SYMA

8+

CYRO REMOTE CONTROL SERIES 2.4G

X22SW

4-CHANNEL HEIGHT HOLD HOVER TRANSMITTER DRONE

BC

USER MANUAL

MAIN FEATURES

- Special 4-axis structure-fast and agile. Suitable for flying in spacious indoor areas.
- Built-in 6-axis gyroscope ensures accurate position hold.
- Modular design for easy upgrades and maintenance.
- Capable of doing 360 degrees stunts.
- Headless mode for easy recall of the drone.
- Improved height hold stability.
- Improved auto take-off/landing function.
- Enjoy aerial photography with high definition wireless real time video transmission.

Notice: The company will not be held responsibly for any printing inconsistencies and may or not inform end users regarding any new potential updates.For further information, please visit the syma website.

Safety Guide

1. Please, keep the small drone accessories out of reach of children.
2. This drone is very powerful. When flying for the first time, avoid sudden movements of the throttle. When ascending push the throttle stick slowly up to avoid unintended damages or injuries.
3. After flying, turn off the transmitter before turning off the drone.
4. Do not keep the batteries in high temperatures areas or near heat sources.
5. It is strongly recommended to operate the drone at 2-3 meters away from a pilot and other people or animals. Crashes may cause unintended injuries. When landing the drone, avoid crashing it into other people.
6. Adult or experienced RC pilot's supervision is recommended for children.
7. Non-rechargeable batteries should not be recharged; Batteries should be inserted with a correct polarity; Different types of batteries, new or used batteries should not be mixing.
8. Turn off the drone/transmitter and remove the batteries when not in use.
9. The supply terminals should not be short-circuited.
10. When not in use for more than 10 days, take measures to pro-long the drone's battery life by reducing the drone battery level to 40%-50% of it's capacity(fully charge the battery then fly the drone for half of its flying time).
11. Keep away from the rotating blades (rotating blades my cause bodily injuries, or damage to property).
12. To avoid interfering with air traffic control signals avoid flying a drone within 5000 meters of an airport. Avoid operating RC equipment during the periods set by the local authority.
13. Only use the included charger.
14. Liquids can be used to clean the product. Turn off the equipment and unplug the charger from the power source before cleaning the drone. Perform routine inspection of the charger (check: port, shell and other parts) on a regular basis. If any abnormalities are found, immediately stop using the equipment until it is fixed.
15. Attention: Drone assembly under adult supervision.
16. Do not look directly into the LED lights of the drone as it can damage your eyes.
17. Open the battery cover of the toy with screwdriver.
18. The packing has to be kept since it contains important information.
19. Do not touch the rotating rotor, avoid loose clothing or hair that could be caught in the rotor, do not fly near the face.
20. Advice to keep the instructions for use.

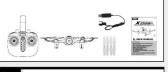
Repair and Maintenance

1. Use clean and soft cloth to clean the product.
2. Keep away the product from heat sources.
3. Avoid water exposure to this product. Moisture may cause damages of the aircraft electronic parts.
4. Charger used with the drone should be examined regularly, such as the cord, plug, enclosures and other parts. In case of any damages is found, please stop using it unless it is repaired or replaced.

Box Contents

Items included:

- Drone
- USB Charging Cable
- User Manual
- Blades X4
- Transmitter
- Mobile Phone Mount



Re-installing the Blades

1. Remove the screws before re-installing the blades.

2. A labeled blades fit on the A labeled motors, B labeled blades fit on the B labeled motors. Use the screws to tighten the blades. Refer to the image.

Installing the Mobile Phone Mount

Installing the Mobile Phone Mount:

1. To install the mobile phone mount, insert it into the mobile phone mount's slot at the top of the transmitter.

2. To adjust to phone holder to the required size, use phone holder mount's clips.

Removing the Mobile Phone Mount:

To remove the mobile phone mount, pull it up from the back of the transmitter.

Charging the Drone Battery Method 1

1. To turn the drone off, press down on the drone's on/off button for 1-2 seconds.

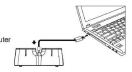
2. Press the battery cover and pull the battery out.

3. Connect the USB charging cable to the battery.

4. Insert the charging cable into computer USB (when charging the light will be on; unplug the charger when the light goes off; charging time about 90 minutes).

Charging the Drone Battery Method 2 (Optional Purchase)

1. Connect the charging cradle to the charging cable. Insert the charging cable into computer USB.



2. After observe the charging cradle light, if the connection is successful the cradle's charging indicator light will be off. Insert the battery into the charging cradle. When charging, the cradle's charging indicator light will glow. Unplug the charger when the light goes off.

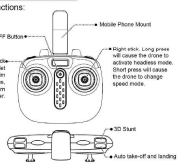
Charging time is about 90 minutes. Drone hover time is about 6.5 minutes.

Important: battery charging information

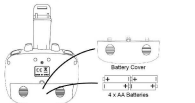
- Do not keep the battery in high temperature areas, such as fire or heat sources. Otherwise, it may damage the battery or even trigger an explosion.
- Do not put the battery into water. Store the battery in a cool and dry environment.
- Avoid dismantling the batteries.
- During the charging of battery, 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 battery is replaced with incorrect ones. Please dispose the batteries according to the instructions.

Understanding the Transmitter

Transmitter functions:



Installing transmitter batteries:



Transmitter battery installation: open the battery cover at the back of the transmitter. Install 4pcs AA batteries according to the polarity indications (Note: batteries are not included).

Precautions during installations: it must be ensured that the polarities of the batteries are matched with that of the battery box. No battery shall be installed with the opposite polarity.
2. Please do not use new and old batteries together.
3. Please do not use different types of batteries together.
4. Do not use rechargeable batteries.

Installing the Drone's Battery

Reminder: when installing the battery, ensure that the arrow sign on the battery is pointing up.

Preparation for Flight

1. Flight preparation

Step 1: Turn on the transmitter.

Step 2: To turn on the drone, press down the drone on/off button for 1-2 seconds.

Step 3: Move the left stick (throttle) fully up and after fully down. The drone indicator lights will turn solid (glow) indicating the drone is ready to fly.

2. Arming Motors

Method 1: Move the left stick (throttle) fully up, after let it come back to the middle and the motors will start spinning.

Method 2: Push both sticks at the same time (left stick to the bottom-right corner and the right stick to the bottom-left corner) and hold for 1 second and the motors will start spinning.

Method 3: Place the drone on a flat level surface and after press the B button. The drone will take-off, and hover at the preset height.

3. Disarming Motors

Method 1: Push the left stick (throttle) fully down and hold it there for 2-3 seconds and the motors will stop spinning.

Method 2: Push both sticks at the same time (left stick to the bottom-right corner and the right stick to the bottom-left corner) and hold for 1 second and the motors will stop spinning.

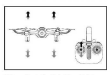
Method 3: After the drone is in stable hovering position, press the R button and the drone will slowly land. Motors will be automatically disarmed.

1. If the drone flies out of control range, the drone indicator lights will start flashing slowly and after the drone will slowly descend.
2. If the transmitter turns off or the transmitter battery runs low, the drone will slowly descend. Turn on the transmitter again, regain the unit and continue to fly.

Fly the Drone

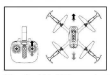
Operations

Ascend/Descend



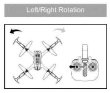
When the left stick (throttle) is moved up/down, the drone will ascend/descend.

Forward/Backward



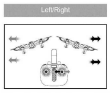
When the right stick is moved up/down the drone will fly forward/backward.

Left/Right Rotation



When the left stick (throttle) is moved left/right, the drone will rotate to the left/right.

Left/Right



When the right stick is moved left/right the drone will fly to the left/right.

Trimming

Forward/Backward Trim Control

If the drone drifts quickly forward or backward while hovering, please adjust forward/backward trim. Press the left stick and hold it, then move the right stick forward/backward until the drone starts hovering as normal.

Left/Right Trim Control

If the drone drifts quickly to the left/right while hovering, please adjust left/right trim. Press the left stick and hold it, after move the right stick to the left/right until the drone starts hovering as normal.

Left/right rotation trim

If the drone rotates quickly to the left/right while hovering, please adjust left/right rotation trim. Press the left stick and hold it, after move it to the left/right until the drone starts hovering as normal.

Product Features

1. Low-Voltage Protection:

When the drone battery is low, the drone indicator lights will start flashing. After this warning, return your drone to the desired location and land it. After the drone's low voltage battery protection is activated, the drone will start losing altitude and will gradually land.

2. Overflow Protection:

When the drone is in the air and the propellers collide with objects or become jammed, the drone overflow protection will be activated.

3. Balance Calibration:

Place the drone on a flat level surface and after, push both sticks to the lowest right corners and hold them there for 2 to 3 seconds. The drone indicator lights will start flashing quickly. Wait until the drone indicator lights stop flashing and turn solid again (glow) indicating successful balance calibration.

4. Low/High Speed Mode:

Low speed mode is the default mode. To change the speed mode gently press the right stick once, the transmitter will emit *two* beeps indicating high speed mode. Gently press the right stick again and the transmitter will emit one beep indicating low speed mode.

5. 3D Stunts:

After the basic operational skills are mastered, you can start performing 3D stunts. The recommended safety height is no lower than 3 meters above the ground. Press the 3D stunt button (top right button on the transmitter) and at the same time push the directional stick completely forward/backward/left/right. The drone will perform forward/backward/ left/right 3D stunt.

Notice: Fully charged drone battery will ensure the best 3D stunts performance.

6. Height Hold:

Use the left stick (throttle) to achieve the desired height and after allow the left stick to fall back to its default middle position.

7. Headless Mode:

①Setting Forward Direction:

●Turn on the transmitter.

●To turn on the drone, press down the drone on/off button for 1-2 seconds. To set the drone's headless mode forward direction, ensure the front of the drone is pointing the desired forward direction.

●Move the left stick (throttle) fully up and after fully down. The transmitter will emit one long beep indicating successful pairing and defined forward direction.

②Calibration:

When in headless mode, the forward direction may start deviating due to numerous crashes. Re-set the forward direction and after push both sticks simultaneously to the lowest left corners. The drone indicator lights will start flashing and after 3 seconds will turn solid (glow) indicating successful calibration.

③Activating/Deactivating Headless Mode:

●After successful pairing observe the drone indicator lights and wait until they turn solid (glow). Press the right stick and hold it for 2 seconds, the transmitter will emit 3 beeps indicating headless mode is activated. Press the right stick again and hold it for 2 seconds after the transmitter will emit one long beep indicating headless mode is deactivated.

●When flying in the headless mode, it does not matter in which direction the front of the drone is facing. It will fly forward/backward/right/left relative to the position of pilot.

Real Time Video Transmission

1. Software Download/Install Instructions

Android: Please download and install the software SYMA FLY from www.symatoys.net or scan the QR code.
IOS: Please download and install the software SYMA FLY from the App Store, or scan the QR code.

Tips: QR codes can be found on the packaging box or at the last page of the user manual. Newest SYMA FLY app version can be found at www.symatoys.net or APP STORE.

2. For more connection instructions, please refer to the App.

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.

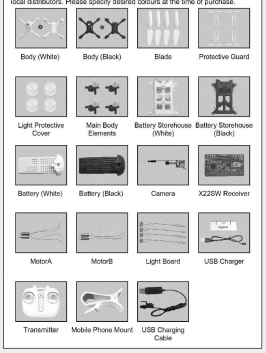
"This device complies with FCC radiation exposure limits set forth for general population (uncontrolled exposure).
This device must not be collocated or operating in conjunction with any other antenna or transmitter."

Decoration 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."

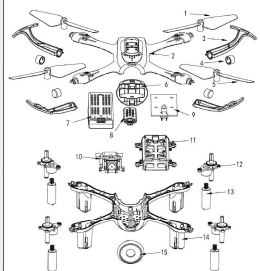
A copy of the full DoC is attached.

Accessories/Parts (Optional)

Please, look through the parts below. For your convenience, we have specified every part and accessory. The parts and accessories can be purchased through local distributors. Please specify desired colours at the time of purchase.

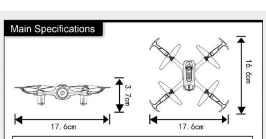


Product Main Parts and Components



Serial number	Component/Part Name	Quantity	Serial number	Component/Part Name	Quantity	Serial number	Component/Part Name	Quantity
01	Counter-Clockwise Blades	2	07	Battery Elements	1	13	Motor Elements	1
02	Top Main Body	1	08	Connecting Components	1	14	Bottom Main Body	1
03	Protective Guard	4	09	Receiver	1	15	Camera Cover	1
04	Light Protective Cover	4	10	Camera	1			
05	Clockwise Blades	2	11	Battery Storehouse	1			
06	Battery Warehouse Elect	1	12	Main Body Elements	1			

Main Specifications



Drone length: 16.6cm Drone width: 17.6cm
Drone height: 3.7cm Motor size: Ø7
Battery : 3.7V 400mAh lithium battery

Troubleshooting

Problem	Reason	Solution
The drone does not respond.	1. The drone has activated low voltage battery protection. 2. The transmitter's battery is low, the transmitter indicator light flashes.	1. Recharge the drone's battery. 2. Change the transmitter's battery.
The transmitter sticks are not sensitive.	1. The transmitter battery is low. 2. There is another transmitter with the same frequency causing interference.	1. Change the transmitter's battery. 2. Please change flying location.
The drone is unstable when hovering or quickly drifts in one direction.	Balance calibration is needed.	Perform balance calibration. Please relate to page number 10.
When in headless mode the forward direction deviates.	Numerous crashes.	Re-set forward direction. Please relate to page number 11.

Problem	Reason	Solution
The drone does not hold the set altitude.	1. Balance calibration is needed. 2. Flying the drone in severe weather. 3. Heavy crash impacts gyroscope calculations.	1. Perform balance calibration. Please relate to page number 10. 2. Avoid flying the drone in severe weather conditions. (strong wind, rain, snow, fog, thunder etc). 3. Perform balance calibration. Please relate to page number 10.

Android APP

iOS APP

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