



SYMA X20T 2.4G Remote Controlled Four Axis Quadcopter with Four Channels User Manual

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Main features

- Four-axis structure for agile, high-speed performance, and improved wind resistance. Suitable for indoor and outdoor use in low wind conditions.
- Built-in six-axis gyro stabilizer for accurate in-flight positioning. Modular design for easy installation and maintenance.
- Barometric pressure hover function and one-touch take-off/landing. Stunning new light effects. 16 new aerial stunt maneuvers.
- 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 HAZARD-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 aM 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. Precautions to be observed such as "Do not touch the rotating rotor, avoid]loose clothing or hair that could be caught in the rotor, do not fly near the face".
10. 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.
11. Maintain a safe distance from the spinning propellers to avoid the risk of injury.
12. 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 center of the runway). Remote controls must not be used when wireless device restriction orders are issued by national authorities.
13. You must only use the recommended transformer for this model. The transformer is not a model. Disconnect the model from the transformer]M 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.
14. The packaging and this manual contain important information and should be kept in a safe place for future reference.
15. Do not look directly at the laser beam.
16. Not suitable for children under 6 years of age.
17. Before first use, read the instruction manual together with your child.
18. Keep the vehicle in sight so you can supervise it at all times.
19. Keep a safe distance from the vehicle when it is moving.
20. Do not change or modify anything on this toy.

Repair and maintenance

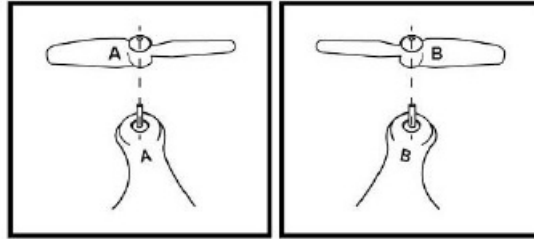
1. Use a damp cloth to clean the vehicle.
2. Do not expose the toy to extreme heat, moisture or direct sunlight.
3. Do not immerse the toy in water as this may damage the electrical components.
4. Remove the batteries when not using the toy for an extended time.

Package contents

This product comes with the following items:

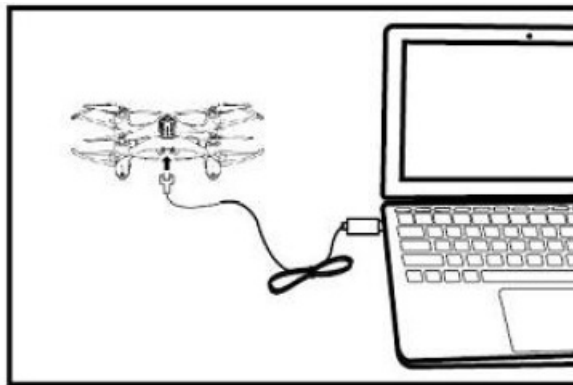
- 1 X Aircraft
- 1 X Instruction manual
- 4 X Blades
- 1X USB charge cable
- 1X Controller

Re-installing the Blades



1. Remove the screws before installing the blades.
2. Labeled blades fit on the A-labeled motors, and B-labeled blades fit on the B-labeled motors. Use the screws to tighten the blades. Refer to the image.

Charging the Drone Battery



- Connect the drone to the charging cable. Insert the charging cable into your computer USB port (When charging, the indicator light below the drone charger port will glow).
- Unplug the charger when the light goes off. The charging time is about 40 minutes.).

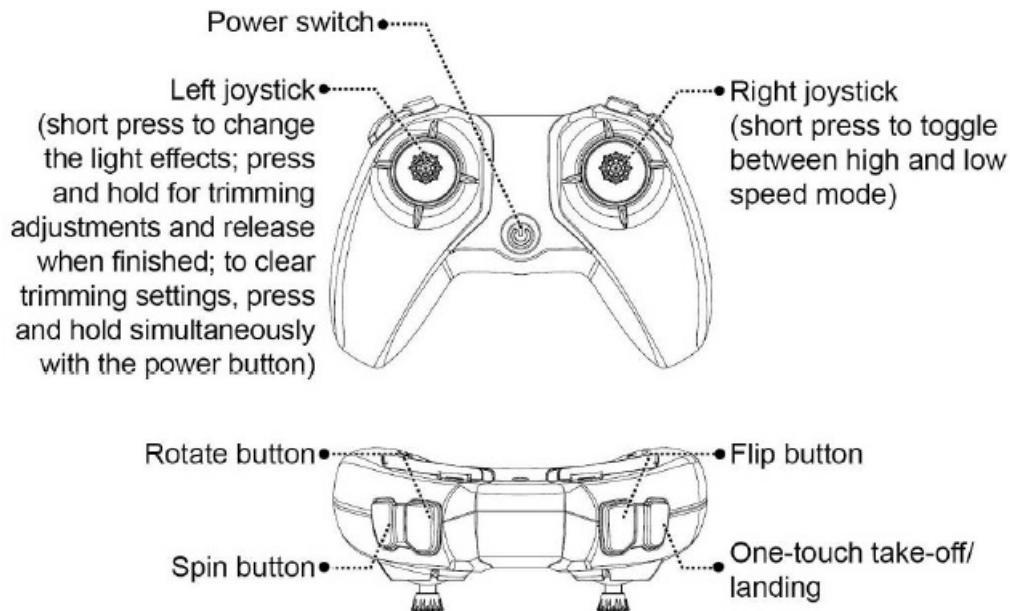
Charging time is about 40 minutes. Drone hover time is about 5 minutes.

Important: battery charging information

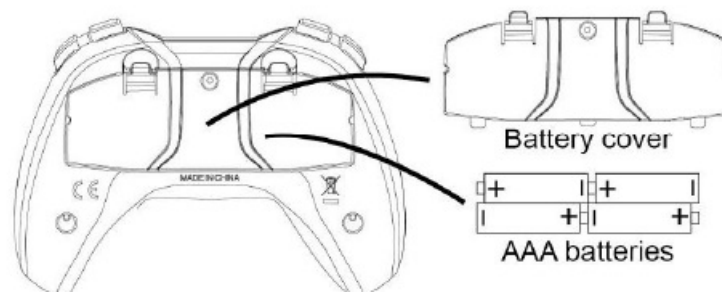
- Do not keep the battery in high-temperature areas, such as fire or heat sources. Otherwise, it may damage the battery or even trigger an explosion.
- Do not put the battery into water. Store the battery in a cool and dry environment.
- Avoid dismantling the batteries.
- During the charging of the battery, avoid leaving the charging place.
- Rechargeable batteries should be removed from the toy before being charged.
- Rechargeable batteries should only be charged under the supervision of adults.
- Exhausted batteries should be removed from the aircraft.
- **Caution:** Risk of explosion if the battery is replaced with incorrect ones. Please dispose of the batteries according to the instructions.

Remote control

Remote control button functions



Inserting the remote control batteries

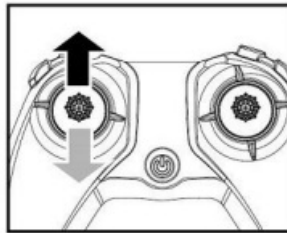
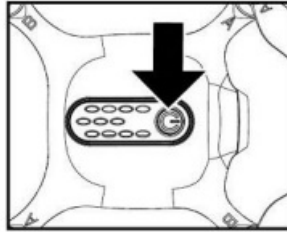
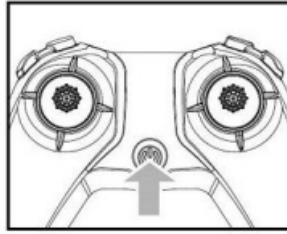


To insert the controller batteries, open the battery cover on the back of the remote control and insert 4 XAAA alkaline batteries, ensuring that you observe the polarity markings (batteries are not included and must be purchased separately).

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.

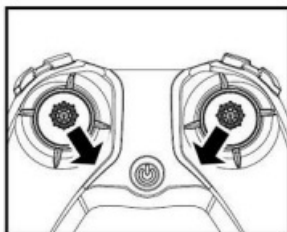
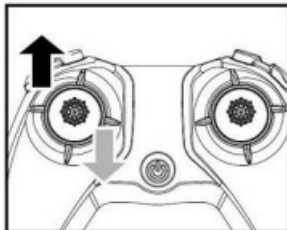
Flight preparation and turning the aircraft on/off

Flight preparation

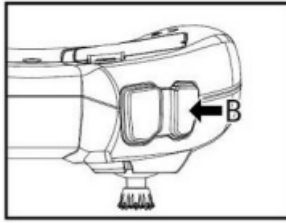


1. Switch the remote control on using the power switch.
2. Move the power button on the top of the quadcopter to the "ON" position to switch on the quadcopter.
3. Push the left joystick (throttle) Tuinly up and then fully down. The indicator will change from a flashing light to a steady light to indicate that the aircraft is in flight-standby mode.

Turning the aircraft on

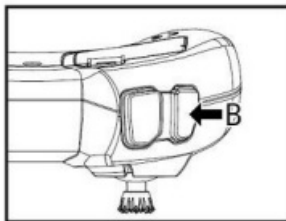
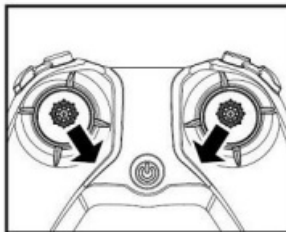
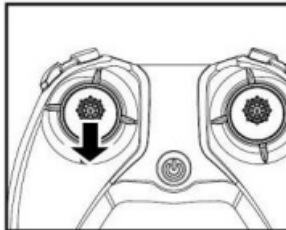


- **Method one:** Push the left joystick (throttle) fully up and then return it to the center. The aircraft's blades will begin to rotate slowly.
- **Method two:** Push the left and right joystick downwards in a V shape for 1 second. The aircraft's Mblades will begin to rotate slowly.



- **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.

Turning the aircraft off



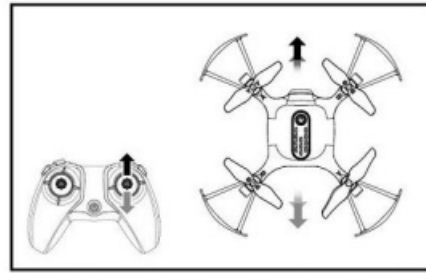
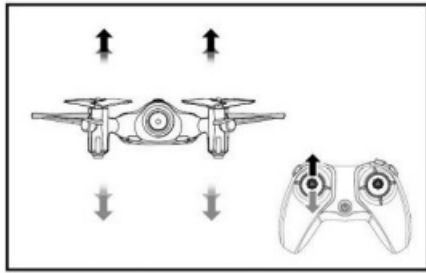
- **Method one:** Push the left joystick (throttle) down for 2-3 seconds to switch the aircraft off.
- **Method two:** Push the left and right joysticks downwards in a V shape for 1 second to switch the aircraft off.
- **Method three:** Press button B when the aircraft is airborne. The aircraft will 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



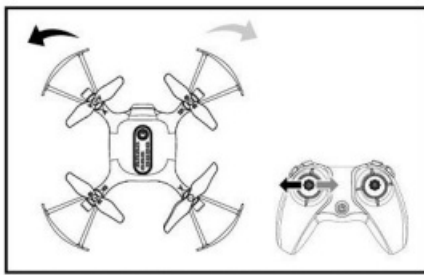
Controlling the ascent/descent

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

Moving forwards and backward

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

Rotating left and right



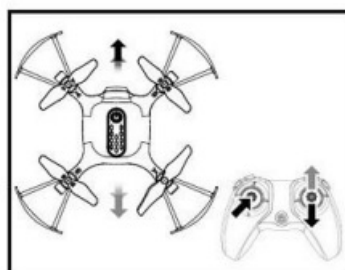
- Push the left joystick (throttle) left or right to make the aircraft rotate left/right.

flying left and right

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

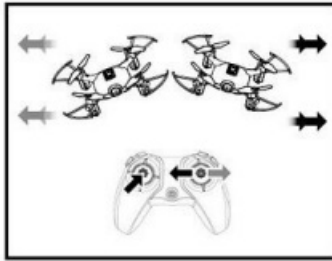
Trimming

Trimming forwards and backward



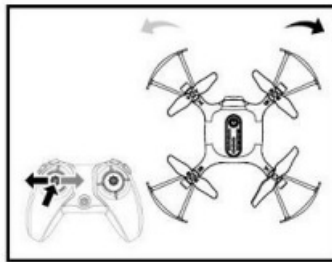
- If the aircraft drifts forwards or backwards when it is hovering, hold the left joystick down and push the right joystick down/up until the aircraft stops drifting.

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.

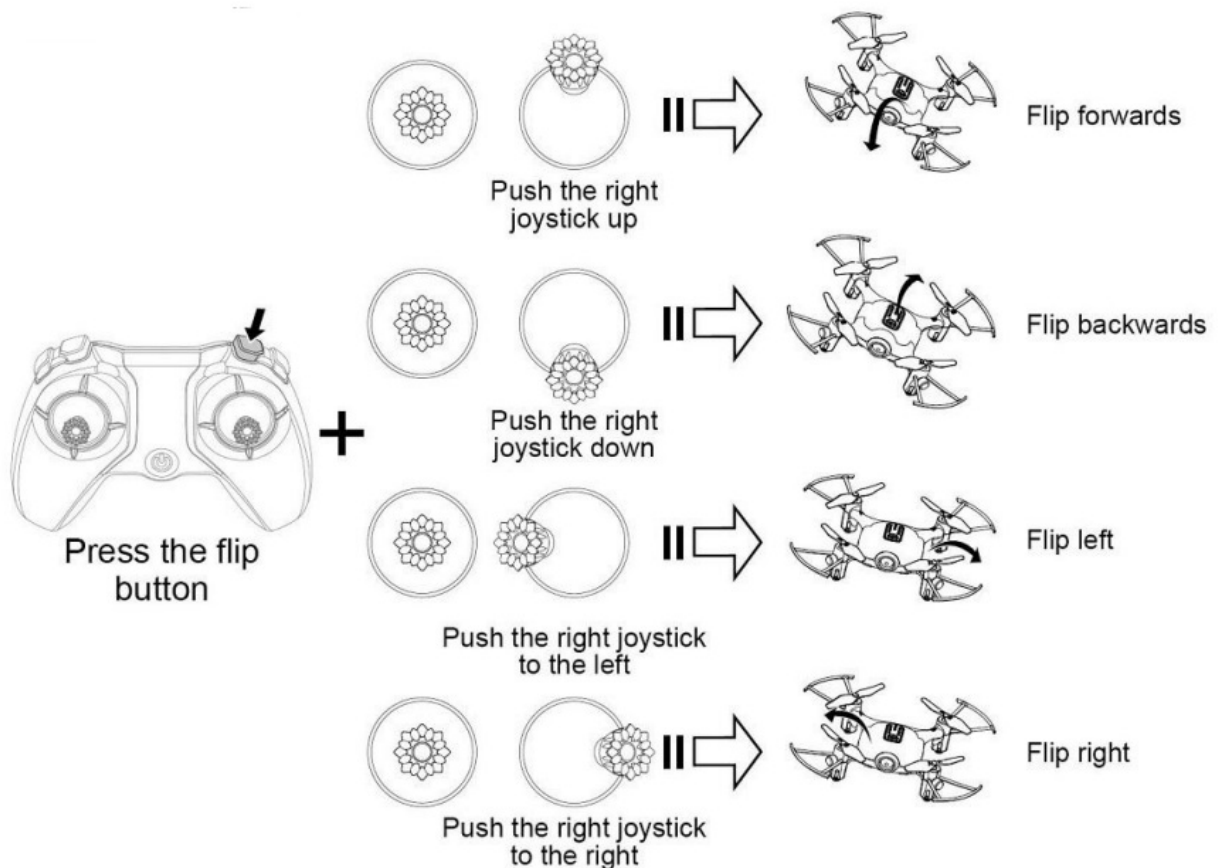
Trimming left and right rotation



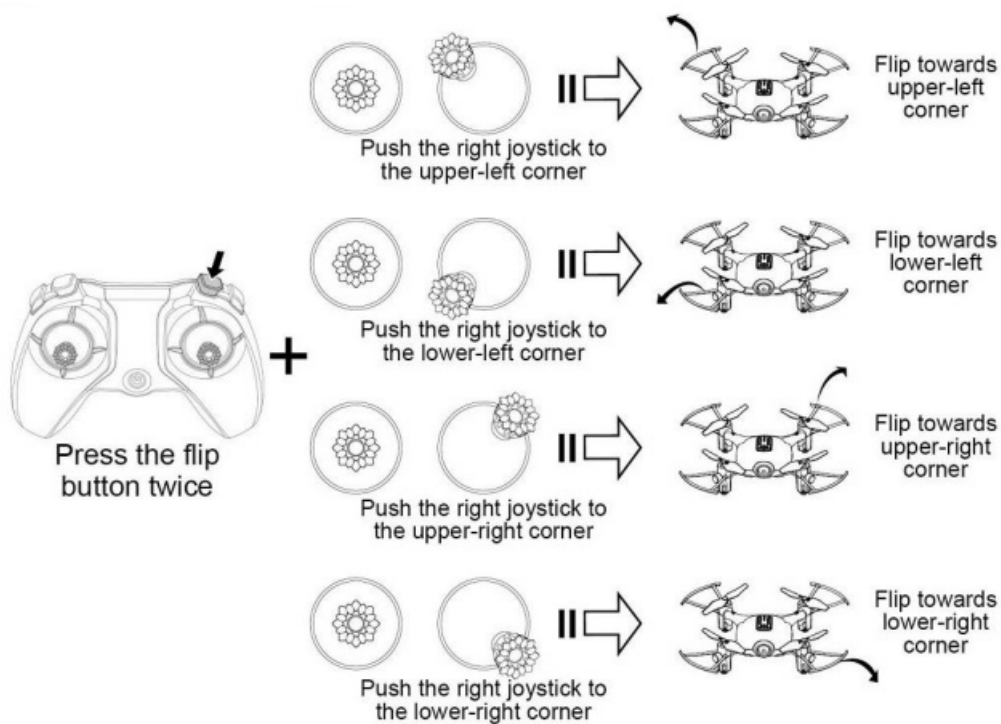
- If the aircraft rotates to the left or right when it is hovering, hold the left joystick down and push it right/left until the aircraft stops rotating.

Stunt maneuvers

Flip function

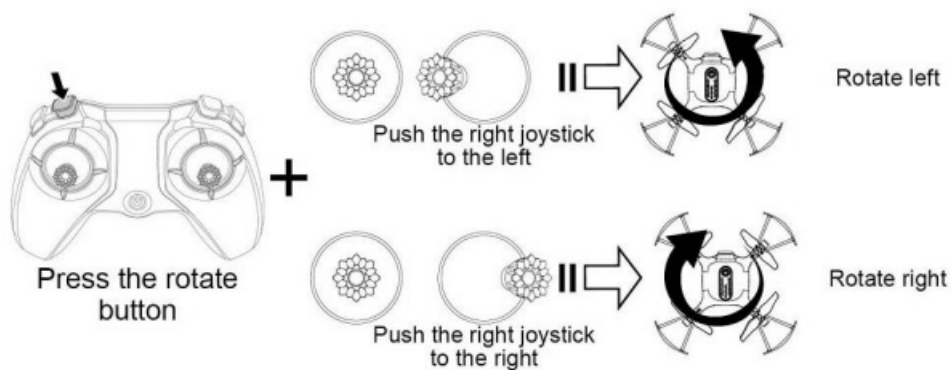


Corner flip function

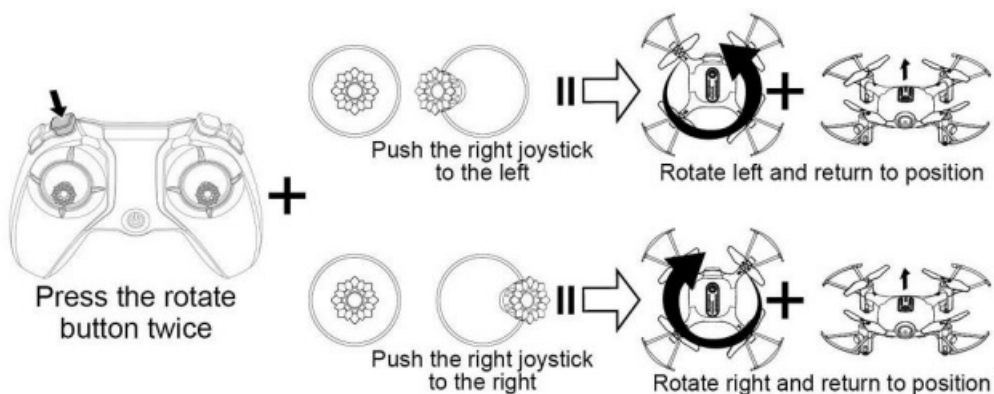


Note: For best results, fully charge the battery before performing stunt flip maneuvers.

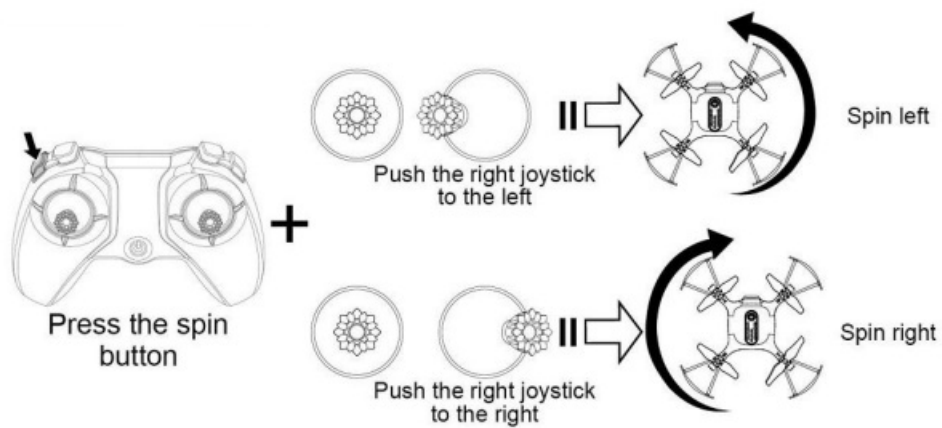
Rotate function



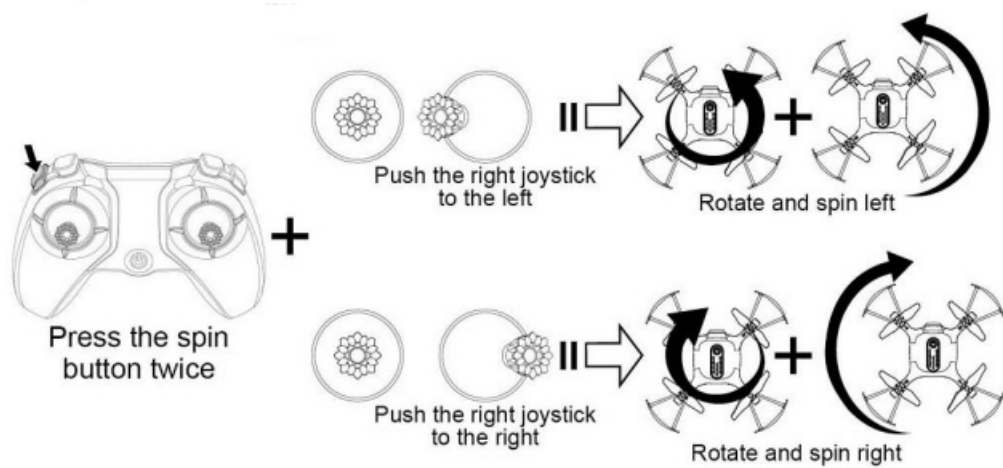
Rotate and return to position function



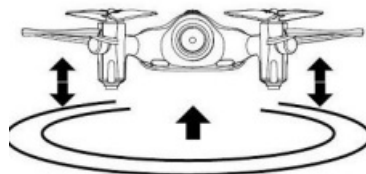
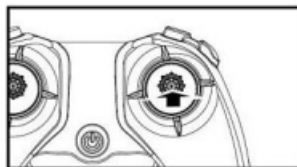
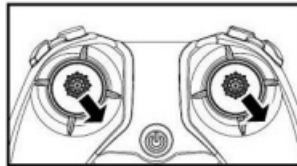
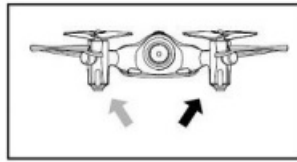
Spin function



Rotate and spin function



Product features



1. **Undervoltage protection:** Two flashing red indicators on the rear of the quadcopter indicate when the battery level is low. When this occurs, bring the aircraft back to land. If the battery life is so low that the quadcopter can no longer continue to fly, the quadcopter will land automatically.
2. **Overcurrent protection:** If the aircraft's blades collided with another object or become stuck, the aircraft's circular indicator light will engage the overcurrent protection mechanism.
3. **Level calibration:** Place the aircraft on a flat surface and use the joysticks to move the aircraft to the bottom right corner for 2-3 seconds. The indicator light will start to flash continuously. After 2-3 seconds, it will become 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 the right joystick. The remote control will beep once to indicate that you have switched back to low-speed mode.
5. **Hovering function:** When you release the left joystick throttle after ascending/descending, the aircraft will continue to hover at the current height.

6. **Light controls:** The start-up colorful lights default to a gradual change. Press the left joystick or right joystick to left and right during standby mode to change the colorful lights into seven cycles. Press the left joystick during flight to change the colorful lights. Seven times for a cycle.

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 color when making your purchase.



Main unit (orange)



Main unit (blue)



Frame components



Propeller protector
(orange)



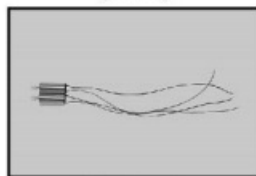
Propeller protector
(blue)



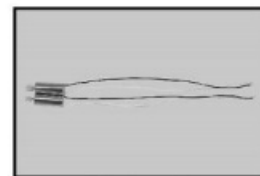
Blades (orange)



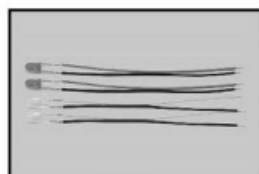
Blades (blue)



Motor A



Motor B



Lights



Receiver board



Light cover



Charging cable



Battery

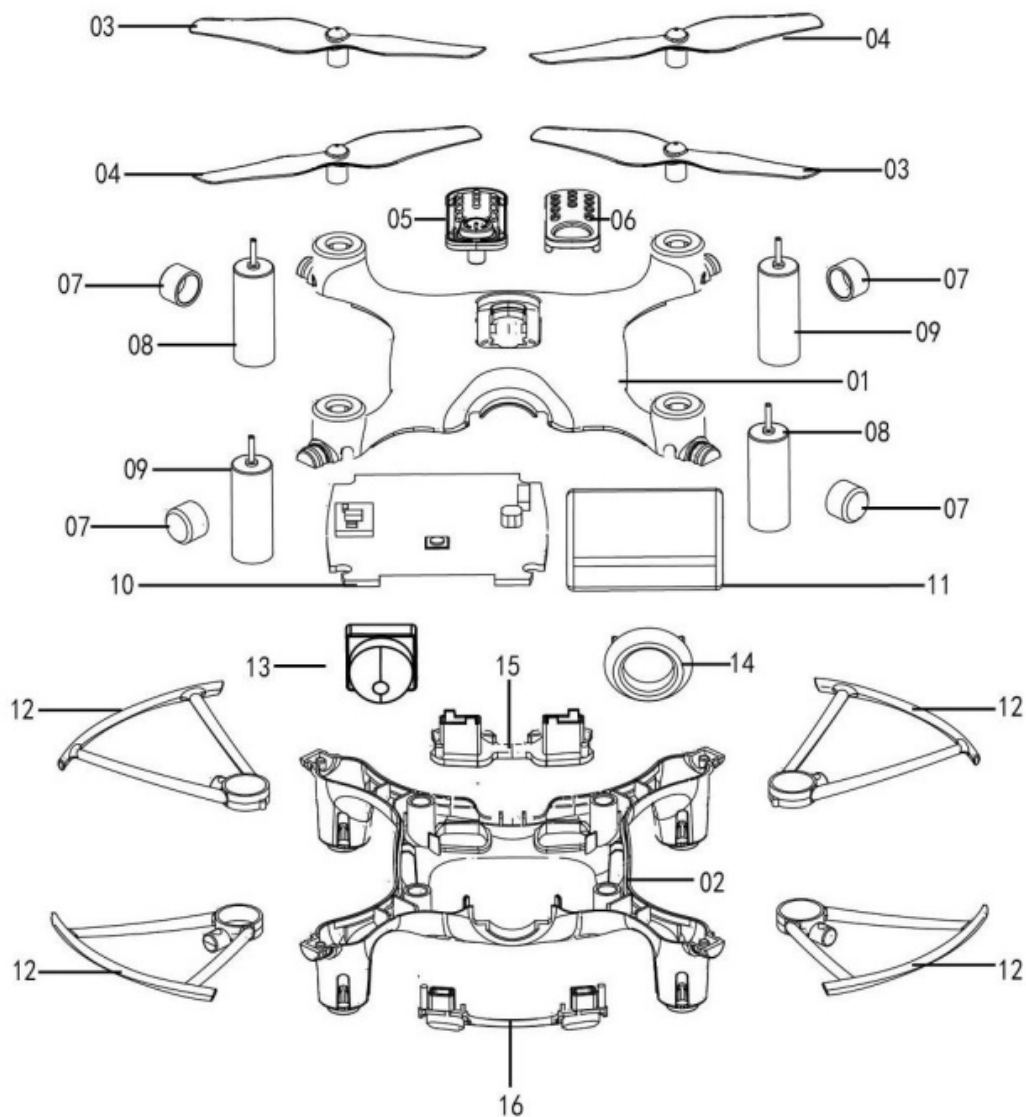


Controller



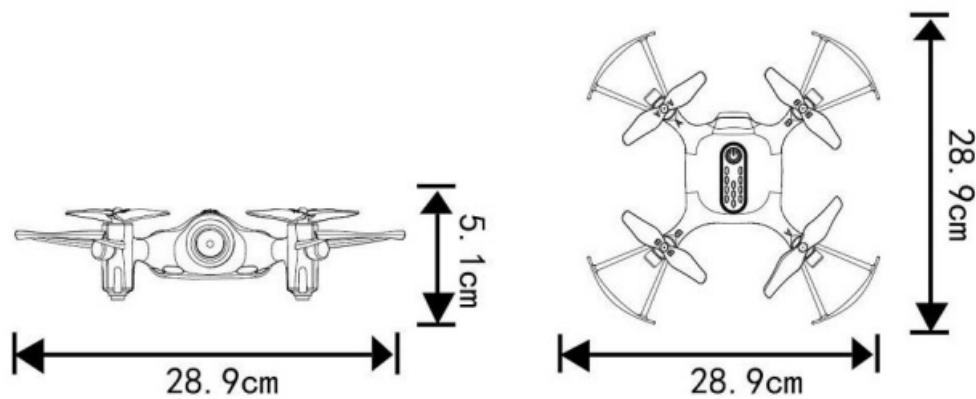
Propeller covers

Product description



Serial number	Component/Part Name	Quantity	Serial number	Component/Part Name	Quantity	Serial number	Component/Part Name	Quantity
01	Top Main Body	1	07	Main Body Mount	4	13	Camera Mount	1
02	Bottom Main Body	1	08	Clockwise Motors	2	14	Lens Protective Cap	1
03	Clockwise Blades	2	09	Counter-Clockwise Motors	2	15	Rear Led Lights Cover	1
04	Counter-Clockwise Blades	2	10	Receiver	1	16	Front Led Lights Cover	1
05	Power Button	1	11	Battery	1			
06	Top Body Compartment	1	12	Protective Guard	4			

General specifications



- **Body length:** 28.9cm
- **Body width:** 28.9cm
- **Body height:** 5.1cm
- **Main motor model:** D6
- **Battery:** 3.7V/400mAAh

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 12 (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 12 (Calibration). 2. Avoid flying in poor weather. 3. Re-calibrate the aircraft. For details, see section 3 on page 12 (Calibration).

FCC STATEMENT

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.

Band: 2408-2472MHz

EIRP(MAX): -5.6dBm

Sold to EU country

- **product name:** [Drone]
- **model number:** [X20T]
- **Brand name:** SYMA
- **Contact person:** Ivan
- **Tel:** +86-0754-86381701

Hereby, [GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD], declares that this [Drone] is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The full test of the EU declaration of conformity is available at the following internet address:

<http://www.symatoys.com/down/declaration-of-conformity.html>

SIMPLIFIED EU DECLARATION OF CONFORMITY

Manufacturer

Guangdong Syma Model Aircraft Industrial Co., Ltd.

- **Address:** No 2 West Xingye Road, the 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 to final interpretation of this user manual.

Documents / Resources



[SYMA X20T 2.4G Remote Controlled Four Axis Quadcopter with Four Channels](#) [pdf] User Manual
GC88752-78, GC8875278, QV7-GC88752-78, QV7GC8875278, X20T, 2.4G Remote Controlled Four Axis Quadcopter with Four Channels, X20T 2.4G Remote Controlled Four Axis Quadcopter with Four Channels, Gyroscope Remote Control Series