure that they are not damaged. If there are any signs of damage, discontinue use immediately until the fault has been repaired.
13. The packaging and this manual contain important information and should be kept in a safe place for future reference.
14. Do not look directly at the laser beam.
15. Not suitable for children under 6 years of age.
16. Before first use, read the instruction manual together with your child.
17. Keep vehicle in sight so you can supervise it at all time.
18. Keep a safe distance from the vehicle when it is moving.
19. Do not change or modify anything on this toy.

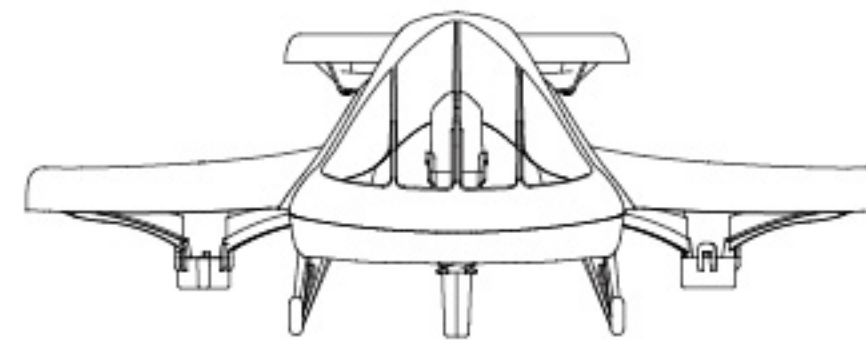
Repair and maintenance

1. Use a damp cloth to clean the vehicle.
2. Do not expose the toy to extreme heat, moisture or direct sunlight.
3. Do not immerse the toy in water as this may damage the electrical components.
4. Remove the batteries when not using the toy for an extended time.

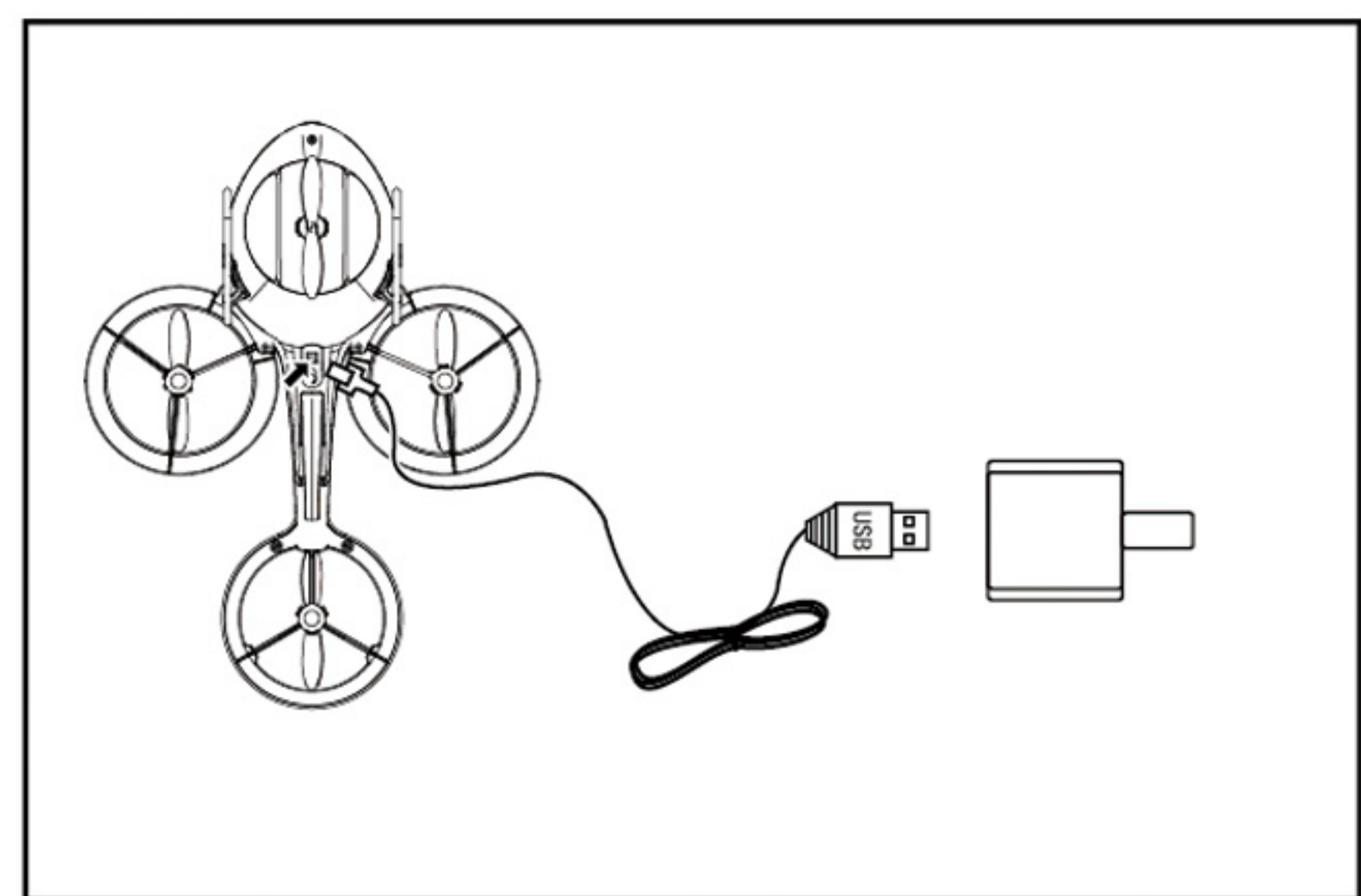
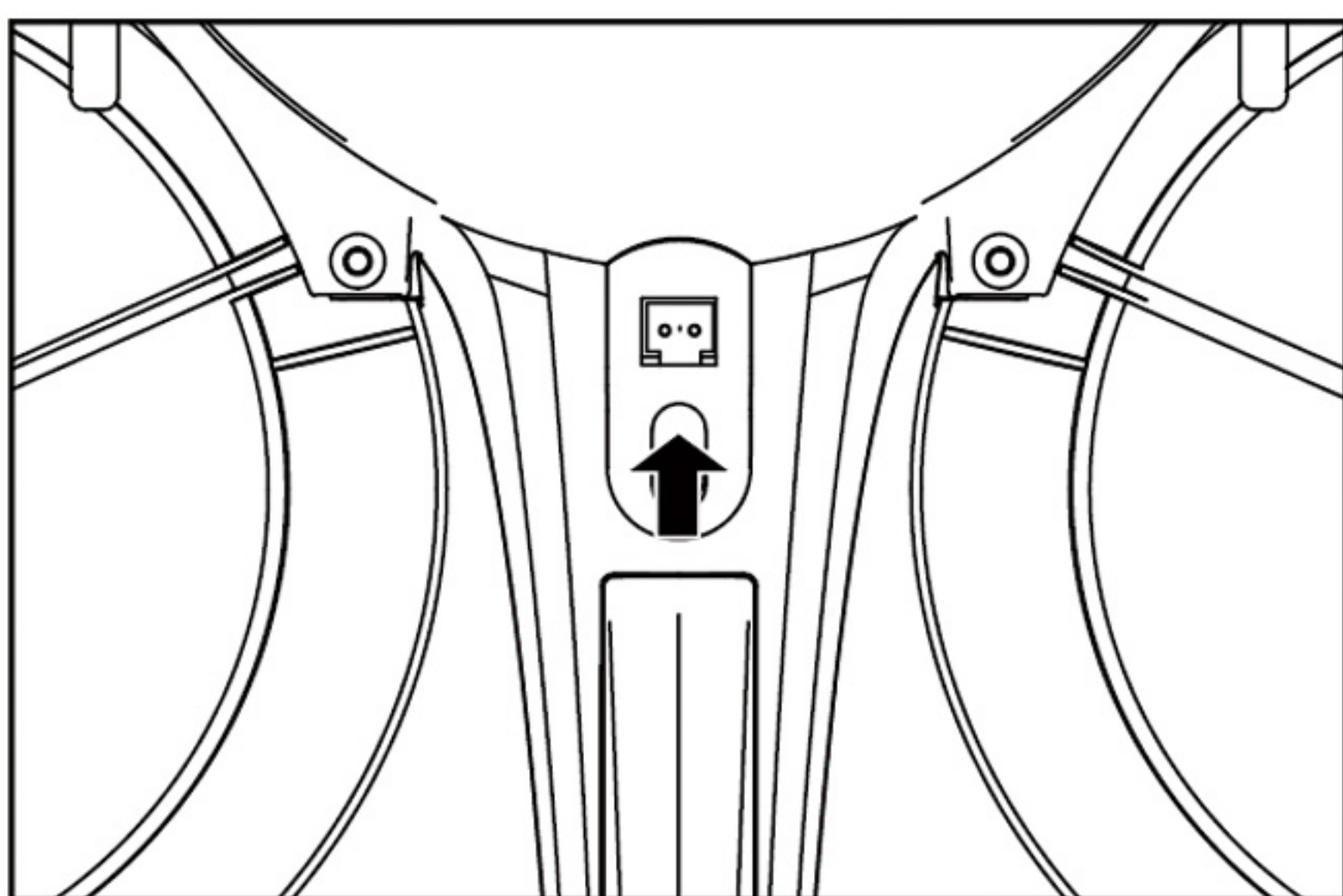
Repair and maintenance

This product comes with the following items:

- 1 X HeliFury360
- 1 X Controller
- 1 X USB charge cable
- 1 X Instruction manual



Aircraft battery charger



1. Switch the vehicle to "OFF".
NOTE: Before recharging the battery, wait 10-15 min. to let the battery cool down.
2. Insert the USB plug into an indoor USB power supply and the charging cable into the plug at the bottom of the HeliFury360 (see diagram).
3. APPROXIMATE FULL CHARGE TIME: 100-120 min.
4. After charging, remove the charge cable from the HeliFury360 and you're ready to fly!

Tip: For best results, charge the aircraft with the USB charging cable that came with the product.

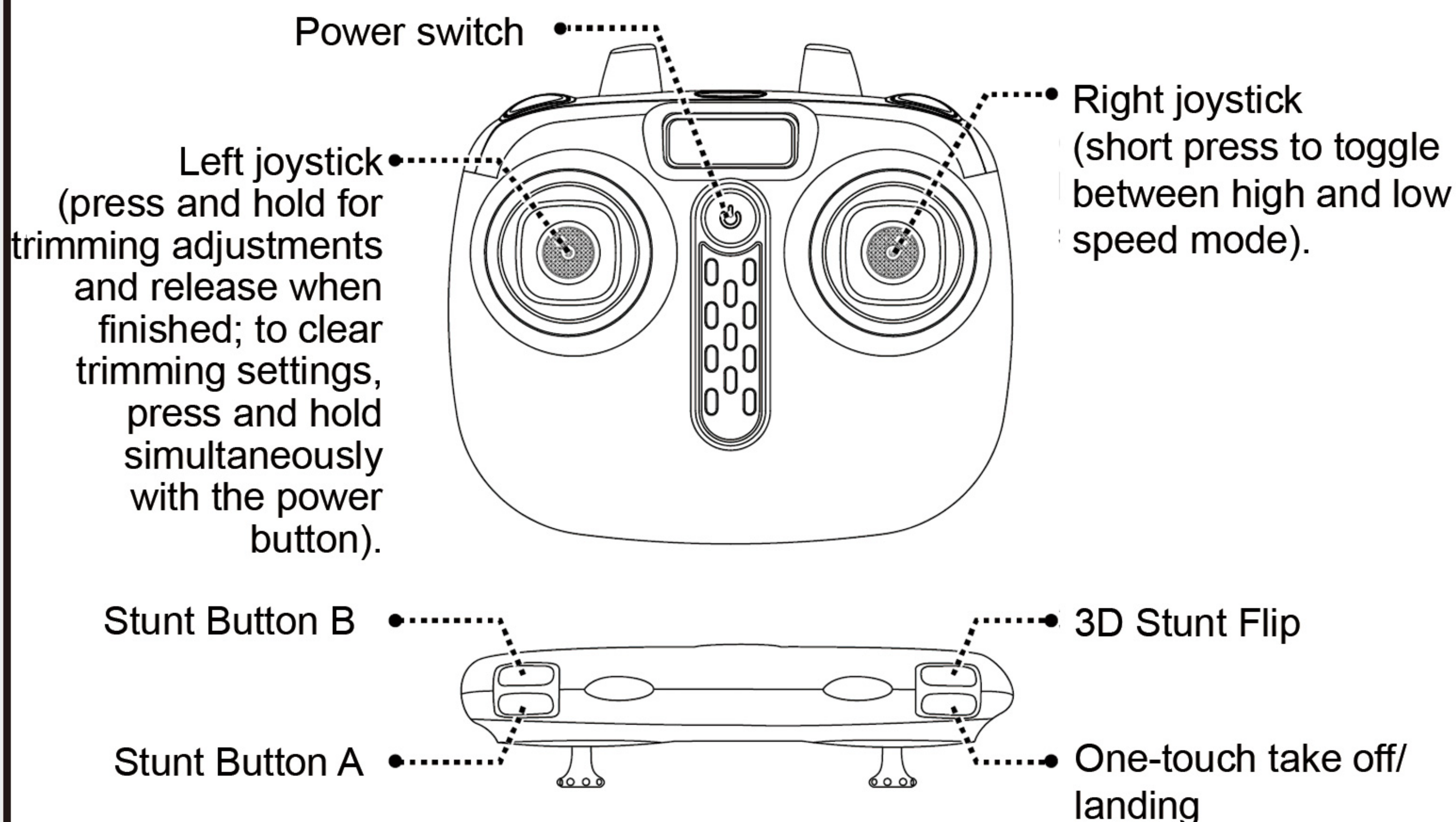
The battery takes approximately 60 minutes to charge (5V/1A power supply required). A full charge provides 7 minutes of flying time.

Observe the following instructions when charging the battery:

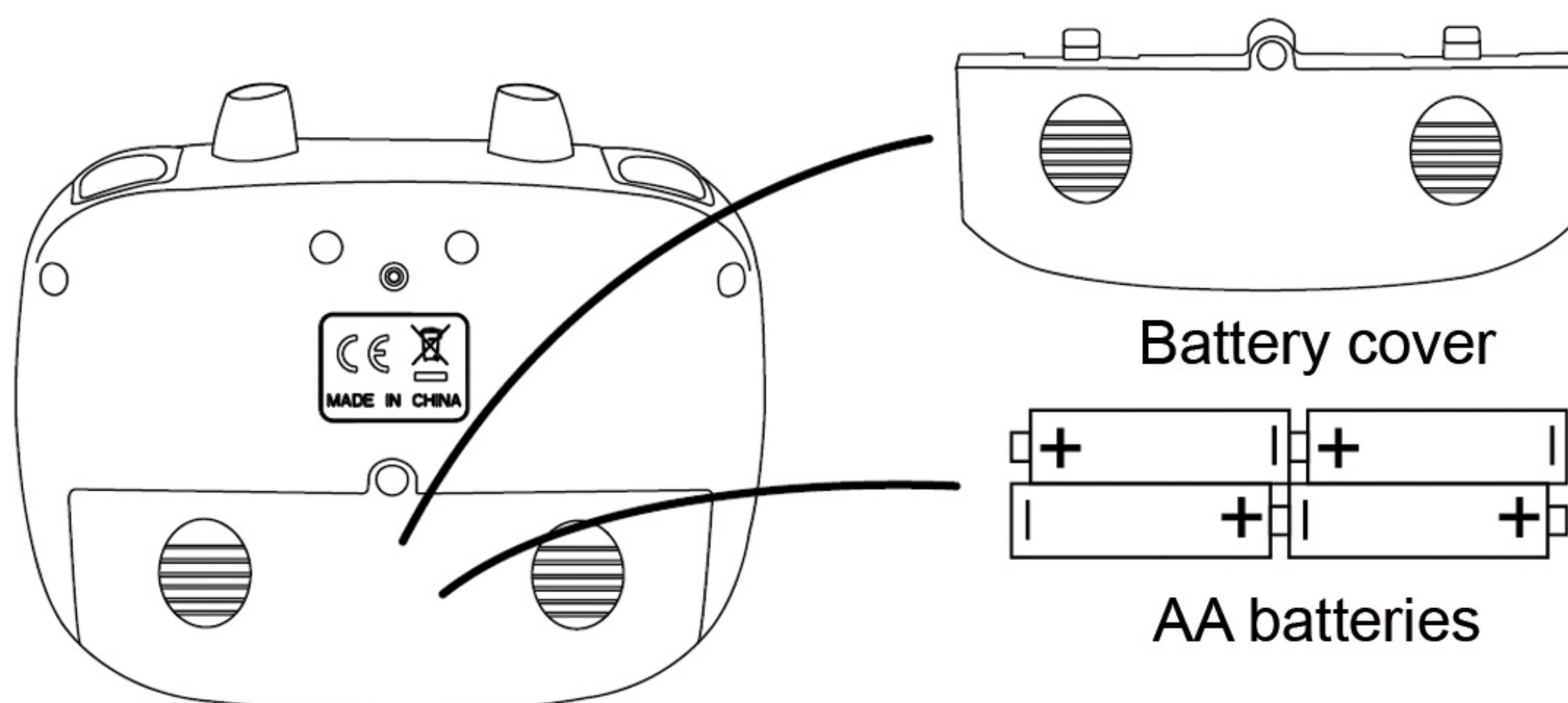
1. Carefully read the instructions and use batteries correctly.
2. Parental guidance recommended when installing, replacing or recharging batteries.
3. Remove batteries from controller and vehicle when not in use.
4. New Alkaline batteries are recommended for use in controller to obtain maximum performance.
5. Only batteries of the same or equivalent type as recommended are to be used.
6. Do not mix old and new batteries or types of batteries (i.e. alkaline/standard)
7. Do not attempt to recharge non-rechargeable batteries.
8. Do not disassemble, modify, heat or short circuit the batteries.
9. The charger is tailor-made for the LiPo rechargeable battery in HeliFury360. Do not use it to charge any battery other than that in the vehicle.
10. Charge the LiPo battery in an isolated area. Keep away from flammable materials.
11. Do not expose LiPo batteries to direct sunlight.
12. There is a risk of the LiPo batteries exploding, overheating or igniting.
13. Do not drop or subject LiPo batteries to strong impact.
14. Do not allow the LiPo batteries to get wet.
15. In the unlikely event of leakage or explosion of LiPo batteries, use sand or a chemical fire extinguisher for the battery.
16. Batteries must be recycled or disposed of properly
17. Do not dispose of incinerate used batteries or dispose of them in fire as batteries may explode or leak.
18. Regularly inspect the batteries for signs of leakage.
19. Keep this instruction manual in a safe place for future reference. It contains important information on how to use the product safely.

Remote control

Remote control button functions:



Inserting the remote control batteries:



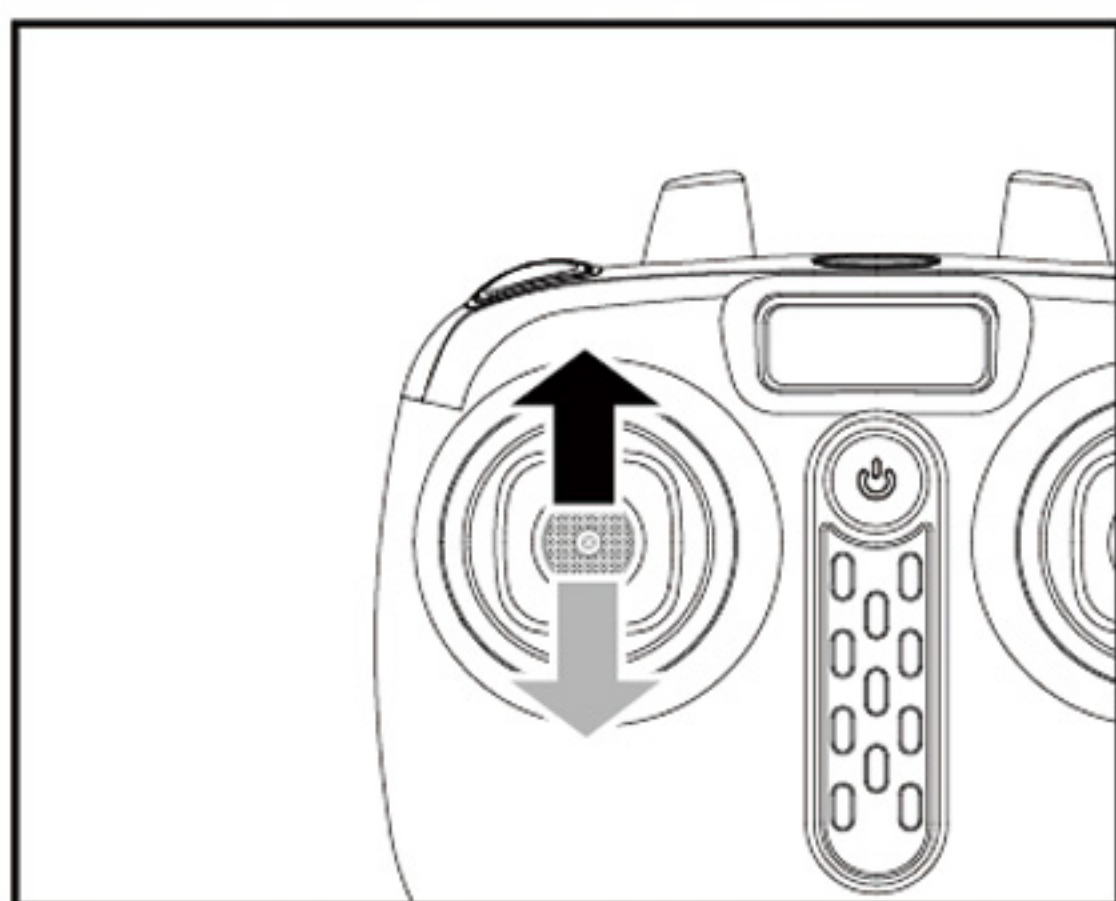
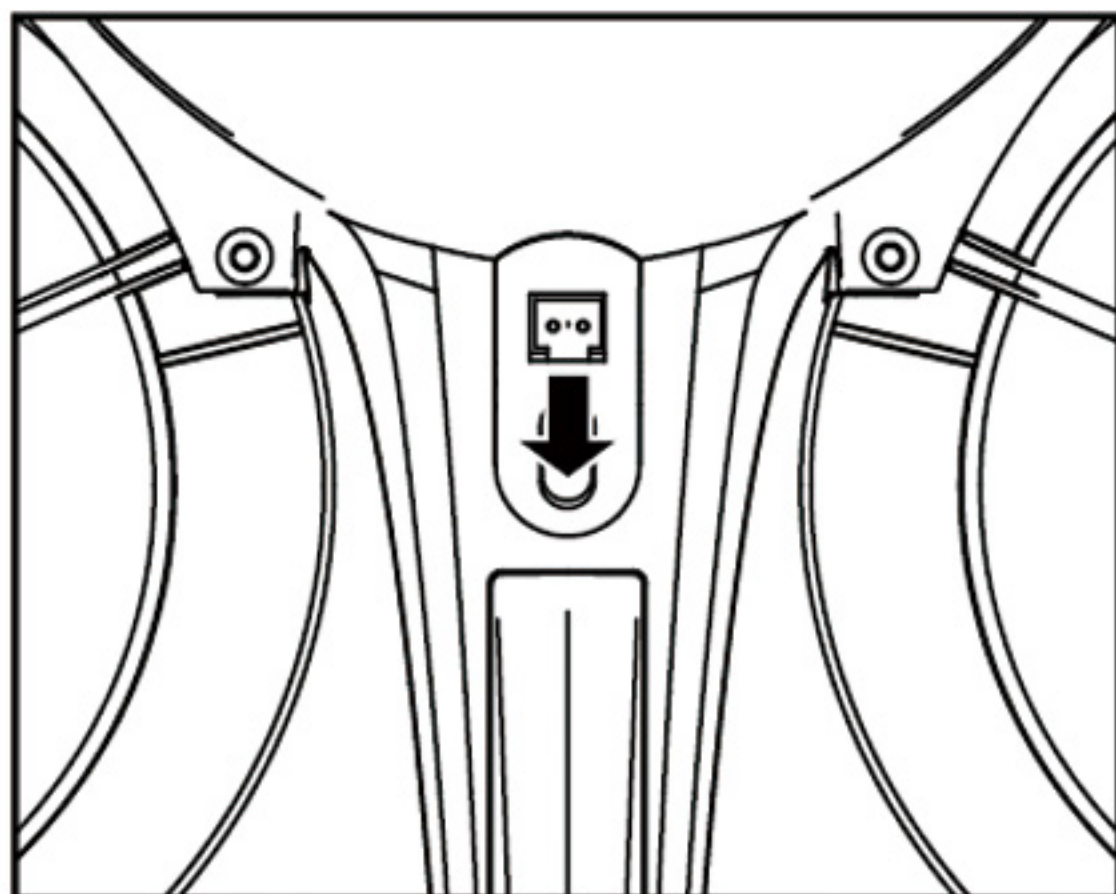
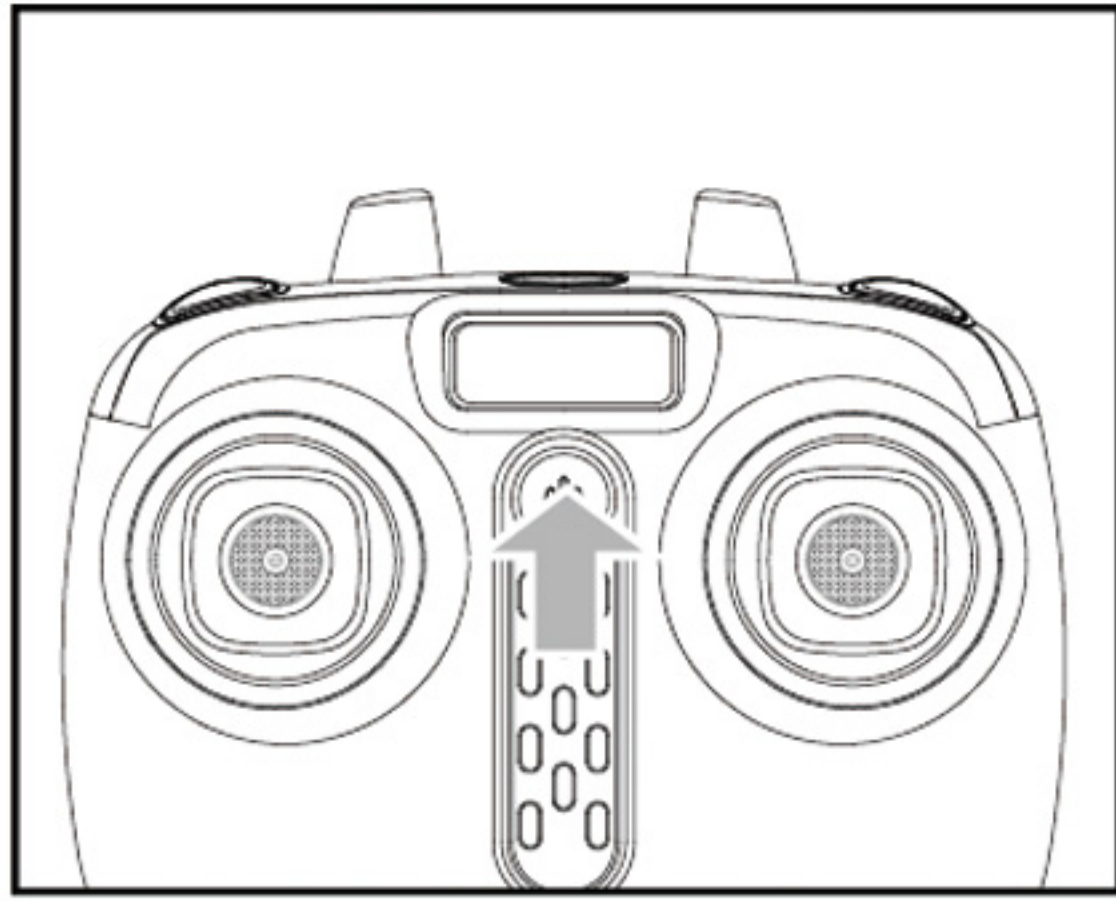
To insert the controller batteries, open the battery cover on the back of the remote control and insert 4x AA alkaline batteries, ensuring that you observe the polarity markings (batteries are not included and must be purchased separately).



1. When installing the batteries, ensure that you match the + and - ends of the battery with the + and - signs on the controller.
2. Do not mix old and new batteries.
3. Do not mix different types of batteries.

Flight preparation and turning the aircraft on/off

1. Flight preparation

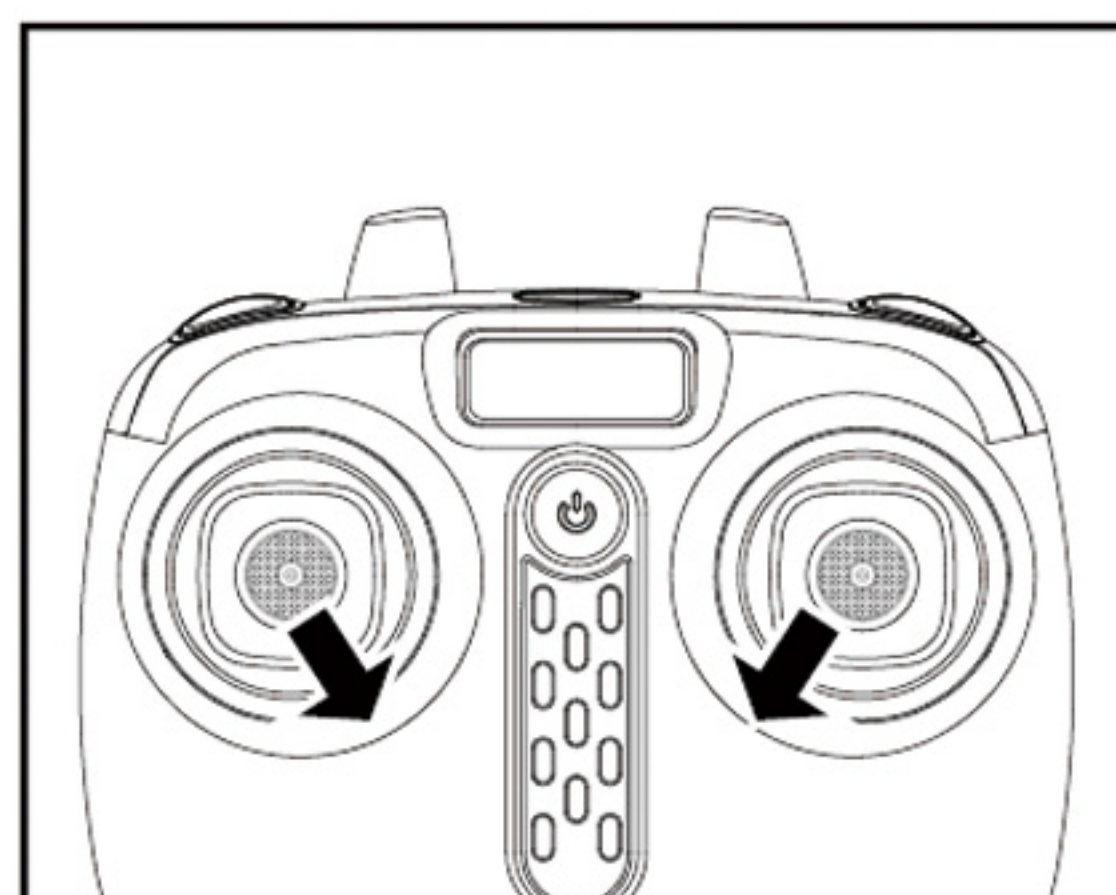
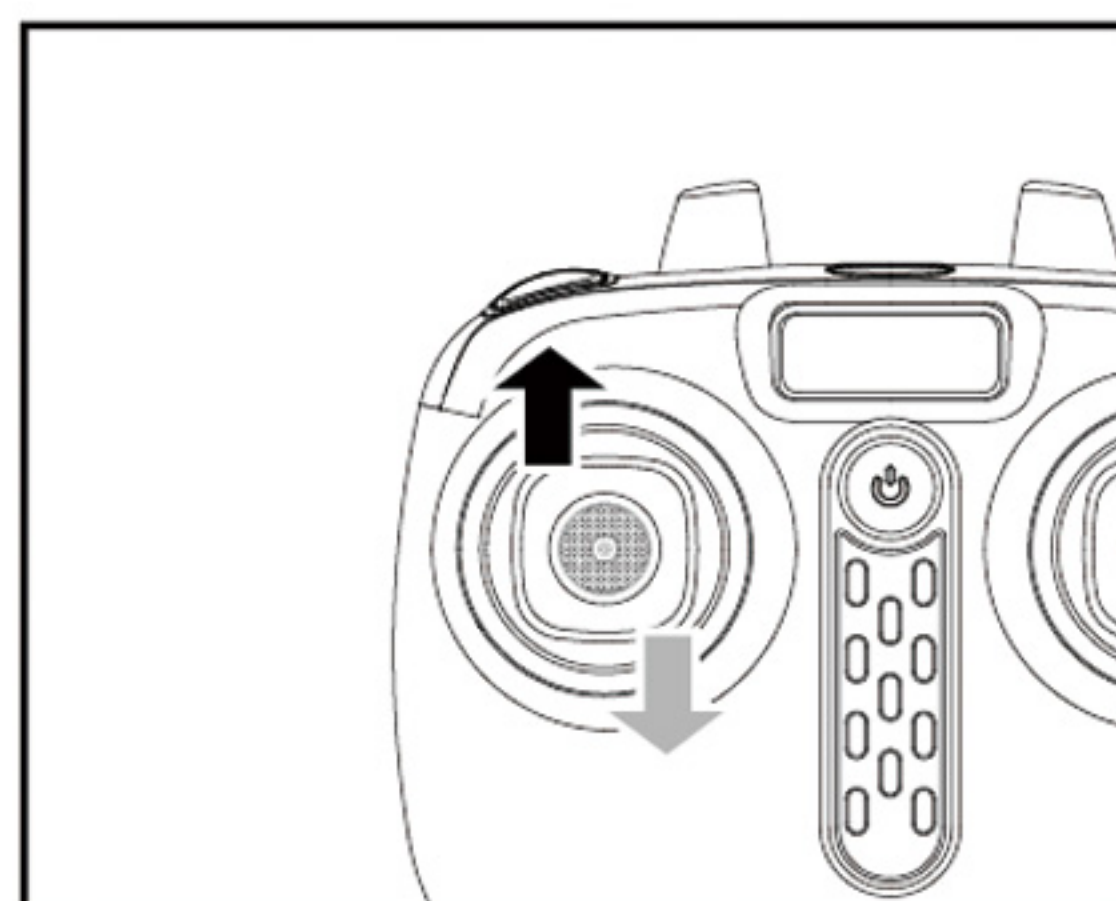


1. Switch the remote control on using the power switch.

2. Turn the power switch on the aircraft to “1” to enable mode 1.

3. Push the left joystick (throttle) fully up and then fully down. The indicator will change from a flashing light to a steady light to indicate that the aircraft is in flight-standby mode.

2. Turning the aircraft on

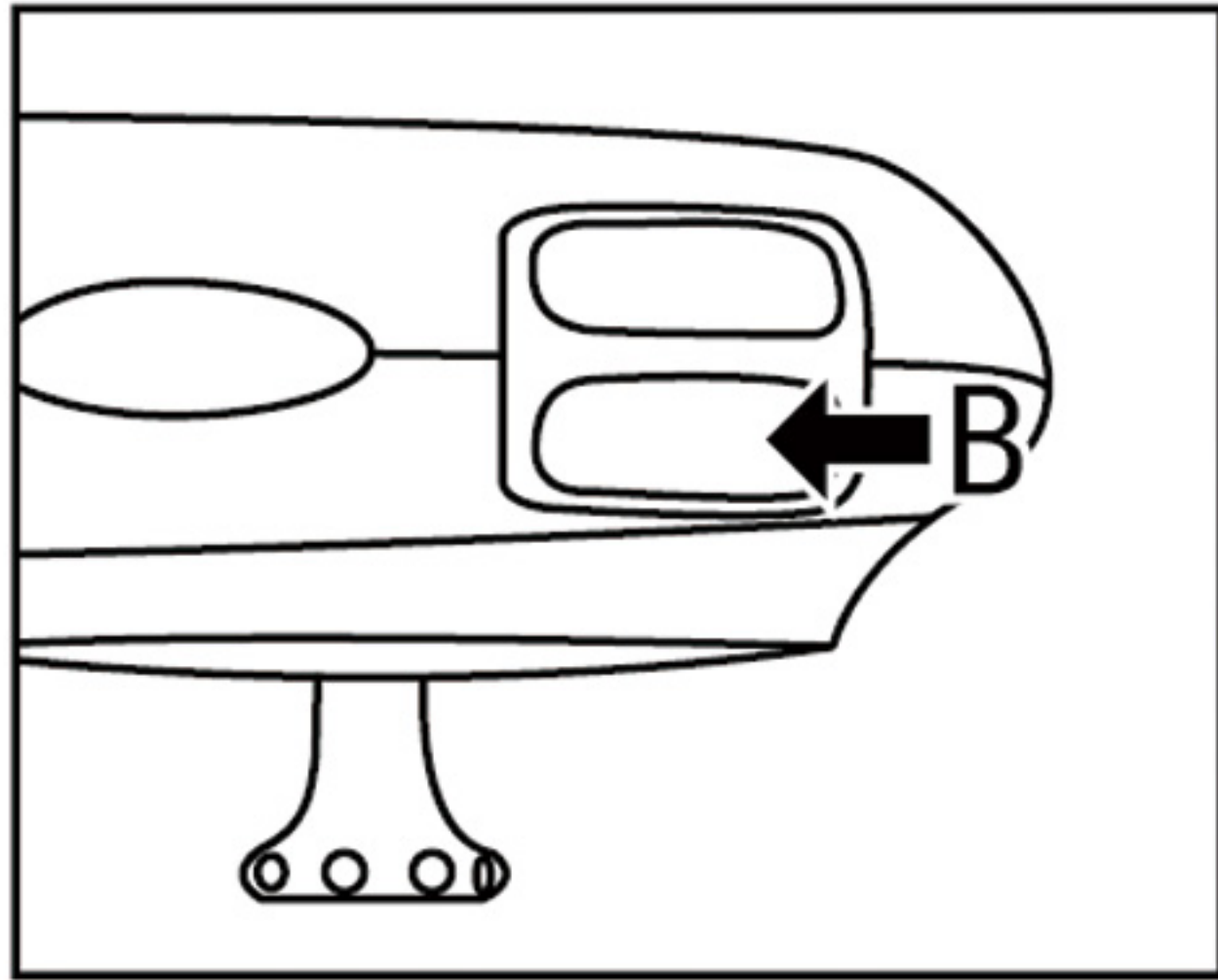


Method one:

Push the left joystick (throttle) fully up and then return it to the centre. The aircraft's blades will begin to rotate slowly.

Method two:

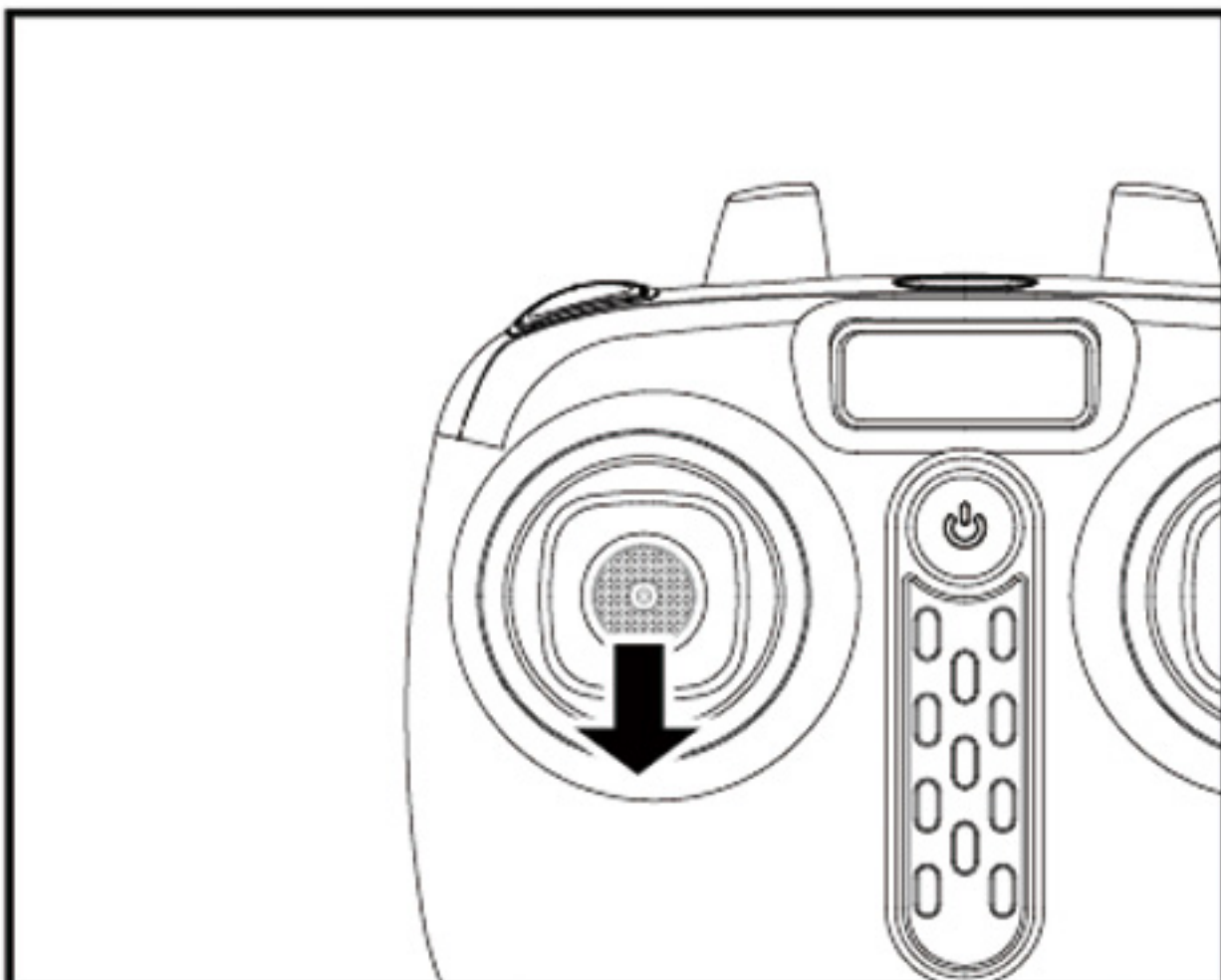
Push the left and right joystick downwards in a V shape for 1 second. The aircraft's blades will begin to rotate slowly.



Method three:

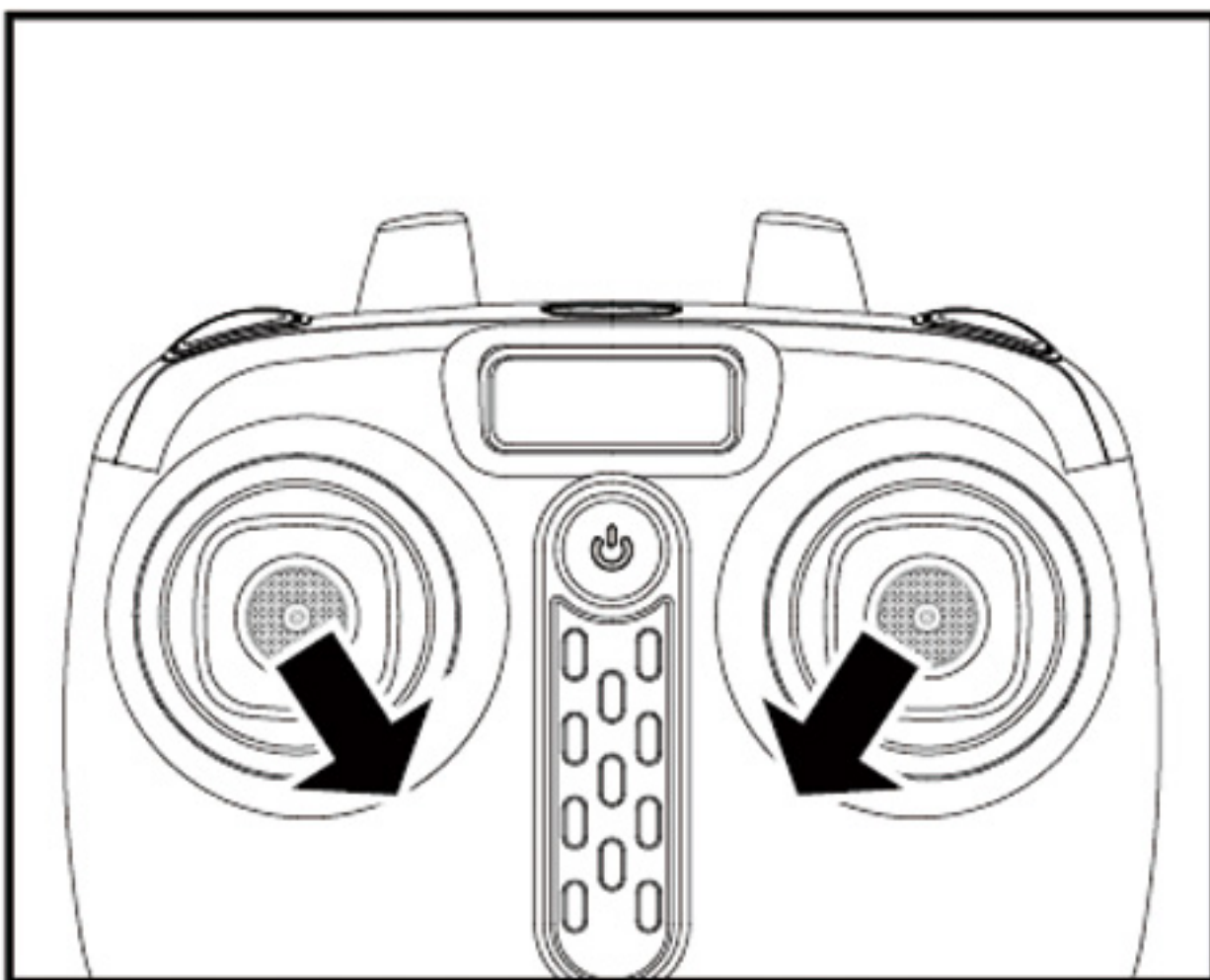
Press button B when the aircraft is static. The aircraft's blades will begin to rotate slowly, after which the aircraft will automatically take off and hover at a fixed height.

3. Turning the aircraft off



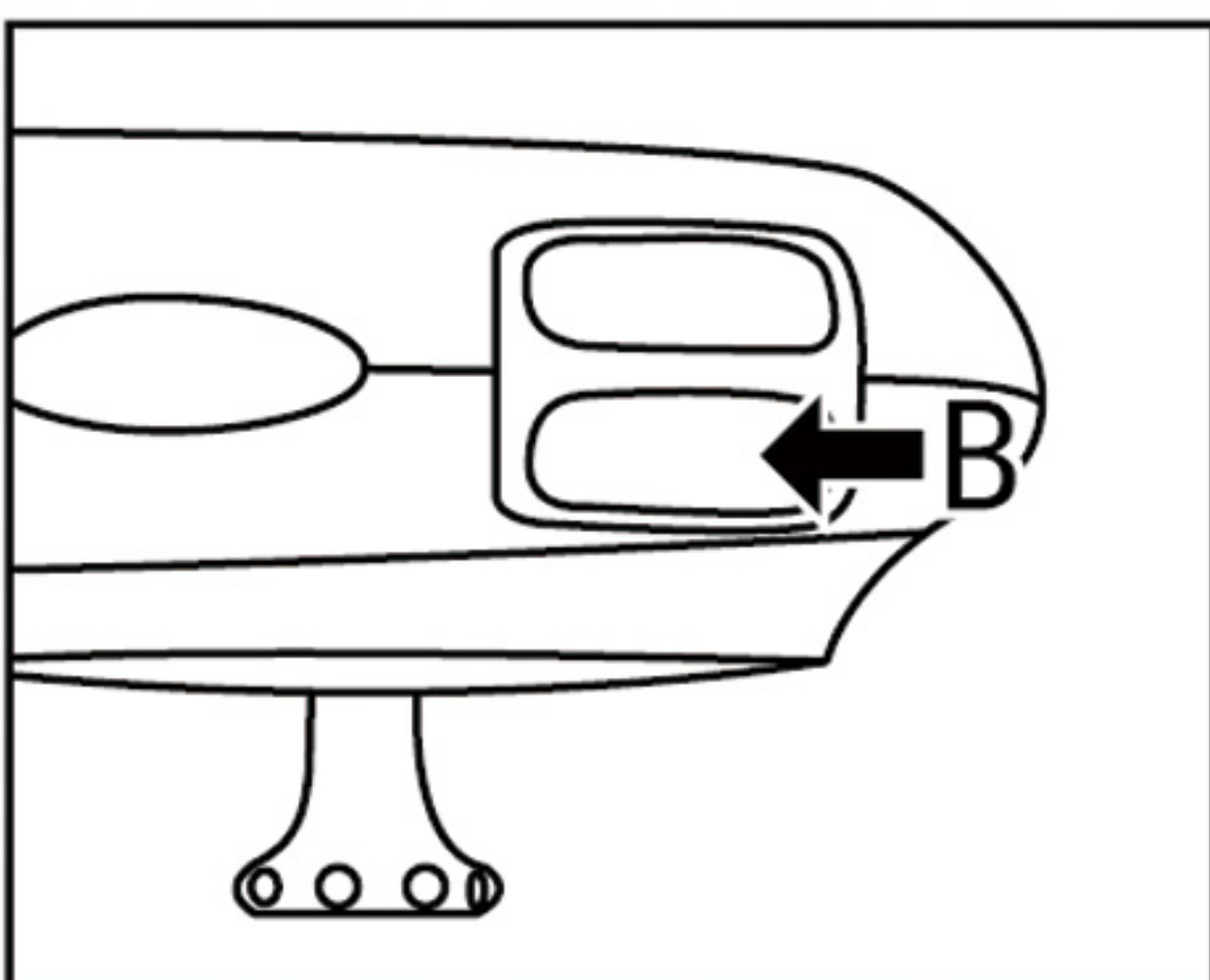
Method one:

Push the left joystick (throttle) down for 2-3 seconds to switch the aircraft off.



Method two:

Push the left and right joysticks downwards in a V shape for 1 second to switch the aircraft off.



Method three:

Press button B when the aircraft is airborne. The aircraft will slowly descend to the ground and switch off automatically.

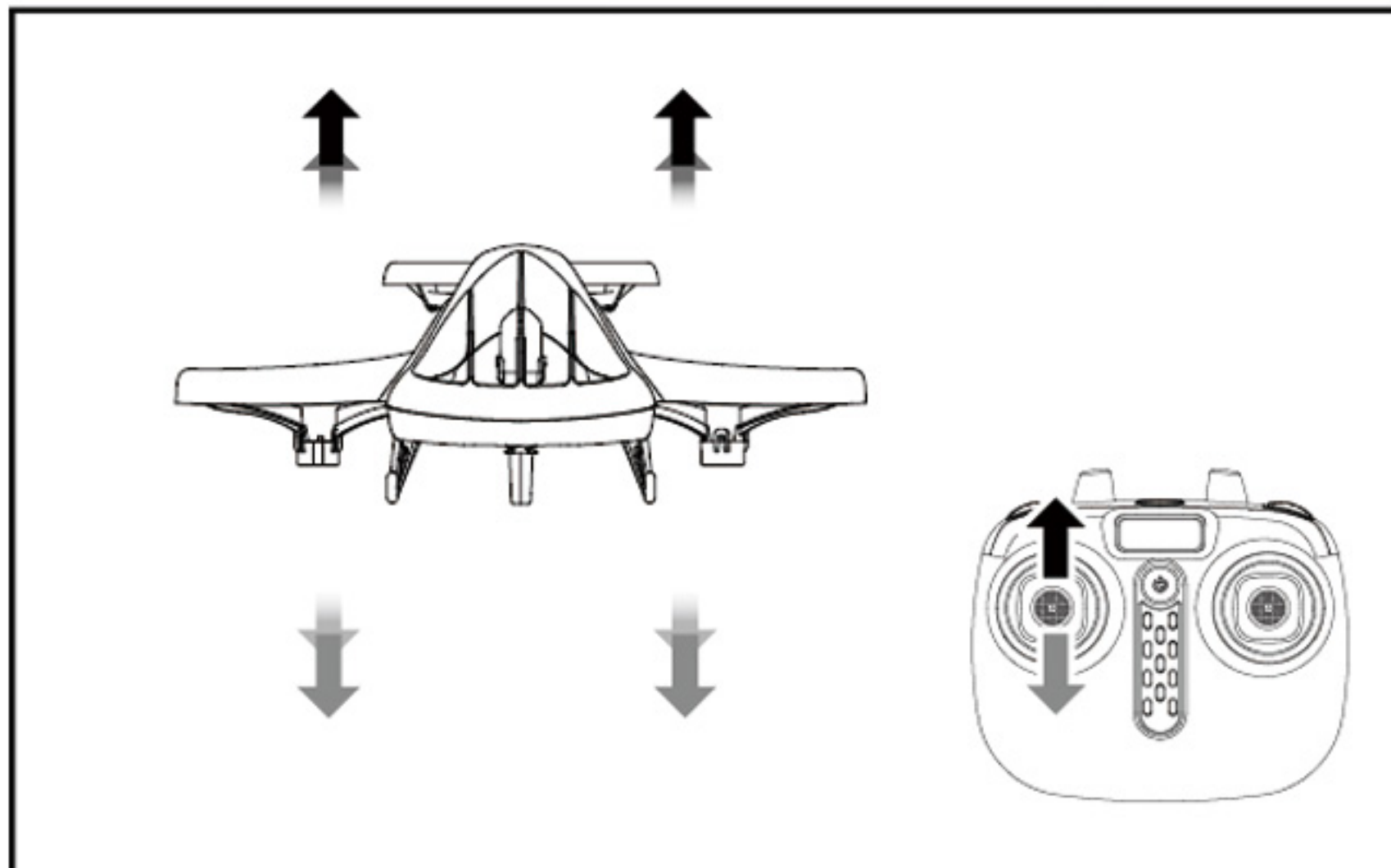
Note:

1. If the aircraft is flown out of range from the remote control, the aircraft indicator light will start to flash and the aircraft will land slowly.
2. If the remote control suddenly turns off or runs out of power during flight, the aircraft will automatically land and come to a stop. If the remote control is turned back on during this process, you will be able to control the aircraft again.

Flying the aircraft

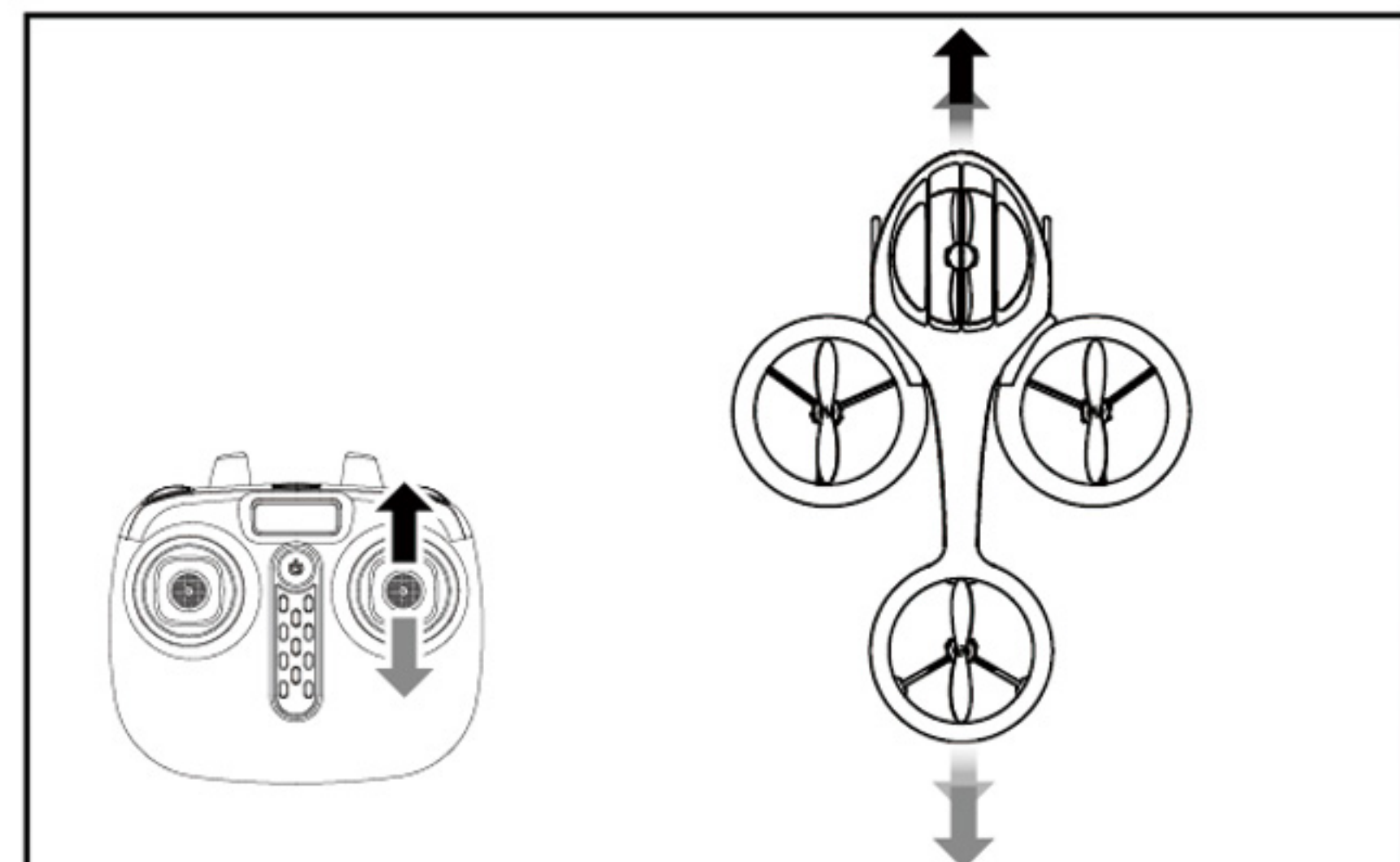
In-flight controls

Controlling the ascent/descent



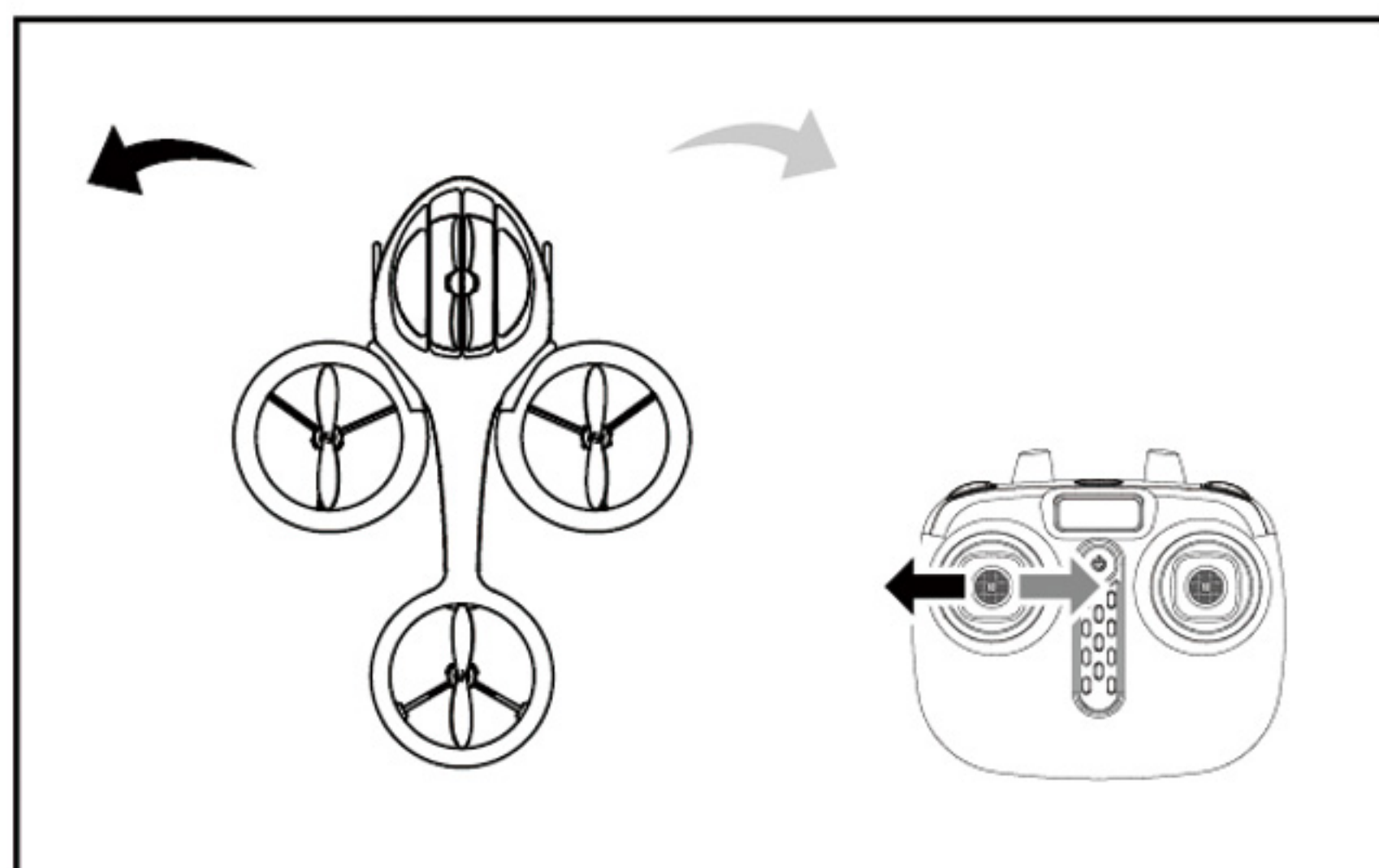
Push the left joystick (throttle) up or down to make the aircraft ascend/descent.

Moving forwards and backwards



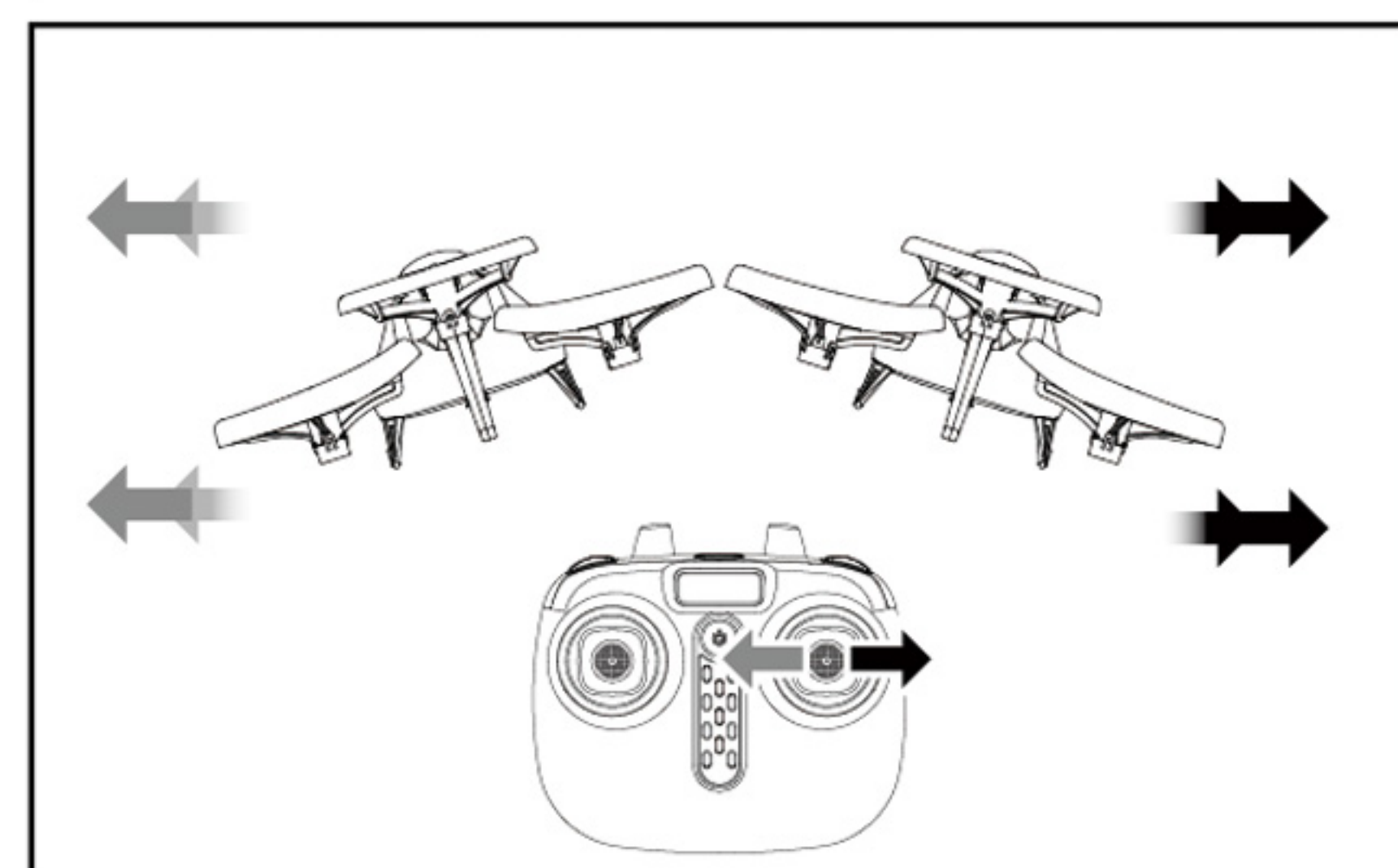
Push the right joystick (rudder) up or down to make the aircraft move forwards/backwards.

Rotating left and right



Push the left joystick (throttle) left or right to make the aircraft rotate left/right.

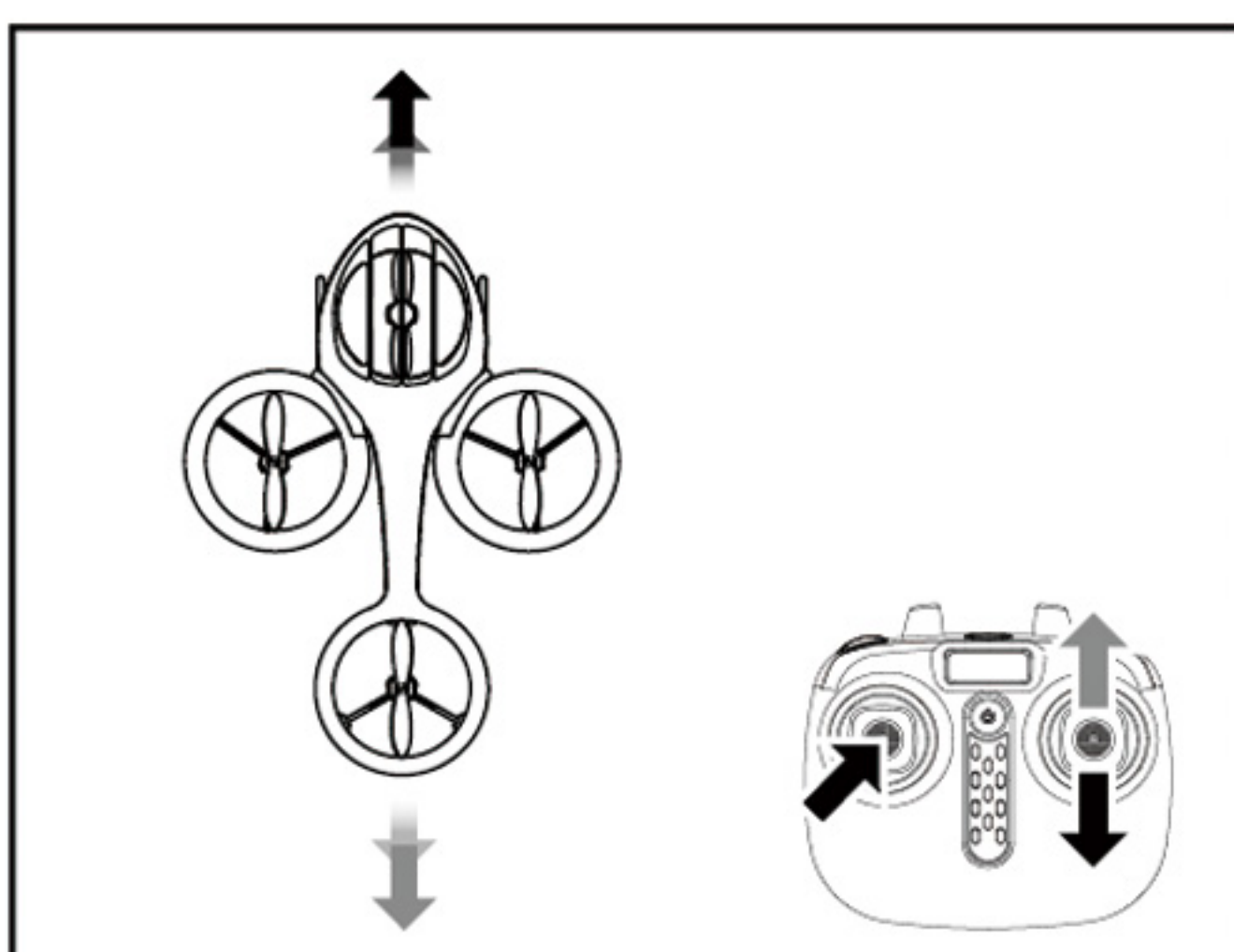
Flying left and right



Push the right joystick (rudder) left or right to make the aircraft fly to the left or right.

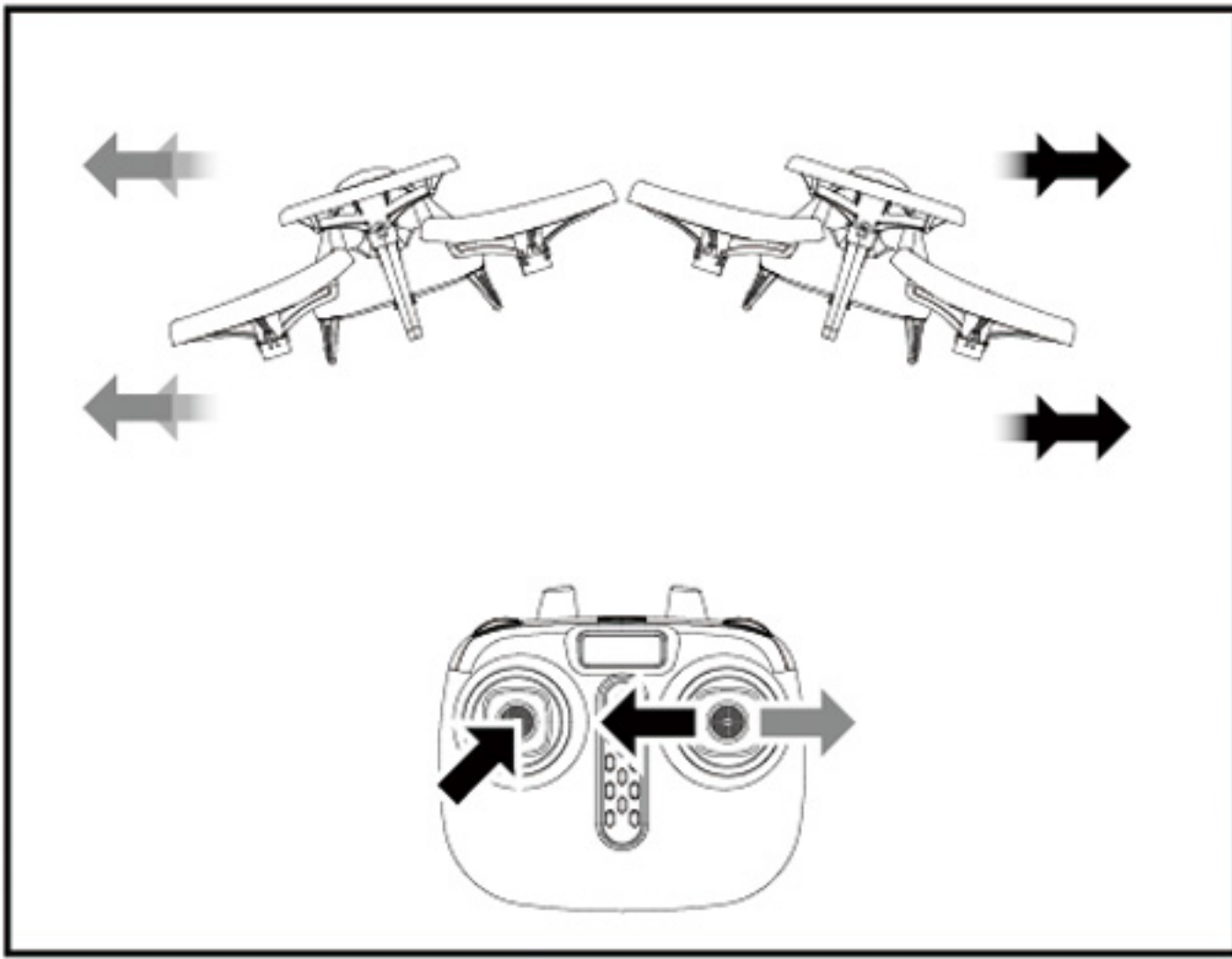
Trimming

Trimming forwards and backwards



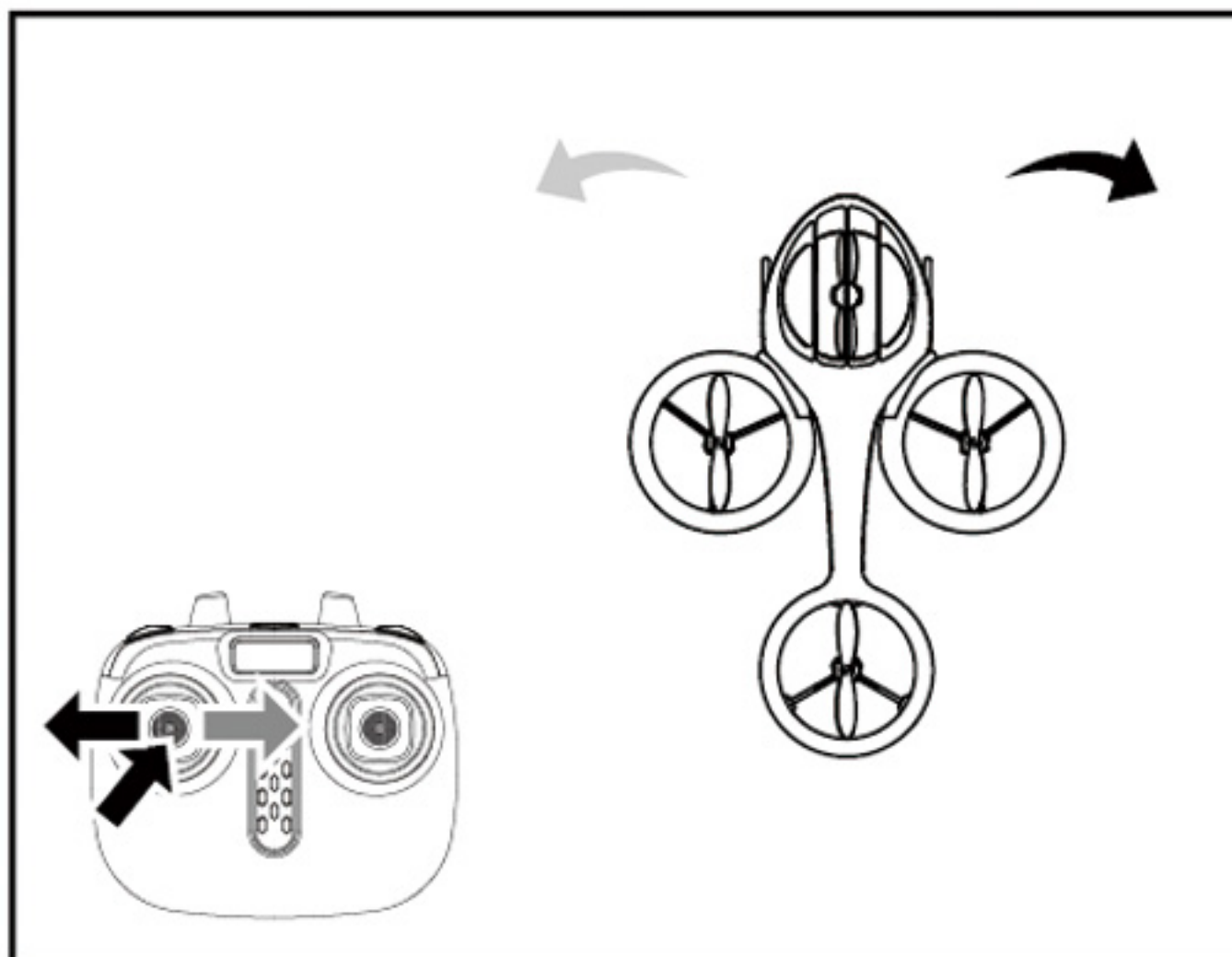
If the aircraft drifts forwards or backwards when it is hovering, hold the left joystick down and push the right joystick down/up until the aircraft stops drifting.

Trimming left and right



If the aircraft drifts to the left or right when it is hovering, hold the left joystick down and push the right joystick right/left until the aircraft stops drifting.

Trimming left and right rotation



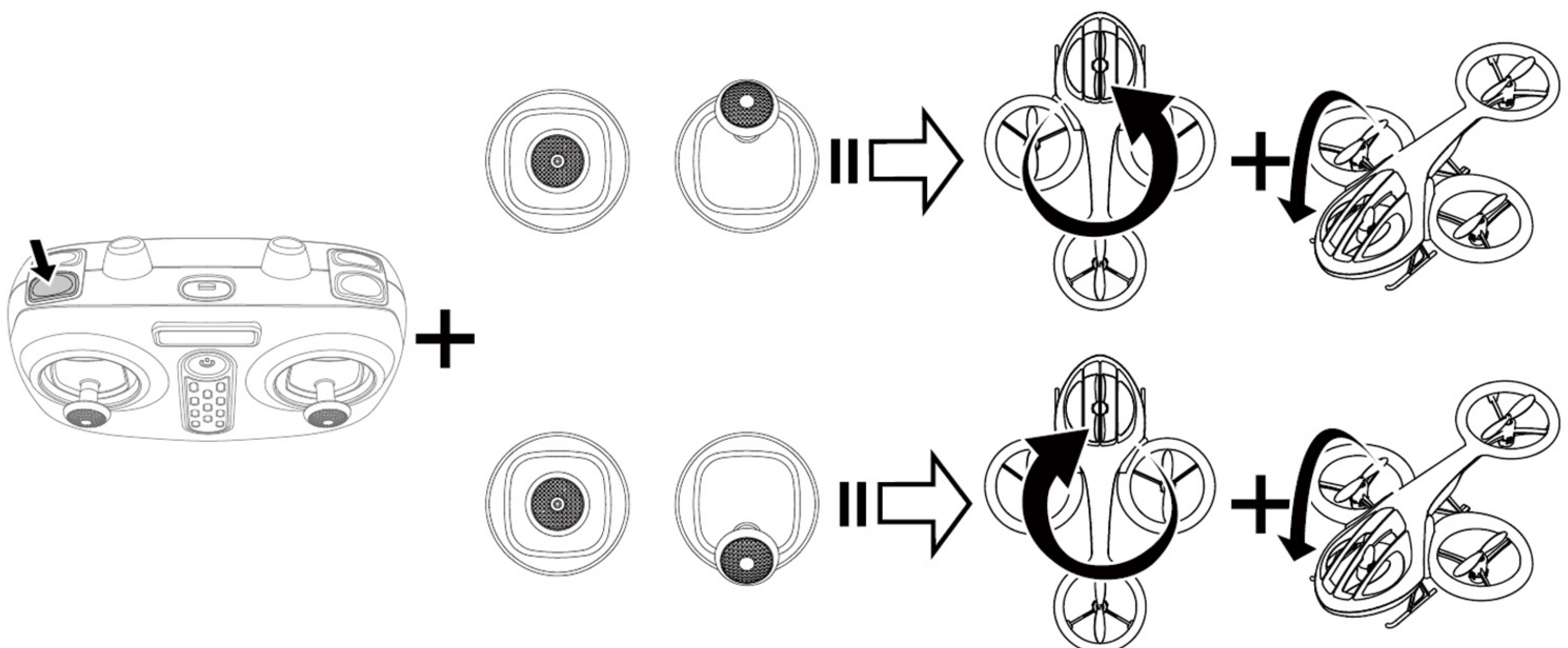
If the aircraft rotates to the left or right when it is hovering, hold the left joystick down and push it right/left until the aircraft stops rotating.

Stunt manoeuvres

CORKSREW: (Right & Left)

Press the top left button, while at the same time, pushing the right joystick in the direction of the desired corkscrew.

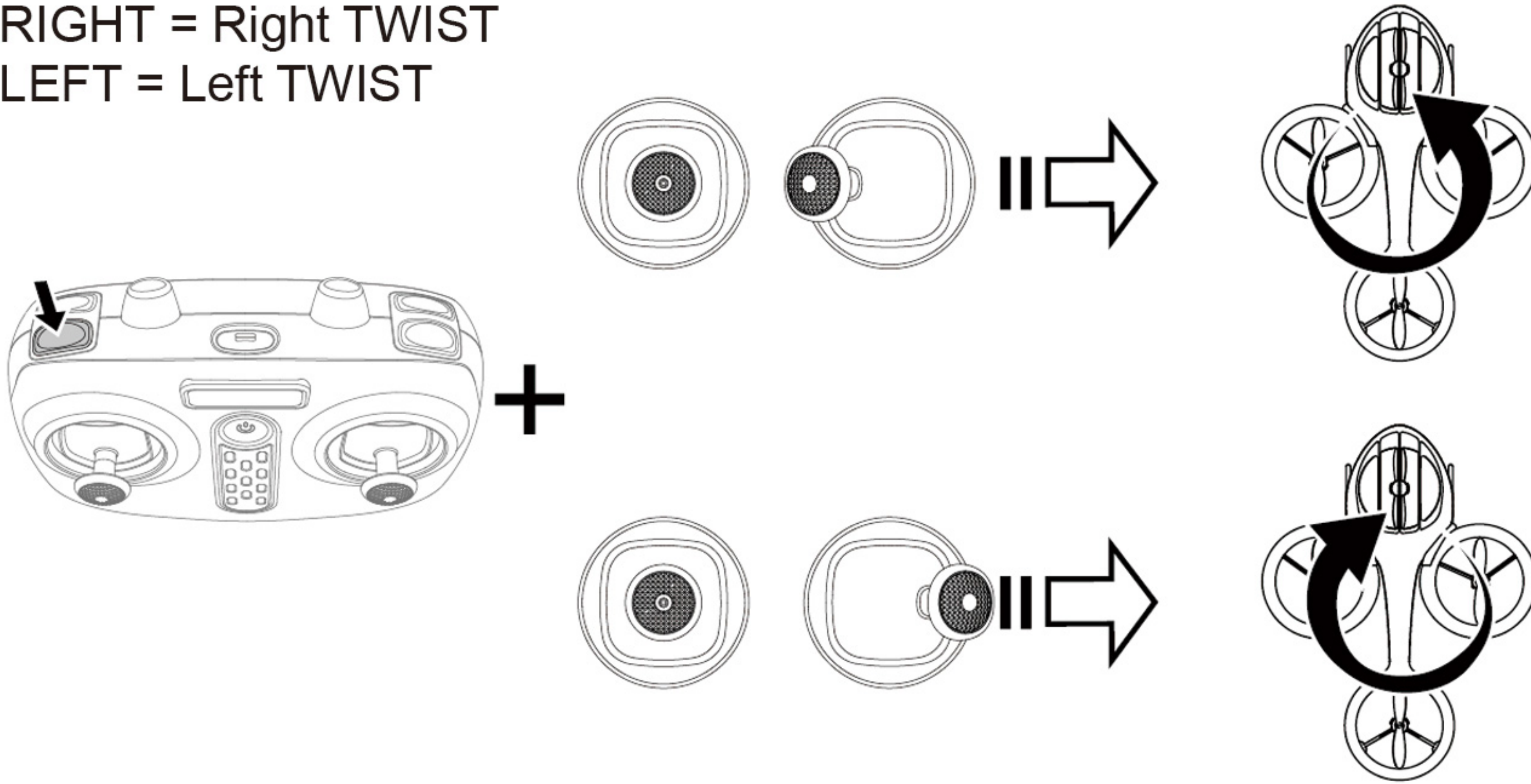
- Backward = Right CORKSCREW
- Forward = Left CORKSCREW



360° TWIST: (Right & Left)

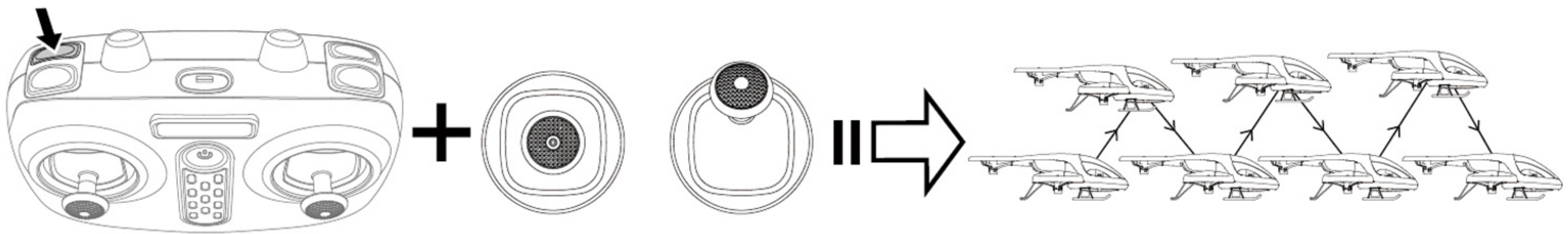
Press the top left button, while at the same time, pushing the right joystick in the direction of the desired twist.

- RIGHT = Right TWIST
- LEFT = Left TWIST



LEAP FROG FLIGHT:

Press the bottom left button, while at the same time, pushing the right joystick UP.



FADE AWAY FLIGHT:

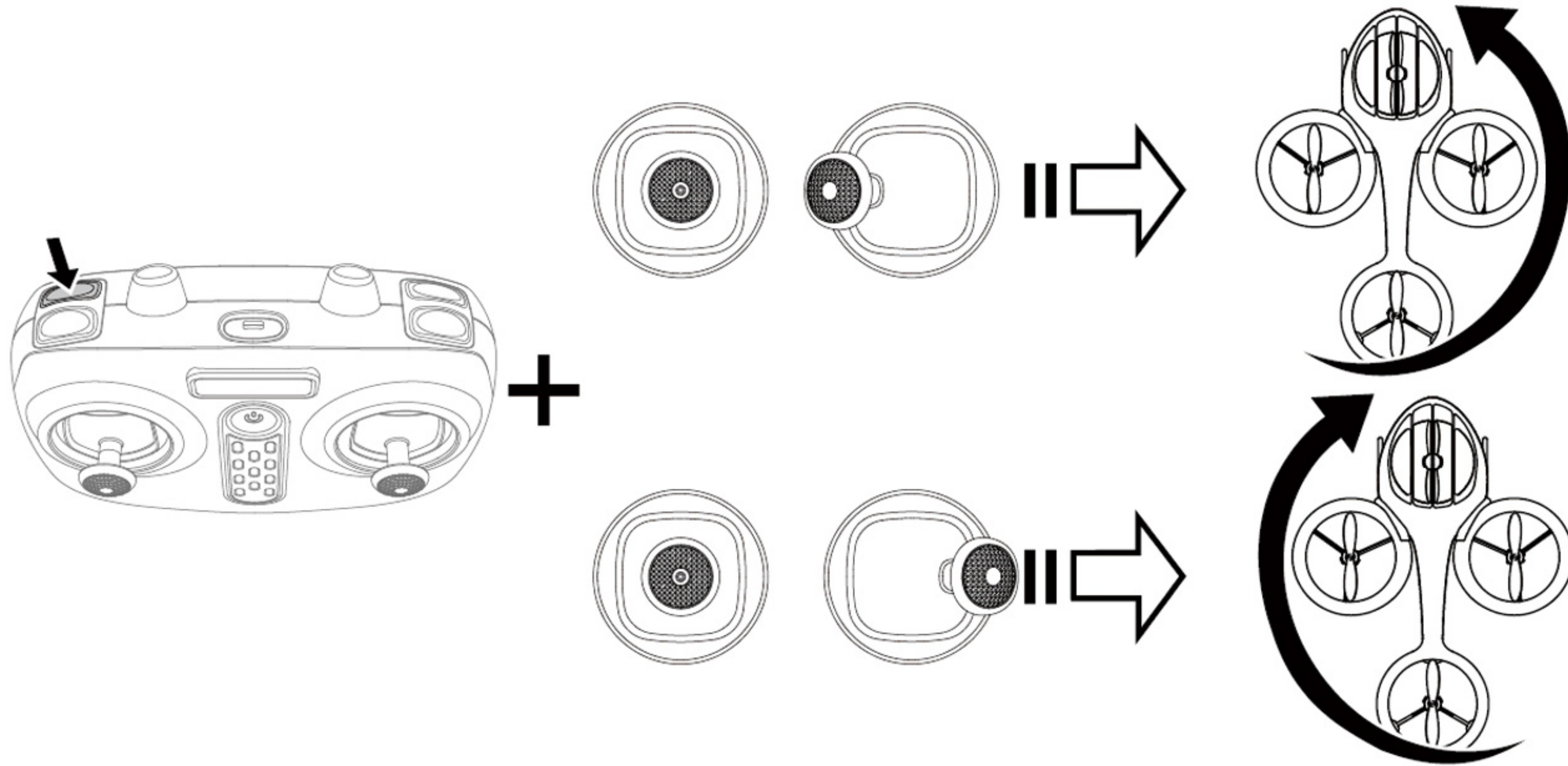
Press the bottom left button, while at the same time, pushing the right joystick DOWN.



BANKED LOOP: (Right & Left)

Press the bottom left button, while at the same time, pushing the right joystick in the direction of the desired BANKED LOOP.

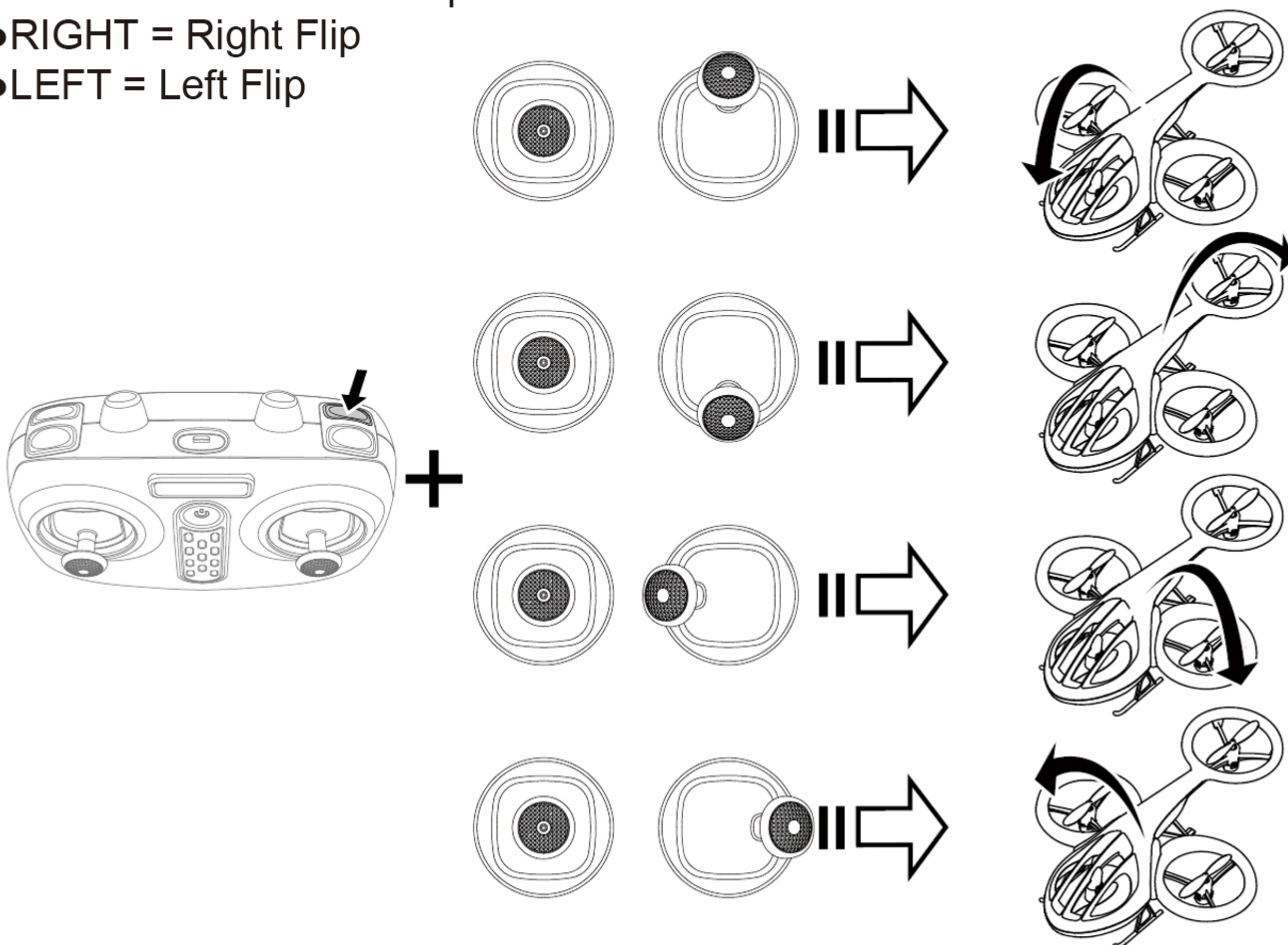
- RIGHT = Right BANKED LOOP
- LEFT = Left BANKED LOOP



FLIPS: (Forward, Backwards, Right & Left)

Press the lower right button, while at the same time, pushing the right joystick in the direction of the desired flip.

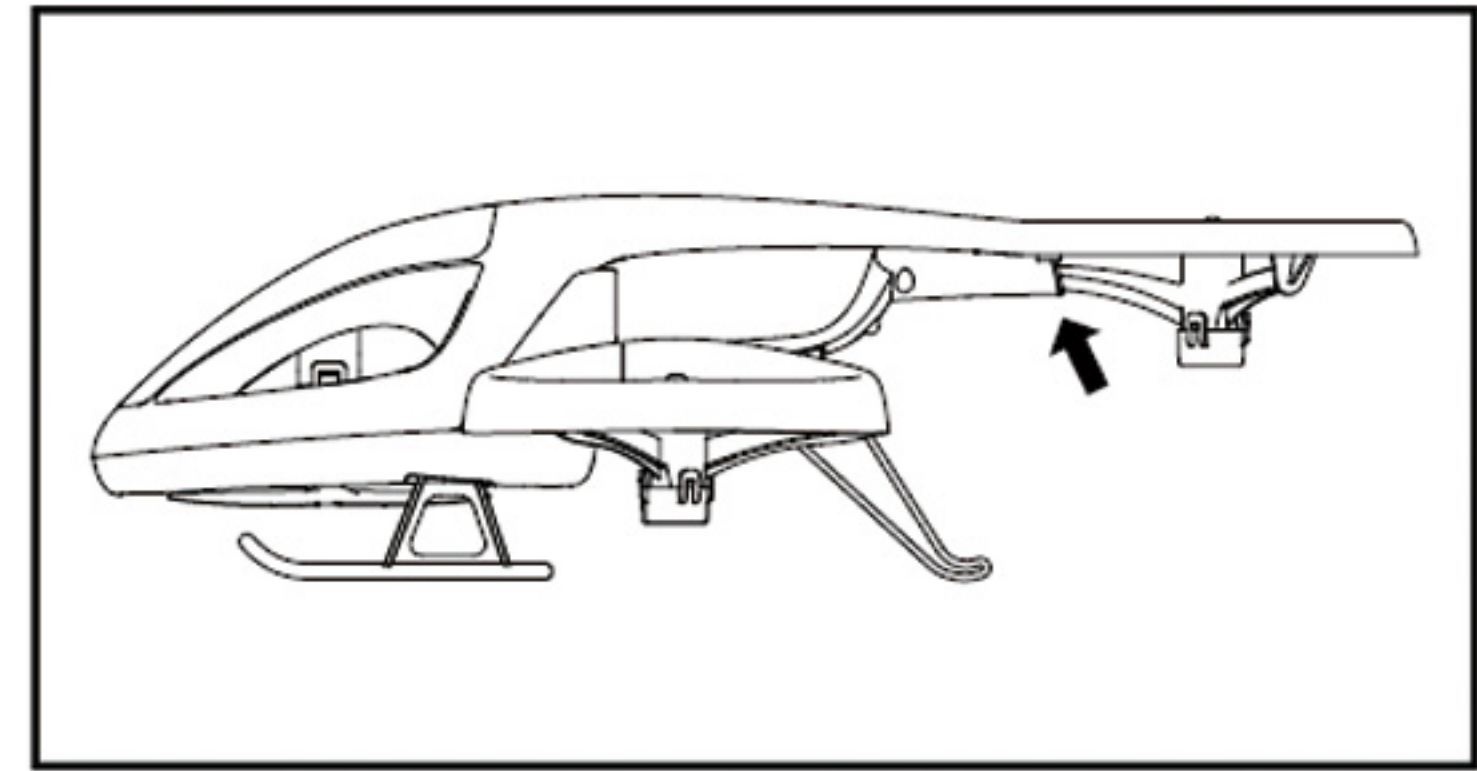
- UP = Forward Flip
- DOWN = Backwards Flip
- RIGHT = Right Flip
- LEFT = Left Flip



Product features

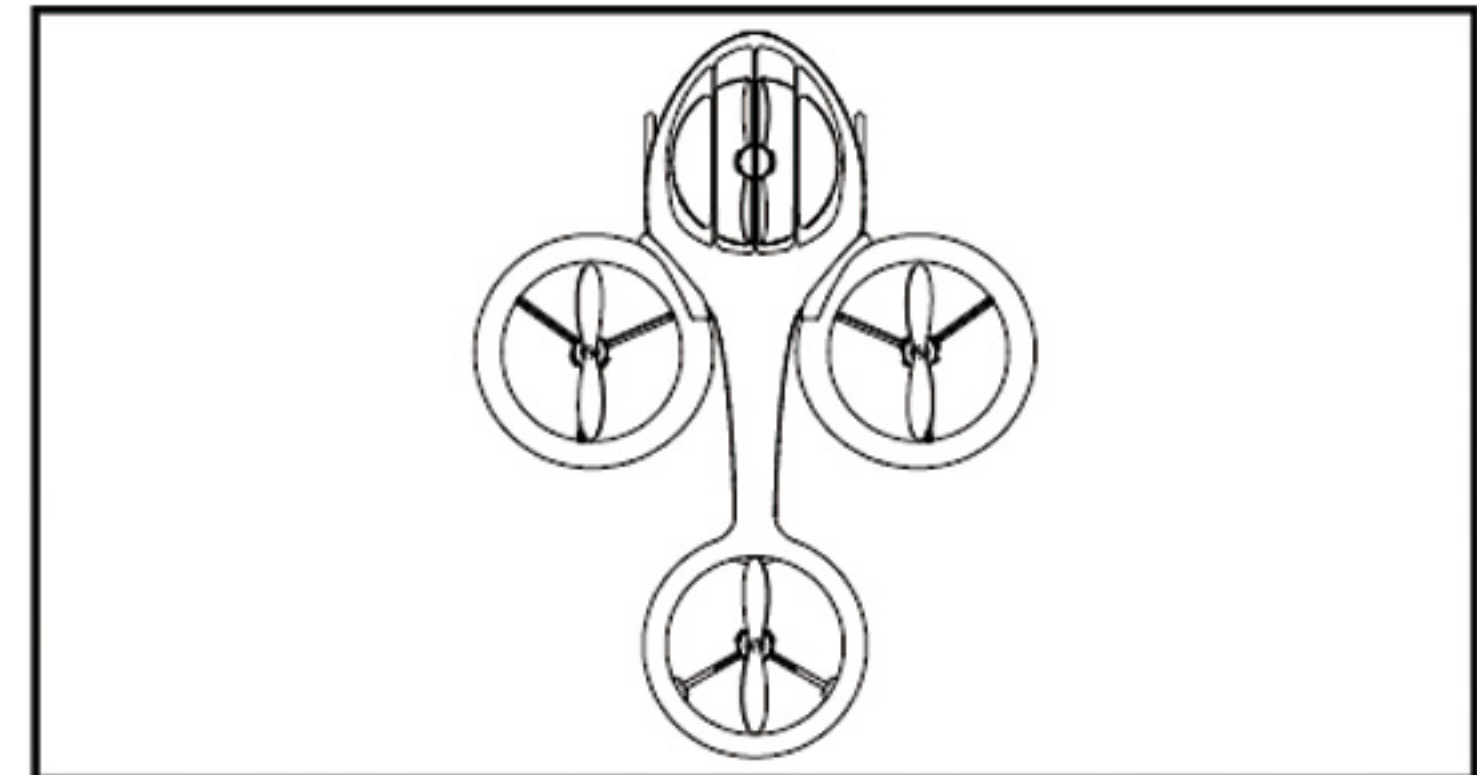
1. Undervoltage protection:

A flashing red indicator light on the base of the aircraft indicates that the battery level is low. When this occurs, bring the aircraft back to land. If the battery life is so low that the aircraft can no longer continue to fly, the aircraft will land automatically.



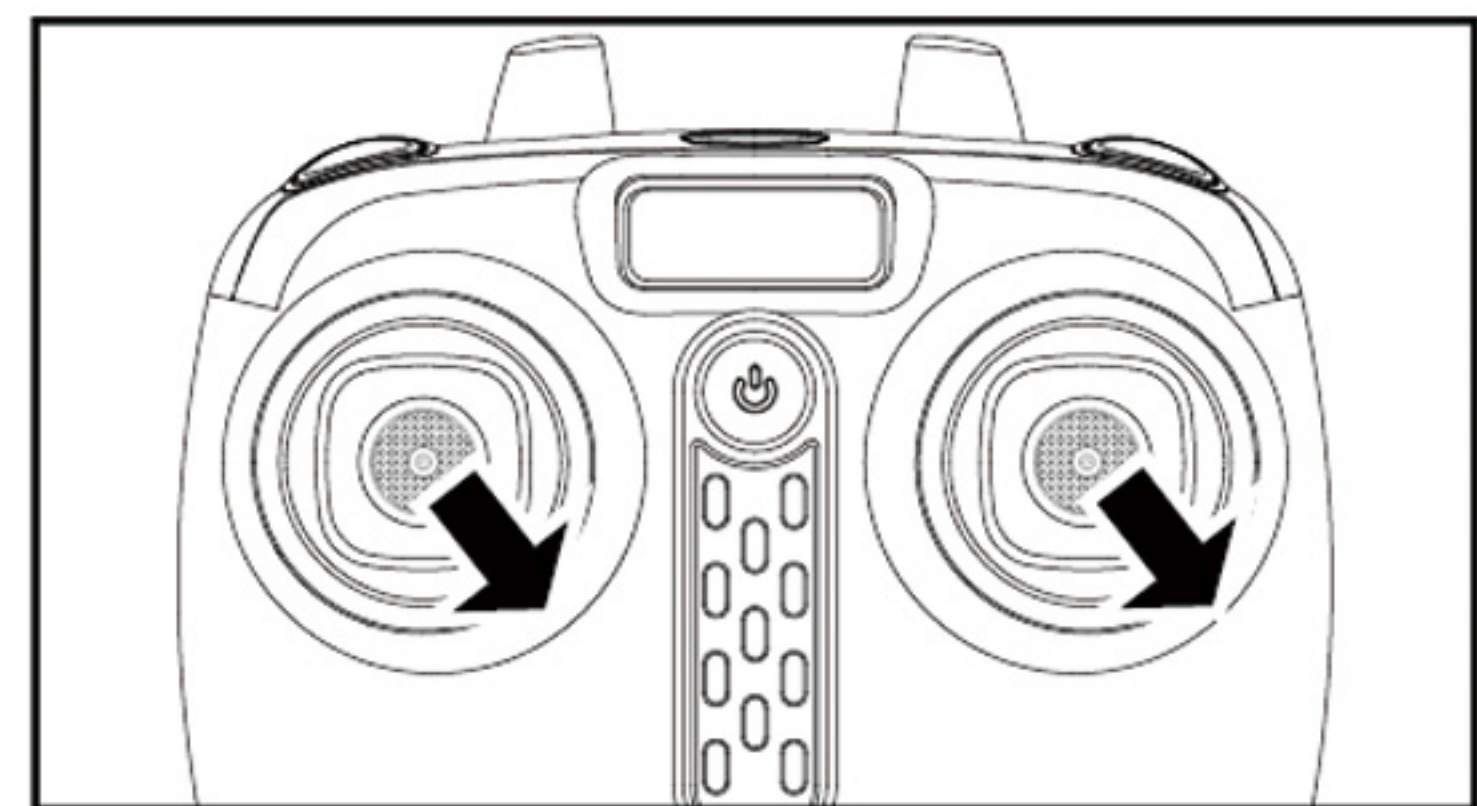
2. Overcurrent protection:

If the aircraft's blades collide with another object or become stuck, the aircraft's circuit will engage the overcurrent protection mechanism.



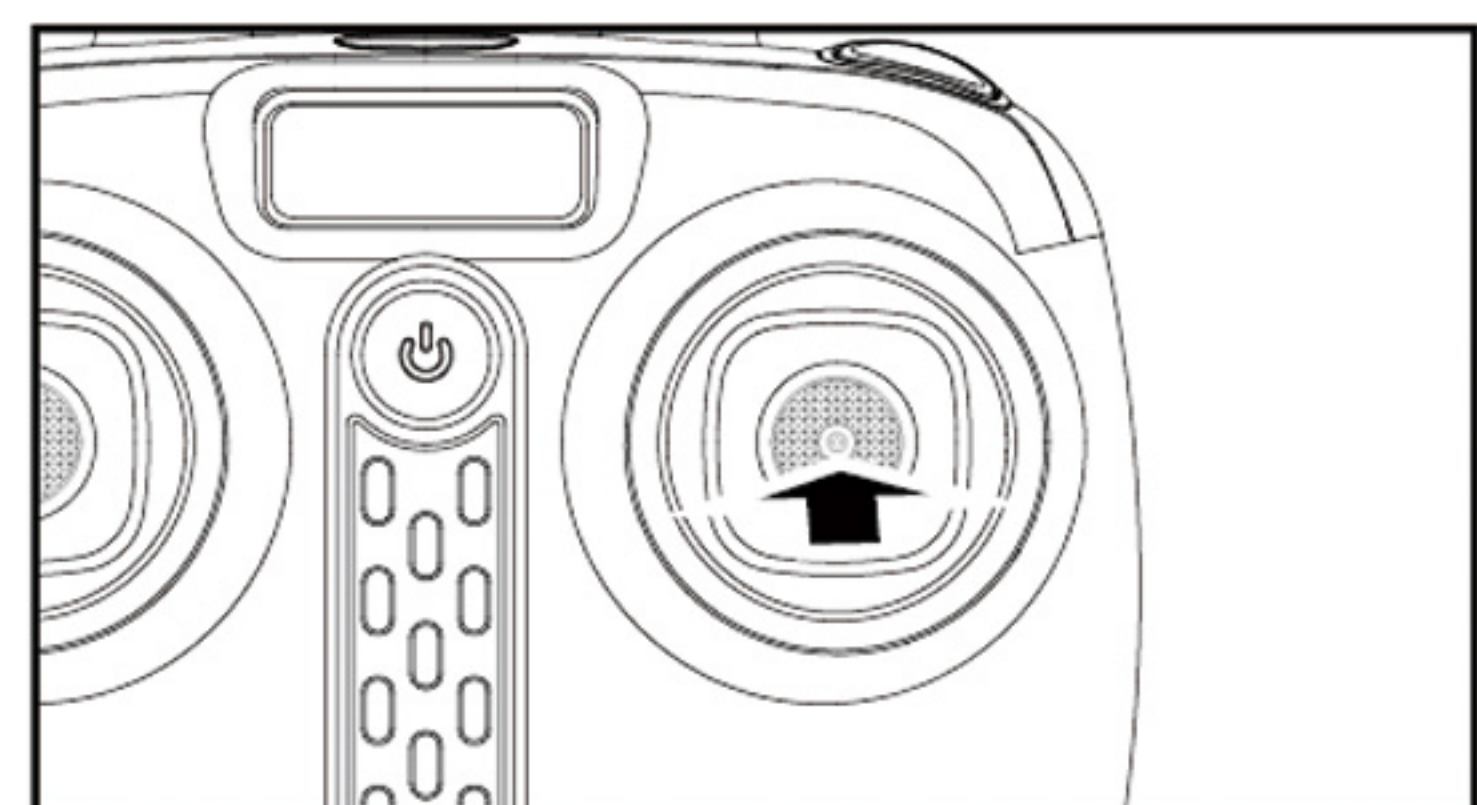
3. Level calibration:

Place the aircraft on a flat surface and push the left and right joysticks on the remote control to the bottom right corner for 2-3 seconds. The indicator light will start to flash continuously. After 2-3 seconds it will stay constant, indicating that calibration is complete.



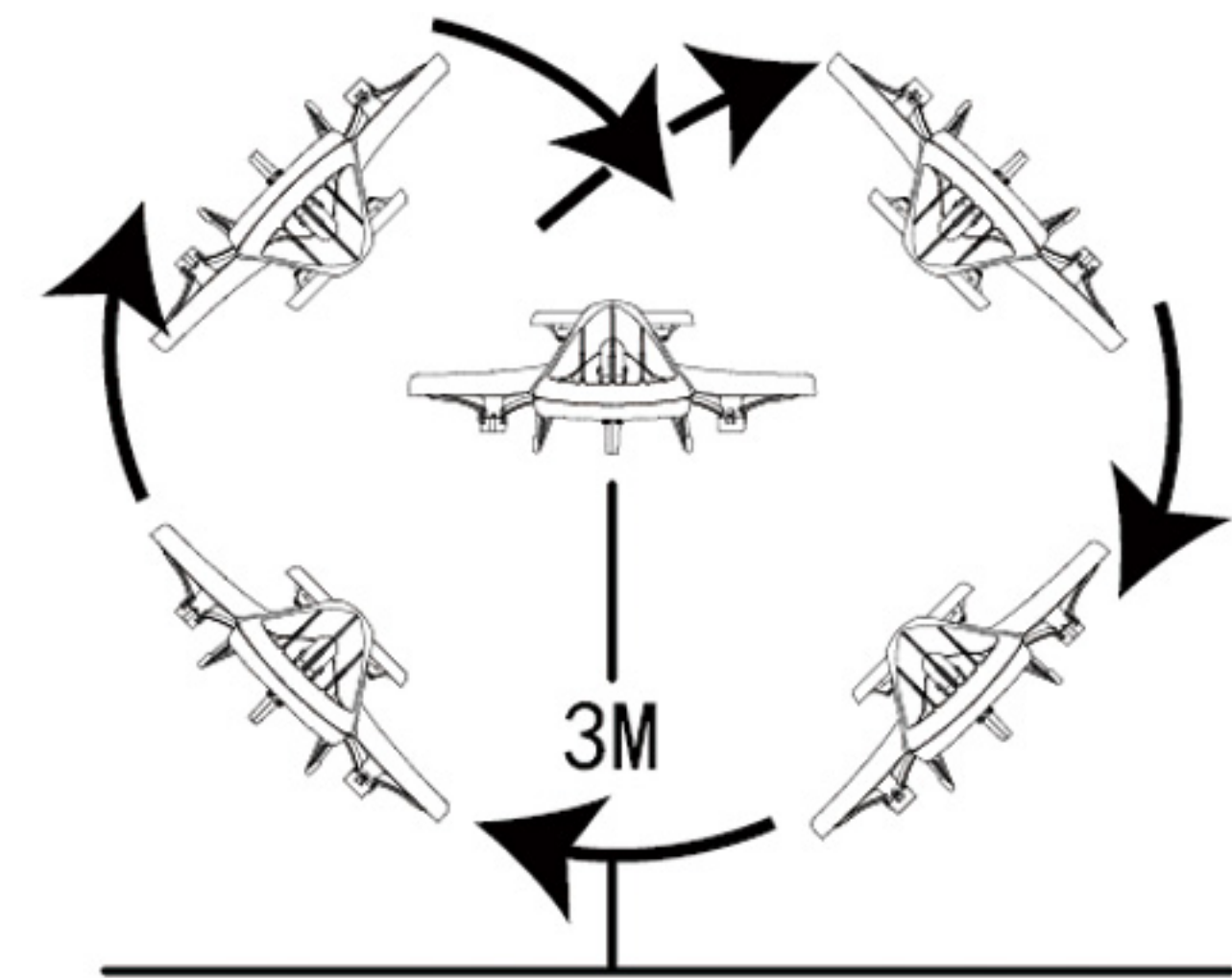
4. High/low speed modes:

By default, the aircraft enables low speed mode when first switched on. To toggle between high/low speed modes, short press on the right joystick. The remote control will beep twice to indicate that high speed mode is enabled. To switch back to low speed mode, short press on the right joystick. The remote control will beep once to indicate that you have switched back to low speed mode.



5. 3D stunt flip:

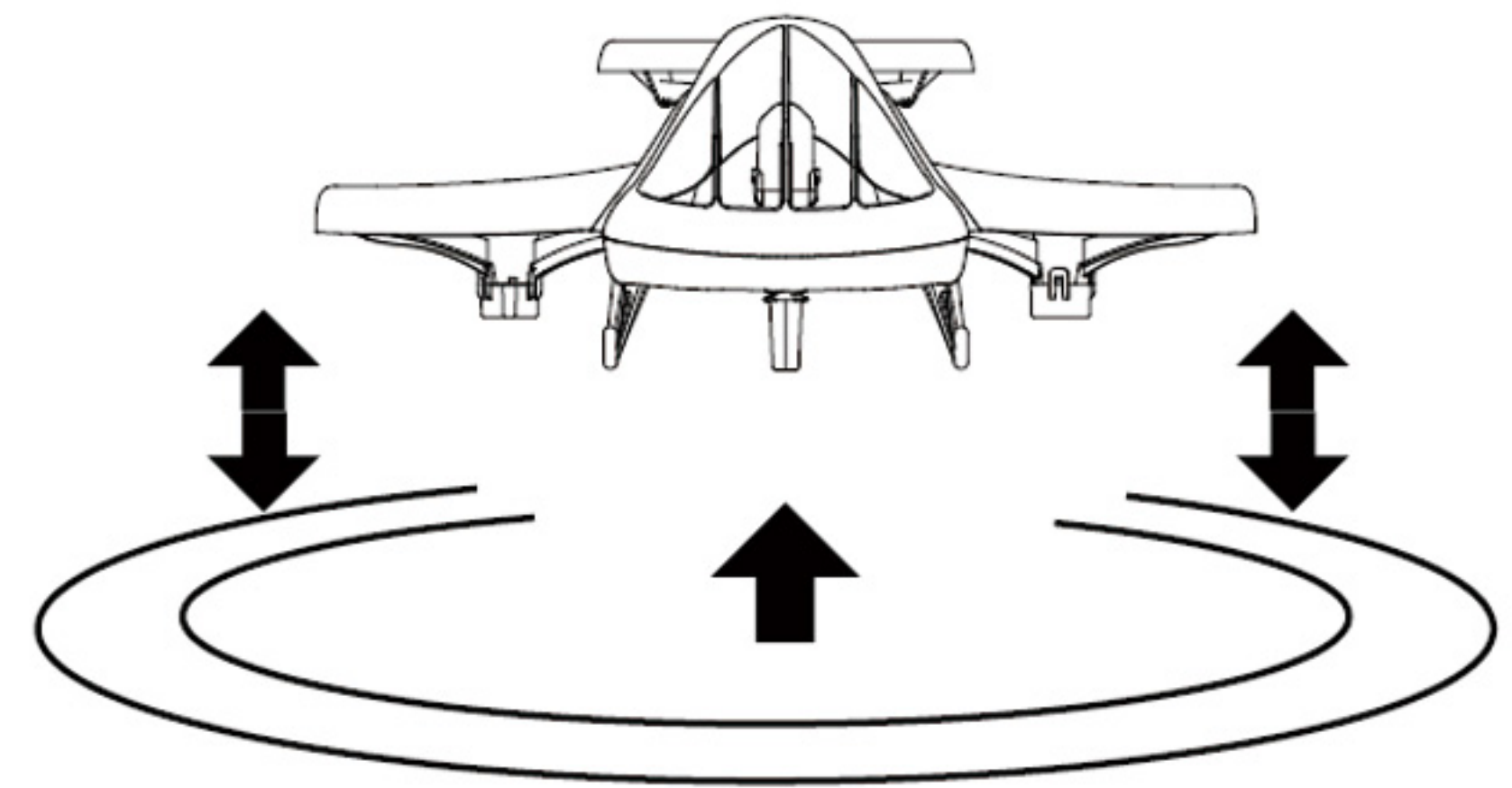
Once you have got the hang of basic manoeuvres, fly the aircraft to 3 m or above to try some more exciting stunts. Hold down the button on the top right corner of the remote control (stunt flip button) and push the right joystick all the way up/down/left/right to flip the aircraft forward/backwards/left/right.



Note: For best results, fully charge the battery before performing stunt flip manoeuvres.

6. Hovering function:

When you release the left joystick (throttle) after ascending/descending, the aircraft will continue to hover at the current height.



Warning: Changes or modifications to this unit 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.

“This device complies with FCC radiation exposure limits set forth for general population (uncontrolled exposure).

This device must not be collocated or operating in conjunction with any other antenna or transmitter.”

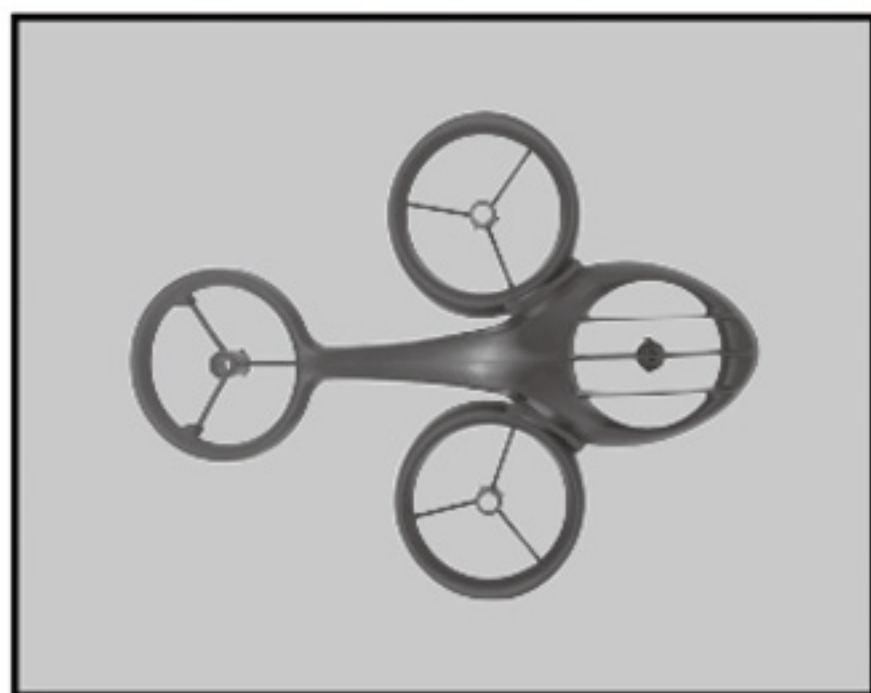
Declaration of Conformity Inserts:

“Hereby, GuangDong Syma model drone Industrial co.,ltd, declares that this drone is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.”

A copy of the full DoC is attached.

Accessories (available separately)

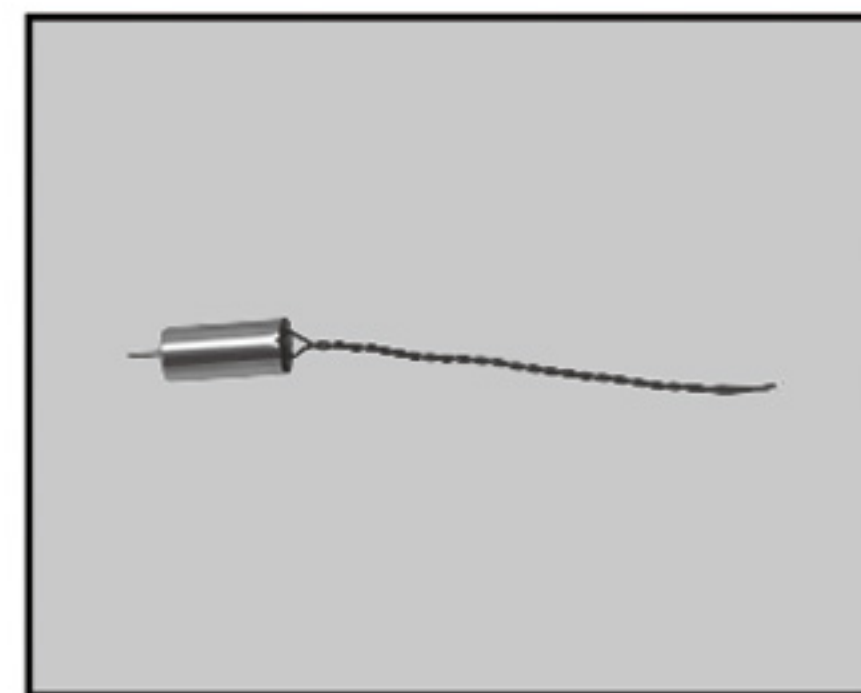
The following section contains a list of optional accessories that are available to purchase. Accessories can be purchased from your local retailer. Please indicate your preferred colour when making your purchase.



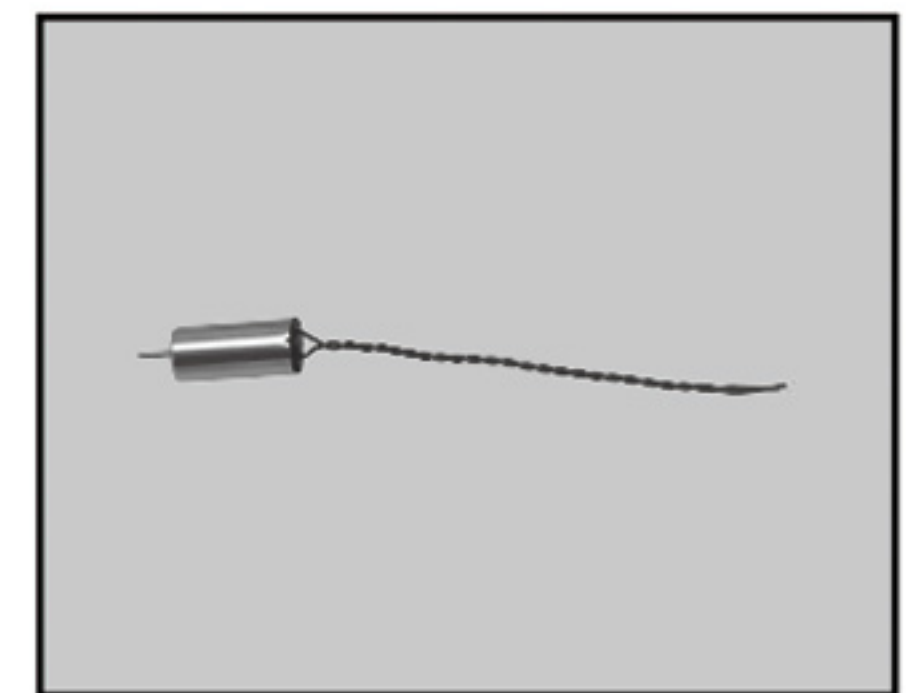
Upper Body



Lower Body



Motor A



Motor A



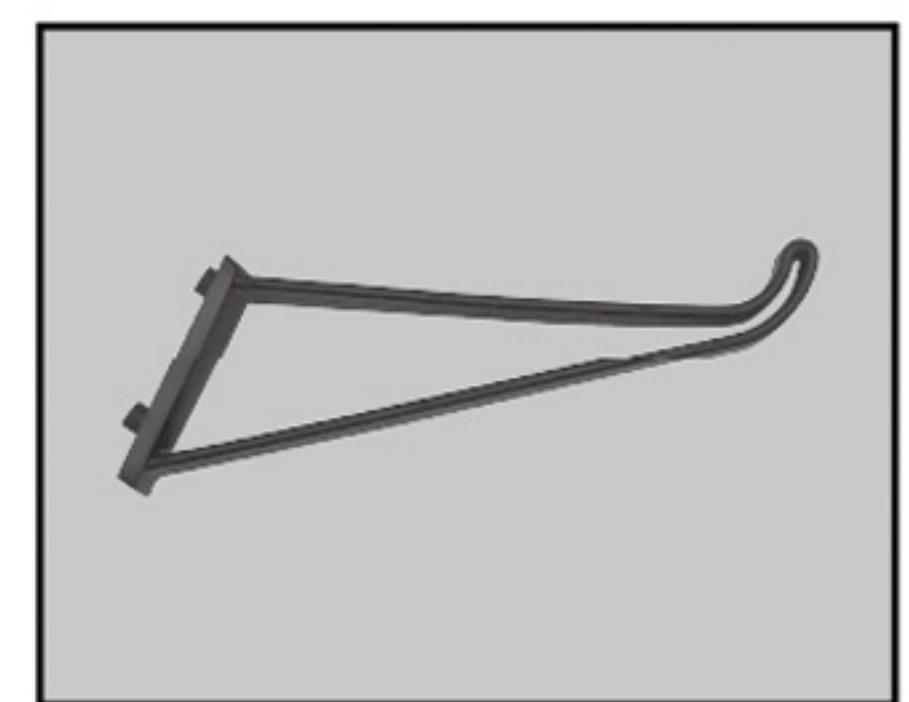
Motor Case



Motor Case Front



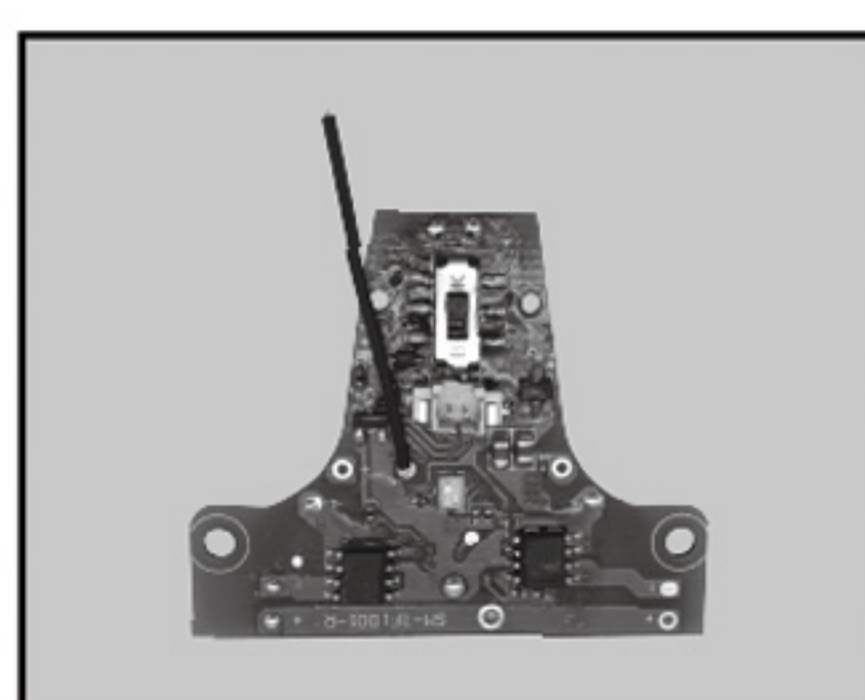
Landing Gear



Rear Landing Gear



Battery



Receiver Board

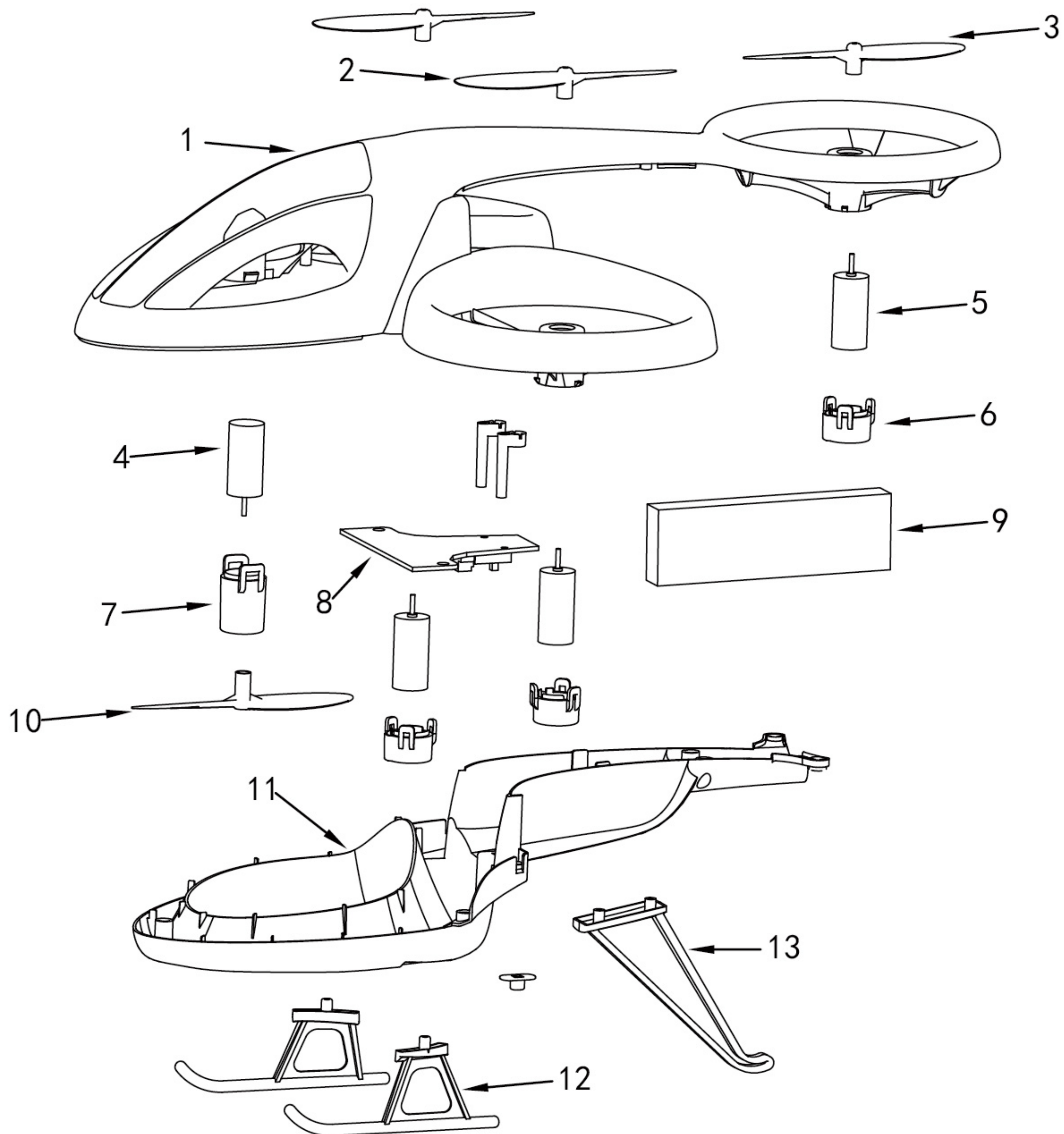


USB Charging Cable



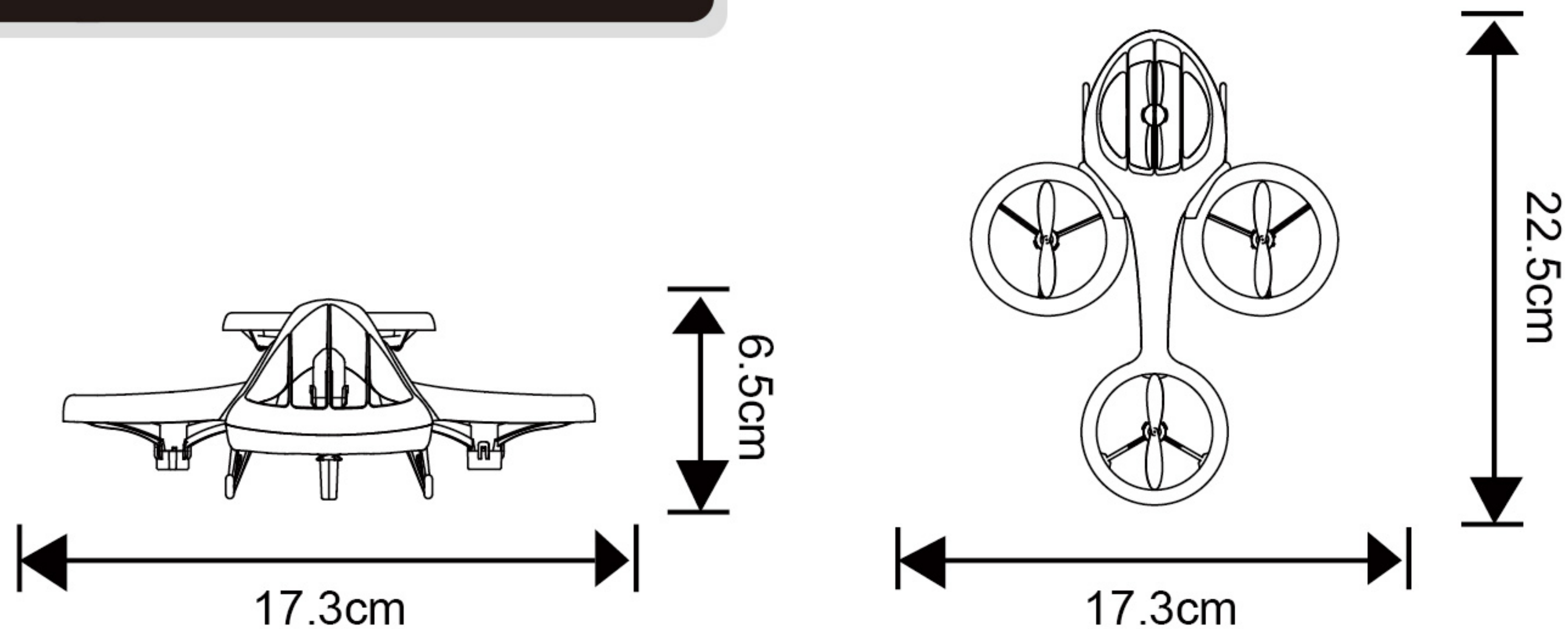
Remote Control

Product description



Serial number	Component/ Part Name	Quantity	Serial number	Component/ Part Name	Quantity	Serial number	Component/ Part Name	Quantity
01	Upper Body	1	07	Motor Case Front	1	13	Rear Landing Gear	1
02	Blades A	2	08	Receiver Board	1			
03	Blades B	1	09	Battery	1			
04	Motor A	3	10	Front Blade	1			
05	Motor B	1	11	Lower Body	1			
06	Motor Case	3	12	Landing Gear	2			

General specifications



Body length: 22.5cm

Body width: 17.3cm

Body height: 6.5cm

Main motor model: $\phi 8$

Battery: 3.7V 500 mAh lithium battery

Troubleshooting

Problem	Cause	Solution
The aircraft does not respond.	<ol style="list-style-type: none"> 1. Undervoltage protection was enabled. 2. The remote control battery level is low and the power indicator is flashing. 	<ol style="list-style-type: none"> 1. Charge the aircraft. 2. Change the batteries in the remote control.
The aircraft's response is intermittent.	<ol style="list-style-type: none"> 1. The remote control batteries are nearly empty. 2. There is interference from a remote control on the same frequency. 	<ol style="list-style-type: none"> 1. Change the batteries. 2. Move to a different area where there is no interference.
The aircraft drifts to one side whilst hovering	The aircraft is not calibrated level to the ground.	Re-calibrate the aircraft. For details, see section 3 on page 10 (Calibration).
The aircraft does not hover properly/the aircraft keeps moving up and down.	<ol style="list-style-type: none"> 1. The aircraft is not calibrated level to the ground. 2. The air pressure is unstable due to poor weather conditions. 3. A violent collision corrupted the gyroscope's data. 	<ol style="list-style-type: none"> 1. Re-calibrate the aircraft. For details, see section 3 on page 10 (Calibration). 2. Avoid flying in poor weather. 3. Re-calibrate the aircraft. For details, see section 3 on page 10 (Calibration).

Manufacturer:

Guangdong Syma Model Aircraft Industrial Co., Ltd.

Address: No 2 West Xingye Road, intersection of North Xingye Road,
Laimei Industrial Park, Chenghai District, Shantou City, Guangdong
Province, China. Postal Code: 515800

Sales department: +86 0754 86980668 After-sales service: +86 0754 86395095

Fax: +86 0754 86395098

Website: www.symatoys.com

Email: syma@symatoys.com

The company has the right of final interpretation of this user manual.